

Today's Cadastral Information Customers and Requirements

July 2008, draft 7/23/08

For several decades, advancements in computing technology have allowed public agencies and private firms to create, migrate and maintain cadastral data in digital format. As this information becomes more widely available, the cadastral information user base and business applications have also dramatically increased and broadened. The traditional customer base of real estate and assessment professionals now includes law enforcement, homeland security and a variety of private and commercial uses ranging from online home buying information to video games.

In an effort to better understand today's customers and market uses for cadastral information, the FGDC Cadastral Subcommittee conducted an informal survey of state and local government cadastral data producers and managers. Interviewees were asked about their current cadastral data customer base, data content and format needs, customer tracking, product and service changes and observable trends. They were also asked if the FGDC cadastral standard was meeting current customer needs. Responses were focused on private sector customers and uses of cadastral data at the jurisdictional or regional level.

□ Who are today's customers?

- Most interviewees reported the **traditional** customer base:
 - realtors, attorneys, title companies, engineers, planners, consultants, utility companies, financial institutions, Tele-atlas, sportsmen (hunting/fishing), academics (students/researchers), media, etc
- **New** customers brought in by the increased availability of digital data included:
 - mapping/atlas companies, oil/gas leasing (limited use of cadastral data since it doesn't typically include subsurface rights), lexis/nexus, neighborhood associations (mailing lists), insurance companies (evaluating property for floodplain/flooding potential)
- **Unexpected** cadastral data uses and customers include:
 - citizen groups (used aerial photos to construct a 3D neighborhood model that illustrated their concerns about a proposed development)
 - forestry/logging companies (reviewed assessment codes to identify forested land and solicit property owners for services)
 - presidential visit (federal agencies wanted building footprints and heights for security planning)
 - homeland security exercise (plume overlays of parcels, estimating volume of contaminated debris using assessor's square footage and number of floors in buildings)
 - immigration (analysis of taxes and services in border areas to see how school districts are being impacted)
 - gamers (a British gaming company wanted data to construct a virtual city)

❑ What are your customers looking for?

○ Content

Interviewees reported that FGDC core parcel elements generally met customer needs, noting that in most cases, customers are grateful for anything in digital format. Other customers just want it all. Similarly with currency, customers tend to be grateful for whatever they can get, but the closer to real time property transactions, the better.

○ File format and delivery

Most customers are looking for fairly common data file formats and delivery mechanisms:

❑ file format – GIS (geodatabase, shape files), CAD (dgn, dwg), spreadsheet

❑ delivery – ftp/downloads, CD/DVD, map services

○ Suggestions for additions and improvements to parcel content standards

▪ **Additional data elements** that would be useful included owner name/address, sales information, parcel status (active/retired), parent/child relationships, assessment categories with acreages, tax information (amounts, payment history, delinquencies) and legal descriptions.

▪ **Suggested standards improvements** included support for easier integration of local data into regional datasets and more support for data transfer. Interviewees noted frustration with “re-inventing the wheel” when it comes to cadastral standards i.e. too many agencies and organizations are developing differing standards and many federal agencies use their own standard and not the FGDC cadastral standard.

❑ How well do you think you know your customers and their needs?

Most public agencies reported that they do little to no tracking of customers. Their goal is to post data online as “self-service” for efficiency and to reduce staff time spent on data requests. Self-service also moves some of the liability to the user and away from the data provider. In addition, there is a tradition of open records/open government that supports citizen access without questioning or tracking. It is difficult to track customers and needs in organizations without centralized or coordinated distribution (similar datasets are often distributed by multiple departments).

Those who did track customers did so via phone/email data requests, product sales records, license agreements, website subscriptions/use agreements, training classes, newsletter mailing lists, and....who calls when your website is down!

❑ Trends

○ Changes in customers and data requests

The volume of requests is the greatest change. In addition, today's customers are:

- technically sophisticated (they know what to ask for and are able to customize the data to meet their needs)
- want the efficiency and timeliness of downloads and self-service
- are willing to pay for data if the cost is reasonable
- have a better understanding of licensing and use agreements.

The most sophisticated customers often are only interested in parcel identifiers and line work, attaching databases and attributes as needed.

- What will customers be looking for in the future?
 - “official” or “certified” public agency data (getting the right data from the right source)
 - “one-stop” access
 - continuous improvements to data content and accuracy
 - increased local/state/federal data integration and sharing
 - greater integration of cadastral data into commercial applications and services
 - ubiquitous cadastral data (already imbedded in products such as MicroSoft and Google)
 - web services, rather than copies of data (15 years ago customers wanted data; today they want information and web services)

□ Other issues

- Is your data customer-friendly? For example, maps that depict arc length for curves, rather than chord distance (property owners cannot measure an arc on their property, but could measure a chord distance); useful acreages (GIS, recorded, assessor’s, etc)
- While data professionals are making great use of today’s cadastral data, citizen use is limited by “home” technology and software. Citizens can download datasets but are less likely to have the software required for analysis, modification, integration, and presentation. They are also less likely to have the hardware needed to create end products, such as a large format plotter.
- How much emphasis should be put on standards? Some interviewees noted that state and federal standards development lag far behind local data development. Since locals cannot “retrofit” data, standards should focus on integration rather than content. Data professionals and resellers are less concerned about standardized data since they reformat and integrate to meet their product and customer needs. It may be more important for data to be well-documented than standardized.

Appendix A

Interviewee Letter of Invitation

Dear (),

I am contacting you on behalf of the FGDC (Federal Geographic Data Committee) Cadastral Subcommittee. The committee is interested in learning more about how current parcel data and standards are meeting the needs of today's customers. There is a general sense that with greater data availability and access, the traditional customer base for parcel data has both increased and broadened, that people are using parcel data in ways never anticipated. If this is so, are commonly available parcel datasets meeting customer needs? Are core data elements and standards supporting today's uses?

We would like to briefly interview you to get a sense of current public and private uses of parcel data - particularly new uses – and how parcel data content and standards support those uses. I am looking for about 30 minutes of your time to speak with you about:

- * How you know your customers
 - ...identifying parcel data customers and their needs
- * What you know about their current needs for parcel data
 - ...core data content needs, geographic extent, access requirements, standards improvements, authoritative sources
- * Whether you provide a means to obtain feedback from your customers
 - ...e.g., a means to report data corrections or ideas for improvement

Please let me know your availability over the two weeks and I would be happy to schedule an interview. We appreciate your support of the work of the FGDC, and thank you in advance for your time and interest.

Appendix B Interviewees

region	name	organization	email	phone
NE-ish	Rob Slivinsky	Howard County, MD	rslivinsky@howardcountymd.gov	410-313-394
SE	Patrick Bresnahan	Richland County, SC	bresnahan@rcgov.us patrickbresnahan@richlandonline.com	803-576-2017
SW	Heather Widlund	San Miguel County, CO	Heatherw@sanmiguelcounty.org	970-369-5470
SW	Larry Brotman	NM Tax&Revenue Dept/IS	larry.brotman@state.nm.us	505-827-2318
NW	Mitch Vanderperren	City of Portland, OR	mitchvan@ci.portland.or.us	503-823-5632
NW	Glenn Meyer	City of Portland, OR Office of Management & Finance, Bureau of Technical Services	gmeyer@ci.portland.or.us	BTS 503-823-5198
W	Stu Kirkpatrick	Montana	skirkpatrick@mt.gov	406-444-9013
midwest	Diann Danielsen	Formerly with Dane County, WI	dkdanielsen@uwalumni.com	608-498-1538
midwest	Brett Budrow	St. Croix County, WI	brettb@co.Saint-Croix.wi.us	715-386-4678