

- EXPLANATION**
- Area with structures that occupied more than 5 percent of the land surface by 1890
  - Area with structures, in addition to the above, that occupied more than 5 percent of the land surface by 1934
  - Area with structures, in addition to the above, that occupied more than 5 percent of the land surface by 1952
  - Area with structures, in addition to the above, that occupied more than 5 percent of the land surface by 1969
  - Areas with less than 5 percent of the land covered by structures, as of 1969
  - Parks, as of 1969

**INTRODUCTION**

This map of the Sugar House quadrangle shows the pattern of urban growth in a part of Salt Lake County that includes the southeastern part of Salt Lake City. The urban areas shown on the map are where people have built homes, businesses, and factories to the extent that at least 5 percent of the land surface is covered by manmade structures. The criteria used on this map are different from those used to establish the urban overprint on standard U.S. Geological Survey topographic maps. The data on which the urban growth map is based came from maps of the area dated 1890, 1934, 1952, and 1969.

References to other reports of possible interest to the reader are included at the end of this text. They are indicated by inserting the authors name and the date at the appropriate place in the text. Thus the entry (Van Horn, 1972a) refers to the first report in the References section by Van Horn in 1972.

The urban growth pattern of the past provides an indication of the direction and amount of future growth. In 1890 only the northwestern corner of the Sugar House quadrangle had 5 percent or more of the land covered by houses. These were on low-lying and gently sloping lake and stream deposits (Van Horn, 1972a) in which it was easy to dig foundations and which were within a convenient distance of the central business district. The urban area spread first into the low-lying parts of old lake deposits in the northwest part of the mapped area, then extended eastward onto the higher ground of the lower benches formed on ancient lake clay and gravel. By 1969 the urbanized area had covered much of the low-lying land to the south and had encroached eastward onto the lower part of the west flank of the Wasatch Range. Future growth will probably completely cover the remaining ground in the low-lying areas and encroach even higher on the slopes of the Wasatch Range. Because future growth does seem to be predictable, this map should be useful to planning and zoning commissions, city and county commissioners, real estate developers, and other people interested in using or developing land.

The growth pattern shown on this map suggests that unless controlled, urban growth will probably cover the flood plains of the major streams (Van Horn, 1972a), drape across the possibly still active earthquake faults (Van Horn, 1972b), and cover most of the valuable sand and gravel deposits in the Sugar House quadrangle (Van Horn, 1973). Construction in the mountain areas will require expensive preparation for roads, foundations, and utilities. There is also hazard from falling rocks, landslides (Van Horn, 1972d), and locally, avalanches. In addition, the development pattern illustrated by the map emphasizes the need for advance land use planning to insure the appropriate availability of open space for recreational use in the southern part of the mapped area.

Sugar House is not a formally designated place in Salt Lake City but is a poorly defined grouping of business establishments and residences situated near 13th East Street and Parleys Creek. The name was proposed, and accepted on April 23, 1854, to designate a newly organized Ward of the Church of Jesus Christ of Latter Day Saints. Margaret T. McMeans Simon suggested the name in honor of the sugar mill her husband was in charge of erecting on the banks of Parleys Creek. Machinery for producing sugar was imported from France, but was incomplete, and no sugar was ever produced at the mill. It did, however, produce paper, nails, containers, and wool. The Utah State Penitentiary was established in the rural area near Sugar House prior to 1860. By 1934 the area was predominantly urban, and a few years later the penitentiary was moved out of the area.

**1890 MAP**

The 1890 map of the Salt Lake City area is a land-ownership map published by the Union Pacific Railroad. It probably was constructed from records maintained by Salt Lake County. I believe that large blocks of land shown as being owned by one person or one organization on that map are rural areas, even though some blocks are shown as subdivision plats. Other parts of the Salt Lake City area are shown as subdivision plats but the ownership is shown only as a number which apparently refers to an entry in the county records. Where the streets conform to the present street pattern the area is interpreted to have been urban. Where the streets do not conform I assumed that the area had not been greatly urbanized at that time, and considered it to have been rural. This interpretation is partly confirmed by recollections of a few longtime residents of Salt Lake City and by the extent of the city as shown on an 1885 reconnaissance map of Salt Lake City by the U.S. Geological Survey. On the 1885 map the urban area in the Sugar House quadrangle did not seem to extend south of 9th South Street.

Less than 1 percent of the Sugar House quadrangle was urbanized in 1890.

**1934 MAP**

The 1934 map was prepared by the U.S. Geological Survey from plane-table surveys made in 1925 and 1934. The map was not formally published; it is a single colored advance sheet in the archives of the U.S. Geological Survey. Streets and major buildings are shown in the central part of Salt Lake City. Surrounding the central part of the city are a few rows of houses. For the purpose of the urban-growth map I assumed that the city area within the outer rows of houses was densely populated and therefore urban. Individual houses are shown on that map in outlying areas (such as Holladay) and in rural areas. In these areas only the land containing 5 percent of manmade structures is included within the urban area on the urban-growth map.

By 1934 about 7 percent of the land in the quadrangle had been covered by urban growth, principally north of 27th South Street and west of 1600 East Street.

**1952 MAP**

The 1952 map is the first of the U.S. Geological Survey's modern maps that show densely populated areas by means of a reddish color (urban overprint) directly on a topographic map. Individual houses are not shown in the colored area, although they are shown outside the colored area. The urban-growth map includes the entire colored area from the 1952 map plus those places outside the colored area where 5 percent or more of the land surface is covered by manmade structures.

During the interval between 1934 and 1952 urban expansion was mostly eastward toward the Wasatch Range, principally west of 2700 East Street. The southward growth did not extend very far south of 3300 South Street except along major arterial streets, such as 700 East Street, 900 East Street, and Highland Drive. The formerly rural community of Holladay became a part of the urban area, as did several isolated real estate developments elsewhere in the county.

About 20 percent of the land within the quadrangle was covered by urban growth by 1952.

**1969 MAP**

The U.S. Geological Survey's 1969 revised edition of the 1952 map shows that the major urban expansion was to the south. The small amount of eastward expansion encroached upon the steep (30-45 percent) slopes at the foot of the very steep slopes (greater than 45 percent) of the Wasatch Range (Van Horn, 1972c). Much of the southward expansion filled the open spaces left by earlier urban growth and also tended to follow the major arterial streets. In addition this southward expansion encroached on the flood plains of Big and Little Cottonwood Creeks and upon several former marshy areas (Van Horn, 1972a, 1972e). A large area on the flood plain of Big Cottonwood Creek southwest of Knedens Corner is shown as rural, but the housing density is very close to being urban. Therefore much of this land may not be available for parks or further development.

By 1969 about 42 percent of the land within the Sugar House quadrangle was covered by urban growth. An additional 39 percent of the land area within the Sugar House quadrangle lies in the Wasatch Range where the slopes are very steep, mostly greater than 45 percent (Van Horn, 1972c).

**HOW THIS MAP WAS MADE**

This map was made by locating areas of 10 acres or more that are shown on older maps as having a concentration of housing, and by regrouping these areas onto a modern base map. If schools in otherwise urban areas, dwelling units, shopping centers, industrial complexes, and drive-in theaters cover 5 percent or more of the land surface, the area is shown on the map as urban. Areas not shown as urban are schools not in otherwise urban areas, parks, cemeteries, and golf courses.

The percentage of urbanization was estimated by utilizing a transparent plastic template. Square dots, the same size as the houses shown on the map being used, were evenly spaced on the template to cover 5 percent of a square size of a 10-acre plot on the map. The transparent plastic was moved around on the map and the number of dots was compared with the number of houses shown on the map. Areas that had more houses than dots were classified as urban; areas that had more dots than houses were considered not to be urban. Isolated densely populated areas smaller than about 5 acres were not classified as urban. Parks in urban areas that are smaller than 5 acres were not classified as urban.

**REFERENCES CITED**

Van Horn, Richard, 1972a, Surficial geologic map of the Sugar House quadrangle, Salt Lake County, Utah: U.S. Geol. Survey Misc. Inv. Map I-766-A.

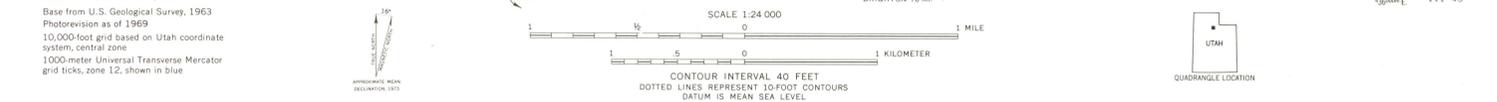
1972b, Relative ages of faults in the Sugar House quadrangle, Salt Lake County, Utah: U.S. Geol. Survey Misc. Inv. Map I-766-B.

1972c, Slope map of the Sugar House quadrangle Salt Lake County, Utah: U.S. Geol. Survey Misc. Inv. Map I-766-C.

1972d, Landslide and associated deposits map of the Sugar House quadrangle, Salt Lake County, Utah: U.S. Geol. Survey Misc. Inv. Map I-766-D.

1972e, Relative slope stability map of the Sugar House quadrangle, Salt Lake County, Utah: U.S. Geol. Survey Misc. Inv. Map I-766-E.

1973, Construction materials map of the Sugar House quadrangle, Salt Lake County, Utah: U.S. Geol. Survey Misc. Inv. Map I-766-F.



**MAP SHOWING URBAN GROWTH IN THE SUGAR HOUSE QUADRANGLE, SALT LAKE COUNTY, UTAH**  
By  
**Richard Van Horn**  
1973