



By Rj Zimmer, LS

Rj Zimmer is registered in Oregon and Montana, and has more than 25 years of surveying experience in the private and public sectors. He is the GIS Consultant & GIS Center Manager for the City of Helena – Lewis & Clark County Geographic Information Services Center in Montana.

Use GIS to Create Form Letters

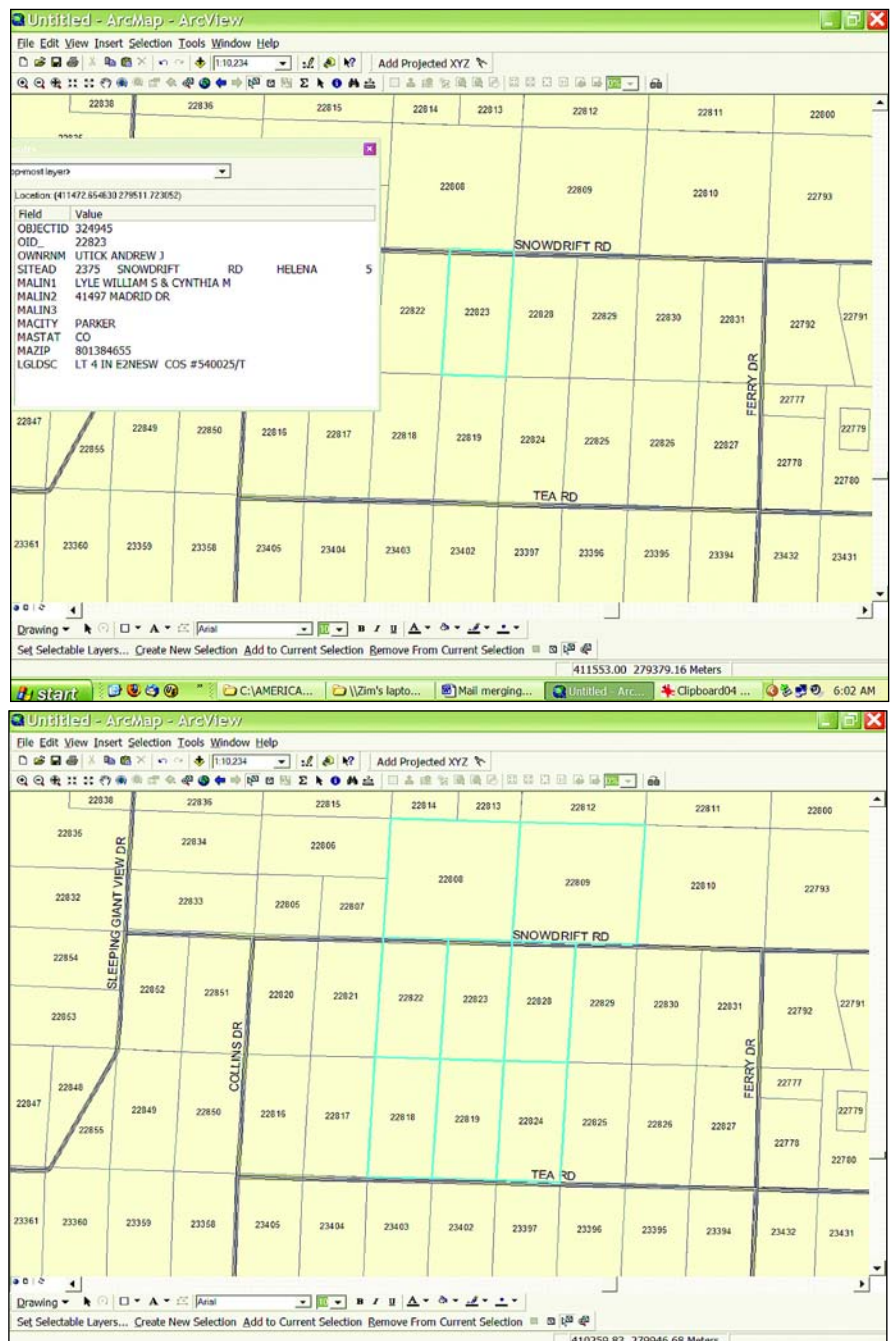
GIS is a powerful tool with innumerable applications. One very simple application that can save a huge amount of time is to use GIS to select a list of information to use in form letters.

For example, in order to inform property owners of an upcoming survey in their neighborhood, a surveyor could use GIS to select the adjoining properties, obtain the landowner names and mailing addresses, and merge that information into a form letter to automatically print letters and envelopes. This saves time it would otherwise take to travel to the courthouse and search through the records, look up each property on a hard copy map, then search for the owner name and mailing address. The ability to *export* a table of selected records from GIS also saves having to transcribe owner names and mailing addresses by hand, while the ability to *import* the data from GIS into a word processing document for a form letter saves having to manually type in each owner's name and address. Because the records are pulled directly from the database into the word processor, typographical errors are avoided. If a record or two are missed, it takes only a few minutes to go back to the GIS and select them, which is obviously more expedient than making another trip to the courthouse.

Of course, in order to use this kind of data, the surveyor must have access to the GIS information and software that pro-

Figure 1 The GIS spatial query function allows you to select those properties that share a boundary with the parcel we are going to survey.

Figure 2 Properties that share boundaries with the selected property



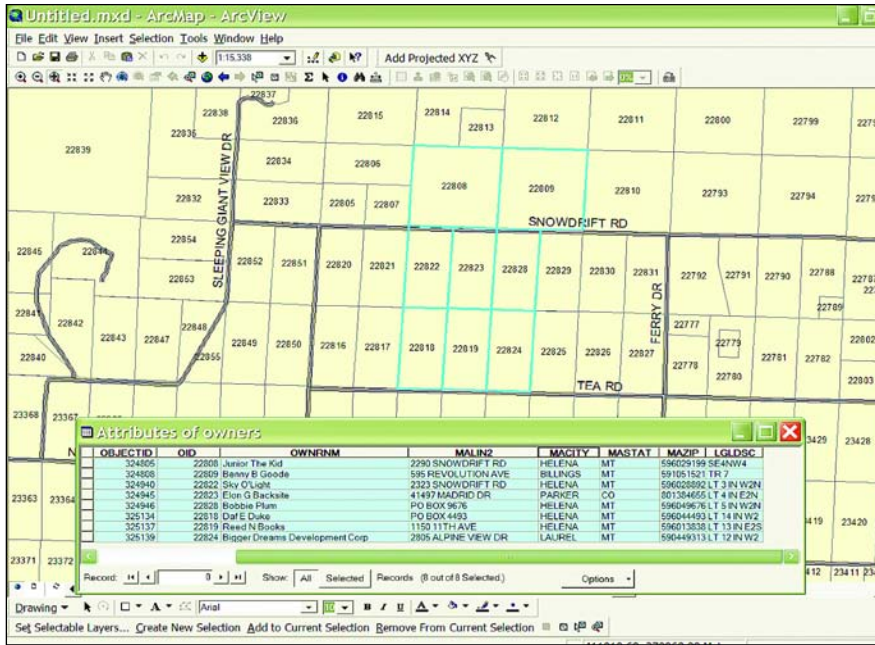


Figure 3 Owner attribute information

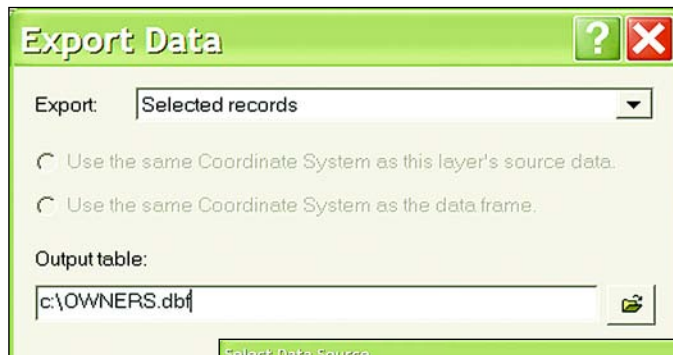
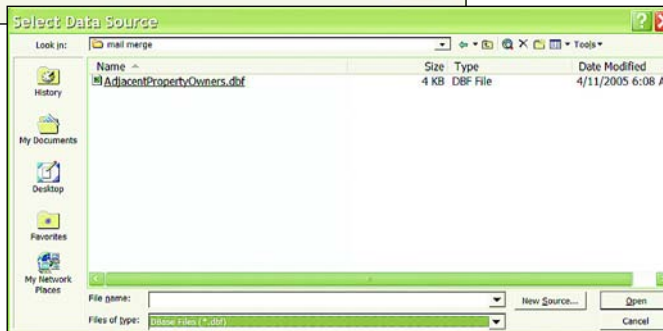


Figure 4 A table is created that contains information needed to create a letter.

Figure 5 Select the file that contains ownership and property information.



vides a means to select records and export the selected records to a file. Presently there are at least three ways to get this information: by obtaining a copy of the data in GIS format from the state or local agency, by connecting to the data as a map service provided by the data hosting agency, or by using Web access to the map data. The important components are:

- The ability to query the GIS layer, such as by owner name, property identifier, road name, or a geographic search (e.g., a map selection of a property and the adjoiners, or by distance from the property);
- The ability to save or export the tabular data of the selected records to a local file.

The basic steps are to use the GIS to select the records of interest, then export the tabular data for those records to a table, such as a dBase format file, create a form letter in a word processing program, insert the field names of the table into the form letter, merge the data into the form letter, then print the letters. This same process also applies to envelope forms for mailing.

Step 1: Selecting the Records
GIS offers many ways to search for and select records. One may query the database on attribute information, such as land

owner name or property identifier, or perform spatial searches, such as finding all parcels that adjoin (boundaries that touch), or are within a certain distance of a selected property or all parcels that are along a certain stretch of road. Figure 1 shows a property selected in GIS. Since this is the property to be surveyed, we will want to inform the adjacent property owners that our crews will be in the area. We use the GIS spatial query function to select those properties that share a boundary with the parcel we are going to survey.

Figure 2 shows the properties that share those boundaries. Figure 3 shows the owner attribute information of the selected parcels that we will use to generate the form letters.

Step 2: Exporting Attributes

Once the parcels are selected, the attributes of those parcels may be exported to a table. Figure 4 shows the export process from the GIS software. In this case a dBase IV formatted (.dbf) table is created that contains the owner and property information we need to create the letter. The file is saved on the computer so that we can later pull the information into the form letter.

Step 3: Creating a Letter

Using a word processing program such as MS Word, create a form letter, then use the mail merge tool to select your exported table as a data source for the form. Figure 5 shows the browse-for-data-source window used by MS Word to select the file that contains our ownership and property information.

Step 4: Inserting Fields

Once we have connected to our exported table, we can then insert its fields into the appropriate places in our form letter (Figure 6). Our form letter will have place holders for the owner's name, street address, city, state, and Zip code for mailing purposes, and a short legal description of the property so that the owner knows which property we are referring to.

Step 5: Merging & Printing

After the fields are set up in the form letter, we can perform the merge and automatically print all the letters (Figure 7) with the push of a button. Such a form letter can be reused, and if the next table exported is saved with the same name as the one previously used in MS Word, then you can skip Steps 1

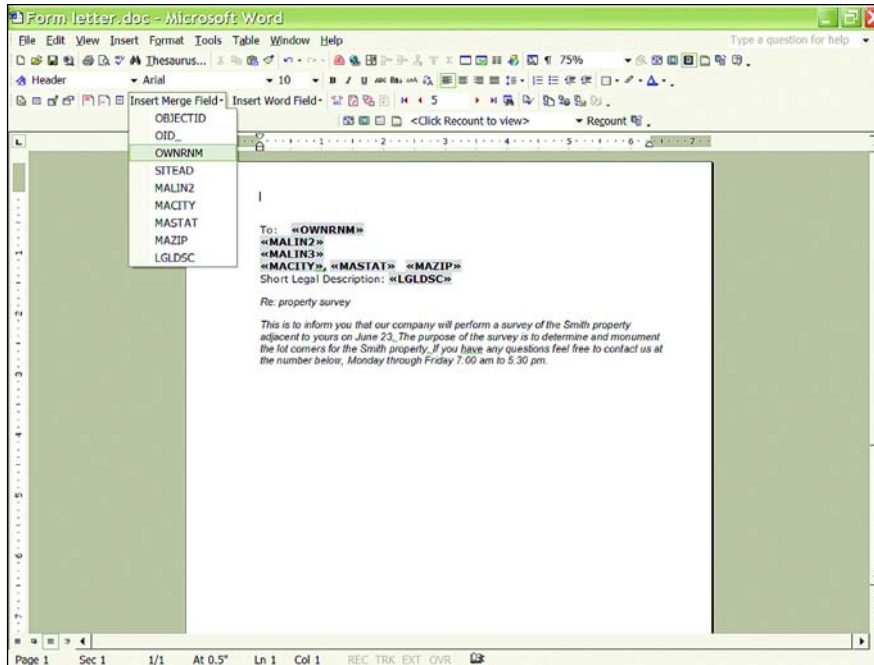


Figure 6 Insert field names into the form letter.

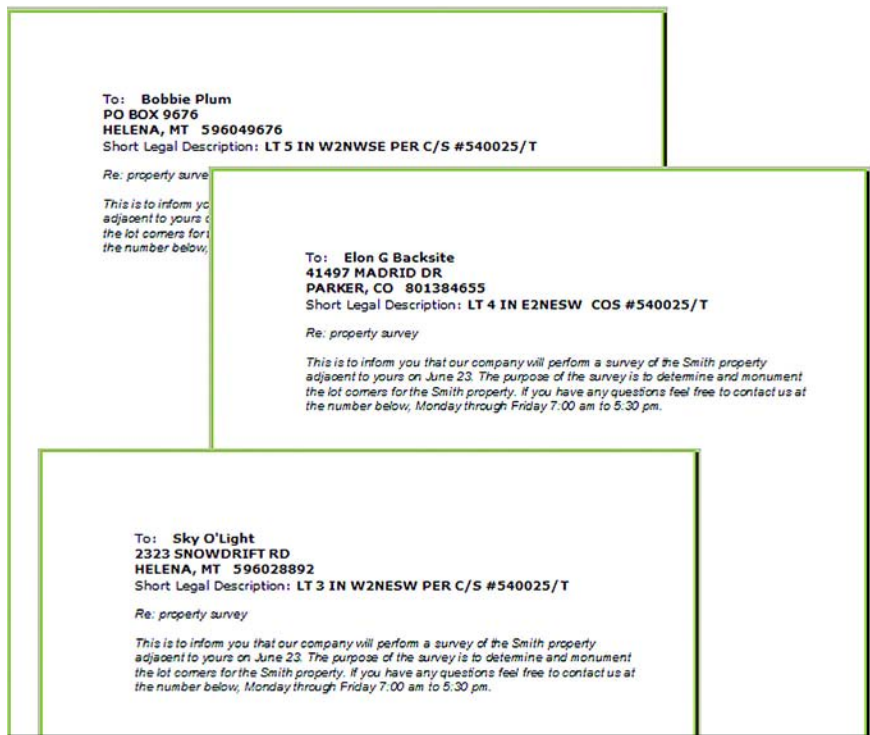


Figure 7 Sample form letters

and 4 in the future and just use a stock letter for any future notifications. In that case you would need to use the GIS to create the selection then export of records, save that export table to the same name, then open the form letter and print using the new records. In addition, as mentioned earlier, this method can also be used to create form envelopes for mailing.

The power of GIS is quite evident in how it can make mundane tasks simple, and very quick. The ability to perform a spatial query to discover the relationship between properties in an area, and then to use the information that is in the GIS in a variety of ways, demonstrates why GIS is quickly becoming a standard desktop tool. *A*

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 guage in a deed executed prior to April 7th of that year is to be interpreted in a different manner than in a deed subsequent to that date. Thus, in Maryland April 7, 1892 is a watershed date in the analysis of road calls. Since the origin of this anomaly was a statute passed by the Maryland legislature, it would be foolish for anyone to assume that Virginia or Pennsylvania or any other jurisdiction would consider 1892 as any different than any other year where roads are concerned. For all I know, Maine has a similar law, with a different watershed date. Or not.

In part, this is a justification for having state-issued surveying licenses. The presumption is that there are various state-specific “knobs and buttons” on the otherwise general practice of surveying that “correct” retracement must take into account. Conversely then, retracement ignoring these anomalies must be viewed as incorrect. Any other conclusion would be illogical.

Lest we be dismayed at this apparent Babel, all is not utter confusion. There have been serious attempts to standardize real estate transactions across the country in an effort to encourage the mortgage markets. Among other things, this results in transaction documents looking similar no matter where you sit. When I speak of Schedule B in the title commitment, for instance, nearly every surveyor in the commercial market will recognize my reference.

Additionally, there are general principles of retracement that are common in nearly every jurisdiction, such as monuments being at the top of the Rules of Construction, etc. We probably have English common law to thank for that since all of our courts trace their roots eventually back to that country. (Except you, Louisiana!)

But doctrine, even if in place elsewhere, only becomes “correct” for you when your controlling authority adopts it.

So What?

Why does any of this matter? Understanding the impact of controlling authority is the foundation of correct practice, for it points to which authorities are in the game and which are in the stands; which writings are obligatory and which are merely interesting. In effect, there are many rule-books, all in effect somewhere, but only a couple count right here, right now. Can you tell which ones? *A*