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THE REAL PROPERTY INVENTORY

BY HOWARD WHIPPLE GREEN

The Cleveland Real Property Inventory, getting under way early in October of 1932, was the first thing of its kind in the United States. Occupancy-vacancy surveys had been made at various times in numbers of communities throughout the country. Most of these surveys covered only the central city and therefore did not reveal the conditions of the entire community. Most of them presented data for the entire area covered and therefore did not divulge the enormous differences present in various parts of the area. In several cities the surveys were made at irregular periods and therefore the data were not entirely comparable. In some cities no recognition was given to the differences in types of property. It is readily seen that occupancy-vacancy surveys present at best but a small part of the vast amount of data so necessary for the intelligent understanding of the multitude of problems relating to real property.

The basis of the Real Property Inventory in Cleveland was developed in two subcommittees of the National Conference on Construction. One of these two subcommittees, that on finance, worked under the chairmanship of Raymond T. Cragin of Cleveland; the other, that on occupancy-vacancy studies, worked under the chairmanship of Howard Whipple Green of Cleveland.

The reports of these two subcommittees were submitted to the National Conference on Construction in July, 1932, by Ernest Trigg, chairman of Committee No. 4, "Committee on Local Organizations" and by S. L. Andrew, chairman of Committee No. 1, "Committee on Business Reports, Statistical and Trade Information" with the aid of the subcommittee chairmen.

The National Conference on Construction and the two sponsoring agencies, the Department of Commerce and the United States Chamber of Commerce, desirous of trying out the recommendations of these two subcommittees, and believing that Cleveland would be an ideal city in which to initiate the work, because of the enormous amount of statistical data already available in the city¹ and because the chairmen of both subcommittees were from Cleveland, influenced the formation of a committee in Cleveland which would develop the recommendations of the National Conference on Construction, as they related to the study

¹ "Population by Census Tracts, Cleveland and Vicinity with Street Index," by Howard Whipple Green.

"Population Characteristics by Census Tracts, Cleveland, Ohio, 1933," by Howard Whipple Green, published by the *Cleveland Plain Dealer*.

of the supply and demand for housing and other real property and the financing of the same.

This committee was formed with Raymond T. Cragin, chairman; Abram Garfield, vice-chairman; William Finley, treasurer; O. W. L. Coffin, secretary; Howard Whipple Green, director, and leading citizens as members of the committee. The committee membership included representatives of various groups interested in real property and in people. It was purposely created as a committee detached from any one individual group or interest in order that there could be no doubt as to lack of prejudice or influence.

The scientific study of real property was by no means a new subject for the chairman of this committee. For a number of years Mr. Cragin had been interested in the progress made in occupancy-vacancy surveys in various cities. He felt that the collection of such data in relation to the central city alone by no means presented a picture of the conditions in the entire community. He believed so thoroughly that an occasional accounting was of little use, if not actually misleading, that he had not encouraged Cleveland's organizations to undertake work of this kind until the necessary preparations were made which would insure at least an annual check carried on over a period of years. The director of the work is responsible nationally for the promotion of the creation and use of census tracts in the large cities of the United States, and the presentation of the data contained in the census in such a manner as to be of real use to business houses as well as public health and welfare organizations.

The Cleveland committee, financed through subscriptions obtained from Cleveland business establishments, was called The Committee on Real Property Inventory. Dr. Robinson Newcomb, experienced in work on various governmental projects involving similar factual backgrounds, was loaned by the Department of Commerce and the United States Chamber of Commerce to aid in the organization of the work.

Through the coöperation of Cleveland's Postmaster and the other Postmasters in the Cleveland Metropolitan District and their staffs, data were collected upon the types of all real property, the occupancy or use in October, 1932, and the number of doubled-up families. All of these data were analyzed by census tracts and with a vast amount of related data collected through other sources published in Report No. 1, "Real Property Inventory of the Cleveland Metropolitan District," by Howard Whipple Green.

The work in Cleveland was initiated on October 1st, 1932. The Cleveland Metropolitan District, including 12 cities, 28 villages, and 3 townships, was the area adopted for study. It had, in 1930, a popula-

tion of 1,194,989 inhabitants and covered 306 square miles of area. This area extends, roughly, from Mentor township in Lake County on the east to Lorain County on the west, a stretch of more than 36 miles. It was the third most densely populated metropolitan district in the United States with 3,852 persons per square mile as compared with New York City with 4,336, Chicago with 3,900, and Philadelphia with 2,865. The number of families in the Cleveland Metropolitan District was found to have increased 1,361 between April, 1930, and October, 1932, certain sections having decreased, and others having increased enormously.

The Cleveland Metropolitan District was divided into 321 small geographically constant areas or census tracts with 205 census tracts in Cleveland, 18 in Lakewood, 17 in Cleveland Heights, 10 in East Cleveland, 6 in Shaker Heights, and 65 in the other parts of the district.

The number of buildings containing family-units in each of the 321 census tracts was presented for each of 8 types of dwellings. The number of family-units, occupied, vacant, and the extra families doubled up with other families were presented for each type and for each census tract.

It was found that 9 per cent of the family-units were vacant but that when the 12,635 extra families undoubled, a vacancy of less than 5 per cent would be experienced. While 9 per cent of all the family-units were vacant, it was shown that vacancy in one-family dwellings was 4 per cent, in two-family dwellings, 8 per cent, while 22 per cent of the apartments in the larger apartment houses were vacant.

The number of office buildings in each census tract was tabulated with the number of office units, occupied and vacant; 29 per cent were vacant. The number of light manufacturing buildings, the number of floors, and the per cent vacant or over half vacant were presented; 21 per cent were vacant. Store fronts, occupied and vacant, were included and the type of store so far as the occupied units were concerned. The occupied stores were shown by 21 types and it was found that 15 per cent of the stores were vacant.

Gasoline stations, theaters, public and semi-public buildings, factories and industrial plants were tabulated for each census tract.

Vacant lots by types of zoning were tabulated by census tracts, also unallotted acreage by acres, and areas used for commercial and industrial purposes, and acreage zoned but not used for these purposes.

The characteristics of the population of each census tract were also included, presenting such factors as the population in 1930, changes during previous decade, predominating racial and nativity characteristics of the family heads, the economic status and so forth.

The number of lots created by subdivision each year in each census tract was tabulated for the period 1916-1932. This tabulation showed that in the peak year of 1926, 18,594 lots were created, followed by 8,970 in 1927; 4,689 in 1928; 2,936 in 1929; 477 in 1930; 326 in 1931 and but 169 lots in 1932. This tabulation also showed that 48 of these 169 lots were created in census tracts W-2 on the extreme west side of Cleveland, a portion annexed in 1923, and of the remaining lots, 96 were created in 4 of the 6 census tracts in the city of Shaker Heights, east of Cleveland. The remaining 25 lots were created outside of the Cleveland 5-city-area. The table showed that 157,750 new lots were created in this entire area during the 17-year period.

Family-units created and demolished were presented showing that in Cleveland proper 86 more family-units were destroyed in 1932 than constructed, 334 constructed against 420 destroyed.

Deeds and mortgages each year for 65 years for a number of Ohio counties were charter. The analysis of foreclosures for a 5-year period showed that while 21,523 properties were involved, 9,438 were vacant lots, or acreage, and only 7,415 were one-family dwellings.

During the 5-year period there were 5.6 foreclosures per 100 one-family dwellings, as compared with 21.6 foreclosures per 100 large apartment houses. Large differences were found for each type of property between the various areas and for the same type of property in any one area.

The movements of population in the Cleveland Metropolitan District have been studied and a report will shortly be published. Numbers of families moving into the district and where they came from is known, and numbers of families moving away and where they went. A total of 2,973 families left the Cleveland Metropolitan District during 1933, 1,778 to other parts of Ohio, 197 to Pennsylvania, 186 to New York, 175 to Michigan, 132 to Illinois, and 517 to other states. A total of 4,588 families came into the Cleveland Metropolitan District during 1933, 2,449 from other parts of Ohio; the others from states similar to those to which Cleveland's families moved.

The net gain for the 12-month period was approximately 1,615 families. The number of families moving into each census tract and the census tracts from which they moved will appear in tabular form and will make possible the calculation of rates of family turn over, that is, stability indices for each census tract.

In October, 1933, a second careful field study was made of occupancies and vacancies and the other pertinent data recorded to be analyzed and published in 1934.

The Cleveland Committee on Real Property Inventory did so thor-

ough a job and demonstrated so completely the value of the work that in the Fall of 1933 Real Property Inventories were included by the Civil Works Administration among other projects for which City Plan Commissions all over the United States could legitimately use CWA men and women.

In December, 1933, the Bureau of Foreign and Domestic Commerce obtained an appropriation of \$2,500,000 for the purpose of carrying on a modified Real Property Inventory in 63 cities in the United States. The Federal project goes much more into the details relating to buildings containing family-units, the family-units themselves, and the families occupying the quarters than has been attempted in the Cleveland work. On the other hand it slights non-family units, simply listing such other units. Each dwelling is placed in one of eleven classes. All stores and industrial plants are listed and the vacant lots noted. The principal material of construction, the height of the dwelling in stories, the basement, the age, the number of passenger and freight elevators and the conditions of the structures are noted. The presence or absence of garages and their car capacity is recorded.

In the case of each family-unit, the type of heating apparatus and the fuel is recorded. The presence or absence of running hot or cold water and of mechanical refrigeration, is noted. The tenure of all family-units and the length of time occupied or vacant is a matter of record. The number of rooms and the number of persons living in these rooms, the number of extra families doubled up with other families and the race of each family is noted. The number of water closets, bath tubs and built-in shower baths and automobiles is recorded. The use of gas and electricity for cooking and lighting, and the length of time it takes the principal wage-earner to get to work and the usual mode of transportation is recognized. The family's inclination to "farm" is also noted. The value of owned homes and the monthly rental of rented homes in January, 1934, may be compared with the same data obtained in April, 1930, and the equivalent monthly rental determined for each census tract.

This expanded Real Property Inventory includes data of enormous significance not only to financiers, real estate people, the construction group and others directly involved in activities of this nature, but also to a broad group of other users. It answers such ever-perplexing questions as: What is the market for mechanical refrigeration, for gas and electric ranges, gas and oil heating, sanitary facilities, paint, transportation, automobiles, gasoline, seeds and shrubs? Where should chain and independent stores, factories, and industrial plants locate? What is the future of this or that location? What is the need for this or that service, or the desire for this or that activity?

The Cleveland Committee is forging ahead again into uncharted areas. Strip maps are being prepared for the main thoroughfares showing graphically each building and the street frontage devoted to each type of retail operation, service and other use.

Careful records are in preparation for each industrial plant and factory. The total area of such space in the Cleveland Metropolitan District is being determined, the extent of the competitive area that is vacant and that which is obsolete. The present use of the occupied area is being classified.

The hotel facilities of the District are being given attention and the conditions of operation and the services rendered are being analyzed.

Data of this kind once obtained are of little significance, but when collected at regular periods throughout a series of years they become the basis for sound community planning, for new construction programs and the promotion of sound business procedures.

The facts regarding real property for an entire district are of slight value until analyzed by specific small areas, and by specific types of property. The fact that 9.0 per cent of the family units in Cleveland were vacant in October, 1932, gives no indication that in two census tracts over 50 per cent of the family units were vacant, nor that in four census tracts there were no vacancies. It gives no indication of a 4 per cent vacancy in single-family dwellings nor of a 22 per cent vacancy in large apartment houses.

A total of 157,750 new lots created in the 17 years, 1916-1932, and the presence of 142,208 vacant sub-lots in October, 1932, indicate excessive activity in allotments. However, these figures do not indicate that in Lakewood, a suburb of Cleveland, where 4,228 new lots were created during the 17 years, only 985 vacant lots remain; nor do they show that 1,119 of the new lots were created between 1920 and 1930, a period in which 5,187 dwellings, as well as a number of other buildings were constructed.

The analysis of such data by small geographical areas and by types of property is thus seen to be imperative for a sound understanding of the problems of the community.