



Census Geographic Programs An Update

- Geographic areas
- TIGERweb
- Count Question Resolution program
- **Geographic data products**
- Geographic Support System Initiative



New TIGER/Line Shapefiles

- **2011 TIGER/Line**
 - Legal boundary changes as of January 1, 2011
 - 2010 Statistical Areas
 - 2010 School Districts
 - Address Range/Feature Name shapefile (better geocoding!)
- **2010 TIGER/Line with UAs**
 - 2010 Urbanized Area boundaries
- **2010 TIGER/Line with Pop and Housing data**
 - Includes block-level 2010 population and housing unit counts

• <http://www.census.gov/geo/www/tiger/tgrshp2010/tgrshp2010.html>



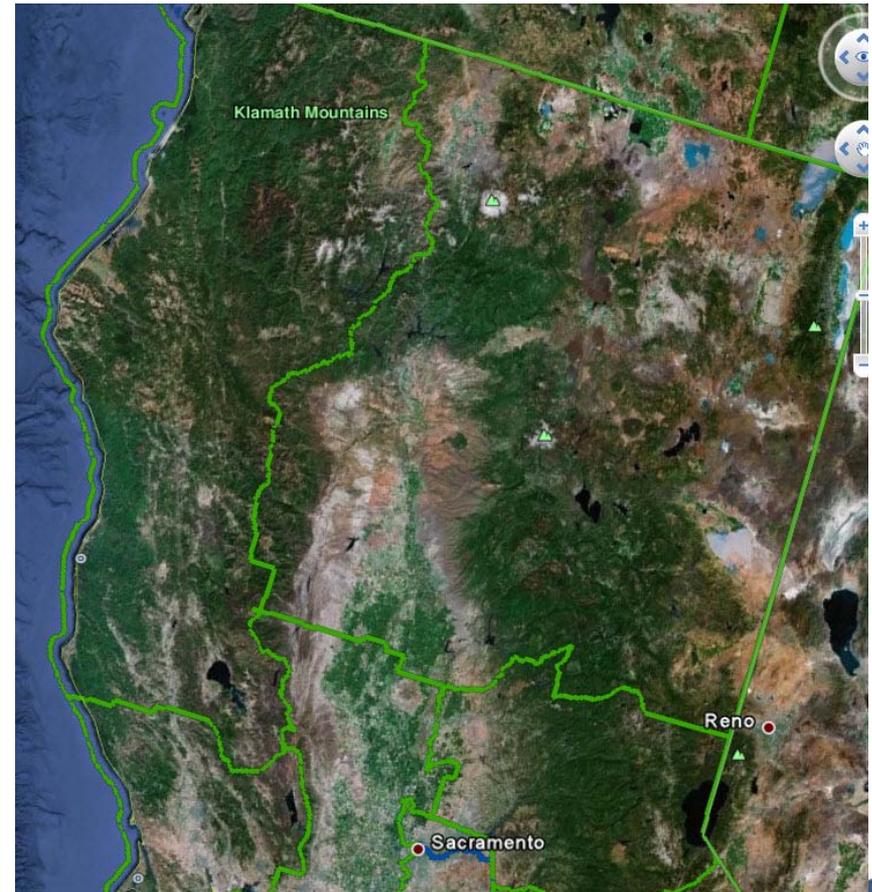
New TIGER Products

- **2010 KMLs**

- For use with Google Earth or Google Maps
- 2010 Census Geography (counties and census tracts available now)
- Limited attribution (GEOIDs)
- You can help!
- <http://www.census.gov/geo/www/tiger/kml/kml.html>

- **Cartographic Boundary Files**

- Generalized boundary files suitable for small-scale mapping
- <http://www.census.gov/geo/www/cob/index.html>



New Census Map Products

REFERENCE MAPS

MAJOR ACQUISITIONS OF TERRITORY BY THE U.S. MAP
OCT 2011

AMERICAN INDIANS / ALASKA NATIVES OF THE U.S. WALL MAP
NOV 2011

CENSUS REGIONS AND DIVISIONS MAP
NOV 2011

COUNTIES OF THE U.S. WALL MAP
NOV 2011

COUNTY SUBDIVISION OUTLINE MAPS
APR - AUG 2012

URBANIZED AREA/URBAN CLUSTER REFERENCE MAPS
OCT 2012

COUNTY SUBDIVISION WALL MAPS
DEC 2012

113th CONGRESSIONAL DISTRICT MAPS
FEB - MAY 2013

CORE BASED STATISTICAL AREAS MAPS
JUL - AUG 2013

STATISTICAL THEMATIC MAPS

APPORTIONMENT OF THE U.S. HOUSE OF REPRESENTATIVES MAP
DEC 2010

PERCENT CHANGE IN POPULATION BY COUNTY: 2000 TO 2010 MAP
FEB - MAR 2011

TOTAL POPULATION BY COUNTY MAP
FEB - MAR 2011

MEAN CENTER OF POPULATION MAP
APR 2011

MEDIAN CENTER OF POPULATION MAP
APR 2011

POPULATION DENSITY BY COUNTY MAP
MAY 2011

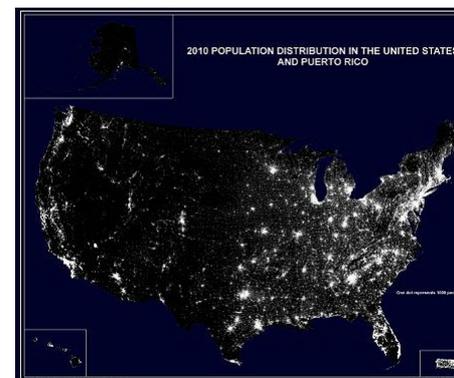
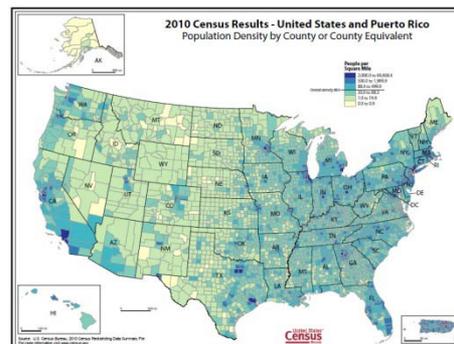
RACE AND HISPANIC ORIGIN POPULATION DENSITY OF THE UNITED STATES MAP
OCT 2011

POPULATION DENSITY IN THE UNITED STATES MAP
OCT 2011

"NIGHT TIME" POPULATION DISTRIBUTION MAP
DEC 2011

POPULATION PROFILE MAPS
DEC 2011

Additional map topics are likely.



2010 State Profiles

2010 Census: California Profile

Population Density by Census Tract

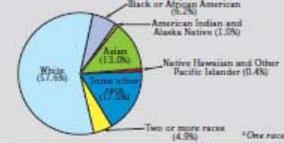


California Population 1970 to 2010	
2010	37,253,956
2000	33,871,648
1990	29,760,021
1980	23,667,902
1970	19,953,134

United States
Census
Bureau

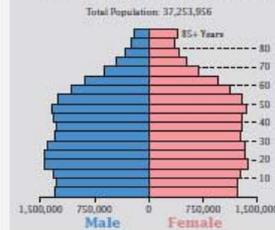
U.S. Department of Commerce Economics and Statistics Administration U.S. CENSUS BUREAU

State Race* Breakdown



Hispanic or Latino (of any race) makes up **37.6%** of the state population.

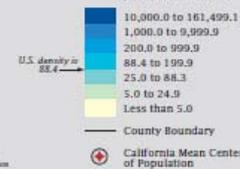
Population by Sex and Age



Housing Tenure



People per Square Mile by Census Tract





Census Geographic Programs An Update

- Geographic areas
- TIGERweb
- Count Question Resolution program
- Geographic data products
- **Geographic Support System Initiative**



The Geographic Support System Initiative

Rick Campbell
U.S. Census Bureau
richard.t.campbell@census.gov
(206) 381-6304

**California State Data Center
Meeting**
May 31, 2012





Census Geographic Support – Major Initiatives Over Time

For the 1990 Census – Introduced TIGER (Topologically Integrated Geographic Encoding and Referencing system)

For the 2000 Census – Introduced the MAF (Master Address File)

For the 2010 Census – conducted the MAF/TIGER Enhancement Program

For the 2020 Census – The GSS Initiative



'Why' the GSS Initiative?

- Stakeholder and oversight recommendations:
 - The General Accountability Office, the Office of the Inspector General, and the National Academies of Science identified as issues:
 - *The lack of a comprehensive geographic update program between censuses*
 - *Associated negative impact on ongoing programs such as the American Community Survey, other current surveys, and small areas estimates programs*



Why the GSS Initiative?

- **A logical next step, building upon:**
 - ❑ Accomplishments of the MAF/TIGER Enhancement Program (MTEP)
 - ❑ MAF/TIGER Accuracy Improvement Project (MTAIP)
 - ❑ Improved positional accuracy of TIGER
 - ❑ Contributions of our partners
 - ❑ GIS files & imagery between 2003 to 2008 for MTAIP
 - ❑ 2010 Local Update of Census Addresses (LUCA) Program
 - ❑ The recommendations of our stakeholder and oversight communities
- **Supports a targeted Address Canvassing in preparation for the 2020 Census**



What is the GSS Initiative?

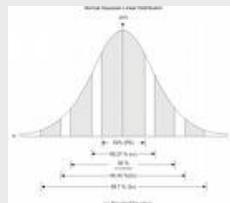
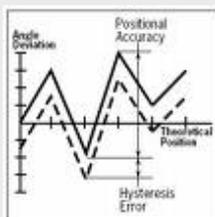
Address Updates



123 Testdata Road
Anytown, CA 94939

Lat 37 degrees, 9.6 minutes N
Lon 119 degrees, 45.1 minutes W

Quality Measurement



Street/Feature Updates



- An integrated program consisting of:
 - Improved address coverage
 - Ongoing address and spatial database updates
 - Enhanced quality assessment and measurement



Major Components of 2010 Census Address List Development





2010 Address Canvassing Facts

- Number of housing unit addresses that needed verification: **145 million**
- Number of census workers hired for Address Canvassing: **140,000**
- Number of hand-held computers used: **151,000**
- Number of local census offices that managed operations: **151**
- Dates of operation: **March 30 - Mid-July 2009**





Goal: A Shift in Focus for the 2020 Census

- From a **complete** Address Canvassing to a **targeted** Address Canvassing
 - Hinges on establishing an acceptable address list for each level of government





Why a “Targeted” Address Canvassing?

- \$\$\$! It is **VERY** expensive
 - Field an **ARMY** of address canvassers
 - “Walk” **EVERY** street in the nation...
- Goal: developing on-going update and change detection processes
- Result: “Target” only areas with uncertainty
 - Quality of Addresses
 - Currency of Addresses



Goals of the GSS Initiative

Address improvement: explore methodologies to achieve complete coverage and a current address list

Feature improvement: ongoing update of the street network and attributes to improve the matching of addresses to their correct geography

Quality improvement: broaden quality assessments and provide quantitative measures

Improved Partnerships: strengthen existing and develop new partnerships



Address Improvement Goals

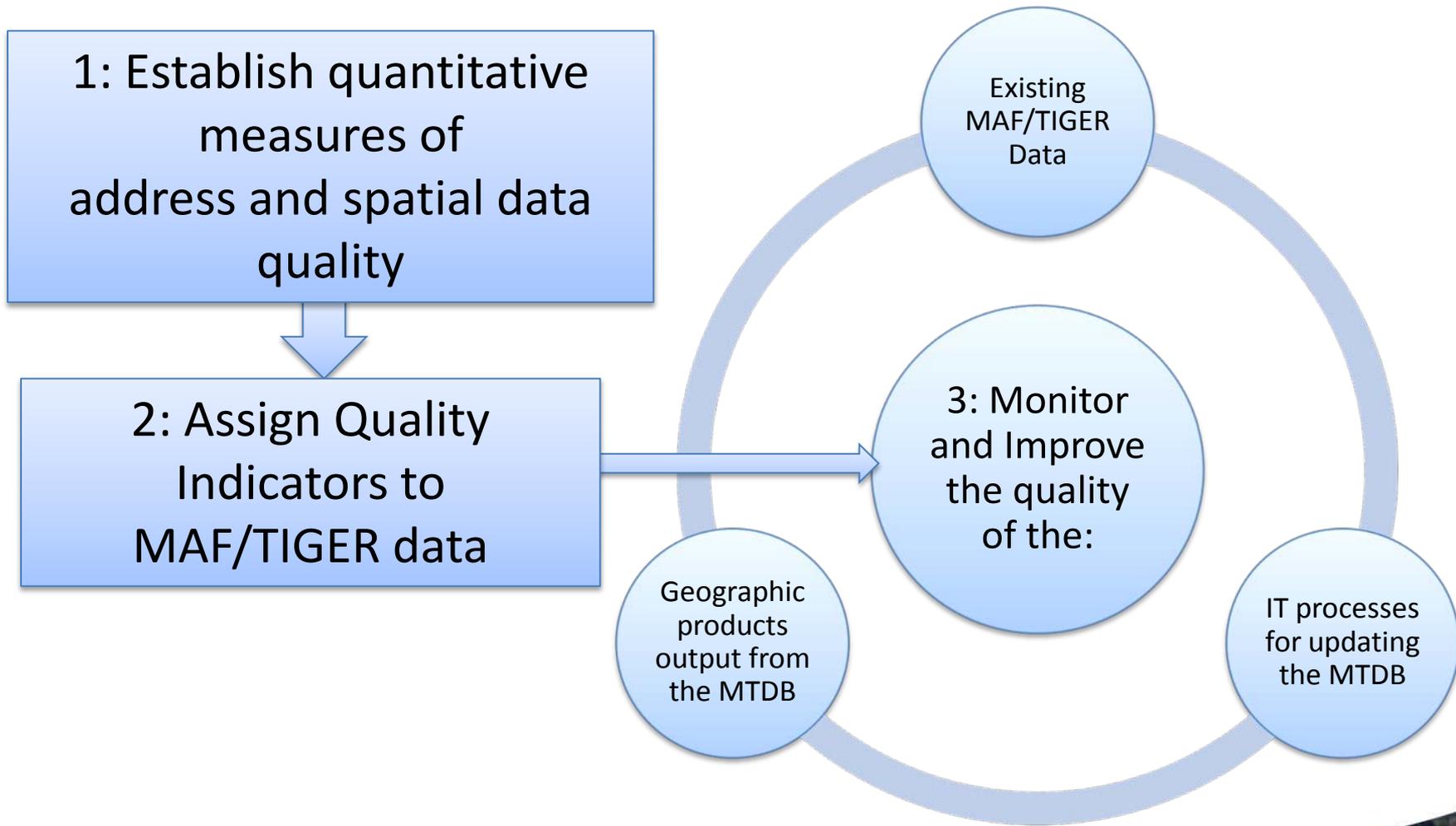
- Complete and current address coverage
- Additional emphasis on change detection
- Expanded address sources for MAF update, especially in areas without city-style addresses
- American Community Survey (ACS) and current surveys need current and complete coverage

Feature Improvement Goals

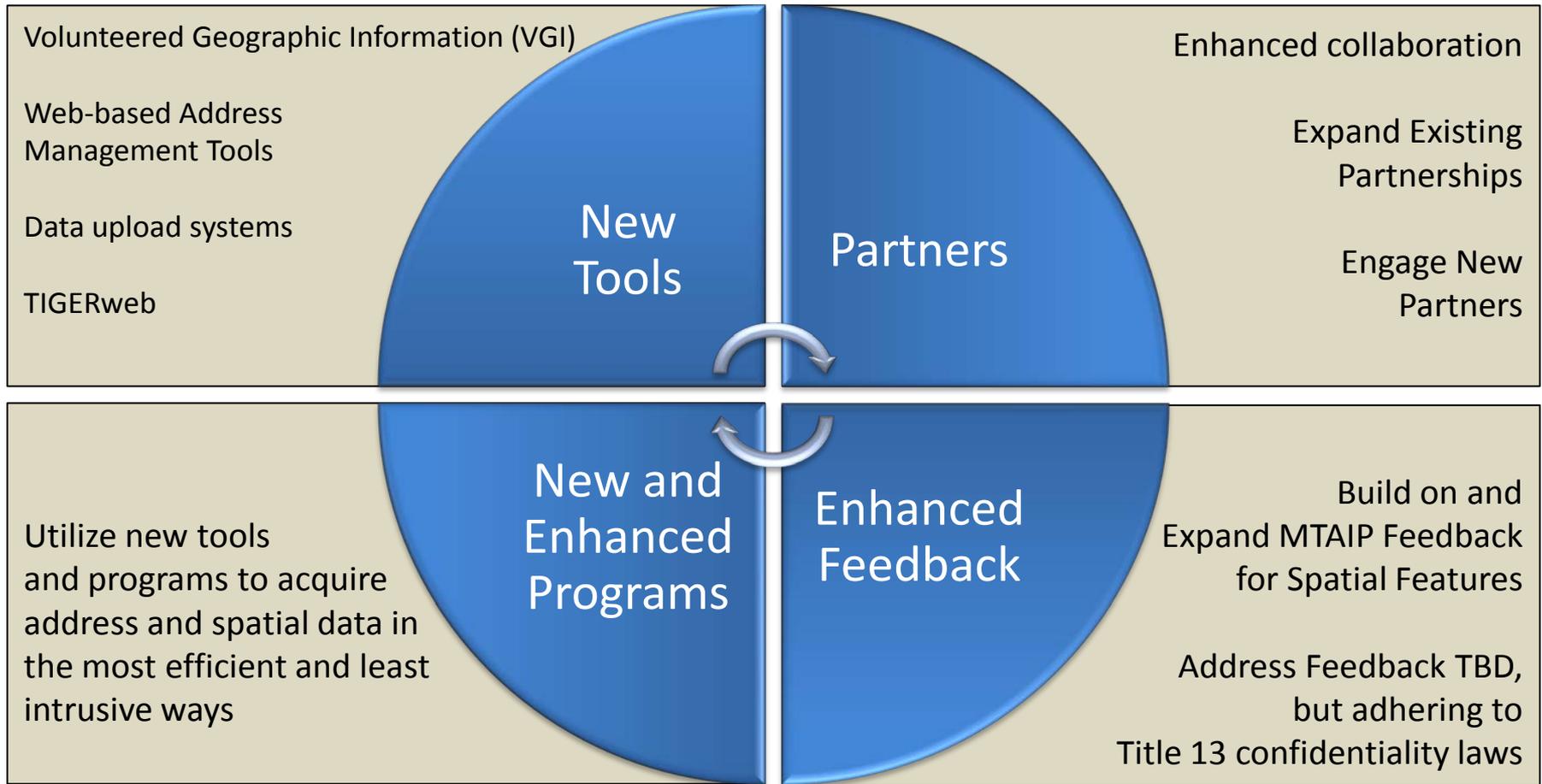
- Ongoing street network and attribute updates
- Best available data from partners and commercial files
- Imagery for change detection and source evaluation



Quality Assurance Goals



Improved Partnerships



Who are the stakeholders?

- U.S. Census Bureau
- Other federal agencies (U.S. Postal Service, U.S. Geological Survey, Environmental Protection Agency)
- Tribal, State, County, and Local governments
- Commercial data providers
- National Advocacy Groups, such as NSGIC, URISA, NENA, and NAPSG



Partnerships are Key!

- You are the authoritative sources for address and spatial data!
- Expanding our Partnerships is Critical
 - Key step towards establishing an accurate and up-to-date address list



What's in it for you?

- **Improved** address and feature coverage
 - support current survey samples, including the American Community Survey.
- More **current** data and **improved** process flows
 - should minimize the impact of programs like LUCA
- Taxpayer **savings**
- A more **accurate** 2020 Census
 - with all the benefits therein (increased funding, etc.)
- Our evaluations & feedback may help you improve **your** data.





Using your Data

- Fiscal Year 2012
 - Process Development
- 2013-2020:
 - Change detection
 - Completeness/coverage testing
 - **Updates to the MAF/TIGER System**



Minimum Address Assumptions

- Sample rules for acceptable addresses:
 - All required fields must have data
 - Address Number, Street Name, and ZIP Code OR Tract/Block OR City/State
 - Must meet predefined business rules
 - For example, ZIP Code is numeric, five digits
 - Unit designations
 - Minimum Address/Feature guidelines will be issued soon

Address Metadata

- In addition to the Federal Geographic Data Committee (FGDC) Address Standard metadata, we would like to collect:
 - What is the source of the address (assessor, utility, emergency management)?
 - Is the address used for mailing and/or locating the structure?
 - Is the address for a Group Quarters (prison, college dorm)?
 - What type of structure does the address represent (single-family home, trailer, multi-unit apartment building)?
 - Is it a commercial, residential, or other type of address?
 - When was the house built and/or addressed?





Feature Requirements

Forthcoming...

Check our GSS-I webpage for updates as they occur:

<http://www.census.gov/geo/www/gss/>



GIS Inventory (aka Ramona)

<http://www.gisinventory.net/>

GIS INVENTORY

The Ramona GIS Inventory is a service of the National States Geographic Information Council (NSGIC)

[Home](#)

[Status Map](#)

[Data Layers](#)

[My Profile](#)

[Directory](#)

[Getting Started](#)

[About](#)

[Support](#)

[Log In](#)

[Create New Account](#)



This is your nation.
This is your inventory.



Welcome to Version 4.0 of the GIS Inventory

The GIS Inventory is produced by the National States Geographic Information Council (NSGIC) as a tool for states and their partners. Its primary purpose is to track data availability and the status of geographic information system (GIS) implementation in state and local governments to aid the planning and building of Spatial Data Infrastructures. The *Random access metadata for online nationwide assessments* (Ramona) database is a critical component of the GIS Inventory.

GIS Inventory: California Status

GIS INVENTORY
The Ramona GIS Inventory is a service of the National States Geographic Information Council (NSGIC)

Home | **Status Map** | Data Layers | My Profile | Directory | Getting Started | About | Support

Log In
Create New Account

NSGIC

Places That Produce

- Registered Users with Data of Any Type
- GIS Data
- National Cadastral Data Infrastructure

Data Categories

Transportation

Data Layers

Roads/Street Centerlines

Can't find your data layer?

Legend

	Complete	In work	Planned
City/Town			
County			
Statewide			
Tribal			
Coastal Areas			
Nationwide			
	No Response		

California

Download This Image

State Names | Tribal Area Names | City Outlines
County Names | Coastal Water Names | Tribal Area Outlines
City Names | County Outlines | Coastal Water Outlines



Address Points

GIS INVENTORY
The Ramona GIS Inventory is a service of the National States Geographic Information Council (NSGIC)

Log In
Create New Account

Home | **Status Map** | Data Layers | My Profile | Directory | Getting Started | About | Support

NSGIC

Places That Produce

- Registered Users with Data of Any Type
- GIS Data
- National Cadastral Data Infrastructure

Data Categories

Location

Data Layers

Address Points

Can't find your data layer?

Legend

	Complete	In work	Planned
City/Town			
County			
Statewide			
Tribal			
Coastal Areas			
Nationwide			
No Response			

California

Download This Image

State Names | Tribal Area Names | City Outlines
County Names | Coastal Water Names | Tribal Area Outlines
City Names | County Outlines | Coastal Water Outlines





County Consolidated BAS

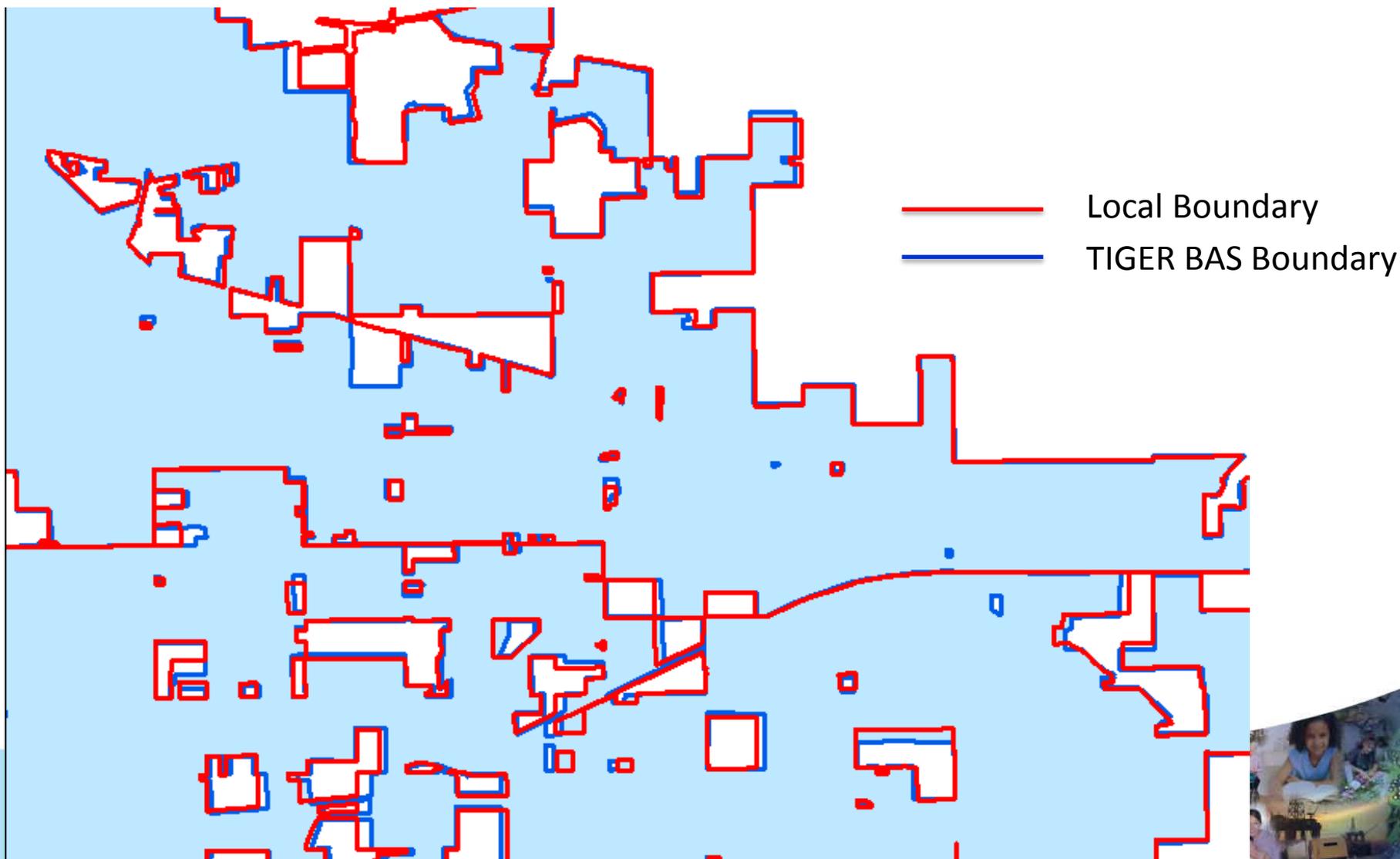
Boundary & Annexation Survey

- BAS: January 1st of each year
- Many entities still participating on paper boundaries, *relatively* correct
- (Most) counties can participate digitally
- Have you reviewed the boundaries for accuracy? (MTAIP Realignment!)

2013 C-BAS sign-up deadline: 8/1/12

County Consolidated BAS

Boundary & Annexation Survey



Action Items:

- 1) Create a Ramona Account and register your data (www.gisinventory.net)
- 2) Counties: Establish a County Consolidated BAS with us
- 3) Review the ***FGDC Address Standard*** and get your data in shape...

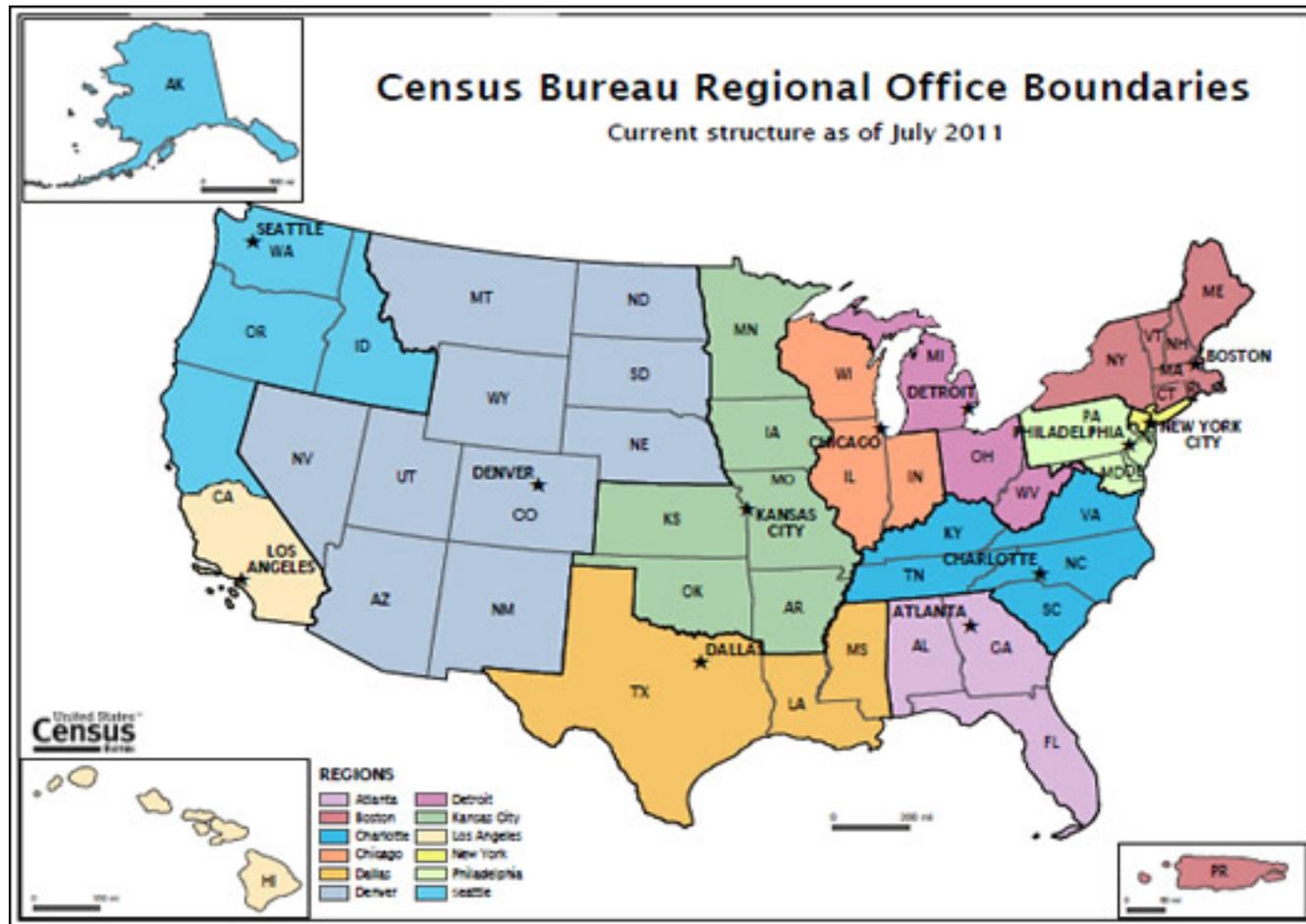


Summary

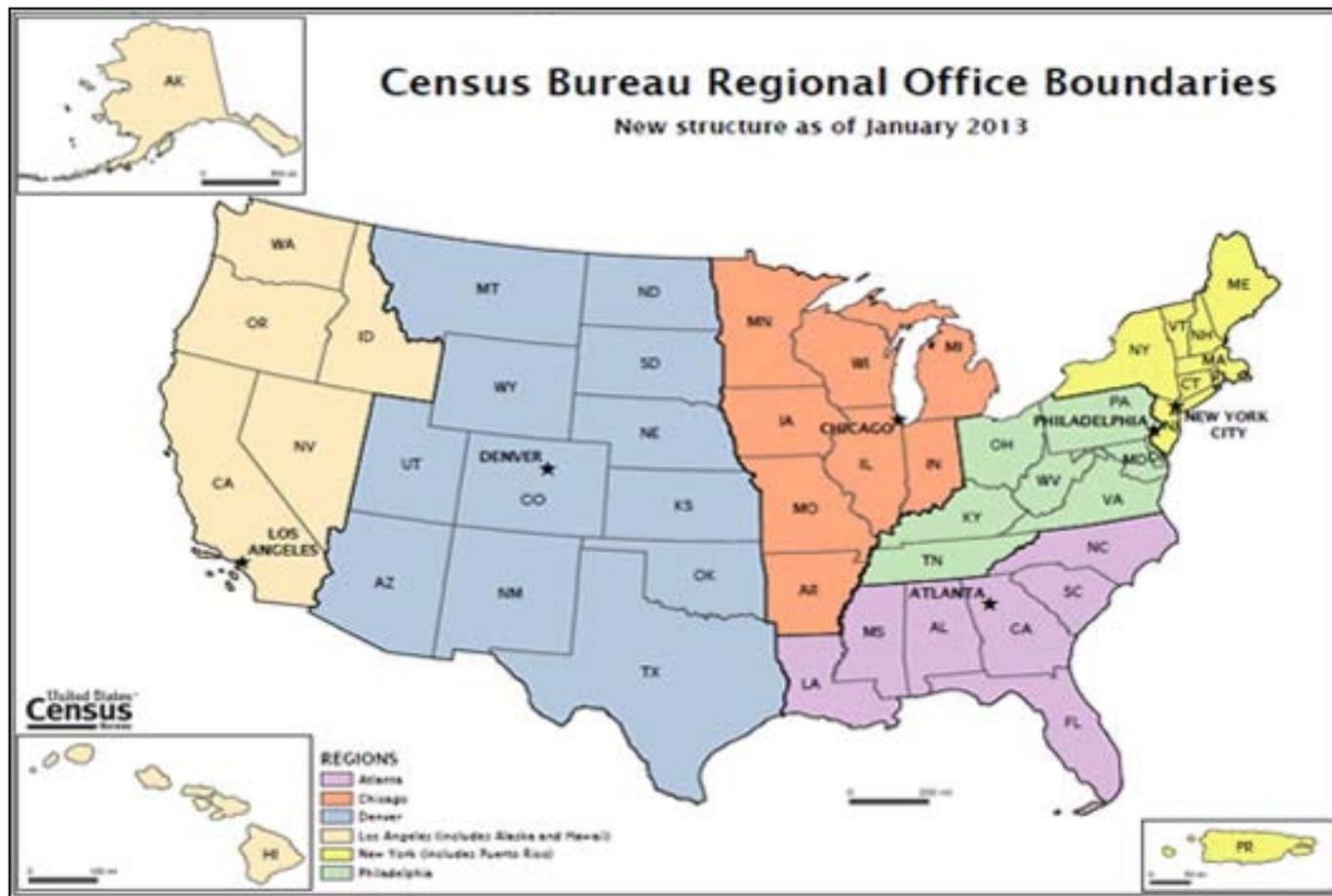
- Goals of the GSS initiative
 - Ongoing update of the MAF/TIGER database
 - Improve address coverage, feature coverage, and quality in the MAF/TIGER database
 - Facilitate a targeted Address Canvassing operation for the 2020 Census
- Aligns with our commitment to provide high quality products and data



Current Census Regional Office Structure



Future Regional Office Structure



Contacts

Los Angeles Regional Office Geographers – (818) 267-1724

Linda Kane Akers Smith

Tim McMonagle

John Kennedy

Seattle Regional Office Geographers – (206) 381-6300

Rick Campbell

Wendy Hawley

Michaellyn Garcia



Questions?

Rick Campbell
U.S. Census Bureau
richard.t.campbell@census.gov
(206) 381-6304
May 31, 2012

<http://www.census.gov/geo/www/gss/index.html>

