

Sanborn® Fire Insurance Maps

About the Collection

The Sanborn Map® Collection consists of a uniform series of large-scale detailed maps, dating from 1867 through 1969 and depicting the commercial, industrial, and residential sections of cities. The maps were designed by surveyor D.A. Sanborn in 1866 to assist fire insurance agents in determining the degree of hazard associated with a particular property. The D.A. Sanborn Co. was the first company to offer insurance maps on a national scale in response to the growth of urban communities after 1850. The company's surveyors meticulously documented the structural evidence of urbanization - building by building, block by block, neighborhood by neighborhood, community by community.

Sanborn Maps® illustrate in outline form the site, size, shape, construction and building material of dwellings, commercial buildings, and factories. Details of buildings include fire walls, the location and number of windows and doors, style and composition of roofs, wall thickness, cracks in exterior walls, and makes of elevators. The maps also indicate building use, sidewalk and street widths, layout and names, property boundaries, distance between buildings, house and block numbers, location of water mains, hydrants, piping, wells, cisterns, and fuel storage tanks.

Sanborn Maps® are colored keyed. For instance, adobe buildings are painted olive, stone blue, brick pink, wood yellow, iron gray. Until 1911, the maps were handmade and hand colored. After that, corrections and amendments were pasted on top every few years. The library owns maps from 1884, 1889, 1898, 1911, 1930, 1949, 1950, 1957 and 1969. Entries are arranged alphabetically by state and then by city.

How this Collection was Digitized

The Sanborn Maps® were photographed with a Leica S1 Pro digital scanning camera, through a 50mm CFI Hasselblad lens. The camera was mounted on a copy stand, and Kaiser Softlite ProVision 6x55W fluorescent 5400K lights were directed at the maps. The maps were not removed from their encapsulation, which created some difficulty with light reflection and glare. It took a long time to get the setup right.

Scanning software was SilverFast v.4.0, operated as a plugin for Adobe PhotoShop 6.0. Digital files were scanned at roughly 5,000 x 4,000 pixels spatial resolution, and saved as uncompressed TIFF format. File information was added to each file through a PhotoShop batch action. Each master file is roughly 60Mb in size; all were saved offline to digital tape.

Initial load - 2001

Files were then encoded with the MrSID encoding software, from LizardTech, Inc. 20:1 compression was achieved, reducing 60Mb TIFF files to 3Mb SID files, without noticeable loss of resolution. Users may download the compressed files and then use the MrSID viewer to zoom in on details of the maps.

MrSID files were imported into the [CONTENTdm](#) image management software acquisition station, assigned metadata based on Dublin Core elements, and then uploaded to the CONTENTdm server, running on an Apache web server on a UNIX Solaris box. A project web page was created, and links were established to the CONTENTdm search engine and browse feature.

Re-load - 2004

It eventually became apparent that MrSID was not a good compression solution for all users, particularly after LizardTech Inc. stopped supporting a Macintosh viewer in 2003. The promise of the open-source JPEG2000 was realized in July 2004 when a new CONTENTdm release began to support that format. We exported all the metadata from the collection and re-imported it with the original TIFF files. During the import CONTENTdm compressed the TIFF files as JPEG2000.

The result is a new collection that offers zoom and pan of the maps without requiring additional browser software.

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