GIS: Metadata for Street Files (including TIGER)

Summary

The main goal of the project is to show differences between street files from different sources. The TIGER street file from Census Bureau is contrasted with a street file from MN DOT and DNR. Metadata about origin (1:100,000 vs. 1:24,000 topographic maps) helps students think about horizontal accuracy. Use of USGS "county" DOQs is a secondary goal.

Materials

ArcView 3x software files and data located in cg streets.zip

Background for Teachers

All of these files should be put into a folder called cg_streets, and this folder should be placed under c:.

This cg_streets folder holds a project called street_metadata.apr.

The main goal of this project is to show differences between street files and therefore to encourage students to appreciate metadata for street files. The TIGER street file comes from the U.S. Census; see the Word file called TIGER_metadata_readme.rtf. The other street file comes from the Minnesota DOT and DNR, and its metadata indicates that the streets were originally digitized from 1:24,000 topographic sheets. The 1:24,000 source is more accurate in terms of horizontal location of streets. A secondary goal of this project is to use a U.S.G.S. "county" DOQ. See the Word file called USGS_county_doqs_readme.rtf for important information. It is very important that a file called Doq.avx is located in the folder called c:\esri\av_gis30\arcview\ext32. The Doq.avx file is included in this cg_streets folder.

Instructional Procedures

Census TIGER® 2000 Data from Geography Network and Metadata about the TIGER files (taken from the Â"censusÂ" sites listed below; annotated by Carol Gersmehl)

INTRODUCTION

We are pleased that you are using the Census TIGER® 2000 data available through Geography Network. The Geography Network TIGER® data set includes over 70,000 compressed files of geographic data that are available for download. Each file represents a data layer for a single county in the United States. As data layers are requested for download, ESRI assembles all the files and packages them as a single .ZIP file for download.

HOW TO ACCESS THE DATA

To access the data, you must decompress the .ZIP file that was downloaded and then decompress each of data layer .ZIP files it contains. This can be done using a compression tool such as WinZip or PK Unzip or using ESRI's ArcExplorer software. Once the data layers have been decompressed, you can display the data using GIS software such as ESRI's ArcExplorer or ArcView GIS. Simply use the "add theme" function for each of the shapefiles.

FILE NAMING CONVENTION

Each data file name is a combination of a layer abbreviation (e.g. 'blk') and a 5-digit County FIPS Code (e.g. '53001') and the file extension (e.g. '.zip' or '.shp'). For example, the compressed county data layer for Cook County, Illinois would be named 'cty17031.zip'. The data layers contained within the .ZIP file contain a TIGER® abbreviation prefix (i.e. 'tgr') followed by the County FIPS and layer abbreviation (e.g. 'tgr17031cty.shp'). Below is a list of the abbreviations for each of the TIGER® data layers.

Layer Name

Abbreviation

Line Features - Roads	lkA
Note: for our school we had Tgr27123lkA.shp which is roads	for Ramsey
Line Features - Rails	lkB
Line Features - Misc. Transport	lkC
Line Features - Landmarks	lkD
Line Features - Physical	lkE
Line Features - Non-visible	lkF
Line Features - Hydrography	lkH
Line Features - Unknown	lkX
County 1990	cty

Data Documentation

Documentation for the TIGER 2000 data can be found on the Census Web sites below and in the attachments 2000 Census TIGER/Line Files (pdf) and About Using DOQs (Digital Orthophoto Quads) purchased from the U.S.G.S. (rich-text format document).

Bibliography Copyright © 1999 ESRI Canada

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