

THE SANBORN MAP: A TOOL FOR THE GEOGRAPHER

ROBERT B. LAMB
San Fernando Valley State College

Geographers often must spend a large amount of time and effort in obtaining adequate land use maps of the area they have under investigation. They should be particularly grateful, therefore, that, as a result of the mapping services of the Sanborn Map Company, most of the urban areas of the United States are reasonably well mapped. The company's present coverage includes maps and atlases for virtually every city, town, and village, as well as many unincorporated communities of the United States. The Sanborn map, with its detail concerning streets, lot lines, individual buildings, construction materials, utilization and height of buildings, all of which are designated by various symbols, offers the greatest detail of any comparable urban map.

Although the description and a survey of the uses and advantages of these maps are available elsewhere,¹ this article will again briefly describe and evaluate the Sanborn map and then indicate other uses to which it may be put.

Many agencies make use of the Sanborn map, but the original intent was to provide a detailed, accurate map that an insurance company underwriting fire casualties might find useful. The origin of fire insurance maps dates back approximately to 1850 when early efforts in New York City to replace the old time street registers resulted in maps of the congested parts of that city. After a few early mapping companies had met with varying degrees of success, the principal organization in the limited field began to function in 1902 under the present corporate name of the Sanborn Map Company. At this time the company and its associates had been in active map production for about forty years.

Since 1902 the Sanborn Map Company has been expanding and revising its large scale maps of cities and towns throughout the United States. Altogether more than eleven thousand communities have been mapped, and these include every town in the United States of two thousand or more in population.

Clearly, the great value of these maps is in the wealth of detail that they offer. All buildings and structures of the built-up area of the community are mapped to scale, and greater detail is often shown in inserts and attachments (Figure 1).

The scale of the Sanborn map has been uniform throughout most of the company's history. Prior to 1953 the maps were plotted on uni-

¹ Robert L. Wrigley Jr., "The Sanborn Map as a Source of Land Use Information for City Planning," *Land Economics*, Vol. 25, No. 2, May, 1949, pp. 216-219; William Applebaum, "A Technique for Construction of a Population and Urban Land-Use Map," *Economic Geography*, Vol. 28, July, 1952, pp. 240-243; Sanborn Map Company, *Description and Utilization of the Sanborn Map*, New York, 1953, 16 pp.

form-size sheets to a scale of 1 inch to either 50 or 100 feet. Since 1953, however, many communities have been plotted on a reduced scale of 100 or 200 feet per inch, and the larger and bulkier atlases and sheets are being replaced by volumes of more compact size.

In addition to the scale and layout, the uses of buildings, the number of stories, and the height of tall buildings are indicated by symbols. For example, residences are indicated by a D. Flats or two stories occupied by two families by an F. A common entrance and with more than one family per floor equals Apts. Rooming houses, if known, are also noted. In buildings with six or more dwelling units per building, the number is so indicated. The latter data, however, are found only on maps of California, Arizona, Nevada, Idaho, Oregon, Alaska, and Hawaii.

Retail stores are indicated by S except when a fire hazard exists, in which case the name of the commercial activity is indicated. The label is usually a contraction, for example, Blsm for a blacksmith shop. Specialty stores are often identified by the company name.

Most industries and manufacturing concerns are labeled, although, admittedly, some manufacturing activities which have no particular fire hazard are not usually noted. A further difficulty is that an industry may be housed in a retail building, and, unless there is a fire hazard factor, such multiplication of businesses in one building is not noted.

All public buildings, such as city halls, schools, churches, and hospitals, are also shown. Not included are such items as terminals of transportation and non-structural land use such as parking lots, parks, gardens, and coal and lumber yards, unless there happens to be a fire hazard connected with any of these. Railroads of the original map period are shown, but corrections are seldom made for this item.

Since fire is the all-important consideration the construction material of all buildings is of vital concern. On the Sanborn maps an elaborate system of symbols and colors has been developed for each kind of building material. When a building has been fireproofed the date of such action is noted. Unfortunately, non-fireproofed buildings are not dated.

An important feature of the maps has been the correction service that is supplied with the purchase of the Sanborn maps. Although each city is costly to survey, it is necessary that the maps be up-dated, and a system was worked out that has been used for more than fifty years. The operation is simple. The company corrects the maps of a particular city by using the field reports of its agents to make correction slips of the mail areas involved. These slips are printed and distributed to the local Sanborn offices outside of New York, which are in Chicago and San Francisco. In each of these offices a slip is pasted over the area being corrected. After the "stickers," as the corrections are called, have been placed on the revised map, the corrected map is sent to a particular agency subscribing to the service. The agency in turn sends its uncorrected copy to the issuing Sanborn office. There the staff corrects the second map and sends it out, and so on, until all the maps in the region have been corrected. As a result of the revisions a large city will have volumes, the originals of which

will be more than thirty or forty years old. For example, the volumes of the central business district of Los Angeles were originally printed in 1907.

From the above description it is clear that the advantages of this kind of map to the geographer are numerous. Disadvantages are less clear, however. First, there is no distinction between vacant land and non-structural land use. Second, multiple use of large buildings is not easy to determine unless a fire hazard exists. Third, the maps do not cover the sparsely-settled areas of a community. Fourth, although construction dates are given for fireproofed buildings, the vast majority of the structures have no date of building. Last, maps are not always available for public use.

How available are Sanborn maps? Many of the very early maps published by the earlier companies remain, but unfortunately they are not particularly available. The only repository having a reasonably large coverage of the original and very early maps is the Library of Congress. Larger communities will usually have Sanborn maps available at the city hall or the county court house, as well as at any fire insurance rating agency.

Despite the disadvantages, the Sanborn map has many users in addition to fire insurance underwriters. Planning and various government agencies have long found the maps useful. Applebaum describes techniques for constructing population maps from the Sanborn maps.² The Sanborn Map Company itself has recently produced detailed composite land use maps for cities such as New York, Philadelphia, and Pittsburg.

Geography departments could also find these maps useful, but the price is prohibitive. This cost factor, however, is no longer a deterrent since acquisition is now feasible as a result of the recent conversion to a different scale, which makes the older documents obsolete to a company although still of value to a department of geography.

Although many of the older maps are in storage or being discarded, they are potentially available to geography departments. For example, a complete set of volumes of Los Angeles were recently donated to San Fernando Valley State College by a local insurance agency that no longer had use for these older maps. It is possible that maps of other local areas would be available from insurance agencies.

The maps that were originally made some thirty or forty years ago and that now have correction "stickers" over major portions of the older city plots are still definitely usable. If such an older type scale map can be obtained, one way of getting the maximum use would be to photograph in color the recently corrected map and then soak off the "stickers" that have accumulated over the years as the town or city changed. A department would then have on color film the recent map as well as the older map with which one could make comparison and change studies.

Although the Sanborn map may not be readily available, it behooves every urban researcher to attempt to examine the Sanborn map of the community he may have under consideration. It is, of course, possible to use a less accurate map, but the Sanborn map might contain in its myriad of details an item of real significance and value to the project.

² Applebaum, *op. cit.*