

Digital Transformation @uscensusbureau

Bringing Census Data
Into the 21st Century

Background

Executive Staff tasked the Communications and IT Directorates to leverage the success and innovations achieved with 2010Census.gov across Census.gov. In late FY2011, contracts were awarded and funding was added to existing contracts all to support work related to:

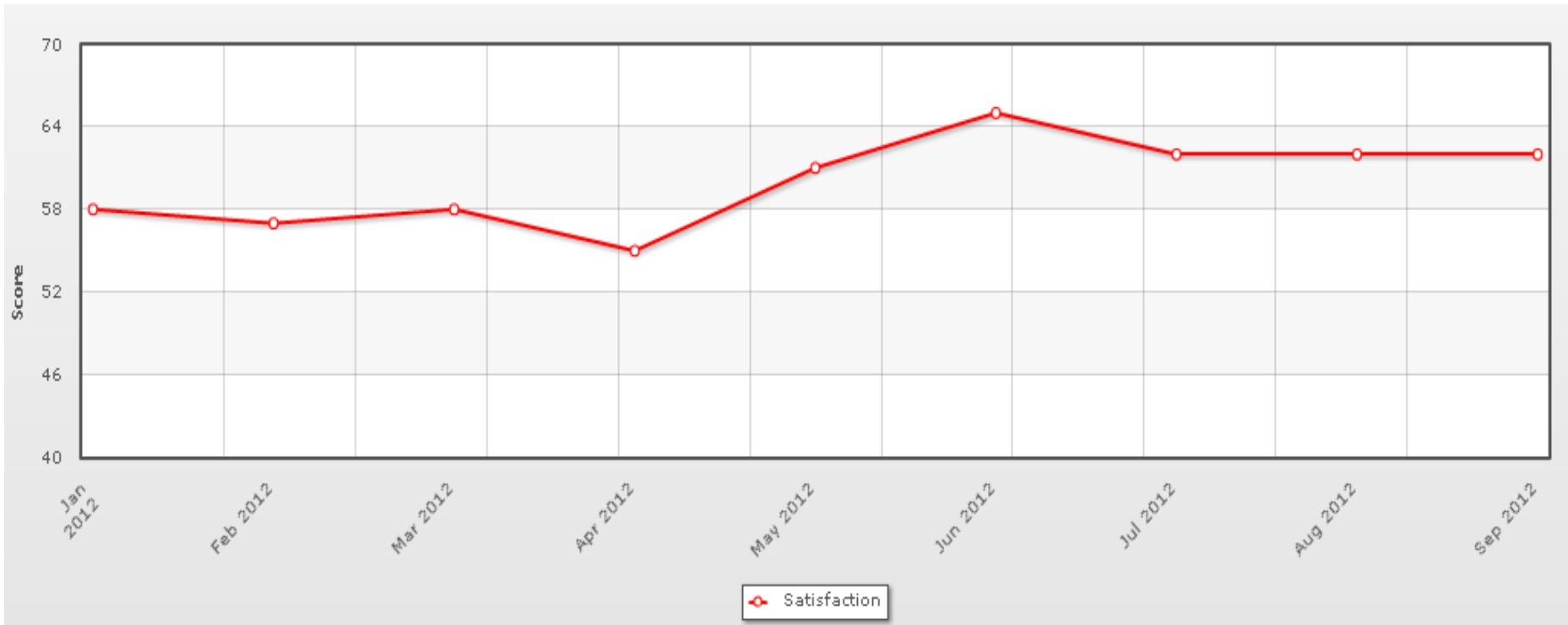
- Mobile apps and web content conversion
- Interactive web apps and videos
- Census.gov redesign including look & feel, search, navigation, and analytics
- Online advertising and search engine marketing

A joint project was established with COM and IT to lead the transformation.

Project Goals:

- Increase Customer Satisfaction
- Improve Access to Census Statistics
- Increase Awareness of Census Statistics

Customer Satisfaction Rates





“Government agencies must enable the public, entrepreneurs and our own government programs to better leverage the rich wealth of federal data (and help) serve to unlock the power of government data, spur innovation, and thereby improve the quality of services for the American people.”

DIGITAL GOVERNMENT: **BUILDING A 21ST CENTURY PLATFORM**

New Digital Strategy

Building a 21st Century Platform to better serve the American People

Information-Centric

Making Open Data, Content, and Web API's the New Default. Facilitating content through Open APIs making data assets freely available for use within and between agencies, private sector, and citizens.

Customer-Centric

Using Modern tools, and technologies, to understand customer satisfaction and needs. Improving priority customer-facing services for mobile use
Measuring performance and customer satisfaction to improve services delivery

Shared Platform

Identifying Content Management System solutions and supporting implementation through training and best practices. Enabling code sharing and modular development

Security and Privacy

Adopting of new technology that will enable safety and security of our data

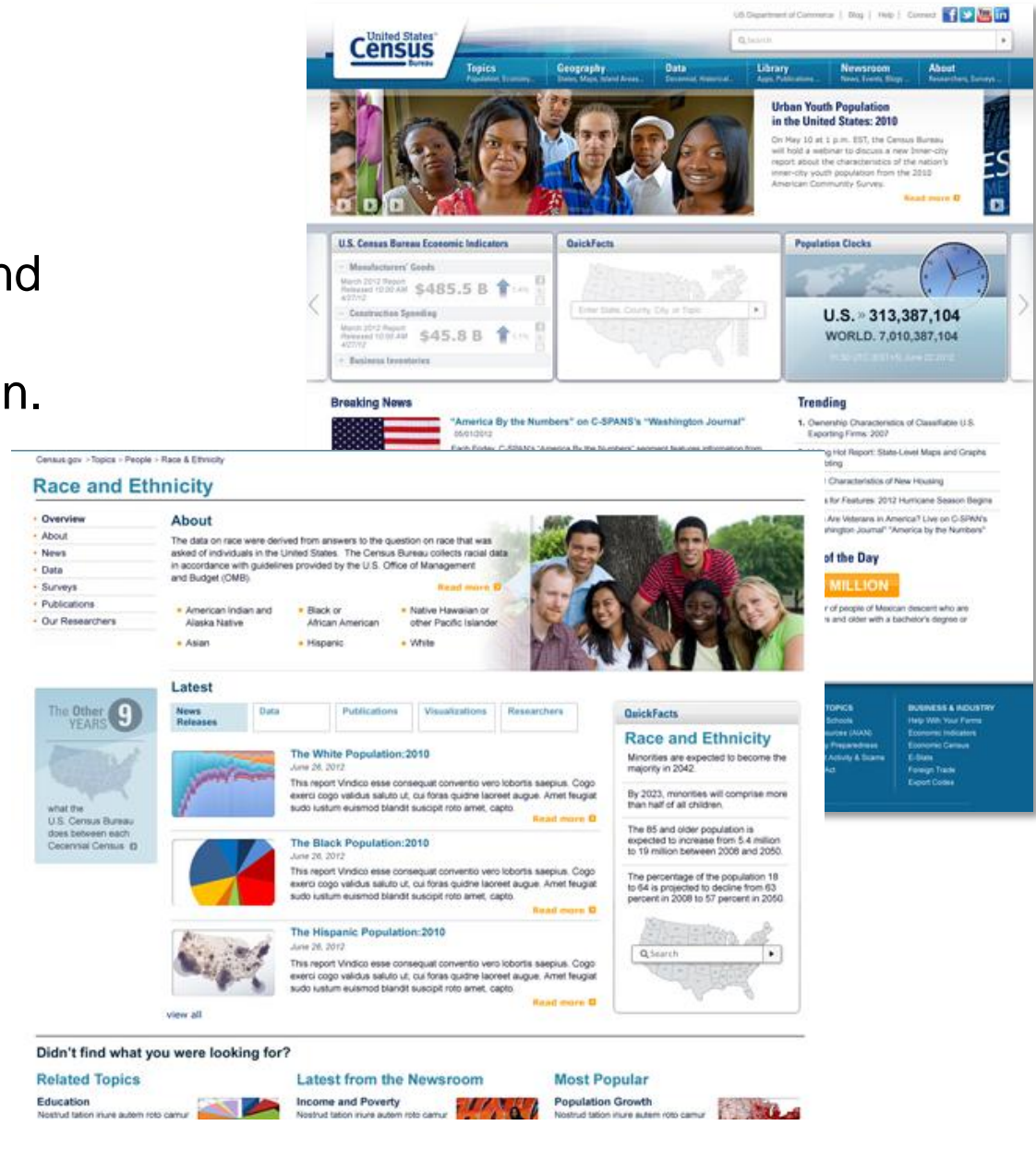
*Building for the future requires us to think beyond programmatic lines.
To keep up with the pace of change in technology and produce better content and data*

Creating a New Platform

- Transform Census.gov (Web)
- Mobile access – server and apps (Mobile)
- Build new rich media tools (Interactive)
- Implement Search Strategy
- Open Data through APIs
- Implementing Personalization and Context with Content Management System
- Build Content Strategy and Integration

Redesign: Visual Design

- New Census.gov website
- Redesign look and feel
- Research driven design
- Improve user experience and navigation
- Theme-based top navigation.



Theme-Based Navigation

- Based on most frequently searched terms on search engines.
- Matches some of the most frequently searched and accessed statistics on census.gov.
 - Population
 - Economy
 - Business
 - Education
 - Employment
 - Energy & Environment
 - Families & Living Arrangements
 - Foreign Trade
 - Government
 - Health
 - Housing
 - Income & Poverty
 - Transportation

Census.gov > Topics > People > Race & Ethnicity

Race and Ethnicity


- Overview
- About
- News
- Data
- Surveys
- Publications
- Our Researchers

About

The data on race were derived from answers to the question on race that was asked of individuals in the United States. The Census Bureau collects racial data in accordance with guidelines provided by the U.S. Office of Management and Budget (OMB).


[Read more](#)

- American Indian and Alaska Native
- Black or African American
- Native Hawaiian or other Pacific Islander
- Asian
- Hispanic
- White



Latest

- News Releases
- Data
- Publications
- Visualizations
- Researchers




The White Population: 2010

June 26, 2012

This report Vindico esse consequat convelto vero lobortis saepius. Cogo exerci cogo validus saluto ut, qui foras quidne laoreet augue. Amet feugiat sudo iustum euismod blandit suscipit roto amet, capto.

[Read more](#)




The Black Population: 2010

June 26, 2012

This report Vindico esse consequat convelto vero lobortis saepius. Cogo exerci cogo validus saluto ut, qui foras quidne laoreet augue. Amet feugiat sudo iustum euismod blandit suscipit roto amet, capto.

[Read more](#)



The Hispanic Population: 2010

June 26, 2012

This report Vindico esse consequat convelto vero lobortis saepius. Cogo exerci cogo validus saluto ut, qui foras quidne laoreet augue. Amet feugiat sudo iustum euismod blandit suscipit roto amet, capto.

[Read more](#)

[view all](#)

Quick Facts


Race and Ethnicity

Minorities are expected to become the majority in 2042.

By 2023, minorities will comprise more than half of all children.

The 65 and older population is expected to increase from 5.4 million to 19 million between 2008 and 2050.

The percentage of the population 18 to 64 is projected to decline from 63 percent in 2008 to 57 percent in 2050.




Didn't find what you were looking for?

Related Topics

Education


Nostrud tation inure autem roto camur



Latest from the Newsroom

Income and Poverty


Nostrud tation inure autem roto camur



Most Popular

Population Growth

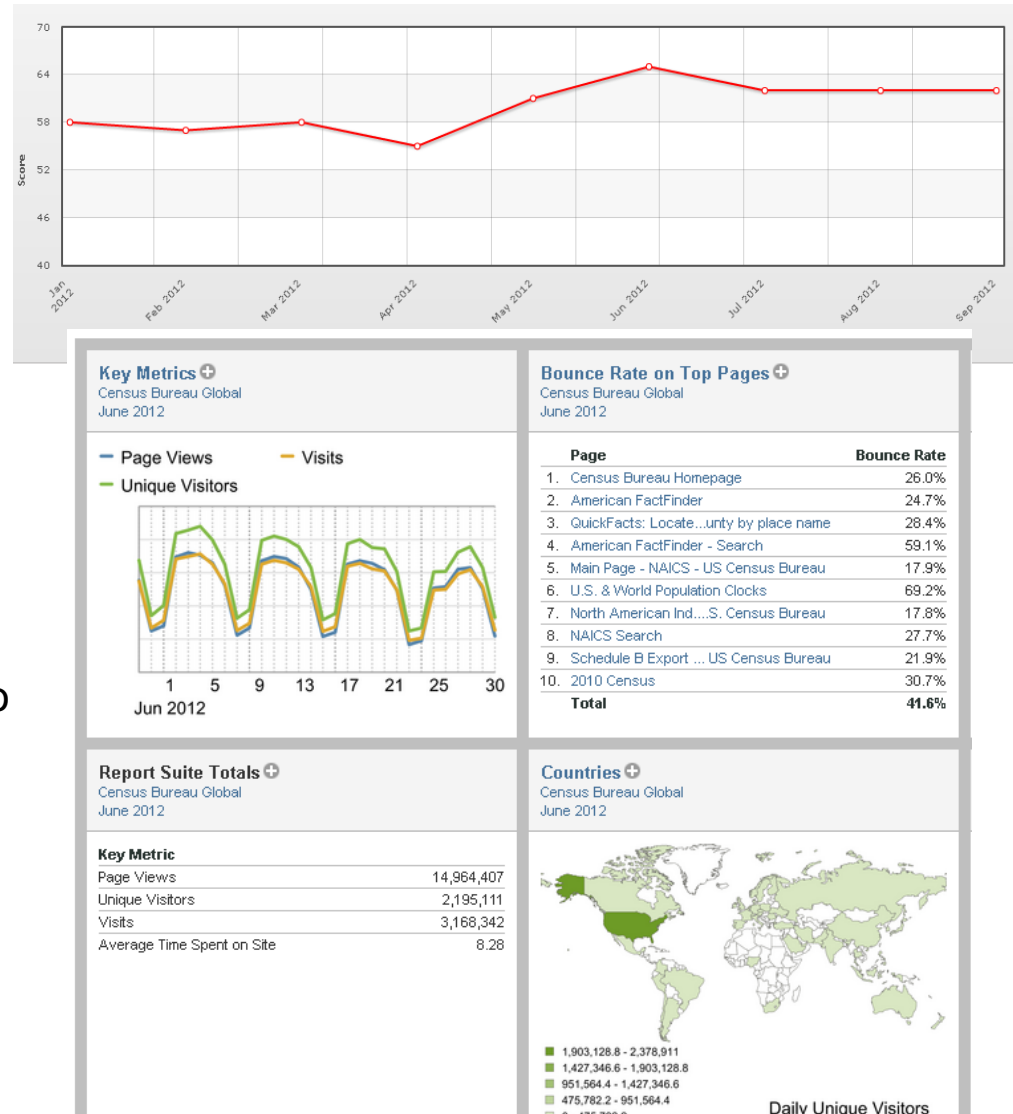
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Web Analytics

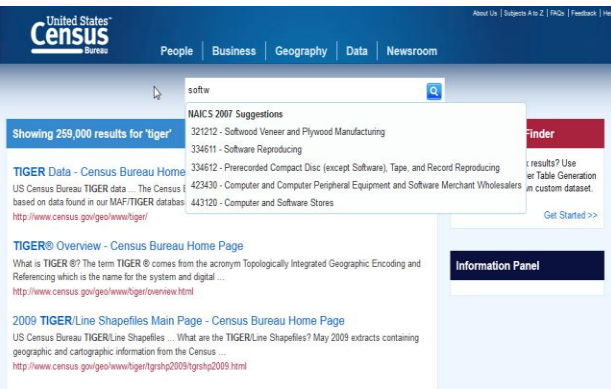
Highlights:

- Procured Site Catalyst as web analytics solution – global view of behavior.
- Initiated Foresee ‘Session Replay’.
- Held Analytics Workshop with HQ staff.
- Purchased social media and sentiment analysis tools.
- Established Customer Feedback team to integrate and analyze metrics across channels.



Search Strategy

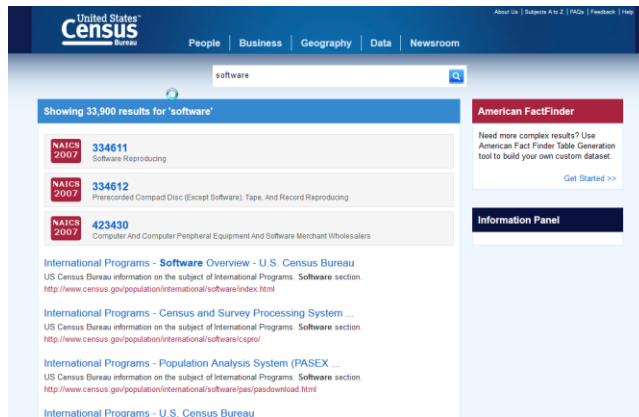
Filtered Type Ahead



Results before Searching



Type Ahead/NAICS Integration



Answers within Results



APIs

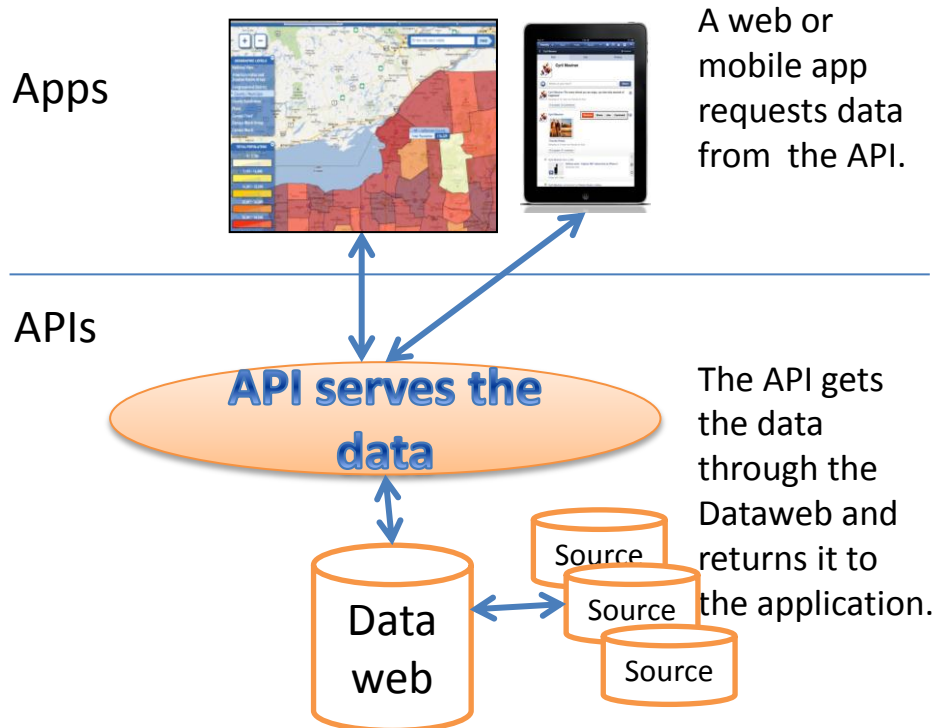
Open Data

Building APIs to encourage access and ease application development

- API: Application Programming Interface
- Provides all the building blocks for developing programs with ease.
- Developers can access a small portion of the data – no need to download, process, and store it themselves.
- APIs available from other sources:
 - have limited data and geography
 - frequently access old data
 - are not always free
 - have usage restrictions

Census Bureau API

How the API Works



- APIs spur innovation. Developers can more easily create their own applications. This lets citizens use our statistics in new ways, thereby maximizing their value.
- APIs empower third parties with niche markets that demand specific applications that fall outside the scope of an agency's budget and services to accommodate those needs.
- Aligns closely with the new Digital Government Strategy aimed at building a 21st century government that works better for the American people.
- Data are available across geographies for selected 2010 Census and ACS data sets. Developers can access a small portion of the data – no need to download, process, and store it themselves.

API Website

- www.census.gov/developers

- Technical documentation
- Example code
- Applications
 - Example: using age data
 - Cornell University poverty map application

The screenshot shows the 'Accessing Data with APIs' page on the U.S. Census Bureau website. The header includes the 'United States Census Bureau' logo and navigation links for People, Business, Geography, Data, Research, and Newsroom. A search bar is also present. The main content area is titled 'Accessing Data with APIs' and includes a breadcrumb trail: Main > Data Sets > Geography > App Gallery. On the left, a sidebar contains links to the 'Developer Forum' and 'Using the API' section, which includes links for 'Examples and Supported Geography' and 'Request a Key'. The main content area features a 'Census Bureau APIs' section with an introduction, a 'Terms of Service' link, and an 'Accessing Data' section. The 'Accessing Data' section explains that data is accessible via a stateless HTTP GET request and provides three examples of request URLs for 2010 Census SF1 data, ACS 2010 5 Year data for California and New York, and ACS 2010 5 Year data for Gross Rent as a Percentage of Household Income. A '2010 Census SF1 white population of 12 year olds in Alabama' example is also provided. A 'Query Response' section states that the response is a two-dimensional JSON array.

United States[™]
Census
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Home | About Us | Subjects A to Z | FAQs | Help

People | Business | Geography | Data | Research | Newsroom

You are here: [Census.gov](#) > [Census Bureau Developer APIs](#)

Accessing Data with APIs

Main | Data Sets | Geography | App Gallery

Developer Forum

Join our [Developer Forum](#) to submit questions, provide feedback, and share ideas to help the Census Bureau as it makes data available through APIs.

Using the API

[Examples and Supported Geography](#)
[Request a Key](#)

Census Bureau APIs

To improve access to data and encourage innovation, the Census Bureau has begun to provide API access to some data sets, beginning with the 2010 Census Summary File 1 and the 2010 American Community Survey (five year data). We invite developers to use these beta APIs, join our Developer Forum, and provide feedback to help us move forward with continued API development.

Please read the [Terms of Service](#) for using the API.

Accessing Data

Data is accessible to software developers through a stateless HTTP GET request. In order to access data, you will need to insert a key into the request URL in order for query results to be returned. If you do not have a key assigned to you, you will be directed to the Request a Key page where you can register for one.

Here is an example of the request URL for 2010 Census SF1 data that has an assigned key inserted:

`http://thedataweb.rm.census.gov/data/2010/sf1?key=b48301d897146e8f8efd9bef3c6eb1fcb864cf&get=P0010001_NAME&for=state.*`

Here is an example of the request URL for ACS 2010 5 Year data for Total Population for California and New York:

`http://thedataweb.rm.census.gov/data/2010/acs5?key=b48301d897146e8f8efd9bef3c6eb1fcb864cf&get=B02001_001E_NAME&for=state:06,36`

Here is an example of the request URL for ACS 2010 5 Year data for Gross Rent as a Percentage of Household Income, 10.0 to 14.9 percent for all counties in CA:

`http://thedataweb.rm.census.gov/data/2010/acs5?key=b48301d897146e8f8efd9bef3c6eb1fcb864cf&get=B25070_003E_NAME&for=county:*&in=state:06`

2010 Census SF1 white population of 12 year olds in Alabama

`http://thedataweb.rm.census.gov/data/2010/sf1?key=[user key]&get=PC012A015_PC012A119&for=state:01`

Query Response

The response for all queries is formatted as a two dimensional JSON array where the first row provides column names and subsequent rows provide data values.

Age Finder

Select State

California

Optional:

Refine by County or Place

☐ County ☒ Place

Cupertino city

Select Criteria

RACE:

- ☒ White
- ☒ Black or African American
- ☒ American Indian and Alaska Native
- ☒ Asian
- ☒ Native Hawaiian and Other Pacific Islander
- ☒ Some Other Race
- ☒ Two or More Races

ETHNICITY: (Optional)

- ☐ Not Hispanic or Latino Population

AGE RANGES:

- ☒ 0 to 5
- ☒ 6 to 17
- ☐ 18 to 64
- ☒ 65 to 99
- ☐ 100+
- ☒ Custom Range* to

Display Data

Clear Filters

*Selecting age of 100 returns ages 100 and above.

California: Cupertino city

| | Persons 0 to 5 | | Persons 6 to 17 | | Persons 65 to 99 | | Persons 13 to 18 | |
|--|-------------------|--------|--------------------|--------|---------------------|--------|---------------------|--------|
| | Male | Female | Male | Female | Male | Female | Male | Female |
| White | 374 | 337 | 1,202 | 1,123 | 1,992 | 2,662 | 664 | 631 |
| Black or African American | 10 | 7 | 27 | 38 | 13 | 17 | 15 | 22 |
| American Indian and Alaska Native | 12 | 13 | 13 | 11 | < 3 | 9 | 11 | 4 |
| Asian | 1,582 | 1,470 | 4,390 | 4,157 | 1,055 | 1,392 | 1,962 | 1,759 |
| Native Hawaiian and Other Pacific Islander | < 3 | 3 | 5 | 6 | 3 | < 3 | < 3 | < 3 |
| Some Other Race | 19 | 21 | 93 | 96 | 9 | 24 | 49 | 31 |
| Two Or More Races | 141 | 180 | 374 | 369 | 44 | 42 | 153 | 170 |

* Source: 2010 Census

Mobile Applications

Mobile App: "America's Economy"

Provides the latest data for the principal federal economic indicators, including BEA and BLS, which allows businesses to have this information at their finger tips when making important decisions everyday.

- Available in both Android and Apple stores on smartphones and tablets.
- Featured in New and Noteworthy Section of iTunes.
- About 45,000 downloads in first month.



Mobile Apps: “Dwellr”

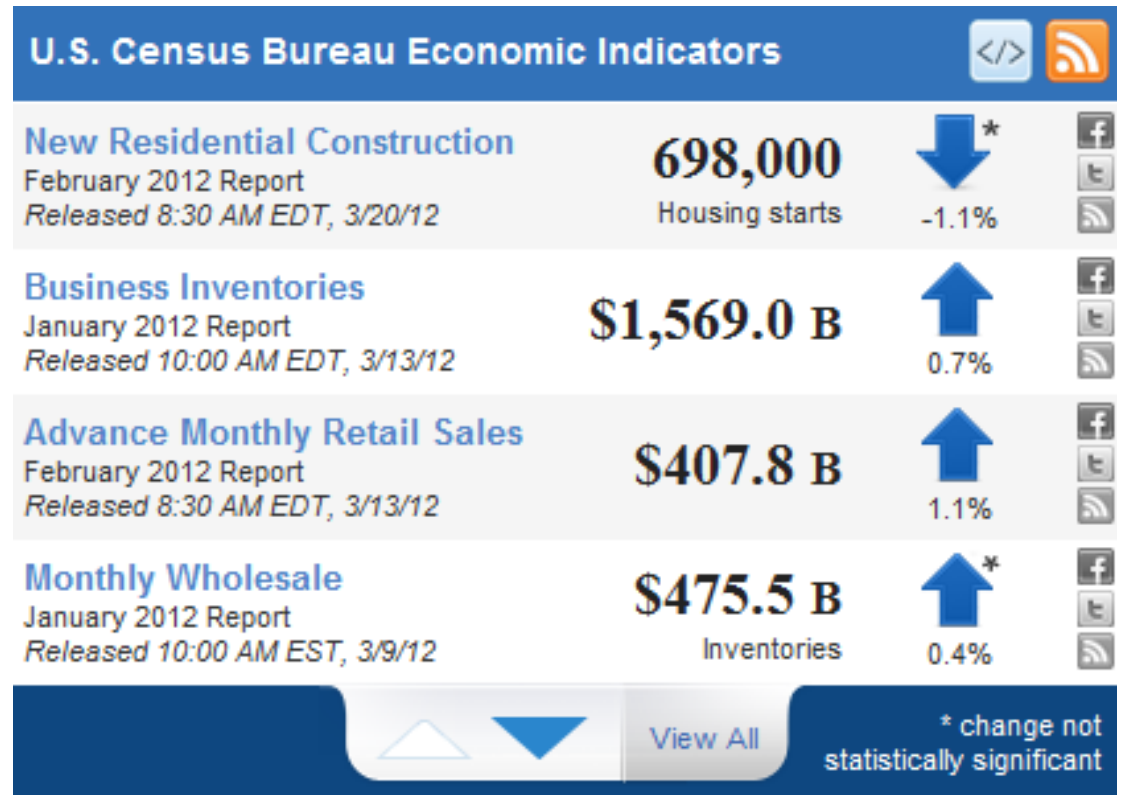
Uses mobile app user’s demographics, occupation , and lifestyle preferences to determine places around the U.S. that would, in theory, be appealing to them... their “place to dwell.”



Web Applications

Economic Indicator Dashboard

- Expand the current dashboard to include additional features and data access.
- Improve charting functionality within CIDR.
- Revamp the briefing room Web site with new templates and added features.

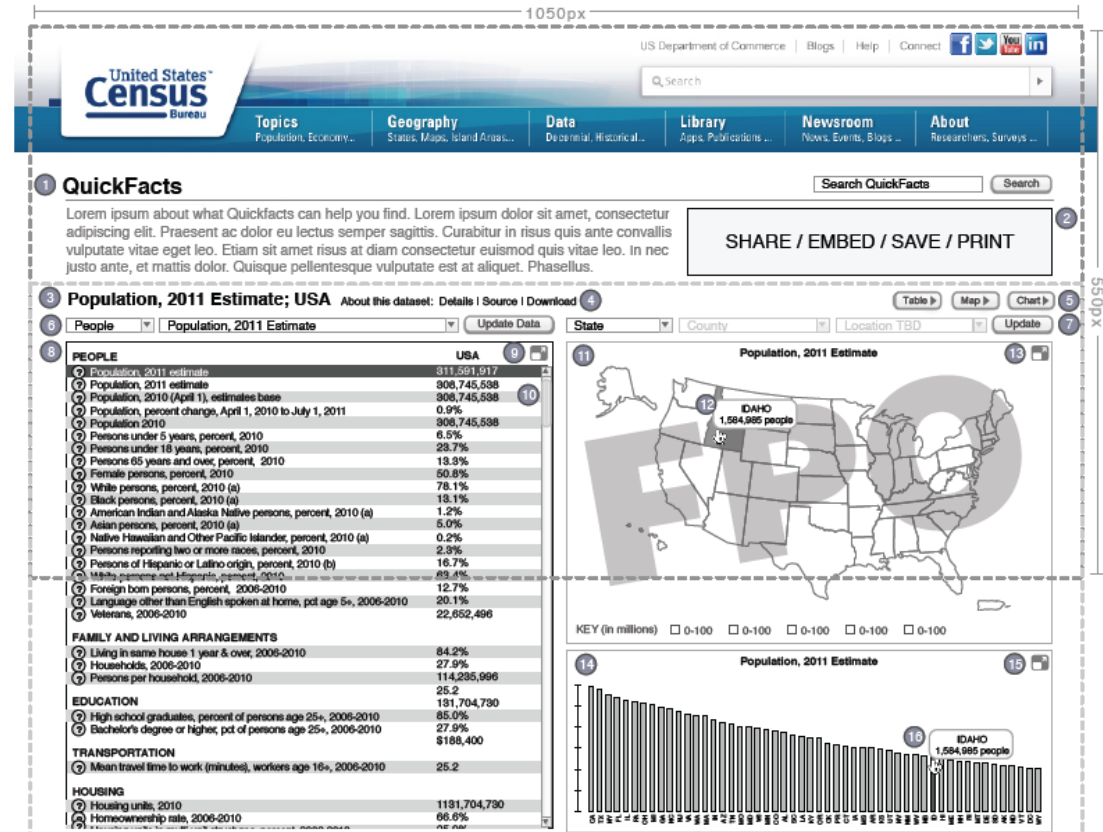


QuickFacts

- Easy access to statistics about any given place, county or state.
- Added graphs and charting features.
- Data visualizations.

QuickFacts Wireframes, Version 3.0
9.6.2012
DRAFT

QuickFacts: Landing Page

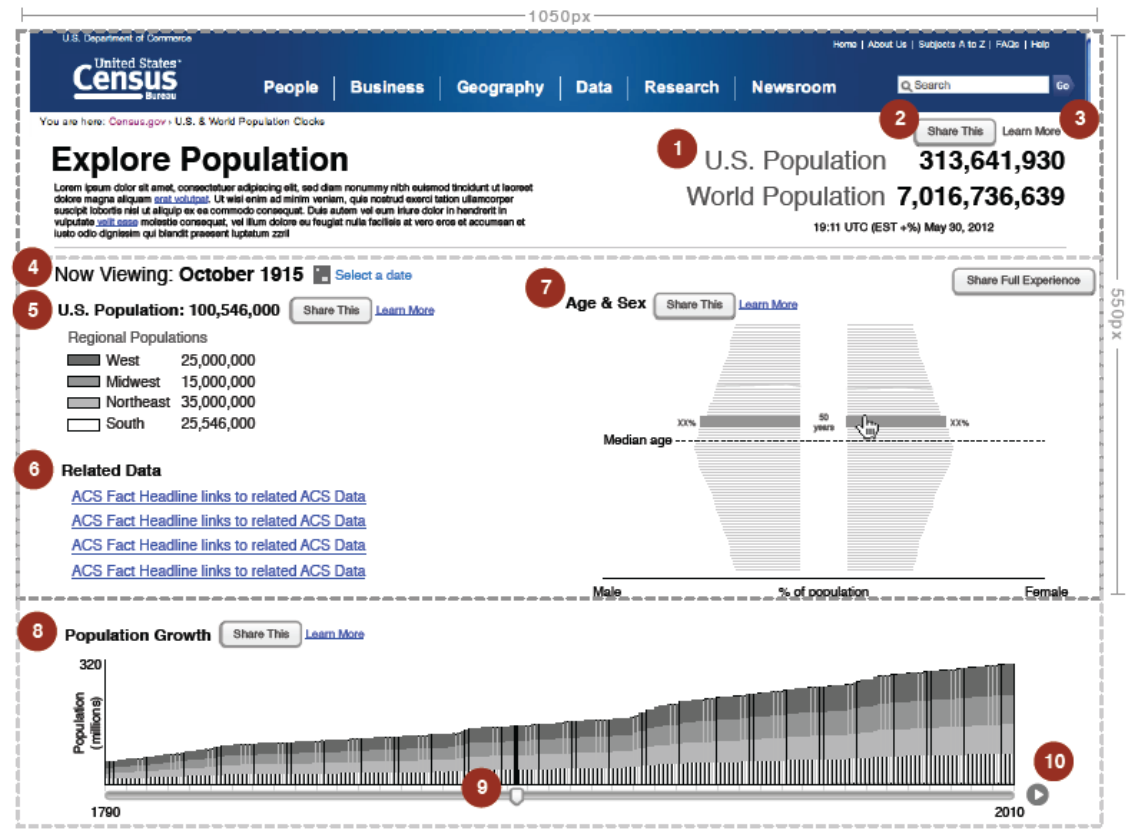


Population Clock

Pop Clock Wireframes, Version 8.0
8.17.2012

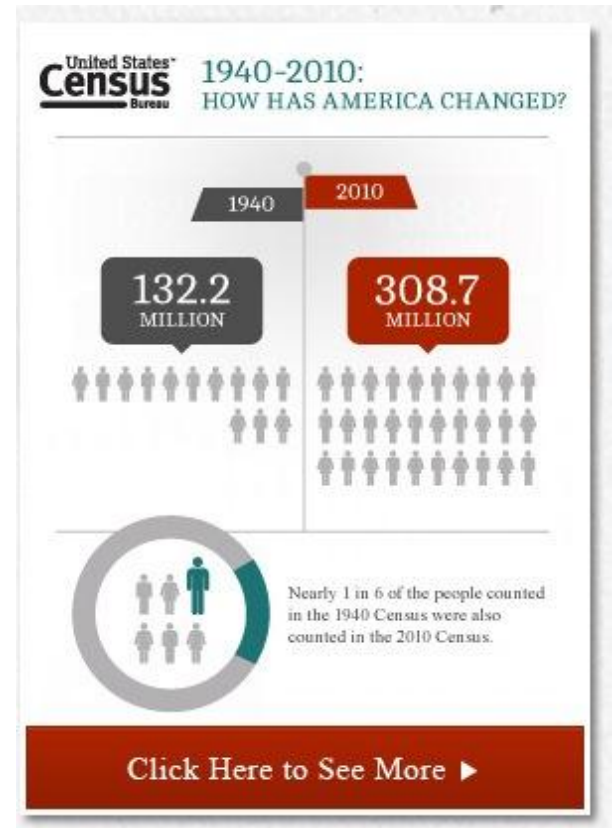
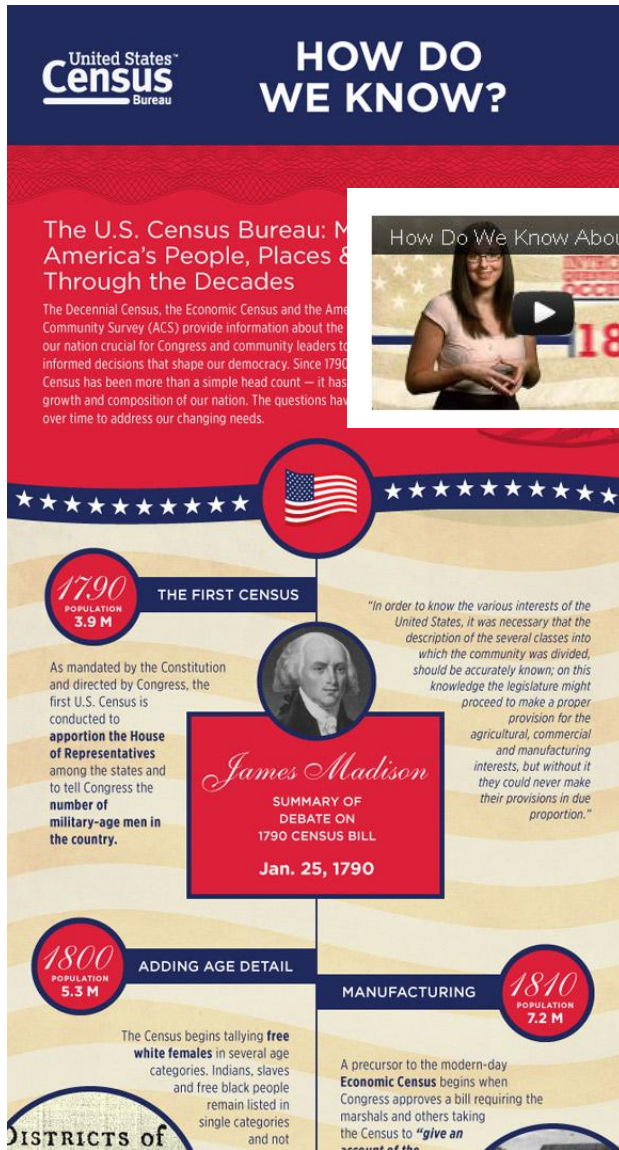
PopClock Landing Page

- One of most popular pages on census.gov.
- Enhance functionality to add interaction, embed capabilities, and other features to offer a richer user experience.



Infographics/Video

- Ongoing “How Do We Know Campaign”
- 1940 Census infographics shared on Yahoo!, Wash Post, others



High-Level Timeline

July 2012

- Launch API

August 2012

- America's Economy Mobile Application (Android and Apple smartphones and tablets)

September 2012

- Mobile Conversion of Homepage, Economic Indicators, QuickFacts, Pop Clock, stat of the day
- Launch “Dwellr”, Mobile App No. 2
- Launch Popclock Web Application
- Social media monitoring tool live
- Final Redesign Census.gov page HTML templates delivered for content migration.

October 2012

- Search Improvements – Phase 1
- Launch “Dwellr”, Mobile App No. 2
- Launch Popclock Web Application

November 2012

- Launch “We The People” – Mobile Applications No. 3

December 2012

- Econ Dashboard – Phase 2

February 2013

- First release of redesign Census.gov web pages in CMS

March 2013

- Launch New QuickFacts