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Survey Record Indices

In my last essay I opined that a firm with unindexed surveying records is a firm with truncated value. In other words, if you have accumulated a trove of records over the course of your career, but have not bothered indexing them, that omission can end up costing you (or your estate) many tens of thousands of dollars in lost value. I'll not re-plow that furrow here, but after reading the piece several readers inquired as to the form such an index should take.

Let's get our cards on the table early on, shall we? No one likes indexing, ever. (Well, maybe gnomes somewhere, but we mortals can think of nearly a million more interesting things to do.) And if indexing current work ranks up there with watching paint dry, how does indexing 25 or more years of past work strike your fancy? Me too. Nevertheless, a well-indexed, comprehensive collection of survey data is a joy to use—both for you and your potential purchaser. *Ka-ching!*

So what should the index look like? From the perspective of a surveyor who needs to find records to assist upcoming surveys, one index method is certain to be of assistance: geographic.

Geographic Indexes

Geographic indexes can be defined as those finding aids that identify records based on the location of the property. We are interested in records of older surveys in the proximity of current work, because data uncovered earlier, or judgments made earlier can assist in completing our tasks. Practically speaking, this form of index depends on a framework of some sort that covers the entire area of practice, such as a horizontal grid, with

the individual surveys referenced to it. For instance, if the area of practice is a particular county, a grid overlaid onto the county map would serve as the framework, and individual surveys would be located with respect to it. A search in the database holding this index would return all surveys located within the same grid.

As I pointed out in the essay on valuing surveying businesses, it seems to me that the Public Land Survey System provides a natural framework for indexing surveying records in the PLSS states.

Thus, surveys can be indexed merely by entering the PLSS designation of the property into a database. Surveyors in metes and bounds areas (like me) must use alternative frameworks such as tax maps, and the like. Frankly, any frame-

also display surveys many blocks away, but within that same square mile. Since few properties stretch beyond a single block, it is unlikely that surveys seven or eight blocks away would be useful in the current work. Worse, if the collection is large, each square mile query could result in hundreds of results – hardly helpful. On the other hand, square mile resolution, or even larger, might be very appropriate in rural areas of the Midwest. Appropriate resolution is governed by the average property size.)

Alphabetic

There are other methods of indexing records that are useful to a lesser extent than geographic, but are still valuable at times: alphabetic by project name and

Indices cannot depend on someone's memory for effectiveness

work will do provided it has the following characteristics: (1) it must be easily understandable to other surveyors; (2) it must be stable and accessible over many years; and (3) it must allow sufficient resolution to generate useful results. (By resolution, I mean the smallest division of the grid. Insufficient resolution renders too many false positives, for instance, a survey collection covering New York City, but having an index resolution to the nearest square mile. A query covering the parcel now under consideration will

by client name. With computer-based accounting systems in place at most firms, these indexes can be generated automatically, but it is important to note that these indexes by themselves cannot and do not add value to the record collection. I once worked at a firm that possessed the records of an earlier firm, which records were filed alphabetically by client name, with no other index. Of course, the records were only marginally useful, because in day to day practice it was impossible to correlate the area of

interest to the former client. The original surveyor could have done it, of course, because he would have *remembered* which client was in the area. Not helpful to us—he was dead.

Leininger's first rule of survey indices: the index cannot depend on someone's memory for its effectiveness. Memories come and go with the people who have them, yet the records are deemed important nevertheless. When the memories are absent, the records lose their retrievability. Another firm where I worked "organized" its records such that a knowledge of the project itself was necessary to find anything. Some in the firm joked about being "sentenced to look for a file in the basement," because it was sure to be a punishing experience, with no guarantee of a happy ending. With 20/20 hindsight it's easy to see the shortsightedness of the scheme, but the principals in that firm probably did no worse than those at many other firms. Reliance on memory is poisonous to effective retrieval.

GIS

A word here about GIS (I can see you GIS guys hopping up and down from here!). Obviously a GIS designed with surveyors in mind could fit the bill for us. There are two caveats to this approach, however. First, it may be that data entry is more complex than in alternative methods, and therefore reason to postpone the whole project. Not good. Second, the GIS system needs to be transferable as the ownership of the records gets transferred. To the extent that the system is owned and controlled by others, it will not likely add value to the records.

It is possible, of course, that other methods of indexing exist, especially in parts of the country where alternative conditions present unique opportunities. As in all aspects of our work, local conditions influence best practices.

Get your indices in order. It's an investment that pays dividends. 