

## A Public-Private Utility is the most efficient way for the United States to build and maintain a National Parcel Map

Before reading this you have already been convinced that a National Parcel map and database would be a good thing for the United States (if not, read something else). You know that applications of the data include:

- Emergency management
- Environmental management
- Response to housing bubble / foreclosure crisis
- Federal asset inventory / proper use of public lands
- Internet industry
- Real estate development and sales industry
- Mortgage origination and processing industry

### It won't be easy for the government to build the map:

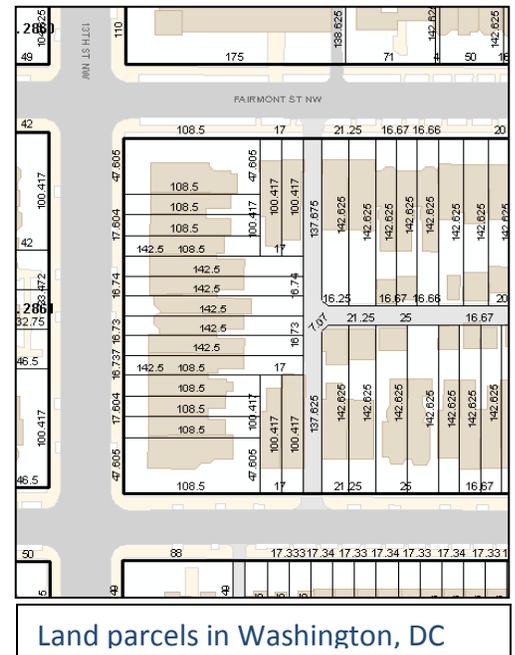
- The data quality and data base design varies from jurisdiction to jurisdiction. Therefore an accountable national aggregator is needed;
- No federal agency currently has the resources to build a national cadastre and the county is already running high deficits;
- In most states local governments have a legal monopoly on this information;
- Some local governments sell their data;
- Rural areas and public lands need special attention.
- The private aggregators demonstrated the capability to assemble and profit from national parcel maps.

### The private sector has demonstrated the ability to build, maintain, and profit from national parcel data, but there are side effects of private ownership:

- Communities who sell their data are rewarded and communities that put their data in the public domain are not. (the incentives are backwards);
- Tax payers can end up paying multiple times as different agencies and levels of government license the same data.
- Private is hard for governments to share licensed data and this hampers applications that require intergovernmental cooperation like emergency management.

**The solution is a public private partnership:** The lead federal agency puts out a competitive price based RFP seeking the private partner(s) to build a national parcel map. The winning bidder(s) must:

- Use a cloud-computing approach for the creation, update, and maintenance of the national parcel layer (see GOOGLE TFS: [http://code.google.com/transit/spec/transit\\_feed\\_specification.html](http://code.google.com/transit/spec/transit_feed_specification.html) ).
- Enable seamless "view only" access to the national parcels plus attributes in a free open environment (i.e. GOOGLE Earth, MS VE, etc.) to the general public.
- Enable downloadable access to government and tribal entities for their geographic jurisdiction and surrounding areas.
- Pay legal custodians of parcels (i.e. local, tribal, state) a licensing fee of \$0.50/year/parcel that are digital and fund the conversion for those custodians still on paper. The Federal Government will tie other Federal funds to the participation in this program by the custodians.
- Under the RFP the private partner retains (with some regulation) the commercial rights to distribute the data. This would include licensing the data to firms like Google, Microsoft and Zillow etc.



## The same public private partnership should build and maintain a national address file

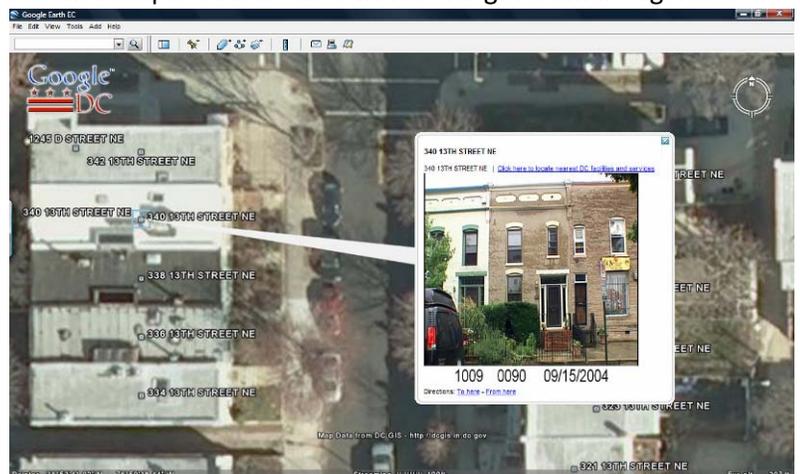
Addresses are not the same as parcels. Particularly in urban areas there is an often a complex many-to-many relationship between the two. National parcels are not a substitute for national addresses which are the preferred data set for 911 and geocoding non-spatial data.

Supporting production of a shareable national address database will allow the U.S. to take another step in the evolution of geospatial technologies that may be comparable to the DIME and TIGER street centerline files.

### Analysis



- Currently, most internet location based systems use address ranges that are associated with a road segment such as a one block segment of a road in an urban area (see graphic on left). This allows a “reasonable person” to find the general area of the exact address they are seeking and ultimately to locate the building. While this approach works reasonably well, tremendous improvements in the technology can be realized through improved addressing.
- Government agencies must maintain precise locations for addresses to ensure timely delivery of emergency services and for a host of other applications such as taxation. Precise address points look more like the graphic on the right where the red “+” symbols represent individual structures along the street highlighted in the red oval at left.
- The following are examples of industries that are dependent on addressing information: 911 dispatch, utilities, real estate, emergency management, telecommunications, healthcare, insurance, local delivery, service providers, and marketing.
- The U.S. Census Bureau is creating an accurate master file of addresses for structures in the Nation to support the 2010 census. It will not share the map coordinates and simple address data with other government agencies or the public due to Title 13 privacy restrictions. The United States Postal Service has similar data and the ability to maintain the data.
- Because street addresses have evolved over many decades, under the control of thousands of local jurisdictions, in many different record and database formats, and to serve many purposes, different address formats pose a number of complex geo-processing and modeling issues. As a consequence, government agencies struggle with these issues as they seek to integrate large, mission-critical files into master address repositories.



District of Columbia Master Address Repository

### Solution/Steps to be taken

- 1) Ask Congress to remove addresses and address point locations from Title 13 restrictions and to instruct the U.S. Census Bureau to make them publicly available.
- 2) Make the maintenance of addresses data the responsibility of the same public-private partnership that will build the parcel database.
- 3) Give the U.S. Census Bureau and U.S. Postal Service sufficient funds to be full participants in the partnership.

This paper is the personal opinion of Barney Krucoff (not the National Geospatial Advisory Committee, the National States Geographic Information Council, or the District of Columbia with all of which Mr. Krucoff has associations)