Census-Administrative Boundaries Data Model

Data Model User Group

Join the data model user group if you are an existing ArcGIS customer and want to learn more about design and architecture of personal or enterprise Geodatabase and become a part of Esri’s growing data model community.

This data model contains a template set of objects that are typically used for Administrative Boundaries at the local, state, and national level. Organizations at all levels have the need to use administrative boundaries. This data model emphasizes US Census Bureau TIGER data, administrative and statistical units along with the underlying line work including roads, hydrography, and rails. It can be applied to any potential application of administrative boundaries.

Many GIS systems integrate TIGER data, enhancing and maintaining the data in an integrated manner with other geographic layers. Units such as blocks, block groups, and tracts are assembled out of the underlying topological line work that represent features such as roads, rails, hydrography, and other linear features.

Rather than duplicate the design in many ArcGIS data models, we document these features in the Administrative Boundaries design template. This model is intended for project teams involved in developing Administrative Boundaries and decision support. These users include database designers, data builders, database administrators, analysts, and developers. Users should draw on this template and incorporate the relevant areas into their projects.

Beyond these distinctions, the actual modeling and use of polygons for Administrative Boundaries is straightforward. The US Census Case Study presented here is based on downloadable Census 2000 data. We have created a Geodatabase model and topology rules that will be useful for state and local agencies that manage administrative areas and demographic information.

User Forums

Visit the Esri data model discussion forum to share your ideas, thoughts, and questions with other users.

Downloads - Case Studies

These Case Studies are a good starting point to learn about best practices for this discipline. These project examples include sample geodatabases, map documents, and documentation.

- **US Census 2000 Case Study** Geodatabase (.mdb) and Map Document (.mxd) - zip format, 38932 kb
- **Census Administrative Boundaries Data Model Poster** - zip format, 10998 kb
- **Census Data Model Chapter** pdf - zip format, 9839 kb

Downloads - Design Templates
The Design Templates are the result of the community-based design process. The general concepts and terms for this discipline are described here. Tools and examples to create a template data model are also included for advanced users.

- **Census Administrative Boundaries Design Template** MS Word, Visio 2000/2002 - zip format, 2296 kb
- **Census Administrative Boundaries Data Model Reference** MS Word - zip format, 35 kb