



RMS has collaborated with Sanborn to provide clients with the highest level of data resolution available for exposure management, allowing companies to geocode exposures in major U.S. cities to the individual building, or 'four-wall' structure. This high-precision geocoding combined with Sanborn building-level data provides clients with enhanced exposure data and modeled loss results for improved risk analysis and management.

## Sanborn CitySets® Data

Sanborn uses high-resolution aerial photography to construct accurate building footprints, 3D building models, street centerlines, and orthoimagery for its Sanborn CitySets® data, which is available for major urban centers across the United States. CitySets data includes detailed building attributes derived from Sanborn Fire Insurance Maps and field surveys.

The integration of Sanborn CitySets data into the RiskLink® and RiskBrowser® software applications provides clients with improved loss results through enhanced geocoding at the highest level of resolution available — the building level. The importance of high-precision geocoding and location-specific building information for catastrophe risk management, particularly for events in dense urban areas, cannot be underestimated. Damage at the building level can vary greatly due to conditions such as soil type and distance to floodplain, and positional inaccuracies can impact results. Sanborn CitySets data improves positional accuracy in major U.S. cities, allowing for the correct assignment of hazard values for natural and man-made catastrophes, from flood zones to terrorism targets.

Companies also have the ability to evaluate multi-line accumulations at the building level, a cornerstone of current catastrophe risk management best practices.

### DATA APPLICATIONS

Sanborn CitySets are detailed city-center databases of address and other building attribute data for validation and enhancement of input exposure data. These databases are integrated into the geocoding engine to allow RMS clients to geocode their locations to specific buildings, providing them with a clear understanding of their exposure locations. In addition, locations in client exposure data that geocode to the street or five-digit ZIP Code level are flagged if they are located in a Sanborn downtown business district, providing an indication that building-level geocoding is available.



Building centroid, building footprints, and aerial imagery for Fisherman's Wharf area, San Francisco

## DETAILED, HIGH-QUALITY EXPOSURE DATA

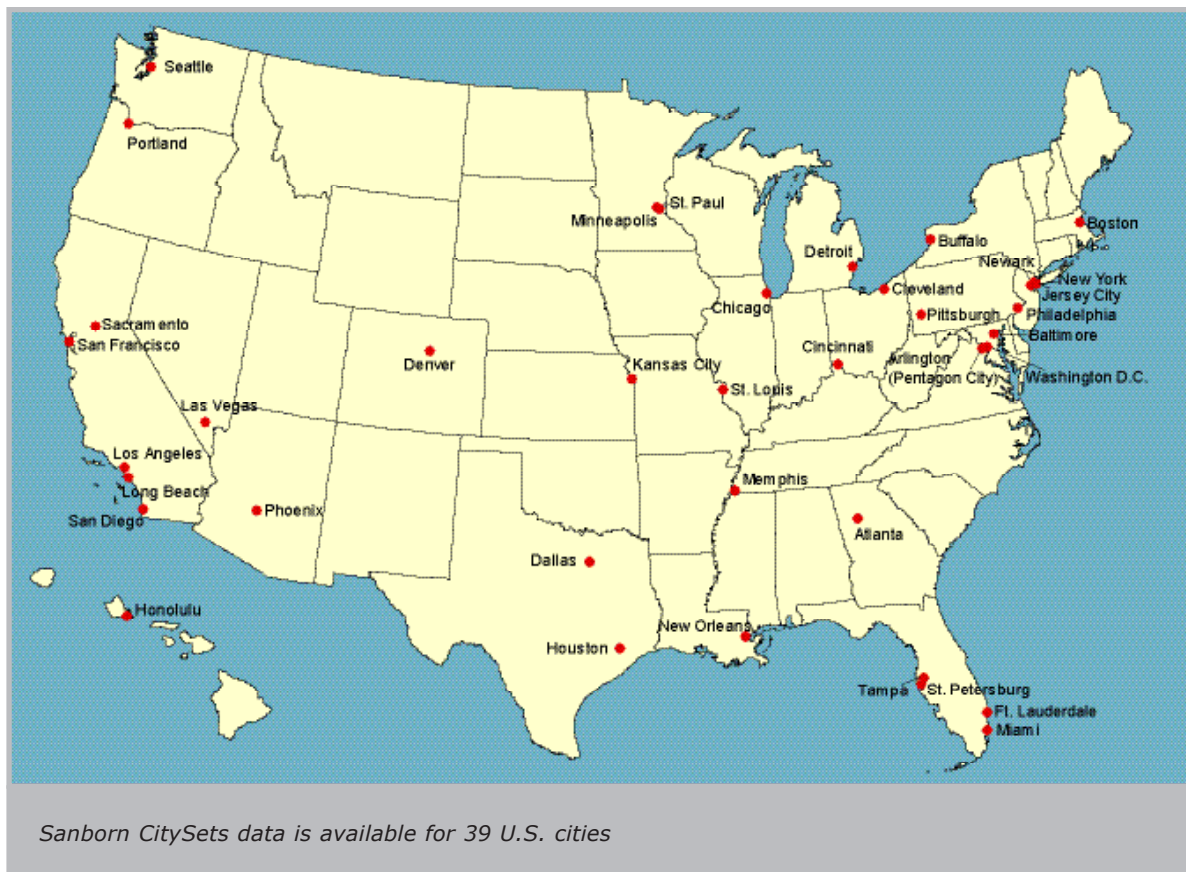
The ability to geocode to specific buildings in urban areas is supplemented with building attribute data including construction, occupancy, year built, height, number of stories, and square footage, as well as the recognition of place names and the assignment of multiple addresses to a single building. Locations are not only assigned a latitude/longitude coordinate, but also have a unique building identifier stamped on each location geocoded at the building level. Compared to traditional street-level geocoding, Sanborn CitySets data applications feature:

- Improved geocoding accuracy
- Enhanced exposure data
- Improved risk analysis
- Higher resolution accumulation management
- Improved event response
- Point-and-click geocoding using building footprints

## DATA COVERAGE

The Sanborn CitySets® data available in the RiskLink® and RiskBrowser® software systems includes information on all structures in the city centers of the largest U.S. cities. The selection of Sanborn coverage areas is based on an evaluation of exposure as well as potential risk assessment. To ensure that commercial property values and population are sufficiently represented, city center coverage areas generally extend three to five square miles around the downtown area of each city. Larger cities have correspondingly larger coverage areas. For example, Chicago's coverage area spans 15 square miles (40 square km) around the downtown area, and cities such as Los Angeles, New York City, and Washington, D.C. have multiple coverage areas to capture non-contiguous regions of exposure concentrations outside the traditional downtown areas.

RMS offers Sanborn CitySets data for 39 cities, with nearly 190,000 buildings and a combined coverage area of over 160 square miles.



Risk Management Solutions, Inc. ■ 7015 Gateway Blvd., Newark, CA 94560, USA ■ <http://www.rms.com>