

A Brief Guide to Data & Resources

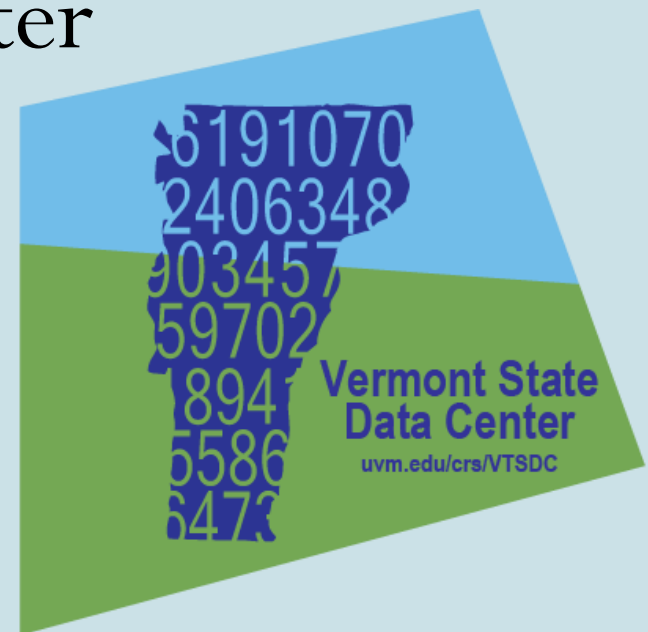
The Vermont State Data Center

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Our Agenda for Today

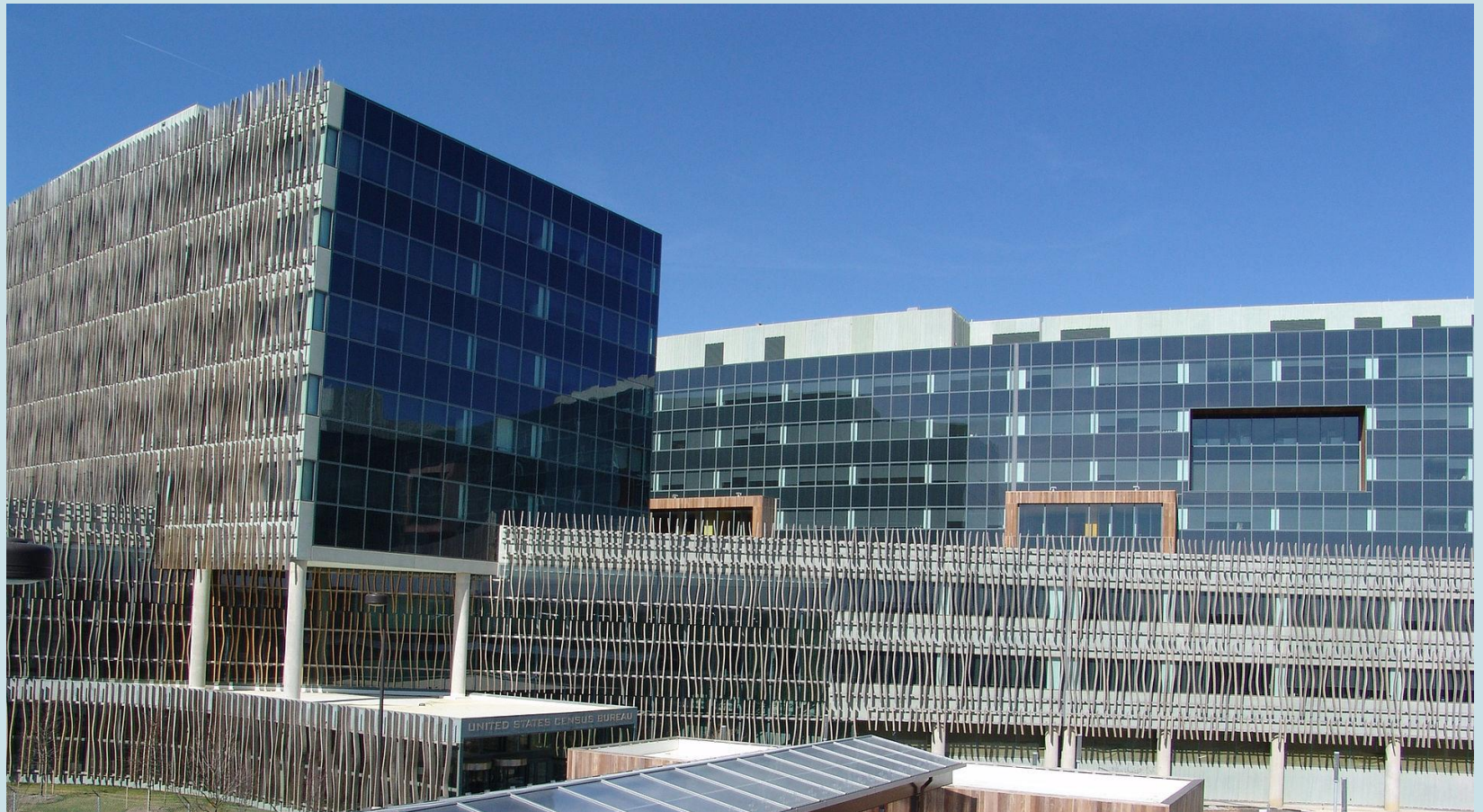
- About the Vermont State Data Center
- What is data and how do we use it
- Types of data
- The data process
- Basics of data analysis
- Data sources
- Guided data access tutorial

The State Data Center Program

- A National network of local data centers
 - Disseminate Federal data to local data users
 - Assist in Federal data collection programs
 - Conduct data education and outreach efforts



US Census Bureau Headquarters



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What is data?

Who are Data Consumers?

- **We all are**, really. But more specifically:
 - Businesses
 - Non-profit Organizations
 - Policy-makers
 - Students
 - etc.

Ultimately:

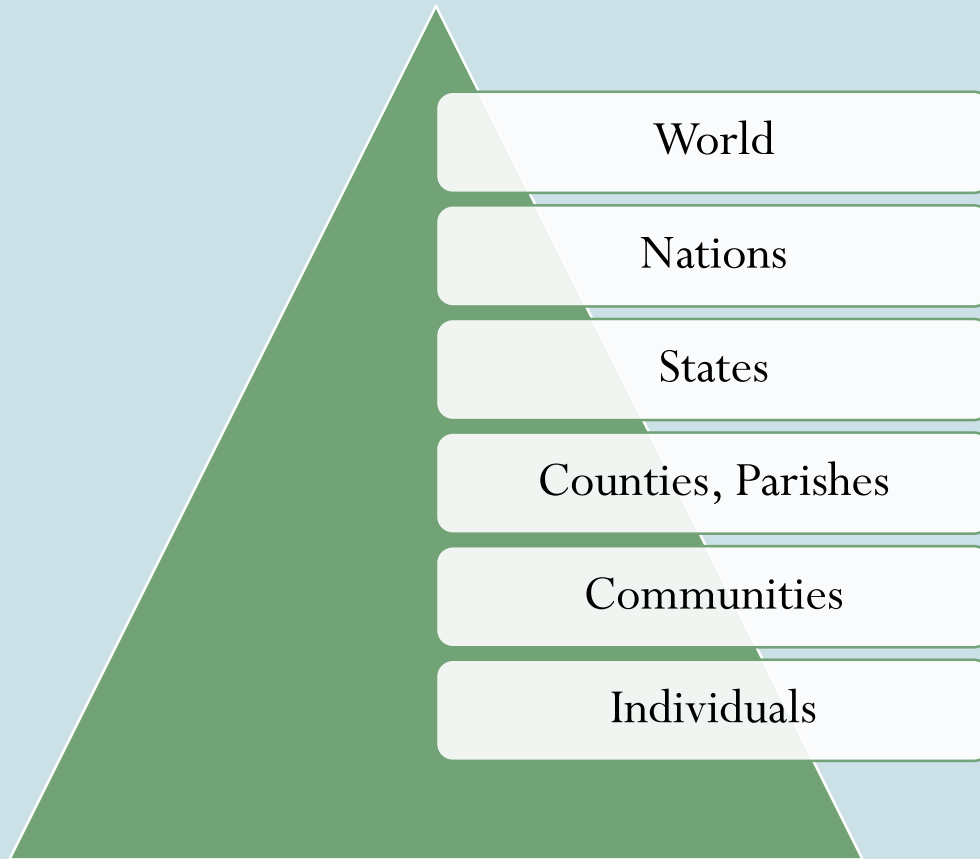
- We all use data in everyday life and...
- **You will use data throughout your professional life.**

How Do We Use Data?

- Decision-making
 - What does this mean?
 - Examples?
 - Users?
- Story-telling
 - What does this mean?
 - Examples?
 - Users?



Levels of Analysis



Types of Data

- Primary data
 - Data that is collected by you.
- Secondary data
 - Data that is not collected by you.

Types of Data

- Quantitative
 - Numeric
 - A tabulation of attributes or characteristics
 - Typically applied to a population
 - Counts, ranges, measurements
- Qualitative
 - Text-based
 - Describes attributes or characteristics
 - Generally not attributable to a population
 - Interviews, focus groups, observations

Types of Data

- **Public Data**
 - Collected by Governments, Academics
 - Confidential
 - Gold standard
- **Commercial Data**
 - Collected from consumers (clicks & swipes)
 - Triangulated
 - Granular

The Data Process

- **Audit**
 - What's available? What's missing?
- **Collection**
 - Secondary data- existing data resources
 - Primary data- surveys, focus groups, intake forms, visuals
- **Management**
 - Database, cloud, security, legacy, etc.
- **Analysis**
 - Comparative / Longitudinal
- **Reporting / Story-telling**

Analyzing Data

- A number by itself can't tell us much
- We need context for our analysis
- Context provides the data story

- Two primary forms of analysis that provide context
 - Comparative analysis
 - Longitudinal/Trend analysis

Analysis

“The unemployment rate in Vermont is 4.1%”

Great!, Right?

Context is required.

Vermont, other Northern New England States and the U.S.
Unemployment rate



Data Reporting

- You want to tell a compelling story
- Be creative
- You must provide context
- Get to the point
- Keep it simple
- Consider the audience

A data story is not unlike an elevator pitch

Example Report

AT A GLANCE: ABILITYONE SALES

Data Synopsis

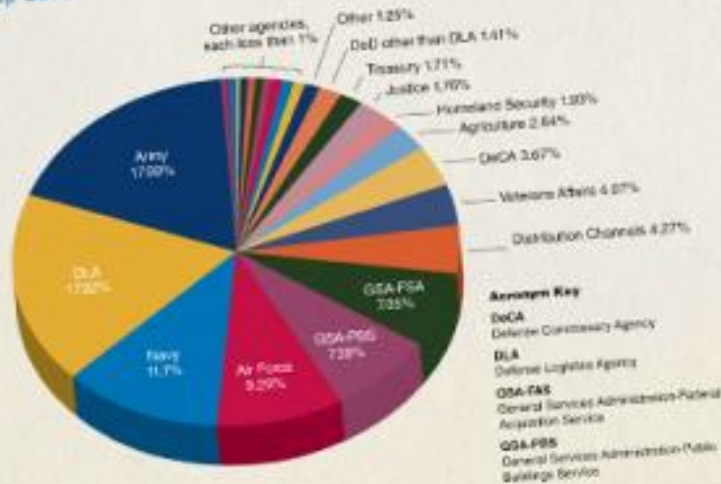
AbilityOne® operates at 1,000 locations nationally, across 40 government agencies, and has a presence at nearly every U.S. military installation. AbilityOne has supported Department of Defense and civilian Federal customers with a variety of products and services for nearly 75 years.

Service sales have increased every year for more than a quarter century. The trend continued in FY2011 with a 8.30 percent increase from 2010 to \$1.85 billion.

Products sales steadily increased in the first half of the last decade, dipped in 2006 and 2007, and increased again every year since the uptick in 2008. Product sales achieved a new Program record in FY2011—\$1.33 billion, an increase of 3.30 percent from 2010.

Combined, AbilityOne product and service sales totaled nearly \$3 billion in FY2011, representing a 5 percent increase from FY2010.

Top Government Agency AbilityOne Sales FY2011



AbilityOne Sales of Products and Services

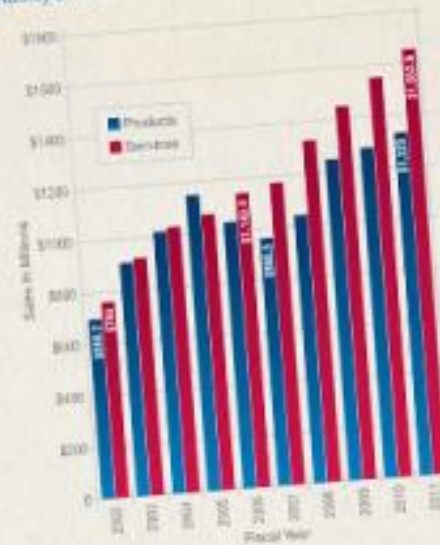


FIGURE 1: AbilityOne Sales of Products and Services, 2005-2011
 SOURCE: AbilityOne Internal Data



Figure 1: The man in the red shirt and white apron is a customer service representative at the Department of Defense. He is standing next to a large industrial machine, possibly a printer or copier, in a well-lit room.

AMBA 10/11

Accessing Data

- Sometimes we will create data
 - When it isn't available
- Most of what we need is out there
 - Finding it is another story...

Common Community Data Points

- **Population**
 - Count, Age, Sex, Race & Ethnicity, Etc.
- **Economy**
 - Unemployment, Median Income, Poverty Rate, Job Counts, Etc.
- **Housing**
 - Owners & Renters, Median Value, Year Built, Etc.
- **Income**
 - Median Income, state/federal assistance, percent of poverty threshold
- **Natural & Built Environment**
 - Roadways, Land Use, Climate Conditions, Etc.

Vermont-Based Data Resources

- Housing: [Vermont Housing Finance Agency](#)
- Employment: [Vermont Department of Labor](#)
- Health: [Vermont Department of Health](#)
- Environment: [Vermont Agency of Natural Resources](#)
- Education: [Vermont Agency of Education](#)
- Youth & Other Topics: [Vermont Insights](#)
- Multiple Topics: [VT State Data Center](#)
- VT Data Resources: [Vermont's Data Landscape](#)

Some Census Bureau Data Resources

- **Business Dynamics Statistics:** [census.gov/ces/dataproducts/bds](https://www.census.gov/ces/dataproducts/bds)
 - Tabulations on establishments, firms, and employment with unique information on firm age and firm size
- **DataFerrett:** dataferrett.census.gov
 - Data from a multitude of programs complex tabulations and business graphics
- **OnTheMap:** onthemap.ces.census.gov
 - Data about where workers are employed and where they live
- **American Factfinder:** factfinder.census.gov
 - Data from selected Census programs

American Factfinder

- The **American Community Survey**- Social-Demographic data
- The **American Housing Survey**- Comprehensive housing survey
- **Annual Economic Surveys**
 - Annual Survey of Manufactures
 - Business Patterns
 - Nonemployer Statistics
- The **Annual Surveys of Governments**- Detailed information about governments' structure, organization, function, finances, and employment.
- The **Census of Governments**- Organization, employment, and finances of all state and local governments.
- The **Commodity Flow Survey**- Data on the movement of goods originating from the United States.
- The **Decennial Census**- Age, sex, race, housing units and more
- The **Economic Census**- U.S. economy by detailed industry and business classification.
- The **Survey of Business Owners**- By industry and by gender, ethnicity, race, and veteran status of owners.
- The **Population Estimates Program**- Estimated population totals

Thank You

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