Seamless Parcels: NC Integrated Cadastral Data Exchange

North Carolina has a new online tool that translates a parcel dataset to a standard set of fields of the same geometry. What will be the end result? Seamless parcels across the state of North Carolina!

Since its inception, the vision of the NC Geographic Information Coordinating Council has been to achieve statewide datasets that are complete, consistent, and current. Parcels (cadastral) have long been recognized as a priority dataset by the Council.

The contractor was the Carbon Project, Inc. and its team included Fairview Industries, Inc. and Atlas Geographic Data, Inc. to combine experience in application development with expertise in parcel standards and integration. The project team included CGIA, and the Departments of the Secretary of State, Transportation GIS Unit, Public Safety, Environment and Natural Resources, Revenue, and the Eastern Band of Cherokee Indians. Truly a collaborative effort!

Twenty-five counties were chosen across the state to represent a good cross-section: they vary by size and region.

The concept for a translator to convert parcels in their original format from existing data suppliers (the counties) and the grant proposal was initially developed, and handed off to the Working Group for Seamless Parcels (WGSP) for implementation. The US EPA Exchange Network Grant was awarded in 2009, and then modified in 2012. With project management by the Center for Geographic Information & Analysis (CGIA), the project team worked intensively for eleven months beginning in June 2013.

The seamless parcels project brought about a new way of thinking about parcel data that can be used by state, local, and private agencies alike. In some instances, the standard set of attributes identified during the course of the project was not included in local datasets. This alerted local data producers to a need that had been expressed by a
Value

⇒ Provides consistent datasets across political boundaries
⇒ Reduces costs of providing data to local governments & to the public
⇒ Encourages regional GIS projects and planning efforts
⇒ Transformer tool stores settings for easy updates—annually, etc.
⇒ Data available for multiple uses: economic development, emergency response, transportation planning, environmental analysis, and many other benefits...
⇒ Data available on NCOOneMap as feature service

The breadth of use of GIS throughout the state continues to grow!

potential user for even better quality information from local sources. For some data producers, a simple change in the way information was exported from their computer-assisted, mass appraisal (CAMA) system yielded the desired results.

**Parcel Transformer: Easy to Use**

The Parcel Transformer has proven to be an easy tool to use by local government parcel data managers. So easy, in fact, that they have been able to implement it with only a printed user guide—no formal training, etc. And, once a data conversion has been completed, an update only requires that a new shapefile be uploaded. The Parcel Transformer does the rest. Auto-generated metadata (data about the data) from the Transformer provides definitions and other information for data consumers. An error log helps identify mismatched field types, changed field names, or invalid geometry to support consistent data quality.

**With Knowledge Comes Problem-Solving**

Seamless parcels could prove to be a crucial dataset in problem-solving. Consistent parcel data could support complete Census population counts that translate into fair allocation of funds. Or, having the number of buildings and the presence of multi-unit buildings by parcel in adjacent counties could support analysis to help respond to events like wildfires. Natural disasters do not respect county boundaries, and having consistent fields for analysis can save time, money, and even lives.

For more details on this project, please feel free to contact:
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Do you have a story to tell? Contact Kathryn Clifton, GISP so that your story may be included in the next edition exploring the importance of statewide datasets. Email your story to [lmddir@ci.spencer.nc.us](mailto:lmddir@ci.spencer.nc.us)