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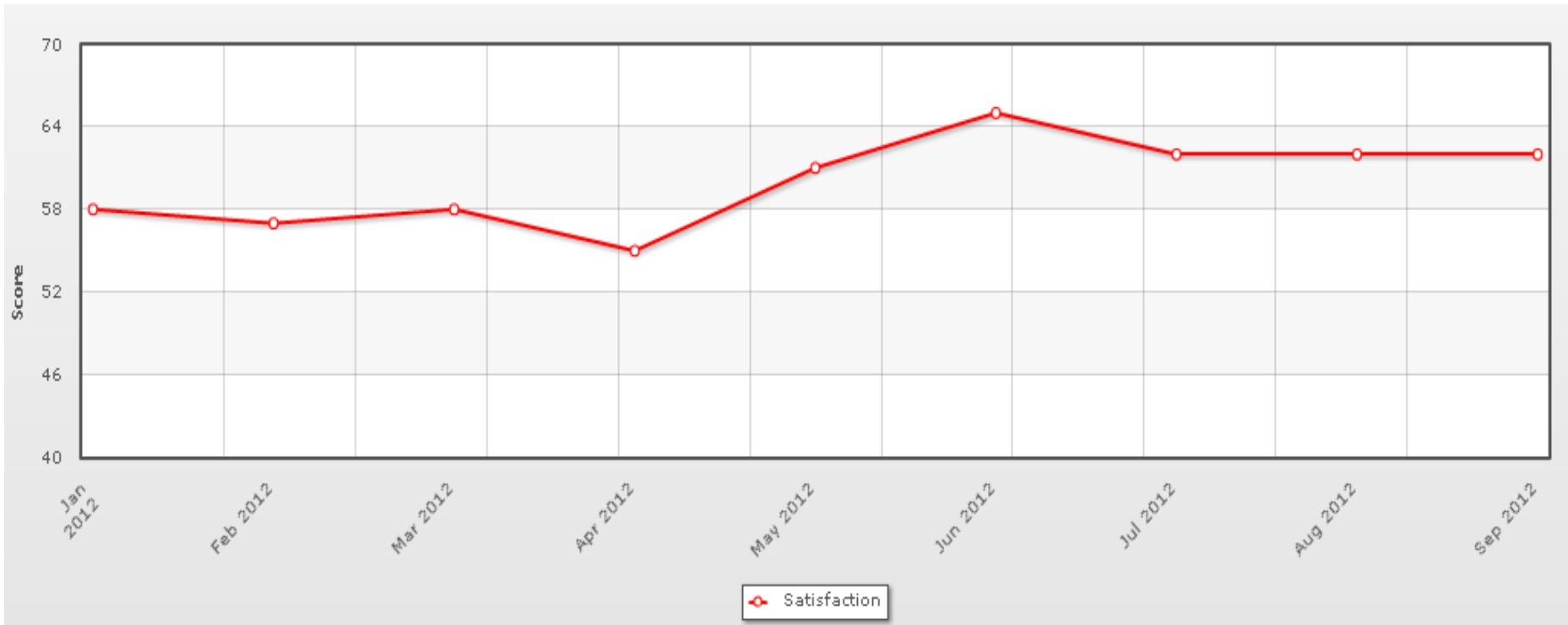
"Government agencies must enable the public, entrepreneurs and our own government programs to better leverage the rich wealth of federal data (and help) serve to unlock the power of government data, spur innovation, and thereby improve the quality of services for the American people."

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 section, 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.
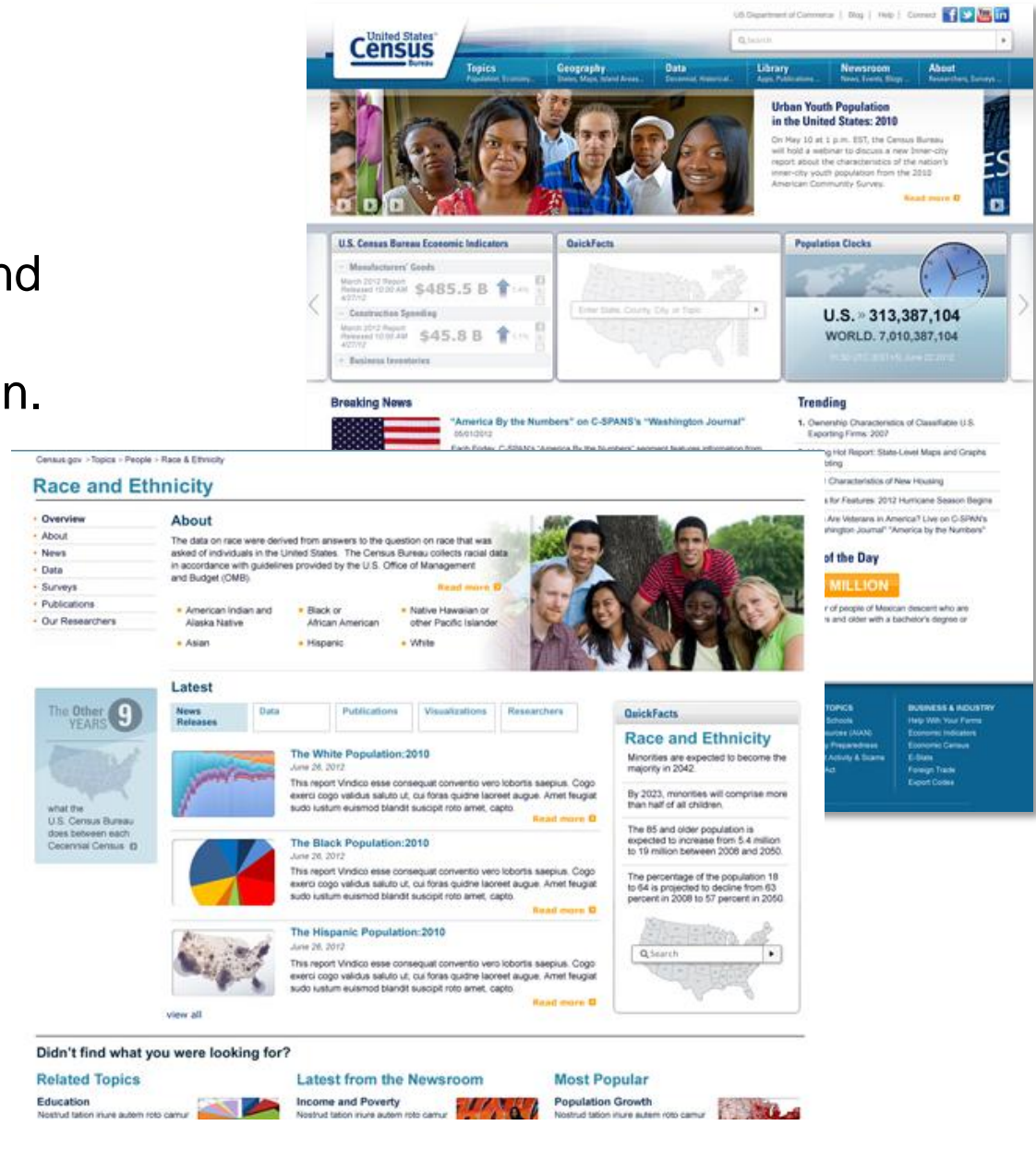
Theme-Based Navigation

- 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

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.

Key Metrics ⊕
Census Bureau Global
June 2012

— Page Views   — Visits
— Unique Visitors

Bounce Rate on Top Pages ⊕
Census Bureau Global
June 2012

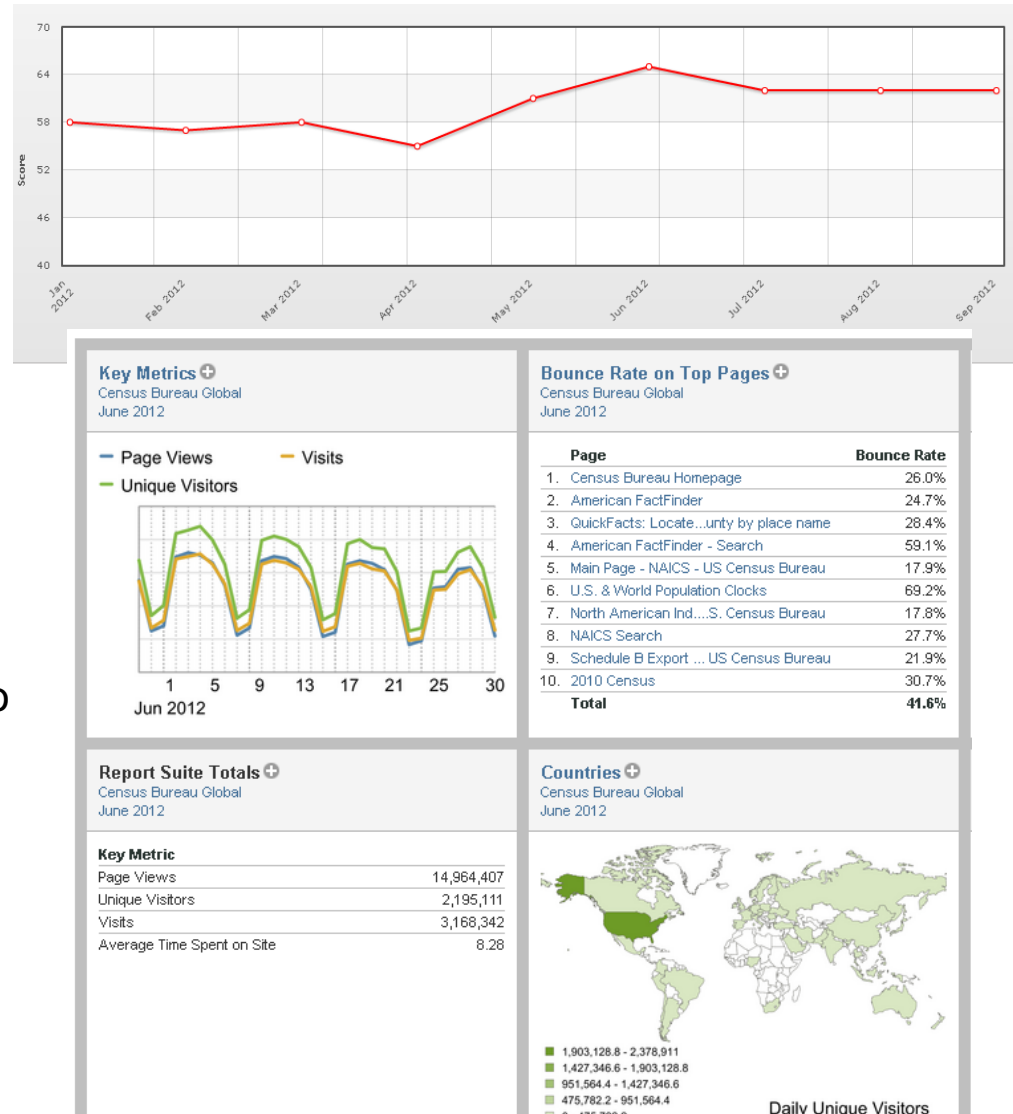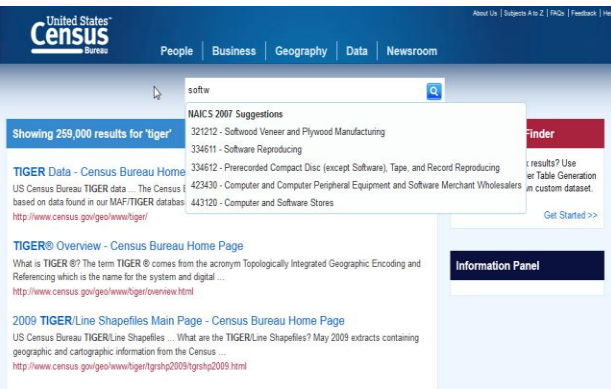|	Page	Bounce Rate
1.	Census Bureau Homepage	26.0%
2.	American FactFinder	24.7%
3.	QuickFacts: Locate...unty by place name	28.4%
4.	American FactFinder - Search	59.1%
5.	Main Page - NAICS - US Census Bureau	17.9%
6.	U.S. & World Population Clocks	69.2%
7.	North American Ind....S. Census Bureau	17.8%
8.	NAICS Search	27.7%
9.	Schedule B Export ... US Census Bureau	21.9%
10.	2010 Census	30.7%
	Total	**41.6%**

Report Suite Totals ⊕
Census Bureau Global
June 2012

Key Metric	
Page Views	14,964,407
Unique Visitors	2,195,111
Visits	3,168,342
Average Time Spent on Site	8.28

Countries ⊕
Census Bureau Global
June 2012

■ 1,903,128.8 - 2,378,911
■ 1,427,346.6 - 1,903,128.8
■ 951,564.4 - 1,427,346.6
■ 475,782.2 - 951,564.4
■ 0 - 475,782.2

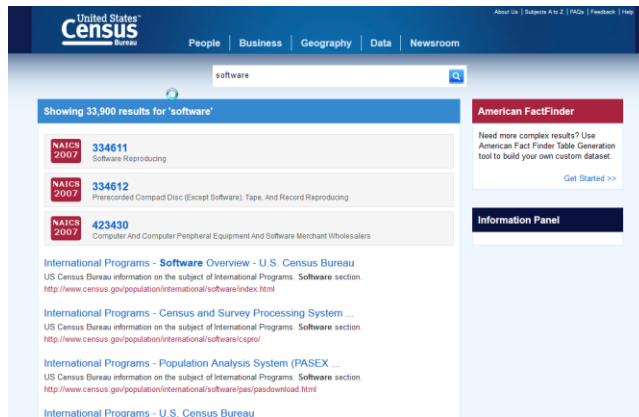Daily Unique Visitors

Search Strategy

Filtered Type Ahead

Results before Searching

Type Ahead/NAICS Integration
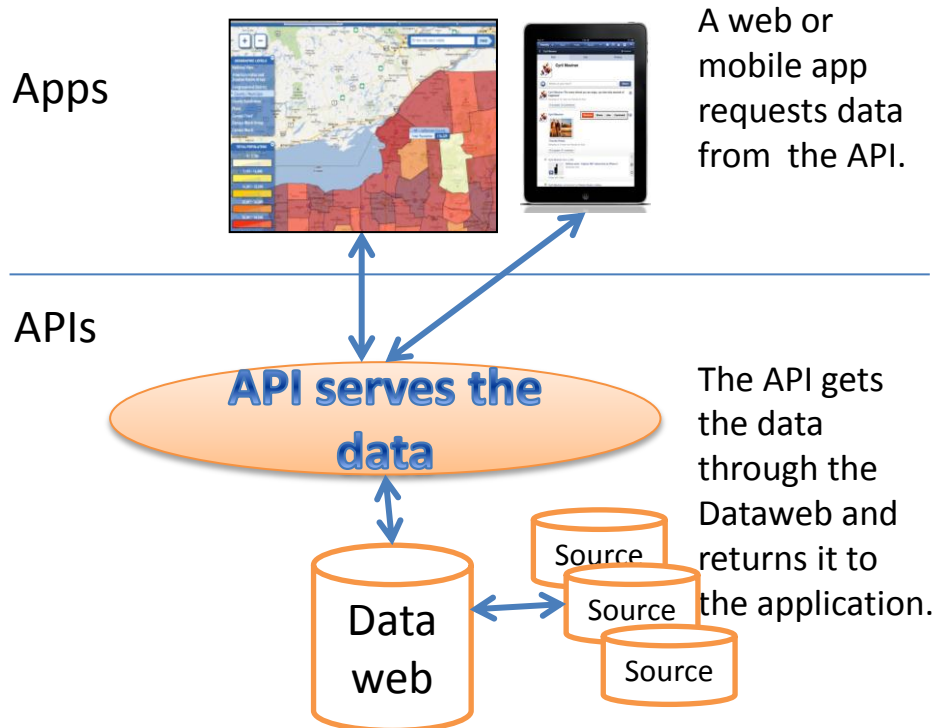

Answers within Results

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

Apps

A web or mobile app requests data from the API.

APIs

API serves the data

The API gets the data through the Dataweb and returns it to the application.

Data web

Source
Source
Source

- 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

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Home | About Us | Subjects A to Z | FAQs | Help

People | Business | Geography | Data | Research | Newsroom

Search Go

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* 13 to 18

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

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U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU

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.
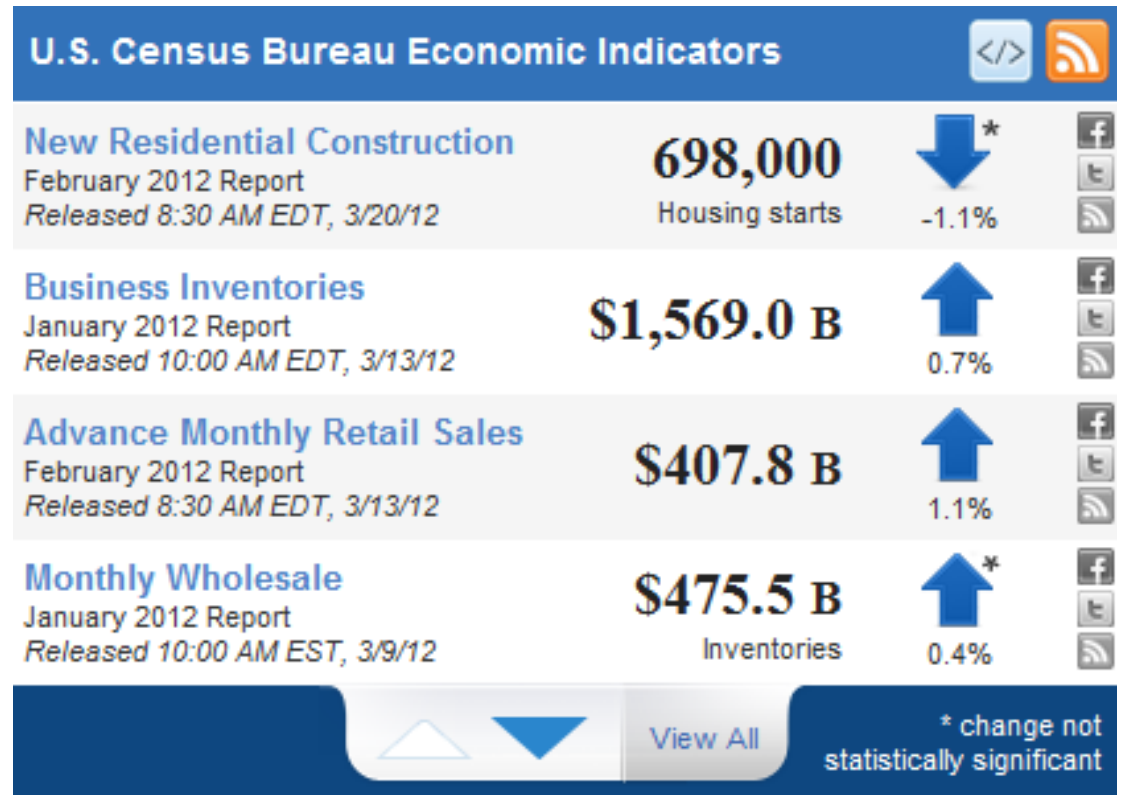- About 45,000 downloads in first month.

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.

U.S. Census Bureau Economic Indicators

New Residential Construction
February 2012 Report
Released 8:30 AM EDT, 3/20/12
698,000
Housing starts
-1.1%

Business Inventories
January 2012 Report
Released 10:00 AM EDT, 3/13/12
$1,569.0 B
0.7%

Advance Monthly Retail Sales
February 2012 Report
Released 8:30 AM EDT, 3/13/12
$407.8 B
1.1%

Monthly Wholesale
January 2012 Report
Released 10:00 AM EST, 3/9/12
$475.5 B
Inventories
0.4%

View All
* change not statistically significant

United States Census Bureau

U.S. Department of Commerce
Economics and Statistics Administration
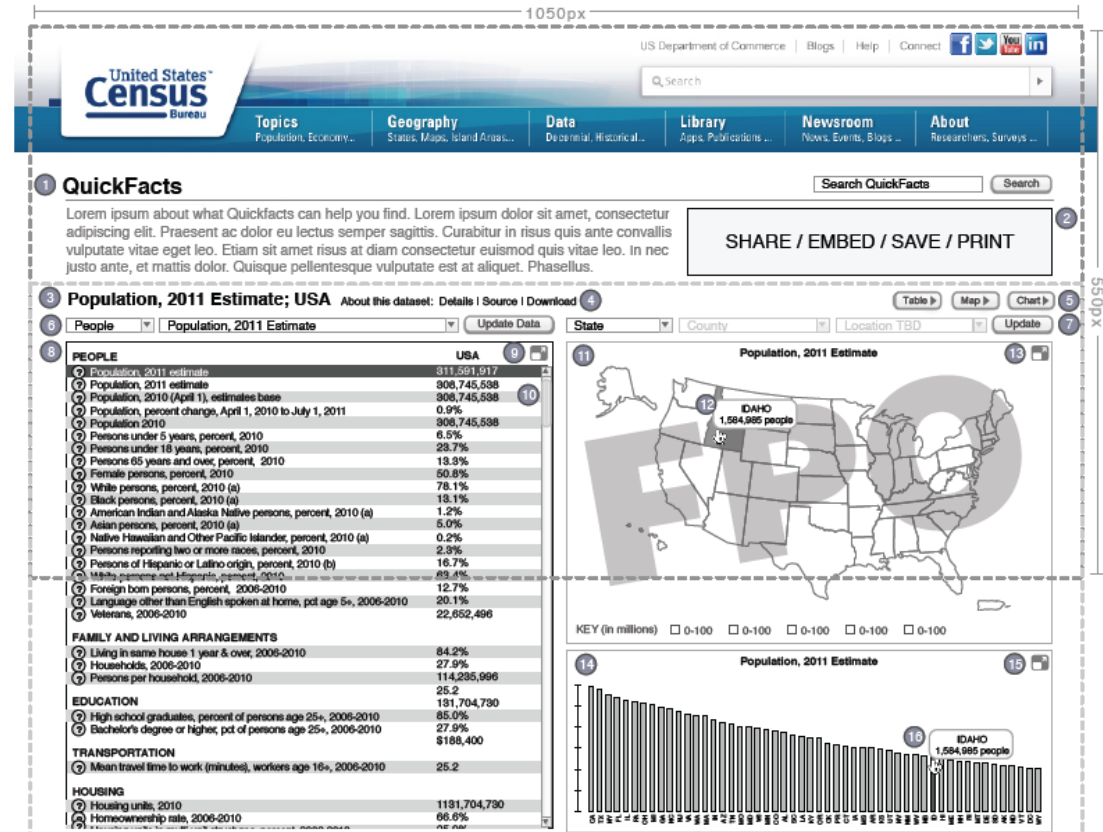U.S. CENSUS BUREAU

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
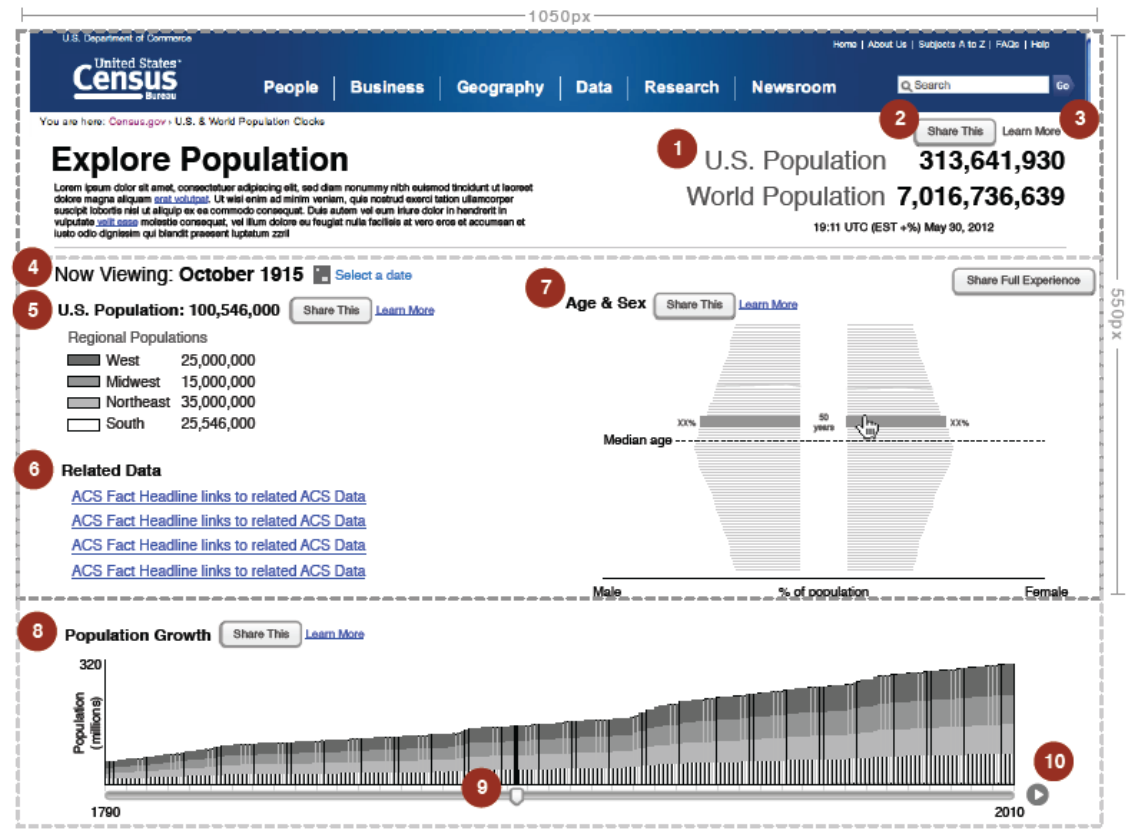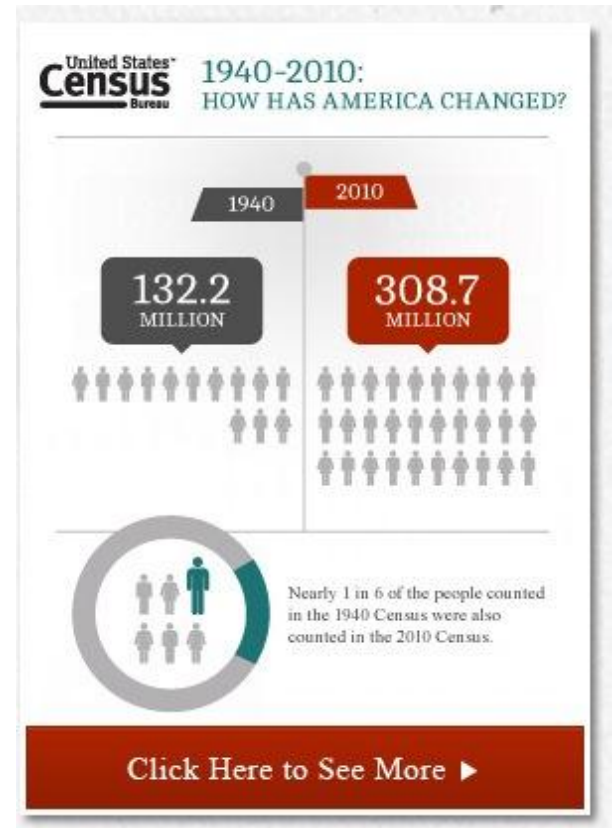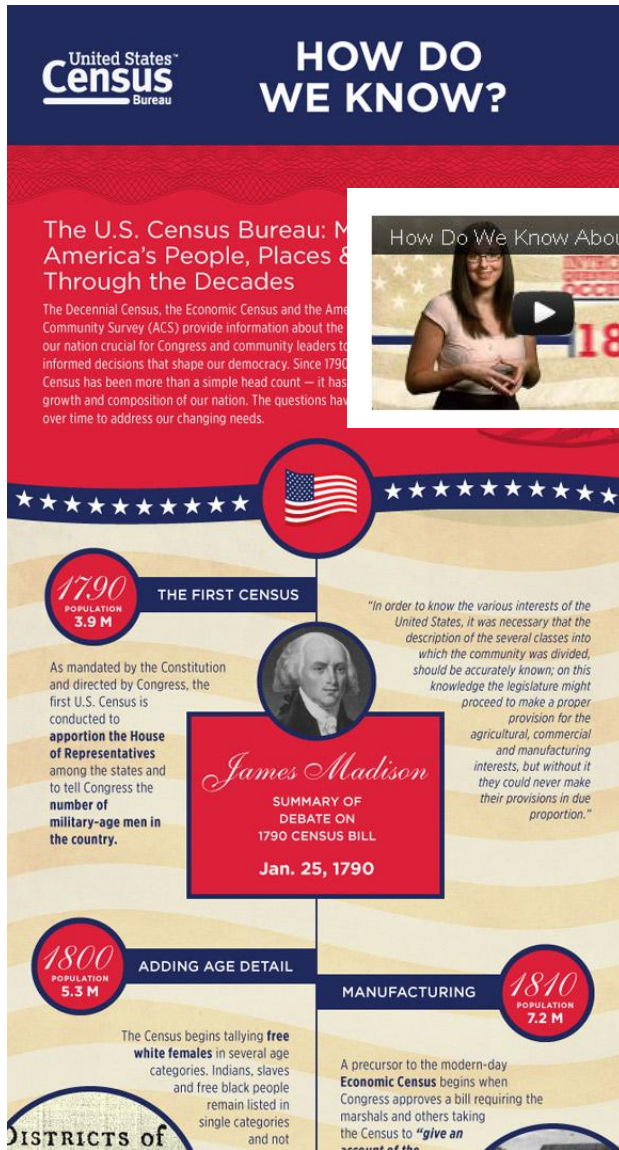DRAFT

QuickFacts: Landing Page

Population Clock

- 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

United States Census Bureau

U.S. Department of Commerce
Economics and Statistics Administration
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