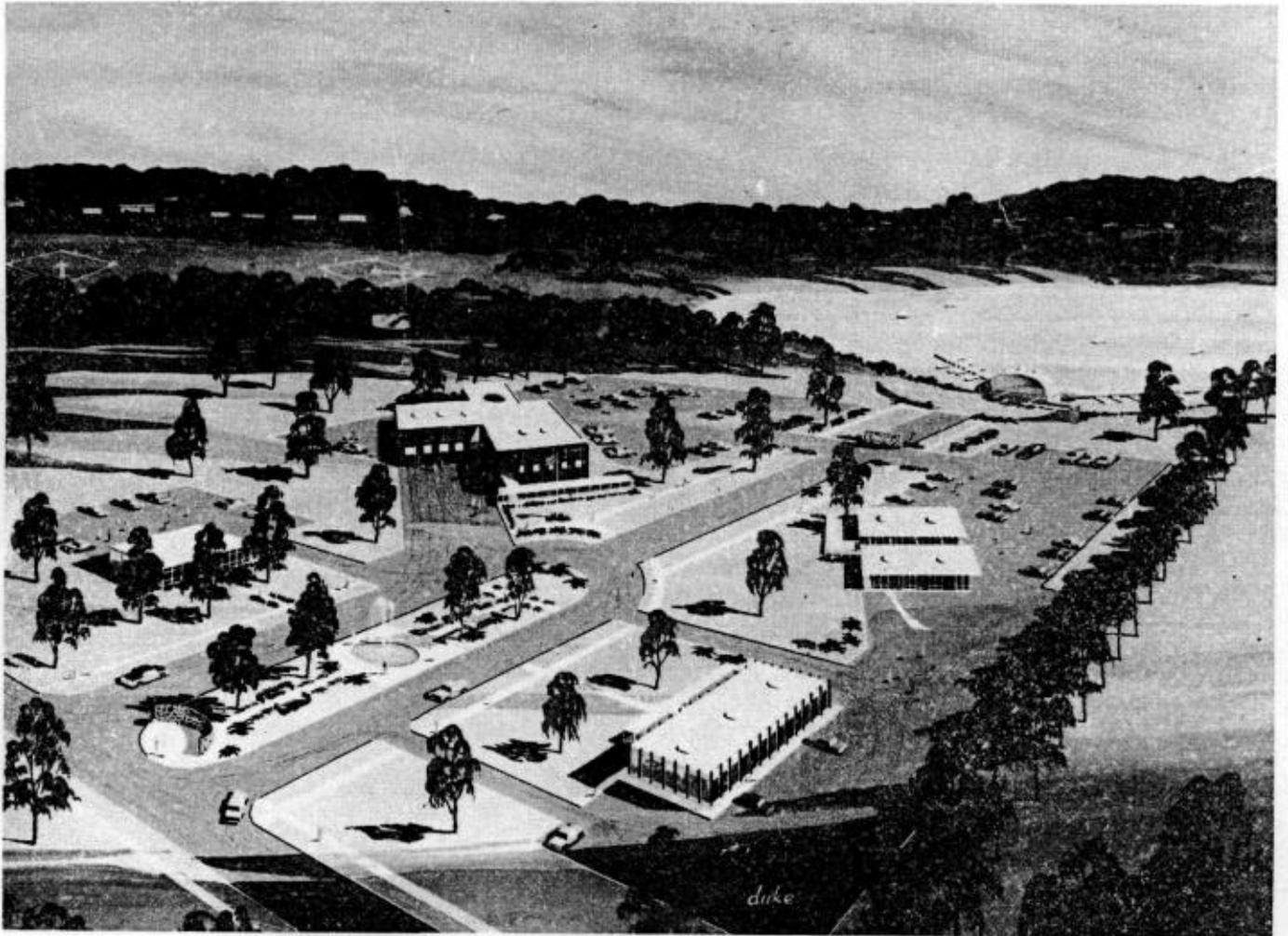


Ed. Geske, Jr.

GENERAL DEVELOPMENT PLAN



WHEELING, ILLINOIS

M. F. RUPP ASSOCIATES - PLANNING CONSULTANTS

m.f. RUPP ASSOCIATES

P L A N N I N G C O N S U L T A N T S

20 N. WACKER DRIVE
CHICAGO 6, ILLINOIS
AREA 312 372-6041

January 1965

President and Board of Trustees
Village of Wheeling
Illinois

Gentlemen:

We are pleased to transmit a General Development Plan for the Village of Wheeling, Illinois, the culmination of work under the two contracts with the Illinois Board of Economic Development. The first contract, between Stanton and Rockwell Associates, our predecessor, and the State of Illinois, was dated May 9, 1962. This summary report covers the second phase contract, dated December 2, 1963, between M. F. Rupp Associates and the State of Illinois.

This report contains a summary of the planning analysis of the Village and suggests recommendations for guiding its future growth. It should help to achieve a beneficial future balance of interest for property owners, the Village government, the School Boards, the Park Board, and other governmental agencies in the area.

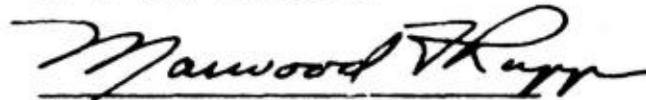
The provisions of this Plan, as well as the spirit and purpose of the Federal Planning Assistance Program, are rewarded only insofar as leaders in the Village actually use the information and recommendations as guides for the future development of the Village. The Village should be commended for the number of steps it has already taken, upon the basis of the preliminary reports, toward active leadership in guiding the growth of the Village. It should be realized that details of the provisions of this Plan cannot be stabilized; changing conditions will require review and adjustment.

It is strongly urged that this Plan be widely circulated throughout the community, so that all citizens may be aware of its implications. We believe that you recognize the importance of furthering the approval and adoption of additional portions of this work as soon as practicable.

We appreciate the opportunity to have been of service.

Sincerely yours,

M. F. RUPP ASSOCIATES



Marwood F. Rupp

GENERAL
DEVELOPMENT
PLAN

WHEELING - ILLINOIS

JANUARY, 1965

THE PREPARATION OF THIS PLAN REPORT WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN RENEWAL ADMINISTRATION OF THE HOUSING AND HOME FINANCE AGENCY, UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.

M. F. RUPP ASSOCIATES
PLANNING CONSULTANTS - CHICAGO, ILLINOIS

ACKNOWLEDGMENTS

Acknowledgment must be made to the many individuals and organizations who helped in the collection and review of data that formed the basis for planning decisions. Besides those specifically named below, others who assisted were the School Board and Superintendent of District No. 21, the Park Board, and numerous citizens of Wheeling.

VILLAGE BOARD

A. R. McIntyre, President
Fred Cargill*
Otis Carter*
Edwin Gieske, Jr.*
Thomas Miller
Ralph Neubauer
Edwin Smith

BOARD OF ZONING APPEALS

Douglas Cargill, Chairman
Alvin Nelson, Secretary
Harold Utpadel, Secretary*
Francis Gloden
Earl Johnson*
Thomas Miller
Fred Moeller*

PLAN COMMISSION

R. William Galow, Chairman
Robert Steinman, Chairman*
Hubert I. Sommerfeld, Secretary*
Bernard Erlin*
Howard Hart*
Donald Paisley*
Thomas Topke
Edward Welflin*
Merle Willis

VILLAGE OFFICIALS

James Bennett, Supt. of Public Works
Paul E. Hamer, Village Attorney
Evelyn R. Diens, Village Clerk

*Term expired during course of work.

CONTENTS

Figures

1	Relationship to Chgo Metrop. Area	4
2	Existing Land Use	5
3	Existing Zoning	7
4	1960 Population Profile	11
5	Distr. Persons by Age Group	12
6	Distr. Persons in 1960.	12
7	1960 Housing Profile	18
8	Actual Land Use & Subdiv. Devel.	20
9	Lot Sizes & Flood Hazard Areas	21
10	Commercial Factors	24
11	Dundee Road Area.	30
12	Wheeling Shopping Center	31
13	Buffalo Creek Shopping Center	33
14	Industrially Zoned & Util. Areas	37
15	Factors of School Site Selection	45
16	Distr. School Age Persons, 1960	47
17	Ultimate School Development	49
18	Park Site Development Factors	54
19	Eventual Park Site Development	56
20	Traffic Volumes-Wheeling Area	62
21	Major Thoroughfare Plan	64
22	Suggested Street Cross Sections.	66
23	Existing Water System	71
24	Sanitary Sewer System	72
25	Existing Storm Drainage	73
26	Suggested Civic Center-Plot Plan	76
27	Suggested Civic Center.	77
28	Community Facilities Plan.	85
29	Generalized Future Land Use	87

Tables

1	Land Use by District	3
2	Population Growth	8
3	Ten-Year Population Trend.	8
4	Wheeling Township Growth	9
5	Labor Force Occupations	13
6	Employment by Industry.	14
7	Surrounding & Competitive Comm.	15
8	Saturated Population	16
9	Density Characteristics	38
10	Management Personnel Opinions	40
11	Summary of Physical Facilities	46
12	Standards for Recreation Facil.	52
13	Summary Schedule-Comm. Facil.	80
14	Sources of Funds-Cap. Imp.	95
15	Potential Capital Requirements	97
16	Cap. Imp. Schedule	99

Transmittal letter	i
Title page, 701 notation	ii
Acknowledgments	iii
Contents	iv

GUIDELINES	1
LAND AND PEOPLE	3
HOUSES AND HOMES.	17
BUSINESS DEVELOPMENT	23
INDUSTRY	36
SCHOOLS.	44
RECREATION.	51
MAJOR THOROUGHFARES.	59
COMMUNITY FACILITIES	69
THE DEVELOPMENT PLAN	86
IMPLEMENTATION	89

Appendix One:

List, Prel. Plan Reports 104

Appendix Two:

List, Consulting Memos . 107

Issued as separate volumes to this report:

Supplement Number One

"Suggested Technical Provisions Subdivision Ordinance"

Supplement Number Two

"Report on Zoning Ordinance Provisions"

GUIDELINES

The Village of Wheeling had discussed the need for planning in the Village for ten years preceding 1962, when the plan was initiated. The importance of planning for Wheeling had been an issue in several elections. Action to develop a plan reflected Wheeling's desire:

1. to guide the future development of the Village and surrounding area,
2. to avoid additional unfortunate subdivision developments,
3. to achieve the amenities desired in terms of schools, parks and recreation facilities, as well as to provide a basis for municipal utilities and streets, and
4. to stabilize the economic and tax base of the Village.

This General Development Plan for Wheeling presents a summary of the many detailed surveys and studies relating the present status of development with past trends, wherever they may be pertinent, the recommended objectives and standards that should guide the Village's development, the recommendations for future development of land, and the means that could be used to accomplish these recommendations.

The Plan presented here is not a blueprint in the sense that action can proceed directly from it. It is intended as a guide to action by the Village Board, Plan Commission, and other agencies, as well as by private developers, over a period of years of Wheeling's growth and development. The future, of course, will bring changing conditions that will require appropriate changes in the Plan. However, the broad policies for use of land, population distribution, and traffic circulation can stand, to insure that the detailed plans presented and acted upon from time to time will follow agreed upon policies.

It is important to recognize that by itself the Plan will accomplish nothing. It is the action of the Village Board, Plan Commission, School Board, Park District, and other Village officials, as well as the action of private citizens and organizations that will determine whether the Plan, when adopted, will produce the kind of Village envisioned therein.

General guidelines were developed throughout the planning program, from meetings, conversations and interviews, that eventually formed the planning goals and policies used in determining the most appropriate alternative courses of action for Wheeling. Over-all, these goals present a challenge for the future: surmounting the fully recognized difficulties and the frequently unpleasant tasks involved in

accomplishing the Plan. The basic goals⁽¹⁾ are:

1. Provide a basis for the enlargement of the economic base.
2. Provide the necessary municipal facilities, atmosphere and vitality to encourage continued Village growth.
3. Provide a basis for expansion of Wheeling's business areas, and encourage the development and redevelopment of attractive, adequate, effective shopping and related facilities.
4. Maintain and improve the pleasant community atmosphere of Wheeling in neighborhood developments, keeping them free from distressing noises, dirt and traffic, and providing them with well located, adequate schools, parks and recreational facilities.
5. Develop a Plan which is technically, politically and financially sound.

(1) See Preliminary Planning Report No. 1, "Planning Program Objectives for the Village of Wheeling, Illinois" for detailed enumerated goals of the General Development Plan.

LAND AND PEOPLE

Basic planning studies covered many aspects of Wheeling's past development, in terms of use of land⁽¹⁾ and of the people living on the land⁽²⁾.

Wheeling is located along the north edge of Cook County, adjoining the Des Plaines River (Figure 1). The immediate area surrounding the Village is presently in Cook County, but as shown in Figure 1, other municipalities almost entirely surround Wheeling. The right to plan in this unincorporated area must be shared with nearby communities. This situation has resulted in conflicting ideas of future use of these areas, and can only be solved by joint agreements as to the territorial limits of the surrounding communities, or agreement as to the most logical use of present unincorporated areas to fit into the respective communities' planning.

Land Use Inventory

In August, 1962, a survey of existing land uses was made. The use of each parcel of land, by predominant types of use, is shown in Figure 2. In addition, a large, colored display map (scale, 1" = 600') was prepared for planning purposes and to be shown in the Village Hall. Summarized in Table 1 are the land uses for the planning area as well as for the Elementary School and Park District.

TABLE 1
LAND USES IN ACRES AND PER CENT, BY DISTRICT

Classification	TOTAL Planning Area		Village of Wheeling		Park District		School Dist. 21*	
	Acres	%	Acres	%	Acres	%	Acres	%
Single-Family	1,653	12.6	347	13.0	396	18.3	669	8.8
Multi-Family	14	0.1	11	0.4	11	0.5	13	.2
Commercial	130	1.0	72	2.7	77	3.5	114	1.5
Light Industrial	71	.5	55	2.0	24	1.0	65	.9
Heavy Industrial	38	.3	31	1.2	16	0.6	33	.4
Semi-Public	1,014	7.8	78	2.9	80	3.6	464	6.1
Public	1,137	8.7	500	18.7	83	3.7	1,068	14.0
Vacant(Farmland)	8,082	61.9	1,364	51.2	1,246	59.2	4,771	62.7
Mixed Uses	12	0.1	2	-	2	-	8	.1
Streets	851	6.5	181	6.8	194	8.8	350	4.6
Railroads	63	0.5	29	1.1	20	.8	55	.7
TOTAL	13,066	100.0	2,670	100.0	2,149	100.0	7,611	100.0
No. of Farmsteads** (73)			(6)		(5)		(45)	

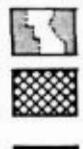
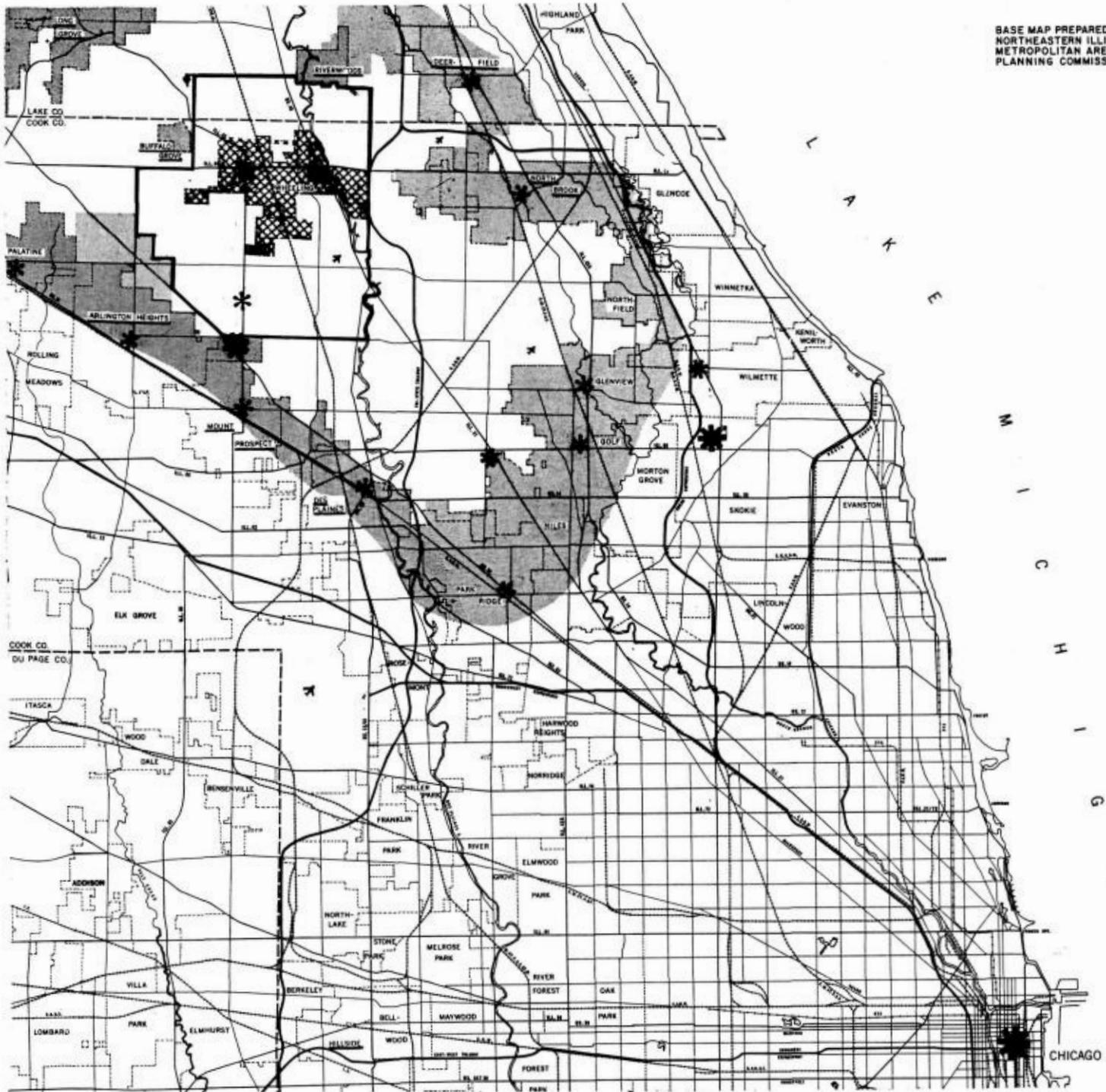
*Area of School Dist. 21 is approx. 9,960 acres, of which 2,350 acres are not in the planning area. Similarly, 150 acres of Wheeling are not in District 21.

**Farm residences have been included in "Vacant" category.

(1) Preliminary Planning Report 2, "Existing Land Use", October 1962.

(2) Preliminary Planning Report 3, "Social-Economic Pop. Char.", April 1963.

BASE MAP PREPARED BY
NORTHEASTERN ILLINOIS
METROPOLITAN AREA
PLANNING COMMISSION.



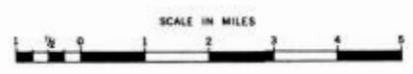
APPROX. LIMITS WHEELING VICINITY
INCORPORATED AREA.
VILLAGE OF WHEELING
PLANNING AREA

CITY COMPARISON COMMUNITY
MAJOR RETAIL CENTERS
LOCAL RETAIL CENTERS
AIRPORTS

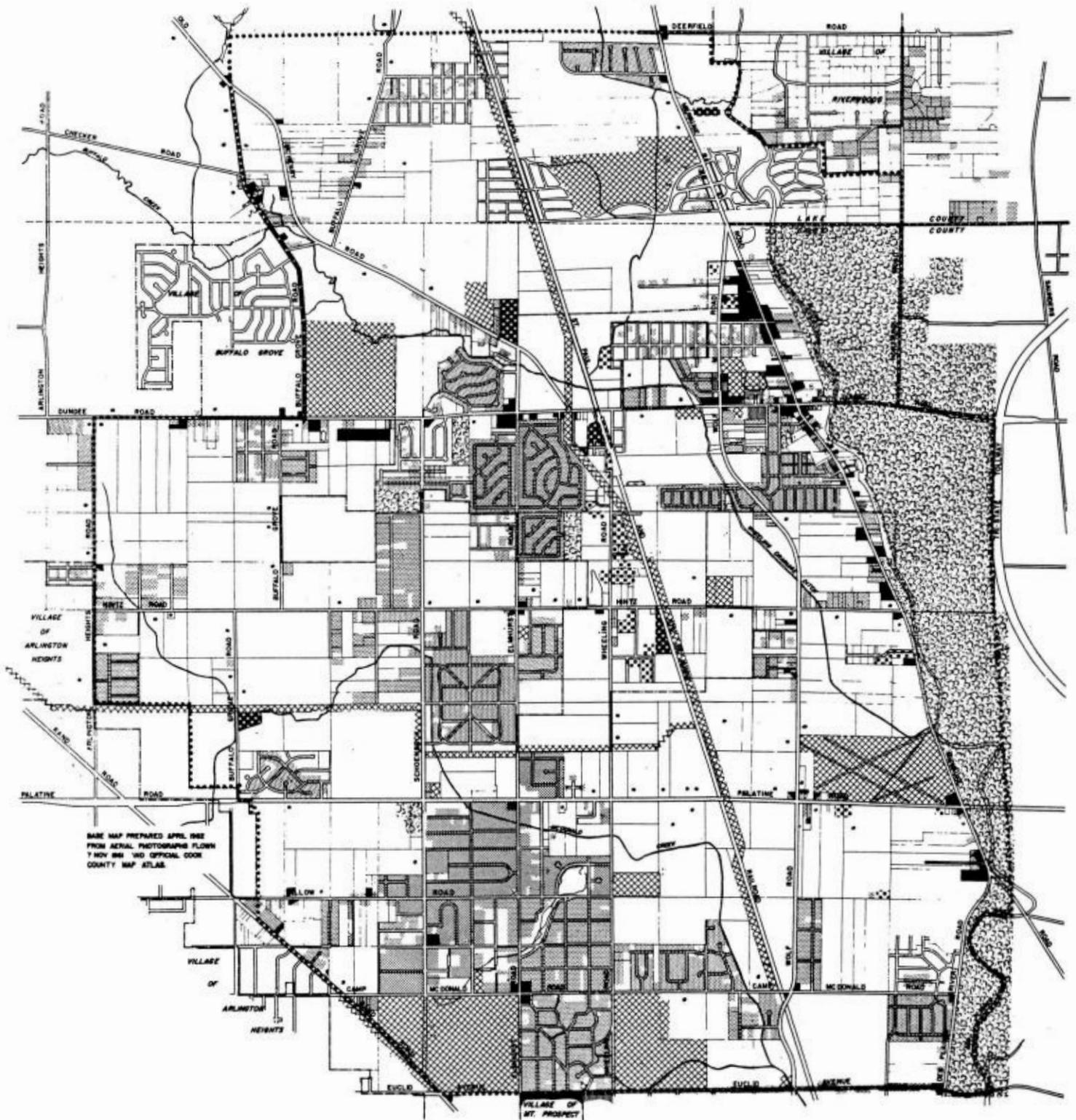
FIGURE 1

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN RENEWAL ADMINISTRATION OF HOUSING AND HOME FINANCE AGENCY, UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.

M. F. RUPP ASSOCIATES
PLANNING CONSULTANTS - CHICAGO, ILL.



**WHEELING'S RELATIONSHIP
TO NORTHERN CHICAGO
METROPOLITAN AREA**



BASE MAP PREPARED APRIL 1962
FROM AERIAL PHOTOGRAPHS FLOWN
7 NOV 58 BY US OFFICIAL CORP
COUNTY MAP ATLAS

- ***** PLANNING AREA BOUNDARY
- [Stippled pattern] SINGLE FAMILY RESIDENTIAL
- [Cross-hatched pattern] MULTI-FAMILY RESIDENTIAL
- [Dotted pattern] FARM RESIDENCE
- [Solid black] COMMERCIAL
- [Diagonal lines /] LIGHT INDUSTRY
- [Diagonal lines \] HEAVY INDUSTRY
- [Checkered pattern] SEMI-PUBLIC
- [Dense stippled pattern] PUBLIC

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN REDEVELOPMENT ADMINISTRATION OF THE HOUSING AND HOME FINANCE AGENCY UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 704 OF THE HOUSING ACT OF 1954, AS AMENDED.

SCALE IN FEET
0 1000 2000 3000 4000 5000

M. F. RUPP ASSOCIATES
PLANNING CONSULTANTS - CHICAGO, ILLINOIS

FIGURE 2
EXISTING LAND USE

For comparison, the zoning existing in 1963 is shown in Figure 3, covering the planning and contiguous areas.

People: their Social and Economic Characteristics

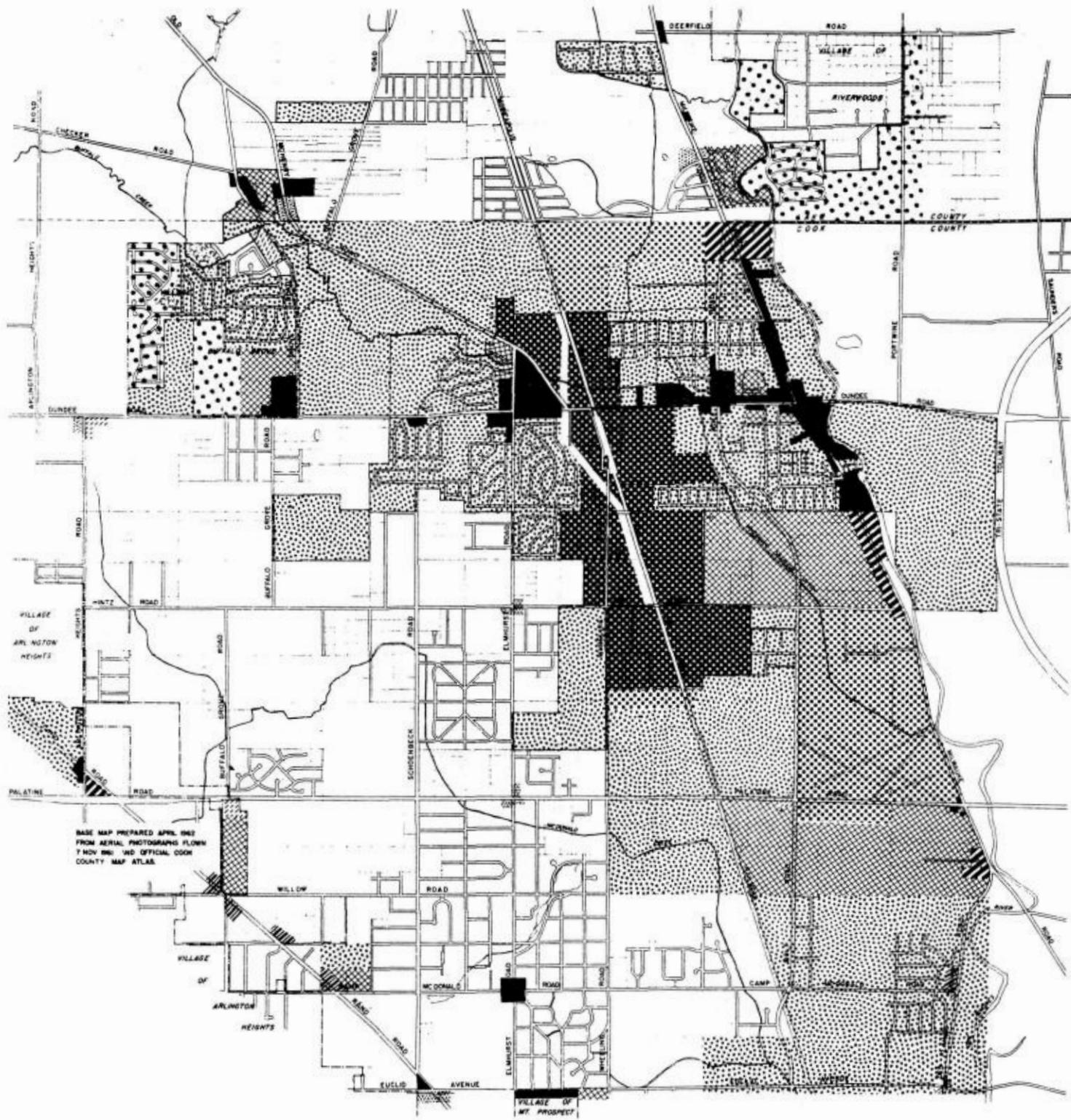
Wheeling, for all practical purposes, can be considered a new community in metropolitan Chicago. Census figures (1964) indicate that the Village has experienced over a 1,000 per cent increase in population since 1950. This means that less than 10 per cent of the people now living in Wheeling lived there twelve years ago. Even though Wheeling's dynamic growth has far outstripped the growth of the total metropolitan area, the Village depends almost solely upon the growth of the metropolitan area for existence.

Wheeling is located on the fringe of the densely built-up suburban development surrounding the central City of Chicago. Some 26 miles from Chicago's "loop", Wheeling is midway between the North Shore communities lying along and serviced by the North Western and Milwaukee Railroads and the string of suburbs served by the Western Division of the North Western Railroad (see Figure 1). Wheeling is the approximate center of this pocket of unincorporated, scatteringly developed area.

Since 1950, several new communities (Riverwoods, Buffalo Grove and Long Grove) have been incorporated to the north of Wheeling.

The interdependence of the Village of Wheeling with the metropolitan area is illustrated throughout the various sections of the report; in population growth alone, the effects of mass migration from the central city to the suburbs are very apparent. Whereas major growth in surrounding areas occurred in the early or middle 1950's and along mass transportation routes or freeways, Wheeling's growth started later, reaching record annual growth in 1956-57 and again in 1960-62.

The Village's dramatic growth is illustrated in Table 2, utilizing U. S. Census data for the years indicated.



BASE MAP PREPARED APRIL 1962 FROM AERIAL PHOTOGRAPHS FLOWN 7 NOV 1960 AND OFFICIAL COOK COUNTY MAP ATLAS.

WHEELING	-	-	R-2	R-3 MULTI	-	-	B	-	-	M	I	-
BUFFALO GROVE	R-3	R-5	R-6	R-9 MULTI	B-1	-	B-3	-	-	-	-	PUBLIC
MOUNT PROSPECT	-	-	-	-	-	-	B-1	-	-	-	-	-
ARLINGTON HEIGHTS	R-3	-	-	R-5 MULTI	B-1	-	-	-	-	-	-	-
COOK COUNTY	R-3	-	R-4	R-5 MULTI	B-1	B-2	B-3	B-4	B-5	M-1	-	-
LAKE COUNTY	F	R-2	R-3	R-4 MULTI	B-1	B-2	B-3	B-4	B-5	M-1	-	-

FIGURE 3

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN REDEVELOPMENT ADMINISTRATION OF THE HOUSING AND HOME FINANCE AGENCY UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.

SCALE IN FEET
0 1000 2000 3000 4000 5000

M. F. FRUPP ASSOCIATES
PLANNING CONSULTANTS - CHICAGO, ILLINOIS

EXISTING ZONING

TABLE 2
POPULATION GROWTH-WHEELING, ILL.

Census Year	Population	Average Annual Increase between Census	Annual Average 1950-1960	Annual Average 1950-1964
1964	11,756	1,064		
1962	9,627	1,229		
1960	7,169	503		
1958	6,162	745	625	774
1957	5,417	2,991		
1956	2,426	252		
1950	916	36		
1940	550	8		
1930	467	-		

Wheeling's Growth Compared

In Table 3, Wheeling's growth is compared with the State, metropolitan area, county and township.

TABLE 3
TEN-YEAR POPULATION TREND AND
SELECTED FACTORS, WHEELING COMPARISON

	Population Trend		% Change	% Pop. under 18	% Males 18 and over	Pop. per Hshld.
	1950	1960				
State of Illinois	8,712,176	10,081,158	15.7	34.1	48.3	3.18
State Urbanized Areas-						
Urban Fringe	-	2,475,468	92.7	37.5	48.5	3.48
Chicago-NW Indiana	5,495,364	6,794,461	21.6	34.3	48.4	3.23
Chicago Met. Area*	4,920,816	6,220,913	20.1	33.8	48.3	3.20
Cook County	4,508,792	5,129,725	13.8	33.0	48.0	3.15
City of Chicago	3,620,962	3,550,404	-1.9	31.1	47.9	3.01
WHEELING Township	27,638	58,910	109.5	-	-	3.91
Village of WHEELING	916	7,169	682.6	49.0	49.6	4.12

*Redefined in 1950 to exclude Indiana area (see Chicago-NW Indiana).

Source: U. S. Census, 1960.

From these comparisons, Wheeling grew 34 times as fast as the metropolitan area in total but only 7 times as fast as all urbanized areas in the State, where located in the "urban fringe", (basically suburban communities), and only 6 times as fast as Wheeling Township.

While Wheeling has shown impressive growth, the growth reflects the population trends of the entire area. From Table 4 it can be seen that every municipal area within Wheeling Township in 1950 increased in total population by a larger number than did Wheeling.

TABLE 4
WHEELING TOWNSHIP
GROWTH BY INCORPORATED AREA AND
PERCENTAGE OF TOTAL POPULATION

	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>Increase</u> <u>1950-60</u>	<u>% of</u> <u>Total</u> <u>1950</u>	<u>% of</u> <u>Total</u> <u>1960</u>	<u>% of</u> <u>Increase</u> <u>1950-60</u>
Total Township	16,187	27,638	58,910	31,272	100.0	100.0	109.0
Arlington Hts.*	5,625	8,737	27,692	18,955	31.7	47.0	217.3
Buffalo Grove	NA	NA	1,492	1,492	-	25.0	-
Des Plaines*	-	-	31	31	-	-	-
Mt. Prospect*	284	1,206	7,629	6,423	4.3	12.9	532.6
WHEELING	550	916	7,169	6,253	3.3	12.2	682.6
Unincorporated Area	9,728	16,789	14,987	-1,802	60.7	25.4	-107.0

*Includes only these portions in Wheeling Township
Source: U. S. Census, 1950, 1960.

It can be readily assumed that the loss of population in the unincorporated areas resulted from a new incorporation (Buffalo Grove) and annexations by the other communities. However, the net effect of the population changes was almost a 100% increase in total population. Therefore, it can be assumed that:

- (1) Wheeling's growth during the 1950's was a direct result of the surge of population to the suburbs.
- (2) Wheeling's future growth will continue to be related to the continued surge of population to the suburbs.
- (3) The desire for new residential development will continue to be in areas served by municipal services, especially utilities.
- (4) Competitive community standards will determine to some extent that portion of the unincorporated area that will develop in Wheeling as opposed to other incorporated areas.

Especially is this true when considering that migration accounts for 69.5% of Wheeling's growth, just the opposite of the metropolitan area as a whole, which had a 73% natural increase (births exceeding deaths) and only a 27% increase by migration.

In planning for Wheeling, no extreme changes were anticipated in the origins of Wheeling's growth. Only after (1) Wheeling has no more space to provide housing

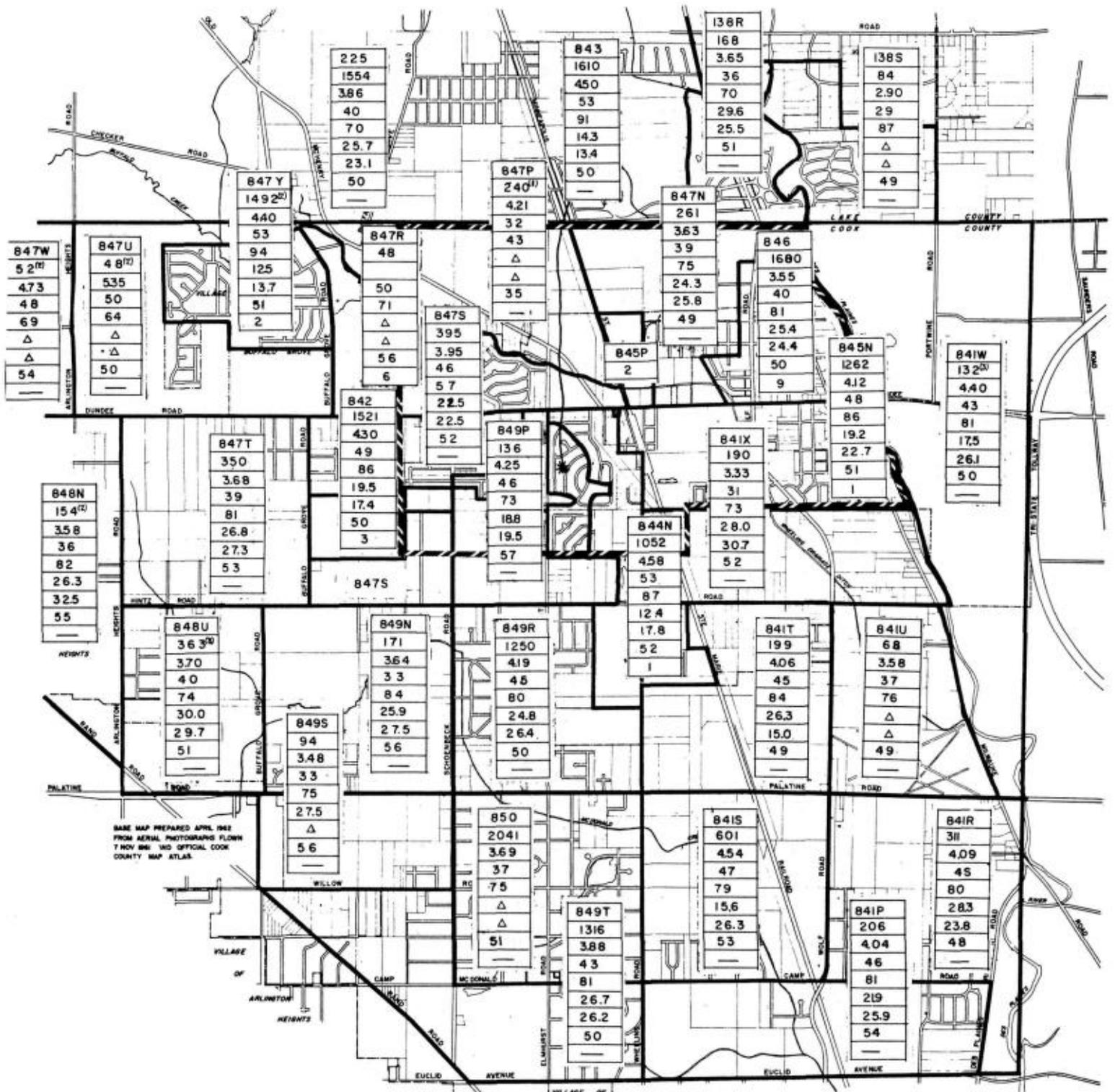
for the population moving to the suburbs and (2) a reduction of women in the child-bearing ages, will the ratio of in-migration to natural increases tend to equalize.

Several characteristics of Wheeling's planning area population are shown in Figure 4. This profile shows variations between the several segments of the planning area, as reflected by census enumeration data of the 1960 Census. For instance, while the household size of the "old" Wheeling area is 3.55 persons, Dunhurst Heights has 4.5 persons in the area east of Elmhurst Road, and 4.25 persons per household west of this road. The Village of Wheeling, however, considering these variations, has 4.12 persons per household. This exceeds the average for all urban areas in the State, Wheeling Township, and the Chicago Metropolitan area. Planning for Wheeling anticipated a continuation of approximately the same size household.

Wheeling's almost even distribution between males (50.3%) and females (49.7%) reflects the man-wife-children family relationship of Wheeling households with a slightly greater number of male than female children. It can be expected that over a period of time this will reverse itself, and there will be more women than men. (Note: the 1964 Census already reflects this factor with 5,900 females and 5,856 males).

Wheeling's population is 79% children or young adults. The distribution of Wheeling's population into five-year age groups is shown in Figure 5 by percentages and in Figure 6 by number of persons. Figure 5 shows the predominance of young (25-34) adults--probably married couples--within the Village and a similar characteristic for the school district area. Similarly, the suburban characteristic of young families with children predominates in the Chicago Metropolitan area with a higher percentage of children. The dip in the 20-29 age bracket reflects the low birth rates of the depression years 1930-39.

Figure 6 forecasts the continued problems in providing services for a continuing young population in both the Village and School District No. 21. For instance, there are more persons under 5 than 35 and older. Wheeling's non-white and ethnic population is so insignificant that no consideration was given to this factor in Wheeling's future planning. The high percentage of married persons--85% of those over 14 years old--indicates a relative community stability because of the predominance of families. There are few unattached individuals except in the "widow" category representing the older age groups.



BASE MAP PREPARED APRIL 1962 FROM AERIAL PHOTOGRAPHS FLOWN 7 NOV 58 - '60 OFFICIAL COOK COUNTY MAP ATLAS

VILLAGE OF WHEELING LAKE COOK PLANNING AREA TOTAL

ENUMERATION DISTRICT NO.	TOTAL POPULATION	POPULATION PER HOUSEHOLD	% UNDER 18	% 14 & OVER MARRIED	MEDIAN AGE, MALES	MEDIAN AGE, FEMALES	% OF POPULATION, MALE	NO. OF NON-WHITE																			
7,169	716	15,378	16,094	4.12	3.80	4.02	4.01	48	37	43	43	18.2	26.1	20.1	20.4	19.1	23.6	22.2	22.3	50.3	50	51	51	14	0	22	22

--- PARK DISTRICT

- △ N.A. OR SAMPLE TOO SMALL
- (1) INCLUDES 78 IN GROUP QUARTERS
- (2) IN SCHOOL DISTRICT BUT NOT PLANNING AREA
- (3) FIGURES ADJUSTED TO PLANNING AREA

FIGURE 4

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN REDEVELOPMENT ADMINISTRATION OF THE HOUSING AND HOME FINANCE AGENCY UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.

SCALE IN FEET
0 1000 2000 3000 4000 5000

M. F. RUPP ASSOCIATES
PLANNING CONSULTANTS - CHICAGO, ILLINOIS

1960 POPULATION PROFILE BY CENSUS DISTRICT

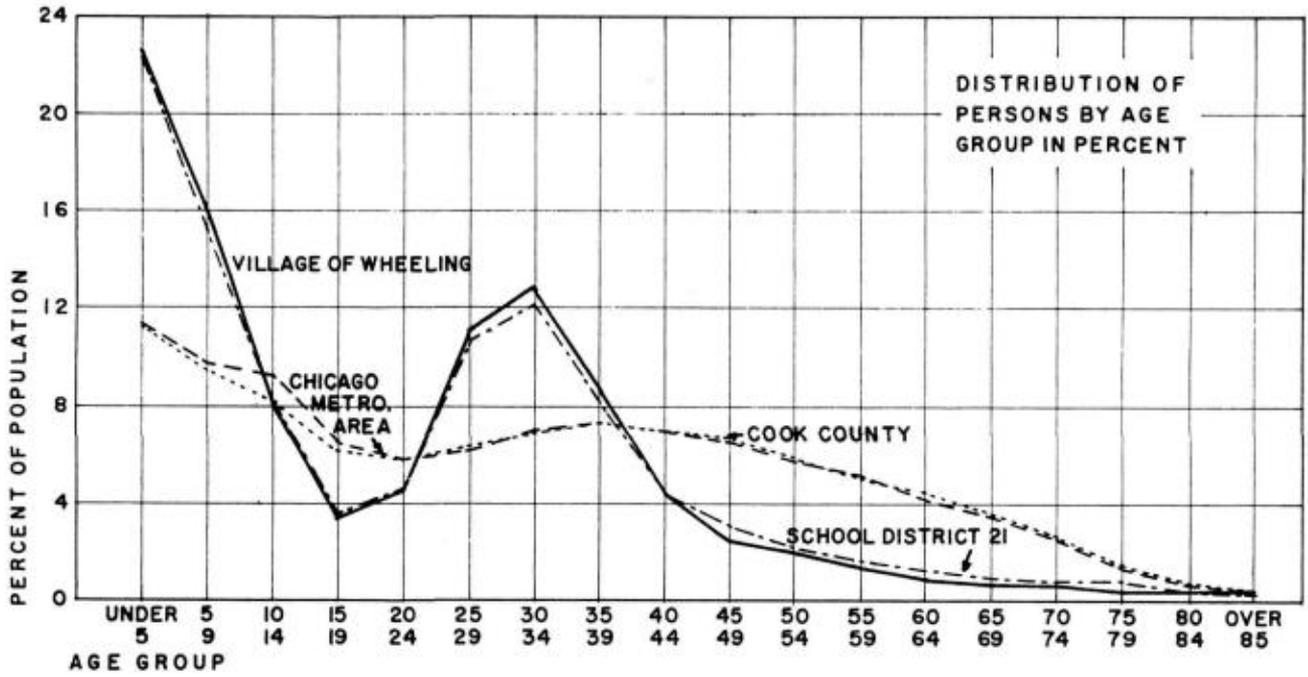


FIGURE 5

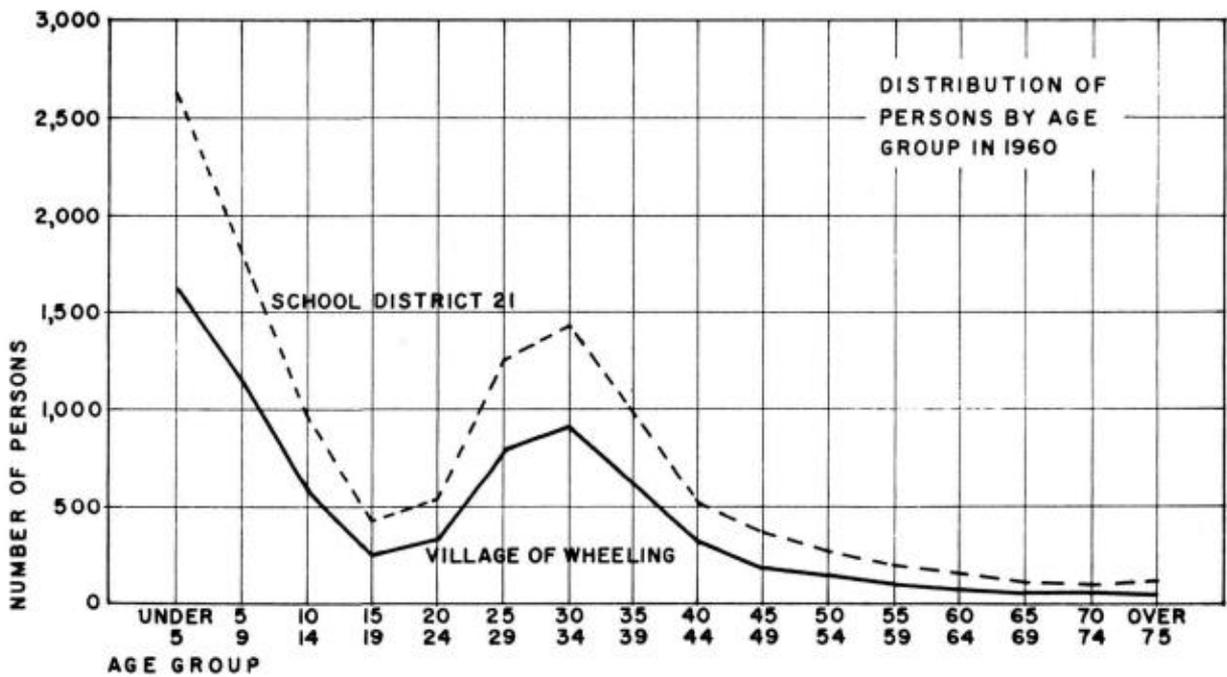


FIGURE 6

Criteria for needed commercial areas in Wheeling's future is indicated by the predominance of families, a high level of school years completed (median, 12.2 years), and the very high percentage of family incomes (65%) in the \$5-9,000 range. These factors help establish expenditure patterns and potential total expenditures in future Wheeling.

Major Occupational Characteristics

Employment by occupational groups is massed between Craftsmen and Foremen (23.40%) and Operatives and Kindred Workers (18.13%). Both of these classifications include jobs and occupations that are "blue collar" in nature. The large number employed in these two groups exceeds the number in the urban fringe by over 32%. Lesser numbers of Wheeling's labor force are in the Professional, Technical Managers, Officers, and Proprietors classifications as a result of this massing in "blue collar" classifications.

The occupations of Wheeling's labor force, as well as a general pattern in all other urban fringe areas, are contained in Table 5.

TABLE 5
LABOR FORCE OCCUPATIONS, BY SEX
WHEELING AND URBAN FRINGE AREAS

Occupation	W h e e l i n g				Urban Fringe
	Male	Female	Total	%	%
TOTAL	1,770	563	2,333		
Professional, Technical	212	66	278	11.90	13.93
Farmers and Farm Managers	12	-	12	.51	.12
Managers, Officers, Proprietors	142	8	150	6.43	10.44
Clerical and Kindred Workers	112	224	336	14.40	17.21
Sales Workers	166	39	205	8.79	8.68
Craftsmen, Foremen, etc.	530	16	546	23.40	16.14
Operatives and Kindred Workers	339	84	423	18.13	16.70
Private Household Workers	-	21	21	.90	1.53
Service Workers	92	79	171	7.32	6.76
Farm Laborers and Foremen	4	-	4	.23	.19
Laborers, except Farm and Mine	63	-	63	2.70	3.65
Occupations not reported	98	26	124	5.31	4.63

Source: U. S. Census, 1960

Principal variations from the urban fringe industrial employment percentages reflect the similarities of the occupations of Wheeling's labor force. Those industries having a greater percentage of people working in them are primarily: construction, durable goods manufacture, and wholesale and retail trade. Smaller percentages of people are employed in the non-durable goods manufacturing and professional categories.

The distribution of Wheeling's labor force in the 1960 Census industrial classifications, compared to the distribution of the labor force generally in the urban fringe areas, is indicated in the following Table 6:

TABLE 6
EMPLOYMENT BY INDUSTRY
WHEELING AND URBAN FRINGE

Industry	No.	WHEELING	Urban Fringe
		%	%
Total Employed	2,333		
Agriculture, Forest, Fisheries	23	.99	.58
Mining	4	.17	.15
Construction	175	7.50	5.53
Durable Goods Manufacture	624	26.75	23.69
Non-durable Goods Manufacture	186	7.97	12.33
Transportation, Communication- Public Utilities	178	7.63	8.40
Wholesale and Retail Trade	473	20.27	18.30
Finance, Insurance, Real Estate	109	4.67	4.94
Business and Repair Service	84	3.60	2.65
Personal Services	74	3.17	3.85
Entertainment, Recreation	38	1.63	.81
Professional and related	169	7.24	11.53
Public Administration	76	3.26	3.47
Not reported	120	5.14	3.77

Note: Wheeling's non-worker-to-worker ratio = 2.00.

Source: U. S. Census 1960.

Unemployment of Wheeling's labor force (1%) is lower than other urban areas in Illinois.

Wheeling Compared to Other Communities

Because of the interplay of metropolitanwide social, economic and housing forces, the various communities within the metropolitan area may vary extensively in characteristics. Similarly, communities achieve recognition, acquire reputations and assume an image as a certain kind of community. In an attempt to relate future planning for Wheeling to its existing characteristics, as a basis for the formulation of planning goals by the Village Board and Plan Commission, and to establish a reference familiar to Village officials, 212 communities were reviewed for characteristics similar to Wheeling's.

All of the 212 Illinois communities reviewed had 1960 populations between 2,500 and 10,000. Communities were compared on the basis of the following criteria:

- (1) They were located within the Metropolitan Chicago area.
- (2) Their populations ranged between 7,000 and 8,500. (Wheeling's is 7,169).
- (3) The population's median school years completed were between 11.5 and 12.7. (Wheeling's is 12.2).
- (4) Between 30 and 41 per cent of the employed persons were employed in manufacturing. (In Wheeling, 34.7%).
- (5) The median income level per household was between \$7,000 and \$7,500 annually. (In Wheeling, it was \$7,390).

The community of Hometown was compared in every criterion. In four of the five items, the following communities were compared:

Cary	Hillside	Warrenville
Chicago Ridge	Hoffman Estates	Worth
Gages Lake	Libertyville	Woodstock
Geneva	Thornton	

Twenty-one (21) other communities also were compared in two or three of the items. Notably missing from these communities were the municipalities surrounding Wheeling and having a competitive effect upon the eventual development of the remaining unincorporated area.

The competitive or surrounding communities were compared on the basis of (1) median household income, (2) per cent of families with income under \$3,000 and over \$10,000 annually, (3) per cent of population in manufacturing, (4) population per household, and (5) per cent of population growth in the community between 1950 and 1960.

TABLE 7
SURROUNDING & COMPETITIVE COMMUNITIES TO WHEELING

1960 Pop. (000)		Median	% under \$3,000	% over \$10,000	Per cent in Mfg.	Pop. per Household	Per cent Growth 1950-1960
27.8	Arlington Hts.	\$9,789	3.7	47.8	31.3	3.9	218.0
1.5	Buffalo Grove	NA				4.4	**
11.7	Deerfield	10,763	3.1	55.3	30.2	3.8	258.5
34.8	Des Plaines	8,610	3.7	34.2	35.9	3.6	132.7
.7	Long Grove	NA					**
18.9	Mt. Prospect	10,398	1.9	52.8	37.1	3.9	371.6
11.6	Northbrook	11,145	2.2	57.2	29.5	3.87	247.5
.7	Riverwoods	NA					**
7.2	Wheeling	7,390	3.7	15.6	34.7	4.12	682.6

NA - Information not available; population under 2,500.

** - Non-existent in 1950.

Source: U. S. Census 1960.

These comparisons of specific factors illustrate the similarities and differences between the communities influencing the development of the unincorporated area surrounding Wheeling.

Planning considerations include a substantial increase in population. At the same time, no radical change is anticipated in Wheeling's future population characteristics. It is anticipated that the high level of migration will continue to be made by white families (the parents in their late 20's and early 30's) and their children. This migration, plus the aging of the present population, will tend to maintain the present percentage age distribution with predominantly young children of young families and will slightly level off the age distribution curve.

The only limits to Wheeling's population growth, assuming that the level of economic productivity in the metropolitan area continues, are the physical limitations of land and space. The rate of growth, however, will be determined by Village governmental actions, such as annexation, and the adoption and stringent enforcement of development controls (subdivision regulations and zoning). The magnitude of the potential populations, which would have to be planned for, is shown in Table 8.

TABLE 8
SATURATED POPULATION FOR
WHEELING AND COMPARED AREAS

<u>District Boundaries</u> <u>(as of December 1963)</u>	<u>Total Population at Assumed</u> <u>Average Family Size:</u>	
	4 people	4.12 people (existing)
Village of Wheeling	17,200	17,500
Park District	16,700	16,900
School District No. 21	99,000	102,000
Planning Area	114,000	117,000

Determinations of "saturated" population considered (1) existing zoning, (2) existing subdivisions, (3) that new subdivisions would require provision for public areas, (4) that school and park areas would be acquired, and (5) that virtually all flood plain areas in residential zones would not be built upon.

Therefore, the planning of the Wheeling area provides for accommodating some 100,000 additional residents at some future date. The planning policy determined and the steps toward implementation would have to reflect this potential level of development.

HOUSES AND HOMES

The place of residence of the person living in Wheeling has an effect upon his health, well being and general attitude toward the Village. The quality and location of the residential areas also affect the Village's growth potential in terms of additional residential expansion and industrial growth. The existing residential conditions, the problems of existing and future developments, and those actions of the community that are deemed desirable and necessary, must all be considered in planning Wheeling's future.⁽¹⁾

Only 13.4% of the Village's total area, or 358 acres, was utilized for residential purposes in August, 1962. These acres contained primarily single-family, 5-room houses, occupied by the owner, valued at about \$17,500, and built within the last ten years.

Similarity in Existing Development

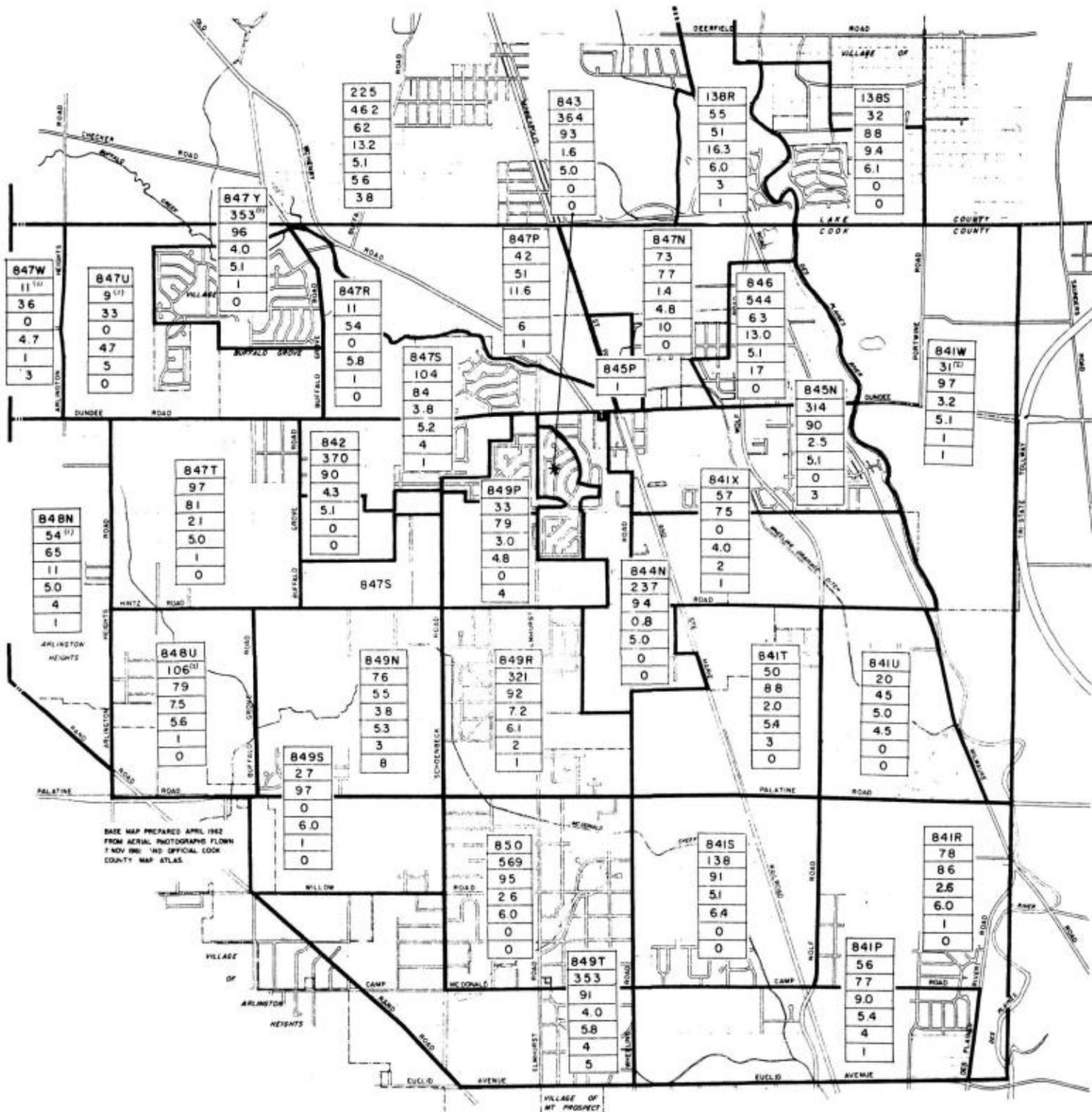
The existing housing stock varies little in terms of age, style, general conditions, or state of maintenance and value. Over 83% of the housing units existing in mid-1963 were constructed since 1955. Values ranged from under \$10,000 (1.3%) through medium prices, \$10-15,000 (9.5%), with the majority of houses in the \$15-20,000 range (78.8%). Houses valued over \$20,000 constituted 10.3%. New houses in the Village have generally been selling over \$20,000.

While in 1963 only about 14% of the housing units were multi-family, the newer construction has consisted of about 35% multi-family units. This 35% figure approaches the existing percentage of multi-family units in all urban areas of the state. Wheeling's high degree of owner-occupied houses (87.6%) usually indicates a consciousness of maintaining the general conditions of the housing unit. However, with a continuing increase in the number of multi-family units, this level of owner-occupied homes can be anticipated to decrease.

General information about the composition and housing characteristics is shown in Figure 7. Other characteristics of the housing stock which represent considerations in the development planning of Wheeling are:

1. Major neighborhood areas were developed within a short period of time and will have similar maintenance problems as these areas age.

(1) Detailed analysis contained in Preliminary Planning Report 4, "Houses and Homes", May, 1963.



BASE MAP PREPARED APRIL 1962
FROM AERIAL PHOTOGRAPHS FLOWN
7 NOV 1961 AND OFFICIAL COOK
COUNTY MAP ATLAS

ENUMERATION DISTRICT	VILLAGE OF WHEELING LAKE COOK PLANNING AREA			
	WHEELING	LAKE COOK	LAKE COOK	TOTAL
NO. OF HOUSING UNITS	1,842	197	4,043	4,240
% OWNER OCCUPIED	86	64	82	81
% VACANT	4.4	13.1	4.4	4.8
MEDIAN NO. OF ROOMS PER UNIT	5.1	5.3	5.2	5.2
NO. OF DETERIORATING UNITS	21	2.4	61	85
NO. OF DILAPIDATED UNITS	4	18	26	44

1 1 1 IN SCHOOL DISTRICT BUT NOT PLANNING AREA
1 2 1 FIGURES ADJUSTED TO PLANNING AREA

FIGURE 7

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN RENEWAL ADMINISTRATION OF THE HOUSING AND HEAVY FINANCE AGENCY UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.

SCALE IN FEET
0 1000 2000 3000 4000 5000

M. F. RUPP ASSOCIATES
PLANNING CONSULTANTS - CHICAGO, ILLINOIS

1960 HOUSING PROFILE BY CENSUS DISTRICT

2. The population per housing unit averaged 4.1 persons with "owner-occupied" units at 4.2 persons per unit and at 3.5 persons per "renter-occupied" unit.
3. Even with 87% of the housing units having 5 or more rooms (excluding bathrooms, halls, etc.), the number of persons per room was generally greater than in other urban areas of Illinois.
4. Over 58% of the 1960 rental units were renting at or in excess of \$120 per month. A review of potential rental rates of apartments under construction in 1962 indicated that all units would rent in excess of \$120 per month. There were no apartments, regardless of size or age, renting for less than \$60 (1960).

Site characteristics of the lot on which the home is located must also be taken into consideration. This information is indicated generally in Figures 8 and 9. A comparison of these two figures shows a trend from small lots (pre-1940) to large lots (1940-55) to smaller lots (1955-59), and the existing trend to larger lots (since 1959). It dramatically shows that subdivisions of recent years have been developed and homes constructed, as opposed to the older subdivisions which were primarily land development speculations.

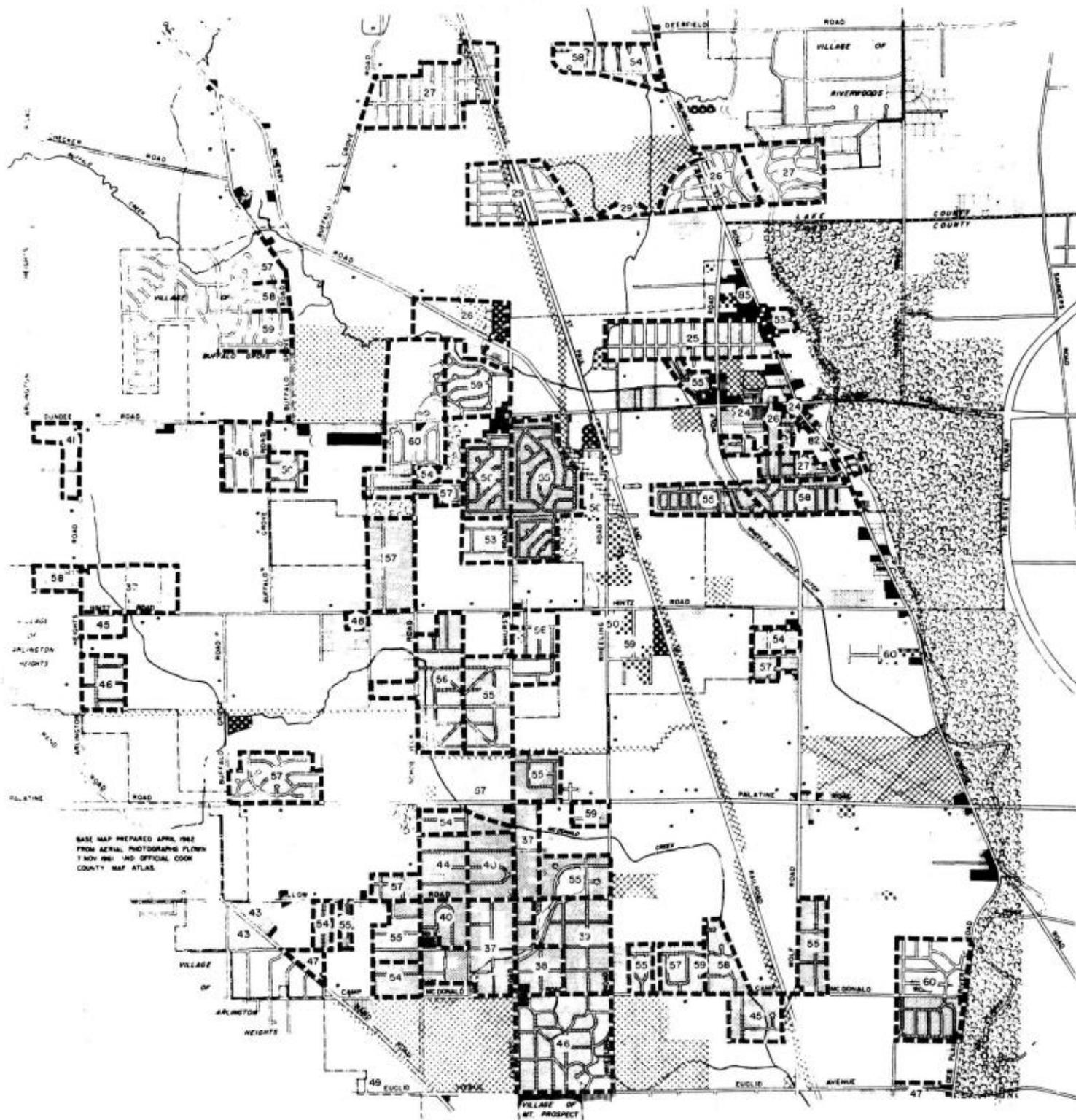
Trends to be Recognized

The trend of increasing lot sizes reflects two basic factors: (1) the demand by the Village for larger lot areas; subsequently, a less dense population, and (2) the need for larger land areas on which to place larger homes (6 rooms and up), driveways, garages, maintain architectural design, and to assure some degree of privacy on the lot. This trend must be considered even with the increasing cost of providing the required municipal facilities.

The desire and need for a greater variety of housing types will continue. Demands will increase for multi-family housing, from older people wanting minimum maintenance problems, young adults living away from home, young married couples, housing for the labor skills to serve suburban industry, the voluntary mobility of the population, and the economic considerations of financing and taxes.

Some Problems and Possible Solutions

Figure 9 shows the location within the planning area where hazards exist from flooding. This illustrates the problems of providing adequate storm drainage facilities to these areas and especially to already developed subdivisions. The Village has recognized that extensive development must be excluded from or protected



BASE MAP PREPARED APRIL 1962
FROM AERIAL PHOTOGRAPHS FLOWN
1 NOV 1961 AND OFFICIAL COOK
COUNTY MAP ATLAS

- | | | |
|---------------------------|----------------|--|
| SINGLE FAMILY RESIDENTIAL | LIGHT INDUSTRY | LIMITS OF SUBDIVISIONS |
| MULTI-FAMILY RESIDENTIAL | HEAVY INDUSTRY | 55 YEAR SUBDIVISION RECORDED |
| FARM RESIDENCE | SEMI-PUBLIC | 60 RECORDED 1960 OR LATER |
| COMMERCIAL | PUBLIC | NOTE: SHADING INDICATES DEVELOPED
AREAS JULY, AUGUST, 1962. |

FIGURE B

<p>THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN RENEWAL ADMINISTRATION OF THE HOUSING AND HOME FINANCE AGENCY UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.</p>	<p>SCALE IN FEET</p>	<p>ACTUAL LAND USE AND SUBDIVISION DEVELOPMENT</p>
<p>M. F. RUPP ASSOCIATES PLANNING CONSULTANTS - CHICAGO, ILLINOIS</p>		

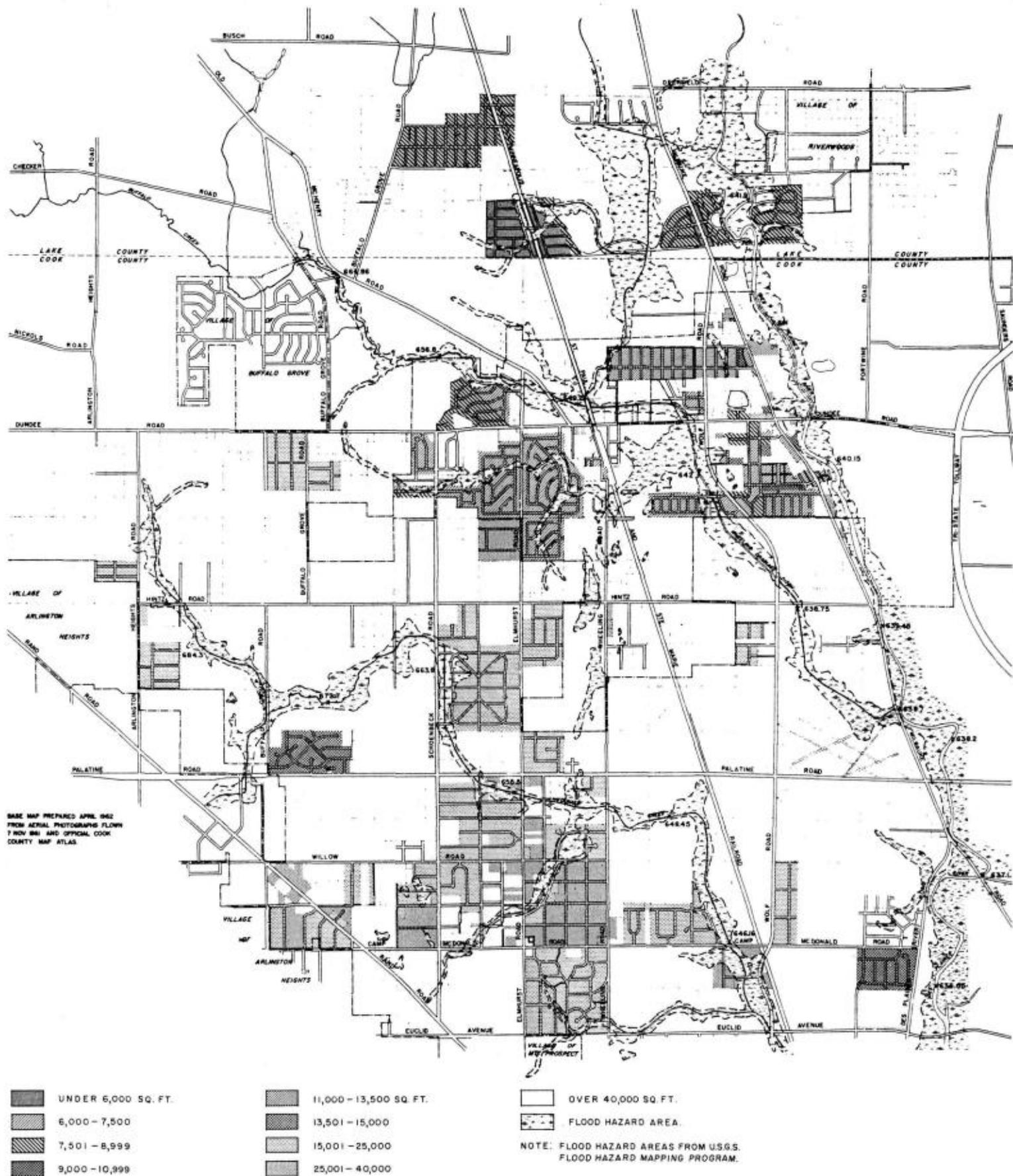
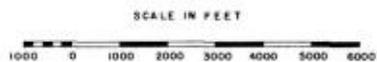


FIGURE 9

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN RENEWAL ADMINISTRATION OF HOUSING AND HOME FINANCE AGENCY, UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.



M. F. RUPP ASSOCIATES
PLANNING CONSULTANTS - CHICAGO, ILL.

**GENERALIZED LOT SIZES
AND FLOOD HAZARD AREAS**

from areas subject to flooding. The Village, as part of its planning program, has adopted flood plain regulations, limiting and requiring extra precautions for building in these areas. The enforcement of these provisions, along with the revised subdivision regulations, can at least prevent additional problems by requiring flood hazards to be reflected in land development planning now undertaken in the Village.

Although urban blight seems to be insignificant in Wheeling, the few (21) dilapidated structures are all in the old part of the Village. It is in this same area that most of the older homes exist. These older homes are feeling the pressures of adjoining business areas and the speculation of possible changes in land use.

Consideration should be given now to a conservation program in the older areas of the Village. Steps must be taken to eliminate conditions that may result in blight, such as:

1. Lack of protection to existing residential areas from haphazard expansion of the business areas;
2. lack of confidence in the Village's zoning;
3. lack of an enforceable and reasonable housing code which could force compliance with an established standard for the Village, and
4. the possibility of acquiring, through annexation, a greater number of dilapidated houses in proximity to the Village.

Previous residential developments have not provided for educational and recreational needs. This lack of public areas or open space is extremely pronounced in the subdivision developments of 1955-62. An attempt is being made to acquire or reserve public school and park areas by the use of the recently adopted Official Map in new subdivisions. It is also strongly recommended that acquisition of open spaces in densely developed areas be undertaken, even where vacant land is nonexistent. Dunhurst is an example of dense residential development without adequate provision for playground areas.

BUSINESS DEVELOPMENT

Wheeling's business and industrial economic potential was reviewed and evaluated. Determining the amount of business being done⁽¹⁾ and then evaluating the amount that can be done⁽²⁾ involves essentially an analysis of the number of people in the area, their personal consumption and shopping habits.

Wheeling's retail trade area is not a geographical fact but is created by the behavior of consumers and their response to the retail areas, indicated by: the type and location of competing centers; travel times and distances; conveniences of each center, variety and merchandising of goods, and personal preference in shopping for various kinds of goods.

Existing retail activities are concentrated in two areas along Dundee Road, west of Milwaukee Road, and at Elmhurst Road. Another commercial center of significant influence (Prospect Heights) is within the planning area. Competing centers are numerous: Randhurst, a large regional center, immediately adjoins the planning area; Mt. Prospect Plaza is within two miles; and Golf Mill and Northbrook both are within about four miles. The locations of these centers are referred to in Figure 10. The remaining business activity is spread throughout the area, primarily as gasoline service stations.

Of the 205 acres zoned for business in the Village, only 35.1% is actually used as such. Similarly, the planning area has 38.6% of the 336 business-zoned acres utilized for business purposes; thus, in each case, about two-thirds of the zoned land is unused for business purposes. Yet, much of the presently unused business-zoned property is improved with non-business structures and comprised of many small parcels. A factor recognized in Wheeling's planning is that a developer of a shopping center will find the acquisition of a large tract of farm land from a single owner simpler and more economical than acquisition from a number of owners.

Community business areas have substantial potential, but they must meet highly specialized competition. Wheeling's present two business areas have succeeded in maintaining retail sales at approximately the same per capita level from 1960 to 1962. During that period, total retail sales in Wheeling increased from \$8.6 million to \$11.5 million. However, the types of retail purchases in the business areas changed. If, for instance, the per capita sales of food alone had been

(1) See Preliminary Planning Report 5, "Commercial Development", July 1963.

(2) See Preliminary Planning Report 12, "Community Business Plan", Jan. 1964.

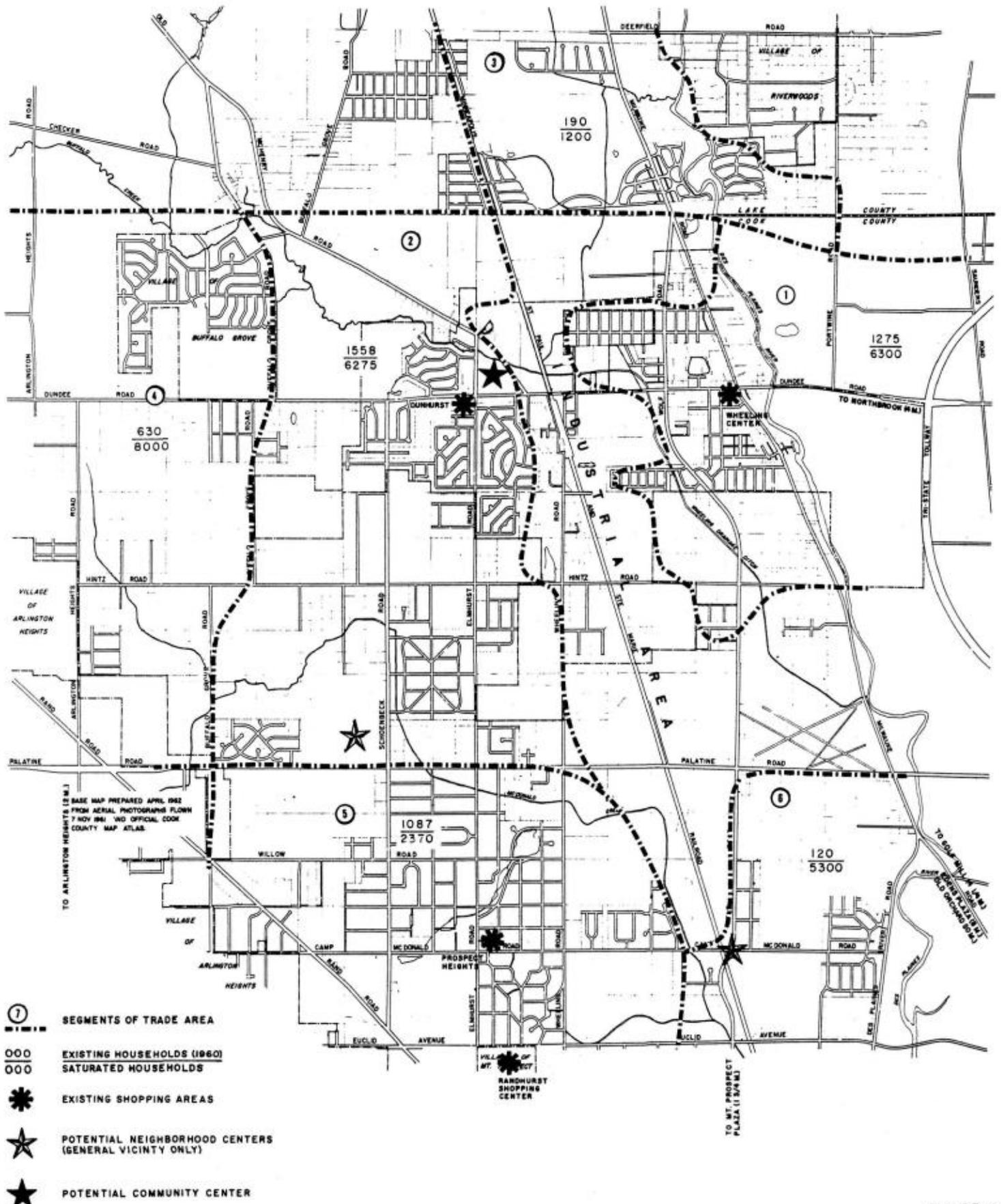


FIGURE 10

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN RENEWAL ADMINISTRATION OF THE HOUSING AND HOME FINANCE AGENCY UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.

SCALE IN FEET
 0 1000 2000 3000 4000 5000

M. F. RUPP ASSOCIATES
 PLANNING CONSULTANTS - CHICAGO, ILLINOIS

**COMMERCIAL FACTORS AND
 POTENTIAL CENTER SITES**

maintained at the 1960 level, an additional half million dollars would have been added to the total sales. Substantial increases in per capita sales were in several retail categories. In these categories, Furniture, for example, made up only a small proportion of the total.

The local businessman, because of greater sales, is doing a better business now than previously, although he is actually obtaining less of the potential business available to him. He could be doing a far greater volume of business than he is, but to do so he must meet the competitive standards of the Randhurst and Golf Mill shopping centers generally, especially in the Service and Convenience Goods category.

There is currently within the Wheeling area a purchasing power of some \$28 million having immediate access to present business areas. After reducing the total purchasing dollars to a figure which can reasonably be expected to be spent in the Wheeling stores, an estimated potential sales level of \$15 million is presently within reach of the Wheeling business areas. They are actually obtaining only about \$11.5 million of this.

When the population nears saturation at an average annual income level of some \$7,500, the purchasing power of the area will approach \$170 million. Wheeling could anticipate attracting up to \$75 million of this. These figures assume that Wheeling, because of its proximity to Chicago's stores and large regional shopping centers such as Randhurst, will be primarily a "service and convenience goods" area. In other words, Wheeling should try to attract and capture the majority of sales resulting from buying everyday needs such as food, drugs, etc.

Competition, when a \$75 million potential is present, will increase. Existing centers will become more active and pressures for new locations will occur. An illustration of those pressures has resulted in the final planning for the development of the Buffalo Grove shopping area. The present population of the Buffalo Grove area, plus the potential of substantial immediate population increases, now make the center feasible. When the Buffalo Grove Center opens, a substantial number of Buffalo Grove customers now shopping in the Wheeling area will change to the Buffalo Grove Center. However, the completion of that center was anticipated and is reflected in the sales potential for the planning area.

Additional retail areas will be justified, based on recommended land uses. The Future Land Use Plan for the Village and surrounding planning area provides for several additional retail areas. Future commercial development has been determined by an analysis of:

- (1) The potential number of customers who can live in the area (reflected in the total population which, under proposed zoning, will support the neighborhood shopping center).
- (2) The potential income of the residents of the planning area and a review of that portion which can reasonably be expected to be spent in the suggested shopping areas.
- (3) The goods and services for which the residents' income is spent or is likely to be spent in the existing and proposed shopping areas.
- (4) The non-residential land uses planned or existing in the area, and the effectiveness of this industrial or public land to delineate trade areas for the suggested shopping areas.
- (5) The various degrees of competition, either from existing centers (Randhurst, Prospect Heights) or proposed centers (Buffalo Grove) on specific service areas.
- (6) The effect that proposed major traffic routes such as County Line Expressway and the improvement of present major streets, like Dundee Road, will have on the total retail sales picture.
- (7) The ability of existing shopping areas to compete effectively with new areas from the standpoint of parking availability and circulation ease.
- (8) The demand for regional types of commercial activities which are part of the total business development of Wheeling but logically lie outside the retail shopping area.

Some of these factors are illustrated in Figure 10. This figure indicates the location of suggested retail sites which, based on the above analysis, can be developed to serve the various neighborhood trade areas.

It must be remembered that changes in zoning regulations, allowing for either a greater or lesser number of people to live in one of the trade area segments, will require the re-evaluation of potential retail sites. For instance, in Preliminary Planning Report No. 5, a new center was proposed on Wolf Road, south of the present Village limits. If the present zoning for multi-family homes prevails, then this center will still be necessary. If, however, the eventual development of this multi-family area is in single-family dwellings, no additional center will be necessary. The existing center at Dundee and Milwaukee and the proposed center at McDonald and Wolf Roads can adequately take care of the convenience shopping needs

of this area. Similarly, if the western portion of the planning area is developed twice as densely as shown on the Future Land Use Map, additional shopping facilities can be justified to meet the needs of these additional customers.

The locations of the recommended sites for shopping centers meet the following principles:

- (1) Shoppers move to the most dominant shopping area.
- (2) Shoppers will not pass through one center to get to another having equal facilities.
- (3) Shoppers will patronize the closest district having equal facilities; this may be measured in travel time rather than actual miles.
- (4) Shoppers tend to follow traditional routes.

The designation of one principal center to serve the Wheeling community at Dundee-Elmhurst-McHenry Road is recommended. The community center would provide a more extensive range of goods and services than the neighborhood centers which are strategically located throughout the planning area. This community center location was chosen because of a relatively central location, a conflux of major streets providing ready vehicular access, sufficient vacant land area for development with adequate parking, and the added feature of being within an established shopping area. This center would provide for about 150,000 square feet of store space and would include a junior department store and specialty shops in addition to a supermarket and drug stores.

The neighborhood locations are recommended for the same reasons but are based upon a much smaller trade area and anticipated design for meeting the immediate needs of the customers. These centers are anticipated to occupy 5-10 acres of land, to have approximately 25-35,000 square feet of retail store space, and presumably to be comprised of a supermarket, drug and miscellaneous service stores, such as barber and beauty shops.

It is anticipated that these centers will provide for retail stores only. In the attempt to eliminate the incompatibility of various stores, such as offices and taverns from prime retail centers, the Zoning Ordinance provisions limit ground floor uses in these centers to prime retail stores. The B-1 Shopping Center area requires the integral planning of the entire site prior to construction. The B-2 area is similar in uses but allows development on existing smaller lots, provided

it is consistent with strengthening the total attraction of the business areas for retail purposes.

Existing shopping areas are incorporated into business area plans but will require improvements. The initial development of new shopping areas for the Wheeling planning area recognized existing shopping facilities in the Village, the investment represented, and the business patterns they have established. However, in every instance improvements should be undertaken to increase the physical comfort and convenience of the existing facilities. Among the problems plaguing existing facilities are: inadequate parking, unattractiveness, border conflicts with major streets, narrow strip zoning, and considerable distances between small groups of retail stores.

Parking and related poor traffic circulation is a problem in every instance. The cramped space of the Wheeling Center plus the drive-in bank windows cause serious traffic and parking problems during peak hours. Most "strip" business areas along Dundee Road have shallow lots that preclude convenient ingress and egress. In addition, the number of parking spaces are at a minimum and are laid out without adequate traffic aisles. Only Dunhurst Shopping Center currently has adequate parking space to meet its needs and even there, steps should be taken to channel traffic to delineate parking spaces in order to make parking easier.

Attractiveness is a problem, especially in comparison to the principal competition which has provided effective landscaping and architectural detail in order to enhance the area and provide a pleasant environment in which to shop. The Wheeling shopping areas provide none of these "extras"; in fact, they do not attempt to supply a minimum of housekeeping operations for street and parking areas. All the Wheeling areas should make a determined effort to improve appearance through the addition of trees, shrubs and landscaping, by raised sidewalks, and through good housekeeping and maintenance practices, such as street sweeping, repair of pavement and preventing the ponding of water in parking areas. If the areas are too small to justify acquisition of a street sweeper, the Village should be interested in the community's appearance enough to provide this service on a fee basis.

Another problem of the Wheeling business areas is the virtually complete dependence of all major segments on Dundee Road for access. Only Dunhurst Shopping Center, with entrances on Elmhurst Road, and two small clusters of stores with entrances on Wolf Road, are not solely dependent on Dundee Road for access. Because of the business locations strung out along Dundee Road and the traffic count of 15,000 cars per

day, street border conflicts are enormous for business uses alone. In addition, numerous single-family homes and apartments, churches and schools are involved. The widening of Dundee Road will provide some relief but, wherever possible, the number of driveways entering directly on Dundee should be reduced.

Solutions to problems have been illustrated. Figure 11 illustrates some of the following suggested improvements to relieve the Dundee Road-Wolf Road-Milwaukee Road business area congestion and to enhance the convenience of the area to potential customers:

- (1) Extend Center Avenue east of Milwaukee to connect with Dundee Road. This will open up substantial vacant area for improvement for parking to serve stores in the southwest corner of Dundee-Milwaukee Avenue.
- (2) Extend Center Avenue north and into residential area along forest preserve. Street extension will also assist in opening up deep business on north side of Dundee east of Milwaukee Road.
- (3) Extend Wille Street north of Dundee to Strong Avenue, to provide additional frontage for service business development on 600-foot deep lots on west side of Milwaukee north of Dundee. Use as secondary access to parking for Milwaukee Avenue service businesses.
- (4) Extend Deborah Lane to the east to Wille extended and west to Wolf Road; to be used as an alternate route in this area and to serve additional parking for stores west of 1st Street.
- (5) Provide for limited expansion of stores but major expansion of off-street parking facilities for stores in area between 1st Street and the Telephone Company; major entrance to parking off of 1st Street.
- (6) Provide additional access for Telephone Company use on Dundee; eliminate conflicts on Dundee Road.
- (7) Decrease length of driveway openings in Wolf Road business area to assist in controlling traffic entering Wolf Road.
- (8) Expand parking area usable to store clusters on Dundee Road between Wolf Road and Buffalo Creek.
- (9) The attractiveness of Dundee Road will be enhanced considerably with the construction of curb-and-gutter. Provision should be made immediately for a community effort to landscape the resulting parkway and planting of trees in these available spaces.

The improvement of the traffic circulation and additional parking for the Wheeling Shopping Center is illustrated in Figure 12. Principal suggested improvements either shown or implied are:

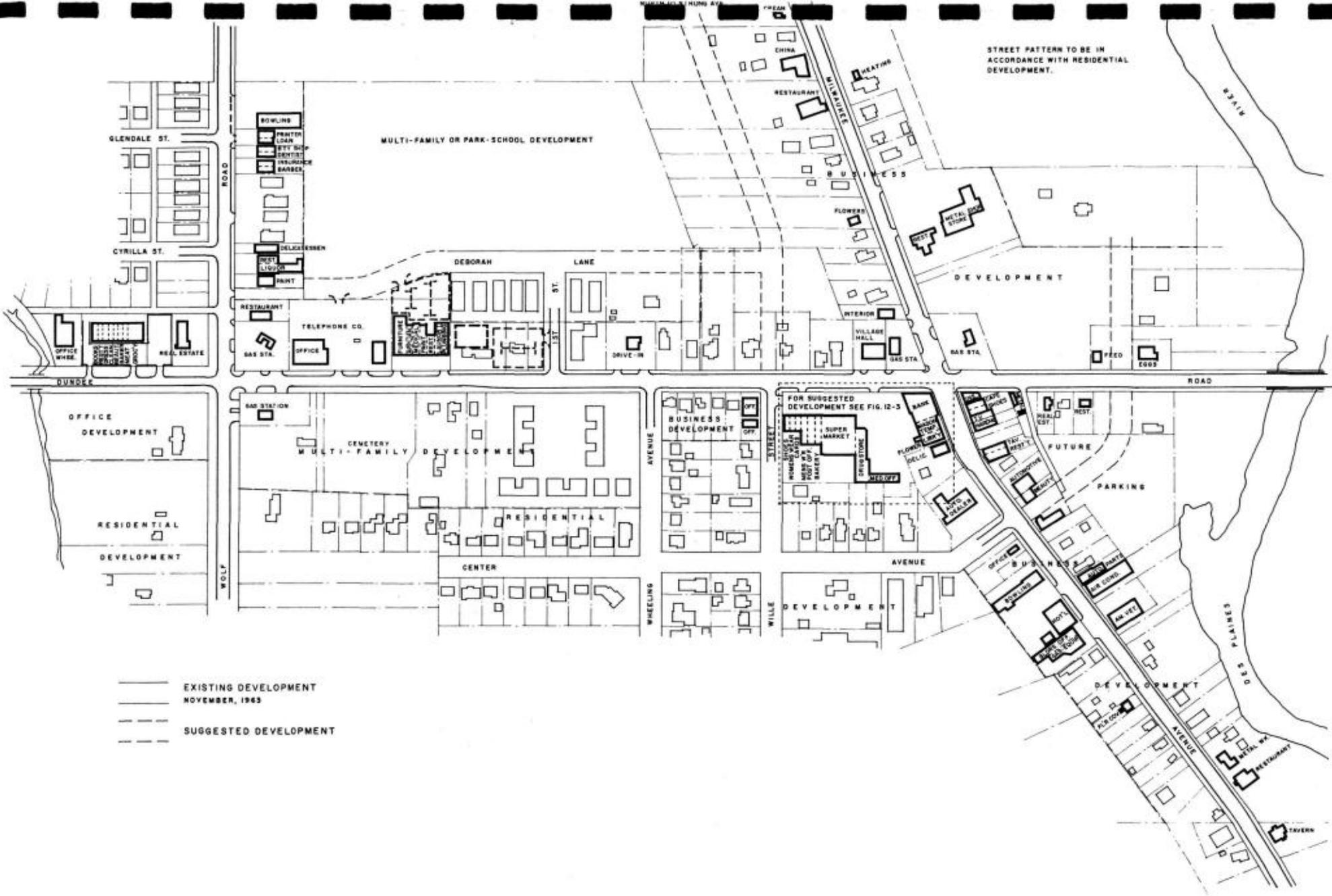
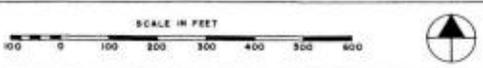


FIGURE II

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN RENEWAL ADMINISTRATION OF HOUSING AND HOME FINANCE AGENCY, UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.

M. F. RUPP ASSOCIATES
 PLANNING CONSULTANTS - CHICAGO, ILL.



**SUGGESTED DEVELOPMENT
 DUNDEE ROAD AREA**

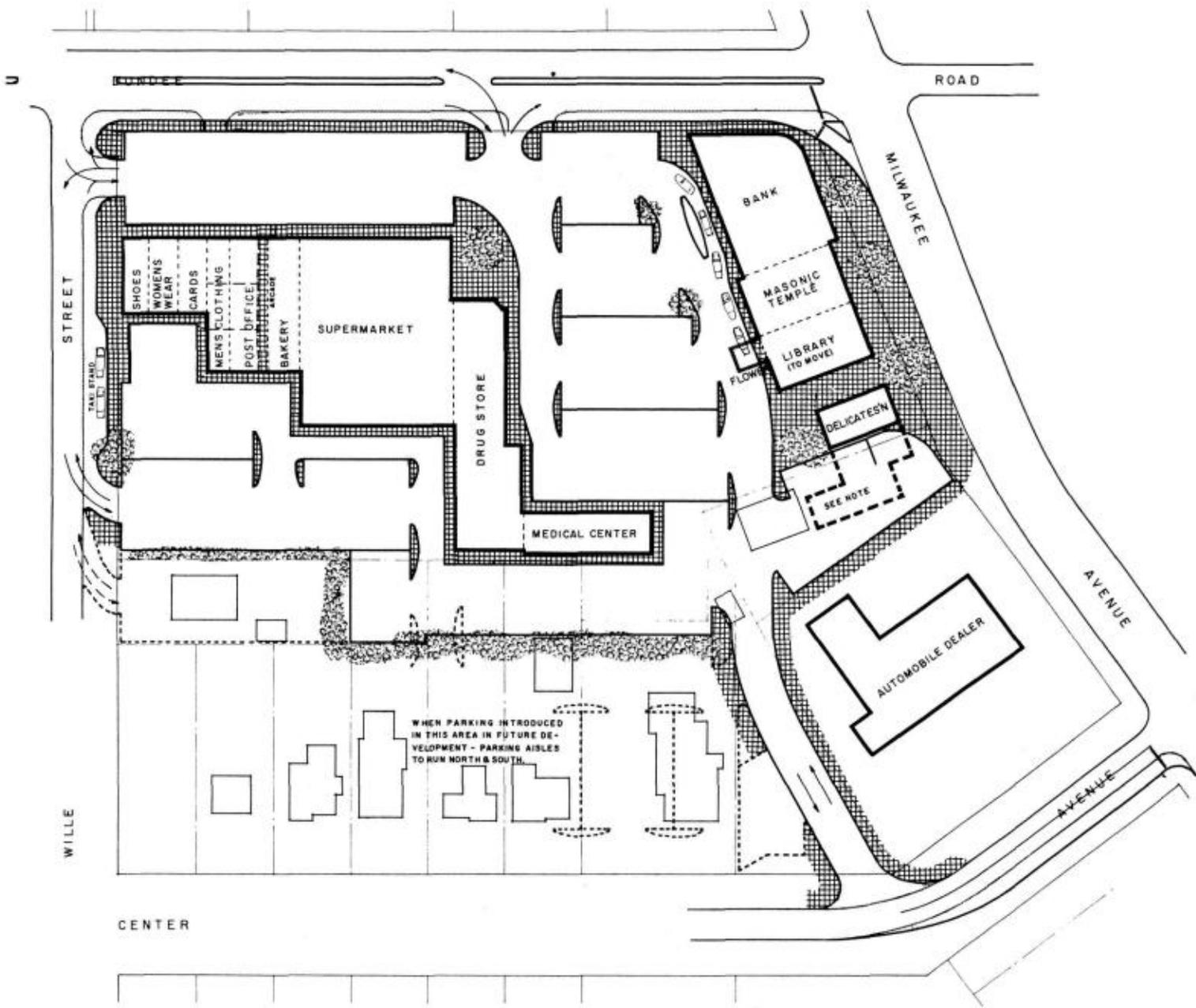


FIGURE 12

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN RENEWAL ADMINISTRATION OF HOUSING AND HOME FINANCE AGENCY, UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.

SCALE: IN FEET
0 20 40 60 80



SUGGESTED DEVELOPMENT
WHEELING SHOPPING CENTER

M. F. RUPP ASSOCIATES
PLANNING CONSULTANTS - CHICAGO, ILLINOIS

- (1) Open up an entrance to the south to Center Avenue.
- (2) Relocate the drive-in teller's window at the bank to take advantage of the additional storage space of waiting cars in new entranceway.
- (3) Add parking facilities in the rear of the present stores by acquiring present vacant rear yards of adjoining property and improving it.
- (4) Decrease walking distance to shopping center from rear parking by (a) putting entrance in rear of shops at the time of remodeling the rear of the stores and (b) establishing an arcade to the front of the stores.
- (5) Widen and channel Center Street from the new entrance to Milwaukee Road and design this entrance to discourage cars from turning west into residential areas.
- (6) Similarly, widen Wille Street from the entrance north to Dundee, again forcing cars to go north after coming out of the lot.
- (7) Require proper parking by delineating parking spaces by barriers, curbs, and landscaped areas.
- (8) Landscape and make the entire area more attractive; plant visual screens between parking areas and adjoining residential areas.
- (9) Move taxi-stand away from corner to provide turning lanes into the center on Wille.
- (10) Prohibit any additional business space expansion until additional parking is provided.

Figure 13 illustrates the Dundee Road-Elmhurst Road-McHenry Road area and shows improvements as well as a suggested layout for the proposed Community Shopping Center in the triangle. In each instance, adequate parking and control of traffic has been stressed, providing at the same time for additional retail store space.

The Buffalo Creek Shopping Center is only one of several possible layouts which could be designed for this area. The plan as proposed can be utilized by the Planning Commission in reviewing the integrated shopping center as required in the B-1 Shopping Center zoning district. Some of the physical features stressed are:

- (1) Adequate parking.
- (2) Limited number of driveways requiring good traffic circulation within the center itself.

1. PEDESTRIAN ARCADE BRIDGE - SPECIALTY SHOPS, RESTAURANT.
2. JUNIOR DEPARTMENT STORE.
3. SUPER MARKET - DRUG STORE.
4. POSSIBLE STORE EXPANSION.
5. PARKING.
6. BUFFALO CREEK PARK, PLAYGROUNDS, WATER RETENTION BASINS, REST AND PICNIC AREAS.

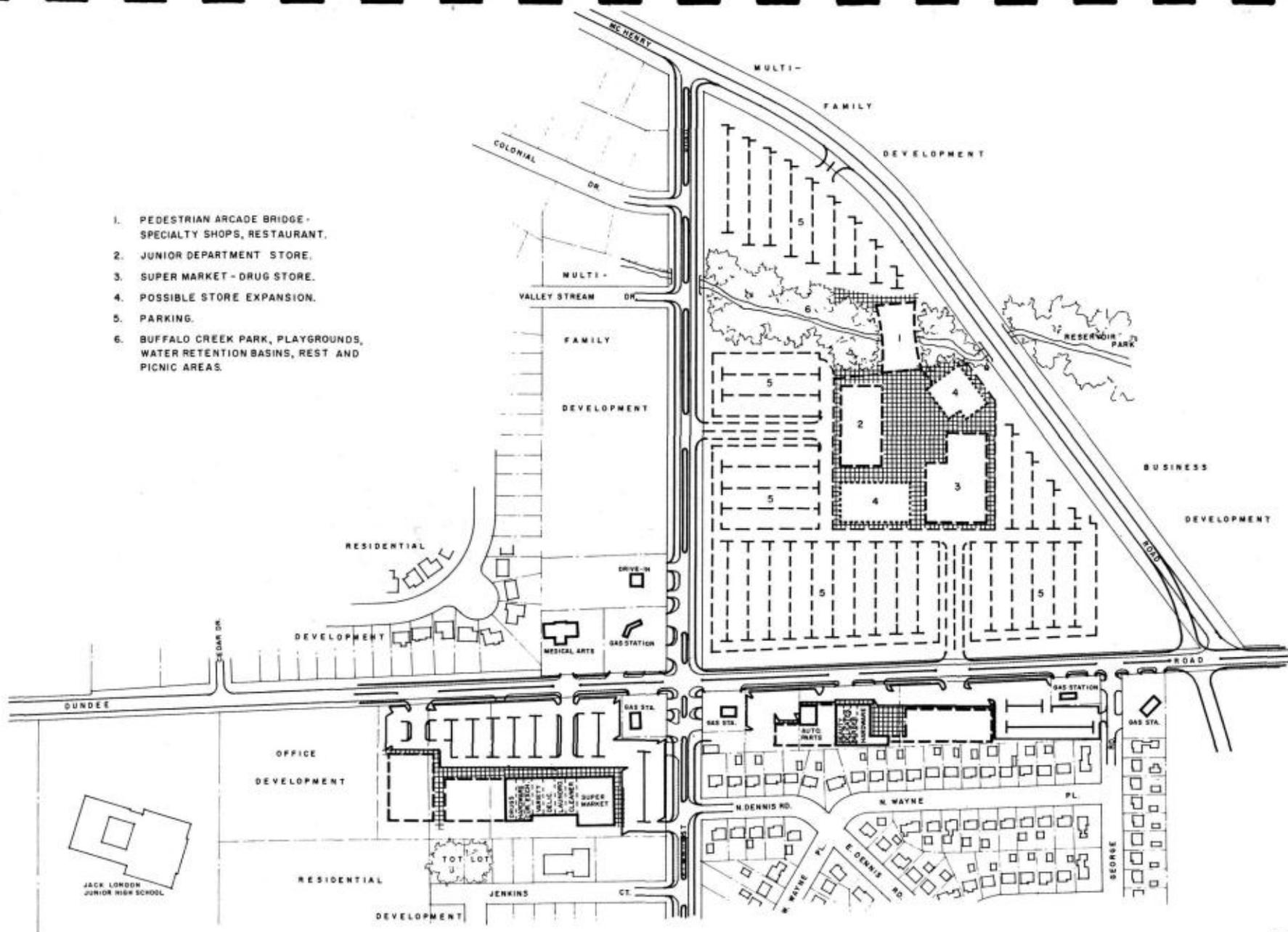
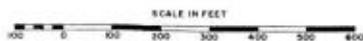


FIGURE 13

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN REGENERATION ADMINISTRATION OF HOUSING AND HOME FINANCE AGENCY, UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1964, AS AMENDED.



M. F. RUPP ASSOCIATES
PLANNING CONSULTANTS - CHICAGO, ILL.

**SUGGESTED DEVELOPMENT
BUFFALO CREEK SHOPPING CENTER**

- (3) Tying the proposed parking areas north of Buffalo Creek to the larger area south of the creek by a pedestrian bridge structure which will also contain specialty shops, restaurants, etc. This bridge-building would be similar to the "Old London Bridge" and the bridges presently existing in Venice.

The center is not a regional center such as Randhurst. It is, however, contemplated to be larger than the present neighborhood center. It would contain, in addition to the supermarket, a drug store, variety store, and junior department store, thereby providing a wider range of merchandise. If properly designed, it could be a very attractive center. The creek area itself would be used for flood retention basins, so that the flood plain area can be utilized for playgrounds for children and rest areas for shoppers, including picnic tables, etc.

A practical limitation of additional retail space in small areas is imposed by the proposed zoning ordinance parking provision. The parking requirements impose an absolute minimum of the number of car spaces for each type of business activity but also require adequate spaces to handle all of the vehicles using a business area. Enforcement of this provision will preclude the construction of additional retail space if parking is inadequate or would become inadequate with the construction or use of the proposed space.

Space for non-retail commercial activities is also needed. Professional offices, contractors' offices, plumbing and heating supply stores, are examples of business activities that do not require prime business locations (as required, for example, by drug and apparel stores), but they should be in proximity to other retail activities and have similar supporting features of circulation and adequate parking. Generally, these non-retail activities create their own clientele who are willing to make the extra effort to obtain the goods or service.

Wheeling currently has more than adequate commercial areas to handle the anticipated demand for this type of non-retail activity. Present strip zoning along Milwaukee Avenue and to a lesser extent along Dundee Road can be utilized for this "general business" type of development. Additional districts throughout the planning area may be necessary as the population increases. All "general business" development should have controls to establish adequate off-street parking facilities and to control access to the principal traffic routes to eliminate or reduce conflicts along the street edge.

The eventual development of the business zoning now stripped along the highways will intensify the conflicts between strip business and adjoining uses, especially in areas where the street frontage is zoned for business and where the area immediately to the rear is zoned for low density residential uses. Therefore, in the final land use plan for the development of the planning area, some modification, elimination, or relocation of existing strip business zoning has been made to minimize these use conflicts.

Appearance is an important part of effective merchandising. The emphasis placed on good appearance is well-illustrated in the regional shopping centers, such as Old Orchard, Randhurst and Oakbrook, and in such smaller centers as Golf Mill. A great deal of skill in design and substantial allocations of money have been used to insure the attractiveness of these areas.

Definite steps should be taken to encourage the good appearance of the community as a whole, not only of the commercial areas. Besides the obvious need for more trees, shrubs and grass, there should be included a plan for maintaining existing parkways, a clear definition of "roadway", "driveway" and "parkway", the use of appropriate street furniture, coordinated color schemes, and good architectural design. As yet, Illinois communities have not been given a clear-cut legal authorization to control appearance, although various areas of control have been established which can lead to good community appearance.

Regulations for commercial areas can limit size, type and locations of signs and billboards, require adequate underground facilities for surface drainage and maintenance of surface improvements, designate installation of curbs, control curb openings, require adequate parking and surfacing of parking areas, and can also require landscaping of non-used areas. All of these regulations could assist the Village in combatting visual blight.

Physical improvements are not enough to solve all retail business area problems.

The improvements suggested will provide the physical comforts of shopping in one of the Wheeling centers: ease of access, parking, and attractiveness of the area. They will not provide all of the means to compete effectively with other areas. The merchants will have to provide a wide range of merchandise priced competitively, pleasant surroundings, and good service to supplement the physical structures and layouts, to be successful. The importance of the merchandising function cannot be stressed too strongly. Regardless of the physical appearance of the centers, the merchants still must satisfy the customers.

INDUSTRY

Wheeling's industrial development⁽¹⁾ closely parallels its residential growth, which reflects its position in the metropolitan area. Similarly, Wheeling's future growth will depend on the economic vitality of the metropolitan area and the framework the Village creates to encourage industrial expansion.

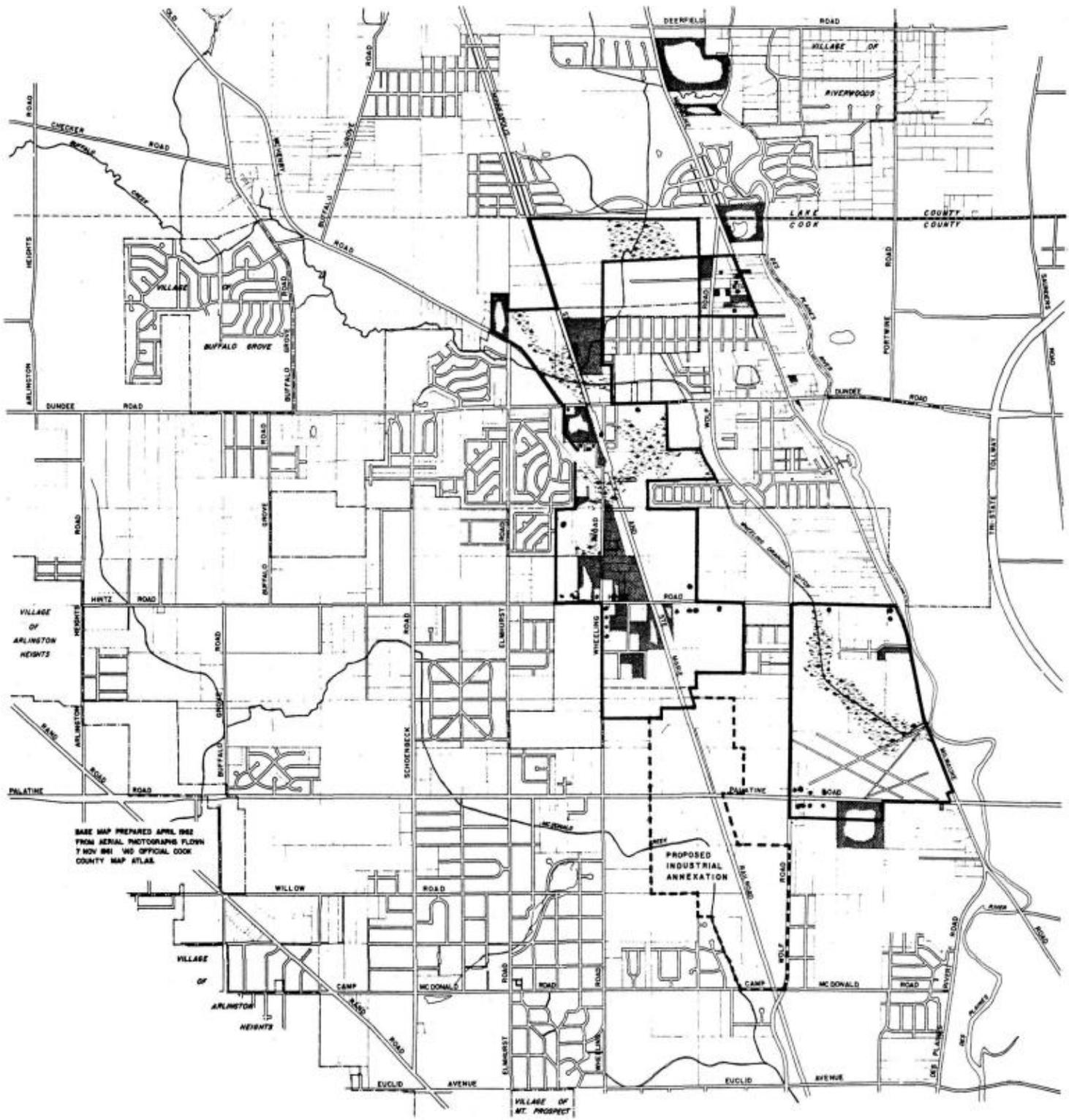
Wheeling's industrial complex has expanded from 3 plants with 58 employes (in 1955) to some 28 plants with over 1,660 employes (in 1963). This increase in industrial growth compares favorably with all of the surrounding communities.

It is to Wheeling's advantage, since it desires industrial development, to be in a section of the metropolitan area preferred by and experiencing industrial development. Employment figures indicated that in the metropolitan area, employment rose 6%, in suburban Cook County, 44%, and in the northwest section of Cook County, 206%. Wheeling is located in this area and experienced an estimated increase in employment of 2,700%.

Mapping of industrial plant expansions, relocations, and new plant locations by the Chicago Association of Commerce and Industry also indicate a definite preference for the north, northwest and west suburban areas. Not only do these facts indicate that development is taking place in the northwest suburban area, but also, information for various development groups and industrial concerns shows that there is a definite preference to locate or relocate plants in the area of which Wheeling is a part.

Wheeling and its planning area also have adequate vacant lands zoned for industrial uses. In August, 1962, only about 10% of Wheeling's 818 acres of industrially zoned property was being used for industry (86 acres). (See Figure 14). The total planning area, including Wheeling, utilized only 109 acres of the 1,513 acres zoned for industrial purposes. In addition, almost 500 acres have since been annexed to Wheeling, all vacant, and all zoned for industrial uses. Based on the land available in 1962, and assuming that about 20% will be used for streets, railroad spurs, and other public areas, Wheeling has about 100 and the planning area 160 more industrial sites at the present average plant site size of nine (9) acres.

(1) See Preliminary Planning Report 6, "Industrial Development", July 1963.



BASE MAP PREPARED APRIL 1962 FROM AERIAL PHOTOGRAPHS FLOWN 7 NOV 1961 AND OFFICIAL COOK COUNTY MAP ATLAS

- AREA ZONED
- AREA UTILIZED
- AREA UTILIZED (OPEN STORAGE OR OPERATION)
- NON-INDUSTRIAL STRUCTURE
- FLOOD HAZARD AREA

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN REDEVELOPMENT ADMINISTRATION OF THE HOUSING AND HOME FINANCE AGENCY UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.

SCALE IN FEET
0 1000 2000 3000 4000 5000

M. F. RUPP ASSOCIATES
PLANNING CONSULTANTS - CHICAGO, ILLINOIS

FIGURE 14

INDUSTRIALLY ZONED AND UTILIZED AREAS

Again, as in residential development, some of the potential development areas reflect hazards from flooding and in a few instances problems of unstable soils -- the unstable soils usually being adjacent to the flood hazard areas. Except for these features, the terrain is desirable for development purposes, being level and generally composed of stable soils.

Wheeling's industrial land uses include, not only operations that make, manufacture, or process a product (not including retail business), but also such industrial types as quarries and contractors' storage yards. Of the 38 industrial activities, the principal uses were for fabricating metal products (10), contractors' or material yards (open storage (6), and electrical machinery or appliances and plastics (5) fields.

The characteristics of Wheeling's larger firms (those employing 15 or more) were determined by a review of existing data, photographs, public records, summarized information, and by personal interviews with company management. Information about the site, structure and employment is shown in Table 9.

TABLE 9
DENSITY CHARACTERISTICS
WHEELING'S LARGEST ESTABLISHMENTS-1963

<u>Plant</u>	<u>Approximate Ground Area of Structure* (square feet)</u>	<u>Site Area in A.</u>	<u>Number of Employees</u>	<u>Ground Area Ratio**</u>	<u>Employees per site acre</u>	<u>Employees per 1000 ft. of Structure</u>
A	235,000	38.0	370	1:7	9.7	1.57
B	110,900	5.1	400	1:2	78.2	3.60
C	88,200	4.8	200	1:2.4	41.4	2.27
D	46,800	42.8	70	1:39.7	1.6	1.50
E	43,800	2.5	150	1:2.5	60.0	3.42
F	42,700	2.7	80	1:2.7	29.5	1.87
G	36,000	2.9	62	1:3.5	21.0	1.72
H	34,000	2.7	60	1:3.5	22.6	1.76
I	27,000	4.2	25	1:6.8	4.2	.93
J	26,000	1.2	45	1:2	37.0	1.73
K	17,800	1.6	40	1:3.9	25.4	2.25
L	16,900	1.9	120	1:4.9	62.0	7.1
M	14,500	4.6	20	1:14	4.2	1.37
N	13,400	1.33	-	1:4.3	-	-
O	12,900	1.2	-	1:4	-	-
P	12,500	2.1	33	1:7.3	15.0	2.64
Q	12,000	1.0	60	1:3.7	59.0	5.00
R	3,200	.5	20	1:6.7	40.0	6.25

*Ground area actually covered by structure; may be less than actual floor area of structure if multiple story plant.

**Ratio of ground area of structure to site area.

One of the more significant facts is that the plants with the greatest coverage of the site by buildings equal only about 50% of the site area. These (some 18 firms) are tied to the metropolitan or midwest area for markets, raw materials, and labor.

Information from plant management indicated:

1. 70% of the plants' products are sold within 500 miles of Chicago; of this, 20% is sold in the metropolitan area.
2. Only one firm gets a major share of its raw material imports from outside the same market area (MICA from New England).
3. Wheeling's plants employ approximately 58% males and 42% females.
4. Individual plants vary from 2% to 60% of female employees.
5. The distribution of employees by skills in Wheeling plants averages as follows:

Management and professional	12%
Clerical	8%
Skilled Workers	40%
Semi-skilled Workers	40%

6. Only about 8% of the employed persons lived in the planning area; the tendency has been that the longer the plant has been located in Wheeling, the shorter the commuting distance.
7. The persons employed by these 18 plants are approximately 90% of Wheeling's industrially employed.

The opinions of the persons interviewed as to Wheeling's suitability for industry are shown in Table 10.

The main reasons indicated for their plants having moved to Wheeling are: no union activity; small-town location near Chicago, and, for those establishments in the Wheeling industrial centers: the availability of a site and building on a leased basis.

Of the 15 plants where management was interviewed, only 3 establishments stated that their present site was their original location. Of the remaining 13, 8 relocated from Chicago and 4 from surrounding areas. One of them chose Wheeling because it was close to its original location, and a site and building was available on a workable lease arrangement.

Markets, labor, transportation, and raw materials are principal factors in selecting an industrial plant location, but these factors vary in priority, depending upon the company. A large employer will be more interested in labor, its availability and cost,

TABLE 10
OPINIONS OF MANAGEMENT PERSONNEL ON VARIOUS ASPECTS OF
WHEELING'S SUITABILITY FOR INDUSTRY

	<u>Poor</u>	<u>Fair</u>	<u>Good</u>	<u>Excellent</u>
Public transportation available to and from area	X			
Quantity of labor available		X	to	X
Quality of labor available				X
Water Supply		X		
Sewage-handling capacity		X		
Service on shipment of materials				X
Raw land costs		X		
Highway network to area			X	to X
Living conditions in area		X		
Community attitude towards industry				X
Taxes in relation to services received	X			
Schools - quality				X
Industrial zoning regulations		X		

union activity, and skills required. A small employer, however, may be more concerned with proximity to markets. Illinois and Wheeling seem to meet these primary location conditions as well as having industrially zoned sites available.

Added to these factors are the advantage of leasing, which is available in the Wheeling industrial center, the excellent transportation facilities of railroad and highway, and the expressed desire of Wheeling for industrial growth. Leasing arrangements offer a tax advantage and provide a means of obtaining adequate plant space with little or no capital investment. The excellent transportation facilities for goods were mentioned as a factor in the plants' having located in Wheeling notwithstanding a small penalty charge of 1-2% for being outside the switching district and Chicago's commercial zone. Statements by political leaders and the attention given industrial development by the Village's planning groups have strongly indicated that Wheeling wants industrial growth.

Furthermore, actions have occurred that strengthen this attitude, such as:

1. Agreements have been worked out for financing sewer and water facilities.

2. Attempts have been made to meet surface water problems.
3. There have been close working relationships between the Village's planning groups and industrial subdividers.
4. Sound industrial zoning provisions that meet the approval of industrial developers have been prepared.
5. A citizens' committee encouraging industrial development has been formed.
6. The response to a Jaycees' public opinion survey has been published, indicating the need for business and industrial expansion.

Even with its desire for industrial growth, Wheeling will have to take steps to meet the problem of an inadequate water supply, to coordinate closely the construction of sanitary sewers, to provide solutions for an increasing storm drainage problem, and to provide adequate all-weather roads to future growth areas.

Wheeling has initiated steps to encourage industrial growth. With the adoption of the revised Subdivision Ordinance, adequate streets and pavement design will be assured in new industrial subdivisions. However, existing streets--notably, Wheeling Avenue--will have to be improved to provide an all-weather, smooth-surfaced access to all of Wheeling's existing major industrial plants outside the Wheeling industrial center. The Village has initiated the improvement of these streets following the approved Capital Improvement Budget.

Wheeling is taking action to assure good industrial development. An amendment to the Zoning Ordinance has corrected some of the existing and potential industrial problems, such as parking, industrial plant nuisances, locations in proximity to residential areas, and density controls on industrially zoned site development.

Provision for adequate parking space is required with the construction of each building. The Zoning Ordinance requires sufficient parking spaces to handle all of the motor vehicles of employees and visitors as well as those used in the operation of a business. In addition, an absolute number of spaces, based on the number of employees, is required.

The Industrial Zoning District regulations contain a basic series of nuisance standards that apply to all industrial districts. However, the I-1 District prohibits outdoor storage and requires that the smoke, noise, glare, heat, vibration, etc., standards be contained within the property lines. The I-2 regulations are similar

but permit outside storage. The I-3 regulations also permit outside storage but increase the limits of the nuisance regulations to the boundaries of the zoning district rather than the boundaries of the site on which the plant is located.

The zoning districts have been designed to provide protection to adjoining residential or public areas. For instance, the I-3 District may only be used where it adjoins other industrial areas. The I-1 and I-2 District regulations provide for additional setbacks of buildings, and an increased setback is required if off-street parking or loading is permitted and adjoins or is across the street from residential or public areas.

The density of development is controlled in the proposed amendment by (1) establishing the setback from a street according to street classification, such as major, secondary or minor, and (2) requiring larger lot sizes and establishing a lower height limit in the I-1 area, which will normally adjoin residential areas; lot coverage, however, is the same in every district.

The outlook for industrial growth is good, as indicated by:

1. Wheeling's location in the Chicago Metropolitan area and the midwest region in terms of markets, labor supply, and accessibility of raw material or component parts.
2. Wheeling's location northwest of Chicago in the path of industrial growth.
3. Availability of large tracts of industrially zoned property.
4. Development plans expressed by individual firms and industrial site development planned by realtors in the Wheeling area.
5. Establishment of zoning regulations which are acceptable to industrial land developers.
6. Desire for industry, actively expressed by the Wheeling governmental administration in working out agreements for the extension of municipal utilities. However, actual growth will be dependent upon availability of these utilities.
7. Increased labor resources from an ever-increasing population with moderate incomes.
8. A continually improving highway transportation network for the movement of goods and employees.
9. Proximity to major transportation facilities, such as O'Hare air field.

10. Proximity to Chicago.
11. Proximity to a wide range of housing within reasonably short commuting time.
12. General desire and need for industrial development in the community.

Future space needs for industry in the entire north, west, and northwestern suburban areas will continue as long as technologies change and the need for more adequate sites with reserve space for expansion and parking continues.

Future areas have been designated for industrial use on the Future Land Use map. These areas tend to be (a) those on which commitments have been made for industrial use and which are not inconsistent with the over-all plan, (b) those which, because of present development, are logical for industrial uses, and (c) those which provide for a moderate expansion of the industrial areas or replacement of areas not suited to industrial development. However, it is anticipated that because of the scattered residential growth within the limits of the Village, any new major industrial area will be located outside the present corporate limits.

SCHOOLS

School planning⁽¹⁾ within the comprehensive planning program is concerned with the timely provision of sites for school facilities to meet population changes, maintain a proper spatial distribution, minimize transportation costs, insure safety, and provide adequate areas for auxiliary uses.

There are no formulae, scientific projections, or fool-proof solutions to problems involving ever-changing factors, and long-range school planning is no exception. Given a mobile population, nearly every governmental and economic action or trend can have an effect on the need for school facilities.

The school recommendations are all confined to public elementary educational facilities provided by School District No. 21. However, private educational facilities available in Wheeling were considered.

Timing is critical to school planning, for neither over-crowded nor empty classrooms are desirable. Adequate classrooms and well-qualified teachers should be available when needed. Although maintaining an appraisal of the changing population and school enrollment situation requires constant vigilance and cooperation among the Village Board, School Board, Plan Commission, Park Commission, and other responsible agencies, nevertheless, up-to-date knowledge of land developments, plans and proposals, and the exchange of such information between the groups concerned, are the best safeguards against unpreparedness for rapid residential development.

School District No. 21 serves a 7,600-acre area which includes the Village of Wheeling and Buffalo Grove. The district, a separate, autonomous governing body with its own power of taxation, had a 1960 population of 11,814. The school district boundaries, and the locations of the district's four elementary and one junior high school as of summer, 1963, are shown in Figure 15, which also shows graphically some of the other factors of school site selection. (A summary of site and school plant facilities by school is contained in Table 11.)

School planning considerations included:

In School District No. 21, an ultimate population figure of about 100,000 was used. (Figure 15 indicates the distribution of the population in terms of possible "home sites".)

(1) See Preliminary Planning Report 7, "Schools", August 1963.

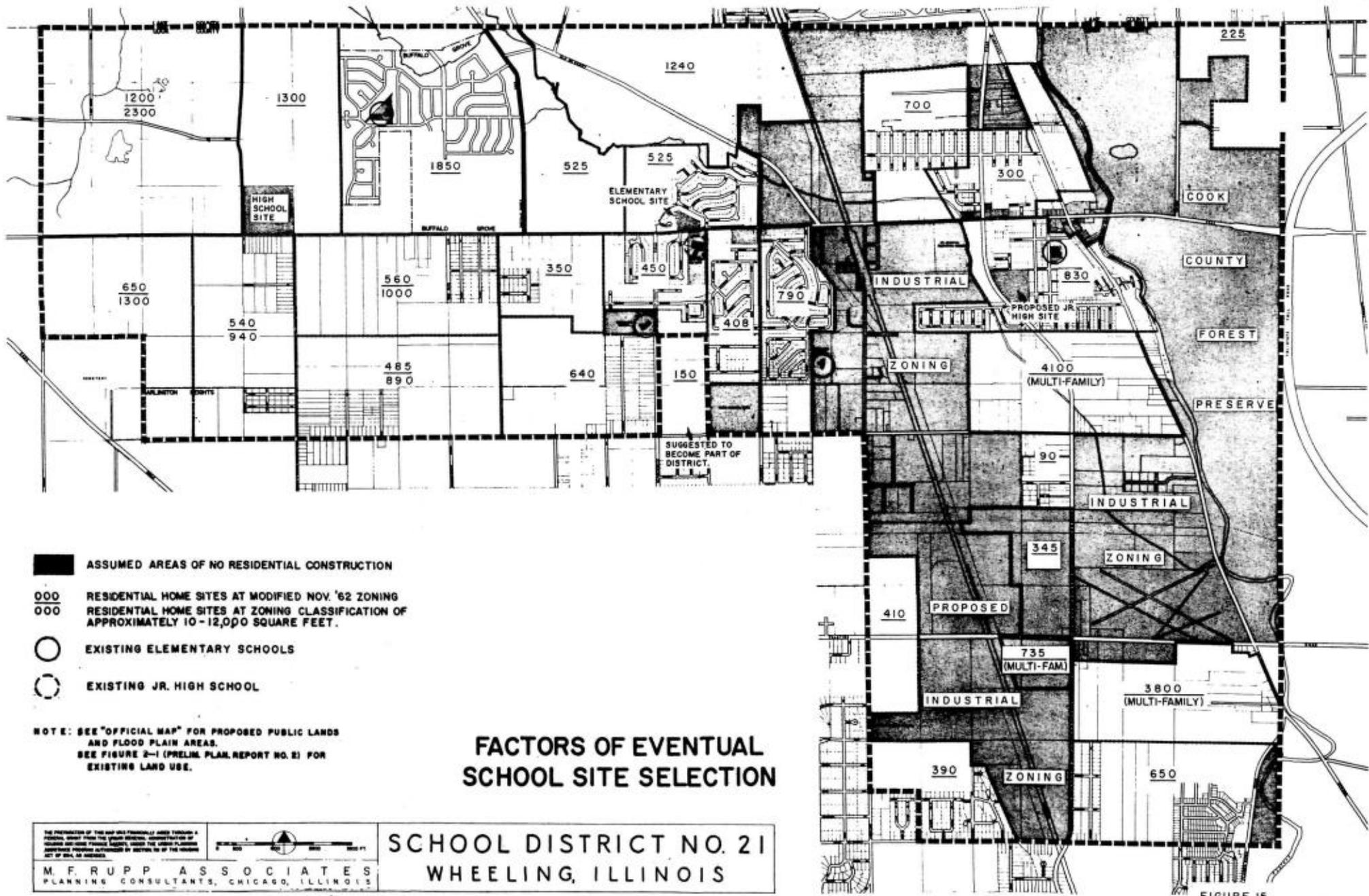


FIGURE 15

**FACTORS OF EVENTUAL
SCHOOL SITE SELECTION**

- ASSUMED AREAS OF NO RESIDENTIAL CONSTRUCTION
- RESIDENTIAL HOME SITES AT MODIFIED NOV. '62 ZONING
- RESIDENTIAL HOME SITES AT ZONING CLASSIFICATION OF APPROXIMATELY 10 - 12,000 SQUARE FEET.
- EXISTING ELEMENTARY SCHOOLS
- EXISTING JR. HIGH SCHOOL

NOTE: SEE "OFFICIAL MAP" FOR PROPOSED PUBLIC LANDS AND FLOOD PLAIN AREAS.
SEE FIGURE 2-1 (PRELIM. PLAN, REPORT NO. 2) FOR EXISTING LAND USE.

THE PREPARATION OF THIS MAP WAS FINANCIALLY ASSISTED THROUGH A FUNDING AGREEMENT FROM THE GREAT LAKES DEVELOPMENT AUTHORITY AS PART OF THE GREAT LAKES DEVELOPMENT PROGRAM. UNDER THE GREAT LAKES DEVELOPMENT PROGRAM, DEVELOPMENT IS FINANCED BY RECEIVING THE BENEFIT OF THE ACT OF 1964, AS AMENDED.

M. FRUPP ASSOCIATES
PLANNING CONSULTANTS, CHICAGO, ILLINOIS

SCHOOL DISTRICT NO. 21
WHEELING, ILLINOIS

School Name	Grades Served	Site Size (Acres)	Year Built	Additions		Total Number Classrooms*	Capacity at 30 Pupils/Rm.	1962 Fall Enrollment (est.)	Special Facilities (see notes)
				Year	Rooms				
WALT WHITMAN	K-5	6	1927		2	25	750	775	1,2,3
				1954	18				
				1959	3				
				1963	2**				
CARL SANDBURG	K-6	23	1956		9	17	510	473	1,4
				1959	8				
MARK TWAIN	K-5	12	1957		12	18	540	501	1,3,5
				1961	6				
					1 (handicapped)				
L. M. ALCOTT	K-6	6	1960		10	20	600	667	1,4
				1962	10				
JACK LONDON JR. HIGH	6-8	16	1961		14	(G.6) 24(G.7,8)	120 600	552	1,2,3,6
				1962	10				
Administration Building	Overflow	Jr. High	1963		2	2	-	-	

*Excluding special rooms.

**Remodeling of business office area.

References to special facilities:

- 1 - Library, all-purpose room or gym, speech correction lab, or infirmary
- 2 - Auditorium
- 3 - Braille resource
- 4 - Remedial reading room
- 5 - Multiple handicapped
- 6 - Band, language laboratory

SUMMARY OF PHYSICAL FACILITIES, BY SCHOOL

TABLE 11

The conservatively estimated annual rate of growth for the school district was 2,000 persons, or slightly less than 500 families per year.

School and U. S. Census figures indicated school enrollments on an individual household basis would be .9 elementary school students for each house, .5 elementary students for each apartment, and .2 junior high school students for each house.

Future school needs were determined on the basis of existing zoning (1963) and the maximum densities allowed by each residential classification. (Figure 15 also indicates those areas where no residential development was expected to take place.)

The potential population also reflected anticipated public land areas. No students are expected from park areas, forest preserves, civic center area, school sites, or flood plain areas.

Modifications which could result from changes in land use were recognized but not made, i.e., a junior college site of some 300 acres, or the changes of zoning which would permit increased residential densities.

A high percentage (45%) of the total population was 14 years of age or under, all of which are potential school students. Figure 16 illustrates the large number of children under 5 years of age who will be starting school in 1964 and later years.

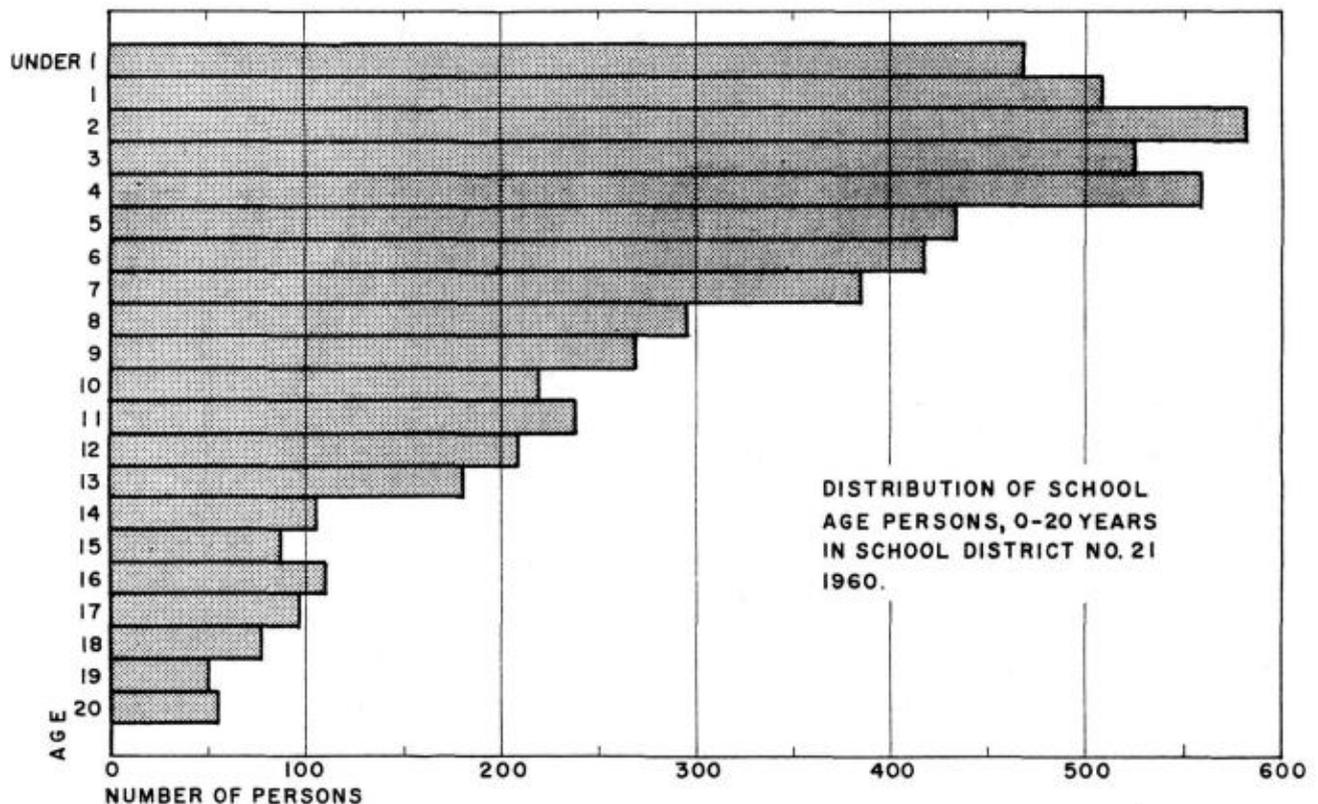


FIGURE 16

On the other hand, from experience of the district, the school census, and from plans of the private schools in the area, some 30% of the children will attend private schools and will not have to be educated in the public school system.

With the prospect of a continuing problem of providing adequate teaching space, realistic goals for the physical facilities were used. These site and building standards were:

- To approach the State recommended classroom load standards, if at all possible (30 students per room).
- To try to limit elementary schools to 20 classrooms, or 560 students, and junior high schools to about 1,000 students.
- To provide as large as possible school sites consistent with the standards generally accepted (National Council on Schoolhouse Construction) and within the financial resources of the district. Elementary sites planned approached 80-90% of the recommended site size for elementary schools, while junior high schools approached two-thirds of the nationally recommended site sizes.
- Wherever possible, to combine school sites with a park site, so that even if the specific ownership of the park district and school district may not be at the desired level, the combined site, used jointly, would meet the needs of each district.
- Similarly, recreation facilities in conjunction with each school to be jointly utilized, owned and developed, by the School and Park Districts.

The recommendations regarding schools are primarily directed to the School Board which does not have an official connection with the Village and its planning function. Yet, the cooperation and close working relationship of the School District, and Village, as well as the Park District, must be increased to provide adequate consideration of all elements of the planning program.

The approximate locations of new schools are shown in Figure 17. If development takes place as projected, a minimum of 24 new elementary schools (4 existing) and 2 new junior high schools (1 existing) will be needed over a period of years. It is not anticipated that all these sites will be acquired immediately but that they would be acquired in advance of the actual need.

The order in which sites must be acquired will depend upon where development takes place and the need arises. It is only through close cooperation that the School District and the Village can foresee where housing development will create school demands. On the Official Map, as adopted, the Village can show the desired locations of most of these proposed sites. The inclusion of these sites on the Official Map

precludes private development for one year, during which time steps can be taken to acquire them for public use. A continued close School-Village relationship must be maintained to provide for agreed relocations of future schools, these changes being reflected on the Official Map.

An interest in planning and zoning matters by the School District must be maintained, not only with the Village of Wheeling, but also with Cook County and the other municipalities which, in exercising the planning prerogatives in the one and one-half mile area, can effect the school planning of the district. If for no other reason, the School District will have to reflect or at least consider these modifications in revising or maintaining future school development plans.

Although it would be desirable to replace the basement classrooms in the Whitman School, the practical difficulty of providing financing to meet the classroom expansion precludes the immediate consideration of replacing these rooms.

One of the objectives of the school site locations is to eliminate ultimately the need for transportation of students. This, however, must be a long-range goal and should not be a primary objective as long as the most efficient use of schools and staff can be obtained by transporting students to less crowded schools. This is especially true because of the unpredictability of where private housing development will occur and because of small, outlying areas which by themselves may not warrant the construction of a school.

At the time of the Preliminary Planning Report No. 7, an immediate expansion program was needed. This need has been met by the approval of a bond issue to construct new schools or additions to existing schools. However, with the continuing growth of Wheeling, the need for new schools will be constant for several years and the citizens will be asked to provide additional financing regularly in the future. However, with all the capital improvement needs of the School District, the Park District and the Village, coordinated long-term fiscal planning between the three main Village governments must be undertaken to attempt to level out the overall tax demands on the Village resident.

Another major recommendation of the preliminary planning report--a joint school-park-land acquisition and use program--has been realized with the recent school-park agreement carrying out the basic ideas of this approach.

RECREATION

Recreation is regarded as a basic need by modern living standards. The large percentage of Wheeling's children and young adult population calls for substantial recreation areas and corresponding activities. Indeed, considering an increasingly shorter work week and greater number of retirees, more and more of Wheeling's citizens have time to enjoy leisure activities.

Planning for the location of adequate park sites⁽¹⁾ and open recreational areas, consistent with potential population demands, is a necessary phase of the comprehensive planning program. Different types of recreational facilities will be needed to satisfy the requirements of various age groups. Recommended standards of the National Recreation Association are used by communities, modified usually to meet local conditions. The generally accepted standard is: 1 acre per 100 people⁽²⁾. However, in recent years, this standard has been modified to represent the area for "active recreational activities" as opposed to "passive" recreation. The strict application of this standard to the planning area would suggest eventually 1,170 acres of public land for recreational purposes, with 175 acres in the present Village and 169 acres within the present park district boundaries.

Active play areas (tot-lots) for preschool and small children should not be provided as separate public areas so long as swings, sand boxes and play apparatus are made a part of other larger facilities. Playgrounds provide a play center for children through early teens and may be extensively developed or simply open land that is set aside for informal play. Teenagers and adults participating in organized activities, such as baseball, softball, or tennis, require larger sized areas, usually called playfields. Other park areas are also needed for informal recreation, including picnicking, hiking, etc. Indoor recreation centers would serve all age groups with social, educational or recreational activities.

Table 12 lists the standards utilized for recreational facilities.

Present recreation and park facilities are being provided by several governmental and private organizations. The Wheeling Township (Rural) Park District has been in existence for many years and included all of the area in the planning area.

- (1) See "Parks" section, Preliminary Planning Report 8, "Community Facilities".
- (2) See "Open Space Needs in Northeastern Illinois", 1963, Northeastern Illinois Planning Commission, Chicago, Illinois.

Area	Service Area	Population Served Per Acre	Total Population Served	Size (in acres)		Application to Wheeling
				Minimum	Desirable	
Tot Lot	as needed	-	-	1/14*	1/8**	Provide as part of larger facility only. Require as integral part of multi-family area developments.
Playgrounds	1/4-1/2 mile	800	to 5,000	2	4	Actual size may vary to serve density of population. May exceed 4 acres to get usable area.
Playfields	1 mile	800	not to exceed 15/20 20,000	-	-	Uses require relatively large site and contain playground or tot lot features.
Major Parks	Areawide	-	-	-	-	Large enough to provide uses planned for it. Uses generally will be "one of a kind."
Recreation Centers	as needed	-	-	-	-	Eventual development to be in school or other civic bldgs., or as joint use bldgs. in larger park areas.
Swimming Pools	as needed	-	30,000	3	6	Year around operating in enclosed building or by use of pools in junior high or high school buildings.

*3,000 sq.ft.

**5,400 sq.ft.

STANDARDS FOR RECREATIONAL FACILITIES
TABLE 12

However, since this District was inactive, and because the need for park and recreation facilities was recognized, the present Wheeling Park District (Village) was formed in 1960 of areas disconnected from the Township District. The limits of this District as of 1963 are shown in Figure 18.

The Village Park District offers a summer and winter recreational program, utilizing school buildings and grounds. The summer activities are primarily directed to the children of the community. The winter program broadens the scope to include a greater number of adult activities. The total Park District properties in 1963 were three small lots. Two additional lots were leased from the library.

The largest owner of public open space in the planning area is the Cook County Forest Preserve. Its properties extend along the entire east edge of the planning area (Figure 18) and are undeveloped except for picnic areas, a camp site and nature area.

The swimming pool was built and is operated by a non-profit corporation. The Chamber of Commerce donated a portion of its park for the swimming pool site. Little League Baseball operates independently of other organizations but on existing school and Chamber of Commerce properties. The Amvets have also developed a baseball diamond which is used intensively.

In addition to these, the Northeastern Illinois Planning Commission has provided planning services to the area.

The determination of the need for, the number, location and distribution of parks and open spaces includes many factors. Primarily, the demand for park areas is represented by the eventual population and its distribution in the planning area. A potential population of 117,000 in the planning area, with 18,000 and 17,000 in the present limits (1964) of the Village and Park District respectively, is anticipated. With the total planning area growing at the conservative rate of 2,000 per year, it is anticipated that the Village and Park District will be practically at these population limits by 1974.

The selection of area was made to conform as nearly as possible with the standards outlined, to serve the recreation program and activities envisioned by the Park District, and to reflect the availability of adequate sized sites.

The eventual incorporation of existing private facilities (swimming pool and golf course, for example), if necessary, in order to avoid the possibility that these areas would be used for purposes other than open spaces, was a paramount consideration. Geographic, geological and terrain features were utilized which favored development as public open space, yet avoided duplicating other park facilities.

The continuation of joint school-park development and cooperation was a factor, as well as other types of joint uses. Especially where flood hazards were present, flood plains have been utilized as recreational areas, to meet the open space needs of the community and to maintain the natural flood capacities of the streams, alleviating some of the need for expensive flood protection works.

Recognition was also given to the arbitrary boundaries of the Village Park District and its financial limitations.

The forest preserve areas were not included in meeting the needs of the local community, as they are designed to meet the needs of the Cook County area. In fact, the report by the Northeastern Illinois Planning Commission, "Open Space Needs in Northeastern Illinois", lists the potential additional needs of the metropolitan area forest preserves as over 40-50,000 acres in the next twenty years. The additional requirements of the State parks in the metropolitan region are 65,000 acres in the same period.

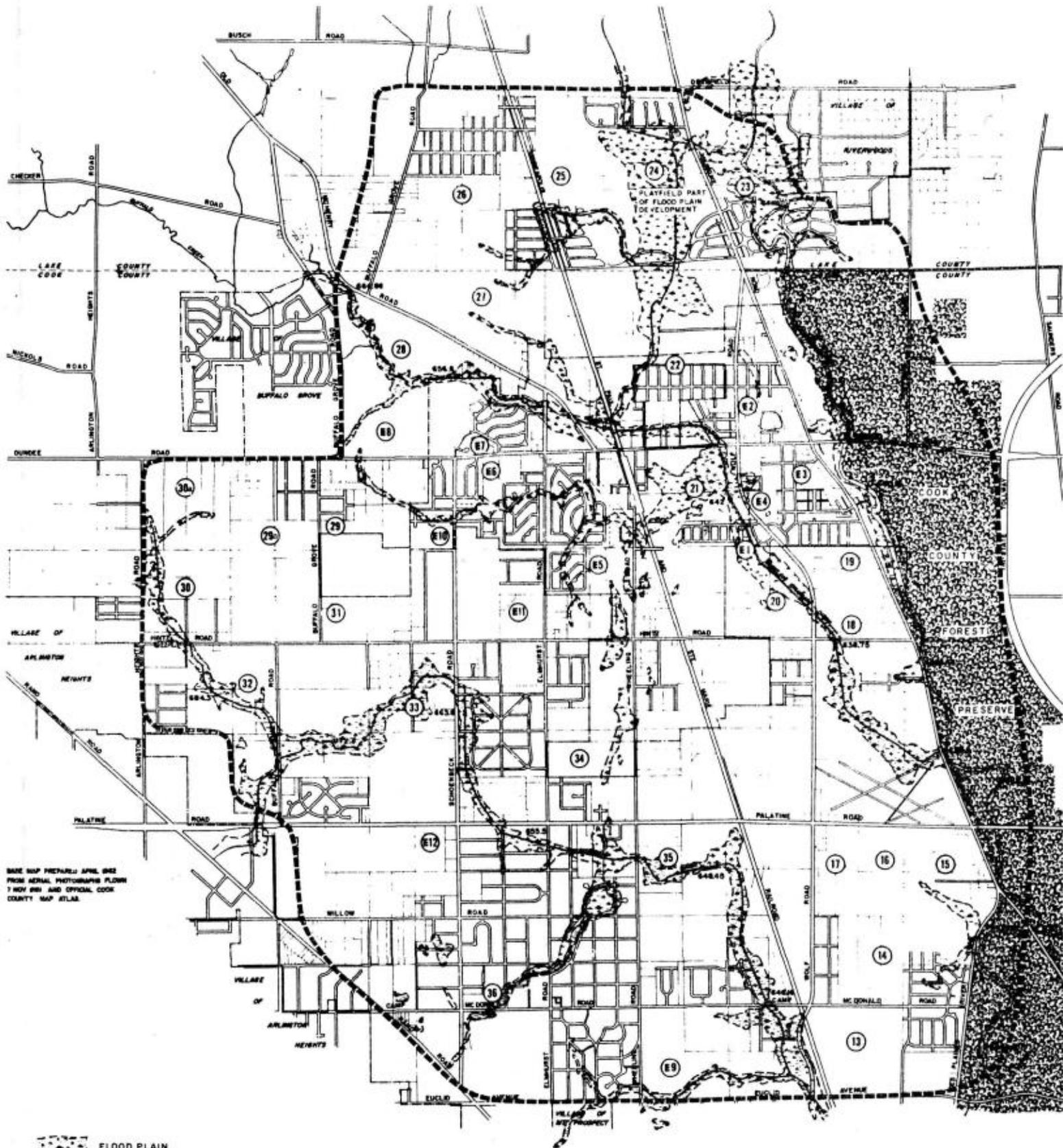
The suggested park facilities are contained in Figure 19. A comparison of the proposed site to the standards suggested is contained in the following summary: ⁽¹⁾

Summary of Land Acquisition

	<u>Total Area</u>	<u>Used for Park Purposes</u>	
Flood Plain	800	640	(assumed 80% of total area usable)
Golf Courses (2, possibly 2 others not included in total)	280	280	
Joint School-Park Site	128*	128*	(Park portion)
Park site only	134.5*	<u>134.5*</u>	
TOTAL area usable for Park purposes,		1,182.5	
Open space required at 1 acre per 100 people and an eventual planning area population of 117,000,		1,170	

*Does not include areas of Flood Plain.

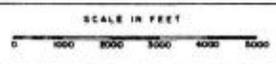
(1) See Table 13, "Summary Schedule-Community Facilities Plan Property Acquisitions".



BASE MAP PREPARED APRIL 1952 FROM AERIAL PHOTOGRAPHIC PLANS 7 NOV 50 AND OFFICIAL COOK COUNTY MAP ATLAS.

-  FLOOD PLAIN
-  ASSUMED PLANNING AREA APPROXIMATELY 1 1/2 MILE EXTRA JURISDICTIONAL AREA (NOT CORRECTED FOR OTHER OFFICIAL PLANS)
-  REFER TO TEXT PRELIMINARY PLAN REPORT NO. 8

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN RENEWAL ADMINISTRATION OF THE HOUSING AND HOME FINANCE AGENCY UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.



M. F. RUPP ASSOCIATES
PLANNING CONSULTANTS - CHICAGO, ILLINOIS

EVENTUAL PARK SITE DEVELOPMENT

FIGURE 19

The implementation of the park development plan will require much effort. The park planning covering the entire planning area is handicapped by the limited area of the Wheeling (Village) Park District. Therefore, definite steps must be taken either to activate the Wheeling Township (Rural) Park District or to effectuate the expansion of the Wheeling (Village) Park District to include, at a minimum, the entire area of the Village.

A first step, and the key to many of the other implementing actions, is a review of these recommended actions and formal adoption of a park development program by the Park Districts. Based on this review, the desired park and open space sites can be shown on the Village's Official Map, and a limited reservation of the sites can be obtained to provide time for acquisition.

Next, coordinate efforts with other governmental bodies in terms of financing, joint development of facilities and especially with surrounding villages, to reflect approved development features on their Official Maps.

Establish a priority listing of land acquisition, but be flexible enough to meet the pressures placed on the Park Districts by subdividers wanting to develop privately proposed sites. To be effective, and in order to meet the site needs as residential development occurs, this will require constant surveillance and revision of the land acquisition program.

Use all of the tools available to the Park Districts with the assistance of other government agencies to accomplish their objectives. These would include:

1. Extensive use of the Official Map provisions.
2. Use of the total revenue possibilities of general tax revenues, bonding resources, use fees, and revenue bonds.
3. Participation in the Federal Government's Land Program under Title VII of the 1961 Housing Act. This program provides Federal grants of 20 to 30 per cent of the cost of title or permanent interest in open space land which has a value for park and recreational purposes, conservation of land or resources, or for historic or scenic purposes. It is relatively recent and is based on development of an open space plan which designates certain areas necessary for preservation of open space. Whereas grants of 20 per cent of the cost of land acquisition are available to communities developing park areas in accordance with an over-all park plan, 30 per cent is available to communities if the parks are part of the regional or metropolitan plan. The Northeastern Illinois Planning Commission has inaugurated the Metropolitan Plan

for the Chicago area, and local districts should incorporate as many major facilities as possible into this over-all plan.

4. The existence of many operating farms in the planning area suggests the use of recent Federal farm legislation which permits and encourages:
 - (a) transfer of farmland to recreational uses (park, lake); grant provides for 50 per cent of conversion costs;
 - (b) provision of outdoor recreational facilities (camp, boat docks, bait factories, etc.) on farmland with long-term loans;
 - (c) creation of lakes, clubs, stables, etc., from large areas of farmland by corporations or associations; large loans.
5. Recognize the importance of land acquisition even to the extent of delaying development of existing park areas, in deference to the purchase of needed sites.
6. Investigate joint purchase, or purchase and repurchase between governmental units of joint use areas, with each agency assuming its fair share of the cost.

Such procedures may open pathways to increased development of recreational facilities, and the various Park Districts should assist in determining needs. All of these implementing factors depend upon the intensive cooperation and coordination of the various governments to accomplish the desired goals.

MAJOR THOROUGHFARES

Planning for transportation⁽¹⁾ and circulation within Wheeling and its regional area involves many modes of travel and a variety of types of rights-of-way. Although the outstanding means of travel in Wheeling is by automobile and truck, other modes of travel, such as bus, rail and plane, cannot be discounted.

Transportation planning involves methods of moving goods and people between various points and providing the necessary land use relationships to enhance and protect transportation facilities and adjoining land uses. To be consistent with the planning goals of the Village, the end result of transportation planning should be a set of minimum transportation facilities designed to perform an economic and safe function for the proposed land uses.

Existing transportation facilities include 4 airports offering scheduled private, charter and business service. The world's busiest airport--O'Hare International--is only 9 miles from Wheeling. The other 3--Pal-Waukee, Chicagoland, and Sky Harbor--are accessible to Wheeling by State highways. No separate heliport exists within the immediate area, nor does one seem to be needed, since Pal-Waukee is located within the planning area.

Railroad freight service to Wheeling customers is handled by one train each day, although the main line track passing through the Village handles 12 scheduled trains each week day, 6 each way.

No railroad passenger service is available in Wheeling. Commuter service to Chicago is available 4-8 miles away at Deerfield, Northbrook, Glenview, Arlington Heights, Mt. Prospect or Des Plaines.

Bus service is provided by 2 franchised lines in accordance with the following schedule (Nov. 1963):

<u>Destination</u>	<u>No. of trips weekdays</u>		<u>Running Time (minutes)</u>
	<u>To</u>	<u>From</u>	
Chicago's "Loop"	12	15	80-85
Des Plaines	8	6	20
Golf Hill Shopping Center	1	1	20
Local Wheeling Route	2	2	20
Evanston	5	7	53

(connects with Chicago Transit Authority)

(1) See Preliminary Planning Report 9, "Transportation and Major Thoroughfare Plan", November 1963.

The major element of the transportation plan is the Major Thoroughfare or Major Street Plan. The railroad must necessarily be integrated into the plan according to its effect upon circulation (street-railroad crossings) and its importance to the movement of goods to customers or potential customers within reasonable proximity to the existing tracks. The importance of air transportation will depend largely upon its future use by Wheeling firms and residents. Wheeling's residents have traditionally used the automobile for transportation needs in the metropolitan area, and it is expected that this trend will continue.

Wheeling's existing street systems consist of approximately a one-mile grid of east-west and north-west travel patterns. The effectiveness of this grid, however, is decreased by the lack of continuity or continuous routes. Only three major streets--Dundee Road, Palatine Road, and Euclid Avenue--provide a continuous east-west route of travel through Wheeling's planning area. Two others--Camp McDonald Road and Hintz Road--extend from the effective east limits to the west limit of the planning area. Two other roads presently terminate at Milwaukee Avenue (Route 21-45): Deerfield Road and County Line Road.

A more limited number passes through the Village on a reasonably continuous north-south route. Milwaukee Avenue (Route 21-45) and Wolf Road roughly parallel each other a mile apart, converging at County Line Road. A third route (State Route 83) also provides through travel from the south to the Wisconsin State line. Limited north-south travel is provided by Wheeling Road, Schoenbeck Road, and Buffalo Grove Road. The remaining streets are short, interrupted by jogs, offsets, undeveloped areas, or blocked by present development. No practical way of connecting two existing streets to provide a continuous route through the planning area is available. The westerly extension of County Line Expressway through the planning area is possible and is being planned.

Entrances and exits to and from Chicago via the Tri-State Tollway are provided at Deerfield Road and Willow-Palatine Roads just outside the planning area. North and south tollway access to Wisconsin is provided at Des Plaines Road (Route 12).

In addition to the lack of many continuous through streets and the lack of possibility to connect existing streets, the improvement of the major thoroughfares will have to overcome several shortcomings. Milwaukee Avenue (Route 21-45), Euclid Avenue, Rand Road (Route 12), all of which border the planning area, and Palatine

Road, are the only major streets in the planning area paved for 4 lanes of traffic. Generally, the streets provide for 2 lanes of traffic on 18-22 feet of pavement width. Newer streets in the Village have pavement widths approaching 30-32 feet, including curbs. The lack of wider paved roadways has resulted in considerable congestion within the Village area. The outlying sections of the planning areas are only now beginning to become congested.

Border friction along Dundee and Milwaukee Roads is a major deterrent to ease of traffic movement. On-street parking, driveway and alley entrances, and commercial loading zones create interruptions to the continuity of traffic flow and rob the major traffic arteries of most of their potential capacity. The elimination of present border friction and the prevention of additional cases must be encouraged. Examples of this potential reduction and the solution to the apartment parking areas along Dundee Road are illustrated in the business district development suggestions.

The substantial increase in the traffic on Dundee Road between Buffalo Grove and Milwaukee Avenue reflects the population growth of the community, and the congestion created can be directly related to residents of Buffalo Grove and Wheeling (Figure 20.) Traffic volumes between 1959 and 1962 show no consistent pattern. They do, however, reflect the growth of the community, construction of Palatine Road, new construction in the area, new shopping center development, the effect of the tollway, and greater reliance on State routes some distance from the tollway.

Shoppers who desire to drive between businesses spread along Dundee Road also tend to increase traffic congestion by "cruising" for parking spaces, or waiting to enter inadequate off-street parking facilities. The problem resulting from the lack of parking spaces can be expected to increase with a continuously expanding population.

The criteria and basis used in the development of the Major Thoroughfare Plan includes population projections, existing transportation studies, State constructed design, present street improvements, the relationships with anticipated future land uses, and limiting existing conditions.

The future traffic patterns were based on a correlation between the proposed future land uses in the planning area and the distribution of the additional population among the suitable vacant areas at the recommended densities of individual areas.

This was then converted to anticipated traffic generation for the projected population.

Basic traffic patterns developed by the Chicago Area Transportation Study and used by the State Division of Highways and Cook County for the design and development of the Metropolitan Highway System were used for the thoroughfare plan's street classifications, design and improvements.⁽²⁾

The Major Thoroughfare Plan (Figure 21) provides for the development of a major street system capable of meeting the future traffic needs efficiently and effectively, encouraging the use of major streets for transportation routes, and preserving the residential characteristics of smaller neighborhoods.

In addition to major limited access expressways, three classifications of streets are illustrated:

Major Arterials: Streets which provide continuity of travel and freedom from hazards and congestion in through-Village and inter-regional traffic movements. The eventual development of a major arterial anticipates 4 traffic lanes of pavement with a median strip, providing either turning lanes or traffic interchanges. The improvement would be a 48-foot pavement on a right-of-way adequate to include the design features of the street but in no case less than 100 feet. No on-street parking would be anticipated.

Secondary Arterials: Streets of importance to intra-village traffic movement that provide easy access to adjoining neighborhoods or to neighboring communities. Eventual improvements would be 4 traffic lanes, 44 feet of pavement, and a minimum right-of-way of 80 feet. No on-street parking would be anticipated.

Collector Streets: Primary streets within a neighborhood unit that are attractively paved, provide reasonable alignment, and that collect traffic from minor streets for travel to secondary or major streets. Eventual development of existing streets and immediate development of new collector streets would be on a minimum right-of-way width of 66 feet.

The pavement improvement is designed for two primary uses: residential and industrial. The residential collector would have a 36-foot pavement and the industrial collector a 44-foot pavement.

The Village's street system will also contain "minor" streets which serve the adjoining properties only and are used as a means of ingress and egress. Future
(2) Volume III Final Report, "Transportation Plan", Chicago Area Transportation Study, April 1962.



EXPRESSWAYS (R.O.W. AS REQUIRED)

- ==== EXISTING
- PROPOSED

MAJOR ARTERIAL (MIN. 100'-0" R.O.W.)

- ==== EXISTING R.O.W.
- NEW LOCATION

SECONDARY ARTERIAL (MIN. 80'-0" R.O.W.)

- ==== EXISTING R.O.W.
- NEW LOCATION

----- COLLECTOR STREET (MIN. 66'-0" R.O.W.)

- GRADE SEPARATION
- ⊙ TRAFFIC INTERCHANGE

FIGURE 21

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN REDEVELOPMENT ADMINISTRATION OF THE HOUSING AND HOME FINANCE AGENCY UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 704 OF THE HOUSING ACT OF 1954, AS AMENDED.



MAJOR THOROUGHFARE PLAN

M. F. RUPP ASSOCIATES
PLANNING CONSULTANTS - CHICAGO, ILLINOIS

minor streets are not shown on the Major Thoroughfare Plan. These streets can be located at the convenience of the subdivider within the framework of the designated streets.

The actual layout of streets reflects the Future Land Use Plan, public open spaces, including park sites, school sites, and flood plain areas. In some areas, Arlington Heights Country Club, as an example, streets have not been indicated because the area is designated as a future public area. The map will have to be amended each time a potential development arises in a proposed public area. The flood plain areas were considered and avoided wherever possible for economy of street construction and to allow for the reduced density of development which is anticipated in flood hazard areas.

Recommended street widths comply with State requirements. Typical street cross-sections are shown in Figure 22. If assistance in the construction of streets is anticipated, either directly from the State or with the use of motor fuel tax funds, construction will have to be in accordance with Figure 22.

Alternate cross-sections are suggested for the major streets. Where existing development precludes acquiring additional right-of-way width, the cross-section showing a 4-foot median strip should be applied. Wherever this cross-section is utilized, at-grade intersections will require additional pavement width to provide for turning lanes. The 16-foot median major street cross-section should be used in all new alignments and in areas where 100-foot rights-of-way can be obtained.

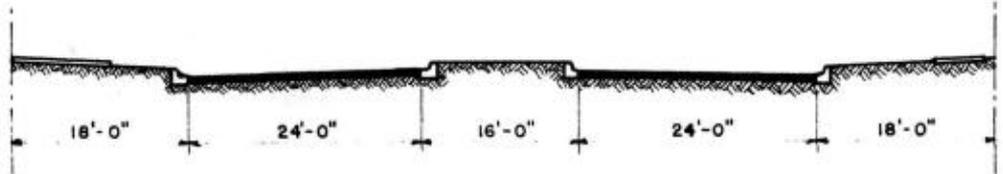
Expressways serve the Wheeling area. Two limited access expressways either exist or are planned within the Wheeling planning area. Another--relocated and improved Route 53--is planned as a north-south expressway just west of the planning area. On the east boundary of the Wheeling area is the Illinois Tri-State Tollway, basically a north-south expressway. In addition, Palatine Road is presently being improved as a partial limited access expressway. Future expressways shown on the map (Figure 21) are:

1. County Line Expressway: Recommended by the Chicago Area Transportation Study, now in active planning stages by the State. The location is shown on the alignment originally proposed; it has a right-of-way width of 300 feet and a limited number of interchanges.
2. Northwest Corridor Expressway: Also proposed by the Chicago Area Transportation Study, development of which is under study although no determination as to location has been made. The general alignment

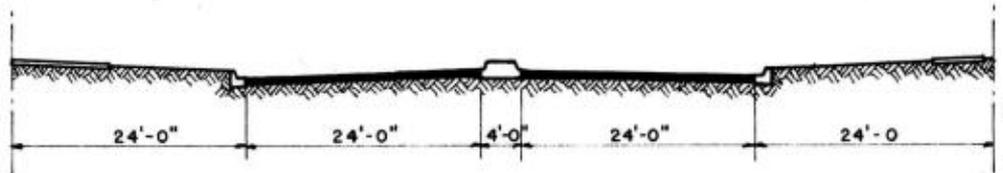
MAJOR STREET

100'-0" RIGHT OF WAY

4 LANES, 16'-0" MEDIAN
CAPACITY: 20,000-24,000
VEHICLES PER DAY.



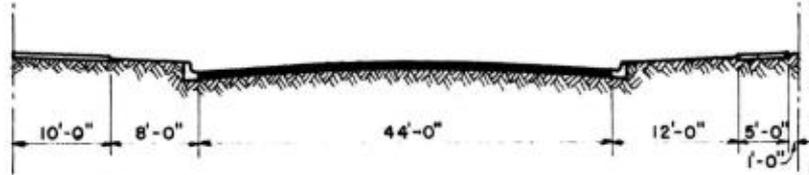
4 LANES, 4'-0" MEDIAN
CAPACITY: 14,000-20,000
VEHICLES PER DAY.



SECONDARY STREET

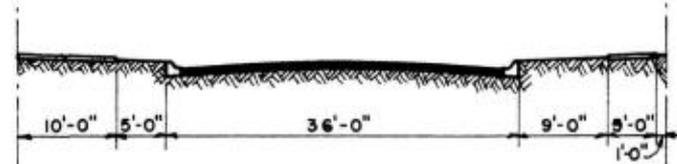
80'-0" RIGHT OF WAY

4 LANES



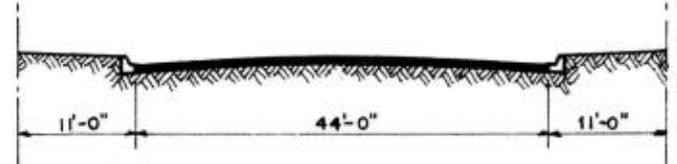
RESIDENTIAL COLLECTOR

66'-0" RIGHT OF WAY



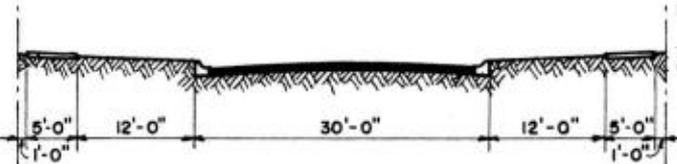
INDUSTRIAL COLLECTOR

66'-0" RIGHT OF WAY



MINOR STREET

66'-0" RIGHT OF WAY



NOTE: LIMITED ACCESS FREEWAYS NOT SHOWN.

FIGURE 22

<p>THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN RENEWAL ADMINISTRATION OF HOUSING AND HOME FINANCE AGENCY, UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.</p>	<p>SCALE: IN FEET</p>	<p>SUGGESTED TYPICAL STREET CROSS SECTIONS</p>
<p>M. F. RUPP ASSOCIATES S PLANNING CONSULTANTS - CHICAGO, ILL.</p>		

will be within a half-mile corridor approximately in the vicinity of Rand Road. The Major Thoroughfare Plan considers the future development of this road, but no specific location is indicated. As soon as the design and approximate location are determined, the information should be placed on the Official Map so that the right-of-way can be protected.

The designated major arterial streets correspond generally to the one-mile spacing recommended by the Chicago Area Transportation Study and adopted as a basic policy by cooperating agencies. The major arterials follow existing routes insofar as possible or are extensions of existing routes in order to provide continuity. The major exception to the use of existing roads is the proposed major arterial west of Schoenbeck Road, actually an extension of Buffalo Grove Road, north of Dundee to the south. This location and alignment also ties in the Arlington Heights thoroughfare plan to provide a north-south street that can extend into, through and beyond Arlington Heights to the south. It would provide a similar connection with the County Line Expressway and eventually new Route 53. Because of possible continuity to the north and south and because of possible connections with the proposed expressways, this particular street alignment should be insisted upon in future development. The new alignment provides the opportunity for planned development to occur along its right-of-way.

In all development along a major arterial, potential border conflicts--driveways, parking areas--should be eliminated and prohibited. With adequate planning, areas adjoining major arterials zoned for residential development can be attractively developed as part of the residential neighborhood.

As designated on the Major Thoroughfare Plan, secondary arterials reflect the established need for them to be placed half-way between major arterials, as recommended by the Chicago Area Transportation Study. The streets are designed to provide a limited continuity by themselves, but are basically intended to provide through-traffic with easy access to major arterials. Their pavement widths encourage free traffic movement.

Secondary arterial locations reflect, to a greater degree than major arterials, the adjoining land uses and potential public areas. In addition, this classification is used as a "frontage road" traffic facility along the County Line Expressway.

The collector street pattern has been designed to "collect" automobiles or to encourage their use when leaving a small neighborhood area and to provide ease of movement to more efficient streets, either secondary or major arterials. The general premise utilized was that in dense residential neighborhoods (under 20,000 sq. ft. lots) every house would be within a quarter of a mile of one of the streets designated on the Major Thoroughfare Plan. This was not possible to accomplish in some existing improved subdivisions. A collector street was utilized in most instances instead of a secondary arterial if the number of houses in the area was low and if no on-street parking was to be allowed. This occurred primarily in the areas contemplated for industrial use or in small areas of residential development. In high density, multi-family residential areas, additional collector streets were designated to accommodate the higher traffic volumes anticipated.

Railroad grade separations at major street intersections, grade separations at streets affected by proposed expressways, and the relocation of some streets to obtain more feasible street interchanges will be continuing activities. Immediate steps should be taken to protect adequate open areas through public land designations on the Official Map. The State and County Highway Departments should make highway alignments available as soon as reasonable accuracy can be assured. In fact, this information should be solicited by the Village every time the Official Map is revised. This cooperation is especially necessary wherever existing street realignments are needed to provide logical interchange design. In both instances of proposed interchanges on the County Line Expressway, realignment of existing streets will be required. At Milwaukee Avenue, Wolf Road should converge with Milwaukee before entering the interchange. Similarly, McHenry Road and Buffalo Grove Road should converge prior to entering the interchange. No other traffic interchanges are contemplated at this time except as they may be needed to maintain the expressway features of Palatine Road.

The Major Thoroughfare Plan illustrates some desired street connections affording additional access to existing residential developments. In many instances, these connections will not be readily available without the purchase of improved property. It is not intended that these be completed immediately but only as the property becomes available; then, the right-of-way should be acquired and construction scheduled.

Although the major transportation improvements that have been proposed are limited to the highway network and its circulation pattern, the Village should take an active interest in the regional mass transportation studies under way or being proposed by the Northeastern Illinois Planning Commission and the Chicago Transit Authority along with the continuing Chicago Area Transportation Study program. As the population of the area increases, the feasibility of extending existing bus service to densely settled areas should be undertaken.

COMMUNITY FACILITIES

Planning for the location of major public community facilities⁽¹⁾ is an integral part of Wheeling's planning. Because of the magnitude of recreation and school site problems and since these problems are the responsibility of separate and distinct taxing authorities, they have been reviewed in separate sections. Site needs are summarized herein, with other community facilities.

Besides school and recreation sites, other governmental functions must be provided for. A Village Hall, fire and police facilities, library, post office, public works garage, and utilities must be considered in terms of their eventual development, consistent with the growth of Wheeling.

In determining the community facilities needed, there will be reflected many factors considered in the proposed land use of the Village and planning area. Among these factors were:

- Existing facilities
- Existing planning for their improvement
- Potential economic development
- Transportation patterns and improvements
- Land capacity and limitations to residential development
- Characteristics of the population, both existing and anticipated
- Number of people to be provided for

The maximum or saturated population to be provided for, based on existing zoning and anticipated or suggested development, will be:

Village of Wheeling (1964 incorporated limits)	17,500
Park District (1964 boundaries)	16,900
Planning Area (closely conforming to one and one-half mile jurisdictional area)	117,000
School District No. 21	102,000
Utility Planning Area (1961-62 limitation placed on existing utility studies)	60,000

Extensive utility studies were made in 1961-62, due to the realization that Village utilities would play an important part in the rate of residential growth, would be a factor in the attraction of new industry to the Village, and would be a decisive factor in either encouraging or discouraging annexations. These studies made initial recommendations for improvement in the water, sanitary sewer and storm drainage systems. The characteristics and recommended improvements

(1) See Preliminary Planning Report 8, "Community Facilities", Oct. 1963 and Preliminary Planning Report 11, "Community Facilities Plan", Jan. 1964.

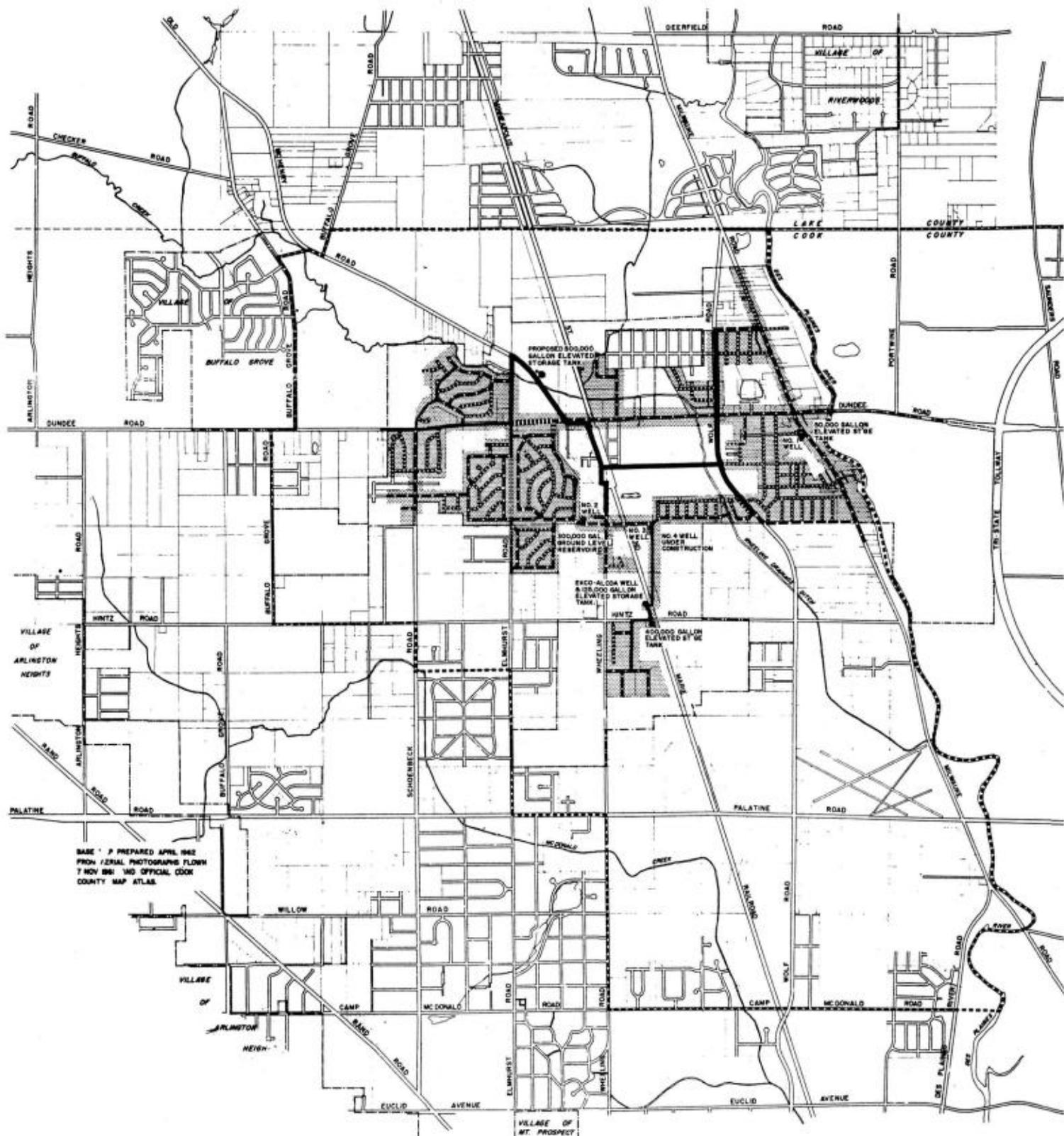
of these three utility systems are shown in Figures 23, 24 and 25. The reports' recommendations are still valid for existing developed areas, but many changes have occurred which will dictate modifications in fringe areas. Based on an adopted plan of development, the Village should have the studies revised to reflect the more definitive development criteria that is available. If needed, interest-free Federal loans are available for these studies and improvement plans.

Improvements to the existing well water supply and water distribution system have been authorized. A future source of water will have to be found to replace or to supplement the present wells. An adequate source of water is a problem common to all municipalities dependent upon wells. The long range solution, however, will require much cooperation between communities, and imaginative solutions may be costly and difficult to execute. Therefore, it is imperative that Wheeling participate in regional water supply studies such as are being carried on by the Northeastern Illinois Planning Commission.

Wheeling's sanitary sewer and disposal problems are twofold. First is the Village's responsibility to extend sewers to presently unserved areas and at the same time correct operating difficulties in the present system. The second is to obtain additional disposal capacity--a responsibility of the Metropolitan Sanitary District.

The improvement recommended by the Village Engineers, plus improvements under construction in 1963-64, should meet the collection needs of the sanitary sewer system. Alternative disposal methods also were discussed. It was estimated that the provision of sewage disposal facilities would cost Wheeling about one million dollars more than if the Sanitary District's interceptor sewers were extended into the area as planned. The future demands on Wheeling's financial resources eliminate the consideration of constructing treatment facilities and make immediate construction of the interceptors mandatory. Limited growth will occur with septic tanks, but major growth will be deterred until sewer facilities are available.

Wheeling's location at the downstream end of an approximately 17,000-acre drainage basin makes it vulnerable to large volumes of storm water. In the past, flooding in the Village's developed areas has occurred. The recommendations of the present engineering studies provide for the improvement to the existing systems and for adequate drainage to the surrounding utility planning area. An important recommendation made by the engineers related to prohibition of buildings in areas north of Hintz



BASE MAP PREPARED APRIL 1962 FROM AERIAL PHOTOGRAPHS FLOWN 7 NOV 1961 AND OFFICIAL COOK COUNTY MAP ATLAS

- | | |
|---|-----------------|
| EXISTING | PROPOSED |
| ----- 6" MAIN | ===== |
| ----- 8" MAIN | ===== |
| ----- 10" & LARGER | ===== |
| ----- LIMITS OF VILLAGE ENGINEER'S UTILITY PLANNING | |
| ===== AREA PRESENTLY SERVED BY WATER SYSTEM | |

SOURCE: ENGINEER'S REPORT WATER SYSTEM, 1961
BAXTER & WOODMAN, ENGINEERS.

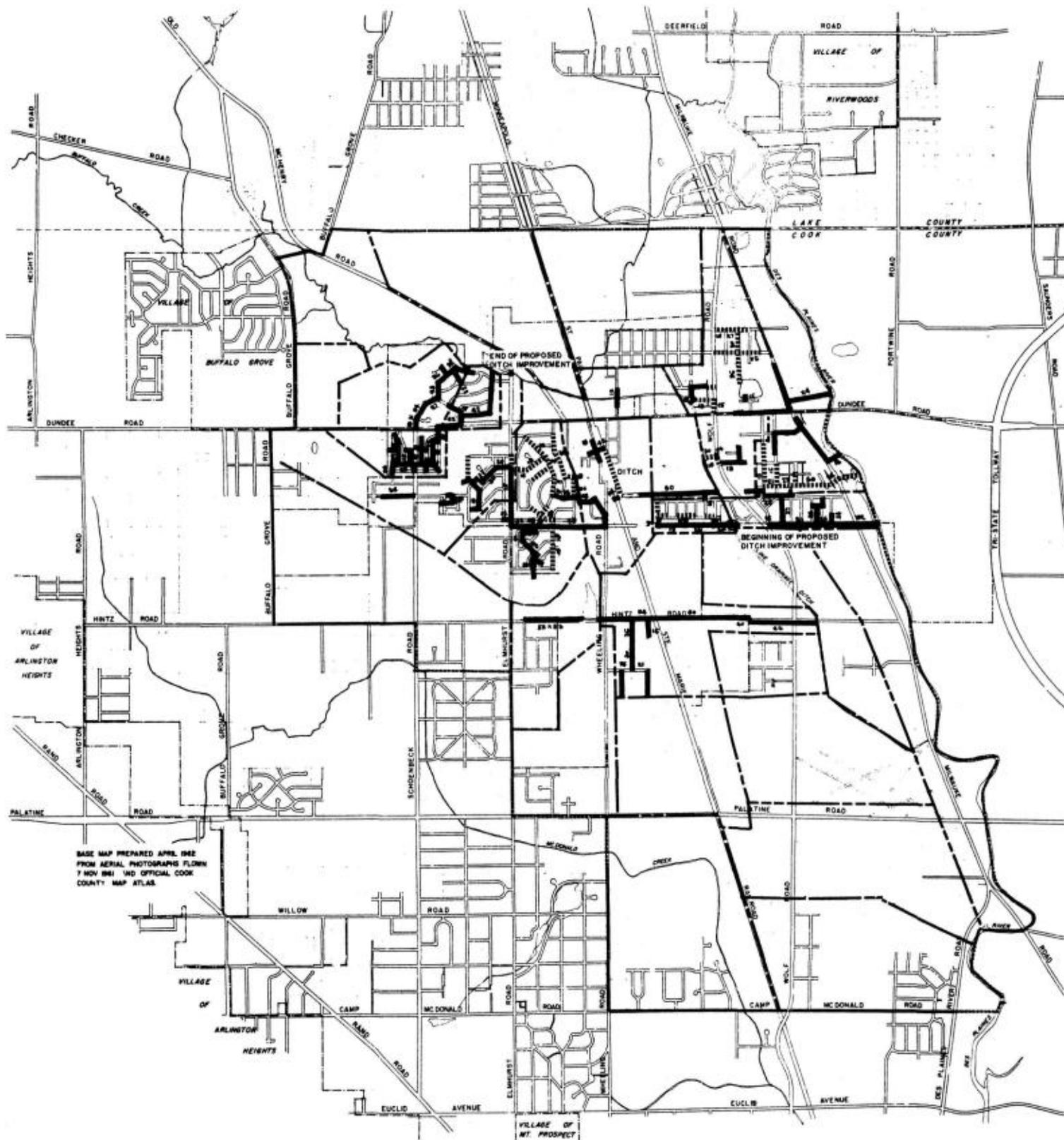
FIGURE 23

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN REDEVELOPMENT ADMINISTRATION OF THE HOUSING AND HOME FINANCE AGENCY UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1964, AS AMENDED.

SCALE IN FEET
0 1000 2000 3000 4000 5000

M. F. RUPP ASSOCIATES
PLANNING CONSULTANTS - CHICAGO, ILLINOIS

EXISTING WATER SYSTEM, IMMEDIATE IMPROVEMENT AND SERVICE AREA



- LIMITS OF UTILITY PLANNING
- EXISTING SEWERS (12" UNLESS OTHERWISE NOTED)
- PROPOSED SEWERS 12" UNLESS OTHERWISE NOTED
- DRAINAGE AREAS

SOURCE: ENGINEER'S REPORT ON STORM DRAINAGE
 BAXTER & WOODMAN, ENGINEERS, 1962.

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN REDEVELOPMENT ADMINISTRATION OF THE HOUSING AND HOME FINANCE AGENCY UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.

SCALE IN FEET
 0 1000 2000 3000 4000 5000

M. F. RUPP ASSOCIATES
 PLANNING CONSULTANTS - CHICAGO, ILLINOIS

FIGURE 25

EXISTING STORM DRAINAGE, RECOMMENDED IMMEDIATE IMPROVEMENTS & SERVICE AREA

Road subject to flooding. The Village has already recognized this problem by the adoption of Flood Plain Zoning regulations as a result of their planning program. Other steps have also been taken to eliminate some of the utility problems in new developments. The Subdivision Ordinance now requires adequate water and sanitary sewer facilities to be constructed. It also requires that provision be made for storm water drainage, both in natural drainage areas and in constructed facilities. The steps taken will not solve the problems but will minimize them, so that improvements can be undertaken to rectify existing situations. Specific recommended improvements to the utility systems operated by the Village have been included in the Capital Works program. Other utilities--gas and electricity--are outside the immediate control of the Village.

Refuse disposal, including garbage, will become a problem unless the Village controls and enforces an adequate collection method, a fair price structure, and suitable disposal. In this area again, the magnitude of refuse disposal in a metropolitan area will require cooperative action on an areawide basis to meet the demand effectively. Wheeling's growth, healthfulness and well-being will depend to a large extent upon the Village administration's readiness to provide a means by which new development areas can be served by municipal utilities. To encourage and force, if necessary, the proper new development, the Village must proceed to:

Enforce the regulations of the subdivision ordinance;

Continually review, modify or increase the design standards and requirements for utilities in the subdivision regulations;

Authorize the revision of the several utility studies to reflect planned intensities of land use, population densities, and the total area to be served;

Expand the studies, using Federal assistance if necessary, to provide detailed methods of serving outlying areas in a general way and presently unserved areas of the Village in a more specific way;

Urge the construction of additional interceptor sewers to the area by the Metropolitan Sanitary District;

Adopt a schedule of needed improvements to forecast the approximate time that various areas can or will be served by municipal utilities. This is especially necessary in areas where development is imminent in order to forestall development by private utilities or the extension of existing private utilities into the Wheeling area.

Initiate the necessary construction improvements within the Village to establish the desired level of municipal utility services.

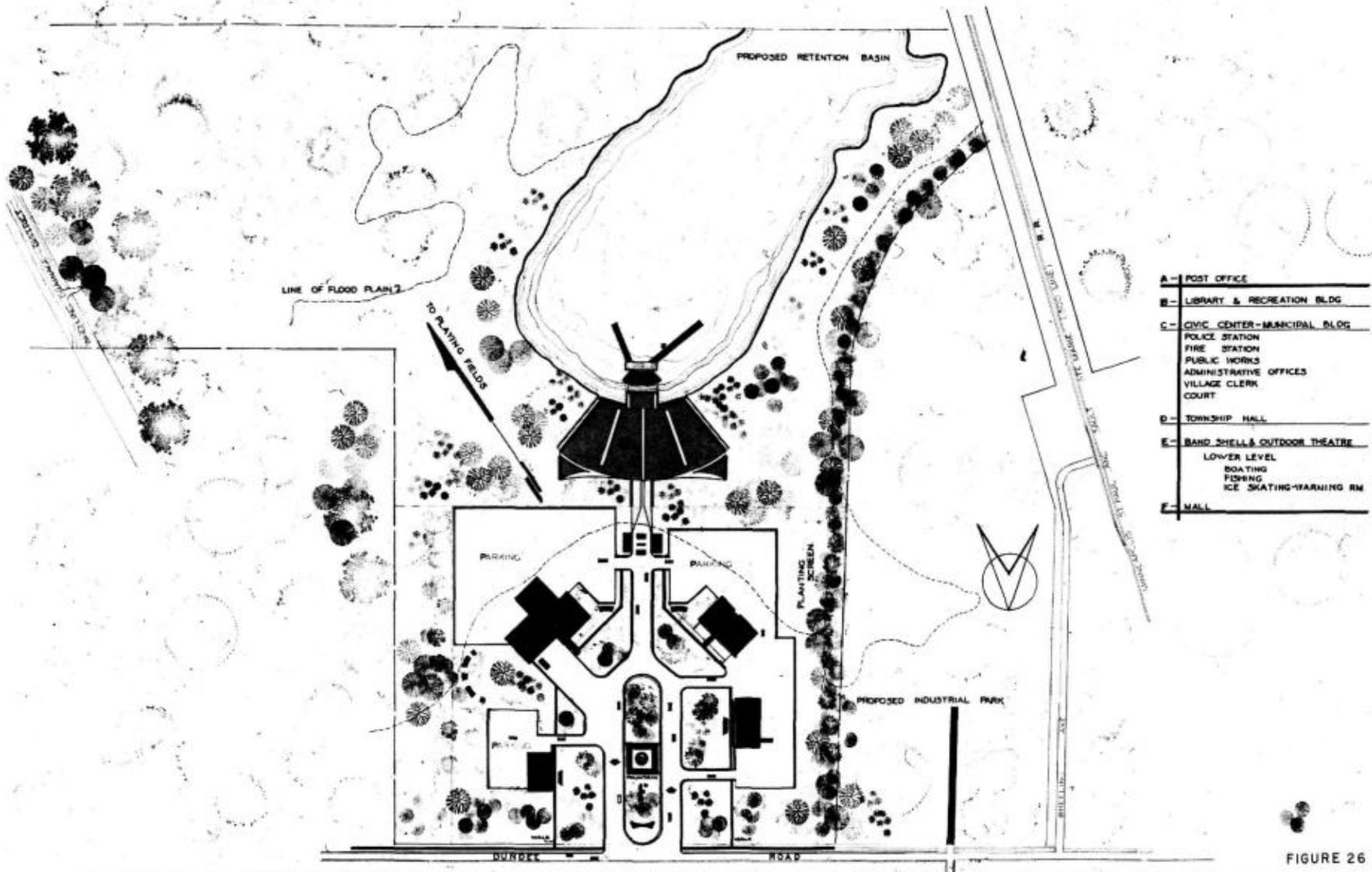
Water is such a valuable resource as to be a factor in every planning activity. For this reason the flood plains are included in public areas. In developing of community facilities, public areas are utilized in order to conserve water as well as to make it an asset to a community.

Without exception, the various government buildings in Wheeling are not large enough to serve the present Village area. They cannot provide the additional space necessary to meet the needs of a growing community. More administrative space is needed for the Village offices; larger quarters are required by the Police and Fire Departments; the post office needs additional building area as well as outside loading space. The Park District is planning a headquarters building, and the library is planning an expansion. With an expanded engineering function, the new Public Works building will be outgrown, and better garage and outside storage space is presently needed. To meet the needs of all these government agencies and to provide a focal point or center for the Village, the development of a Civic Center is unequivocally recommended.

From a planning standpoint, for effective coordination of effort and multiple use of areas, the location of the Civic Center should be on Dundee Road west of the Catholic Church and school. This location offers a site of sufficient size (1) to consolidate all governmental functions into one location, (2) to provide for joint use of parking facilities, (3) to utilize the openness of adjoining park areas, (4) to provide enough area for segregating maintenance and storage functions of the Park and Public Utilities Departments, (5) to provide for the integrated development of the Center, including flood controls, and (6) to provide a compatible land use for the varying surrounding uses, existing and proposed.

A visual concept of the Wheeling Civic Center is shown in Figures 26 and 27. These were prepared at our request and in conjunction with our recommendations by Godfrey L. Duke, a Wheeling architect, illustrating only one way in which the various component parts of the Civic Center can be planned to complement each other. Eventual development will require cooperation, surveillance and programming. The development of the various community facilities recommended for the Wheeling planning area will require a new level of cooperation within the various Village governmental bodies. It will also require constant review of development in the area, updating of the Official Map for control or acquisition of public land, and continued capital improvement programming to provide the financial resources to acquire and develop the recommended community facilities.

WHEELING CIVIC CENTER



- A - POST OFFICE
- B - LIBRARY & RECREATION BLDG
- C - CIVIC CENTER - MUNICIPAL BLDG
POLICE STATION
FIRE STATION
PUBLIC WORKS
ADMINISTRATIVE OFFICES
VILLAGE CLERK
COURT
- D - TOWNSHIP HALL
- E - BAND SHELL & OUTDOOR THEATRE
LOWER LEVEL
BOATING
FISHING
ICE SKATING-WARNING RM
- F - MALL

FIGURE 26

GODFREY L. DUKE - ARCHITECT
 M. F. RUPP ASSOCIATES
 PLANNING CONSULTANTS

SUGGESTED WHEELING
 CIVIC CENTER



GODFREY L. DUKE ARCHITECT
M. F. RUPP ASSOCIATES
PLANNING CONSULTANTS

SUGGESTED WHEELING
CIVIC CENTER

FIGURE 27

The regional land acquisitions for community facilities other than utilities are listed in Table 13. This summary schedule lists, by broad classification, lands which, based on the anticipated future population, will be needed for (1) School District No. 21, the area intensively studied for school purposes, (2) park requirements in the entire area, without reference to the more limited Wheeling Park District area, (3) combined school-park sites in School District No. 21, with reference to anticipated joint uses outside of School District No. 21, and (4) other municipal uses including the Village, Library, Township facilities.

Comments on each site or proposed location indicate primary responsibility in the acquisition or development of the area. All of the sites are keyed to Figure 28 by means of a letter-letter or letter-number reference. The map also shows all flood hazard areas, so labeled by the United States Geological Survey and detailed on the U.S.G.S. maps.

Where the flood hazard areas, or flood plains, were contemplated as integrated portions of a proposed development, the delineation of the area includes the flood plain as designated on the map. The development of the planning area contemplates the imposition of present Village of Wheeling flood plain regulations on all applicable property. Also, the acquisition of the flood areas is contemplated wherever necessary to implement the solution of Village utility problems. One of the primary uses of the flood plain in solving utility problems will be the use of drainageways and surrounding existing flood plain areas in providing storm drainage facilities. The acquisition of flood plain areas in lieu of the construction of large storm sewers may accomplish the same end: providing drainage and at the same time additional open space in the area.

Changes may be required in the Community Facilities Plan. The community facilities requirements for the execution of the Development Plan can be met with the suggested land acquisition and flood plain areas. However, development in accordance with the Development Plan is not wholly within the control of the Village. Therefore, future land uses may be changed which in turn will require the Village to modify its community facilities.

Figure 28, the Community Facilities Plan map, is confined to the planning area. Several potentially required school sites are outside of Wheeling's planning area, yet within School District No. 21. However, since the control of the public land areas involved lies within another municipality, these sites have not been shown on

the Community Facilities map. They are graphically displayed in Figure 17, "Ultimate School Development". The potential school sites in the immediate Village of Buffalo Grove area, not shown on the Community Facilities Plan, are Elementary Schools 14, 15, 16 and 17 and Junior High School J-2. (The numbers refer to Figure 17.) In the area west of Arlington Heights Road, which was considered the west edge of the planning area, School District No. 21 could have as many as 8 additional schools. Four of them, 18, 19, 20, 21, would be required at residential development at present zoning densities. Another four, 18a, 19a, 20a, and 21a, will become necessary upon saturated residential development at 4 or 5 houses to the acre. (Again, refer to Figure 17.)

TABLE 13
SUMMARY SCHEDULE-COMMUNITY FACILITIES PLAN
PROPERTY ACQUISITIONS BY USE, SIZE AND AGENCY

Ref. to Map	Facility	S i z e (acres)		Comments, with suggested action unit.	
		Existing	Proposed (add) Not in Flood Pl. Flood Pl.		
S-A	Whitman Sch.	6	6.5	Acquisition of vacant adjoining acreage-Sch.Dist. or Park Dist. for modified playground.	
S-B	Sandberg Sch. & playground	23		Playground to be developed by Park Dist. on existing school site.	
S-C	Twain School	12		Park Dist. to develop playground on site.	
S-D	Alcott School	6		Only improved land available for expansion--outside planning area.	
S-E	London Jr. H.	16	1	4	Additional acreage to be acquired by Park Dist. for joint use.
S-1	Junior High		15		Acquired by School Dist.
S-2	Wheeling High	38			Existing.
S-3	High School	40			Future high school by High School Dist.
S-4	High School		40		Future high school site to be acquired by High Sch.Dist.
S-5	Junior College		330	20	To be acquired and developed by Jr. College Dist. If this area is not, 2 additional elementary school sites and 2 additional playgrounds should be acquired in this area.
S-6	Elementary Sch.	20			Existing School--outside District No. 21.
S-7	Elementary Sch.		6		Site to serve multi-family area to be developed in conjunction with Flood Plain Park (P-1).

TABLE 13 (cont'd.)

Ref. to Map	Facility	S i z e (acres)		Comments, with suggested action unit.	
		Existing	Proposed (add) Not in Flood Pl. Flood Pl.		
P-1	Playground	.9		40	Original park area to be expanded in treatment plant site and flood plain area by Park District.
P-2	Major Park		45	55	Total area to be acquired by Park Dist. (see J-2)
P-3	Maintenance HQ				Area included in P-2 but used for Maint. Bldg. and yard.
P-4)	Golf Courses		50	100	Acquisition of golf courses to prevent non-recreational use by Park Dist. on revenue basis; if P-5 is not acquired, then provision must be made for a playground and elementary school in this area.
P-5)			130	30	
P-6)			100	20	
P-7	Playground		4		Area acquired by Park Dist.; playground developed on park land and school property.
P-8	Playground		10		Acquire and add to S-6 for playground area (Park Dist.)
P-9	Playground		4.5		Playground to be acquired in conjunction with proposed school in this area (school outside Dist. 21).
P-10	Playground		5	5	Area to be developed only if Flood Plain is not obtained for public use (Lake Co. forest preserve, Water Commission, or Village); would be in eventual conjunction with needed school (outside Dist. 21).
P-11	Playfield		18(unlimited)		(see comment P-10.)
P-12	Playground		5		To be developed in conjunction with school site (outside Dist. 21).
P-13	Playfield- Playground		20		To be developed in conjunction with proposed school (outside Dist. 21) if possible.

TABLE 13 (cont'd.)

Ref. to Map	Facility	S i z e (acres)		Comments, with suggested action unit.	
		Existing	Proposed (add) Not in Flood Pl. Flood Pl.		
P-14	Playground, Playfield		20	To be developed in conjunc- tion with proposed school (outside Dist. 21 if possible)	
P-14	Playground, Playfield		8	20	Developed by Park Dist. If school becomes necessary (out- side Dist. 21), should be developed in conjunction w/ this area. Additional acre- age should be acquired by School Dist. Playfield moved to this location from previous site in Jr. college area.
P-15	Playground		4	20	Developed by Park Dist. School may be necessary (outside Dist. 21) but additional land should be acquired if school is added.
P-16	Playground		4	9	(same as for comment P-15)
P-17	Playground	7	5		Complements school in area. Developed by Park Dist.
J-1	Playground		1	4	Addition to S-E; Park Dist. acquisition.
J-2	School	5			Elementary School constructed by School Dist.; modified playground developed by Park Dist.
J-3	School-Play- ground-Swim- ming Pool		15		Eventual acquisition of C. of Commerce park and Park Dist. swimming pool; additional area to be acquired for elementary school.
J-4	School-Park		5		Combined elementary school and modified playground area; School Dist. to purchase, Park Dist. to develop, grounds. Limited area due to subdiv. development under construc- tion.
J-5	School- Playground		5	8	Combined site to serve multi- family area.

TABLE 13 (cont'd.)

Ref. to Map	Facility	S i z e (acres)		Comments, with suggested action unit.	
		Existing	Proposed (add) Not in Flood Pl. Flood Pl.		
J-6	School- Playground		13	Combined site to serve multi- family area.	
J-7	Jr. H., elem. sch., playfield		44	Combined site to serve multi- family area. If no Jr. H. is required, deduct 13 acres.	
J-8	School-Playground		10	7	Combined site to serve multi- family area.
J-9	School-Playground		17	Combined site to serve multi- family area.	
J-10	School-Playground		13	Combined developed of School and Park Districts.	
J-11	School-Playground		9	4	Combined development.
J-12	School-Playfield		5	7	Combined development with P-5 and adjoining park area in Flood Plain; school to adjoin these park areas; playfield to be developed in combined J-12-P-5 areas.
J-13	School-Playground		13	Combined development by School & Park Districts.	
J-14	School-Playground		13	Combined development by School & Park Districts.	
J-15	School-Playfield- Playground		8	20	Combined playfield, elemen- tary school site to be developed cooperatively.
V-1	Civic Center -Village Hall -Recreation Bldg. -Library -Public Safety Facil. -Township Off. -Post Office -Water Retention Basin		19	7	Area acquired by Village for Civic Center development; costs to be shared by all gov't. units utilizing space. (See sketch of Civic Center, Figure 27).
V-2	Public Works Garage & Maintenance Yard				Utilization of a portion of area acquired by Park Dist. (P-1) for use of public works garage & storage yard.
V-3	Tot Lot	.5			Library property to revert to park use. Library to be located in Civic Center.

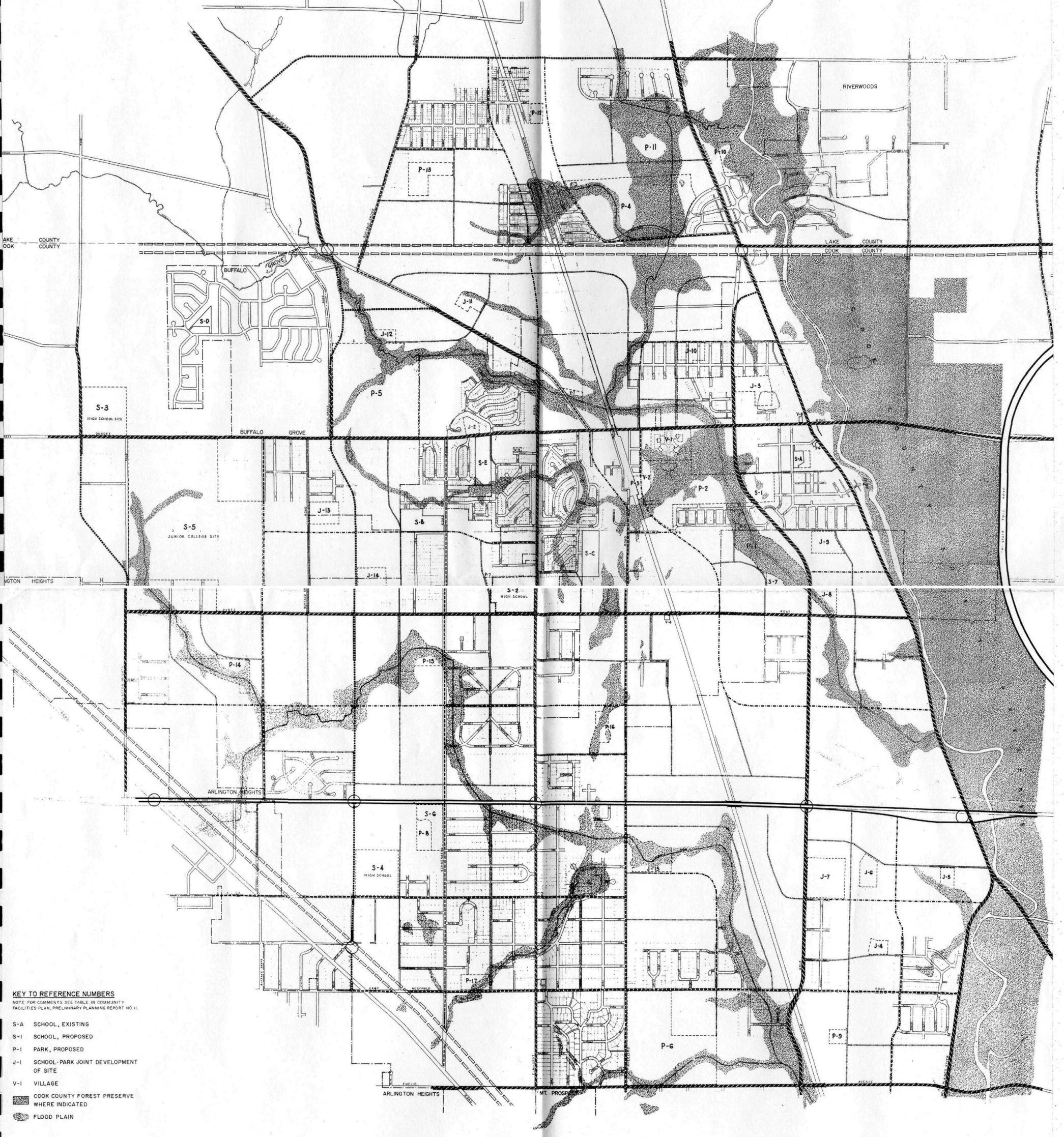
TABLE 13 (cont'd.)

Ref. to Map	Facility	S i z e (acres)			Comments, with suggested action unit.
		Existing	Proposed Not in Flood Pl.	(add) Flood Pl.	
V-4	Fire Station #2, elevated water storage	.5			Existing Public Works Garage & Fire Station. Public Works Facil. to be moved to V-2; fire station to take over entire structure.
V-5	Sewage Treatment Plant	2.2			Metropolitan Sanitary Dist. Plant to be abandoned and property to be used in con- junction with P-1.
V-6	Existing Water Storage areas	.4			To continue for present uses.
V-7	Water Storage (2) & Well	3.0			Area too small for adequate Civic Center development.
V-8	Village Hall- Fire Station	.3			To be sold for private use. New facilities to be in Civic Center.
Community Facilities Sites Summarized by Use:					
SCHOOLS:	Elementary	83	28.5	4	<u>Total</u>
	High	78	40		
	Jr. College		330	20	
	Total	161	398.5	24	583.5
PARKS-PLAYGROUNDS & PLAYFIELDS:		.9	43.5	79	
	Major		46	20	
	Golf Courses		45	55	
	Total	.9	280	150	719.4
JOINT*					
	Schools	1.25	43	13	
	Parks	3.75	128	37	
	Total	5	171	50	226
OTHER:					
	Civic Center		19	7	
	Village	6.9			
	Flood Plain**			459	
	Total	6.9	19	466	491.9
GRAND TOTAL		173.8	1,003	844	2,020.8

*Assigned three-quarters to parks; one-quarter to schools.

**Based on partial acquisition of total Flood Plain areas, Prel. Plan. Report 8.

BASE MAP PREPARED APRIL 1962
FROM AERIAL PHOTOGRAPHS PLANNED
NOVEMBER 1961 AND OFFICIAL
COOK COUNTY ATLAS.



KEY TO REFERENCE NUMBERS
NOTE FOR COMMENTS SEE TABLE IN COMMUNITY FACILITIES PLAN, PRELIMINARY PLANNING REPORT NO. 11.

- S-A SCHOOL, EXISTING
- S-1 SCHOOL, PROPOSED
- P-1 PARK, PROPOSED
- J-1 SCHOOL-PARK JOINT DEVELOPMENT OF SITE
- V-1 VILLAGE
- COOK COUNTY FOREST PRESERVE WHERE INDICATED
- FLOOD PLAIN

FIGURE 28

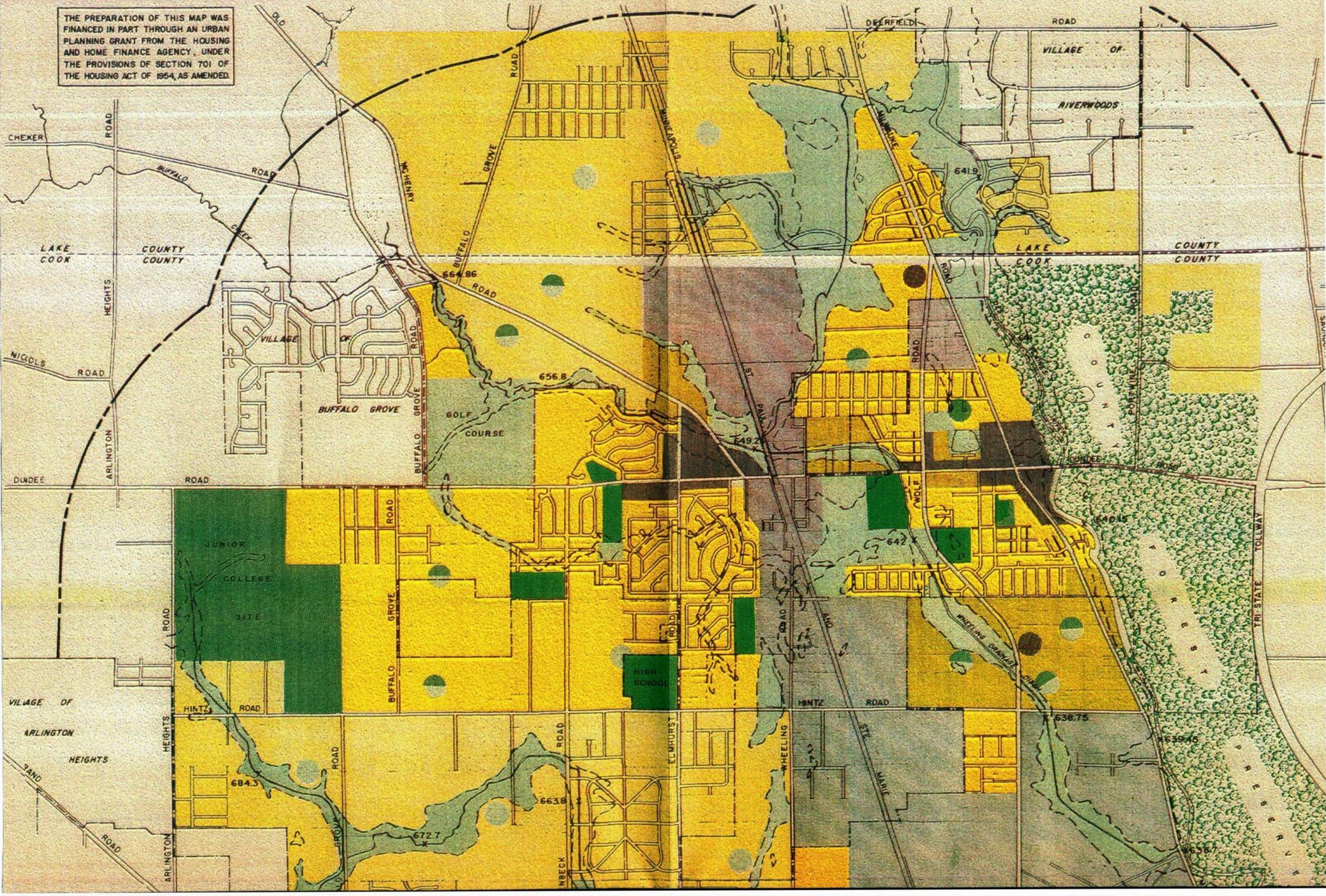
THE PREPARATION OF THIS MAP WAS FINANCIALLY ASSISTED THROUGH A FEDERAL GRANT FROM THE URBAN REDEVELOPMENT ADMINISTRATION OF HUDSON AND HOME FINANCE AGENCY, UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.

SCALE: 1" = 1/4" (1/4" = 100 FEET)

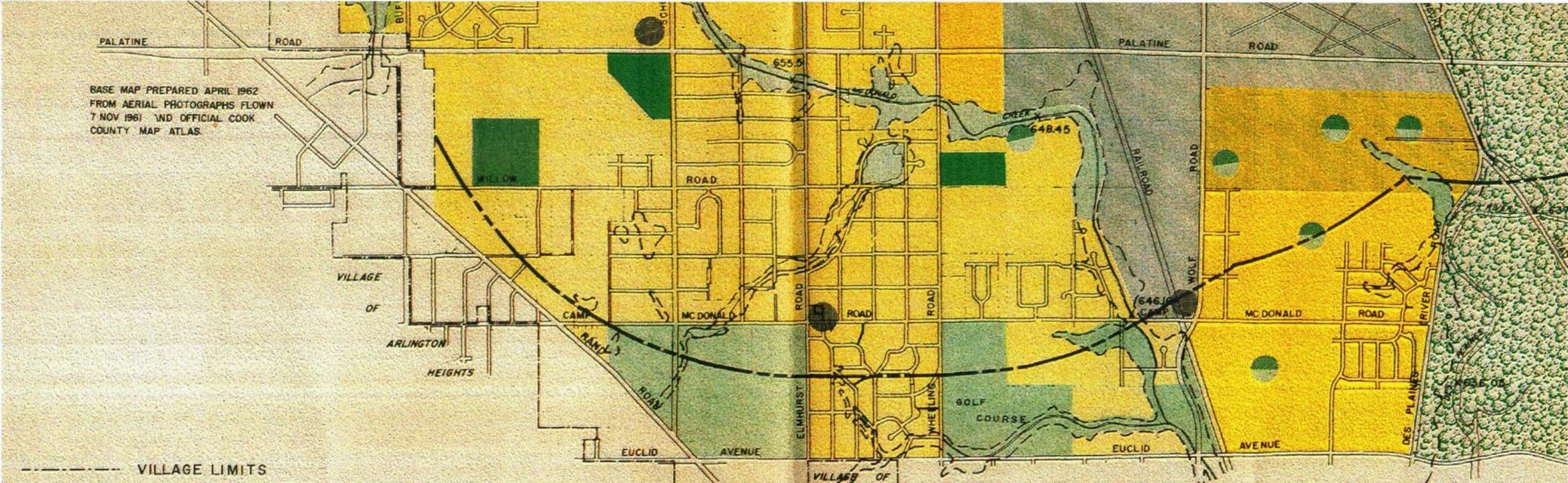
M. F. RUPP ASSOCIATES
PLANNING CONSULTANTS - CHICAGO, ILLINOIS

COMMUNITY FACILITIES PLAN
WHEELING, ILLINOIS & ENVIRONS

THE PREPARATION OF THIS MAP WAS FINANCED IN PART THROUGH AN URBAN PLANNING GRANT FROM THE HOUSING AND HOME FINANCE AGENCY, UNDER THE PROVISIONS OF SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.



BASE MAP PREPARED APRIL 1962 FROM AERIAL PHOTOGRAPHS FLOWN 7 NOV 1961 AND OFFICIAL COOK COUNTY MAP ATLAS



- VILLAGE LIMITS
- LIMITS OF PLANNING JURISDICTION
- - - FLOOD PLAIN LIMITS
- PUBLIC & SEMI-PUBLIC AREAS**
- EXISTING PARKS
- PROPOSED PUBLIC LANDS: PARKS, CIVIC CENTER, FIRE STATIONS, WATER RESERVOIRS OR RETENTION AREAS, ETC., EXCLUDES SCHOOLS.
- EXISTING SCHOOL; PUBLIC OR PRIVATE
- PROPOSED SCHOOLS (ELEMENTARY DISTRICT 21)

- LAND USES**
- LOW DENSITY SINGLE FAMILY
- HIGH DENSITY SINGLE FAMILY
- MULTI-FAMILY RESIDENTIAL
- BUSINESS & COMMERCIAL
- INDUSTRIAL

NOTE: WHERE IS INDICATED, SEE SUPPORTING MAPS FOR SIZE AND ACREAGE.

P. 87
 FUTURE LAND USES INDICATED HEREON ARE THE RECOMMENDED ULTIMATE USE SUPPORTED BY PREVIOUS PLANNING REPORTS. THEY DO NOT NECESSARILY REFLECT THE IMMEDIATE ZONING CLASSIFICATIONS TO BE IMPROVED. **FIGURE 29**

THE PREPARATION OF THIS MAP WAS FINANCIALLY AIDED THROUGH A FEDERAL GRANT FROM THE URBAN RENEWAL ADMINISTRATION OF THE HOUSING AND HOME FINANCE AGENCY UNDER THE URBAN PLANNING ASSISTANCE PROGRAM AUTHORIZED BY SECTION 701 OF THE HOUSING ACT OF 1954, AS AMENDED.

M. F. RUPP ASSOCIATES
 PLANNING CONSULTANTS — CHICAGO, ILLINOIS



GENERALIZED FUTURE LAND USE

THE DEVELOPMENT PLAN

The Development Plan is a guide to the future physical development of Wheeling and its planning area. It expresses in graphic form the future physical characteristics of the area determined from the guidelines and established planning principles and in conformity with subsidiary studies. The Development Plan is a composite of many interrelated segments--residential, commercial, industrial, schools, parks, major streets, and community facilities. No single portion of Wheeling's planning can be utilized out of context of all the others; the inter-relationship of all must be maintained. For instance, the need for schools, parks, and streets depends on the number of people requiring these services. The size of the population is in turn dependent upon the future growth of Wheeling. In the future, as each factor involved is modified or changed, a corresponding change will be necessary in other segments of the various plans which all together comprise the Development Plan for Wheeling.

The culmination of the planning studies is illustrated in a generalized way by the Future Land Use Map⁽¹⁾ (Figure 29). This map, along with the Major Thoroughfare Map (Figure 21) illustrates the comprehensiveness of the planning considerations for Wheeling and the interrelation of all aspects of planning. While these two figures show the basic general details of the development plan, specific supporting information is obtained from the respective detailed maps.

The Development Plan anticipates a potential level of residential development within the planning area. Based on studies related to people, composition of families, income and housing trends, provision had to be made for a variety of housing types to meet a broad spectrum of housing needs. The saturation of the usable land areas, less non-residential uses, i.e., public lands, industrial and commercial areas, will provide for a population between 17,000 within the 1963 Village limits and 117,000 in the total planning area. The areas anticipated for residential development are shown in Figure 29.

Meeting the many needs of this anticipated population, future public land areas are shown. School and park sites are indicated to serve a population anticipated by the residential development. The Major Thoroughfare Plan shows the locations of proposed major and secondary streets within the planning area as well as the major expressways planned eventually to serve the Wheeling area. The classification

(1) See Preliminary Planning Report 10, "Future Land Use", October, 1963.

of streets, the number, location and size of parks, and the location and number of schools are related insofar as the potential population of the planning area establishes their need and location.

Business areas are included, showing expansion of existing shopping areas and new areas which will be needed as growth occurs. Also, some existing business zoned areas have been eliminated as potential business areas.

Modification of existing industrial areas is indicated. Industrial areas shown on the Future Land Use Map are consistent with previous planning recommendations. They are not, however, consistent with existing zoning districts. Some areas have been removed from consideration of industrial uses, either because of the unusable nature of the land (flood plain), because of a more appropriate use as public land, or because flood plain areas, natural boundaries, and the Major Thoroughfare Plan suggested a realignment of the existing or previously planned boundaries. Other areas have been included for future industrial use because of (1) easy access via the Major Thoroughfare Plan, (2) more defensible boundaries between different land uses by the use of the flood plain area, (3) logical extensions of industrial uses into relatively small areas in proximity to industrial areas established or proposed, and (4) illustrating the end goal to be attained, even though interim action has been taken.

The adoption of goals as expressed in the Future Land Use Map (recommended or modified upon recommendation of the Planning Commission), provides the basis for implementing actions. This map is the graphic illustration of the desire of the Village for its future development. It is the basis upon which the multi-governments of the planning area can effectively have inter-governmental cooperation and joint policy determination. It also can stimulate the citizens to an awareness of the magnitude and the relationship of all planning problems.

IMPLEMENTATION

The Development Plan represents recommendations for the future development of Wheeling within the framework of stated policies and assumptions. This Plan is useful and will be effective only if active steps are taken to carry out the various proposals. Hundreds of decisions shape the future of Wheeling, but whether these decisions by the Village Board, School Board, Park District, other governmental agencies, and private developers lead to a well-designed, attractive, orderly and convenient community will depend upon the degree that the goals of the Plan are followed. Therefore, it is important to take appropriate action to insure a close relationship between the Plan and decisions to subdivide land, build houses, establish new business or industry, and improve old or build new public facilities.

Adoption of the Plan

The preparation of this Plan (and its background studies contained in Preliminary Reports 1 through 13) is the initial stage toward realization of the Village's objectives for future development. The Plan Commission should formally adopt the Plan, revised or modified, as the general policy of future development in the Village. Action of the Village Board is not required by law; however, for coordination of effort to attain the goals expressed for Wheeling, the Village Board should review and express its agreement prior to adoption by the Plan Commission. In addition, additional opportunity should be given citizens to comment on the Plan through a public hearing.

Continuous Study and Improvement

A major portion of the Plan Commission's future program should be a continuing study of the proposals in the Plan to make sure that it continually reflects the objectives of the Village and that it continually reflects these objectives in Village policy. The Plan should be modified or revised whenever necessary to reflect changing community conditions. Although the responsibility for continuing study and modifications is primarily the Plan Commission's, it must be shared by the Village Board, School Board, and Park District, especially during periods of growth and resultant problems, in order to carry on the cooperative planning activities undertaken in the preparation of the Development Plan.

Establishing Responsibility for Action

The continuing program of action needed to carry through the provisions of the Plan will involve many groups and organizations. All elements of the Plan need

not be carried out by governmental organizations; in fact, many of the economic development aspects, although encouraged by the Village Government, must be undertaken by local organizations. The following actions illustrate the potential involvement of the entire community - public and private - in achieving Wheeling's goals:

<u>Action</u>	<u>Carried out by</u>
Ordinance Controls--	
Revising existing Zoning Subdivision Housing Code	Appropriate Village Commission for preparation, or suggested revisions, and present recommendations to Village Board for adoption.
Establishing new Building Code	
New Residential Area	Private developers and individuals with Village approval, in conformity with development regulations.
Improvement of Shopping Areas-- new shopping, business, industrial areas	Private owners and developers; W.I.N. or similar group.
New Roads, road improvements	Plan Commission by action on subdivisions; Village Board action on widening, relocation, rebuilding.
Improvement of Major Highways	State and County action.
Water Supply	Village Board.
Sanitary Sewer Collection Treatment	Metropolitan Sanitary District.
Water Sewer Extensions	Village Board and Plan Commission, along with private individual cooperation.
School Sites, Buildings	School Board.
Residential Conservation (Urban renewal)	Village Board through appointed local renewal organization, citizens' groups and private individuals
Recreation Areas and Parks	Park Board.
Community Appearance	Civic Organization, Tree Committee

Referral to Plan Commission

Since the authority and possibility to initiate and carry out the many different aspects is widely distributed throughout the community organizations and governmental agencies, it is of great importance that various proposals for action by myriad groups

and agencies be referred to the Plan Commission. Such referral will (1) allow the Plan Commission to perform its function of coordinating proposals of one agency with another, (2) strengthen the effectiveness of the Official Map, and (3) coordinate development of the groups to meet the end results of the Plan. Although the Plan Commission has no authority to require other agencies to conform to the Plan, at the same time, it is assumed that other agencies have no desire to work purposely in contradiction to the adopted Village Plan. Similarly, any Plan Commission suggestion resulting from the referral must be made quickly, constructively and reasonably.

Significant Steps to Implementation

At the end of the preliminary planning phases, the Village took several significant steps in implementing its planning goals as itemized at that time. Two of the better tools toward effectuating the Development Plan are the subdivision and zoning controls.

The SUBDIVISION REGULATIONS control the development of new land into building sites. The layout of lots, street patterns, design and general specifications for the construction of public facilities and procedures are covered by these controls. Early in the planning program it was recognized that the controls over subdivision development must be intensified. Therefore, in September, 1962, Supplement Number One⁽¹⁾ to this report was prepared. A revised subdivision ordinance was prepared, numerous public hearings were held, and the new controls were adopted at that time. The continuous review of these provisions, and their modification when necessary, is an integral part of the maintenance of the planning program.

It was also recognized early in the planning program that substantial revisions to the ZONING REGULATIONS would be necessary. Almost immediately, various provisions of the zoning ordinance were reviewed and desired changes were initiated. During the planning program, flood plain and revised industrial regulations were adopted. However, it was not until nearly the conclusion of the preliminary planning stages that the final goals were determined to be effectuated by ZONING PROVISIONS. In December, 1962, the "Report on Zoning Ordinance Provisions"⁽²⁾ was prepared. Immediately, public hearings were initiated, the ordinance was revised, and the map was prepared and subsequently adopted.

(1) See Supplement Number One, "Suggested Technical Provisions Subdivision Ordinance", September, 1962.

(2) See Supplement Number Two, "Report on Zoning Ordinance Provisions", December, 1963.

Housing Code

To conserve the housing conditions in Wheeling and to require housekeeping standards for the increasing numbers of rental properties, a housing code should be adopted. This code will also assist in maintaining property values and community interest as well as rectify undesirable conditions. The provisions of a housing code would establish minimum standards in many areas, such as the following:

- (1) Space and occupancy (floor areas, numbers of persons per room, etc.)
- (2) Light and ventilation
- (3) Sanitary facilities (sinks, water closets, tub and/or shower, hot water, etc.)
- (4) Structural elements (state of physical repair, capacity to support loads, etc.)
- (5) Heating provisions (temperature safety of appliances, etc.)
- (6) Electrical requirements (adequate installation)
- (7) Criteria for determining sub-standard conditions and provisions for correcting those conditions.

The Housing Code differs from the Building Code since it is a continuing enforceable document applied to existing structures and can be utilized as a maintenance measure, whereas the Building Code provides for an initial construction review.

Building Code

The Building Code was in the process of being revised during the planning program. This, like all tools, must be sharpened occasionally by critical review and modification.

Official Map

The Official Map will show future public land areas, a highway network and its right-of-way needs, and other similar features of physical layout. An Official Map was prepared, adopted and recorded with the County to clarify the rights of the Village in exercising the controls allowed by State statutes in the one and one-half mile unincorporated area surrounding the Village. This map must now be revised to reflect the desired development of the area as substantiated in the planning studies to date and as shown on the adopted Development Plan for Wheeling.

Most of the data controlling future development which cannot be shown on the Zoning Map can and should be incorporated in an Official Map which should show at least the following items:

- (1) The Major Thoroughfare Plan, including all existing streets, extensions of streets, and street widenings, as indicated by the street classifications.
- (2) Areas to be reserved for public use., i.e., schools, parks, community center.
- (3) All other physical features referred to in the Subdivision Ordinance which can only be illustrated graphically, i.e., typical street cross-sections, engineering data, drainageways, etc.
- (4) Areas where flood plain regulations will be applied; resubdivision of existing plotted lands will be required as well as an indication of the Village government's desired development, in terms of non-public or semi-public areas.
- (5) Suggested zoning applicable to the unincorporated area, if annexed to the Village.

Capital Improvement Budget⁽¹⁾

The important tool in establishing the fiscal feasibility of the planning program is the Capital Improvement Program as reflected in the annual Capital Improvement Budget. The Program is a long-range schedule of financing non-recurring, usually large expenditures, while the Budget is the annual expenditure plan to "buy" the projects or items wanted. An annual budget allows yearly review of the expenditure commitments and priorities established for projects, to allow changes to be made to provide for changing conditions, therefore, changes in need and priority each year. An important phase of the Plan Commission's and Village Board's work will be the preparation of this "shopping list" of needed projects to be completed within the coming fiscal year.

The Capital Improvement Program has two major aspects: (1) it examines the past financial experience of the Village and attempts to project this experience in order to determine the approximate amount of money that will be available to finance needed or recommended improvements; and (2) it combines the total number of proposed improvements and public projects for careful evaluation and programming. All improvements should be carefully scheduled, whether they are made on a "pay-as-you-go" basis, from bond issues, or in conjunction with special assessment projects.

The Capital Improvement Budget must reflect all currently anticipated capital improvement expenditures. Some projects may be warranted as a result of obsolescence; others

(1) See Preliminary Planning Report 13, "Capital Improvement Program", January, 1964.

may be needed to carry out the over-all planning in the Development Plan. The projects included in this program are based on community need and the comprehensive development plans for Wheeling. It has become traditional to adopt a Capital Improvement Program on a five-year basis.

The Capital Improvement Program will give the community a clear picture of its future requirements, projects' costs, the method of financing them, and the community's ability to pay for the projects in relation to the continuing costs of other municipal services and expenditures. Inasmuch as Wheeling never remains static, and because stages of growth are necessary for healthful community development, the Capital Improvement Budget must be flexible.

Capital Improvement programming has the advantage of offering:

- (1) An appraisal of community improvements needed by an expanding population, consistent with the community's ability to pay for them.
- (2) A factual base for judging the worthiness of projects, in order to protect the community from "pet" projects forced on it by pressure groups.
- (3) An orderly manner of forecasting financial needs, in order to avoid extreme fluctuations in the tax rate.
- (4) A method of showing impartiality to all sections of the community in scheduling improvement projects.
- (5) A plan for acquisition of land for schools, parks, and other public purposes, in order to take advantage of favorable land costs.
- (6) A period of time over which to develop proper technical design, thereby eliminating the pitfall of hasty or ill-conceived projects.
- (7) The necessary justification for considering improvements by the President, Village Board, and other budget-making authorities.

The Village is currently operating on a balanced budget, utilizing budget and fiscal control to maintain a cash balance in the two principal operating funds. The cash reserves at the end of each fiscal year are not sufficient to undertake the needed improvements without considering additional revenues. Without adding new taxes but by expanding the use of present sources and modifying the management of the existing bond funds, additional monies can be made available. Other sources, such as Federal grants and interest-free loans, can and should be used in Wheeling's development. Normal increases in assessed valuations, user's fees and charges, and

enlargement of the tax base through annexations, all must be considered in the improvement programming. Available sources of funds for capital improvements are listed in the following table:

TABLE 14
POSSIBLE SOURCES OF FUNDS FOR CAPITAL IMPROVEMENTS

<u>Sources</u>	<u>Purposes</u>	<u>Limitations</u>
GENERAL FUNDS		
(a) Property Tax, G.O. Bonds	Any	No limitation; permitted by referendum.
(b) Sales Tax; (\$57,000, 1963)	Any	Limited by amount of collection.
(c) Utility Tax; (not now used)*	Any	Limited by amount of collection (5% of utility bills).
PARKING METER FUNDS		
(a) Revenue Funds; (not now used)	Acquisition, maintenance, operation, on and off-street parking sites, enforcement, lot improvement.	Limited by amount of collection and related to rates.
MOTOR FUEL TAX		
(Annually, \$58,000 approx.)**	Streets, curbs, sidewalks; related storm drainage.	Unlimited to arterial streets; 25% previous year's allocation to non-arterials; may be pledged to retire G.O.'s; may add 10% mileage per year.
SPECIAL ASSESSMENT		
	Streets, curbs, sidewalks, drainage, parking lots, parking decks.	None. Village's share can be paid by special levy.
GENERAL OBLIGATION BONDS		
(\$23,000 outstanding)	Any.	Combined 5% of assessed valuation for both General (2½%) and Special (2½%) projects, with voter approval.
REVENUE BONDS		
(\$540,000 outstanding)	Sanitary Sewers, water, parking lots, and meters.	As established by existing revenue bond ordinances and coverage required by fiscal market. (1½ times amount utilized by bonds).

*1955 Legislature allowed 5% Utility levy.

**Village has approximately \$200,000 available for use (January, 1964).

The Capital Improvement Program must consider all the projects contemplated in the Development Plan. A list of these projects, regardless of the authority responsible, is given in Table 15. However, the Village's suggested program (Table 16) reflects only those projects under the control of and to be financed by the Village. This program is necessary because of lack of maintenance or not recognizing the need for improvements in the past and because of the reluctance of the Village to take the necessary steps to obtain citizen authority to issue bonds for financing. Many of these projects would have been avoided if an adequate subdivision ordinance had been enforced.

A concerted effort should be made to consolidate the most urgent improvements into a "Wheeling Progress Program", covering a wide range of projects. In developing a program of this kind, it should be considered that the level of bonded indebtedness chargeable to the real estate property tax would remain at approximately the same level, once established. Based on present and anticipated assessed valuation, this level amounts to approximately one-half the available bonding power. Assuming that bonds would be issued for a twenty-year period, carrying an interest rate of 4 per cent, and would be paid off equally in the twenty-year period, the Village would be able to issue bonds in subsequent years, 1966-67 and 1968-69, to maintain a relatively consistent tax levy of approximately \$2.00 per \$1,000.00 assessed valuation. The actual rate would be determined by the amount of operating funds which could be utilized as repaying the bond issues and would thereby abate the tax levy for the bonds.

In addition, it is assumed that where possible, the Village would dedicate Motor Fuel Tax funds to the repayment of the General Obligation bonds for street and related improvements. An optional method of handling special assessment projects is available. The "public benefit" share, i.e., that portion paid by the Village, can be either levied as a special assessment benefit tax or paid from bond issues. The special levy does not require voter approval whereas bond issues do.

It is not anticipated that all of the projects included in the Progress Program will be undertaken the first year, but plans for coordinating street improvements and water and sewer construction should be provided. Since the success of an improvement program will depend to some extent on the citizens' acceptance, it is felt that an educational program should be included that would inform citizens of what is anticipated in the program's improvements and the extent of future demands for additional bond issues.

TABLE 15

POTENTIAL CAPITAL REQUIREMENTS CONSIDERED IN PRELIMINARY PLANNING REPORTS

Future Residential Urban Renewal Projects

- (1) Predominant open land projects involving sub-standard existing subdivision development upon annexation.
- (2) Spot clearance, if in conservation areas.
- (3) Demonstration project; residential remodeling and maintenance

Commercial Development

- (4) Additional parking area for commercial areas.
- (5) Street connections to proposed or resubdivided commercial areas along Milwaukee Road.
- (6) Landscaping of present Village areas.
- (7) Elimination of border conflict points; installation of curbs, closing of driveways, etc.

Schools (Note: Program designed to maintain present tax level. Not within Village tax limitations but should be coordinated with total public expenditures.)

- | | | |
|------|--|-----------|
| (8) | 1964 - Purchase Junior High Site | \$ 92,000 |
| (9) | 1964 - Hollywood Ridge School | 450,000 |
| | Sandburg Addition | 160,000 |
| (10) | 1965 - Buffalo Grove School | 350,000 |
| | South School | 350,000 |
| (11) | 1966 - Junior High School. | 800,000 |
| (12) | Future School Sites | |

Parks (Portion of acquisition to be participated in, 30%; 20% by Federal Gov't.)

- | | | |
|------|--|-----------------|
| (13) | Acquisition of park areas | 262 acres |
| (14) | Acquisition of flood plain. | 800 acres |
| (15) | Acquisition of golf courses | 280 acres (Min) |
| (16) | Park Administration Building-Recreation Center | |
| (17) | Park Improvement Costs (unlimited) | |

Utilities (Revise all utility studies to reflect future land uses as adopted by Village Board.)

- | | | |
|------|--|-------------------|
| (18) | Water: | |
| | (a) New deep well | \$225,000 (a + d) |
| | (b) Deepening present deep well | 25,000 |
| | (c) Completing new shallow well | 22,000 |
| | (d) 500,000 gal. elevated storage tank | |
| | (e) Replace 50,000 with 300,000 gal.
elevated storage | 40,000 |
| | (f) Central water facility controls | 20,000 |
| | (g) Water source survey; cooperative
effort with others | |
| | (h) Water system extensions, circulation | 247,000 |
| | (i) Future extension (cost over 8" only) | 400,000 |

TABLE 15 (Cont'd.)

POTENTIAL CAPITAL REQUIREMENTS CONSIDERED IN PRELIMINARY PLANNING REPORTS

Utilities

(19)	Sanitary Sewers (immediate, \$158,000):	
	(a) Completion of 1958 program	\$ 108,000
	(b) Sewer extension along North Milwaukee	41,000
	(c) By-pass pump and controls	8,500
	(d) Future extensions, new areas - over 10"	1,200,000
(20)	<u>Storm Drainage</u>	
	(a) Storm sewer extensions:	
	-1 2nd St., Strong-Meyer Aves.. . . .	50,000
	-2 Outlet for Chamber of Commerce basin	56,000
	-3 Mors Av.	60,000
	-4 Wolf Rd.	19,000
	-5 Meadowbrook	16,000
	-6 Dunhurst	95,000
	-7 Hollywood Ridge	1,500
	-8 along railroad	500
	Total*	\$ 358,000
	(b) New areas.	1,600,000
	(c) Drainage Ditch improvement	80,000

Community Facilities

(21)	Civic Center Site	\$ 225,000
(22)	Village Hall--Police, fire, etc.	350,000
(23)	Library	
(24)	Park Building	
(25)	Public Works Garage, Yard	
(26)	Future Fire Station Site	

Streets (Cost estimates based on previously discussed program)

(27)	Dundee Road Improvement	
(28)	Dundee Road Railroad underpass	
(29)	County Line Road expressway	
(30)	Wheeling Road improvement and relocation to connect with McHenry Road	\$ 130,000
(31)	Improvement of sub-standard streets	\$ 275,000
	(reconstruction and repair) Immediate	
	Note: Storm drainage facilities should be adequate or improved at same time	
	Future	\$ 250,000
(32)	New construction (Strong) Immediate	\$ 65,000

*Total includes 20% contingencies and engineering fees.

<u>Project and Year</u>	<u>Total Project Cost</u>	<u>Gen'l. Oblig. Bonds</u>	<u>M.F.T. G.O. Bonds</u>	<u>Special Assessment</u>		<u>Revenue</u>		<u>Source</u>
				<u>Public Benefit Tax</u>	<u>Private</u>	<u>Bonds</u>	<u>Other</u>	
<u>1964-1965</u>								
STORM DRAINAGE:								
Items necessary for completion prior to Street Impr.								
Dunhurst Heights	95	48			47*			
Mors Avenue	60	30			30*			
WATER:	50					50		
Deep well & 500,000-gal. storage	225					225		
Deepen present deep well	25					25		
Complete shallow well	22					22		
Replace 50,000-gal. storage tank	40					40		
Centralize system, controls	20					20		
SANITARY SEWERS:								
Completion of 1958 program (108)						(108)		
No. Milwaukee sewer ext.	41					41		
STREETS:								
Wheeling Rd. relocation & reconstruction	130				20**		110	M.F.T.
COMMUNITY FACILITIES:								
Acquisition of Civic Center site-prel. site developm't.	260	260						
TOTAL 1964-1965 (1958 program excluded)	968	338			97	423	110	

*Where no storm sewers exist, cost split 50% Village, 50% to benefited property.

**Cost of curbs for improvement to be assessed.

SUGGESTED CAPITAL IMPROVEMENT SCHEDULE BY PRIORITY YEAR AND FINANCING
(Figures shown in thousands, \$000's omitted)

TABLE 16

<u>Project and Year</u>	<u>Total Project Cost</u>	<u>Gen'l. Oblig. Bonds</u>	<u>M.F.T. G.O. Bonds</u>	<u>Special Assessment</u>		<u>Revenue Bonds</u>	<u>Other</u>	<u>Source</u>
				<u>Public Benefit Tax</u>	<u>Private</u>			
<u>1967-1968</u>								
WATER-Misc. Improvements	25					25		
STREETS - to be scheduled	25		20		5			
VILLAGE HALL	200	150					50	Sale of bldg.
TOTAL 1967-1968	250	150	20		5	25	50	
<u>1968-1969</u>								
WATER-500,000-gal. storage & deep well	225					225****		
STREETS - to be scheduled	25		20		5			
PUBLIC WORKS GARAGE & YARD Relocation and construction	50	50						
TOTAL 1968-1969	300	50	20		5	225		

****Becomes both necessary and feasible with additional population growth--increase in service revenues.

SUGGESTED CAPITAL IMPROVEMENT SCHEDULE BY PRIORITY YEAR AND FINANCING

TABLE 16 (Cont'd.)

101.

A factor in the development of the large public land acquisition phase of the Capital Improvement Program is the development of flood retention areas and municipal lands that could utilize the Federal Government's 20 or 30% public land grant program.

Urban Renewal

An urban renewal program, under existing State and Federal legislation, is recommended in two general areas. The conservation of existing older neighborhoods should be undertaken. This would include the selective removal of dilapidated structures as well as assist in and encourage maintenance and preservation of existing structures, both residential and commercial. The other area is in the acquisition and resubdivision of antiquated, underdeveloped subdivisions that are annexed to Wheeling. The costs of such programs, meeting Federal requirements and eligibility, are shared from two-thirds to three-quarters of the net costs of the project.

Community Facilities

The restudy of the planning area for needed utilities as well as extensions of municipal utilities should be undertaken, to complete the utility planning program effectively initiated and to provide a sound base for subdivision review as well as Village construction program.

The respective School and Park Districts must review their respective sections of the Development Plan and transmit to the Plan Commission and Village Board the extent of sites to be embodied in the Official Map. The establishment of a focal point for the Village has been recommended in the cooperative acquisition and construction of a Community Center.

Jurisdictional Control and Annexation

The vastness of unincorporated areas surrounding Wheeling will require extensive cooperative action of adjoining municipalities to establish logical spheres of jurisdiction within the provision of the State law. The legal arbitrary mid-point between municipalities as planning jurisdictional limits should be changed by mutual agreement to boundaries which can be served by each municipality and yet be consistent, if possible, with the wishes of the residents. In no case should the municipalities involved be "played off" against each other by a developer to permit development below a common minimum standard. An extension of planning in the jurisdiction would be a policy of encouraging and accepting annexations to the Village.

Detailed technical reports were issued during the course of the preparation of the General Development Plan in Wheeling. These Preliminary Planning Reports contain background information on which planning decisions were based and point out areas of necessary policy decisions. Their general content is listed below:

Prel. Report	Subject	Figures	Tables
1	PLANNING PROGRAM OBJECTIVES		
2	EXISTING LAND USE	Existing Land Use 2-1 Existing Zoning 2-2	Land Uses, Acres & Per Cent 2-1 Ranking of Land Use Categories . . . 2-2
3	SOCIAL-ECONOMIC POPULATION CHARACTERISTICS	Wheeling's Relationship to No. Chicago Area . . 3-1 1960 Population Profile by Census District . . 3-7 Distribution of Persons by Age Group in % . . 3-8 Distribution of Persons by Age Group in 1960 . 3-9	Population Growth, Wheeling 3-2 Potential Comparison Communities . 3-3 Surrounding & Competitive Comm. . . 3-4 Ten-Yr. Population Trend 3-5 Wheeling Township Growth by Incorporated Area and Percentage. 3-6 Income by Category 3-10 Employed and Unemployed 3-11 Labor Force Occupations 3-12 Employment by Industry 3-13 Saturated Population for Plan Area. 3-14
4	HOUSES AND HOMES	1960 Housing Profile . . 4-6 Actual Land Use & Subdivision Developm't. 4-7 Lot Sizes & Flood Hazard Areas 4-8 Potential Developm't. in Housing Units 4-11	Residential Units in Wheeling . . . 4-1 % of Residential Units by Type. . . 4-2 Type of Occupancy of Housing Units. 4-3 Vacancy Rate 4-4 Housing Characteristics 4-5 Density in Housing Units & People . 4-9 Existing Zoning 4-10 Summary-Potential Developm't. Multi-Family Units 4-12
5	COMMERCIAL DEVELOPMENT	Areas Zoned and Utilized for Business 5-1 Commercial Factors and Potential Center Sites 5-5	Land Zoned and Utilized as Business, in Acres 5-2 Total and Per Capita Retail Sales for 1960-1962 in Wheeling 5-3 Summary of Business Facilities . . 5-4 Competing Shopping Centers 5-6

PRELIMINARY PLANNING REPORTS

<u>Prel. Report</u>	<u>Subject</u>	<u>Figures</u>	<u>Tables</u>
11	COMMUNITY FACILITIES PLAN	Suggested Civic Center, Wheeling . . . Plot Plan Architect's Concept of Civic Center . . . Sketch Community Facilities Plan Map	Summary Schedule--Property Acquisitions
12	COMMUNITY BUSINESS PLAN	Commercial Factors and Potential Sites 12-1 Suggested Development: Dundee Road Area . . . 12-2 Suggested Development: Wheeling Shop. Center. 12-3 Suggested Development: Buffalo Creek Center . 12-4	
13	CAPITAL IMPROVEMENT PROGRAM		Summary, Revenue Bond Expenditures, 1959-1963 13-1 Possible Sources of Funds for Capital Improvements. 13-2 Actual and Estimated Assessed Valuations; G. O. Bonded Indebt- edness, 1959-1968 13-3 Potential Capital Requirements. . .13-4-a Suggested Capital Improv.Schedule .13-4-b Example of Amortization of G.O. Bonded Debt13-5-a Example of Amortization of Revenue Bonds13-5-b

APPENDIX TWO
CONSULTING MEMORANDUMS

During the preparation of the Plan, it was necessary for the Village to make decisions upon various planning matters. Our opinions on these problems, whenever they were requested, were furnished in the form of consulting memorandums, the contents of which are listed below:

<u>No.</u>	<u>Date</u>	<u>Subject</u>
1	3/26/62	Hintz Road Annexation
2	3/26/62	Annexation and Zoning of Appropriate 300 Acres South of the Village along the Soo Railroad
3	3/27/62	Review Subdivision Plat--Wheeling Gardens
4	4/19/62	Rezoning Request--Wheeling Gardens Subdivision Area
5	6/1/62	Industrial District Setbacks
6	8/16/62	Subdivision Ordinance--Construction Details
7	8/20/62	Amerline Property--Sector Maps
8	8/29/62	References to Industrial Setback and Intensity Studies
9	9/19/62	Additional Background--Industrial Setbacks
10	11/14/62	Background Outline of Development Factors re: Official Map
11	1/2/63	Questions Raised in Plan Commission Letter of 29 Dec. 1962
12	1/8/63	Explanation of Improvement Procedure Suggested in Supplement Number One, "Technical Provisions, Subdivision Ordinance"
13	1/24/63	Review of Multi-Family Zoning Request (O'Donnell)
14	2/13/63	Revisions to Subdivision Ordinance. Sidewalks: Application to Non-Residential Uses
15	2/21/63	Comments--Wheeling Standards
16	2/27/63	Comments re: Zoning Amendments #71 (Multi-Family, Height) and #72 (Industrial--45 acres)
17	2/27/63	Various Amendments--Industrial District Regulations
18	3/27/63	Industrial District Zoning Regulations
19	4/3/63	Clarification of Article V, Section C, Subdivision Regulations
20	5/20/63	Elm Development Corporation--Industrial Subdivision (Street R-O-W)
21	6/7/63	Zoning Board of Appeals, Docket #60
22	7/23/63	Flood Plain Ordinance

