Introduction to Demographic and Business Data Products and Sources
Census Bureau Geographic Entities

- Nation
- Regions
- Divisions
- States
- Counties
- Census Tracts
- Block Groups
- Blocks
Census Bureau Data Products

• **People and Household Products**
  • Decennial Census
  • American Community Survey
  • Population Estimates
  • Population Projections

• **Business and Industry Products**
  • Economic Census
  • Annual Economic Surveys
People and Household Product Comparison

• **Decennial Census**
  • Actual counts based on limited census data of entire population

• **American Community Survey**
  • Estimates based on extensive survey data from a scientifically selected random sample of the population

• **Population Estimates**
  • Estimates based on past and present data

• **Population Projections**
  • Modeled based on assumptions of trends
Decennial Census
Historic Decennial Census Products

1790-1930
  • Down to county level for entire nation

1940-1960
  • Down to census tract level for select counties

1970-2000
  • Down to census tract level 1970-1980 for entire nation
  • Down to census block level 1990-2000 for entire nation
  • Short Form (100%) – Count 1, STF1, SF1
  • Long Form (Survey) – Count 3, STF3, SF3

2010
  • Short Form Only
  • Long Form replaced with American Community Survey
Decennial Census Variables

- Race
- Ethnicity
- Sex
- Age
- Household Relationship (Family vs. Nonfamily, Married-couple family, Male vs. Female householder)
- Housing Tenure (Own vs. Rent)
Decennial Census Products

- **Redistricting Data Summary File (PL 94-171)**
  - Population counts by race to block level

- **Demographic Profile**
  - All variables down to place level

- **Summary File 1**
  - All variables down to block or census tract level

- **Summary File 2**
  - All variables down to block or census tract level broken down into nearly 300 race-based groups
Decennial Census Products

• Congressional District Summary File
• State Legislative District Summary File
• American Indian and Alaska Native Summary File
• Summary Population and Housing Characteristics Report
• Population and Housing Unit Counts Report
• 2010 Census Briefs
• Special Reports
• Public Use Microdata Sample (PUMS) Files
• Advance Group Quarters Summary File
• Same-Sex Couple Households Summary File
Decennial Census Preparations

• All territories are walked and every address is checked 4 times for those that need to be added or removed

• Addresses are also updated from a variety of sources, such as USPS, utility companies, and government entities

• Up to date addresses of all known living quarters are stored in the Master Address File (MAF)
Decennial Census Data Collection

*Every address in the MAF is:*  
- Mailed a census form  
- If no response, visited by a census taker 5 times at different times of day  
- If no response, neighbor is visited by a census taker  
- April 1 reference date
American Community Survey
ACS Variables

Population Variables

- Marital status
- Birth place, citizenship, entry year
- School enrollment/education attainment
- Ancestry
- Migration
- Language spoken
- Veteran Status
- Disability
- Grandparents as caregivers
- Labor force status
- Place of work, journey to work
- Occupation, industry, class
- Work status
- Income
- Poverty

Housing Variables

- Value of home or monthly rent payment
- Units in structure
- Year structure built
- Number of rooms and number of bedrooms
- Year moved into residence
- Plumbing and kitchen facilities
- Telephone services
- Vehicles available
- Heating fuel
- Farm residence
- Utilities, mortgage, taxes
- Insurance and fuel costs
ACS Data Collection

• Forms mailed at the start of each month

• Currently, 300,000 mailed per month, and 3.5 million mailed per year
ACS Time Period Availability

1-Year Estimates - projections by single years
  • (2005 through 2018)

3-Year Estimates - projections over three years
  • (2005-2007 through 2011-2013)

5-Year Estimates - projections over five years
ACS Time Period Availability

1-Year Estimates- projections by single years
  • (2005 through 2018)

3-Year Estimates- projections over three years
  • (2005-2007 through 2011-2013)

5-Year Estimates- projections over five years
ACS Geographic Availability

<table>
<thead>
<tr>
<th>Population Requirements</th>
<th>1-Year Estimates</th>
<th>3-Year Estimates</th>
<th>5-Year Estimates</th>
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<tbody>
<tr>
<td></td>
<td>Places County Subdivisions</td>
<td>Places County Subdivisions</td>
<td>Census Tracts Census Block Groups</td>
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<tr>
<td>&gt; 65,000 people</td>
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<tr>
<td>&gt; 20,000 people</td>
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<tr>
<td>&lt; 20,000 people</td>
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</table>

**Use multiyear estimates when:**

- No 1-year estimate is available
- Margins of error for 1-year estimates are large
- Analyzing data for small population groups
### ACS Geographic Availability

<table>
<thead>
<tr>
<th>County</th>
<th>2009 Population Estimates</th>
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<tr>
<td>Dallas County, TX</td>
<td>2,451,730</td>
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<td>Cooke County, TX</td>
<td>38,650</td>
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<tr>
<td>Andrews County, TX</td>
<td>14,057</td>
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</table>

<table>
<thead>
<tr>
<th>County</th>
<th>1-Year Estimates</th>
<th>3-Year Estimates</th>
<th>5-Year Estimates</th>
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<tbody>
<tr>
<td>Dallas County, TX</td>
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<td>Cooke County, TX</td>
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<td>Andrews County, TX</td>
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</table>
### ACS Margins of Error

% Bachelor’s Degree or Higher

2005-2009 American Community Survey
5-Year Estimates

<table>
<thead>
<tr>
<th>Texas</th>
<th>Dallas County</th>
<th>City of Dallas</th>
<th>Census Tract 122.04</th>
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<tbody>
<tr>
<td>25.5% +/- 0.2 MOE</td>
<td>27.5% +/- 0.6 MOE</td>
<td>28.3% +/- 0.9 MOE</td>
<td>20.1% +/- 5.3 MOE</td>
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</table>
Population Estimates
Population Estimates

**Demographic components of change**
- Births, deaths, migration

**Estimates by demographic characteristics**
- Age, sex, race

**Down to county level**

**July 1 reference date**
Population Projections
Population Projections

*Population projections by demographics*

- Age, sex, race

*Modeled using the cohort-component method*

- Components of change
  - Fertility, mortality, net migration

- Projected separately
  - For each birth cohort
People and Household Product Use

**Decennial Census**
- Use for population counts

**American Community Survey**
- Use for characteristics of the population and to view trends over time
- Block group

**Population Estimates**
- Use for population counts in intercensal years

**Population Projections**
- Use for future planning
- **County level**
Business and Industry Products

- **Economic Census**
  - Conducted every 5-years
  - Down to county, place, and zip code level

- **Annual Economic Surveys**
  - Various surveys conducted monthly, quarterly, annually, and every 5 years
  - Varies, but usually down to county level
Economic Census Variables

- Number of establishments
- Sales, receipts, revenue, shipments, business done
- Annual payroll
- Number of employees
- Employee wages
Annual Economic Surveys

Annual Capital Expenditures Survey
Annual Public Employment Survey
Annual Retail Trade Survey
Annual Survey of Manufactures
Annual Survey of State and Local Government Finances
Annual Wholesale Trade Survey
Building Permits
Business Dynamics Statistics
Business R & D and Innovation Survey
Consolidated Federal Fund Report
County Business Patterns
Current Industrial Reports
E-Stats (E-Commerce Statistics)
Exports from Manufacturing Establishments
Federal Audit Clearinghouse
Information and Communication Technology Survey
Local Government School System Finance Survey
Medical Expenditure Panel Survey
Nonemployer Statistics
Profile of U.S. Exporting Companies
Service Annual Survey
State Government Tax Collections Survey
State and Local Government Public-Employee Retirement Systems
Statistics of U.S. Businesses
Survey of Construction
Tax Collections
Data Sources
Demographic and Business Data Sources

- Census Bureau FTP Server (Census only)
- Data.census.gov (Census only)
- National Historical GIS (Census only)
- Social Explorer (Census only+)
- IPUMS (Census only)
- SimplyAnalytics (Census and Business)
- Esri Community Analyst and Business Analyst Online (Census and Business)
- Infogroup InfoUSA/ReferenceUSA (Business only)
Data.census.gov Data Products

Decennial Census (2000-2010)
American Community Survey (2005-2017)
Economic Census (2002-2012)

Selected Annual Economic Surveys

- Annual Survey of Manufacturers
- Business Expenses Survey
- Commodity Flow Survey
- County Business Patterns
- Non-employer Statistics
- Survey of Business Owners
National Historical GIS Data Products

Decennial Census (1790-2010)
American Community Survey (2009-2016)
Agricultural Census (1840-1950)
Census of Religious Bodies (1850-1952)
County Business Patterns (1970-2002)
SABINS (School Attendance Boundaries)
Social Explorer Data Products

Decennial Census (1790-2010)
American Community Survey (2005-2016)
Religion Data (1980-2010)
Crime Data (2010-2015)
Health Data (2008-2016)
Environmental Data (2001-2011)
United Kingdom and Canadian Census (2011)
European Statistics Data (1990-2014)
World Development Indicators (1960-2015)
SimplyAnalytics Data Products

Census Data
Consumer Expenditure
Business Counts
Market Segments
Quality of Life
Consumer Price Index
Retail Sales
Sales Potential

Claritas PRIZM
SimmonsLOCAL
Business Points
## Esri Community Analyst Data Products

<table>
<thead>
<tr>
<th>Category</th>
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<tr>
<td>Esri Demographics (2010/15, 2011/16)</td>
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<td>Decennial Census (1990-2010)</td>
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<td>Consumer Spending</td>
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<td>Crime Indices</td>
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<td>Death Measures</td>
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<td>EPA Enforcement</td>
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<td>Supplemental Security Income</td>
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<td>Food Consumption</td>
<td>Tapestry Segmentation</td>
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<td>Food Stamps</td>
<td>Traffic Counts</td>
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InfoUSA/ReferenceUSA Data Products

- US Businesses (14 million businesses)
- US New Businesses (4 million businesses)
- US Standard White Pages (89 million residents)
- US Healthcare (855,000 physicians and dentists)
- US Consumers/Lifestyles (203 million consumers)
- US New Movers/Homeowners (300,000 weekly)
# Data Sources Export Comparison

<table>
<thead>
<tr>
<th>Tabular Data</th>
<th>Data Sources</th>
<th>NHGIS</th>
<th>Social Explorer</th>
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Census GIS Products

**TIGER/Line Shapefiles**
- Full geographic detail
- Extensive attributes

**Shapefiles with Demographic Data**
- 2010
- Selected variables from SF1 Demographic Profile, including total population, total housing units, median age, population 16 and over, population 65 and over, race, relationship, average household size, etc.

**Cartographic Boundary Files**
- Generalized geographic detail (1:500k, 5m, 20m) with accurate coastlines
- Limited attributes

**Keyhole Markup Language (KML)**
- 2010
- For use in Google Earth