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Introduction to  
**Demographic and Business  
Data Products and Sources**



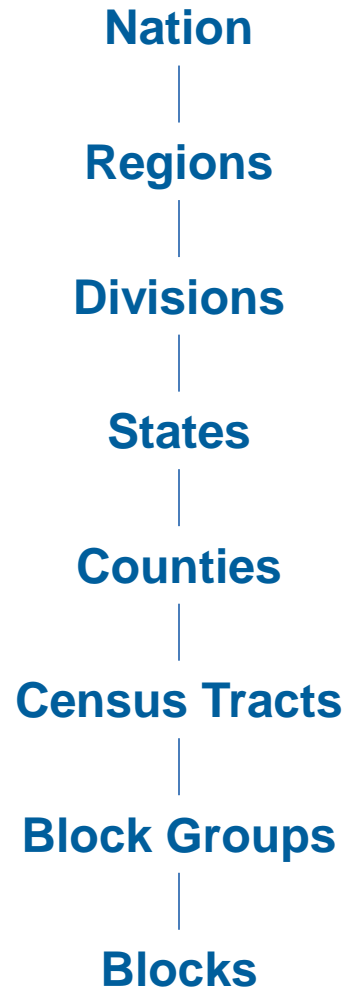
**RICE**

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# Census Geographic Entities

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# Census Data Products

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## 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

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## 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

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## 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

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- Race
- Ethnicity
- Sex
- Age
- Household Relationship
- Housing Tenure (Own vs. Rent)

# Decennial Census Products

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## 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

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**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

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- 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

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## 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

# — American Community Survey —

# ACS Variables

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## 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 Time Period Availability

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## 1-Year Estimates

(2005, 2006, 2007, 2008, 2009, 2010, 2011)

## 3-Year Estimates

(2005-2007, 2006-2008, 2007-2009, 2008-2010, 2009-2011\*)

## 5-Year Estimates

(2005-2009, 2006-2010, 2007-2011\*)

# ACS Geographic Availability

Population Requirements	1-Year Estimates	3-Year Estimates	5-Year Estimates
	Places County Subdivisions	Places County Subdivisions	Census Tracts Census Block Groups
> 65,000 people	x	x	x
> 20,000 people		x	x
< 20,000 people			x

## 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

2009 Population Estimates	
Dallas County, TX	2,451,730
Cooke County, TX	38,650
Andrews County, TX	14,057

	ACS 1-Yr Estimate: 2009	ACS 3-Yr Estimate: 2007-2009	ACS 5-Yr Estimate: 2005-2009
Dallas County	X	X	X
Cooke County		X	X
Andrews County			X



# ACS Margins of Error

## % Bachelor's Degree or Higher 2005-2009 American Community Survey 5-Year Estimates

Texas	Dallas County	City of Dallas	Census Tract 122.04
25.5% +/- 0.2 MOE	27.5% +/- 0.6 MOE	28.3% +/- 0.9 MOE	20.1% +/- 5.3 MOE

# ACS Data Collection

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- Forms mailed at the start of each month
- Currently, 250,000 mailed per month
- Currently, 3 million mailed per year

# Population Estimates

# Population Estimates

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## **Population Estimates**

### **Demographic components of change**

- Births, deaths, migration

### **Estimates by demographic characteristics**

- Age, sex, race

### **Down to county level**

### **July 1 reference level**

# Population Projections

# Population Projections

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## 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

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## Decennial Census

- Use for population counts

## American Community Survey

- Use for characteristics of the population and to view trends over time

## Population Estimates

- Use for population counts in intercensal years

## Population Projections

- Use for future planning

# Business and Industry Products

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## 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

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

# Annual Economic Surveys

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[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

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- Census Bureau FTP Server (Census only)
- American FactFinder (Census only)
- National Historical GIS (Census only)
- Social Explorer (Census only)
- SimplyMap (Census and Business)
- Esri Community Analyst and Business Analyst Online (Census and Business)
- Infogroup InfoUSA/ReferenceUSA (Business only)

# American FactFinder Data Products

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**Decennial Census (2000-2010)**

**American Community Survey (2005-2011)**

**Economic Census (2002-2007)**

**Population Estimates (2009)**

**Selected Annual Economic Surveys**

- Annual Survey of Manufacturers
- Business Expenses Survey
- Commodity Flow Survey
- County Business Patterns
- Nonemployer Statistics
- Survey of Business Owners



# National Historical GIS Data Products

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**Decennial Census (1790-2010)**


**American Community Survey (2010)**

**Agricultural Census (1840-1950)**

**Census of Religious Bodies (1950-1952)**

**County Business Patterns (1970-2002)**

**SABINS (School Attendance Boundaries)**



**NHGIS** National Historical  
Geographic Information System

# Social Explorer Data Products

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**Decennial Census (1790-2010)**

**American Community Survey (2005-2010)**

**Religion – RCMS data (1980-2000)**

**Religion – InfoGroup data (2009-2010)**



# SimplyMap Data Products

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**Census Data**

**Consumer Expenditure**

**Business Counts**

**Market Segments**

**Quality of Life**

**Consumer Price Index**

**Retail Sales**

**Sales Potential**

**MRI Consumer Survey**

**Claritas PRIZM**

**SimmonsLOCAL**

**Points of Interest**

The logo for SimplyMap 2.0 beta, featuring the text "SimplyMap" in a white sans-serif font on a dark blue rectangular background, with "2.0 beta" in a smaller font size to the right.



# Esri Community Analyst Data Products

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## Esri Demographics (2010/15, 2011/16)

Access to Care

Adult Preventive Services Use

American Community Survey

Birth Measures

Building Permits

Business Locations (BAO only)

Business Summary

Decennial Census (1990-2010)

Consumer Spending

Crime Indices

Death Measures

EPA Enforcement

Food Access

Food Consumption

Food Stamps

Health Insurance

Health Status

Housing Affordability

HUD Income Limits

HUD Subsidized Households

Infant Mortality

Infectious Disease Cases

Major Shopping Centers

Map Data (BAO only)

Market Potential

Poverty

Retail MarketPlace

Risk Factors for Premature Death

Supplemental Security Income

Tapestry Segmentation

Traffic Counts

Esri Community Analyst

Esri Business Analyst Online

# InfoUSA/ReferenceUSA Data Products

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**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

	American FactFinder	Social Explorer	National Historical GIS	SimplyMap	Census Bureau FTP
<b>TABULAR DATA</b>					
<b>Presentation Ready Formats</b>					
Microsoft Excel (.xls)	x	x		x	
Portable Document Format (.pdf)	x				
Rich Text Format (.rtf)	x				
<b>Database Compatible Formats</b>					
Database File (.dbf)				x	
Comma delimited text (.csv)	x	x	x	x	x
Tab delimited text (.txt)		x			
SAS (.sas)		x	x		
SPSS (.sps)		x	x		
STATA (.dct and .do)		x	x		
<b>MAP DISPLAYS</b>					
<b>Presentation Ready Formats</b>					
Microsoft PowerPoint (.ppt)		x			
Portable Document Format (.pdf)	x			x	
JPEG Image (.jpeg)	x				
PNG Image (.png)		x			
GIF Image (.gif)				x	
<b>GIS Compatible Formats</b>					
Shapefiles (.zip)	x		x	x	

# Census GIS Products

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## TIGER/Line Shapefiles

- 2007-2012
- 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