

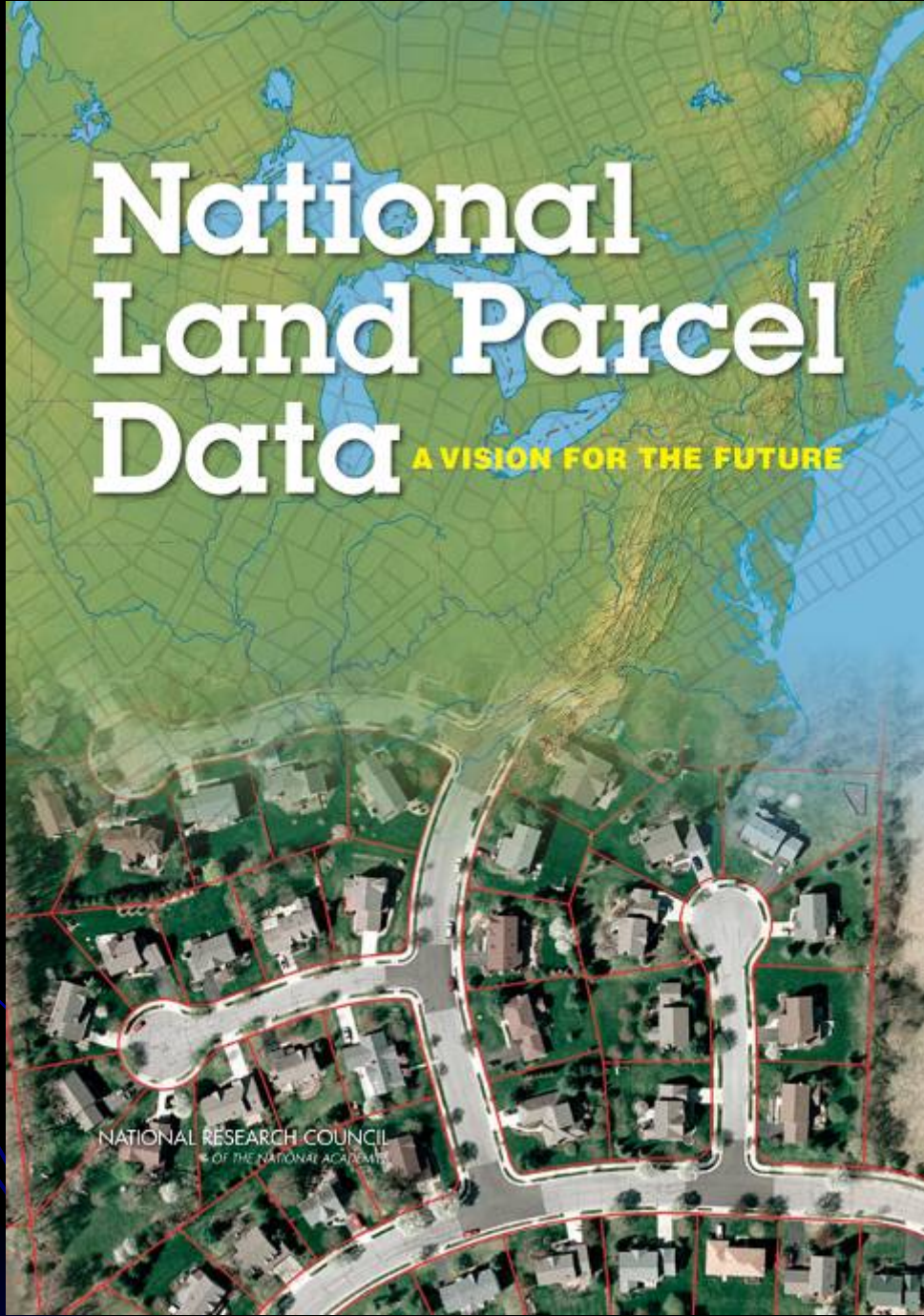
The background of the slide is a faded, sepia-toned map showing a grid of land parcels. A compass rose is visible in the bottom right corner. The text is contained within white rectangular boxes with black borders.

National Vision for Land Parcel Databases in the United States

NGAC

October 15, 2008

David J. Cowen,
University of South Carolina
Chair – National Research Council Study



National Land Parcel Data

A VISION FOR THE FUTURE

NATIONAL RESEARCH COUNCIL
OF THE NATIONAL ACADEMIES

***Land Parcel Databases: A National Vision
The National Research Council Study Committee***



What do we know ?

- “There is a critical need for a better land-information system in the United States to improve land-conveyance procedures, furnish a basis for equitable taxation, and provide much-needed information for resource management and environmental planning “

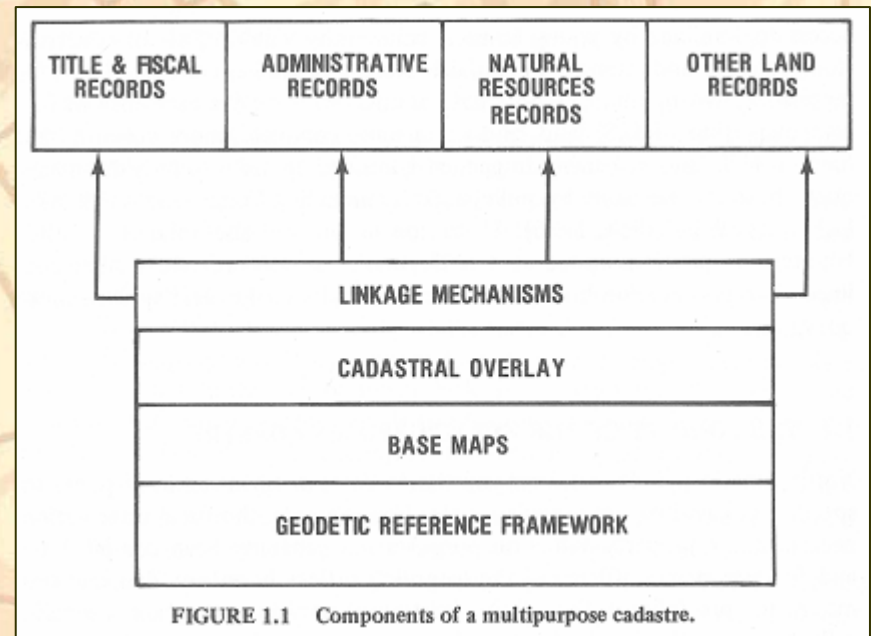
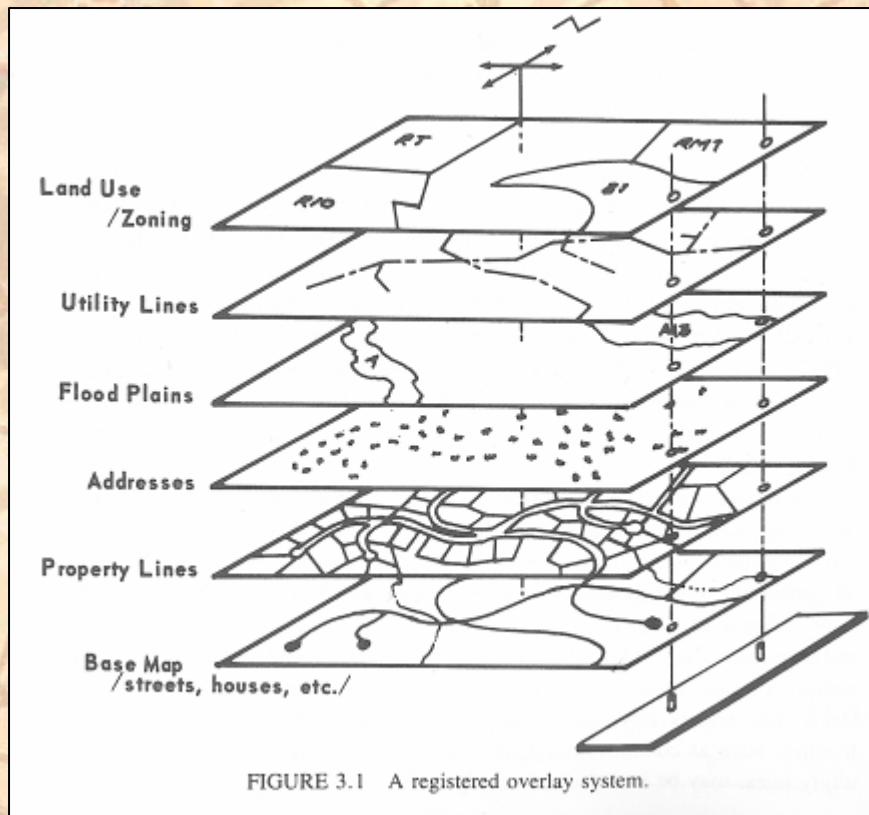
Technology

- “**Current technology is adequate** in most cases for the surveying, mapping, data collecting, filing and dissemination of information.
- Advancement in computer applications, communication **networks** and copying processes promise of more-efficient use of the multipurpose cadastre.”

Obstacles

- The major **obstacles** in the development of a multipurpose cadastre are the **organizational** and **institutional** requirements.

Parcels are a critical part of a modern GIS



Parcels are linked to many operations of Government

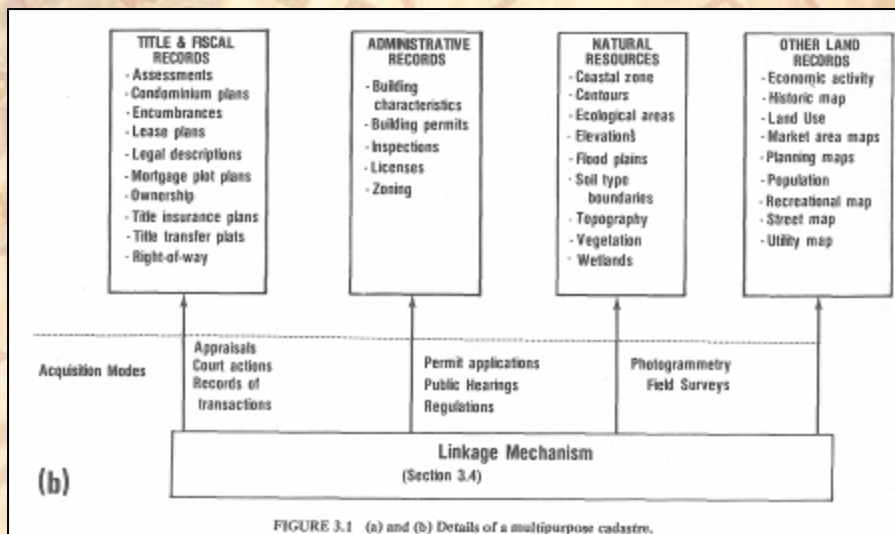


FIGURE 3.1 (a) and (b) Details of a multipurpose cadastre.

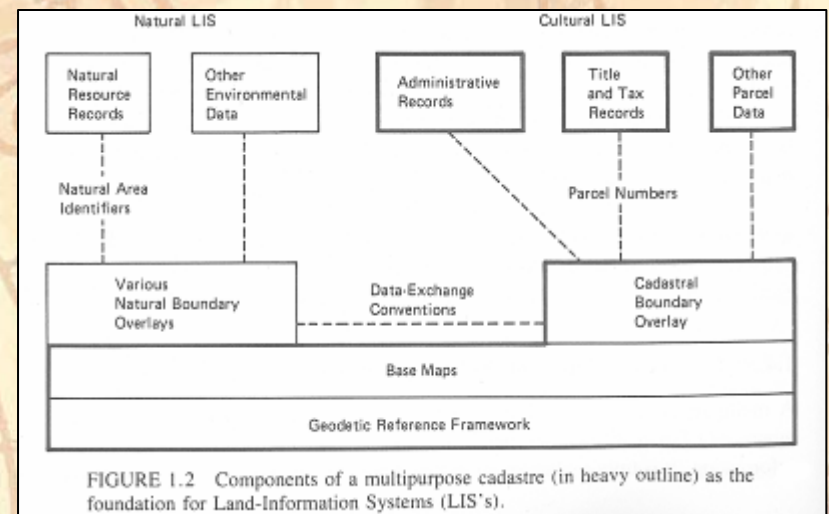
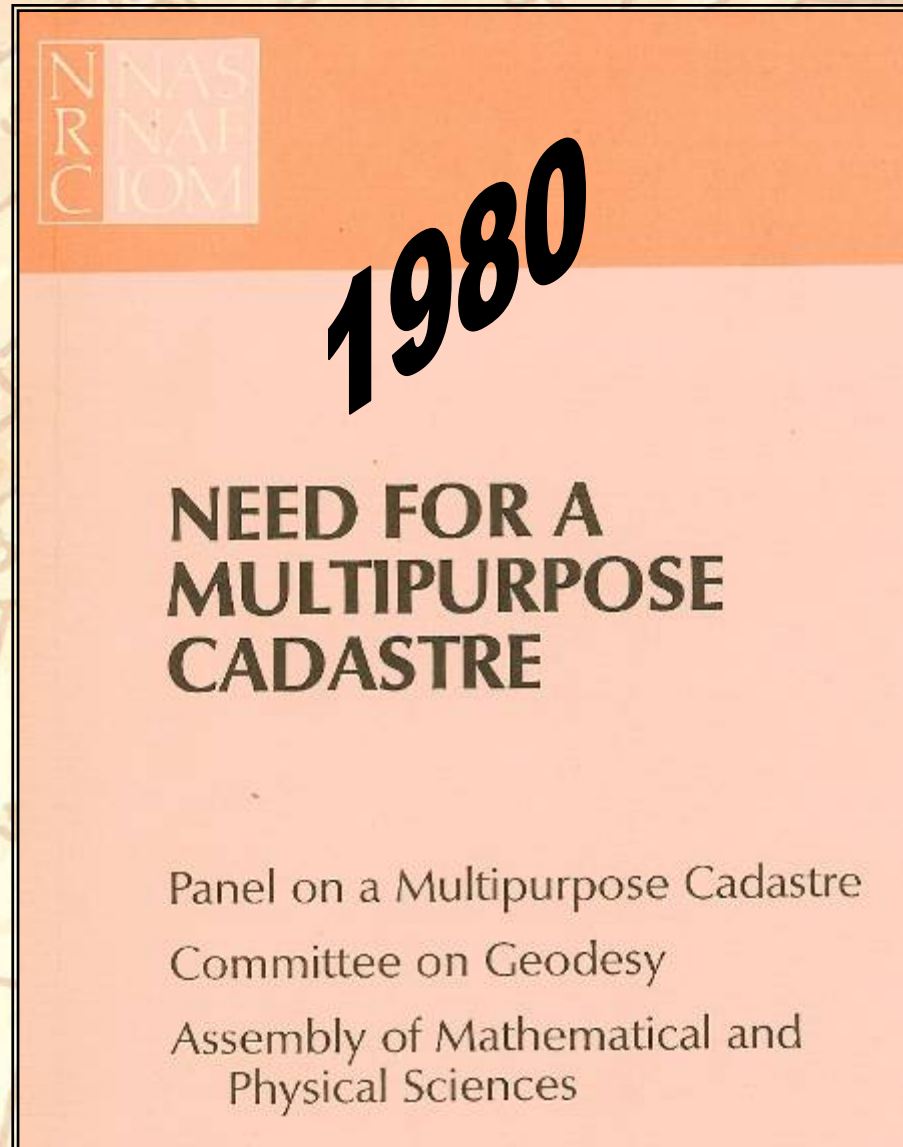


FIGURE 1.2 Components of a multipurpose cadastre (in heavy outline) as the foundation for Land-Information Systems (LIS's).

But, of course, we knew that in 1980



Enmark – FIG

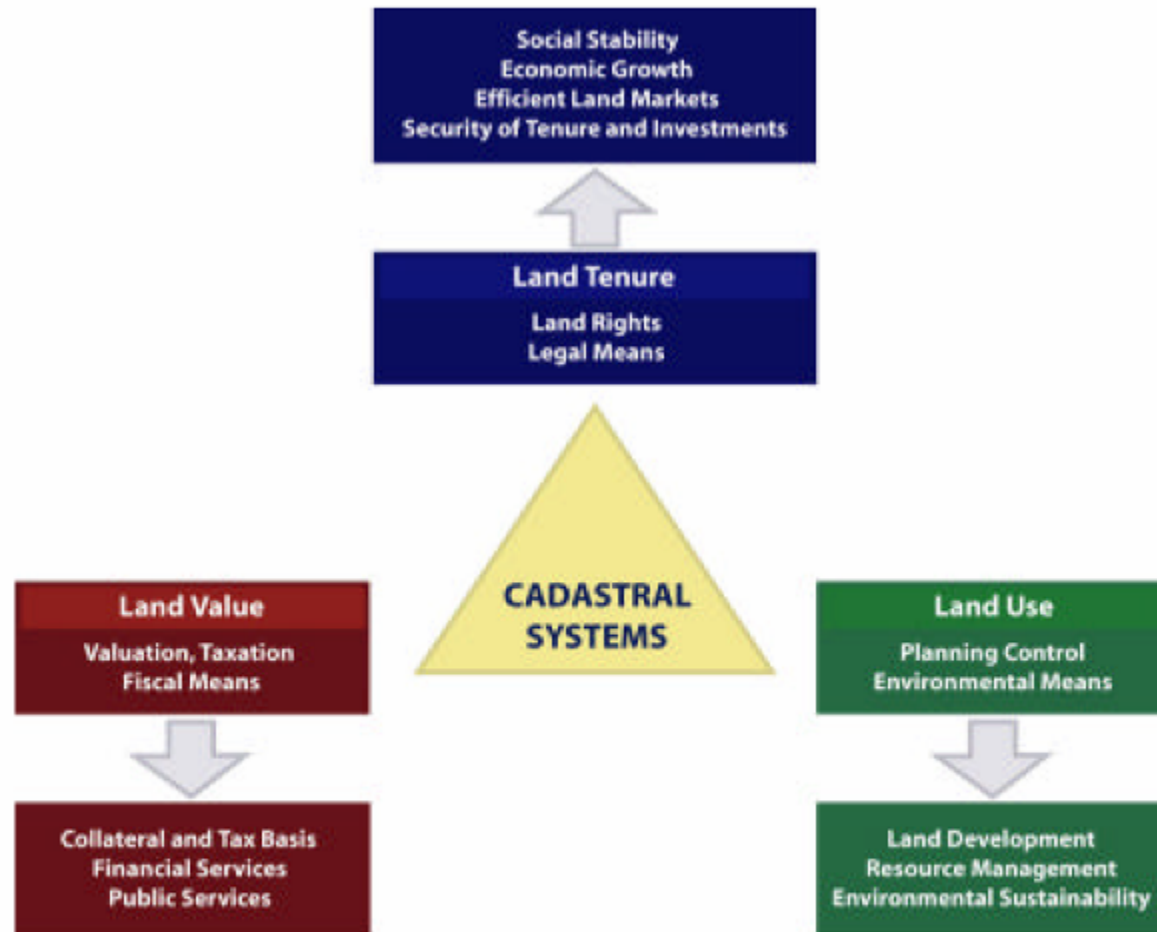


Fig. 1: Cadastral systems provide a basic land information infrastructure for running the interrelated systems within the areas of Land Tenure, Land Value, and Land Use.

What do Americans pay for not having a public LIS? Kjellson

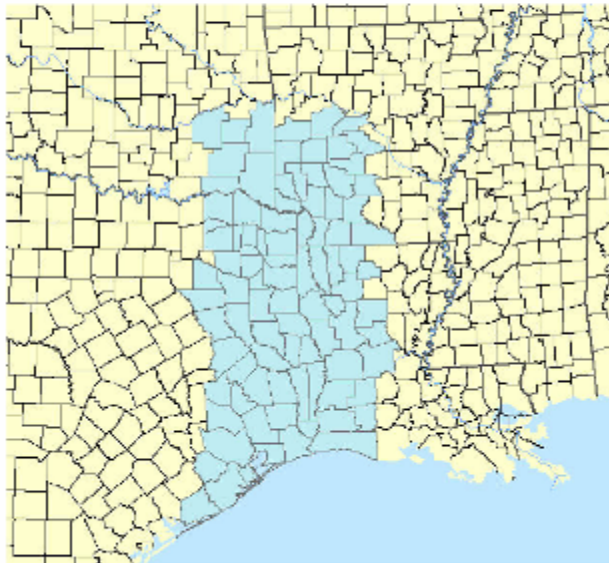
The US has a unique position among the most developed countries, having ***no state or federal system for land registration in a title system or computerized deeds system.*** Instead the property market relies on title insurance companies to provide stability and order. Public initiatives seem to be restricted to information about federal land.

the American ***homeowner is paying dearly*** for the inefficiencies in our real estate markets by paying extremely high property transaction costs because of the complexity in finding the needed property information.

County Parcel Data

| | |
|---------------------------|-----|
| Table 1 Parcel Status | |
| To Be Determined | 21 |
| Not Available | 26 |
| Pursuing | 13 |
| Available | 8 |
| Acquired | 22 |
| Acquired and Standardized | 25 |
| Total No of Counties | 115 |

***Parcels Acquired for
60 of 115 counties***



Initial Estimated Area of Impact

Lessons Learned - Again

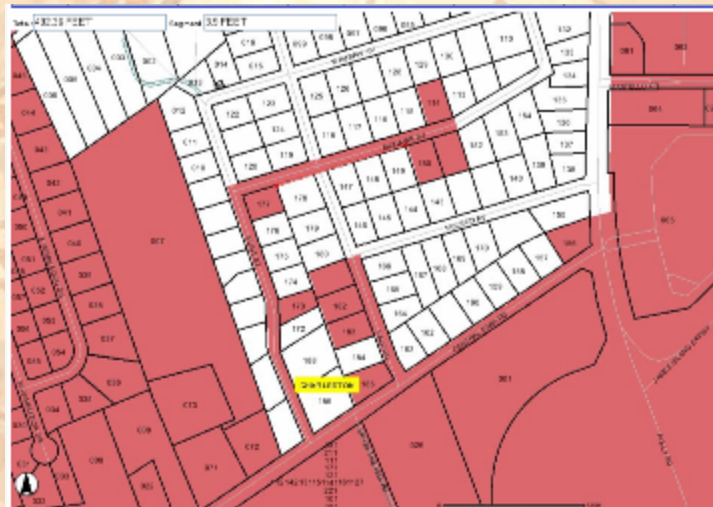
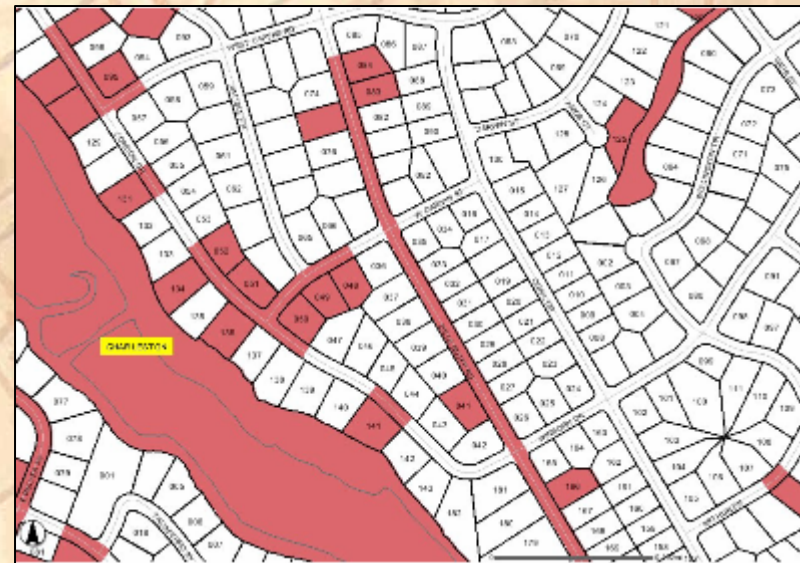
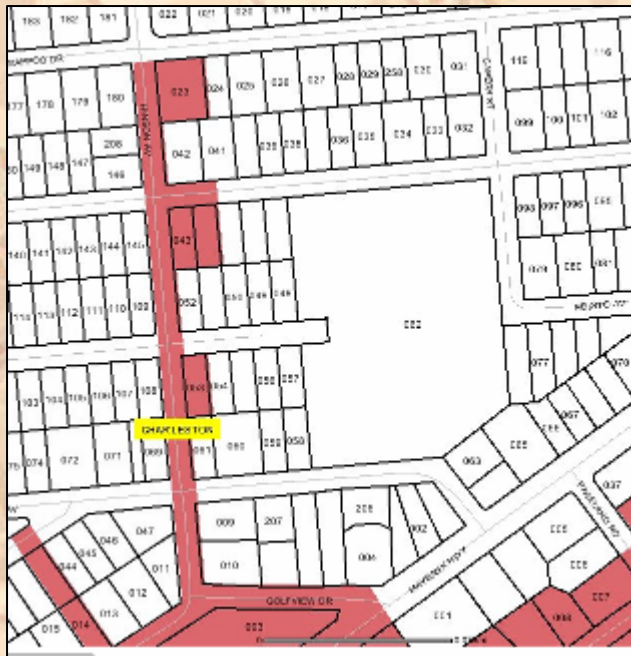
- Communication among Parcel People is Good
- Local Governments Get It
- State Coordinators answer their email at midnight
- There is more data out there than you think.

Lessons Learned - Again

- *You have to build the fire station before there is a fire*
- We had a heck of a time in Kentucky
- Arkansas – what a great state
- The private sector did a lot of sideline dancing
- Metadata - boring to collect but you can't live without it

Charleston SC

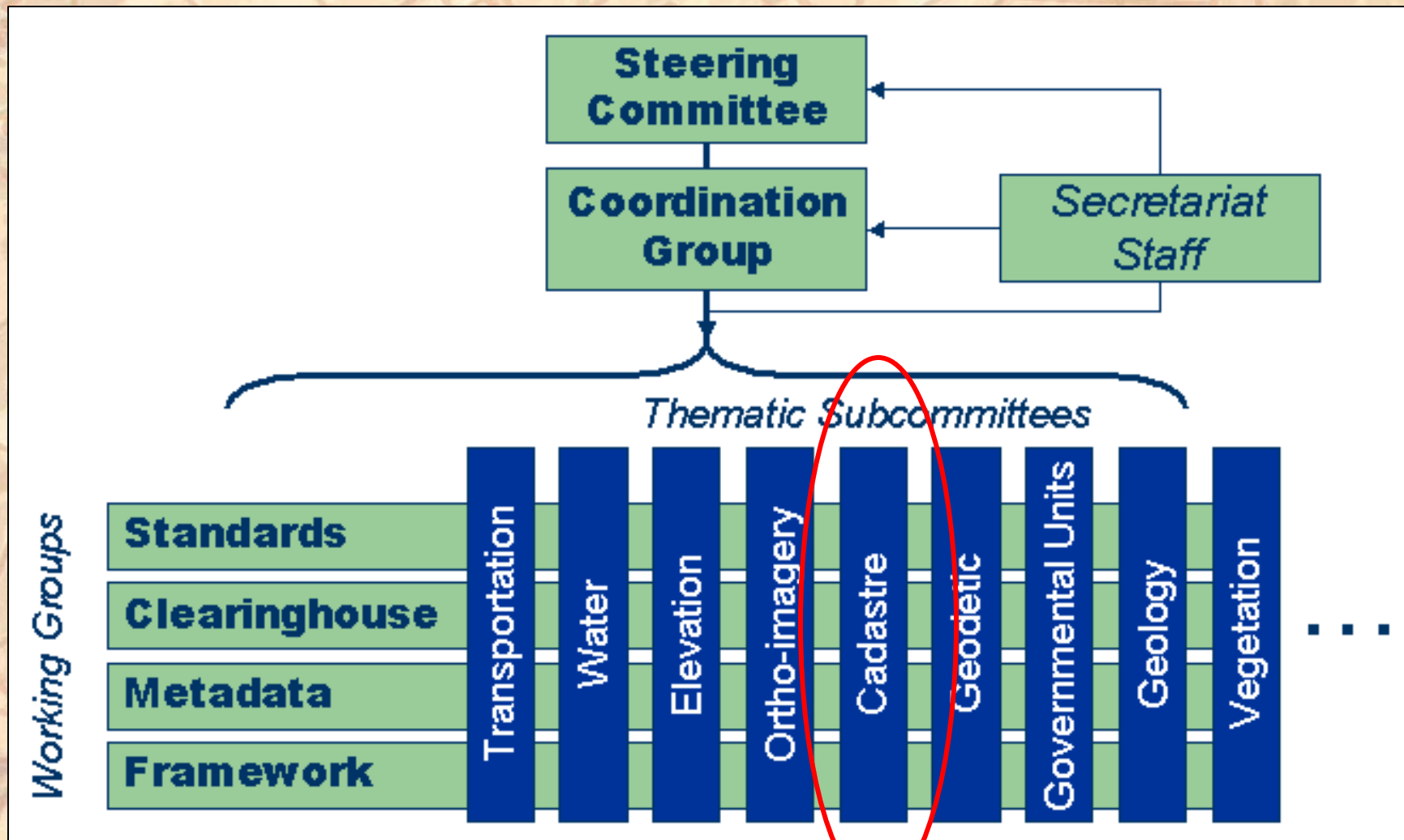
Does the Census need parcels ?



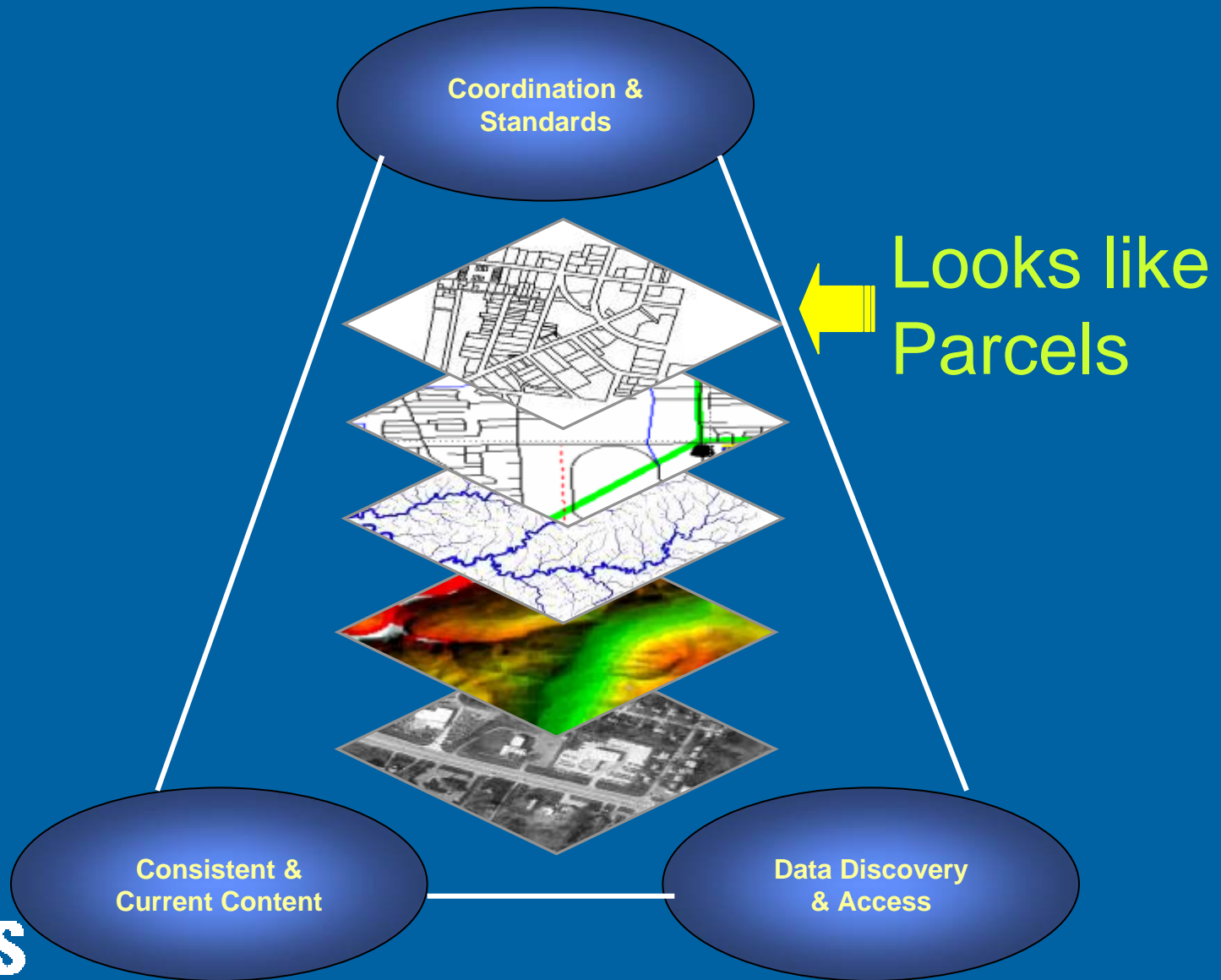
Lots of Organizations



FGDC Organization



Connecting the Components





N.C. / S.C. Parcels :NC One Map & USGS National Map It is possible!!!

The screenshot displays a web-based mapping application. At the top left, there are logos for 'nc ONE map' and 'The National Map'. Below these, the text 'NC OneMap Viewer' and 'Back to the Main Page' is visible. The main map area shows a detailed view of parcel boundaries in Mecklenburg County, North Carolina, with labels for 'Charlotte', 'Mecklenburg County', and 'York County'. A diagonal line runs across the map. On the left side, there is a vertical toolbar with sections for 'Zoom', 'Query', 'Tools', and 'Docs'. On the right side, there is a 'Layers' panel with a 'Scale Information' section showing a scale of 1:9,149. The 'Layers' panel includes categories like 'Location-Geodetic Structures' and 'Transportation', with various road types listed. At the bottom of the map area, there is a note: '- Zoom in for higher resolution data - Participating local governments outlined in orange'. At the very bottom of the page, there is a footer with contact information: 'U.S. Department of the Interior || U.S. Geological Survey || EROS Data Center', 'URL: <http://gisdata.usgs.net/website/NC%5FOneMap/> || Maintainer: webmapping@usgs.gov || Modified: June 28, 2004

NSDI Parcel Related Geospatial data

Cadastral


Framework?

| | | | | |
|----------------------|---|---------|-----|---|
| Cadastral | Describes the geographic extent of past, current, and future right, title, and interest in real property, and the framework to support the description of that geographic extent. | DOI/BLM | Yes |  |
| Cadastral (offshore) | Offshore Cadastral is the land management system used on the Outer Continental Shelf. It extends from the baseline to the extent of U.S. jurisdiction. | DOI/MMS | Yes |  |

Federal Lands

| | | | | |
|-------------------------------|--|---------|----|--|
| Federal land ownership status | Federal land ownership status includes information describing all title, estate, or interest of the federal government in a parcel of real and mineral property. | DOI/BLM | No | |
|-------------------------------|--|---------|----|--|

Governmental Units

| | | | | |
|--------------------|---|----------|-----|---|
| Governmental units | These data describe, by a consistent set of rules and semantic definitions, the official boundary of federal, state, local, and tribal governments as reported to the Census Bureau by responsible officials of each government for purposes of reporting the nation's official statistics. | DOC/USCB | Yes |  |
|--------------------|---|----------|-----|---|

Housing

| | | | | |
|---------|---|-----|----|--|
| Housing | Geographic data on homeownership rates, including many attributes such as HUD revitalization zones, location of various forms of housing assistance, first-time home buyers, underserved areas, and race. | HUD | No | |
|---------|---|-----|----|--|

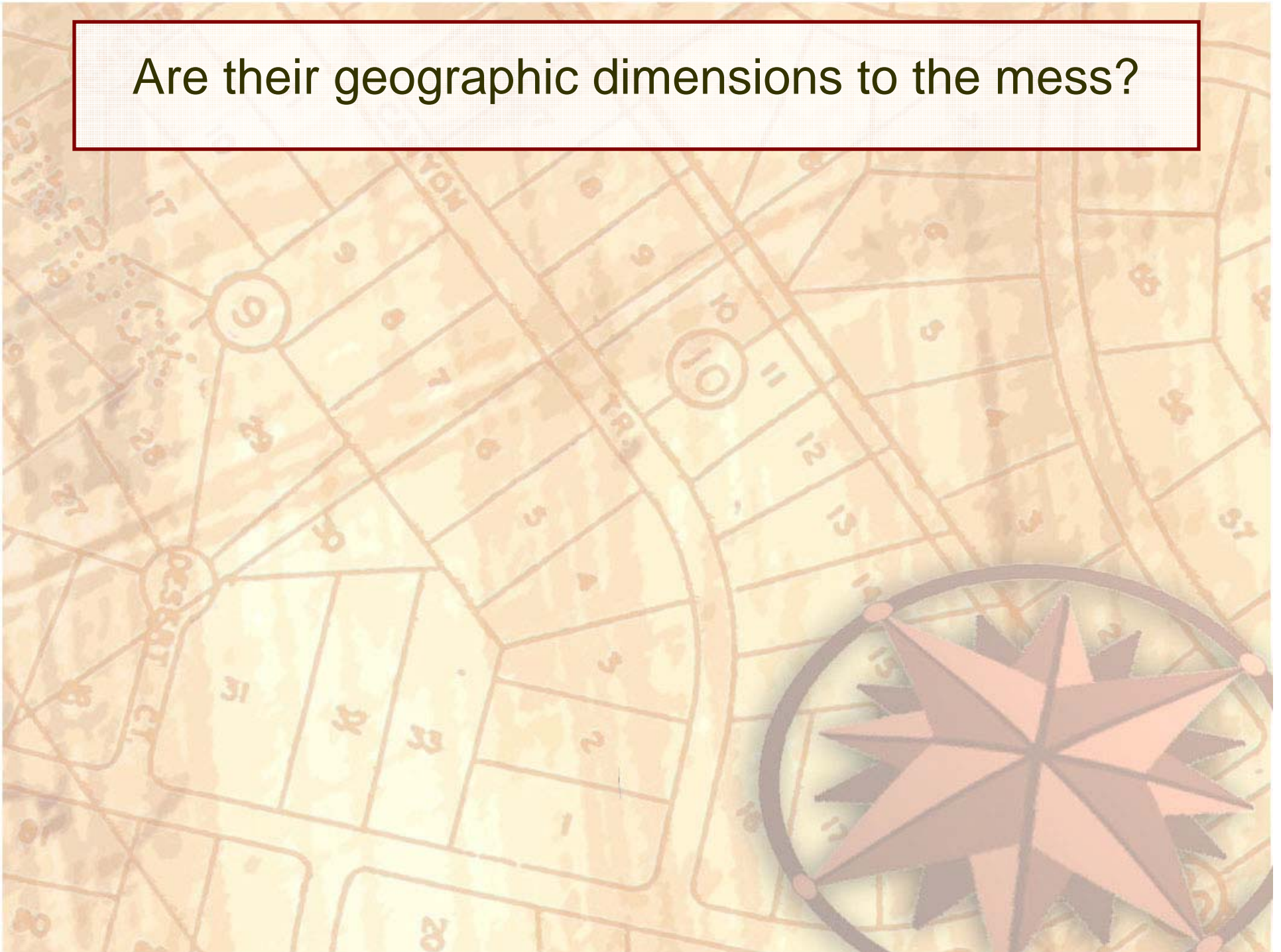
Land Conveyance

| | | | | |
|---|--|---------|----|--|
| Public land conveyance (patent) records | The records that describe all past, current, and future rights, titles, and interest in real property. | DOI/BLM | No | |
|---|--|---------|----|--|

Post Bailout Presentation

- **The mortgage mess has important geographic dimensions**
- **Existing Federal Programs (HMDA) should have been monitoring this mess**
- **Many local governments have systems (CAMA) that could monitor this**
- **The private sector is monitoring it**
- **If not now – WHEN?**

Are their geographic dimensions to the mess?



Newsweek June 2 , 2008

Mortgages and Madness

Questionable lending practices turned a peaceful
Cleveland neighborhood into a blighted slum.



WASTELAND: As owners have defaulted and abandoned their homes, the community of Slavic Village has become a boarded-up ghost town

Reverse Redlining

grated. To meet Wall Street's demand for a steady supply, lenders kept reaching lower and lower down the scale of quality in both property and borrowers, until the street hustlers jumped in to offer up their "product." Not surprisingly, the once shunned inner city became a prime lending spot across America. That, in turn, led to the phenomenon of reverse redlining. More than a decade ago, the big story was the redlining of low-income, often African-American, neighborhoods by banks that refused to lend there. Now the opposite happened.

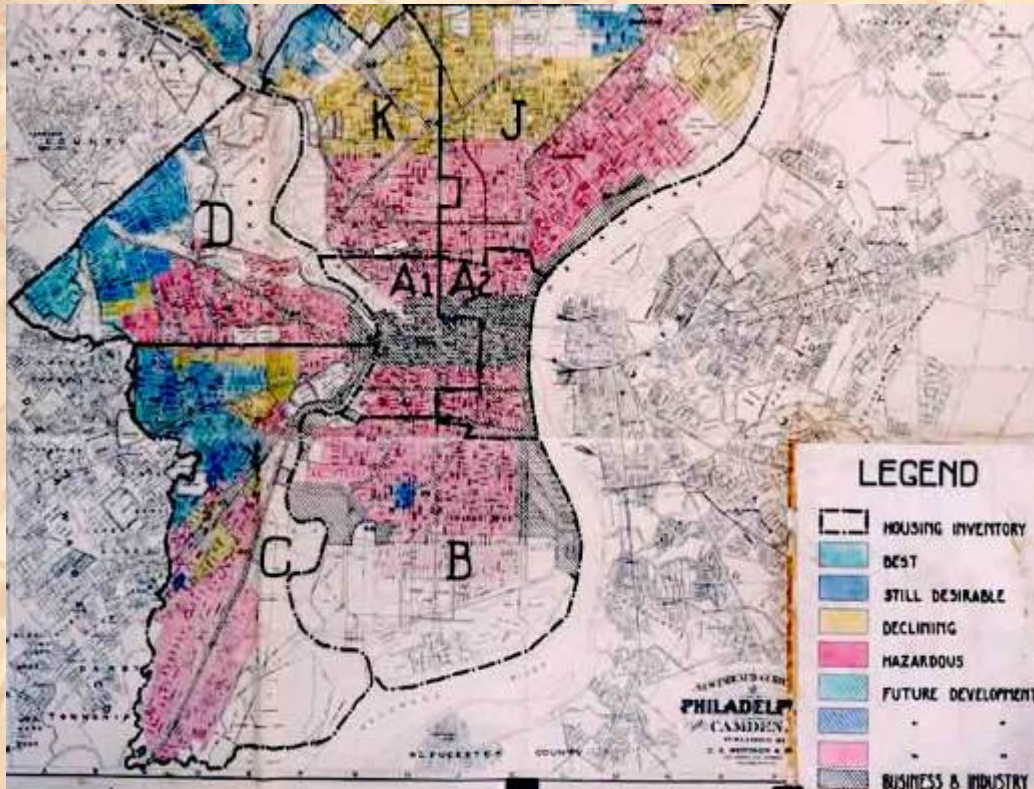
Wall Street's insatiable demand inspired the local shop owner and plumber to go into the mortgage business—what Brancatelli calls "station-wagon brokers."

"There are a lot of former drug dealers who have gotten into the business," adds Ed Kraus of the Ohio Attorney General's office. Many brokers simply invented biog-

'In a way it's the perfect crime,' one official says of the subprime mess.



Redlining in Philadelphia - 1932



MS FORM-6
2-3-32

AREA DESCRIPTION
(For Instructions see Reverse Side)

1. NAME OF CITY PHILADELPHIA SECURITY GRADE D AREA NO. 11

2. DESCRIPTION OF TERRAIN Level.

3. FAVORABLE INFLUENCES. Good shopping area on Lehigh Avenue and Germantown Avenue. Fairly close to commercial area - good transportation.

4. DETRIMENTAL INFLUENCES. Obsolescence - some negro - some foreign.

5. INHABITANTS:
a. Type Mill workers - clerks.; b. Estimated annual family income \$ 800. - \$1800.
c. Foreign-born Mixture; % 50 %; d. Negro Yes; % 5;
(Nationality) (Race or %)
e. Infiltration of Above; f. Relief families Fairly heavy
g. Population is increasing ; decreasing ; static .

6. BUILDINGS:
a. Type or types 2 & 3 story rows; b. Type of construction Brick
c. Average age 28 to 30 yrs.; d. Repair Poor to fair.

7. HISTORY:

| YEAR | SALE VALUES | | RENTAL VALUES | |
|-------------------|-----------------|-----------------|---------------|-----------------|
| | RANGE | PREDOMINATING % | RANGE | PREDOMINATING % |
| 1929 level | \$1200.-\$2000. | \$2500. 100% | \$12.- \$50. | \$20. 100% |
| 1924-29 low | \$ 600.-\$1700. | \$1800. 48% | \$10.- \$30. | \$18. 60% |
| June 1927 current | \$ 700.-\$1900. | \$1500. 58% | \$12.- \$35. | \$20. 67% |

Peak sale values occurred in and were % of the 1929 level.
Peak rental values occurred in and were % of the 1929 level.

8. OCCUPANCY: a. Land 100 %; b. Dwelling units 28 %; c. Home owners 28 - 30 %

9. SALES DEMAND: a. Fair; b. 2 story row - \$1800-\$2000. Activity is Fair

10. RENTAL DEMAND: a. Good; b. 2 story row - \$15. - \$25. c. Activity is Good

11. NEW CONSTRUCTION: a. Types No; b. Amount last year ---

12. AVAILABILITY OF MORTGAGE FUNDS: a. Home purchase Very limited; b. Home building what limited.

13. TREND OF DESIRABILITY NEXT 10-15 YEARS Stable to downward.

14. CLASSIFYING REMARKS: Front Street is principally business. Many industrial plants in the section. Broad Street and Germantown Avenue are principally business. Some rents have been increased in recent years, but no blanket increases have been instituted. Tenants are being increased 10% where they warrant it. A fair 4th grade section.

15. Information for this form was obtained from HARRY REIDLEBOSCH

Date June 7th, 1932

(Over)

and often vandalism prevail. Unstable incomes of the people and difficult collections are usually prevalent. The areas are broader than the so-called slum districts. Some mortgage lenders may refuse to make loans in these neighborhoods and others will lend only on a conservative basis.

March 2005 !!!!!!!!!!!

Home Insecurity

How Widespread Appraisal Fraud Puts Homeowners at Risk

BY DAVID CALLAHAN

Borrowing to Make Ends Meet Briefing Paper #4, March 2005

While many U.S. households have benefited from the recent rise in real estate prices, homeowners who have bought at record high prices are vulnerable to a fall in property values that could leave them owing more on their mortgage than their home is worth. This risk is aggravated by the fact that many Americans have reduced the equity in their home to pay off credit card debts and cover day-to-day expenses. More troubling still is evidence that many appraisers fraudulently inflate property values during the buying or refinancing of homes. This paper explores the implications of appraisal fraud.

PAPER

What appraisers were saying

Key Findings

- Serious conflicts of interest pervade the mortgage industry. Lenders, brokers, and real estate agents often have an incentive to inflate the value of residential properties. The process of appraising a property — among the most important steps in either the purchase or refinancing of a home — is sometimes done dishonestly as appraisers go along with requests to overstate the value of a home.
- Appraisal fraud can lead homeowners to borrow more money than their homes are worth, putting themselves at risk of being “upside down” in a home — e.g., not being able to sell for a high enough price to pay off their mortgage — even if there is no downturn in the real estate market.
- Appraisal fraud is not a new problem, but the refinancing boom — in which homeowners have cashed out over \$450 billion in home equity since 2001 — has created fresh incentives for self-interested parties to collude in the overstatement of property values.
- Up to half of all appraisers have reported feeling pressures from lenders or brokers to overstate property values. Many appraisers go along with these pressures out of fear of losing future work. Appraisers who have not complied with such pressures report not being paid for work and being blacklisted by lenders and brokers.
- The inflation of home prices through appraisal fraud may be helping to push real estate prices up to unsustainable levels and contributing to a housing “bubble.” Some observers believe that appraisal fraud helps explain high foreclosure rates in certain parts of the nation.
- Predatory lending targeting minority and sub-prime borrowers often involves appraisal fraud. Low-income aspiring homeowners are also targeted by developers who collude with dishonest appraisers in the aggressive marketing of new homes offered at inflated prices.

USA Today



Denver foreclosures: One hard hit neighborhood at a glance



Lenders foreclosed on about 7,700 homes in Denver last year; officials expect 11,000 this year, mirroring a national increase. Among the neighborhoods hardest hit was this core map shows foreclosures since late 2006. [Click a property for details.](#)

[Regional Map](#) [Reset Map](#)



Sources: Denver Public Trustee, DenverGIS; Graphic by Brad Heath and Ron Coddington, USA TODAY

USA Today – Query by location



Denver foreclosures: One hard hit neighborhood at a glance



Lenders foreclosed on about 7,700 homes in Denver last year; officials expect 11,000 this year, mirroring a national increase. Among the neighborhoods hardest hit was this one. The map shows foreclosures since late 2006. [Click a property for details.](#)

[Regional Map](#) [Reset Map](#)



Parcel Based Early Warning System

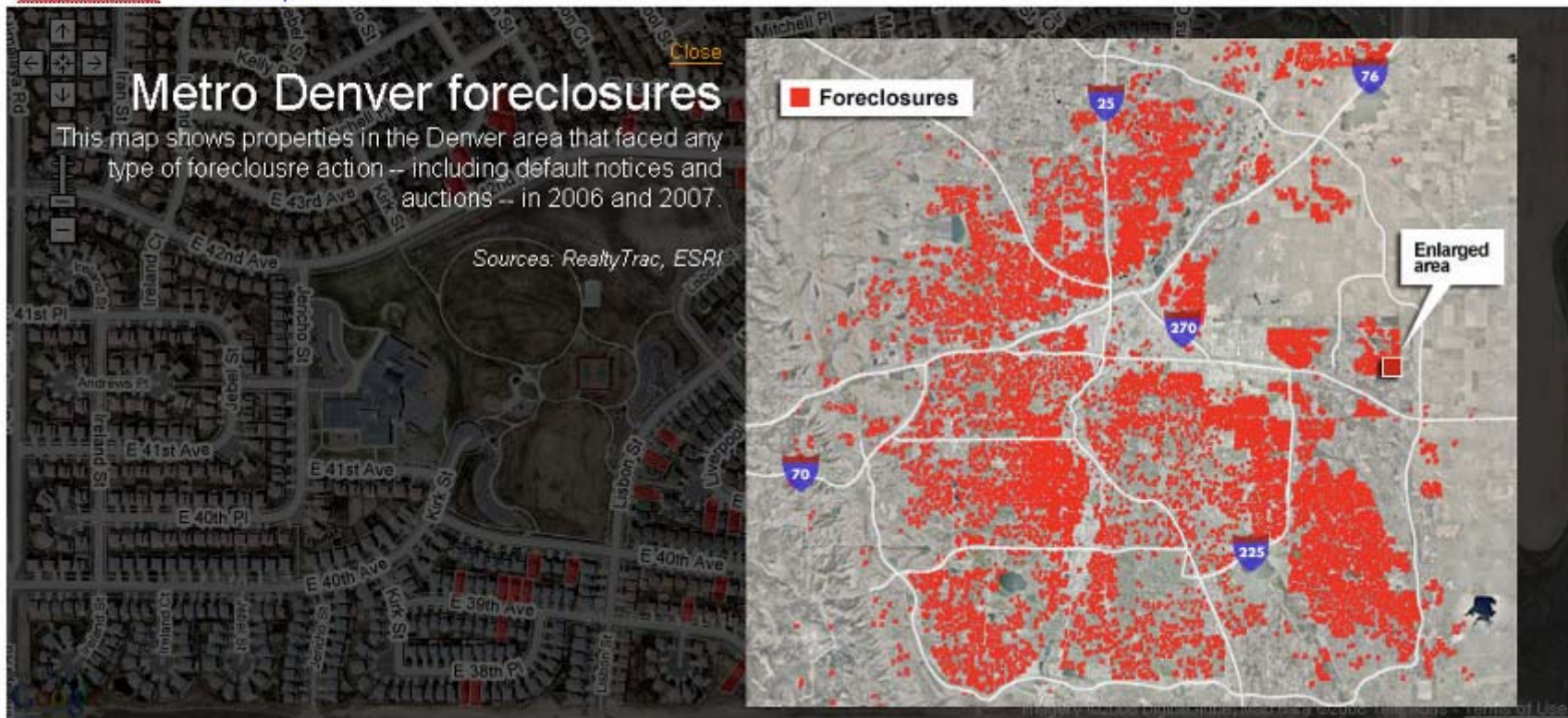


Denver foreclosures: One hard hit neighborhood at a glance



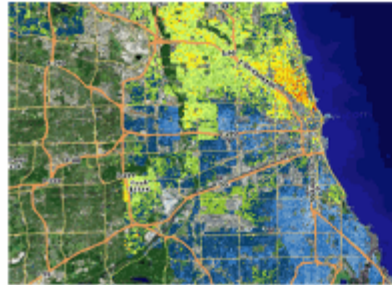
Lenders foreclosed on about 7,700 homes in Denver last year; officials expect 11,000 this year, mirroring a national increase. Among the neighborhoods hardest hit was this one. This map shows foreclosures since late 2006. [Click a property for details.](#)

[Regional Map](#) [Reset Map](#)



Zillow – Heat Maps

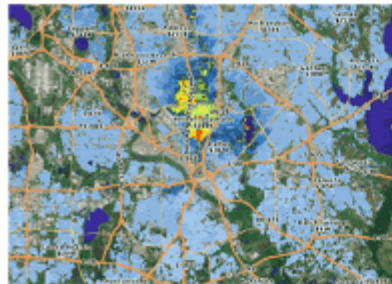
Chicago



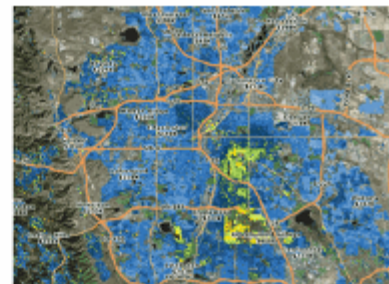
Cleveland



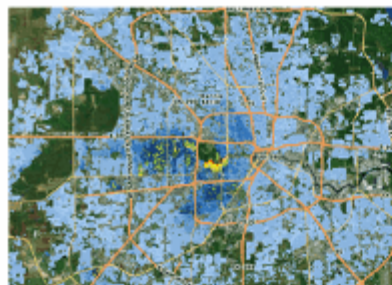
Dallas



Denver



Houston



Los Angeles



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Year Any

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 Photos Only

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Zillow® Dueling Digs
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Heat map:

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What Zillow Knows

US >> South Carolina >> Columbia Real Estate >> Views: 55


116 Ila Ln Columbia SC 29206
4 beds, 3.0 baths, 2,680 sq ft

Zestimate®: \$277,500 ?
My Estimate: [CREATE](#)



Microsoft Virtual Earth™

North | **East** | South | West



Microsoft Virtual Earth™

Street | Aerial | Hybrid | Show all homes

and homes: **116 Ila Ln 29206**

US >> South Carolina >> Columbia Real Estate >> Views: 55

116 Ila Ln Columbia SC 29206
4 beds, 3.0 baths, 2,680 sq ft

Zestimate®: \$277,500 ?
My Estimate: [CREATE](#)

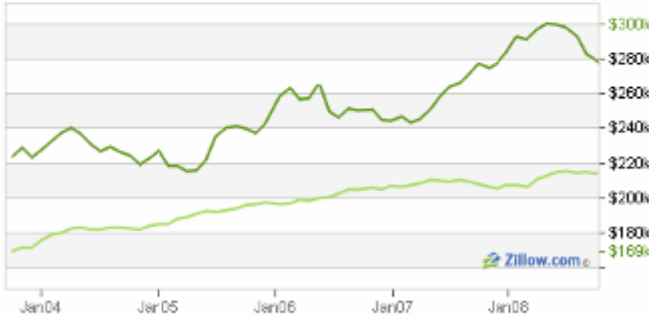
Zestimate Information

Zestimate: **\$277,500**
30-day change: -\$2,000
Value Range: \$213,675 - \$296,925
Last updated: 10/06/2008

Market Value Change

Show: [\\$ Dollar](#) | [% Percentage](#)

Time frame: [1YR](#) | [5YR](#) | [10YR](#)



Compare:

This home 29206 Columbia
 Richland SC USA Show sales

Sales History & Tax Information

Zillow - Foreclosures

Find homes: 110 in 29206

SC > Richland county > Columbia > Showing Homes

Want the latest results, fast? Get e-mail alerts when new homes are added that match this search.

Street Aerial Hybrid

Sort by: Featured

See homes in a list

Pine Cone Dr, Columbia, SC

 For Sale: \$81,900
 3 bd 1.5 ba 1,050 sqft
 0 soft lot Built: 1968
 Days on Zillow: 4

Ferrell Dr, Columbia, SC

 For Sale: \$61,000
 3 bd 2 ba 0 soft
 0 soft lot Built: --
 Days on Zillow: 4

Naybank St, Columbia, SC

 For Sale: \$52,000
 0 bd -- ba 0 sqft

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Zillow Mortgage Marketplace

| Average Rates | Today | Last Week |
|---------------|-------|-----------|
| 30 Year Fixed | 5.73% | 5.87% |
| 15 Year Fixed | 5.48% | 5.59% |

Live Quotes

| Rate | Rate | Rate |
|----------------|-------|------------|
| 30 year fixed | 5.62% | 58 min ago |
| 30 year fixed | 5.88% | 59 min ago |
| 7/1 ARM, Jumbo | 6.12% | 61 min ago |

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| Agent | Stats |
|------------------|-----------------------------|
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| Hill and Nardone | 33 listings Local Expert |
| Lisa McIvergin | 31 listings Local Expert |

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Foreclosure Listing Information [Search and Terms Help](#)

Atascadero Dr, Columbia, SC 29206

[Power Search](#) [Pre-foreclosures](#) [Sheriff Sales](#) [Foreclosures](#) [Bankruptcies](#) [FEROs](#) [Tax Liens](#) [Deeds](#)

Using: City: Zip Code: Deed: Date: Price:

Advanced Options

[Open Search Results](#)

FORECLOSURE **\$134,900**

[Complete address with trail](#) 3 Beds, 2 Baths,
Columbia, South Carolina 29206 1,585 sq. ft.
Richland County Rating: ★★★★★

Listing ID: 12540200
[Inactive](#)

Property Questions? Ask an expert!
 Chad Skoen
[Continue about this listing](#)

Payments as low as \$707 per month **Latest Rates**
Based on a 30 year fixed rate of 5.25% w/ \$13,490 (10%) down: **30 yr fixed: 5.73%**
15 yr fixed: 5.40%
[Get custom mortgage quotes](#) [Powered by Zillow Mortgage Marketplace](#)

Contact Information
Agent Company: [FREE with trail](#)
Agent Company Address: [FREE with trail](#)
Agent Company City: [FREE with trail](#)
Agent Company State: [FREE with trail](#)
Agent Company Phone: [FREE with trail](#)
Agent Company Email: [FREE with trail](#)

Property Information
Price: **\$134,900** Beds: **3**
Bathrooms: **2** Living Area Size: **1,585**
Description: [FREE with trail](#)

County Tax Roll
Tax Gap: [FREE with trail](#)
Tentative Value: [FREE with trail](#)
Year Built: [FREE with trail](#)
Last Sale Date: [FREE with trail](#)
Last Sale Price: [FREE with trail](#)

1 year Market Value Change for this listing

ZESTIMATE®: \$162,000 Updated: 09/29/08
Value Range: \$120,640 - \$170,260 Powered by Zillow.com
30-day Change: **↑ \$4,000**

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Listing ID City Zip Code Beds Baths Price -

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[1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [Next](#)

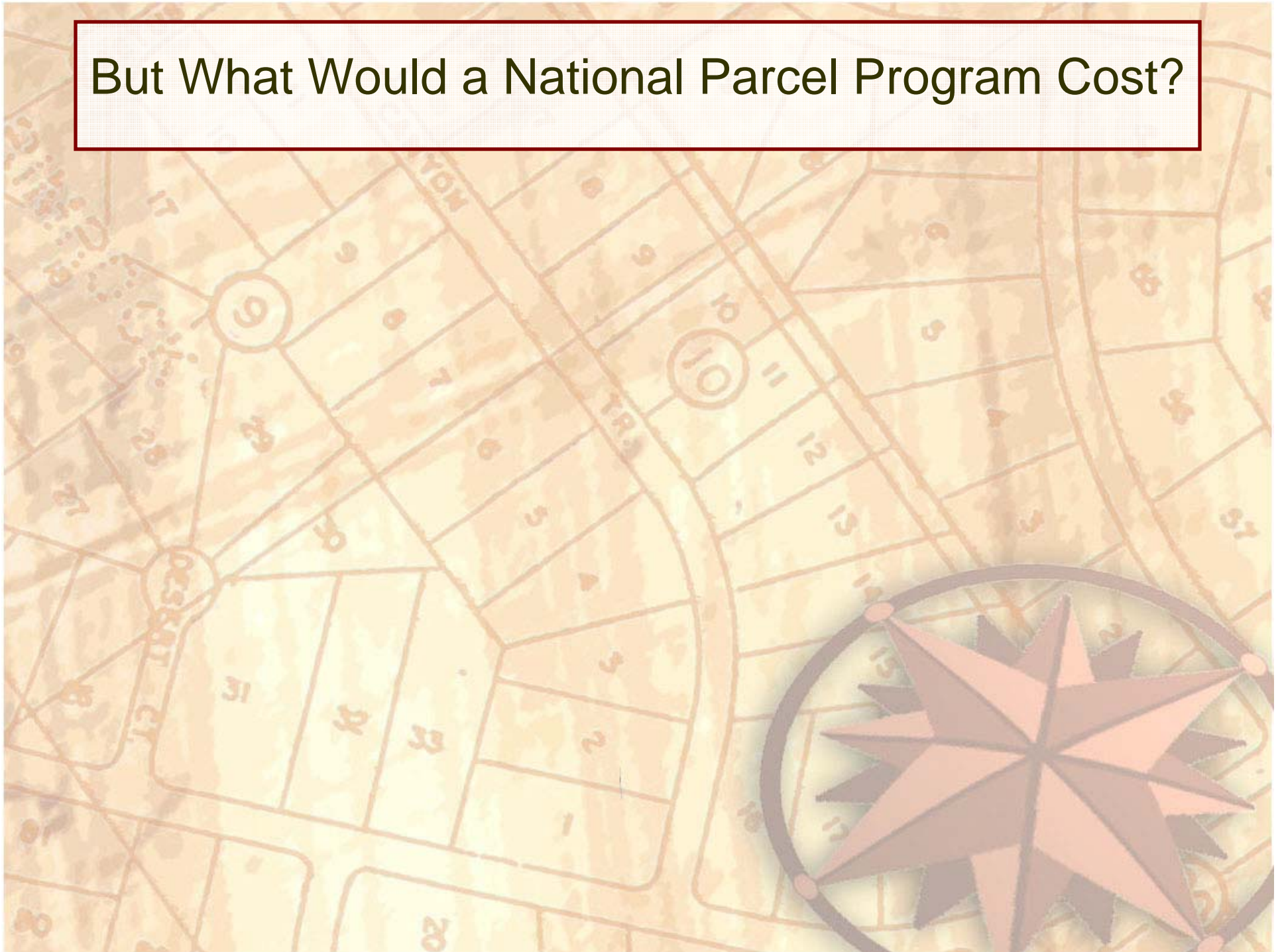
| # | Details | Status | DOS | Listing Type | Street | City | ST | Zip | BD/BH | Price | Zestimate® | PT | Map |
|---|-------------------------|----------------------------|-----|--------------|--------------------------------|------------|----|-------|---------|-----------|------------|----|---------------------|
| 1 | Details | MAKE OFFER | - | Foreclosure | 43 Settleme... | Blythewood | SC | 29016 | | \$115,900 | | LA | Map |
| 2 | Details | MAKE OFFER | - | Foreclosure | Laurens St | Columbia | SC | 29201 | 3 / 3 | \$457,900 | \$530,000 | PU | Map |
| 3 | Details | MAKE OFFER | - | Foreclosure | Silver Cres... | Columbia | SC | 29223 | 3 / 2.5 | \$399,900 | \$525,500 | SF | Map |
| SAVE 30-50% on your next home! Click here. | | | | | | | | | | | | | |
| 4 | Details | NEW | 2 | Foreclosure | Covey Ct | Hopkins | SC | 29061 | 3 / 2 | \$57,800 | | SF | Map |
| 5 | Details | NEW | 2 | Foreclosure | Hickory Rid... | Columbia | SC | 29209 | 3 / 2 | \$52,000 | \$76,500 | SF | Map |
| 6 | Details | NEW | 2 | Foreclosure | Cresthill Dr | Columbia | SC | 29223 | 3 / 2 | \$45,000 | \$96,000 | SF | Map |
| 7 | Details | NEW | 2 | Foreclosure | Coachmen Ct | Columbia | SC | 29229 | 3 / 2 | \$114,700 | \$126,000 | SF | Map |
| 8 | Details | NEW | 3 | Foreclosure | Aintree Dr | Columbia | SC | 29223 | 3 / 2 | \$112,000 | \$119,000 | UN | Map |
| 9 | Details | NEW | 3 | Foreclosure | Windsorces... | Columbia | SC | 29229 | 4 / 2.5 | \$163,000 | | UN | Map |
| 10 | Details | NEW | 5 | Foreclosure | Stockland Rd | Irmo | SC | 29063 | 5 / 3 | \$93,900 | | UN | Map |
| 11 | Details | NEW | 5 | Foreclosure | Alumni Ln | Blythewood | SC | 29016 | 4 / 3 | \$579,900 | | UN | Map |
| 12 | Details | NEW | 6 | Foreclosure | Poultry Ln | Eastover | SC | 29044 | 4 / 2 | \$22,900 | | UN | Map |
| 13 | Details | NEW | 7 | Foreclosure | Norwich Court | Columbia | SC | 29223 | 1 / 1 | \$45,000 | | UN | Map |
| 14 | Details | NEW | 7 | Foreclosure | Pine Cone Dr | Columbia | SC | 29204 | 3 / 1.5 | \$51,900 | | UN | Map |
| 15 | Details | NEW | 7 | Foreclosure | 34 Links Cr... | Blythewood | SC | 29016 | | \$75,000 | | SF | Map |
| 16 | Details | NEW | 7 | Foreclosure | 69 Mills Grove | Blythewood | SC | 29016 | | \$82,900 | | UN | Map |
| 17 | Details | NEW | 7 | Foreclosure | Autumn Wood... | Irmo | SC | 29063 | 3 / 2 | \$124,900 | \$138,500 | UN | Map |
| 18 | Details | NEW | 7 | Foreclosure | Co Co Rd | Columbia | SC | 29210 | 3 / 2 | \$92,000 | \$102,000 | UN | Map |
| 19 | Details | NEW | 7 | Foreclosure | Carriage Oa... | Columbia | SC | 29229 | 4 / 2.1 | \$112,900 | \$127,500 | UN | Map |
| 20 | Details | NEW | 7 | Foreclosure | Small Oak Ct | Blythewood | SC | 29016 | 4 / 2.5 | \$144,900 | \$189,500 | UN | Map |
| 21 | Details | NEW | 7 | Foreclosure | Elders Pond... | Columbia | SC | 29229 | 2 / 2 | \$80,000 | \$95,500 | UN | Map |
| 22 | Details | NEW | 7 | Foreclosure | Ferrell Dr | Columbia | SC | 29204 | 3 / 2 | \$63,000 | \$136,500 | UN | Map |
| 23 | Details | NEW | 7 | Foreclosure | Caughman Ri... | Columbia | SC | 29209 | 3 / 2 | \$135,000 | \$144,000 | UN | Map |
| 24 | Details | NEW | 7 | Foreclosure | 69 Mills Grove | Blythewood | SC | | | \$82,900 | | LA | Map |
| 25 | Details | NEW | 7 | Foreclosure | 18 Block A... | Blythewood | SC | | | \$179,900 | | LA | Map |

Real Estate Listing Results 1 - 25 of 2,046

NEW! [Real estate discussion forum](#)

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But What Would a National Parcel Program Cost?



Cost = \$294.6 Million

Box 5.1 Estimated Cost for Producing Parcel Data for the Nation

The FGDC Subcommittee for Cadastral Data estimates that it would require \$294.6 million in initial one-time costs, with recurring costs of \$84.7 million per year to complete a national set of land parcel data.

The one-time cost includes:

- The creation of parcel management programs and training (\$1.5 million)
- Improvements to the ground control (\$3.1 million)
- Supplemental data acquisition (0) (There are no costs assigned to supplementary data because it either already exists or is considered the responsibility of other agencies.)
- Hardware and software (\$33.7 million)
- Conversion of hard copy maps to a digital product (\$240 million)
- Publication of the data by the counties into a standard format (\$15.7 million)

The recurring cost of \$84.7 million includes:

- Compilation and integration of the data received from the counties (\$1.3 million)
- Acquisition of imagery for urban (\$37.2 million) and rural areas (\$37.2 million), on a three year cycle
- Providing technical support and training to the counties (\$5 million)

This estimate is based on a recent inventory of the status of parcel data in all fifty states. The figures assume that each county will be responsible for the conversion and maintenance of the parcel data in their jurisdiction, and that all counties and states with existing data will need resources for the publication of the county data into a standard format and the integration of this data into uniform statewide parcel data coverage.

SOURCE: Stage and von Meyer, 2006c.

Lets do the math

Taxpayers are going to spend about \$2,295 per person to purchase bad mortgages

• $(\$700,000,000,000/305,000,000)$

Parcel program ~ \$294 Million

– Or \$.96 per person !!!!

– Or 0.00042 = .04% of the bailout budget

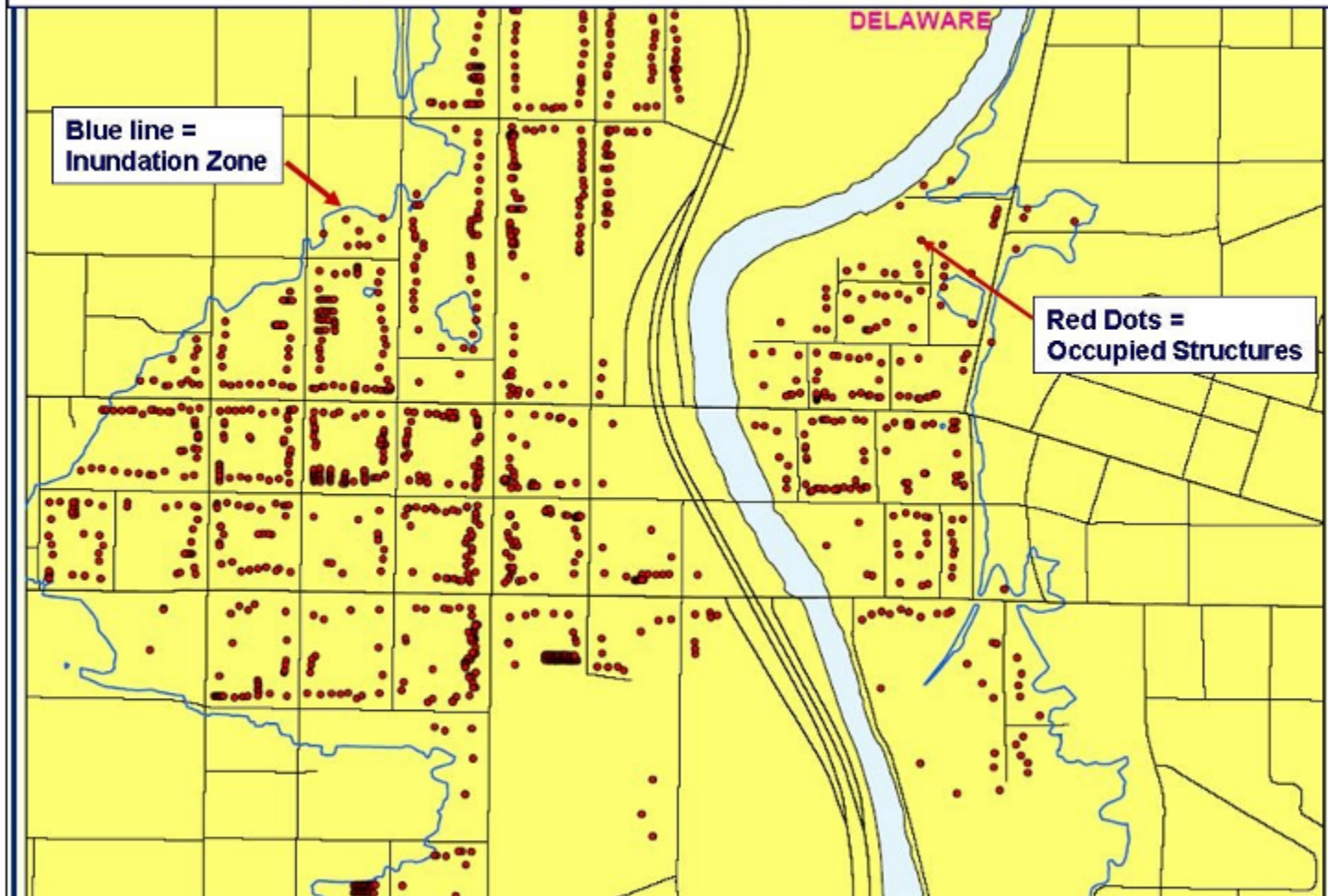
$(\$294,600,000/ \$700,000,000,000)$

But Wait – There is more!

- Points will do**
- Google and Microsoft also want these parcels**
- E-911 needs them**
- Several Companies will subsidize**
- More states are getting involved**
 - Washington – 39 counties last week**
 - Arkansas**
 - North Carolina**
 - Florida**

NPR - All Things Considered, July 31, 2006

Flood of 2005 – Identification & Notification of Affected Residents within the Inundation Zone



www.npr.org/templates/story/story.php?storyId=5590541

Mapping to save lives: Intense mapping of Delaware County helped Shoreh Elhami assemble this flood map. The red dots show the locations of homes in low-lying areas of Delaware County that were expected to flood.

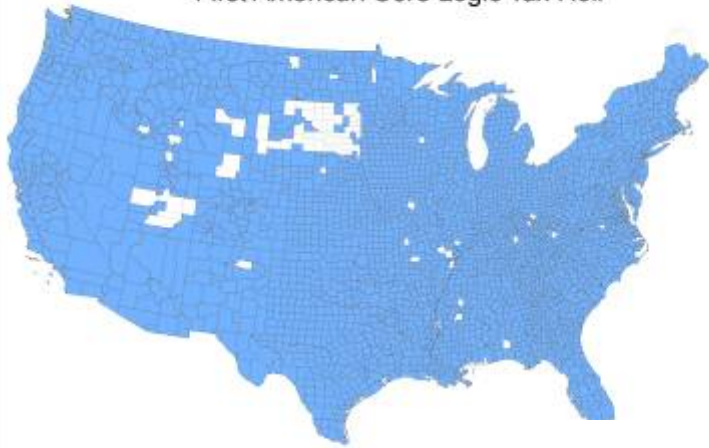
Private Parcel Activities

TABLE 4.2. A sample of firms that offer parcel based information

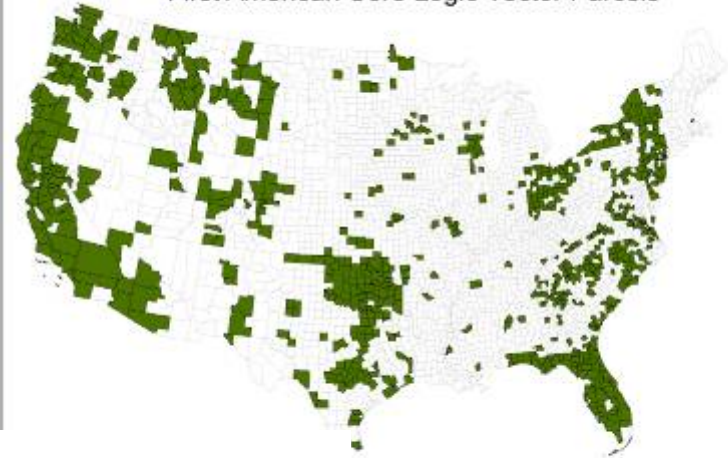
| Company | Product | Points or Polygons | Internal / Distribute | Coverage |
|--|------------------------------|--------------------|-----------------------|--|
| <i>Firms that support improved address location and navigation</i> | | | | |
| NAVTEQ | ParcelBoundaries | Polygons | Distribute | US |
| Tele Atlas | Address Points | Points | Distribute | US |
| First American | ParcelPoint | Points & Polygons | Both | US |
| GDR | Addresspoints | Points | Distribute | US |
| Proxix | PxPoint | Points & Polygons | Both | US |
| <i>Firms that provide parcel information and boundaries</i> | | | | |
| Boundary Solutions | National Parcel Portal | Polygons | Distribute | US |
| Parcel Quest | ParcelQuest | Polygons | Distribute | CA |
| Sidwell Maps | Digital Tax Maps, Shapefiles | Polygons | Distribute | IL, IA, IN, MI, MN |
| eMapsPlus | Digital Tax maps | Points | Distribute | CA, AL, FL, TN, MI, MO, MS, GA, NM, SC |
| Netronline | Digital Tax Maps | Polygons | Distribute | US |

First American

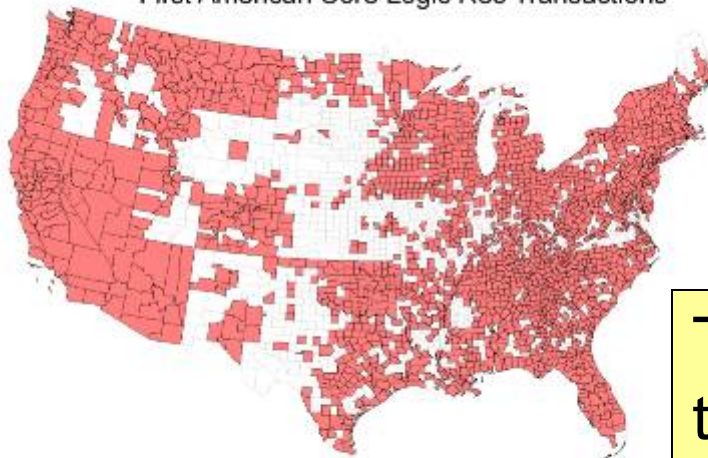
First American Core Logic Tax Roll



First American Core Logic Vector Parcels

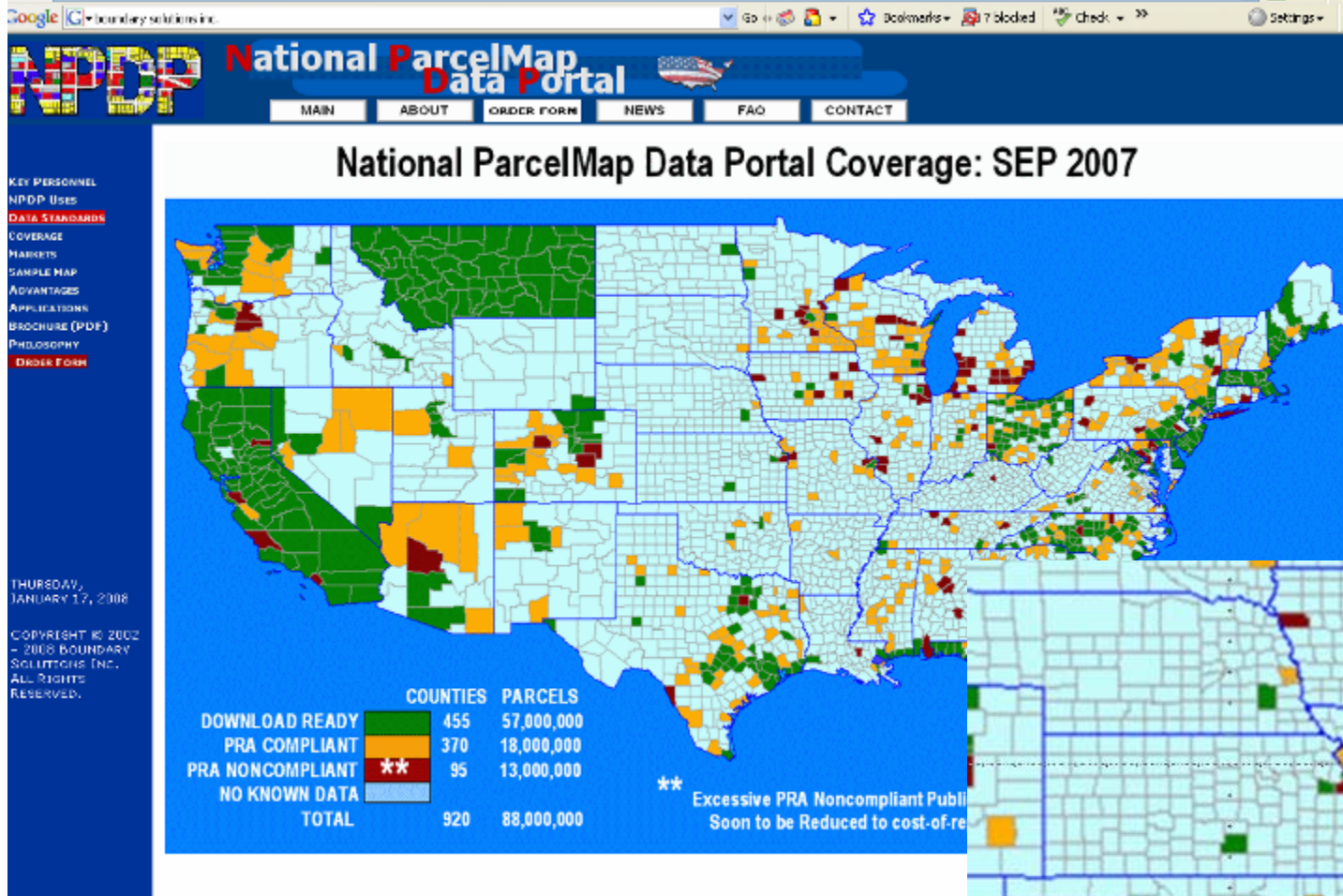


First American Core Logic Res Transactions



They have offered
to create parcels for
any county in the US

National Parcel Map Data Portal Boundary Solutions Inc.



- KEY PERSONNEL
- NPDP Uses
- [DATA STANDARDS](#)
- COVERAGE
- MARKETS
- SAMPLE MAP
- ADVANTAGES
- APPLICATIONS
- BROCHURE (PDF)
- PHILOSOPHY
- [ORDER FORM](#)

THURSDAY,
JANUARY 17, 2008

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Parcel Web Service with Imagery

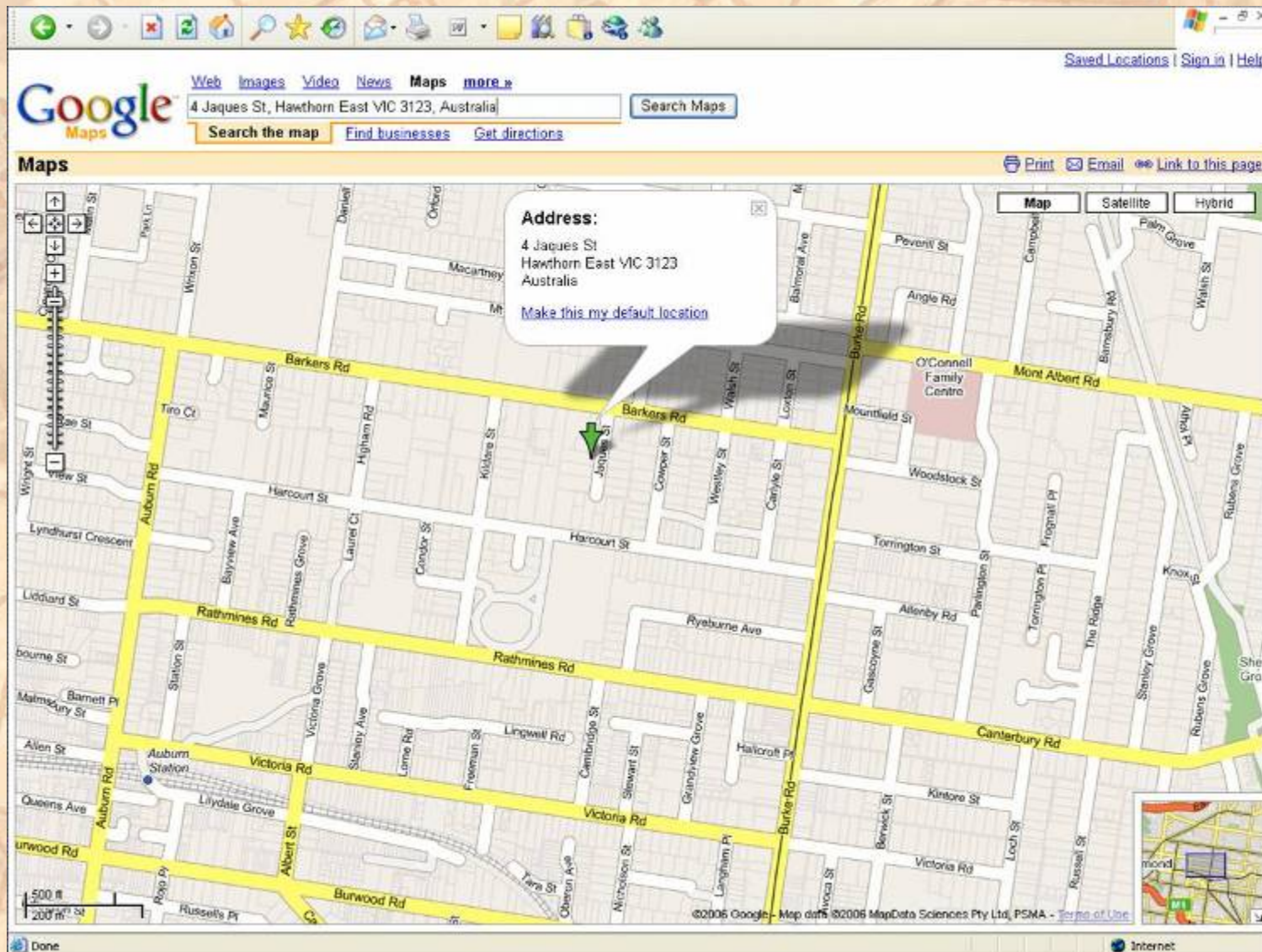
The screenshot displays a web-based parcel map interface. The main map area shows an aerial view of a residential neighborhood with numerous parcels outlined in green. Each parcel is labeled with a unique parcel ID, such as 26G420076, 26G420087, 26G420065, 26G420021, 26G141182, 26G141160, 26G141151, 26G141142, 26G141124, 26G141083, 26G141061, 26G141072, 26G141032, 26G141014, 26G141023, 26G140996, 26G140987, 26G140969, 26G140950, 26G140923, 26G140932, 26G140941, 26G140886, 26G140877, 26G140868, 26G140840, 26G140804, 26G140822, 26G140785, 26G140767, 26G140758, 26G140730, 26G140721, 26G141610, 26G140749, 26G140712, 26G141504, 26G140693, 26G140708, 26G140666, 26G141353, 26G141344, 26G140602, 26G140592, 26G140583, 26G140574, and 26G140574. The map includes a scale bar at the bottom left showing 0, 50 m, and 200 ft. A copyright notice at the bottom left reads "(©) 2008 ESRI, Blue Raster, GlobeExplorer, Tile Atlas". The interface features a top toolbar with icons for search, home, layers, and other functions. On the right side, there is a control panel with buttons for "Aerial Map" and "Street Map", and sliders for "Streets Transparency", "Parcel Transparency", and "Basemap Transparency". Below these sliders are zoom in (+) and zoom out (-) buttons. At the bottom right, there is a scroll bar and an ESRI logo.

Streets Transparency
Parcel Transparency
Basemap Transparency
Zoom + -

0 50 m 200 ft
(©) 2008 ESRI, Blue Raster, GlobeExplorer, Tile Atlas

Transferring data from wwwd.arcwebservices.com...

Australia – Google Map Address Matching to Parcel Nation Wide



The Changing Role of the Geospatial Community

Increased Demand - and Resources !

Government gets the benefit of commercial investment

Earth Information

Government



Commercial



Consumers & Business Enterprises

now in the hundreds of millions

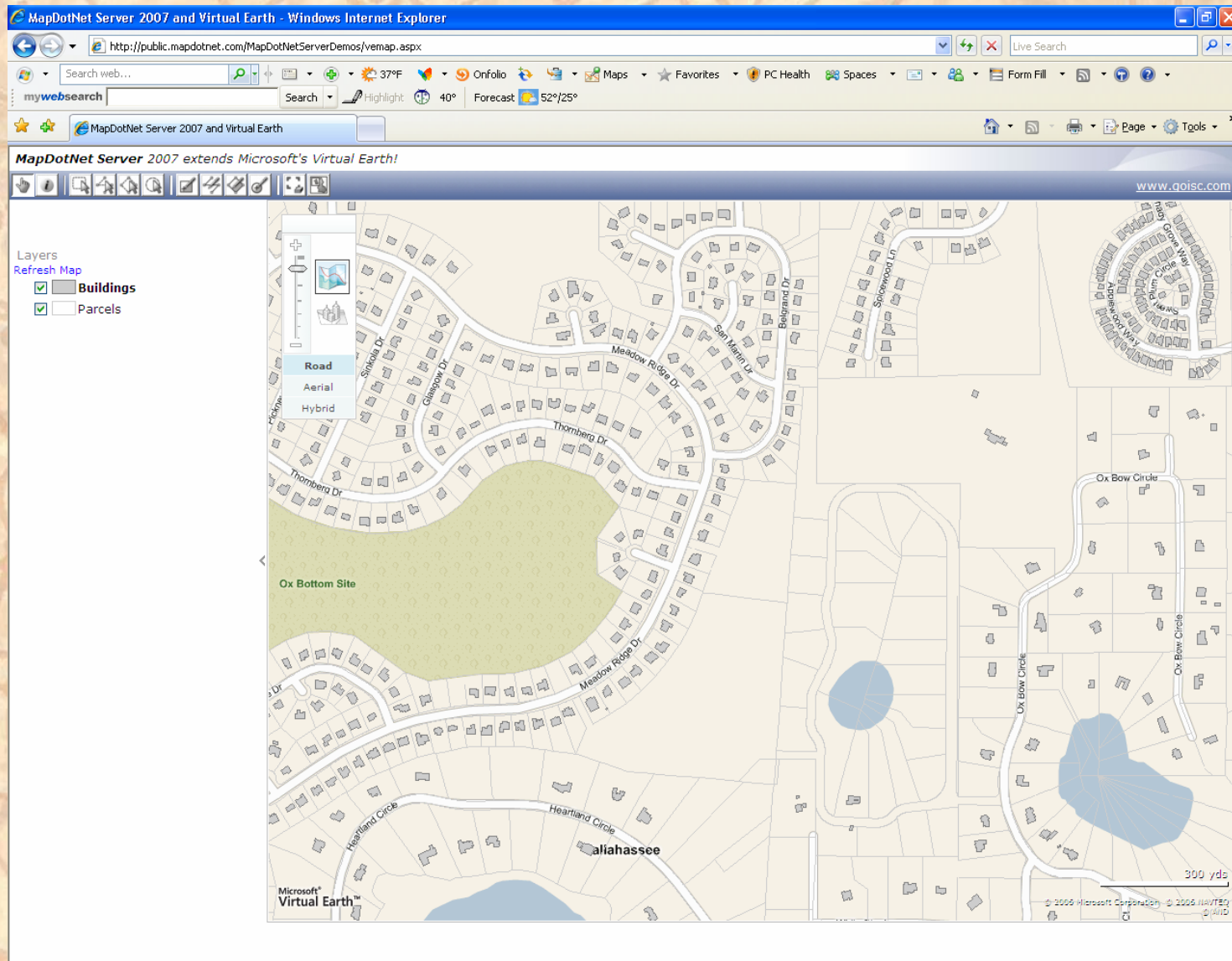
current local search market is \$60 billion

SUPPLY AND DEMAND

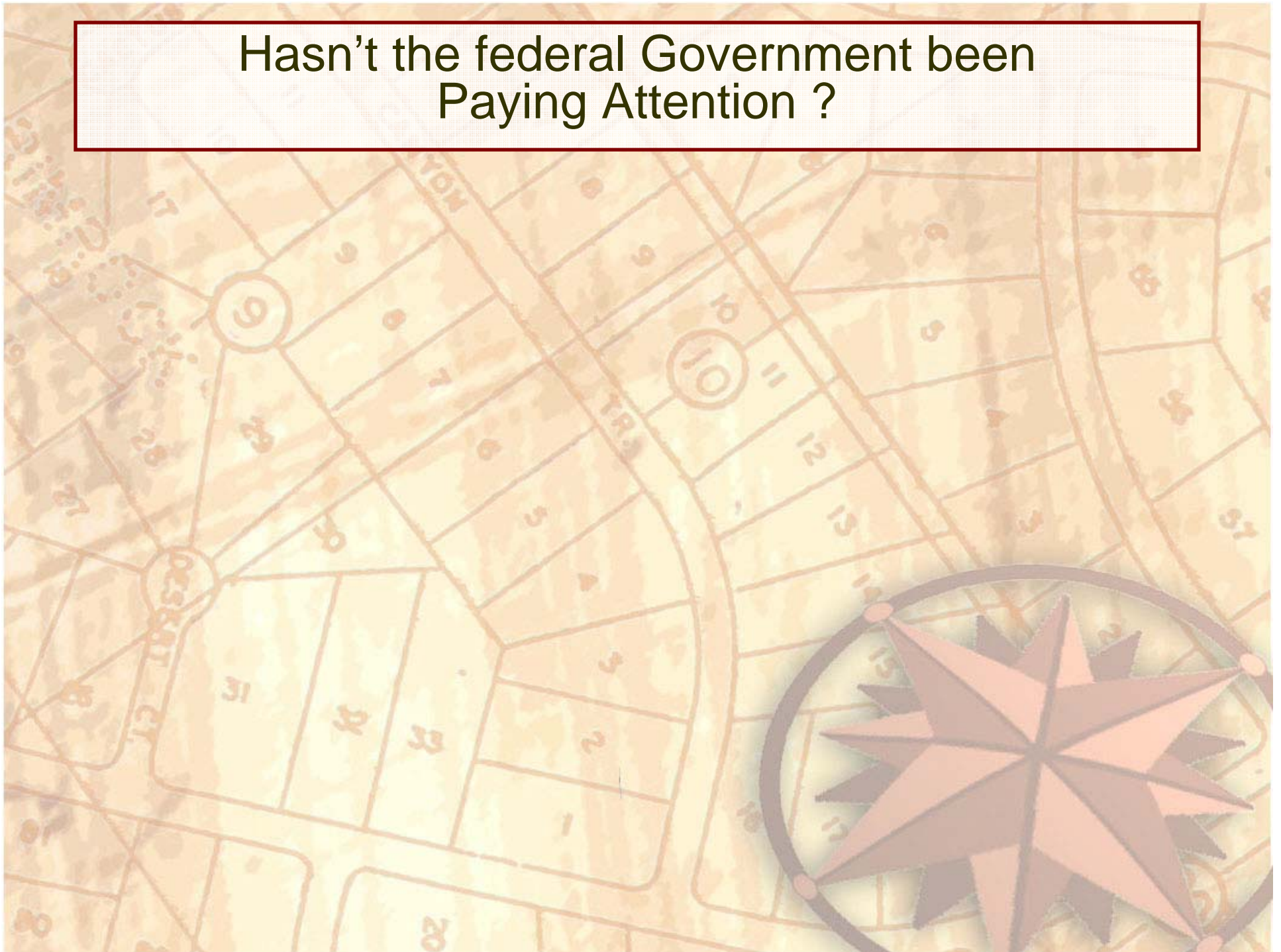
Decision Makers

GIS Specialists and Earth Scientists

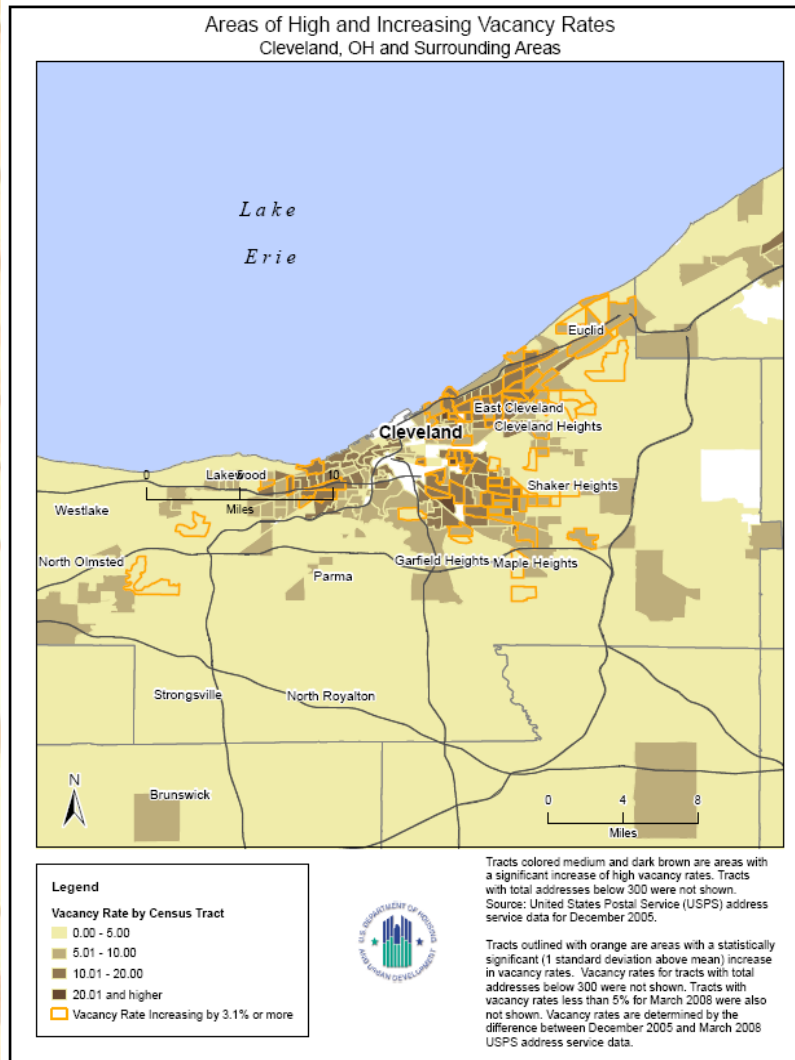
Customizing the Virtual Earth Platform for Government



Hasn't the federal Government been
Paying Attention ?



HUD Map of Cleveland Tract Level Annual Data



HMDA

Home Mortgage Disclosure Act



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HMDA

The Home Mortgage Disclosure Act (HMDA), enacted by Congress in 1975 and implemented by the Federal Reserve Board's Regulation C, requires lending institutions to report public loan data. In this section of the web site, you can find out more about the regulation and its interpretation.



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- [General Info & Price Data Questions](#)
- [HMDA Glossary](#)
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- [Who Reports Data?](#)

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What's New

- ▶ [Press Release](#) announces the availability of 2007 HMDA data. [DOWNLOAD](#) the 2007 HMDA & PMIC Raw data.
- ▶ [2008 HMDA Guide](#) is now available.
- ▶ [Correction](#) made in Table 5 series of HMDA A&D for CYs 2004-2007.
- ▶ [Geocoding System](#) is now updated with 2007 Census information.
- ▶ [2008 Census Data](#) is available.
- ▶ The third release of 2007 [HMDA Data Entry Software](#) is available.
- ▶ [2008 HUD Estimated MFI figures](#) are available.
- ▶ [HMDA System rewrite information effective CY 2010 data collection](#) MUST READ.

The Home Mortgage Disclosure Act (HMDA)

Enacted by Congress in 1975 and is implemented by the Federal Reserve Board's Regulation C. This regulation provides the public loan data that can be used to assist:

- in determining whether financial institutions are serving the housing needs of their communities;
- public officials in distributing public-sector investments so as to attract private investment to areas where it is needed;
- and in identifying possible discriminatory lending patterns.
- This regulation applies to certain financial institutions, including banks, savings associations, credit unions, and other mortgage lending institutions

Federal Financial Institutions Examination Council (FFIEC)



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Welcome to the Federal Financial Institutions Examination Council's (FFIEC) Web Site.

FFIEC Council

The Council is a formal interagency body empowered to prescribe uniform principles, standards, and report forms for the federal examination of financial institutions by the Board of Governors of the Federal Reserve System ([FRB](#)), the Federal Deposit Insurance Corporation ([FDIC](#)), the National Credit Union Administration ([NCUA](#)), the Office of the Comptroller of the Currency ([OCC](#)), and the Office of Thrift Supervision ([OTS](#)), and to make recommendations to promote uniformity in the supervision of financial institutions. In 2006, the State Liaison Committee (SLC) was added to the Council as a voting member. The SLC includes representatives from the Conference of State Bank Supervisors ([CSBS](#)), the American Council of State Savings Supervisors ([ACSSS](#)), and the National Association of State Credit Union Supervisors ([NASCUS](#)).

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The Community Reinvestment Act CRA

Community Reinvestment Act

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CRA

The Community Reinvestment Act (CRA), enacted by Congress in 1977 (12 U.S.C. 2901) and implemented by Regulations 12 CFR parts 25, 228, 345, and 563e, is intended to encourage depository institutions to help meet the credit needs of the communities in which they operate. In this section of the web site, you can find out more about the regulation and its interpretation and information on CRA examinations.



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The Community Reinvestment Act CRA

- The Community Reinvestment Act is intended to encourage depository institutions to help meet the credit needs of the communities in which they operate, including low- and moderate-income neighborhoods, consistent with safe and sound banking operations. It was enacted by the Congress in 1977 (12 U.S.C. 2901) and is implemented by Regulations 12 CFR parts 25, 228, 345, and 563e. ([See Regulation](#)).

HMDA Reporting

Purposes of HMDA

The Home Mortgage Disclosure Act, enacted by Congress in 1975 and made permanent in 1988, requires depository and nondepository lenders to collect and publicly disclose information about housing-related loans and applications for such loans, including several applicant/borrower characteristics. HMDA is implemented by the Federal Reserve Board's Regulation C (12 CFR Part 203) and a staff commentary (12 CFR Part 203, Supp. I).

The housing-loan data that lenders must disclose under HMDA:

- show whether financial institutions are serving the housing credit needs of their neighborhoods and communities;
- assist in directing government officials and private investors to areas that may need investment; and
- help identify possible discriminatory lending patterns and assist regulatory agencies in enforcing compliance with antidiscrimination statutes.

HMDA does not prohibit any activity, nor is it intended to encourage unsound lending practices or the allocation of credit.

Data Collection, Reporting, and Disclosure in a Nutshell

As implemented by Regulation C, HMDA requires covered depository and nondepository institutions to collect and publicly disclose information about applications for, originations of, and purchases of home purchase loans, home improvement loans, and refinancings. Whether an institution is covered depends generally on its asset size, its location, and whether it is in the business of residential mortgage lending. The regulation's coverage criteria are illustrated in diagrams in the next chapter, **Who Must Report**.

Every loan application, origination, and purchase that falls into one or more of the three categories must be reported. With some exceptions, for each transaction the lender reports data about:

- the loan, such as its type and amount;
- the property, such as its location and type;
- the disposition of the application, such as whether it was denied or resulted in an origination; and
- the applicant (namely, ethnicity, race, sex, and income).

Locational Information

Property Location

- MSA/MD number, state code, and county code.** Report the five-digit metropolitan statistical area (MSA) number or, if available, the five-digit metropolitan division (MD) number; the two-digit code for the state; and the three-digit code for the county. Enter those codes for any loan or loan application on property located in an MSA where you have a home or branch office. See page 5 for guidance on the meaning of “branch office.” If the property is located outside the MSAs where you have a home or branch office (or outside any MSA) and you are not required to report data under the Community Reinvestment Act (CRA), you may enter the applicable codes or you may enter “NA” in every column. See page 15 for guidance on CRA reporting requirements. You may also enter “NA” for every geography field (including census tract) if a preap-proval request was denied, or approved but not accepted by the applicant.

| | | Action Taken | | | Property Location | | | | Ethnic | |
|--------------------------|--------------|--------------|-------------------|--------------------------|----------------------|-------------------------|---------------------------|---|--------|--|
| Loan amount in thousands | Pre-approval | Type | Date (mm/dd/ccyy) | Five-Digit MSA/MD Number | Two-Digit State Code | Three-Digit County Code | Six-Digit Census Tract | A | | |
| | | | | | | | | | | |
| 65 | 1 | 1 | 02/20/2008 | 47894 | 51 | 059 | 4 2 1 9 • 8 5 | 2 | | |
| 125 | 1 | 7 | 06/16/2008 | NA | NA | NA | N A • | 2 | | |
| 50 | 1 | 3 | 04/30/20 | | | | | | | |

Some institutions rely on appraisers to identify the census tract numbers. Others arrange for data processors to “geocode” loans. Whatever method you choose to follow, the ultimate responsibility for the accuracy of the data—and for ensuring that 2000 census tract numbers are used—rests with your institution. An incorrect entry for a particular census tract number is a violation unless your institution maintains reasonable procedures to avoid such errors—for example, by conducting periodic checks of the tract numbers obtained from your data processor, if you use one.

HMDA Reporting



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Geocoding System

MSA Code: [17900](#) | State Code: [45](#) | County Code: [079](#) | Tract Code: [0112.02](#)

Summary Census Demographic Information

| | | | |
|---|----------|----------------------|-------|
| Tract Income Level | Middle | Tract Population | 3544 |
| Underserved or Distressed Tract | No | Tract Minority % | 14.39 |
| 2008 HUD Estimated MSA/MD/non-MSA/MD Median Family Income | \$59,200 | Minority Population | 510 |
| 2008 Est. Tract Median Family Income | \$66,553 | Owner-Occupied Units | 1259 |
| 2000 Tract Median Family Income | \$55,313 | 1- to 4-Family Units | 1563 |
| Tract Median Family Income % | 112.42 | | |

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Last update: 07/17/2008 4:49 PM

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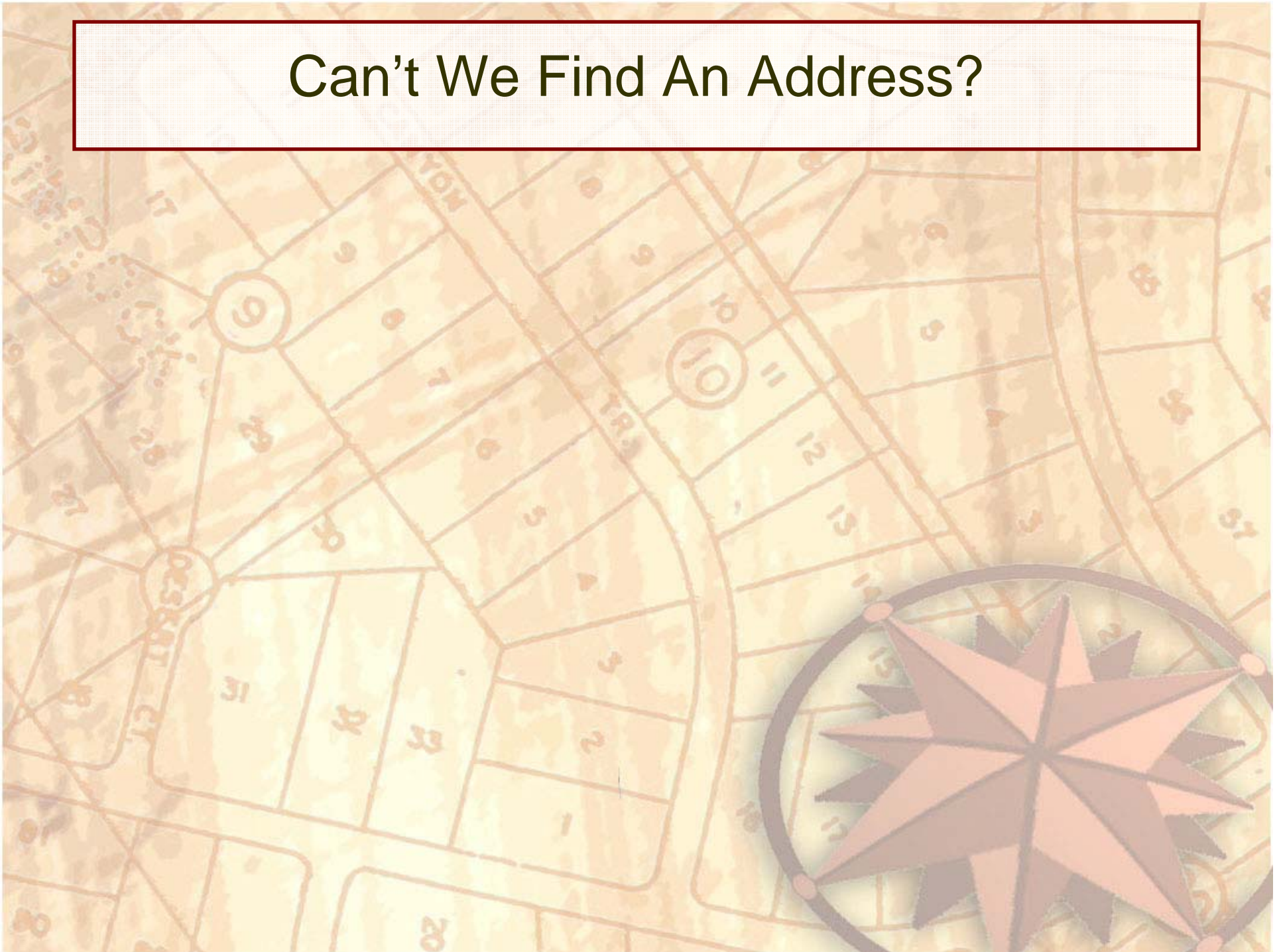
By Tract / Annually

AGGREGATE TABLE 1: DISPOSITION OF LOAN APPLICATIONS, BY LOCATION OF PROPERTY AND TYPE OF LOAN, 2007

ALL LOANS ON PROPERTY LOCATED IN MSA/MD 3/

| CENSUS TRACT OR COUNTY NAME AND DISPOSITION OF APPLICATION 1/ (STATE/COUNTY/TRACT NUMBER) | Loans on 1-to-4 Family and Manufactured Home Dwellings | | | | | | | |
|---|--|--------|--------------|--------|--------------|---------------------------|---------|-----|
| | Home Purchase Loans | | | | Refinancings | Home Improvement Loans | | |
| | FHA, FSA/RHS & VA | | Conventional | | | | | |
| | A | | B | | C | | D | |
| Number | \$000's | Number | \$000's | Number | \$000's | Number | \$000's | |
| SC/KERSHAW COUNTY/9701.00 | | | | | | | | |
| LOANS ORIGINATED | 3 | 458 | 14 | 1179 | 23 | 2586 | 7 | 300 |
| APPROVED, NOT ACCEPTED | 1 | 45 | 3 | 101 | 6 | 530 | 1 | 10 |
| APP DENIED | | | 9 | 442 | 24 | 2359 | 3 | 87 |
| APP WITHDRAWN | | | 2 | 162 | 7 | 847 | | |
| FILES CLOSED FOR INCOMPLETENESS | | | | | 1 | 160 | | |
| SC/KERSHAW COUNTY/9702.00 | | | | | | | | |
| LOANS ORIGINATED | 3 | 522 | 30 | 2553 | 21 | 1477 | 4 | 143 |
| APPROVED, NOT ACCEPTED | | | 3 | 150 | 4 | 127 | 1 | 25 |
| APP DENIED | 3 | 274 | 11 | 774 | 18 | 1174 | 8 | 218 |
| APP WITHDRAWN | | | 2 | 110 | 10 | 879 | | |
| FILES CLOSED FOR INCOMPLETENESS | 1 | 143 | 1 | 85 | 2 | 126 | | |
| SC/KERSHAW COUNTY/9703.00 | | | | | | | | |

Can't We Find An Address?

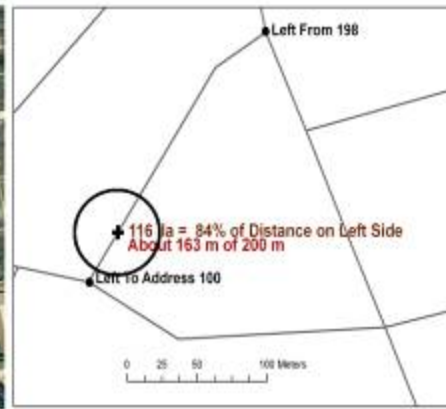


Where in the world is 116 Ila Lane ?

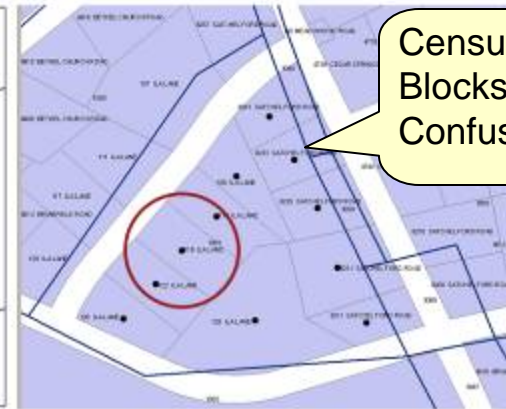
County Parcel GIS



A
Richland County



B
Census TIGER



Census Blocks Confused

C
Blocks vs. Parcels

Wrong End of Street



D
Google Maps

Wrong End of Street



E
MapQuest

Pretty Good Now



F
Microsoft Virtual Earth

HMDA



FFIEC Geocoding System



2008 Information

| | |
|----------------|------------|
| Street Address | 116 ILA LN |
| City Name | COLUMBIA |
| State Abbr. | SC |
| Zip Code | 29206 |
| MSA/MD Code | 17900 |
| State Code | 45 |
| County Code | 079 |
| Tract Code | 0112.02 |

Get Census Demographic

[Back to FFIEC main](#)

[Back to GeoCode](#)

[Disclaimer](#)

[Help](#)

Legend

- Highway
- Tract
- Street

Note: Click the map -- Re-center Map

Not Rocket Science !!



G
Pictometry



H



I
Zillow

Put a bar code on it !!!



If FedEx can tell you where your package is – It should not be too hard to keep track of parcels

116 Ila Lane, 29206
Assessor – **Not confidential**

- **Owners: David & Sandra Cowen,**
- **Legal residence**
- **Taxes = \$2,293**
- **Market Value \$196,900**

Richland County
South Carolina

Assessed Property

February 25, 2007

As accurate as the date of publication, portions of such information may be incorrect. RICHLAND COUNTY HEREBY DISCLAIMS ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, AS TO ITS ACCURACY, COMPLETENESS OR FITNESS FOR ANY PARTICULAR PURPOSE. All official records of the County and the countywide elected officials are in their respective offices and may be viewed by the public at those offices.

| Owner Information | Tax Information |
|------------------------------------|---|
| Tax Map Number: R14114-10-10 | Year: 2006 |
| Owner: COWEN DAVID J & SANDRA H | Property Tax Relief: (\$460.00) |
| Address 1: 116 ILA LN | Local Option Sales Tax Credit: (\$567.47) |
| Address 2: | Tax Amount: \$2,872.75 |
| Address 3: | Paid: Yes |
| City/State/Zip: COLUMBIA SC 29206 | Homestead: No |
| Property Location/Code: 116 ILA LN | Assessed: \$7,880.00 |

| Assessment Information | |
|------------------------------------|---------------------------|
| Year Of Assessment: 2006 | Legal Residence: Yes |
| Tax District: 1FA | Sever Connection: CITY |
| Acreage Of Parcel: 0 | Water Connection: CITY |
| Non-Agriculture Value: \$23,000.00 | Agriculture Value: \$0.00 |
| Building Value: \$166,400.00 | Improvements: \$7,500.00 |
| Market Value: \$196,900.00 | |

Helpful Tools
Acrobat Reader

Census versus Tele Atlas Address Points

Part of \$200+ Million
Confidential

Commercial
Not – Confidential

MAF/TIGER Accuracy Improvement Program (MTAIP)

- Realignment of TIGER database to a minimum spatial accuracy of 7.6 meters to support field data collection with GPS for 2010 census



USCENSUSBUREAU



Tele Atlas® Address Points

When finding spatially accurate physical locations for addresses is a key driver for your application, Tele Atlas Address Points delivers real-world accuracy by pinpointing street addresses to physical buildings or property. This enables application developers to greatly enhance the value and usefulness of their geo-location and navigation products, and offers consumers a faster, more accurate method of locating addresses. To ensure the highest level of accuracy, Tele Atlas incorporates address data from multiple private and public sources, and the entire database is tested and updated regularly. More than 40 million address points are available today, including those in major urban areas, with plans to provide full coverage with more than 100 million address point locations across the US.

Selected Applications:

- Navigation
- Routing
- Internet Applications
- Risk Management
- Facilities Maintenance (AM/FM)
- Location-Based Services (LBS)
- Geocoding
- Emergency Response & Dispatching
- Automated Mapping
- Territory Management
- Site Selection
- Market Analysis
- Presentation Quality Maps

Dynamap ID: 441335802
Street Name: West Blvd
Address Number: 3709
Postal: 90016
City Name: Los Angeles
Type: POB



Features & Benefits:

How it could work

Five Minute Exercise



Richland County Comparable Sales

http://www2.richlandmaps.com - Comparative Sales Analysis (Richland County, SC) - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Richland County Comparative Sales Analysis

INSTRUCTIONS

Search Type

Type of Property:

Property Use: Improved Vacant

Search By: Address TMS Custom

Address:
Enter your address without the city and zip. e.g., 12 Main St.

Radius:
The radius must be within (5, 5280) feet.

Search Criteria

| | Min | Max |
|---------------|-----------|-----------|
| Date of Sale: | 10/6/2003 | 10/6/2008 |
| Sale Price: | 10000 | 500000 |
| Acreage: | 0 | 200 |
| Price/Acre: | 0 | 200000 |
| Year Built: | 1900 | 2008 |
| Price/SQFT: | 20 | 200 |
| SQFT: | 100 | 5000 |
| Bedroom: | 1 | 4 |
| Bathroom: | 1 | 3 |

↓ Please check the result table in the below.

Legend

| Price/SQFT | Color |
|-------------|--------------|
| 89 --- 95 | Light Yellow |
| 97 --- 99 | Yellow |
| 100 --- 102 | Orange |
| 106 --- 108 | Dark Orange |
| 110 --- 150 | Red |

21 parcels returned.

| Location | Tax Map Number | Sale Date | Sale Price | SQFT | Price/SQFT | Bed Rooms | Bath Rooms | Year Built | Neighborhood | Zoning |
|-----------------------|----------------|-----------|------------|------|------------|-----------|------------|------------|------------------------------|-------------|
| 5 ORCHARD CIRCLE | R14114-01-04 | 12/4/2007 | 150000 | 1339 | 112 | 3 | 1.5 | 1960 | TRENHOLM HILLS - FOREST LAKE | Residential |
| 4739 MEADOWOOD RD | R14114-01-05 | 4/24/2008 | 205000 | 1930 | 106 | 4 | 2 | 1963 | TRENHOLM HILLS - FOREST LAKE | Residential |
| 4726 MEADOWOOD RD | R14114-03-04 | 5/26/2005 | 169500 | 1662 | 102 | 3 | 2 | 1960 | TRENHOLM HILLS - FOREST LAKE | Residential |
| 4719 CEDAR SPRINGS RD | R14114-03-17 | 8/15/2006 | 210000 | 1942 | 108 | 3 | 2 | 1959 | TRENHOLM HILLS - FOREST LAKE | Residential |
| 4726 CEDAR SPRINGS RD | R14114-03-18 | 8/15/2006 | 210000 | 1942 | 108 | 3 | 2 | 1959 | TRENHOLM HILLS - FOREST LAKE | Residential |

Done

\$150 Per Square Foot

21 parcels returned.

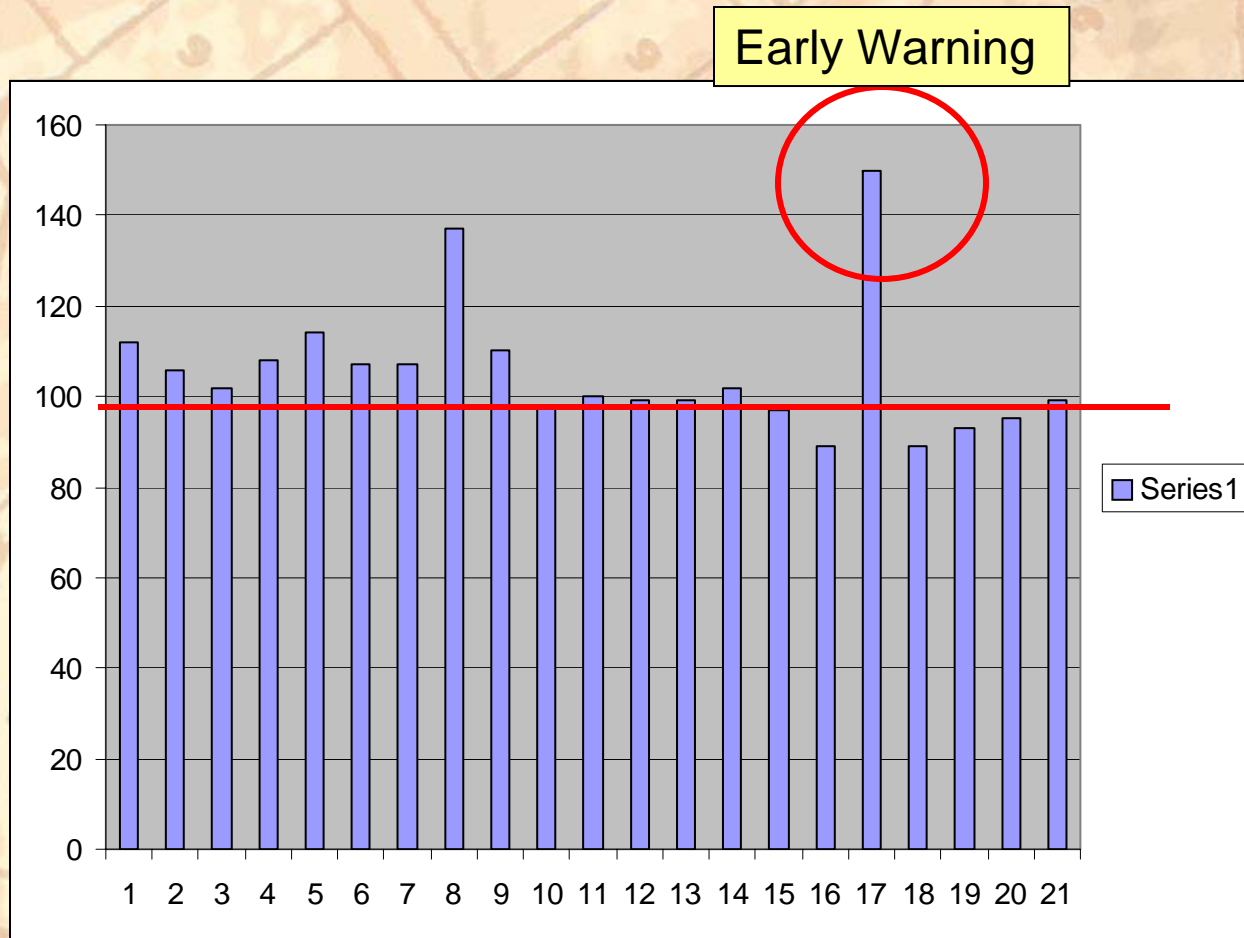
| Location | Tax Map Number | Sale Date | Sale Price | SQFT | Price/SQFT | Bed Rooms | Bath Rooms | Year Built | Neighborhood | Zoning |
|-----------------------|----------------|------------|------------|------|------------|-----------|------------|------------|-------------------------------|-------------|
| 5 ORCHARD CIRCLE | R14114-01-04 | 12/4/2007 | 150000 | 1339 | 112 | 3 | 1.5 | 1960 | TRENHOLM HILLS - FOREST LAKE | Residential |
| 4739 MEADOWOOD RD | R14114-01-05 | 4/24/2008 | 205000 | 1930 | 106 | 4 | 2 | 1963 | TRENHOLM HILLS - FOREST LAKE | Residential |
| 4726 MEADOWOOD RD | R14114-03-04 | 5/26/2005 | 169500 | 1662 | 102 | 3 | 2 | 1960 | TRENHOLM HILLS - FOREST LAKE | Residential |
| 4719 CEDAR SPRINGS RD | R14114-03-17 | 8/15/2006 | 210000 | 1942 | 108 | 3 | 2 | 1959 | TRENHOLM HILLS - FOREST LAKE | Residential |
| 4726 CEDAR SPRINGS RD | R14114-03-18 | 3/21/2008 | 194000 | 1706 | 114 | 3 | 2 | 1958 | TRENHOLM HILLS - FOREST LAKE | Residential |
| 4921 BETHEL CHURCH RD | R14110-04-07 | 10/2/2006 | 149000 | 1396 | 107 | 3 | 1 | 1954 | SACHELFORD & BETHEL CHURCH RD | Residential |
| 4903 BETHEL CHURCH RD | R14110-04-08 | 7/14/2007 | 240000 | 2240 | 107 | 4 | 2 | 1951 | SACHELFORD & BETHEL CHURCH RD | Residential |
| 4714 CEDAR SPRINGS RD | R14114-12-07 | 12/12/2006 | 199000 | 1456 | 137 | 3 | 2 | 1953 | TRENHOLM HILLS - FOREST LAKE | Residential |
| 6241 SACHEL FORD RD | R14114-13-01 | 7/27/2007 | 189640 | 1724 | 110 | 3 | 2 | 1964 | SACHELFORD & BETHEL CHURCH RD | Residential |
| 6233 SACHEL FORD RD | R14114-13-02 | 7/5/2005 | 180000 | 1843 | 98 | 3 | 2.5 | 1960 | SACHELFORD & BETHEL CHURCH RD | Residential |
| 4823 BETHEL CHURCH RD | R14110-07-03 | 4/20/2006 | 196900 | 1970 | 100 | 3 | 2 | 1956 | SACHELFORD & BETHEL CHURCH RD | Residential |
| 4736 CEDAR SPRINGS RD | R14114-12-02 | 5/8/2007 | 192000 | 1944 | 99 | 2 | 2 | 1954 | TRENHOLM HILLS - FOREST LAKE | Residential |
| 4803 BETHEL CHURCH RD | R14110-07-05 | 6/17/2005 | 145000 | 1471 | 99 | 3 | 2 | 1956 | SACHELFORD & BETHEL CHURCH RD | Residential |
| 128 ILA LN | R14114-13-08 | 7/17/2007 | 175350 | 1727 | 102 | 3 | 2 | 1962 | SACHELFORD & BETHEL CHURCH RD | Residential |
| 4953 OAKHILL RD | R14113-01-10 | 5/27/2005 | 174000 | 1801 | 97 | 3 | 2 | 1959 | RAVENWOOD | Residential |
| 4902 CIRCLE DR | R14113-04-09 | 2/13/2007 | 200000 | 2000 | 100 | 4 | 2 | 1958 | SACHELFORD & BETHEL CHURCH RD | Residential |
| 4808 STORK DR | R14110-04-13 | 10/26/2007 | 294500 | 1960 | 150 | 3 | 2.5 | 2007 | SACHELFORD & BETHEL CHURCH RD | Residential |
| 4916 BETHEL CHURCH RD | R14110-05-11 | 5/19/2008 | 167000 | 1876 | 89 | 3 | 2 | 1969 | SACHELFORD & BETHEL CHURCH RD | Residential |
| 6329 SACHEL FORD RD | R14111-06-04 | 6/5/2006 | 118000 | 1267 | 93 | 3 | 1.5 | 1952 | SACHELFORD & BETHEL CHURCH RD | Residential |
| 24 ORCHARD CIRCLE | R14114-02-01 | 5/3/2007 | 159500 | 1674 | 95 | 3 | 1.5 | 1960 | TRENHOLM HILLS - FOREST LAKE | Residential |
| 15 ORCHARD CIRCLE | R14114-01-03 | 4/4/2005 | 182500 | 1837 | 99 | 3 | 1.5 | 1958 | TRENHOLM HILLS - FOREST LAKE | Residential |

1

Disclaimer: This application is a product of the Richland County GIS Department. The data depicted here have been developed with extensive cooperation from other county departments, as well as other federal, state and local government agencies. All sales information is gathered from the Richland County computer aided mass appraisal (CAMA) database. Reasonable efforts have been made to ensure the accuracy of this data. However, the information presented may be out of date or incorrect, and should be used for general reference only. Richland County expressly disclaims responsibility for damages or liability that may arise from the use of the information presented herein.

Done

Graph of Comparable Sales



Who / When ?

http://www4.rcgov.us - AssessorView - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Comparative Sales Analysis (Richland ...) AssessorView

The information provided on this page reflects data as of **December 31, 2007** and should be used for reference only. For official assessment information, please contact the Richland County Assessor's Office.

Information presented on the Assessor's Database is collected, organized and provided for the convenience of the user and is intended solely for informational purposes. **ANY USER THEREOF OR RELIANCE THEREON IS AT THE SOLE DISCRETION, RISK AND RESPONSIBILITY OF THE USER.** While every attempt is made to provide information that is accurate at the date of publication, portions of such information may be incorrect or not current. **RICHLAND COUNTY HEREBY DISCLAIMS ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, AS TO ITS ACCURACY, COMPLETENESS OR FITNESS FOR ANY PARTICULAR PURPOSE.** All official records of the County and the countywide elected officials are on file in their respective offices and may be viewed by the public at those offices.

| | | | |
|--------------------------|--------------------|--------------------------------|------------|
| Owner Information | | Tax Information | |
| Tax Map Number: | R14110-04-13 | Year: | 2007 |
| Owner: | LEISHMAN CLAYTON D | Property Tax Relief: | \$0.00 |
| Address 1: | 4808 STORK RD | Local Option Sales Tax Credit: | (\$27.42) |
| Address 2: | | Tax Amount: | \$670.48 |
| Address 3: | | Paid: | Yes |
| City/State/Zip: | COLUMBIA SC 29206 | Homestead: | No |
| Property Location/Code: | 4808 STORK DR | Assessed: | \$1,100.00 |

| | | | |
|-------------------------------|--------------|---------------------------|--------|
| Assessment Information | | | |
| Year Of Assessment: | 2008 | Legal Residence: | Yes |
| Tax District: | 1ER | Sewer Connection: | CITY |
| Acreage Of Parcel: | 0 | Water Connection: | CITY |
| Non-Agriculture Value: | \$18,400.00 | Agriculture Value: | \$0.00 |
| Building Value: | \$276,100.00 | Improvements: | \$0.00 |
| Market Value: | \$294,500.00 | | |
| Zoning: | RS-LD | SINGLE-FAMILY RESIDENTIAL | |

| | | | |
|-----------------------------|-----------------------|-----|-------------|
| Property Information | | | |
| Legal Description: | LOT B | #SU | |
| | 100.1X120.1X100.1X120 | #PR | RB1177-3526 |
| Land Type: | | | |

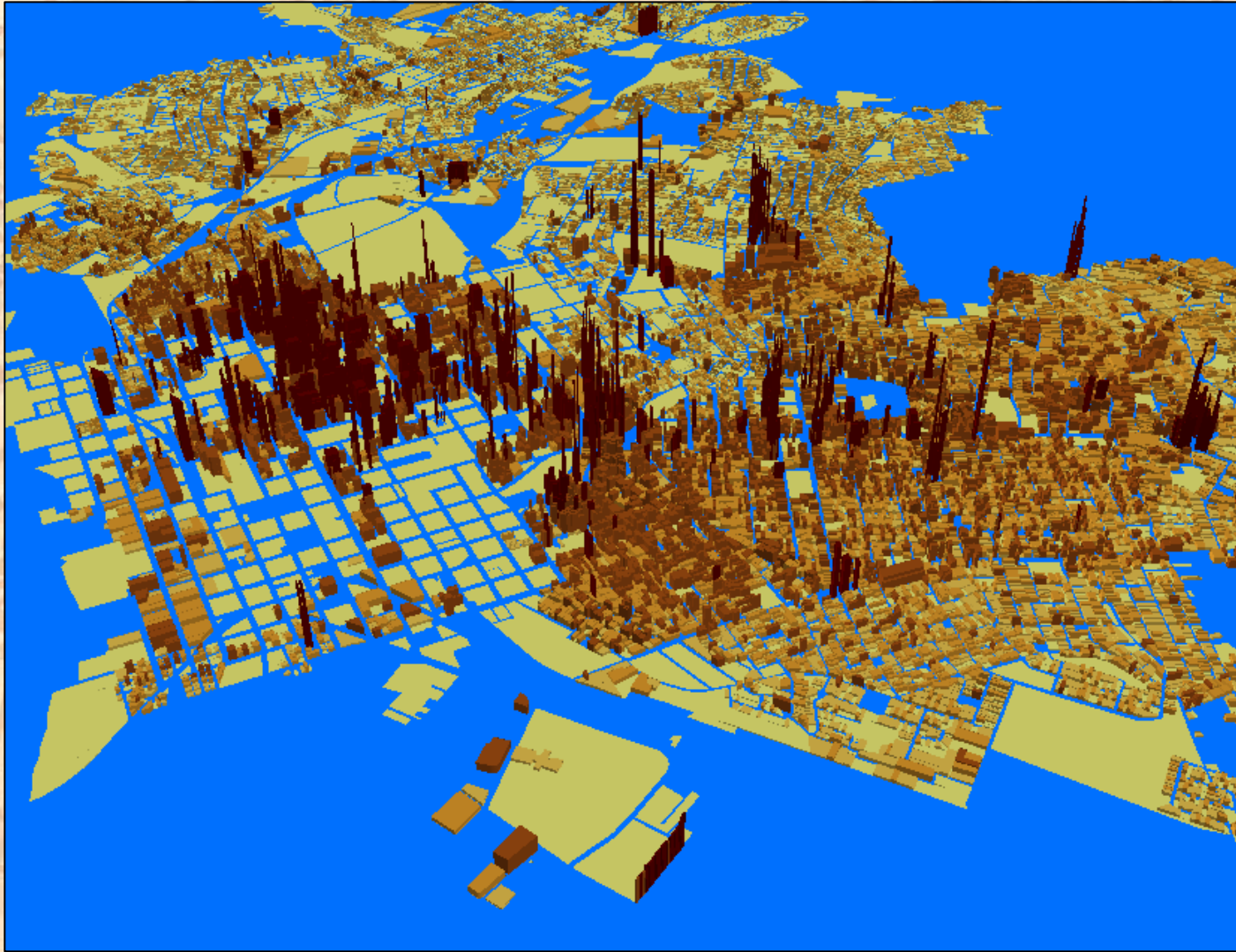
| Sales History | | | | |
|----------------------------|------------|--------------------|----------------|--------------|
| Current Owner Name | Sale Date | Vacant or Improved | Deed Book/Page | Sale Price |
| LEISHMAN CLAYTON D | 10/26/2007 | I | R1370/ 974 | \$294,500.00 |
| YELLOW HAMMER LLC | 08/11/2006 | I | R1217/ 1996 | \$36,000.00 |
| JONES KENNETH T & | 05/01/2006 | | R1177/ 3444 | \$40,000.00 |
| LEISHMAN RICHARD M TRUSTEE | 06/21/2001 | | R0533/ 1471 | \$0.00 |

| Structure Information | | | | | | | | |
|------------------------------|-----------------------------|------------------------|-------------------|---------------------|--------------------|-------------------------|-----------------------|----------------------|
| Building Number | Year Structure Was Assessed | Building Description | Actual Year Built | Number Of Bathrooms | Number Of Bedrooms | Total Number Of Stories | Heated Square Footage | Total Square Footage |
| 1 | 2008 | SGL FAM - WALL GROUP 3 | 2007 | 2.50 | 3 | 2.0 | 1960 | 2521 |

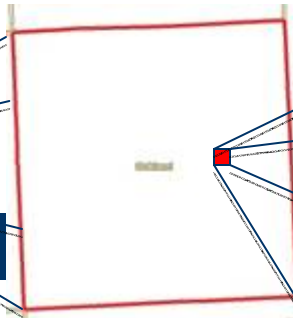
Done

| Structure Information | | | | | | | | |
|------------------------------|-----------------------------|------------------------|-------------------|---------------------|--------------------|-------------------------|-----------------------|----------------------|
| Building Number | Year Structure Was Assessed | Building Description | Actual Year Built | Number Of Bathrooms | Number Of Bedrooms | Total Number Of Stories | Heated Square Footage | Total Square Footage |
| 1 | 2008 | SGL FAM - WALL GROUP 3 | 2007 | 2.50 | 3 | 2.0 | 1960 | 2521 |

Possible Visualization



Dissecting the Problem



Sold in 2005 for \$402,000

Sold in 2008 for \$364,000

These sale prices are typical for current housing market conditions.

Taxes in 2005 - \$5,935

Taxes in 2008 - \$5,375

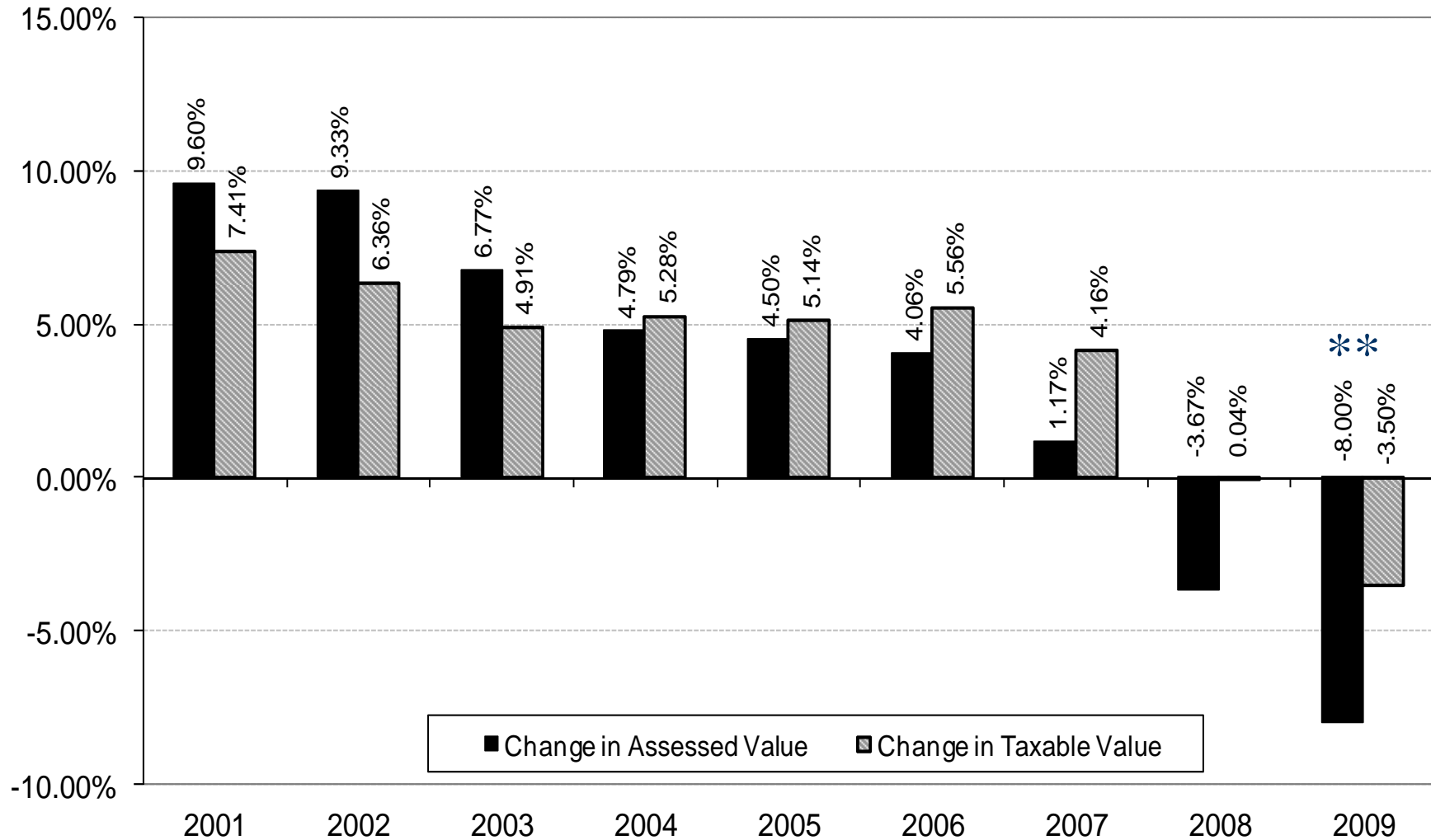
Tax Dollars since 2005 **-\$560**

This is a single parcel example. There are over 477,000 parcels in Oakland County.

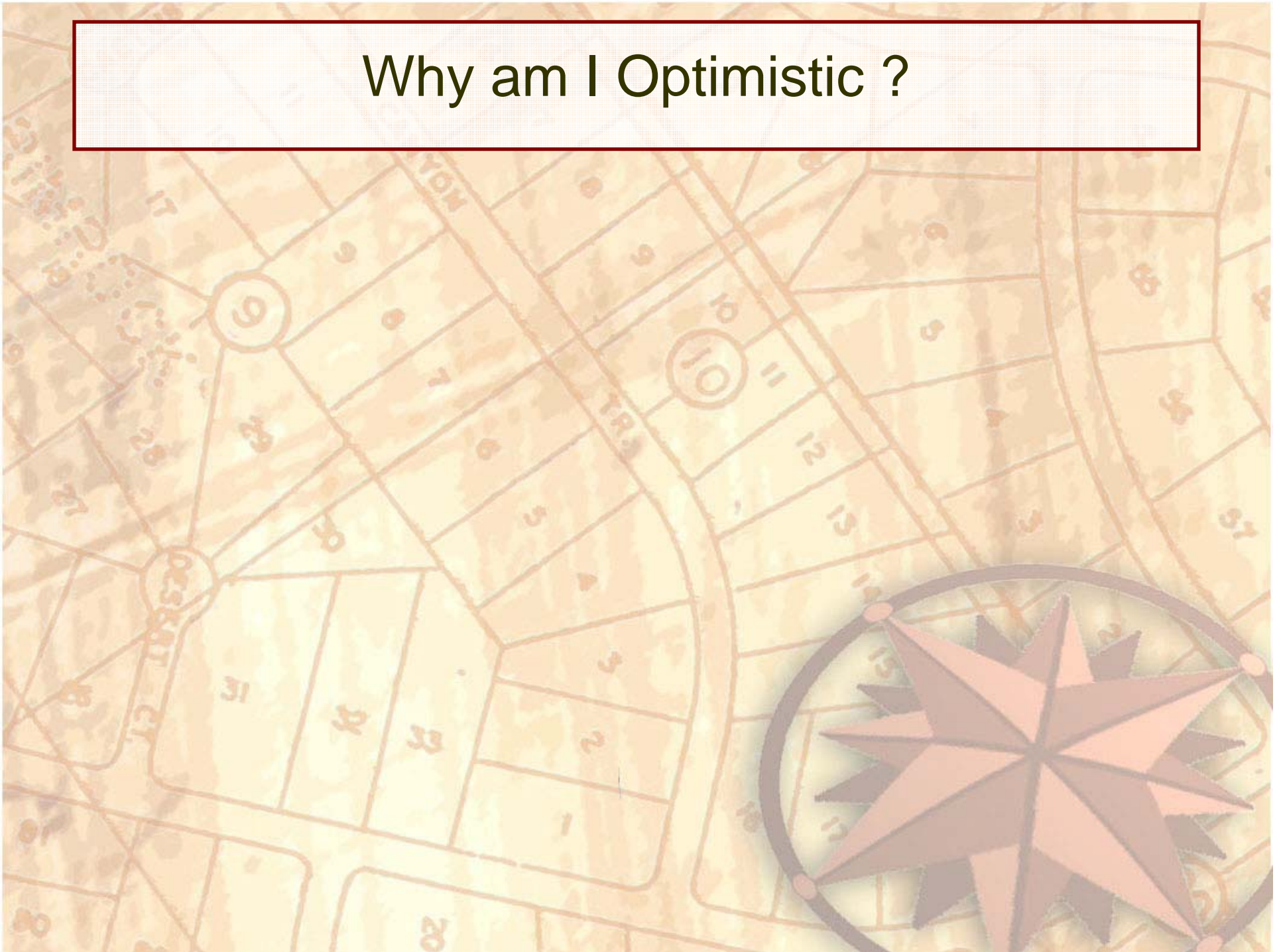
Property Value Changes

Oakland County, MI

Percentage Change in Assessed and Taxable Values 2001 through 2008



Why am I Optimistic ?





National States Geographic Information Council Advocacy Agenda 2007 – 2008

CADASTRAL (PARCEL) MAPPING

The National Academy's report entitled "National Land Parcel Data: A Vision for the Future" provides an opportunity to quickly enhance and improve significant portions of the cadastral layers³ of the NSDI. The report's nine recommendations are important in that they encourage cost sharing and integration among federal, state and local cadastral activities.

Because of the dispersed ownership of private, public, and tribal properties across the nation, and the requirement for state and local surveying and mapping in the interface between those lands, the most practical way to build a cadastral infrastructure is to fund state and local governments to collect this information. It also requires coordination with federal activities and compliance with applicable standards.

The Council will seek, support, and advocate for federal legislation, including The Federal Land Asset Inventory Reform Act (FLAIR), to further develop and enhance the cadastral infrastructure for the nation. The Council will help identify additional sponsors for the bill and advocate for its passage.

The Council will seek, support, and advocate that adequate and permanent funding be authorized and appropriated to support these critical partnerships and the cost-sharing aspects of the bill.

The Council will encourage and participate in further development of the Academy's recommendations for parcels, boundaries, addresses and reference systems.

Washington Parcel Data - 39 Counties

STATELANDS GIS LouisianaMAP - Links & Resources Washington State Parcel Database

The University of Washington Geographic Information Service at the College of Forest Resources

Home | About | Projects | Data | Publications | Tools | Blog | Discussion Board | Contact Us

 Google Custom Search

About the Parcel Database

[Overview](#)

[Goals](#)

[Participants](#)

[History](#)

[Timeline](#)

[Process](#)

[Participation Status](#)

[Documentation](#)

[Derivative Projects](#)

[Frequently Asked Questions](#)

Related Links

[Parcels Working Group](#)

[Family Forest Database](#)

[Rural Technology Initiative](#)

[College of Forest Resources](#)

[University of Washington](#)

[home](#) / [projects](#) / [parcels](#) /

Washington State Parcel Database

Creating the Washington State Parcel Database

Preliminary information about the creation of the Washington State Parcel Database is provided below. As the project progresses, we will add more information regarding the status of data acquisition, documentation, process, and more. Please visit this site regularly and provide suggestions, thoughts, and concerns via the contact us page.

Overview

Parcel Data is Critical. Digital parcel data, stored in a geographic information system (GIS), is a critical source of information for resource land managers, community development needs, infrastructure maintenance, research, homeland security, business development, public safety, and more.

Redundant Efforts are Costly. Currently, there is not a single source of GIS-based parcel information for Washington State. Efforts to collect, store, and manage county, state and federal parcel data are often redundant at all levels of government. Each public or private entity must request data directly from over forty different entities; data which arrives in a myriad of formats and differing attribute schemes. Many counties have data license agreements that prohibit or severely restrict the ability of one user to share parcel data with other users, making cross-agency or interdisciplinary research difficult, expensive, and variable since no two groups are using the same data.

Thus, this project aims to provide simplified access to parcel data, while increasing data quality and decreasing redundancy.

Goals

- Survey current and potential parcel data users to identify what components of parcel data are important to their business needs.
- Establish relationships with Washington's counties, state and federal agencies to understand their parcel data needs.
- Identify derivative products that are currently produced from parcel data and develop the capability to share those data.
- Develop a master license agreement to allow parcel data to be shared with other partner entities.
- Collect parcel data from Washington's 39 counties, state and federal agencies.
- Develop a common statewide parcel data format that meets the needs of project participants.
- Work with each parcel data producer to develop a protocol for transformation of local parcel data into a common statewide format.
- Transform Washington State parcel data into a common statewide format, documenting procedures and protocols for future updates.
- Implement a collaborative parcel data distribution and update service.
- Identify long-term funding sources for improving the quantity and quality of parcel GIS data in the State.
- Identify long-term funding sources for support personnel, updates to the database, and maintenance of hardware.

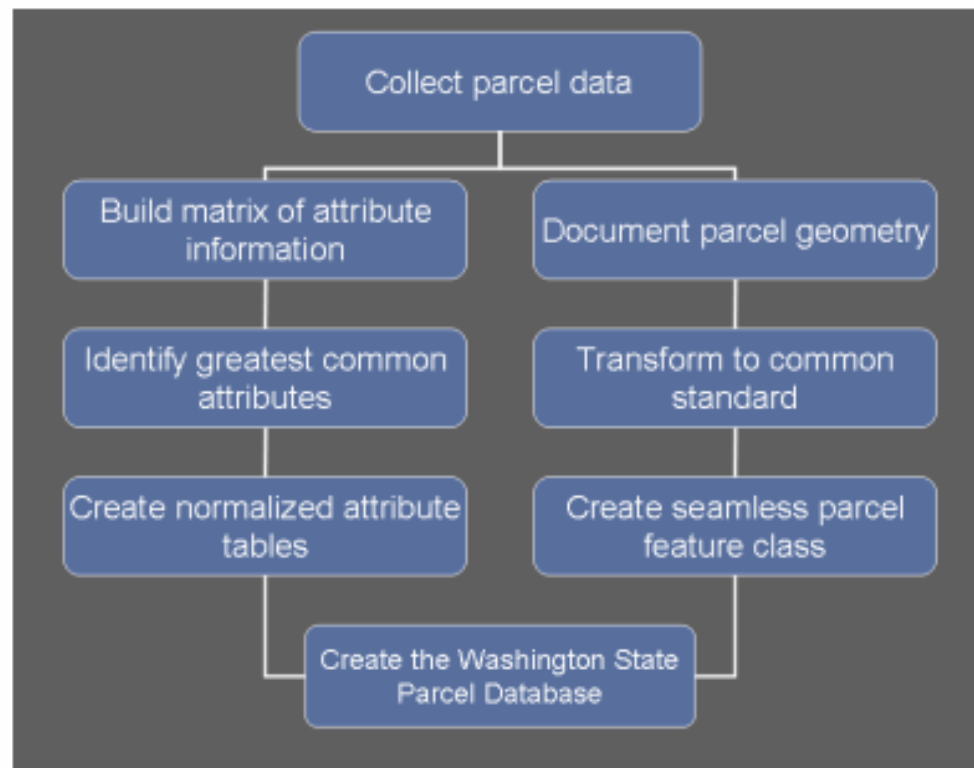
Participants

- Washington State's 39 Counties
- State and Federal Agencies
- [University of Washington, College of Forest Resources, Rural Technology Initiative](#)
- [Family Forest Foundation and Washington Farm Forestry Association](#)
- [Washington State Parcel Working Group](#)

Washington Process

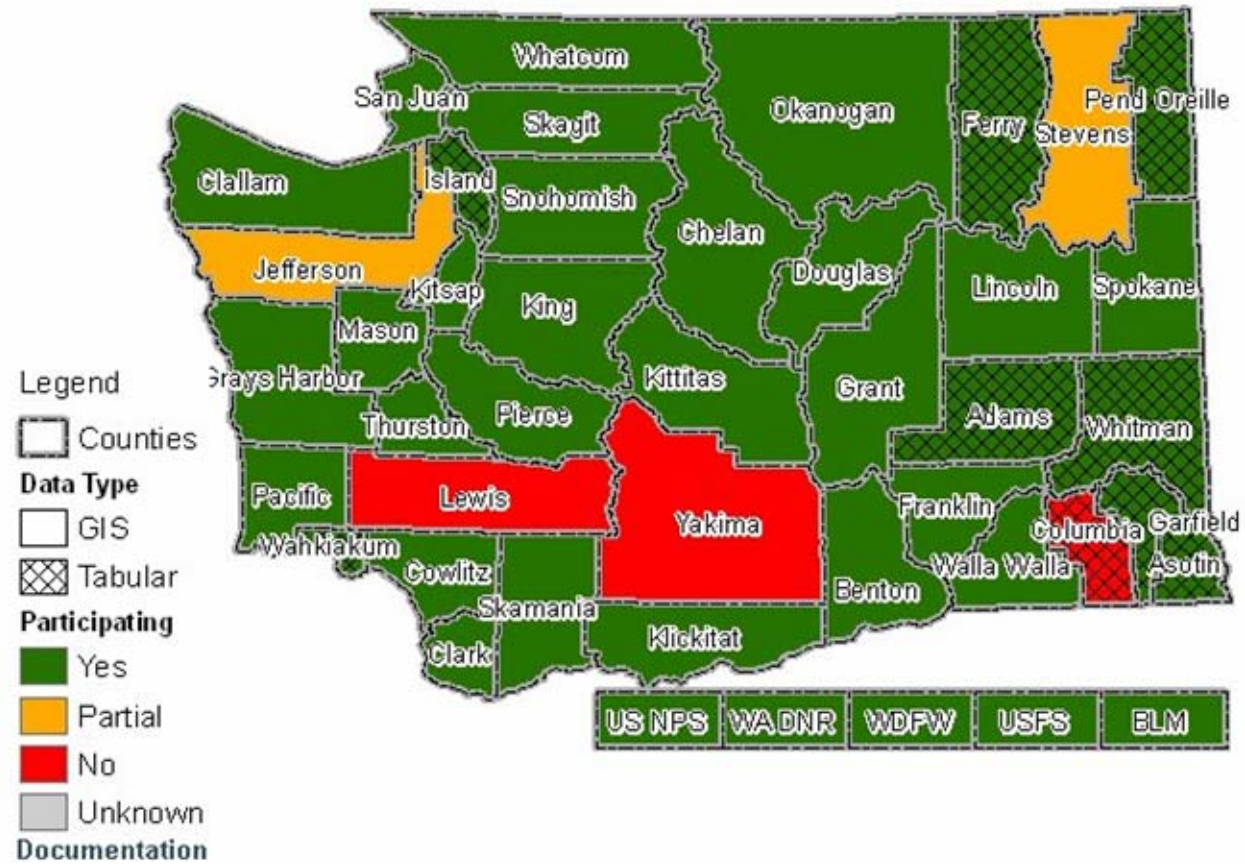
Process

Learn about the process of creating a statewide parcel database by clicking



Statewide Parcel Database Participation Status

Status Map



Washington Timeline

Timeline

| Task | Timeline |
|--|------------------|
| Encourage the use and need for a statewide parcel database | On-going |
| Form the Parcel Working Group | Fall 2006 |
| Invite project participants | On-going |
| Conduct a user survey | Winter 2007 |
| Conduct a needs assessment | Summer 2007 |
| Document derivative works | Summer 2007 |
| Collect currently published parcel data | Late Summer 2007 |
| Document similarities and differences | Fall 2007 |
| Identify greatest common attributes | Winter 2008 |
| Normalize attribute and geometry data | Winter 2008 |
| Create seamless parcel layer | Spring 2008 |
| Publish Washington State Parcel Database | Summer 2008 |
| Begin Phase II | Summer 2008 |

Florida



- Virtual GIS Training for Geotechnology Professionals
- E-learning & Instructor Led GIS Training Courses
- GIS Consulting & Planning Services
- Custom Applications for ESRI and Google Platforms

Florida Department Of Revenue Provides Public Access to Assessment Roll & GIS Data

Written by J Spalding
Friday, 22 February 2008

Per a Florida Department Of Revenue (DOR) Property Tax Informational Bulletin (PTO 07-18) issued by James McAdams, Director the Property Tax Oversight Program:

"Effective immediately, the Department of Revenue will provide public access to assessment roll and GIS map data from all 67 Florida counties to anyone who wishes to access the information. The Governor's Executive Order 07-01 created the Office of Open Government and requires each executive agency to assure full and expeditious compliance with Florida's open government and public records laws."

The data was available previously for a very reasonable amount at the cost of reproduction, however the DOR will now post the data to an [FTP Site](#) for the public to access.

Additional publications available from the Department of Revenue's Property Tax Oversight Program include:

[The 2007 County GIS/Mapping Data and Personnel Directory](#)

[The 2008 DOR Aerial Photography Schedule](#)

Florida Parcels on FTP Site



The screenshot shows a Mozilla Firefox browser window with the title "Index of ftp://sdrftp03.dor.state.fl.us/ - Mozilla Firefox". The address bar contains the URL "ftp://sdrftp03.dor.state.fl.us/". The browser interface includes a menu bar (File, Edit, View, History, Bookmarks, Tools, Help), a toolbar with navigation buttons, and a search bar. The main content area displays the title "Index of ftp://sdrftp03.dor.state.fl.us/" and a list of directories with their last modification times.

Index of ftp://sdrftp03.dor.state.fl.us/

[Up to higher level directory](#)

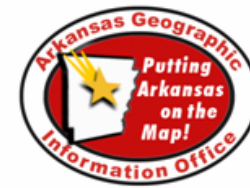
| | |
|---|-------------|
| 2007 Final Real Property Tax Rolls | 6:28:00 PM |
| 2007 Tangible Personal Property Tax Rolls | 3:05:00 PM |
| 2008 Map Data | 1:12:00 PM |
| About Tax Roll Data | 8:45:00 PM |
| Training | 10:44:00 AM |

Arkansas

For Immediate Release:

July 28, 2008

Little Rock, Arkansas



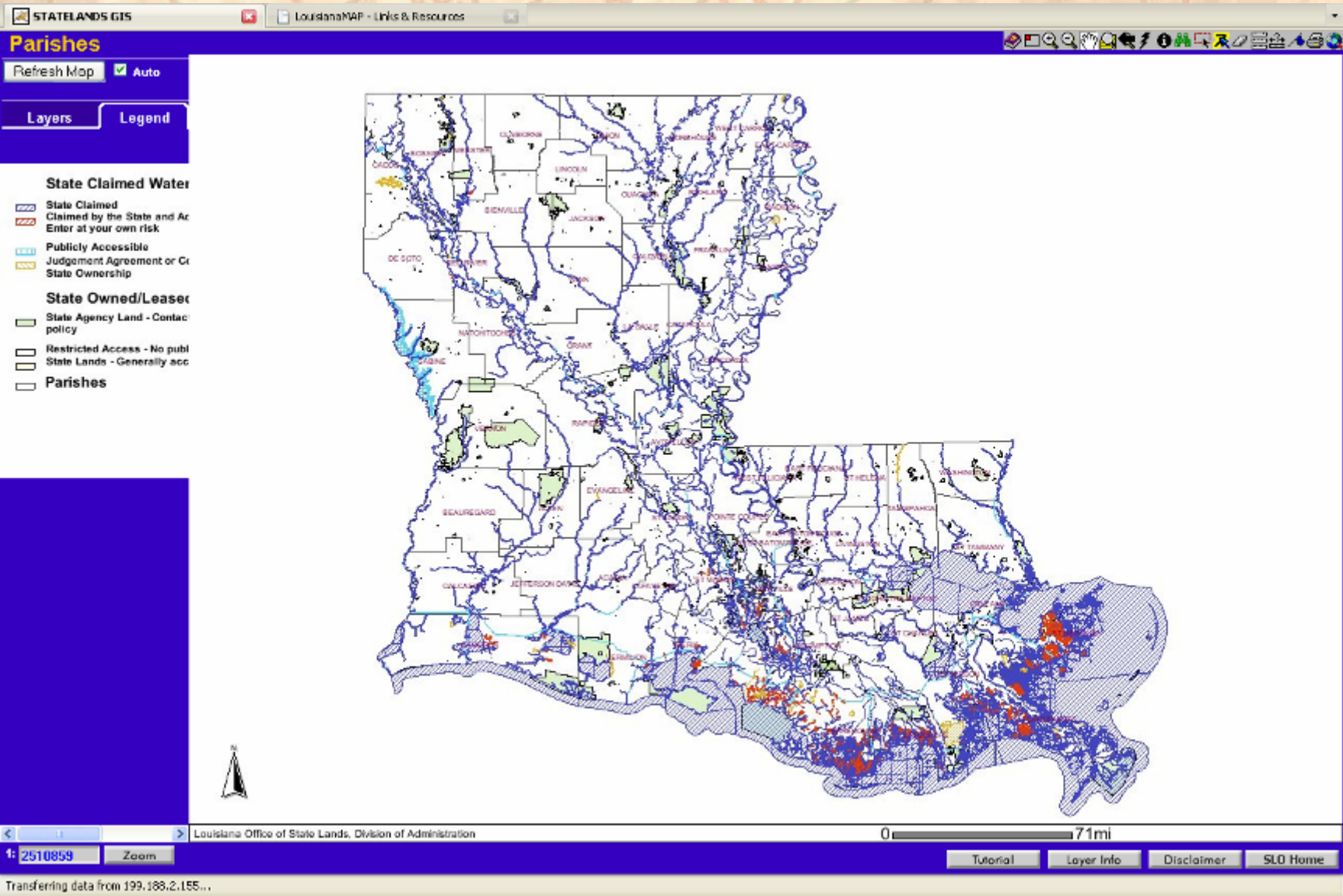
County Assessor Mapping Program Data Published

The Arkansas Geographic Information Office (AGIO) is pleased to announce a major publication update of digital cadastral data from the counties of Arkansas. The data has been published on GeoStor the state's GIS data clearinghouse. This update represents an extraordinary body of work produced by the participating counties, their contractors, employees and in many cases the Assessor themselves. This work is the realization of a visionary idea of the Arkansas Assessment Coordination Department, County Assessors and the AGIO all cooperating together on a statewide program. The updated data have benefits reaching far beyond the individual Assessor Offices. We believe GIS users, citizens and policy makers across the state will be able to use this data for effective decision making.

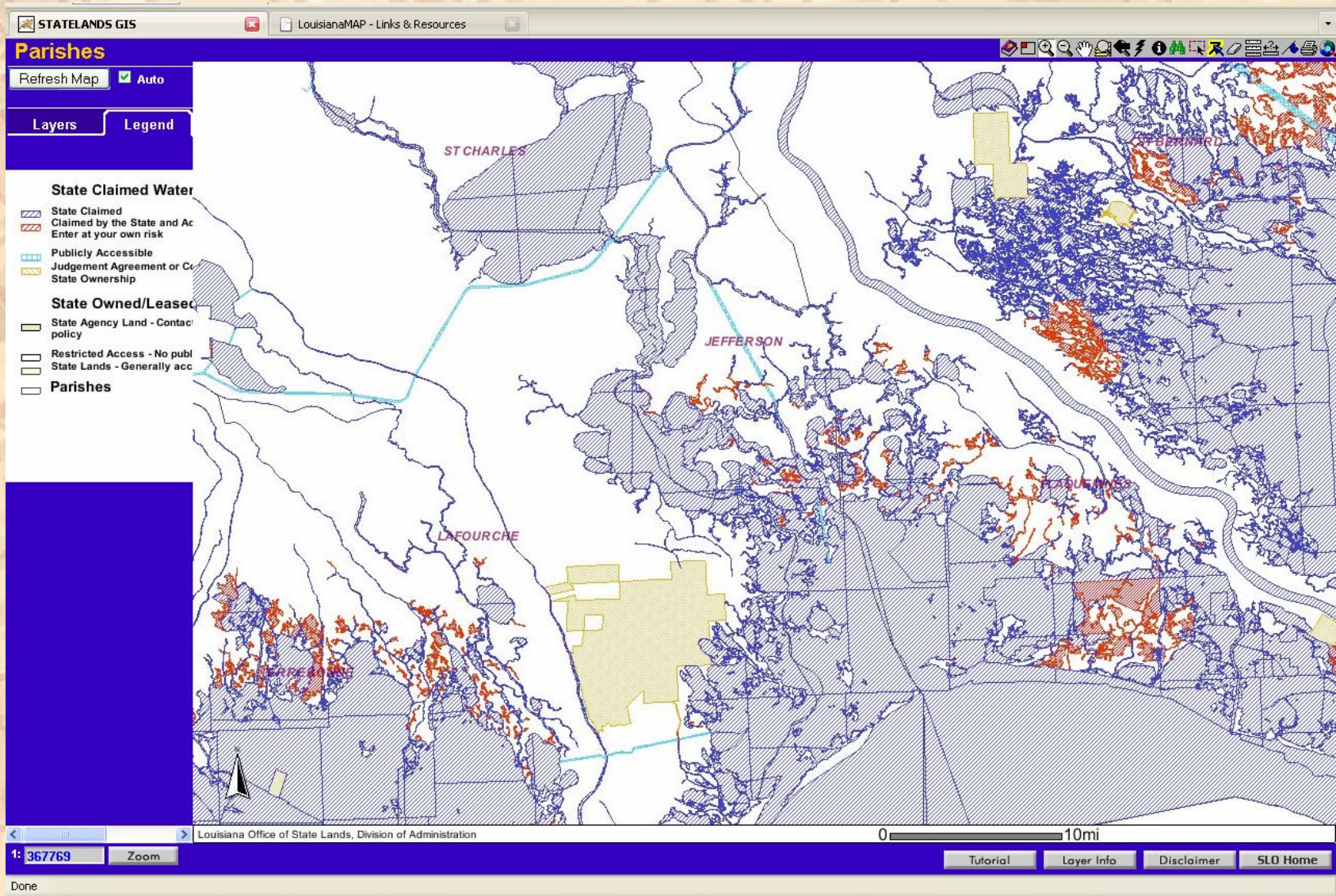
North Carolina \$10 Fee

-
- **"§ 161-11.3. Fees for floodplain mapping.**
- Ten dollars (\$10.00) of each fee collected by the register of deeds for registering or
- filing a deed of trust or mortgage pursuant to G.S. 161-10(a)(1a) must be forwarded by
- the register of deeds to the county finance officer, who must forward the funds to the
- Department of Crime Control and Public Safety to be credited to the Floodplain
- Mapping Fund established under G.S. 143-215.56A. The county finance officer must
- forward the funds to the Department on a monthly basis."
- **SECTION 29.7.(c)** Part 6 of Article 21 of Chapter 143 is amended by
- adding a new section to read:
- **"§ 143-215.56A. Floodplain Mapping Fund.**
- The Floodplain Mapping Fund is established as a special revenue fund. The Fund
- consists of the fees credited to it under G.S. 161-11.3. Revenue in the fund may be used
- only to offset the Department's cost in preparing floodplain maps and performing its
- other duties under this Part."
- **SECTION 29.7.(d)** This section becomes effective October 1, 2008, and
- applies to deeds of trust and mortgages registered or filed on or after that date.
-

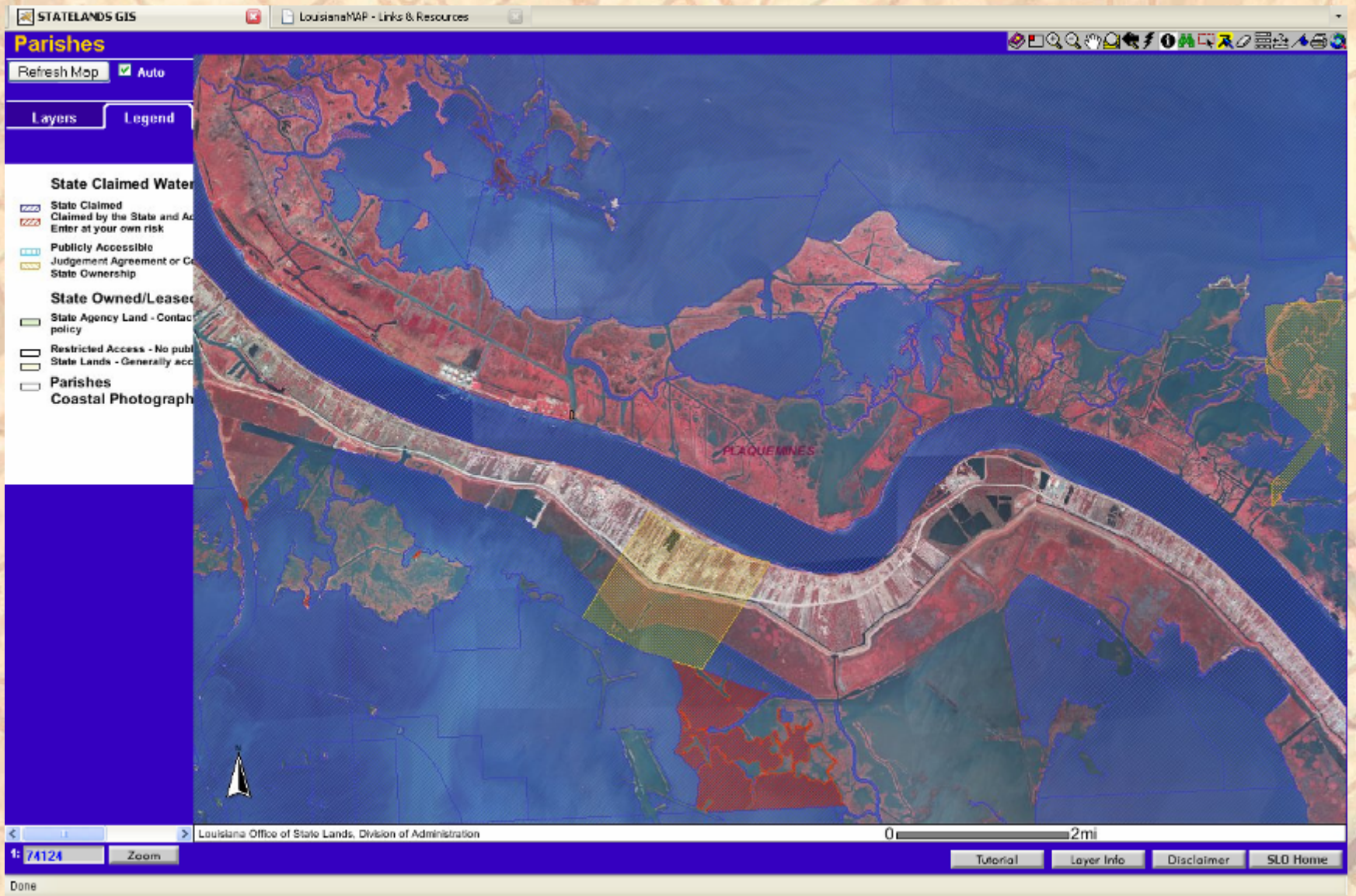
State Owned Property



State Owned Property



Aerial Photos



GLOB Goals

- Geospatial LoB will establish a new and more citizen-centric collaborative model for geospatial-related activities and investments.
- This will create a framework for sustainable participation from non-Federal partners, and create a more coordinated and leveraged approach to producing, maintaining, and using geospatial data and services.
- Provisioning the Nation with easy to use geospatial capabilities will promote cheaper, smarter and more efficient government business, services and information.

FGDC Mission or Lip service ?

“Building a viable NSDI to serve the needs of all levels of government and the private sector requires a solid foundation that is strategic, deliberate, and assembled in discrete, manageable units.”