

RM
CIP
Map
Page

Frankfort-CLINTON COUNTY Comprehensive Plan



VIA-FLY

HUFF · CARPENTER · ROSS · ASSOCIATES PLANNING CONSULTANTS
SOUTH BEND · INDIANAPOLIS



HUFF • CARPENTER • ROSS • ASSOCIATES

ROBERT L. HUFF, A.I.P.
DOUGLAS CARPENTER, A.I.P.
ERNEST ROSS

COMMUNITY PLANNING • URBAN DESIGN • COMMUNITY DEVELOPMENT • ZONING

MEMBERS • AMERICAN INSTITUTE OF PLANNERS
AMERICAN SOCIETY OF PLANNING OFFICIALS
REGISTRATION • COMMUNITY PLANNER-MICHIGAN

SEPTEMBER 22, 1974

AREA PLAN COMMISSION OF CLINTON COUNTY
COURT HOUSE
FRANKFORT, INDIANA

GENTLEMEN:

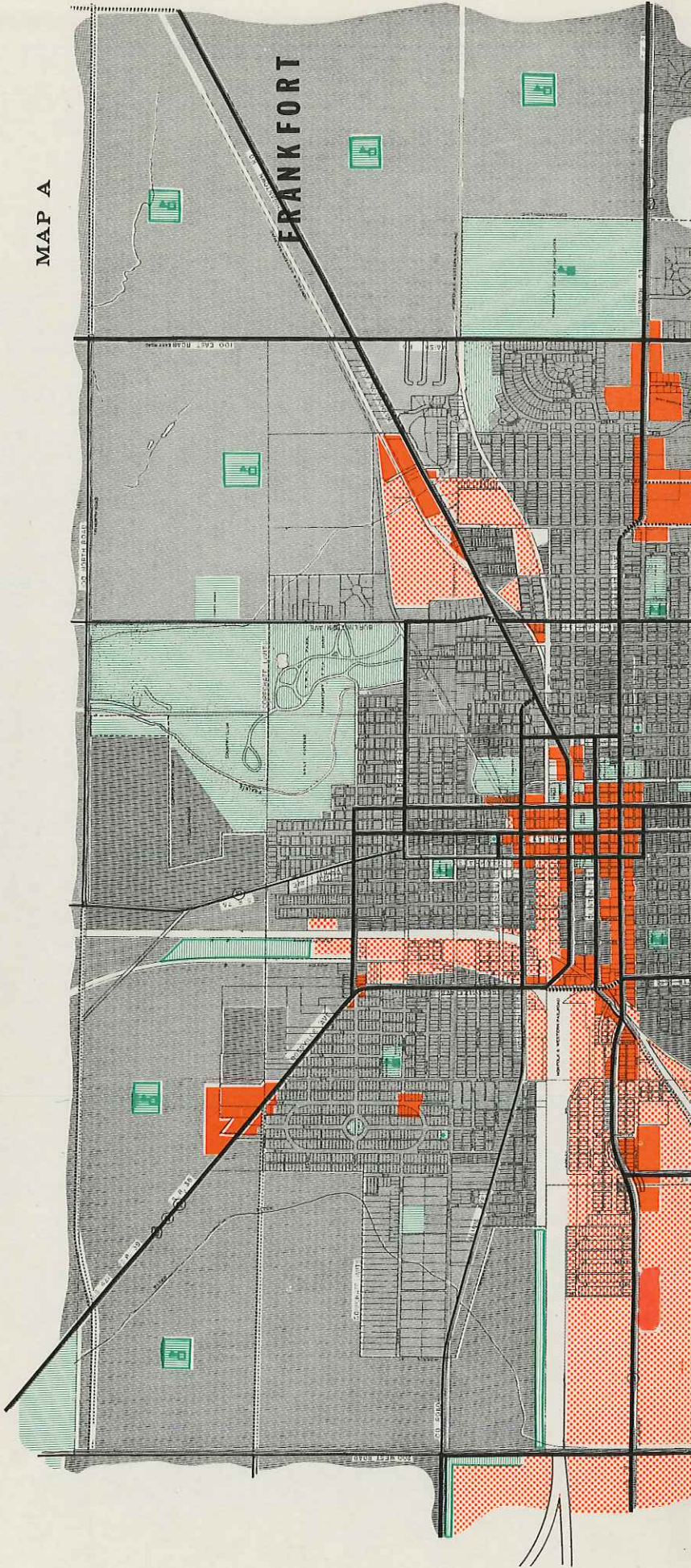
IT IS A PLEASURE TO PRESENT THE COMPREHENSIVE PLAN FOR CLINTON COUNTY, THE CITY OF FRANKFORT, AND THE TOWNS OF MICHIGANTOWN, COLFAX, KIRKLIN, MULBERRY, AND ROSSVILLE. PART I IS THE INVENTORY AND ANALYSIS PHASE OF THE PROGRAM UPON WHICH MANY OF THE PLANS AND RECOMMENDATIONS OF THE NEXT PHASE (PART II) ARE BASED.

WITH THE COMPLETION OF THIS REPORT A MAJOR STEP HAS BEEN MADE TOWARD THE ORDERLY FUTURE DEVELOPMENT OF THE CLINTON COUNTY COMMUNITY, BOTH URBAN AND RURAL.

SINCERELY,

ROBERT L. HUFF

MAP A



COMPREHENSIVE DEVELOPMENT PLAN - CLINTON COUNTY

South Bend HUFF - CARPENTER - ROSS ASSOCIATES Indianapolis

PART I

TABLE OF CONTENTS

CHAPTER 1

EXISTING LAND USE

CHAPTER 2

POPULATION

CHAPTER 3

ECONOMIC PROFILE

CHAPTER 4

TRANSPORTATION

CHAPTER 5

HOUSING

CHAPTER 6

NATURAL RESOURCES

CHAPTER 7

COMMUNITY FACILITIES

CHAPTER 8

PUBLIC UTILITIES

CHAPTER 9

GOALS, STANDARDS, AND OBJECTIVES

INTRODUCTION

THE COMPREHENSIVE PLAN FOR CLINTON COUNTY AND FRANKFORT, INDIANA

THIS REPORT IS THE COMPREHENSIVE PLAN; THE HISTORICAL AND EXISTING CONDITION OF DEVELOPMENT AND THE POTENTIAL FOR THE NEXT TWENTY YEARS. THIS IS THE SURVEY AND ANALYSIS PHASE OF THE PROGRAM... PART I.

PART II, TRANSLATES THE FINDINGS AND NEEDS DETERMINED BY THE STUDIES OF PART I INTO PLANS AND RECOMMENDATIONS.

CORRELATIVE TO THE PLANNING STUDIES, AND INSEPARABLE FROM THE PLAN ELEMENTS, ARE THE ASPIRATIONS OF THE RESIDENTS FOR THE ENVIRONMENT IN WHICH THEY LIVE - THEIR GOALS AND OBJECTIVES. THIS REPORT OUTLINES GENERAL GOALS FOR THE DEVELOPMENT OF THE COUNTY AND CITY, SUGGEST STANDARDS WHICH APPEAR TO REPRESENT THE CONSENSUS OF DEVELOPMENT TO MEET THE GENERAL NEEDS AND DESIRES OF THE CLINTON COUNTY COMMUNITY, AND PRESENTS TENTATIVE OBJECTIVES TO BE ATTAINED IN DEVELOPMENT.

A THIRD PART OF THE TOTAL PLANNING PROGRAM CONSISTS OF THE POLICIES AND PROGRAMS WHICH ARE USED TO CARRY OUT DEVELOPMENT AND REDEVELOPMENT IN RESPONSE TO THE PLANS AND GOALS. THESE ARE THE IMPLEMENTING ORDINANCES --- THE SUBDIVISION CONTROL ORDINANCE, THE CAPITAL IMPROVEMENT PROGRAM, THE ZONING ORDINANCE, FOR EXAMPLE.

THE PHYSICAL MAKE-UP OF THE AREA IS COMPOSED OF THREE PRINCIPAL ELEMENTS: MAJOR LAND USES, WHICH HELP SHAPE THE AREA; COMMUNITY FACILITIES, WHICH SERVE THE RESIDENTS; AND TRANSPORTATION FACILITIES, WHICH PROVIDE FOR THE MOVEMENT OF PEOPLE AND GOODS.

**EXISTING
LAND USE**

EXISTING LAND USE

SINCE THE BASIC INGREDIENT IN PLANNING IS THE LAND, AN UNDERSTANDING OF ITS CHARACTERISTICS IS PREREQUISITE TO THE SUBSEQUENT DEVELOPMENT OF PLANNING PROPOSALS. BY MEANS OF LAND USE MAPS, IT IS POSSIBLE TO VIEW THE DISTRIBUTION AND RELATIONSHIPS OF THE EXISTING LAND USES IN THE URBAN-RURAL AREA. THE RESULTS OF THE CONSULTANT'S FIELD SURVEYS OF LAND USE ARE ILLUSTRATED ON MAPS SHOWING RESIDENTIAL, BUSINESS, INDUSTRIAL AND INSTITUTIONAL USES IN THE CITY OF FRANKFORT, THE INCORPORATED TOWNS IN THE COUNTY, AND THE ENTIRE URBAN-RURAL COUNTY.¹ THIS CHAPTER IS CONCERNED WITH THE SURFACE UTILIZATION OF LAND; THEREFORE, ALL LAND IS EITHER DEVELOPED, VACANT, OR WATER AREA. DEVELOPED LAND IS THAT WHICH IS USED FOR PURPOSES THAT ARE RECOGNIZED AS URBAN IN CHARACTER, WHETHER PUBLIC OR PRIVATE, WHETHER DEVOTED TO AN OPEN USE SUCH AS PARKS AND PLAYGROUNDS, OR TO A SITE USE SUCH AS RESIDENTIAL, COMMERCIAL, OR INDUSTRIAL. AGRICULTURAL LAND, FOR THE PURPOSE OF THIS ANALYSIS, IS VACANT LAND. VACANT LAND AND WATER ARE INCLUDED TO GIVE AN ACCOUNTING OF ALL ACREAGE, ALTHOUGH AS QUANTITIES, THEY LACK SIGNIFICANCE. FOR PURPOSES OF DESCRIPTION THE TOTAL PLANNING AREA, CLINTON COUNTY, HAS BEEN DIVIDED INTO THREE PARTS-- THE CITY OF FRANKFORT; THE INCORPORATED TOWNS OF MULBERRY, COLFAX, KIRKLIN, ROSSVILLE, AND MICHIGANTOWN; AND THE REMAINING UNINCORPORATED TERRITORY.

EACH PARCEL OF LAND WAS ASSIGNED TO ONE OF THE CLASSIFICATIONS CONTAINED IN THE STANDARD LAND USE CODING MANUAL, 1965, DEVELOPED BY THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT AND THE BUREAU OF PUBLIC ROADS, DEPARTMENT OF COMMERCE. USE OF THE STANDARD CODING MANUAL PROVIDES COMPARABILITY BETWEEN LOCALITIES AND BETWEEN REGIONS AND PERMITS THE STUDY OF TRENDS OVER TIME IN INDIVIDUAL URBAN AREAS.

LAND USE ANALYSIS

LAND USE INFORMATION PORTRAYED ON A MAP IS ESSENTIAL TO THE PLANNING PROGRAM (SEE MAPS 1, 2, AND 3). LAND USE ANALYSIS, HOWEVER, FOR VERY SMALL COMMUNITIES AND THE RURAL COUNTY IS AN ENDEAVOR OF VERY LIMITED USEFULNESS OR PURPOSE AND ARE ANALYZED IN THIS REPORT IN THE MOST GENERAL WAY.

THE APPLICATIONS OF LAND USE DATA FOR PLANNING PURPOSES ARE MANIFOLD. FOR EXAMPLE, THEY CAN BE USED TO DETERMINE COMMERCIAL MARKETS, TO LOCATE INSTITUTIONS SUCH AS CHURCHES AND

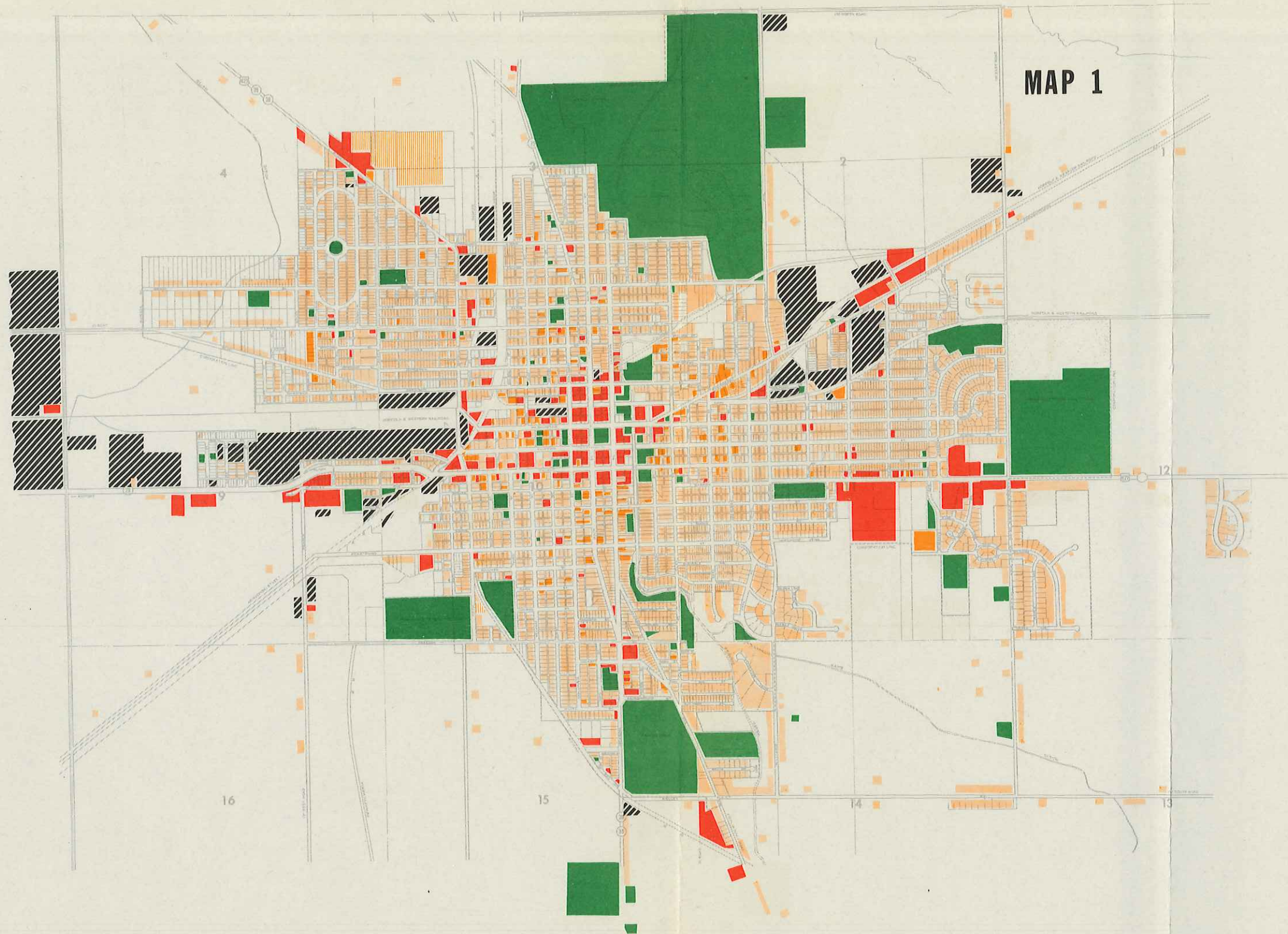
¹ LAND USE INFORMATION REPRESENTING CONDITIONS AT THE TIME OF THE FIELD SURVEY, JANUARY, FEBRUARY, 1974, WAS CHECKED AGAINST THE LATEST U.S. DEPARTMENT OF AGRICULTURE AERIAL MOSAICS, MAPS OF THE U.S. DEPARTMENT OF INTERIOR GEOLOGICAL SURVEYS, AND WITH INDIVIDUALS KNOWLEDGEABLE OF DEVELOPMENT WITHIN THE COUNTY.

SCHOOLS, FOR THOROUGHFARE PLANNING, AND FOR ZONING PURPOSES. IN ZONING, IT IS ESSENTIAL TO KNOW THE LOCATION AND EXTENT OF LAND USED FOR VARIOUS PURPOSES. THE RESULT OF LAND USE INFORMATION FOR FRANKFORT IS EXPRESSED AS AN AREA IN ACRES, IN PERCENTAGES OF A PRESCRIBED AREA, AND AS A RATIO TO 100 PERSONS. ONE VALUE OF LAND USE SURVEYS TABULATED IN THIS MANNER LIES IN COMPARATIVE STATISTICS. HOWEVER, AS WITH ALL SIMILAR COMPARISONS, THERE ARE LIMITS OF APPLICABILITY. A COMMUNITY'S FUTURE LAND REQUIREMENTS CANNOT BE PROJECTED WITH COMPLETE ACCURACY ON A BASIS OF CURRENT RATIOS. LIKEWISE, A COMPARISON OF LAND USES BETWEEN TWO OR MORE COMMUNITIES WILL NOT DISCLOSE DIFFERENCES DUE TO PHYSIOGRAPHY AND CHARACTER. HOWEVER, IN EACH CASE, COMPARISON CAN BE INSTRUCTIVE. IN COMBINATION WITH OTHER BASIC STUDIES, AND WITH GOOD JUDGMENT, CORRECT LAND USE DATA OFFERS A FACTUAL BASE FOR SOUND PLANNING AND ZONING. AMONG THE LAND USE CATEGORIES OF VARIOUS CENTRAL CITIES, SUCH AS FRANKFORT, ONLY THE AVERAGES OF RESIDENTIAL AND COMMERCIAL AREAS, AND TO A LESSER DEGREE, OF STREETS AND ALLEYS, CAN BE CONSIDERED NORMS, OR AS HAVING DEFINITE LAWS OF ABSORPTION. THIS PROVIDES A RELIABLE MEANS OF FORECASTING THE AMOUNT OF LAND THAT CAN BE ABSORBED BY THESE USES IN THE FUTURE, AND WHEN DIRECTLY RELATED TO FUTURE POPULATION, AT ABOUT WHAT TIME IN THE FUTURE. WITH SUPPLEMENTARY INFORMATION TO BE DEVELOPED IN LATER PHASES OF THE PLANNING PROGRAM, A REASONABLY RELIABLE METHOD OF FORECASTING THE DISTRIBUTION AND EXTENT OF LAND USE WILL BE AVAILABLE. FOR IF PLANNING IS TO SERVE ADEQUATELY IN THE PROMOTION OF RATIONAL AND ECONOMIC DEVELOPMENT, IT MUST BE CLOSELY RELATED TO THE AMOUNT AND GEOGRAPHIC DISTRIBUTION OF LAND THAT CAN BE ABSORBED FOR VARIOUS PURPOSES.

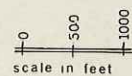
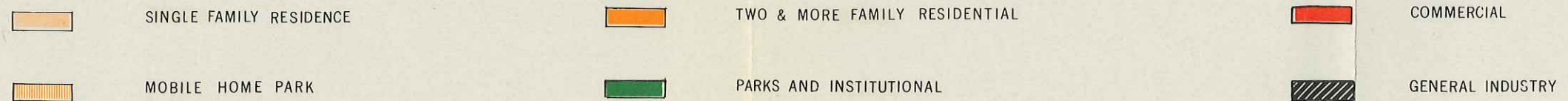
THE FRANKFORT URBAN AREA

SPACE FOR NEW POPULATION AND ACTIVITIES IN SMALLER URBAN AREAS IS OBTAINED PREDOMINANTLY BY LATERAL EXPANSION. THIS PERIPHERAL DEVELOPMENT IS AN EXTENSION OF THE OLDER CITY AND IT MUST BE RECOGNIZED THAT THE WHOLE URBAN AREA IS THE "COMMUNITY" WHETHER WITHIN OR WITHOUT THE ARBITRARY POLITICAL CORPORATION BOUNDARIES.

THE TOWN OF FRANKFORT CONTAINS ONLY THE LARGER PORTION OF THE DEVELOPED LAND WITHIN THE URBAN COMMUNITY. GRAPHIC PRESENTATION OF THE TYPES AND DISTRIBUTION OF LAND USES IN THE FRANKFORT AREA ARE SHOWN ON MAP 1. TWO TABLES, 1 AND 2, HAVE ALSO BEEN PREPARED SHOWING (1) THE MEASUREMENT OF THE EXISTING USE OF LAND IN THE AREA AND (2) ACREAGE BY TYPE OF USE PER 100 PERSONS RESIDENT IN THE AREA IN 1970. THESE DATA SERVE TO PLACE THE DISTRIBUTION OF LAND USE IN PERSPECTIVE RELATIVE TO OTHER URBAN AREAS AND TO HIGHLIGHT THE RELATIONSHIPS WITHIN THE AREA.



MAP 1



FRANKFORT, INDIANA



EXISTING LAND USE

1974



TABLE 1

FRANKFORT URBAN AREA

EXISTING LAND USE - 1974

CODE NO.	USE	AREA - ACRES	PERCENT ¹ OF AREA
	DEVELOPED AREA		
10	RESIDENTIAL	910.9	29.0
11	SINGLE FAMILY	850.3	27.0
12-13	TWO AND MORE FAMILY	55.1	1.8
14	MOBILE HOME PARK	5.5	0.2
20-30	INDUSTRIAL	458.8	14.5
40	TRANSPORTATION	948.2	30.2
41	RAILROADS (R/W)	278.7	8.9
45	STREETS	610.5	19.4
45	ALLEYS	58.9	1.9
50-60	TRADES AND SERVICE	208.6	6.6
60-70	PUBLIC SERVICE & RECREATIONAL	618.2	19.7
68-72	PUBLIC & INSTITUTIONAL	280.3	8.9
76	PARKS & RECREATION	<u>337.9</u>	<u>10.8</u>
	TOTAL DEVELOPED AREA	3,144.7	100.0
	DEVELOPED AREA	3,144.7	88.8
	VACANT LAND & WATER	<u>395.8</u>	<u>11.2</u>
	TOTAL ACERAGE	3,540.5	100.0

¹PERCENT OF DEVELOPED ACERAGE

SOURCE: HUFF-NEIDIGH & ASSOCIATES

TABLE 2

ACRES OF DEVELOPED LAND PER 100 PERSONS
BY MAJOR LAND USE CATEGORY¹

FRANKFORT URBAN AREA AND SELECTED URBAN AREAS

USE	FRANKFORT	SELECTED URBAN AREAS ²			FRANKFORT DEVIATION FROM AVERAGE
		LOW	AVERAGE	HIGH	
RESIDENTIAL	6.0	3.1	4.2	8.1	+ 1.8
TRADE & SERVICES ³	1.4	0.2	0.4	1.2	+ 1.0
INDUSTRIAL ⁴	4.8	2.7	11.8	23.1	- 7.0
PUBLIC SERVICE ⁵ & RECREATIONAL	4.1	0.7	4.4	83.9	- 0.3
STREETS & ALLEYS	4.6	2.4	4.1	12.5	+ 0.5
TOTAL DEVELOPED AREA	20.9	9.1	24.9	128.8	- 4.0

- 1 AN ESTIMATED 1974 POPULATION OF 15,250 WAS USED FOR THE URBAN AREA.
- 2 SELECTED URBAN AREAS ARE FROM 7,150 POPULATION TO 119,825. FOUR OF THE AREAS ARE IN INDIANA, FIVE IN THE MIDWEST, AND SIX IN OTHER SECTIONS OF THE COUNTY.
- 3 EXCLUDE WHOLESALE AND WAREHOUSE.
- 4 INCLUDES RAILROAD, COMMUNICATIONS, WHOLESALE AND WAREHOUSE.
- 5 INCLUDES SCHOOLS, PARKS, CEMETERIES, CHURCHES, AND SIMILAR PUBLIC USES.

RESIDENTIAL USE

AREA OCCUPIED. REFERRING TO TABLES 1 AND 2, IT IS SEEN THAT RESIDENTIAL USES OCCUPY APPROXIMATELY 910 ACRES (29 PERCENT) OF THE DEVELOPED AREA AND CONSTITUTE WITH THE TRANSPORTATION CATEGORY, THE MAJOR USE OF LAND. THE AREA IS ABOVE THE "AVERAGE" IN RESIDENTIAL AREA PER 100 PERSONS, AS SHOWN ON TABLE 2.

APPROXIMATELY 55 ACRES (1.8 PERCENT) ARE DEVOTED TO TWO AND MORE FAMILY USE, WHILE MOBILE HOME PARKS OCCUPY 5.5 ACRES AND USE 0.2 PERCENT OF THE DEVELOPED LAND.

TRADES AND SERVICES

AREA OCCUPIED AND DISTRIBUTION. TRADES AND SERVICES USES, INCLUDING WHOLESALE AND WAREHOUSE, OCCUPY APPROXIMATELY 208 ACRES, 6.6 PERCENT OF THE TOTAL DEVELOPED AREA. AS SEEN IN TABLE 2, THIS FIGURE AMOUNTS TO 1.4 ACRES PER 100 PERSONS. BOTH FIGURES ARE ABOVE AVERAGE. THIS IS PRIMARILY A REFLECTION OF FRANKFORT'S ROLE AS THE PRINCIPAL MARKET CENTER TO A RELATIVELY LARGE FARM AND RURAL COMMUNITY WITH LITTLE COMPETITION IN SUPPLYING THE DAILY CONVENIENT SHOPPING REQUIREMENTS OF THAT COMMUNITY.

A RELATIVELY LARGE NUMBER OF INDIVIDUALLY SITED COMMERCIAL USES ARE FOUND ON SMALLER LOTS AND PARCELS THROUGHOUT THE AREA. THE CENTRAL BUSINESS DISTRICT HAS PROBLEMS IN STRUCTURAL OBSOLESCENCE AND OFF-STREET PARKING.

INDUSTRIAL USE

AREA OCCUPIED. THERE ARE APPROXIMATELY 458 ACRES OF LAND DEVOTED TO INDUSTRIAL USES, 14 PERCENT OF THE TOTAL DEVELOPED AREA. TABLE 1 DOES NOT INCLUDE IN THIS CATEGORY RAILROAD YARDS AND RIGHT-OF-WAY, COMMUNICATIONS AND WHOLESALE AND WAREHOUSE. TABLE 2, WHICH DOES, SHOWS 4.8 ACRES PER 100 PERSONS, SIGNIFICANTLY BELOW THE AVERAGE.

PUBLIC SERVICE AND RECREATIONAL

PUBLIC SERVICE AND RECREATIONAL USES OCCUPY A SUBSTANTIAL PART OF THE DEVELOPED URBAN AREA (618 ACRES, 20 PERCENT), INCLUDING SCHOOL AND PARK LANDS, CEMETERIES, CHURCHES, HOSPITAL, WESLEY MANOR, CITY, COUNTY AND STATE GOVERNMENT, AND SELECTED SERVICE AND FRATERNAL ORGANIZATIONS. THESE USES APPROACH THE AVERAGE OF THE URBAN AREAS STUDIED BY ACRES PER 100 PERSONS. THE ENVIABLE AMOUNT OF TOTAL PARK ACREAGE SLIGHTLY EXCEEDS THE NATIONAL RECREATION ASSOCIATION STANDARDS FOR CITY-WIDE PARKS (10 PERCENT OF DEVELOPED AREA), DUE PRIMARILY TO T-P-A CITY PARK.

STREETS AND ALLEYS

THESE USES OCCUPY APPROXIMATELY 669.4 ACRES OF THE DEVELOPED LAND IN THE URBAN AREA AND ARE THE SECOND LARGEST USE AFTER RESIDENTIAL. AREAS IN USE PER 100 PERSONS IS ALSO ABOVE THE AVERAGE. THIS IS EXPLAINED IN PART BY THE FORTUNATELY WIDE RIGHT-OF-WAY OF MOST MAJOR AND SEVERAL MINOR STREETS, THE FORMER THE RESULT OF A CONTINUING ADHERENCE TO THE WIDE STREET CONCEPT OF THE ORIGINAL TOWN PLAT. IT IS ALSO PARTIALLY ATTRIBUTED TO THE LARGE AMOUNT OF ALLEYWAYS WITHIN THE TOWN, WHEREIN MOST OF THE BLOCKS IN BOTH THE NEWER AND OLDER SECTIONS ARE CRISS-CROSSED WITH ALLEYWAYS WHETHER THEY EXIST ON THE LAND OR ON PLAT RECORDINGS. CONSIDERATION SHOULD BE GIVEN TO VACATING UNNEEDED AND "PAPER" ALLEYS TO RELIEVE THE PUBLIC EXPENSE OF MAINTENANCE AND TO RETURN MUCH OF THIS LAND TO THE TAX ROLLS.

INCORPORATED TOWNS

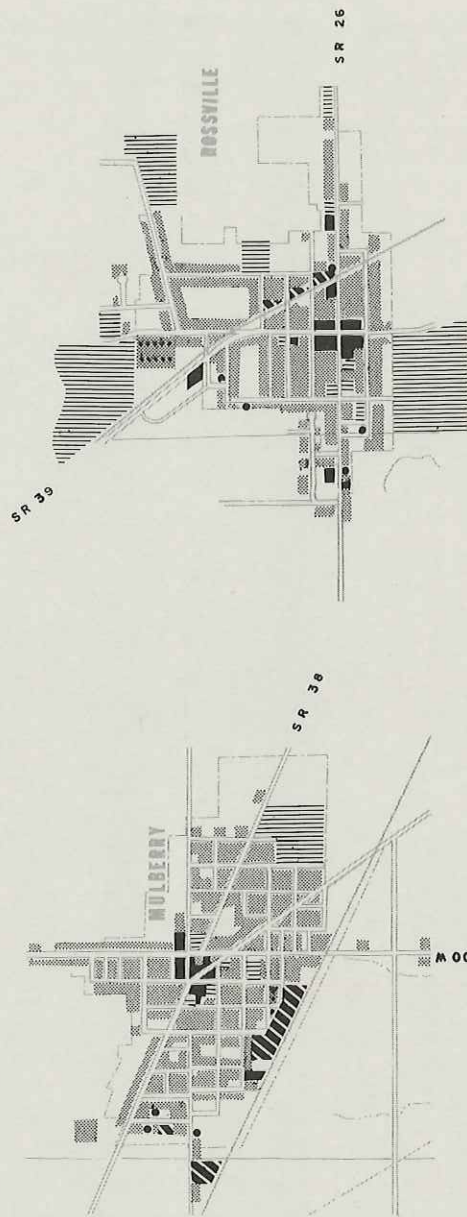
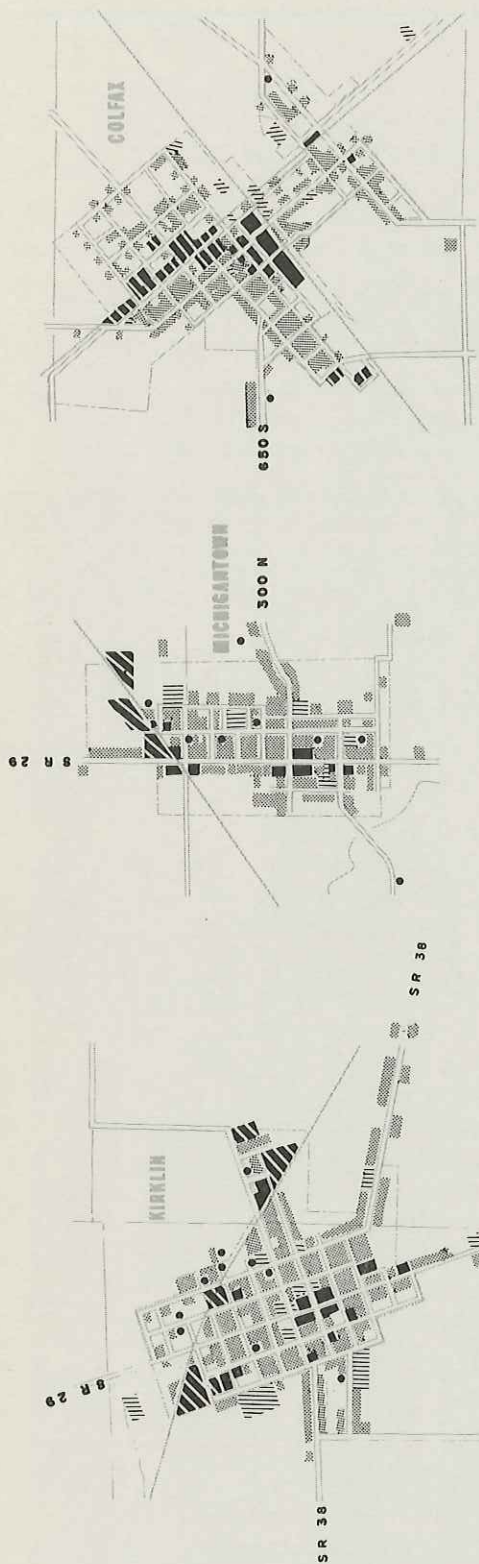
GRAPHIC PRESENTATION OF THE TYPES AND DISTRIBUTION OF LAND USE FOR THE INCORPORATED TOWNS OF ROSSVILLE, MICHIGANTOWN, COLFAX, MULBERRY AND KIRKLIN ARE SHOWN ON MAP 2.

CLINTON COUNTY AS A WHOLE

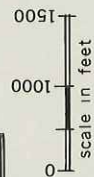
THE GROWTH OF URBAN COMMUNITIES, WITH FEW EXCEPTIONS, IS IN A PREDOMINANTLY HORIZONTAL DIRECTION. THE GROWTH OF THE INCORPORATED COMMUNITIES WITHIN CLINTON COUNTY IS IN THIS DIRECTION. THE GROWTH OF FRANKFORT HAS BEEN RELATIVELY COMPACT ALTHOUGH THERE ARE VACANT AREAS, PARTICULARLY IN THE FRINGE. THE URBAN GROWTH HAS NOT BEEN CONTAINED WITHIN THE CORPORATE CITY THROUGH ANNEXATION BUT HAS BEEN GENERALLY CONTAINED IN THE CITY'S URBAN AREA. AS A RESULT, THE PATTERN OF USE IN THE UNINCORPORATED COUNTY OUTSIDE THE ABOVE INCORPORATED TOWNS AND UNINCORPORATED PLACES IS RURAL IN CHARACTER WITH LIMITED SPILL-OVER OF CITY-ORIENTED USE. THE MAJOR PORTION OF THE TERRITORY IS DEVOTED TO AGRICULTURE AND AGRICULTURE-RELATED USES, WITH NON-AGRICULTURAL USES OCCURRING PREDOMINANTLY ALONG NUMBERED STATE AND FEDERAL ROUTES. THIS IS ILLUSTRATED IN MAP 3. AS WAS THE CASE WITH THE INCORPORATED AND UNINCORPORATED COMMUNITY, NO COUNTY COMPARATIVE ANALYSIS HAS BEEN DEVELOPED BECAUSE OF THE MEANINGLESS AND STATISTICAL NON-APPLICABILITY OF SUCH DATA.

GENERAL SUMMARY

IN THE PREPARATION OF A COMPREHENSIVE PLAN TO GUIDE GROWTH IN THE RURAL AND URBAN AREA OF CLINTON COUNTY, THE AREA PLANNING COMMISSION, THE CITY AND COUNTY ADMINISTRATIONS AND THE CITIZENS OF THE COUNTY MUST HAVE AN OVERALL PICTURE OF THE REGION AS IT NOW EXISTS - THE ARRANGEMENT, DISTRIBUTION AND EXTENT OF THE LAND USE MUST BE KNOWN. THE CONSOLIDATION OF THIS INFORMATION, TOGETHER WITH POPULATION PROJECTIONS AND CHARACTERISTICS, ANTICIPATED GENERAL ECONOMIC CONDITIONS, NATURAL RESOURCES AND OTHER BASIC INFORMATION BEFORE COMPREHENSIVE PLANNING MAY BEGIN.



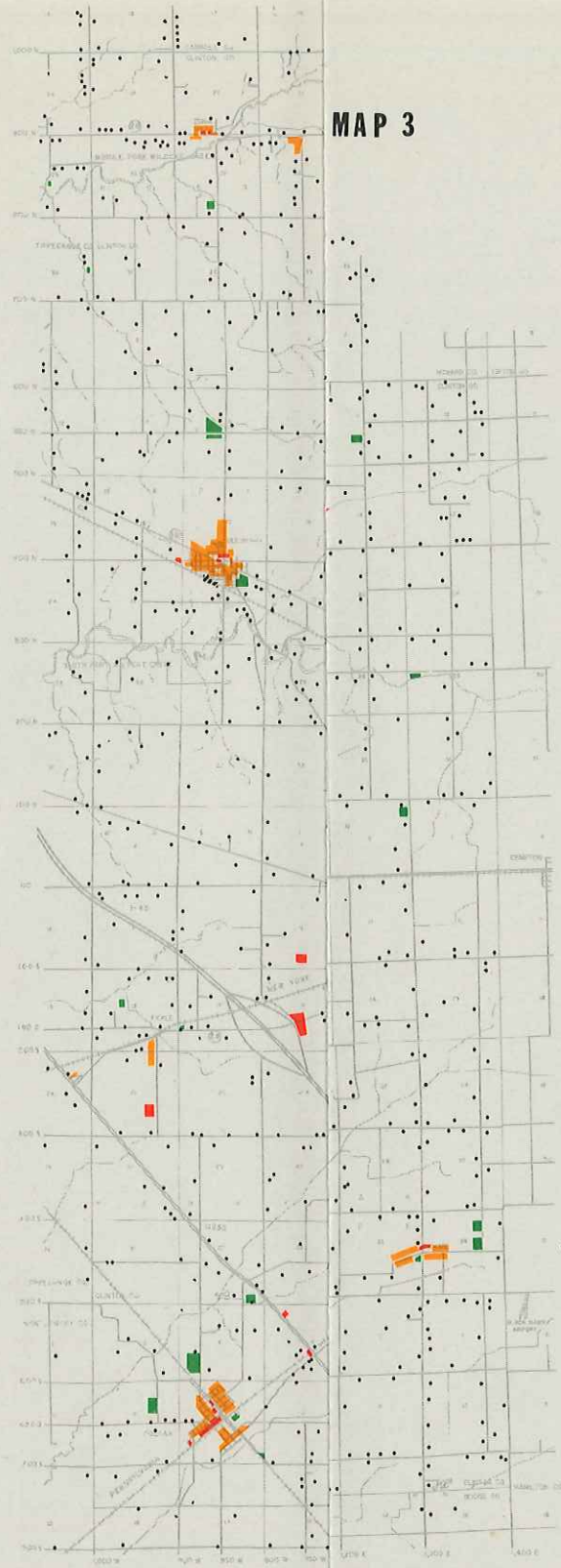
- URBAN RESIDENTIAL
- SINGLE MOBILE HOME
- COMMERCIAL
- GENERAL INDUSTRIAL
- PUBLIC & INSTITUTIONAL
- MOBILE HOME COURT



FRANKFORT - EXISTING LAND USE JAN - FEB 1974



MAP 3



SINGLE FAMILY RESIDENTIAL



PARKS AND INSTITUTIONAL



POPULATION

POPULATION PROFILE

INTRODUCTION

THIS CHAPTER IS CONCERNED WITH PROJECTIONS OF THE TOTAL POPULATION OF CLINTON COUNTY AND ITS POLITICAL SUBDIVISIONS AND PROJECTIONS OF AGE AND SEX DISTRIBUTION IN SUCH AREAS.

THE BASIC ELEMENTS OF PLANNING ARE LAND AND PEOPLE. WHAT AMOUNT OF LAND WILL BE REQUIRED TO SUPPORT HOW MANY PEOPLE, WHAT GOVERNMENTAL SERVICES WILL THEY REQUIRE, HOW WILL THEY USE THE LAND, AT WHAT TIME IN THE FUTURE WILL ADDITIONAL OR EXPANDED SERVICES AND FACILITIES BE NEEDED---THESE AND SIMILAR QUESTIONS AND THEIR ANSWERS ARE BASIC TO THE PLANNING PROCESS FOR DEMOGRAPHIC PROJECTIONS AND DISTRIBUTIONS OF AGE AND SEX, GIVE "SCALE" TO THE COMPREHENSIVE PLAN AND ASSURE IN LARGE DEGREE THAT THE PLAN WILL BE NEITHER OVERSIZED NOR UNDERSIZED TO MEET PRESENT AND FUTURE NEEDS.

THIS CHAPTER EXAMINES THE RATE OF GROWTH AND THE ABSOLUTE AMOUNTS OF GROWTH. THE GEOGRAPHIC DISTRIBUTION OF THE POPULATION IS CONSIDERED IN THE CHAPTER ON THE EXISTING USE OF LAND AND THE PLAN FOR THE FUTURE USE OF LAND, WHILE THE CHAPTER ON THE ECONOMIC PROFILE EXAMINES THAT RELATED GROWTH DIMENSION.

REFERENCE TO TABLE 4 -- POPULATION TRENDS AND PROJECTIONS --- INDICATES A GENERALLY STABLE TO SLIGHTLY DECLINING POPULATION FOR MOST LOCAL GOVERNMENT JURISDICTIONS FOR THE NEXT TWENTY YEARS. THEY ARE BASED ON TRENDS DURING THE LAST THIRTY YEARS. IT IS PROVIDENT TO STATE THAT FACT AT THE BEGINNING BECAUSE THE AMERICAN ETHOS FOR THE LAST TWO CENTURIES HAS EQUATED GROWTH WITH QUALITY AND PROGRESS, FIRMLY BELIEVING THAT GROWTH IS INEVITABLE, THAT POPULATION GROWTH IS ESSENTIAL TO ECONOMIC PROGRESS AND THAT ECONOMIC PROGRESS IS THE PRIMARY MEASURE OF COMMUNITY WELL BEING. THESE BELIEFS ARE NOT THE ORIENTATION OF THIS CHAPTER NOR OF THIS REPORT FOR CONTRARY TO POPULAR BELIEF, THERE ARE SOME LEGITIMATE ECONOMISTS WHO BELIEVE THAT THIS NATION WILL NOT GO DOWN THE DRAIN IF WE STOPPED GROWING, BOTH IN TERMS OF POPULATION AND THE GROSS NATIONAL PRODUCT.

THERE ARE A FEW COMMUNITIES IN THIS COUNTRY WHICH HAVE RECENTLY BEGAN TO QUESTION THE BENEVOLENCE OF GROWTH AND DEVELOPMENT AND HAVE TAKEN A SERIES OF INITIATIVES TO DISCOURAGE IT. IT IS IN PART THE REALIZATION THAT A GIVEN UNIT OF POPULATION WILL COST X NUMBER OF TAX DOLLARS AND THAT REVENUE FROM THAT X AMOUNT WILL NOT USUALLY BE COMPENSATORY IN TERMS OF ESSENTIAL COMMUNITY SERVICES. IN PART IT IS CONCERNS OF IMPACT ON THE ENVIRONMENT; THE GROWTH RATE OF THE COMMUNITY AS IT RELATES TO THE PRESENT POPULATION, THE AVAILABLE LAND, AND THE GROWTH RATE OF THE

SURROUNDING REGION, AND SIMILAR CONCERNS (INCLUDING THE PROBABILITY THAT GROWTH WILL UNDOUBTEDLY BE ACCOMPANIED BY THE LONG SHADOW OF McDONALDS GOLDEN ARCHES).

FINALLY, MANY COMMUNITIES IN THIS COUNTRY AND THIS STATE ARE EXPERIENCING NON-GROWTH OR DECLINE AS A NATURAL FACT. THIS IS MORE PRONOUNCED IN THE MORE RURAL COMMUNITIES, THOSE LYING SUFFICIENTLY DISTANT FROM METROPOLITAN AREAS THAT SPINOFF IS NOT LIKELY TO EFFECT THEM. WHILE POPULATION GROWTH IS A VARIABLE WHICH IS SUBJECT TO STRONG INTERGOVERNMENTAL INFLUENCE, THE PROJECTIONS SHOWN IN TABLE 4 ARE NOT EXPECTED TO VARY APPRECIABLY DURING THE NEXT TWENTY YEARS. THE ECONOMIC PROFILE CHAPTER DISCUSSES SOME VERY BROAD AND LONG RANGE CONSIDERATIONS THAT MIGHT REVERSE PRESENT TRENDS, BUT EVEN THE ADVENT OF A LARGE LABOR INTENSIVE INDUSTRY LOCATION IN OR NEAR THE COUNTY WILL NOT APPRECIABLY, CERTAINLY NOT DRAMATICALLY, EFFECT FUTURE POPULATION QUANTITIES AS COMMUTING IS MADE INCREASINGLY EASIER.

THE EXPECTED DECLINE IN TOTAL POPULATION AND THE TRENDS IN AGE COMPOSITION SHOULD NOT BE VIEWED NEGATIVELY. WITH A STABLE POPULATION THE OPPORTUNITY EXISTS FOR CONSOLIDATION OF GOVERNMENTAL EXPENDITURES SINCE PUBLIC FACILITIES AND UTILITIES THAT ARE NOW ADEQUATE WILL REMAIN SO, AND DEMANDS OF THE PRESENT POPULATION MAY BE MET WITHOUT THE FURTHER EXPENDITURE OF TAX DOLLARS THAT A GROWING POPULATION WOULD REQUIRE. NON-GROWTH, IN CONCLUSION, WILL ALLOW CITIZENS TO PLAN FOR THE FUTURE INSTEAD OF REACTING TO THE PAST. THE LANDMARK STUDY "POPULATION AND THE AMERICAN FUTURE" THE REPORT OF THE COMMISSION ON POPULATION GROWTH AND THE AMERICAN FUTURE, ¹ STATES, UNDER THE HEADING THE GROWTH MYSTIQUE, "WE FIND NO CONVINCING ECONOMIC ARGUMENT FOR CONTINUED NATIONAL GROWTH. ON THE CONTRARY MOST OF THE PLUSES ARE ON THE SIDE OF SLOWER GROWTH. THIS FINDING IS AT VARIANCE WITH MUCH OPINION, ESPECIALLY IN THE BUSINESS COMMUNITY AND AMONG MANY CIVIC LEADERS, BUT THE HEALTH OF OUR ECONOMY DOES NOT DEPEND ON IT. THE VITALITY OF BUSINESS DOES NOT DEPEND ON IT. THE WELFARE OF THE AVERAGE PERSON CERTAINLY DOES NOT DEPEND ON IT".

THE DIMINISHED BURDEN OF PROVIDING FOR THE MULTIPLICATION OF LOCAL FACILITIES TO KEEP UP WITH EXPANDING POPULATION SHOULD MAKE MORE OF THE LOCAL TAX DOLLAR AVAILABLE FOR MANY DESIRABLE PURPOSES: HUMAN RESOURCES INVESTMENT, PUBLIC EXPENDITURE

1. COMMISSION ON POPULATION GROWTH AND THE AMERICAN FUTURE, 762 JACKSON PLACE, N.W. WASHINGTON, D.C. 20506, MARCH 1972 P. 41. THE COMMISSION WAS APPOINTED BY THE PRESIDENT AND CONGRESS OF THE UNITED STATES, PURSUANT TO SEC. 8, PL 91-213

INVOLVING QUALITATIVE IMPROVEMENTS AND MODERNIZATION; AND GREATER ATTENTION TO ENVIRONMENTAL AND AMENITY OBJECTIVES. THUS, WHATEVER THE FUTURE PROBLEMS OF THE COUNTY, ITS URBAN AREAS AND THE REGION, THERE SHOULD BE MORE AMPLE PER CAPITA RESOURCES TO ATTACK THEM IN A SITUATION WITH A STABLE OR DECLINING OR LOWER RATE OF POPULATION GROWTH THAN WITH A HIGHER RATE.

A FINAL OBSERVATION—AS STATED PREVIOUSLY THE PROJECTIONS OF TABLE 4 ARE BASED ON POPULATION TRENDS SINCE 1940. IT IS GENERALLY ACCEPTED THAT NO ONE METHOD UNIFORMLY GIVES THE BEST RESULTS AND THAT A SIMPLE MATHEMATICAL METHOD MAY BE AS ACCURATE AS A HIGHLY SOPHISTICATED ONE. IT IS ALSO RECOGNIZED THAT THE "ERROR" RATE TENDS TO VARY DIRECTLY WITH THE RATE OF POPULATION GROWTH AND WITH THE LENGTH OF THE PROJECTION PERIOD. AFTER 20 YEARS NO METHOD PROVIDES ACCURATE FORECASTS. THE LONGER THE PROJECTION PERIOD THE GREATER THE LIKELYHOOD OF UNFORSEEN DEVELOPMENTS (AN ENERGY SHORTAGE) WHICH CAN CAUSE THE ACTUAL POPULATION TO FALL OUTSIDE THE RANGE PROJECTED. SIMILARLY, POPULATION TRENDS ARE LESS REGULAR FOR SMALL POPULATIONS THAN FOR LARGE ONES, I.E. THE PROJECTION FOR INDIANA IS LIKELY TO BE MORE ACCURATE THAN FOR CLINTON COUNTY, THAT FOR FRANKFORT LESS ACCURATE THAN THE COUNTY, WHILE ONE OR TWO FAMILIES ARRIVING OR DEPARTING THE SMALLER TOWNS OF THE COUNTY WOULD INTRODUCE SIZABLE "ERRORS" IN THOSE PROJECTIONS.

POPULATION TRENDS AND CHARACTERISTICS GROWTH TRENDS

REFERENCE TO TABLE 1 SHOWS THAT THE STATES' POPULATION INCREASED FROM 3,427,796 IN 1940 TO 5,193,669 IN 1970 AND BY 14.8 PERCENT BETWEEN 1940-50 THROUGH 18.5 PERCENT BETWEEN 1950-60, DECREASING TO A 1960-70 PERCENT CHANGE OF 11.4. CLINTON COUNTY, UNLIKE ITS PARENT AREA,¹ RECORDED ITS LARGEST GROWTH RATE DURING THE DECADE OF THE FORTIES. WHILE THE STATE RECORDED A SUBSTANTIAL INCREASE IN THE FIFTIES, REFLECTING IN PART THE POST WORLD WAR II BIRTH RATE, THE COUNTY DECLINED IN PERCENT OF CHANGE BY 1.2 (FROM 4.7 TO 3.5) AND DID NOT, THEREFORE, ATTAIN ITS PROPORTIONATE "SHARE" OF THE STATE INCREASE BETWEEN 1960 AND 1970.

DURING THE 1960-70 INTERCENSUS PERIOD COUNTY POPULATION DECLINED BY 218 PERSONS, OR BY 2.8 PERCENT. THE CITY OF FRANKFORT AND CENTER TOWNSHIP (WITHIN WHICH FRANKFORT IS WHOLLY LOCATED,)

1 THE LARGER AREAS ARE PARENT TO THE NEXT SMALLER AREA. FOR EXAMPLE, THE PARENT AREA OF FRANKFORT IS CLINTON COUNTY, THE PARENT AREA FOR THE COUNTY IS INDIANA; THEN THE EAST-NORTHCENTRAL STATES AND IN TURN, THE UNITED STATES.

SHOWS SIMILAR PERCENTAGE CHANGE TRENDS WITH INCREASING POPULATIONS BETWEEN 1940 AND 1960, FOLLOWED BY DECLINE DURING THE 1960's. THE FIVE SMALLER INCORPORATED TOWNS SHOW GENERALLY SIMILAR TRENDS. WHILE THE TOWN OF MULBERRY GAINED SLIGHTLY, ROSSVILLE REMAINED STABLE. MICHIGANTOWN AND COLFAX EXPERIENCED SIGNIFICANT DECLINES IN THE LAST TEN YEARS (RESPECTIVELY MINUS 10.9 PERCENT AND MINUS 12.7 PERCENT). KIRKLIN HAD A MINUS 4.0 PERCENT CHANGE DURING THIS PERIOD.

AGE COMPOSITION

TABLE 2 LISTS THE 1960 AND 1970 COMPOSITION OF POPULATION BY AGE GROUPS FOR THE STATE, FOR CLINTON COUNTY, AND FOR FRANKFORT. AS WITH DATA ON SEX COMPOSITION, DATA ON AGE ARE IMPORTANT IN THEMSELVES, FOR THE DISCRIPTION AND ANALYSIS OF OTHER TYPES OF DEMOGRAPHIC DATA, AND FOR THE EVALUATION OF THE QUALITY OF THE CENSUS COUNTS OF POPULATION.

SOCIAL SCIENTISTS OF MANY TYPES HAVE A SPECIAL INTEREST IN THE AGE STRUCTURE OF A POPULATION SINCE SOCIAL RELATIONSHIPS WITHIN A COMMUNITY ARE CONSIDERABLY AFFECTED BY THE RELATIVE NUMBERS OF EACH AGE. MANY TYPES OF PLANNING, PARTICULARLY PLANNING OF COMMUNITY INSTITUTIONS, FACILITIES, UTILITIES, AND SERVICES, REQUIRE DATA ON AGE COMPOSITION. AGE IS AN IMPORTANT VARIABLE IN MEASURING POTENTIAL SCHOOL POPULATION, THE POTENTIAL VOTING POPULATION, POTENTIAL MANPOWER, ETC. AS WITH DATA ON SEX, A LARGE PART OF THE USEFULNESS OF THE AGE CLASSIFICATION LIES IN ITS CROSS-CLASSIFICATIONS WITH OTHER DEMOGRAPHIC CHARACTERISTICS. FOR EXAMPLE, THE CROSS-CLASSIFICATION OF AGE WITH MARITAL STATUS, LABOR FORCE, MIGRATION, ETC., MAKE POSSIBLE A MUCH MORE EFFECTIVE USE OF CENSUS DATA ON THESE SUBJECTS. CONSOLIDATION OR SPECIAL COMBINATIONS ARE DESIRABLE TO REPRESENT SPECIAL AGE GROUPS. FOR FERTILITY ANALYSIS THE TOTAL NUMBER OF WOMEN 15 TO 44 YEARS OF AGE (THE CHILDBEARING AGES) IS IMPORTANT IN EDUCATIONAL RESEARCH AND PLANNING; AND THE GROUP 18 TO 24 AS A WHOLE ROUGHLY DEFINES THE COLLEGE-AGE GROUP, THE GROUP OF PRIME MILITARY AGE, THE PRINCIPAL AGES OF LABOR FORCE ENTRY AND MARRIAGE, ETC. A CLASSIFICATION OF THE TOTAL POPULATION INTO SEVERAL MUTUALLY EXCLUSIVE BROAD AGE GROUPS HAVING GENERAL FUNCTIONAL SIGNIFICENCE MAY BE FOUND USEFUL FOR A WIDE VARIETY OF ANALYTICAL PURPOSES. AN OBVIOUS EXAMPLE:

UNDER 5 YEARS	-	THE PRESCHOOL AGES
5 TO 17	-	THE SCHOOL AGES
18 TO 44	-	THE EARLIER WORKING YEARS
45 TO 64	-	THE LATER WORKING YEARS
65 AND OVER	-	THE PERIOD OF RETIREMENT

TABLE 2 IS INCLUDED SO THAT THOSE ADMINISTRATIVE AGENCIES OF LOCAL GOVERNMENT MAY HAVE READY ACCESS TO THE MATERIAL AND THAT ANALYSIS AS MAY BE REQUIRED IN SUBSEQUENT CHAPTERS OF THIS REPORT

G R O W T H T R E N D S

NUMBER OF PERSONS

<u>YEAR</u>	<u>UNITED STATES</u>	<u>EAST NORTH CENTRAL STATES</u>	<u>INDIANA</u>	<u>CLINTON COUNTY</u>	<u>FRANKFORT</u>	<u>CENT TOWN (FRA</u>
1940	132,164,569	26,626,342	3,427,796	28,411	13,706	14,4
1950	151,325,798	30,399,368	3,934,224	29,734	15,028	15,7
1960	179,323,175	36,225,024	4,662,498	30,765	15,302	16,4
1970	203,210,158	40,246,817	5,193,669	30,547	14,956	16,2

P E R C E N T C H A N G E

PER 10 - YEAR PERIOD

1940-50	14.5	14.2	14.8	4.7	9.5	9
1950-60	18.5	19.4	18.5	3.5	1.8	4
1960-70	13.3	11.1	11.4	-0.7	-2.3	-1

SOURCE: U. S. CENSUS

MAY BE MADE. NO ATTEMPT HAS BEEN MADE TO DRAW ALL OR MOST CONCLUSIONS FROM THE TABLE EXCEPT THOSE DISCUSSED BELOW.

PERCENT DISTRIBUTIONS. IN THE SIMPLEST KIND OF ANALYSIS OF AGE DATA, THE MAGNITUDE OF THE NUMBERS RELATIVE TO ONE ANOTHER IS EXAMINED. IF THE ABSOLUTE NUMBERS DISTRIBUTED BY 5-YEAR AGE GROUPS ARE CONVERTED TO PERCENTS, A CLEARER INDICATION OF THE RELATIVE MAGNITUDES OF THE NUMBERS IN THE DISTRIBUTION IS OBTAINED. CONVERSION TO PERCENT IS NECESSARY IF THE AGE DISTRIBUTION OF AREAS OF QUITE DIFFERENT POPULATION SIZE ARE TO BE CONVENIENTLY COMPARED:

	UNDER 5		5 - 14		15 - 24		25 - 34		35 - 64		65 +	
	1960	1970	1960	1970	1960	1970	1960	1970	1960	1970	1960	1970
INDIANA	11.6	8.8	20.1	20.7	13.5	17.7	12.7	12.3	32.5	31.0	9.6	9.5
CLINTON												
COUNTY	10.1	8.2	19.6	19.6	13.0	15.4	11.2	11.4	33.1	32.3	13.0	13.1
FRANK-												
FORT	10.4	8.0	18.7	17.0	13.7	15.6	12.0	11.1	32.7	30.8	12.5	17.4

THE MOST OBVIOUS CONCLUSIONS FROM THE ABOVE TABLE IS THE DISPROPORTIONATE PERCENTAGE OF AGE GROUP 65 AND OVER IN THE FRANKFORT DISTRIBUTION, ALMOST DOUBLE THAT DISTRIBUTION FOR THE STATE. THIS IS CLEARLY REFLECTED IN THE COUNTY PERCENTAGES.

A SECOND SIMPLE ANALYSIS OF THE AGE DATA IS THE DISTRIBUTION COMPARISONS OF 1960 AND 1970. ONE OF THE MOST STRIKING IS THE PRONOUNCED BIRTH DIRTH. THE UNDER 5 HAS DECLINED BY 2.8 PERCENT FOR THE STATE, 1.9 FOR THE COUNTY, AND 2.2 FOR THE CITY OF FRANKFORT. NUMERICALLY THERE WERE 616 FEWER PERSONS UNDER FIVE IN CLINTON COUNTY IN 1970 THAN IN 1960; THERE WERE 410 FEWER IN FRANKFORT. THESE FIGURES REPRESENT THE SINGLE DOMINANT FACTOR IN DECLINING GROWTH RATES FOR THE CITY AND COUNTY (SEE TOTALS, TABLE 2).

ONE ADDITIONAL COMPARISON IS NOTEWORTHY--THE DECLINE IN THE 25 - 34 AND THE 35 - 44 AGE GROUP IN FRANKFORT. AS NOTED ABOVE THE 25 - 44 AGE GROUP REPRESENT IN PART EARLY WORKING YEARS. THE GROUP DECLINED BY 400 PERSONS DURING THE INTERCENSUS PERIOD AND REPRESENTS A SIGNIFICANT OUTMIGRATION OF A HIGHLY PRODUCTIVE AGE GROUP. WESLEY MANOR, A LARGE RETIREMENT HOME, ACCOUNTS, OF COURSE, FOR THE DISPROPORTIONATE DISTRIBUTION OF THE OVER 65 GROUP IN FRANKFORT.

TABLE 2

POPULATION BY AGE GROUPS

STATE OF INDIANA	1960		1970		% CHANGE
	NUMBER	%	NUMBER	%	
UNDER 5 YEARS	542,950	11.6	455,676	8.8	-2.8
5 - 14	938,618	20.1	1,074,927	20.7	0.6
15-24	628,773	13.5	916,964	17.7	4.2
25-34	593,881	12.7	639,471	12.3	-0.4
35 - 44	609,993	13.1	582,399	11.2	-1.9
45 - 54	508,694	10.9	578,857	11.1	0.2
55 - 64	394,070	8.5	451,566	8.7	0.2
65 AND OVER	445,519	9.6	493,809	9.5	-0.1
TOTAL	4,662,498	100	5,193,669	100	
MEDIAN AGE	28.9		27.2		
UNDER 18	--		1,840,293		
<u>CLINTON COUNTY</u>					
UNDER 5 YEARS	3,121	10.1	2,505	8.2	-1.9
5 - 14	6,035	19.6	5,975	19.6	0.0
15 - 24	3,987	13.0	4,697	15.4	2.4
25 - 34	3,461	11.2	3,484	11.4	0.2
35 - 44	3,821	12.4	3,405	11.1	-1.3
45 - 54	3,369	11.0	3,504	11.5	0.5
55 - 64	2,986	9.7	2,973	9.7	0.0
65 AND OVER	3,985	13.0	4,004	13.1	0.1
TOTAL	30,765	100	30,547	100	
MEDIAN AGE	31.6		30.8		
UNDER 18	10,807		10,321		
<u>FRANKFORT</u>					
UNDER 5 YEARS	1,602	10.4	1,192	8.0	-2.4
5 - 14	2,888	18.7	2,705	17.0	-1.7
15 - 24	1,986	13.7	2,363	15.6	1.9
25 - 34	1,835	12.0	1,654	11.1	-0.9
35 - 44	1,842	12.0	1,623	10.7	-1.3
45 - 54	1,685	11.0	1,680	10.0	-1.0
55 - 64	1,520	9.7	1,531	10.1	0.4
65 AND OVER	1,944	12.5	2,208	14.8	2.3
TOTAL	15,302	100	14,956	100	
MEDIAN AGE	31.5		32.1		
UNDER 18	5,251		4,708		

SOURCE: U.S. CENSUS
HUFF - NEIDIGH & ASSOC.

TABLE 3

NUMBER OF MALES PER 100 FEMALES
(CHILD BEARING AGE)

<u>STATE OF INDIANA</u>				<u>1960</u>		<u>1970</u>		<u>1960-70</u>
AGE GROUP	MALES	FEMALES	% MALES To FEMALES	MALES	FEMALES	% MALES To FEMALES	% CHANGE	
15 - 19	172,072	173,285	99.3	253,127	249,113	101.6	2.3	
20 - 24	136,052	147,364	92.3	195,629	219,095	89.3	-3.0	
25 - 29	138,988	144,649	96.1	171,449	174,413	98.3	2.2	
30 - 34	152,671	157,573	96.9	144,834	148,775	97.4	0.5	
35 - 39	155,975	163,248	95.5	136,324	143,141	95.2	-0.3	
40 - 44	142,722	148,048	96.4	148,231	154,703	95.8	-0.6	
 <u>CLINTON COUNTY</u>								
15 - 19	1,184	1,117	106.0	1,390	1,358	102.4	-3.6	
20 - 24	782	904	86.5	845	1,104	76.5	-10.0	
25 - 29	785	880	89.2	915	921	99.3	10.0	
30 - 34	883	913	96.7	823	825	99.8	3.1	
35 - 39	904	1,018	88.8	786	879	89.4	0.6	
40 - 44	939	960	97.8	872	868	100.5	2.7	
 <u>FRANKFORT</u>								
15 - 19	513	569	90.2	645	662	97.4	7.2	
20 - 24	403	501	80.4	465	591	78.6	-1.8	
25 - 29	435	469	92.8	466	447	104.3	11.5	
30 - 34	445	486	91.6	363	378	96.0	4.4	
35 - 39	437	514	85.0	368	394	93.4	8.4	
40 - 44	455	436	104.4	416	445	93.5	-10.9	

SOURCE: U. S. CENSUS
HUFF - NEIDIGH & ASSOC.

SEX COMPOSITION

THE PERSONAL CHARACTERISTIC OF SEX HOLDS A POSITION OF PRIME IMPORTANCE IN POPULATION STUDIES. SEPERATE DATA FOR MALES AND FEMALES ARE IMPORTANT IN THEMSELVES AND FOR THE ANALYSIS OF OTHER TYPES OF DATA.

AS WITH AGE COMPOSITION, MANY TYPES OF PLANNING, BOTH PUBLIC AND PRIVATE, SUCH AS PLANNING OF COMMUNITY INSTITUTIONS AND SERVICES, PARTICULARLY HEALTH SERVICES, REQUIRE SEPERATE POPULATION FOR MALES AND FEMALES. THE ORDINARY AND USEFUL PRACTICE IS TO PRESENT AND ANALYZE THE STATISTICS SEPERATELY FOR MALES AND FEMALES FOR A VERY LARGE PART OF THE USEFULNESS OF SEX CLASSIFICATION IN POPULATION STATISTICS LIES IN ITS CROSS-CLASSIFICATION WITH OTHER CLASSIFICATIONS IN WHICH ONE MAY BE INTERESTED.

THE SEX RATIO IS THE PRINCIPAL MEASURE OF SEX COMPOSITION USED IN TECHNICAL STUDIES. IT IS DEFINED AS THE NUMBER OF MALES PER 100 FEMALES. ONE HUNDRED IS THE POINT OF BALANCE OF THE SEXES ACCORDING TO THIS MEASURE. A SEX RATIO ABOVE 100 DENOTES AN EXCESS OF MALES; A RATIO BELOW, AN EXCESS OF FEMALES. ACCORDINGLY THE GREATER THE EXCESS OF MALES THE HIGHER THE SEX RATIO; THE GREATER THE EXCESS OF FEMALES, THE LOWER THE SEX RATIO, (INDICATING THAT IT WAS A MALE WHO ASSIGNED THE RELATIVE POSITIONS).

THE TRENDS IN AGE GROUP DISTRIBUTION IN CONJUNCTION WITH SEX RATIO BY AGE GROUPS NOT ONLY EFFECT POPULATION GROWTH BUT ECONOMIC PROSPECTS AS WELL SINCE THEY AFFECT THE SIZE OF THE LOCAL LABOR FORCE. NATIONALLY, THE SEX RATIO HAS BEEN DECREASING AS A DIRECT RESULT OF THE INCREASING FEMALE POPULATION. THE MAJOR CONTRIBUTION TO THIS TREND IS THE INCREASING LIFE SPAN OF WOMEN AND THE HIGHER MORTALITY RATES OF MALES IN THE YOUNGER AND OLDER AGE GROUPS.

TABLE 3 SHOWS THE RATIO OF MALES PER 100 FEMALES FOR INDIANA, CLINTON COUNTY, AND FRANKFORT. AGE GROUPS ARE THOSE OF THE FEMALE CHILD BEARING AGE. THE GENERAL DECLINE IN THE SEX RATIO FOR INDIANA, CLINTON COUNTY AND FRANKFORT PARALLEL THE NATIONAL TREND.

THE MOST OBVIOUS CONCLUSION THAT MAY BE DRAWN FROM THE TABLE IS THE EXTREMELY LOW RATIO IN THE 20 TO 24 AGE GROUP FOR BOTH THE COUNTY AND FRANKFORT. THIS, WHEN CROSS-REFERENCED WITH EDUCATION ATTAINMENT AND OUT-MIGRATION MAY EXPLAIN THIS FACTOR.¹ THE

1 SINCE 1950 COLLEGE STUDENTS HAVE BEEN CONSIDERED BY THE CENSUS AS RESIDENTS OF THE COMMUNITIES IN WHICH THEY WERE RESIDING WHILE ATTENDING COLLEGE.

LOWER RATIO IN THE COUNTY REPRESENTS A 10.0 PERCENT DECLINE FROM 1960. THIS LOW RATE IS FOLLOWED IN FRANKFORT BY A 11.5 PERCENT INCREASE BETWEEN 1960 AND 1970 IN THE NEXT OLDER AGE GROUP---THE 25 TO 29. THE SEX RATIO DECLINES SIGNIFICANTLY BETWEEN 1960 AND 1970 IN THE FRANKFORT 40 - 44 AGE GROUP (10.9 %), WHICH SUGGESTS SIGNIFICANT OUT-MIGRATION OF MALES WHO HAVE BEEN EMPLOYED FOR SEVERAL YEARS OUTSIDE OF THE CITY (AND PROBABLY THE COUNTY) WHO HAVE MOVED CLOSER TO THEIR SOURCE OF EMPLOYMENT AS JOB SENIORITY AND SECURITY INCREASE.

IN GENERAL, NATIONAL SEX RATIOS TEND TO FALL IN THE NARROW RANGE FROM ABOUT 95 TO 102, BARRING SPECIAL CIRCUMSTANCES, SUCH AS A HISTORY OF HEAVY WAR LOSSES OR HEAVY OUT-MIGRATION; NATIONAL SEX RATIOS OUTSIDE THE RANGE OF 90 TO 105 ARE VIEWED AS EXTREME. THE 1960 SEX RATIO FOR THE UNITED STATES WAS 97.1.

FUTURE POPULATION

POPULATION CHANGES IN ANY AREA ARE A FUNCTION OF A COMPLEX MIX OF ECONOMIC, SOCIAL AND POLITICAL FACTORS, MANY OF WHICH CANNOT BE ANTICIPATED.

METHODOLOGY

TWO TECHNIQUES HAVE BEEN EMPLOYED IN DEVELOPING PROJECTIONS:

1. ARITHMETIC PROJECTIONS, A SIMPLE ARITHMETIC EXTRA-POLATIONS OF PAST TRENDS; USED AS A BACKUP PROCEEDURE; PROVIDES A ROUGH CHECK ON THE RESULTS OF THE MORE COMPLEX PROJECTION TECHNIQUE DISCUSSED BELOW. BECAUSE OF THE GENERALIZED NATURE OF THIS PROJECTION IT IS NOT DISCUSSED.
2. APPORTIONMENT PROJECTIONS, THE TECHNIQUE USED IN THIS STUDY, IS BASED ON PAST DEMOGRAPHIC RELATIONSHIPS OF CLINTON COUNTY TO THOSE OF LARGER RELATED GEOGRAPHIC AREAS.

APPORTIONMENT REQUIRES A PREVIOUSLY PREPARED FORCAST FOR A LARGER GEOGRAPHIC AREA, WHICH, WITHIN THIS STUDY, IS THE UNITED STATES FORECAST PREPARED IN 1967 BY THE U. S. BUREAU OF CENSUS. APPORTIONMENT ASSUMES THAT SMALLER AREAS, THE EAST NORTH CENTRAL STATES, THE STATE OF INDIANA, CLINTON COUNTY, FRANKFORT, AND THE SMALLER TOWNS, WILL CONTINUE TO SHARE IN FUTURE POPULATION GROWTH AT THE RATE PROJECTED FROM THE PAST DECENNIAL PERIODS.

THE POPULATION OF THE SMALL AREAS IS EXPRESSED AS A PERCENT OF THE NEXT LARGER PARENT AREA USING THE 1940 TO 1970 TREND. THESE PRECENTAGES ARE THEN PLOTTED IN TIME SERIES AND PROJECTED TO THE FORECAST DATES OF 1975, 1980, 1985, AND 1990.

POPULATION TRENDS AND PROJECTIONS

1940 - 1990

TABLE 4

YEAR	INDIANA	CLINTON COUNTY % OF INDIANA	CLINTON COUNTY	CENTER TWP. % OF CTY.	CENTER TWP.	FRANKFORT % OF CTY.	FRANKFORT	KIRKLIN % OF CTY.	KIRKLIN	MICHIGAN- TOWN % OF COUNTY	MICHIGAN- TOWN
1940	3,427,796	0.8	28,411	50.7	14,411	48.2	13,706	2.5	712	1.5	417
1950	3,934,224	0.7	29,734	53.0	15,786	50.5	15,028	2.5	734	1.5	443
1960	4,662,498	0.6	30,765	53.4	16,450	49.7	15,302	2.5	767	1.7	513
1970	5,193,669	0.5	30,547	53.0	16,210	48.9	14,956	2.5	763	1.5	457
1975	5,503,437	0.5	30,050	54.0	16,250	50.1	15,075	2.5	760	1.6	475
1980	5,844,072	0.5	29,825	54.4	16,240	49.7	14,850	2.5	755	1.6	465
1985	6,198,270	0.4	28,775	54.8	15,775	50.3	14,500	2.5	730	1.6	465
1990	6,570,162	0.4	28,500	55.1	15,730	50.4	14,375	2.5	722	1.6	465

SOURCE: U. S. CENSUS
HUFF-NEIDIGH & ASSOC.

COLFAX % OF COUNTY	COLFAX	ROSSVILLE % OF COUNTY	ROSSVILLE	MULBERRY % OF COUNTY	MULBERRY
2.5	717	2.2	627	-	-
2.4	725	2.5	739	3.3	950
2.4	725	2.7	831	3.6	1,062
2.1	633	2.7	830	3.5	1,075
2.1	620	2.8	840	3.3	990
1.9	575	2.8	850	3.3	985
1.9	550	3.0	855	3.3	950
1.8	525	3.0	855	3.3	945

THE PROJECTED PERCENTAGES ARE THEN APPLIED TO THE FUTURE POPULATION ESTIMATE OF THE LARGER AREA TO PROVIDE A PROJECTION FOR EACH SMALLER AREA. THIS PROCEDURE IS REPEATED FOR EACH OF THE GEOGRAPHIC AREAS FROM THE EAST NORTH CENTRAL STATES TO THE COUNTY, TO THE CITIES AND TOWNS.

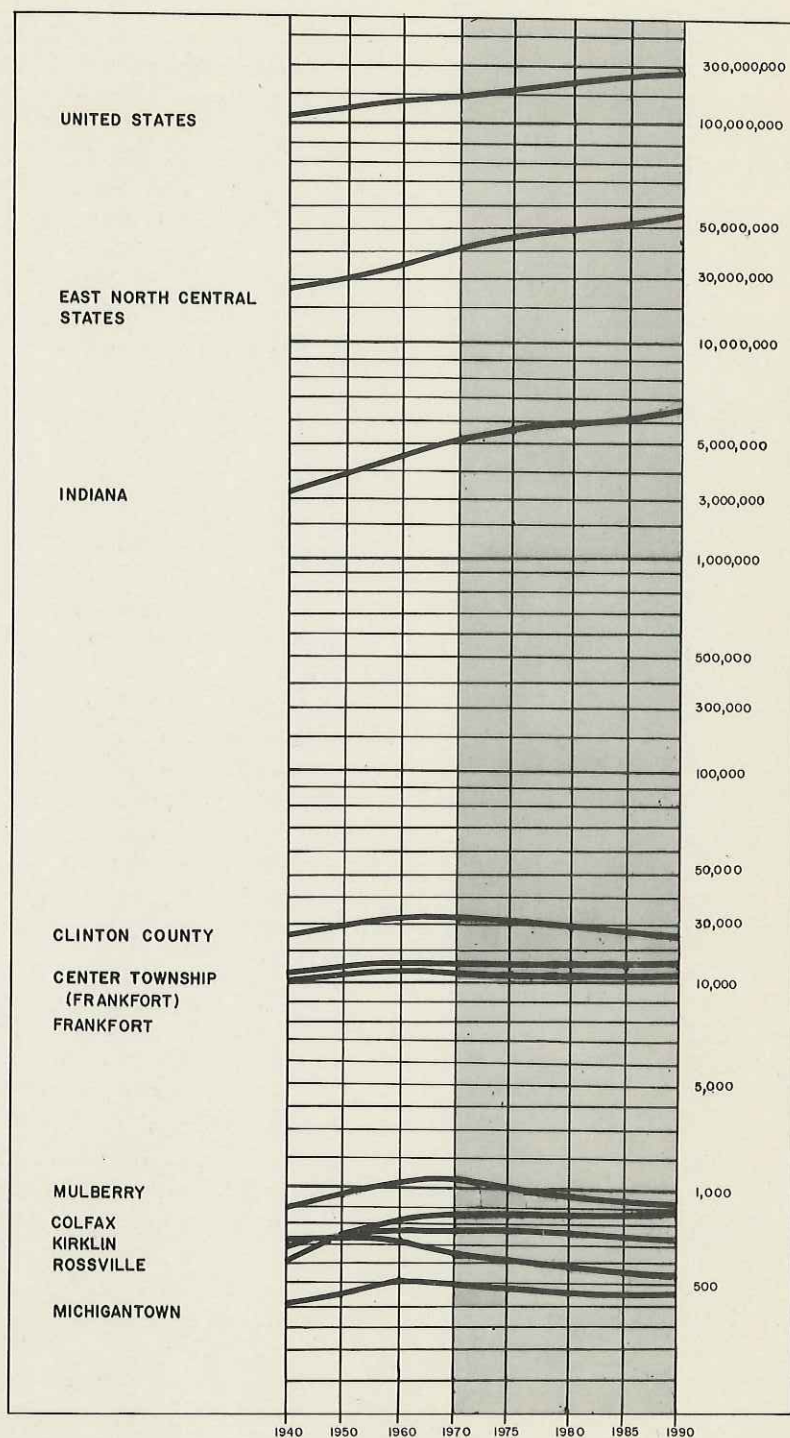
THE APPORTIONMENT PROJECTION RECOGNIZES PAST POPULATION CHANGES OF THE LARGER PARENT AREAS IN ADDITION TO THE PAST GROWTH TRENDS OF THE SUBJECT AREA. THE PROBABILITY OF ERROR OF ALL POPULATION ESTIMATES INCREASES AS THE SIZE OF THE AREA DECREASES. EXTREME FLUCTUATIONS IN THE POPULATION ESTIMATES FOR THE UNITED STATES AND EAST NORTH CENTRAL STATES COULD ONLY OCCUR THROUGH NATIONAL OR REGIONAL SOCIAL AND ECONOMIC CHANGES; WHEREAS, THE SMALLER AREAS ARE OFTEN CONTROLLED BY THE AVAILABILITY OF LAND RESERVES, TRANSPORTATION FACILITIES, MARKETS, LABOR FORCE AND LOCAL ECONOMIC TRENDS.

PROJECTION ANALYSIS

THROUGHOUT THE PROJECTION PERIOD, CLINTON COUNTY WILL REALIZE A DECREASING SHARE OF INDIANA'S POPULATION, DECLINING FROM ABOUT 0.5 PERCENT IN 1970 TO ABOUT 0.4 PERCENT BY 1990 (TABLE 4 AND FIGURE 1) AND APPROACH A POPULATION OF 28,500 BY 1990, A REDUCTION OF APPROXIMATELY 2,000 PERSONS OVER THE TWO DECADES. CENTER TOWNSHIP'S SHARE OF THE COUNTY POPULATION WILL INCREASE FROM 53 PERCENT IN 1970 TO 55 PERCENT IN 1990. THE DECREASE IN ABSOLUTE NUMBERS IS, OF COURSE, ATTRIBUTABLE TO THE PARENT AREA (COUNTY) DECREASE IN ABSOLUTE NUMBER. (CENTER TOWNSHIP IS SELECTED BECAUSE THE CITY OF FRANKFORT IS WHOLLY LOCATED THEREIN.) FRANKFORT, HAVING EXPERIENCED STEADY GROWTH TO 1960, REVERSED BY 1970, AND, EXPECTED TO MAINTAIN A CONSTANT SHARE OF COUNTY POPULATION, WILL, LIKE CENTER TOWNSHIP, EXPERIENCE DECREASES IN ABSOLUTE TERMS--- TO 14,375 BY 1990.

AS PREVIOUSLY DISCUSSED THE PROBABILITY OF "ERROR"---OR MORE PRECISELY, OF INACCURACY, FOR A PROJECTED POPULATION,--- INCREASES AS THE SIZE OF THE AREA DECREASES. THE PROJECTED POPULATION OF INDIANA FOR 1990 WILL BE MUCH CLOSER TO THE 1990 CENSUS FIGURE THAN THE PROJECTED POPULATION OF CLINTON COUNTY. IN TURN, THE COUNTY WILL BE CONSIDERABLY CLOSER THAN ANY OF THE SMALL INCORPORATIONS IN THE COUNTY. EXTREME FLUCTUATIONS IN POPULATION ESTIMATES FOR THE UNITED STATES OR THE EAST NORTH CENTRAL STATES COULD ONLY OCCUR THROUGH SIGNIFICANT NATIONAL OR REGIONAL ECONOMIC OR SOCIAL CHANGE, WHEREAS SMALLER AREAS ARE CONTROLLED BY THE AVAILABILITY OF BUILDABLE LAND, OF IMPROVED LAND (I.E. SEWER AND WATER) OF POTENTIALLY IMPROVABLE LAND AND BY TRANSPORTATION FACILITIES, MARKETS, LABOR FORCE, AND SHORT AND INTERMEDIATE LOCAL ECONOMIC TRENDS OR CONDITIONS.

FIGURE 1



POPULATION TRENDS AND ESTIMATES

SOURCE: UNITED STATES CENSUS
HUFF-NEIDIGH AND ASSOCIATES

SUMMARY

CLINTON COUNTY GREW FROM 28,411 PERSONS IN 1940 TO 30,765 IN 1960, THEN DECLINED (BY 118 PERSONS) TO 30,547 IN 1970. ASSUMING THAT SOCIAL, ECONOMIC, AND CULTURAL CONDITIONS REMAIN ESSENTIALLY UNCHANGED, AND ON THE BASIS OF PAST AND PROJECTED TRENDS, THIS DECLINING 1960-70 TREND IS EXPECTED TO CONTINUE, RESULTING IN A 1990 COUNTY POPULATION OF APPROXIMATELY 28,500 TO 29,000.

CENTER TOWNSHIP, WITHIN WHICH THE TOWN OF FRANKFORT IS WHOLLY LOCATED, SAW A RELATIVELY STEADY INCREASE IN POPULATION--FROM 13,706 PERSONS IN 1940 TO 14,956 IN 1970. IT IS EXPECTED THAT CENTER WILL REACH A PEAK POPULATION OF 15,775 TO 15,800 BY 1985, BUT DUE TO THE PARENT AREA'S DECREASING POPULATION, A POPULATION OF 15,730 TO 15,750 IS EXPECTED FOR THIS AREA IN 1990, A GENERALLY STABLE CONDITION. THE TOWNSHIP POPULATION PERCENT OF THE COUNTY WILL INCREASE SLIGHTLY FROM 54.0 PERCENT IN 1970 TO 55.1 PERCENT IN 1990.

FRANKFORT, WITH 13,706 PERSONS IN 1940, FOLLOWED THE COUNTY TREND, REACHING A 1960 POPULATION OF 15,302, THEN DECLINING SLIGHTLY TO 14,956 IN 1970. A 1980 POPULATION OF 14,850 TO 14,900 AND A 1990 FIGURE OF APPROXIMATELY 14,375 TO 14,400 IS ANTICIPATED.

FUTURE CENSUS FIGURES FOR KIRKLIN, MICHIGANTOWN, COLFAX, ROSSVILLE, AND MULBERRY VARY CONSIDERABLY FROM THE PROJECTED POPULATION SINCE A SMALL CHANGE WOULD HAVE SIGNIFICANT EFFECT BECAUSE OF THE SMALL POPULATION BASE. THE SMALLER THE POPULATION OF A DEMOGRAPHIC AREA, THE LESS DEGREE OF ACCURACY CAN BE EXPECTED. AS WITH THE CITY OF FRANKFORT, WHAT GROWTH DOES OCCUR IN THE INCORPORATED TOWNS, WILL OCCUR WHERE A COMMUNITY OR MUNICIPAL OR SIMILAR SEWER SYSTEM IS AVAILABLE---A PARTIAL RESULT OF INCREASING ENVIRONMENTAL AWARENESS.

THE COUNTY'S FERTILITY RATE---FOLLOWING AND, IN FACT, EXCEEDING NATIONAL TRENDS, HAS DECLINED IN THE PREVIOUS TEN YEARS. MUCH OF THE LABOR FORCE AGE GROUP IS MOVING OUT OF THE COUNTY, AND THE 65 AND OVER GROUP IS INCREASING---ALL TRENDS WHICH MAY BE EXPECTED TO CONTINUE AT LEAST IN THE SHORT TO INTERMEDIATE RUN. THE SCHOOL CORPORATIONS WILL HAVE A GENERALLY STABLE TO SLIGHTLY DECLINING ENROLLMENT.

COMMUNITY SERVICE COSTS FOR THE OLDER SEGMENT OF THE POPULATION SHOULD RISE SLIGHTLY TO MEET THE ADDED DEMAND FOR MEDICAL FACILITIES AND HOUSING ACCOMMODATIONS. THE LOCATION OF LABOR-INTENSIVE INDUSTRY IN THE COUNTY SHOULD NOT BE RELIED UPON TO INCREASE TOTAL POPULATION EXCEPT IN THE LONG RUN AS MUCH OF THE LABOR FORCE, PARTICULARLY SEMI-SKILLED TO SKILLED, WILL COMMUTE FROM SURROUNDING AREAS AND WILL ONLY GRADUALLY LOCATE CLOSER TO THEIR SOURCE OF EMPLOYMENT AS THEIR SENIORITY AND JOB SECURITY INCREASES. IN THE SAME MANNER, MANY PERSONS CURRENTLY COMMUTING TO EMPLOYMENT OUTSIDE THE COUNTY MAY DESIRE

TO ELIMINATE FREQUENTLY LONG COMMUTING DISTANCES WHICH RESULTS, OF COURSE, IN NO POPULATION INCREASE. AS HAS BEEN THE EXPERIENCE OF MANUFACTURING INDUSTRY WITH A PREDOMINANTLY FEMALE LABOR FORCE, THE AREA HOUSEWIFE MAY OPT TO JOIN THE LABOR FORCE, RESULTING AGAIN IN NO POPULATION CHANGE.

THE EXPECTED DECLINE IN TOTAL POPULATION AND TRENDS IN AGE COMPOSITION IN THE COUNTY COMMUNITY SHOULD NOT NECESSARILY BE VIEWED NEGATIVELY. VIEWED POSITIVELY, THE OPPORTUNITY IS PRESENT FOR CONSOLIDATION OF GOVERNMENTAL EXPENDITURES TOWARD THOSE FACILITIES THAT REQUIRE MODIFICATION OR EXPANSION. SINCE THE MAJORITY OF PUBLIC FACILITIES AND UTILITIES WILL REMAIN ADEQUATE DURING THE PLANNING PERIOD, LOCAL GOVERNMENT WILL MEET THE DEMANDS OF THE PRESENT POPULATION WITHOUT THE FURTHER EXPENDITURE OF TAX DOLLARS THAT A GROWING POPULATION WOULD REQUIRE. THESE POPULATION STUDIES WILL BROADLY GUIDE AND INFLUENCE DECISIONS IN THE DEVELOPMENT OF PLANS AND STUDIES FOR THESE COMMUNITY FACILITIES, PUBLIC SERVICES, TRAFFICWAYS, AND LAND USES THAT ARE THE BASICS OF THE PLANNING PHASE OF THIS PROGRAM.

ECONOMIC PROFILE

THE ECONOMY

PURPOSE AND OBJECTIVES

A PRIMARY OBJECTIVE OF AN ECONOMIC PROFILE IS TO DEVELOP INFORMATION WHICH WILL HELP A COMMUNITY SOLVE LOCAL PROBLEMS, MAKE APPROPRIATE DECISIONS CONCERNING MATTERS THAT WILL INHANCE ECONOMIC OPPORTUNITIES FOR ITS CITIZENS, IMPROVE THEIR WELFARE, AND MAKE IT POSSIBLE FOR THEM TO INCREASE THEIR CONTRIBUTIONS TO THE GENERAL WELLBEING OF THE COMMUNITY.

THE ECONOMIC BASE CONSISTS OF THOSE ACTIVITIES WHICH PROVIDES THE BASIC EMPLOYMENT AND INCOME UPON WHICH THE LOCAL ECONOMY DEPENDS. THE ECONOMIC BASE STUDY SHOULD IDENTIFY THE PRIMARY SOURCES OF EMPLOYMENT AND INCOME AND PROVIDE AN UNDERSTANDING OF THE SOURCE AND LEVEL OF ALL EMPLOYMENT AND INCOME IN A COMMUNITY.

ANOTHER IMPORTANT FUNCTION OF AN ECONOMIC BASE STUDY IS TO IDENTIFY STRENGTHS AND WEAKNESS IN THE CURRENT ECONOMIC STRUCTURE SO THAT FUTURE CHANGES AND DEVELOPMENT CAN BE GUIDED TOWARD ACHIEVING A BALANCED AND STRONG ECONOMY.

IT ALSO PROVIDES THE BASIS FOR PROJECTING FUTURE ECONOMIC ACTIVITIES WHICH CAN BE TRANSLATED INTO SPACE AND LOCATION REQUIREMENTS. THESE AMONG OTHER CONSIDERATIONS, ARE REFLECTED IN THE LAND USE PLAN AND IMPLIMENTED THROUGH THE ZONING ORDINANCE AND OTHER REGULATORY MEASURES. THE LAND USE PLAN, IN TURN, PROVIDES THE PRINCIPAL RATIONALE FOR THE FORMULATION OF THE TRANSPORTATION AND COMMUNITY FACILITIES ELEMENTS OF THE GENERAL PLAN.

IT CAN BE SEEN THEN THAT A CLEAR UNDERSTANDING OF THE BASIC ECONOMIC FORCES WITHIN A COMMUNITY IS ESSENTIAL TO THE PLANNING PROCESS.

TYPES OF ECONOMIC ACTIVITY

THERE ARE TWO ESSENTIALLY SEPERATE CATEGORIES OF ECONOMIC ACTIVITY. THE FIRST, OFTEN REFERRED TO AS "PRIMARY", INCLUDES ALL MANNER OF THINGS THAT BRING FRESH MONEY INTO THE COMMUNITY. THE OTHER, REFERRED TO AS "SECONDARY", INCLUDES THE EXCHANGE OF GOODS AND SERVICES THAT KEEPS MONEY CIRCULATING WITHIN THE COMMUNITY.

PRIMARY ACTIVITIES INCLUDES SUCH THINGS AS THE SALE OF ITEMS OR COMMODITIES MANUFACTURED OR PRODUCED IN THE AREA AND SOLD OUTSIDE THE AREA, DIVIDENDS, ANNUITIES OR OTHER INCOME FROM OUTSIDE INVESTMENTS, PENSIONS AND RETIREMENT INCOME COINED

ELSEWHERE, SOCIAL SECURITY PAYMENTS, NON-LOCAL GOVERNMENTAL EXPENDITURES, AND THE LIKE. SECONDARY ACTIVITIES INCLUDE RETAIL SALES, LOCAL SALARIES AND WAGES, PERSONAL AND PROFESSIONAL SERVICES, ETC.

THERE IS, OF COURSE, A DEGREE OF OVERLAPING WHERE ONE CANNOT BE CLEARLY SEPERATED FROM THE OTHER. FOR EXAMPLE, A PLANT MAY MANUFACTURE ITEMS PRIMARILY FOR SALE OUTSIDE THE AREA BUT ALSO SELL PART OF ITS PRODUCTION TO RESIDENTS OF THE COMMUNITY. SOME FARM PRODUCE MAY BE SOLD LOCALLY AS WELL AS SHIPPED TO OUTSIDE MARKETS. CERTAIN MERCHANTS AND PROFESSIONAL PEOPLE MAY RECIEVE THEIR INCOME FROM BOTH INSIDE AND OUTSIDE THE COMMUNITY. THESE SMALL DISCREPANCIES TEND TO OFF-SET ONE ANOTHER, HOWEVER, AND ONE NEED NOT BE CONCERNED WITH SUCH MINOR REFINEMENTS IN ORDER TO GAIN AN OVERALL PICTURE OF THE LOCAL ECONOMY.

ECONOMIC ESTABLISHMENT AND INCOME

THE U.S. DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS PUBLISHES DATA REGARDING ECONOMIC ACTIVITIES OF THE FOUR MAJOR TYPES OF ESTABLISHMENTS: MANUFACTURING, WHOLESALE TRADE, RETAIL TRADE AND SELECTED SERVICES WITHIN COUNTIES, METROPOLITAN AREAS AND LARGER CITIES. AN ESTABLISHMENT IS DEFINED AS "A PHYSICAL LOCATION AT WHICH BUSINESS IS CONDUCTED".

PAYROLL BY ACTIVITY

AN INDICATION OF THE IMPORTANCE OF AN ECONOMIC ACTIVITY IS THE DOLLAR VALUE OF ITS PAYROLL. TABLE 1 PRESENTS THE 1967 PAYROLL FOR MANUFACTURING, WHOLESALE TRADE, RETAIL TRADE AND SELECTED SERVICES IN CLINTON COUNTY AND INDIANA.

THE COMBINED TOTAL OF THE FOUR CATEGORIES AMOUNTED TO \$21,605,000 FOR THE REPORTING YEAR. MANUFACTURING CONTRIBUTED THE MAJOR PORTION, ACCOUNTING FOR 66.0% OF THE TOTAL PAYROLL. THIS IS, NEVERTHELESS, WELL BELOW THE 75.1% FIGURE FOR THE STATE AS A WHOLE WHERE MANUFACTURING TENDS TO DOMINATE ALL OTHER CATEGORIES IN THIS GROUP DUE TO THE HEAVY CONCENTRATION OF INDUSTRIAL DEVELOPMENT AROUND MAJOR URBAN AREAS. RETAIL TRADE, ACCOUNTING FOR 25.0% OF THE TOTAL PAYROLL CONTRIBUTED AS SIGNIFICANTLY HIGHER PROPORTION (ALMOST TWICE AS MUCH) TO THE LOCAL ECONOMY THAN IT DOES IN THE STATE AS A WHOLE (14.1%). THIS DISTINCTION IS TYPICAL OF MANY RURAL TRADE CENTERS SCATTERED THROUGHOUT INDIANA AND THE MIDWEST. IT POINTS UP THE RELATIVE IMPORTANCE OF RETAIL TRADE IN THE LOCAL ECONOMY. WHOLESALE TRADE 6.0% AND SELECTED SERVICES 3.0% CLOSELY PARALLELED THE OVERALL STATE CONTRIBUTION OF 7.2% AND 3.6% RESPECTFULLY.

TABLE 1

PAYROLLS BY ACTIVITY - 1967
INDIANA AND CLINTON COUNTY

	CLINTON CO.		INDIANA	
	(\$1,000)	%	(\$1,000)	%
MANUFACTURING	14,300	66.0	5,023,200	75.1
RETAIL TRADE	5,346	25.0	953,667	14.1
WHOLESALE TRADE	1,374	6.0	502,539	7.2
SELECTED SERVICES*	585	3.0	253,412	3.6
TOTAL	21,605	100%	6,732,818	100%

SOURCE: U.S. CENSUS, COUNTY BUSINESS PATTERNS, 1967

* SELECTED SERVICES ARE THOSE BUSINESS ACTIVITIES UNIFORMLY SELECTED BY THE CENSUS FOR PURPOSES OF COMPARISON. THEY ARE: HOTELS, MOTELS, TOURISTS CAMPS, PERSONAL SERVICES, MISCELLANEOUS BUSINESS SERVICES, MISCELLANEOUS REPAIRS, MOTION PICTURES, OTHER AMUSEMENT AND RELATED RECREATION ACTIVITY.

A FIRST CONCLUSION FROM THE ABOVE IS THAT THERE EXISTS A MARKET FOR ADDITIONAL WHOLESALE ACTIVITIES IN THE AREA. THIS IS PREDICATED ON THE FACT THAT WHILE RETAIL TRADE (THE CONSUMMER FOR WHOLESALE TRADE) WAS SUBSTANTIALLY HIGHER THAN FOR THE STATE AS A WHOLE WHILE WHOLESALE TRADE WAS SLIGHTLY LOWER. CONSIDERING FRANKFORT'S PROXIMITY TO THE INDIANAPOLIS METROPOLITAN AREA, HOWEVER, THIS IS TO BE EXPECTED. WHOLESALE ESTABLISHMENTS TEND TO LOCATE IN LARGE URBAN CENTERS WHERE THERE ARE MORE CUSTOMERS FOR THEIR PARTICULAR PRODUCT AND IT IS DOUBTFUL THAT THIS PATTERN WILL CHANGE IN THE FORESEEABLE FUTURE.

MANUFACTURING

THE DOLLAR VALUE ADDED TO PRODUCTS THROUGH THE MANUFACTURING PROCESS IS ONE OF THE MORE ACCURATE INDICATIONS OF THE RELATIVE IMPORTANCE OF MANUFACTURING IN THE LOCAL ECONOMY. TABLE 2 DEPICTS THE TREND IN VALUE ADDED BY MANUFACTURING AS WELL AS BY NUMBER OF ESTABLISHMENTS, NUMBER OF EMPLOYEES, PAYROLL AND

TABLE 2

VALUE ADDED BY MANUFACTURING - 1963 - 1967

CLINTON COUNTY & INDIANA

	NUMBER OF ESTABLISHMENTS TOTAL	EMPLOYING 20 OR MORE	ALL EMPLOYEES NUMBER	(\$1,000) PAYROLL	VALUE ADDED BY MANUFACTURING (\$1,000)	CAPITAL EXPENDITURES NEW (\$1,000)	PRODUCTION WORKERS (NUMBER)
<u>1967</u>							
CLINTON COUNTY	38	20	2,800	14,300	30,300	2,000	2,300
INDIANA	6,920	2,917	710,200	5,023,200	10,308,000	1,004,400	543,600
<u>1963</u>							
CLINTON COUNTY	41	19	2,274	9,915	19,900	774	---
INDIANA	6,860	2,547	609,800	3,794,300	7,726,900	555,200	462,900
<u>% CHANGE</u>							
CLINTON Co.	-8.0	+5.0	+19.0	+31.0	+52.0	+155.0	---
INDIANA	+0.9	+14.9	+16.5	+32.0	+33.0	+81.0	17.4

SOURCE: U.S. CENSUS OF MANUFACTURING, AREA STATISTICS

CAPITAL EXPENDITURES WITHIN CLINTON COUNTY AND THE STATE OF INDIANA FROM 1963 TO 1967. VALUE ADDED IS DERIVED FOR EACH ESTABLISHMENT BY SUBTRACTING THE COST OF RAW MATERIALS, PARTS, COMPONENTS, FUELS, SUPPLIES, GOODS PURCHASED FOR RE-SALE AND CONTRACTED WORK, FROM THE VALUE OF SHIPMENTS, ADJUSTED FOR THE NET CHANGE IN FINISHED WORK IN PROCESS INVENTORY.

DURING THE PERIOD 1963-67, VALUE ADDED BY MANUFACTURE INCREASED FROM \$19,900,000 TO \$30,300,000 IN CLINTON COUNTY. THIS AMOUNTS TO AN INCREASE OF 52% COMPARED TO AN INCREASE OF 33% FOR THE STATE AS A WHOLE. MANUFACTURING PAYROLLS IN CLINTON COUNTY INCREASED BY 31% WHILE THE TOTAL NUMBER OF EMPLOYEES INCREASED BY ONLY 19% INDICATING A SUBSTANTIAL INCREASE IN PERSONAL INCOME. THIS CLOSELY PARALLELS THE GROWTH PATTERNS FOR THE STATE WHERE PAYROLLS INCREASED 32% AND THE NUMBER OF EMPLOYEES INCREASED BY 16.5%. WHILE THESE INCREASES WERE TAKING PLACE THE TOTAL NUMBER OF ESTABLISHMENTS IN CLINTON COUNTY ACTUALLY DECREASED (-8.0%) AND ONLY A SLIGHT INCREASE (0.9%) ACCURED THROUGHOUT THE STATE.

IN GENERAL, VALUE ADDED BY MANUFACTURING CAN BE ATTRIBUTED TO A NUMBER OF FACTORS: GREATER PRODUCTIVITY PER ESTABLISHMENT, IMPROVED AND MORE EFFICIENT MANAGEMENT AND OPERATIONS, INCREASED PRODUCTION PER EMPLOYEE, REDUCTION IN THE COST OF RAW MATERIALS, HIGHER DEMAND FOR THE PRODUCT, ETC. IN CLINTON COUNTY THE RATE OF INCREASE IN VALUE ADDED WAS CONSIDERABLY HIGHER THAN THAT FOR THE STATE WHILE THE INCREASES IN NUMBER OF EMPLOYEES AND PAYROLLS WAS ABOUT THE SAME. IT WOULD APPEAR THAT THIS WAS LARGELY DUE TO INCREASED PLANT CAPACITY RESULTING IN MORE EFFICIENT OPERATIONS AND GREATER PRODUCTIVITY PER EMPLOYEE. THIS IS INDICATED BY THE FACT THAT THE INCREASE IN CAPITAL EXPENDITURES FOR CLINTON COUNTY FAR OUTSTRIPED THE OVERALL EXPENDITURES FOR THE STATE AS A WHOLE.

TABLE 3

TRENDS IN MANUFACTURING - 1954 - 1967 - CLINTON CO.

	NUMBER OF ESTABLISHMENTS	TOTAL No. OF EMPLOYEES	TOTAL WAGES (\$1,000)	VALUE ADDED BY MANUFACTURING (\$1,000)
1954	31	2,124	5,714	12,288
1958	39	1,983	5,636	14,291
1963	41	2,274	7,192	19,900
1967	38	2,800	10,500	30,300

SOURCE: CENSUS OF MANUFACTURERS, AREA STATISTICS

RETAIL TRADE - CLINTON COUNTY & INDIANA - 1967

TABLE 4

	CLINTON COUNTY			INDIANA		
	NUMBER OF ESTABLISHMENTS	SALES (\$1,000)	PERCENT DISTRIBUTION OF SALES	NUMBER OF ESTABLISHMENTS	SALES (\$1,000)	PERCENT DISTRIBUTION OF SALES
LUMBER, BUILDING MATERIALS, FARM EQUIP.	24	7,171	15.0	763	262,011	3.3
GENERAL MERCHANDISE	17	4,586	9.0	1,244	1,126,212	14.5
FOOD STORES	34	10,020	21.0	3,585	1,735,294	22.5
AUTOMOTIVE DEALERS	26	7,940	16.0	2,226	1,545,033	20.0
GASOLINE SERVICE STATIONS	36	3,167	7.0	4,757	630,163	8.1
APPAREL & ACCESSORIES	16	2,074	4.0	2,073	333,154	4.2
FURNITURE, HOME APPLIANCES	23	1,807	4.0	1,933	360,884	4.7
EATING, DRINKING PLACES	56	3,454	7.0	6,750	572,142	7.4
DRUG STORES, PROP. STORES	8	1,728	4.0	1,311	314,745	4.1
OTHER RETAIL	55	6,393	2.0	4,030	640,941	8.3
NON-STORE RETAILERS	15	337	1.0	439	227,089	2.9
TOTAL	310	48,677	100	29,111	7,747,668	100
PER CAPITA SALES		\$1,590			\$1,492	

1 BASED ON 1970 CENSUS SOURCE: U.S. CENSUS

RETAIL SALES

TABLE 4. PRESENTS A BREAKDOWN OF RETAIL SALES BY TYPE FOR CLINTON COUNTY AND THE STATE OF INDIANA.

WITH FEW EXCEPTIONS THE GENERAL RETAIL TRADE PATTERNS IN CLINTON COUNTY CLOSELY RESEMBLE THOSE FOR THE STATE AS A WHOLE. THE MOST PRONOUNCED DEVIATION IS IN THE CATEGORY OF LUMBER, BUILDING MATERIALS, HARDWARE AND FARM EQUIPMENT. THIS HIGHER THAN AVERAGE PERCENTAGE (15.0% FOR CLINTON COUNTY AS OPPOSED TO 3.3% FOR THE STATE), IS DUE TO THE SALE OF FARM EQUIPMENT AND HIGHLIGHTS THE RURAL NATURE OF THE LOCAL TRADE AREA AS COMPARED TO THE BROADER BASE WHICH INCLUDES LARGE URBAN AREAS. ANOTHER, AND LESS PRONOUNCED DEVIATION (9.0% COMPARED TO 14.5%), OCCURES IN THE CATEGORY OF GENERAL MERCHANDISE. THIS AGAIN IS TO BE EXPECTED DUE TO FRANKFORT'S CLOSE PROXIMITY TO THE INDIANAPOLIS METROPOLITAN AREA WHERE MAJOR DEPARTMENT STORES, DISCOUNT STORES AND THE LIKE TEND TO LOCATE. FOR THE SAME REASON AUTOMOTIVE, AND TO A LESSER DEGREE, FURNITURE AND APPLIANCE SALES LAG BEHIND THE STATE AVERAGE BECAUSE PEOPLE TEND TO PURCHASE MAJOR ITEMS WHERE THERE IS A GREATER SELECTION AND WHERE THEY CAN COMPARE PRICES. THE SUBSTANTIAL DEVIATION IN THE MINOR CATEGORY OF NON-STORE-RETAILERS IS DUE TO THE FACT THAT ROUTE AND DOOR-TO-DOOR SALESPeOPLE ARE MORE PROLIFIC IN CONCENTRATED POPULATION CENTERS THAN IN RURAL AREAS. THESE PATTERNS WILL LIKELY CONTINUE IN THE FUTURE SINCE IT IS NOT ANTICIPATED THAT THE RURAL CHARACTER OF THE COUNTY WILL CHANGE, NOR WILL THE TRADE AREA POPULATION INCREASE TO A POINT THAT WOULD SUPPORT MAJOR GENERAL RETAIL ESTABLISHMENTS.

TABLE 5 PRESENTS TRENDS IN RETAIL TRADE - 1958 - 67 CLINTON COUNTY, AND REFLECTS THE NATIONAL TREND OF FEWER SMALL OUTLETS AND HIGHER SALES PER ESTABLISHMENT. IN GENERAL THE RETAIL SALES PICTURE IN CLINTON COUNTY IS QUITE GOOD. SALES PER CAPITA EXCEEDS THE STATE OF INDIANA AVERAGE AND IT IS NOT LIKELY THAT THOSE SALES BEING CAPTURED BY THE INDIANAPOLIS AREA COULD BE RETAINED REGARDLESS OF ANY ACTION THAT MIGHT BE PURSUED BY THE LOCAL COMMUNITY.

TABLE 5
TRENDS IN RETAIL TRADE - 1958 - 1967 CLINTON COUNTY

YEAR	No. OF ESTABLISHMENTS	SALES (\$1,000)
1958	330	33,743
1963	308	38,448
1967	310	48,677

SOURCE: CENSUS OF BUSINESS, RETAIL TRADE, AREA STATISTICS.

TABLE 6

WHOLESALE TRADE 1963 - 1967

	NUMBER OF ESTABLISHMENTS	TOTAL SALES (\$1,000)	PAYROLL (\$1,000)	MERCHANT WHOLESALER No. OF ESTAB.	WHOLESALE SALES (\$1,000)	OTHER OPERATING TYPES No. OF ESTAB.	SALES (\$1,000)
<u>1967</u>							
CLINTON COUNTY	50	35,840	1,374	22	7,173	28	28,667
INDIANA	7,166	8,348,859	502,539	4,307	3,816,082	2,855	4,532,777
<u>1963</u>							
CLINTON COUNTY	51	35,941	1,299	18	4,752	33	31,189
INDIANA	7,257	6,452,059	364,890	4,303	2,730,880	2,954	3,721,179
PERCENT CHANGE 1963-67							
CLINTON COUNTY	-0.1	-3.0	5.0	18.0	34.0	-18.0	-9.0
INDIANA	-0.1	32.5	36.5	0.0	3.9	-3.5	21.8

SOURCE: CENSUS OF BUSINESS

WHOLESALE TRADE

TABLE 6 PRESENTS COMPARABLE FIGURES FOR WHOLESALE TRADE ACTIVITIES IN CLINTON COUNTY AND THE STATE OF INDIANA FOR THE YEARS 1963 TO 1967. PRESENTED ARE FIGURES FOR THE TOTAL NUMBER OF ESTABLISHMENTS AND A BREAK-DOWN FOR MERCHANT WHOLESALERS AND FOR OTHER OPERATING TYPES. THE U.S. CENSUS OF BUSINESS DEFINES MERCHANT WHOLESALERS AS:

ESTABLISHMENTS PRIMARILY ENGAGED IN BUYING AND SELLING MERCHANDISE ON THEIR OWN ACCOUNT, INCLUDING FARM PRODUCT MERCHANTS WHO DO NOT BUY PRIMARILY FROM FARMERS.

THE TOTAL NUMBER OF WHOLESALE ESTABLISHMENTS REMAINED ALMOST CONSTANT DURING THE REPORTING PERIOD FOR BOTH CLINTON COUNTY AND THE STATE OF INDIANA WHILE TOTAL SALES VARIED CONSIDERABLY. CLINTON COUNTY EXPERIENCED A 3.0% DECLINE IN OVERALL SALES WHILE TOTAL SALES FOR THE STATE INCREASED BY 32.5%. A SIMILAR CONDITION EXISTS WITH RESPECT TO TOTAL PAYROLL. IN CLINTON COUNTY TOTAL PAYROLL INCREASED BY 5.0% WHILE THE TOTAL PAYROLL FOR THE STATE INCREASED 36.5%. IT WOULD APPEAR THAT WHILE THE NUMBER OF ESTABLISHMENTS IN CLINTON COUNTY IS KEEPING PACE WITH THE GENERAL TREND, THEIR INDIVIDUAL SALES AND PAYROLLS ARE NOT SHARING IN THE GENERAL GROWTH PATTERNS ENJOYED THROUGHOUT THE STATE. THIS, WHILE RETAIL TRADE WAS ON THE INCREASE IN CLINTON COUNTY CAN ONLY BE ATTRIBUTED TO THE FACT THAT WHOLESALERS PREFER TO BASE THEIR OPERATIONS IN MAJOR URBAN CENTERS AND SERVE THE OUTLYING AREAS FROM A CENTRAL LOCATION.

TRENDS IN WHOLESALE TRADE FOR CLINTON COUNTY FROM 1948 TO 1967 ARE SHOWN IN TABLE 7.

TABLE 7

TRENDS IN WHOLESALE TRADE - 1948 - 1967 CLINTON COUNTY

YEAR	NUMBER OF ESTABLISHMENTS	NUMBER OF EMPLOYEES	PAYROLL (\$1,000)	SALES (\$1,000)
1948	50	208	578	11,647
1958	51	223	1,039	22,061
1963	51	284	1,299	35,941
1967	50	259	1,374	35,840

SOURCE: CENSUS OF BUSINESS

SELECTED SERVICES

THE U. S. CENSUS OF BUSINESS REPORTS STATISTICS FOR SIX
SELECTED SERVICES:

MOTELS AND HOTELS
PERSONAL SERVICES
MISCELLANEOUS REPAIR
AUTO REPAIR SERVICES
MISCELLANEOUS BUSINESS
AMUSEMENT ENTERPRISES

TABLE 8 PRESENTS DATA CONCERNING THESE SERVICES COVERING
THE YEARS 1963 TO 1967 FOR CLINTON COUNTY AND THE STATE OF
INDIANA.

TABLE 8

SELECTED SERVICES - 1963 - 1967 CLINTON CO. & INDIANA

	CLINTON COUNTY		INDIANA	
	1963	1967	1963	1967
MOTELS, HOTELS, ETC. 6		3	1,509	1,555
PERSONAL SERVICES 102		104	13,023	14,264
MISC. BUSINESS SERV. 8		16	2,929	4,426
AUTO REPAIR SERV. 24		34	3,579	3,344
MISC. REPAIR SERV. 27		21	3,702	3,133
AMUSEMENTS 12		12	2,332	2,702
<hr/>				
TOTAL NUMBER OF ESTABLISHMENTS	179	190	27,074	29,424
PAYROLL (\$1,000)	495	585	177,690	253,412
TOTAL RECEIPTS (\$1,000)	2,574	2,561	789,064	686,851
PER CAPITA RECEIPTS	118	152	152	132
<hr/>				
PERCENT CHANGE				
1963 - 1967				
TOTAL No. ESTB.		6.0		8.6
PAYROLL		18.0		42.6
TOTAL RECEIPTS		-1.0		-14.9
PER CAPITA RECPTS.		29.0		-15.1

SOURCE: CENSUS OF BUSINESS BASED ON 1970 CENSUS OF POPULATION

IN 1967 THERE WERE A TOTAL OF 190 SERVICE ESTABLISHMENTS OPERATING IN CLINTON COUNTY, AN INCREASE OF 11 OVER 1963. OF THESE, BY FAR THE LARGEST NUMBER (104) WERE IN THE PERSONAL SERVICE CATEGORY. THIS IS ALSO THE LARGEST SINGLE CATEGORY IN THE STATE AND IS TO BE EXPECTED SINCE IT INCLUDES SUCH SERVICES AS LAUNDRIES, DRY CLEANERS, BEAUTY PARLORS, BARBER SHOPS, TAILORS, AND SHOE REPAIR SHOPS.

DURING THE PERIOD 1963 - 67, CLINTON COUNTY'S FLUCTUATION IN TOTAL NUMBER OF ESTABLISHMENTS PER CATEGORY PARALLELED THAT OF THE STATE AS A WHOLE WITH ONE EXCEPTION. THE TOTAL AUTO REPAIR SERVICES IN CLINTON COUNTY INCREASED FROM 24 TO 34 WHILE THE STATE EXPERIENCED A SLIGHT DECLINE IN THESE ESTABLISHMENTS.

CLINTON COUNTY'S INCREASE OF 6.0% IN TOTAL ESTABLISHMENTS COMPARES WITH AN 8.6% FOR THE STATE. HOWEVER, THE TOTAL PAYROLL IN THE COUNTY INCREASED ONLY 18.0% WHILE THE TOTAL PAYROLL FOR THE STATE INCREASED BY 42.6%. ALTHOUGH TOTAL RECEIPTS DECREASED FOR BOTH GEOGRAPHICAL AREAS, THE COUNTY'S LOSS WAS ONLY 1.0% WHILE THE STATE DROPPED 14.9%. THIS WOULD SEEM TO INDICATE THAT INDIVIDUAL SERVICE ESTABLISHMENTS IN CLINTON COUNTY ARE DOING BETTER THAN THE AVERAGE IN THE STATE.

TRENDS IN SELECTED SERVICES FOR CLINTON COUNTY FOR THE PERIOD 1948 - 1967 ARE SHOWN IN TABLE 9.

TABLE 9

TRENDS IN SELECTED SERVICES 1948 - 1967
CLINTON COUNTY

<u>YEAR</u>	<u>NUMBER OF ESTABLISHMENTS</u>	<u>RECEIPTS (\$1,000)</u>	<u>PAYROLL (\$1,000)</u>
1948	124	1,038	225
1958	116	1,730	369
1963	179	2,574	495
1967	190	2,561	585

SOURCE: CENSUS OF BUSINESS

TABLE 10

EMPLOYMENT - MAJOR INDUSTRIAL GROUPS - 1960 - 1970

	CLINTON COUNTY				FRANKFORT			
	1960		1970		1960		1970	
	No.	%	No.	%	No.	%	No.	%
AGRICULTURE, FORESTRY, FISHERIES	1,537	13.4	935	7.7	76	1.3	43	0.7
MINING	13	0.1	34	0.4	0	0.0	10	0.2
CONSTRUCTION	511	4.5	800	6.5	226	3.9	355	5.8
MANUFACTURING	3,297	28.8	4,343	35.5	1,926	33.0	2,442	40.1
TRANSPORTATION, COMMUNI- CATIONS, & UTILITIES	1,224	10.7	822	6.7	838	14.4	503	8.3
WHOLESALE TRADE	278	2.4	295	2.4	129	2.2	126	2.1
RETAIL TRADE	1,605	14.0	1,911	15.6	965	16.6	1,062	17.4
FINANCE, INSURANCE & REAL ESTATE	446	3.9	392	3.2	233	4.0	164	2.7
BUSINESS & REPAIR SERVICE	190	1.7	151	1.3	126	2.2	102	1.7
PROFESSIONAL & RELATED	1,591	13.9	2,239	18.3	826	14.2	1,177	19.3
PUBLIC ADMINISTRATION	287	2.5	298	2.4	184	3.2	110	1.7
INDUSTRY NOT REPORTED	465	4.1	---	---	294	5.0	---	---
TOTAL EMPLOYMENT	11,434	100%	12,220	100%	5,823	100%	6,094	100%

SOURCE: U.S. CENSUS, GENERAL SOCIAL & ECONOMIC CHARACTERISTICS

EMPLOYMENT BY MAJOR INDUSTRIAL GROUPS

MAJOR INDUSTRIAL GROUPS ACCORDING TO THE U.S. CENSUS ARE EMPLOYMENT ESTABLISHMENTS OF SIMILAR ECONOMIC ACTIVITIES. THE PROCEDURE FOR GATHERING INFORMATION ACCORDING TO INDUSTRIAL GROUPS WAS DEVELOPED BY THE GOVERNMENT TO PROVIDE STANDARDIZATION DATA FOR ANALITICAL PURPOSES. A DISCUSSION OF THE TRENDS FOR THE VARIOUS INDUSTRIAL GROUPS IN CLINTON COUNTY AND THE CITY OF FRANKFORT FROM 1960 TO 1970 FOLLOWS.

AGRICULTURE, FORESTERY, FISHERIES

IN 1960 THIS GROUP (PRIMARILY AGRICULTURE) ACCOUNTED FOR 13.4% OF THE TOTAL EMPLOYMENT IN CLINTON COUNTY AND 1.3% OF TOTAL EMPLOYMENT IN FRANKFORT. BY 1970 THE PERCENTAGE HAD FALLEN TO 7.7% FOR THE COUNTY AND 0.7% FOR THE CITY, A DROP OF ALMOST ONE-HALF. NUMERICALLY EMPLOYMENT IN THE COUNTY FELL FROM 1537 INDIVIDUALS EMPLOYED IN 1960 TO 935 IN 1970, A DECLINE OF 602. CITY EMPLOYMENT IN THIS GROUP WAS TOO SMALL AT EITHER TIME TO BE OF ANY IMPORTANCE.

MINING

EMPLOYMENT IN THIS GROUP IS TOO SMALL TO BE OF ANY SIGNIFICANCE IN EITHER THE CITY OR THE COUNTY.

CONSTRUCTION

ALTHOUGH STILL NOT A MAJOR FACTOR, CONSTRUCTION IN THE COUNTY ACCOUNTED FOR 4.5% OF TOTAL EMPLOYMENT IN 1960 AND BY 1970 HAD INCREASED ITS SHARE TO 6.5%. A SIMILAR INCREASE FROM 3.9% TO 5.8% OCCURED IN THE CITY. THESE FIGURES INDICATE THAT THE CONSTRUCTION INDUSTRY IS GRADUALLY BECOMING MORE IMPORTANT IN THE ECONOMY OF BOTH THE CITY AND THE COUNTY.

MANUFACTURING

MANUFACTURING REPRESENTS THE LARGEST AND MOST IMPORTANT EMPLOYMENT GROUP IN BOTH THE CITY AND THE COUNTY. IN 1960 28.8% OF THE LABOR FORCE IN THE COUNTY WERE EMPLOYED IN MANUFACTURING AND THIS FIGURE HAD RISEN TO 35.5% BY 1970. IN 1960 33.0% OF THE LABOR FORCE IN THE CITY WERE SO EMPLOYED AND BY 1970 40.1% WERE WORKING IN MANUFACTURING.

TRANSPORTATION, COMMUNICATIONS AND UTILITIES

FROM 1960 TO 1970 EMPLOYMENT IN THIS GROUP DECREASED FROM 10.1% TO 6.7% IN THE COUNTY AND FROM 14.4% TO 8.3% IN THE CITY OF FRANKFORT. SINCE NONE OF THESE SERVICES HAVE DEMINISHED SUCH A DROP IN EMPLOYMENT CAN ONLY BE ATTRIBUTED TO THE NATION WIDE TREND TOWARDS AUTOMATION AND CENTRALIZATION OF SOME OF THESE ACTIVITIES.

WHOLESALE TRADE

WHOLESALE TRADE MAINTAINED A STEADY 2.4% OF THE COUNTY LABOR FORCE FROM 1960 TO 1970 WITH ONLY A SLIGHT DROP FROM 2.2% TO 2.1% WITHIN THE CITY.

RETAIL TRADE

RETAIL TRADE EMPLOYED A HEALTHY PROPORTION OF THE LABOR FORCE IN 1960 IN BOTH THE COUNTY AND THE CITY, 14.0% AND 16.6% RESPECTFULLY. ALTHOUGH THIS CATEGORY INCREASED MODERATELY BY 1970 TO 15.6% FOR THE COUNTY AND 17.4% FOR THE CITY, THE GROUP DROPPED FROM THE SECOND HIGHEST EMPLOYER TO THIRD IN BOTH AREAS BECAUSE OF A GREATER INCREASE IN PROFESSIONAL AND RELATED SERVICES.

FINANCE, INSURANCE AND REAL ESTATE

THIS INDUSTRIAL GROUP LOST A PART OF ITS SHARE OF THE LABOR FORCE DURING THE DECADE, DECLINING FROM 3.9% TO 3.2% IN THE COUNTY WITH AN EVEN GREATER REDUCTION FROM 4.0% TO 2.7% IN THE CITY. IN ADDITION TO THE DECREASE IN RELATIVE POSITION THE ACTUAL DECREASE IN NUMBERS AMOUNTED TO MORE THAN ONE-HALF OF THOSE SO EMPLOYED WITH THE CITY BETWEEN 1960 AND 1970.

BUSINESS AND REPAIR SERVICES

THERE WERE SLIGHT DECLINES FROM 1.7% TO 1.3% IN THE COUNTY AND FROM 2.2% TO 1.7% IN FRANKFORT IN THIS MINOR INDUSTRIAL GROUP.

PROFESSIONAL AND RELATED SERVICES

THIS GROUP EXPERIENCED A SUBSTANTIAL INCREASE IN ITS SHARE OF THE LABOR FORCE DURING THE TEN YEAR PERIOD. FROM 13.9% TO 18.3% IN THE COUNTY AND FROM 14.2% TO 19.3% IN THE CITY. NUMERICALLY THIS WAS AN INCREASE OF 648 EMPLOYEES IN THE COUNTY OF WHICH 451 WERE IN THE CITY. THIS INCREASE RAISED THIS CATEGORY FROM THE THIRD TO THE SECOND LARGEST EMPLOYMENT GROUP IN BOTH JURISDICTIONS.

PUBLIC ADMINISTRATION

WHILE THE GENERAL TREND IS FOR PUBLIC ADMINISTRATION TO GAIN A GREATER SHARE OF THE LABOR FORCE, THIS CATEGORY DECLINED IN THE FRANKFORT-CLINTON COUNTY AREA DURING THE 1960 - 1970 DECADE. THIS GROUP DROPPED FROM 2.5% TO 2.4% IN THE COUNTY AND FROM 3.2% TO 1.7% IN THE CITY.

THREE OF THE MAJOR INDUSTRIAL GROUPS, MANUFACTURING, PROFESSIONAL AND RELATED AND RETAIL TRADE ACCOUNTED FOR ALMOST 70% OF THE TOTAL EMPLOYMENT.

TABLE 11

MAJOR OCCUPATIONAL GROUPS 1960 - 1970

	CLINTON COUNTY		FRANKFORT	
	1960, No.	1970 No.	1960 No.	1970 No.
	%	%	%	%
PROFESSIONAL, TECHNICAL	387	1,052	430	557
	6.9	8.6	7.4	9.1
FARMERS, FARM MANAGERS	1,128	691	11	11
	21.2	5.7	0.2	0.2
MANAGER, OFFICIALS, PROPRIETORS (EXCEPT FARM)	337	921	550	509
	6.0	7.5	9.5	8.4
CLERICAL & KINDRED WORKERS	549	1,482	661	730
	9.8	12.1	10.1	12.0
SALES WORKERS	249	653	423	330
	4.4	5.3	7.3	5.4
CRAFTSMEN, FOREMEN	756	2,016	897	1028
	13.4	16.5	15.4	16.9
OPERATIVES, EXCEPT TRANSPORT TRANSPORT EQUIPMENT OPERATIVES	1,071	2,603	1,552	1541
	19.1	21.3	27.0	25.3
	2	531	2	277
		4.3		4.5
		25.6		29.8
SERVICE WORKERS, (NOT HOUSEHOLD)	344	1,265	510	670
	6.1	10.4	8.8	11.0
LABORERS, EXCEPT FARM FARM LABORERS & FOREMEN	207	538	292	270
	4.8	4.4	5.0	4.4
	305	204	48	17
	5.5	1.7	0.8	0.3
PRIVATE HOUSEHOLD WORKERS	64	265	97	154
	1.1	2.2	1.6	2.5
OCCUPATIONS NOT REPORTED	214	-	352	-
	3.8	-	6.8	-
TOTAL	5,611	12,220	5,823	6,094
	100%	100%	100%	100%

SOURCE: U.S. CENSUS - SOCIAL & ECONOMIC CHARACTERISTICS

MAJOR OCCUPATIONAL GROUPS

THE PRECEDING SECTION DISCUSSED EMPLOYMENT TRENDS BY INDUSTRIAL GROUPS. THIS SECTION PRESENTS DATA FOR THE VARIOUS OCCUPATIONAL GROUPS. OCCUPATION GROUPS COMBINE WORKERS BY THE ACTUAL JOB PERFORMED AND ONE GROUP MAY INVOLVE PEOPLE EMPLOYED IN A NUMBER OF INDUSTRIAL GROUPS, I.E., CLERICAL AND KINDRED WORKERS COULD BE EMPLOYED IN MANUFACTURING, FINANCE, PUBLIC ADMINISTRATION, ETC.

THE NATIONAL TREND HAS BEEN ONE OF INCREASED EMPLOYMENT OPPORTUNITIES FOR PERSONS HAVING SPECIAL SKILLS OR ADVANCED EDUCATION WHEREAS THE DEMAND FOR UNSKILLED PERSONS HAS DECLINED SUBSTANTIALLY OVER THE LAST SEVERAL DECADES. CONTINUED TECHNOLOGICAL ADVANCES INDICATE THAT MUCH OF THE LABOR FORCE WILL REQUIRE VARIOUS LEVELS OF TRAINING OR RETRAINING IN ORDER TO REMAIN COMPETITIVE. OCCUPATION TRENDS IN CLINTON COUNTY AND THE CITY OF FRANKFORT ARE PRESENTED IN TABLE 11 AND GENERALLY FOLLOW THE NATIONAL TRENDS. A BRIEF DISCUSSION OF EACH GROUP FOLLOWS.

PROFESSIONAL AND TECHNICAL

THIS GROUP REPRESENTED 6.9% OF THE COUNTY'S EMPLOYMENT IN 1960 AND BY 1970 HAD INCREASED TO 8.6%. FRANKFORT INCREASED FROM 7.4% TO 9.1% DURING THE TEN YEAR PERIOD.

FARMERS AND FARM MANAGERS

OF ALL THE MAJOR GROUPS IN THE COUNTY, FARMERS AND FARM MANAGERS EXPERIENCED THE GREATEST DECLINE, BOTH NUMERICALLY AND AS A PERCENTAGE OF THE TOTAL. IN 1960 THIS GROUP ACCOUNTED FOR 21.2% OF THE TOTAL COUNTY EMPLOYMENT, THE LARGEST SINGLE OCCUPATIONAL GROUP. BY 1970 THIS FIGURE HAD FALLEN TO 5.7% OF THE TOTAL WITH AN ACTUAL NUMERICAL DECREASE OF 437 JOBS. ALTHOUGH THE RESIDENCES IN THE CITY EMPLOYED IN THIS GROUP REMAINED CONSTANT DURING THE TEN YEAR PERIOD, THE NUMBER WAS SO SMALL AS TO BE INSIGNIFICANT IN THE TOTAL.

MANAGERS, OFFICIALS, PROPRIETORS (EXCEPT FARM)

THIS GROUP INCREASED FROM 6.0% TO 7.5% OF THE TOTAL COUNTY EMPLOYMENT DURING THE TEN YEAR PERIOD, WHILE AT THE SAME TIME THIS OCCUPATIONAL GROUP DROPPED FROM 9.5% TO 8.4% OF THE TOTAL EMPLOYMENT WITHIN THE CITY.

CLERICAL AND KINDRED WORKERS

THIS CATEGORY INCREASED ITS SHARE OF EMPLOYMENT IN BOTH THE CITY AND COUNTY TOTALS, AND IN APPROXIMATELY THE SAME PROPORTIONS. FROM 9.8% IN 1960 TO 12.1% IN 1970 FOR THE COUNTY

AND FROM 10.1% TO 12.0% IN THE CITY DURING THE SAME PERIOD.

SALES WORKERS

SALES WORKERS INCREASED THEIR RELATIVE POSITION FROM 4.4% TO 5.3% IN THE COUNTY BUT LOST GROUND WITHIN THE CITY, DECLINING FROM 7.3% TO 5.4%. THE CITY ACTUALLY LOST 93 WORKERS IN THIS GROUP DURING THE DECADE.

CRAFTSMEN, FOREMEN

THIS CATEGORY INCREASED ITS SHARE OF TOTAL EMPLOYMENT IN BOTH THE CITY AND THE COUNTY. THE COUNTY ROSE FROM 13.4% IN 1960 TO 16.5% IN 1970, WHILE THE CITY GREW SOMEWHAT MORE SLOWLY FROM 15.4% TO 16.9%. THE COUNTY'S NUMERICAL GAIN WAS EVEN MORE DRAMATIC, FROM 756 EMPLOYED IN THIS GROUP IN 1960 TO 2,016 SO EMPLOYED IN 1970. AN INCREASE OF 1,360 JOBS.

OPERATIVES

OPERATIVES' SHARE OF TOTAL EMPLOYMENT INCREASED IN BOTH AREAS DURING THE REPORTING PERIOD. THIS IS THE SINGLE LARGEST OCCUPATIONAL GROUP IN THE STUDY AREA, COMPRISING 25.6% OF THE TOTAL IN THE COUNTY AND 29.8% OF THE TOTAL IN THE CITY.

LABORERS

THIS GROUP LOST A PORTION OF ITS SHARE OF THE TOTAL EMPLOYMENT IN BOTH THE CITY AND COUNTY. ALTHOUGH THE ACTUAL NUMBER OF PERSONS EMPLOYED AS LABORERS IN THE COUNTY INCREASED DURING THE TEN YEAR PERIOD THE PERCENTAGE THIS GROUP REPRESENTED OF THE TOTAL FELL FROM 10.3% TO 6.1% BECAUSE OF THE SUBSTANTIAL INCREASE IN OVERALL JOBS. IT WOULD BE EXPECTED THE LARGEST REDUCTION, BOTH AS A PERCENTAGE AND IN ACTUAL OCCURED IN THE SUB-CATEGORY OF FARM LABORERS AND FOREMAN. THIS IS IN KEEPING WITH THE GENERAL DECREASE IN FARM ORIENTED EMPLOYMENT THAT OCCURED DURING THE REPORTING PERIOD.

PRIVATE HOUSEHOLD WORKERS

THIS GROUP EXPERIENCED A GRADUAL INCREASE IN JOBS FILLED IN BOTH THE CITY AND COUNTY DURING THE 10 YEAR PERIOD; GROWING FROM 1.1% TO 2.2% IN THE COUNTY AND FROM 1.6% TO 2.5% IN THE CITY. IT STILL REMAINS THE SMALLEST OF THE MAJOR GROUPINGS, HOWEVER, AND AS SUCH IS RELATIVELY UNIMPORTANT IN THE TOTAL EMPLOYMENT PICTURE.

PROJECTED COUNTY LABOR FORCE PARTICIPATION

ALL PERSONS 16 YEARS OF AGE OR OVER ARE CONSIDERED POTENTIAL MEMBERS OF THE LABOR FORCE ALTHOUGH A SMALLER NUMBER ACTUALLY PARTICIPATE. IN 1960, 80.2% OF THE MALES AND 37.2% OF THE FEMALES IN THIS AGE GROUP WERE IN THE LABOR FORCE. IN 1970 THE FIGURE FOR MALES HAD DECLINED SLIGHTLY TO 79.1% WHILE FEMALE PARTICIPATION HAD RISEN TO 42.2%, AS SHOWN IN TABLE 12. IT IS EXPECTED THAT MALE PARTICIPATION WILL CONTINUE TO DECLINE SLIGHTLY THROUGH THE PLANNING PERIOD AND FEMALE PARTICIPATION WILL CONTINUE TO INCREASE, ALTHOUGH NOT SO RAPIDLY AS DURING THE 1960 - 70 PERIOD. APPLYING THESE FIGURES TO THE ANTICIPATED DECLINING POPULATION PROJECTIONS FOR THE COUNTY RESULTS IN A PROJECTED LABOR FORCE OF 12,446 PERSONS IN 1980 AND 11,993 PERSONS IN 1990. FEMALES WILL GRADUALLY ASSUME A MORE IMPORTANT ROLL IN THE TOTAL EMPLOYMENT PICTURE IN THE FUTURE.

TABLE 12

PROJECTED LABOR FORCE PARTICIPATION

YEAR	TOTAL NO. 16 YRS. AND OLDER		MALES %		IN LABOR FORCE		TOTAL LABOR FORCE
	MALE	FEMALE	TOTAL	No.	% TOTAL	No.	
1960	10,159	9,006	80.2	8,149	37.2	3,350	11,498
1970	9,882	11,351	79.1	7,820	42.2	4,793	12,613
1980	9,604	11,105	78.8	7,549	44.1	4,897	12,446
1990	9,225	10,665	78.2	7,204	44.9	4,789	11,993

SOURCE: U. S. CENSUS AND HUFF - NEIDIGH & ASSOCIATES

FUTURE LABOR FORCE BY INDUSTRIAL GROUP

THE PROJECTION OF CLINTON COUNTY'S INDUSTRIAL GROUPS PRESENTED IN TABLE 13 IS BASED ON THE NATIONAL PROJECTION (1960 - 2000) PREPARED BY THE FEDERAL OUTDOOR RECREATION RESOURCES REVIEW COMMISSION (O.R.R.R.C.). THIS TABLE WAS DEVELOPED BY APPLYING THE NATIONAL TRENDS TO EACH OF THE CLINTON COUNTY INDUSTRIAL GROUPS WITH ADJUSTMENTS FOR LOCAL CONDITIONS. THE PROJECTED COUNTY PROJECTIONS WERE THEN RELATED TO THE PROJECTED TOTAL LABOR DEVELOPED IN THE PREVIOUS SECTION TO PROVIDE THE ESTIMATED NUMBER OF PERSONS BY INDUSTRIAL GROUP.

TABLE 13

LABOR FORCE PROJECTION BY INDUSTRIAL GROUPS
CLINTON COUNTY

INDUSTRY	1970		1985		2000	
	No.	%	No.	%	No.	%
AGRICULTURE	935	7.8	734	5.9	480	4.0
MANUFACTURING	4,343	36.9	4,281	34.4	3726	31.9
CONSTRUCTION	800	6.6	884	7.1	911	7.6
TRANSPORTATION, COMMUNICATION & UTILITIES	822	6.7	697	5.6	540	4.5
TRADE	1,911	15.7	2,237	18.7	2515	21.8
FINANCE & REAL ESTATE	392	3.2	373	3.0	337	2.8
SERVICES	2,239	18.7	2,639	21.2	2841	23.7
PUBLIC ADMIN.	298	2.6	286	2.3	228	1.9
OTHER	227	1.8	224	1.8	216	1.8

AGRICULTURE

AGRICULTURE EMPLOYMENT FOR THE NATION IS EXPECTED TO DECLINE FROM 9.0% IN 1960 TO 4.0% IN THE YEAR 2000. AGRICULTURE EMPLOYMENT IN CLINTON COUNTY HAS BEEN DROPPING AT A SLIGHTLY FASTER RATE THAN THE NATION AND IT IS EXPECTED THAT THIS TREND WILL CONTINUE UNTIL IT STABILIZES AROUND THE YEAR 2000 AT APPROXIMATELY 4.0%.

MANUFACTURING

MANUFACTURING IN THE NATION IS PROJECTED TO DECLINE FROM 25.7% IN 1960 TO 18.5 IN THE YEAR 2000. ALTHOUGH A HIGHER PERCENTAGE OF THE LABOR FORCE IS EMPLOYED IN THIS CATEGORY IN CLINTON

COUNTY THAN IS TRUE FOR THE NATION, THE GENERAL DECLINING TREND IS EXPECTED TO APPLY HERE AS WELL. IT IS EXPECTED THAT MANUFACTURING EMPLOYMENT IN CLINTON COUNTY WILL DECLINE FROM THE 36.9% EMPLOYED IN 1970 TO 31.9% IN THE YEAR 2000.

CONSTRUCTION

NATIONALLY, ACCORDING TO O.R.R.R.C. PROJECTIONS, CONSTRUCTION IS EXPECTED TO INCREASE SLIGHTLY TO 1975, THEN TO EXPERIENCE A SLIGHT DECLINE BY THE YEAR 2000. BECAUSE OF THE AGE OF MANY STRUCTURES IN CLINTON COUNTY AND BECAUSE OF AN ANTICIPATED IMPROVEMENT IN PERSONAL INCOME, IT IS EXPECTED THAT CONSTRUCTION EMPLOYMENT WILL MAINTAIN A MODEST GROWTH TO THE YEAR 2000, FROM 6.7% IN 1970 TO 7.6% BY 2000.

TRANSPORTATION, COMMUNICATIONS AND UTILITIES

THIS CATEGORY IS EXPECTED TO LOSE A SHARE OF THE TOTAL LABOR FORCE ON THE NATIONAL LEVEL; DOWN FROM 6.4% IN 1960 TO 4.1% BY THE YEAR 2000. THERE IS NO REASON TO BELIEVE THAT CLINTON COUNTY WILL DEVIATE MATERIALLY FROM THE NATIONAL TREND AND IT IS PROJECTED THAT THE PERCENTAGE SO EMPLOYED WILL DROP FROM 6.7% IN 1970 TO 4.5% BY 2000.

TRADE

TRADE IS EXPECTED TO ATTRACT A SUBSTANTIALLY LARGER SHARE OF THE LABOR FORCE ON THE NATIONAL LEVEL. O.R.R.R.C. PROJECTS AN INCREASE FROM 19.8% IN 1960 TO 25.9% IN THE YEAR 2000. CLINTON COUNTY IS EXPECTED TO PARALLEL THIS TREND WITH A RESULTING INCREASE FROM 15.7% IN 1970 TO 21.8% IN THE YEAR 2000.

FINANCE AND REAL ESTATE

FINANCE AND REAL ESTATE SHARE OF THE LABOR FORCE IS EXPECTED TO DECREASE ONLY SLIGHTLY ON THE NATIONAL LEVEL, DECLINING FROM 4.1% IN 1960 TO 3.7% BY THE YEAR 2000. IN CLINTON COUNTY THIS CATEGORY IS EXPECTED TO REMAIN RELATIVELY STABLE ALSO, WITH A SMALL DECLINE FROM 3.2% IN 1970 TO 2.8% IN THE YEAR 2000.

SERVICES

SERVICES ARE EXPECTED TO UNDERGO THE MOST RAPID GROWTH OF ANY OF THE MAJOR INDUSTRIAL GROUPS WITHIN THE NATION BY INCREASING FROM 17.8% IN 1960 TO 25.9% IN 2000. THIS CATEGORY IS EXPECTED TO GROW IN CLINTON COUNTY AS WELL, ALTHOUGH AT A SOMEWHAT SLOWER RATE; UP FROM 18.7% IN 1970 TO 23.7% BY THE YEAR 2000.

PUBLIC ADMINISTRATION

IN 1960, 10.4% OF THE NATIONS LABOR FORCE WAS EMPLOYED IN PUBLIC ADMINISTRATION. BY THE YEAR 2000 THIS FIGURE IS EXPECTED TO INCREASE 12.0%. IN CLINTON COUNTY, ON THE OTHER HAND, PUBLIC ADMINISTRATIONS SHARE OF THE TOTAL LABOR FORCE IS EXPECTED TO DECLINE SLIGHTLY, BECAUSE OF A DECREASING POPULATION AND A REDUCED NEED FOR PUBLIC SERVICE. THE 2.6% SO EMPLOYED IN 1970 IS EXPECTED TO DROP TO 1.9% BY THE YEAR 2000.

ECONOMIC STABILITY

THE VITALITY OF THE ECONOMY IS GENERALLY DESCRIBED BY SUCH TERMS AS STABILITY, THE CAPACITY TO WEATHER LONG TERM OR SEASONAL BUSINESS CHANGES, BALANCE OR DIVERSIFICATION IN PRODUCTION ACTIVITY, AND PRODUCTIVITY WHICH REFERS TO OUTPUT PER WORKER. A NUMBER OF STUDIES HAVE BEEN MADE TO DETERMINE THE ECONOMIC VITALITY OF AN AREA. ONE OF THE MORE VALID METHODS HAS BEEN DEVELOPED BY EDWARD F. DENISON OF THE UNITED STATES OFFICE OF BUSINESS ECONOMICS. THIS TECHNIQUE IS BASED UPON THE 1929 TO 1947 PERIOD OF THE NATIONAL ECONOMY WITH ASSIGNED RATIOS BASED UPON HOW THE VARIOUS NON-AGRICULTURAL INDUSTRIES WEATHERED THE DEPRESSION. THE FINAL RATIO, TERMED THE "STABILITY RATIO", WAS USED AS A MEASURE OF CYCLICAL STABILITY DURING THE DEPRESSION. THOSE INDUSTRIES WHOSE INCOME REMAINED THE SAME AS THE AGGREGATE OF PRIVATE NON-AGRICULTURAL INDUSTRIES HAD A STABILITY RATIO OF 1.00. A RATIO HIGHER THAN 1.00 INDICATED THAT THE INDUSTRY FLUCTUATED LESS THAN THE INCOME OF THE AGGREGATE OF INDUSTRIES WHEREAS A RATIO LESS THAN 1.00 INDICATED THAT THE INDUSTRY FLUCTUATED MORE THAN THE INCOME OF THE AGGREGATE.

THE LIST OF DENISON'S GROUPING OF PRIVATE NON-AGRICULTURAL INDUSTRIES BY DEGREE OF SENSITIVITY FOLLOWS:

HIGHLY INSENSITIVE TO CYCLIC FLUCTUATION (2.06 TO 1.38). THESE INDUSTRIES INCLUDE EDUCATION SERVICES; UTILITIES, ELECTRIC AND GAS; MISCELLANEOUS REPAIR SERVICES; INSURANCE AND COMBINATION OFFICES.

MARKEDLY INSENSITIVE TO CYCLIC FLUCTUATION (1.32 TO 1.14). INDUSTRIES WITHIN CLASSIFICATION ARE FOOD INDUSTRIES, PRINTING AND PUBLISHING, ENGINEERING AND PROFESSIONAL SERVICES, PERSONNEL SERVICES, AND REAL ESTATE.

AVERAGE SENSITIVE TO CYCLIC FLUCTUATION (1.13 TO 0.88).
THE INDUSTRIES INCLUDED UNDER THIS CLASSIFICATION ARE
CHEMICALS AND RELATED PRODUCTS, RAILROADS, AMUSEMENT
AND RECREATION, WHOLESALE AND RETAIL SALES, BANKING,
MOTION PICTURES, FINISHED FABRIC OR TEXTILE PRODUCTIONS,
AND LEATHER PRODUCTS.

MARKEDLY SENSITIVE TO CYCLIC FLUCTUATION (0.87 TO 0.64).
THESE INDUSTRIES INCLUDE TEXTILE AND MILL PRODUCTS,
CRUDE PETROLEUM, NATURAL GAS PRODUCTS, AND CONTRACTORS.

HIGHLY SENSITIVE TO CYCLIC FLUCTUATION (0.56 TO .36).
INDUSTRIES WITHIN THIS CLASSIFICATION ARE MACHINERY,
AUTOMOBILES AND EQUIPMENT, TRANSPORTATION EQUIPMENT,
STONE, CLAY AND GLASS PRODUCTS, PRODUCTS OF PETROLEUM,
COAL, IRON AND STEEL, LUMBER AND BASIC PRODUCTS.

ALTHOUGH THE MEASURE OF RELATIVE CYCLICAL STABILITY OF THE
VARIOUS PRIVATE NON-AGRICULTURAL ECONOMIC ACTIVITIES WAS DE-
VELOPED FOR EXAMINING THE FLUCTUATIONS IN THE NATIONAL ECONOMY,
THESE RATIOS CAN PROVIDE WITH CERTAIN RESERVATIONS, A GENERAL
INDICATION OF THE STABILITY OF THE LOCAL ECONOMY. TABLE 14
PRESENTS THE APPLICATION OF THE PREVIOUSLY OUTLINED RATIOS
TO THE CLINTON COUNTY LABOR FORCE, EXCLUDING AGRICULTURAL
EMPLOYMENT, FOR THE 1960 AND 1970 CENSUS PERIODS.

THE OVERALL STABILITY RATIO FOR THE COUNTY WAS MEASURED AT
1.07 IN 1960 INDICATING AN ECONOMY OF AVERAGE CYCLIC SENSIT-
IVITY. IN 1970 THE RATIO HAD DECLINED TO 0.95, BUT STILL
REMAINED WITHIN THE AVERAGE SENSITIVITY RANGE. REVIEWING
THE TABLE, THE MAJOR CONTRIBUTORS TO MODEST DECLINE IN THE
RATIO WERE THE RATHER SUBSTANTIAL DROP IN PERSONS EMPLOYED
IN THE FIELDS OF TRANSPORTATION, UTILITIES AND COMMUNICATIONS,
AND THE INCREASE IN MANUFACTURING, PARTICULARLY IN THE CATE-
GORIES OF METAL AND MACHINERY AND MOTOR VEHICLE AND TRANSPORT-
ATION EQUIPMENT. THE OVERALL DEVIATION OVER THE 10 YEAR PERIOD
HAS NOT BEEN DRAMATIC, HOWEVER, AND SHOULD BE NO CAUSE FOR
ALARM. THE COUNTY STILL MAINTAINS A RELATIVELY STABLE ECONOMY.

THE TYPES OF INDUSTRIES THAT SHOULD BE ENCOURAGED TO LOCATE
WITHIN THE COUNTY IN ORDER TO LEND STABILITY TO THE ECONOMY,
ARE THOSE RANGING FROM AVERAGE TO HIGHLY INSENSITIVE TO
CYCLIC FLUCTUATION.

TABLE 14

TRENDS IN ECONOMIC STABILITY - CLINTON COUNTY - 1960 - 1970

	1960			1970		
	TOTAL EMPLOY- MENT	INDEX*	PRODUCT**	TOTAL EMPLOY- MENT	INDEX*	PRODUCT**
CONSTRUCTION	511	0.75	383	800	0.75	600
MINING	13	0.46	6	34	0.46	15
TRANSPORTATION, UTILITIES & COMMUNICATIONS	1,224	1.72	2105	822	1.72	1414
BUSINESS & REPAIR SERVICES	190	1.72	327	151	1.72	260
PERSONAL SERVICES	436	1.23	536	544	1.23	669
PUBLIC ADMINISTRATION	287	1.23	353	298	1.23	366
RETAIL TRADE	1,605	1.01	1621	1,911	1.01	1930
WHOLESALE TRADE	278	1.01	281	295	1.01	298
MANUFACTURING						
FURNITURE, LUMBER, WOOL	274	0.75	201	176	0.75	132
FOOD & RELATED PRODUCTS	628	1.23	772	368	1.23	452
PRINTING & PUBLISHING	106	1.23	130	57	1.23	70
APPAREL & TEXTILES	168	1.01	170	182	1.01	184
METAL & MACHINERY	892	0.46	410	1,346	0.46	619
MOTOR VEHICLE & TRANS- PORTATION EQUIPMENT	231	0.46	106	882	0.46	405
CHEMICALS & ALLIED PROD.	28	0.46	13	73	0.46	33
NOT SPECIFIED	277	0.85	235	-	0.85	-
FINANCE, INSURANCE & REAL ESTATE	446	1.12	500	392	1.12	439
INDUSTRY NOT REPORTED	465	1.09	507	-	1.09	-
TOTAL	8,059	1.07	8656	8,331	0.95	7880

* ADOPTED FROM EDW. F. DENISON, INDUSTRIAL COMPOSITION OF NATIONAL INCOME, SURVEY OF CURRENT BUSINESS.

**PRODUCT EQUALS EMPLOYMENT X INDEX NUMBER.

SOURCE: HUFF-NEIDIGH & ASSOCIATES.

SUMMARY

MANUFACTURING, WITH 66.0% OF THE TOTAL PAYROLL, WAS THE DOMINATE ECONOMIC ACTIVITY IN CLINTON COUNTY IN 1967. THIS IS STILL BELOW THE 75.1% FIGURE FOR THE STATE AS A WHOLE WHERE MANUFACTURING TENDS TO DOMINATE ALL OTHER CATEGORIES. RETAIL TRADE ACCOUNTING FOR 25% OF THE TOTAL PAYROLL CONTRIBUTED A SIGNIFICANTLY HIGHER PROPORTION (ALMOST TWICE AS MUCH) TO THE LOCAL ECONOMY THAN IT DID IN THE STATE AS A WHOLE (14.1%). WHOLESALE TRADE WITH 6.0% AND SELECTED SERVICES WITH 3.0% CLOSELY PARALLELED THE OVERALL STATE FIGURES OF 7.2% AND 3.6% RESPECTFULLY.

DURING THE PERIOD 1963-67, VALUE ADDED BY MANUFACTURING INCREASED FROM \$19,900,000 TO \$30,300,000 IN CLINTON COUNTY. THIS AMOUNTS TO AN INCREASE OF 52% COMPARED TO AN INCREASE OF 33.0% FOR THE STATE OF INDIANA. MANUFACTURING PAYROLLS IN CLINTON COUNTY INCREASED BY 31.0% WHILE TOTAL NUMBER OF EMPLOYEES INCREASED BY ONLY 19.0%. THIS CLOSELY PARALLELS THE GROWTH PATTERNS FOR THE STATE WHERE PAYROLLS INCREASED BY 32.0% AND THE NUMBER OF EMPLOYEES INCREASED BY 16.5%. WHILE THIS WAS TAKING PLACE THE TOTAL NUMBER OF ESTABLISHMENTS IN CLINTON COUNTY ACTUALLY DECREASED BY 8.0% ONLY A SLIGHT INCREASE, 0.9%, OCCURED THROUGHOUT THE STATE.

WITH FEW EXCEPTIONS THE RETAIL TRADE PATTERNS IN CLINTON COUNTY CLOSELY RESEMBLE THOSE FOR THE STATE AS A WHOLE. THE MOST PRONOUNCED DEVIATION WAS IN THE CATEGORY OF LUMBER, BUILDING MATERIALS, HARDWARE, AND FARM EQUIPMENT WITH 15.0% OF TOTAL SALES IN THE COUNTY AS OPPOSED TO 3.3% IN THE STATE. ANOTHER AND LESS PRONOUNCED DEVIATION WAS IN THE CATEGORY OF GENERAL MERCHANDISE WITH 9.0% OF TOTAL SALES IN THE COUNTY AND 14.5% OF TOTAL SALES IN THE STATE. AUTOMOTIVE, FURNITURE AND APPLIANCE ALSO CAPTURED A SLIGHTLY SMALLER SHARE OF THE MARKET IN CLINTON COUNTY THAN THEY DID IN THE STATE.

THE TOTAL NUMBER OF WHOLESALE ESTABLISHMENTS REMAINED ALMOST CONSTANT DURING THE REPORTING PERIOD (1963-67) FOR BOTH CLINTON COUNTY AND THE STATE OF INDIANA, WHILE TOTAL SALES VARIED CONSIDERABLY. CLINTON COUNTY EXPERIENCED A 3.0% DECLINE IN OVERALL SALES WHILE TOTAL SALES FOR THE STATE WAS 32.5%. A SIMILAR SITUATION EXISTED WITH RESPECT TO TOTAL PAYROLL. IN CLINTON COUNTY, TOTAL PAYROLL INCREASED BY 5.0% WHILE THE TOTAL PAYROLL FOR THE STATE INCREASED 36.5%.

THE TOTAL NUMBER OF SELECTED SERVICE ESTABLISHMENTS IN CLINTON COUNTY INCREASED BY 6.0% BETWEEN 1963 - 67, WHILE DURING THE SAME PERIOD THERE WAS AN 8.6% INCREASE IN THE STATE. PAYROLLS INCREASED 18.0% IN THE COUNTY COMPARED TO 42.6% INCREASE IN THE STATE. TOTAL RECEIPTS ON THE OTHER HAND FELL ONLY 1.0% IN THE COUNTY, BUT WERE DOWN 14.9% IN THE STATE AND PER CAPITA

SALES WERE UP 29.0% IN THE COUNTY, WHILE PER CAPITA SALES IN THE STATE DROPPED 15.1%.

THREE OF THE MAJOR INDUSTRIAL GROUPS, MANUFACTURING, RETAIL TRADE AND PROFESSIONAL AND RELATED SERVICES ENJOYED THE LARGEST INCREASE IN TOTAL EMPLOYMENT FROM 1960 TO 1970, IN CLINTON COUNTY. THESE SAME THREE ALSO ACCOUNTED FOR ALMOST 70.0% OF THE TOTAL LABOR FORCE IN 1970. TWO GROUPS, AGRICULTURE AND TRANSPORTATION, COMMUNICATION AND UTILITIES LOST SUBSTANTIAL NUMBER, WHILE ALL OTHERS RETAINED APPROXIMATELY THE SAME PROPORTION OF THE LABOR FORCE. OCCUPATIONAL GROUPS HAVE ALSO UNDERGONE SOME CHANGES FROM 1960 TO 1970. WHILE FARMERS AND FARM MANAGERS WERE THE LARGEST GROUP IN 1960 WITH 21.2% OF THE LABOR FORCE, THAT GROUP ACCOUNTED FOR ONLY 5.7% OF THE LABOR FORCE IN 1970. THE TREND IS TOWARDS JOBS REQUIRING SPECIAL SKILLS OR ADVANCED EDUCATION AS EVIDENCED BY THE SUBSTANTIAL INCREASES IN THE PROFESSIONAL, TECHNICAL, CRAFTSMAN, FOREMAN AND OPERATIVES GROUP. THESE GROUPS NOW DOMINATE THE LABOR FORCE.

FUTURE EMPLOYMENT IS EXPECTED TO GENERALLY PARALLEL THE NATIONAL ECONOMIC PROJECTION WITH AGRICULTURE AND MANUFACTURING TO ASSUME SMALLER SHARES OF THE LABOR FORCE, WITH CONSTRUCTION, TRADE AND SERVICES TO INCREASE THEIR SHARE OF THE LABOR FORCE. TRANSPORTATION, COMMUNICATIONS AND UTILITIES ARE EXPECTED TO DECREASE SLIGHTLY AS IS FINANCE, REAL ESTATE AND PUBLIC ADMINISTRATION. BECAUSE OF A DECLINING POPULATION THE TOTAL LABOR FORCE IS EXPECTED TO DECLINE FROM A HIGH OF 12,613 IN 1970 TO 11,993 BY 1990.

BASED UPON STABILITY RATIO DEVELOPED BY EDWARD F. DENISON DURING 1929 TO 1947 PERIOD OF THE NATIONAL ECONOMY, CLINTON COUNTY'S STABILITY RATIO DECREASED FROM 1.07 IN 1960 TO 0.95 IN 1970. THE ECONOMY OF THE COUNTY STILL REMAINS WITHIN THE AVERAGE CYCLIC SENSITIVITY TO ECONOMIC FLUCTUATION RANGE. THE MAJOR CONTRIBUTORS TO THE MODEST DECLINE WERE THE REDUCTION OF PERSONS EMPLOYED IN THE FIELDS OF TRANSPORTATION, COMMUNICATION AND UTILITIES AND THE INCREASE OF THOSE EMPLOYED IN MANUFACTURING. THE OVERALL DECLINE IN THE 10 YEAR PERIOD HAS NOT BEEN DRAMATIC AND SHOULD BE NO CAUSE FOR ALARM. THE COUNTY STILL ENJOYS A RELATIVELY STABLE ECONOMY.

TRANSPORTATION

CLINTON COUNTY TRANSPORTATION STUDY -- SURVEY AND ANALYSIS

INTRODUCTION

TWO MAIN OBJECTIVES FOR THE CLINTON COUNTY TRANSPORTATION STUDY ARE TO ANALYZE THE NEED FOR EXISTING AND FUTURE TRANSPORTATION FACILITIES AND THEN PREPARE A TRANSPORTATION PLAN SERVING THESE NEEDS. THE ANALYSIS AND PLAN DEVELOPMENT ARE TO TAKE PLACE WITHIN A FRAMEWORK OF DEFINED PARAMETERS LEADING TO AN OPTIMIZATION OF THE ENVIRONMENT WITHIN THE URBAN AND NON-URBAN AREA.

THE PURPOSE OF AN INVENTORY AND ANALYSIS OF THOROUGHFARES AND MAIN TRAVELED WAYS IS TO PROVIDE BASIC INFORMATION AND PINPOINT EXISTING AND POTENTIAL PROBLEM AREAS OF THE THOROUGHFARE SYSTEM. WITH SUFFICIENT KNOWLEDGE OF CURRENT AND EXPECTED TRAFFIC AND THE RELATION TO EXISTING AND PROPOSED LAND USE PATTERNS, PARTICULARLY AREAS OF LARGER CONCENTRATIONS OF SHOPPING AND EMPLOYMENT, IT IS A RELATIVELY SIMPLE MATTER TO RECOMMEND AND DOCUMENT SOLUTIONS, BOTH INTERIM AND LONG-RANGE, FOR EASING AND EVENTUAL ELIMINATION OF TRAFFIC PROBLEMS.

THE SELECTION OF ANY TRANSPORTATION SYSTEM SHOULD ATTEMPT THE FOLLOWING OBJECTIVES:

1. ACCOMMODATE A MAJORITY OF TRAFFIC MOVEMENTS ON RELATIVELY FEW WELL-IMPROVED FACILITIES.
2. UTILIZE TO THE MAXIMUM EXTENT PRACTICAL, THE EXISTING STREET AND HIGHWAY (TRANSPORTATION) SYSTEM.
3. PROVIDE, WHERE PRACTICAL, A BALANCED USE OF ALTERNATE MODES OF TRAVEL.
4. COORDINATE TRANSPORTATION WITH OTHER ELEMENTS OF THE COMPREHENSIVE DEVELOPMENT PLAN WITH A MINIMUM OF DISRUPTIVE INFLUENCES.
5. PROVIDE THE OPTIMUM TRANSPORTATION SYSTEM TO MEET TRAVEL DESIRED FOR THE STIPULATED DESIGN YEAR AT MAXIMUM ECONOMY WITH APPROPRIATE CONSIDERATION FOR FUTURE EXPANSION OF THE SYSTEM.

PLANNING A FUTURE STREET SYSTEM

IN SPECIFIC TERMS, FUTURE TRAVEL DEMAND CAN BE DEFINED AS THE NUMBER OF VEHICLE TRIPS THAT WILL BE MADE WITHIN OR THROUGH THE ENTIRE STUDY AREA AND MORE PARTICULARLY THE URBAN AREA FOR A TYPICAL WEEKDAY OF THE DESIGN YEAR 1990. THE EXISTING STREET SYSTEM PLUS THOSE FACILITIES FOR WHICH CONSTRUCTION FUNDS HAVE BEEN COMMITTED WILL FORM A MAJOR PORTION OF THE STREET SYSTEM SERVING FUTURE TRAVEL DESIRES.

THUS, THE TRANSPORTATION PLANNING PROCESS RESULTING IN AN EFFICIENT FUTURE STREET SYSTEM MUST CONSIDER SUCH FACTORS AS STUDIES OF CAPACITY DEFICIENCY, OPPORTUNITIES OR CONSTRAINTS FOR FACILITY LOCATION, AND THE FEASIBILITY OF PROVIDING NEW FACILITIES BASED ON EXISTING AND ANTICIPATED LAND DEVELOPMENT AND LONG-RANGE GOALS FOR THE AREA.

LAND USE FACTORS AFFECTING AREA DEVELOPMENT

LAND USE CONSTITUTES ONE OF THE MOST IMPORTANT INFLUENCES ON THE LOCATION OF A MAJOR STREET, AND EXISTING AND FUTURE LAND USE REQUIREMENTS ARE SIGNIFICANT DETERMINANTS FOR LOCATION OF TRAVEL FACILITIES. AMONG THE FACTORS THAT SHOULD BE NOTED IN THIS REPORT ARE:

1. EXISTING AND PROPOSED INDUSTRIAL LOCATIONS.
2. EXISTING AND PROPOSED MAJOR SHOPPING COMPLEXES.
3. MAJOR PUBLIC AND SEMI-PUBLIC LANDS.
4. CURRENTLY UNDEVELOPED OR SPARSELY DEVELOPED AREAS. THESE AREAS PROVIDE THE OPPORTUNITY FOR THE LOCATION OF NEW MAJOR STREETS.
5. SUBSTANDARD HOUSING AND URBAN RENEWAL AREAS. THESE PROVIDE OPPORTUNITIES FOR REDEVELOPMENT AND LOW RIGHT-OF-WAY ACQUISITION COSTS FOR LOCATION OF NEEDED FUTURE FACILITIES.
6. TRENDS IN POPULATION GROWTH. PAST GROWTH TRENDS IN POPULATION BY AREA INDICATE DIRECTION OF DEVELOPMENT.

OPPORTUNITIES FOR MAJOR STREET LOCATION OR IMPROVEMENT

CERTAIN FACTORS PROVIDE A SIGNIFICANT OPPORTUNITY IN LOCATING A NEW MAJOR STREET OR STREET IMPROVEMENT:

1. STREETS WITH WIDE BUILDING SETBACKS, ESPECIALLY THOSE OF 25 FEET OR MORE.
2. STREETS WITH WIDE RIGHT-OF-WAY, ESPECIALLY THOSE HAVING AN 80 FOOT OR MORE RIGHT-OF-WAY WIDTH.
3. STREETS WHERE PARKING CAN BE REMOVED TO PROVIDE ADDED CAPACITY.
4. THE CREATION OF ONE-WAY STREET PAIRS, THIS IS A RELATIVELY LOW COST IMPROVEMENT THAT CAN PROVIDE ADDED CAPACITY WITH MINIMUM DISRUPTIONS.

CONSTRAINTS TO MAJOR STREET LOCATION OR IMPROVEMENT

IN CONTRAST, THERE ARE CONSIDERATIONS THAT TEND TO CONSTRAIN THE DEVELOPMENT OF AN ADEQUATE STREET NETWORK. THESE MUST ALSO BE IDENTIFIED AND EVALUATED. AMONG THE MORE IMPORTANT ARE:

1. NEIGHBORHOOD BOUNDARIES. EXISTING, WELL ESTABLISHED NEIGHBORHOODS AND PROPOSED RESIDENTIAL AREAS SHOULD BE PROVIDED WITH ADEQUATE ACCESS TO THE MAJOR STREET NETWORK. MAJOR STREETS SHOULD GO AROUND, RATHER THAN THROUGH NEIGHBORHOODS SO THAT DISTURBANCE BY LARGE TRAFFIC VOLUMES IS MINIMIZED.
2. PARKS. ALTHOUGH PARKS REQUIRE STREET SERVICE, IT IS UNDESIRABLE TO DIVIDE PLAYGROUNDS AND PARKS WITH MAJOR STREET FACILITIES.
3. ELEMENTARY AND JUNIOR HIGH SCHOOLS (AND TO SOME EXTENT HIGH SCHOOLS). SCHOOLS ALSO REQUIRE STREET SERVICE, BUT TO SOME DEGREE THEIR LOCATIONS FORM CONSTRAINTS ON A DESIRABLE STREET PATTERN AND MUST BE CONSIDERED. PROPOSED SCHOOL LOCATIONS MUST ALSO BE NOTED.
4. RAILROAD TRACKS, YARDS, AND TERMINALS. RAILROAD TRACKS AND INTENSITY OF TRAIN USAGE CAN CAUSE DELAY TO TRAFFIC AND INCREASE ACCIDENTS.
5. EXISTING GRADE SEPARATIONS. THESE LIMIT THE WIDENING OF CROSS STREETS.
6. HOSPITALS, CHURCHES, AND OTHER INSTITUTIONAL USES.
7. STREETS WITH NARROW RIGHT-OF-WAY AND/OR SETBACKS.
8. TREE-LINED STREETS. TREE-LINED STREETS HAVE AESTHETIC CONSIDERATIONS AND ARE DIRECTLY RELATED TO COMMUNITY VALUES.
9. HISTORICAL SITES. EVERY ATTEMPT SHOULD BE MADE TO PRESERVE THESE AREAS, CREATE A CONGRUOUS ENVIRONMENT FOR THEM, AND IMPROVE ACCESS TO THEM.

SPECIAL PURPOSE AREAS REQUIRING CONSIDERATION

THERE ARE A NUMBER OF AREAS WITHIN A STUDY AREA THAT REQUIRE SEPARATE CONSIDERATIONS. THEY MAY ACT AS EITHER OPPORTUNITY OR CONSTRAINT, BUT A SAFE GENERALIZATION IS THAT THEY USUALLY ARE LARGE TRAFFIC GENERATORS REQUIRING A HIGH LEVEL OF SERVICE WHILE PROVIDING SOME CONSTRAINTS TO THE LOCATION OF THROUGH ROADWAYS.

IN ADDITION TO THE SPECIAL USES NOTED IN THE LAST TWO SECTIONS, THIS GROUP INCLUDES:

1. COLLEGES AND UNIVERSITIES.
2. AIRPORTS.
3. TRUCK TERMINALS.
4. CENTRAL BUSINESS DISTRICTS.

ONCE ALL FACTORS AFFECTING THE LOCATION OF MAJOR STREETS HAVE BEEN IDENTIFIED AND LOCATED, A VALUABLE TOOL FOR TRANSPORTATION PLANNING IS AVAILABLE. FOR THIS PURPOSE SEE EXISTING LAND USE MAP, CHAPTER 1, PART 1.

SERVICE VOLUMES

ONE OF THE MOST IMPORTANT ELEMENTS LIMITING, AND OFTEN INTERRUPTING THE FLOW TRAFFIC ON A HIGHWAY, ESPECIALLY IN URBAN AREAS, IS THE INTERSECTION AT GRADE. THE AMOUNT OF VEHICULAR TRAFFIC WHICH CAN APPROACH AND PASS THROUGH AN INTERSECTION DEPENDS ON (A) VARIOUS PHYSICAL AND OPERATING CHARACTERISTICS OF THE ROADWAYS, (B) ENVIRONMENTAL CONDITIONS WHICH HAVE A BEARING ON THE EXPERIENCE AND ACTIONS OF THE DRIVER, (C) CHARACTERISTICS OF THE TRAFFIC STREAMS AND (D) TRAFFIC CONTROL MEASURES. IT IS, THEREFORE, NOT FEASIBLE TO DEFINE "IDEAL CONDITIONS" AS IN THE CASE OF UNINTERRUPTED FLOW AND, THEREFORE, "INTERRUPTED FLOW" CRITERIA ARE DEVELOPED AROUND TYPICAL OR AVERAGE CONDITIONS.

THE CAPACITY OF ANY SPECIFIC INTERSECTION IS DETERMINED LARGELY BY THE EFFECT OF ELEMENTS DIRECTLY RELATED TO ITS CONTIGUOUS APPROACH ROADWAYS. SELDOM ARE ALL APPROACHES TO AN INTERSECTION SIMULTANEOUS BURDENED TO THEIR FULL CAPACITIES. THEREFORE, IT IS APPROPRIATE THAT INTERSECTION CAPACITY BE IN TERMS OF SEPARATE CAPACITIES OF EACH INDIVIDUAL APPROACH ROADWAY, AND THE TERM "INTERSECTION CAPACITY" AS USED IN TRANSPORTATION PLANNING ACTUALLY REPRESENTS INDIVIDUAL APPROACH CAPACITY.

CAPACITY INCREASING MEASURES

A MAJOR STREET'S OVERALL CAPACITY—I.E., THE VOLUME IT IS CAPABLE OF PASSING ALONG A GIVEN SECTION OF THE STREET IN A UNIT OF TIME—IS DEPENDENT UPON MANY VARIABLES, AS PREVIOUSLY STATED, BUT IS PRIMARILY CONTROLLED OVER THE LENGTH OF A CITY STREET BY THE INTERSECTIONS AND BY STREET WIDTH. ALSO, SUCH ITEMS AS PARKING RESTRICTIONS OR PARKING ARRANGEMENTS, LANE WIDTHS, TRUCK VOLUMES, ETC., AFFECT THE CAPACITY OF THE STREET. IN ADDITION, THE MEANS BY WHICH ACCESS IS PROVIDED FORMS A SECONDARY CATEGORY OF VARIABLES. THIS CATEGORY IS PRIMARILY DIVIDED INTO TWO TYPES OF ACCESS PROVISION. ONE IS THE AT-GRADE INTERSECTION, AND THE SECOND IS THE GRADE-SEPARATED CROSSING WITH ACCESS BEING PROVIDED BY VARIOUS TYPES OF RAMPS.

ON-STREET PARKING IS A DIRECT CONTRIBUTOR TO DECREASED CAPACITY. GENERALLY SPEAKING, PARKING SHOULD NOT BE PERMITTED ON MAJOR STREETS AND SHOULD NOT BE PLANNED FOR NEW MAJOR STREETS. REMOVAL OF EXISTING PARKING CAN PROVIDE INCREASED CAPACITY, INCREASED SAFETY, AND INCREASED AMENITY. CONVERTING A TWO-WAY STREET TO ONE-WAY OPERATION PROVIDES A SIGNIFICANT INCREASE IN CAPACITY. HOWEVER, IT IS NOT ALWAYS FEASIBLE TO PROVIDE SUCH CONVERSION; AND IF DONE INCORRECTLY, A DECREASE IN CAPACITY MAY RESULT.

THERE ARE NUMEROUS OTHER METHODS AVAILABLE FOR PROVIDING ADDITIONAL CAPACITY. SOME OF THESE ARE RELATIVELY INEXPENSIVE, WHILE OTHERS CAN BE QUITE COSTLY. FROM THE VIEWPOINT OF A SYSTEM'S CAPACITY, INCREASES CAN BE PROVIDED IN TWO MANNERS--ADDITION OF NEW FACILITIES OR IMPROVING EXISTING FACILITIES. THE ADDITION OF NEW FACILITIES INVOLVES INCORPORATION OF EXISTING STREETS INTO THE MAJOR STREET SYSTEM (NO CONSTRUCTION NECESSARY) OR THE DEVELOPMENT OF NEW FACILITIES ON NEW RIGHTS-OF-WAY.

TABLE 1 PRESENTS A SUMMARIZATION OF THE TWO BASIC METHODS OF INCREASING THE CAPACITY OF EXISTING STREETS. THESE METHODS INVOLVE IMPROVEMENTS IN TRAFFIC CONTROL MEASURES AND CONSTRUCTION. THE TABLE SUMMARIZES THE ADVANTAGES AND DISADVANTAGES OF EACH. BECAUSE THE PROVISION OF INCREASED CAPACITY THROUGH TRAFFIC CONTROL MEASURES GENERALLY OFFERS THE MOST ECONOMICAL AND THE LEAST DISRUPTIVE SOLUTION, IT SHOULD BE UTILIZED TO ITS MAXIMUM. HOWEVER IN THE DEVELOPMENT OF MOST TRANSPORTATION PLANS, THE NEED FOR INCREASED CAPACITY IS GREAT ENOUGH IN MANY SECTIONS OF THE AREA TO PRECLUDE THE USE OF ANY SOLUTION OTHER THAN CONSTRUCTION. THE SOLUTIONS DISCUSSED IN THE TABLE ARE NOT ALL APPLICABLE TO THE CITY OF FRANKFORT.

IN THE TOWNS AND IN FRANKFORT, AS IN THE AVERAGE COMMUNITY, IT IS THE PEAK HOUR TRAFFIC THAT CREATED CONGESTION. DURING THE BALANCE OF THE 24 HOUR PERIOD THERE IS CONSIDERABLY LESS FREQUENT INCONVENIENCE AND DELAY. WITHIN THE STUDY AREA (CLINTON COUNTY) CONGESTION OCCURS ONLY IN THE FRANKFORT COMMUNITY AND ONLY DURING PEAK HOURS. WITH MINOR EXCEPTIONS, TRAFFIC MOVES THROUGH THE CITY CENTER IN THE MORNING AND AFTER-NOON PEAKS, THE LATTER CONSIDERABLY GREATER AS THE DISTRIBUTION IS OVER A SHORTER TIME PERIOD.

A MAJOR STREET'S OVERALL CAPACITY, I.E., THE VOLUME IT IS CAPABLE OF PASSING ALONG A GIVEN SECTION OF STREET IN A GIVEN UNIT OF TIME UNDER PREVAILING ROADWAY AND TRAFFIC CONDITIONS, IS DEPENDENT UPON MANY VARIABLES, BUT IT IS PRIMARILY CONTROLLED OVER THE LENGTH OF AN URBAN STREET BY THE INTERSECTIONS AND BY STREET WIDTH. ALSO, SUCH ITEMS AS PARKING RESTRICTIONS OR ARRANGEMENTS, LANE WIDTHS, TRUCK VOLUMES, TURNING MOVEMENTS, ETC., AFFECT THE CAPACITY OF A STREET. BUT STREET CAPACITY IS SYNONYMOUS WITH INTERSECTION CAPACITY AND INTERSECTIONS AT GRADE VARY IN ALMOST DIRECT RATIO WITH THE WIDTH OF APPROACH TO THE INTERSECTION.

TABLE 1

CAPACITY INCREASING MEASURES

COUNTY TRANSPORTATION STUDY

<u>1. TRAFFIC CONTROL MEASURES</u>	<u>ADVANTAGES</u>	<u>DISADVANTAGES</u>
A. LIMITED PROGRESSIVE SIGNAL SYSTEM	1. RELATIVELY LOW COST 2. EASILY INSTALLED 3. LONG-RANGE FLEXIBILITY	1. PROVIDES MINIMAL INCREASES IN CAPACITY 2. INTERCONNECTION DESIRABLE 3. LIMITED FLEXIBILITY
B. FLEXIBLE PROGRESSIVE SIGNAL SYSTEM	1. RELATIVELY LOW COST 2. MAXIMUM FLEXIBILITY POSSIBLE WITH COMPUTER CONTROL 3. PROVIDES ADAPTION FOR FLOW CHANGES AND SPEEDS	1. PROVIDES MINIMAL INCREASES IN CAPACITY 2. OFTEN DIFFICULT TO OBTAIN GOOD PROGRESSION FOR TWO-WAY STREETS 3. CAN BE RELATIVELY EXPENSIVE
C. OFF-PEAK FLASHING SIGNALS	1. LOW COST 2. AIDS CROSS STREET DURING PEAK HOURS 3. AIDS MAJOR STREET DURING OFF-PEAK HOURS	1. DOES NOT AID MAJOR STREET PEAK HOUR NEEDS
D. VOLUME DENSITY CONTROLLERS	1. PROVIDES ADAPTION TO FLOW CHANGES 2. MOST CAPACITY FOR "AS IS" CONDITIONS	1. RELATIVELY EXPENSIVE 2. CANNOT PROVIDE GROSS INCREASES IN CAPACITY
E. PARKING RESTRICTIONS	1. LOW COST 2. PROVIDES HIGH CAPACITY INCREASES	1. REQUIRES STRICT ENFORCEMENT
F. TURN RESTRICTIONS	1. LOW COST 2. EASILY INSTALLED 3. CAN EFFECTIVELY INCREASE CAPACITY	1. REQUIRES ENFORCEMENT 2. SHIFTS THE PROBLEM -- DOES NOT SOLVE IT 3. OFTEN ONLY MINIMAL RELIEF PROVIDED

TABLE 1 (CONTINUED)

G. REVERSE LANES	<ol style="list-style-type: none"> 1. LOW COST POSSIBLE 2. PROVIDES HIGH CAPACITY INCREASES 	<ol style="list-style-type: none"> 1. REQUIRES HIGH DEGREE OF PUBLIC INFORMATION 2. CAN BE RELATIVELY EXPENSIVE 3. AT LEAST 5 LANES DESIRABLE
H. ONE-WAY COUPLES	<ol style="list-style-type: none"> 1. LOW COST 2. MAXIMUM UTILIZATION OF PAVEMENT WIDTH POSSIBLE 3. EASY TO OBTAIN PROGRESSION 4. PROVIDES INCREASED INTERSECTION CAPACITIES 	<ol style="list-style-type: none"> 1. SOME CIRCUITY 2. REQUIRES A PAIR OF NEARBY SIMILAR STREETS 3. STREETS SHOULD BE CONNECTED AT EACH END OF COUPLE
I. REVERSE STREETS	<ol style="list-style-type: none"> 1. LOW COST POSSIBLE 2. PROVIDES VERY HIGH CAPACITY INCREASES WHEN MOST NEEDED 3. PERMITS NORMAL TWO-WAY OPERATION DURING OFF-PEAK HOURS 4. EASY TO OBTAIN PROGRESSION DURING PEAK HOURS 5. PROVIDES INCREASED INTERSECTION CAPACITY 6. MAXIMUM UTILIZATION OF PAVEMENT WIDTH POSSIBLE 	<ol style="list-style-type: none"> 1. REQUIRES HIGH DEGREE OF PUBLIC INFORMATION & ACCEPTANCE 2. REQUIRES SPECIAL TREATMENT AT EACH TERMINUS; MAY BE EXPENSIVE 3. SOME CIRCUITY INTRODUCED DURING PEAK HOURS
II. <u>CONSTRUCTION</u>		
	<u>ADVANTAGES</u>	<u>DISADVANTAGES</u>
A. INTERSECTION TREATMENTS	<ol style="list-style-type: none"> 1. LESS COSTLY CONSTRUCTION THAN OVERALL WIDENING 2. BETTER UTILIZATION OF PAVEMENT WIDTHS BETWEEN BLOCKS 3. REDUCES RIGHT-OF-WAY REQUIREMENTS BETWEEN MAJOR INTERSECTIONS 	<ol style="list-style-type: none"> 1. MAY NOT PERMIT DESIRABLE OPERATING SPEEDS BETWEEN INTERSECTIONS 2. ON WIDER STREETS CALLS FOR VERY LARGE INTERSECTION AREAS 3. CAN HAVE LIMITED EFFECTIVENESS
B. WIDENING	<ol style="list-style-type: none"> 1. CAN PROVIDE LARGE CAPACITY INCREASES 2. CAN PERMIT DESIRABLE OPERATING SPEEDS BETWEEN INTERSECTIONS 	<ol style="list-style-type: none"> 1. MOST COSTLY MEANS 2. AESTHETICS

SOURCE:
HUFF-NEIDIGH & ASSOCIATES

ACCORDINGLY, INTERSECTION APPROACH CAPACITY APPROXIMATIONS WERE DEVELOPED FOR EACH APPROACH LEG AT THE PRINCIPAL SIGNALIZED-STATE-FEDERAL ROUTE INTERSECTION WHERE TRAFFIC CONGESTION WAS APPARENT:

- (1) THE STATE ROUTE 28, U.S. 471 -- HOKE STREET INTERSECTION
- (2) STATE ROUTE 28, U.S. 421 -- STATE ROUTES 38 AND 39 (JACKSON - CLINTON STREETS) INTERSECTION.

THERE ARE, OF COURSE, ADDITIONAL INTERSECTIONS THAT ARE TEMPORARILY CONGESTED, BUT THE TWO ABOVE ARE THE DOMINANT AND CONTROLLING INTERSECTIONS IN THE FRANKFORT URBAN AREA.

AN APPROACH IS THAT PORTION OF A STREET APPROACHING AN INTERSECTION. IT IS MEASURED FROM THE CURB TO THE DIVISION LANE APPROACH WIDTH IN FEET. TABLE 2 INCORPORATES AVERAGE ANNUAL DAILY TRAFFIC VOLUMES (AADT) --THE TOTAL YEARLY VOLUME DIVIDED BY THE NUMBER OF DAYS IN THE YEAR-- AS RECORDED BY STATE HIGHWAY DURING 1972 AT SELECTED STATIONS WITHIN FRANKFORT. THE FRANKFORT URBAN AREA WAS EXCLUSIVELY SELECTED BECAUSE IT IS ESSENTIALLY HERE THAT TRAFFIC CONFLICT AND CONGESTION OCCURS WITH CONSISTENT REGULARITY. HIGHWAY RECORDER COUNTS WERE PROJECTED IN FIVE YEAR INCREMENTS TO THE DESIGN YEAR--1990. A RATE OF PROJECTION OF 4.5 PERCENT PER YEAR (2.25 PER APPROACH) WAS APPLIED, A PERCENTAGE INCREASE DERIVED FROM STATEWIDE EXPERIENCE ON URBAN ARTERIAL STREETS BY THE STATE HIGHWAY COMMISSION. PEAK HOUR TRAFFIC-- THE HIGHEST NUMBER OF VEHICLES FOUND TO BE PASSING OVER A SECTION OF A LANE OR ROADWAY DURING 60 CONSECUTIVE MINUTES-- WAS COMPUTED AT TEN PERCENT OF AADT (FROM NATIONWIDE EXPERIENCE OF THE HIGHWAY RESEARCH BOARD).

TO PROCEED WITH TABLE 2, SOME DEFINITIONS AND METHODOLOGY ARE REQUIRED FOR UNDERSTANDING. LEVEL OF SERVICE IS A TERM, WHICH BROADLY INTERPRETED, DENOTES ANY ONE OF AN INFINITE NUMBER OF DIFFERING COMBINATIONS OF OPERATING CONDITIONS THAT MAY OCCUR ON A GIVEN LANE OR ROADWAY WHEN IT IS ACCOMMODATING VARIOUS TRAFFIC VOLUMES. LEVEL OF SERVICE IS A QUANTITATIVE MEASURE OF THE EFFECT OF A NUMBER OF FACTORS, WHICH INCLUDE SPEED AND TIME, TRAFFIC INTERRUPTIONS, FREEDOM TO MANEUVER, SAFETY, AND OPERATING COSTS. FOR THE PURPOSES OF THIS REPORT, SELECTED SPECIFIC LEVELS OF SERVICE ARE DEFINED IN TERMS OF PARTICULAR LIMITING VALUES OF CERTAIN OF THESE FACTORS.

THE DESIRED LEVEL OF SERVICE FOR URBAN AREAS IS GENERALLY ACCEPTED AS LEVEL OF SERVICE C (HIGHWAY CAPACITY MANUAL). LEVEL OF SERVICE C IS SIMILAR TO THE PREVIOUS 1950 HIGHWAY CAPACITY MANUAL--"PRACTICAL URBAN CAPACITY". LEVEL OF SERVICE C REPRESENTS "STABLE FLOW WITH OPERATING SPEEDS BEGINNING TO BE RESTRICTED BY TRAFFIC CONDITIONS", AND MOST DRIVERS WILL FIND THAT THEY ARE RESTRICTED IN THEIR FREEDOM TO SELECT THEIR OWN SPEED, CHANGE LANES, OR PASS.

TABLE 2

CLINTON COUNTY TRANSPORTATION STUDY

TRAFFIC PROJECTIONS AND SERVICE VOLUMES — MAIN INTERSECTIONS — FRANKFORT

INTERSECTION APPROACH	1972 ² (ACTUAL)	AVERAGE DAILY TRAFFIC ¹					1975	1980	1985	1990	INTERSECTION APPROACH ³ TYPICAL SERVICE VOLUME C IN VEHICLES / HOUR	INTERSECTION DEFICIENCIES		
		1975	1980	1985	1990	(PROJECTED)						1975	1980	1990
S.R 28 AND HOKE														
EAST	5728,	6120	6840	7640	8580		610	680	760	850	325	285	355	525
NORTH	3872	4140	4630	5170	5750		410	460	520	570	200	210	260	370
CLINTON & JACKSON														
NORTH	5159	5520	6160	6880	7690		550	620	690	770	1375	0	0	0
EAST	5158	5520	6160	6880	7690		550	620	690	770	1100	0	0	0
SOUTH	3783	4040	4530	5060	5640		400	450	500	560	700	0	0	0
WEST	5350	5720	6380	7120	8030		570	640	710	800	1375	0	0	0

1 PROJECTIONS BASED ON UNPUBLISHED DATA OF STATE HIGHWAY COMMISSION, DIVISION OF PLANNING, FROM STATEWIDE ARTERIAL EXPERIENCE. EACH APPROACH INCREASED BY 2.25 PERCENT ANNUALLY (COMPOUNDED).

2 ASSUMES EQUAL FLOW IN EACH DIRECTION. ADT COUNTS WERE THEREFORE HALVED TO REFLECT APPROACH VOLUMES.

3 BASED ON THE FOLLOWING AVERAGE CONDITIONS: LEVEL OF SERVICE C; NO PARKING, LOAD FACTOR = 0.3; COMMERCIAL TRAFFIC 5%; SIGNAL GREEN TIME 35% IN DIRECTION OF LEAST VOLUMES, 55% DIRECTION OF MOST VOLUME; AREA POPULATION 75,000; TURNING MOVEMENT 10% RIGHT, 10% LEFT; AND A PEAK HOUR FACTOR OF 0.85. COMPUTATIONS ARE BASED ON TWO-WAY STREETS WITH NO PARKING ON THE APPROACH LEG.

IT IS ACCEPTED THAT INTERSECTIONS CONTROL THE CAPACITY OF THEIR SURFACE STREETS WITH STOP AND GO OPERATION. SERVICE VOLUME—THE MAXIMUM NUMBER OF VEHICLES THAT CAN PASS OVER A GIVEN SECTION OF A LANE OR ROADWAY IN ONE DIRECTION ON MULTI-LANE HIGHWAYS (OR BOTH DIRECTIONS ON A TWO OR THREE-LANE HIGHWAY) DURING A SPECIFIC TIME PERIOD WHILE OPERATING CONDITIONS ARE MAINTAINED CORRESPONDING TO THE SELECTED OR SPECIFIC LEVEL OF SERVICE. EXPRESSED AS AN HOURLY VOLUME, IN THE ABSENCE OF A TIME MODIFIER—SERVICE VOLUME C FOR ANY INTERSECTION APPROACH IS BASED ON APPROACH WIDTH, ONE-WAY OR TWO-WAY OPERATION, PARKING CONDITIONS, TURNING MOVEMENTS, COMMERCIAL TRAFFIC, PEDESTRIAN INTERFERENCES, PEAK HOUR FACTOR, AREA POPULATION, LOCATION WITHIN THE URBAN AREA, AND THE PERCENTAGE OF GREEN TIME.

IN DETERMINING THE DESIGN YEAR SERVICE VOLUME C FOR THE SUBJECT INTERSECTIONS, REPRESENTATIVE TRAFFIC CONDITIONS WERE ASSUMED BECAUSE THE EXISTING PERCENT GREEN TIMES AND TURNING MOVEMENTS WILL PROBABLY CHANGE BY THE DESIGN YEAR. THUS IT WAS ASSUMED THAT INTERSECTION SERVICE VOLUME C WOULD BE DETERMINED SIGNIFICANTLY BY THE G/C RATIO (GREEN TIME/TOTAL CYCLE TIME) WHICH IN TURN WAS RELATED TO FUNCTIONAL CLASSIFICATION:

1. ARTERIAL $G/C = 0.55$

2. COLLECTOR $G/C = 0.35$

IT WAS ALSO ASSUMED THAT A NO PARKING CONDITION AT THE APPROACH WOULD APPLY AS RELATED TO STREET CAPACITY, BECAUSE ON-STREET PARKING IS COSTLY AND SHOULD BE REMOVED BEFORE ANY MAJOR IMPROVEMENT IS ATTEMPTED. TABLES 2 AND 3 PRESENT TYPICAL SERVICE VOLUMES C FOR $G/C = 0.55$ AND 0.35 AND AN AREA POPULATION OF 75,000. THE "AVERAGE CONDITIONS" REFERRED TO IN TABLES 2 AND 3 ARE DEFINED AS FOLLOWS: LOAD FACTOR IS A RATIO OF THE TOTAL NUMBER OF GREEN SIGNAL INTERVALS THAT ARE FULLY UTILIZED BY TRAFFIC DURING THE PEAK HOUR TO THE TOTAL NUMBER OF GREEN INTERVALS FOR THE APPROACH DURING THE SAME PERIOD. ITS MAXIMUM ATTAINABLE VALUE IS ONE. IT IS USED IN DESCRIBING THE DEGREE OF UTILIZATION OF AN INDIVIDUAL INTERSECTION APPROACH. A GREEN PHASE ON AN APPROACH IS LOADED WHEN (1) VEHICLES ARE READY TO ENTER THE INTERSECTION IN ALL LANES WHEN THE SIGNAL TURNS GREEN, AND (2) THEY CONTINUE TO BE AVAILABLE TO ENTER DURING THE ENTIRE PHASE WITH NO UNUSED TIME OR EXCEEDINGLY LONG SPACING BETWEEN VEHICLES DUE TO LACK OF TRAFFIC. AS SUCH, IT IS ALSO A MEASURE OF THE LEVEL OF SERVICE ON THE APPROACH, AS DISCUSSED PREVIOUSLY.

A LOAD FACTOR OF 0.0 REPRESENTS ANY SITUATION IN WHICH NO CYCLE DURING THE HOUR IS LOADED. HENCE, IT REPRESENTS VERY GOOD OPERATING CONDITIONS HANDLING VOLUMES FROM VERY FEW VEHICLES TO THE POINT WHERE MOST GREEN PHASES ARE ALMOST FULLY UTILIZED. A LOAD FACTOR OF 0.2 STILL INDICATES A GOOD OPERATING CONDITION—A CONDITION WHERE SOME 20 PERCENT OF THE PHASES ARE UTILIZED,

TABLE 3

TYPICAL SERVICE VOLUME C IN VEHICLES/HOUR
FOR LONG-RANGE PLANNING OF URBAN STREETS

CLINTON COUNTY URBAN AREA TRANSPORTATION STUDY

PAVEMENT WIDTH (FEET)	ARTERIAL G/C = 0.55		COLLECTOR G/C = 0.35	
	TWO-WAY OPERATION		TWO-WAY OPERATION	
	<u>CBD</u>	<u>Non-CBD</u>	<u>CBD</u>	<u>Non-CBD</u>
26	800	1000	510	640
28	870	1090	550	690
30	940	1180	600	750
32	980	1230	630	790
34	1050	1320	670	840
36	1120	1400	710	890
38	1190	1480	750	940
40	1260	1570	800	1000
42	1320	1650	840	1050
44	1380	1730	880	1100
46	1440	1810	920	1150
48	1510	1890	960	1200
50	1570	1970	1020	1280
52	1630	2040	1050	1310
54	1700	2120	1080	1350
56	1760	2200	1120	1400
58	1820	2280	1160	1450
60	1890	2360	1200	1500

NOTE: ABOVE VALUES ARE BASED ON THE FOLLOWING AVERAGE CONDITIONS:
 LEVEL OF SERVICE C; NO PARKING; LOAD FACTOR = 0.3; LEFT TURNS = 8%;
 RIGHT TURNS = 12%; COMMERCIAL TRAFFIC = 8%; AND AREA POPULATION OF
 75,000.

SOURCE: HIGHWAY CAPACITY MANUAL, 1965
 ADJUSTED FOR CLINTON COUNTY BY: HUFF--NEIDIGH & ASSOCIATES

BUT THE REMAINING CYCLES ARE OPERATING BELOW THIS LEVEL. A LOAD FACTOR OF 0.4 REPRESENTS A RELATIVELY HIGH VOLUME CONDITION WHICH MAY RESULT IN CONSIDERABLE DELAY TO SOME VEHICLES ON THE APPROACH. IT IS GENERALLY ACCEPTED THAT A LOAD FACTOR OF 0.3 REPRESENTS AVERAGE CONDITIONS.

AREA POPULATION HAS BEEN FOUND TO HAVE A STRONG INFLUENCE ON INTERSECTION APPROACHES. LARGE METROPOLITAN AREAS INTERSECTIONS HAVE HIGHER CAPABILITIES THAN THOSE OF SIMILAR GEOMETRICS LOCATED IN EQUIVALENT AREAS IN SMALLER CITIES. THE FACT THAT DRIVERS IN LARGE CITIES ARE MORE EXPERIENCED IN COPING WITH HIGH DENSITIES, AND ARE MORE INTENT ON MOVING THROUGH BECAUSE THEY HAVE GREATER DISTANCES TO TRAVERSE UNDER THESE CONDITIONS, PROBABLY EXPLAIN THIS CONDITION. FOR THE PURPOSES OF THIS STUDY AN AREA POPULATION OF 75,000 WAS USED AS A GENERAL REFLECTION OF THE REGIONAL AREA POPULATION.

LOCATION WITHIN AREA IS ANOTHER PRIME CRITERIA ADJUSTMENT:

1. CENTRAL BUSINESS DISTRICT
2. FRINGE AREA
3. OUTLYING BUSINESS DISTRICT
4. RESIDENTIAL AREA

THE INTERSECTIONS UNDER CONSIDERATION IN THIS STUDY WERE ADJUSTED FOR THE CENTRAL BUSINESS DISTRICTS VARIABLE.

ALTHOUGH THE RESULTANT SERVICE VOLUMES ARE OF NECESSITY APPROXIMATIONS THEY ARE BASED ON EMPIRICAL CHARTS DEVELOPED FROM LONG OBSERVATION BY THE HIGHWAY RESEARCH BOARD IN COOPERATION WITH THE BUREAU OF PUBLIC ROADS AND ADJUSTED FOR THE CLINTON COUNTY TRANSPORTATION STUDY BY THE CONSULTANTS.

OUTLINE OF STANDARDS

EXPERIENCE HAS EVOLVED CERTAIN ACCEPTABLE STANDARDS FOR MAJOR THOROUGHFARES. WHILE COMPLIANCE IS NOT ALWAYS FEASIBLE, THEY SHOULD BE ADHERED TO AS CLOSELY AS LOCAL PHYSICAL CONDITIONS AND FINANCIAL LIMITATIONS PERMIT. A BASIC REQUIREMENT FOR ALL MAJOR THOROUGHFARES IS THAT THEY BE OF AMPLE WIDTH, PROVIDE A SMOOTH PAVEMENT AND POSSESS EASY GRADES AND DIRECT ALIGNMENT. A MINIMUM OF INTERSECTING STREETS IS DESIRABLE AND INTERSECTIONS SHOULD BE PROPERLY CONTROLLED. WHERE SIGNALS ARE USED, THEY SHOULD BE CAREFULLY TIMED WITH THE OBJECTIVE OF PROVIDING CONTINUOUS MOVEMENT OF TRAFFIC. TABLE 4 PROVIDES MAJOR STREET AND HIGHWAY STANDARDS WHICH ARE APPLICABLE TO CLINTON COUNTY AREA STREETS AND THOROUGHFARES.

TABLE 4

DESIGN STANDARDS FOR RURAL STATE HIGHWAYS

INTERSTATE AND PRINCIPAL

TRAFFIC, DESIGN HOUR	4,000 & OVER	UNDER 4,000
DESIGN SPEED	70 MPH	70 MPH
DESIGN OPERATING SPEED	55-60 MPH	55-60 MPH
CONTROL OF ACCESS	FULL	FULL
DESIGN BASIS	FREEWAY	FREEWAY
NO. LANES & WIDTH, FT.	6 AT 12 FT.	4 AT 12 FT.
SURFACE TYPE	HIGH	HIGH
SHOULDER WIDTH, STABILIZED	10' RIGHT-4' LEFT	10' RIGHT-4' LEFT
MEDIAN WIDTH	40 FEET	60 FEET
MINIMUM RIGHT-OF-WAY	260 FEET TO 360 FEET DEPENDING ON FRONTAGE ROAD REQUIREMENTS	
WIDTH, FEET	2½ DEGREES	2½ DEGREES
MAXIMUM CURVATURE	3 PER CENT	3 PER CENT
MAXIMUM GRADIENT	600 FEET	600 FEET
STOPPING SIGHT DISTANCE		

MAJOR

TRAFFIC DESIGN HOUR	OVER 900	650 TO 900	UNDER 650
DESIGN SPEED	70 MPH	70 MPH	70 MPH
AVERAGE OPERATING SPEED	50-55 MPH	50-55 MPH	50-55 MPH
CONTROL OF ACCESS	PARTIAL	PARTIAL	PARTIAL
INTERSECTION TREATMENT	GRADE SEPARATED IF FEASIBLE AT GRADE		
DESIGN BASIS	EXPRESSWAY	TWO-WAY	TWO-WAY
CROSS-SECTION DESIGN	DIVIDED		
NO. LANES & WIDTH, FT.	4 AT 12'	2 AT 12'	2 AT 12'
SURFACE TYPE	HIGH	HIGH	HIGH
SHOULDER WIDTH STABILIZER	4' LEFT		
MEDIAN WIDTH	10' RIGHT	10 FEET	10 FEET
RIGHT-OF-WAY WIDTH	260 TO 360'		130 FEET
MAXIMUM CURVATURE	2½ DEGREES	2½ DEGREES	3 DEGREES
MAXIMUM GRADIENT	3 PER CENT	3 PER CENT	4 PER CENT
STOPPING SIGHT DISTANCE	600 FEET	600 FEET	600 FEET
PASSING SIGHT DISTANCE		2,300 FEET	2,300 FEET

STATE HIGHWAYS - COLLECTOR

DESIGN TRAFFIC, VEHICLES/DAY	500-1500	UNDER 500	
TERRAIN		FLAT	HILLY
DESIGN SPEED	60 MPH	60 MPH	50 MPH
DESIGN OPERATING SPEED	40-45 MPH	40-45 MPH	35-40 MPH
NO. LANES & WIDTH FT.	2 AT 12'	2 AT 12'	2 AT 12'
SURFACE TYPE	HIGH	INTERMEDIATE	
SHOULDER WIDTH, STABILIZED	8 FEET	8 FEET	6 FEET
MINIMUM RIGHT-OF-WAY	120 FEET	100 FEET	100 FEET
MAXIMUM CURVATURE	4 DEGREES	5 DEGREES	8 DEGREES
MAXIMUM GRADIENT	5 PER CENT	5 PER CENT	8 PER CENT
STOPPING SIGHT DISTANCE	475 FEET	475 FEET	350 FEET
PASSING SIGHT DISTANCE	2000 FEET	2000 FEET	1700 FEET

TABLE (CONTINUED)

**DESIGN STANDARDS FOR CITY STREETS
INCLUDING URBAN STATE HIGHWAYS**

INTERSTATE AND PRINCIPAL

TRAFFIC DESIGN HOUR	1,000 VEHICLES PER LANE PER HOUR, MAXIMUM
SURFACE TYPE	HIGH
NUMBER OF LANES	DEPENDENT ON TRAFFIC
LANE WIDTH	12 FEET
ACCESS CONTROL	FULL
MEDIAN WIDTH	16 FEET, OR MINIMUM 4 FOOT BARRIER TYPE
SHOULDER WIDTH	11 FEET RIGHT, 4 FEET LEFT

	MAJOR ARTERIAL	ARTERIAL	COLLECTOR DOWNTOWN OUTLYING
			HIGH INTERMEDIATE
SURFACE TYPE	HIGH	HIGH	HIGH
NUMBER OF LANES	4 OR MORE	4 OR MORE	2 OR MORE
LANE WIDTH	12 FEET	11 FEET	11 FEET
SURFACE WIDTH, MIN.	48 FEET	44 FEET	38 FEET
ACCESS CONTROL	PARTIAL	NONE	NONE
MEDIAN WIDTH	16' OR MIN. 4' BARRIER TYPE		
CURBS & SIDEWALKS	YES	YES	YES

LOCAL ACCESS STREETS

DESIGN GROUP	OVER 5,000 POPULATION	1,000 - 5,000 POPULATION	UNDER 1,000 POPULATION
SURFACE TYPE	INTERMEDIATE	LOW	LOW
LANE WIDTH	14 FEET	14 FEET	12 FEET
SURFACE WIDTH, MIN.	28 FEET	28 FEET	24 FEET
CURBS & GUTTERS	YES	YES	NO
SIDEWALKS	BOTH SIDES	ONE SIDE	NONE
STORM SEWERS	YES	YES	NO

24 - HOUR ANNUAL AVERAGE TOTAL TRAFFIC

TWENTY-FOUR HOUR ANNUAL AVERAGE TOTAL TRAFFIC ON STATE AND FEDERAL ROUTES IN FRANKFORT, AS RECORDED BY THE STATE HIGHWAY COMMISSION FOR 1972 (UNPUBLISHED) IS SHOWN ON MAP 1. VOLUMES CLEARLY SHOW THAT THE PREDOMINANT TRAFFIC ORIENTATION IS EAST-WEST. FRANKFORT IS FORTUNATE IN THE POSSESSION OF REASONABLY WIDE DOWNTOWN STREETS. AT PRESENT THIS ADVANTAGE IS PARTLY OFFSET BY THE LACK OF GOOD CROSSTOWN AND BY-PASS ARTERIALS WHICH FORCE A CONSIDERABLE VOLUMN OF EXTRANEIOUS TRAFFIC THROUGH THE CENTRAL BUSINESS DISTRICT IN TRAVELING BETWEEN DIFFERENT PARTS OF THE COMMUNITY, THEREBY ABSORBING STREET CAPACITIES NEEDED FOR CIRCULATION DURING PEAK HOUR PERIODS WITHIN THE DISTRICT ITSELF. ALTHOUGH TABLE 2 PROJECTS NO INTERSECTION DEFICIENCIES IN THE DOWNTOWN AREA BY 1990 -- THIS THROUGH TRAFFIC IS NON-THE-LESS UNDESIRABLE AS IT DETRACTS AND MAKES THAT AREA LESS CONVENIENT AND AMENABLE FOR THOSE WHO HAVE A DESTINATION THERE, AND PARTICULARILY THOSE WISHING TO SHOP THERE.

TABLE 5 - 24 HOUR AND PEAK HOUR TRAFFIC VOLUMES-- TAKEN AT FRANKFORT CITY LIMITS - 1962 - 1972 AND PROJECTED TO 1990 HAS BEEN PREPARED TO AUGMENT TABLE 2. WHILE TABLE 2 AND MAP 1 SHOWED FRANKFORT'S INTERNAL TRAFFIC, TABLE 5 SHOWS PAST AND PROJECTED TRAFFIC ENTERING AND LEAVING THE MUNICIPAL CORPORATION. THIS DOES NOT REPRESENT APPROACH TRAFFIC AS DID TABLE 2, BUT TOTAL CURB TO CURB TRAFFIC.

TABLE 5

24-HOUR ANNUAL AVERAGE AND PEAK HOUR TRAFFIC, FRANKFORT CITY LIMITS, 1962 - 1990

LOCATION HIGHWAY OF COUNT *	VOLUMES ¹			ANNUAL AVERAGE CHANGE		PROJECTED VOLUMES 1990	PEAK HOUR TRAFFIC ² 1990
	1962	1966	1969	1972	NO. %		
421 -39 - 38 No WEST	3825	4700	4875	3105	-72 -0.20	3200 **	320
75 NORTH	1750	1825	2325	2334	58 0.33	3375	337
421 - 28 EAST	3900	4450	5400	5490	159 0.41	8000	800
38 - 39 SOUTH	4625	5050	5600	5683	105 0.23	7500	750
28 WEST	4525	6325	7750	10243	452 1.00	18000	1800

* COUNTS RECORDED AT CITY LIMITS

** PROJECTIONS MODIFIED TO REFLECT NEW CONSTRUCTION ON STATE ROUTE 28 WEST AND EXISTANCE OF SR-28 - I-65 INTERCHANGE, I.E. A CONSIDERABLE AMOUNT OF NORTHWEST BOUND TRAFFIC USED SR-38 PRIOR TO I-65 CONSTRUCTION.

1 SOURCE: DIVISION OF PLANNING, STATE HIGHWAY COMMISSION. (1972 UNPUBLISHED)

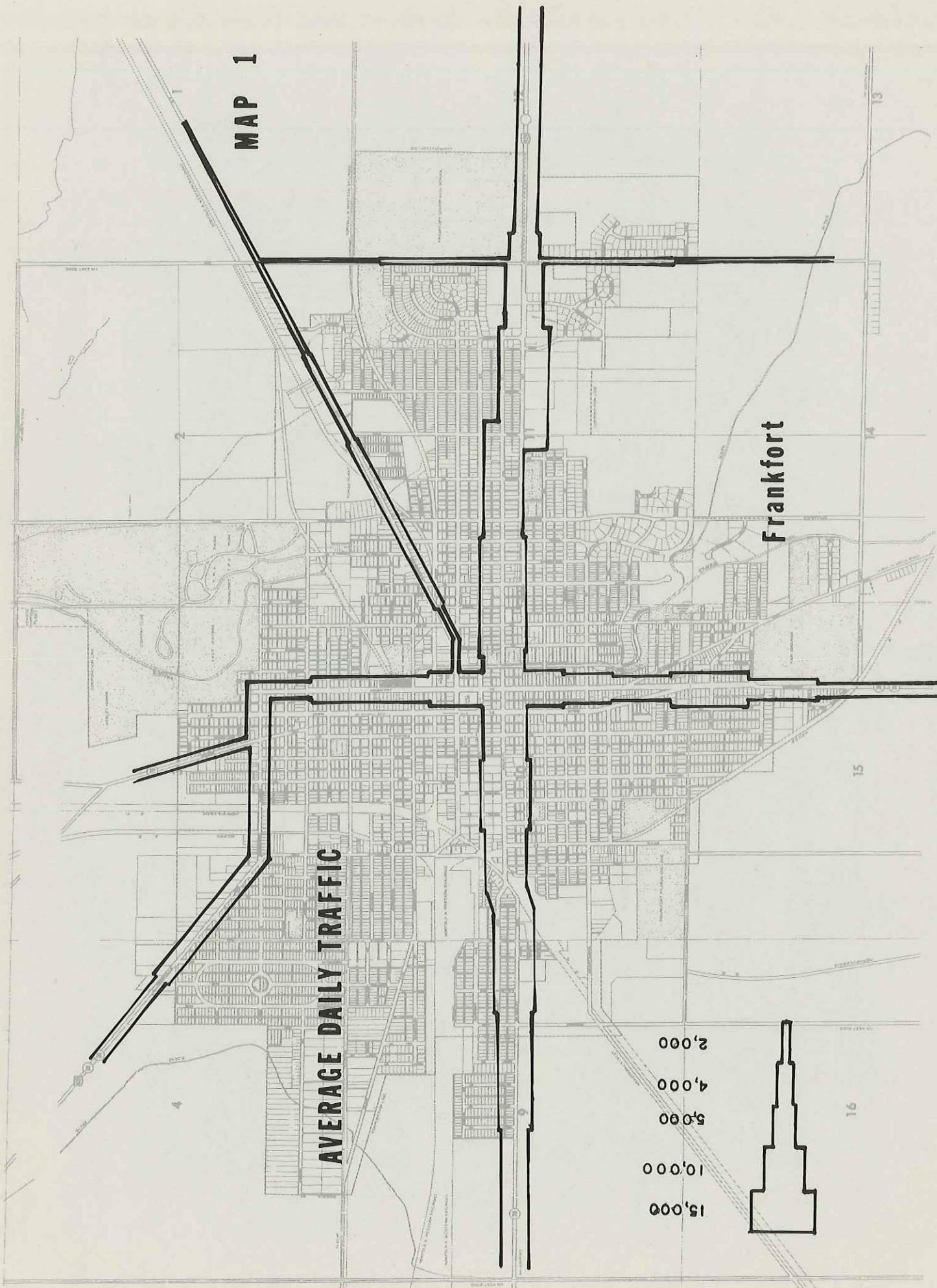
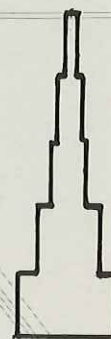
2 TEN PERCENT OF 24-HOUR TRAFFIC.

MAP 1

Frankfort

AVERAGE DAILY TRAFFIC

15,000
10,000
5,000
4,000
2,000



AVERAGE DAILY TRAFFIC VOLUMES

SHOWN ON MAP 2 ARE THE AVERAGE DAILY TRAFFIC (ADT'S) FOR ALL OF CLINTON COUNTY. THIS IS, OF COURSE, A COMPANION TO MAP 1. MAPS SUCH AS THESE PROVIDE THE PLANNING COMMISSION AND LOCAL GOVERNMENTS WITH A STATISTICAL AND GRAPHIC BASIS OF PRIORITY VIS-A-VIS TRAFFIC VOLUMES IN BACKING REQUESTS FOR STATE HIGHWAY IMPROVEMENTS.

SELECTED STREET AND TRAFFIC PROBLEMS

ALSO SHOWN ON MAP 2 ARE SELECTED STREET AND TRAFFIC PROBLEMS, INDICATING COUNTYWIDE CONGESTED AREAS AND A CATEGORY OF "OTHER" WITHIN WHICH ARE GROUPED TRAFFIC DIFFICULTIES AS INDICATED BY ACCIDENT REPORTS (OUTSIDE CONGESTED AREAS), SPECIAL TRAFFIC PROBLEMS, AND TRAFFIC RELATED STREET AND ROAD CONDITIONS ON MAIN TRAVELLED ROADS AND STREETS.

FRANKFORT

WITHIN THE CITY OF FRANKFORT THE MOST CRITICAL CONGESTION HAS OCCURRED AT THE HOKE - WABASH - WALNUT INTERSECTION (S.R. 28) AS INDICATED BY TABLE 2. SINCE THE COMPILATION OF THE DATA USED IN TABLE 2, HOWEVER, THE CITY HAS ELEMENATED ALL STOP CONTROLS FOR EAST AND WEST BOUND TRAFFIC ON STATE ROUTE 28 AT THE INTERSECTION SO THAT THERE IS NOW THROUGH TRAFFIC ON THAT STATE ROUTE. INTERSECTION TRAFFIC IS NOW CONTROLLED BY STOP SIGNS. ONLY THE HOKE STREET JOG REMAINS AS A TRAFFIC PROBLEM, PARTICULARLY WITH LARGE TRUCK TRAFFIC. TO EXPRESS IT DIFFERENTLY, THERE IS NO LONGER A CONTROLLED INTERSECTION AT HOKE-28 AND THE INTERSECTION APPROACH DATA OF TABLE 2 NO LONGER APPLIES. THE RENOVATION IS AN IMMINENTLY PRACTICAL AND SUCCESSFUL INTERIM SOLUTION.

AS INDICATED ON TABLE 2 THE JACKSON - WALNUT INTERSECTION IS THE MOST CONGESTED IN DOWNTOWN FRANKFORT, FOLLOWED IN DECLINING LEVELS OF CONGESTION BY MAIN - WALNUT; CLINTON - JACKSON; WASHINGTON - JACKSON; AND COLUMBIA - WALNUT.

STREET DRAINAGE IS A REOCCURRING PROBLEM ON WALNUT BETWEEN MYRTLE AND BOOMER, WITH A LESS ACUTE PROBLEM AT JACKSON AND WHITE STREETS.

AN ADDITIONAL PROBLEM OF MAJOR CONCERN TO ALL GOVERNMENTAL UNITS OF THE CITY AND TO THE CITIZEN TAXPAYER IS THE LONG STANDING NEED FOR A CENTRALIZED GRADE SEPERATION ON THE NORFOLK AND WESTERN RAILROAD TO PROVIDE UNINTERRUPTED ACCESS TO THE NORTH AND SOUTH SECTIONS OF THE CITY. THIS SUBJECT IS MORE FULLY CONSIDERED IN THE COMMUNITY FACILITIES CHAPTER.

CONSIDERABLE CONGESTION OCCURS BETWEEN HOKE AVENUE TO A POINT EAST OF MARSH ROAD AND IS ATTRIBUTED PRIMARILY TO THE UNCONTROLLED ACCESS OF ALL TRAFFIC FROM THE MANY RETAIL OUTLETS ONTO WABASH.

CLINTON COUNTY

CONGESTION OCCURS IN CLINTON COUNTY AT THE INTERSECTION OF S.R. 29 AND 28, AND TO LESSER DEGREES IN THE MAIN BUSINESS CENTERS OF KIRKLIN (ON SUMMER WEEKENDS), MICHIGANTOWN, ROSSVILLE, MULBERRY, COLFAX, AND JEFFERSON. S.R. 28 AND 200 W. EXPERIENCES SOME PEAK HOUR CONGESTION WHILE 200 W. AT 00 (BASE LINE) ROAD HAS HARVEST TIME IMPACTS.

VISION CLEARANCE ON MOST COUNTY ROAD INTERSECTIONS IS IMPAIRED BY TALL WEEDS OR CORN. GENERALLY THE ALIGNMENT, BRIDGE ADEQUACY, GRADES, RAILROAD CROSSING AND RELATED CONDITIONS IN THE COUNTY ARE REPORTED "IN GOOD SHAPE" WITH NO "SPECIAL PROBLEMS" REPORTED, EXCEPT AS NOTED. THERE IS, HOWEVER, AN OBVIOUS NEED FOR A CONNECTION OF 300 W. FROM 00 (BASE LINE) ROAD AND S.R. 28 TO ACCOMMODATE FACTORY GENERATED TRAFFIC WITH A WESTBOUND DESTINATION. THIS WOULD ALLEVIATE SOME CONGESTION BOTH AT S.R. 28 — 200 W. AND IN JEFFERSON AT S.R. 28 AND 450 W.

FUNCTIONAL CLASSIFICATION

MAP 3 SHOWS THE BASIC FUNCTION OF CLINTON COUNTY HIGHWAYS. THE INDIANA STATE HIGHWAY COMMISSION HAS CLASSIFIED ALL ROADS IN THE STATE ACCORDING TO THE FOLLOWING FUNCTIONS:

- | | |
|-----------------|---|
| 1. INTERSTATE | HIGHWAYS LINKING MAJOR METROPOLITAN AREAS IN THE UNITED STATES; SERVES CITIES OVER 75,000 POPULATION. |
| 2. PRINCIPAL | SERVES CITIES OVER 30,000 POPULATION. |
| 3. MAJOR | SERVES CITIES OVER 5,000 POPULATION. |
| 4. COLLECTOR | SERVES COUNTY SEATS AND LARGE AREAS NOT SERVED BY OTHER SELECTED STATE ROUTES. |
| 5. LOCAL RURAL | ROADS SERVING TOWNS OVER 1,000 POPULATION, THEN SERVES ALL OTHER INCORPORATED COMMUNITIES, AND FINALLY, PROVIDES AREA SERVICE AND COLLECTS TRAFFIC FROM LOCAL ACCESS ROADS. |
| 6. LOCAL ACCESS | ROADS PROVIDING ACCESS TO RURAL LAND. |

WITHIN URBAN AREAS, MAJOR ARTERIALS SERVE LARGE TRAFFIC GENERATING CENTERS; ARTERIALS SERVE SMALL CENTERS OF ACTIVITY; COLLECTORS COLLECT TRAFFIC FROM LOCAL STREETS; WHILE LOCAL ACCESS STREETS PROVIDE ACCESS TO RESIDENTIAL AND BUSINESS USE.

SELECTION OF ARTERIAL STREET SYSTEMS IN URBAN AREAS AND ARTERIAL HIGHWAY SYSTEMS IN RURAL AREAS HELPS THE LOCAL OFFICIAL IDENTIFY THE PARTS OF ROAD OR STREET NETWORK WHERE IMPROVEMENTS WILL BENEFIT THE GREATEST NUMBER OF PEOPLE. ESTABLISHING THE PROPER DISTINCTION BETWEEN ROADS AND STREETS PROVIDING DIFFERENT KINDS OF TRAFFIC SERVICE HELPS TO AVOID DUPLICATION OF SERVICES AND GUIDES THE SELECTION OF STANDARDS FOR MAINTENANCE AND IMPROVEMENTS.

A GRAPHIC OUTLINE OF SUGGESTED STREET CROSS SECTIONS ACCOMPANIES THIS DISCUSSION.

SUBDIVISION STREETS

AN INVESTIGATION OF STREET CONDITIONS IN SUBDIVISIONS IN THE FRANKFORT URBAN AREA REVEALED THE FOLLOWING:

1. MOST ARE PROVIDED WITH HARD SURFACE AND CURB AND GUTTER.
2. A FEW SUBDIVISIONS HAVE BEEN DEVELOPED ALONG EXISTING COUNTY ROADS.

OTHER TRANSPORTATION MODES

AIR TRAVEL - THE NEAREST COMMERCIAL SCHEDULED AIR SERVICE AVAILABLE IS INDIANAPOLIS, ABOUT FIFTY MINUTES DISTANCE. GENERAL AVIATION FACILITIES IN THE COUNTY IS PROVIDED BY THE CLINTON COUNTY MUNICIPAL FACILITY WHERE FUEL AND STORAGE SERVICES ARE AVAILABLE.

BUS SERVICE - SERVICE IS PROVIDED BY GREYHOUND WHICH LINKS FRANKFORT AND THE COUNTY DIRECTLY AND INDIRECTLY WITH THE NATIONS BUS SERVICE NETWORK.

RAILROADS - PASSENGER TRAINS, OPERATED BY AMTRACK, PASS THROUGH THE COUNTY STOPPING IN FRANKFORT. AS A FORMER MAJOR RAILROAD CENTER THE FOLLOWING LINES SERVE THE AREA: NORFOLK AND WESTERN, PENN CENTRAL, AND THE L. & N. RAILROAD COMPANY.

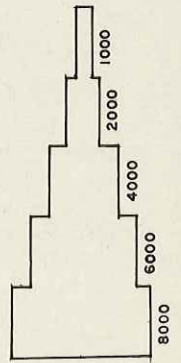
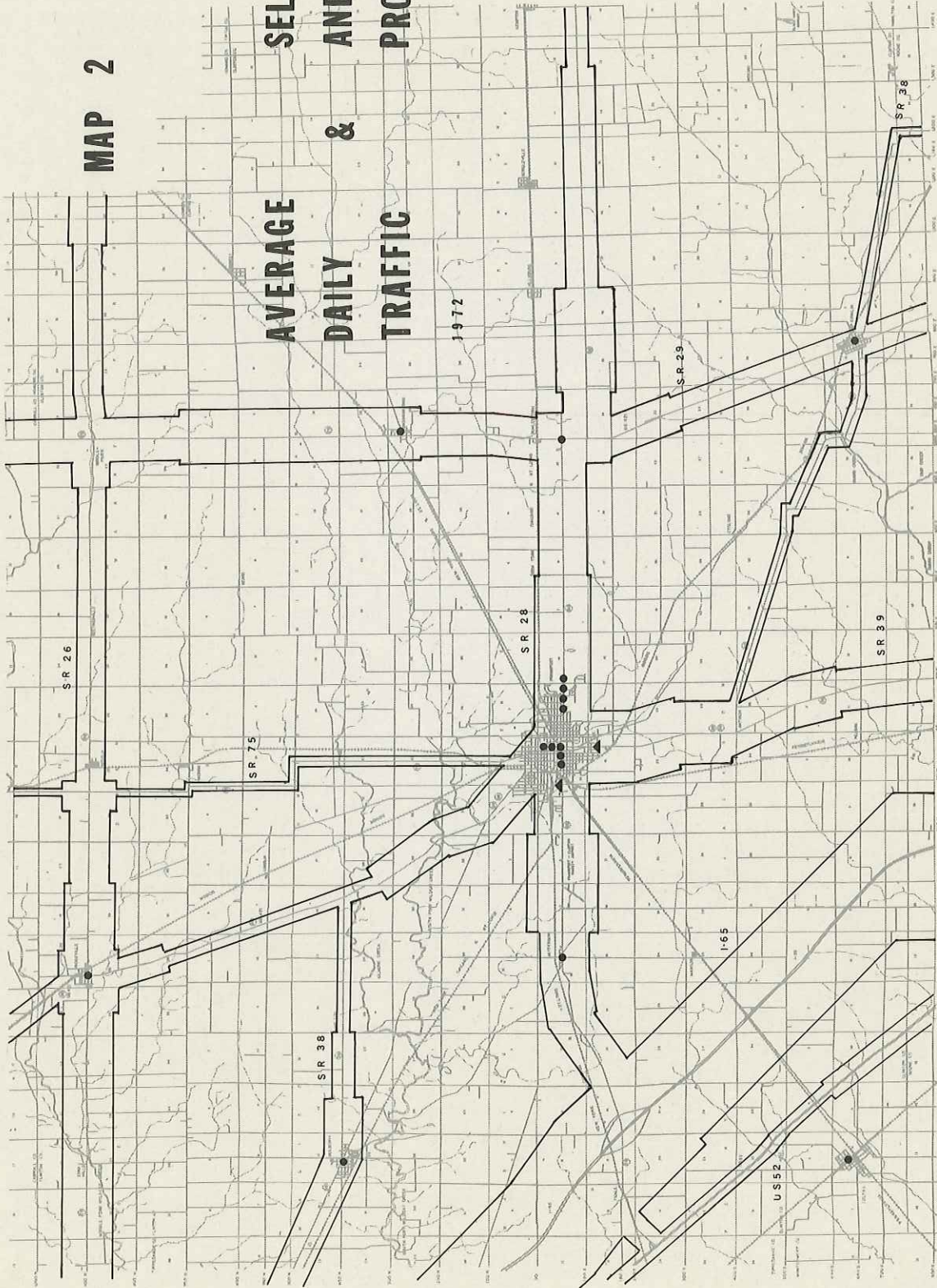
MAP 2

AVERAGE DAILY TRAFFIC & SELECTED STREET AND TRAFFIC PROBLEMS

CONGESTED AREA •
OTHER ▲



PLANNED BY: HARRY W. HARRIS
DESIGNED BY: HARRY W. HARRIS
DRAWN BY: HARRY W. HARRIS
DATE: 1972



Clinton County

MAP 3

FUNCTIONAL CLASSIFICATION

STATE HIGHWAY

INTERSTATE
MAJOR
COLLECTOR

LOCAL RURAL
HIGHWAY



0 3000' 6000'

NOT TO SCALE AND ASSOCIATES

PLANNING ENGINEERS

1977

1978

1979

1980

1981

1982

1983

1984

1985

1986

1987

1988

1989

1990

1991

1992

1993

1994

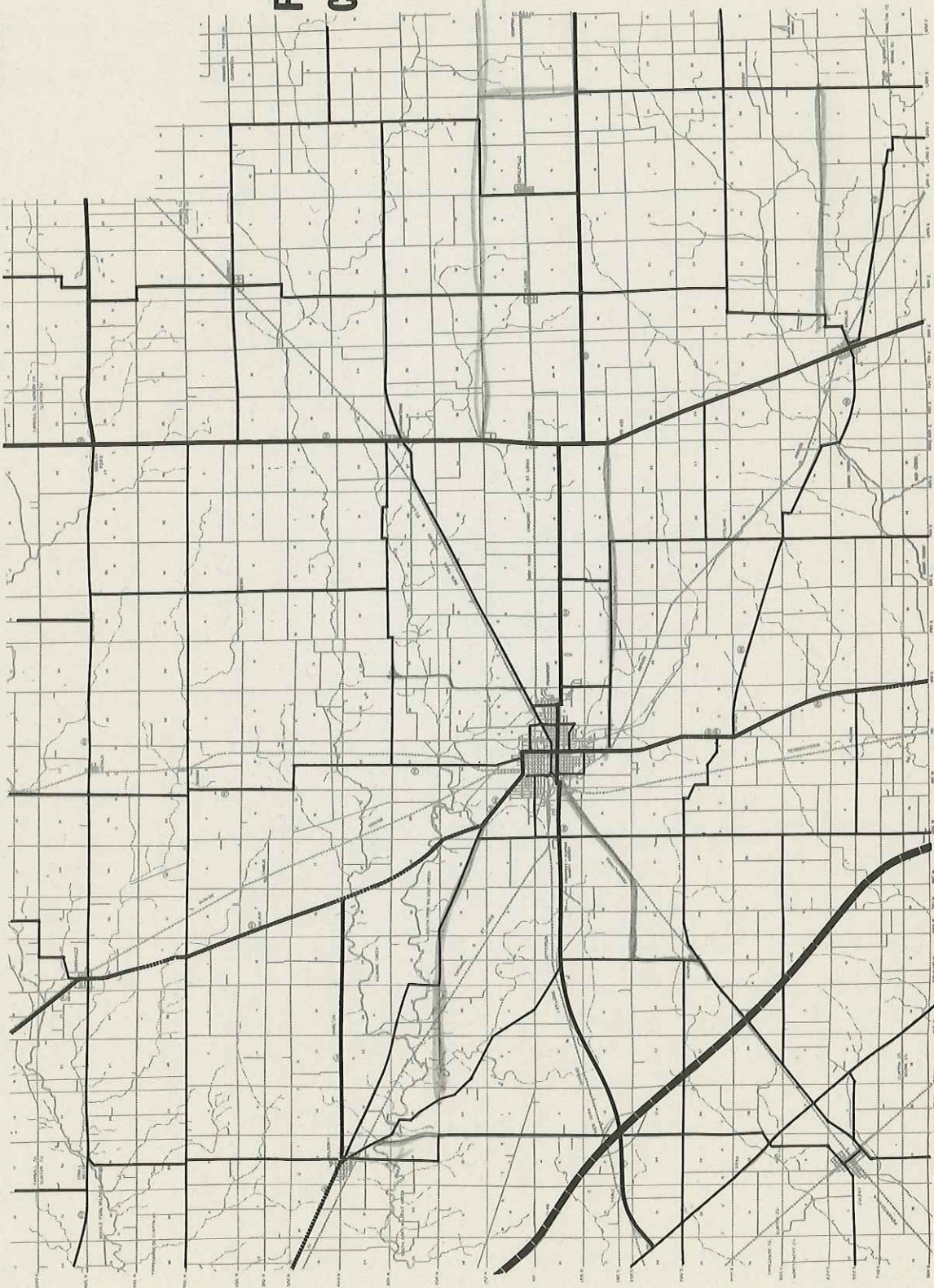
1995

1996

1997

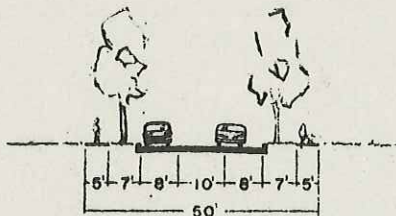
1998

1999



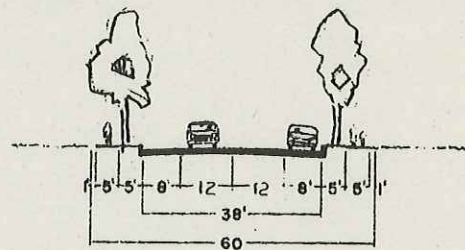
Clinton County

SUGGESTED STREET CROSS SECTIONS



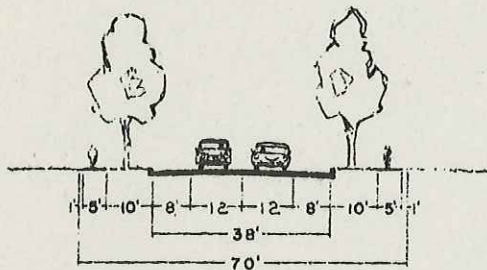
MINOR STREET

FIG. 1



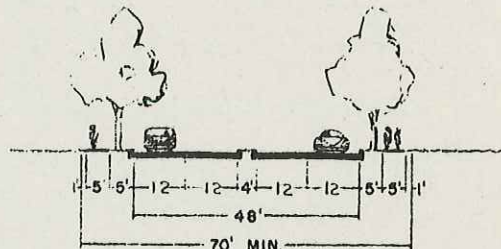
COLLECTOR STREET

FIG. 2



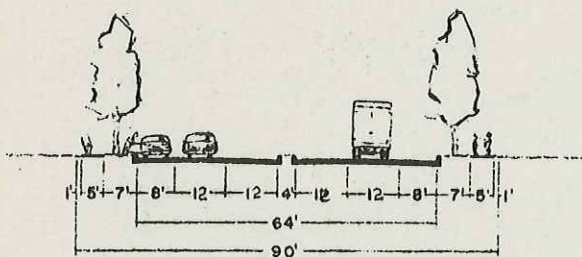
COLLECTOR STREET

FIG. 3



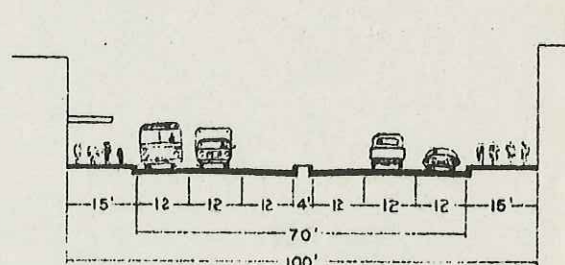
MAJOR THOROFARE - 4 MOVING LANES - NO PARKING

FIG. 4



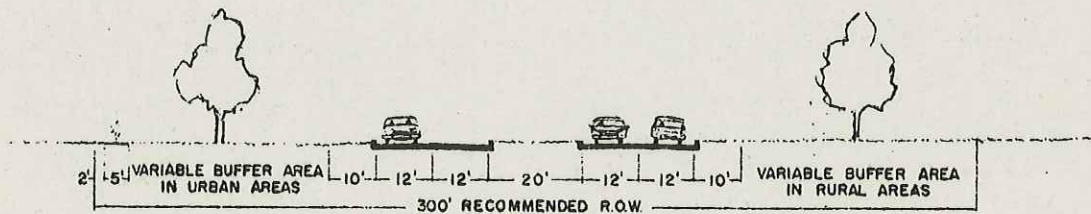
MAJOR THOROFARE - 4 MOVING & 2 PARKING LANES

FIG. 5



MAJOR THOROFARE - 6 MOVING LANES

FIG. 6



OUTER BELT PARKWAY

HOUSING

HOUSING STUDY

INTRODUCTION

THIS CHAPTER SURVEYS AND ANALYZES PERTINENT FACTUAL HOUSING DATA FOR FRANKFORT PRIMARILY, AND THE UNINCORPORATED COUNTY SECONDARILY. THE PURPOSE HERE IS TO IDENTIFY HOUSING PROBLEMS SO THAT CORRECTIVE ACTION AS OUTLINED IN PART II OF THE COMPREHENSIVE PLAN MAY BE INITIATED.

SOURCES OF INFORMATION FROM CENSUS DATA TO VISUAL INSPECTIONS WERE CAREFULLY REVIEWED AND EVALUATED AS TO INTERPRETATION AND ACCURACY. TOGETHER THEY PROVIDE A SOUND BASIS FOR THIS STUDY.

WHILE THIS PHASE OF THE PLANNING PROGRAM IS ONE OF FACT GATHERING AND ANALYSIS IT NEVERTHELESS SEEMS APPROPRIATE TO BRIEFLY CONSIDER HOUSING IN A MORE GENERAL CONTEXT, IN THE POLITICAL CONTEXT, AND IN SOCIAL-ECONOMIC RELATIONSHIPS.

"A DECENT HOME AND A SUITABLE LIVING ENVIRONMENT FOR EVERY AMERICAN FAMILY".

THAT WAS THE MANDATE EXPRESSED IN THE HOUSING ACTS OF 1949 AND 1968. TO REACH THAT GOAL, CONGRESS IN 1968 SET A NATIONAL HOUSING TARGET OF 26 MILLION NEW OR REHABILITATED UNITS BY 1978, INCLUDING 6 MILLION FOR LOW AND MODERATE INCOME FAMILIES.

WE HAVE NOT, OF COURSE, COME CLOSE TO THAT TARGET. THE SEVERITY OF THE HOUSING CRUNCH NATIONWIDE WAS EMPHASIZED IN A RECENT REPORT BY THE JOINT CENTER FOR URBAN STUDIES OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY AND HARVARD UNIVERSITY. ACCORDING TO THEIR TWO YEAR SURVEY, 13.1 MILLION LOW AND MODERATE INCOME FAMILIES IN THE U.S. WERE "HOUSING DEPRIVED" IN 1970, A CONSERVATIVE ESTIMATE. IT MEANS THAT ONE OUT OF EVERY FIVE AMERICAN HOUSEHOLDS HAS SOME SORT OF HOUSING DEPRIVATION. THIS IS ATTRIBUTED TO:

1. A PHYSICALLY INADEQUATE HOME -- (ONE WITHOUT PLUMBING, ETC.)
2. OVERCROWDED (MORE THAN 1.5 PERSONS PER ROOM)
3. AN EXCESSIVE RENT BURDEN (OVER 25 TO 35% OF TOTAL INCOME.)

SOME 6.9 MILLION OF THE HOUSING POOR FAMILIES HAVE PHYSICALLY INADEQUATE HOMES.

ANOTHER 5.5 MILLION ARE PAYING TOO MUCH RENT.

AND ABOUT 700,000 ARE OVERCROWDED.

FAMILIES WITH INCOMES UNDER \$5,000 A YEAR ARE PARTICULARLY HARD HIT. EIGHT OUT OF TEN SUFFER SOME FORM OF HOUSING DEFICIENCY, INCLUDING 54% WHO ARE PAYING TOO MUCH RENT AND 24 PERCENT WHO ARE LIVING IN PHYSICALLY INADEQUATE HOMES.

THERE IS A FOURTH TYPE OF FAMILY NOT INCLUDED IN THE "HOUSING DEPRIVED" STATISTICS, WHICH NEVERTHELESS IS NOT HAPPY WITH THE CONDITIONS IN WHICH IT LIVES. THIS IS THE FAMILY WITH A DECENT, REASONABLY PRICED HOME BUT LIVING IN AN INADEQUATE NEIGHBORHOOD OR ENVIRONMENT.

THAT IS THE NATIONAL OVERVIEW. ALL OF US TEND TO MAINTAIN CERTAIN TRAVEL PATTERNS--HOME TO WORK TO SHOPPING AREA TO HOME-- WITH FEW VARIATIONS. THERE ARE SECTIONS OF EVEN SMALL COMMUNITIES THAT ARE UNFAMILIAR TO LONGTIME RESIDENTS. THE HOUSING CONDITIONS PORTRAYED IN THIS REPORT AND ON BOTH PUBLISHED AND UNPUBLISHED MAPS ARE PRIMARILY THE RESULT OF FIELD SURVEYS AND OF RESEARCH OF THE 1970 CENSUS OF HOUSING PUBLICATIONS. THE RESULTS MAY SURPRISE AND EVEN SHOCK MANY CONCERNED AND INVOLVED CITIZENS OF THE CLINTON COUNTY COMMUNITY.

GENERAL HOUSING CHARACTERISTICS

HOUSING UNITS

A HOUSING UNIT IS A HOUSE, AN APARTMENT, A GROUP OF ROOMS, OR A SINGLE ROOM INTENDED FOR OCCUPANCY AS SEPERATE LIVING QUARTERS. SEPERATE LIVING QUARTERS ARE THOSE IN WHICH THE OCCUPANTS DO NOT LIVE AND EAT WITH ANY OTHER PERSONS IN THE STRUCTURE AND WHICH QUARTERS HAVE EITHER (1) DIRECT ACCESS FROM THE OUTSIDE OR THROUGH A COMMON HALL OR (2) COMPLETE KITCHEN FACILITIES FOR THE EXCLUSIVE USE OF THE OCCUPANTS. THE OCCUPANTS MAY BE A SINGLE FAMILY, ONE PERSON LIVING ALONE, TWO OR MORE FAMILIES LIVING TOGETHER, OR A GROUP OF RELATED OR UNRELATED PERSONS WHO SHARE LIVING QUARTERS.

GROUP QUARTERS ARE LIVING ARRANGEMENTS FOR INSTITUTIONAL INMATES OR FOR OTHER GROUPS CONTAINING FIVE OR MORE PERSONS NOT RELATED TO THE PERSON IN CHARGE. A HOSPITAL IS CONSIDERED GROUP QUARTERS AS IS A HOUSE OR APARTMENT IF IT IS SHARED BY THE PERSON IN CHARGE AND FIVE OR MORE PERSONS UNRELATED TO HIM.

THE NUMBER, TENURE AND VACANCY STATUS OF EXISTING HOUSING UNITS IN CLINTON COUNTY HAVE IMPORTANT BEARINGS ON HOUSING PROFILES. TABLE 1 REPORTS THE NUMBER AND PERCENT OF HOUSING UNITS IN THESE CLASSIFICATIONS IN 1970 FOR UNINCORPORATED CLINTON COUNTY AND FOR FRANKFORT.

TABLE 1
OCCUPANCY AND VACANCY
OF HOUSING UNITS - 1970

CLINTON COUNTY - UNINCORPORATED																			
OCCUPANCY					VACANCY					1		2		TOTALS		ALL HOUSING			
OWNER OCCUPIED	%	RENTER OCCUPIED	%	TOTAL OCCUPIED	%	VACANT FOR SALE	%	VACANT FOR RENT	%	SEASONAL & MIGRATORY	%	OTHER VACANT	%	TOTAL VACANT	%	YEAR ROUND UNITS	%	No.	%
No.		No.		No.		No.		No.		No.		No.		No.		No.		No.	
3685	75.0	1238	25.0	4923	100	35	8.0	23	6.0	98	23.0	262	63.0	418	100	5295	98.0	5393	100
FRANKFORT																			
3549	68.0	1691	32.0	5240	100	65	23.0	127	46.0	20	7.0	69	24.0	285	100	5564	99.0	5584	100

- 1 IF A VACANT YEAR-ROUND UNIT IN OTHER CLASSIFICATIONS IS CLASSIFIED AS "OTHER VACANT". FOR EXAMPLE, UNITS HELD FOR SETTLEMENT OF AN ESTATE, HELD FOR OCCUPANCY BY A CARETAKER, AND UNITS HELD FOR PERSONAL REASONS.
- 2 TOTAL VACANT EXCLUDES CATEGORIES OF "RENTED OR SOLD, AWAITING OCCUPANCY", AND "HELD FOR OCCASIONAL USE".

TO BRIEFLY SUMMARIZE TABLE 1 --- 75 PERCENT OF THE TOTAL NUMBER OF OCCUPIED HOUSING UNITS IN THE UNINCORPORATED AREA OF CLINTON COUNTY (3685) ARE OCCUPIED BY THEIR OWNERS; 25 PERCENT (1238) ARE OCCUPIED BY THOSE WHO RENT; A TOTAL OF 4,923.

THE "VACANT - FOR SALE" CLASSIFICATION IS 8 PERCENT WHILE THE "VACANT FOR RENT" IS 23 PERCENT OF THE TOTAL NUMBER OF VACANT RURAL (UNINCORPORATED) UNITS. SINCE THE DECENNIAL CENSUS IS TAKEN IN APRIL IT MAY BE EXPECTED THAT MOST OR ALL SEASONAL AND MIGRATORY UNITS WOULD BE VACANT. USUALLY THE "OTHER VACANT" CATEGORY IS THE LARGEST. IN THE RURAL COUNTY IT IS 63 PERCENT (262) OF ALL VACANT UNITS.

ALL OF THE YEAR-ROUND UNITS IN THE RURAL COUNTY NUMBER 5,295 AND ARE 98 PERCENT OF THE TOTAL UNITS. THEREFORE, 98 UNITS (2 PERCENT) ARE NOT "YEAR-ROUND". THE TOTAL SEASONAL AND MIGRATORY UNITS THAT WERE VACANT WAS 98.

THE CITY OF FRANKFORT'S CLASSIFICATION OF OWNER AND RENTER OCCUPIED ARE ROUGHLY SIMILAR TO THOSE OF THE RURAL COUNTY. WITHIN THE MUNICIPAL CORPORATION, AS WOULD BE EXPECTED, THERE EXISTS A LARGER NUMBER OF RENTER OCCUPIED UNITS; ALMOST 1,700 COMPARED TO 1,200 RURAL UNITS; 32 PERCENT COMPARED TO 25 PERCENT, WHILE THE TOTAL NUMBER OF OCCUPIED UNITS ARE ABOUT THE SAME ---4,923 RURAL, 5,240 FRANKFORT.

SINCE MOST RENTAL UNITS TRADITIONALLY OCCUR WITHIN URBAN AREAS, THE "VACANT FOR RENT" CLASSIFICATION IS GENERALLY HIGHER. TABLE 1 SHOWS THAT CLASSIFICATION TO BE 46 PERCENT OF THE TOTAL NUMBER OF VACANT UNITS ; WHILE THOSE VACANT UNITS FOR SALE ARE 23 PERCENT. A SIGNIFICANT FIGURE IS THE PERCENT OF ALL VACANT UNITS TO ALL YEAR-ROUND UNITS:

COUNTY-RURAL	8 PERCENT
FRANKFORT	5 PERCENT

THERE IS NO READILY ACCEPTABLE EXPLANATION FOR THE LARGE VARIATION BETWEEN THE COUNTY'S "OTHER VACANT" CLASSIFICATION (63 PERCENT) AND THE CITIES (24 PERCENT).

HOUSING GROWTH - 1950 - 1970

TABLE 2 REVIEWS THE GROWTH RATE FOR CLINTON COUNTY AND FRANKFORT FOR 1950 TO 1970. THIS DATA INCLUDES ALL HOUSING: OWNER AND RENTER OCCUPIED, VACANT, SEASONAL AND MIGRATORY AND "OTHER" UNITS.

ADDITIONS TO THE HOUSING SUPPLY OCCUR AS A RESULT OF:

1. CONSTRUCTION OF NEW UNITS

2. THE PLACING OF NEW OR THE RELOCATION OF OLDER MOBILE HOMES, AND
3. THE CONVERSION OF SINGLE-FAMILY TO MULTI-FAMILY DWELLINGS OR FROM STRUCTURES CONVERTED TO DWELLINGS FROM OTHER USES.

TABLE 2

HOUSING UNIT GROWTH RATE
1950 - 1970

	TOTAL HOUSING UNITS				
	1950	1960	% CHANGE	1970	% CHANGE
FRANKFORT	5067	5519	9.0	5584	1.0
COUNTY	9719	10608	9.0	10969	3.0

SINCE BOTH FRANKFORT AND THE COUNTY ARE EXPECTED TO EXPERIENCE A STABLE TO SLIGHTLY DECLINING POPULATION DURING THE NEXT TEN TO TWENTY YEARS, NO ADDITIONS TO THE INVENTORY ARE EXPECTED TO RESULT FROM THAT SOURCE. NEW CONSTRUCTION AND CONVERSIONS ARE DISCUSSED LATER IN THIS CHAPTER.

HOUSING UNIT TYPES - 1970

TYPES OF HOUSING UNITS REFER TO THE FOLLOWING THREE PRINCIPLE RESIDENTIAL USES:

- A) SINGLE-FAMILY
- B) MULTIPLE-FAMILY (LIVING QUARTERS FOR TWO OR MORE FAMILIES)
- C) MOBILE HOMES (ALL MOBILE HOMES AND TRAILERS USED AS PERMANENT YEAR-ROUND LIVING UNITS)

THE LARGEST CLASSIFICATION IN CLINTON COUNTY, BOTH URBAN, RURAL, AND THE TOTAL COUNTY, ACCORDING TO TABLE 3, IS SINGLE FAMILY. THE TWO OR MORE DWELLING UNIT CLASSIFICATIONS FALL WITHIN THE AREA OF NORMALITY, WHILE THE ONE PERCENT (FRANKFORT) AND THREE PERCENT (COUNTY, BOTH URBAN AND RURAL) ARE LOW, I.E., LOWER THAN THE REALM OF EXPECTANCY, OR THAN THAT "USUALLY" FOUND IN "SIMILAR" COUNTIES.

IT IS PROBABLE THAT A SUBSTANTIAL PORTION OF ANY PROJECTED HOUSING DEMAND IN THE CITIES, TOWNS AND COUNTY WOULD BE MET BY MOBILE HOMES IN THE ABSENCE OF RESTRICTIVE OR PROHIBITIVE MEASURES AGAINST THEM.

TABLE 3

HOUSING UNIT TYPES ¹ - 1970

DWELLING UNIT	FRANKFORT		TOTAL		COUNTY		RURAL FARM	
	No.	%	No.	%	No.	%	No.	%
SINGLE FAMILY	4323	78.0	9278	85.0	4955	94.0	1608	95.0
TWO OR MORE	1151	21.0	1280	12.0	129	2.0	31	2.0
MOBILE HOME OR TRAILER	<u>75</u>	<u>1.0</u>	<u>286</u>	<u>3.0</u>	<u>211</u>	<u>4.0</u>	<u>53</u>	<u>3.0</u>
TOTAL	5549	100.0	10844	100.0	5295	100.0	1692	100.0

¹ DATA ON HOUSING CHARACTERISTICS ARE LIMITED TO YEAR-ROUND HOUSING UNITS, I.E. ALL OCCUPIED UNITS PLUS VACANT UNITS INTENDED FOR YEAR-ROUND USE. EXCLUDED ARE VACANT UNITS INTENDED FOR SEASONAL OCCUPANCY AND MIGRATORY LABOR.

THE LIFE EXPECTANCY OF A MOBILE HOME, (IF MOBILE HOMES HAVE LIVES) IS CONSIDERABLY LESS THAN THAT OF A NORMALLY CONSTRUCTED DWELLING. WARRANTIES ON MOBILE HOMES, FOR EXAMPLE, GENERALLY DO NOT EXCEED 90 DAYS. AS MOBILE HOMES ARE ADDED TO THE INVENTORY IT MAY ALSO BE ANTICIPATED, THEREFORE, THAT AN ALMOST EQUAL AMOUNT MAY BE REMOVED OVER AN EXTENDED TIME PERIOD.

THE MOBILE HOMES IN THE CITY OF FRANKFORT (75) ARE, WITH FEW EXCEPTIONS, CONFINED TO MOBILE HOME COURTS. THE CONTRAST BETWEEN MOBILE HOMES IN THE "RURAL FARM" CLASSIFICATION (53) AND THE "RURAL" CLASSIFICATION (211) IS PARTIALLY THE RESULT OF RESTRICTIONS TO THEIR PLACEMENT WITHIN FRANKFORT AND THE APPROXIMATELY TWO MILE JURISDICTIONAL AREA OF THE FRANKFORT ZONING ORDINANCE; TOGETHER WITH THE UNWILLINGNESS OF FARM OWNERS TO DIVERT EVEN SMALL PLOTS OF THIS VALUABLE LAND TO NON-AGRICULTURAL PURPOSES. ALSO IN PART, THE NON-SUITABILITY OF MOST CLINTON COUNTY SOILS TO SEPTIC TANK USE, AND THE MARKET FOR THIS TYPE OF HOUSING GENERALLY. NO RESTRICTIONS TO THEIR PLACEMENT EXIST IN THE RURAL COUNTY AREA OUTSIDE THE JURISDICTIONAL AREA. THE RELATIVELY SMALL NUMBERS OF MOBILE HOME UNITS IN "RURAL FARM" ARE PREDOMINENTLY THE RESULT OF

A SECOND DWELLING ON THE FARM FOR THE SON OR DAUGHTER , FOR FARM LABORERS, OR SEASONAL MIGRATORY USE.

CONDITION OF HOUSING - 1970

PLUMBING. THE CENSUS CLASSIFIES HOUSING BY THE EXISTENCE OF ADEQUATE PLUMBING. TABLE 4 ILLUSTRATES THOSE CONDITIONS IN FRANKFORT AND CLINTON COUNTY AND REVEALS 227 UNITS (4.0 %) IN FRANKFORT WITHOUT ADEQUATE PLUMBING. CLINTON COUNTY HAS 538 (5.0 %) IN THIS CLASSIFICATION, THE RURAL COUNTY WITH 358 (7.0 %) AND "RURAL FARM" WITH 71 UNITS OR 4.0 PERCENT HAVING INADEQUATE PLUMBING. WHILE THE PERCENTAGES ARE NOT IMMENSE, THE NUMBERS ARE HIGH WHEN RELATED TO FAMILIES EXPERIENCING THESE INADEQUACIES.

TABLE 4

PLUMBING CONDITIONS - 1970

	FRANKFORT		TOTAL		CLINTON COUNTY		RURAL FARM	
	No.	%	No.	%	No.	%	No.	%
WITH ALL PLUMBING FACILITIES	5334	96.0	10306	95.0	4937	93.0	1621	96.0
WITHOUT ADEQUATE PLUMBING	<u>227</u>	<u>4.0</u>	<u>538</u>	<u>5.0</u>	<u>358</u>	<u>7.0</u>	<u>71</u>	<u>4.0</u>
TOTAL ALL UNITS	5561	100.0	10969	100.0	5295	100.0	1692	100.0

OVERCROWDING. TABLE 5 REVEALS THE EXTENT OF OVERCROWDING IN THE CITY AND COUNTY TO BE 286 UNITS (5.0 %) IN FRANKFORT, 539 UNITS (5.0 %) FOR THE COUNTY - TOTAL, 139 (5.0 %) COUNTY-RURAL, AND 38 (2.0 %) RURAL - FARM.

PARENTHETICALLY, IT BECOMES OBVIOUS THAT THE "RURAL FARM" CLASSIFICATION, AS PORTRAYED BY TABLES 1 THROUGH 5 HAVE THE LOWEST PERCENTAGES OF PROBLEMS, THAT CONVERSELY, THE CITY AND THE RURAL-NONFARM HAVE PROBLEMS IN THE AREAS COVERED BY THE TABLES.

TABLE 5

OVERCROWDING CONDITIONS - 1970

PERSONS PER ROOM	FRANKFORT		TOTAL		CLINTON COUNTY		RURAL FARM	
	No.	%	No.	%	No.	%	No.	%
ONE OR LESS	4954	95.0	9620	95.0	4684	95.0	1654	98.0
MORE THAN ONE	286	5.0	539	5.0	139	5.0	38	2.0
TOTAL ALL HOUSING UNITS	5240	100.0	10159	100.0	4923	100.0	1692	100.0

THE LOCATION AND EXTENT OF RESIDENTIAL BLIGHT

AN EXTERIOR SURVEY OF EACH RESIDENCE IN THE FRANKFORT URBAN AREA, IN ROSSVILLE, MICHIGANTOWN, COLFAX, KIRKLIN, AND MULBERRY AND THEIR FRINGE AREAS, AND ALONG MAIN-TRAVELED ROUTES AND "GROWTH AREAS" WAS CONDUCTED IN JANUARY AND FEBRUARY, 1974.¹ EACH RESIDENTIAL STRUCTURE WAS ASSIGNED A NUMERICAL RATING TO INDICATE ITS APPARENT CONDITION. HOMES IN GOOD OR STANDARD CONDITION WERE ASSIGNED "1". THOSE IN THE NEXT CATEGORY SHOWING ONLY MINOR DEFICIENCIES WERE ASSIGNED "2", WHILE THOSE WITH MAJOR DEFICIENCIES WERE RANKED "3". THOSE HOUSES FOUND TO BE DILAPIDATED AND GENERALLY ECONOMICALLY IRREPARABLE WERE ASSIGNED CONDITION "4". THE CONDITION RANK IS BASED ON THE FOLLOWING CRITERIA:

GOOD

1. SOUND STRUCTURE OF ADEQUATE CONSTRUCTION AND EXCELLENT MAINTENANCE; LITTLE OR NO POOR FACTORS.
2. ADEQUATE SIZE.

¹ TO AVOID DISCLOSURE, THE PRECISE LOCATION MAP INDICATING THE RESULTS OF THE SURVEY HAS NOT BEEN REPRODUCED IN THIS REPORT.

POOR

1. DETERIORATED OR DETERIORATING WALLS.
2. CRACKED, SINKING, OR SAGGING FOUNDATION.
3. STRUCTURE OUT OF PLUMB OR SETTLING.
4. DETERIORATED OR MAKESHIFT ROOF.
5. BUILDING COMPONENTS (CHIMNEY, PORCH, WINDOWS, AND DOOR FRAMES) DETERIORATED.
6. POOR MAINTENANCE LEVELS (GENERALLY DEPICTED ABOVE).
7. OTHER.

INDIVIDUAL STRUCTURE RATINGS

THE CONDITION OF HOUSING INDICATED BY THE NUMERICAL RATING IS AS FOLLOWS:

"1"

STANDARD

THIS CATEGORY APPLIES TO ALL NEW HOUSING (ONE TO TEN YEARS OLD) AND TO OLDER HOUSING APPEARING TO HAVE BEEN WELL-CONSTRUCTED AND WELL-MAINTAINED. THIS RATING WAS ASSIGNED TO THOSE HOUSES WHICH APPEAR TO HAVE A LONG PERIOD OF USEFULNESS REMAINING, ASSUMING NORMAL UPKEEP, AND IS INDEPENDENT OF THE TYPE (MASONRY, FRAME) OR COST OF ORIGINAL CONSTRUCTION. THUS, A NEW BRICK, FOUR BEDROOM, \$30,000 HOME AND A THIRTY-YEAR OLD FRAME, TWO BEDROOM, \$15,000 HOME WHICH WAS WELL-BUILT AND HAS RECEIVED EXCELLENT MAINTENANCE RECEIVED THE SAME RATING.

"2"

MINOR

DEFICIENCIES

THIS RATING WAS ASSIGNED TO HOMES WHICH HAD OBVIOUS DEFICIENCIES BUT WERE CAPABLE OF RESTORATION TO A "1" CONDITION WITHOUT UNREASONABLE EXPENDITURES. GENERALLY, HOMES WHICH FALL INTO THIS CATEGORY ARE THOSE FROM 10 TO 40 YEARS OLD WHICH HAVE NOT RECEIVED THE HIGHEST MAINTENANCE, OR WERE OF INADEQUATE ORIGINAL CONSTRUCTION. THE VAST MAJORITY OF ALL HOMES IN THE AVERAGE COMMUNITY ARE WITHIN THIS CLASSIFICATION.

"3"

MAJOR

DEFICIENCIES THIS RATING WAS ASSIGNED TO HOMES WHICH APPEARED MINIMALLY SUITED FOR OCCUPANCY. THESE INCLUDE HOMES IN WHICH DETERIORATION HAS ADVANCED TO THE POINT WHERE REHABILITATION IS ECONOMICALLY QUESTIONABLE, OR OLDER HOMES ORIGINALLY CONSTRUCTED IN A MANNER INADEQUATE TO TODAY'S CODES. SUCH HOUSES MAY BE TOO SMALL BY TODAY'S STANDARDS OR WERE ORIGINALLY BUILT WITH INADEQUATE BUILDING MATERIALS.

ALSO INCLUDED IN THIS CATEGORY ARE CONVERSIONS, I. E., DWELLING UNITS IN BUILDINGS ORIGINALLY DESIGNED FOR COMMERCIAL OR INDUSTRIAL USE AND, THEREFORE, LACKING THE RESIDENTIAL AMENITIES OF TODAY'S STANDARDS.

"4"

DILAPIDATED

THIS CATEGORY IS SELF-EXPLANATORY. MOST OF THESE HOMES WERE VACANT OR HAVE HAD LITTLE OR NO MAINTENANCE OVER THE YEARS, WERE USUALLY AT LEAST 40 YEARS OLD, AND GENERALLY OF INADEQUATE ORIGINAL CONSTRUCTION.

MAP 1 HAS BEEN DIVIDED INTO SEVEN AREAS WHOSE PHYSICAL AND POLITICAL BOUNDARIES, ALTHOUGH SOMEWHAT ARBITRARILY ASSIGNED, DIVIDE THE CITY AND THE DEVELOPED FRINGE INTO "NEIGHBORHOODS" OF ROUGHLY EQUAL AREA. TABLE 6 ANALYZES STRUCTURAL HOUSING CONDITIONS BY THESE NEIGHBORHOODS. ONLY THOSE RESIDENCES DETERMINED BY THE FIELD SURVEY TO BE IN CLASSIFICATION "3"-- MAJOR DEFICIENCIES, AND "4"-- DELAPIDATED, ARE TABULATED. THE TABLE AND MAP REVEAL LARGE NUMERICAL DEFICIENCIES IN AREA 1, 2, AND 6.¹ THE REMAINING AREAS ARE NOMINAL IN DEFICIENT UNITS AND ARE WHAT MAY BE EXPECTED IN AN "AVERAGE" AREA OF A CITY. THE THREE NEIGHBORHOODS HAVE 620 SUBSTANDARD UNITS. EIGHTY-SIX PERCENT OF ALL UNITS WITH MAJOR DEFICIENCIES, AND 83 PERCENT OF ALL DELAPIDATED UNITS ARE LOCATED IN THESE THREE AREAS.

FOR THE FRANKFORT URBAN AREA, I. E., FRANKFORT AND ITS DEVELOPED FRINGE, THERE ARE 303 SUBSTANDARD UNITS.

1 AREA 7 IS PREDOMINANTLY NON-RESIDENTIAL.

TABLE 6

SUBSTANDARD DWELLING UNITS - FRANKFORT 1974

AREA	NO. MAJOR DEFICIENT	% OF TOTAL MAJOR DEFICIENT	MAJOR DEFICIENT % OF TOTAL HOUSING UNITS	NUMBER DELAPIDATED	% OF TOTAL DELAPIDATED	DELAPIDATED % OF TOTAL HOUSING UNITS
1	241	40.0	4.0	90	60.0	1.6
2	108	19.0	2.0	8	5.0	0.1
3	23	4.0	0.5	2	1.0	0.1
4	19	3.0	0.4	16	12.0	0.3
5	43	7.0	1.0	3	1.0	0.1
6	148	24.0	3.0	25	17.0	0.5
7	<u>16</u>	<u>3.0</u>	<u>0.3</u>	<u>11</u>	<u>4.0</u>	<u>0.3</u>
TOTAL	588	100.0	11.2	155	100.0	3.0

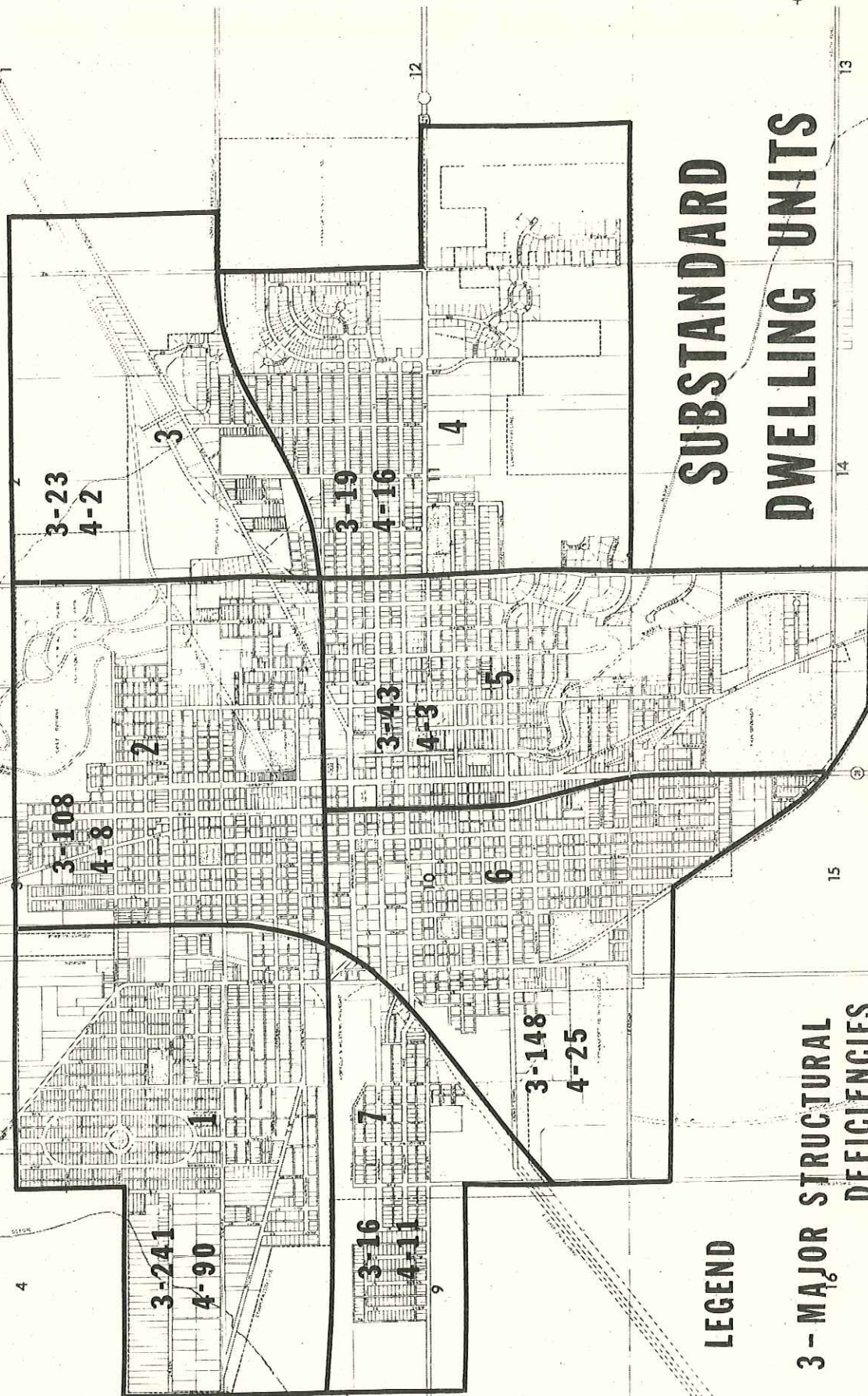
MAP 1

FRANKFORT

SUBSTANDARD
DWELLING UNITS

LEGEND

3 - MAJOR STRUCTURAL
DEFICIENCIES
4 - DILAPIDATED



RELATED TO THE TOTAL NUMBER OF UNITS, IN THE URBAN AREA,¹ 13.7 % ARE SUBSTANDARD---OR 14 UNITS OF EVERY ONE HUNDRED UNITS--- A SIGNIFICANT NUMBER, AND ONE AMONG MANY TO BE REMEMBERED IN THE POLITICAL ARENA WHEN REMEDIAL ACTIONS ARE DISCUSSED AND DEBATED AND WHERE DECISIONS MUST ULTIMATELY BE MADE.

VALUE AND RENTS OF HOUSING UNITS²

OWNER OCCUPIED. THE DISTRIBUTION OF THE HOUSING UNITS IN THE VARIOUS PRICE RANGES IS SHOWN IN TABLE 7 AND 8. TWELVE PERCENT OF OWNER-OCCUPIED UNITS IN THE TOTAL COUNTY ARE VALUED AT LESS THAN \$5,000, A FIGURE SUBSTANTIALLY SUPPORTIVE OF THE 13.7 PERCENT SUBSTANDARD FRANKFORT UNITS OF TABLE 6, AND STRONGLY INDICATIVE THAT THE COUNTIES' RURAL NON-FARM PROBLEMS WITH SUBSTANDARD UNITS IS ABOUT THE SAME MAGNITUDE AS THAT OF THE CITY. EXPECTABLY, MOST OF THE COUNTY WIDE OWNER-OCCUPIED UNITS (51 %) ARE IN THE \$5,000 TO \$15,000 MARKET VALUE RANGE IN 1970 DOLLARS, WHERE THEY ARE ABOUT EVENLY DIVIDED BETWEEN \$5,000 TO \$10,000 AND \$10,000 TO \$15,000. IN 1972 THE AVERAGE COST OF A NEW SINGLE-FAMILY HOME IN THIS COUNTRY WAS \$25,000; WITH A TYPICAL MORTGAGE AND AVERAGE MAINTENANCE, UTILITY AND RELATED COSTS, THIS REQUIRED A MONTHLY EXPENDITURE OF ABOUT \$250 --- OR AT LEAST \$12,000 A YEAR INCOME. THAT SAME UNIT IN 1973 COST \$27,200. THE AVERAGE PRICE OF EXISTING SINGLE-FAMILY UNITS IS ITSELF IN THE \$20,000 TO \$25,000 RANGE. MORE THAN 80 PERCENT OF NEW RENTAL UNITS ON THE NATIONAL MARKET ARE PRICED AT MORE THAN \$150 A MONTH --- AND THE LARGER APARTMENTS WHICH POOR FAMILIES MOST OFTEN NEED, ARE, OF COURSE, MORE EXPENSIVE. (GIVEN THE REALITIES OF INCOME DISTRIBUTION IN OUR SOCIETY SOME LEVEL OF SUBSIDY WILL PROBABLY ALWAYS BE NECESSARY.)

SIMILAR FIGURES FOR THE CITY OF FRANKFORT ARE 2582 UNITS AT \$15,000 OR LESS, A WHOPPING 79 PERCENT OF ALL OWNER OCCUPIED UNITS. THOSE IN THE \$20,000 AND MORE VALUE RANGE TOTAL 9.0 PERCENT.

1 THE URBAN AREA WAS THE AREA OF SURVEY, BUT ONLY 11 SUBSTANDARD UNITS WERE FOUND OUTSIDE THE CORPORATION, A STATISTICALLY INSIGNIFICANT NUMBER.

2 SOURCE: U.S. CENSUS, BASED ON ONE-FIFTH SAMPLING. THE VALUES ARE RESPONDENTS ESTIMATES OF HOW MUCH THE PROPERTY WOULD SELL FOR IF IT WERE FOR SALE. DATA FOR RENTAL UNITS ARE REPORTED IN DOLLARS PER MONTHLY RENT.

TABLE 7
VALUE OF SPECIFIED OWNER-OCCUPIED UNITS - 1970

AREA	SPECIFIED ¹ OWNER OCCUPIED	LESS THAN \$5,000	5,000 9,999	10,000 14,999	15,000 19,999	20,000 24,999	25,000 34,999	35,000 OR MORE	MEDIAN
FRANKFORT	3275	389	1223	970	414	132	86	70	10,100
UNINCORPORATED CO.	2307	298	651	549	457	247	95	10	11,800
CLINTON CO.	5592	651	1889	1540	876	406	181	49	10,700
PERCENT TOTAL CO.	100.0	12.0	33.0	28.0	16.0	7.0	3.0	1.0	---

TABLE 8
VALUE OF SPECIFIED RENTER-OCCUPIED UNITS - 1970

AREA	SPECIFIED ² RENTER OCCUPIED	LESS THAN \$30	30-39	40-59	60-79	80-99	100-149	150 OR MORE	No CASH RENT	MEDIAN
FRANKFORT	1680	53	72	352	628	290	175	7	103	69
UNINCORPORATED CLINTON COUNTY	550	23	40	177	146	31	36	5	92	59
CLINTON CO.	2213	58	114	492	785	328	219	15	202	68
PERCENT TOTAL CO.	100.0	3.0	5.0	22.0	35.0	15.0	10.0	1.0	9.0	---

¹ SPECIFIED OWNER OCCUPIED IS LIMITED TO ONE-FAMILY HOMES ON LESS THAN TEN ACRES AND NO BUSINESS ON PROPERTY... OWNER OCCUPIED COOPERATIVES, CONDOMINIUMS, MOBILE HOMES AND TRAILERS ARE EXCLUDED.

² SPECIFIED RENTER OCCUPIED UNITS EXCLUDE ONE-FAMILY HOUSES ON TEN ACRES OR MORE.

MEDIAN VALUE FOR FRANKFORT IS \$10,100, FOR THE UNINCORPORATED COUNTY IT IS \$11,800, AND THE ENTIRE COUNTY IS \$10,700 IN 1970 DOLLARS. THE STATEWIDE MEDIAN VALUE IS \$13,800.

RENTER OCCUPIED. THE MEDIAN MONTHLY CONTRACT RENT IN 1970 WAS: CLINTON COUNTY \$68; FRANKFORT \$69; UNINCORPORATED COUNTY \$59. THE MEDIAN CONTRACT RENT FOR THE STATE WAS \$83. THE PREDOMINANT RENT IN ALL AREAS OF CLASSIFICATION IS THE \$40 TO \$79 RANGE. THIS IS 58 PERCENT OF ALL RENTER-OCCUPIED UNITS FOR FRANKFORT; 59 PERCENT UNINCORPORATED COUNTY AND 57 PERCENT FOR THE COUNTY AS A WHOLE. THE NEXT HIGHEST CLASSIFICATION IS THE \$80 TO \$99 GROUP AT 15.0 PERCENT.

FAMILY INCOME STATUS - 1969

INCOME PER FAMILY WITHIN VARIOUS CATAGORIES IS SHOWN IN TABLE 9. EXPECTABLY MOST (58 %) OF THE FRANKFORT ANNUAL INCOME IS BETWEEN \$5,000 AND \$12,000; BUT 834 FAMILIES (19 %) HAVE INCOMES LESS THAN \$5,000 A YEAR. COMPARABLE FIGURES FOR THE COUNTY AS A WHOLE REVEAL THAT 54 % OF THE INCOMES ARE BETWEEN \$5,000 AND \$12,000 AND THAT 1529 FAMILIES (19 %) EARN LESS THAN \$5,000.

STANDARD CONVERSION FACTORS OF A HOUSING UNIT VALUE-TO-ANNUAL INCOME RATIO OF $2\frac{1}{2}$ TO 1 MAY BE USED TO DETERMINE THE THEORETICAL HOUSING UNIT PURCHASING POWER BY NUMBER AND PERCENT FROM THE FAMILY INCOME CLASSIFICATIONS OF TABLE 9. THIS REVEALS THAT A MAJORITY OF HOUSING UNITS IN FRANKFORT SHOULD THEORETICALLY FALL WITHIN THE PRICE RANGE OF BETWEEN \$12,000 AND \$30,000 ($2.5 \times \$3,000$ THRU \$12,000) BUT THAT THE \$7,500 TO \$12,000 PRICE RANGE ALSO EXISTS FOR 19 % OF FRANKFORT'S FAMILIES. COMPARABLE FIGURES ARE READILY DERIVED FOR THE COUNTY.

WHILE THE ABOVE PARAGRAPH CONCERNS PURCHASE, WHAT OF FAMILY INCOME RELATED TO RENTAL UNITS? HERE A 25 PERCENT INCOME-RENT RATIO IS AN ACCEPTED NORM. FIFTY-FOUR PERCENT OF ALL COUNTY RESIDENTS, THEREFORE, ARE PRESUMABLY ABLE TO AFFORD RENTS OF BETWEEN \$104 AND \$250 PER MONTH. NINETEEN PERCENT CAN AFFORD NOT MORE THAN \$104 RENT PER MONTH.

ENVIRONMENTAL DEFICIENCIES

IN THE VAST MAJORITY OF URBAN COMMUNITIES, ENVIRONMENTAL DEFICIENCIES ARE ATTRIBUTABLE TO THE EXISTENCE OF TRANSPORTATION ARTERIES DIVIDING THE COMMUNITY INTO SMALL NEIGHBORHOOD AREAS, LEAVING FEW SECTIONS FREE FROM THEIR NEGATIVE INFLUENCE. ALTHOUGH THIS IS TRUE TO A DEGREE IN FRANKFORT AND CLINTON COUNTY, THE EFFECT IS LESSENED BECAUSE THESE

TABLE 9

FAMILY INCOME STATUS - 1969

<u>AREA</u>	TOTAL NO. OF FAMILIES	LESS	<u>No. %</u>		3,000	<u>No. %</u>		5,000	<u>No. %</u>		7,000	<u>No. %</u>		9,000	<u>No. %</u>		12,000	<u>No. %</u>		15,000	<u>No. %</u>		25,000 OR MORE	<u>MEDIAN INCOME</u>	
		THAN 2,999	No.	%	TO 4,999	No.	%	TO 6,999	No.	%	TO 8,999	No.	%	TO 11,999	No.	%	TO 14,999	No.	%	TO 24,999	No.	%			
FRANKFORT	3,912	332	7.0		502	12.0		858	21.0		657	16.0		857	21.0		492	12.0		405	9.0		82	2.0	8,664
CLINTON COUNTY	8,091	690	9.0		837	10.0		1173	14.0		1373	17.0		1840	23.0		1062	13.0		946	12.0		168	2.0	8,959

ARTERIES DO NOT AT THIS TIME CARRY LARGE VOLUMES OF VEHICULAR TRAFFIC. HOWEVER, THEY DO SEGMENT THE COMMUNITIES CAUSING DIFFICULTIES IN LESS THAN POTENTIALLY EFFICIENT STREET PATTERNS, INCIDENTS OF DANGEROUS OR, AT LEAST, "UNSAFE INTERSECTIONS AND OCCASIONALLY IRREGULARLY SHAPED AND UNDERSIRABLE PARCELS OF LAND.

A SECOND ENVIRONMENTAL DEFICIENCY FREQUENTLY OCCURRING IN MOST COMMUNITIES IS THE EXISTENCE OF OBSOLETE PLOTS WITH LOT SIZES BELOW MODERN MINIMUM STANDARDS. OTHER ENVIRONMENTAL DEFICIENCIES ARE LACK OF SIDEWALKS; SIDEWALKS AND SOME STREETS IN DISREPAIR; THE FREQUENCY, THROUGH MOST OF THE FRANKFORT URBAN AREA, OF THE INTRUSION OF COMMERCIAL AND RELATED USES SCATTERED ON INDIVIDUAL PARCELS IN RESIDENTIAL AREAS.

CAUSES OF BLIGHT

THE CAUSES OF BLIGHT CANNOT BE EASILY SEPARATED AND CLASSIFIED. MANY SOCIAL, ECONOMIC AND PHYSICAL FACTORS ARE INVOLVED IN DETERMINING WHAT ACTUALLY CAUSES BLIGHT. THE LACK OF COMPREHENSIVE PLANNING AND LAND USE CONTROLS, INDISCRIMINATE MIXING OF LAND USES, INADEQUATE ORIGINAL CONSTRUCTION AND INADEQUATE TRAFFIC CIRCULATION CONTRIBUTE TO STRUCTURAL BLIGHT AND ENVIRONMENTAL DETERIORATION. SEVERAL OF THE FACTORS LISTED BELOW ARE FOUND IN EACH AREA OF BLIGHT AND EVEN IN THE SAME STRUCTURE. IN SOME CASES ONE MAY BE DOMINANT, BUT ATTENTION MUST BE GIVEN TO ALL ITEMS IF A TOTAL PROGRAM OF BLIGHT ELIMINATION IS TO SUCCEED.

OBSOLETE AND INADEQUATE ORIGINAL CONSTRUCTION - THE FRANKFORT URBAN AREA COMPRISES A SIGNIFICANT NUMBER OF OLDER BUILDINGS WHICH TEND TO BE OBSOLETE. WHILE THESE BUILDINGS MAY HAVE BEEN STANDARD AT THE TIME BUILT, ADVANCED AGE IS CAUSING INADEQUACY TO GROW IN IMPORTANCE. STRUCTURAL DEFECTS, LACK OF ADEQUATE COMFORT AND CONVENIENCE, AND GENERAL APPEARANCES, CAUSE THESE BUILDINGS TO BECOME BLIGHTED. IN SOME INSTANCES, THESE BUILDINGS HAVE BEEN WELL-MAINTAINED AND CONVENIENCE ITEMS HAVE BEEN ADDED AT CONSIDERABLE EXPENSE; BUT IN MANY CASES IT IS NOT ECONOMICALLY FEASIBLE TO REHABILITATE THEM. THIS IS PROBABLY ONE OF THE MOST IMPORTANT SINGLE CAUSES OF BLIGHT IN FRANKFORT.

SOME COMMERCIAL AND INDUSTRIAL BUILDINGS FALL INTO THIS CATEGORY AND WHILE INADEQUATE STRUCTURAL CONDITION IS A PROBLEM, IN MANY CASES OBSOLETE LAYOUT AND INADEQUATE OPERATING SPACE CAN BECOME MORE OF A PROBLEM.

INADEQUATE BUILDING MAINTENANCE - ALTHOUGH INADEQUATE MAINTENANCE IS DIRECTLY ASSOCIATED WITH STRUCTURES, ENVIRONMENT CAN ACT AS A STIMULANT TO DECLINING MAINTENANCE. A NUMBER OF FACTORS ARE INVOLVED, SUCH AS LACK OF INCENTIVE IN REPAIRING ORIGINALLY POOR CONSTRUCTION; THE PRESENCE OF BLIGHTING FACTORS

SUCH AS RAILROADS, TRAFFIC, MIXED AND INCOMPATIBLE LAND USES; AND A GENERAL LACK OF FAITH IN THE STABILITY OF A NEIGHBORHOOD. OLDER AREAS HAVE A LARGE PROPORTION OF ELDERLY POPULATION, MANY WITH A PENSION INCOME WHICH DOES NOT HAVE ADEQUATE ALLOWANCE FOR REPAIRS AT THE SAME TIME THAT STRUCTURE AGE AND OBSOLESCENCE REQUIRE EXTENSIVE REPAIRS. MANY ELDERLY PERSONS ARE NOT PHYSICALLY ABLE TO MAKE REPAIRS THAT MIGHT BE NORMALLY MADE BY A HOUSEHOLDER AT MINIMUM EXPENSE.

MIXED STRUCTURE USES - THE USE OF A SINGLE BUILDING FOR BOTH RESIDENTIAL AND NONRESIDENTIAL USE CREATES A SUBSTANDARD CONDITION FOR ONE OF THE USES. A RESIDENTIAL UNIT HOUSING A COMMERCIAL OPERATION AS WELL AS FAMILY UNIT IS USUALLY DEFICIENT IN COMMERCIAL AMENITIES SUCH AS OFF-STREET PARKING, BUILDING DESIGN, ETC. A RESIDENTIAL UNIT IN A COMMERCIAL BUILDING MAY SUFFER FROM THE LACK OF PROPER LIGHT AND AIR, PRIVATE OUTDOOR LIVING AREA, AND BUILDING DESIGN. MOST CONTEMPORARY ZONING ORDINANCES CONSIDER THESE MIXED STRUCTURE USES TO BE UNLAWFUL.

INCOMPATIBLE LAND USES - INCOMPATIBLE LAND USES OCCUR WHERE INDUSTRIAL OR COMMERCIAL USES EXIST IN PREDOMINANTLY RESIDENTIAL AREAS. THE OPPOSITE IS ALSO TRUE -- WHERE RESIDENTIAL UNITS ARE MIXED WITH INDUSTRIAL AND COMMERCIAL USES. THIS CONDITION EXISTS, PARTICULARLY IN FRANKFORT.

COMMERCIAL OR INDUSTRIAL ENCROACHMENT UPON RESIDENTIAL AREAS CREATES PROBLEMS NOT CONDUCTIVE TO NORMAL LIVING CONDITIONS. THESE USES CAUSE THE GENERATION OF HEAVY TRAFFIC INTO RESIDENTIAL AREAS THAT ARE OFTEN DEFICIENT IN OFF-STREET PARKING, AUGMENTING TRAFFIC CONGESTION. MANY MANUFACTURING OPERATIONS CAUSE NOISE, VIBRATION, AND OFFENSIVE ODORS THAT ARE INCOMPATIBLE IN RESIDENTIAL AREAS. THESE NONRESIDENTIAL USES ARE USUALLY BORDERLINE OPERATIONS THAT SUFFER FROM THE LACK OF NONRESIDENTIAL FACILITIES. THESE USES WOULD THRIVE MORE READILY IN AN AREA THAT COULD PROVIDE THE FACILITIES NECESSARY FOR THEIR EFFICIENT OPERATION.

INADEQUATE NEIGHBORHOOD FACILITIES - LACK OF ADEQUATE NEIGHBORHOOD FACILITIES IS ALSO ASSOCIATED WITH BLIGHT. SCHOOLS IN OLDER NEIGHBORHOODS TEND TO SUFFER IN COMPARISON WITH MORE MODERN SCHOOL DEVELOPMENT. PLAY AREAS ARE LESS IN NUMBER AND LESS ACCESSIBLE IN TRAFFIC-CONGESTED AREAS. NARROW AND DETERIORATING STREETS AND SIDEWALKS AFFECT OLDER AREAS, WHILE LACK OF ADEQUATE SEWERS AND PAVING HAVE A NEGATIVE EFFECT ON SOME OUTLYING NEIGHBORHOODS.

TRAFFIC - STREET CONDITIONS AND LAYOUT CAN HAVE A BLIGHTING EFFECT ON AN AREA. PLATTING PRACTICES IN SOME RESIDENTIAL AREAS HAVE RESULTED IN INADEQUATE STREET WIDTHS FOR ACCESS AND SERVICE. THE LAND USE DISTRIBUTION FOR THE MOST PART, CONTROLS THE TRAFFIC PROBLEMS. COMMERCIAL AND INDUSTRIAL TRAFFIC CAN CREATE A STRONG BLIGHTING INFLUENCE IN RESIDENTIAL AREAS.

PARKING - NONRESIDENTIAL USES NOT PROVIDING ADEQUATE PARKING FOR THEIR EMPLOYEES OR PATRONS RESULT IN PARKING ON RESIDENTIAL STREETS. COMBINED WITH AN INCREASE IN RESIDENTIALLY BASED VEHICLES, THIS CAN RESULT IN A LOWERING OF PROPERTY VALUE FOLLOWED BY NEGLECT IN MAINTENANCE.

ECONOMIC FACTORS - THE BLIGHTED AREAS OF A CITY OFTEN CONTAIN THE LARGEST CONCENTRATION OF LOW INCOME FAMILIES AND INDIVIDUALS. IN MOST CASES, THIS GROUP DOES NOT HAVE THE MEANS AVAILABLE FOR ADEQUATE HOUSING AND NORMAL UPKEEP BECAUSE A LARGE PORTION OF THEIR INCOME IS SPENT FOR FOOD AND CLOTHING.

INADEQUATE CODES AND ENFORCEMENT - GENERALLY, THIS PROBLEM HAS BEEN NEGLECTED IN RECENT YEARS. BUT MOST OF THE PRESENT BLIGHT BEGAN ITS DEVELOPMENT BEFORE ADEQUATE CODES WERE IN EXISTENCE. TRADITIONALLY, THERE HAS BEEN A RESENTMENT AGAINST VIGOROUS CODE ENFORCEMENT. HOWEVER, A RECOGNITION OF THE INTERDEPENDENCE OF NEIGHBORING STRUCTURES WILL ENABLE A STEP UP IN THE ACCEPTANCE OF GOOD CODES AND THEIR ENFORCEMENT.

CONVERSION TO MULTIPLE DWELLINGS - ALTHOUGH CONVERSION OF LARGER, OLDER HOMES FROM ONE OR TWO FAMILY TO MULTIPLE DWELLINGS ARE NOT HARMFUL IN THEMSELVES, THEIR PRESENCE OR OCCURRENCE IN A NEIGHBORHOOD IS OFTEN A SIGN THAT THE RESIDENTS OF THAT NEIGHBORHOOD ARE NO LONGER ABLE TO MAINTAIN THEIR HOMES AS SINGLE FAMILY RESIDENCES. THIS CAUSES OVERCROWDING OF THE STRUCTURE WITH ATTENDANT PROBLEMS OF INADEQUATE PARKING AND UTILITIES.

HOUSING DEMAND

THE PROCESSES OF HOUSING SUPPLY AND DEMAND ARE INTIMATELY RELATED, AS EACH SHAPES AND MOLDS THE OTHER. HOUSING IS SUPPLIED, FOR THE MOST PART, IN PROPORTION TO THE QUANTITY DEMANDED AND, TO A CERTAIN EXTENT, TO THE TYPES OF UNITS DEMANDED. WHILE DEMAND IS BEING FULFILLED, THE DIFFERENT TYPES OF UNITS SUPPLIED CAN AND DO INFLUENCE THE TYPES DEMANDED. AS SUCH, THE OPERATION OF A HOUSING MARKET CANNOT BE SATISFACTORILY UNDERSTOOD WITHOUT CONSIDERATION OF SUPPLY, DEMAND, AND NEED.

DEMAND INCLUDES THE NUMBER AND TYPES OF DWELLING UNITS THAT ARE REQUIRED AT ANY POINT IN TIME. DEMAND IS A RESULT OF A NECESSITY WHICH CAN ONLY BE SUPPLIED BY BUILDING OR REPAIRING A UNIT WHICH WILL FULFILL THE NECESSITY.

IN THIS CONTEXT, A UNIT IS NOT INCLUDED IN DEMAND IF THE UNIT ALREADY EXISTS. VIEWED IN THIS WAY THEN ARE FOUR POTENTIAL SOURCES OF DEMAND IN CLINTON COUNTY:

1. AS A RESULT OF NEW HOUSEHOLD FORMATION.
2. AS A RESULT OF DELETION IN THE EXISTING HOUSING STOCK;

3. DUE TO ANY INCREASE IN THE NUMBER OF VACANT UNITS REQUIRED FOR A VIABLE HOUSING MARKET;
4. BECAUSE OF THE EXISTENCE OF AN IMPROPER MIX OF UNITS THAT IS NOT IN LINE WITH THOSE TYPES DEMANDED.

HOUSING DEMAND QUANTIFIED

THE DEMAND FOR HOUSING MEANS THE DEMAND FOR STANDARD HOUSING UNITS. SINCE DEMOGRAPHIC PROJECTIONS SHOW A STABLE TO SLIGHTLY DECLINING POPULATION FOR FRANKFORT AND CLINTON COUNTY DURING THE NEXT 20 YEARS THE QUANTIFIED DEMAND FOR STANDARD HOUSING WILL BE ESSENTIALLY THE SAME NUMBER OF LIVING UNITS OR SHELTERS THAT NOW EXIST IN ADDITION TO THE NUMBER REQUIRED TO REPLACE EXISTING SUBSTANDARD UNITS AND TO ELIMINATE OVERCROWDING.

HOUSING DEMAND QUALIFIED

DEMAND FOR HOUSING CANNOT BE VIEWED SOLELY AS THE NECESSITY FOR AN ANNUAL NUMBER OF DWELLING UNITS AS VARIOUS INDIVIDUALS AND FAMILIES HAVE DIFFERING NEEDS, TASTES, AND FINANCIAL CAPABILITY. DEMAND MUST BE QUALIFIED ACCORDING TO THE TYPE OF HOUSING, ITS SIZE, COSTS, AND LOCATION. IN ADDITION THESE TASTES AND DESIRES CHANGE AS PERSONAL CIRCUMSTANCES CHANGE.

TWO OF THE MOST SIGNIFICANT TRENDS IN DEMAND IN THE STATE ARE MOBILE HOMES AND RENTAL HOUSING. IN 1950, FOR EXAMPLE, APPROXIMATELY 1.0 PERCENT OF THE HOUSING STOCK IN INDIANA WAS MOBILE HOMES. BY 1970 THIS UNIT HAS INCREASED TO 3.5 PERCENT. CURRENT STATEWIDE TRENDS INDICATE A CONTINUED SIMILAR INCREASE.

RECENTLY "32 WELL-QUALIFIED CONSTRUCTION INDUSTRY OBSERVERS" PARTICIPATED IN THE FIRST ROUND OF A PRODUCER'S COUNCIL --- SPONSORED BY THE CONSTRUCTION INDUSTRY. A MAJORITY BELIEVED THAT MULTIFAMILY STARTS WILL USE FROM 45 PERCENT TO 60 PERCENT OF ALL NEW CONVENTIONAL HOUSING; THAT NATIONAL BUILDING CODES WILL MAKE MODULAR RESIDENTIAL CONSTRUCTION A MAJOR FACTOR, WHILE INCREASED LAND AND CONSTRUCTION COSTS WILL RESULT IN SMALLER HOUSES. MOBILE HOMES, EXPECTED TO BE PRODUCED AT A 750,000 UNIT RATE, WILL BE SUBJECT TO THE SAME TAXING, BUILDING CODES, AND QUALITY SPECIFICATIONS AS CONVENTIONAL HOUSING.

WITH THESE NATIONWIDE EXPECTATIONS, IT IS LOGICAL THAT FRANKFORT AND CLINTON COUNTY WILL REFLECT THESE TRENDS. THE DEMAND FOR APARTMENTS HAS INCREASED FOR THE SAME ECONOMIC, SOCIAL AND PSYCHOLOGICAL REASONS AS THE MOBILE HOME. YEARS AGO IT GENERALLY COST THE CONSUMER LESS PER MONTH TO OWN HIS OWN HOME THAN TO RENT IN A MULTIPLE-UNIT STRUCTURE. THIS WAS

BECAUSE FINANCING WAS RELATIVELY INEXPENSIVE, PROPERTY TAXES WERE QUITE LOW; THE AVERAGE HOUSE DID NOT HAVE EXPENSIVE LUXURY ITEMS LIKE AIR CONDITIONING, DISHWASHERS, AND GARBAGE DISPOSALS; HOUSES WERE OF A SIMPLER DESIGN; COSTS OF CONSTRUCTION WERE LESS; LAND COSTS WERE LESS, THEREBY NOT REQUIRING MULTIPLE RESIDENCES AND MULTIPLE USES; AND MOST EARLY APARTMENTS REQUIRED THE TENANT TO HAVE HIS OWN STOVE, REFRIGERATOR, DRAPERIES AND RUGS. PEOPLE ALSO PLACED MORE IMPORTANCE ON STABILITY AND HOME OWNERSHIP. COUPLES HAD CHILDREN EARLIER IN MARRIAGE AND MORE OF THEM, AND SOCIETY WAS LESS MOBILE THAN AT PRESENT. OVER A PERIOD OF TIME, HOWEVER, MOST OF THESE CHARACTERISTICS HAVE CHANGED AND THE DEMAND FOR RENTAL UNITS IN MULTI-UNIT STRUCTURES HAS INCREASED.

SOME CONSUMERS HAVE THE MEANS TO BUY ADEQUATE HOUSING BUT CHOOSE TO SPEND THEIR MONEY ELSEWHERE. OTHERS, HOWEVER, INVOLUNTARILY LIVE IN INADEQUATE HOUSING BECAUSE THE SUPPLY OF ADEQUATE HOUSING IS LIMITED OR TOO EXPENSIVE. AS LONG AS THOSE WITH ADEQUATE INCOMES DO NOT CHOOSE TO OCCUPY UNITS DANGEROUS TO THEMSELVES AND POSSIBLY TO PUBLIC HEALTH OR SAFETY, THERE IS LITTLE REASON TO IMPOSE HIGHER STANDARDS ON THIS GROUP. THE SECOND GROUP, HOWEVER, IS FACED WITH A NEGATIVE HOUSING CHOICE; NONE OF THE UNITS OPEN TO THIS GROUP ADEQUATELY MEETS ITS NEEDS. SOCIETY HAS THE RESPONSIBILITY TO PROVIDE THE LOW-INCOME FAMILY WITH A POSITIVE RANGE OF HOUSING CHOICES.

THE FOREGOING SECTIONS OF THIS CHAPTER HAVE SHOWN THUS FAR THAT A SET OF ELEMENTS, WHICH WHILE DIFFICULT TO QUALIFY, SHOULD BE TAKEN INTO ACCOUNT IN DEFINING A MODERN HOUSING STANDARD AND DEVELOPING A HOUSING STRATEGY. MOST IMPORTANT OF ALL, THE ADEQUACY OF A HOUSING UNIT SHOULD NOT BE ASSESSED INDEPENDENTLY OF THE CHARACTERISTICS, NEEDS, AND DESIRES OF ITS OCCUPANTS.

IN SUMMARY THE NATIONAL GOAL PRONOUNCED BY THE NATIONAL HOUSING LEGISLATION OF 1949 IS REITERATED: A DECENT HOME AND A SUITABLE LIVING ENVIRONMENT FOR EVERY CITIZEN. IT IS WITH THIS PERSPECTIVE THAT THE ANALYSIS MOVES ON TO SPECIFIC AREAS IN EACH COMMUNITY THAT REQUIRE SOME PROGRAM OR PROGRAMS OF UPGRADING AND DISCUSSES THE VARIOUS PROGRAMS TO ACCOMPLISH THIS.

BASIC CAUSE OF HOUSING PROBLEMS

CLINTON COUNTY'S HOUSING PROBLEMS MAY BE DIRECTLY ATTRIBUTED TO:

1. INADEQUACY OF ORIGINAL CONSTRUCTION. POOR CONSTRUCTION ACCELERATES OBSOLESCENCE AND INCREASES MAINTENANCE COSTS.
2. LACK OF PUBLIC SERVICE. ABSENCE OF SEWER AND WATER, PAVED STREETS, AND POOR DRAINAGE REDUCES NEIGHBORHOOD AMENITIES AND LESSENS THE IMPROVEMENT AND MAINTENANCE INCENTIVE.
3. ABANDONMENTS. AN OVERALL POPULATION EXPERIENCING SLIGHT DECLINES TOGETHER WITH OBSOLESCENCE OF STRUCTURE, HAS RESULTED IN SOME ABANDONMENTS WHICH ACCELERATES DETERIORATION AND CONTRIBUTES SIGNIFICANTLY TO DECREASING NEIGHBORHOOD DESIRABILITY.
4. FINANCIAL INCAPABILITY. POVERTY LEVEL AND FIXED INCOME FAMILIES AND INDIVIDUALS ARE A FREQUENTLY OVERLOOKED DIRECT CAUSE OF DETERIORATION AS THESE SEGMENTS OF THE POPULATION ARE UNABLE TO AFFORD NECESSARY DWELLING MAINTENANCE.

OBSTACLES TO SOLVING HOUSING PROBLEMS

A MAJOR OBSTACLE TO SOLVING HOUSING PROBLEMS HAS BEEN THE LACK OF CLEAR PROBLEM DEFINITION; BEFORE INITIATION OF THIS PLANNING PROGRAM, NO DATA WERE AVAILABLE ON STRUCTURAL CONDITION OF DWELLINGS AND LOCATION OF AREAS WITH HIGH INCIDENCE OF DETERIORATING AND SUBSTANDARD DWELLINGS.

PROGRAMS OF THE PUBLIC SECTOR FOR SOLUTION OF HOUSING PROBLEMS CAN ONLY BE ESTABLISHED IN CONTEXT WITH OTHER REGIONAL AND COMMUNITY INVESTMENT NEEDS (INCLUDING PARK, SCHOOL, AND UTILITY SYSTEM IMPROVEMENTS). AT PRESENT, HIGHER PRIORITY HAS BEEN PLACED ON INVESTMENT OTHER THAN HOUSING. THERE HAS NEVER BEEN PUBLICLY ASSISTED HOUSING IN CLINTON COUNTY. IT SHOULD BE REMEMBERED, HOWEVER, THAT INVESTMENTS IN OTHER COMMUNITY FACILITIES INDIRECTLY IMPROVE NEIGHBORHOOD AND HOUSING CONDITIONS.

FORCED REMOVAL OF SUBSTANDARD STRUCTURES OFTEN MEETS DELAYS, LEGAL OBSTRUCTIONS, AND PROBLEMS IN OBTAINING APPROPRIATE REPLACEMENT HOUSING. FURTHERMORE, MANY "HOUSING PROBLEMS" OFTEN RESULT FROM SOCIAL AND ECONOMIC SITUATIONS OVER WHICH THE COMMUNITY HAS LITTLE CONTROL. REHABILITATION OF DETERIORATING DWELLINGS MEETS OBSTACLES WHERE OWNERS CANNOT AFFORD REQUIRED REPAIRS IN INSTANCES OF ABSENTEE OWNERSHIP.

A FINAL AND SIGNIFICANT IMPEDIMENT TO THE SOLUTION OF HOUSING PROBLEMS HAS BEEN CAUSED BY THE FEDERAL GOVERNMENT. UNCLEAR FEDERAL HOUSING POLICIES AND RESOURCE COMMITMENTS HAVE OFTEN CONTRIBUTED TO THE PROBLEMS OF LOCAL OFFICIALS RATHER THAN SOLVING THEM. PRESENT SUSPENSION OF HOUSING PROGRAMS HAS INCREASED THE FEDERAL CONFUSION. THE STATUS OF FEDERAL "SPECIAL REVENUE SHARING" PROGRAMS, WHICH PROMISE TO END THE CONFUSIONS, IS YET UNCERTAIN.

HOUSING RECOMMENDATIONS

IT IS RECOMMENDED THAT THE COUNTY AND FRANKFORT ESTABLISH A LONG-RANGE GOAL OF IMPROVING HOUSING QUALITY AND MEETING THE HOUSING NEEDS OF ALL SEGMENTS OF THE POPULATION THROUGH 1990. IT IS RECOMMENDED THAT THE AREA PLAN COMMISSION OF CLINTON COUNTY, ESTABLISH A BROAD BASED CITIZENS COMMITTEE ON HOUSING TO CONSIDER HOUSING PROBLEMS AND NEEDS. RECOMMENDED GENERAL GOALS FOR THE COMMITTEE ARE AS FOLLOWS:

1. IMPROVE EXISTING HOUSING BY STIMULATING THE ENHANCEMENT OF THE NEIGHBORHOOD ENVIRONMENT.
2. ESTABLISH MINIMUM STANDARDS FOR FUTURE HOUSING CONSTRUCTION AND SUBDIVISION DEVELOPMENT.
3. IMPROVE HOUSING OPPORTUNITIES FOR DISADVANTAGED SEGMENTS OF THE POPULATION, PARTICULARLY THE ELDERLY.¹

BUILDING AND HOUSING CODES

EFFECTIVE PROGRAMS TO IMPROVE HOUSING CONDITIONS AND ASSURE SOUND CONSTRUCTION OF RESIDENTIAL AND NONRESIDENTIAL STRUCTURES REQUIRE ADOPTION AND ENFORCEMENT OF COMPREHENSIVE BUILDING AND HOUSING CODES. WHILE CODE ESTABLISHMENT AND ADMINISTRATION HAS TRADITIONALLY BEEN A FUNCTION OF LOCAL GOVERNMENT, PARTICULARLY IN LARGER COMMUNITIES, THE ROLE OF CODE ADMINISTRATION IS NOW FREQUENTLY BEING ASSUMED BY STATE GOVERNMENT. RECENT PREPARATION BY THE INDIANA ADMINISTRATIVE BUILDING COUNCIL OF A STATEWIDE BUILDING CODE AND MOBILE HOME CONSTRUCTION CODE HAS RELIEVED LOCAL GOVERNMENTAL UNITS OF MUCH OF THE TASK OF BUILDING CODE ADMINISTRATION. THE STATE BUILDING CODE ALSO NOW REQUIRES COUNTY OR MUNICIPAL ENFORCEMENT OF STANDARDS FOR ONE AND TWO-FAMILY RESIDENTIAL STRUCTURES. FRANKFORT - CLINTON COUNTY OFFICIALS WILL HAVE TO CONSIDER PROVIDING THIS MANDATORY ENFORCEMENT SERVICE.

-
1. DUE TO ETHNIC COMPOSITION OF THE COUNTY COMMUNITY, NO RACIAL MINORITY HOUSING PROBLEM EXISTS.

A HOUSING CODE DIFFERS FROM A BUILDING CODE IN THAT IT REQUIRES THAT ALL RESIDENCES BE BUILT AND MAINTAINED IN A SAFE AND SOUND MANNER SO AS TO ASSURE THE HEALTH AND SAFETY OF THE COMMUNITY. A HOUSING CODE NOT ONLY ASSURES PROPER QUALITY OF FUTURE RESIDENCES BUT CAN BE USED TO ENSURE UPGRADING OF EXISTING HOUSING UNITS. THE FOLLOWING HOUSING CODE IS RECOMMENDED:

UNIFORM BUILDING CODE, VOLUME III (HOUSING)
PUBLISHED BY THE BUILDING OFFICIALS CONFERENCE OF
AMERICA
1313 E. 60TH STREET
CHICAGO, ILLINOIS

EACH COMMUNITY AND THE COUNTY, AS DESIRED, MAY ADOPT THE HOUSING CODE BY REFERENCE. ADMINISTRATIVE SERVICES CAN BE PROVIDED BY THE AREA PLAN COMMISSION IF AND WHEN STAFF IS ESTABLISHED. EFFECTIVE ENFORCEMENT OF THE HOUSING CODE CAN ONLY RESULT WHEN ADEQUATE STANDARD HOUSING IS MADE AVAILABLE FOR PERSONS DISPLACED BY DEMOLITION OF SUBSTANDARD UNITS. CODE ENFORCEMENT SHOULD BE BUT ONE PART OF A BROAD BASED PROGRAM TO IMPROVE GENERAL HOUSING CONDITIONS IN THE ENTIRE COUNTY.

EFFECTIVE ADMINISTRATION OF ZONING, SUBDIVISION REGULATIONS AND BUILDING AND HOUSING CODES REQUIRES THE SUPPORT OF THE ENTIRE COUNTY. PARTICULAR ATTENTION MUST BE PAID TO THE NEEDS OF VARIOUS GROUPS INCLUDING LAND DEVELOPERS, MEMBERS OF THE BUILDING TRADES, AND REALTORS. ENDORSEMENT OF PLAN IMPLEMENTATION REGULATIONS BY PERSONS WHO WORK WITH CODES ON A DAY-TO-DAY BASIS IS A POSITIVE STEP TOWARD COMMUNITY-WIDE ACCEPTANCE AND EFFECTIVE ENFORCEMENT.

SPECIFIC OBJECTIVES FOR ACTION PROGRAMS ARE RECOMMENDED IN TABLE 10. THESE OBJECTIVES SHOULD BE CONSISTENT WITH THE GENERAL GOALS OF THE AREA PLAN COMMISSION, AND PLANS OF THE RECOMMENDED COMMITTEE SHOULD BE CAREFULLY COORDINATED WITH ACTIVITIES OF OTHER COUNTY AND MUNICIPAL AGENCIES.

TABLE 10

RECOMMENDED HOUSING OBJECTIVES
CLINTON COUNTY, INDIANA
1974-1977

	1974-75	1975-76	1976-77
<u>PROTECT EXISTING HOUSING AND NEIGHBORHOODS</u>			
ESTABLISH ZONING THROUGHOUT COUNTY	X	X	
EXAMINE EFFECT OF ESTABLISHMENT OF MINIMUM HOUSING CODE	X		
CONTINUE PROGRAMS TO EXTEND PUBLIC SEWER AND WATER SYSTEMS	X	X	
INITIATE PROGRAMS TO IMPROVE STREETS AND STORM DRAINAGE SYSTEMS	X	X	
<u>ASSURE HIGH QUALITY OF FUTURE HOUSING AND NEIGHBORHOODS</u>			
ESTABLISH SUBDIVISION STANDARDS THROUGHOUT THE COUNTY	X		
EXAMINE EFFECT OF BUILDING CODE ADOPTION	X		
<u>IMPROVE HOUSING OPPORTUNITY FOR DIS- ADVANTAGED PERSONS</u>			
ANALYZE NEED FOR ADDITIONAL HOUSING PROGRAMS FOR ELDERLY		X	
PROVIDE ADDITIONAL LOW COST HOUSING FOR THE ELDERLY, IF NEEDED			X
ANALYZE NEED FOR ADDITIONAL HOUSING PROGRAMS FOR LOW AND MIDDLE INCOME FAMILIES		X	
PROVIDE ADDITIONAL LOW COST HOUSING FOR LOW AND MIDDLE INCOME FAMILIES, IF NEEDED			X

SOURCE: HUFF-NEIDIGH & ASSOCIATES

NATURAL RESOURCES

NATURAL RESOURCES

THIS CHAPTER OF THE REPORT DESCRIBES THE NATURAL FEATURES AND RESOURCES OF THE CLINTON COUNTY COMMUNITY THAT HAVE HAD AND WILL CONTINUE TO HAVE AN INFLUENCE ON THE LOCATION AND KIND OF DEVELOPMENT: TOPOGRAPHY, DRAINAGE, SOILS, AND GROUND WATER SUPPLY, AND THE LESS DIRECT INFLUENCES OF GEOLOGICAL CONSIDERATIONS.

IT IS, OF COURSE, BEYOND THE SCOPE OF THIS REPORT TO EXHAUST THE AVAILABLE INFORMATION ON EACH RESOURCE. THE PURPOSE IS TO ESTABLISH POTENTIALS AND LIMITATIONS FOR DEVELOPMENT. PLANS FOR HOUSING, FOR UTILITY EXTENSIONS, COMMUNITY FACILITIES, FOR THOROUGHFARES AND, IN GENERAL, FOR THE FUTURE USE OF LAND WITHIN THE COUNTY MAY BE DIRECTLY OR INDIRECTLY RELATED TO THE INFORMATION OF THIS CHAPTER.

CERTAIN KEY CONSIDERATIONS MAY BE ANSWERED FROM THESE NATURAL FEATURES AND RESOURCES:

- 0 WHAT AREAS OF THE COUNTY HAVE INADEQUATE SURFACE DRAINAGE THAT LIES IN THE PATH OF URBAN DEVELOPMENT?
- 0 WHAT LAND IS SUBJECT TO FLOODING?
- 0 WHERE ARE ADEQUATE (FOR THE INTENDED PURPOSE) SUPPLIES OF GROUND WATER AVAILABLE? SAND AND GRAVEL? SOIL AND WATER CONSERVATION AREAS?
- 0 ARE THERE MINERAL DEPOSITS OF POTENTIAL COMMERCIAL VALUE?
- 0 WHERE ARE THE PRIME AGRICULTURAL LANDS? IN WHAT AREAS ARE SEPTIC SYSTEMS LIKELY TO HAVE PROBLEMS?

ANSWERS TO MOST OF THESE AND SIMILAR QUESTIONS ARE NEEDED BEFORE SOUND PLANNING RECOMMENDATIONS CAN BE MADE.

IT SHOULD BE THOROUGHLY UNDERSTOOD THAT IT IS NOT INTENDED THAT THIS CHAPTER WILL ELEMINATE THE NEED FOR ON-SITE SAMPLING AND TESTING OF SOILS FOR DESIGN AND CONSTRUCTION OF SPECIFIC PUBLIC WORKS AND USES AND THE NEED OF THE PLANNING COMMISSION TO KNOW.

PHYSIOGRAPHY

THE GENERAL PHYSIOGRAPHY (PHYSICAL GEOGRAPHY) OF CLINTON COUNTY IS IN THE PHYSIOGRAPHIC REGION KNOWN AS THE TIPTON TILL PLAIN, A

NEARLY FLAT TO GENTLY ROLLING PLAIN OF GLACIAL DEPOSITION OF VARIABLE THICKNESS THAT HAS MODIFIED BY POST GLACIAL STREAM EROSION. THE MOST RECENT WISCONSIN ICE SHEET COMPLETELY COVERED THE COUNTY AND THE TOPOGRAPHY, THEREFORE, SHOWS THE EFFECT OF BEDROCK CONTROL.

THE STATE HAS BEEN DIVIDED INTO THREE BROAD PHYSIOGRAPHIC ZONES. THE CENTRAL ZONE IS A PLAIN OF LOW RELIEF, UNDERLAIN LARGELY BY THICK GLACIAL TILL AND MODIFIED ONLY SLIGHTLY BY POST GLACIAL STREAM EROSION. THIS IS THE TIPTON TILL PLAIN AND CLINTON COUNTY LIES WITHIN ITS 12,000 SQUARE MILES. THE TOPOGRAPHY OF THE COUNTY, LYING WITH THE CENTRAL OR MIDDLE PART OF THE TILL PLAIN, REFLECTS THE INFLUENCE OF BEDROCK STRUCTURE, STRATIGRAPHY, AND LITHOLOGY.

GEOLOGICAL FEATURES

THE BEDROCK UNITS OF CLINTON COUNTY ARE COMPOSED OF CONSOLIDATED ROCKS OF SILURIAN AND ORDOVICIAN AGE (SEE FIGURE 1). THE FOLLOWING DESCRIBES THE TWO BEDROCK UNITS AND THEIR APPLICABILITY TO CLINTON COUNTY:

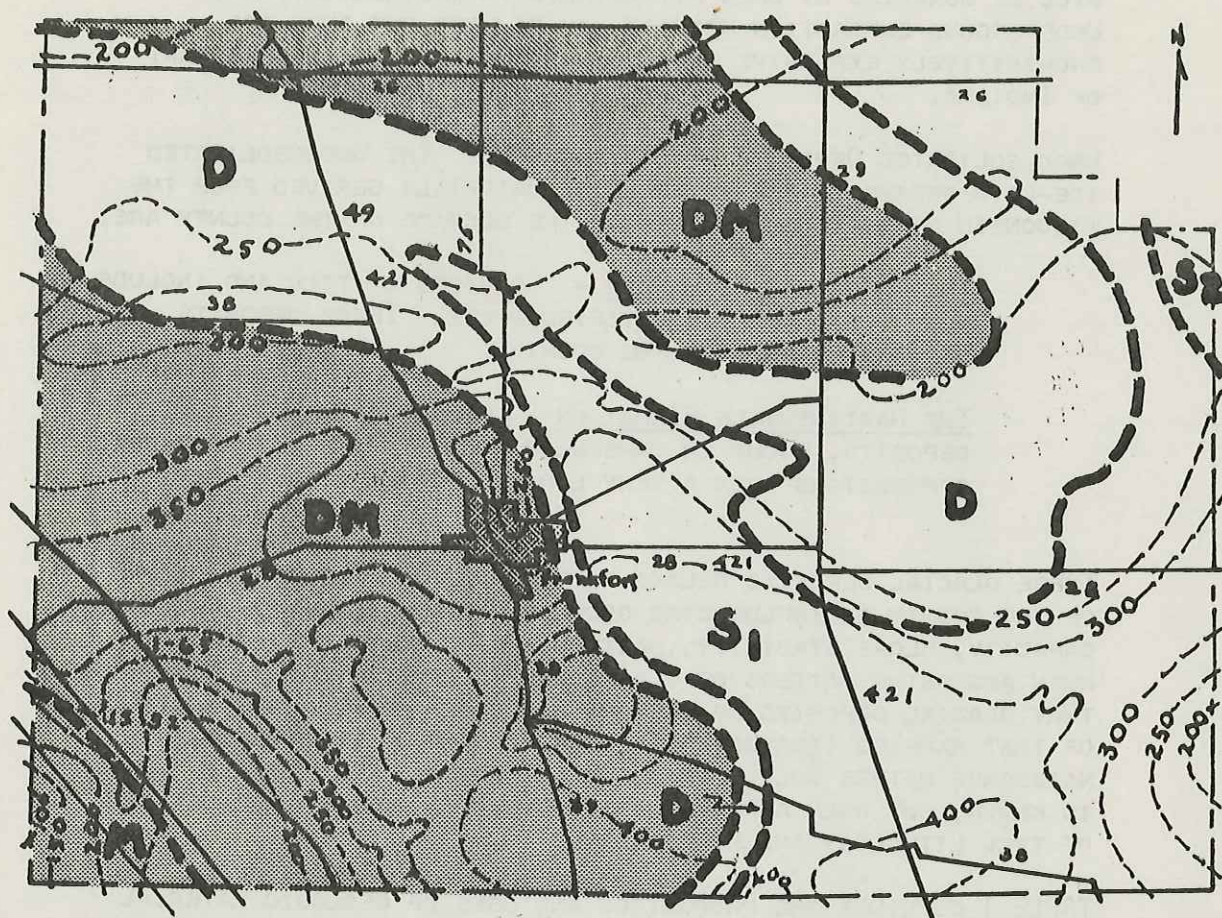
SILURIAN AGE UNIT - COMPOSED OF SHALE, DOLOMITE, AND LIMESTONE. STRENGTH OF UNWEATHERED ROCK IS GOOD. DOLOMITE AND LIMESTONE ARE EXTENSIVELY QUARRIED (ELSEWHERE) AND YIELD CRUSHED STONE OF GOOD QUALITY, GENERALLY ADEQUATE FOR DOMESTIC AND INDUSTRIAL USE. UNIT IS A MAJOR AQUIFER IN MANY AREAS WHERE IT DIRECTLY UNDERLIES GLACIAL DRIFT. IN MOST PLACES, INCLUDING CLINTON COUNTY, THE UNIT IS COVERED BY UNCONSOLIDATED DEPOSITS AND HAS LITTLE EFFECT ON SOIL AND LAND USE.

ORDOVICIAN AGE UNIT - COMPOSED OF CALCAREOUS SHALE AND LIMESTONE. STRENGTH OF UNWEATHERED SHALE IS FAIR. PROPER DRAINAGE OF CUT WALLS (HIGHWAYS FOR EXAMPLE) IS ESSENTIAL TO REDUCE SLIDE HAZZARD. LIMESTONE DOES NOT MEET MARKET REQUIREMENTS. SHALE IS TOO CALCAREOUS FOR CLAY PRODUCTS. LIMESTONE IN UPPER PARTS OF UNIT MAY YIELD SMALL AND UNCERTAIN WATER QUANTITIES. SHALE DOES NOT YIELD WATER. IN MOST PLACES UNIT IS COVERED BY UNCONSOLIDATED DEPOSITS AND HAS LITTLE DIRECT EFFECT ON SOIL AND LAND USE.

BEDROCK -

CLINTON COUNTY BEDROCK FORMATION (FIGURE 1) OF LIMESTONE AND DOLOMITE ARE DEEPLY BURIED BY GLACIAL MATERIAL. THEY ARE CLOSEST TO THE SURFACE IN THE EASTERN PART OF THE COUNTY, BUT BECAUSE OF THE INCLINED NATURE OF THE ROCK UNITS, THE SAME FORMATION MAY BE TENS OR EVEN HUNDREDS OF FEET DEEPER IN THE SOUTHWEST. BEDROCK IS PRESENT AT SHALLOWER DEPTHS IN THE SOUTHWEST BUT THEIR BEDS OF SILTONE AND SHALE OVERLIE THE

Figure 1



BEDROCK GEOLOGY

CLINTON CO

M

DM

GLACIAL DEBRIS AND SHALE OF MISSISSIPPIAN (M_1) AND/OR DEVONIAN-MISSISSIPPIAN (DM) AGE COVERING LIMESTONE

D

S_2

S_1

ONLY GLACIAL DEBRIS OVER LIMESTONE OF DEVONIAN (D) AND/OR SILURIAN (S_2, S_1) AGE

--- 250 ---

CONTOUR LINE OF DEPTH (IN FEET) TO BEDROCK

SOURCE: WAYNE, W. J. 1956, INDIANA GEOL. SURVEY REPT. PROG, 7, 70 P.

WAYNE, W. J., JOHNSON, G. H., AND KELLER, S. J. 1966, INDIANA GEOL. SURVEY REGIONAL GEOL. MAP, SCALE 1:250,000.

LIMESTONE AND DOLOMITE.

IN CLINTON COUNTY IT IS UNLIKELY THAT LIMESTONE OR DOLOMITE WILL BE QUARRIED BY OPEN PIT METHODS IN THE NEAR FUTURE. UNDERGROUND EXTRACTION METHODS MAY BE USED BUT THEY ARE PROHIBITIVELY EXPENSIVE AND ARE NOT COMPETITIVE IN THIS PART OF INDIANA.

UNCONSOLIDATED DEPOSITS - (FIGURE 2) THE UNCONSOLIDATED ICE-LAID SEDIMENTS AND WATER-LAID MATERIALS DERIVED FROM THE WISCONSIN GLACIATION AND FORMING THE SURFACE OF THE COUNTY ARE:

THE TRAFALGAR FORMATION - CONSISTS OF TILL AND INCLUDE SOME ICE CONTACT STRATIFIED DRIFT. THESE DEPOSITS OCCUR OVER MOST OF THE COUNTY

THE MARTINSVILLE FORMATION - MUCK, PEAT AND MIRE DEPOSITS, OCCUR IN IRREGULAR POORLY DRAINED TOPOGRAPHIC DEPRESSIONS OVER A VERY LIMITED PART OF THE COUNTY

THESE GLACIAL DEPOSITS RELATE TO THE PAST AND FUTURE DEVELOPMENT OF THE COUNTY BY INFLUENCING GROUND WATER AVAILABILITY, BEARING CAPACITY, SLOPE STABILITY, WASTE DISPOSAL AREAS AND SIMILAR. WHEN ASSESSING MATTERS OF GLACIALOLOGY IT SHOULD BE UNDERSTOOD THAT GLACIAL DEPOSITS OF INDIANA HAVE BEEN MAPPED, BUT MOST OF THAT MAPPING (INCLUDING CLINTON COUNTY) IS OF A RECON-NAISSANCE NATURE ONLY. THE GENERAL COMPOSITION OF TILLS IS KNOWN, BUT ONLY A FEW STUDIES HAVE BEEN MADE ON THE DETAILS OF TILL LITHOLOGY AND MINERALOGY.

TABLE I OUTLINES THE PROPERTIES AND USES OF GEOLOGIC MATERIAL FOUND IN CLINTON COUNTY BY FORMATIONS, THE BASIC UNIT OF THE GEOLOGIC MAP.

GROUND WATER

GROUND WATER, AS DIFFERENTIATED FROM SURFACE WATER IS WATER THAT PERCOLATES OR FLOWS BENEATH THE SURFACE. AVAILABILITY OF GROUND WATER IS DEFINED AS THE AVERAGE MAXIMUM AMOUNT OF WATER THAT MAY NORMALLY BE OBTAINED FROM THE WATER-BEARING FORMATIONS UNDERLYING A GIVEN AREA FROM A WELL WHICH IS PROPERLY SIZED AND DEVELOPED.

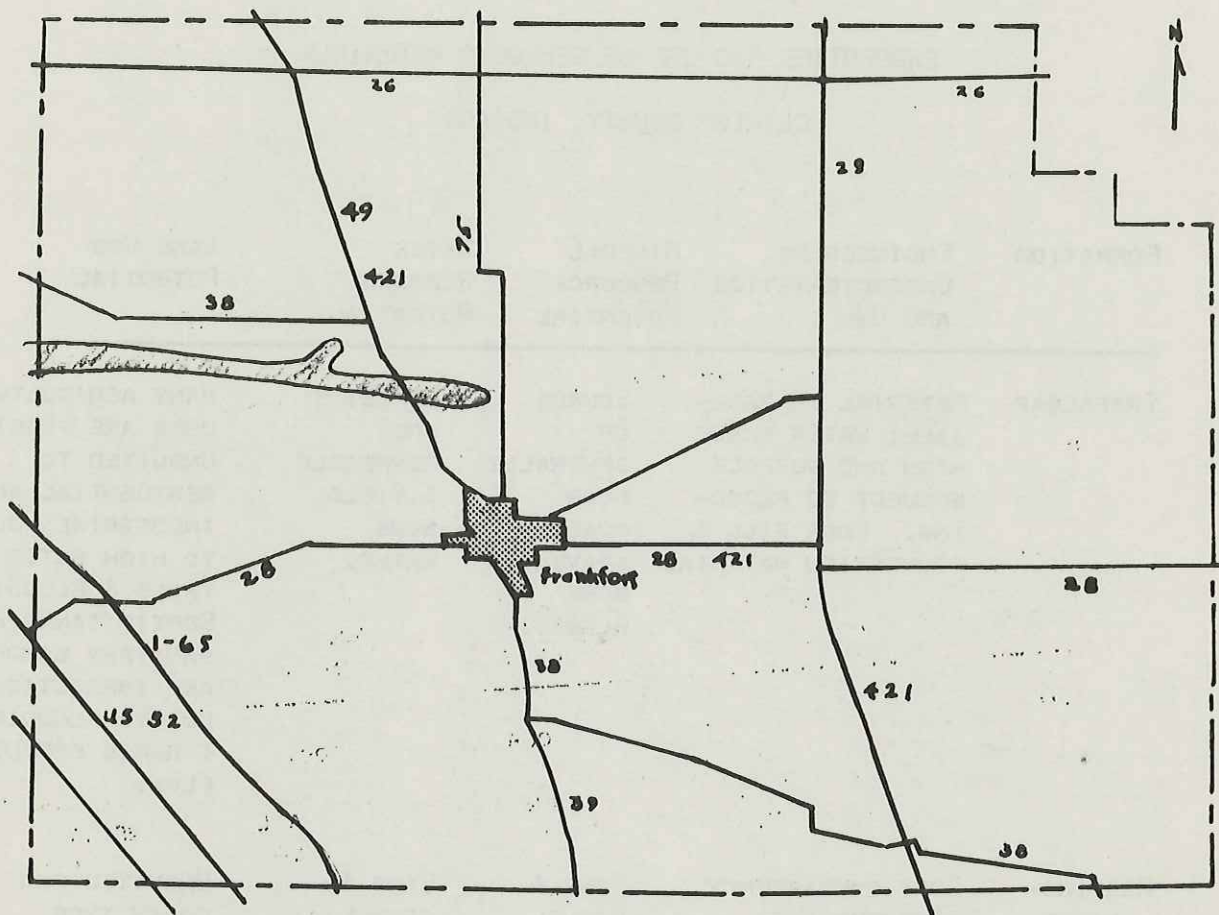
AS PRECIPITATION FALLS ON THE EARTH IT:

RUNS OFF THE LAND SURFACE TO RIVERS AND STREAMS,

IS EVAPORATED OR TRANSPIRED BY PLANTS,

SOAKS THROUGH THE GROUND AND BECOMES GROUND WATER.

Figure 2



CLINTON CO

GLACIAL GEOLOGY



TRAFALGAR FORMATION



MARTINSVILLE FORMATION

SOURCE: NATURAL RESOURCES OF INDIANA. IND. ACADEMY OF SCIENCE, 1966

TABLE 1

PROPERTIES AND USE OF GEOLOGIC MATERIALS
CLINTON COUNTY, INDIANA

FORMATION	ENGINEERING CHARACTERISTICS AND USE	MINERAL RESOURCE POTENTIAL	WATER RESOURCE POTENTIAL	LAND USE POTENTIAL
TRAFALGAR	MATERIAL IS VARIABLE; WATER TABLE HIGH AND SURFACE SUBJECT TO FLOODING. POOR FILL & FOUNDATION MATERIAL	SOURCE OF GENERALLY POOR QUALITY GRAVEL IN SOME PLACES.	DEPOSITS ARE PERMEABLE & YIELD SOME WATER.	MANY AGRICULTURAL USES ARE POSSIBLE. UNSUITED TO RESIDENTIAL AND INDUSTRIAL, DUE TO HIGH WATER TABLE & FLOODING. SEPTIC TANKS & SANITARY LANDFILLS ARE IMPRACTICAL DUE TO FLOODING & RAPID EFFLUENT FLOW.
MARTINSVILLE	SOFT CONSISTENCY COMPRESSIBLE. BEARING CAPACITY GENERALLY POOR. WATER TABLE HIGH.	SAND & GRAVEL, GENERALLY OF POOR QUALITY.	SAND & GRAVEL DEPOSITS OF LOWER PART IMPORTANT AQUIFERS	UNSUITED FOR URBAN TYPE DEVELOPMENT. WET SOIL CONDITIONS. SEPTIC TANKS & LANDFILLS IMPRACTICABLE.

SOURCE: HENRY H. GRAY, HEAD STRATIGRAPHER, GEOLOGY SECTION, INDIANA GEOLOGICAL SURVEY.

EIGHT TO TWENTY PERCENT OF INDIANAS' TOTAL ANNUAL PRECIPITATION OF 39.7 INCHES RUNS OFF THE SURFACE DIRECTLY INTO STREAMS AND EVENTUALLY REACHES THE ATLANTIC OCEAN, EXCEPT FOR THAT WHICH EVAPORATES ON ITS WAY. ABOUT TWO-THIRDS IS LOST BY EVAPORATION AND TRANSPIRATION, AND THE REMAINING EIGHT TO SIXTEEN PERCENT FINDS ITS WAY INTO THE GROUND. UPON ENTERING THE GROUND, THIS WATER PERCOLATES DOWNWARD THROUGH THE ZONE OF AERATION UNTIL IT REACHES THE WATER TABLE, OR THE ZONE OF SATURATION. HERE UNDER NORMAL CONDITIONS, THIS GROUND WATER MOVES Laterally THROUGH THE EARTH TO POINTS OF LOWER ELEVATION AND EVENTUALLY TO AREAS OF GROUND WATER DISCHARGE SUCH AS SPRINGS, RIVERS, AND LAKES, BECOMING SURFACE WATER AND ULTIMATELY EVAPORATES BACK INTO THE ATMOSPHERE.

FOUR WATER PROVINCES HAVE BEEN DELINEATED IN INDIANA:

PROVINCE 1 - YIELDS OF SEVERAL HUNDRED GALLONS PER MINUTE (GPM); HIGHS OF 2,000 GPM.

PROVINCE 2 - YIELDS TO 1,000 GPM IN SUBPROVINCE 2A; 2B YIELDS TO SEVERAL HUNDRED GPM; 2C OF 300 TO 500 GPM.

PROVINCE 3 - YIELDS OF 10 TO 100 GPM.

PROVINCE 4 - YIELDS TO LESS THAN 20 GPM IN 4A; 4B YIELDS AVERAGE 5 GPM, HIGHS OF 30; 4C YIELDS ARE LESS THAN 2 GPM.

WITH THE EXCEPTION OF A FEW ACRES IN THE EXTREME SOUTHWEST WHERE PROVINCE 3 OCCURS, CLINTON COUNTY LIES WITHIN PROVINCE 2B. MOST WELLS IN 2B ARE COMPLETED IN GLACIAL DRIFT, ALTHOUGH SOME PENETRATE BEDROCK. MANY WELLS OF SEVERAL HUNDRED GPM HAVE BEEN REPORTED. DEPTH OF WELLS RANGE FROM FIFTY TO 400 FEET, WITH AN AVERAGE DEPTH OF 150 FEET.

GROUND-WATER OCCURRENCE ¹

GROUND-WATER SOURCES IN CLINTON COUNTY GENERALLY RANGE FROM GOOD TO EXCELLENT IN THEIR CAPABILITY TO SUPPLY WATER. FEW AREAS ARE ENCOUNTERED WHERE PROBLEMS MAY ARISE IN OBTAINING SUFFICIENT WATER SUPPLIES, AND USUALLY 10 GPM OR MORE MAY BE OBTAINED IN MOST INSTANCES. MOST WELL SOURCES ARE FOUND IN THE CONFINED BEDS OF SAND AND GRAVEL OCCURRING BELOW THE CLAY HARDPAN (TILL) THAT IMMEDIATELY UNDERLIES MOST OF THE COUNTY, AND FROM THE DEEPER BEDROCK SOURCES (LIMESTONE) IN THE EAST-

¹ SOURCE - DIVISION OF WATER, DEPARTMENT OF NATURAL RESOURCES, STATE OF INDIANA. GROUND-WATER RESOURCES OF CLINTON COUNTY STEEN, W.J. AUGUST 1972.

This topographic map shows the Frankfort, Kentucky area. The Frankfort station is marked with a shaded cross-hatch symbol. The map features contour lines with elevations ranging from 650 to 900 feet. Major roads are shown as solid lines, and a dashed line indicates the Kentucky-Maryland border. A north arrow is located in the upper right corner, and a scale bar is in the lower right corner. The map is labeled with various elevations and road numbers, including 650, 675, 700, 725, 750, 775, 800, 825, 850, 875, 900, 925, 950, 975, 1000, 1025, 1050, 1075, 1100, 1125, 1150, 1175, 1200, 1225, 1250, 1275, 1300, 1325, 1350, 1375, 1400, 1425, 1450, 1475, 1500, 1525, 1550, 1575, 1600, 1625, 1650, 1675, 1700, 1725, 1750, 1775, 1800, 1825, 1850, 1875, 1900, 1925, 1950, 1975, 2000, 2025, 2050, 2075, 2100, 2125, 2150, 2175, 2200, 2225, 2250, 2275, 2300, 2325, 2350, 2375, 2400, 2425, 2450, 2475, 2500, 2525, 2550, 2575, 2600, 2625, 2650, 2675, 2700, 2725, 2750, 2775, 2800, 2825, 2850, 2875, 2900, 2925, 2950, 2975, 3000, 3025, 3050, 3075, 3100, 3125, 3150, 3175, 3200, 3225, 3250, 3275, 3300, 3325, 3350, 3375, 3400, 3425, 3450, 3475, 3500, 3525, 3550, 3575, 3600, 3625, 3650, 3675, 3700, 3725, 3750, 3775, 3800, 3825, 3850, 3875, 3900, 3925, 3950, 3975, 4000, 4025, 4050, 4075, 4100, 4125, 4150, 4175, 4200, 4225, 4250, 4275, 4300, 4325, 4350, 4375, 4400, 4425, 4450, 4475, 4500, 4525, 4550, 4575, 4600, 4625, 4650, 4675, 4700, 4725, 4750, 4775, 4800, 4825, 4850, 4875, 4900, 4925, 4950, 4975, 5000, 5025, 5050, 5075, 5100, 5125, 5150, 5175, 5200, 5225, 5250, 5275, 5300, 5325, 5350, 5375, 5400, 5425, 5450, 5475, 5500, 5525, 5550, 5575, 5600, 5625, 5650, 5675, 5700, 5725, 5750, 5775, 5800, 5825, 5850, 5875, 5900, 5925, 5950, 5975, 6000, 6025, 6050, 6075, 6100, 6125, 6150, 6175, 6200, 6225, 6250, 6275, 6300, 6325, 6350, 6375, 6400, 6425, 6450, 6475, 6500, 6525, 6550, 6575, 6600, 6625, 6650, 6675, 6700, 6725, 6750, 6775, 6800, 6825, 6850, 6875, 6900, 6925, 6950, 6975, 7000, 7025, 7050, 7075, 7100, 7125, 7150, 7175, 7200, 7225, 7250, 7275, 7300, 7325, 7350, 7375, 7400, 7425, 7450, 7475, 7500, 7525, 7550, 7575, 7600, 7625, 7650, 7675, 7700, 7725, 7750, 7775, 7800, 7825, 7850, 7875, 7900, 7925, 7950, 7975, 8000, 8025, 8050, 8075, 8100, 8125, 8150, 8175, 8200, 8225, 8250, 8275, 8300, 8325, 8350, 8375, 8400, 8425, 8450, 8475, 8500, 8525, 8550, 8575, 8600, 8625, 8650, 8675, 8700, 8725, 8750, 8775, 8800, 8825, 8850, 8875, 8900, 8925, 8950, 8975, 9000, 9025, 9050, 9075, 9100, 9125, 9150, 9175, 9200, 9225, 9250, 9275, 9300, 9325, 9350, 9375, 9400, 9425, 9450, 9475, 9500, 9525, 9550, 9575, 9600, 9625, 9650, 9675, 9700, 9725, 9750, 9775, 9800, 9825, 9850, 9875, 9900, 9925, 9950, 9975, 10000.

PIEZOMETRIC (WATER LEVEL) SURFACE

CENTRAL PARTS OF THE COUNTY. LOCALLY THICK UNITS OF SAND AND GRAVEL EXHIBIT THE CAPACITY TO SUPPLY AS MUCH AS 1500 GPM, BUT MOST LARGE DIAMETER WELLS CAN BE EXPECTED TO SUPPLY FROM 250 THROUGH 800 GPM EACH. THE MAP * DEFINING GROUND WATER AVAILABILITY OUTLINES THE EXPECTED MAXIMUM QUANTITIES OF WATER THAT MAY BE EXPECTED THROUGHOUT THE COUNTY.

WATER LEVEL (PEIZOMETRIC) MAP *

WATER LEVELS IN THE COUNTY ARE GENERALLY RATHER SHALLOW AND MOST WELLS HAVE STATIC WATER LEVELS OF 20-30 FEET BELOW THE GROUND SURFACE. SOME VARIATION EXISTS IN THIS REGARD NATURALLY, AND EXTREMES IN WATER LEVEL RANGE FROM AS DEEP AS 80 FEET TO AS MUCH AS 3 FEET ABOVE GROUND LEVEL (FLOWING WELL). LOCALIZED AREAS OF ARTESIAN FLOWING WELLS ARE NOTED IN THE NORTHERN AND WESTERN PORTIONS OF THE COUNTY AND ARE FOUND IN OR NEAR THE EXISTING STREAM VALLEYS. THESE CONDITIONS ARE NOT WIDELY PREVALENT IN THE COUNTY AND ARE CONFINED TO TOPOGRAPHICALLY LOW POSITIONS.

THE MAP (FIGURE 3) OF THE PEIZOMETRIC (WATER LEVEL) SURFACE IN CLINTON COUNTY DEFINES THE ELEVATION OF THE WATER LEVEL THROUGHOUT THE COUNTY AND DEPICTS THE GENERAL DIRECTION OF GROUND WATER FLOW THROUGH THIS AREA. AS MAY BE NOTED, THE GENERAL SLOPE IS FROM SOUTHEAST TO THE NORTHWEST, WITH LOCAL VARIATIONS ALONG THE SOUTH COUNTY LINE.

WETLANDS

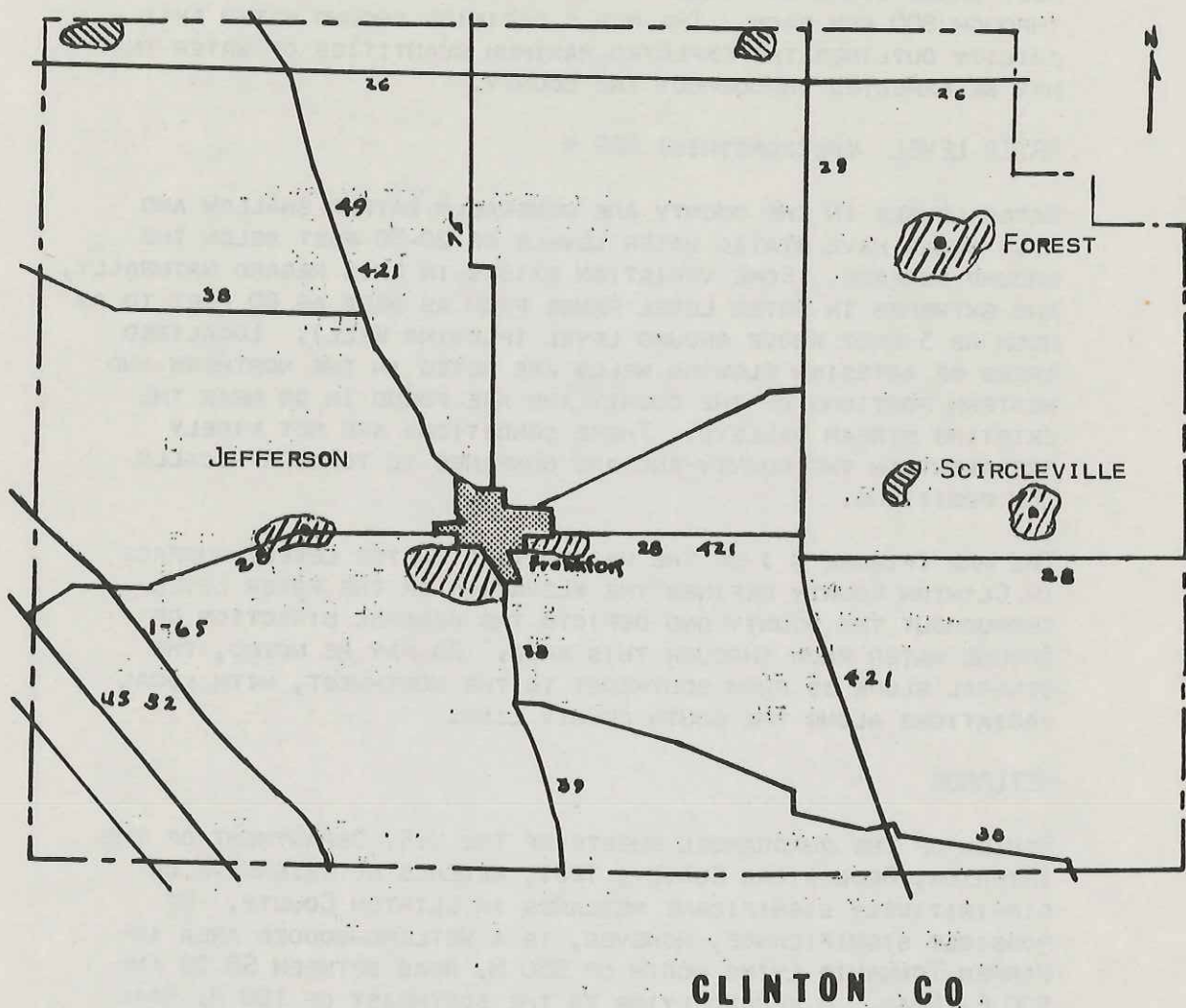
REVIEW OF THE QUADRANGEL SHEETS OF THE U.S. DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY, 1961, REVEALS NO EXTENSIVE OR DIFFINITIVELY SIGNIFICANT WETLANDS IN CLINTON COUNTY. OF POSSIBLE SIGNIFICANCE, HOWEVER, IS A WETLAND-WOODED AREA IN WARREN TOWNSHIP LYING NORTH OF 550 N. ROAD BETWEEN SR 29 AND 500 E. ROAD. A SECOND LYING TO THE SOUTHEAST OF 100 N. ROAD AND 730 E. ROAD, (MICHIGAN TOWNSHIP) TOGETHER WITH AN AREA TO THE SOUTHEAST OF 1000 W. ROAD AND 1000 N. ROAD (ROSS TOWNSHIP) HAVE POTENTIAL FOR CONSERVATION. THE LAND IS SO AGRICULTURALLY PRODUCTIVE THAT THERE ARE NO LONGER WETLANDS ALONG SWAMP CREEK! WETLANDS ARE SHOWN IN FIGURE 4 .

GROUND-WATER AVAILABILITY

THE COUNTY GENERALLY IS UNDERLAIN BY WATER-BEARING UNITS CONTAINING GOOD SUPPLIES OF WATER, AND WHILE NO MAJOR AREAS OF GROUND-WATER OCCURRENCE ARE KNOWN IN THE COUNTY, MANY EXCELLENT WELLS ARE NOTED. GOOD CONDITIONS ARE PRESENT IN THE NORTHWESTERN PORTION OF THE COUNTY AND IN PLACES NEAR FRANKFORT,


* LARGE SCALE MAP ON FILE IN THE OFFICES OF THE AREA PLAN COMMISSION.


Figure 4



CLINTON CO.

WETLANDS, AND SOILS WITH SEVERE LIMITATIONS FOR URBAN DEVELOPMENT *

 MAJOR LIMITATIONS AREAS (HIGH WATER TABLE AT 0 - 3 FEET FROM SURFACE) (POOR INTERNAL DRAINAGE) (POOR CIRCULATION)

 WETLANDS

• URBAN AREA

* DETAILED SOILS INFORMATION IN CLINTON COUNTY WILL NOT BE AVAILABLE FOR APPROXIMATELY 3 YEARS. ONLY SOIL CONSTRAINTS AFFECTING EXISTING URBAN AREAS ARE THEREFORE INDICATED.

WHILE TO THE SOUTHWEST AND NORTHEAST PORTIONS OF THE COUNTY SOME AREAS OF QUESTIONABLE YIELD ARE PRESENT AND LIMITED WELL SUPPLIES OR ADDITIONAL WELLS MAY HAVE TO BE DRILLED TO SECURE THE DESIRED VOLUMES OF WATER. DEEP ZONES (250' - 300') OF WATER-BEARING SAND AND GRAVEL ARE PRESENT EAST OF FRANKFORT AND THESE UNITS IN PLACES EXHIBIT MODERATE TO GOOD CAPABILITY TO SUPPLY WATER. SOME WELLS AT FRANKFORT TAP THIS ZONE. ELSEWHERE WATER-BEARING DEPOSITS OF SAND AND GRAVEL ARE FOUND AT VARIOUS DEPTHS AND MAY BE EXPECTED TO YIELD WATER AS DEFINED.

THE AQUIFER SYSTEMS MAP (FIGURE 5) DEFINES THE VOLUME OF WATER THAT MAY BE EXPECTED IN AN AREA FROM A PROPERLY CONSTRUCTED LARGE DIAMETER DRILLED WELL. THESE UNITS ARE GRADED IN THEIR COMPARATIVE ABILITY TO SUPPLY WATER AND ARE BASED ON PRESENTLY AVAILABLE DATA. MORE DETAILED STUDIES AND EXPLORATORY DRILLING ARE NEEDED TO FULLY EVALUATE THE GROUND-WATER RESOURCES OF THE COUNTY.

NOTES COMPILED IN THE EVALUATION OF THE COUNTY FOLLOW; REGARDING GROUND-WATER AVAILABILITY, WELL DEPTHS, LOCAL CONDITIONS, ETC. ARE PRESENTED BY TOWNSHIP AND RANGE.

TOWNSHIP 20 NORTH - RANGE 2 EAST

WELLS IN THIS AREA RECEIVE WATER FROM BOTH INTER-TILL SAND AND GRAVEL UNITS AND DEEPER BEDROCK LIMESTONE SOURCES. LOCALLY ERRATIC CONDITIONS CREATE SUBSTANTIAL VARIATIONS IN WELL DEPTHS AND YIELDS. WELLS RANGE IN DEPTH FROM 30 TO OVER 275 FEET.

TOWNSHIP 20 NORTH - RANGE 1 EAST

WELL DEPTHS ARE QUITE VARIABLE WITHIN THE AREA RANGING FROM 40 TO OVER 300 FEET. SAND AND GRAVEL AQUIFERS PREDOMINATE, BUT THESE UNITS ARE NOTICEABLY THINNER THAN IN ADJACENT AREAS AND SOME LOCALIZED PROBLEMS MAY BE ENCOUNTERED.

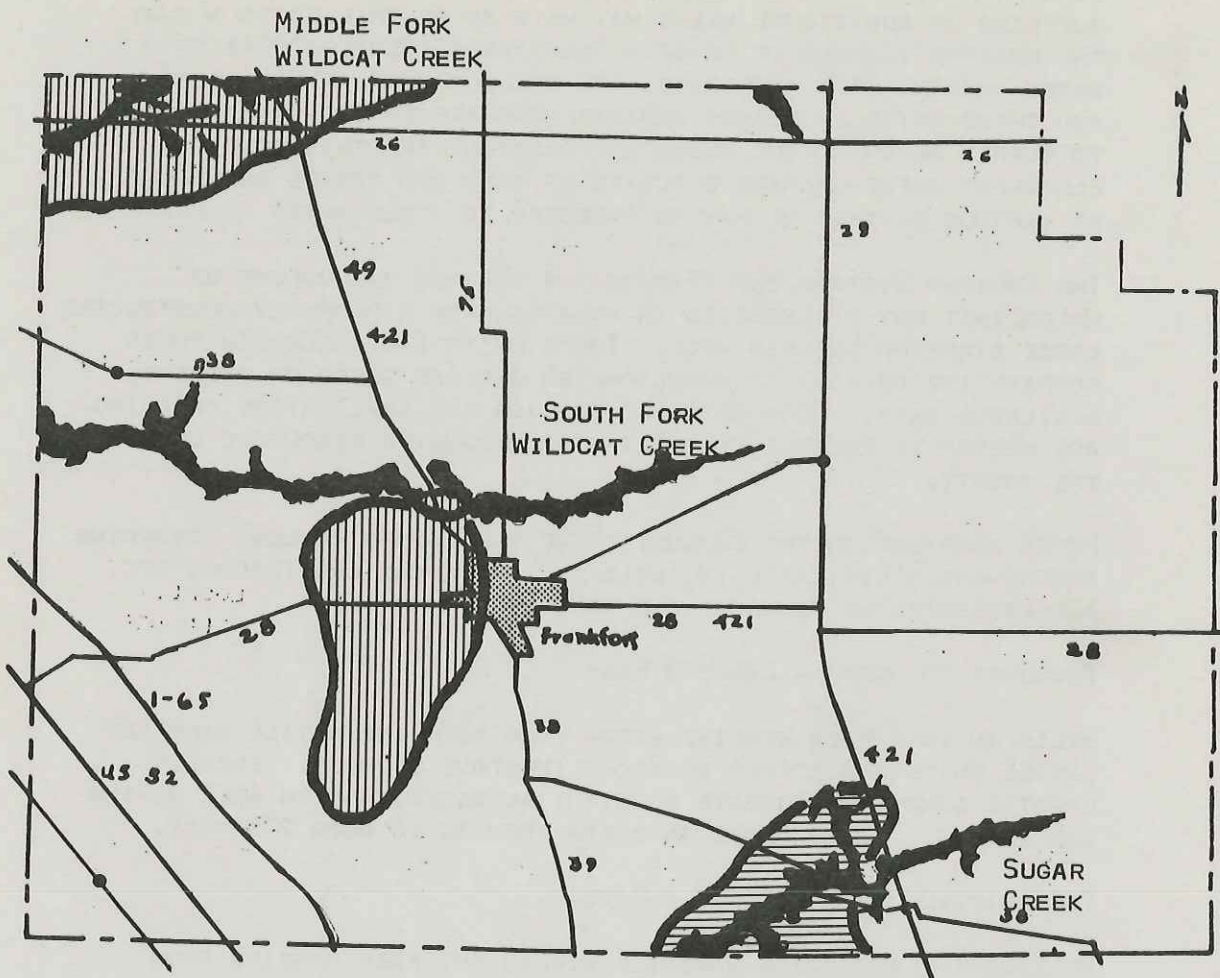
TOWNSHIP 20 NORTH - RANGE 1 WEST

WELLS ARE USUALLY OBTAINED AT DEPTHS RANGING FROM 40 - 150 FEET, ALTHOUGH SOME DEEPER WELLS ARE PRESENT THAT EXCEED 200 FEET. LOCALLY SOME THICKER DEPOSITS OF WATER-BEARING SAND AND GRAVEL ARE NOTED IN THE NORTHERN AND EASTERN PORTIONS OF THE AREA AND MAY EXHIBIT CAPABILITIES FOR HIGH YIELD WELLS.

TOWNSHIP 20 NORTH - RANGE 2 WEST

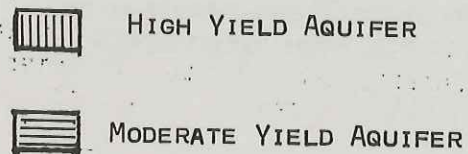
LOCALLY THICK UNITS OF WATER-BEARING SAND AND GRAVEL ARE PRESENT IN THE EASTERN PORTION OF THIS AREA WITH MOST WELLS RANGING IN DEPTH FROM 60 - 90 FEET. SOME LOCALLY DEEPER WELLS ARE NOTED, BUT MOST WELL SUPPLIES ARE OBTAINED AT DEPTHS LESS THAN 100 FEET.

Figure 5



CLINTON CO

AQUIFER SYSTEM AND FLOOD PLAIN MAP



SOURCE: DIVISION OF WATER, DEPT. OF NATURAL RESOURCES,
GROUND WATER RESOURCES OF CLINTON COUNTY., STEEN, W.J.
AUGUST 1972. FLOOD HAZZARD AREAS SOURCE, DNR - DIV.
OF WATER.

TOWNSHIP 21 NORTH - RANGE 2 EAST

WELL DEPTHS AND YIELDS ARE VARIABLE IN THIS AREA AND IN MANY RESPECTS ARE SIMILAR TO THE AREA SOUTH OF THIS SECTION. SOME LOCALLY THICK UNITS OF WATER-BEARING SAND AND GRAVEL ARE PRESENT AND CONTRAST WITH LOCALLY LIMITED WELLS AND AREAS OF DEEPER WELLS TAPPING LIMESTONE BEDROCK SOURCES.

TOWNSHIP 21 NORTH - RANGE 1 EAST

WELL DEPTHS IN THIS AREA IN GENERAL EXCEED THOSE OF THE REST OF THE COUNTY WITH MANY WELLS IN EXCESS OF 250 FEET DEEP. MAXIMUM WELL DEPTHS EXTEND TO NEARLY 400 FEET, WITH SUPPLIES BEING OBTAINED FROM SAND AND GRAVEL SOURCES. NO BEDROCK WELLS ARE NOTED IN THIS AREA.

TOWNSHIP 21 NORTH - RANGE 1 WEST

WELLS OF VARIOUS DEPTHS OCCUR IN THIS AREA, ALTHOUGH MOST ARE 100 FEET OR LESS IN DEPTH. SOME DEEP WELLS EXCEEDING 250 FEET RECEIVE WATER FROM A GENERALLY CONTINUOUS SAND AND GRAVEL ZONE THAT IS PRESENT ABOVE THE BEDROCK SURFACE. A LOCALLY THICK UNIT OF SAND AND GRAVEL IS PRESENT ALONG THE WESTERN BOUNDARY OF THE AREA.

TOWNSHIP 21 NORTH - RANGE 2

RELATIVELY THICK SAND AND GRAVEL ZONES ARE ENCOUNTERED NEAR THE EASTERN EDGE OF THIS AREA WITH MOST WELLS LESS THAN 100 FEET IN DEPTH. ELSEWHERE WELL DEPTHS ARE ERRATIC VARYING FROM 35 - 265 FEET.

TOWNSHIP 22 NORTH - RANGE 2 EAST

WELLS IN THIS AREA VARY FROM 50 TO OVER 300 FEET IN DEPTH. SOME LOCALLY THICK SAND AND GRAVEL AQUIFERS ARE PRESENT IN THE NORTHERN PORTION OF THIS AREA, BUT MOST WELLS ENCOUNTER RELATIVELY THIN LAYERS OF SAND AND GRAVEL. OCCASIONAL WELLS COMPLETED IN BEDROCK ARE NOTED.

TOWNSHIP 22 NORTH - RANGE 1 EAST

WELL DEPTHS ARE GENERALLY GREATER IN THE NORTHERN AND EASTERN PORTIONS OF THIS AREA, WITH MANY WELLS IN THE 150 - 290 FOOT DEPTH RANGE. ELSEWHERE WELLS TAPPING SHALLOWER SAND AND GRAVEL ZONES VARY IN DEPTH FROM 50 - 130 FEET. THE DEEPER LIMESTONE AQUIFERS ARE MORE IN USE IN THIS AREA AND MANY WELLS RECEIVE WATER FROM THIS SOURCE, PARTICULARLY IN THE NORTHERN AND CENTRAL AREAS.

TOWNSHIP 22 NORTH - RANGE 1 WEST

WELLS ARE SOMEWHAT SHALLOWER IN THIS AREA NORMALLY RANGING FROM 50 - 100 FEET, PARTICULARLY IN THE NORTHERN PORTIONS. ELSEWHERE WELL DEPTHS ARE VARIABLE RANGING UP TO 250 FEET. SOME THICKER DEPOSITS OF WATER-BEARING SAND AND GRAVEL ARE PRESENT IN THE SOUTHWEST CORNER AND FORM PART OF AN AQUIFER SYSTEM OCCURRING NEAR JEFFERSON.

TOWNSHIP 22 NORTH - RANGE 2 WEST

WELL DEPTHS ARE ERRATIC IN THIS AREA WITH THE DEEPER ZONES BEING USED ON A MORE REGULAR BASIS. SOME LOCALLY THICK ZONES OF WATER-BEARING SAND AND GRAVEL ARE PRESENT, BUT MOST WELLS ENCOUNTER ONLY A FEW FEET OF SAND AND GRAVEL. WELL DEPTHS VARY FROM 50 - 200 FEET, WITH THE AVERAGE DEPTH LESS THAN 150 FEET.

TOWNSHIP 23 NORTH - RANGE 2 EAST

WELLS IN THIS AREA USUALLY ENCOUNTER WATER-BEARING SAND AND GRAVEL AT DEPTHS FROM 25 - 250 FEET. BOTH THE LIMESTONE BEDROCK AND OVERLYING SAND AND GRAVEL AQUIFERS ARE UTILIZED AND WELL DEPTHS ARE VARIABLE WITHIN THE AREA. LOCALIZED UNITS OF THICKER SAND AND GRAVEL ARE NOTED IN THE NORTHERN PORTION OF THIS AREA.

TOWNSHIP 23 NORTH - RANGE 1 EAST

WELLS ARE GENERALLY DEEPER IN THIS AREA WITH MANY SUPPLIES BEING OBTAINED FROM THE DEEPER LIMESTONE AQUIFERS. "SULFUR WATER" IS ENCOUNTERED IN THE BEDROCK AT DEPTH AND WELLS SHOULD NOT PENETRATE THE BEDROCK TOO DEEPLY. SAND AND GRAVEL ZONES ARE GENERALLY THINNER AND LESS PRODUCTIVE THAN IN AREAS TO THE WEST. WELLS VARY IN DEPTH FROM 40 - 290 FEET.

TOWNSHIP 23 NORTH - RANGE 1 WEST

GENERALLY SHALLOWER AND MORE PRODUCTIVE ZONES OF WATER-BEARING SAND AND GRAVEL ARE NOTED IN THE AREA, AND FEW WELLS EXCEED 150' IN DEPTH. OCCASIONAL WELLS TAP THE DEEPER LIMESTONE BEDROCK AQUIFERS, BUT SAND AND GRAVEL AQUIFERS PREDOMINATE.

TOWNSHIP 23 NORTH - RANGE 2 WEST

WELLS VARY IN DEPTH IN THIS AREA FROM 40 - 250 FEET WITH MOST WELLS BEING 120 FEET OR LESS IN DEPTH. WATER BEARING SAND AND GRAVEL ZONES ARE FOUND AT VARIOUS LEVELS, WITH SOME THICKER ZONES BEING ENCOUNTERED IN THE 50 - 100 FOOT RANGE. BEDROCK AQUIFERS ARE NOT UTILIZED IN THIS AREA.

SURFACE WATER

CLINTON COUNTY HAS NO LAKES OF APPRECIABLE SIZE. SURFACE WATER IS, THEREFORE, CONFINED TO FARM PONDS, WETLANDS, AND THE STREAMS AND CREEKS TRAVERSING THE COUNTY.

CLINTON COUNTY HAS A FEW AREAS OF MARSH AND SWAMP, AREAS WHICH ARE EITHER WATERLOGGED OR COVERED WITH SHALLOW WATER DURING THE GROWING SEASON.

WETLANDS SERVE AS OVERFLOW RESERVOIRS ALONG STREAMS AND THEREBY REDUCE THE EXTENT OF FLOODING. WETLANDS ARE A DIMINISHING NATURAL RESOURCE IN THE MIDWEST. THEIR SOILS HAVE SEVERE LIMITATIONS FOR OTHER THAN OPEN SPACE--CONSERVATION PURPOSES. THE DOMINANT SOIL OF WETLANDS IS CARLISLE MUCK, A DEEP, VERY POORLY DRAINED, NEARLY LEVEL ORGANIC SOIL. THE SOIL IS COVERED BY WATER TOLERANT GRASSES THAT PROVIDE HABITAT FOR WETLAND WILD LIFE. WHERE USED FOR CROPS THIS SOIL REQUIRES INTENSIVE MANAGEMENT TO REDUCE WETNESS AND SOIL BLOWING.

ALTHOUGH IT IS USUALLY UNECONOMICAL TO DRAIN THE REMAINING WETLANDS, DRAINAGE IS STILL THE PRIMARY HAZZARD. THIS COULD EFFECT, AT LEAST IN THE LOCAL AREA ITSELF, AN EXISTING NATURAL BALANCE IN TERMS OF FLOODING, DRAINAGE, WATER TABLE LEVELS, AND WILDLIFE HABITAT.

MINERAL RESOURCES

CLINTON COUNTY IS NOT ENDOWED WITH MINERAL RESOURCES OF COMMERCIAL QUANTITIES, OR QUALITY. MINERAL RESOURCES ARE COMMONLY CLASSIFIED AS FUELS, METALS, AND INDUSTRIAL MINERALS (NON-METALS).

SAND AND GRAVEL - THERE ARE THREE SEPERATE AREAS OF THE COUNTY THAT HAVE PRODUCED SAND AND GRAVEL. ONE IS FOUND IN THE CENTRAL AREA OF THE COUNTY, ANOTHER IS LOCATED IN THE CENTRAL-WEST, AND THE THIRD TO THE NORTH AND NORTHWEST. THESE ARE PRODUCED FROM GLACIAL DRIFT.

OIL - MOST OF THE OIL IN INDIANA HAS COME FROM THE TRENTON FIELD IN EAST-CENTRAL INDIANA AND THE SOUTHWESTERN AREA. THE "BOUNDARIES" OF THE TRENTON TOUCH THE EXTREME SOUTHEAST SECTION OF THE COUNTY. ALTHOUGH PRODUCTION OF OIL HAS BEEN DECREASING SINCE 1951, TOTAL PRODUCTION IS INCREASING. SECONDARY RECOVERY REFERS TO OIL REMAINING AFTER THE PRIMARY 20 TO 25 PERCENT OF AVAILABLE CRUDE IS PRODUCED BY NORMAL PUMPING METHODS. DURING THE LIFE OF AN OILFIELD THE AMOUNTS OF SECONDARY PRODUCTION RANGES FROM ONE TO THREE TIMES AS MUCH AS PRIMARY PRODUCTION. SECONDARY RECOVERY IN INDIANA IS COMMONLY ACCOMPLISHED BY WATER-FLOODING --- INJECTING WATER UNDER PRESSURE INTO THE RESERVOIR.

NATURAL GAS - NATURAL GAS IN INDIANA IS IN MUCH THE SAME AREA AS OIL. MOST OF THE GAS, ALTHOUGH IN SIGNIFICANT AMOUNT FOR THE

ENTIRE STATE, IS TOO SMALL IN QUANTITY IN MANY INDIVIDUAL FIELDS TO BE RECOVERED ECONOMICALLY. THE TRENTON OIL FIELD WAS ONE OF THE LARGEST GAS-PRODUCERS IN THE WORLD, BUT LITTLE PRODUCTION NOW COMES FROM THIS AREA.

RENEWED ATTENTION MAY SOON BE FOCUSED ON THESE AREAS, INCLUDING THE PREVIOUSLY MENTIONED SECTION OF CLINTON COUNTY AS THE ENERGY SHORTAGE CONTINUES.

SLOPES AND SLOPE FAILURE

ONE OF THE MARGINAL CONDITIONS EFFECTING URBAN DEVELOPMENT ARE SLOPES IN EXCESS OF 10%. UNLESS UNBIASED EXPERT ASSURANCE THAT SLIPPAGE IS UNLIKELY OR THAT APPROPRIATE ENGINEERING STEPS MAY BE TAKEN TO PREVENT IT, SLOPE DEVELOPMENT IS NOT A RECOMMENDED PRACTICE. HILLSIDES THAT ARE LIKELY TO SLIP ARE THOSE WHERE A PERMEABLE (POROUS) SURFACE MORE THAN FOUR FEET DEEP LIES ATOP AN IMPERMEABLE MATERIAL, SUCH AS CLAY OR ROCK. WHEN WATER ACCUMULATES ON THE IMPERMEABLE LAYER, THE POROUS SOIL ABOVE TURNS SOFT OR SOUPY, THEN SLIDES.

THE MOVEMENT OF SOIL AND LOOSE ROCK IS A PROCESS THAT OCCURS ALMOST EVERYWHERE THAT SLOPES EXIST. RATES OF MOVEMENT DEPEND, OF COURSE, ON THE STEEPNESS OF SLOPE, MOISTURE CONTENT, SIZE OF THE LOOSE ROCK. RATE OF FAILURE LIES BETWEEN ROCK-FALLS AND IMPERCEPTABLE SOIL CREEP.

SOIL MOISTURE INCREASES DURING THE WINTER AND SPRING. WHERE THIS MOISTURE CAN DRAIN INTERNALLY, SUCH AS ON AREAS OF GRAVEL AND SAND, THE SURFACE MATERIALS ARE SATURATED ONLY BETWEEN SHORT WINTER THAWS WHILE AN IMPERMEABLE LAYER OF ICE IS STILL IN THE GROUND; ELSEWHERE, ON FINER-GRAINED MATERIALS, INTERNAL DRAINAGE IS SLOW AND FREQUENT DOWNSLOPE MOVEMENTS ARE LIKELY TO TAKE PLACE, PARTICULARLY ON SLOPES WHERE AN IMPERMEABLE ROCK OR CLAY LAYER IS PRESENT AT A SHALLOW DEPTH.

CLINTON COUNTY HAS SUCH STEEP SLOPE AREAS (PRIMARYLY ASSOCIATED WITH STREAM MEANDER) WHICH ARE LIKELY TO BE AFFECTED BY MASS WASTING AND SOIL CREEP. STEEPER SLOPES IN WEATHERED GLACIAL TILL ARE ALSO LIKELY TO BE AFFECTED BY SLOPE FAILURE, PARTICULARLY IF STREAM EROSION OR EXCAVATION FOR CONSTRUCTION OF A HIGHWAY OR A BUILDING OVERSTEEPENS THEM.

SOIL LIMITATIONS FOR URBAN DEVELOPMENT

FIGURE 4 SHOWS THE AREAS OF CLINTON COUNTY WHERE URBAN DEVELOPMENT (AS DERIVED FROM PAST AND PRESENT DIRECTIONS OF GROWTH) IS LIKELY TO OCCUR IN ASSOCIATION WITH SOILS WITH SEVERE LIMITATIONS FOR URBAN DEVELOPMENT USING SEPTIC TANK SYSTEMS OR SEWER SYSTEMS.

TABLE 2

SOIL LIMITATIONS

SOIL ASSOCIATIONS	RESIDENTIAL DEVELOPMENT WITH SEWER	DEVELOPMENT WITHOUT SEWER	INDUSTRY	ROADS & HIGHWAYS	RECREATION	AGRICULTURE
GENESEE - EEL - SHOALS	SEVERE	SEVERE	SEVERE	MODERATE	MODERATE	SLIGHT
FINCASTLE - RAGSDALE - BROOKSTON	MODERATE - SEVERE	SEVERE	MODERATE - SEVERE	MODERATE - SEVERE	MODERATE - SEVERE	SLIGHT
BROOKSTON	MODERATE - SEVERE	SEVERE	MODERATE - SEVERE	MODERATE - SEVERE	MODERATE - SEVERE	SLIGHT
MIAMI - RUSSELL	SLIGHT - MODERATE	MODERATE - SEVERE	SLIGHT - MODERATE	SLIGHT - MODERATE	SLIGHT - MODERATE	SLIGHT
RANB - RAGSDALE	MODERATE - SEVERE	SEVERE - SEVERE	MODERATE - SEVERE	MODERATE - SEVERE	MODERATE - SEVERE	SLIGHT - SLIGHT
MIAMI - CROSBY	MODERATE - SEVERE	SLIGHT - SEVERE	SLIGHT - MODERATE	MODERATE - SEVERE	SLIGHT - MODERATE	MODERATE - SLIGHT

THE MAJOR SOIL LIMITATION AREAS HAVE SOILS WITH A HIGH WATER TABLE (0 TO 3 FEET FROM THE SURFACE); POOR INTERNAL DRAINAGE; AND SLOW PERCOLATION. THESE LIMITATIONS ARE SEVERE ENOUGH TO MAKE THESE AREAS QUESTIONABLE FOR URBAN DEVELOPMENT.

TOPOGRAPHY

THE TOPOGRAPHY OF CLINTON COUNTY IS MORE UNIFORM THAN DIVERSE AND RANGES FROM VERY FLAT TO GENTLY SLOPING. THIS VARIETY OF LAND FORMS CREATES AN INTERESTING LANDSCAPE. THE TOPOGRAPHY ITSELF, HOWEVER, PRESENTS BUT FEW LIMITATIONS TO FUTURE URBAN DEVELOPMENT.

LOCAL RELIEF, WHICH IS IMPORTANT TO PHYSICAL PLANNING, IS NOT GREAT. IT GENERALLY RANGES LESS THAN 50 FEET. LOCAL RELIEF IS GREATEST WHERE GLACIAL DEPOSITS OF END MORAINES FORM THE SURFACE OF THE COUNTY (SEE GLACIAL GEOLOGY MAP).

ALTHOUGH A PROBLEM IN ONLY A VERY FEW PLACES, THE MAIN LIMITATION IMPOSED BY THE SURFACE FEATURES UPON FUTURE DEVELOPMENT IS SLOPE. THE SLOPE IS MEASURED IN TERMS OF PERCENT, WHICH EXPRESSES A RATIO BETWEEN THE VERTICAL CHANGE IN HEIGHT COMPARED WITH THE HORIZONTAL DISTANCE IN WHICH THE CHANGE OCCURS. STEEP SLOPES ARE MOST NUMEROUS OVER THE AREA EAST OF MULBERRY. THEY COMMONLY OCCUR ALONG STREAM VALLEYS. MOST OF THE STEEP SLOPE AREAS ARE NARROW AND OF VERY LIMITED EXTENT.

THE THREE SLOPE CATEGORIES APPROPRIATE FOR CLINTON COUNTY AND THEIR GENERAL LIMITATIONS ON DEVELOPMENT ARE AS FOLLOWS:

LEVEL LAND: 0 - 5 PERCENT SLOPE. MOST OF THE LAND AREA OF THE COUNTY FALLS IN THIS CATEGORY. EXCEPT FOR LIMITATIONS IMPOSED BY FLOODING OR UNSUITABLE SOIL OR SUBSOIL CONDITION, THIS LAND IS SUITABLE FOR ANY TYPE OF DEVELOPMENT. NEARLY ALL URBAN-TYPE DEVELOPMENT IN THE COUNTY HAS TAKEN PLACE ON THIS LEVEL LAND.

ROLLING LAND: 6 - 12 PERCENT SLOPE. THIS LAND IS GENERALLY NOT SUITABLE FOR EXTENSIVE INDUSTRIAL, COMMERCIAL, OR HIGH DENSITY RESIDENTIAL USES. SMALL COMMERCIAL USES AND LOWER DENSITY RESIDENTIAL DEVELOPMENT ARE POSSIBLE ON THE LESSER SLOPE AREAS OF THIS LAND PROVIDING CAREFUL PLANNING IS UNDERTAKEN TO FIT THESE USES TO THE TOPOGRAPHY.

STEEP LAND: OVER 12 PERCENT SLOPE. STEEP SLOPE AREAS ARE NOT SUITABLE FOR URBAN-TYPE DEVELOPMENT. SOME LOW DENSITY USES, SUCH AS SINGLE-FAMILY HOMES OR RESORT CABINS, MAY BE LOCATED ON THIS LAND PROVIDING SPECIAL PRECAUTIONS ARE TAKEN IN ADAPTING THE DESIGN OF THE STRUCTURE AND SITE TO TOPOGRAPHIC CONDITIONS. SOIL SLUMPING, EROSION, ACCESS PROBLEMS, AND DIFFICULTIES IN

PROVIDING UTILITIES AND SERVICES MAKE THESE EXCESSIVE SLOPE AREAS UNDERSIRABLE FOR DEVELOPMENT. THIS LAND DOES HAVE VALUE, HOWEVER, FOR AESTHETIC PURPOSES AND RECREATIONAL USE.

MOST OF THE TIMBER LANDS REMAINING IN THE COUNTY ARE ON SLOPE AREAS, IN MARSH OR SWAMP AREAS, OR IN SMALL WOOD LOTS SCATTERED OVER THE COUNTY.

SANITARY LANDFILL PLANNING ¹

SANITARY LANDFILLS BY LAW ARE NOW DESIGNED WITH CAREFUL ENGINEERING PLANNING. THUS A LANDFILL CAN BE DESIGNED FOR ANY SITUATION, ITS COST BEING SCALED IN ACCORD. VARIOUS BASIC NATURAL FACTORS AFFECT THE DESIGN, AND THOSE OF CONCERN IN CLINTON COUNTY ARE EXPLAINED BELOW.

SURFACE AND NEAR-SURFACE SAND AND GRAVEL ACCUMULATIONS IN UPLAND KAME DEPOSITS AND VALLEY-FRINGING TERRACES (FIGURE 6) * ARE POTENTIAL PROBLEM AREAS WITH RESPECT TO LANDFILL DESIGN. LEAKAGE OF LANDFILL LEACHATE FROM A SITE IN THESE MATERIALS WILL OCCUR TO SOME EXTENT AND MAY REQUIRE SPECIALIZED DESIGN. THE UPLAND KAME DEPOSITS ARE IN GROUNDWATER RECHARGE ZONES, BUT THE CONNECTION OF THE SURFACE DEPOSITS IN THESE KAMES WITH WATER-BEARING ZONES BELOW IS PROBLEMATICAL. WE CANNOT SAY WITHOUT ACTUAL SITE TESTING WHETHER SUCH DEPOSITS ARE OR ARE NOT CONTINUOUS WITH PRINCIPAL AQUIFERS AT DEPTH. THE VALLEY-FRINGING TERRACES ARE GENERALLY WITHIN AREAS OF REGIONAL GROUNDWATER DISCHARGE, SO THAT IF LANDFILLS ARE CONSTRUCTED IN THESE AREAS THE POSSIBILITY OF CONTAMINATION OF NEARBY WELLS IN THE SAME THICK GRAVEL AND CONTAMINATION OF THE SURFACE STREAMS AS WELL MUST BE CONSIDERED.

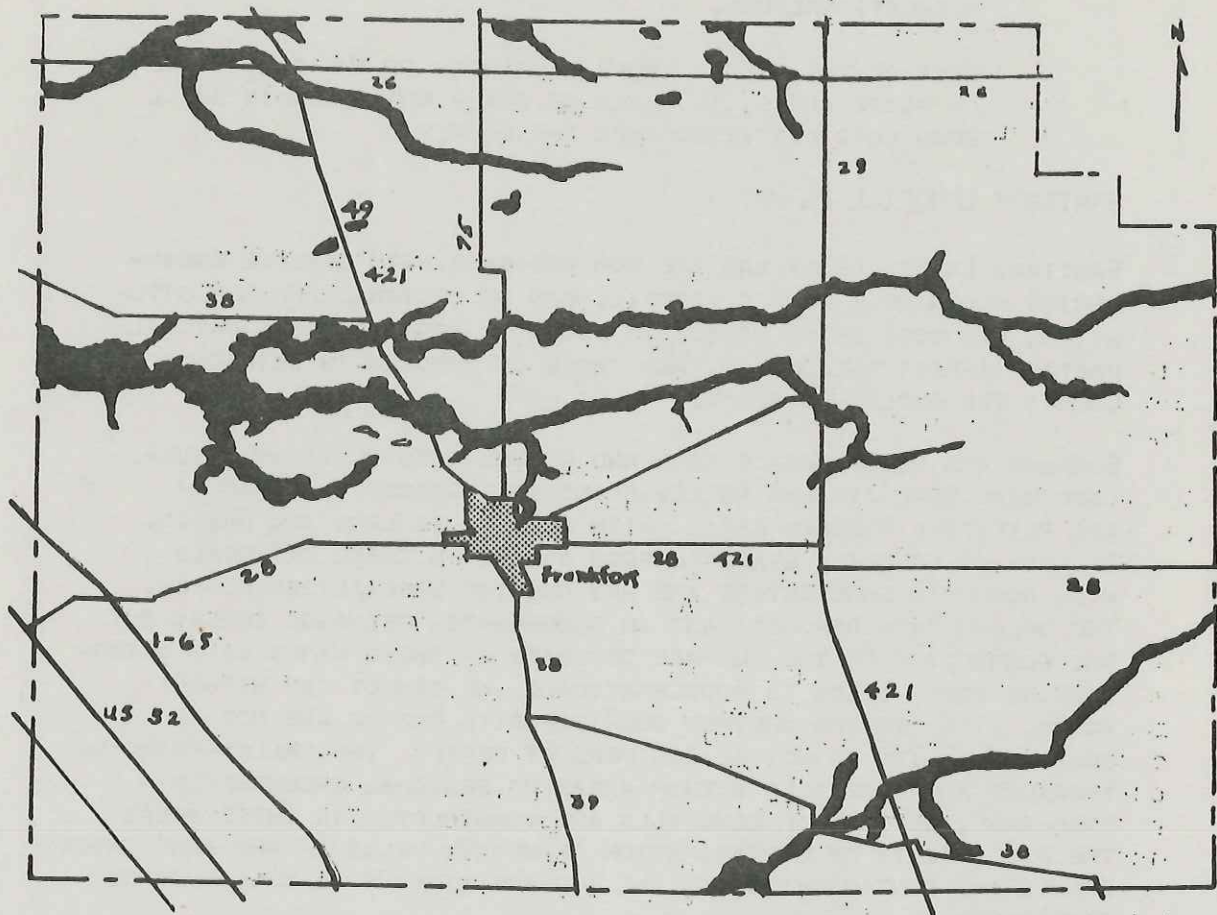
THE GREATEST PART OF THE COUNTY IS UNDERLAIN BY GLACIAL TILL COMPOSED OF LOAM TO SANDY LOAM MATERIAL THAT GENERALLY IS QUITE SUITABLE FOR LANDFILLING. LOCAL PROBLEMS OF SLOPE, DRAINAGE, AND WATER TABLE ARE BEST DETERMINED FOR A SITE ON THE SPOT AND WITH SOIL CONSERVATION SERVICE AND DIVISION OF WATER ADVICE. THE MAJOR GEOLOGIC CONCERN IS THE NATURE OR EXTENT OF BURIED WATER-BEARING ZONES OF SAND OR GRAVEL, BEDS THAT MIGHT BE EXCAVATED OR APPROACHED BY EXCAVATING DURING LANDFILLING.

IN ALMOST ALL REPORTED WELLS IN CLINTON COUNTY THE PRINCIPAL WATER-BEARING ZONES (AQUIFERS) ARE FAR BELOW THE SURFACE, OR BELOW THE 20 FOOT-DEEP BASE OF A TRENCH LANDFILL. HOWEVER, A VERY FEW WELLS IN VALLEY TERRACES AND ELSEWHERE PENETRATE THICK SAND OR GRAVEL THAT EXTENDS UPWARD TO THE SURFACE, AND MANY WELLS

¹ INDIANA GEOLOGICAL SURVEY, CONSIDERATION FOR SANITARY LANDFILL PLANNING IN CLINTON COUNTY, INDIANA. BLEUER, NED K. JULY 1974.

* ON FILE IN THE OFFICES OF THE AREA PLAN COMMISSION.

Figure 6



CLINTON CO



AREAS OF MOST QUESTIONABLE VALUE
AS SANITARY LANDFILL SITES*

* UPLAND SAND AND GRAVEL KAME DEPOSITS, ω GK; MAJOR LOWLYING, WET PEAT AND MUCK ACCUMULATIONS, ω MP; RIVER ALLUVIUM AND ADJACENT, SLIGHTLY HIGHER GRAVEL TERRACES, ω SH, ω GV. THE REMAINDER OF THE COUNTY IS GENERALLY MORE SUITABLE.

SOURCE: INDIANA GEOLOGICAL SURVEY,
DEPARTMENT OF NATURAL RESOURCES

PENETRATE ONE OR MORE SAND AND GRAVEL BEDS ABOVE THE USED AQUIFER THAT ARE SANDWICHED BETWEEN MUCH LESS PERMEABLE GLACIAL TILLS. FOR THE GREATER PART OF CLINTON COUNTY, LANDFILLING WILL NOT ENCOUNTER A SAND OR GRAVEL BED IN A TRENCH OPERATION; AND IN THE GREAT MAJORITY OF SITES WHERE SUCH A BED MIGHT BE ENCOUNTERED, THE UNIT PROBABLY WILL PROVE TO BE THIN AND DISCONTINUOUS. THE NEAR-SURFACE BUT BURIED UNITS ARE DISCONTINUOUS AND ARE NOT PREDICTABLE IN THEIR DISTRIBUTION. THE DEGREE OF CONCERN THAT THEY SHOULD OFFER TO POTENTIAL LANDFILLING OPERATIONS IS DIFFICULT TO SET.

IT IS TRUE THAT WELL DRILLERS FIND IT NECESSARY AT MOST PLACES TO DRILL FAR BELOW THESE UNITS TO REACH A GOOD WATER SUPPLY, BUT AS IS ALMOST ALWAYS TRUE WHERE SUCH A UNIT IS ENCOUNTERED DURING LANDFILLING, ONE CANNOT BE ABSOLUTELY SURE OF NONCONTAMINATION OF THE DEEP AQUIFER. THUS, IT IS GOOD PRACTICE TO BE AWARE OF SUCH A PROBLEM FROM THE BEGINNING AND TO AVOID EVEN SHALLOW SAND AND GRAVEL DEPOSITS IN LANDFILL SITING IF POSSIBLE. IN CLINTON COUNTY THIS IS MOST SIGNIFICANT IN THE NORTHERN TIER OF TOWNSHIPS, WHERE SHALLOW AQUIFERS ARE MORE COMMON.

THE TILL-COVERED UPLANDS CONTAIN THE PRIME SITES FOR LANDFILLING. ONCE POTENTIAL SITES ARE CHOSEN ON THE BASIS OF OTHER FACTORS, THE SUBSURFACE SITUATION SHOULD BE STUDIED, FIRST THROUGH THE FILES OF THE DIVISION OF WATER, THEN WITH PRELIMINARY ENGINEERING BORINGS.

THE OPTIONS OF AREA AND RAMP-METHOD (ADDITION TO TRENCH-METHOD) LANDFILLING PROBABLY SHOULD BE LEFT OPEN INITIALLY, SO THAT IF SIGNIFICANT SAND OR GRAVEL UNITS ARE ENCOUNTERED IN THE UPPER 30 TO 40 FEET OF DETAILED DRILLING, A SITE PLAN CAN BE MODIFIED AND THE SITE STILL USED. THIS IS PARTICULARLY TRUE OF THE NORTHERN TIER OF TOWNSHIPS. A RAMP-OR AREA-METHOD PLAN SHOULD, WITH LITTLE DOUBT, ELIMINATE THE GEOLOGIC PROBLEMS TO BE EXPECTED IN SITING A LANDFILL IN THE TILL PLAIN OF CLINTON COUNTY.

SANITARY LANDFILLS ARE REGULATED BY THE STATE BOARD OF HEALTH AND THEIR PERSONNEL ARE ABLE TO GIVE ADVICE AND DIRECTION TO LANDFILL-SITE PLANNING FROM ITS INCEPTION. HAVING THIS INFORMATION EARLY IS PARTICULARLY IMPORTANT IN LIGHT OF NEW AND MORE SPECIFIC BOARD OF HEALTH POLICIES AND PROCEDURES. IN ADDITION, INFORMATION ON WATER TABLE AND AQUIFER CHARACTERISTICS, AVAILABLE FROM THE DIVISION OF WATER, AND INFORMATION ON SURFACE DRAINAGE AND SLOPE CHARACTERISTICS, AVAILABLE FROM THE SOIL CONSERVATION SERVICE, ARE PARTICULARLY VALUABLE.

REVIEW OTHER NATURAL RESOURCES MAPS AVAILABLE

IN ADDITION TO THE TWO MAPS MENTIONED ABOVE (LANDFILL POTENTIAL MAP; GROUND WATER RESOURCES) THERE ARE SEVERAL ADDITIONAL MAPS SUPPLIED TO THE COMMISSION BY THE INVOLVED DIVISIONS OF THE

DEPARTMENT OF NATURAL RESOURCES. THEIR CONTENTS ARE BRIEFLY DESCRIBED BELOW.

(1) LIMESTONE AVAILABILITY MAP - FIGURE 1 SHOWS BEDROCK FORMATIONS OF LIMESTONE AND DOLOMITE BEING DEEPLY BURIED BY GLACIAL MATERIAL IN CLINTON COUNTY. THEY ARE CLOSEST TO THE SURFACE IN THE EASTERN PART OF THE COUNTY, BUT BECAUSE OF THE INCLINED NATURE OF THE ROCK UNITS, THE SAME FORMATION MAY BE TENS OR EVEN HUNDREDS OF FEET DEEPER TO THE SOUTHWEST. BEDROCK IS PRESENT AT SHALLOWER DEPTHS IN THE SOUTHWEST BUT THICK BEDS OF SILTSTONE AND SHALE OVERLIE THE LIMESTONE AND DOLOMITE.

IT IS UNLIKELY THAT LIMESTONE OR DOLOMITE WILL BE QUARRIED BY OPEN PIT METHODS IN THE FORSEEABLE FUTURE. UNDERGROUND EXTRACTION METHODS CAN POSSIBLY BE USED, BUT THEY ARE PROHIBITIVELY EXPENSIVE AND ARE NOT COMPETITIVE IN THIS PART OF INDIANA.

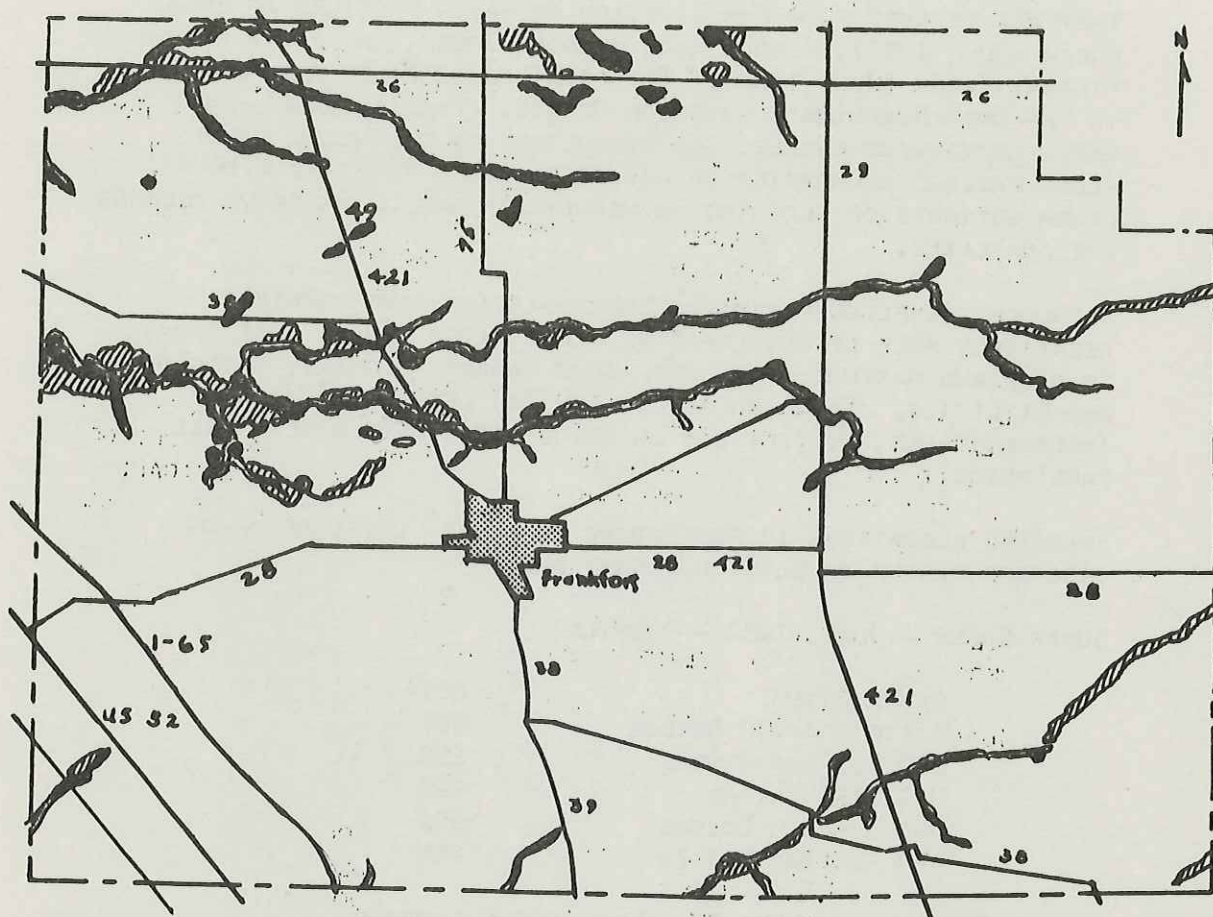
(2) SAND AND GRAVEL AVAILABILITY MAP - FIGURE 7 . ALL SAND AND GRAVEL DEPOSITS IN CLINTON COUNTY DERIVE, ULTIMATELY, FROM MATERIAL INCORPORATED IN THE MASSIVE SHEETS OF GLACIAL ICE WHICH ONCE COVERED THE AREA. THE ENERGY OF RUNNING WATER FROM MELTING ICE AND RAIN WINNOWED AWAY THE FINE-GRAINED SILT AND CLAY AND LEFT SAND AND GRAVEL PARTICLES IN BARS ALONG THE GLACIAL STREAMS. THESE SEDIMENTS, WASHED FROM THE LOAD OF THE GLACIER, ARE CALLED "OUTWASH", AND ARE THE MAJOR AGGREGATE RESOURCE OF CLINTON COUNTY. MANY PRESENT-DAY STREAMS FOLLOW THE "VALLEY-TRAIN" OF THE ANCIENT GLACIAL DRAINAGEWAYS.

MELTWATERS CASCADING OFF OF, OR ISSUING FROM BENEATH, GLACIAL ICE, DEPOSIT OUTWASH TOO. THE IRREGULAR MOUNDS OF SAND, GRAVEL AND TILL (A HETEROGENOUS MIXTURE OF SILT, SAND; CLAY AND BOULDERS DEPOSITED DIRECTLY FROM ICE) LEFT WHEN THE ICE MELTS, ARE CALLED "KAMES" OR "ESKERS".

POST-GLACIAL STREAMS ALSO WASH SAND AND GRAVEL FROM THE TILL AND CARRY THE FINER PORTIONS DOWNSTREAM WHILE DEPOSITING BARS OF COARSER SAND AND GRAVEL. THIS MATERIAL IS CALLED "ALLUVIUM", AND IS, IN GENERAL FINER-GRAINED AND OF LESS ECONOMIC IMPORTANCE THAN OUTWASH.





SIMILAR TYPES OF DEPOSITS WERE FORMED EACH TIME THE GLACIER ADVANCED AND RETREATED ACROSS CLINTON COUNTY AND SOMETIMES THESE WERE BURIED BY THICK DEPOSITS OF TILL. SUCH BURIED CHANNELS ARE EXCELLENT SOURCES OF GROUNDWATER. ALL POTENTIAL AGGREGATE SOURCES ARE ASSOCIATED WITH VALLEY-TRAINS AND KAMES OR WITH PRESENT-DAY STREAMS AT THE SURFACE, AS SHOWN BY THE DISTRIBUTION OF ABANDONED PITS ON THE MAP.

Figure 7



CLINTON CO

SAND AND GRAVEL AVAILABILITY MAP

-  SILT, SAND, AND GRAVEL (MOSTLY ALLUVIUM)
-  GRAVEL, SAND, AND SILT (VALLEY-TRAIN DEPOSITS)
-  GRAVEL, SAND, AND SOME SILT (KAMES AND ESKERS)
-  SILT AND CLAY-RICH MATERIALS (TILLS AND MUCK)

SOURCE: WAYNE, W.J., JOHNSON, G.H., AND KELLER, S.J., 1966 GEOLOGIC MAP OF THE 1° X 2° DANVILLE QUADRANGLE, INDIANA AND ILLINOIS

FLOOD PRONE AREAS

FLOOD PRONE AREAS OF CLINTON COUNTY ARE DEPICTED ON FIGURE 5. THEY ARE DERIVED FROM DNR DIVISION OF WATER PROFILES OF SUGAR CREEK (JUNE 1957), MIDDLE FORK WILDCAT CREEK, AND SOUTH FORK WILDCAT CREEK (JUNE 1958). THE DETAILED PROFILES ARE ON FILE IN THE AREA PLANNING COMMISSION OFFICE. PROFILES AND HIGH WATER MARKS HAVE ENABLED THE CONSULTANT TO DELINEATE THESE FLOOD HAZZARD BOUNDARIES OF RECORDED FLOODS TOGETHER WITH A ROUGH ESTIMATE OF FLOODING ON NEARBY STREAMS ON WHICH NO RECORDS ARE AVAILABLE.

ALTHOUGH THE FLOOD PLAINS OF THESE STREAMS HAVE REMAINED RELATIVELY FREE OF DEVELOPMENT, FLOOD WATER CAUSES MOST DAMAGE TO CROP AND PASTURE LAND, WITH SOME DAMAGE TO ROADS, BRIDGES, AND UTILITIES. FLOODING PLACES SEVERE, OFTEN ECONOMICALLY INSURMOUNTABLE, LIMITATIONS ON WHERE URBAN DEVELOPMENT WILL TAKE PLACE.

SELECTED ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL OF MAJOR RECORDED FLOODS IN CLINTON COUNTY ARE:

SUGAR CREEK - JUNE, 1957 - PROFILE

DAVID DITCH	861
STATE ROAD 38 BRIDGE	887
580 S. ROAD BRIDGE	890
U.S. 421 BRIDGE	893
850 E. ROAD BRIDGE	902
480 S. ROAD BRIDGE	908

MIDDLE FORK WILDCAT CREEK - JUNE 1958 - PROFILE

TIPPECANOE COUNTY LINE	640
STATE ROAD 26 BRIDGE	652
680 WEST ROAD	677
MONON RAILROAD BRIDGE	694
100 WEST ROAD BRIDGE	727
100 EAST ROAD BRIDGE	739
400 EAST ROAD BRIDGE	762
CARROLL COUNTY LINE	785

SOUTH FORK WILDCAT CREEK - JUNE 1958 - PROFILE

TIPPECANOE COUNTY LINE	701
950 W. ROAD BRIDGE	708
850 W. ROAD BRIDGE	720
MULBERRY-JEFFERSON RD. BRIDGE	728
N.Y.- CHICAGO, ST. L. RR "	743
400 W. ROAD BRIDGE	771
200 N. ROAD BRIDGE	794
STATE ROAD 75 BRIDGE	807
250 N. ROAD BRIDGE	830

PARTICULARLY SIGNIFICANT IS THE FACT THAT THESE STREAMS DO NOT EFFECT EXISTING URBAN DEVELOPMENT NOR, DUE TO THEIR DISTANCE, FROM SUCH DEVELOPMENT, MAY THEY BE EXPECTED TO DO SO IN THE FUTURE.

IN ADDITION TO FLOODING THERE IS, OF COURSE, THE USUAL ADDITIONAL SMALL WATERSHED PROBLEMS OF STREAMBANK EROSION, GULLY EROSION, SITUATION OF CHANNELS AND IMPAIRMENT OF CAPACITY DUE TO HEAVY TREE AND SHRUB GROWTH ADJACENT TO THE STREAM FLOW AND IN THE IMMEDIATELY ADJACENT BOTTOMLAND.

DRAINAGE AREAS

CLINTON COUNTY IS WITHIN THE MIDDLE WABASH DRAINAGE BASIN. AS PORTRAYED IN FIGURE 8 THERE ARE SEVEN DRAINAGE AREAS IN THE COUNTY. THREE ARE MAJOR: MIDDLE FORK WILDCAT CREEK, SOUTH FORK WILDCAT CREEK, AND SUGAR CREEK. THE LINES ON THE MAP ARE THOSE DIVIDING EACH COUNTY BASIN AND SUB-BASIN. THEY ARE REFERRED TO AS DRAINAGE DIVIDES, OR MORE COMMONLY, AS RIDGE LINES. SUCH RIDGE LINES AND THE BASINS BETWEEN THEM MAY INFLUENCE RURAL AND NON-RURAL PLANNING IN RELATION TO THE FOLLOWING:

- 0 ADEQUACY, DIRECTION, SPEED OF SURFACE DRAINAGE
- 0 THE INSTALLATION OR EXTENSION OF SEWER SYSTEMS
- 0 DEFINING (IN THE BROADEST SENSE) SEWERABLE AREAS.

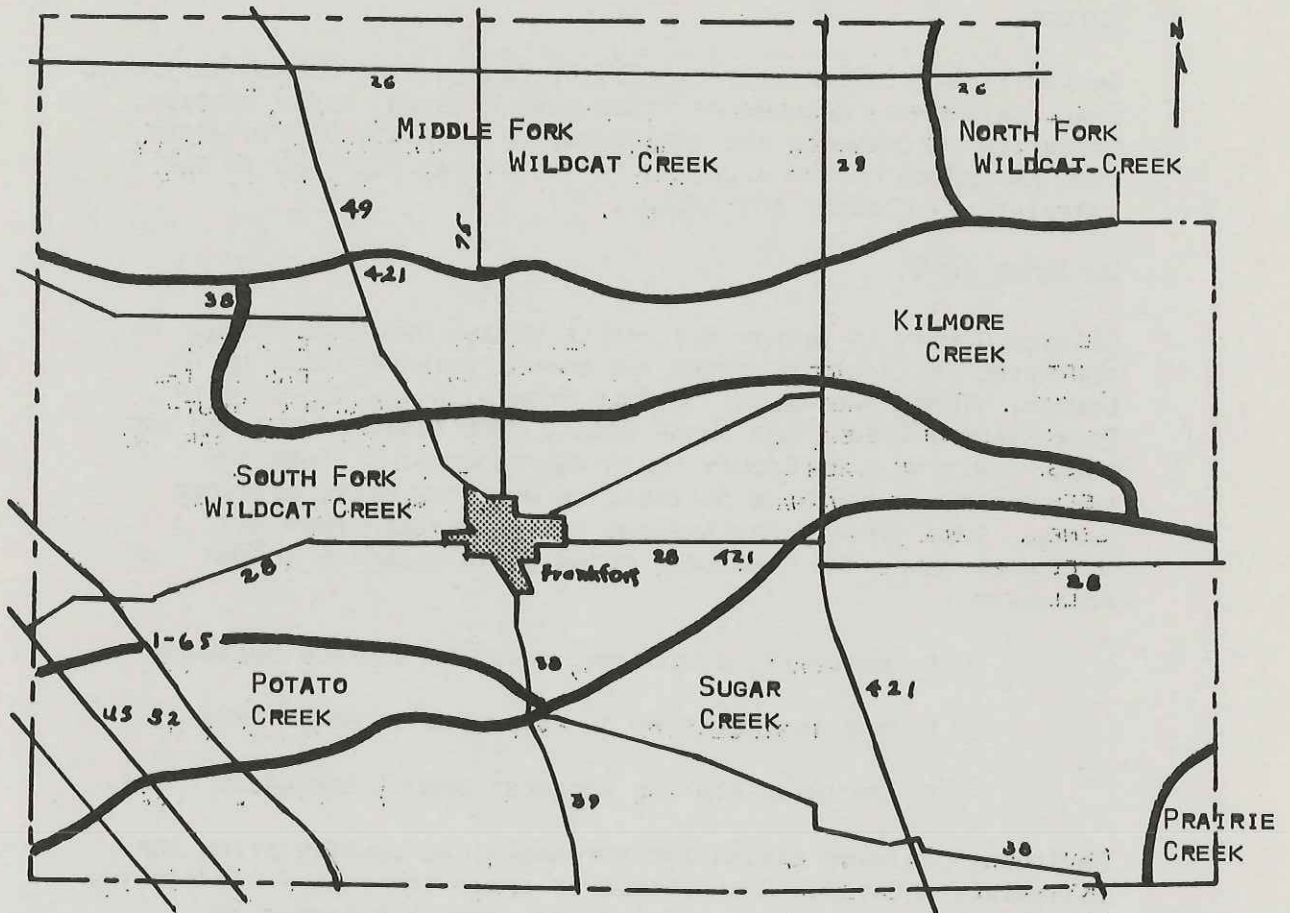
OBVIOUSLY DRAINAGE BASINS AND TOPOGRAPHICAL CONSIDERATION ARE INTIMATELY RELATED. A KNOWLEDGE OF BASIN TOPOGRAPHY MAY AID THE PLANNER AND THE SANITARY ENGINEER OR HIGHWAY ENGINEER IN LOCATIONAL TERMS.

OPPORTUNITIES AND CONSTRAINTS OF PHYSICAL FEATURES, CLINTON CO.

THE PRECEDING MAPS, TABLES, AND TEST HAVE ILLUSTRATED THE CONSTRAINTS AND OPPORTUNITIES OF THE MORE IMPORTANT PHYSICAL FEATURES OF THE COUNTY. MOST OF THE DIRECTION OF THE STUDY HAS APPROACHED THE AREA OF CONSTRAINTS: FLOOD PLAINS, HIGH WATER TABLE, POOR SOIL DRAINAGE (PONDING), GENERAL AREAS OF EXCESSIVE SLOPE, AND SIMILAR. THESE ENCOMPASS DIRECT RELATIONSHIPS TO FUTURE DEVELOPMENT AND THEREFORE, TO THE FUTURE LAND USE PLAN. AN ADDITIONAL CONSTRAINT TO URBAN DEVELOPMENT IS THE POLICY REQUIREMENT OF PRESERVING AGRICULTURE LAND FOR AGRICULTURE PURPOSES, ALTHOUGH, WITH FEW EXCEPTIONS, THE PRIME AND SECONDARY AGRICULTURE LAND IS ENTIRELY SUITABLE FOR URBAN DEVELOPMENT.

ADDITIONAL APPROACHES IN THE AREA OF GLACIAL AND BEDROCK GEOLOGY MAY SEEM ESOTERIC BUT THERE IS A RELATIONSHIP BETWEEN THEM AND EXISTING MAJOR LANDFORMS -- (MEANING MAJOR TOPOGRAPHIC FEATURES); ALTHOUGH A REMOTE ONE IN CLINTON COUNTY WHERE

Figure 8



CLINTON CO

MAP OF MAJOR DRAINAGE AREAS

GEOLOGICAL SURVEY MAP SHOWS ABOUT 80% OF THE EXTANT BEDROCK
"MORE THAN 200 FEET BELOW THE SURFACE".

WHILE IT IS MOST OFTEN TRUE THAT THE NATURAL PHYSICAL FEATURES
OF AN AREA HAVE A STRONG INFLUENCE ON WHERE DEVELOPMENT OCCURS,
IT SHOULD BE UNDERSTOOD THAT THE COUNTY'S MAJOR DEVELOPMENT -
FRANKFORT - WAS LOCATED NOT IN RELATION TO THESE FEATURES.
FRANKFORT IS LOCATED PRIMARILY BECAUSE MAINLINE RAILROADS
CONVERGED AT THIS POINT FOR THIS FRANKFORT AREA IS SURROUNDED
GENERALLY ON THE SOUTHWEST AND SOUTHEAST BY AREAS OF MAJOR
SOILS LIMITATIONS FOR URBAN DEVELOPMENT. THE UNINCORPORATED
URBAN PLACES OF JEFFERSON, FOREST, AND SCIRCLEVILLE ALL LOCATED
ENTIRELY WITHIN SOILS AREAS OF LIKE LIMITATIONS. THE USE OF
INDIVIDUAL SEWER SYSTEMS (SEPTIC TANK) IN THESE AREAS PRESENT
SERIOUS PUBLIC HEALTH CONSIDERATIONS.

NATURAL, SCENIC, AND HISTORIC AREAS OF CLINTON COUNTY ¹

TWELVE-MILE PRAIRIE -- IN ITS NATURAL STATE, THIS AREA WAS A
TRUE GRASSLAND PRAIRIE, ALMOST COMPLETELY SURROUNDED BY FOREST.
LOCATED SOUTH OF FRANKFORT, THE AREA IS COMPOSED OF SOME 30,000
ACRES, INCLUDING PARTS OF CENTER, JACKSON, KIRKLIN, PERRY, AND
WASHINGTON TOWNSHIPS. EARLY HISTORIES OF THE COUNTY, WHICH MAKE
FREQUENT REFERENCES TO THE AREA, ALSO COMMENT THAT THE AREA WAS
SUBJECT TO FIRES SET BY INDIANS OR SETTLERS, SOMETIMES PURPOSELY
AND SOMETIMES THROUGH CARELESSNESS. THESE FIRES WERE VERY
DIFFICULT TO CONTROL AND PROVIDED AN AWESOME SIGHT. THE AREA
TODAY IS PRIMARILY DEVELOPED AS CROPLAND, WITH SOME MINOR AREAS
OF TOWNS, RESIDENCES, AND INDUSTRIAL SITES.

THE TWELVE-MILE PRAIRIE IS RAUB-RAGSDALE SOIL ASSOCIATION (SEE
GENERAL SOIL MAP AND LEGEND), WHICH, WITH FINCASTLE-RAGSDALE -
BROOKSTON AND THE CROSBY-BROOKSTON ASSOCIATION, ARE THE PRIME
AGRICULTURAL LAND IN CLINTON COUNTY. SECONDARY AGRICULTURAL
SOILS ARE MIAMI - RUSSELL - FINCASTLE AND MIAMI-CROSBY. GENESEE-
SHOALS - EEL SOILS ARE OF NO MAJOR SIGNIFICANCE FOR AGRICULTURE
IN CLINTON COUNTY. THESE AREAS, OF COURSE, NEED CONTINUED
PROTECTION THROUGH CONSERVATION AND PLANNING.

HISTORIC SITE

"AMITY HALL" - OLD BICKLEY TAVERN - THIS PIONEER TAVERN,
LOCATED ON THE OLD MICHIGAN ROAD, WAS OPENED EARLY IN 1830
AND OPERATED BY JOSEPH BICKLEY. IT WAS NAMED "AMITY HALL"
OR FRIENDSHIP HOUSE TO SERVE AS A WELCOME TO VISITORS. ITS
MANY VISITORS INCLUDED THOSE INVOLVED WITH THE WABASH AND ERIE

1 SOURCE: AN APPRAISAL FOR POTENTIALS FOR OUTDOOR RECREATIONAL
DEVELOPMENTS, CLINTON COUNTY; FEBRUARY 1970.

CANAL WORK TO THE NORTH. THE TAVERN REMAINS AT ITS ORIGINAL LOCATION, ONE MILE NORTH OF KIRKLIN ON THE WEST SIDE OF U.S. HIGHWAY 421 AND INDIANA HIGHWAY 29, JUST NORTH OF THE HIGHWAY BRIDGE. THE OLD LOG BUILDING HAS DETERIORATED VERY RAPIDLY IN THE LAST FEW YEARS.

SCENIC DRIVES

SOUTHEAST OF MULBERRY -- DRIVING IN THIS AREA SHOULD INCLUDE THE FARMERS GRAVEL ROAD, WHICH PASSES CAMP GEORGE C. CULLOM. THIS SCENIC AREA INCLUDES WOODED HILLS WITH REDBUDS IN THE SPRING AND COLORFUL FOLIAGE IN THE FALL. PARTS OF THE JEFFERSON-MULBERRY BLACKTOP SHOULD BE INCLUDED FOR THE CHARMING RURAL RESIDENCES SCATTERED ABOUT THE COUNTRYSIDE AND FOR THE ROLLING TOPOGRAPHY NEAR THE SOUTH FORK OF THE WILDCAT CREEK. ANOTHER SCENIC ROUTE IS THE ROAD SOUTH OUT OF HAMILTON; THIS ROAD PASSES OVER KILMORE CREEK AND THE SOUTH FORK OF THE WILDCAT CREEK. THE AREA HAS MANY OLD MILL SITES AND CEMETERIES OF INTEREST. ROBERT WRIGHT, A REVOLUTIONARY SOLDIER, IS BURIED IN PROVIDENCE CEMETERY.

WEST OF KIRKLIN -- DRIVING IN THIS AREA SHOULD INCLUDE THE COUNTY ROAD ALONG SUGAR CREEK AND PAST THE OLD SCOTLAND CHURCH. THIS SCENIC AREA INCLUDES MEANDERING SUGAR CREEK, THE WOODED BANKS OF WHICH OFFER NATURE'S COLORFUL FOLIAGE IN THE FALL. INDIANA HIGHWAY 38 SHOULD ALSO BE INCLUDED; THIS HIGHWAY TRAVELS THROUGH THE EASTERN EDGE OF THE "TWELVE-MILE PRAIRIE" WITH ITS MANY PROSPEROUS FARMS. SEVERAL OLD CEMETERIES ARE IN THE AREA. NATHAN KIRK, KIRKLIN'S FOUNDER, AND JOHN APPELGATE, THOMAS HARRIS, AND JOHN REED, REVOLUTIONARY SOLDIERS, ARE BURIED IN THE KIRKLIN CEMETERY.

INVENTORY OF MAJOR POTENTIAL IMPOUNDMENT SITES IN CLINTON COUNTY

USGS TOPOGRAPHIC MAPS AND OTHER SOURCES HAVE BEEN STUDIED TO IDENTIFY POTENTIAL WATER IMPOUNDMENT SITES IN CLINTON COUNTY. THE LARGER SITES IDENTIFIED HAVE A TOTAL POTENTIAL OF AROUND 1,200 SURFACE ACRES. IN ADDITION, THERE ARE MANY SMALLER SITES WITH LESS THAN 5 ACRES SURFACE AREA WHICH MIGHT ALSO BE DEVELOPED.

THE POTENTIAL IMPOUNDMENT SITES LISTED BELOW HAVE BEEN INVESTIGATED AND EVALUATED TO SOME DEGREE. ALL ENGINEERING ASPECTS (INCLUDING SOILS BORINGS) HAVE NOT BEEN CHECKED. SOIL MAPS SHOULD BE STUDIED AND ON-SITE GEOLOGIC SUB-SURFACE INVESTIGATIONS CONSIDERED BEFORE DEVELOPMENT. SITES LISTED BELOW ARE PRESENTLY USED PRIMARILY FOR AGRICULTURAL USES.

1. SEDALIA LAKE, OWEN TWP., EAST OF ROSSVILLE -- 25 SURFACE ACRES; 200 ACRE DRAINAGE AREA; GOOD WATER SUPPLY
2. LAKE FOREST, FOREST TWP., NORTHEAST OF MICHIGANTOWN -- 50 SURFACE ACRES; 1,000-ACRE DRAINAGE AREA; GOOD WATER SUPPLY

3. LAKE WARREN, WARREN TWP., NORTH OF MICHIGANTOWN-- 25
SURFACE ACRES; 240-ACRE DRAINAGE AREA; GOOD WATER SUPPLY
4. CAMPBELL'S LAKE, OWEN TWP., NORTH OF FRANKFORT -- 65 SURFACE
ACRES; 1,400-ACRE DRAINAGE AREA; CONTINUOUS FLOW, EXCELLENT
WATER SUPPLY
5. KILMORE LAKE, UNION TWP., NORTH OF FRANKFORT -- 25 SURFACE
ACRES; 150-ACRE DRAINAGE AREA; GOOD WATER SUPPLY
6. LAKE CLINTON, MICHIGAN TWP., NORTHEAST OF FRANKFORT -- 700
SURFACE ACRES (APPROX.); 30,000-ACRE DRAINAGE AREA (APPROX.);
CONTINUOUS FLOW, EXCELLENT WATER SUPPLY
7. LAKE MADISON, MADISON TWP., SOUTH OF MULBERRY -- 100 SURFACE
ACRES; 675-ACRE DRAINAGE AREA; CONTINUOUS FLOW, EXCELLENT
WATER SUPPLY
8. WILDCAT LAKE, MICHIGAN TWP., SOUTHWEST OF MICHIGANTOWN --
30 SURFACE ACRES; 1,600-ACRE DRAINAGE AREA; EXCELLENT WATER
SUPPLY
9. SPRING LAKE, MADISON TWP., NORTHWEST OF JEFFERSON -- 20
SURFACE ACRES; 140-ACRE DRAINAGE AREA; FAIR WATER SUPPLY
10. HEAVILON LAKE, WASHINGTON TWP., NORTHWEST OF JEFFERSON --
80 SURFACE ACRES; 1,800-ACRE DRAINAGE AREA; CONTINUOUS
FLOW, EXCELLENT WATER SUPPLY

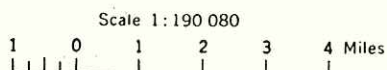
WILDCAT RESERVOIR

WILDCAT RESERVOIR, PRESENTLY PLANNED BY THE CORPS OF ENGINEERS, WILL BE LOCATED IN TIPPECANOE COUNTY, NORTHWEST OF CLINTON COUNTY. THIS RESERVOIR WILL HAVE A MINIMUM POOL OF 1,320 SURFACE ACRES, NONE OF WHICH WILL BE IN CLINTON COUNTY; CLINTON COUNTY WILL BE INVOLVED IN FLOOD STAGE ONLY, FOR ROSS TOWNSHIP IN THE NORTHWEST CORNER OF THE COUNTY ON THE MIDDLE FORK OF WILDCAT CREEK. THE RESERVOIR'S PROXIMITY TO CLINTON COUNTY, WILL, HOWEVER, AFFECT RECREATIONAL OPPORTUNITIES IN THAT PORTION OF THE COUNTY AND ALSO WILL ATTRACT CLIENTELE FROM WITHIN THE COUNTY.

CLINTON COUNTY

General Soil Map

AGRICULTURAL EXPERIMENT STATION AND COOPERATIVE
EXTENSION SERVICE, PURDUE UNIVERSITY; AND THE SOIL
CONSERVATION SERVICE, U.S. DEPARTMENT OF AGRICULTURE

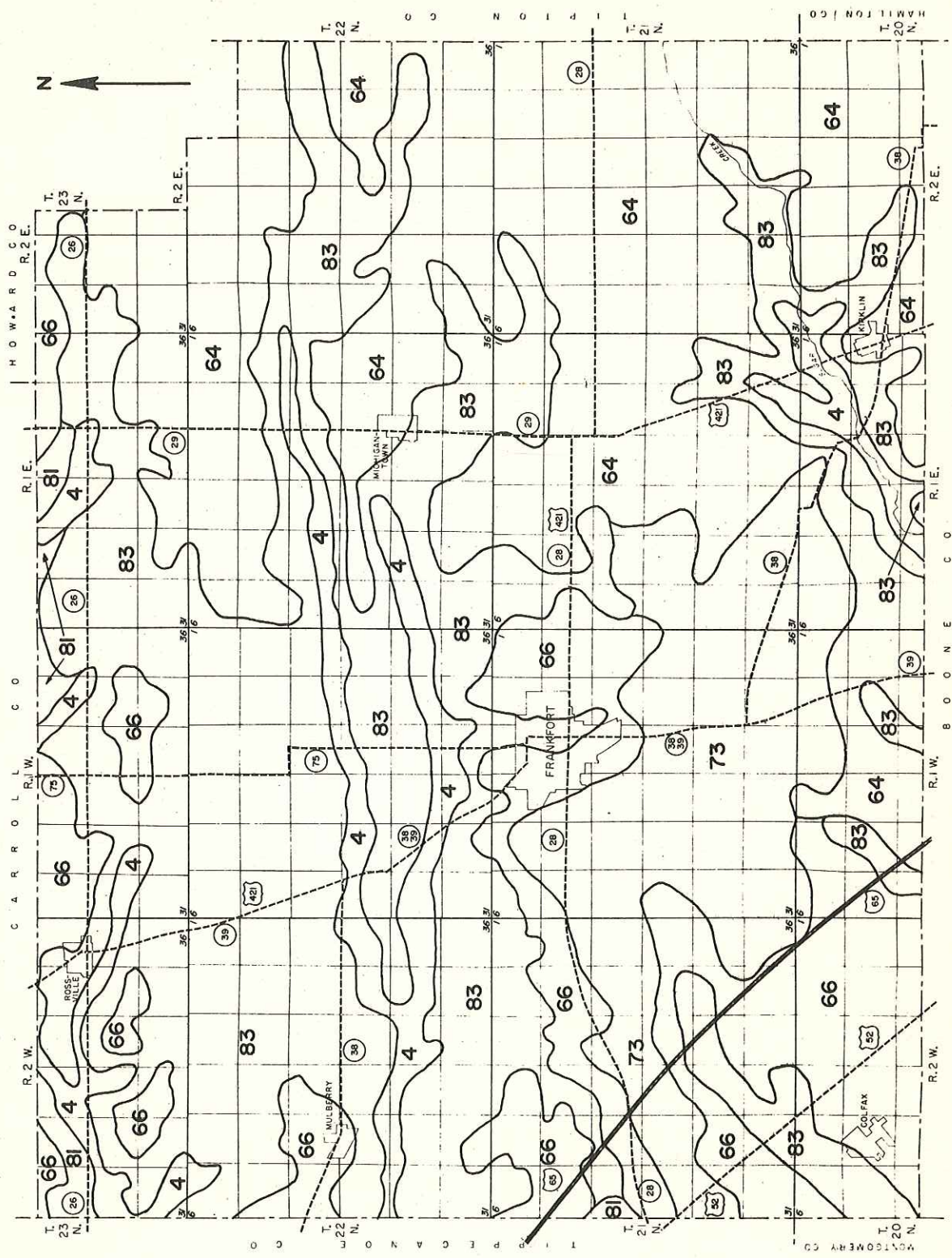


Base map from the Indiana Geological Society

Note: This map is intended for general planning. Each delineation contains soils different from those shown in the legend. For operational planning, use detailed soil maps that may be available in published or unpublished form at the local Soil and Water Conservation District Office.

SOIL ASSOCIATIONS

4. *Genesee-Shoals-Eel*: Nearly level, well drained, loamy Genesee, moderately well drained, loamy Eel, and somewhat poorly drained, loamy Shoals in alluvial deposits.
64. *Crosby-Brookston*: Nearly level, somewhat poorly drained, clayey Crosby and very poorly drained, loamy Brookston in glacial till.
66. *Fincastle-Ragsdale-Brookston*: Nearly level, somewhat poorly drained, silty Fincastle in wind-blown silts and glacial till, very poorly drained, silty Ragsdale in wind-blown silts and loamy Brookston in glacial till.
73. *Raub-Ragsdale*: Nearly level, somewhat poorly drained, silty Raub in wind-blown silts and glacial till and very poorly drained, silty Ragsdale in wind-blown silts.
81. *Miami-Russell-Fincastle*: Sloping, well drained, loamy Miami in glacial till and silty Russell in wind-blown silts and glacial till and nearly level somewhat poorly drained, silty Fincastle in wind-blown silts and glacial till.
83. *Miami-Crosby*: Sloping, well drained, loamy Miami and nearly level, somewhat poorly drained, clayey Crosby in glacial till.



COMMUNITY FACILITIES

COMMUNITY FACILITIES

INTRODUCTION

THIS CHAPTER IS AN INVENTORY AND ANALYSIS OF EXISTING PUBLIC FACILITIES, BOTH URBAN AND RURAL, INCLUDING THOSE THAT ARE NECESSARY, SUCH AS SEWER AND WATER AND POLICE PROTECTION, AND THOSE THAT ARE DESIRABLE, SUCH AS RECREATION FACILITIES. THE PURPOSE OF THIS CHAPTER IS TO DETERMINE THE CONDITION, ADEQUACY, AND APPROPRIATENESS OF PUBLIC FACILITIES SERVING THE NEEDS OF THE CITIZEN OF A GIVEN AREA. THE APPLICATION OF THE FINDINGS OF THIS CHAPTER WILL RESULT IN THE COMMUNITY FACILITIES PLAN WHICH WILL INCORPORATE RECOMMENDATIONS OR ASSUMPTIONS REGARDING THEIR USE THROUGH 1990.

IN GATHERING THIS INFORMATION THE CONSULTANTS HAVE PERSONALLY INSPECTED EACH FACILITY AND DISCUSSED ITS ADEQUACY AND RELATED CONSIDERATIONS WITH THE RESPONSIBLE PERSONNEL DURING OCTOBER- NOVEMBER 1974. MOST OF THE OPINIONS, CONCLUSIONS AND PRELIMINARY RECOMMENDATIONS, HOWEVER, ARE THOSE OF THE CONSULTANTS.

MOST OF THE COMMUNITY FACILITIES REVIEWED HERE HAVE BEEN OBSERVED AS PHYSICAL ENTITIES, AS HARDWARE. QUESTIONS OF CONCERN HAVE BEEN IN THE REALM OF THEIR ADEQUACY, THEIR SUFFICIENCY, AND THE COST OF IMPROVEMENTS. THE FACT OF THEIR FUNCTION AS A SUPPLIER OF A SERVICE, AS A RESOURCE APPLIED TO HUMAN OR SOCIAL CONCERNS, HAS NOT BEEN EMPHASIZED. YET MANY OF THE COMMUNITY FACILITIES ARE INVOLVED DIRECTLY OR INDIRECTLY WITH HUMAN RESOURCE PLANNING, AND ALTHOUGH THIS PROGRAM IS PRIMARILY CONCERNED WITH THE PHYSICAL PLAN AND ITS IMPLEMENTATION, NO SOUND PLAN CAN OVERLOOK THE HUMAN RESOURCE AREA, EVEN THOUGH SOLUTIONS ARE NOT NOW READILY DISCERNABLE.

IT IS BEYOND THE SCOPE OF THIS REPORT TO ATTEMPT TO IDENTIFY THE NATURE AND SCOPE OF HUMAN SERVICE PLANNING THAT MIGHT BE UNDERTAKEN, EXCEPT IN THE VERY BROADEST ASPECTS.

AT THE CITY-COUNTY LEVEL THERE IS A NEED TO IDENTIFY HUMAN RESOURCE IMPLICATIONS OF PHYSICAL PROJECTS AND ATTEMPT TO INCLUDE HUMAN SERVICE CONSIDERATIONS IN COMPREHENSIVE PLANNING; TO ATTEMPT TO FIND THE ROLE OF THE CITY-COUNTY (AS OPPOSED TO FEDERAL ROLE) IN THE DELIVERY OF THESE RESOURCES, WHILE ANOTHER SET OF ISSUES CONCERNS HOW TO MAKE PARTICULAR HUMAN RESOURCES MANAGEMENT AND DELIVERY SYSTEMS TRULY ACCOUNTABLE AND RESPONSIVE TO THE PEOPLE THEY SERVE AND WHOSE RESOURCE THEY USE, AND THE NATURE AND DEGREE OF COMMUNITY CONTROL AND GENERAL MECHANIZATION FOR CITIZEN PARTICIPATION.

STANDARDS USED THROUGHOUT THIS CHAPTER ARE MODIFIED FROM URBAN LAND, MAY 1961. BASED ON INFORMATION SUMMARIZED IN THIS CHAPTER GENERAL RECOMMENDATIONS WILL BE MADE IN PART II OF THIS PLANNING PROGRAM.

ARCHITECTURAL BARRIERS

NONE OF THE APPROPRIATE COMMUNITY FACILITIES REVIEWED IN THIS CHAPTER, EXCEPT AS NOTED IN THE PARK AND RECREATION SECTION, WERE CONSTRUCTED IN SUCH A MANNER THAT THEY ARE ACCESSIBLE AND FUNCTIONAL FOR THE PHYSICALLY HANDICAPPED AND AGED. BEING OLD BUILDINGS THIS IS TO BE EXPECTED. BUILDINGS BUILT WITH PUBLIC FUNDS; MEDICAL, NURSING, DENTAL, AND HEALTH FACILITIES; SCHOOLS, CULTURAL CENTERS, MUSEUMS, AND BUILDINGS WITH SIMILAR PURPOSES; RECREATION AND ENTERTAINMENT FACILITIES; CHURCHES, RETAIL AND SERVICE STORES, PUBLIC CONVENIENCE STATIONS AND TOILETS AND PARKING FACILITIES; TRANSPORTATION TERMINAL FACILITIES AND SIMILAR, SHOULD BE OF BARRIER FREE DESIGN.

PARKING FACILITIES SHOULD PROVIDE ONE CLEARLY MARKED ELEVEN FOOT WIDE PARKING SPACE IN EACH PARKING LOT OF AVERAGE SIZE, LOCATED CLOSE TO ELEVATORS, RAMPS, AND ENTRANCES. (HOTELS AND MOTELS SHOULD PROVIDE ACCOMODATIONS. APARTMENT BUILDINGS SHOULD APPORTION AN APARTMENT (S).) MINIMUM WIDTH OF SERVICE WALKS IS GENERALLY ACCEPTED AS FOUR FEET, WHILE ONE PRIMARY ENTRANCE TO EACH BUILDING SHOULD BE USABLE BY WHEELCHAIRS; DOORS SHOULD HAVE A CLEAR OPENING OF NOT LESS THAN 36 INCHES. RAMPS, TOILET ROOMS, PUBLIC TELEPHONES, ELEVATORS, CHECKOUT LANES AND TURNSTILES, AND MANY OTHERS ALL HAVE THEIR INDIVIDUAL SET OF REQUIREMENTS FOR THE PHYSICALLY HANDICAPPED AND AGED.

THE BASIC BUILDING CODE OF THE BUILDING OFFICIALS CONFERENCE OF AMERICA HAS ADOPTED A CHAPTER ON THIS SUBJECT. THE INITIAL PUBLICATION IS JANUARY - FEBRUARY 1975. THEIR ADDRESS IS 1313 E. 60TH STREET, CHICAGO, ILLINOIS 60637.

ALTHOUGH RECOMMENDATIONS ARE USUALLY STATED IN THE PART II PLANNING ELEMENTS SECTION OF THIS REPORT, THEY ARE STATED HERE TOO FOR EASIER REFERENCE. THE ADOPTION BY ORDINANCE OF THE ABOVE CHAPTER OF THE BOCA CODE IS HIGHLY RECOMMENDED. WHEN THE FRANKFORT CENTRAL BUSINESS DISTRICT HAS NO BENCHES OR SIMILAR REST AREAS FOR THE AGED, IN A COMMUNITY OF DIS- PROPORTIONATE NUMBERS OF AGED CITIZENS, (SEE POPULATION CHAPTER) ONE NEED HARDLY LOOK FURTHER TO SURMIZE THAT THOSE AGED AND HANDICAPPED HAVE BEEN OVERLOOKED, A SITUATION NOT UNIQUE TO FRANKFORT, BUT DEPLORABLE NONE-THE-LESS.

AN ADDITIONAL AREA OF LOCAL INVESTIGATION IS LOCAL TRANSPORT- ATION FOR THE OLDER CITIZENS OF FRANKFORT. IT WILL BE NOTED UNDER THE DISCUSSION OF THE COUNTY HOME - PARKVIEW - THAT NO PROVISIONS OTHER THAN TAXI SERVICE ARE MADE FOR THE TRANS-

PORTATION OF PARKVIEW RESIDENTS. FOR THESE RESIDENTS AND OTHER ELDERLY AND HANDICAPPED CITIZENS OF THE COMMUNITY IT IS RECOMMENDED THAT A SO CALLED "DIAL-A-RIDE" BUS OR TAXI SERVICE BE INVESTIGATED. LA PORTE, INDIANA, (POPULATION 23,000) HAS RECENTLY STARTED THE SERVICE WITH THREE 12 PASSENGER VANS AND THREE STATION WAGONS, AFTER A SURVEY CONDUCTED BY THE LOCAL JAYCEES SHOWED THAT OVER 90 PERCENT OF THE 2,600 PEOPLE RESPONDING TO THEIR SURVEY WERE IN FAVOR OF THE IDEA.

THE MAJOR BENEFICIARIES OF THE PROGRAM WOULD BE THE PEOPLE WHO NEED IT MOST, THE ELDERLY AND THE POOR IN NEED OF TRANSPORTATION.

PUBLIC SCHOOLS

GENERAL

TABLE 1 PRESENTS SELECTED CHARACTERISTICS OF SCHOOLS IN CLINTON COUNTY AS OF NOVEMBER 1974.

ALL SCHOOL SYSTEMS IN THE COUNTY HAVE SPECIAL EDUCATION FACILITIES. CLINTON COUNTY AND BOONE COUNTY HAVE A JOINT SERVICE PROGRAM FOR EXCEPTIONAL CHILDREN. VOCATIONAL TRAINING IS AVAILABLE IN EXISTING FACILITIES. FRANKFORT, CLINTON-PRAIRIE, AND ROSSVILLE OFFER PROGRAMS IN OFFICE EDUCATION AND IN HEALTH SERVICES (NURSES AIDS, ETC.). CLINTON PRAIRIE HAS AN AGRICULTURAL OCCUPATION PROGRAM, WHILE ROSSVILLE SUPPLIES INSTRUCTION IN THE BUILDING TRADES. ALL SUPERINTENDENTS' OFFICES ARE ADEQUATE FOR THEIR PURPOSE, ALTHOUGH NONE HAVE AN ABUNDANCE OF USEABLE FLOOR SPACE. ALL PLAYGROUNDS HAVE SOME PLAYGROUND FACILITIES RANGING FROM APPARATUS SUCH AS SLIDES AND TEETERS FOR THE YOUNGEST, THROUGH TENNIS COURTS, BASKETBALL COURTS, TO LARGE HIGH SCHOOL GYMNASIA AND FOOTBALL FIELDS. THE GYMS AND OTHER LIKE INDOOR FACILITIES ARE AVAILABLE TO THE PUBLIC AT SLIGHT (NON-PROFIT) CHARGE. NO SCHOOL ENROLLMENT IS ANTICIPATED TO EXCEED CAPACITY WITHIN THE NEXT 15 TO 20 YEARS; ALL EXPECT A SLIGHT BUT CONTINUING ENROLLMENT DECLINE. SCHOOL BUILDINGS ARE STRUCTURALLY AND FUNCTIONALLY ADEQUATE FOR ANOTHER 20 YEARS. WITH A SLIGHTLY DECLINING POPULATION EXPECTATION NO SCHOOL BUILDINGS SHOULD REQUIRE CLASSROOM ADDITIONS. THE FINE FRANKFORT ELEMENTARY SCHOOLS ARE NEIGHBORHOOD ORIENTED --- EACH SERVE A SECTION OF THE CITY WHICH IS OF SUFFICIENT POPULATION TO SUPPORT AN ELEMENTARY SCHOOL WITH AN ENROLLMENT TO JUSTIFY THE EXPENDITURES OF TAX DOLLARS IN THAT SCHOOL AS OPPOSED TO COMBINING THEIR ENROLLMENT WITH ONE OR MORE SCHOOLS. THESE ARE, THEN, "WALK-TO" SCHOOLS FOR CITY RESIDENTS A CONCEPT THAT, IF AT ALL FEASIBLE, SHOULD BE MAINTAINED.

THERE ARE, OF COURSE, A NUMBER OF POSSIBLE SCHOOL HOUSE COMBINATIONS FOR THE FRANKFORT SYSTEM, I.E.:

SELECTED CHARACTERISTICS - CLINTON COUNTY SCHOOLS - NOVEMBER 1974 TABLE 1

SCHOOL CORPORATION	ROSSVILLE CONSOLIDATED SCHOOL DISTRICT	CLINTON CENTRAL SCHOOL CORP.	CLINTON CENTRAL SCHOOL CORP.	FRANKFORT SCHOOL CORP.
NAME	ROSSVILLE SCHOOL	CLINTON CENTRAL JR - SR. HIGH	CLINTON ELEMENTARY	RILEY ELEMENTARY
SITE			SAME SITE AS JR - SR HIGH	
ACERAGE	45	40		3
% OCCUPIED	20%	10%	10%	30%
BUILDING				
YEAR BUILT	1957	1957	1971	1920's
ADDITIONS	1967	NONE	NONE	NONE
CONDITION	EXCELL. - USE 20+ YRS	EXCELL. - USE 20+	EXCELL. - 20+ YR	FAIR - USE 10-15 YRS
EXPANSION				
POTENTIAL	YES	YES	YES	YES
GRADES	K - 12	7 - 12	K - 6	K - 6
ENROLLMENT CAPACITY	1,000	800	850	350
PRESENT ENROLLMENT	856	676	811	314
ENROLLMENT TRENDS	SLIGHT DECLINE	SLIGHT DECLINE	SLIGHT DECLINE	SLIGHT DECLINE
AREA SERVED	TOWN OF ROSSVILLE ROSS & OWEN TWP. CLAY TWP., CARROLL COUNTY	FOREST, KIRKLIN, MICHIGAN, WARREN, SUGAR CREEK, JOHNSON TOWNSHIPS	SAME AS JR - SR. HIGH	EAST FRANKFORT AREA

SOURCE: SCHOOL SUPERINTENDENT'S OFFICE AND HUFF-CARPENTER ROSS-ASSOCIATES

CLINTON COUNTY SCHOOLS - NOVEMBER 1974 (CONTINUED) TABLE 1

SCHOOL CORPORATION	FRANKFORT	FRANKFORT JR. HIGH
NAME	KYGER ELEM.	LINCOLN ELEM.
SITE	2	3
ACERAGE	12	2
% OCCUPIED	50%	50%
BUILDING	1930's	1916
YEAR BUILT	NONE	1920, '26, '30
ADDITIONS	GOOD - USE	FAIR - USE
CONDITION	20+ YRS.	THROUGH 1995 1
EXPANSION	LIMITED	NONE
POTENTIAL	K - 6	7 - 8
GRADES	500	650
ENROLLMENT CAP.	489	610
PRESENT ENROLL	SLIGHT DECLINE	SLIGHT DECLINE
ENROLLMENT TRENDS	SOUTHWEST FRANKFORT AREA	CITY OF FRANKFORT & UNION & CENTER TOWNSHIPS.
AREA SERVED	SOUTHWEST FRANKFORT AREA	NORTH FRANKFORT AREA
	UNION & CENTER TOWNSHIPS.	

1 AFTER APPROXIMATELY 20 YEARS OF ADDITIONAL USES, THE HIGH SCHOOL SITE OFFERS A READY POTENTIAL FOR NEW JR. HIGH SCHOOL SITE.

CLINTON COUNTY SCHOOLS - NOVEMBER 1974 (CONTINUED) TABLE 1

SCHOOL CORPORATION--FRANKFORT		CLINTON-PRAIRIE	
NAME	FRANKFORT	JR.- SR. HIGH	JEFFERSON ELEM.
SITE	SR. HIGH		MULBERRY ELEM.
ACERAGE	100	40	2
% OCCUPIED	5%	10%	45%
BUILDING			
YEAR BUILT	1962	1961	1900's
ADDITIONS	NONE	NONE	NONE
CONDITION	EXCELL.	EXCELL.- USE	FAIR - USEABLE
EXPANSION	USE 20+ YR	20 YRS +	20 YRS +
POTENTIAL	AMPLE	AMPLE	SOME
GRADES	0 - 12	7-8 / 9 -12	K - 6
ENROLLMENT CAP.	1,100	655	278
PRESENT ENROLL.	1,110	600	250
ENROLLMENT TRENDS	SLIGHT INCREASE - ACADEMIC YR '75 THEN DECLINE	SLIGHT DECLINE	SLIGHT DECLINE
AREA SERVED	SAME AS JR. HIGH	PRAIRIE MADISON, WASHINGTON, JACKSON TOWNS.	MADISON TWP. JACKSON TWP.

1 ESTIMATED

(1) ABANDON WOODSIDE AND RILEY AND BUILD ONE NEW ELEMENTARY AT PRESENT RILEY SITE (IN COMBINATION WITH STOTT (FOOTBALL) FIELD SITE) WHICH WOULD BE REMOVED TO HIGH SCHOOL SITE.

(2) ABANDON RILEY AND WOODSIDE AND ERECT NEW FACILITIES AT HIGH SCHOOL SITE AND DIVIDE WOODSIDE DISTRICT BOUNDARIES BETWEEN LINCOLN AND KYGER.

(3) ABANDON RILEY; RELOCATE AT HIGH SCHOOL SITE.

(4) MOVE STOTT FIELD TO HIGH SCHOOL SITE, ADD THE FOUR ACRES TO RILEY SITE.

(5) ABANDON WOODSIDE - DIVIDE DISTRICT BETWEEN KYGER AND LINCOLN.

(6) IT IS REASONABLE TO EXPECT THAT THE JUNIOR HIGH WILL BE MOVED IN 20 YEARS OR SO TO THE HIGH SCHOOL SITE. OTHER ALTERNATIVES MAY EVOLVE WITHIN 15 OR 20 YEARS AS POPULATIONS WITHIN THE VARIOUS SCHOOL DISTRICTS CHANGE.

AS AN IMPORTANT PLANNING CONSIDERATION, HOWEVER, NO NEW SITES APPEAR TO BE NEEDED ALTHOUGH WHEN RELATED TO SUGGESTED STANDARDS, SOME SITES SHOULD BE ENLARGED. IT IS, MOREOVER, RECOMMENDED THAT THE "WALK-IN" PRINCIPLE BE MAINTAINED IN THE FRANKFORT URBAN AREA SO THAT THEY MAY CONTINUE TO SERVE AS A FOCAL POINT FOR THE COMMUNITIES NEIGHBORHOODS. THE ELEMENTARY SCHOOL, THEN, BECOMES THE SOCIAL AND CULTURAL, AS WELL AS EDUCATIONAL CENTER OF THE NEIGHBORHOOD. THE SITE SIZE, IDEALLY, SHOULD CONFORM WITH MINIMUMS OUTLINED IN THE STANDARDS SECTION OF THIS CHAPTER AND THE WALKING DISTANCE FROM THE FURTHEREST DWELLING TO THE SCHOOL SHOULD NOT EXCEED ONE-HALF MILE. WALK-IN CONSIDERATIONS FOR SCHOOLS OTHER THAN THOSE ELEMENTARY FACILITIES THAT SERVE THE FRANKFORT AREA ARE NOT APPLICABLE.

STANDARDS FOR SCHOOL FACILITIES ARE SHOWN IN THE FOLLOWING TABLE.

TABLE 2

SCHOOL FACILITIES STANDARDS

SCHOOL TYPE	IDEAL SIZE (PUPILS)	MINIMUM SIZE (PUPILS)	MAXIMUM SIZE (PUPILS)	SERVICE* RADIUS (MILES)	SITES SIZE (ACRES)
ELEMENTARY (1-6)	700	200	900	0.5	5 + 1 PER 100 PUPILS
JUNIOR HIGH (7-8)	750	500	950	1.5	15 + 1 PER 100 PUPILS
SENIOR HIGH (9-12)	1500	900	2500	2.0	25 + 1 PER 100 PUPILS

* APPLICABLE TO URBAN AREAS ONLY

BASIC SOURCE: NATIONAL COUNCIL ON SCHOOL HOUSE CONSTRUCTION

PUBLIC RECREATION AREAS

FRANKFORT

T.P.A. PARK - T.P.A. PARK IS ACRONYMIC FOR TRAVELER'S PROTECTIVE ASSOCIATION PARK. LOCATED IN FRANKFORT'S NORTHEAST, THIS 89 ACRE FACILITY IS ONE OF THE MOST IMPORTANT CULTURAL AND RECREATIONAL FACILITIES IN THE CLINTON COUNTY REGION. THE RECREATION AREA STANDARDS FOUND AT THE END OF THIS SECTION DEFINES IT AS A "DISTRICT PARK" WITH A GENERAL SERVICE AREA OF THREE TO FIVE MILES. BECAUSE OF THE ESSENTIALLY RURAL COMPOSITION OF THE COUNTY OUTSIDE OF THE FRANKFORT URBAN AREA, HOWEVER, THE GENERAL SERVICE AREA IS DOUBTLESS 25 TO 30 MILES.

THE PARK HAS THE FOLLOWING IMPROVEMENTS:

2 BALL DIAMONDS	2 BASKETBALL COURTS
1 LITTLE LEAGUE AREA	6 TENNIS COURTS
1 HUGH SWIMMING POOL	3 HORSESHOE COURTS
1 SHELTERHOUSE	1 COMMUNITY BUILDING
BANDSTAND	GREENHOUSE
MAINTENANCE BUILDINGS	OFFICE BUILDING
PICNIC AREAS	UNDEVELOPED OPEN SPACE
TRAILS	APPARATUS AREA
TIMBER IN ABUNDANCE	ROLLING TOPOGRAPHY

ALL FACILITIES ARE ACCESSIBLE TO THE PHYSICALLY HANDICAPPED, I.E., NO STEPS TO THE ABOVE FACILITIES EXIST, ALL ARE AT GROUND LEVEL. TRAILS ARE OF SUFFICIENT WIDTH AND SMOOTHNESS TO ACCOMMODATE WHEELCHAIR PATIENTS. ALL FACILITIES ARE IN GOOD TO EXCELLENT CONDITION (SEE CRITERIA OF TABLE 1). THERE IS A REPORTED NEED FOR ONE MORE SHELTERHOUSE (\$8,000 TO \$10,000) AND A NATURAL ICE RINK (\$1,000).

FARRELL PARK - LARRY FARRELL PARK, ON CRESCENT DRIVE IN THE CITY'S NORTHEAST NEIGHBORHOOD, IS A 12 ACRE FACILITY WHICH SERVES SMALLER CHILDREN. IT IS ABOUT TEN PERCENT DEVELOPED WITH A BALL DIAMOND AND PLAYGROUND APPARATUS AREA. IT SERVES AS AN EFFECTIVE BUFFER BETWEEN THE RAILROAD WHICH IS ITS NORTHERN BOUNDARY AND RESIDENTIAL DEVELOPMENT TO THE SOUTH. LYING ADJACENT TO THE HIGH SCHOOL SITE, ITS LOCATION IS NOT CONDUCIVE TO CONCENTRATED ACTIVE RECREATION USE. IT WAS FORMERLY KNOWN AS EAST SIDE PARK.

DORNER PARK - THIS TEN ACRE PARK IS LOCATED ON SOUTH CLAY STREET AND SERVES PRINCIPALLY A PASSIVE RECREATION FUNCTION, ALTHOUGH THERE IS A BASKETBALL COURT, TWO TENNIS COURTS, AN APPARATUS AREA, A HORSESHOE COURT, AND A CONCESSION STAND. IT IS A STABILIZING PIECE OF OPEN SPACE -- VALUABLE TO THE NEIGHBORHOOD AND TO THE COMMUNITY. ITS VALUE LIES IN ITS OPEN SPACE NATURE EXTENDING AT LITTLE WIDTH AND CONSIDERABLE LENGTH THROUGH A RESIDENTIAL NEIGHBORHOOD ALONG THE CREEK BED.

REDMON PARK - JOHN REDMON PARK'S ELEVEN ACRES SERVES THE SOUTH WEST FRANKFORT NEIGHBORHOOD. IT IS DEVELOPED WITH A BASKETBALL COURT, BASEBALL DIAMOND, AN APPARATUS AREA, A CONCESSION STAND, AND STORAGE SHELTER. ALTHOUGH ITS LOCATION IS AT THE EDGE AS OPPOSED TO A GENERAL CENTRAL LOCATION WITHIN THE SOUTHWEST NEIGHBORHOOD, ITS RECREATION CONTRIBUTION IS CONSIDERABLE.

WOODSIDE CIRCLE PARK - THIS THREE ACRE PARK SERVES THE NORTHWEST NEIGHBORHOOD. THERE IS LITTLE UNDEVELOPED AREA. PROVIDED IS AN APPARATUS AREA AND A CONCESSION STAND. ITS LOCATION IS GENERALLY CENTRAL TO THE NEIGHBORHOOD.

WESTGREEN STREET PARK - THIS TEN ACRE FACILITY IS IMPROVED WITH A BASEBALL DIAMOND, BASKETBALL COURT, APPARATUS AREA. A HOPED FOR IMPROVEMENT IS A SHELTER HOUSE WITH TOILETS. IT PROVIDES OPEN SPACE RECREATION TO THE WESTERN COMMUNITY.

SUMMARY

THERE IS NO PART OF THE FRANKFORT COMMUNITY NOT SERVED BY SOME OPEN SPACE RECREATION AREA. T.P.A. PARK IS THE "FAMILY" PARK AND SERVES BOTH AN ACTIVE AND PASSIVE RECREATION FUNCTION. THE REMAINDER SERVE THEIR RESPECTIVE NEIGHBORHOOD UNITS AS ACTIVE RECREATION CENTERS FOR THE ELEMENTARY AGE GROUP PREDOMINENTLY, ALTHOUGH DORNER SERVES IN PART A PASSIVE RECREATION FUNCTION. ALL PARKS ARE PROVIDED WITH PORTABLE BENCHES AND TABLES; NONE INHIBIT THEIR USE BY THE PHYSICALLY HANDICAPPED DUE TO STEPS OR SIMILAR BARRIERS. PARK OFFICIALS STATED THAT THEY DO NOT SEE ANY AREA WHERE A PARTICULAR AGE GROUP IS NOT SERVED ADEQUATELY. T.P.A. PARK IS ADJACENT TO BOTH THE FRANKFORT COMMUNITY'S CONCENTRATION OF ELDERLY I.E. WESLEY MANOR AND THE COUNTY HOME (PARKVIEW) AND WAS UNDOUBTEDLY A MAJOR CONSIDERATION IN THEIR LOCATION DECISION. OTHER AREAS OR NEIGHBORHOODS ARE LESS FORTUNATE IN THEIR SERVICE TO THE ELDERLY.

ROSSVILLE

ROSSVILLE MAINTAINS A 1.5 ACRE PARK ON EAST STREET WITH SHELTER HOUSE, RESTROOMS, A BASKETBALL COURT AND SOME PLAYGROUND APPARATUS. ACCESSIBILITY IS GOOD, THE FACILITY IS ADEQUATE AND THERE ARE NO PLANS FOR EXPANSION OR FURTHER DEVELOPMENT.

KIRKLIN

THE KIRKLIN LIONS CLUB IS IN THE PROCESS OF DEVELOPING A PARK AT THE OLD SCHOOL SITE WHERE A BALL DIAMOND AND PLAYGROUND APPARATUS EXISTS. PLANS ENVISION A TENNIS AND A BASKETBALL COURT ON THE SIX ACRE SITE. NO FURTHER IMPROVEMENTS ARE CONTEMPLATED AT THIS TIME. A SHELTER HOUSE IS A DESIRABLE FUTURE PROJECT. ACCESSIBILITY IS GOOD. IN A TOWN THIS GEOGRAPHIC SIZE, EVERYTHING IS ACCESSIBLE IN TERMS OF DISTANCE.

MICHIGANTOWN

THE MICHIGANTOWN PARK HAS GOOD ACCESSIBILITY, A SHELTERHOUSE (ACCESSIBLE TO HANDICAPPED), BASKETBALL COURT, BASEBALL DIAMOND, AND PLAYGROUND APPARATUS ON FIVE ACRES. NO FURTHER IMPROVEMENTS ARE CONTEMPLATED.

COLFAX

THE ACCESSIBLE LIONS CLUB COMMUNITY PARK MAINTAINS A SHELTER, PLAYGROUND APPARATUS, SOFTBALL DIAMOND, BASKETBALL COURT, AND ON-SITE UNIMPROVED PARKING AREA ON A TWO ACRE SITE. AMPLE UNDEVELOPED AREA EXISTS FOR EXPANSION. IN TERMS OF RECOMMENDED STANDARDS, NO FURTHER IMPROVEMENTS ARE PLANNED OR NEEDED.

MULBERRY

THE ELEVEN ACRE MULBERRY CENTRAL PARK HAS A SHELTER HOUSE, 2 SOFTBALL DIAMONDS AND A CONCESSION STAND. A REQUIREMENT IS NEW TOILET FACILITIES FOR THE NEW SEWERAGE SYSTEM. ACCESSIBILITY IS GOOD.

RECREATION AREA STANDARDS

A RECENTLY PUBLISHED STUDY PREPARED BY THE NATIONAL RECREATION AND PARK ASSOCIATION, FUNDED BY THE HUF OFFICE OF COMMUNITY PLANNING AND DEVELOPMENT, FINDS THAT HOMOGENEOUS STANDARDS ACCEPTED OVER THE YEARS, SUGGESTING THAT EACH CITY SHOULD HAVE A SPECIFIC NUMBER OF ACRES OF OPEN SPACE PER CAPITA IN ITS INNER CITY, ARE NO LONGER RELEVANT. IT CONCLUDES THAT IT IS NOT THE AMOUNT OF OPEN SPACE ALONE THAT DETERMINES THE RECREATIONAL HEALTH OF A COMMUNITY; THE CRITICAL FACTORS ARE THE LOCATION OF THE SPACE, THE PROGRAMS CONDUCTED ON IT, THE RESPONSIVENESS OF THE PERSONNEL WHO RUN IT, THE PHYSICAL CONDITION OF THE SPACE, AND THE RELATIVE ACCESSIBILITY FOR THE PEOPLE WHO WILL USE THE FACILITIES. (SEE TABLE 3)

PARKVIEW HOME (COUNTY)

THE PARKVIEW "COUNTY HOME" IS RESIDENTIAL ONLY, I.E. IT IS NOT A NURSING HOME AND ALL RESIDENTS ARE AMBULATORY. THE HOME IS LOCATED IN A FINE SETTING JUST ACROSS THE STREET FROM T.P.A. PARK. THE BUILDING WAS ERECTED ABOUT 1919 (TO REPLACE A FIRE-DESTROYED EARLIER STRUCTURE) AND IS STATE LICENSED FOR 40 RESIDENTS. THE NUMBER OF RESIDENTS HAVE REMAINED STABLE BETWEEN 20 AND 30 DURING THE LAST TEN YEARS. NO PROVISIONS ARE MADE FOR OTHER THAN "RESIDENTIAL" INHABITANTS, AND NO PROVISION IS MADE FOR TRANSPORTATION TO OTHER PARTS OF THE COMMUNITY. RESIDENTS WISHING TO VISIT ELSEWHERE EITHER WALK OR USE THE LOCAL TAXI SERVICE. APPARENTLY NO ATTEMPT HAS BEEN MADE TO COORDINATE TRAVEL, EVEN EXCURSION SERVICES, WITH THOSE PROVIDED BY NEARBY WESLEY MANOR.

THE PAUL PHILLIPPE HUMAN RESOURCE CENTER, 252 SOUTH SECOND STREET FRANKFORT, HAS RECENTLY ACQUIRED A NEW BUS-TYPE VAN. IT IS RECOMMENDED THAT THIS TRANSPORTATION SERVICE BE COORDINATED WITH PARKVIEW HOME.

TABLE 3

RECREATION AREA STANDARDS ¹

<u>FACILITY</u>	<u>IDEAL</u>	<u>MINIMUM</u>	<u>GENERAL SERVICE AREA</u>
PLAYLOTS	5,000 Sq. Ft.	2,000 Sq. Ft.	2 - 3 BLOCKS
PLAYGROUNDS	5 ACRES	3 ACRES	1/2 TO 3/4 MILES
NEIGHBORHOOD PARKS	5-8 ACRES	3 ACRES	1/2 TO 3/4 MILES
PLAYFIELDS	15-20 ACRES	8-10 ACRES	1-1/2 TO 2 MILES
COMMUNITY PARKS	40-50 ACRES	25 ACRES	1-1/2 TO 2 MILES
DISTRICT PARKS	150-250 ACRES	100 ACRES	3 TO 5 MILES ²
REGIONAL PARKS	600 OR MORE ACRES	VARIABLE	10 TO 40 MILES

1 BASIC SOURCE: NATIONAL OUTDOOR RECREATION ASSOCIATION

2 RELATED TO POPULATION OF THE REGIONAL AREA

NOTE -- THERE ARE, OF COURSE, VARIOUS COMBINATION SITES WHOSE SIZE AND SERVICE AREAS ARE PREDICATED ON THE COMPONENTS OF THE SEPARATE RECREATIONAL AREAS.

AIRPORT

THE FRANKFORT MUNICIPAL AIRPORT IS LOCATED WEST OF FRANKFORT ON STATE ROUTE 28. EIGHTY-NINE ACRES OF 126 ACRES ARE IN AIRPORT USE, THE REMAINING 37 ARE IN AGRICULTURE. THE MUNICIPALLY OWNED, PRIVATELY OPERATED, SELF-SUPPORTING FACILITY IS CLASSIFIED A BASIC UTILITY AIRPORT, I.E., THE PRIMARY RUNWAY LENGTH CLASSIFICATION IS 2200' TO 3400'. ACTUAL LENGTH IS 3000', 70' WIDE, LIGHTED, HARDSURFACED AT 30 DEGREES/210 DEGREES. THIS RUNWAY CAN ACCOMMODATE AIRCRAFT TO 12,500 GROSS WEIGHT.

THERE ARE HANGER FACILITIES FOR 17 AIRCRAFT, AN ADEQUATE TERMINAL BUILDING, AND 12 TIEDOWNS. THERE IS AMPLE EXPENSION AREA FOR BOTH. AVAILABLE SERVICES ARE RADIO UNICOM, REPAIR, GAS, CHARTER, AND A NONDIRECTIONAL RADIO BEACON.

IN ADDITION TO THE PRIMARY RUNWAY (30° - 210°) THERE IS A 9-27 (90° - 270°) 60' WIDE GRASS LANDING STRIP. THERE ARE NO OBSTRUCTED FLIGHT PATHS. THERE ARE CLEAR ZONES ON BOTH ENDS OF RUNWAY OBTAINED THROUGH EASEMENTS OR DEVELOPMENT RIGHTS.

RECOMMENDATIONS OF THE INDIANA AIRPORT SYSTEM PLAN ¹ ARE:

1975 -- 1979

1. PRIMARY RUNWAY (30 - 210) LENGTH EXTENSION FROM 3000' TO 4800'
2. TAXIWAY CONSTRUCTION
3. APRON EXPANSION
4. APRON STRENGTHENING
5. NAVIGATIONAL AIDS
6. LIGHTED TAXIWAYS

1980 -- 1990

1. APRON EXPANSION
2. APRON STRENGTHENING

THE RECOMMENDATIONS FOR THE PROGRAM PERIOD 1971 - 1972 HAVE BEEN ACCOMPLISHED:

1. PUBLIC ACQUISITION OF PRIVATE AIRPORT
2. LAND ACQUISITION

THE AIRPORT HAS RECENTLY RECEIVED A \$20,000 PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION TO BE USED "TO FINANCE A MASTER PLAN FOR THE AIRPORT". SUCH A PLAN IS PREREQUISITE TO

¹ DIVISION OF PLANNING, DEPARTMENT OF COMMERCE, STATE OF INDIANA, 1971.

FURTHER FEDERAL AID. TOTAL COST OF THE STUDY IS \$28,900, \$5,000 HAS BEEN RAISED FROM LOCAL INDUSTRY, THE REMAINDER WILL COME FROM THE STATE OF INDIANA.

AN AIRPORT, LIKE A HOSPITAL IS A "COMMUNITY BUILDING" FACILITY. ITS ROLL IN THE ATTRACTION OF NEW INDUSTRY TO THE FRANKFORT AREA CANNOT BE MEASURED BUT UNDOUBTEDLY HAS BEEN ONE OF THE MANY LOCATIONAL CONSIDERATIONS FOR RECENTLY ATTRACTED INDUSTRY. ONE RELATIVELY CLEAR INDICATION OF ITS ROLL, HOWEVER, IS THAT OVER 90 PERCENT OF THE AIRCRAFT STATIONED HERE ARE OWNED BY LOCAL CORPORATIONS.

COURT HOUSE

LOCATED AT THE "CENTER" OF THE FRANKFORT COMMUNITY "ON THE SQUARE", THE CLINTON COUNTY COURT HOUSE WAS ERECTED IN 1862 OF BEDFORD LIMESTONE ON STEEL FRAME. IT IS A DESIGNATED CIVIL DEFENSE SHELTER. THE FOLLOWING OFFICES ARE LOCATED HERE:

COURT ROOM	CENTER TOWNSHIP ASSESSORS OFFICE
JUDGES CHAMBER	COUNTY CLERK
COURT LAW LIBRARY	COUNTY RECORDER
PROSECUTING ATTORNEY	COUNTY TREASURER
JUVENILE COURT	COUNTY DRAINAGE BOARD OFFICE
JURY ROOM	COUNTY COMMISSIONERS OFFICE
COUNTY SURVEYOR	VETERANS ADMINISTRATION
COUNTY WELFARE DEPARTMENT	DAUGHTERS OF AMERICAN REVOLUTION
COUNTY ASSESSOR' OFFICE	LICENSE BUREAU BRANCH
AUDITORS OFFICE	AMERICAN RED CROSS

IN ADDITION THERE ARE THREE OR FOUR AREAS ON THE FOURTH FLOOR USED FOR STORAGE. THESE WERE FORMERLY OFFICES AND WITH A RELATIVELY SMALL INVESTMENT COULD BE SO USED AGAIN. THE WELFARE DEPARTMENT OFFICES AND WAITING AREA IS OVERCROWDED AND SOME CONSIDERATION IS BEING GIVEN TO MOVING TO LARGER QUARTERS OUTSIDE THE COURT HOUSE.

THE COURT HOUSE SQUARE SITE IS ADEQUATE AND BUILDING EXPANSION AREA IS AVAILABLE. ARCHITECTUALLY THE COURT HOUSE IS EXCELLENT AND NO BUILDING EXPANSION SHOULD DETRACT OR MAR ITS BASIC DESIGN, SIMPLICITY AND SYMMETRY. THE COURT HOUSE HAS HISTORIC AND ARCHITECTURAL VALUE. PLANTING MATERIAL SHOULD BE REINTRODUCED ON THE SQUARE. OTHERWISE, THERE ARE NO MAJOR PROBLEMS WITH THE COURT HOUSE AND ITS CONTINUED USE FOR COUNTY AND RELATED SERVICES OFFICES SEEMS ASSURED. EXPANSION OF COUNTY GOVERNMENT OFFICES IS EXPECTED TO OCCUR INTO OFFICES NOW OCCUPIED BY NON-GOVERNMENTAL OFFICES AND NOT BY EXTERIOR ADDITIONS.

IT IS RECOMMENDED THAT THE COURT HOUSE BE PLACED ON THE NATIONAL REGISTER (SEE HISTORIC PRESERVATION SECTION AT THE INTRODUCTION OF THIS CHAPTER). THIS HISTORICALLY AND ARCHITECTUALLY IMPORTANT

BUILDING, TOGETHER WITH THE FRANKFORT PUBLIC LIBRARY, SHOULD BE PLACED ON THE NATIONAL REGISTER. ¹

CITY BUILDING - FRANKFORT

FACING THE SQUARE IN DOWNTOWN FRANKFORT, THIS FORMER BANK BUILDING HAS BEEN OCCUPIED AS CITY HALL SINCE THE 1930'S. ITS LOCATION AND ACCESSIBILITY ARE EXCELLENT.

THE BUILDING HOUSES THE FOLLOWING:

BASEMENT:

CITY ENGINEER / BUILDING INSPECTOR
WATER SUPERINTENDENT

FIRST FLOOR:

CITY UTILITIES PAYMENT OFFICES AND AUDITOR
CITY CLERK-TREASURER
PARKING METER COLLECTION

SECOND FLOOR

MAYOR'S OFFICE
LIGHT UTILITY SUPERINTENDENTS' OFFICE
CITY JUVENILE OFFICER

THE BUILDING WHICH IS STRUCTURALLY IN EXCELLENT CONDITION, COVERS THE ENTIRE SITE; NO EXPANSION POTENTIAL EXISTS NOR IS IT CONTEMPLATED. THE CITY BUILDING SHOULD BE ADEQUATE FOR 20 OR MORE YEARS.

TOWN HALLS

THE TOWN HALL OF KIRKLIN, MULBERRY, COLFAX, ROSSVILLE, AND MICHIGANTOWN ARE ALL ADEQUATE SPACIALLY AND STRUCTURALLY FOR THE NEXT 20 YEARS. ALL ARE CENTRALLY LOCATED IN OR NEAR THE COMMUNITIES COMMERCIAL CENTER.

LIBRARIES

FRANKFORT

THE FRANKFORT COMMUNITY PUBLIC LIBRARY, BUILT IN 1908, IS LOCATED ON AN AMPLE SITE A SHORT BLOCK AWAY FROM THE CENTRAL BUSINESS AREA. SIMILAR TO THE CLINTON COUNTY COURT HOUSE, THE BUILDING IS AN ARCHITECTURAL TREASURE---ONE OF THE FINEST IN THE CONSULTANT'S EXPERIENCE. ALTHOUGH THERE IS ROOM FOR ON-SITE

1 NATIONAL TRUST FOR HISTORIC PRESERVATION
740 - 748 JACKSON PLACE N.W.
WASHINGTON, D.C. 20006

LATERAL EXPANSION OF THE LIBRARY BUILDING, NONE IS RECOMMENDED. THERE IS ROOM FOR INTERNAL EXPANSION INCLUDING THE EXCAVATION OF THE REMAINING ONE-HALF OF THE BASEMENT, ALTHOUGH THERE IS NO PROJECTED NEED. THERE ARE A NUMBER OF ALTERNATIVES TO ON-SITE EXPANSION:

1. LIBRARY ADMINISTRATION, MATERIAL MAINTENANCE, AND RELATED ACTIVITIES COULD BE HOUSED ELSEWHERE, THUS LEAVING THE LIBRARY FOR ITS PRIMARY PURPOSE.
2. SOME CIRCULATION FUNCTIONS COULD BE HOUSED IN A STORE-FRONT BUILDING ON THE SQUARE.

THERE ARE ADDITIONAL COMBINATIONS AND ALTERNATIVES. THESE ARE NOT RECOMMENDATIONS BUT FUTURE POSSIBILITIES WHICH SUPPORT THE CONTENTION THAT LIBRARY ON-SITE EXTERNAL EXPANSION IS NOT FORSEEABLY NEEDED NOR REQUIRED AND WILL PROBABLY NOT BE REQUIRED AT ANY FUTURE DATE.

THE LIBRARY, ESTABLISHED IN 1880, SERVES FRANKFORT, AND UNION AND CENTER TOWNSHIPS. IT IS OPEN 303 DAYS PER YEAR, 63 HOURS A WEEK. ITS TOTAL BOOK STOCK IS 47,144 VOLUMES AND IT SUBSCRIBES TO 161 PERIODICALS; ANNUAL CIRCULATION IS 100,657 AND HAS BEEN STABLE; THERE IS A RECORD COLLECTION AND LISTENING ROOM, A PRE-SCHOOL STORY HOUR, A READING CLUB FOR ELEMENTARY SCHOOL CHILDREN DURING THE SUMMER, AND AN ADULT EDUCATION PROGRAM.

THERE ARE ALSO TWO UNIQUE COLLECTIONS:

1. 40,000 COLOR SLIDES OF COMMUNITY ACTIVITIES FROM 1945 TO PRESENT, A CONTINUING CONTRIBUTION BY FARMERS BANK.
2. THE FUGATE COLLECTION -- A SUBSTANTIAL GENEALOGY REFERENCE, INCLUDING PERSONAL PAPERS, FAMILY HISTORIES, ETC.

THE FACILITY MEETS ALL EXCEPT ONE OF THE STANDARDS FOR PUBLIC LIBRARIES ¹ (THE EXCEPTION IS 3 INSTEAD OF 5 YEAR RETENTION OF PERIODICALS-- A CONDITION IN THE PROCESS OF CORRECTION).

THE MAJOR RECOMMENDATION (OTHER THAN THE PRESERVATION OF THE ARCHITECTURAL INTEGRITY OF THE LIBRARY BUILDING,) IS THAT A COUNTY-WIDE LIBRARY SYSTEM BE ESTABLISHED TO SERVE THE TEN TOWNSHIPS THAT ARE NOT NOW SERVED. IT IS ALSO RECOMMENDED THAT IT BE PLACED ON THE NATIONAL REGISTER (SEE COURT HOUSE DISCUSSION).

¹ AS PROMULGATED BY THE INDIANA LIBRARY & HISTORICAL BOARD, INDIANA STATE LIBRARY, 140 N. SENATE AVE., INDIANAPOLIS, IN.

DURING THE LAST QUARTER OF 1975 A RAMP IS TO REPLACE THE MAIN ENTRANCE STEPS FOR USE BY THOSE WHO ARE PHYSICALLY HANDICAPPED.

MULBERRY

THERE IS A SIZEABLE BOOK COLLECTION IN THE PRIVATELY OPERATED LIBRARY IN MULBERRY. SPACE FOR THE FACILITY IS PROVIDED BY THE TOWN. ALTHOUGH IT IS OPEN ONLY SEVEN HOURS A WEEK AND THE CONSULTANT DID NOT INTERVIEW THE OWNER, IT APPEARS TO MEET COMMUNITY NEEDS. AS A PRIVATE FACILITY NO RECOMMENDATIONS ARE MADE.

KIRKLIN

THE KIRKLIN PUBLIC LIBRARY SERVES AND IS IN TURN FINANCIALLY SUPPORTED BY THE TOWN OF KIRKLIN AND BY KIRKLIN TOWNSHIP. IT IS LOCATED ON AN AMPLE SITE WITHIN THE MAIN COMMERCIAL AREA OF THE TOWN. THERE IS AMPLE ROOM FOR ON-SITE EXPANSION ALTHOUGH NO EXPANSION REQUIREMENT IS FORSEEN. THE STRUCTURE IS IN GOOD CONDITION AND USABLE FOR THE NEXT TWENTY OR MORE YEARS.

COLFAX

THE COLFAX PUBLIC LIBRARY SERVING COLFAX AND PERRY TOWNSHIP, EXISTS ON A SITE ADEQUATE TO ACCOMMODATE 100 PERCENT BUILDING EXPANSION. THE BUILDING, ERECTED IN 1917, IS IN EXCELLENT GENERAL CONDITION AND WILL SERVE THE COMMUNITY FOR PROBABLY ANOTHER 57 YEARS.

IT IS RECOMMENDED THAT THE FRANKFORT PUBLIC LIBRARY BUILDING BE PUT ON THE NATIONAL REGISTER BY CONTACTING THE NATIONAL TRUST FOR HISTORIC PRESERVATION, 740 - 748 JACKSON PLACE N.W., WASHINGTON, D.C. 20006.

HOSPITAL

THE CLINTON COUNTY HOSPITAL, A SHORT TERM GENERAL HOSPITAL, 1300 S. JACKSON, FRANKFORT, WAS ERECTED IN 1922. A MAJOR ADDITION OCCURED IN 1953. PRINCIPLE SERVICES ARE: EMERGENCY ROOM, X-RAY AND LABORATORY, SURGERY, PHYSICAL THERAPY, INHALATION THERAPY, OBSTETRICS, BLOOD BANK AND A CONCENTRATED NURSING CARE AREA, I.E. CORONARY CARE AND INTENSIVE CARE.

THE IMPLEMENTATION OF PRESENT PLANS WILL DISCONTINUE THE 1922 SECTION, EXPAND THE 1953 SECTION, AND COMPLETELY REMODEL THAT SECTION WITH NEW SURGERY, LABORATORY, A COMBINATION OF CORONARY CARE - INTENSIVE CARE - MEDICAL SURGICAL PATIENT BEDS, AND AN EXPANSION OF OUTPATIENT SERVICES AREA. TOTAL PRESENT BED CAPACITY IS 92, PLANNED IS 120. OBVIOUSLY, THE PRESENT FACILITY IS LESS THAN ADEQUATE, AND, OBVIOUSLY, THE PROPOSED ADDITION WILL MAKE IT SO.

ALTHOUGH THE HOSPITAL, ITS BED TO COUNTY POPULATION RATIO AND SIMILAR MATTERS ARE NOTED, A HOSPITAL IS A FACILITY WHICH OBVIOUSLY DOES NOT CONFINE ITS SERVICES TO THE COMMUNITY. A HOSPITAL IS A REGIONAL FACILITY. THE LARGER REGIONAL MEDICAL CENTER IS IN LAFAYETTE.

A GOOD WORKING RELATIONSHIP WITH THE HOSPITAL AND NURSING HOME AT WESLEY MANOR AND WITH EMERGENCY AMBULANCE SERVICE THROUGHOUT THE COUNTY IS REPORTED (AND REVIEWED ELSEWHERE IN THIS CHAPTER). A DISASTER WOULD ACTIVATE BACKUP PRIVATE AMBULANCES-- 3 IN FRANKFORT, 1 ROSSVILLE, 1 KIRKLIN, AND 1 CIVIL DEFENSE UNIT.

THERE ARE NO PROJECTIONS BEYOND PRESENT PLANS. THERE IS AMPLE ON-SITE EXPANSION CAPABILITY, THERE ARE 65 PUBLIC AND STAFF OFF-STREET PARKING BAYS.

POLICE PROTECTION

FRANKFORT

THE FRANKFORT POLICE DEPARTMENT, 260 E. WASHINGTON, IS QUARTERED IN A BUILDING ERECTED IN 1938 AND OWNED BY THE CITY WATER UTILITY. IT IS ON THE EDGE OF THE CENTRAL BUSINESS DISTRICT, AND DIRECTLY ACROSS THE STREET FROM THE COUNTY JAIL WHICH PROVIDES DETENTION AND LOCK-UP FACILITIES FOR THE CITY. INTERIOR FACILITIES ARE:

- ADMINISTRATIVE OFFICES
- COMMUNICATIONS ROOM
- STAFF QUARTERS
- RECEPTION ROOM
- INTERROGATION ROOMS

THE QUARTERS ARE OVERCROWDED. EXPANSION POTENTIAL EXISTS TO THE WEST. A STOREROOM, LABORATORY AND DARKROOM ARE NEEDED ADDITIONS. CONDITION OF STRUCTURE IS "AVERAGE".

CLINTON COUNTY SHERIFFS DEPARTMENT

THE SHERIFFS DEPARTMENT AND JAIL, 255 E. WASHINGTON, WAS ERECTED IN 1952 AND HOUSES THE FOLLOWING:

- ADMINISTRATIVE OFFICES
- GARAGE
- COMMUNICATIONS ROOM
- JAIL (26 CAPACITY)
- STAFF QUARTERS
- ARMS AND AMMUNITION ROOM
- RECEPTION ROOM
- INTERROGATION ROOM
- PHOTO LAB AND I.D. ROOM

CONDITION OF STRUCTURE IS EXCELLENT. THERE IS ON-SITE EXPANSION POTENTIAL ALTHOUGH NONE IS NOW ANTICIPATED. FUTURE EXPANSION REQUIREMENTS, HOWEVER, ARE: TWO ADDITIONAL 8 MAN CELL BLOCKS ON THE SECOND FLOOR (COST \$80,000; THE LAW ENFORCEMENT ASSISTANCE ADMINISTRATION WOULD PROBABLY PAY 75%).

ROSSVILLE, KIRKLIN, COLFAX, MICHIGANTOWN, MULBERRY

THE INCORPORATED COMMUNITIES HAVE POLICE PROTECTION ADEQUATE TO THEIR DEMANDS. EACH HAS AT LEAST A TOWN MARSHALL OR EQUIVALENT, AND A RADIO EQUIPPED SQUAD CAR. NO SEPERATE BUILDING IS PROVIDED. POLICE PERSONNEL USUALLY WORK OUT OF THE TOWN CLERKS OFFICE.

FIRE PROTECTION

FRANKFORT

THERE ARE THREE FIRE STATIONS SERVING THE CITY OF FRANKFORT, AND UNION, CENTER, AND JACKSON TOWNSHIPS.

No. 1, AT 257 S. CLAY, IS A THREE BAY STATION BUILT IN 1968, OCCUPYING APPROXIMATELY 80% OF ITS ONE-QUARTER BLOCK SITE. THERE IS NO ON-SITE EXPANSION POTENTIAL, NOR IS THE NEED TO EXPAND FORSEEABLE. THE STRUCTURE IS IN EXCELLENT CONDITION AND IS USEABLE THROUGH 1990. EIGHTEEN PAID FIREMEN ARE ASSIGNED.

EQUIPMENT:

65' SNORKEL; 1972; 1250 GALLON PER MINUTE (GPM) PUMPING CAPACITY; CONDITION EXCELLENT

1966 FORD PUMPER, 750 GPM PUMPING AND 750 GALLON TANK CAPACITY; CONDITION EXCELLENT

1970 FORD TANK WAGON, 1250 GALLON CAPACITY, EXCELLENT CONDITION

1972 FORD GRASS FIRE WAGON, 200 GALLON TANK, 250 GPM

RESCUE UNIT, 1974, FULLY EQUIPPED, TRAINED PERSONNEL

No. 2, 508 N. MAIN, A ONE BAY FACILITY ERECTED IN 1927. THE STRUCTURE IS USEABLE THROUGH 1990. NO ON-SITE EXPANSION IS FEASIBLE NOR IS ANY CONTEMPLATED.

EQUIPMENT:

1958 AMERICAN LAFRANCE 1000 GPM PUMPER WITH 300 GALLON TANK CAPACITY

SIX FIREMEN ARE ASSIGNED TO THIS STATION.

No. 3, 1400 W. BARNER, A ONE BAY STATION ERECTED 1948 ON A SMALL BUT ADEQUATE SITE WITH AMPLE, THOUGH NOT NEEDED, EXPANSION POTENTIAL, IS IN GOOD CONDITION AND USEABLE THROUGH 1990.

EQUIPMENT:

1965 MACK PUMPER, 1250 PUMPING GPM CAPACITY, A 300 GALLON TANK, ALL IN GOOD CONDITION.

RAILROADS AND RESPONSE:

ONCE WITHIN NINE YEARS IT IS AS REPORTED, WAS THERE A DELAY IN RESPONSE OF FIRE FIGHTING EQUIPMENT DUE TO BLOCKAGE OF ROUTE BY RAILROAD EQUIPMENT. FIRE FIGHTING OFFICIALS DO NOT SEE, THEREFORE, A HIGH PRIORITY REQUIREMENT FOR AN ADDITIONAL RAILROAD GRADE SEPARATION. ACCESSIBILITY IS REASONABLY GOOD, IT IS REPORTED, AND AT LEAST ONE TRUCK CAN GET TO THE FIRE SITE IN THE NORMAL (FOR FRANKFORT) RESPONSE TIME OF TWO MINUTES. (AN OLD FIRE ADAGE IS THAT THE FIRST FIVE MINUTES IS WORTH THE NEXT FIVE HOURS.)

THE EVENTUAL MOVEMENT OF No. 2 TO THE EAST SOULD BE CONTEMPLATED, ALTHOUGH IN THE FACE OF A STABLE TO DECLINING POPULATION, THIS IS UNLIKELY TO OCCUR WITHIN 10 TO 20 YEARS. RESIDENTIAL GROWTH IS OCCURING, HOWEVER, AT THE CITY'S EASTERN AREA (WHILE INDUSTRIAL GROWTH ACCELERATES ALONG SR 28 TO THE WEST). SINCE FIRE UNDERWRITERS HAVE A STANDARD "FIRST DUE" RADIUS OF TWO AND ONE HALF MILES (FOR PUMPER) THE OVERLAP BETWEEN STATIONS No's 1 AND 2 IS APPARENT.

MULBERRY

THE MADISON TOWNSHIP VOLUNTEER FIRE DEPARTMENT SERVES, IN ADDITION TO THE TOWN, THE ADJOINING TOWNSHIPS OF WASHINGTON AND MADISON. THE THREE BAY STATION, BUILT IN 1955, IS SOUND STRUCTURALLY AND HAS ON-SITE ROOM FOR AN ADDITIONAL BAY. THERE ARE 20 VOLUNTEER FIREMEN. ALERT IS BY TELEPHONE, I.E., WHEN A FIRE CALL IS MADE 20 TELEPHONES RING.

EQUIPMENT:

1947 CHEV. 500 GPM PUMPER WITH 800 GALLON TANK CAPACITY

1958 FORD 500 GPM PUMPER AT 800 GALLON TANK CAPACITY

1968 FORD 500 GPM PUMPER AT 800 GALLON TANK CAPACITY

1946 GMC GRASS RIG WITH 300 GALLON TANK CAPACITY

ALL EQUIPMENT EXCEPT THE 1946 GRASS RIG IS RATED GOOD TO EXCELLENT.

ONE ADDITIONAL BAY TO ACCOMMODATE A NEW GRASS RIG, RADIO ROOM AND OFFICE IS TO BE COMPLETED DURING 1975.

COLFAX

THE COLFAX VOLUNTEER FIRE DEPARTMENT SERVES THE TOWN AND PERRY TOWNSHIP. THIS IS A TWO BAY FACILITY BUILT IN 1952 AND IS IN GOOD CONDITION. THERE IS ADEQUATE ON-SITE BUILDING EXPANSION CAPABILITY. FOURTEEN VOLUNTEERS NOW SERVE BUT FIRE DEPARTMENT PERSONNEL STATE THE NEED FOR SIX MORE. COMMUNICATION IS BY RADIO.

EQUIPMENT:

1957 AMERICAN LAFRANCE 500 GPM PUMPER WITH A TANK CAPACITY OF 500 GALLONS

1946 HOWELL, 400 GPM PUMPER WITH TANK CAPACITY OF 660 GALLONS

1965 FORD, 250 GPM PUMPER AT 1500 GALLON TANK CAPACITY

1952 TRUCK WITH 120 GPM PUMPER AND 1000 GALLON TANK CAPACITY

1950 JEEP GRASS RIG AT 120 GALLON PER MINUTE AND 175 GALLON TANK CAPACITY.

THE TOWN OF COLFAX OWNS THE 1957 AMERICAN LAFRANCE PUMPER, ALL OTHER EQUIPMENT IS OWNED BY THE DEPARTMENT. THE TOWN COVERS MAINTENANCE COST OF BUILDING AND EQUIPMENT -- THE DEPARTMENT SUPPLIES ALL OTHER FUNDING.

THE 1946 HOWELL PUMPER IS TO BE REPLACED BY 1975 AND HOUSED IN PART OF A 2 BAY ADDITION.

EMERGENCY RESCUE SERVICE:

TEN VOLUNTEERS, ALL WITH EMERGENCY MEDICAL TECHNICAL TRAINING (WITH TEN CURRENTLY IN TRAINING) OPERATE A FULLY EQUIPPED CADILLAC RESCUE UNIT. PLANS CALL FOR A FULLY EQUIPPED VAN TYPE TRUCK AS AN ADDITIONAL RESCUE UNIT IN THE NEAR FUTURE. THE COST IN 1974 DOLLARS, \$8,000. RESCUE SERVICE COMMUNICATION IS BY PHONE.

MICHIGANTOWN

THIS VOLUNTEER DEPARTMENT SERVES THE TOWN AND TOWNSHIPS OF MICHIGAN AND WARREN. THE 2 BAY STATION WAS ERECTED IN 1951 ON A SITE WITH AMPLE BUILDING EXPANSION AREA, IS IN EXCELLENT CONDITION, AND HOUSES THE FOLLOWING EQUIPMENT:

1972 CHEV. 750 GALLON PUMPER WITH 750 GALLON TANK CAPACITY

1966 CHEV. TANKER AT 750 GALLONS

1957 GRASS RIG AT 150 GALLONS

FIRE DEPARTMENT SPOKESMAN RECOMMEND ONE ADDITIONAL BAY AT A FUTURE DATE AND AN EQUIPMENT STORAGE VAN TYPE TRUCK, ALSO IN THE FUTURE, TO ACCOMPANY FIRE EQUIPMENT TO THE FIRE SITE.

THE DEPARTMENT HAS 30 VOLUNTEER FIREMEN.

KIRKLIN

THIS 24 VOLUNTEER DEPARTMENT SERVES THE TOWN OF KIRKLIN AND SUGAR CREEK TOWNSHIP. THERE IS NO ON-SITE EXPANSION POTENTIAL AT THE PRESENT SITE AND NO EXPANSION NEED IS REPORTED. THE BUILDING WAS ERECTED IN 1965 AND 1974, IN EXCELLENT CONDITION, AND HOUSES THE FOLLOWING EQUIPMENT:

1964 GMC 750 GPM PUMPER,

1965 GMC 1000 GALLON TANKER

1956 INTERNATIONAL 500 GPM PUMPER WITH 300 GALLON TANK

1961 JEEP GRASS-RIG

ALL EQUIPMENT IS IN GOOD CONDITION AND THE NEED FOR ADDITIONAL EQUIPMENT IS NOT FORSEEN.

THERE ARE 24 VOLUNTEERS ON A RADIO ALERT SYSTEM.

EMERGENCY RESCUE UNIT:

A FULLY EQUIPPED 68 CHEVROLET AMBULANCE WITH AN ADEQUATE NUMBER, ACCORDING TO THOSE WHO MAN THE EQUIPMENT AND ASSOCIATED EMPLOYEES OF THE TOWN, OF TRAINED VOLUNTEERS IS THE RESCUE UNIT.

ROSSVILLE:

THIS FIRE DEPARTMENT SERVICES ROSS, OWEN, AND CLAY TOWNSHIPS AND THE TOWN OF ROSSVILLE.

THE FOLLOWING IS HOUSED IN EXCELLENT AND ADEQUATE QUARTERS IN TOWN CENTER:

1970 FORD 750 GPM PUMPER, 750 GALLON TANK

1948 CHEV. 400 GPM PUMPER, 450 GALLON TANK

1956 INTERNATIONAL 1500 GALLON TANKER

1950 GRASS RIG - 850 GALLON TANK

1974 GRASS RIG - 750 GALLON TANK

ALL EQUIPMENT IS IN EXCELLENT CONDITION. THE UNDERWRITERS RECOMMEND, HOWEVER, A 1000 GALLON TANKER TO REPLACE 1948 PUMPER.

THERE ARE 15 VOLUNTEERS ON CENTRAL TELEPHONE COMMUNICATIONS SYSTEM.

EMERGENCY AMBULANCE SERVICE:

THE PRIMARY SERVICE AREA, FOR THE EMERGENCY AMBULANCE SERVICE, IS CLAY AND DEMOCRAT TOWNSHIPS IN CARROLL COUNTY AND ROSS AND OWEN TOWNSHIPS IN CLINTON COUNTY. THE SERVICE MAINTAINS A 1974 FULLY EQUIPPED DODGE AMBULANCE WITH THREE PATIENT CAPACITY AND A 1967 CADILLAC, FULLY EQUIPPED. THE UNITS ARE TO BE HOUSED IN A NEW 24' X 32' GARAGE.

FIRE PROTECTION STANDARDS (PAID PERSONNEL)

IT IS GENERALLY ECONOMICALLY ADVANTAGEOUS FOR ANY URBAN RESIDENTIAL AREA SUCH AS FRANKFORT TO BE AT LEAST CLASS 8 OF THE 10 CLASS CATEGORY OF THE AMERICAN INSURANCE UNDERWRITERS. THIS REQUIRES THAT THERE BE AN ADEQUATE WATER SUPPLY AND DISTRIBUTION SYSTEM AND THAT THE AREA BE WITHIN THE BOUNDARIES OF A MUNICIPALITY OR DISTRICT SUPPLYING FIRE PROTECTION.

WATER SUPPLY:

THE SYSTEM SHOULD BE ABLE TO DELIVER AT ALL TIMES, THE REQUIRED FIRE FLOW FOR A PERIOD UP TO 10 HOURS DURING A PERIOD OF FIVE DAYS MAXIMUM CONSUMPTION. AIA RECOMMENDS A FIRE FLOW FOR AVERAGE CITIES GIVEN BY THE FORMULA:

$$Q = 1,021 \sqrt{P} \quad (\text{WHERE } Q = \text{FLOW IN GALLONS PER MINUTE AND } P = \text{POPULATION})$$

MINIMUM WATER MAIN SIZE OF 6". FIRE HYDRANTS LOCATED WITHIN 500 FEET OF EVERY STRUCTURE, AND NO MORE THAN 1,000 FEET APART. FIRE DEPARTMENTS SHOULD BE LOCATED IN AN AREA OF GREATEST FLEXIBILITY, GENERALLY NEAR MAJOR TRAFFIC INTERSECTIONS.

<u>TYPE OF STATION</u>	<u>PRIMARY SERVICE AREA</u>		<u>No. OF MEN ON DUTY</u>
	<u>HIGH VALVE DISTRICT</u>	<u>RESIDENTIAL DISTRICT</u>	
PUMPER & HOSE Co.	3/4 MILES:	1-1/2 MILE	4 - 5
LADDER Co.	1 MILE	2 MILES	5 - 6
PUMPER-LADDER Co.	1 MILE		8 - 10

FIRE DEPARTMENT STANDARDS. (VOLUNTEER)

ONE PUMPER AND 1,000 FEET OF FIRE HOUSE
REGULARLY SCHEDULED MEETINGS AND DRILLS

POLICE DEPARTMENT STANDARDS:

PERSONNEL: 1.75 TO 2.0 POLICE OFFICERS PER 1,000 POPULATION

NOTE - AS ALL STANDARDS, THE ABOVE ARE THE RESULT OF RECOMMENDATIONS OF ONE OR MORE INTEREST GROUPS. THEY MUST BE ADJUSTED BY LOCAL CONSIDERATIONS AND REQUIREMENTS. THIS ADJUSTMENT MUST COME FROM THE LOCAL GOVERNMENT WORKING CLOSELY WITH PROFESSIONAL AND LAY INTEREST GROUPS, AND WITH FULL CITIZEN PARTICIPATION. IT IS CERTAINLY BEYOND THE SCOPE OF THIS STUDY TO SUGGEST, FOR INSTANCE, THE NUMBER OF PAID FIREMEN THAT ARE NEEDED. STANDARDS FOR SITE LOCATION ARE WITHIN THIS SCOPE, HOWEVER, AND WILL BE CONSIDERED IN PART II OF THIS REPORT.

EMERGENCY AMBULANCE SERVICE - COUNTY WIDE

A REVIEW OF AMBULANCE SERVICE BY INCORPORATED TOWNS REVEALS A COUNTY WIDE DISTRIBUTION SERVING THE TOWNS AND SURROUNDING DESIGNATED TOWNSHIPS. IN THE OPINION OF HOSPITAL AUTHORITIES IN CLINTON COUNTY AND SPOKESMEN FOR THE VARIOUS AMBULANCE SERVICES, THE SYSTEM IS FUNCTIONALLY ADEQUATE AND PERFORMING AT A HIGH LEVEL OF OPERATION.

STREET AND HIGHWAY DEPARTMENTS

COUNTY HIGHWAY GARAGE, AT COUNTY ROADS 100 N AND 30 E, WAS ERECTED IN 1959, AND IS IN VERY GOOD CONDITION ON AN 8 ACRE SITE WHICH IS LESS THAN 5% OCCUPIED.

THE FACILITY COULD USE MORE COVERED SPACE, SUCH AS A POLE BUILDING FOR SNOW PLOWS AND GRADERS. WITH THIS EXCEPTION THE STRUCTURE IS "AMPLE FOR EVERYTHING". THE SITE IS AT THE NORTH OF T.P.A. PARK AND CURRENTLY DOES NOT DETRACT FROM RESIDENTIAL DEVELOPMENT. THIS IS AN EXCELLENT, WELL LOCATED FACILITY.

FRANKFORT STREET DEPARTMENT

THE CITY STREET DEPARTMENT GARAGE, LOCATED 905 BURLINGTON AVENUE (NORTH OF THE LIGHT COMPANY POWER PLANT), IN AN AREA ESSENTIALLY UNDEVELOPED, WAS BUILT IN 1968. THIS STEEL AND CONCRETE STRUCTURE IS IN EXCELLENT CONDITION AND SOUNDLY LOCATED. THERE IS VERY AMPLE EXPANSION POTENTIAL AND THE STRUCTURE ITSELF WAS DESIGNED FOR EASTERLY EXPANSION. IT HOUSES REPAIR AND MAINTENANCE FACILITIES, ADMINISTRATIVE OFFICES, AND THE USUAL AMOUNT OF MAJOR ROLLING EQUIPMENT IN ADDITION TO THE TWO PACKERS OF THE GARBAGE PICKUP FUNCTION.

THIS IS ONE OF THE VERY BEST CITY FACILITIES OF THIS TYPE IN THE LONG EXPERIENCE OF THE CONSULTANT, AND ONE OF THE BEST SITES IN THAT THERE IS NOTHING SURROUNDING THE SITE TO CONFLICT WITH THE NORMAL OPERATION OF THE GARAGE.

COLFAX, KIRKLIN, MICHIGANTOWN, MULBERRY, ROSSVILLE

GARAGES AND STREET/PARK MAINTENANCE EQUIPMENT IN THE SMALLER COMMUNITIES MAY BE READILY CLASSIFIED AS ADEQUATE FOR THEIR FUNCTION. EACH HAVE BEEN VIEWED AND DISCUSSED WITH FOUR OFFICIALS BUT A GARAGE BUILDING IT MAY BE SAID, IS A GARAGE BUILDING. NO NEW OR ADDITIONAL MAJOR EQUIPMENT WAS CONTEMPLATED WITHIN THE NEXT SEVERAL YEARS.

REFUSE DISPOSAL

THE CITY OF FRANKFORT OPERATES THE ONLY SANITARY LANDFILL (FOR SOLID WASTE DISPOSAL) IN CLINTON COUNTY. LOCATED ON HUMES ROAD JUST NORTH OF THE CITY, THIS 20 ACRE SITE RECEIVES CINDERS FROM THE COAL BURNING CITY LIGHT PLANT, HAULED BY CITY STREET DEPARTMENT CREWS AND USED DAILY AS COVER MATERIAL. THE FULL 20 ACRES HAVE BEEN "LAYERED" IN THIS MANNER BY ONE COMPACTOR AND ONE TRACTOR MANY TIMES. UNLIKE MOST, THE SITE IS NOT LIMITED TO THE QUANTITY OF COVER MATERIAL AVAILABLE ON-SITE OR NEAR-SITE. OFFICIALS ESTIMATE THAT FIVE YEARS OF LANDFILL OPERATION REMAIN AT THE SITE.

OBVIOUSLY, THIS IS AN EFFICIENT AND BENEFICIAL ARRANGEMENT. THE CINDERS ARE POUROUS, HOWEVER, AND NOT READILY COMPACTABLE. THE SOLID WASTE MANAGEMENT SECTION OF THE STATE BOARD OF HEALTH, THEREFORE, HAS GIVEN THE CITY A DEADLINE TO FORMULATE SPECIFIC PLANS FOR A NEW LANDFILL SITE.

A NEW SITE HOWEVER, SEEMS DESTINED TO BE IN OPERATION SOON. THERE IS CURRENT AGREEMENT OR UNDERSTANDING THAT THE OWNERSHIP SHOULD BE A COUNTYWIDE RESPONSIBILITY OR THAT THE COUNTY GOVERNMENT PAY A MORE EQUITABLE SHARE OF THE TOTAL OPERATING COSTS THAN THE \$8,000 PAID IN 1974.

AN OPERATION WITHOUT CINDER COVER PRESENTS A PROBLEM OF WHAT TO DO WITH THAT WASTE PRODUCT. AN OBVIOUS SOLUTION IS STOCKPILING ON A VERY LARGE SITE OF THE LIGHT PLANT OR FOR FILL MATERIAL AT CONSTRUCTION SITES AS REQUIRED.

REFERENCE TO THE NATURAL RESOURCES CHAPTER AND THE DISCUSSION OF LANDFILL SITES REVEALS THAT ESSENTIALLY ALL LAND IN CLINTON COUNTY HAS SOIL TYPES SUITABLE FOR THIS OPERATION EXCEPT LAND ALONG RIVER AND STREAM FLOODPRONE AREAS.

COLLECTION:

GARBAGE IS COLLECTED BY CITY COLLECTION CREWS USING ONE 13 CUBIC YARD AND ONE 16 CUBIC YARD PACKER. RESIDENTIAL CUSTOMERS RECEIVE WEEKLY SERVICE, COMMERCIAL CUSTOMERS ARE SERVED THREE TIMES A WEEK. ALL RUBBISH IS COLLECTED BY PRIVATE HAULERS. THE COUNTIES' TOWNS EITHER CONTRACT AS A CORPORATION OR RESIDENTS CONTRACT INDIVIDUALLY FOR GARBAGE AND RUBBISH PICKUP. THE LARGEST PRIVATE HAULER HAS THREE PACKERS COLLECTING BOTH GARBAGE AND RUBBISH (EXCEPT FRANKFORT GARBAGE). THERE ARE NO REPORTED SIGNIFICANT PROBLEMS ASSOCIATED WITH THE COLLECTION SYSTEM.

A RECENT REPORT BY A MEMBER OF THE DEPARTMENT OF AGRICULTURE ECONOMICS AT PURDUE UNIVERSITY ESTIMATED A LANDFILL YEARLY OPERATING COSTS OF \$81,500, OR ABOUT TWICE THE AMOUNT PAID BY THE CITIES AND COUNTY TOWARD THE CURRENT LANDFILL OPERATION. THE REPORT INVOLVED NO DISCUSSION OF SITES OR THE QUESTION OF CITY OR COUNTY OPERATION. IN ADDITION TO ANNUAL OPERATING COSTS, THE REPORT ESTIMATED START-UP COSTS OF AT LEAST \$50,000 BASED ON A PURCHASE PRICE OF \$1,500 PER ACRE FOR THIRTY ACRES AND A FIVE YEAR OPERATIONAL PERIOD. IT WAS ACKNOWLEDGED, HOWEVER, THAT THE LAND COULD BE LEASED AT A CONSIDERABLY REDUCED COST FIGURE. THE \$81,500 FIGURE IS BASED ON NATIONAL PER CAPITA WASTE VOLUMN AVERAGES OF FOUR POUNDS IN RURAL AREAS AND SIX POUNDS IN URBAN AREAS. THIS COMPUTES IN CLINTON COUNTY TO ABOUT 28,000 TON A YEAR. THE COST OF OPERATION IS COMPUTED AT \$2.90 A TON.

THE REPORT LISTED FOUR ALTERNATIVES FOR MANAGING AND FINANCING THE OPERATION:

- (1) PUBLIC MANAGEMENT AND TAXATION. A GENERAL OBLIGATION BOND, HOWEVER, COULD PAY FOR THE INITIAL INVESTMENT.
- (2) PUBLIC MANAGEMENT AND USER FEES, WITH INITIAL INVESTMENT PAID BY REVENUE BONDS, AND USERS ASSUMING OPERATING COSTS.
- (3) PRIVATE MANAGEMENT AND PRIVATE CONTRACT, WITH INITIAL INVESTMENT AND OPERATION COSTS BORN BY A PRIVATE INDIVIDUAL. THE COUNTY WOULD CONTRACT FOR SERVICE WITH THE COST PAID THROUGH THE TAX RATE.
- (4) PRIVATE MANAGEMENT AND USER FEES, WHERE AN INDIVIDUAL IS BILLED DIRECTLY BY THE OPERATOR.

THE LAST THREE ALTERNATIVES WOULD REQUIRE THE ADDED EXPENSE OF A BILLING AND COLLECTION SYSTEM FOR FEES. THE REPORT NOTED THE ADVANTAGE OF USER FEES BECAUSE THE AMOUNT OF TRASH MAY NOT BE PROPORTIONAL TO THE TAXES TO WHICH A BUSINESS IS SUBJECTED. USER FEES MEAN COST CAN BE DIRECTLY RELATED TO THE VOLUMN OF WASTE GENERATED. THE REPORT RECOMMENDED THAT THE LAND BE OWNED BY A GOVERNMENTAL AGENCY AS A WAY OF CONTROLLING CONTRACTURAL ADHERENCE BY A PRIVATE OPERATOR.

IMPORTANT PLANNING CONSIDERATIONS OF THE REPORT ARE:

- (1) KNOW BEFOREHAND WHAT USE THE LANDFILL SITE WILL BE RETURNED TO SO THAT APPROPRIATE MEASURES MAY BE TAKEN INITIALLY FOR THAT FUTURE USE.
- (2) LOCATE THE FACILITIES NEAR THE CITY OF FRANKFORT SINCE HALF THE COUNTY POPULATION IS THERE.

FUNCTIONAL ARRANGEMENT

LIVING AREAS EXIST WITHIN EASY WALKING OR DRIVING DISTANCE OF THE COMMUNITIES EMPLOYMENT CENTERS, SHOPPING CENTERS, EDUCATION, RECREATION AND CULTURAL CENTERS. FIRE (BOTH PAID AND VOLUNTEER) AND POLICE PROTECTION TO EACH DWELLING UNIT AND HIGH VALUE (INDUSTRIAL-COMMERCIAL) DISTRICT IS GENERALLY EXCELLENT. WITH THE FEW NOTED EXCEPTIONS, EACH RESIDENCE IN THE INCORPORATED AREAS ARE SERVED BY ADEQUATE SEWERS AND WATER PRESSURE AT REASONABLE USER RATES. THE FRANKFORT PUBLIC LIBRARY IS CENTRALLY LOCATED ALTHOUGH IT IS NOT AS CLOSE TO THE CENTRAL SHOPPING AREA AS DESIRABLE. STREET AND HIGHWAY GARAGES DO NOT INTRUDE INTO OR CONFLICT WITH RESIDENTIAL AMENITIES. THE LOCATION OF THE COUNT HOUSE IS SATISFACTORY. FRANKFORT AIRPORT HAS AN EXCELLENT LOCATION BUT GROWTH TRENDS OF THE CITY FOREWARN THE APPROACH OF URBAN DEVELOPMENT AND THE NEED FOR AIRSPACE CONTROLS. LOCATION AND ARRANGEMENT OF THE AREA'S COMMUNITY FACILITIES ARE BASICALLY FUNCTIONAL WITHIN THE FRAMEWORK OF EXISTING LAND USE. EMERGENCY SERVICE IS QUITE ADEQUATE THROUGHOUT THE COUNTY.

UTILITIES

UTILITIES

GENERAL

ADEQUATE UTILITY SYSTEMS ARE OF VITAL IMPORTANCE TO URBAN AREAS AND OF CONSIDERABLE IMPORTANCE IN SERVING THE NEEDS OF AREA-WIDE DEVELOPMENT. IN THIS CHAPTER THE GENERAL CHARACTERISTICS OF EXISTING SEWER AND WATER SYSTEMS ARE PRESENTED AND SIGNIFICANT PROBLEMS OUTLINED. ALSO DISCUSSED BRIEFLY IS THE CITIES LIGHT AND POWER UTILITY.

THE INCORPORATED COMMUNITIES OF FRANKFORT, KIRKLIN, COLFAX, ROSSVILLE, AND MULBERRY FURNISH BOTH SEWER AND WATER.

BASED ON INFORMATION SUMMARIZED IN THIS CHAPTER, GENERAL RECOMMENDATIONS TO GUIDE THE PLANNING COMMISSION IN ITS DELIBERATIONS AND RECOMMENDATIONS WILL BE DEVELOPED AND PRESENTED IN PART II, THE "PLANS" PART OF THE AREA PLANNING PROGRAM.

WATER SYSTEMS

DESIGN CONSIDERATIONS

EFFECTIVE WATER SYSTEMS MUST HAVE A RELIABLE SOURCE OF SUPPLY, TREATMENT IF NECESSARY, STORAGE, AND DISTRIBUTION NETWORK. ALL SYSTEMS IN CLINTON COUNTY DEPEND ENTIRELY ON GROUND WATER FOR SUPPLY. THE NATURAL RESOURCE CHAPTER OF THIS REPORT SHOW AVERAGE CLINTON COUNTY GROUND WATER YIELDS VARY FROM 300 TO 500 GALLONS PER MINUTE. MUNICIPAL SYSTEMS SHOULD HAVE AT LEAST TWO WELLS, EACH CAPABLE OF MEETING MAXIMUM DAY DEMANDS. ONE WELL CAN ACT AS A STANDBY IF THE OTHER IS OUT OF SERVICE.

STORAGE OF WATER IS REQUIRED TO SUPPLY PEAK SERVICE DEMANDS, RESERVES FOR PUMP FAILURES OR SYSTEM BREAKS, AND FOR FIRE FIGHTING. THE BULK OF THE WATER STORAGE IN CLINTON COUNTY IS IN ELEVATED TANKS. OPTIMUM FIRE STORAGE REQUIREMENTS ARE VERY HIGH AND COMMUNITIES SELDOM FIND THE COST JUSTIFIED BY INSURANCE RATE RESTRICTIONS.

MAINS DISTRIBUTING WATER TO RESIDENTIAL AND COMMERCIAL AREAS SHOULD BE PROVIDED BY PIPES AT LEAST SIX INCHES IN DIAMETER. THE COST OF A SIX INCH MAIN IS APPROXIMATELY 25% MORE THAN A FOUR INCH. AT A FLOW OF 500 GPM, HOWEVER, THE SIX INCH LINE HAS ONLY ONE-SEVENTH THE PRESSURE LOSS OF A FOUR INCH LINE OVER 400 FEET IN LENGTH. THIS RESULTS IN A SIGNIFICANT IMPROVEMENT IN FIRE FIGHTING CAPABILITIES FOR THE INVESTMENT OF AN ADDITIONAL TWENTY-FIVE PERCENT. A SIX INCH LINE IS ALSO GENERALLY RECOMMENDED BY THE STATE BOARD OF HEALTH.

PUBLIC SERVICE TO ALL SIGNIFICANT AREAS WITH URBAN DENSITIES IS DESIRABLE AND ECONOMICALLY JUSTIFIED. EXTENSION OF SERVICES SHOULD BE COORDINATED WITH LAND USE POLICIES AND ADMINISTERED AS A MEANS OF AUGMENTING THE PROGRESSIVE REALIZATION OF THE LAND USE PLAN.

EXISTING WATER SYSTEMS

ALL INCORPORATED COMMUNITIES EXCEPT MICHIGANTOWN HAVE PUBLIC WATER SYSTEMS. THE IMPORTANT COMPONENTS OF THESE SYSTEMS ARE ILLUSTRATED IN TABLE 1 AND MAPS 1 AND 2 *. WATER SUPPLY, TREATMENT, STORAGE, AND DISTRIBUTION APPEAR GENERALLY ADEQUATE FOR PRESENT NEEDS. THE SUPPLY AND TREATMENT PLANT CAPACITIES FOR ALL THE TOWNS OF TABLE 1 ARE ADEQUATE FOR PRESENT AND PROJECTED NEEDS. EXPANSION TO NEWLY DEVELOPED AREAS SHOULD BE MADE WITH SIX INCH MAINS WHERE FEASIBLE.

EXISTING SEWER SYSTEM

DESIGN CONSIDERATIONS:

SEWER SYSTEMS CONSIST OF TWO MAJOR COMPONENTS - COLLECTION SEWERS AND TREATMENT FACILITIES. SEWER LINES ARE GENERALLY LAID TO FOLLOW TOPOGRAPHY, UTILIZING GRAVITY FORCES TO DELIVER FLOWS TO A PUMPING STATION OR TREATMENT PLANT. LIFT STATIONS ARE COMMONLY USED TO OVERCOME TOPOGRAPHIC RESTRICTIONS. SANITARY SEWERS SHOULD BE FREE OF STORM WATER INLETS WHICH OVERBURDEN THE SYSTEM DURING PERIODS OF HIGH RUNOFF.

SIZE OF SEWER DEPENDS ON DEGREE OF SLOPE OF LINES AND INTENSITY OF USE. SERVICE LINES GENERALLY FEED INTO LARGER MAINS OR INTERCEPTORS WHICH DELIVER WASTES TO THE TREATMENT PLANT. LINES MUST BE DESIGNED TO HANDLE PEAK USAGE AND GROUNDWATER INFILTRATION. THEY MUST BE ADEQUATELY SIZED TO MEET PRESENT AND FUTURE DEMANDS AS A RESULT OF EXTENSIONS.

ADEQUATE TREATMENT IS ESSENTIAL FOR THE PROTECTION OF PUBLIC HEALTH AND PRESERVATION OF THE RECEIVING LAKE, RIVER, OR STREAM. SMALLER STREAMS AND LAKES REQUIRE A HIGHER DEGREE OF TREATMENT THAN LARGER ONES.

PRIMARY TREATMENT OR CLARIFICATION CONSISTS OF SETTLING OUT AND REMOVAL OF PART OF THE SUSPENDED SOLIDS IN SEWAGE. SECONDARY TREATMENT CONSISTS OF FURTHER REMOVAL OF SUSPENDED SOLIDS AND OXYGEN-CONSUMING ORGANIC WASTES WHICH REMAIN AFTER CLARIFICATION. TERTIARY TREATMENT IS A FILTRATION TREATMENT; A "POLISHING" PROCESS THAT REMOVES ADDITIONAL COLLOIDAL AND SUSPENDED SOLIDS FROM THE EFFLUENT OF SECONDARY TREATMENT.

* ALL MAPS OF UTILITY SYSTEMS ARE FOUND IN THE CHAPTER—
UTILITY PLANS - IN PART II OF THIS REPORT.

FIVE COMMUNITIES IN CLINTON COUNTY HAVE SANITARY SEWER AND WASTE TREATMENT SYSTEMS: FRANKFORT, KIRKLIN, COLFAX, MULBERRY, AND ROSSVILLE. THESE SYSTEMS ARE SHOWN ON MAPS 3 AND 4 * WITH THE EXCEPTION OF COLFAX WHERE NO SEWER UTILITIES MAP IS AVAILABLE.

TABLE 1

PUBLIC WATER SYSTEMS
CLINTON COUNTY, INDIANA - 1974

	<u>FRANKFORT</u>	<u>ROSSVILLE</u>	<u>KIRKLIN</u>	<u>COLFAX</u>	<u>MULBERRY</u>
EXISTING MAXIMUM DEMAND GPD	4,250,000	150,000	100,000	70,000	85,000
TOTAL SUPPLY CAPACITY GPD	7,000,000	200,000	200,000	150,000	150,000
STORAGE CAPACITY	2,750,000	50,000	75,000	65,000	75,000
AREA SERVED	CITY AND WESLEY MANOR	TOWN & GOLF COURSE	TOWN + 6 HOMES	TOWN	TOWN
TREAT- MENT	AERATE, FILTRATE CHLORINATE	CHLORINATE	CHLORINATE	CHLORINATE	CHLORINATE

SOURCE: HUFF-CARPENTER-ROSS ASSOCIATES AND STATE BOARD OF HEALTH

* ALL MAPS OF UTILITY SYSTEMS ARE FOUND IN THE CHAPTER -
UTILITY PLANS - IN PART II OF THIS REPORT.

FRANKFORT

FRANKFORT'S SEWAGE TREATMENT IS THE TRICKLING FILTER PROCESS WITH TWO DIGESTERS, ONE AT 912,600 GALLON CAPACITY IS NOT IN USE. THE OTHER DIGESTER HAS A 265,072 GALLON CAPACITY PER DAY. THE PLANT HAS 3,132,000 GPD CAPACITY WITH CURRENT DEMAND APPROACHING THAT FIGURE. THE WASTEWATER IS CHLORINATED AND SLUDGE IS PROCESSED BY ANAEROBIC DIGESTION. EFFLUENT IS 85% CLEAN WHEN RELEASED. THE EXISTING SYSTEM COMBINES BOTH STORM AND SANITARY FLOWS AND SERVES WESLEY MANOR AND THE INDUSTRIAL AREAS ALONG SR 28 WEST OF THE CITY, IN ADDITION TO THE CITY. THE TREATMENT PLANT WAS BUILT IN 1928. THERE IS ADEQUATE ON-SITE EXPANSION AREA.

PLANT EXPANSION TO IMPROVE THE TREATMENT FACILITIES (ACTIVATED SLUDGE AND ADVANCED WASTEWATER TREATMENT) MAY BEGIN DURING 1975. COST ESTIMATES RANGE FROM \$6.5 MILLION TO \$7.7 MILLION FOR UPGRADING THE OLD PLANT; \$975,000 FOR POSSIBLE SEWER LINE EXTENSIONS AND \$250,000 FOR ADVANCED TREATMENT FACILITIES. TIMING OF THE IMPROVEMENTS DEPENDS ON APPROVAL OF GRANTS. ENVIRONMENTAL PROTECTION AGENCY (EPA) GRANTS WILL COVER 75% OF PROJECT COSTS, THE STATE WILL ADD TEN PERCENT, LEAVING THE CITY TO PAY 15 PERCENT, OR ABOUT \$1 MILLION.

THE PROPOSED FACILITY WOULD ELIMINATE 80 PERCENT OF STORM WATER RUNOFF (WATER WHICH INFILTRATES THE SYSTEM FROM THE GROUND, ROOF AND CELLAR DRAINS). THE OTHER 20 PERCENT WOULD BE TREATED. PLANS ARE TO USE THE EXISTING TREATMENT PLANT SITE NORTH OF T.P.A. PARK. THERE WILL ALSO BE A RETENTION BASIN WHICH WILL DIVERT TO THE PLANT AT PERIODS OF LOW-FLOW.

MULBERRY'S SEWAGE TREATMENT PLANT USES THE EXTENDED AERATION PROCESS, CHLORINATION AND AEROBIC DIGESTION. THE EFFLUENT, DISCHARGED INTO SOUTH FORK, WILDCAT CREEK, IS 94.5% CLEAN WATER. THE PLANT HAS A GALLON PER DAY CAPACITY OF 160,000. BECAUSE OF THE RELATIVE NEWNESS OF MOST OF THE SYSTEM ONLY ABOUT ONE-HALF OF POTENTIAL USERS ARE NOT ON HOOKUP. THERE IS NO ESTIMATE AS TO WHEN CAPACITY WILL BE REACHED. THE SYSTEM, TWELVE YEARS IN THE CONSTRUCTION AND PLANNING STAGES, MAY BE COMPLETED BY JANUARY, 1975, ACCORDING TO TOWN OFFICIALS. INTERCEPTOR AND LATERAL SEWERS ARE COMPLETED, BUT AS OF OCTOBER, 1974, 144 RESIDENTS STILL HAVE NOT BEEN CONNECTED TO THE SYSTEM. THE SYSTEM WAS MANDATED IN 1963 BY THE STATE BOARD OF HEALTH. AFTER TEN YEARS OF APPLYING FOR FEDERAL AID THE ENVIRONMENTAL PROTECTION AGENCY IN 1973 AWARDED A \$191,700 GRANT FOR TREATMENT PLANT CONSTRUCTION; THE STATE LATER ADDED \$25,560; AN ADDITIONAL \$480,000 TO PAY OFF THE ESTIMATED \$680,000 PROJECT COST WAS RAISED THROUGH A BOND SALE THROUGH THE FARMERS HOME ADMINISTRATION. THE BONDS WILL MATURE IN 38 YEARS FROM GENERAL SEWER REVENUES.

KIRKLIN

KIRKLIN OPERATES THE TRICKLING FILTER, CHLORINATES, AND UTILIZES AN AEROBIC DIGESTION PROCESS IN THE TREATMENT OF SEWAGE. EFFLUENT IS 87.0 PERCENT CLEAR. THE GPD CAPACITY IS 142,000 WITH CURRENT DEMAND VOLUME AT 34,000 GPD AVERAGE. THERE ARE NO PLANS FOR REQUIREMENTS FOR INCREASED CAPACITY.

THE ONLY PROBLEM WITH THE SYSTEM IS ONE OF STORM WATER INFLOW. SINCE NO TESTS HAVE YET BEEN MADE THE SOURCE OF THE INFILTRATION IS UNKNOWN AT THIS TIME.

COLFAX

COLFAX'S TREATMENT IS BY TRICKLING FILTER, CHLORINATION, AND ANAEROBIC DIGESTION OF SLUDGE WITH A PLANT CAPACITY OF 160,000 GPD. THE "DEMAND" FIGURE WAS NOT AVAILABLE AT THE TIME OF THE FIELD CHECK BECAUSE ABOUT ONE-HALF OF THE EXPECTED USERS ARE YET TO BE HOOKED INTO THE SYSTEM. THE DEMAND WILL PROBABLY BE IN THE 50,00 TO 60,000 RANGE, HOWEVER, ACCORDING TO UTILITY PERSONNEL ESTIMATES. THE OUTFALL IS INTO WALDCAT CREEK (MIDDLE BRANCH). THERE IS AMPLE, THOUGH UNNEEDED, ON-SITE EXPANSION AREA.

ROSSVILLE

THE ROSSVILLE PLANT IS DESIGNED FOR A 100,000 GPD CAPACITY. CURRENT DEMAND IS 74,000 GPD. TREATMENT IS BY TRICKLING FILTER, CHLORINATION, AND ANAEROBIC SLUDGE DIGESTION AND IS 99 PERCENT CLEAN ON RELEASE. THERE IS AMPLE ON-SITE EXPANSION BUT THERE ARE NO PLANS FOR ADDITIONAL TREATMENT CAPACITY.

ADVANCED TREATMENT:

IT IS RECOMMENDED, AS A MATTER OF COURSE, THAT THE ABOVE SYSTEMS ULTIMATELY HAVE MORE ADVANCED TREATMENT. THIS RECOMMENDATION IS MADE FOR ECOLOGIC, NOT ECONOMIC, REASONS.

MICHIGANTOWN

MICHIGANTOWN HAS NEITHER SEWER NOR WATER. THERE ARE PRELIMINARY ENGINEERING PLANS READY FOR SEWERS. THE TOWN IS AWAITING FEDERAL FINANCIAL ASSISTANCE FOR THE SYSTEM. CURRENT COST ESTIMATES ARE \$893,000.

UNSERVED DEVELOPMENT - WITH THE EXCEPTION OF MICHIGANTOWN THERE ARE NO AREAS OF SUFFICIENT URBANIZATION TO WARRANT A COMMUNITY, A PUBLIC, OR A "PACKAGE" WASTEWATER TREATMENT PLANT.

OTHER UTILITIES

SYSTEMS SUPPLYING NATURAL GAS ENERGY AND COMMUNICATIONS SERVICES ARE GENERALLY ADEQUATE TO MEET PRESENT NEEDS. THESE PRIVATE OR

SEMI-PUBLIC CONCERNS ARE USUALLY CAPABLE OF RELATIVELY QUICK AND EFFECTIVE REACTION TO REQUIRED CHANGES AND INCREASES.

LIGHT AND POWER

FRANKFORT

THE CITY LIGHT AND POWER PLANT OCCUPIES A LARGE SITE AT THE CITY'S NORTHEAST. THE PLANT IS A MUNICIPAL OPERATION WHICH SERVES THE CITY OF FRANKFORT, CLINTON COUNTY, AND PARTS OF TIPTON, BOONE, AND TIPPECANOE COUNTY. THE POWER DEMAND AND SUPPLY IS IN ESSENTIAL BALANCE AT 150 MILLION KW ANNUALLY. THE SYSTEM HAS INTERCONNECT TO PUBLIC SERVICE OF INDIANA (PRIVATE) FOR 2500 KW NOMINAL AND 3300 KW PER HOUR PEAK.

ON-SITE GENERATION HAS DECLINED DURING THE LAST TEN YEARS FROM 95 PERCENT TO THE PRESENT 70 PERCENT, THE BALANCE PURCHASED FROM PSI. JULY 1974, SAW THE FIRST RATE ADJUSTMENT GRANTED BY THE PUBLIC SERVICE COMMISSION, THE STATE REGULATORY AGENCY, SINCE 1949. ONE OF THE RECOGNIZED DEFICIENCIES IS THE LACK OF ELECTRICAL CODE ENFORCEMENT IN THE SERVICE AREA. (NOT A UTILITY PROBLEM BUT A SAFETY FROM FIRE PROBLEM FOR THOSE WHO USE THE SERVICE.)

SUMMARY

THIS CHAPTER HAS BEEN A SUMMARY OF EXISTING AND PLANNED SEWER, WATER, AND LIGHT AND POWER UTILITIES IN CLINTON COUNTY. ALL INCORPORATED COMMUNITIES EXCEPT MICHIGANTOWN PROVIDE BOTH SEWER AND WATER.

MAJOR IMPROVEMENTS WILL BE REQUIRED ONLY IN THE CITY OF FRANKFORT. ALL COMMUNITIES (EXCEPT MICHIGANTOWN) HAVE STORAGE CAPABILITY WHICH ARE BELOW OPTIMUM FIRE PROTECTION NEEDS BUT WHICH ARE ENTIRELY ADEQUATE TO MEET "AVERAGE" OR "NORMAL" AND LESS THAN OPTIMUM NEEDS. WITH THE EXCEPTION OF MICHIGANTOWN ALL AREAS IN THE COUNTY -- BOTH INCORPORATED AND NAMED PLACES -- WHICH ARE URBANIZED OR DEVELOPED TO AN "URBAN" DENSITY THAT WOULD JUSTIFY SEWER SYSTEMS NOW HAVE SEWER SYSTEMS.

THE EXTENSION OF PUBLIC SEWERS FROM THE MUNICIPALITIES NOW PROVIDING THAT SERVICE MUST BE ACCOMPLISHED WITHIN AREAS OF SOILS FAVORABLE TO URBAN DEVELOPMENT. A PARTICULAR CONCERN ARE AREAS OF PONDING. THIS CHAPTER, THEN, SHOULD BE CAREFULLY RELATED AND CORRELATED WITH THE NATURAL RESOURCES CHAPTER OF THIS REPORT.

COMMUNITY

GOALS

STANDARDS

OBJECTIVES

COMMUNITY GOALS, STANDARDS, AND OBJECTIVES

THIS CHAPTER IS CONCERNED WITH COMMUNITY GOALS, STANDARDS, AND OBJECTIVES IN THE DESIGN OF THE ELEMENTS OF THE PLAN. THESE CULTURAL AND SOCIAL VALUES ARE A NECESSARY PART OF AND INSEPARABLE FROM THE PHYSICAL PLAN.

BECAUSE THESE EXPRESSIONS OF COMMUNITY VALUES ARE IMPORTANT TO THE COMPREHENSIVE DEVELOPMENT PLAN, THEY ARE PRESENTED PRIOR TO THE DESCRIPTION OF THE PLANNING PROPOSALS.

WHILE THE END PRODUCT--ATTAINMENT-- REPRESENTS A POINT IN TIME, IT ALSO REPRESENTS A CONTINUING SERIES OF ATTAINMENTS RESULTING FROM CONTINUING PLANNING (UPDATING, IMPROVING BY TECHNOLOGICAL ADVANCEMENTS, ETC.) AND CONTINUING ADMINISTRATION.

GOALS

GOALS ARE BROAD, IDEAL, AND SLOW-TO-CHANGE EXPRESSIONS OF COMMUNITY DESIRES AND ASPIRATIONS. THEY EXIST ESSENTIALLY INDEPENDENTLY OF THE PLANNING PROGRAM AND ARE MORE LIKELY TO BE FURTHERED THAN REVISED BY THE PROGRAM'S FINDINGS AND RECOMMENDATIONS. CHARACTERISTICALLY, GOALS ARE STATED AS ABSTRACTIONS SUFFICIENTLY GENERAL TO ENCOMPASS A CONSENSUS OF MOST MEMBERS OF THE COMMUNITY, AND THEY ARE STATED AS DIRECTIONS, PURSUITS, OR AIMS. AS DIRECTIONS, THEY ARE NOT INTENDED TO BE ATTAINED AND FORGOTTEN. THEY ARE ONGOING, SERVING TO CHANNEL ACTIVITIES AND ACTIONS TOWARD THE ATTAINMENT OF SPECIFIC ACHIEVEMENTS (OBJECTIVES). GOALS PROVIDE THE IMPETUS TO ACTION; IN THIS REGARD, IT MAY BE SAID THAT THE PLANNING PROGRAM IS ONE OF SEVERAL PROGRAMS CREATED BY THE COMMUNITY TO FURTHER ITS ASPIRATIONS (GOALS). ALTHOUGH GOALS ARE FREQUENTLY EXPRESSED AS PURSUITS OF ATTAINMENT THEY ARE TRANSLATED INTO MORE NUMEROUS AND MORE SPECIFIC ITEMS CALLED OBJECTIVES (DISCUSSED BELOW) WHICH ARE INTENDED TO BE ACHIEVED.

STANDARDS

IN ORDER TO TRANSLATE GOALS INTO OBJECTIVES, IT IS NECESSARY TO DETERMINE A SET OF STANDARDS FOR THE SERVICES AND USES DEALT WITH IN THE PLAN TO PROVIDE MEASURABLE DESCRIPTIONS OF WHAT IS TO BE ACHIEVED. CERTAIN "YARD-STICKS" ARE REQUIRED TO STATE SUCH THINGS AS REQUIRED AREAS OF LAND, BUILDING CAPACITIES, LOCATIONS AND CHARACTERISTICS OF PARKS AND SCHOOLS, FIRE STATIONS, TREATMENT PLANTS, AND MOST OTHER COMMUNITY FACILITIES AND SERVICE SYSTEMS.

BY AND LARGE, THESE STANDARDS WILL REFLECT THE WANTS OF THE PUBLIC AGENCIES AND PRIVATE ACTIVITIES WHICH PROVIDE THE SERVICES AND ACCOMPLISH THE IMPROVEMENTS AND DEVELOPMENT. FOR EXAMPLE, THE SCHOOL STANDARDS SHOULD BE THOSE OF THE SCHOOL AUTHORITY.

STANDARDS ARE ALSO AFFECTED BY THE ASSETS AND LIABILITIES OF THE COMMUNITY'S RESOURCES, INCLUDING TOPOGRAPHY, LOCATION, EXISTING DEVELOPMENT, AND FINANCIAL CAPACITIES. MOST OF THE APPLICABLE RESOURCES AND CONSTRAINTS TO DEVELOPMENT HAVE BEEN ANALYZED IN THE COURSE OF THE SURVEY AND ANALYSIS.

OBJECTIVES

THE TRANSLATION OF COMMUNITY GOALS INTO OBJECTIVES IS A CRITICAL ACTIVITY IN PLANNING BECAUSE THE OBJECTIVES DESCRIBE THE SPECIFICS THE PLAN IS TO ACCOMPLISH.

AN OBJECTIVE STATES WHAT IS TO BE ACCOMPLISHED BUT IT DOES NOT INDICATE WHY IT SHOULD BE ACHIEVED; THE GOAL OR GOALS IT SERVES PROVIDES THE JUSTIFICATION. IDEALLY EXPRESSED OBJECTIVES HAVE TWO CHARACTERISTICS: THEY ARE MEASURABLE AND THEY ARE ATTAINABLE. TO BE MEASURABLE IT IS DESIRABLE THAT OPERATIONAL OBJECTIVES STATE NUMERICAL AMOUNTS, DISTANCES, OR DIMENSIONS (I.E., SO MANY ACRES OF RESIDENTIAL LAND TO BE REQUIRED, SO MANY ELEMENTARY SCHOOLS, ETC.). BUT THIS IS NOT ALWAYS POSSIBLE AND IT IS OFTEN NECESSARY TO STATE RELATIONSHIPS INSTEAD.

SUMMARY

WITH THE ABOVE DEFINITIONS AND RELATIONSHIPS IN VIEW, REFERENCE MAY BE MADE TO THE IDENTIFICATION OF GOALS, STANDARDS, AND OBJECTIVES. RECOMMENDED GOALS ARE OUTLINED AS A PREFACE TO THE DESCRIPTION OF STANDARDS AND THE OBJECTIVES WHICH OCCUR THROUGH THE REMAINDER OF THE REPORT.

GENERAL GOALS

PHYSICAL DEVELOPMENT WITH WHICH THE PLAN DEALS, IS ESSENTIALLY CONCERNED WITH ENVIRONMENTAL GOALS, BUT IT IS ALSO INFLUENCED BY THE COMMUNITY'S SOCIAL, ECONOMIC, AND POLITICAL GOALS. THESE GENERAL CATEGORIES ARE DISCUSSED BELOW. COMMUNITY MEANS BOTH URBAN AND RURAL CLINTON COUNTY.

ENVIRONMENTAL GOALS

- 0 THE ATTAINMENT OF CONDITIONS OF SAFETY THROUGHOUT THE COMMUNITY

WITH SO MANY NEW PROBLEMS RECEIVING ATTENTION, IT IS SOMETIMES EASY TO OVERLOOK THE MORE BASIC AND TRADITIONAL GOALS. SAFETY IS ONE OF THESE. PLANNING HAS ALWAYS BEEN CONCERNED WITH MAKING THE COMMUNITY A SAFER PLACE IN WHICH TO LIVE. IT PURSUES THIS GOAL IN A VARIETY OF WAYS INCLUDING ISOLATING DANGEROUS ACTIVITIES, REQUIRING INHERENTLY SAFER URBAN DESIGN, AND REGULATING DEVELOPMENT IN AREAS OF UNSAFE TOPOGRAPHY AND FLOODPLAIN.

- 0 THE ATTAINMENT OF CONDITIONS CONDUCTIVE TO HEALTH THROUGHOUT THE COMMUNITY

HEALTH IS ANOTHER TRADITIONAL AND FREQUENTLY OVERLOOKED GOAL. PLANNING'S CONTRIBUTIONS TO THIS GOAL RANGE FROM RELATING DEVELOPMENT (THROUGH SETBACK REQUIREMENTS AND YARD SIZES) TO NATURAL CONDITIONS OF LIGHT AND AIR REQUIRING ADEQUATE SANITATION INSTALLATIONS AND ACCOMMODATING HEALTH FACILITIES IN THE URBAN PATTERN.

- 0 THE ATTAINMENT OF CONDITIONS OF AMENITY THROUGHOUT THE COMMUNITY

THE COMMUNITY HAS ALWAYS BEEN CONCERNED WITH WHAT PEOPLE SEE, HEAR, AND SMELL, BUT INCREASING EMPHASIS IS BEING PLACED ON AMENITIES AS THEIR ECONOMIC AND PSYCHOLOGICAL VALUES BECOME BETTER KNOWN. SINCE PLANNING DEALS WITH THE PHYSICAL AND FUNCTIONAL PATTERN OF THE COMMUNITY, ITS CONTRIBUTION TO THE MAKING OF A MORE ATTRACTIVE COMMUNITY CAN BE SUBSTANTIAL.

- 0 THE ATTAINMENT OF AN OPTIMUM USAGE OF THE NATURAL ENVIRONMENT

THE NATURAL LANDSCAPE CONTAINS ELEMENTS OF OPPORTUNITY AND RESTRAINT. RELATING DEVELOPMENT TO THE LANDSCAPE CAN EFFECT PUBLIC AND PRIVATE ECONOMIES, CONTRIBUTE TO COMMUNITY APPEARANCE, AND PREVENT UNSAFE CONDITIONS.

- 0 THE ATTAINMENT OF OPTIMUM RELATIONSHIPS BETWEEN DEVELOPMENT AND FACILITIES

BOTH EFFICIENCY AND LIVABILITY ARE PROVIDED WHEN DEVELOPMENT (LARGELY PRIVATE) AND FACILITIES (LARGELY PUBLIC) ARE BALANCED. FOR EXAMPLE, HOUSING MUST BE CONSIDERED IN RELATIONSHIP TO UTILITIES, PARKS, SCHOOLS, AND STREETS. PLANNING PROVIDES SEVERAL OF THE INSTRUMENTS BY WHICH COORDINATION IS ACHIEVED.

- 0 THE ATTAINMENT OF AN OPTIMUM RELATIONSHIP BETWEEN LAND USES AND ACTIVITIES THROUGH THE COMMUNITY

SOCIAL GOALS

- 0 THE ATTAINMENT OF AN OPTIMUM RANGE OF OPPORTUNITIES FOR ALL RESIDENTS OF THE COMMUNITY

THE RESPONSIBLE COMMUNITY TODAY BOTH URBAN AND RURAL INSEPARATELY IS ONE WHICH PROVIDES AMPLE OPPORTUNITIES FOR THE PERSONAL DEVELOPMENT OF ITS CITIZENS COMMENSURATE WITH ITS RESOURCES. THE CITIZENS INCLUDE PERSONS OF DIFFERENT ABILITIES, AGES, TASTES, AND ASPIRATIONS, AND THE OPPORTUNITIES INCLUDE EDUCATION, HOUSING, RECREATION AND EMPLOYMENT. BOTH PUBLIC AND PRIVATE SERVICES ARE CONSIDERED. PLANNING'S CONTRIBUTIONS INCLUDE THE PLACEMENT OF NEEDED FACILITIES IN APPROPRIATE SIZE AND LOCATIONS AND RECOMMENDED PROGRAMMING FOR THEIR PROVISION.

- 0 THE ATTAINMENT OF A RANGE OF CHOICE FOR ALL RESIDENTS TO THE COMMUNITY

ALTHOUGH RELATED TO THE GOAL ABOVE, RANGE OF CHOICE DESERVES SEPARATE MENTION. IT IMPLIES THAT THE RANGE OF OPPORTUNITIES SHOULD BE SUFFICIENTLY WIDE AS TO PERMIT THE INDIVIDUAL TO DECIDE AMONG ALTERNATIVES. FOR EXAMPLE, THERE SHOULD BE A CHOICE IN REGARD TO EMPLOYMENT, EDUCATION, AND HOUSING. PLANNING CAN IDENTIFY FACILITIES NEEDED TO EFFECT CHOICE AND PROVIDE THE FLEXIBILITY NEEDED IN DEVELOPMENTAL REGULATIONS TO ENCOURAGE GREATER VARIETY.

ECONOMIC GOALS

- 0 THE ATTAINMENT OF A GROWING AND MORE DIVERSIFIED ECONOMY

MOST CITIZENS OF A COMMUNITY ARE INTERESTED IN ECONOMIC GROWTH (AND, CONSEQUENTLY, IN POPULATION EXPANSION) RATHER THAN LIMITING EXPANSION, AND A MORE DIVERSIFIED ECONOMY CAPABLE OF PROVIDING A GREATER RANGE OF EMPLOYMENT AND A MORE STABLE TAX BASE IS DESIRED. PLANNING CAN ACCOMMODATE THIS GOAL BY PROVIDING FOR A GREATER VARIETY OF LOCATIONS AND ENVIRONMENTS FOR ECONOMIC ACTIVITIES.

- 0 THE ATTAINMENT OF OPTIMUM EMPLOYMENT FOR THE LABOR FORCE OF THE COMMUNITY

THE COMMUNITY IS INTERESTED IN ENSURING THAT ALL ITS CITIZENS SEEKING EMPLOYMENT ARE ABLE TO FIND IT. THROUGH PROVIDING A PHYSICAL FRAMEWORK CONDUCTIVE TO THE RETENTION OF EXISTING "INDUSTRIES" AND THE ATTRACTION OF NEW ECONOMIC ACTIVITIES, PLANNING CAN PLAY A MAJOR ROLE, IN THE LONG RUN, IN OBTAINING DESIRED LEVELS OF EMPLOYMENT.

- 0 THE ATTAINMENT OF AN ADEQUATE TAX BASE TO PROVIDE AN OPTIMUM BASE OF COMMUNITY SERVICES

WITH COMMUNITY "OVERHEAD" INCREASING IN RANGE AND COST AS A RESULT OF CHANGES IN TECHNOLOGY AND THE ECONOMY, COMMUNITIES ARE BEING FORCED TO ENLARGE THEIR TAX BASES. PLANNING SEEKS TO IMPROVE THE TAX BASE INDIRECTLY BY ENCOURAGING HIGHER QUALITY AND LONGER LASTING DEVELOPMENT, AND BY PROMOTING CONDITIONS WHICH SHOULD MAKE THE COMMUNITY ATTRACTIVE TO ECONOMIC ENTERPRISES.

POLITICAL GOALS

- 0 THE ATTAINMENT OF OPTIMUM DEVELOPMENT THROUGHOUT THE COMMUNITY

THE COMMUNITY (I.E., THE CITIZENS) RECOGNIZES THAT ITS WELL BEING IS RELATED TO COMPATIBLE DEVELOPMENT AND ACTIVITY THROUGHOUT THE COMMUNITY AREA. INASMUCH AS THE COMPREHENSIVE AREA PLAN IS A FORMAL EXPRESSION OF THE COMMUNITY'S INTENTIONS, IT IS AN INSTRUMENT WHICH THE COMMUNITY CAN USE IN EFFECTING COOPERATION WITH OTHER UNITS OF GOVERNMENT, PARTICULARLY THE STATE AND FEDERAL GOVERNMENT AND THAT OF ADJACENT COUNTIES.

- 0 THE ATTAINMENT OF WORKABLE RELATIONSHIPS WITH STATE AND FEDERAL GOVERNMENTS

THE GROWING COMPLEXITY OF GOVERNMENT ACTIVITIES IS FORCING CLOSER RELATIONSHIPS BETWEEN LOCALITIES AND STATE AND FEDERAL GOVERNMENTS, PARTICULARLY IN THE ECONOMIC SPHERE. WORKABLE ARRANGEMENTS BETWEEN THESE LEVELS OFTEN REQUIRE THE KIND OF FIRM LOCAL DEVELOPMENT DECISIONS WHICH ARE EMBODIED IN A COMPREHENSIVE PLAN.

- 0 THE ATTAINMENT OF STATURE IN THE COMMUNITY OF MUNICIPALITIES

A PRIDE IN THE COMMUNITY IS IMPORTANT TO MOST CITIZENS. ITS REPUTATION AMONG OTHER COMMUNITIES IS A TEST OF STATURE. BY ENCOURAGING A BETTER AND DISTINCTIVE PHYSICAL

IMAGE, PLANNING CONTRIBUTES TO THE COMMUNITY'S REPUTATION.

SPECIFIC GOALS

THE GENERAL PLANNING GOALS MAY BE EXTENDED, OR SUPPLEMENTED, BY THE STATEMENT OF GOALS RELATIVE TO THE COMPREHENSIVE PLAN ELEMENTS, INCLUDING:

- o LAND USE, BY MAJOR CATEGORIES
- o COMMUNITY FACILITIES
- o MAJOR THOROUGHFARES

THE FOLLOWING ARE REPRESENTATIVE OF THIS "LEVEL" OF GOAL FORMULATION.

LAND USE GOALS

RESIDENTIAL GOALS

RECOGNIZING THAT THE COMMUNITY IS PREDOMINANTLY A PLACE IN WHICH PEOPLE RESIDE AND THAT RESIDENTIAL DEVELOPMENT CONSTITUTES THE LARGEST USE OF (IMPROVED) LAND. AN APPROPRIATELY LARGE SHARE OF ATTENTION IN PLANNING MUST BE ACCORDED TO THE QUALITY AND QUANTITY OF HOUSING AND RESIDENTIAL AREAS. THE FOLLOWING GOALS ARE SUGGESTED:

- o THE ELIMINATION OF UNSOUND HOUSING AND THE REHABILITATION OF BLIGHTED HOUSING.
- o THE PROTECTION OF EXISTING HOUSING FROM PREMATURE STRUCTURAL OR ENVIRONMENTAL DECAY.
- o THE ATTAINMENT OF AN ADEQUATE QUANTITY OF NEW HOUSING TO ACCOMMODATE ANTICIPATED POPULATION GROWTH AND TO REPLACE ELIMINATED HOUSING UNITS.
- o THE TRANSITION OF EXISTING RESIDENTIAL DEVELOPMENT INTO FUNCTIONAL NEIGHBORHOOD UNITS THROUGH HOUSING REHABILITATION, NEW HOUSING, MODERNIZED SERVICES, IMPROVED TRAFFIC FLOW, AND LAND RE-DESIGN.
- o THE ATTAINMENT OF NEW RESIDENTIAL DEVELOPMENT ON A NEIGHBORHOOD BASIS, FUNCTIONALLY UNIFIED THROUGH LAND DESIGN, SERVICE AND INTERIOR CIRCULATION FEATURES.
- o THE ATTAINMENT OF A RANGE OF HOUSING AND ASSOCIATED RESIDENTIAL ENVIRONMENTS TO ACCOMMODATE DIFFERENT

GROUPS, AGE GROUPS, HOUSEHOLD SIZES, LOCATIONAL PREFERENCES AND STYLE PREFERENCES.

- o THE ENCOURAGEMENT OF NEW AND CREATIVE FORMS OF HOUSING AND NEIGHBORHOOD DESIGNS.

COMMERCIAL GOALS

COMMERCIAL ACTIVITIES ARE IMPORTANT TO THE COMMUNITY BOTH FOR THE SERVICES THEY PROVIDE TO THE RESIDENT POPULATION AND FOR THEIR ECONOMIC BASE ROLE IN PROVIDING TAX INCOME AND EMPLOYMENT. THE FOLLOWING GOALS WERE SUGGESTED:

- o THE ATTAINMENT OF THE PLANNING AREA'S COMMERCIAL POTENTIAL THROUGH AN OPTIMUM VARIETY OF COMMERCIAL DEVELOPMENTS, AND LOCATIONS.
- o THE ATTAINMENT OF A DISTRIBUTION OF COMMERCIAL AREAS OF SCALES AND FUNCTIONS RELATED TO THE OVERALL DEVELOPMENTAL PATTERN OF THE PLANNING AREA.
- o THE RENEWAL OF THE CENTRAL BUSINESS DISTRICT AND ASSOCIATED AREAS TO FUNCTION AS A COMMUNITY SHOPPING, SERVICE, AND SOCIAL CENTER.
- o THE TRANSITION OF OTHER EXISTING COMMERCIAL AREAS INTO MORE FUNCTIONAL AND COMPETITIVE CONCENTRATIONS THROUGH STRUCTURAL REHABILITATION, BETTER USES, RE-DESIGN, AND BETTER SERVICE FACILITIES.
- o THE ATTAINMENT OF CLUSTERED FORMS OF NEW COMMERCIAL DEVELOPMENT WHICH ARE UNIFIED BY APPROPRIATE COMMERCIAL USES, LAND AND ARCHITECTURAL DESIGN, AND SERVICE ARRANGEMENTS.

INDUSTRIAL GOALS

OPPORTUNITIES FOR CONTINUED GROWTH IN THE FUTURE IN THIS ACTIVITY ARE FAIRLY GOOD. THE FOLLOWING GOALS ARE SUGGESTED:

- o THE ATTAINMENT OF THE PLANNING AREA'S POTENTIAL IN INDUSTRIAL DEVELOPMENT THROUGH THE PROVISION OF SUFFICIENT INDUSTRIAL LAND OF SUITABLE QUALITY IN OPTIMUM LOCATIONS AND SUPPLIED WITH ADEQUATE SERVICES.
- o THE ATTAINMENT OF A DISTRIBUTION OF INDUSTRIAL AREAS OF SCALES AND PERFORMANCE CHARACTERISTICS COMPATIBLE WITH THE OVERALL DEVELOPMENT OF THE PLANNING AREA.

- O THE ATTAINMENT OF NEW INDUSTRIAL DEVELOPMENT IN APPROPRIATE CONCENTRATIONS UNIFIED BY LAND DESIGN, STRUCTURAL COMPATIBILITY, AND PERFORMANCE CHARACTERISTICS.
- O THE REINFORCEMENT OF EXISTING INDUSTRIAL AREAS IN TERMS OF BETTER ACCESS AND SERVICE FACILITIES.

COMMUNITY FACILITIES GOALS

THE MANY SERVICES PROVIDED BY PUBLIC AND PRIVATE COMMUNITY FACILITIES ARE ESSENTIAL TO ITS EXISTENCE AND LIVABILITY. SIGNIFICANTLY, MANY OF THESE SERVICES ARE PUBLIC AND THE EFFICIENCIES OF THEIR LOCATIONS AND SCALES AFFECT THE AMOUNT AND EFFECTIVENESS OF PUBLIC EXPENDITURES.

- O THE ATTAINMENT OF AN OPTIMUM RANGE OF SCHOOL FACILITIES.
- O THE ATTAINMENT OF AN OPTIMUM RELATIONSHIP BETWEEN PUBLIC SCHOOL FACILITIES, OTHER COMMUNITY FACILITIES, AND THE DEVELOPMENTAL PATTERN.
- O THE ATTAINMENT OF AN OPTIMUM RANGE OF RECREATIONAL FACILITIES.
- O THE ATTAINMENT OF AN OPTIMUM RELATIONSHIP BETWEEN PUBLIC RECREATION AREAS, OTHER COMMUNITY FACILITIES AND THE DEVELOPMENTAL PATTERN.
- O THE ATTAINMENT OF EFFICIENT LOCATIONAL ARRANGEMENTS FOR OTHER PUBLIC AND SEMI-PUBLIC FACILITIES IN TERMS OF THEIR SERVICE FUNCTIONS, AND THE ACHIEVEMENT OF COMPATIBLE RELATIONSHIPS WITH SURROUNDING DEVELOPMENT IN TERMS OF THEIR CHARACTERISTICS.
- O THE ATTAINMENT OF ADEQUATE LEVELS OF UTILITY SERVICE AND EFFICIENT SYSTEMS OF UTILITY INSTALLATIONS, SCALED TO THE INTENSITY AND DEMAND CHARACTERISTICS OF THE DEVELOPMENTAL PATTERN.

TRANSPORTATION

BETTER THOROUGHFARE FACILITIES AND MORE SPECIALIZED FACILITIES ARE CERTAIN TO BE NEEDED IN THE FUTURE. THOROUGHFARES, ESPECIALLY MAJOR INSTALLATIONS, ARE CERTAIN TO PLAY A STRONGER ROLE IN MOLDING URBAN PATTERNS OF THE FUTURE.

- O THE ATTAINMENT OF OPTIMUM ACCESSIBILITY BETWEEN THE COMMUNITY AND ITS MARKETS, SOURCES OF SUPPLY, AND LABOR SHED.

- O THE ATTAINMENT OF OPTIMUM ACCESSIBILITY BETWEEN ALL PARTS OF THE URBAN-RURAL COMMUNITY.
- O THE ATTAINMENT OF AN OPTIMUM RELATIONSHIP BETWEEN THE SYSTEM OF THOROUGHFARES AND THE COMMUNITY'S DEVELOPMENTAL PATTERN.

CHANGES IN GOAL ORIENTATION

A LIMITATION WHICH MUST BE RECOGNIZED IN THE STATING OF GOALS IS THAT THE GOALS ESTABLISHED FOR FUTURE DEVELOPMENT ARE PRE-
 DICATED UPON TODAY'S KNOWLEDGE AND ATTITUDES. A CLEAR EXAMPLE IS THE AUTOMOBILE. PRIOR TO THE AUTOMOBILE, CITIES WERE PLANNED FOR THE MODE OF TRAVEL OF THE DAY. EVERYONE IS AWARE OF THE EFFECT OF THE INTRODUCTION OF THIS VEHICLE INTO COMMUNITIES ORIGINALLY DESIGNED FOR THE HORSE AND BUGGY. THE PLANNING GOALS AND THE RESULTANT PLAN MUST BE CONSIDERED TO BE FLEXIBLE AND SUBJECT TO ADJUSTMENT AS CONDITIONS CHANGE DUE TO TECHNOLOGICAL ADVANCES AND CHANGING VALUES.

IN CONCLUSION, THE WAY OF LIFE IN OUR COUNTRY CHANGES SLOWLY, OFTENTIMES AS A RESULT OF OUR INABILITY TO ADAPT OUR PHYSICAL ENVIRONMENT TO WORTHWHILE ADVANCES IN OUR SOCIAL, ECONOMIC AND POLITICAL ENVIRONMENTS. NOT ALL CHANGES MAY BE CONSIDERED TO BE WORTHWHILE BY THE COMMUNITY BECAUSE SOME OF THESE "CHANGES" MAY BE ONLY "FADS" OF SHORT DURATION WHICH CONTRIBUTE LITTLE, IF ANY, VALUE TO THE COMMUNITY'S WELL BEING. THE PURPOSE OF THE FOLLOWING PLANNING DISCUSSION IS TO POINT TO THE APPARENTLY DESIRABLE CHARACTERISTICS OF LAND USE AS THEY ARE RECOGNIZED TODAY--TO ENABLE THE COMMUNITY TO BEGIN TO FORMULATE THE ADMINISTRATIVE POLICIES FOR THE FUTURE DESIGN AND CONSTRUCTION OF THE COMMUNITY WHICH WILL BE MOST BENEFICIAL IN THE LONG TERM.

LAND USE PLAN

AN INTRODUCTION TO THE LAND USE AND MAJOR THOROUGHFARES PLANS

WHILE POPULATION IN THE CLINTON COUNTY COMMUNITY IS EXPECTED TO DECREASE SLIGHTLY DURING THE NEXT TEN OR TWENTY YEARS, IT IS NOT A VALID NOR INEVITABLE CONCLUSION THAT THE URBAN AREA OF FRANKFORT WILL NOT CONTINUE TO DEVELOP AND EXPERIENCE LATERAL EXPANSION OVER THE LONG RUN AT ROUGHLY THE SAME RATE AS THE PAST TEN OR TWENTY YEARS. UNINCORPORATED CLINTON COUNTY BEYOND THE URBAN AREAS OF THE INCORPORATED COMMUNITIES WILL ALSO EXPERIENCE A CONTINUAL MODERATE POPULATION DECLINE.

AVERAGE FAMILY SIZE IN THE LAST DECADE HAS BEEN AND IS EXPECTED TO CONTINUE TO DECREASE AS NATIONWIDE BIRTH AND FERTILITY RATES DECREASE. THIS MEANS FEWER PERSONS---BUT IT WILL NOT TOTALLY RESULT IN FEWER DWELLING UNITS---JUST SMALLER FAMILIES (TOGETHER WITH A PROBABLE AND SLIGHTLY DECREASING RATE OF FAMILY FORMATION).

IN RECOMMENDING A LOW POPULATION DENSITY CATEGORY EXTENDING OUTWARD FROM THE PRESENT URBAN AREA TO THE GENERAL AREA OF THE PROPOSED CIRCUMFERENTIAL ROUTES AROUND FRANKFORT (SEE COMPREHENSIVE PLAN MAPS AT THE END OF THIS REPORT), IT IS RECOGNIZED THAT THE AREA ENCOMPASSED IS SEVERAL TIMES THAT OF THE AREA NOW DEVELOPED AT URBAN DENSITIES, AND IT IS NOT ANTICIPATED THAT THESE NOW VACANT OR ESSENTIALLY UNDEVELOPED AREAS WILL FORESEEABLY BE FILLED IN EVEN AT A LOW-LOW DENSITY. BUT SOME OF IT WILL BE--- EVEN IN THE INTERMEDIATE RANGE---AND EVENTUALLY, AT SOME PERHAPS FAR HORIZON, THERE IS NO REASON TO ASSUME THAT SOMETHING APPROACHING AN URBAN DENSITY WILL NOT EXIST IN MUCH OF THIS AREA.

STREETS AND THOROUGHFARES, ONCE IMPROVED, ARE "FOREVER". IT IS NECESSARY, THEREFORE, THAT A LONG-RANGE VIEW PREVAIL AND IT IS NECESSARY TO ACCEPT AND UNDERSTAND SUBJECTIVELY OR OBJECTIVELY THAT A MAJOR THOROUGHFARE PLAN COMPRISES SOMETHING MORE THAN "LINES ON A MAP"--- THAT THESE LINES CONSTITUTE A SYSTEM OF THOROUGHFARES THAT ARE INTERRELATED TO (1) EXISTING AND PROPOSED MAJOR LAND USES AND TRAFFIC GENERATORS SUCH AS THE INDUSTRIAL AND DOWNTOWN AREAS OF FRANKFORT, (2) TO GENERAL AREAS OF TRAFFIC ORIGIN AND DESTINATION, (3) TO COMMUTING PATTERNS, (4) TO THE EXISTING HIGHWAY NETWORK, AND (5) TO THE PRESERVATION AND CREATION OF INTEGRAL NEIGHBORHOOD UNITS. IT IS ALSO NECESSARY TO RECOGNIZE THAT PROJECTIONS OF PAST TRENDS IN REGISTRATION AND USE INDICATE EVER INCREASING VOLUMES OF MOTOR VEHICLE TRAFFIC. IT MAY BE FURTHER NECESSARY TO RECOGNIZE THAT HIGH GASOLINE PRICES WILL PROBABLY NOT SUBSTANTIALLY REDUCE TRAFFIC VOLUME, PARTICULARLY PEAK HOUR VOLUMES, AS THIS IS "WORK TO HOME" TRAFFIC AND THEREFORE NECESSARY.

FINALLY IT MUST BE RECOGNIZED AS A FUNDAMENTAL CONCEPT THAT IT IS NOT THE FUNCTION OF THE PLAN TO PREDICT A GIVEN LEVEL OF DEVELOPMENT AT ANY SPECIFIC POINT IN TIME: THE FUNCTION IS TO PROVIDE GENERAL DIRECTION TO PHYSICAL GROWTH REGARDLESS OF WHEN IT MAY OCCUR. THE RECOMMENDATIONS OF THIS REPORT ADHERE TO THIS PRINCIPLE.

IT NOW BECOMES IMPORTANT TO PUT THESE RECOMMENDATIONS INTO SOME PERSPECTIVE THAT IS RECOGNIZABLE BY AND ACCEPTABLE TO THE CITIZENS OF CLINTON COUNTY. THIS INVOLVES CHANGE AND THE RATE OF CHANGE. IT MUST BE UNDERSTOOD THAT THE HUMAN WAY OF LIFE HAS CONTINUALLY UNDERGONE CHANGE AND THAT THAT CHANGE HAS TO BE REFLECTED PARTICULARLY IN OUR URBAN AREAS. THE CHANGE HAS GENERALLY RESULTED FROM A TECHNOLOGICAL ADVANCE-- A NEW TOOL, A NEW TECHNIQUE, A NEW ENERGY SOURCE, AS EACH TECHNOLOGICAL ADVANCE BROADENED THE BASE OF HUMAN TECHNOLOGICAL CAPACITY, FURTHER ADVANCE BECAME MORE FREQUENT AND WERE MADE IN A GREATER NUMBER OF DIRECTIONS, SO THAT THE RATE OF CHANGE HAS CONTINUALLY INCREASED.

UNTIL MODERN TIME THE RATE OF CHANGE WAS SO SLOW THAT THE PROCESS WAS UNNOTICEABLE IN THE COURSE OF ANY ONE PERSONS LIFETIME. THERE WAS THE ILLUSION, THEREFORE, THAT CHANGE DID NOT TAKE PLACE. WHEN, IN THE FACE OF THAT ILLUSION, A CHANGE HAD CLEARLY TAKEN PLACE, THE RESPONSE WAS TO VIEW IT AS SOMETHING THAT SHOULD NOT HAVE HAPPENED--A SOMETHING THAT REPRESENTED A DEGENERATION FROM "THE GOOD OLD DAYS".

HERE IS AN EXAMPLE. PART I OF THIS PLANNING PROGRAM, THE SURVEY AND ANALYSIS PART, WOULD HAVE FOUND CONSIDERABLY DIFFERENT DATA AND CONDITIONS UPON WHICH TO BASE--BOTH DIRECTLY AND INDIRECTLY--THE RECOMMENDATIONS OF PART II, THE PLANNING PHASE. FOR EXAMPLE, THE POPULATION OF CLINTON COUNTY AND FRANKFORT WAS EXPERIENCING A SUBSTANTIAL INCREASE IN 1950, ALMOST FIVE PERCENT IN THE COUNTY AND ALMOST TEN PERCENT IN FRANKFORT AND CENTER TOWNSHIP (FRANKFORT) OVER THE 1940 POPULATION. (SEE TABLE 1 POPULATION CHAPTER) A POPULATION PROJECTION MADE BETWEEN 1950 AND 1959 WOULD HAVE LOGICALLY AND WITH RELIABLE STATISTICAL BACKING, BEEN ENTIRELY DIFFERENT THAN THE SLIGHTLY DECLINING POPULATION PROJECTIONS OF THIS REPORT.

IN 1940 AND PREVIOUSLY, THE RAILROADS WERE THE DOMINANT EMPLOYER, THE SINGLE LARGEST TAXPAYER, AND STEAM WAS THE SOURCE OF THEIR ENERGY. AVERAGE DAILY TRAFFIC VOLUMES WERE CONSIDERABLY LESS * THAN THOSE OF TODAY AND IT IS MOST LIKELY THAT WITHIN THE NEXT 20 TO 40 YEARS, THAT THEY WILL BE CONSIDERABLY MORE THAN THEY ARE TODAY, (SINCE THE WORLD'S OIL RESERVES ARE NOT FORCAST TO BE DEPLETED BY THAT TIME). MOST OF THE MANUFACTURING INDUSTRY ON SR 28 WEST WAS NOT THERE IN 1940, NOR IN 1950 AND 1960. THE AGRICULTURAL LABOR FORCE IN THE COUNTY IN 1970 WAS 935, VASTLY DIFFERENT THAN DURING THE 1920'S, 30'S AND EVEN 40'S. AT THE PRESENT RATE THERE IS STATISTICAL AND ECONOMIC BASIS FOR A YEAR 2000 LABOR FORCE OF ABOUT 480 PERSONS WHICH IS FOUR PERCENT OF

* REFERS TO VEHICULAR TRAFFIC.

THE TOTAL COUNTY INDUSTRIAL LABOR FORCE. IT IS NOT UNUSUAL FOR OLDER CITIZENS OF THE COUNTY TO RECALL WHEN AGRICULTURAL EMPLOYMENT WAS DOMINANT IN THE NATION MUCH AS RAILROAD AND AGRICULTURE EMPLOYMENT WAS LOCALLY DOMINANT. EXISTING LAND USE MAPS OF 1910 WOULD BE VASTLY DIFFERENT THAN THE SAME MAP OF 1972. IN 1910 THROUGH 1960 ALL ROADS LED TO THE FRANKFORT CENTRAL BUSINESS AREA WHICH WAS THE FOCAL POINT AND THE ONLY FOCAL POINT OF COMMERCIAL ACTIVITY. THERE WAS NO COMPETING GRANT'S PLAZA AND ITS SATALLITE RETAIL OUTLETS. (THE EXISTANCE OF THE PLAZA REPRESENTS A FUNDAMENTAL AND CONTINUING CHANGE IN THE CITIES URBAN FABRIC.) THE BASIC STREET PATTERN OF FRANKFORT AND THE RURAL COMMUNITY WOULD HAVE BEEN MUCH THE SAME, HOWEVER, IN 1910 - 20 FOR, AS HAS BEEN NOTED ELSEWHERE, STREETS ARE "FOREVER". STREET PATTERNS HAVE BEEN EXTENDED, NEW SUBDIVISIONS HAVE BEEN RECORDED AND DEVELOPED, BUT THE BASIC PATTERN IS MUCH THE SAME.

MANY SIMILAR EXAMPLES FROM THE ANALYSIS OF PART I COULD BE CITED BUT THESE MAY ESTABLISH A FOUNDATION FOR THE FACT OF CHANGE— ECONOMIC, SOCIAL AND PHYSICAL CHANGE AND ITS INFLUENCE ON THE URBAN AND RURAL COMMUNITY.

THE RECOMMENDATIONS OF PART II, HAVING BEEN SOLIDLY BASED ON THE FINDINGS OF PART I, MERELY AND IN GENERAL TERMS, SEE THE OBVIOUS AND FORSEE THE INEVITABLE. WHAT IS AMAZING AND FRUSTRATING IS MANKINDS HABIT OF REFUSING TO SEE THE OBVIOUS AND INEVITABLE, UNTIL IT IS THERE, AND THEN MUTTERING ABOUT UNFORSEEN CATASTROPHES (LIKE THE TRAFFIC GLUT IN THE GRANT'S PLAZA AREA).

IT SEEMS OBVIOUS IN RETROSPECT THAT ALL THE TECHNOLOGICAL ADVANCES IN THE PAST THAT HAD SIGNIFICANTLY RUFFLED THE CURRENT OF HUMAN CUSTOM HAD BEEN ATTACKED BY IMPORTANT SEGMENTS OF THE POPULATION, WHO FOR ONE REASON OR ANOTHER, FOUND IT DIFFICULT TO ACCEPT CHANGE.

PLANNING IS A METHOD, THEN, OF COOPERATING WITH THE INEVITABLE, OF FORSEEING PROBLEMS IN TIME AND TO RECOMMEND ACTION TO PREVENT THEM LONG BEFORE THEY HAPPEN. THIS IS AN EASY PHILOSOPHY TO ESPOUSE AND A MOST DIFFICULT ONE TO PERFORM BY GOVERNMENTAL AGENCIES BUT IT AGAIN EMPHASIZES THE NEED FOR HARD DECISIONS REACHED IN ADVANCE.

THE LAND USE PLAN

OBJECTIVES

THE OBJECTIVE OF THE LAND USE PLAN IS A COMPATIBLE AND EFFICIENT ARRANGEMENT OF LAND USE AND A REASONABLE RELATIONSHIP BETWEEN AREAS REQUIRED FOR LIVING, WORKING, RECREATION, AND EDUCATION PURPOSES. THE INVENTORY AND ANALYSIS OF EXISTING PATTERNS AND CHARACTERISTICS OF MAJOR LAND USES, PUBLIC SERVICES, TOPOGRAPHY, NATURAL AND MAN-MADE BARRIERS AND THE EXISTING MAJOR STREETS SYSTEM IN PART I IS A BASIC CONSIDERATION IN THE DEVELOPMENT OF THE LAND USE PLAN. THE SECOND PHASE OF DEVELOPMENT ADJUSTS THIS INITIAL PLANNING BY THE INTRODUCTION OF CONSIDERATIONS OF ANTICIPATED DIRECTIONS OF GROWTH AND THE NEED FOR ADDITIONAL AREAS FOR MAJOR LAND USES, AND SUPPORTING PUBLIC FACILITIES. FINALLY, IT IS AN ADJUSTMENT AND REFINEMENT OF THE PLAN RESULTING FROM CAREFUL REVIEW AND RECOMMENDATIONS BY THE AREA PLAN COMMISSION AND OTHER PUBLIC AND PRIVATE GROUPS.

SEVERAL OF THE BASIC STUDIES UNDERTAKEN IN THE FIRST PHASE OF THE PLANNING PROGRAM WERE CONCERNED WITH PAST TRENDS, CURRENT CONDITIONS, AND MORE PARTICULARLY PROJECTIONS FOR THE NEXT 20 TO 25 YEARS. THIS "PLANNING PERIOD" IS GENERALLY CONSIDERED TO BE THE MAXIMUM LENGTH OF TIME FOR WHICH ESTIMATES CAN BE MADE WITH ANY DEGREE OF RELIABILITY. THE LAND USE PLAN, ON THE OTHER HAND, NEED NOT BE GOVERNED BY ANY SUCH STATISTICAL LIMITATIONS. IT IS NOT THE FUNCTION OF THE PLAN TO DEPICT OR PREDICT A GIVEN LEVEL OF DEVELOPMENT AT ANY SPECIFIC POINT IN TIME, BUT RATHER TO PROVIDE GENERAL DIRECTION TO PHYSICAL GROWTH REGARDLESS OF WHEN IT MAY OCCUR.

INDICATIONS ARE THAT ALL THE AREA WITHIN THE FRANKFORT AND THE SMALLER COMMUNITIES PLANNING AREA WILL NOT BE DEVELOPED DURING THE PLANNING PERIOD. IT IS APPROPRIATE, HOWEVER, THAT THE PLAN PROVIDE FOR ULTIMATE DEVELOPMENT TO THE EXTENT THAT IT CAN BE ANTICIPATED AT THIS TIME. CONSEQUENTLY, ALL LAND WITHIN THE COUNTY, BOTH URBAN AND RURAL, HAS BEEN ASSIGNED A LAND USE DESIGNATION.

FUNCTION OF THE PLAN

THE FORMULATION OF A COMPREHENSIVE PLAN IS A PROCESS INVOLVING THE INTEGRATION OF MANY COMPONENTS, AND THE PATTERN OF DEVELOPMENT THE PLAN PROPOSES IS ESSENTIAL TO THE DEVELOPMENT OF THE THOROUGHFARE PLAN, THE COMMUNITY FACILITIES PLAN, AND THE PUBLIC UTILITIES PLAN. IN LIKE MANNER, THE LAND USE PLAN IS ESSENTIAL TO THE DEVELOPMENT OF THE IMPLEMENTATION PHASES OF THE PROGRAM--ZONING, SUBDIVISION CONTROL, HOUSING, CAPITAL IMPROVEMENT PROGRAMS AND THE COMMUNITY DEVELOPMENT PROGRAM OF THE 1974 HOUSING AND

COMMUNITY DEVELOPMENT ACT (P.L. 93-383), --WHICH ARE THE PRINCIPAL INSTRUMENTS FOR CARRYING OUT A COMPREHENSIVE PLAN.

THE PURPOSE OF THE LAND USE PLAN IS TO PROPOSE A GENERALIZED PATTERN OF PRIMARY LAND USES--RESIDENTIAL, COMMERCIAL, INDUSTRIAL, OPEN SPACE, AND AGRICULTURAL--WHICH THE COUNTY AND ITS URBAN COMMUNITIES INTEND TO ESTABLISH THROUGH IMPROVEMENT PROGRAMS AND THEIR REGULATORY POWERS. THE PATTERN PROJECTED BY THIS PLAN IS BASED UPON ESTIMATES OF SPACE REQUIREMENTS AND RELATIONSHIPS TO THE PRIMARY LAND USES, WHILE RECOGNIZING BOTH THE POTENTIALS AND LIMITATIONS OF THE PHYSICAL ENVIRONMENT.

FINALLY, IT IS ESSENTIAL TO ACKNOWLEDGE THAT ALL PLANS OF THIS NATURE ARE ESSENTIALLY STATEMENTS OF POLICY, THAT THEY ARE CONCEIVED AS GUIDES TO DECISION MAKING AND NOT AS ADMINISTRATIVE DIRECTIVES. IT IS IMPORTANT TO RECOGNIZE THAT SPACE NEEDS EXTEND WELL INTO THE FUTURE, THAT SOME OBJECTIVES MAY BE ACCOMPLISHED IN FIVE YEARS--SOME IN FIFTY YEARS--AND THAT THE URBAN-RURAL COMMUNITY IS SUBJECT TO CONDITIONS WHICH MAY ALTER NEEDS OVER PERIODS OF TIME.

LAND USE vs. ZONING

UNDOUBTEDLY, THE MOST COMMON MISCONCEPTION CONCERNING THE IMPLEMENTS EMPLOYED IN THE PLANNING PROCESS IS THE TENDENCY TO CONFUSE THE LAND USE PLAN AND THE ZONING MAP. ALTHOUGH BOTH DEAL WITH LAND AND ITS USE, EACH HAS A DISTINCT AND SEPARATE FUNCTION. THE LAND USE PLAN DEPICTS THE LONG RANGE EXPECTATIONS AND ASPIRATIONS OF THE COMMUNITY EXPRESSED IN GENERAL TERMS. THE ZONING MAP IS A PRECISE STATEMENT OF THE SPECIFIC USES WHICH MAY OCCUPY EACH PARCEL OF LAND AT ANY GIVEN TIME. IT PORTRAYS GRAPHICALLY THE APPLICATION OF THE VARIOUS DISTRICTS SET FORTH IN THE ZONING ORDINANCE WHICH REGULATE THE TYPE, EXTENT AND ARRANGEMENT OF BUILDINGS AND USES AND IS AN INTEGRAL PART OF THAT DOCUMENT. THE ZONING ORDINANCE (INCLUDING THE MAP) IS ONLY ONE OF SEVERAL TOOLS USED TO IMPLEMENT THE COMPREHENSIVE PLAN. WHILE THE PLAN IS SUBJECT TO OCCASIONAL REVISION IN RESPONSE TO MAJOR SHIFTS IN THE ECONOMIC OR SOCIAL STRUCTURE OF THE COMMUNITY, IT SHOULD REMAIN ESSENTIALLY STABLE OVER AN EXTENDED TIME PERIOD. THE ZONING ORDINANCE, ON THE OTHER HAND, IS A DAY TO DAY WORKING DOCUMENT SUBJECT TO RELATIVELY FREQUENT REVISION TO ACCOMMODATE CURRENT NEEDS AND ADVANCED TECHNOLOGY. THIS SHOULD, HOWEVER, OCCUR WITHIN THE OVERALL FRAMEWORK OF THE COMPREHENSIVE PLAN. THIS DISTINCTION MAY BE SHOWN BY A SIMPLE ILLUSTRATION. THE LAND USE PLAN INDICATES RESIDENTIAL DEVELOPMENT OVER BROAD AREAS, EXPRESSED IN OVERALL OR AGGREGATE DWELLING UNIT DENSITIES. THE BOUNDARIES ARE NOT NECESSARILY PRECISE AND THE PLAN DOES NOT IDENTIFY LOCAL VARIATIONS IN DENSITY PATTERNS. THE ZONING ORDINANCE ESTABLISHES RESIDENTIAL DISTRICTS BY STRUCTURE TYPES AND PRESCRIBES PRECISE BOUNDARIES FOR EACH. WHERE APPROPRIATE, RELATIVELY SMALL AREAS MAY BE ZONED FOR RESIDENTIAL STRUCTURES WHICH GENERALLY PRODUCE A HIGHER CONCENTRATION OF DWELLING UNITS THAN THAT INDICATED IN THE LAND USE PLAN. SUCH DIVERGENCE IS

ANTICIPATED AND IF CAREFULLY CONTROLLED WILL NOT IMPAIR THE OVERALL INTEGRITY OF THE PLAN. ZONING SHOULD REFLECT CURRENT AND SHORT RANGE NEEDS AND AT THE SAME TIME BE RESPONSIVE TO CHANGING CONDITIONS CONSISTENT WITH ORDERLY GROWTH AND THE LONG-RANGE OBJECTIVES OF THE COMPREHENSIVE PLAN.

FLOOD PLAIN ZONING

ONE DESIGNATION SHOWN ON THE LAND USE PLAN AND REFLECTED IN THE ZONING ORDINANCE WHICH DESERVES SPECIAL COMMENT IS THE FLOOD PLAIN DISTRICT. THIS IS NOT A TRUE ZONING CLASSIFICATION IN THAT IT IS AN OVERRIDING RESTRICTION PLACED ON CERTAIN LAND SOLELY BECAUSE OF ITS PHYSIOGRAPHIC CHARACTERISTICS AND NOT BECAUSE OF THE USUAL LAND USE DETERMINANTS. IT LIMITS THE CONSTRUCTION OF PERMANENT STRUCTURES ON AREAS SUSCEPTIBLE TO PERIODIC FLOODING AND MAY BE REMOVED WHEN IT CAN BE SHOWN THAT THE CONDITION NO LONGER EXISTS. ITS PURPOSE IS SINGULAR -- TO PREVENT HUMAN OCCUPATION OF BUILDINGS WHICH MAY BE INUNDATED DUE TO UNUSUALLY HEAVY RAINFALL -- A MOTIVE DIRECTLY RELATED TO THE PUBLIC WELFARE.

FLOODING OCCURS OVER LOW LYING LANDS AT VARYING INTERVALS. THE EXTENT OF THE AREA FLOODED DEPENDS ON THE SEVERITY OF THE RAINFALL AND IS MEASURED BY THE FREQUENCY OF OCCURRENCE. IT WOULD NOT BE REASONABLE TO RESTRICT DEVELOPMENT ON ALL LAND THAT HAS EVER BEEN FLOODED BUT SOME APPROPRIATE CRITERIA MUST BE EMPLOYED WHEN DELINEATING FLOOD PLAIN DISTRICTS. IN THIS INSTANCE, THE AREAS ADJACENT TO SOUTH FORK WILDCAT CREEK, MIDDLE FORK WILDCAT CREEK, KILMORE CREEK, AND SUGAR CREEK, WHICH ARE SUBJECT TO INTERMEDIATE FLOODING, AS DETERMINED BY THE STATE OF INDIANA, DIVISION OF WATER OF THE DEPARTMENT OF NATURAL RESOURCES, HAVE BEEN INCLUDED IN THE FLOOD PLAIN DESIGNATION.

URBAN LAND USE DETERMINANTS

THE RECOMMENDATIONS FOR FUTURE LAND USE LOCATIONS FOR URBAN AREAS ARE BASED UPON RELATED STUDIES OF PART I OF THIS REPORT AND PRIMARILY OF THE STUDIES OF CHARACTERISTICS OF THE LAND AND PRIMARY SUPPORT FACILITIES:

SOILS CHARACTERISTICS

MAJOR AND SECONDARY / COLLECTOR THOROUGHFARES

TRENDS IN THE DIRECTION OF GROWTH

SOIL LIMITATIONS ¹ -- URBAN AND BUILT-UP AREAS

FRANKFORT: TWO SOIL ASSOCIATIONS ARE FOUND IN THE FRANKFORT AREA:

¹ FROM SOIL SURVEY, CLINTON COUNTY, SOIL AND WATER CONSERVATION DISTRICT.

1. FINCASTLE - RAGSDALE - BROOKSTON: NEARLY LEVEL, SOMEWHAT POORLY DRAINED, SILTY FINCASTLE IN WINDBLOWN SILTS AND GLACIAL TILL, VERY POORLY DRAINED, SILTY RAGSDALE IN WIND-BLOWN SILTS AND LOAMY BROOKSTON IN GLACIAL TILL.
2. MIAMI - CROSBY: SLOPING, WELL DRAINED, LOAMY MIAMI AND NEARLY LEVEL, SOMEWHAT POORLY DRAINED, CLAVEY CROSBY IN GLACIAL TILL.

SIGNIFICANT BARRIERS TO URBAN DEVELOPMENT EXIST (1) TO THE SOUTH-WEST OF THE CITY IN THE AREA SOUTH OF FREEMAN STREET AND WEST OF THE MONON RAILROAD, (2) TO THE EAST OF THE CITY IN THE AREA SOUTH OF S.R. 28, EAST OF THE 1975 CITY LIMITS AND NORTH OF FREEMAN STREET. (SEE NATURAL RESOURCES CHAPTER, MAP TITLED "SOILS WITH SEWER LIMITATIONS FOR URBAN DEVELOPMENT" PART I OF THIS REPORT).

THESE SOILS HAVE A HIGH WATER TABLE AT 0 - 3 FEET FROM SURFACE; POOR INTERNAL DRAINAGE; POOR CIRCULATION.

FOREST, SCIRCLEVILLE AND JEFFERSON -

THESE UNINCORPORATED NAMED PLACES ARE LOCATED GENERALLY IN THE CENTER OF THE SAME SOILS LIMITATION AREAS AS THAT DESCRIBED ABOVE.

OTHER URBAN PLACES: -

NO SOIL RESTRICTIONS EXIST FOR THE REMAINING URBAN PLACES OF THE COUNTY. THERE IS AMPLE ROOM FOR PERIPHERAL GROWTH IN ANY DIRECTION WITHOUT ENCOUNTERING SOIL CONSTRAINTS OR FLOOD PLAINS. THESE INCORPORATED COMMUNITIES, AND NAMED PLACES ARE NOT, HOWEVER, EXPECTED TO EXPERIENCE SIGNIFICANT EXPANSION. (SEE CHAPTER ON POPULATION, PART I OF THIS REPORT.)

RURAL LAND USE DETERMINANTS

WITH THE EXCEPTION OF THE GENESEE - SHOALS - EEL ASSOCIATION¹ WHICH ARE LOCATED IN FLOOD PLAINS (SEE NATURAL RESOURCES CHAPTER, PART I) NO SOILS ASSOCIATION IN THE COUNTY PRESENT SIGNIFICANT DEVELOPMENT OR AGRICULTURAL BARRIERS.

¹ NEARLY LEVEL, WELL DRAINED, LOAMY GENESEE, MODERATELY WELL DRAINED, LOAMY EEL, AND SOMEWHAT POORLY DRAINED LOAMY SHOALS IN ALLUVIAL DEPOSITS.

SANITARY SEWERS

FRANKFORT: CURRENT TREATMENT DEMAND AND CAPACITY ARE APPROACHING A BALANCE. THE PROPOSED FACILITY, (SEE UTILITIES CHAPTER, PART I) WILL ELIMINATE ABOUT 80 PERCENT OF STORM WATER RUNOFF AND TREAT THE REMAINING 20 PERCENT. MOST OF THE COLLECTION NETWORK IS ADEQUATE AND ECONOMICAL EXTENSION OF THE SYSTEM, AS REQUIRED, IS FEASIBLE.

MULBERRY: A NEW DESIGNED TO SERVE PRESENT AND NOMINAL FUTURE NEEDS. TREATMENT PLANT IS IN USE IN MULBERRY. (SEE UTILITIES CHAPTER, PART I) NEW INTERCEPTOR AND LATERAL SEWERS ARE COMPLETED.

KIRKLIN: THE TREATMENT PLANT CAPACITY FAR EXCEEDS CURRENT DEMAND VOLUME. THE COLLECTION SYSTEM IS ADEQUATE NOW AND FORSEEABLY. (SEE UTILITY CHAPTER)

COLFAX: TREATMENT PLANT CAPACITY IS APPROXIMATELY 100,000 GPH IN EXCESS OF EXPECTED DEMAND. THE COLLECTION SYSTEM AND ITS EXPANSION IF REQUIRED ARE FEASIBLE.

ROSSVILLE: DESIGNED CAPACITY IS ABOUT 25 PERCENT OVER CURRENT DEMAND. COLLECTION NETWORK IS ADEQUATE AND EXPANDIBLE.

MICHIGANTOWN: NO SEWER OR WATER, BUT PRELIMINARY ENGINEERING PLANS HAVE BEEN MADE.

UNSERVED DEVELOPMENT: THERE ARE NO OTHER AREAS OF SUFFICIENT URBANIZATION TO WARRANT A COMMUNITY, A PUBLIC OR A "PACKAGE" WASTEWATER TREATMENT PLANT.

MAJOR THOROUGHFARE SYSTEM

THE COUNTY, FRANKFORT, AND THE INCORPORATED TOWNS ARE FORTUNATE IN HAVING A BASICALLY (FOR NOW) SOUND ROAD AND STREET NETWORK. WITH THE PROPOSED MODIFICATIONS AND DEVELOPMENT OF SHORT RANGE, INTERMEDIATE, AND LONG-RANGE PROPOSALS, AS SHOWN ON THE MAJOR THOROUGHFARE PLAN, THE SYSTEM WILL SERVE ADEQUATELY FOR DECADES.

TRENDS IN GROWTH DIRECTION

FRANKFORT: THE ONLY RECENT SUBDIVISION OF CONSEQUENCE HAS OCCURRED IN THE SOUTHWEST OF THE GRANT PLAZA SHOPPING CENTER AND SOUTH OF FRANKFORT SENIOR HIGH SCHOOL. THE VACANT AND UNPLOTTED AREA BETWEEN THESE TWO SUBDIVISIONS SHOULD EXPECT RESIDENTIAL DEVELOPMENT WITHIN THE NEXT 10 - 20 YEARS, AS SHOULD THE AREA SOUTH OF FREEMAN ROAD EXTENDED AND BETWEEN WILLIAMS AND 100 E. ROAD NORTH OF KELLEY ROAD. SOME DEVELOPMENT MAY OCCUR NORTH OF KELLEY AND EAST OF 100 E. ROAD. ADDITIONAL DEVELOPMENT WILL TAKE PLACE GENERALLY TO THE CITY'S NORTHEAST AREA AND TO A LESSER EXTENT TO THE NORTH AND NORTHWEST SECTORS OF THE CITY. REFERENCE TO THE PREVIOUSLY MENTIONED SOILS LIMITATION MAP WILL INDICATE SIGNI-

FICANT ADDITIONAL IMPROBABILITY OF URBAN TYPE GROWTH TO THE SOUTHWEST AND EAST OF THE EXISTING SUBDIVISION THAT IS LOCATED EAST OF 100 E BELOW S.R. 28 AND FREEMAN ST. EXTENDED (SOUTH OF FRANKFORT SENIOR HIGH).

CONTINUED INDUSTRIAL AND RELATED DEVELOPMENT MAY BE EXPECTED ALONG S.R. 28 WEST OF FIFTH STREET - ROSSVILLE ROAD WHICH MAY EVENTUALLY APPROACH JEFFERSON.

SOME DEVELOPMENT IS LIKELY TO OCCUR BY THE FILLING IN OF VACANT LOTS AND PARCELS WITHIN THE PRESENT CORPORATE LINES. THIS MAY BE PARTICULARLY TRUE IF CITY ADMINISTRATIONS DECIDE ON A POLICY OF NEW DWELLING UNITS AS PART OF THE IMPLEMENTATION OF THE HOUSING PLAN WHICH IS COVERED IN THIS PART II SECTION OF THE REPORT. THE "FILLING IN" OF THESE AREAS IN THIS MANNER IS NOT, HOWEVER, EXPECTED TO UTILIZE MORE THAN A RELATIVELY SMALL NUMBER OF THESE VACANT PROPERTIES AS MANY ARE LOCATED IN AREAS THAT WILL PROBABLY BE FOUND UNSUITABLE AS A RESIDENTIAL ENVIRONMENT. IN ADDITION, THE TOTAL NUMBER OVER TIME WILL PROBABLY NOT BE SIGNIFICANT. (SEE CHAPTER ON HOUSING, PART I OF THE REPORT.)

PRINCIPLES AND STANDARDS OF LOCATION

GENERAL PRINCIPLES RELATING TO THE LOCATION OF LAND USES IDENTIFY THREE MAJOR FUNCTIONAL AREAS IN AN URBAN COMMUNITY:

WORK AREAS
LIVING AREAS
LEISURE TIME AREAS

IN THE BROAD CONTEXT, EACH SHOULD BE IN CONVENIENT PROXIMITY TO THE OTHER WITH READY ACCESS TO CONNECTING ROUTES.

THE FACTORS INVOLVED IN A MORE DETAILED FORMULATION OF LOCATION PRINCIPLES ARE OUTLINED BELOW, ACCORDING TO THE CATEGORY OF LAND USE:

INDUSTRIAL AREAS

REASONABLY LEVEL LAND. RANGE OF CHOICE BETWEEN CLOSE-IN AND DISPERSED SITES. DIRECT ACCESS TO COMMERCIAL TRANSPORTATION FACILITIES. AVAILABILITY OF UTILITIES AT OR NEAR THE SITE SUCH AS POWER, WATER, AND SEWER FACILITIES. COMPATIBILITY WITH SURROUNDING LAND USES.

CENTRAL BUSINESS DISTRICT

ADJOINING HEAVY TRAFFIC FLOWS, CENTRAL TO TRIBUTARY TRADE AREA. EASILY ACCESSIBLE AND WITH ADEQUATE PARKING.

RESIDENTIAL AREAS

VARIETY OF TERRAIN, BUT AVOIDING STEEP OR IRREGULAR SITES AND LOW OR POORLY DRAINED AREAS; SLOPES USUALLY UNDER 15 TO 20 PERCENT, IN PROXIMITY TO MAJOR THOROUGHFARES, BOUNDED BUT NOT PENETRATED BY MAJOR STREETS AND SERVED INTERNALLY BY A SYSTEM OF COLLECTOR AND SERVICE STREETS FITTED TO THE TERRAIN.

SCHOOLS

REASONABLY LEVEL SITES. UPPER LEVEL SCHOOLS WITHIN CONVENIENT COMMUTING RANGE AND LOWER LEVEL SCHOOLS WITHIN EASY WALKING DISTANCE. SITES ADEQUATE FOR BUILDING, RECREATION FACILITIES, AND LANDSCAPING.

PLAYGROUND AREAS AND PARKS

REASONABLY LEVEL SITES, USUALLY BUT NOT EXCLUSIVELY IN CONJUNCTION WITH SCHOOLS, WITHIN EASY WALKING DISTANCE OF AGE GROUPS SERVED.

SPACE REQUIREMENTS

HAVING ESTABLISHED IN PRINCIPLE WHERE EACH CATEGORY OF USE SHOULD BE LOCATED IN THE FUTURE, IT IS DESIRABLE TO ESTIMATE, AS A GENERAL GUIDE, HOW MUCH LAND WILL BE NEEDED FOR EACH USE IN THE FUTURE. ALL THE BASIC STUDIES OF PART I — THE ECONOMY, EMPLOYMENT, AND POPULATION — PROVIDE MEASURES OF GROWTH POTENTIAL, WHILE THE LAND USE STUDIES INDICATE THE GENERAL CHARACTER OF EXISTING DEVELOPMENT AND PROVIDE THE BASIS FOR DETERMINING THE SPACE-USING CHARACTERISTICS OF VARIOUS LAND USE CATEGORIES.

THE INITIAL STEP INVOLVES THE DERIVATION OF SPACE STANDARDS APPROPRIATE TO EACH CLASS OF USE. THIS WAS PARTIALLY ACCOMPLISHED IN THE LAND USE ANALYSIS CHAPTER OF PART I WHICH DETERMINED THE NUMBER OF ACRES BY PRINCIPAL LAND USE CATEGORIES. THE POPULATION STUDIES OF PART I PROJECT A STABLE TO SLIGHTLY DECREASING POPULATION FOR THE COUNTY AND ITS POLITICAL SUBDIVISIONS TO 1990. THE NUMBER OF ACRES PER 100 PERSONS, WITH THE EXCEPTION OF INDUSTRIAL ACRES, MAY BE EXPECTED TO REMAIN ESSENTIALLY STABLE FOR THE NEXT 15 TO 20 YEARS, IN THE ABSENCE OF NEW LABOR INTENSIVE INDUSTRIAL LOCATION, A MAJOR TOURIST ATTRACTION, OR SIMILAR DEVELOPMENT.

IT IS MOST PROBABLE, THEREFORE, THAT EXISTING LAND USE PATTERNS AND ACERAGES WILL REMAIN ESSENTIALLY AS THEY NOW ARE TO ABOUT 1990.

THE ESTIMATED FUTURE LAND USE REQUIREMENTS BY MAJOR CATEGORIES FOR THE YEARS 1980 AND 1990 WILL NOT APPRECIABLY CHANGE. RATIOS OF ACRES PER 100 PERSONS ANTICIPATE RELATIVELY LITTLE CHANGE IN RESIDENCE AND ESSENTIALLY NO CHANGE IN COMMERCIAL USE. NO

RATIOS ARE GIVEN FOR INDUSTRIAL AS THAT USE IS NOT RELATED TO A GIVEN POPULATION. THE AMOUNT OF RAILROAD PROPERTY SHOULD NOT INCREASE--IT IS PROBABLE THAT IT WILL DECREASE. PUBLIC AND SEMI-PUBLIC USE SHOULD REMAIN OPEN FOR PEOPLE.¹

THE FINAL STEP IS THE BALANCING OF SPACE REQUIREMENTS, AGAINST THE SUPPLY OF LAND. PART I REVEALED THAT THERE EXISTS CONSIDERABLE VACANT LAND WITHIN THE PRINCIPAL COMMUNITIES, BOTH INSIDE AND OUTSIDE THE CORPORATE AREA. IN FACT, THERE IS A RELATIVELY CONSIDERABLE SURPLUS IN THE SUPPLY OF VACANT LAND. THIS MAKES POSSIBLE AN ADEQUATE, EVEN GENEROUS, ALLOWANCE FOR FLEXIBILITY IN THE PLAN. THIS FLEXIBILITY ALLOWS FOR VARIOUS CHOICES BY INDIVIDUALS AND FIRMS WHICH MAY ACQUIRE LAND IN EXCESS OF NEED. IT ALSO ALLOWS LAND WHICH MAY BE HELD OUT OF USE BECAUSE OF PERSONAL PREFERENCES OF PROPERTY OWNERS OR BECAUSE OF LEGAL COMPLICATIONS WHICH MAKE THE LAND UNAVAILABLE FOR IMMEDIATE USE.

THERE ARE, IN ADDITION, A NUMBER OF VARIABLES WHICH WILL BEAR UPON FUTURE LAND USE REQUIREMENTS. LOCATIONAL PREFERENCES, FINANCING PROGRAMS, SCHOOL DISTRICTS, SCHOOL LOCATIONS, AND THE MANY REASONS PEOPLE LIVE AND WORK WHERE THEY DO, ARE FACTORS THAT DEFY MEASUREMENT. BECAUSE OF THIS, AND ALTHOUGH FUTURE LAND NEED REQUIREMENTS SERVE A PURPOSE, SUCH FIGURES CONSTITUTE RATHER ROUGH GUIDELINES ONLY. IT IS NOT, TO REPEAT, THE FUNCTION OF THE PLAN TO PREDICT A GIVEN LEVEL OF DEVELOPMENT AT ANY SPECIFIC POINT IN TIME, BUT RATHER TO PROVIDE GENERAL DIRECTION TO PHYSICAL GROWTH REGARDLESS OF WHEN IT MAY OCCUR.

THE LAND USE PLAN

MAPS A, B, AND C, FOUND AT THE END OF THIS REPORT, PRESENT THE GENERALIZED LAND USE PLAN FOR, RESPECTIVELY, FRANKFORT, THE FIVE COMMUNITIES OF COLFAX, MICHIGANTOWN, MULBERRY, KIRKLIN AND ROSSVILLE; AND UNINCORPORATED CLINTON COUNTY. ALTHOUGH THE PLANS ARE SHOWN ON SEPARATE MAPS, THEY ARE BUT ONE UNIFIED PLAN. THE PLAN EXTENDS DEVELOPMENT WELL BEYOND THE YEAR 1990 FOR REASONS PREVIOUSLY DISCUSSED. TO FACILITATE REVIEW, EACH IS DISCUSSED BY MAJOR LAND USE CATEGORIES:

RESIDENTIAL
COMMERCIAL
INDUSTRIAL
AGRICULTURAL

RESIDENTIAL LAND USE

OF THE THREE GENERAL LAND USE CATEGORIES SHOWN ON THE LAND USE PLAN, (RESIDENTIAL, COMMERCIAL, INDUSTRIAL) RESIDENTIAL USE IS

1 PART I DOES NOT DELINEATE OPEN SPACE AS A SEPARATE CATEGORY.

BY FAR THE MOST EXTENSIVE. THE COMPREHENSIVE PLAN (WHICH ENCOMPASSES THE LAND USE PLAN) ;IS FOUND AT THE BACK OF THIS REPORT. ALTHOUGH THE RATIO OF RESIDENTIAL AREAS TO OTHER AREAS WILL VARY FROM ONE COMMUNITY TO ANOTHER, THE AREA DEVOTED TO RESIDENTIAL DEVELOPMENT WILL INVARIABLY EXCEED THAT OCCUPIED BY ALL OTHER USES COMBINED. THIS HOLDS TRUE EVEN IN LARGE URBAN CENTERS WHERE RESIDENTIAL DEVELOPMENT IS OFTEN INTENSIVE AND WHERE AIRPORTS, MODERN INDUSTRIAL PARKS, AND THE LIKE OCCUPY LARGE TRACTS OF LAND.

TWO RESIDENTIAL CATEGORIES ARE PROPOSED. THE FIRST AND MOST EXTENSIVE IS KEYED TO THE PREDOMINANTLY LOW DENSITY DEVELOPMENT THAT HAS OCCURRED IN THE PAST AND WHICH IS EXPECTED TO CONTINUE IN THE FUTURE. DENSITIES RANGE FROM LESS THAN ONE--TO FOUR DWELLING UNITS PER ACRE AND THE PREDOMINANT STRUCTURE TYPE IS THE SINGLE FAMILY HOME LOCATED ON INDIVIDUAL LOTS OR PARCELS. HIGHER DENSITIES MAY OCCUR AT STRATEGIC LOCATIONS, PARTICULARLY IN PLANNED UNIT DEVELOPMENTS, BUT SUCH DEVELOPMENTS WILL CONSTITUTE A RELATIVELY MINOR PORTION OF THE TOTAL AND WILL BE OFFSET BY THE LARGER THAN AVERAGE SIZED LOTS WHICH WILL INVARIABLY OCCUR. THE OVERALL DENSITY SHOULD NOT EXCEED THE MAXIMUM ESTABLISHED FOR THE DISTRICT. THE SECOND CATEGORY OF RESIDENTIAL USE HAS BEEN DESIGNATED MEDIUM DENSITY. THE DESIGNATION IS AN ARBITRARY ONE, SELECTED TO INDICATE THAT MORE INTENSE DEVELOPMENT AND A GREATER RANGE OF DWELLING UNIT DENSITIES CAN BE EXPECTED IN THE AREA SO CLASSIFIED. ALTHOUGH A MORE DIVERSIFIED ARRAY OF STRUCTURE TYPES IS INTENDED TO ACCOMMODATE A DIFFERENT SEGMENT OF THE HOUSING MARKET THAN WILL BE FOUND IN OTHER RESIDENTIAL AREAS, THE AGGREGATE DENSITY WILL REMAIN RELATIVELY LOW AS COMPARED TO A TYPICAL "HIGH DENSITY" AREA. NO DEMAND FOR HIGH RISE DWELLINGS CAN BE ANTICIPATED IN THE FRANKFORT COMMUNITY WITHIN THE FORESEEABLE FUTURE AND ONLY A LIMITED MARKET FOR MULTIPLE DWELLINGS OF ANY TYPE EXCLUSIVE OF WESLEY MANOR EXPANSION, IS INDICATED.

THE AREAS BEST SUITED FOR RENTAL HOUSING ARE THOSE WHICH HAVE READY ACCESS TO MAJOR TRAFFIC ARTERIES, ARE CLOSE TO SHOPPING FACILITIES, CAN BE OR ARE NOW SERVED BY PUBLIC UTILITIES AND WHICH, BECAUSE OF EXISTING DEVELOPMENT OR OTHER FACTORS, ARE NOT ATTRACTIVE TO PRIVATE HOME OWNERS. THE AREA WITHIN THE FRANKFORT COMMUNITY POSSESSES ALL OR MOST OF THESE CHARACTERISTICS; THE OLDER RESIDENTIAL SECTIONS CLOSE TO TOWN CENTER.

COMMERCIAL LAND USE

IN SMALL COMMUNITIES WITH LIMITED MARKET POTENTIAL AND EXISTING COMPETITIVE ESTABLISHMENTS IN RELATIVE CLOSE PROXIMITY, SUCH AS FRANKFORT, THERE IS SELDOM A NEED FOR IN-DEPTH OR EXHAUSTIVE MARKET STUDIES TO DETERMINE THE APPROPRIATE LOCATIONS FOR COMMERCIAL ENTERPRISES. WITH FEW EXCEPTIONS THE PUBLIC AND PRIVATE INTERESTS WILL BEST BE SERVED BY DIRECTING NEW ECONOMIC ACTIVITIES IN A MANNER DESIGNED TO STRENGTHEN EXISTING DEVELOPMENT. ANY COMMUNITY, REGARDLESS OF SIZE, CAN GENERATE ONLY SO MUCH

RETAIL ACTIVITY. (SEE ECONOMIC PROFILE CHAPTER) IN LARGE URBAN AREAS WHERE THE TRADITIONAL ROLE OF "DOWNTOWN" IS CHANGING FROM PRIMARILY RETAILING TO THE FINANCIAL, CULTURAL AND GOVERNMENT CENTER, THE DEVELOPMENT OF OUTLYING SHOPPING CENTERS IS THE NATURAL AND DESIRABLE RESULT. IN SMALL, AND EVEN MEDIUM-SIZED COMMUNITIES, HOWEVER, WHICH DO NOT GENERATE SUFFICIENT NON-RETAIL ACTIVITIES TO REPLACE TRADE LOST TO A NEW SHOPPING CENTER, THE EFFECT ON EXISTING ESTABLISHMENTS IN THE TOWN CENTER HAS BEEN SUBSTANTIAL. THEY MUST EITHER ABANDON THEIR OLD LOCATIONS AND MOVE TO THE CENTER, WHICH MEANS VACANT AND NEGLECTED STORES, OR STRUGGLE WITH A MARGINAL OPERATION IN A DECLINING AREA.

THE SUCCESS OF ANY SHOPPING AREA IS DEPENDENT ON ITS CONVENIENCES, ATTRACTIVENESS AND ON THE AMOUNT AND VARIETY OF GOODS AND SERVICES AVAILABLE TO THE CUSTOMER WITHOUT HAVING TO MOVE HIS CAR. THE TOWN CENTER OF FRANKFORT IS THE MOST ACCESSIBLE, CAN BE ATTRACTIVE, HAS SUFFICIENT AREA TO ACCOMMODATE NEW BUSINESS AND OFF-STREET PARKING AND SHOULD REMAIN THE FOCAL POINT OF RETAIL AND SERVICE ACTIVITIES IN THE AREA. THE LAND USE PLAN, THEREFORE, DOES NOT PROPOSE ANY NEW SITES FOR COMPETING FACILITIES WITHIN THE PLANNING AREA.

THERE ARE CERTAIN BUSINESSES, NEVERTHELESS, THAT ARE BEST LOCATED OUTSIDE A PRIMARILY PEDESTRIAN CENTER. THESE ARE GENERALLY ONE-STOP SPECIALTY ENTERPRISES THAT CATER TO THE MOTORING PUBLIC. REPAIR GARAGES, SERVICE STATIONS, MOTELS, EATING, DRINKING, AND OTHER DRIVE-IN BUSINESS ARE EXAMPLES. AMPLE AREA IS INDICATED ON THE PLAN, PRIMARILY ALONG S.R. 28, TO ACCOMMODATE WHAT IS GENERALLY TERMED HIGHWAY BUSINESS. THE ILLS USUALLY ATTENDANT TO "STRIP" COMMERCIAL DEVELOPMENT ARE NOT DUE TO THE FACT THAT BUSINESS OF THIS TYPE EXTENDS ALONG A HIGHWAY BUT BECAUSE THERE IS SELDOM SUFFICIENT DEPTH TO PERMIT CONTROL OF POINTS OF ACCESS OR TO ACCOMMODATE VEHICULAR MOVEMENT AND PARKING OFF THE STREET.

INDUSTRIAL LAND USE

IN THE PAST, INDUSTRIAL LAND USE HAS PLAYED A DOMINANT ROLE IN THE DEVELOPMENT OF THE FRANKFORT COMMUNITY. THE PLANNING STUDIES INDICATE, HOWEVER, THAT IN ORDER TO ACHIEVE A BALANCED ECONOMY AS THE AREA MATURES, NEW JOB OPPORTUNITIES WILL BE NEEDED. ALSO, THE INDUSTRIALIZATION OF THIS REGION OF THE STATE CAN BE EXPECTED TO CONTINUE AND AS THIS INCREASE TAKES PLACE, THE OPPORTUNITY TO ATTRACT NEW INDUSTRY TO FRANKFORT AND CLINTON COUNTY SHOULD ALSO INCREASE. INDUSTRIAL LAND RESERVED ON THE PLAN SHOULD BE LARGE ENOUGH TO PERMIT A CHOICE OF LOCATIONS, OFFER A VARIETY OF SITE SIZES AND OTHER SPECIAL REQUIREMENTS, BUT NOT BE SO EXTENSIVE AS TO ENCOURAGE WIDELY DISPERSED DEVELOPMENT WHICH COULD RENDER ADJACENT LANDS UNDESIRABLE FOR OTHER PURPOSES. THE AREA PROPOSED ON THE PLAN SHOULD MORE THAN MEET THE NORMAL INDUSTRIAL REQUIREMENTS OF THE FRANKFORT COMMUNITY.

AGRICULTURAL LAND USE

THE PLAN FOR THE COUNTY OUTSIDE THE URBAN AREAS OF THE INCORPORATED COMMUNITIES GENERALLY PLACES ALL LAND EXCEPT A FEW AREAS OF COMMERCIAL AND INDUSTRIAL USE IN THE AGRICULTURAL CATEGORY. THE NAMED PLACES AND EXISTING SUB-DIVISIONS ARE PROPOSED FOR LOW-DENSITY RESIDENTIAL DEVELOPMENT, THE FORMER WITH RELATED COMMERCIAL USES. SINCE IT IS ANTICIPATED THAT NEW INDUSTRY WILL BE LOCATED IN THE URBAN AREAS, ONLY ONE ADDITIONAL INDUSTRIAL SITE HAS BEEN PROPOSED. MAP C PORTRAYS THE CLINTON COUNTY LAND USE PLAN.

SUMMARY

THE PURPOSE OF THE LAND USE PLAN IS TO DIRECT THE DEVELOPMENT OF THE VARIOUS USES TO THOSE AREAS THAT ARE BEST SUITED FOR THEIR PURPOSE WITHOUT REGARD TO THE TIMING OF THEIR DEVELOPMENT. IN MAKING THESE LOCATIONAL AND SPACE DETERMINATIONS, CONSIDERATION WAS GIVEN TO:

THE EXISTING PATTERNS AND DISTRIBUTION OF LAND USE.

THE ANTICIPATED AREA REQUIREMENTS OF THE VARIOUS USES.

SOIL CONDITIONS, TOPOGRAPHY, AND PHYSICAL BARRIERS WHICH MAKE DEVELOPMENT ECONOMICALLY FEASIBLE.

THE AVAILABILITY OF PUBLIC UTILITIES AND THE PRACTICALITY OF THEIR EXTENSION.

THE PROXIMITY OF THE VARIOUS FORMS OF TRANSPORTATION.

FINALLY A BASIC PREMISE OF THE PLAN IS THAT AREAS DESIGNATED FOR THE VARIOUS USES CONTAIN SUFFICIENT ACREAGE TO SERVE WELL BEYOND THE PLANNING PERIOD. THE PLAN, THEREFORE, IS A GUIDE TO DEVELOPMENT AND A REFLECTION OF POLICY REGARDING LONG-RANGE OBJECTIVES; A POLICY AIMED AT REVERSING THE DETERIORATION OF THE QUALITY OF THE URBAN/RURAL ENVIRONMENT BY A RATIONAL UTILIZATION OF LAND AND OTHER NATURAL RESOURCES AND THE BETTER ARRANGEMENT OF RESIDENTIAL, COMMERCIAL, INDUSTRIAL, RECREATIONAL; AND OTHER NEEDED ACTIVITY CENTERS.

THOROFARES PLAN

MAJOR THOROUGHFARES PLAN

INTRODUCTION

THE PURPOSE OF THE THOROUGHFARE PLAN IS TO RECOMMEND THE DEVELOPMENT, IMPROVEMENT, EXTENSION, AND PROPOSED CHANGES FOR MAJOR THOROUGHFARES. IT IS A GUIDE AND A POLICY FOR HIGHWAY PLANNING BASED ON FUTURE POPULATION AND FUTURE INDUSTRIAL AND COMMERCIAL DEVELOPMENT. THE PLAN IS A GENERAL BLUEPRINT FOR RESPONSIBLE PUBLIC AGENCIES THAT BUILD AND IMPROVE ROADS, STREETS, AND HIGHWAYS. THE IMPLEMENTATION OF THE RECOMMENDATIONS OVER THE YEARS WILL RESULT IN A SYSTEM WHICH WILL MITIGATE CIRCULATION DEFICIENCIES IDENTIFIED IN PART I OF THE PLANNING PROGRAM AND ADEQUATELY SERVE THE LAND USE ARRANGEMENTS RECOMMENDED IN THE LAND USE PLAN. PART I, "TRANSPORTATION STUDY", PROVIDED SOME BASIC INFORMATION AND DISCLOSED EXISTING AND POTENTIAL PROBLEM AREAS OF THE PRESENT SYSTEM.

PART I OF THIS PROGRAM RELATES PRESENT AND EXPECTED TRAFFIC VOLUMES TO THE PRACTICAL CAPACITY OF EXISTING STREET PAVEMENT WIDTHS, THE VOLUMES RECORDED BY THE INDIANA STATE HIGHWAY COMMISSION ¹ AT THE CITY LIMITS OF FRANKFORT ON STATE AND FEDERAL ROUTES (AS WELL AS THROUGHOUT THE ENTIRE COUNTY), WHEN RELATED TO (A) COUNTS TAKEN DURING THE LAST TEN YEARS AND TO (B) EXPECTED VOLUME INCREASES OUTLINED IN PART I, INDICATE STEADILY INCREASING VOLUMES TO 1990. PEAK HOUR TRAFFIC, WITH MINOR EXCEPTIONS, IS 10 PERCENT OF 24-HOUR TOTAL TRAFFIC. ² WHILE THE MOST USED SYSTEMS OF STREETS AND HIGHWAYS IN BOTH FRANKFORT AND THE COUNTY ARE BASICALLY SOUND AND FUNCTIONAL, EACH IS SLOWLY BECOMING OVERTAXED BY INCREASING PEAK HOUR TRAFFIC DEMANDS.

IT MUST BE EMPHASIZED THAT THIS MAJOR THOROUGHFARES PLAN (TOGETHER WITH PREVIOUS PLANS) IS THE INITIAL STEP IN THOROUGHFARE PLANNING WHICH, IN TURN, IS THE BASIS FOR SUBSEQUENT AND CONTINUING DETAILING THROUGH ENGINEERING AND PROGRAMMING EFFORTS. THIS IS THE DIAGRAMATIC SYSTEM PLAN.

THOROUGHFARE PLANNING PRINCIPLES AND OBJECTIVES

THE RECOMMENDATIONS OF A THOROUGHFARE PLAN SHOULD:

PROPOSE A LOCATIONAL ARRANGEMENT WHICH WILL SERVE THE MAJOR CENTER OF TRAFFIC GENERATION AND DESTINATION--

1. TWENTY-FOUR HOUR ANNUAL AVERAGE TOTAL TRAFFIC, DIVISION OF PLANNING, INDIANA STATE HIGHWAY COMMISSION IN COOPERATION WITH THE U.S. DEPARTMENT OF TRANSPORTATION, 1969.
2. INSTITUTE OF TRAFFIC ENGINEERS, NEW HAVEN, CONNECTICUT.

FRANKFORT--AND LINK IT TO THE REGIONAL HIGHWAY NETWORK.

ESTABLISH A SYSTEM WHOSE DESIGN STANDARDS RELATE DIRECTLY TO EXPECTED TRAFFIC VOLUMES AND TO THE ROLE OF THE SYSTEM IN THE LAND USE ARRANGEMENT IN THE CITY, THE TOWNS, AND THE RURAL COUNTY AREA.

SERVE CONCENTRATED BUSINESS AND INDUSTRIAL TRAFFIC GENERATORS.

PROVIDE FOR THE MODIFICATION OF THE EXISTING SYSTEM TO MEET PRESENT AND ANTICIPATED NEEDS AND ADOPT MODERN STANDARDS FOR NEW THOROUGHFARES.

PROVIDE THE BASIS FOR COORDINATION WITH STATE, COUNTY, AND MUNICIPAL HIGHWAY AGENCIES.

ENCOURAGE THE STABILITY OF PRIVATE AND PUBLIC INVESTMENT IN EXISTING AND PROPOSED DEVELOPMENT BY (1) CHANNELING TRAFFIC FLOWS, WHEREVER POSSIBLE, ALONG BOUNDARIES RATHER THAN WITHIN RESIDENTIAL NEIGHBORHOODS AND BY (2) CONCENTRATING TRAFFIC ON A RELATIVELY FEW THOROUGHFARES.

CONNECT ALL THE NAMED URBANIZED PLACES, INSOFAR AS FEASIBLE, IN THE RURAL COUNTY COMMUNITY AND PROVIDE THE MOST DIRECT ACCESS TO FRANKFORT AND TO THE CLINTON COUNTY REGION.

MAJOR STREET PATTERNS ARE NOT DESIGNED TO INCREASE THE SPEED IN MILES PER HOUR OF INDIVIDUAL VEHICLES BUT TO INCREASE THE AMOUNT OF THE TOTAL FLOW. IT IS NOT TRUE THAT THE CARRYING CAPACITY OF A STREET IS PROPORTIONATELY INCREASED BY THE GREATER SPEED OF INDIVIDUAL VEHICLES. THE MAXIMUM CARRYING CAPACITY OF A STREET IS ACHIEVED AT SPEEDS OF 15-25 MILES PER HOUR, AND THE CARRYING CAPACITY DECREASES AT HIGHER SPEEDS BECAUSE OF THE GREATER NECESSARY SPACING BETWEEN CARS. THUS HIGH SPEEDS MAY REDUCE STREET CAPACITY. OTHER CAUSES OF REDUCED STREET CAPACITY ARE:

TRUCK TRAVEL. THIS MAY REDUCE CAPACITY BY 25-40 PERCENT.

CROSS-TRAFFIC INTERFERENCE. THIS REDUCES STREET CAPACITY BY AS MUCH AS 40 PERCENT, STRONG EVIDENCE OF THE NECESSITY FOR LIMITED ACCESS ON SELECTED MAJOR STREETS, AS FOR EXAMPLE KELLEY ROAD.

PARKING. CURB PARKING PRE-EMPTS ONE LANE OF MOVING TRAFFIC AND REDUCES THE CAPACITY OF THE ADJACENT LANE BY 10-20 PERCENT. A MAJOR STREET PLAN IS DESIGNED TO BE CARRIED OUT OVER A NUMBER OF YEARS; MEANWHILE MANY MINOR MALADJUSTMENTS MAY BE CORRECTED AND UP-TO-DATE TRAFFIC REGULATIONS ADOPTED TO PROVIDE TEMPORARY RELIEF.

SECURING THE NECESSARY RIGHTS-OF-WAY FOR STREET WIDENING PROJECTS IS EXPENSIVE AND DIFFICULT AND MAY BECOME CONTROVERSIAL. ADOPTION OF A STREET PLAN AND PROGRAM ESTABLISHES A POLICY AND METHOD, WHICH MAY BE FLEXIBLE TO A DEGREE, BUT IS IMPARTIAL AND LESS SUBJECT TO ATTACK BY INDIVIDUALS WHO MAY BE INCONVENIENCED. WISE ADMINISTRATION OF A STREET PLAN IS THE RESPONSIBILITY OF BOTH MUNICIPAL OFFICIALS AND THE CITIZENS WHO ARE INTIMATELY CONCERNED--- THE HOUSEWIFE WHO MUST SEND HER CHILD TO SCHOOL ACROSS A BUSY STREET...THE NERVE-WRECKED FAMILIES WHOSE QUIET RESIDENTIAL STREETS ARE USURPED BY SPEEDING VEHICLES BOUND ELSEWHERE...THE WORKER AND EMPLOYER WHO MUST SPEND MORE TIME AND MONEY BECAUSE OF DELAYS AND CONGESTION...THE BUSINESSMEN WHO CAN FORSEE THE SHIFT OF THE STREAM OF CUSTOMERS AWAY FROM THEIR BUSINESS AREA TOWARD ONE LESS CONGESTED AND MORE ACCESSIBLE...THE CONSUMER WHO PAYS THE PRICE OF INEFFICIENT MOVEMENT OF GOODS.

THE QUESTION OF COST IS NOT SO MUCH ONE OF A TOTAL FIGURE, BUT OF HOW IT CAN BE DISTRIBUTED EQUITABLY OVER THE YEARS, AS TO WHETHER IT IS WORTH THE EXPENDITURES, AND WHETHER AN EQUAL OR GREATER COST IN ONE OR ANOTHER FORM CAN BE AVOIDED IN ANY EVENT. EXPENDITURES FOR STREET IMPROVEMENTS CONSTITUTE A SUBSTANTIAL PROPORTION OF ALL MUNICIPAL EXPENDITURES, AND WILL UNDOUBTEDLY CONTINUE TO DO SO. PLANNED AND PROGRAMMED EXPENDITURES ARE A BASIC ECONOMY.

PRINCIPLES AND STANDARDS OF A MAJOR STREET SYSTEM

IF THE URBAN STREET SYSTEM IS TO FUNCTION PROPERLY, IT MUST BE IN HARMONY WITH THE PHYSICAL AND ECONOMICAL DEVELOPMENT OF THE CITY. THE LOCATION OF FUTURE AS WELL AS EXISTING, COMMERCIAL, AND RESIDENTIAL AREAS MUST BE PROTECTED AND PRESERVED, IN SO FAR AS POSSIBLE, FROM THE ANNOYANCES AND DISTURBANCES OF HEAVY TRAFFIC VOLUMES. MAJOR THOROUGHFARES SHOULD NOT DIVIDE NEIGHBORHOODS BUT RATHER SHOULD TRAVERSE THEIR BORDERS. WHEREVER POSSIBLE NEW THOROUGHFARES SHOULD BE LOCATED ALONG NATURAL PHYSICAL FEATURES AND BARRIERS OR ALONG THE BORDERS OF INDUSTRIAL, COMMERCIAL AND RESIDENTIAL DISTRICTS.

A FEW DIRECT AND WELL-IMPROVED MAJOR THOROUGHFARES CAN ACCOMMODATE THE MAJOR PART OF A COMMUNITY'S VEHICULAR TRAFFIC. ONLY VERY SMALL PROPORTIONS OF THE OVER-ALL STREET SYSTEM NEED BE IMPROVED TO A HIGH STANDARD. THE REMAINING STREETS, WHICH NORMALLY COMPRISE ABOUT 80 PERCENT OF THE TOTAL STREET MILEAGE, CAN BE RETAINED IN THEIR LOCAL CHARACTER TO PROVIDE ACCESS TO ADJOINING PROPERTY--- THEIR PRIMARY FUNCTION.

BY PROVIDING FOR THE BULK OF TRAFFIC ON A FEW PRINCIPAL STREETS COMPRISING A MAJOR THOROUGHFARE SYSTEM, LESS EXPENSE IS INVOLVED SINCE ONLY LIMITED MILEAGE OF STREETS NEED TO BE WIDENED OR IMPROVED WITH AN EXPENSIVE HIGH STANDARD PAVEMENT; GREATER SAFETY CAN BE INCORPORATED IN STREET CONSTRUCTION; TRAFFIC CAN BE BETTER

ACCOMMODATED AND CONTROLLED AND RESIDENTIAL NEIGHBORHOODS CAN BE PROPERLY PROTECTED.

THE REORGANIZATION OF THE STREET PATTERN IS ACCOMPLISHED BY A PLANNED SCHEDULE OF STREET WIDENING, REALIGNMENT AND LIMITATIONS OF ACCESS AND STREET CLOSURES, PROPERLY CO-ORDINATED WITH UP-TO-DATE TRAFFIC REGULATIONS. NO ONE OF THESE STEPS ALONE WILL EXPEDITE TRAFFIC; HOWEVER, TOGETHER THEY OFFER A SOLUTION TO THE TRAFFIC PROBLEM.

STREET WIDENING PROJECTS UNDERTAKEN WITHOUT REFERENCE TO AN OVER-ALL PLAN OFTEN INCREASE CONGESTION RATHER THAN RELIEVE IT.. HAPHAZARD ERECTION OF STOP SIGNS AND TRAFFIC LIGHTS IN CONGESTED ZONES FURTHER DELAYS TRAFFIC AND ADDS TO THE MOUNTING CONGESTION. JUDICIOUS STREET CLOSURES TO PROTECT RESIDENTIAL AREAS AND LIMIT ACCESS TO MAIN THOROUGHFARES, IN ADDITION TO MITIGATING TRAFFIC HAZARDS AND CONGESTION, WILL MEAN THAT 30 TO 50 PERCENT OF THE LAND AREA NOW INEFFICIENTLY USED OR WASTED CAN BE DEVOTED TO INTERIOR BLOCK OR NEIGHBORHOOD PARK AREAS WITHOUT ADDITIONAL LAND ACQUISITION COSTS. THE SAVINGS IN TERMS OF STREET MAINTENANCE, STREET ASSESSMENT COSTS, AND INCREASED LOT VALUES ARE MORE THAN ENOUGH TO PAY THE COST OF PARK DEVELOPMENT AND MAINTENANCE.

THOROUGHFARE SYSTEM COMPONENTS

IT IS RECOMMENDED THAT THE FUTURE THOROUGHFARE SYSTEM FOR CLINTON COUNTY BE COMPOSED OF THE CLASSES OF STREETS AND HIGHWAYS DESCRIBED AS FOLLOWS:

EXPRESSWAYS

AN EXPRESSWAY, INCLUDING A BYPASS, IS A CONTROLLED ACCESS FACILITY WHICH IS DESIGNED FOR HIGH SPEED TRAFFIC, USUALLY ACCOMMODATING THROUGH CIRCUMFERENTIAL TRAFFIC. AT LEAST 120 FEET OF RIGHT-OF-WAY IS DESIRABLE DEPENDING ON ROADWAY DESIGN, THE DEGREE OF ACCESS, AND THE INTENSITY OF DEVELOPMENT ALONG THE ROUTE. ULTIMATELY, IT IS EXPECTED TO PROVIDE FOR FOUR MOVING TRAFFIC LANES DIRECTIONALLY DIVIDED BY A MEDIAN STRIP. THE SELECTION OF THE PRECISE RIGHT-OF-WAY IN ANY GIVEN AREA WILL REQUIRE ENGINEERING DETERMINATIONS AND PUBLIC HEARINGS.

MAJOR THOROUGHFARES

MAJOR THOROUGHFARES PROVIDE REASONABLY CONTINUOUS ROUTES THROUGH THE URBAN AND RURAL AREA, MAY OR MAY NOT HAVE INTERSECTIONS AT-GRADE AND USUALLY PROVIDE DIRECT ACCESS TO OUTLYING PROPERTY. SELECTED MAJOR THOROUGHFARES, LIKE THE EXPRESSWAY, ARE EXPECTED TO ULTIMATELY PROVIDE FOUR DIRECTIONALLY SEPARATED, MOVING TRAFFIC LANES. IN DEVELOPED AREAS AN 80 TO 100 FOOT RIGHT-OF-WAY WILL PERMIT TURNING LANES OR ADDITIONAL SECTIONS OF MOVING LANES. THEY GENERALLY CARRY BOTH INTRA-URBAN TRAFFIC AND THROUGH TRAFFIC AND MAY COMPRISE PAIRS OF ONE-WAY STREETS. SECONDARY

THOROUGHFARES PROVIDE CONSIDERABLE FLEXIBILITY AS CONNECTORS DISTRIBUTING TRAFFIC FROM CONCENTRATIONS OF EMPLOYMENT TO MAJOR THOROUGHFARES. THE CAPACITY OF THOROUGHFARES IS LIMITED PRINCIPALLY BY MAIN INTERSECTIONS, THE DESIGN OF TURNING LANES, AND ON-STREET PARKING.

SECONDARY COLLECTOR STREETS

THE COLLECTOR STREET, AS THE NAME IMPLIES, "COLLECTS" TRAFFIC FROM LOCAL STREETS AND ADJOINING PROPERTY AND DISTRIBUTES IT TO THE MAJOR THOROUGHFARES. IT IS A NEIGHBORHOOD STREET WITH A MINIMUM RECOMMENDED 70-FOOT RIGHT-OF-WAY ACCOMMODATING TWO 12 FOOT MOVING LANES AND TWO 12-FOOT PARKING LANES IN FULLY DEVELOPED AREAS, BUT FOUR MOVING LANES MAY BE DESIRABLE FOR PEAK HOUR OR OTHER MAXIMUM-USE CONDITIONS.

LOCAL STREETS, URBAN

SINCE THEIR PRINCIPAL FUNCTION IS THE PROVISION OF ACCESS TO ABUTTING PROPERTY AND NOT THE MOVEMENT OF TRAFFIC, LOCAL STREETS ARE NOT A PART OF THE THOROUGHFARE SYSTEM AND THROUGH TRAFFIC SHOULD BE DISCOURAGED. LOCAL STREET RIGHTS-OF-WAY SHOULD BE 50 TO 60 FEET DEPENDING ON DENSITY OF DEVELOPMENT AND CONTINUITY OF ALIGNMENT. FORTY TO FIFTY FEET MAY BE UTILIZED ONLY FOR SHORT-LOOP STREETS OR CUL-DE-SACS. A MOVING SURFACE WIDTH OF 26 FEET IS RECOMMENDED IN LOW-DENSITY AREAS AND 32 TO 38 FEET IN LOW-MEDIUM AREAS (AS WILL BE SPECIFIED IN THE SUBDIVISION CONTROL ORDINANCE). PAVING WIDTH OF SHORT CUL-DE-SACS AND SHORT LOOP STREETS MAY BE AS LOW AS 18 FEET, IF A LOW DENSITY AND OFF-STREET PARKING REQUIREMENTS PREVAIL. TWENTY-FOUR FOOT PAVEMENT WIDTHS IS THE STANDARD FOR 2-LANE RURAL HIGHWAYS AND THE MORE HEAVILY TRAVELED RURAL ROADS.

THE RELATIONSHIP BETWEEN THROUGHFARES AND LAND USE PATTERNS

THE HAZARDS, BOTH PHYSIOLOGICAL AND ECONOMIC, OF HEAVY STREAMS OF TRAFFIC ALONG MAJOR TRANSPORTATION ROUTES, SUCH AS WALNUT STREET IN THE FRANKFORT URBAN AREA, AND AT AREAS OF MAJOR EMPLOYMENT, ARE FREQUENTLY CITED AS ADVERSELY AFFECTING URBAN AREAS. WHILE THESE ADVERSE EFFECTS CAN BE ADAPTED, THEY CANNOT BE ELIMINATED. LAND USE PLANNING, HOWEVER, DOES OFFER A MEANS OF CONTROLLING EXPOSURE TO TRANSPORTATION AND INDUSTRIAL HAZARDS BY THE USE OF SPACE, ORIENTATION, AND INTERNAL DESIGN. SEPARATION OF INCOMPATIBLE USES BY OPEN SPACE OR BY USES THAT ARE MUTUALLY COMPATIBLE CAN BE USED AS AN ALLEVIATING FACTOR. LOCATIONS SELECTED SO THAT PREVAILING WINDS CAN SERVE TO REDUCE EXPOSURE TO SMOKESTACK INDUSTRIES IS A SOUND CONTROL MECHANISM OF LAND USE PLANNING. THE INTERNAL DESIGN OF USE AREAS CAN ASSIST IN REDUCING EXPOSURE--A LAYOUT THAT DISCOURAGES THROUGH TRAFFIC THROUGH A RESIDENTIAL AREA, THE ROUTING OF MAJOR AND SECONDARY THOROUGHFARES ALONG ROUTES SPECIFICALLY DESIGNED FOR THESE FACILITIES, THE INTRODUCTION OF INSULATION OR BUFFER STRIPS OF PLANTED OPEN SPACES, ALL SERVE TO MODERATE THE EFFECTS OF ADVERSE ENVIRONMENTAL

INFLUENCES. A THOROUGHFARE SYSTEM IS A SERVICE WHICH ENABLES PEOPLE, FIRMS, AND OTHER ENTITIES TO CARRY ON ACTIVITIES AT SITES IN SEPARATED LOCATIONS. A MAJOR CONSIDERATION IN SELECTING A LOCATION, EITHER INDUSTRIAL, COMMERCIAL, RESIDENTIAL, OR RELATED, IS THE ACCESSIBILITY OF THAT ACTIVITY TO CERTAIN OTHER ACTIVITIES. THOROUGHFARE PLANNING IS CONCERNED WITH THE DESIGN OF THE THOROUGHFARE SYSTEM WHICH MAXIMIZES ACCESSIBILITY FOR ESSENTIAL MOVEMENTS BETWEEN ACTIVITIES, WITH DUE CONSIDERATION FOR SAFETY AND CONVENIENCE AS WELL AS COST.

HIGH DENSITY OF RESIDENTIAL DEVELOPMENT AND HIGH DENSITY OF EMPLOYMENT OBVIOUSLY CREATE HIGH DEMANDS FOR MOVEMENT. WHILE GENERAL ACCESSIBILITY FROM THE URBAN AND RURAL AREA IS ADEQUATE, IN THE FRANKFORT AREA, IMMEDIATE AND DIRECT ACCESSIBILITY TO MAJOR EMPLOYMENT AREAS IS GENERALLY INADEQUATE AND TRAFFIC TO OR FROM THESE AREAS, EXCEPT THE CENTRAL AREA, HAVE LITTLE CHOICE BUT TO CONTRIBUTE SUBSTANTIALLY TO EXISTING CONGESTION OR TRAVERSE RESIDENTIAL AREAS ON LOCAL STREETS IN ORDER TO REACH MAIN-TRAVELED THOROUGHFARES.

IN THE ABSENCE OF AN IN-CITY TRAFFIC STUDY, THIS SECTION IS NECESSARILY RESTRICTED TO AN OVERVIEW OF THE RELATIONSHIP OF EXISTING LAND USE PATTERNS, IN THE GENERALIZED SENSE, AND EXISTING MAIN-TRAVELED THOROUGHFARES. THIS SAME PROCEDURE HAS BEEN EMPLOYED MORE DEFINITELY IN THE CONSIDERATION OF FUTURE GENERALIZED LAND USE PATTERNS AND THEIR INTERRELATION TO FUTURE THOROUGHFARES AND TO THE FUTURE THOROUGHFARE SYSTEM.

IT IS ESSENTIAL THAT THE COMPREHENSIVE PLAN STRENGTHEN THE ROLE OF FRANKFORT AS THE FOCAL POINT OF THE TRADING AREA. ONE OF THE BASIC FACTORS IN THIS ENDEAVOR IS THE COORDINATION OF THE VARIED PATTERN OF LAND USES WITH TRANSPORTATION ROUTES FOR THE EFFICIENT MOVEMENT OF PEOPLE AND GOODS WITHIN, TO, AND FROM THE CITY AND THAT THE THOROUGHFARES PLAN BE UTILIZED TO FACILITATE THE ACHIEVEMENT OF LAND USE OBJECTIVES SUCH AS AN ADEQUATE STREET SYSTEM TO EXISTING AND PROPOSED INDUSTRIAL AREAS AND THEIR DIRECT ACCESSIBILITY TO THE INTER-REGIONAL HIGHWAY SYSTEM.

THE THOROUGHFARE PLAN -- FRANKFORT URBAN AREA

THE PROPOSED THOROUGHFARE SYSTEM FOR THE FRANKFORT URBAN AREA IS SHOWN ON MAP A AT THE END OF THIS REPORT. THE PLAN IS BASED ON THE PRONOUNCED EAST-WEST PHYSICAL ORIENTATION OF THE AREA WHICH IS OBSERVED IN BOTH EXISTING LAND USE DEVELOPMENT (SEE CHAPTER - EXISTING LAND USE) AND EXISTING AND POTENTIAL TRAFFIC VOLUMES, THE LATTER MOST EVIDENT ON WALNUT STREET - SR 28. AN ANCILLIARY BASIC ROUTE IS SR 39 AND 38. THESE ROUTES FORM RESPECTIVELY THE EAST-WEST AND NORTH-SOUTH AXIS AND ARE THE BASIC FRAMEWORK OF THE URBAN COMMUNITY.

THE FRANKFORT STREET SYSTEM IS, THEREFORE, A RADIAL SYSTEM (WALNUT - WASHINGTON - JACKSON - ARMSTRONG (IN ITS SOUTHWEST-NORTHEAST ALIGNMENT) DELPHI AVENUE - SR 75, AND ROSSVILLE AVE. - US 421 - SR 39 AND 38) OVER A BASIC GRID PATTERN. IT CONSISTS OF THE ABOVE RADIAL HIGHWAYS EXTENDING DIRECTLY OR INDIRECTLY FROM THE CITY'S CENTER MUCH LIKE THE SPOKES OF A WHEEL. THE GRID ARRANGEMENT OF THE SYSTEM IS CHARACTERIZED BY STREETS AT RIGHT ANGLES TO EACH OTHER. THE MAIN OR LOCAL STREETS LYING BETWEEN THE MAJOR GRID FOLLOW ESSENTIALLY THE SAME PATTERN RESULTING, WITH THE EXCEPTION OF MOST POST WORLD WAR II SUBDIVISION, IN OBLONG BLOCKS. WHERE POSSIBLE, ALL MAJOR AND SECONDARY / COLLECTOR STREETS FOLLOW THE ALIGNMENT OF EXISTING STREETS AND ROADS.

BELT THOROUGHFARES:

INTERMEDIATE BELT -

THE FOLLOWING STREETS FUNCTION AS AN INTERMEDIATE BELT THOROUGHFARE SYSTEM WHICH DISTRIBUTES TRAFFIC VOLUMES ON SELECTED STREETS TO ITS DESTINATION (PRIMARILY THE CENTRAL BUSINESS DISTRICT AND THE SR 28 INDUSTRIAL AREA) FROM POINTS LYING OUTSIDE THE BELT, AND RE-DISTRIBUTES THAT TRAFFIC TO ITS POINT OF ORIGIN:

FREEMAN STREET

FIFTH STREET - ROSSVILLE ST.¹

GREEN STREET.

WILLIAMS - BURLINGTON

THE INTERMEDIATE BELT ALSO SERVES AS A LIMITED CENTRAL BUSINESS DISTRICT BY-PASS.

INTER BELT -

THE INNER THOROUGHFARE BELT ENCOMPASSES THE CENTRAL BUSINESS DISTRICT ITSELF. THIS CENTRAL LOOP, IN ADDITION TO SERVING AS A CENTRAL DISTRICT BY-PASS ROUTE, ALSO FUNCTIONS AS A MARGINAL DISTRIBUTOR STREET FOR TRAFFIC DESTINED FOR VARIOUS PARTS OF THE TOWN CENTER DISTRICT. THIS BELT LOOP USES:

WALNUT STREET

COLUMBIA

MORRISON

CLAY

1 THE EXISTENCE OF RAIL TRACKAGE ALONG MUCH OF FIFTH ST. SEGMENT OF THE BELT AND THE ENGINEERING PROBLEMS THAT THEY CAUSE, ARE RECOGNIZED. HOWEVER, ADEQUATE ALTERNATIVES DO NOT EXIST WITHIN THE REALM OF ECONOMIC FEASIBILITY.

CLAY IS USED AS THE EAST LEG OF THE BELT BECAUSE NO LOGICAL AND ECONOMICALLY FEASIBLE ALTERNATIVES ARE AVAILABLE CLOSER TO THE CENTRAL DISTRICT.

OUTER BELT -

THE OUTER BELT THOROUGHFARE GENERALLY CIRCUMVENTS THE MAIN PORTION OF THE FRANKFORT URBAN AREA, USING, AS SHOWN ON MAP A:

KELLEY ROAD AND EXTENSION
200 WEST ROAD
100 NORTH ROAD AND EXTENSION
250 EAST AND EXTENSION¹

OBVIOUSLY, DUE TO THE EAST-WEST ORIENTATION, THE EAST-WEST LEGS OF THESE BELT SYSTEMS ARE OF CONSIDERABLY MORE IMPORTANCE THAN THE NORTH-SOUTH LEGS.

RADIAL ROUTES -

RADIAL ROUTES HAVE BEEN PREVIOUSLY MENTIONED (WALNUT - WASHINGTON - JACKSON - ARMSTRONG (SOUTHWESTERLY) - DELPHI AVENUE - ROSSVILLE ROAD). THESE RADIATE GENERALLY FROM THE CENTRAL BUSINESS DISTRICT. NO TRUE RADIAL SERVES THE SOUTHEAST SECTOR OF THE COMMUNITY AND NONE IS PROPOSED. PRESENT VOLUMES UTILIZING THE WALNUT - SR 28 - US 421 RADIAL ARE LARGE (SEE TRANSPORTATION CHAPTER PART I, PARTICULARLY SEE TABLE 5 AND MAP 1) WITH ROUGHLY THE 11,000 VEHICLES OF 1972 INCREASING TO AN EXPECTED 18,000 VEHICLES PER 24-HOUR DAY BY 1990. THIS TRANSLATES TO APPROXIMATELY 1,800 VEHICLES AT PEAK HOUR IN 1990. WITH THE EXPECTED INCREASED DEVELOPMENT ALONG SR 28 TO THE WEST OF THE URBAN AREA, IT MAY BE ANTICIPATED THAT FUTURE TRAFFIC ALONG THIS ROUTE WILL BE EVEN HEAVIER.

TRAFFIC ON THE REMAINING RADIALS IS EXPECTED TO BE ACCOMMODATED WITHIN PRESENT RIGHTS-OF-WAY THROUGHOUT MOST OF THE 20 YEAR PLANNING PERIOD. ON-STREET PARKING ON SELECTED SEGMENTS OF THIS REMAINDER WILL PROBABLY REQUIRE FUTURE RESTRICTIONS, AT LEAST DURING PEAK PERIODS.

THE PROPOSED EAST-WEST BYPASS

ONE OF THE MOST FAR REACHING RECOMMENDATIONS OF THE PLAN IS THE PROPOSED URBAN AREA BY-PASS. THE ROUTE OF THE BY-PASS, BEGINNING AT SR 28 - US 421, AS SHOWN, IS:

150 SOUTH ROAD - KELLEY ROAD EXTENDED
200 WEST ROAD TO SR 28

250 EAST ROAD AND THE PROPOSED EXTENSION WOULD DIVERT TRAFFIC FROM MICHIGANTOWN ROAD AND SR 28 SOUTH TO KELLEY ROAD, WHILE FREEMAN ST. EXTENDED WEST FROM FIFTH STREET WOULD FUNCTION AS

1. DUE TO MAP AREA LIMITATIONS 250 E. ROAD IS NOT SHOWN ON MAP A. IT IS, OF COURSE, SHOWN ON MAP C.

A BY-PASS ROUTE ON AN INTERUM BASIS. ROUTES 200 WEST, 130 WEST AND FIFTH STREET EXTENDED WOULD INTERCEPT AND DISTRIBUTE INDUSTRIAL AND RELATED TRAFFIC FROM THE BY-PASS FACILITY.

THIS ROUTE WILL ATTRACT MOST OF THE INDUSTRIAL TRAFFIC VOLUMES WITH ORIGIN - DESTINATION TO THE EAST BY OFFERING AN ATTRACTIVE, ACCESSIBLE ALTERNATIVE TO THE US-28 / WALNUT STREET CONGESTION. THAT PORTION OF THE BY-PASS THAT LIES WITHIN THE EXTENDED URBAN AREA SHOULD HAVE A MINIMUM 100 FOOT RIGHT-OF-WAY, AND ACCESS SHOULD BE CONTROLLED. EVENTUALLY FOUR LANES DIRECTIONALLY DIVIDED SHOULD BE PROVIDED. INITIALLY TWO LANES WILL SUFFICE BUT THEY SHOULD BE PLACED WITHIN THE RIGHT-OF-WAY SO THAT THE DIVIDER (AT LEAST 12 FEET IN WIDTH FOR TURNING LANES) MAY BE ADDED IN THE FUTURE. LAND USE PLANS CALL FOR NEW SECTIONS OF THE RIGHT-OF-WAY TO TRAVERSE AGRICULTURAL AND INDUSTRIAL LAND USE, THUS MINIMIZING THE TRAFFIC RESIDENTIAL LAND USE CONFLICT. PARALLEL ACCESS ROADS BUILT ON EITHER SIDE OF THE EXISTING AND FUTURE SEGMENTS OF THE BY-PASS SHOULD BE CONSTRUCTED TO PRESERVE CONTROL OF ACCESS.

SINCE ESSENTIALLY ALL THE RIGHT-OF-WAY LIES IN THE RURAL COUNTY, THERE MUST BE THE CLOSEST COOPERATION BETWEEN CITY AND COUNTY IN ADOPTING, IN PROGRAMMING, AND IN CARRYING OUT THE RECOMMENDATIONS OF THIS BY-PASS ROUTE (AS IN ALL PROPOSALS SIMILARLY LOCATED). THE EXISTANCE OF THE AREA (CITY-COUNTY) PLANNING COMMISSION WILL AID IN THIS COORDINATION. THE COMMISSION, OF COURSE, MAY ONLY RECOMMEND, IN PROPER TIME SEQUENCES, AND COORDINATE THIS AND SIMILAR PROJECTS. IT CANNOT, IN THE END, ACCOMPLISH THEM.

INITIALLY, THE EAST-WEST SEGMENT OF THE BY-PASS MAY TERMINATE AT 130 WEST ROAD - PRAIRIE STREET. THIS WOULD REQUIRE NEW ACCESS TO WALNUT - SR-28 NORTH OF MCKINLEY AVENUE. IT WOULD ALSO REQUIRE APPROXIMATELY TWO MILES OF NEW RIGHT-OF-WAY BETWEEN SR-38 - 39 AND 130 WEST ROAD. THIS WILL BE ENTIRELY ADEQUATE AS A BY-PASS FOR A CONSIDERABLE TIME PERIOD. THE FREEMAN STREET EXTENSION WEST OF 130 WEST ROAD WILL BE REQUIRED ONLY WHEN INDUSTRIAL TRAFFIC ON SR-28 WEST NECESSITATES TRAFFIC RELIEF. THE FREEMAN STREET EXTENSION WILL BE SOUTH OF THE SECTION LINE TO ACCOMMODATE THE AIRPORT EXPANSION PLANS.

HOKE AVENUE - SR 28

CONGESTION ACCRUING AT THIS INTERSECTION HAS BEEN CONSIDERABLY AMELIORATED BY THE RECENT ELEMINATION OF STOP SIGNS ON EITHER SIDE OF HOKE ON SR 28, AMONG OTHER TRAFFIC ENGINEERING MEASURES. TRAFFIC MUST STILL MAKE TWO RIGHT-ANGLE TURNS AND THERE IS STILL A DEGREE OF CONGESTION. NO LARGE OR EVEN SIGNIFICANT TRAFFIC VOLUMES, OTHER THAN THOSE ON SR 28, CONVERGE AT THIS INTERSECTION. NO POINTS OF SIMILAR OR EVEN SIGNIFICANT CONFLICT OCCURS ON SR 28 ALONG THE COMMERCIAL FRONTAGE EAST OF HOKE.

FROM THESE MUNDANE BUT BASIC CONSIDERATIONS IT SEEMS REASONABLY CLEAR THAT THE EXISTING JOG IN ALIGNMENT OF SR 28 IS THE PRINCIPAL CONTRIBUTOR TO CONGESTION AND THAT THE ELEMINATION OF THE JOG WOULD SIGNIFICANTLY REDUCE THAT CONGESTION. PART I (THOROUGHFARES) POINTED OUT A TRAFFIC ENGINEERING PRINCIPLE: THE CAPACITY OF AN AT GRADE STREET IS DETERMINED BY THE WIDTH AT THE INTERSECTION. THE ELEMINATION OF THE JOG, AS PROPOSED, WILL, THEREFORE, ELEMIMATE THE CONGESTION AT THAT INTERSECTION.

A PROPOSED NORTH-SOUTH SECONDARY STREET IS PROPOSED AT THE WESTERN BOUNDARY OF GRANT'S PLAZA BETWEEN WABASH AND FREEMAN. THE PURPOSE OF THIS STREET IS TO RELIEVE SHOPPING CENTER CONGESTION ON SR 28 - WALNUT STREET PRIMARILY AT THE HOKE AVENUE AREA. AN INTERSECTION WITH WALNUT, THEREFORE, IS NOT RECOMMENDED. THE FUNCTION OF THE PROPOSED STREET IS TO COLLECT-DISTRIBUTE GRANT'S PLAZA TRAFFIC, FUNNELLING IT TO FREEMAN STREET FOR FURTHER DISTRIBUTION.

THE MAJOR THOROUGHFARE PLAN IS PRESENTED OF NECESSITY, IN A DIAGRAMATIC METHOD AND IT IS BEYOND THE SCOPE OF THIS REPORT TO SUGGEST THE DETAILED TRAFFIC ENGINEERING MEASURES (AS OPPOSED TO A THOROUGHFARE SYSTEM PLAN) THAT WOULD BE REQUIRED TO LESSEN CONGESTION HERE.

THE PREVIOUS PLAN

VERY FEW OF THE MULTITUDINOUS RECOMMENDATIONS OF THE PREVIOUSLY PROPOSED FRANKFORT THOROUGHFARE PLAN HAVE BEEN RETAINED. THAT PLAN, IN THE CONSULTANT'S OPINION, FAILED TO ADHERE TO TWO OF THE MOST FUNDAMENTAL CONCEPTS OF THOROUGHFARE PLANNING:

1. THE CONCENTRATION OF TRAFFIC ON THE FEWEST STREETS, PARTICULARLY IN RESIDENTIAL SECTIONS, AND THE CONCURRENT REQUIREMENT:
2. THE PRESERVATION, IN SO FAR AS POSSIBLE, OF THE RESIDENTIAL INTEGRITIES AND AMENITIES OF NEIGHBORHOODS.

TO USE A MOST APT PHRASE OF A MEMBER OF THE PLANNING COMMISSION, IN REFERRING TO THE PREVIOUS PLAN, "NO HARD DECISIONS ON TRAFFICWAYS WERE MADE". ALTHOUGH THE PLAN AS NOW PROPOSED ADHERES TO THE ABOVE REQUIREMENTS AND IS WITHIN THE ECONOMIC CAPABILITY OF LOCAL GOVERNMENT - "HARD DECISIONS" WILL CONTINUE TO CONFRONT LOCAL POLICY / DECISIONS MAKERS AND PROGRAMERS.

ONE OF THE MOST OBVIOUS IS THE REQUIREMENT TO PRESERVE THE FUNCTIONAL INTEGRITY OF THE PROPOSED URBAN AREA BY-PASS -- BY MEANS OF CONTROLLING ITS ACCESS POINTS. PARTICULARLY ON THE EXISTING SECTIONS AND PARTICULARLY, ALSO, IN THE FRANKFORT VACINITY, PRESSURE WILL BE BROUGHT TO BEAR FOR THE APPROVAL OF SUBDIVISION PLATS WHOSE LOTS ABUT AND THEREFORE HAVE UNCONTROLLED ACCESS TO THE BY-PASS. PRESSURE WILL ULTIMATELY BE FELT IN TERMS OF ZONE CHANGES ALONG THE ROUTE. A HARD DECISION--A SERIES OF HARD DECISIONS--WILL BE NECESSARY TO REQUIRE CONTROLLED ACCESS THROUGH PARALLEL ACCESS ROADS (FOR EXAMPLE) WHICH FUNNEL TRAFFIC TO PLANNED ACCESS POINTS (AT EXISTING INTERSECTIONS) BUT REQUIRE OF THE SUBDIVIDER/ DEVELOPER THE EXPENDITURE OF FUNDS IN THE CONSTRUCTION OF SAID PARALLEL ROAD--WHEN KELLEY, IS NOW A PUBLIC ROAD.

IF, HOWEVER, THE PLAN IS TO BE ULTIMATELY ACCOMPLISHED, THIS IS THE SORT OF DECISION THAT MUST BE MADE AND REMADE.¹

THE THOROUGHFARE PLAN - OTHER INCORPORATED COMMUNITIES

MAP B SHOWS THE PROPOSED THOROUGHFARE PLAN AS IT RELATES TO THE INCORPORATED COMMUNITIES, OTHER THAN FRANKFORT. SINCE THESE COMMUNITIES ARE RELATIVELY SMALL, ALL MAJOR TRAFFIC ACCRUES TO EXISTING STATE OR FEDERAL ROUTES SERVING FRANKFORT. NO ADDITIONAL THOROUGHFARES ARE REQUIRED NOR IS A FUTURE REQUIREMENT ANTICIPATED.

THE THOROUGHFARE PLAN - CLINTON COUNTY

FRANKFORT IS NOT AND CANNOT BE CONSIDERED SEPERATELY FROM ITS URBAN AREA, FROM THE COUNTY, AND FROM THE REGIONAL AREA IN TERMS OF TRAFFICWAYS. AS MENTIONED, THERE MUST BE THE CLOSEST COOPERATION BETWEEN THE COUNTY AND THE CITY IN PROGRAMMING AND IN CARRYING OUT THE RECOMMENDATIONS HEREIN, PARTICULARLY FOR THOROUGHFARES NOT WITHIN OR PARTIALLY WITHIN THE CORPORATE LIMITS, BECAUSE OF THEIR IMPORTANCE TO THE THOROUGHFARE PLAN AS A SYSTEM, SIGNIFICANTLY INFLUENCE THE CITY OF FRANKFORT. BEYOND THE URBAN AREA PREDOMINENTLY VACANT LAND EXISTS. HERE SUBDIVISION CONTROL AND BUILDING SETBACKS WILL, IF IMPARTIALLY AND JUDICIOUSLY ADMINISTERED, RESULT IN THE SAVINGS OF VAST SUMS OF TAX MONIES IN THE ACQUISITION OF RECOMMENDED RIGHTS- OF-

1 A MORE ACCEPTABLE METHOD FOR RESIDENTIAL USE ALONG THE PROPOSED BY-PASS IS BACK LOTS OF EXTRA DEPTH ON THE BY-PASS AND REQUIRE A 10' NON-ACCESS (TO THE BY-PASS) RESERVATION ON THE BACK OF EACH LOT. THIS MAY BE READILY ACCOMPLISHED THROUGH THE PLAT APPROVAL AUTHORITY OF THE AREA PLAN COMMISSION. WHERE NO PLAT IS INVOLVED CONSIDERATION SHOULD BE GIVEN TO ACQUIRING A NON-ACCESS RESERVATION BY PURCHASE.

WAY AND IS THE PRESERVATION OF THE FUNCTIONAL UTILITY OF EACH THOROUGHFARE SEGMENT AND, INDEED, OF THE ENTIRE THOROUGHFARE SYSTEM.

THE PLAN IS SHOWN ON MAP C AT THE BACK OF THIS REPORT. THE PROPOSED THOROUGHFARES SHOULD ADEQUATELY ACCOMMODATE THE VOLUME OF TRAFFIC THAT IS EXPECTED IN BOTH THE RURAL COUNTY AND THE URBAN AREA DURING THE NEXT TWENTY OR THIRTY YEARS.

STATE AND FEDERAL HIGHWAYS ARE THE MAJOR ROUTES OF THE COUNTY. AS THEY NOW EXIST THEY ARE ONE OF THE MOST COMPLETE SYSTEMS OF RURAL THOROUGHFARES WITHIN THE CONSULTANT'S EXPERIENCE.

THE PLAN IS A GUIDE TO THE TYPE AND LOCATION OF COUNTY ROADS THAT ARE NOW NEEDED, OR WILL BE NEEDED IN THE FUTURE. WHENEVER POSSIBLE THE SYSTEM FOLLOWS EXISTING ALIGNMENT. JOGS IN ALIGNMENT WITHIN THE SYSTEM SHOULD BE PROGRESSIVELY ELEMENATED AND SOME SECTIONS CLOSER TO THE URBAN AREA WILL ULTIMATELY REQUIRE INCREASED RIGHT-OF-WAY WITH A MINIMUM TWENTY FOOT PAVEMENT WIDTH. ALL STATE AND FEDERAL ROUTES SHOULD EVENTUALLY BE PAVED TO 24' PAVEMENT WIDTHS.

THE PROPOSED SYSTEM SERVES ALL SECTIONS OF THE COUNTY--THE CITY, THE URBAN AREA, THE INCORPORATED TOWNS, THE NAMED PLACES--SIMULTANEOUSLY PROVIDING INCREASED ACCESSIBILITY AND DECREASED CONGESTION TO THE THREE AREAS OF THE MOST IMPORTANT ECONOMIC ACTIVITY--THE FRANKFORT CENTRAL BUSINESS DISTRICT, GRANT'S PLAZA SHOPPING CENTER, AND THE INDUSTRIAL DEVELOPMENT ON SR 28 TO THE WEST.

EFFICIENT USE OF MAJOR STREETS

PRINCIPAL CONGESTION ALONG MAJOR STREETS OCCURS DURING THE MORNING AND AFTERNOON PEAK HOUR MOVEMENT. USUALLY THE CONGESTION IS MOST ACUTE DURING THE AFTERNOON PEAK PERIOD WHICH NORMALLY OCCURS BETWEEN 4:30 AND 6:00 P.M. DURING THE BALANCE OF THE DAY TRAFFIC MOVEMENT IS MUCH LIGHTER AND USUALLY CAN BE ACCOMMODATED BY EXISTING PAVEMENT WIDTHS.

ALTHOUGH THE ULTIMATE OBJECTIVE CONTEMPLATES AN ADEQUATE WIDTH OF PAVEMENT FOR ALL MAJOR THOROUGHFARES, COSTS OF RIGHT-OF-WAY ACQUISITION AND NEW PAVEMENT CONSTRUCTION ARE GENERALLY VERY HIGH. IT IS, THEREFORE, EXTREMELY IMPORTANT THAT THE MOST EFFICIENT POSSIBLE USE BE MADE OF EXISTING PAVEMENT.

ONE-WAY TRAFFIC MOVEMENTS ON VARIOUS TYPES OF STREETS HAS BEEN ESTABLISHED IN MANY AMERICAN CITIES. ONE WAY PAIRS HAVE TWO BASIC ADVANTAGES:

1. THERE ARE FEWER POINTS OF CONFLICT AND THEREFORE, FEWER ACCIDENTS/INCIDENTS.
2. THEY CAN USUALLY ACCOMMODATE A GREATER VOLUME THAN THE SAME STREETS WITH TWO-WAY TRAFFIC.

THERE ARE NOW NO ONE-WAY STREETS IN FRANKFORT OR CLINTON COUNTY. THE FRANKFORT POLICE TRAFFIC DIVISION HAS MADE PREVIOUS PROPOSALS BUT THEY HAVE NOT BEEN IMPLEMENTED. THE EXISTING STREET SYSTEM DOES NOT GENERALLY LEND ITSELF TO THE USE OF ONE-WAY TRAFFIC MOVEMENT. INTERSECTION (AND THEREFORE STREET) CAPACITY HAS NOT YET BEEN EXCEEDED BY TRAFFIC VOLUMES. THERE IS NO FEASIBLE ALTERNATIVE TO TRAVERSING RESIDENTIAL FRONTAGE IF WALNUT AND WABASH STREET OR CLINTON, ARE MADE ONE-WAY PAIRS BETWEEN HOKE AND CRESCENT STREET, FOR EXAMPLE. THE SAME RESIDENTIAL INTRUSIONS WOULD ACCRUE TO WABASH IF THAT STREET AND WALNUT WERE DESIGNATED FOR ONE-WAY BETWEEN CLAY AND CRESCENT. THIS WOULD UNNECESSARILY CONFRONT THE "MOST TRAFFIC ON THE FEWEST STREETS" PRINCIPLE.

IN TERMS OF CURRENT TRAFFIC VOLUMES THERE SEEMS SCANT JUSTIFICATION FOR ONE-WAY MOVEMENT NORTH OR SOUTH OF THE CENTRAL BUSINESS DISTRICT. AGAIN, AN UNNECESSARY RESIDENTIAL INTRUSION WOULD RESULT. A MORE LOGICAL AND FEASIBLE SOLUTION FOR IMMEDIATE TRAFFIC RELIEF WOULD BE TO PROHIBIT PARKING OR STOPPING DURING THE MORNING AND EVENING RUSH HOURS ALONG SELECTED MAJOR STREETS THAT HAVE COMPARATIVELY NARROW PAVEMENT. SUCH RESTRICTIONS COULD BE LIMITED TO THE INBOUND CURB LANE ON RADIAL THOROUGHFARES DURING THE MORNING PEAK PERIOD AND SIMILARLY ALONG THE OUTBOUND CURB LANE IN THE AFTERNOON AT SUCH TIME AS THIS IS REQUIRED. THIS WILL CAUSE SOME INCONVENIENCE TO THE ADJOINING PROPERTY OWNERS, PARTICULARLY WHERE BUSINESS FRONTAGE IS INVOLVED, YET IT IS FOR SUCH A RELATIVELY SHORT PERIOD AND RESULTS IN SO MANY SUBSTANTIAL BENEFITS TO THE ENTIRE CITY THAT IT CAN BE EASILY JUSTIFIED. PROPER IDENTIFICATION OF TRAFFIC LANES ON MAJOR ROUTES OF TRAVEL, PARTICULARLY IN THE VICINITY OF INTERSECTIONS IS ADVANTAGEOUS TO MAXIMUM TRAFFIC MOVEMENT. THE PAINTING OF LINES ON THE PAVEMENT AS TO CLEARLY MARK THE SEPARATE TRAFFIC LANES IS NOT A NEW PROCEDURE TO FRANKFORT; MOST STREETS ARE COMMENDABLY MARKED. FINALLY, THE PROPER USE OF TRAFFIC SIGNALS AND CONTROL MEASURES CAN EXPEDITE VEHICULAR MOVEMENT. THE TIMING OF TRAFFIC SIGNALS SO AS TO PERMIT PROGRESSIVE MOVEMENT ALONG MAJOR STREETS IS NECESSARY TO INSURE MAXIMUM POSSIBLE USE. THE PLACEMENT OF STOP SIGNS MUST BE CAREFULLY CONSIDERED. IT IS THE PARAMOUNT FUNCTION OF A MAJOR THOROUGHFARE TO PROVIDE FOR EFFICIENT AND EXPEDITIOUS TRAFFIC MOVEMENT. TRAFFIC CONTROLS INTERRUPTING SUCH FLOW SHOULD BE HELD TO A MINIMUM. SIGNALS SHOULD BE CONFINED TO HEAVILY TRAVELLED INTERSECTIONS AND STOP SIGNS FOR MAJOR MOVEMENT SHOULD BE USED ONLY WHERE ABSOLUTELY NECESSARY. ¹

1. THESE ARE GENERAL TRAFFIC PRINCIPLES AND DO NOT IMPLY THAT FRANKFORT AND THE COUNTY DO NOT COMPLY.

COMMUNITY FACILITIES PLAN

THE COMMUNITY FACILITIES PLAN

COMMUNITY FACILITIES IS THE GENERAL PLANNING TERM APPLIED TO ALL PUBLIC USES AND SERVICES THAT ARE ASSOCIATED WITH THE BROAD RANGE OF COMMUNAL FUNCTIONS THAT CONTRIBUTE TO AN URBAN ENVIRONMENT. PLANNING, IN THIS CONTEXT, REFERS TO THE PHYSICAL PLANT OR LAND REQUIREMENTS AND THE GEOGRAPHICAL DISTRIBUTION OF THE VARIOUS FACILITIES AND NOT TO THE DETAILS OF EQUIPMENT, STAFFING OR OPERATIONS. SOME COMMUNITY FACILITIES PROVIDE SERVICES ESSENTIAL TO THE PUBLIC WELFARE, SUCH AS POLICE AND FIRE PROTECTION, WHILE OTHERS, SUCH AS RECREATION AND CULTURAL FACILITIES, ARE NOT MANDATORY BUT ARE NECESSARY IF A COMMUNITY IS TO BE A DESIRABLE PLACE TO LIVE. ALL REQUIRE PUBLIC FINANCING AND THE QUALITY AND EXTENT OF THE SERVICES PROVIDED WILL DEPEND UPON THE WILLINGNESS OF THE TAXPAYERS TO CONTRIBUTE TO THEIR SUPPORT.

SMALL COMMUNITIES CANNOT BE EXPECTED TO PROVIDE THE VARIETY OF SERVICES ON A SCALE WITH METROPOLITAN AREAS. MANY SPECIAL SERVICES OF INTEREST TO ONLY A RELATIVELY SMALL PERCENTAGE OF THE POPULATION, OR THOSE FACILITIES REQUIRING LARGE NUMBERS FOR EFFICIENT OPERATION, CANNOT BE ECONOMICALLY PROVIDED ON A LOCAL SCALE.

THE PLAN WAS DEVELOPED, THEREFORE, WITH THE FOLLOWING CONSIDERATIONS IN MIND:

- THE FINANCIAL RESOURCES AVAILABLE TO EACH GOVERNMENTAL UNIT.

- THE REALIZATION THAT CERTAIN FACILITIES REQUIRING EXTENSIVE SERVICE AREAS CAN ONLY BE PROVIDED ON A REGIONAL BASIS.

- THE PRIMARY NEED TO PROVIDE SERVICES OF GENERAL USE TO A MAJOR SEGMENT OF THE POPULATION.

- THE PROVISION OF A MAXIMUM LEVEL OF SERVICE CONSISTENT WITH THE SIZE OF THE URBAN-RURAL COMMUNITIES.

COMMUNITY FACILITIES RECOMMENDATIONS ARE SHOWN ON THE COMPREHENSIVE PLAN MAPS FOUND AT THE BACK OF THIS REPORT.

POPULATION AND THE COMMUNITY FACILITIES PLAN

IN LARGER URBAN AREAS WHERE THE EXTENT OF DEVELOPMENT IS SUCH THAT IT CAN BE DIVIDED INTO FUNCTIONAL COMPONENTS (NEIGHBORHOODS, COMMUNITIES AND REGIONS), THE PROVISION OF COMMUNITY FACILITIES IS KEYED PRIMARILY TO THE SIZE OF THE EXISTING AND

PROJECTED POPULATION. IT IS THE AMOUNT, DISTRIBUTION AND CHARACTERISTICS OF THE POPULATION TO BE ACCOMMODATED THAT DICTATES THE NUMBER, TYPE AND, TO A DEGREE, THE LOCATION OF THE VARIOUS FACILITIES. FOR EXAMPLE, RECREATION FACILITIES WOULD BE PROPOSED ON A REGIONAL LEVEL FOR EACH 50,000 TO 100,000 POPULATION, A COMMUNITY CENTER AND PLAYFIELD WOULD BE PLANNED FOR EACH 20,000 TO 25,000 POPULATION AND NEIGHBORHOOD FACILITIES FOR EACH 2,500 TO 5,000 POPULATION, DEPENDING ON THE INTENSITY OF DEVELOPMENT. THESE GENERAL REQUIREMENTS WOULD BE MODIFIED TO TAKE INTO ACCOUNT THE EFFECTS PHYSICAL BARRIERS MAY HAVE ON THE EFFECTIVE SERVICE AREAS. THE SMALLER THE GEOGRAPHICAL UNIT, THE MORE CRITICAL SUCH BARRIERS BECOME.

THERE IS A MINIMUM "SET" OF COMMUNITY FACILITIES THAT ARE NEEDED BY ANY COMMUNITY REGARDLESS OF THE LIMITATIONS IMPOSED ON THE MAXIMUM POPULATION POTENTIAL. WITH THE EXCEPTION OF NEIGHBORHOOD FACILITIES (SCHOOLS AND PARK/PLAYGROUNDS), THE PROVISION OF ONE EACH OF THE OTHER REQUIRED FACILITIES, SCALED TO A COMMUNITY LEVEL, WILL PROVIDE ADEQUATE SERVICE TO ALL RESIDENTS. EVEN THE PROVISION OF NEIGHBORHOOD FACILITIES IS MORE DEPENDENT UPON GEOGRAPHICAL DISTRIBUTION THAN UPON POPULATION TO BE SERVED. BASED SOLELY ON POPULATION, THE PROJECTED 1995 POPULATION WOULD INDICATE THAT NO PARK/PLAYGROUNDS WILL BE NEEDED IN THE FRANKFORT PLANNING AREA. THE PLAN, ON THE OTHER HAND, PROPOSES THAT ULTIMATELY NEW SITES BE DEVELOPED FOR THIS PURPOSE. THIS IS DUE TO THE RELATIVELY SMALL SERVICE AREAS OF SUCH FACILITIES, BECAUSE OF EXISTING AND NECESSARILY PROPOSED PHYSICAL BARRIERS (PRIMARILY MAJOR HIGHWAYS) WHICH FURTHER RESTRICT THEIR EFFECTIVE USE, AND BECAUSE SOME INDETERMINATE AMOUNT OF DEVELOPMENT WILL OCCUR IN THE URBAN-RURAL FRINGE DURING THE NEXT 20 - 30 YEARS.

COMPONENTS OF THE PLAN

EDUCATIONAL FACILITIES

BASED ON THE FINDINGS OF PART I THE EDUCATIONAL FACILITIES OF CLINTON COUNTY AND ITS CIVIL SUBDIVISIONS ARE REMARKABLY ADEQUATE TO SERVE FOR MANY YEARS. NO SCHOOL ENROLLMENT IS ANTICIPATED TO EXCEED CAPACITY DURING THAT TIME; ALL SCHOOLS MAY EXPECT A SLIGHT AND CONTINUING ENROLLMENT DECLINE.

TABLE I OF COMMUNITY FACILITIES CHAPTER OF PART I LISTS THE FOLLOWING SCHOOLS TO BE IN "FAIR" CONDITION:

MULBERRY ELEMENTARY - JACKSON ELEMENTARY
WOODSIDE ELEMENTARY - FRANKFORT JR. HIGH
RILEY ELEMENTARY

UNFORSEEABLE CONDITIONS MAY DEVELOP, OF COURSE, THAT WOULD NECESSITATE REPLACEMENT OR MAJOR ALTERATIONS WITHIN THE NEXT 20 YEARS.

ALL OTHER SCHOOL HOUSE FACILITIES ARE CLASSIFIED "EXCELLENT" OR "GOOD". THESE CLASSIFICATIONS ARE BASED ON THE CONSULTANT'S OBSERVATION OF STRUCTURAL ADEQUACY USING A "SCALE" OF "POOR", "FAIR", "GOOD", "EXCELLENT". THE KEY WORD IN THIS ANALYSIS IS STRUCTURAL. SCHOOLS WERE OBSERVED AND RATED PRIMARILY ON THEIR STRUCTURAL CONDITION.

IT IS BEYOND THE SCOPE OF THIS PROGRAM TO DETERMINE THE NEED FOR REWIRING, NEW LIGHTING, NEW SEPTIC SYSTEMS AND SIMILAR. A DETAILED INSPECTION IS REQUIRED FOR THOSE DETERMINATIONS, A SURVEY DONE BY EXPERTS IN EACH FIELD BY THOSE WHO WILL NOT BENEFIT BY THE RESULTS OF THE SURVEY; BY THOSE WHO HAVE NO INTEREST BEYOND THE SURVEY FINDINGS AND RECOMMENDATIONS.

BUT IF THE SCHOOLS ARE STRUCTURALLY SOUND AND IF THEIR LAYOUT OR DESIGN MEETS REASONABLE STANDARDS OF FUNCTIONAL ADEQUACY, THEN INSIDE REMODELING WORK WILL NOT MEAN A SITUATION IN WHICH GOOD MONEY WILL BE THROWN AFTER BAD. ALL BUILDINGS NEED MAINTENANCE AND OCCASIONAL MODIFICATIONS TO MEET CURRENT BUILDING CODES.

ONLY STRUCTURALLY UNSOUND BUILDINGS OR THOSE WHERE IT IS PRECISELY DOCUMENTED BY INDEPENDENT SURVEYS THAT COST OF UPDATING WOULD APPROACH THE COST OF NEW CONSTRUCTION SHOULD NEW BUILDINGS BE SERIOUSLY CONSIDERED.

AS MENTIONED IN PART I OF THIS REPORT, IT IS RECOMMENDED THAT THE "WALK-IN" PRINCIPLE BE MAINTAINED IN THE FRANKFORT URBAN AREA SO THAT ELEMENTARY SCHOOLS CONTINUE TO SERVE AS THE FOCAL POINT FOR THE COMMUNITY'S NEIGHBORHOOD. NO NEW SCHOOL SITES APPEAR TO BE NEEDED IN THE EXISTING URBAN AREA, ALTHOUGH IDEALLY SOME SITES SHOULD BE ENLARGED.¹ NO ENLARGEMENT RECOMMENDATIONS ARE MADE, HOWEVER, IN VIEW OF THE FACT THAT THE "STANDARDS" ARE GUIDES WHERE EXISTING SITES ARE CONCERNED, AND SUBSTANTIAL OR SIGNIFICANT SITE EXPANSION INTO ALREADY DEVELOPED AREAS IS ENTIRELY TOO COSTLY FOR THE BENEFITS THAT MAY ACCRUE.

RECREATION FACILITIES

THERE IS NO PART OF THE FRANKFORT COMMUNITY NOT SERVED BY SOME OPEN SPACE RECREATION AREA. T.P.A. PARK IS THE "FAMILY" PARK AND SERVES BOTH AN ACTIVE AND PASSIVE RECREATION FUNCTION. THE REMAINDER SERVE THEIR RESPECTIVE NEIGHBORHOOD UNITS AS ACTIVE RECREATION CENTERS FOR THE ELEMENTARY AGE GROUP PREDOMINENTLY, ALTHOUGH DORMER SERVES IN PART A PASSIVE RECREATION FUNCTION. ALL PARKS ARE PROVIDED WITH PORTABLE BENCHES AND TABLES; NONE INHIBIT THEIR USE BY THE PHYSICALLY HANDICAPPED DUE TO STEPS OR

1 SEE TABLE 1, AND TABLE 2 "STANDARDS" OF COMMUNITY FACILITIES CHAPTER, PART I.

SIMILAR BARRIERS. PARK OFFICIALS STATED THAT THEY DO NOT SEE ANY AREA WHERE A PARTICULAR AGE GROUP IS NOT SERVED ADEQUATELY. T.P.A. PARK IS ADJACENT TO BOTH THE FRANKFORT COMMUNITY'S CONCENTRATION OF ELDERLY I.E., WESLEY MANOR AND THE COUNTY HOME (PARKVIEW), AND WAS UNDOUBTEDLY A MAJOR CONSIDERATION IN THEIR LOCATION DECISION.

THERE ARE SEVERAL PROPOSED NEIGHBORHOOD PARKS/OPEN SPACE PROPOSED FOR NEIGHBORHOODS THAT ARE EXPECTED TO DEVELOP IN WHOLE OR PART AT AN INDEFINITE FUTURE DATE. THEIR APPROXIMATE LOCATION IS SHOWN ON THE COMPREHENSIVE PLAN AT THE END OF THIS REPORT. THEIR DISTRIBUTION IS PREDICATED ON THE EFFECTIVE SERVICE RADIUS GENERALLY ASSOCIATED WITH SUCH FACILITIES. ALL ARE, OF COURSE, LOCATED ON UNDEVELOPED AREAS AND SITES SHOULD BE ACQUIRED AS THE AREA IS SUBDIVIDED. FOUR TO SEVEN ACRES ARE RECOMMENDED FOR THESE NEIGHBORHOOD PARKS. SINCE THEY WILL ULTIMATELY SERVE, IN PART, THE SAME FUNCTION AS THE NEIGHBORHOOD ELEMENTARY SCHOOL, A MUTUALLY BENEFICIAL COMBINATION OF SCHOOL SITE--PARK SITE IS RECOMMENDED. APPROXIMATE SCHOOL ACREAGE MAY BE DERIVED FROM TABLE 2 OF COMMUNITY FACILITIES OF PART I, BUT WILL, NORMALLY ACCOMMODATE ABOUT 700 PUPILS IN GRADES 1 - 6, WHO LIVE WITHIN APPROXIMATELY ONE HALF MILE OF THE SCHOOL, AND WHOSE SITE ACREAGE WILL BE ABOUT 12 TO 15 ACRES.

IT IS RECOGNIZED THAT THESE SCHOOL/PARK FACILITIES WILL NOT BE REQUIRED DURING THE NEXT 10 TO 20 YEARS, BUT IT IS INCUMBANT ON THOSE RESPONSIBLE FOR THEIR ULTIMATE DEVELOPMENT TO INDICATE THEIR FUTURE NEED AND MAKE INITIAL PROVISIONS REGARDLESS OF WHEN THE NEED MAY OCCUR. THE ESTABLISHMENT OF SOME TYPE OF PARK AND RECREATION BOARD FOR CITY--COUNTY IS STRONGLY RECOMMENDED.

AIRPORT

THE FRANKFORT MUNICIPAL AIRPORT ON SR 28-W WILL REQUIRE 60 TO 99 ACRES OF ADDITIONAL LAND IF THE \$60,000 STUDY OF AN ENGINEERING FIRM, NOW (JULY 1975) UNDER REVIEW BY THE FEDERAL AERONAUTICS ADMINISTRATION IS IMPLEMENTED. THE SUBJECT ACREAGE IS LOCATED AT THE SOUTHEAST CORNER OF THE AIRPORT BOUNDARIES; THE RUNWAY WILL BE 200 FEET NORTH OF THE PRESENT TURF RUNWAY, ORIENTED EAST-WEST, 4800' LONG, 100' WIDE, LIGHTED, AND HAVE A NONPRECISION INSTRUMENT LANDING SYSTEM. RUNWAY 3 - 21 IS TO BE EXTENDED TO THE SOUTHWEST APPROXIMATELY 550' TO PROVIDE A 3000' TOTAL AND WOULD BE LIGHTED. THERE WOULD ULTIMATELY BE PARALLEL TAXIWAYS FOR BOTH RUNWAYS. TOTAL COST IS ESTIMATED AT \$2,500,000 AT ULTIMATE DEVELOPMENT.

COUNTY GOVERNMENT AND COURT FACILITIES

IT IS RECOMMENDED THAT THIS ARCHITECTUALLY AND HISTORICALLY IMPORTANT BUILDING BE PRESERVED, THAT ADDITIONAL ON-SITE BUILDINGS BE PROHIBITED, THAT ADDITIONS TO THE COURT HOUSE NOT TAKE PLACE, AND THAT EXPANSION OF COUNTY GOVERNMENT (EXCEPT POSSIBLY COURTS) OCCUR BY OCCUPYING AREAS NOW USED BY NON-GOVERNMENTAL AGENCIES.

CITY GOVERNMENT FACILITIES

NO EXPANSION POTENTIAL OR NEED EXISTS, NOR IS IT CONTEMPLATED.

TOWN GOVERNMENT FACILITIES

THE TOWN HALLS OF KIRKLIN, MULBERRY, COLFAX, ROSSVILLE, AND MICHIGANTOWN ARE ALL SPACIALLY AND STRUCTURALLY ADEQUATE TO MEET ANTICIPATED DEMANDS DURING THE NEXT 20 YEARS.

LIBRARY FACILITIES

FRANKFORT: THE FRANKFORT COMMUNITY PUBLIC LIBRARY IS AN ARCHITECTURAL TREASURE--ONE OF THE FINEST IN THE CONSULTANTS EXPERIENCE. IT IS RECOMMENDED THAT NO ON-SITE EXPANSION OF THE BUILDING EVER OCCUR. (FOR ALTERNATES TO BUILDING EXPANSION SEE COMMUNITY FACILITIES CHAPTER OF PART I, PAGE 15.)

OTHER LIBRARY FACILITIES: THE LIBRARIES AT MULBERRY (PRIVATE), KIRKLIN, AND COLFAX ARE GENERALLY ADEQUATE TO THEIR PURPOSE AND MAY BE EXPECTED TO REMAIN SO FOR 20 YEARS AND MORE.

HOSPITAL FACILITIES

A NEW, MODERN, AND ADEQUATE HOSPITAL EXPANSION PROGRAM TO SERVE THE CLINTON COUNTY COMMUNITY AND THE REGION IS IN THE FINAL PRE-CONSTRUCTION STAGES. THE RESULT OF LENGTHY PLANNING AND ANALYSIS, REVIEW BY APPROPRIATE PUBLIC AND PRIVATE AUTHORITIES IN THE AREA OF HOSPITAL PLANNING, DESIGN AND CONSTRUCTION; THE FACILITY WILL ADEQUATELY SERVE THE COMMUNITY FOR THE NEXT TWO DECADES.

POLICE FACILITIES

FRANKFORT: THE FRANKFORT POLICE DEPARTMENT QUARTERS ARE OVER-CROWDED. IT IS RECOMMENDED THAT THE STRUCTURE BE EXPANDED TO THE WEST. A STOREROOM, LABORATORY AND DARKROOM ARE SOME NEEDED ADDITIONS.

CLINTON COUNTY: THE SHERIFF'S DEPARTMENT HAS A FUTURE REQUIREMENT OF TWO MORE EIGHT-MAN CELL BLOCKS ON THE SECOND FLOOR. THE FEASIBILITY OF AN EXERCISE YARD SHOULD BE INVESTIGATED.

ROSSVILLE, KIRKLIN, COLFAX, MICHIGANTOWN, MULBERRY: THESE COMMUNITIES HAVE POLICE PROTECTION IN THE FORM OF A TOWN MARSHALL OR EQUIVALENT WHO USUALLY WORKS FROM THE TOWN CLERKS OFFICE.

FIRE PROTECTION FACILITIES

FRANKFORT: THERE IS A FUTURE CONSIDERATION INVOLVING THE LESSENING OF THE OVERLAPPING "FIRST DUE" RADII, PARTICULARLY OF STATION NO. 2 AT 508 N. MAIN STREET. BUILT IN 1927 ON A SITE NOT ECONOMICALLY FEASIBLE OF EXPANSION, LOCATED WITHIN THREE

BLOCKS OF THE COURT HOUSE SQUARE WHICH IS THE CENTER OF THE TOWNS COMMERCIAL ACTIVITY AND THEREFORE, ITS HIGH VALUE DISTRICT, THIS STATION BACKS UP No. 1 AT 257 S. CLAY WHICH ITSELF IS LOCATED WITHIN FOUR BLOCKS OF THE COURT HOUSE SQUARE, IS A 3 BAY STATION WITH 18 PAID FIREMEN ASSIGNED, AND HOUSES A 65' SNORKEL, A 750 GPM PUMPER, AND A 1250 GALLON TANK WAGON. SINCE 3/4 OF A MILE IS THE UNDERWRITERS RECOMMENDED MINIMUM DISTANCE TO A HIGH VALUE DISTRICT, THE THREE AND FOUR BLOCKS TO THE CENTER OF THIS DISTRICT AND BOTH No's 1 AND 2 OVERLAP THE ENTIRE HIGH VALUE DISTRICT, IT SEEMS REASONABLE TO SUGGEST THAT No. 2 MAY AT SOME FUTURE DATE BECOME LOCATIONALLY DISADVANTAGED IN RELATION TO THE CONTINUING GROWTH ON THE CITY'S EAST SIDE. THE TIMING OF THIS LOCATIONAL DISADVANTAGE WILL BE DETERMINED BY THE TIMING OF THIS DEVELOPMENT. ANY NEW LOCATION WOULD UNDOUBTEDLY BE IN THE SAME NORTHEAST QUADRANT FORMED BY THE MONON AND THE NORFOLK AND WESTERN RAILROADS.

BECAUSE OF THE NECESSARILY NEBULOUS TIMING OF THE RELATION POTENTIAL, NO SITE RECOMMENDATION IS MADE. BUT TO ULTIMATELY COVER THE FRANKFORT AREA IN THE MOST EFFICIENT AND ECONOMICAL MANNER THE FUTURE RELOCATION IS RECOMMENDED. THE COST OF MAINTAINING, EQUIPING, STAFFING, AND OPERATING A FIRE PROTECTION SYSTEM IS TOO COSTLY IN TERMS OF TAX DOLLARS, NOT TO DERIVE THE MOST EFFICIENT COVERAGE. A LOCATION TO SERVE THE NORTHWEST QUADRANT AND THE HIGH VALUE DISTRICT IS FEASIBLE AND APPROPRIATE AT A LOCATION A MILE OR SO EAST OF THE PRESENT No. 2 LOCATION. THE FEASIBILITY OF A FOURTH STATION TO SERVE THE INDUSTRIAL PARK ON SR 28 W SHOULD BE CONSIDERED IN THE FUTURE.

OTHER INCORPORATED COMMUNITIES: MULBERRY WITH THE COMPLETION OF AN ADDITIONAL BAY TO HOUSE A NEW GRASS RIG, RADIO ROOM AND SMALL OFFICE, SCHEDULED FOR 1975, THE FACILITY WILL ADEQUATELY SERVE THE TOWN AND WASHINGTON AND MADISON TOWNSHIPS FOR 20 YEARS.

COLFAX WITH THE PURCHASE OF A NEW PUMPER TO REPLACE THE 1946 HOWELL PUMPER, THE DEPARTMENT SHOULD SERVE THIS TOWN AND PERRY TOWNSHIP UNTIL 1995.

THE EMERGENCY RESCUE SERVICE PLANS TO ACQUIRE A FULLY EQUIPPED VAN TRUCK AS AN ADDITIONAL UNIT TO THE CADILLAC RESCUE UNIT IN THE NEAR FUTURE. THE TWO WILL PROVIDE A SUBSTANTIAL SERVICE TO 1995.

MICHIGANTOWN FIRE DEPARTMENT SPOKESMEN RECOMMEND AN ADDITIONAL BAY AT "A FUTURE DATE". ALSO RECOMMENDED IS A VAN TRUCK FOR EQUIPMENT STORAGE TO ACCOMPANY FIRE EQUIPMENT TO THE FIRE SITE.

KIRKLIN: THE NEED FOR ADDITIONAL BAYS OR EQUIPMENT IS NOT FORESEEN. THE EMERGENCY RESCUE UNIT IS A VERY ADEQUATE SERVICE.

ROSSVILLE: UNDERWRITERS RECOMMEND A 1000 GALLON TANKER TO REPLACE THE 1948 PUMPER. THE 1974 DODGE AMBULANCE AND 1967 CADILLAC ARE TO BE HOUSED IN A NEW GARAGE. STATIONS ALSO EXIST IN THE UNINCORPORATED PLACES OF FOREST AND HILLISBURG.

STREET AND HIGHWAY DEPARTMENTS

COUNTY HIGHWAY GARAGE: THIS EXCELLENT, WELL LOCATED , AMPLE FACILITY HAS AN AMPLE SITE TO ACCOMMODATE ADDITIONAL COVERED SPACE SUCH AS POLE BUILDINGS FOR SNOW PLOWS AND ROAD GRADERS.

FRANKFORT: ONE OF THE BEST FACILITIES OF THIS TYPE IN THE CONSULTANTS EXPERIENCE.

OTHER INCORPORATED COMMUNITIES: ALL GARAGE AND STREET/PARK MAINTENANCE FACILITIES IN THE OTHER INCORPORATED COMMUNITIES ARE ADEQUATE AND SHOULD SERVE FOR MANY YEARS.

REFUSE DISPOSAL

THE SANITARY LANDFILL OPERATED ON HUMES ROAD BY THE CITY OF FRANKFORT, AND THE RECIEPIENT OF SOLID WASTE FROM THE ENTIRE COUNTY, WAS CLOSED IN THE SPRING BY THE STATE BOARD OF HEALTH, DUE PRIMARILY TO INABILITY TO PROVIDE ADEQUATE COVERING MATERIAL.

AS THIS CHAPTER IS WRITTEN THE STATE BOARD OF HEALTH IN COOPERATION WITH LOCAL OFFICIALS AND SOIL CONSERVATION SERVICE HAVE BEEN ACTIVELY SEEKING A NEW SITE. A PROSPECTIVE SITE ON SR 39 NORTH AND GAS LINE ROAD HAS ONSITE DRILLING.

AS MENTIONED IN PART I OF THIS REPORT IMPORTANT PLANNING CONSIDERATIONS ARE:

1. KNOW BEFOREHAND WHAT USE THE LANDFILL SITE WILL BE RETURNED TO SO THAT APPROPRIATE MEASURES MAY BE TAKEN INITIALLY FOR THAT FUTURE USE.
2. LOCATE THE FACILITIES NEAR THE CITY OF FRANKFORT SINCE HALF THE COUNTY POPULATION IS THERE.

CONCLUSION:

REVIEWING THE TEXT OF THE COMMUNITY FACILITIES PLAN ABOVE, THE OVER-RIDING CONCLUSION IS THAT COMMUNITY FACILITIES IN THE COUNTY, THE CITY OF FRANKFORT, AND THE INCORPORATED TOWNS ARE VERY ADEQUATE AND THAT SOLUTIONS FOR THOSE INADEQUACIES THAT ARE APPARENT ARE BEING ACTIVELY PURSUED.

HOUSING PLAN

THE LOCAL HOUSING ASSISTANCE PLAN

INTRODUCTION

THE 1974 ACT DEALING WITH HOUSING ASSISTANCE PLANS ¹ ARE THE SINGLE MOST IMPORTANT INOVATION IN RECENT HOUSING LEGISLATION. THESE REQUIRED PLANS ARE INTENDED TO FASTEN ON LOCAL ELECTED OFFICIALS THE PRIMARY RESPONSIBILITY OF ADDRESSING AND MEETING LOCAL HOUSING DEMANDS.

THESE PROVISIONS ARE A RESULT OF A GROWING RECOGNITION BY CONGRESS OVER THE PAST FIVE YEARS THAT THE NEARLY COMPLETE DIVORCE OF RESPONSIBILITY FOR OVER-ALL COMMUNITY DEVELOPMENT FROM RESPONSIBILITY FOR PROVIDING HOUSING HAS BEEN A PRINCIPAL DETERRENT TO SOUND AND RATIONAL HOUSING AND COMMUNITY DEVELOPMENT POLICY. LOCAL ELECTED OFFICIALS ARE GENERALLY RESPONSIBLE FOR CONTROLLING THE PACE AND TIMING OF A BROAD RANGE OF PHYSICAL DEVELOPMENT ACTIVITIES IN THEIR COMMUNITIES IN A MANNER CONSISTENT WITH THE PHYSICAL AND FINANCIAL NEEDS OF THEIR COMMUNITY. YET - APART FROM ZONING - THEY HAVE INADEQUATE RESPONSIBILITY FOR CONTROL OF THE DEVELOPMENT OF HOUSING, PARTICULARLY HOUSING FOR LOWER INCOME PEOPLE WHICH IS A CRITICAL INGREDIENT IN THE GROWTH OF THEIR COMMUNITIES.²

THE URBAN RENEWAL PROGRAM, FOR EXAMPLE, HAS BEEN AN IMPORTANT FACTOR IN THE DEVELOPMENT OF HUNDREDS OF COMMUNITIES OVER THE PAST TWO DECADES. THE RENEWAL LAW REQUIRES COMMUNITIES TO PROVIDE SITES FOR THE DEVELOPMENT OF HOUSING, PARTICULARLY FOR LOWER-INCOME FAMILIES. YET, APART FROM THE LIMITED HELP AVAILABLE TO THEM THROUGH THE PUBLIC HOUSING PROGRAM, MANY COMMUNITIES ARE VIRTUALLY POWERLESS TO ASSURE THAT THEIR RENEWAL PLANS WITH RESPECT TO HOUSING WILL BE CARRIED OUT. IN MANY CASES, ADEQUATE HOUSING SUBSIDY FUNDS ARE NOT AVAILABLE, OR NOT AVAILABLE IN A TIMELY FASHION. IN OTHERS, THERE IS A LACK OF COMPETENT DEVELOPER-SPONSORSHIP TO CARRY OUT THE COMPLEX AND TIME-CONSUMING PROJECTS. AND IN YET OTHERS, THE RIGID NATIONAL REQUIREMENTS CONTAINED IN PAST SUBSIDY PROGRAMS THEMSELVES (FOR EXAMPLE, LIMITATIONS ON THE USE OF EXISTING HOUSING) SERVE TO FRUSTRATE AND DELAY THE BEST OF EFFORTS.

1 THE HOUSING AND COMMUNITY DEVELOPMENT ACT OF 1974.

2 FROM THE INTRODUCTION TO "A LOCAL HOUSING ASSISTANCE PLAN" A NAHRD GUIDEBOOK, BY CONGRESSMAN THOMAS L. ASHLEY, MEMBER OF SUBCOMMITTEE ON HOUSING OF THE HOUSE COMMITTEE ON BANKING AND CURRENCY.

ON THE OTHER HAND, PRIVATE BUILDERS, PRIVATE NONPROFIT GROUPS, AND IN MANY CASES, VIRTUALLY AUTONOMOUS LOCAL HOUSING AUTHORITIES HAVE CONTROLLED NOT ONLY THE KIND OF HOUSING TO BE PROVIDED (LARGE OR SMALL UNITS, SINGLE OR RENTAL, AND SO ON) THE LOCATION OF THAT HOUSING, AND (BY VIRTUE OF THE ABOVE DECISIONS) ITS COST TO THE FEDERAL GOVERNMENT, BUT WHETHER HOUSING WILL BE PROVIDED AT ALL. IF A CITY LACKS NONPROFIT GROUPS CAPABLE OF SPONSORING PROJECTS, A LOCAL BUILDING INDUSTRY WILLING TO TACKLE DIFFICULT PROJECTS, OR AN AGGRESSIVE AND POLITICALLY ACCEPTED LOCAL HOUSING AUTHORITY, SUBSIDIZED HOUSING SIMPLY IS NOT PROVIDED WHEN AND WHERE IT IS NEEDED.

IN SHORT, WITH RESPECT TO HOUSING, THE MOST CRITICAL DECISIONS OF A PUBLIC NATURE HAVE BEEN ENTRUSTED PRIMARILY TO PRIVATE INDIVIDUALS AND ORGANIZATIONS WHILE THE PUBLIC OFFICIALS MOST RESPONSIBLE FOR THE ORDERLY DEVELOPMENT OF THEIR COMMUNITIES HAVE BEEN VIRTUALLY BY-PASSED, LEFT TO EXERCISE LARGELY NEGATIVE POWERS, SUCH AS IMPEDING HOUSING DEVELOPMENT ALTOGETHER, OR COMPELLING MINOR AND OFTEN HARMFUL MODIFICATIONS IN PROJECTS BEING CARRIED ON BY OTHERS. THE CURRENT "NO GROWTH" AND PHASED GROWTH MOVEMENTS ARE IN NO SMALL PART THE REACTION OF LOCAL ELECTED OFFICIALS TO DEVELOPMENT THAT DOES NOT PROPERLY ACCOMMODATE THEIR PUBLIC MANAGEMENT RESPONSIBILITIES.

UNDER THE 1974 ACTS, COMMUNITIES WILL MAKE VIRTUALLY ALL KEY DECISIONS WITH RESPECT TO HOUSING; WHO, AMONG THOSE ELIGIBLE FOR HOUSING ASSISTANCE, IS TO BE SERVED; IN WHAT KIND OF HOUSING (NEW, SUBSTANTIALLY-REHABILITATED, OR EXISTING); AND WHERE SUCH HOUSING IS TO BE LOCATED. THESE DECISIONS WILL BE SPELLED OUT IN THEIR HOUSING ASSISTANCE PLANS, USING GENERAL UNIT ALLOCATIONS BY HUD EACH YEAR.

FURTHERMORE, COMMUNITIES WILL BE ABLE TO ENFORCE THEIR PLANS THROUGH THE LOCAL APPROVAL PROVISIONS OF THE ACT. THESE PROVISIONS GIVE COMMUNITIES A 30-DAY PERIOD TO REVIEW ALL APPLICATIONS FOR HOUSING ASSISTANCE TO DETERMINE CONSISTENCY WITH THEIR PLANS. HUD WILL BE ABLE TO OVER-RULE LOCAL DETERMINATIONS WITH RESPECT TO CONSISTENCY ONLY ON THE BASIS OF SUBSTANTIAL REASONS.

THESE PROVISIONS--AS IS EVIDENT FROM THE INCLUSION OF THE HOUSING ASSISTANCE PLAN AS PART OF THE COMMUNITY DEVELOPMENT APPLICATION--ARE IMPORTANT NOT ONLY WITH RESPECT TO HOUSING, BUT FOR THE ENTIRE COMMUNITY DEVELOPMENT PROCESS AS WELL. FOR THE FIRST TIME, FEDERAL LAW WILL PERMIT COMMUNITIES TO PLAN AND CARRY OUT UNIFIED HOUSING AND COMMUNITY DEVELOPMENT PROGRAMS, COORDINATING THE LOCATION OF ASSISTED HOUSING UNITS WITH EXISTING OR PLANNED PUBLIC FACILITIES AND SERVICES, SUCH AS SCHOOLS, TRANSPORTATION, POLICE AND FIRE PROTECTION, RECREATIONAL FACILITIES, AND JOB OPPORTUNITIES.

IN GENERAL

IMPORTANT NEW HOUSING RESPONSIBILITIES ARE IMPOSED ON LOCAL GOVERNMENTS UNDER THE HOUSING AND COMMUNITY DEVELOPMENT ACT OF 1974:

1. ALL NEW FEDERALLY-ASSISTED HOUSING MUST BE "IN CONFORMANCE" WITH A LOCAL HOUSING ASSISTANCE PLAN, THE HAP.
2. A LOCAL HOUSING ASSISTANCE PLAN MUST BE PART OF ANY COMMUNITY DEVELOPMENT PROGRAM FUNDED UNDER TITLE 1 OF THE ACT.
3. EACH LOCAL RECIPIENT OF FEDERAL PLANNING ASSISTANCE UNDER TITLE IV OF THE ACT - (COMPREHENSIVE PLANNING) IS REQUIRED TO CARRY OUT AN ONGOING COMPREHENSIVE PLANNING PROCESS, INCLUDING A "HOUSING ELEMENT".

IN GENERAL THE PLAN IS "TO ACCURATELY SURVEY THE CONDITION OF THE LOCAL HOUSING STOCK; TO ASSESS THE HOUSING NEEDS OF LOWER INCOME PERSONS RESIDING OR EXPECTED TO RESIDE IN THE COMMUNITY; TO SPECIFY A REALISTIC ANNUAL GOAL FOR ASSISTED HOUSING, INCLUDING NEW DEVELOPMENT, REHABILITATED, AND EXISTING UNITS; TO IDENTIFY GENERAL LOCATIONS OF PROPOSED HOUSING FOR LOWER INCOME PERSONS WITH THE OBJECTIVES OF REVITALIZING THE COMMUNITY, RESTORING OR REHABILITATING STABLE NEIGHBORHOODS, PROMOTING GREATER CHOICE OF HOUSING OPPORTUNITIES, AVOIDING UNDUE CONCENTRATIONS OF ASSISTED PERSONS, AND TO ASSURE AVAILABILITY OF PUBLIC FACILITIES AND SERVICES TO SERVE PROPOSED HOUSING PROJECTS". THE OVERALL FUNCTION OF THIS PLAN REQUIREMENTS IS TO LINK LOCAL HOUSING ACTIVITIES CLOSELY INTO THE COMMUNITY DEVELOPMENT AND COMPREHENSIVE PLANNING PROCESSES AND TO PUT NEW EMPHASIS ON LOCAL HOUSING SERVICES.

FOR COMMUNITY DEVELOPMENT PROGRAMS, THE ACT MAKES THE LINKAGE BETWEEN CD AND HOUSING VERY STRONG IN THE STATEMENT OF "FINDINGS AND PURPOSES" IN TITLE 1 OF THE ACT--THE COMMUNITY DEVELOPMENT TITLE. THE PURPOSES INCLUDE:

---ADDRESSING CRITICAL PROBLEMS ARISING FROM "INADEQUATE PUBLIC AND PRIVATE INVESTMENT AND REINVESTMENT IN HOUSING"

---REQUIRING "THE CONSERVATION AND EXPANSION OF THE NATION'S HOUSING STOCK IN ORDER TO PROVIDE A DECENT HOME AND A SUITABLE LIVING ENVIRONMENT FOR ALL PERSONS, BUT PRINCIPALLY THOSE OF LOW AND MODERATE INCOME,"

---PURSUING THE "REDUCTION OF THE ISOLATION OF INCOME GROUPS WITHIN COMMUNITIES AND GEOGRAPHICAL AREAS, AND THE PROMOTION OF AN INCREASE IN THE DIVERSITY AND VITALITY OF NEIGHBORHOODS THROUGH THE SPATIAL DECONCENTRATION OF HOUSING OPPORTUNITIES FOR PERSONS OF LOWER INCOME AND THE REVITALIZATION OF DETERIORATING OR DETERIORATED NEIGHBORHOODS TO ATTRACT PERSONS OF HIGHER INCOME."

---FOSTERING THE UNDERTAKING OF HOUSING AND COMMUNITY DEVELOPMENT ACTIVITIES IN A COORDINATED AND MUTUALLY SUPPORTIVE MANNER.

IT IS CLEAR THAT THE LOCAL COMMUNITY DEVELOPMENT PROGRAM IS EXPECTED TO CONTRIBUTE TO HOUSING OPPORTUNITIES IN AT LEAST FIVE MAJOR WAYS:

---THROUGH PROVIDING HOUSING SITES AND OPPORTUNITIES FOR HOUSING REHABILITATION AS PART OF A TOTAL COMMUNITY IMPROVEMENT PROGRAM.

---THROUGH PROGRAMMING PHYSICAL IMPROVEMENTS, INCLUDING WATER, SEWER, AND NEIGHBORHOOD FACILITIES, IN SUPPORT OF HOUSING DEVELOPMENT LOCATIONS.

---THROUGH ELIMINATING CONDITIONS OF BLIGHT THAT DETER HOUSING DEVELOPMENT AND REHABILITATION ACTIVITIES.

---THROUGH IMPROVEMENTS AIMED AT PRESERVING EXISTING STABLE NEIGHBORHOODS, INCLUDING LOANS TO FAMILIES TO REHABILITATE THEIR HOMES.

---THROUGH UNDERTAKING DEVELOPMENT ACTIVITY THAT CONTRIBUTES TO THE GENERAL ECONOMIC, PHYSICAL, AND SOCIAL VIABILITY OF THE COMMUNITY AND ENCOURAGES INVESTMENT IN HOUSING.

THE HOUSING LINKAGE INTO COMPREHENSIVE PLANNING, AS NOTED ABOVE, IS THROUGH THE REQUIRED "HOUSING ELEMENT" OF A COMPREHENSIVE PLAN. THAT HOUSING ELEMENT MUST TAKE INTO ACCOUNT "ALL AVAILABLE EVIDENCE OF THE ASSUMPTIONS AND STATISTICAL BASES UPON WHICH THE PROJECTION OF ZONING, COMMUNITY FACILITIES AND POPULATION GROWTH IS BASED". FURTHER, A REQUIRED "LAND-USE ELEMENT" OF THE COMPREHENSIVE PLAN PROVIDES ADDED ASSURANCE THAT LOCAL COMMUNITIES WILL GIVE ATTENTION TO DEVELOPING THE LONG-RANGE SYSTEMS AND FACILITIES ESSENTIAL TO SUPPORT HOUSING DEVELOPMENT, INCLUDING HIGHWAYS AND MASS TRANSIT; MAJOR DIVERSIFIED CENTERS AND INDUSTRIAL PARKS; OPEN SPACE; MAJOR UTILITIES; A RANGE OF OTHER FUNCTIONAL COMPONENTS SUCH AS SANITARY SERVICES, SOLID WASTE DISPOSAL, RECREATION FACILITIES AND AIRPORT DEVELOPMENT.

THE HOUSING ELEMENT REQUIREMENTS OF THE 1974 ACT IS A RESTATEMENT AND A RE-EMPHASIS OF A SIMILAR PROVISION IN THE HOUSING AND URBAN DEVELOPMENT ACT OF 1968, WHICH FORCES ALL LOCAL AND STATE GOVERNMENTS RECEIVING FEDERAL PLANNING ASSISTANCE TO GIVE PRIORITY ATTENTION TO HOUSING IN THEIR PLANNING ACTIVITIES. IT IS SUGGESTED THAT, SINCE ONLY A LIMITED NUMBER OF LOCAL COMMUNITIES NOW POSSESS REFINED HOUSING AND COMMUNITY DEVELOPMENT PROCESSES TO WHICH THEY CAN RELATE LOCAL HOUSING ASSISTANCE PLANS, THAT HOUSING AGENCIES SEEK TO TAKE ADVANTAGE OF THE WIDENED

ELIGIBILITY FOR USE OF THE FEDERAL FINANCIAL AID AVAILABLE UNDER TITLE IV. THE 1974 ACT MAKES TITLE IV AID AVAILABLE FOR DEVELOPING A CAPACITY TO "MORE RATIONALLY AND EFFECTIVELY SET LONG-TERM GOALS AND SHORT-TERM OBJECTIVES; DEVISE PROGRAMS AND ACTIVITIES TO MEET THESE OBJECTIVES; CARRY OUT MANAGEMENT, COORDINATION AND MONITORING OF PROGRAM ACTIVITIES"----WHICH IS A RATHER GOOD DEFINITION OF THE PROCESS OF DEVELOPING A LOCAL HOUSING ASSISTANCE PLAN.

BUT, REGARDLESS OF HOW THE PLAN IS FUNDED AND PREPARED, THE ROLE OF GENERAL LOCAL GOVERNMENT IS CRITICAL IN PROVIDING LEADERSHIP; IN DIRECTING THE COMMUNITY'S COMPREHENSIVE PLANNING AND DEVELOPMENT EFFORTS; IN COORDINATING THE MULTIPLE ACTIVITIES INVOLVING A RANGE OF LOCAL DEPARTMENTS AND AGENCIES; AND IN INTEGRATING THE COMPREHENSIVE PLANNING, COMMUNITY DEVELOPMENT AND HOUSING COMPONENTS WITH THE COMMUNITY'S CAPITAL AND OPERATING BUDGETS.

ONCE THE HOUSING ASSISTANCE PLAN IS BUILT INTO THE FUNCTIONING OF LOCAL GOVERNMENT, THERE ARE IMPLICATIONS THAT NEW, ONGOING LOCAL HOUSING SERVICES WILL BE ADDED, SUCH AS TECHNICAL SERVICES TO INSURE QUALITY IN THE DESIGN AND DEVELOPMENT, AS WELL AS THE LONG-TERM MANAGEMENT, OF ASSISTED HOUSING AND THE GEARING OF THE MUNICIPAL SERVICE STRUCTURE TO ASSURE THE MAINTENANCE OF SOUND RESIDENTIAL DEVELOPMENTS AND NEIGHBORHOODS OVER THE LONG RUN.

PROPOSED PROGRAM FOR HOUSING ASSISTANCE

THE HOUSING ASSISTANCE PLAN REQUIRES "A REALISTIC ANNUAL GOAL FOR THE NUMBER OF DWELLING UNITS OR PERSONS TO BE ASSISTED, INCLUDING (A) THE RELATIVE PROPORTION OF NEW, REHABILITATED, AND EXISTING UNITS, AND (B) THE SIZE AND TYPES OF HOUSING PROJECTS AND ASSISTANCE BEST SUITED TO THE NEEDS OF LOWER INCOME PERSONS IN THE COMMUNITY". TO PREPARE THE TABLE THAT THIS REQUIREMENT SUGGEST, IT IS NECESSARY TO SET PRIORITIES AMONG HOUSING NEEDS, DEFINE APPROACHES TO MEET THESE NEEDS AND SPECIFY WHAT STEPS WILL BE TAKEN TO CARRY OUT THESE APPROACHES.

THE ANALYSIS CARRIED OUT IN PART 1 OF THIS REPORT----THE HOUSING CONDITIONS SURVEY AND THE HOUSING NEEDS ANALYSIS----MAKE SELECTING APPROPRIATE ASSISTANCE PROGRAMS EASIER. IT PROVIDES A BASIS FOR SETTING PRIORITIES. IT CAN HELP ALLOCATE SCARCE FUNDS OBJECTIVELY AND IT CAN SET STANDARDS BY WHICH THE PERFORMANCE OF THE AGENCIES RESPONSIBLE FOR CARRYING OUT THESE PROGRAMS CAN BE MEASURED. THE THREE KEY STEPS, THEREFORE, ARE:

1. SPECIFY THE TARGET HOUSEHOLDS TO BE ASSISTED.

2. DETERMINE THE APPROPRIATE ROLE FOR THE COMMUNITY IN DELIVERING THE APPROPRIATE HOUSING PRODUCTS TO THE TARGET HOUSEHOLDS.

COMPLETING THIS PROCESS WILL GIVE THE NUMBERS REQUIRED BY THE HOUSING ASSISTANCE PLAN A PRACTICAL MEANING.

SPECIFIC TARGET HOUSEHOLDS

TARGET HOUSEHOLDS FOR HOUSING ASSISTANCE ARE SPECIFIED IN TERMS OF THEIR INCOMES AND LOCATIONS. INCOMES CAN BE GROUPED INTO APPROPRIATE CATEGORIES SUCH AS, UPPER, MIDDLE, MODERATE, AND LOW. UPPER-INCOME GROUPS ARE, OF COURSE, TYPICALLY OUTSIDE THE RANGE OF PUBLICLY ASSISTED HOUSING PROGRAMS; THEY MAY BENEFIT, HOWEVER, FROM THE TOTAL PLANNING AND COMMUNITY DEVELOPMENT PROGRAM AND ASSIST IN STABILIZING RESIDENTIAL AREAS.

HOUSING LOCATION CATEGORIES CAN BE SPECIFIED IN TERMS OF PLANNING AREAS (OR GROUPS OF PLANNING AREAS). THE KEY FACTS TO KEEP IN MIND ARE THAT:

- A - TARGET HOUSEHOLDS ARE A COMBINATION OF INCOME AND LOCATION. THE TYPE OF HOUSING ASSISTANCE REQUIRED MAY VARY NOT ONLY IN TERMS OF THE INCOME GROUP TO BE SERVED BUT ALSO IN TERMS OF THE AREA WHERE THOSE INCOME GROUPS ARE LOCATED.
- B - A COMPREHENSIVE HOUSING ASSISTANCE PROGRAM WILL RECOGNIZE THAT MOST INCOME GROUPS RESIDE IN MOST LOCATIONS. FEW AREAS ARE 100 PERCENT EXCLUSIVE.
- C - THIS WAY OF SPECIFYING TARGET GROUPS FOR HOUSING AND COMMUNITY DEVELOPMENT PROGRAMS IS BASICALLY INTENDED TO HELP SET PRIORITIES AND DEFINE APPROACHES.

DESIGN AND CONSTRUCTION OF HOUSING FOR TARGET HOUSEHOLDS

HOUSING IS DEFINED BOTH BY THEIR TYPE OF DESIGN AND CONSTRUCTION AND BY THE QUALITY STANDARDS THEY REPRESENT. THE TYPE OF CONSTRUCTION DEPENDS ON WHETHER THE UNIT IS A NEW OR EXISTING UNIT. IF IT IS A NEW UNIT, THE CONSTRUCTION MAY BE EITHER SINGLE FAMILY OR MULTI-FAMILY. SINGLE FAMILY UNITS MAY BE DETACHED OR STRUCTURALLY ATTACHED. EXISTING UNITS MAY BE SINGLE-FAMILY, ONE TO FOUR-FAMILY, OR FIVE OR MORE UNIT STRUCTURES. WITHIN THESE GENERAL STRUCTURAL TYPES, THERE ARE FURTHER REFINEMENTS BASED ON WHETHER THE HOUSEHOLDS TO BE SERVED ARE LARGE OR SMALL FAMILY GROUPS, ELDERLY OR HANDICAPPED PERSONS.

THE QUALITY STANDARDS THAT DEFINE A PROGRAM PRODUCT ARE SPACE, AMENITIES, AND MATERIALS. THE SQUARE FOOT ALLOWANCE PER HOUSING UNIT IS A KEY DETERMINANT OF QUALITY.

WITH THESE GENERAL DEFINITIONS IT IS POSSIBLE TO SPECIFY THE RELATIONSHIP BETWEEN TARGET HOUSEHOLDS AND APPROPRIATE HOUSING PRODUCTS. FOR EXAMPLE, IT MAY BE POSSIBLE TO SERVE LOWER INCOME FAMILIES IN ONE LOCATION BY PUBLICALLY ASSISTED, TOWNHOUSE TYPE NEW CONSTRUCTION; IN ANOTHER LOCATION, IT MAY BE MORE APPROPRIATE TO SERVE THE SAME GROUP THROUGH REHABILITATION OF EXISTING ONE-TO-FOUR FAMILY STRUCTURES. BOTH NEW AND EXISTING SINGLE-FAMILY UNITS MAY BE APPROPRIATE FOR SERVING LOWER-INCOME FAMILIES IN OUTLYING AREAS.

THE KEY POINT IS THAT THERE ARE, IN FACT, MANY "HOUSING PRODUCTS". THERE IS THEREFORE, GREAT FLEXIBILITY IN ASSIGNING HOUSING PRODUCTS TO TARGET HOUSEHOLDS---AND BOTH INCOME AND LOCATIONAL CHARACTERISTICS WILL HELP DETERMINE WHAT PRODUCT IS APPROPRIATE FOR A GIVEN TARGET GROUP.

IT IS RECOMMENDED:

THAT, IN KEEPING WITH THE BASIS CHARACTERISTICS OF THE EXISTING HOUSING STOCK THAT THE BASIC HOUSING PRODUCT FOR FRANKFORT ---CLINTON COUNTY BE THE SINGLE FAMILY, DETACHED HOUSING UNIT WITH ADEQUATE FLOOR AREA IN EXISTING RESIDENTIAL AREAS TO SERVE THE "AVERAGE" ASSISTED FAMILY.

THAT, HOUSING FOR THE ELDERLY BE A BASICALLY MEDIUM-SIZED MULTI-UNIT PRODUCT LOCATED WITHIN WALKING DISTANCE OF THE FRANKFORT DOWNTOWN CORE.

THAT, THE "LARGE FAMILY" PRODUCT POSSESS THE SAME CHARACTERISTICS AS THOSE FOR THE AVERAGE FAMILY WITH ADDITIONAL FLOOR SPACE, AS REQUIRED.

WHAT IS THE APPROPRIATE HOUSING ASSISTANCE MECHANISM?

AFTER RECOMMENDING OR SPECIFYING THESE HOUSEHOLD TARGETS AND APPROPRIATE HOUSING PRODUCTS TO SERVE THESE HOUSEHOLDS, IT BECOMES NECESSARY TO IDENTIFY THE MECHANISMS THAT MAY BE USED TO DELIVER THE HOUSING PRODUCT. THE BROAD RANGE OF POSSIBLE ALTERNATIVES, RANGING FROM DIRECT DEVELOPMENT THROUGH DIRECT FINANCING AND INDIRECT APPROACHES OF VARIOUS KINDS, MAKES IT POSSIBLE FOR LOCAL GOVERNMENTS TO BE HIGHLY FLEXIBLE IN DECIDING WHICH WAY TO GO. IN SOME CASES, THE LOCAL GOVERNMENT MAY WISH TO TAKE THE DIRECT APPROACH OF OWNING OR MANAGING THE HOUSING DEVELOPMENT ITSELF. IN BETWEEN THERE ARE A WIDE RANGE OF FINANCIAL ROLES, THE SUITABILITY OF WHICH DEPENDS IN PART ON THE SIZE OF THE COMMUNITY AND THE SCOPE OF THE PROGRAM EFFORT TO BE UNDERTAKEN. THE KEY POINT IS THAT THE LOCAL GOVERNMENT SHOULD NOT BE CONSTRICTED IN ITS ROLE TO ONE GIVEN APPROACH.

UNDER THE 1974 HOUSING AND COMMUNITY DEVELOPMENT ACT, LOW-INCOME AND MODERATE INCOME FAMILIES CAN BE REACHED THROUGH

FEDERAL HOUSING ASSISTANCE THROUGH A RANGE OF HOUSING ASSISTANCE MECHANISMS, INCLUDING THE NEW SECTION 8 HOUSING ASSISTANCE PAYMENT (HAP) PROGRAM (INVOLVING NEWLY-CONSTRUCTED, SUBSTANTIALLY REHABILITATED, OR EXISTING HOUSING); THE TRADITIONAL PUBLIC HOUSING APPROACH (INCLUDING THE LEASING ALTERNATIVE) THE FHA SECTION 235 HOMEOWNER ASSISTANCE PROGRAM; THE FHA SECTION 236 MULTIFAMILY RENTAL PROGRAM; THE SECTION 202 DIRECT LOAN PROGRAM FOR ELDERLY HOUSING; AND THE RURAL HOUSING PROGRAMS.

HOWEVER, HUD HAS INDICATED THAT IT INTENDS TO UTILIZE THE NEW SECTION 8 PROGRAM TO THE MAXIMUM EXTENT AS THE PREDOMINANT FEDERALLY-ASSISTED HOUSING MECHANISM. THERE IS A LIMITED AMOUNT OF FUNDS MANDATED UNDER THE ACT TO BE USED FOR NEW DEVELOPMENT UNDER THE TRADITIONAL PUBLIC HOUSING FORMULA.

IT IS RECOMMENDED THAT FRANKFORT - CLINTON COUNTY CAREFULLY REVIEW THE UTILIZATION OF HOUSING FINANCING AND HOUSING PROGRAMS OF THE NEWLY REACTIVATED STATE HOUSING BOARD. THE 1974 ACT PROVIDES NEW SUPPORT FROM FEDERAL GOVERNMENT FOR HOUSING OBLIGATIONS OF STATES AND MAKES STATE HOUSING AGENCIES ELIGIBLE AS MAJOR SPONSORS OF HOUSING UNDER THE SECTION 8 HOUSING ASSISTANCE PAYMENT PROGRAM.

RATING LOCATIONAL ELEMENTS

OF COURSE, NOT ALL LOCATIONS ARE EQUALLY ACCEPTABLE AS HOUSING SITES FOR LOWER-INCOME FAMILIES. THE PROBLEM, HOWEVER, IS TO MEASURE HOW THEY DIFFER FROM ONE ANOTHER. SOME KEY CRITERIA ARE:

---POTENTIAL NUMBER OF UNITS. THE AVAILABILITY OF LAND FOR DEVELOPMENT OR ACQUISITION AND DEMOLITION AND THEIR COSTS DETERMINE THE POTENTIAL NUMBER OF NEW UNITS THAT A GIVEN AREA CAN SUPPORT. A LOCAL COMMUNITY MIGHT SURVEY THE POTENTIAL FOR NEW CONSTRUCTION IN EACH OF ITS PLANNING AREAS AND RANK THEM IN TERMS OF POSSIBLE VOLUMES.

---POTENTIAL FOR REHABILITATION. THE TYPES OF STRUCTURES AND THEIR CONDITION IN A GIVEN AREA WILL DETERMINE POTENTIAL FOR REHABILITATION IN THAT AREA. A COMMUNITY MIGHT ESTIMATE THE NUMBER OF UNITS THAT COULD BE PROVIDED BY VARIOUS LEVELS OF REHABILITATION IN ITS PLANNING AREAS AND RANK THEM APPROPRIATELY.

---POTENTIAL FOR HOUSING CHOICES. MIXED INCOMES IN A PLANNING AREA SUGGEST THE POTENTIAL FOR A RANGE OF HOUSING CHOICES. AN INDEX OF THE CONCENTRATION OF INCOME GROUPS IN A GIVEN AREA COULD BE DEVELOPED AND PLANNING AREAS RANKED FROM MOST OPEN (WIDE RANGE OF INCOMES) TO MOST CLOSED (LEAST VARIATION IN INCOME OF RESIDENT FAMILIES).

---NEIGHBORHOOD QUALITY AND FACILITIES. PHYSICAL SERVICES, SUCH AS UTILITIES, SEWER AND WATER, AND PARKS AFFECT NEIGHBORHOOD QUALITY, WHICH MAY, IN TURN, AFFECT THE POTENTIAL FOR

SUCCESSFUL HOUSING PROJECTS. PLANNING AREAS COULD BE RATED IN TERMS OF AN INDEX OF NEIGHBORHOOD QUALITY AND RANKED ACCORDINGLY.

---TRANSPORTATION SERVICES. GOOD TRANSPORTATION SERVICES ARE NECESSARY FOR A VIABLE HOUSING MARKET, SINCE THESE ARE THE KEY LINKS TO JOBS AND SHOPPING OPPORTUNITIES. THUS, PLANNING AREAS COULD BE RANKED IN TERMS OF ACCESSABILITY.

---SCHOOL SERVICES. NEW HOUSING MAY LEAD TO INCREASES IN SCHOOL POPULATIONS IN KEY DISTRICTS. PLANNING AREAS COULD BE RATED IN TERMS OF THEIR ABILITY TO ABSORB INCREASES IN SCHOOL AGE CHILDREN AND RANKED ACCORDINGLY.

---OTHER SERVICES. POLICE, SANITATION, AND HEALTH SERVICES ARE IMPORTANT TO SUCCESSFUL COMMUNITY AND HOUSING DEVELOPMENT EFFORTS. PLANNING AREAS COULD BE RATED IN TERMS OF THE AVAILABILITY OF THOSE SERVICES NOW AND RANKED ACCORDINGLY; ALTERNATIVELY, PLANNING AREAS COULD BE RATED IN TERMS OF THE OPPORTUNITY TO IMPROVE THE DELIVERY OF THOSE SERVICES IN THOSE AREAS.

---ENVIRONMENT IMPACT. THE GENERAL LOCAL GOVERNMENT HAS RESPONSIBILITY TO IMPLEMENT ITS COMMUNITY DEVELOPMENT, AND ITS HOUSING COMPONENT, FOR CONFORMANCE WITH THE NATIONAL ENVIRONMENTAL POLICY ACT OF 1969. FOR THIS REASON, IT WOULD BE USEFUL TO INSURE THAT SUCH REQUIREMENTS ARE CONSIDERED IN THE DEVELOPMENT OF GENERAL HOUSING LOCATIONS. A FEW KEY ITEMS THAT SHOULD BE CONSIDERED ARE AIR QUALITY, NOISE LEVELS, WATER QUALITY, AND OTHER ENVIRONMENTAL FACTORS.

NOISE LEVELS ARE HARD TO CONTROL DIRECTLY; THE DIRECT APPROACH-- SITE SELECTION AND BUILDING DESIGN--MAY BE MOST PRACTICAL. IN PARTICULAR, AREAS MIGHT BE ELIMINATED AS CANDIDATES FOR NEW HOUSING DEVELOPMENT IF EXISTING NOISE LEVELS ARE TOO HIGH AND THE COSTS OF REDUCING THEM TO AN ACCEPTABLE LEVEL THROUGH BUILDING DESIGN ARE TOO GREAT.

THE RATING SCHEME FOR GENERAL HOUSING LOCATION NEED NOT BE SOPHISTICATED, AT LEAST FOR A FIRST EFFORT. FOR EXAMPLE, A "HIGH, MEDIUM, LOW" SCALE MAY BE ALL THE DIFFERENTIATION BETWEEN GRADES THAT IS REQUIRED. MORE DETAILED SCALES ARE TOO DIFFICULT TO DEVELOP AND IMPLEMENT. IN ADDITION, THEY MAY NOT BE USEFUL IN SELECTING AREAS, SINCE THE KEY FOCUS IS ON A COMBINATION OF FACTORS---NOT FINE DISTINCTIONS BETWEEN AREAS IN TERMS OF ONE OF THE CRITERIA.

HOUSING ASSISTANCE PLAN

METHODOLOGY - GENERAL

THE HAP SECTION OF THE COMMUNITY DEVELOPMENT BLOCK GRANT APPLICATION CONSISTS OF FOUR FORMS AND, WHERE APPLICABLE, A MAP, WITH NARRATIVE EXPLANATIONS SHOWING, RESPECTIVELY:

- I. SURVEY OF HOUSING CONDITIONS.
- II. HOUSING ASSISTANCE NEEDS OF LOWER INCOME HOUSEHOLDS.
- III. ANNUAL GOAL FOR HOUSING ASSISTANCE.
- IV. GENERAL LOCATIONS FOR LOWER INCOME HOUSING.

THIS FIRST YEARS APPLICATION HAS USED ALREADY AVAILABLE DATA SUCH AS MATERIALS FROM THE CENSUS BUREAU; RECORDS OF APPLICABLE LOCAL AGENCIES; AND SOME MATERIAL SUPPLIED BY HUD. THE PRINCIPAL RESOURCE MATERIAL HOWEVER, IS DRAWN FROM THE HOUSING CHAPTER OF PART 1 OF THIS REPORT. PART 1 SURVEYED AND ANALYZED PERTINENT FACTUAL HOUSING DATA TO IDENTIFY HOUSING PROBLEMS SO THAT CORRECTIVE ACTION, AS HERE PROPOSED, COULD BE INITIATED. IN ADDITION TO PULLING RAW DATA FROM THE 1970 CENSUS AND REFINING, ANALYSING AND SYNTHESIZING THAT DATA, AN EXTERIOR SURVEY OF EACH RESIDENCE IN THE FRANKFORT URBAN AREA (THE CITY AND ITS DEVELOPED AND DEVELOPING FRINGE); IN ROSSVILLE; IN MICHIGANTOWN; COLFAX, KIRKLIN; AND IN MULBERRY AND THEIR FRINGE AREAS AND ALONG MAIN TRAVELED ROUTES AND GROWTH AREAS IN THE RURAL COUNTY WAS CONDUCTED BY THE CONSULTANT IN THE THREE WEEKS FIELD SURVEY IN JANUARY AND FEBRUARY 1974. EACH RESIDENTIAL STRUCTURE WAS ASSIGNED A NUMERICAL RATING TO INDICATE ITS APPARANT CONDITION. HOMES IN GOOD OR STANDARD CONDITION WERE ASSIGNED "1"; THOSE IN THE NEXT CATAGORY SHOWING ONLY MINOR DEFICIENCIES WERE ASSIGNED "2"; WHILE THOSE WITH MAJOR DEFICIENCIES WERE RANKED "3". THOSE HOUSES FOUND TO BE DELAPIDATED AND GENERALLY ECONOMICALLY IRREPARABLE WERE ASSIGNED CONDITION "4". FOR A THOROUGH EXPLANATION OF CRITERIA SEE P.7, HOUSING CHAPTER, PART 1.

THE CHAPTER ALSO DISCUSSED SOME OF THE BASIC CAUSES OF HOUSING BLIGHT, THE OBSTACLES TO SOLVING HOUSING PROBLEMS AND THE NEED FOR ESTABLISHING BUILDING CODES FOR EACH LOCAL PUBLIC AGENCY IN CLINTON COUNTY.

IN ADDITION TO STRUCTURAL CONDITIONS RATING SOME OF THE MORE IMPORTANT DISCLOSURES OF HOUSING, PART 1, LIE IN THE AREAS OF:

CATEGORY	COUNTY	FRANKFORT
* OCCUPANCY AND VACANCY OF HOUSING UNITS	8%	5%
* HOUSING UNIT GROWTH- (1950-1970)	1950-1960 9%	9%
	1960-1970 3%	1%
* HOUSING UNIT TYPES (MULTI-FAMILY DWELLING UNITS)	12% (1280)	21% (1151)
* PLUMBING CONDITIONS (WITHOUT ADEQUATE PLUMBING)	7% (358)	4% (227)
* OVERCROWDING	5% (539)	5% (286)
* VALUES AND RENTS OF HOUSING UNITS		
\$40 - \$59	22%	-
\$60 - \$79	35%	-
* VALUE OF OWNER OCCUPIED UNITS		
\$5,000 - 9,999	33%	-
\$10,000 - 14,999	28%	-
* FAMILY INCOME STATUS		
\$7,000 - 8,999	17%	-
\$9,000 - 11,999	23%	-
* ENVIRONMENTAL DEFICIENCIES	-	-
* ADEQUACY OF NEIGHBORHOOD	-	-
* HOUSING DEMAND (QUALIFIED AND QUANTIFIED)	-	-

SURVEY OF HOUSING CONDITIONS - TABLE I

AS A BASIC REQUIREMENT THE PLAN, AS SHOWN IN TABLES I, II, AND III AND APPROPRIATE MAPS AS REQUIRED, DESCRIBES THE CONDITION OF THE HOUSING STOCK. PROVIDED IS A SUMMARY DESCRIPTION OF THE TOTAL NUMBER OF YEAR-ROUND UNITS. THOSE IN SUBSTANDARD CONDITION ARE IDENTIFIED AND THOSE SUITABLE FOR REHABILITATION ARE FURTHER IDENTIFIED. THESE ARE THE UNITS WHICH CAN BE ECONOMICALLY IMPROVED OR REPAIRED IN ORDER TO BRING THEM UP TO A LOCALLY ACCEPTABLE CONDITION.

HOUSING ASSISTANCE NEEDS OF LOWER INCOME HOUSEHOLDS - TABLE II

THE PLAN CONTAINS ESTIMATES OF THE HOUSING ASSISTANCE NEEDS OF LOWER INCOME HOUSEHOLDS RESIDING IN THE COMMUNITY. SEPERATE ESTIMATES ARE MADE OF ASSISTANCE NEEDS OF:

ELDERLY AND HANDICAPPED HOUSEHOLDS; AND
LARGE SIZE (4 OR MORE MINORS) HOUSEHOLDS

ESTIMATES HAVE BEEN BASED PRIMARILY ON THE ESTIMATED NUMBER OF LOWER INCOME HOUSEHOLDS THAT SPEND AN EXCESSIVE PROPORTION ON DECENT, SAFE, SANITARY, NON-LUXURY HOUSING SUITED TO THEIR HOUSEHOLD REQUIREMENTS. THESE NON-EXCESSIVE ESTIMATES RECOGNIZE THAT SOME LOWER INCOME HOUSEHOLDS OCCUPY ADEQUATE HOUSING WITHOUT SPENDING AN EXCESSIVE AMOUNT OF INCOME. NEED ESTIMATES ARE BASED ON INCOME ELIGIBILITY REQUIREMENTS OF HUD FOR THE LOWER INCOME HOUSING ASSISTANCE PROGRAM, (I.E., FAMILIES WHOSE INCOME DOES NOT EXCEED 80 PERCENT OF MEDIAN INCOME FOR THE AREA,

WITH UPWARD OR DOWNWARD ADJUSTMENTS FOR LARGER OR SMALLER FAMILIES.)

NO PART OF THE PLAN IS SEPERATELY DEVOTED TO HOUSING FOR RACIAL ORIGIN GROUPS SINCE THEY COMPRISE LESS THAN FIVE PERCENT OF THE HOUSEHOLDS IN ANY CLINTON COUNTY COMMUNITY OR IN THE RURAL COUNTY. IN ADDITION, NO HOUSEHOLDS ARE EXPECTED TO BE DISPLACED DUE TO CLEARANCE, DEMOLITION, MAJOR REHABILITATION OR OTHER REASONS. EVENTUALLY, HOWEVER, THERE MAY BE SOME LIMITED DISPLACEMENT IN FRANKFORT IF THE COMMUNITY IMPLEMENTS CERTAIN SECTIONS OF THE MAJOR THOROUGHFARE PLAN. SINCE THIS WILL FALL BEYOND THE THREE YEAR PLAN IT CANNOT REALISTICALLY NOW BE DETERMINED IF LOWER INCOME HOUSEHOLDS WILL BE INVOLVED.

ANNUAL GOAL FOR HOUSING ASSISTANCE - TABLE III

THE PLAN SPECIFIED A REALISTIC GOAL FOR THE NUMBER OF DWELLING UNITS TO BE ASSISTED, TAKING INTO ACCOUNT THE FIRST TWO PARTS OF THE PLAN. THESE GOALS SEPERATELY IDENTIFY THE PROPORTION OF NEW, REHABILITATED, AND EXISTING DWELLING UNITS, AND THE SIZE AND TYPES OF DWELLING UNITS THAT NEED TO BE ASSISTED, TAKING INTO ACCOUNT THE KINDS OF ASSISTANCE BEST SUITED TO THE NEEDS OF LOWER INCOME PERSONS.

AS A GENERAL POLICY THE DISTRIBUTION OF ASSISTANCE BETWEEN NEW AND REHABILITATED UNITS SHOULD ACKNOWLEDGE THAT THE SECTION 8 HOUSING ASSISTANCE PROGRAM EMPHASIZES THE USE OF EXISTING HOUSING AND THE DISTRIBUTION OF ASSISTANCE BETWEEN NEW AND REHABILITATED UNITS AND SHOULD TAKE INTO CONSIDERATION THE OBJECTIVES OF: CURTAILMENT OF HOUSING DETERIORATION; PROMOTION OF NEIGHBORHOOD STABILITY; MINIMIZING DETRIMENTAL ENVIRONMENTAL IMPACT; AVOIDENCE OF UNDUE CONCENTRATIONS OF LOW INCOME (AND MINORITY GROUP) PERSONS; AND ECONOMIC FEASIBILITY.

IN SUMMARY, HUD REGULATIONS APPLICABLE TO CLINTON COUNTY SPECIFY FOUR TASKS THE HOUSING ASSISTANCE PLAN MUST FULFILL:

- (1) AN ACCURATE SURVEY OF THE CONDITION OF THE COMMUNITY'S HOUSING STOCK.
- (2) AN ESTIMATE OF THE HOUSING ASSISTANCE NEEDS OF LOWER-INCOME FAMILIES (INCLUDING THE ELDERLY AND HANDICAPPED, LARGE FAMILIES (FAMILIES WITH FOUR OR MORE DEPENDENT CHILDREN)).
- (3) A REALISTIC ANNUAL GOAL OF THE NUMBER OF DWELLING UNITS OR PERSONS TO BE ASSISTED, INCLUDING THE RELATIVE PROPORTIONS OF NEW, REHABILITATED, AND EXISTING DWELLING UNITS; AND THE SIZE AND TYPES OF HOUSING PROJECTS AND ASSISTANCE BEST SUITED TO THE NEEDS OF LOWER-INCOME PERSONS IN THE COMMUNITY.

- (4) A MAP INDICATING WHERE APPLICABLE (I.E., FRANKFORT) THE GENERAL LOCATIONS OF PROPOSED HOUSING FOR LOWER-INCOME PERSONS WITH THE OBJECTIVES OF PROMOTING A GREATER CHOICE OF HOUSING OPPORTUNITIES AND AVOIDING UNDUE SEGREGATION OF THESE UNITS IN LOWER INCOME NEIGHBORHOODS.

OF INTEREST TO ALL LOCAL GOVERNMENTS IS THE FACT THAT THE OPERATION OF A DEPARTMENT OF REDEVELOPMENT IS AN ELIGIBLE FUNDING ITEM OF THE COMMUNITY DEVELOPMENT ACT.

RECOMMENDED GENERAL HOUSING POLICY

IT IS THE RECOMMENDED POLICY OF THE AREA PLAN COMMISSION OF CLINTON COUNTY TO THE PARTICIPATING PUBLIC AGENCIES THAT BOTH A SHORT TERM AND A LONG RANGE STRATEGY FOR NEIGHBORHOOD CONSERVATION AND THE GENERAL UPGRADING OF HOUSING STOCK WITHIN THE CITY, TOWNS, AND COUNTY BE IMPLEMENTED. THIS STRATEGY HAS AS ITS BASIC APPROACH ALLOCATING COMMUNITY DEVELOPMENT DOLLARS ON A PRIORITY BASIS TO THOSE AREAS WHERE THE NEED IS THE GREATEST FOR THE PURPOSE OF UPGRADING EXISTING HOUSING UNITS.

AS A MATTER OF POLICY THE WISE PUBLIC AGENCIES REJECT MASSIVE DEMOLITION AND RELOCATION PROJECTS. LARGE SCALE DEMOLITION PROGRAMS ONLY SERVE TO MOVE THE PROBLEM AROUND WITHOUT SOLVING IT.

A BASIC TENET OF THE HOUSING STRATEGY IS THAT THE OVERALL HOUSING POLICY WILL BE IMPLEMENTED IN CONJUNCTION WITH AN UPGRADING IN ALL FACETS OF GOVERNMENTAL SERVICES ON A NEIGHBORHOOD BASIS. PARTICULAR ATTENTION WOULD BE GIVEN TO ENVIRONMENTAL PROTECTION.

THE PROBLEM:

IN SPITE OF THE FACT THAT APPROXIMATELY 60% OF THE HOUSING UNITS IN THE COUNTY AS A WHOLE WERE BUILT PRIOR TO 1940, THE OVERALL CONDITION OF THE HOUSING STOCK IS GOOD. THERE ARE POCKETS OF DETERIORATION AND BLIGHT, AND RELATIVELY LARGE NUMBERS OF HOUSING UNITS HAVE SOME DEGREE OF DEFICIENCY.

APPROXIMATELY 70% OF THE SUB-STANDARD HOUSING UNITS IN CLINTON COUNTY HAVE A MARKET VALUE OF LESS THAN \$6,000 AND MANY OF THESE UNITS ARE OCCUPIED BY ELDERLY PERSONS. THE HOUSING STOCK IS LIKELY TO DETERIORATE RAPIDLY IN THE FUTURE WITH LITTLE PRIVATE MONEY AVAILABLE FOR REHABILITATION PURPOSE.

1 CONSULTANT'S ESTIMATE.

OBJECTIVES:

ENVISIONED IS A MULTI-FACETED HOUSING PROGRAM THAT HAS AS ITS CORE THE CONSERVATION OF SCARCE COMMUNITY RESOURCES, THE REHABILITATION OF HOUSING STOCK, AND THE PRESERVATION OF NEIGHBORHOODS. WITH THIS PROGRAM WE HOPE TO STIMULATE HISTORICAL PRESERVATION AND ENCOURAGE NEW CONSTRUCTION. IT IS THE INTENTION TO ENCOURAGE MAXIMUM PRIVATE FINANCIAL INVESTMENT IN THE HOUSING INDUSTRY AT ALL LEVELS. THE FINAL OBJECTIVE IS TO MAKE URBAN AREA LIVING COMPETITIVE WITH "OTHER AREAS" LIVING IN ALL RESPECTS.

PROJECTS:

FIVE SPECIFIC PROJECTS ARE RECOMMENDED FOR THE PURPOSE OF GUARANTEEING MAXIMUM IMPACT ON THE FULL RANGE OF HOUSING AND NEIGHBORHOOD CONCERNS. EMPHASIS IS PLACED ON THOSE PROGRAMS THAT WILL ENCOURAGE MAXIMUM IMPACT ON COMMUNITY DEVELOPMENT FUNDS.

A. CODE ENFORCEMENT

FUNDS SHOULD BE ALLOCATED FOR THE PURPOSE OF ESTABLISHING A COUNTY WIDE BUILDING CODE ENFORCEMENT PROGRAM. THE MONEY WOULD BE ALLOCATED FOR THE PURPOSE OF FUNDING SUB-STANDARD DEMOLITIONS ONLY.

THE REVOLVING FUND

THE PRIMARY MECHANISM FOR IMPLEMENTING THE OVERALL HOUSING PROGRAM WILL BE A REVOLVING FUND FROM WHICH GRANTS AND LOANS WILL BE DRAWN AND INTO WHICH ACCRUED INTEREST, LOAN REPAYMENTS, AND OTHER SOURCES OF HOUSING FUNDS CAN BE PLACED.

THE FUND ITSELF WOULD BE CREATED IN A MANNER CONSISTENT WITH THE CREATION OF OTHER SPECIAL FUNDS.

ALL GRANTS AND LOANS DRAWN FROM THE REVOLVING FUNDS WOULD BE APPROVED BY THE DEPARTMENT OF DEVELOPMENT, OR OTHER APPLICABLE AGENCY UPON RECOMMENDATION OF AN APPLICABLE ADVISORY COMMITTEE. THE PROGRAMS WOULD BE ADMINISTERED BY THE DEPARTMENT OF DEVELOPMENT. EMPHASIS WOULD BE PLACED ON LOANS RATHER THAN GRANTS, AND PROCEDURES WILL BE ALTERED TO FIT THE NEEDS OF THE OTHER PROJECTS THAT ARE TO BE FUNDED FROM THE REVOLVING FUND. THE ACTUAL LOANS WOULD BE ADMINISTERED BY LOCAL BANKS.

STRICT GUIDELINES FOR ELIGIBILITY WOULD BE DEVELOPED, AND A SLIDING SCALE FOR DETERMINING GRANT AND LOAN ELIGIBILITY ESTABLISHED.

B. PROJECT REHAB PROGRAM

THE MAJOR PORTION OF THE HOUSING PROGRAM WILL BE THE PROJECT AREA REHABILITATION PROGRAM. EMPHASIS WILL BE PUT ON LOANS RATHER THAN GRANTS.

C. GUARANTEED LOANS:

THE GUARANTEE LOAN PROGRAM IS DESIGNED SPECIFICALLY TO ENCOURAGE PRIVATE FINANCIAL INVOLVEMENT IN POTENTIALLY TRANSITIONAL NEIGHBORHOODS WHERE OTHER HOUSING PROGRAMS MAY NOT BE PRACTICAL.

IT IS ESTIMATED THAT A 100,000 LOCAL COMMITMENT COULD INSURE AS MUCH AS 500,000 IN HOME IMPROVEMENT LOANS AND MORTGAGES.

THIS PROJECT WOULD BE ADMINISTERED BY LOCAL FINANCIAL INSTITUTIONS. THESE INSTITUTIONS WOULD CERTIFY RESIDENTIAL AND FINANCIAL ELIGIBILITY. PARTICIPANTS IN THE PROGRAM COULD EITHER APPROACH A FINANCIAL INSTITUTION DIRECTLY OR BE REFERRED THROUGH THE VARIOUS REFERRAL SERVICES. THE PROGRAM WOULD BE COORDINATED BY THE DEPARTMENT OF DEVELOPMENT, WHO WOULD BE RESPONSIBLE FOR ESTABLISHING ELIGIBILITY REQUIREMENTS, AND APPROVING APPLICANTS.

SERVICE CHARGES FOR THE FINANCIAL INSTITUTIONS WOULD BE DEDUCTED FROM THE INITIAL ALLOCATION OR FROM THE INTEREST DERIVED THEREFROM. PARTICIPATIVE FINANCIAL INSTITUTIONS WOULD ADMINISTER THE PROGRAM ON A CONTRACTUAL BASIS.

D. NON-PROFIT REHABILITATION PROJECT:

THE PURPOSE OF THIS PROJECT IS TO STIMULATE A WIDE RANGE OF INVOLVEMENT INCLUDING SPECIFIC HOUSING PROBLEMS. FUNDS IN THIS PROJECT WOULD BE USED TO SUPPLEMENT RESOURCES AVAILABLE TO NON-PROFIT GROUPS WHO SEEK TO ACQUIRE AND REHAB HOUSING UNITS.

THIS PROJECT OFFERS THE GREATEST POTENTIAL FOR MULTIPLYING THE IMPACT OF COMMUNITY DEVELOPMENT DOLLARS. IT IS ESTIMATED THAT A RELATIVELY SMALL AMOUNT OF MONEY CAN STIMULATE 5 TO 10 TIMES THE ORIGINAL AMOUNT IN RESOURCES FROM VARIOUS NON-PROFIT GROUPS.

THIS PROGRAM WOULD OPERATE IN CONJUNCTION WITH OTHER REHAB PROJECTS. THE FUNDS INVOLVED WOULD BE ADMINISTERED BY THE DEPARTMENT OF DEVELOPMENT. THESE FUNDS WOULD BE ALLOCATED ON A GRANT-ONLY BASIS. THE GROUP WOULD HAVE TO HAVE SPECIFIC UNITS CHOSEN, GUARANTEE FINANCIAL RESPONSIBILITY, AND BE ABLE TO SHOW THAT A WIDE RANGE OF OTHER RESOURCES WERE AVAILABLE TO THEM.

E. EMERGENCY REPAIR PROGRAM

THE PURPOSE OF THIS PROGRAM IS TO PROVIDE ASSISTANCE ON AN EMERGENCY BASIS FOR THOSE PERSONS WHO NEED IMMEDIATE REPAIRS, BUT ARE WITHOUT THE RESOURCES TO ACCOMPLISH THEM.

ASSISTANCE UNDER THIS PROGRAM WOULD BE LIMITED TO A SPECIFIC DOLLAR AMOUNT (2,000) AND FOR SPECIFIC FUNCTIONS. (FURNACE, ROOF, PLUMBING, ETC.) THE DEPARTMENT OF DEVELOPMENT WOULD RETAIN ULTIMATE RESPONSIBILITY FOR APPROVING EMERGENCY REPAIR CONTRACTS.

TABLE I

HOUSING ASSISTANCE PLAN
SURVEY OF HOUSING CONDITIONS

OCCUPANCY STATUS & CONDITION OF HOUSING UNITS	NUMBER OF YEAR ROUND HOUSING UNITS					
	FRANKFORT			CLINTON COUNTY		
	<u>TOTAL</u>	<u>OWNER</u>	<u>RENTAL</u>	<u>TOTAL</u>	<u>OWNER</u>	<u>RENTAL</u>
OCCUPIED UNITS: TOTAL	5240	3549	1691	10,163	7234	2929
SUBSTANDARD	641	279	362	1,213	581	630
ALL OTHER	4599	3290	1329	8,950	6653	2297
VACANT UNITS: TOTAL	265	87	178	585	279	306
SUBSTANDARD	112	37	75	247	118	129
ALL OTHER	153	50	103	338	161	177
TOTAL OCCUPIED & VACANT UNITS	5505	3636	1869	10,748	7513	3235
SUITABLE FOR REHABILITATION:						
OCCUPIED UNITS	532	231	301	1,039	498	541
VACANT UNITS	66	29	77	129	67	62
TOTAL	598	260	378	1,168	565	603

SOURCE: PART I - THE COMPREHENSIVE PLAN - HOUSING STUDY OF 701
 PLANNING PROGRAM. A PART OF THE COMPREHENSIVE PLAN FOR
 CLINTON COUNTY BY HUFF-CARPENTER-ROSS-ASSOCIATES,
 SOUTH BEND, IN. 46601

TABLE II

HOUSING ASSISTANCE NEEDS OF
LOWER INCOME HOUSEHOLDS

SOURCE OF HOUSING NEEDS	NUMBER OF HOUSEHOLDS					
	<u>FRANKFORT</u>			<u>CLINTON COUNTY</u>		
	<u>TOTAL</u>	<u>LARGE FAMILY</u>	<u>OTHER</u>	<u>TOTAL</u>	<u>LARGE FAMILY</u>	<u>OTHER</u>
CURRENTLY REQUIRING ASSISTANCE	1234	171	1063	2469	343	2126
ELDERLY & HANDICAPPED *	500	7	494 *	1001	13	988 *
NON-ELDERLY/ HANDICAPPED	734	164	569	1468	330	1138

SOURCE: 1970 CENSUS OF HOUSING
 PART I - COMPREHENSIVE PLAN, CLINTON COUNTY - HUFF CARPENTER
 ROSS ASSOCIATES.

* DEPARTMENT OF PUBLIC WELFARE, CLINTON COUNTY, INDIANA

NOTE: NO DISPLACEMENT OR ADDITIONAL HOUSEHOLDS EXPECTED.

TABLE III

ANNUAL GOAL FOR HOUSING ASSISTANCE

FIRST YEAR GOAL -- NUMBER OF UNITS

	<u>FRANKFORT</u>				<u>CLINTON COUNTY</u>			
	<u>TOTAL</u>	<u>NEW</u>	<u>EXIST.</u>	<u>REHAB.</u>	<u>TOTAL</u>	<u>NEW</u>	<u>EXIST.</u>	<u>REHAB.</u>
TOTAL	30	0	30	0	39	8	30	1
ELDERLY	30	0	30	0	38	8	30	0
NON-ELDERLY								
LARGE	0	0	0	0	1	0	0	1
OTHER	0	0	0	0	0	0	0	0
SOURCE OF ASSISTANCE								
HUD								
SECTION 8								
AMOUNT	61,200	0	61,200	0	94,965	30,240	61,200	3,500
C D BLOCK GRANTS								
OTHER								
STATE AGENCIES								
OTHER								
FA H A					150,000	150,000	0	0
LOCAL PROGRAM								
OTHER								

EXPLANATION OF PRIORITIES: FROM TABLE II OF THIS PLAN, APPROXIMATELY 40% OF THOSE HOUSEHOLDS REQUIRING ASSISTANCE WERE IDENTIFIED AS ELDERLY OCCUPIED, FOR 1975, THE HOUSING ASSISTANCE PLAN (HAP) WILL BE AIMED AT ELDERLY OCCUPIED HOUSEHOLDS. FRANKFORT IS ANTICIPATING USING APPROXIMATELY \$61,200 AND CLINTON CO. APPROX. 65% OF THE SECTION 8 ALLOTTMENT FOR RENT SUBSIDY OF ELDERLY OCCUPIED EXISTING HOUSING. ABOUT 32% OF SECTION 8 ALLOTTMENT FOR CLINTON CO. WILL GO FOR SUBSIDY OF ELDERLY OCCUPIED NEW HOUSING. THIS FIRST YEAR PLAN IS FOCUSED TOWARD THE ELDERLY BECAUSE: 1) THE LIMITED MONEY AVAILABLE CURTAILS THE IMPLEMENTATION OF A MULTI-GOAL PLAN; 2) THE LIMITED TIME SPAN FOR FORMULATING THE FIRST YEAR HAP PREVENTS A MORE AMBITIOUS PROGRAM; 3) CLINTON COUNTY HAS A VERY ACTIVE COUNTY COUNCIL ON AGING AND AGED (CCAA) AND HUMAN RESOURCE CENTER WHO HAS THE INITIATIVE AND EXPERTISE TO UNDERTAKE ELDERLY HOUSING PROJECTS; AND 4) FOR ANY FUTURE HAP, ONGOING STUDIES BY THE CCAA AND CLINTON COUNTY AREA PLAN COMMISSION WILL HAVE BEEN COMPLETED AND A MORE COMPREHENSIVE HAP WILL BE POSSIBLE.

SUMMARY OF THE HOUSING ASSISTANCE PLAN FOR CLINTON COUNTY

THE CLINTON COUNTY HOUSING ASSISTANCE PLAN (HAP) FOR 1975 IS A MODEST ATTEMPT TO DEAL WITH THE HOUSING PROBLEMS OF CLINTON COUNTY. AS WITH ANY FIRST EFFORT, THE HAP PROBABLY LACKS COMPREHENSIVE APPROACHES, BUT IT IS HOPED THAT THE PLAN WILL SERVE AS A FIRST STEP IN ACHIEVING A GOAL OF STANDARD HOUSING FOR ALL OF THE COUNTIES CITIZENS.

THERE ARE 10,748 YEAR-ROUND HOUSING UNITS IN THE COUNTY, OF WHICH 1,460 ARE SUBSTANDARD. THERE ARE 1,213 SUBSTANDARD UNITS INCLUDED IN THE 10,163 OCCUPIED UNITS, AND 247 OF THE 585 VACANT UNITS ARE SUBSTANDARD. IN DETERMINING THE NUMBER OF SUBSTANDARD UNITS THE FOLLOWING DEFINITIONS WERE USED:

"3"

MAJOR

DEFICIENCIES

THIS RATING WAS ASSIGNED TO HOMES WHICH APPEARED MINIMALLY SUITED FOR OCCUPANCY. THESE INCLUDE HOMES IN WHICH DETERIORATION HAS ADVANCED TO THE POINT WHERE REHABILITATION IS ECONOMICALLY QUESTIONABLE, OR OLDER HOMES ORIGINALLY CONSTRUCTED IN A MANNER INADEQUATE TO TODAY'S CODES. SUCH HOUSES MAY BE TOO SMALL BY TODAY'S STANDARDS OR WERE ORIGINALLY BUILT WITH INADEQUATE BUILDING MATERIALS.

ALSO INCLUDED IN THIS CATEGORY ARE CONVERSIONS, I.E., DWELLING UNITS IN BUILDINGS ORIGINALLY DESIGNED FOR COMMERCIAL OR INDUSTRIAL USE AND THEREFORE, LACKING THE RESIDENTIAL AMENITIES OF TODAY'S STANDARDS.

"4"

DILAPIDATED

THIS CATEGORY IS SELF-EXPLANATORY. MOST OF THESE HOMES WERE VACANT OR HAVE HAD LITTLE OR NO MAINTENANCE OVER THE YEARS, WERE USUALLY AT LEAST 40 YEARS OLD, AND GENERALLY OF INADEQUATE ORIGINAL CONSTRUCTION.

THE FIVE INCORPORATED TOWNS WILL FILE THEIR OWN HAP WITH FUTURE CDA APPLICATIONS. THE DATA COLLECTION BY THE CONSULTANT, TO BE USED IN THE HOUSING PLAN SECTION OF THE COMPREHENSIVE PLAN FOR CLINTON COUNTY, WAS NOT COMPLETED BY THE CDA MAY 15, 1975 DEADLINE, AND IT WAS NEXT TO IMPOSSIBLE FOR PERSONS IN THE FIVE TOWNS TO COMPILE THE NECESSARY INFORMATION BY THE DEADLINE. AFTER CONFERRING WITH HUD OFFICIALS IN INDIANAPOLIS, PERMISSION WAS GRANTED TO THE FIVE TOWNS FOR INCLUSION IN CLINTON COUNTY'S HOUSING ASSISTANCE PLAN. ALL FIVE TOWNS PASSED RESOLUTIONS REQUESTING THIS INCLUSION.

INCLUDED IN THE COUNTY'S HAP IS A MAP OF THE CITY OF FRANKFORT

(FOUND IN PART I) WHICH DESIGNATES THE NUMBERS OF SUBSTANDARD HOUSING AND THE LOCATION. THE FIVE INCORPORATED TOWNS AND THE RURAL COUNTY HAVE SUBSTANDARD DWELLINGS SCATTERED THROUGHOUT THEIR HOUSING PATTERNS. A MAP IS NOT NECESSARY THEREFORE, IN PIN-POINTING ANY PARTICULAR AREAS, SINCE THERE ARE NO CONCENTRATIONS OF SUBSTANDARD AREAS.

FOR 1975 THE HOUSING ASSISTANCE PLAN FOR CLINTON COUNTY WILL CONCENTRATE ON ELDERLY HOUSING. APPROXIMATELY 65% OF THE SECTION 8 ALLOTMENT WILL BE USED FOR RENT SUBSIDY OF ELDERLY OCCUPIED HOUSING. ABOUT 32% OF THE SECTION 8 ALLOTMENT WILL GO FOR SUBSIDY OF ELDERLY OCCUPIED NEW HOUSING. FOR A MORE DETAILED EXPLANATION OF THE RATIONALE AND PRIORITIES USED IN THE HAP REFER TO THE TABLES, PARTICULARLY TABLE III, (PAGE 18) DATA SOURCES AND METHODS.

SUMMARY OF THE HOUSING ASSISTANCE PLAN FOR FRANKFORT

THE CITY OF FRANKFORT'S HOUSING ASSISTANCE PLAN FOR 1975 IDENTIFIES A TOTAL OF 5240 YEAR-ROUND HOUSING UNITS OCCUPIED, WITH 641 BEING SUBSTANDARD, 265 VACANT, 112 OF WHICH ARE SUBSTANDARD. THERE IS A TOTAL OF 5505 OCCUPIED AND VACANT UNITS. UTILIZING DATA PREPARED BY THE CONSULTANT (PART I), IT IS DETERMINED THAT THERE IS APPROXIMATELY 598 UNITS SUITABLE FOR REHABILITATION WITH 532 BEING OCCUPIED AND 66 VACANT.

TABLE II SHOWS 1234 FAMILIES REQUIRING ASSISTANCE, 500 OF WHICH ARE ELDERLY AND HANDICAPPED. FRANKFORT IS RECOGNIZING A NEED FOR THE REHABILITATION OF EXISTING HOUSING FOR LOW INCOME FAMILIES AND THE NEED TO SUPPLY RENT SUBSIDY FOR THE ELDERLY AND HANDICAPPED. THE HAP FOR 1975 CONTEMPLATES THE USE OF SECTION 8 FUNDS FOR RENT SUBSIDY OF ELDERLY OCCUPIED EXISTING HOUSING. THE CITY OF FRANKFORT WILL CONTINUE ITS STUDY OF THE HOUSING SITUATION, EMPHASIZING THE REHABILITATION OF EXISTING HOUSING, TO AVAIL ADEQUATE HOUSING FOR ALL CITY RESIDENTS.

GENERAL LOCATION OF LOWER INCOME HOUSING

EXPLANATION OF SELECTION OF GENERAL LOCATIONS:

1. NEW CONSTRUCTION

FRANKFORT, FOR THE FIRST YEAR, WILL CONCENTRATE ON SUBSIDIZING EXISTING HOUSING.

2. REHABILITATION

FRANKFORT DOES NOT INTEND TO IMPLEMENT A MAJOR REHABILITATION PROGRAM FOR 1975. AFTER THE COMPLETION OF THE COMPREHENSIVE DEVELOPMENT PLAN, THE CITY PLANS TO STUDY THE POSSIBILITY OF INITIATING A REHABILITATION PROGRAM IN THE NEAR FUTURE.

3. THE FOLLOWING MAP I INDICATES THE GENERAL LOCATION OF PROPOSED LOWER INCOME HOUSING IN THE CITY OF FRANKFORT. NINE AREAS ARE DELINEATED AND, IN THE OPINION OF THE CONSULTANT, EACH AREA IS APPROXIMATELY EQUAL TO THE OTHER IN NEIGHBORHOOD FACILITIES AND AMENITIES.

THE VARIOUS GENERAL AREAS HAVE NOT BEEN GIVEN A RATING OR RANKING BECAUSE EACH AREA IN FRANKFORT IS ESSENTIALLY SIMILAR TO ALL OTHERS AND PRECISE MEASUREMENTS ARE IMPOSSIBLE. TOO, THERE IS LITTLE DIFFERENCE IN ACCEPTABILITY AS HOUSING SITES IN THE COUNTY (AS DISCUSSED ELSEWHERE).

AS FUTURE HOUSING ASSISTANCE PLANS ARE DEVELOPED, HOWEVER, IT MAY BE DESIRABLE TO REVALUE AND RATE THESE GENERAL AREAS. THIS PROCESS AND APPLICABLE CRITERIA IS DISCUSSED ABOVE UNDER THE HEADING "RATING LOCATIONAL ELEMENTS".

RECOMMENDATIONS

SO THAT THE GOAL OF AN ACCEPTABLE ENVIRONMENTAL AND HOUSING ACCOMMODATIONS THAT HAVE BEEN ACCEPTABLE MINIMUM STANDARDS FOR EVERY CITIZEN, MAY BE OBTAINED, IT IS RECOMMENDED THAT:

- (1) THE COUNTY ESTABLISH A HOUSING AUTHORITY (AS RECENTLY CONSIDERED) TO BE THE LEGAL ENTITY TO CONTRACT FOR HOUSING SUBSIDIES IN THE COUNTY.
- (2) THAT THE CLINTON COUNTY HOUSING AUTHORITY ACT AS AGENT FOR THE FIVE INCORPORATED TOWNS WITHIN THE COUNTY AND THAT THE CITY OF FRANKFORT EXPLORE THIS UNIFIED APPROACH SO THAT DUPLICATION MAY BE AVOIDED.
- (3) IT BE RECOGNIZED THAT THE OUTLOOK FOR HOUSING (AND COMMUNITY DEVELOPMENT) DURING THE NEXT FEW YEARS OF THIS NEW PROGRAM IS FOR UNCERTAINTY, CHANGE, AND COMPETITION AS NEVER BEFORE; THAT BOTH PUBLIC AGENCIES AND PRIVATE DEVELOPERS ARE COMPETING FOR THE LIMITED AMOUNT OF SUBSIDIZED HOUSING; THAT NOT NEARLY ENOUGH MONEY HAS OR PROBABLY WILL BE APPROPRIATED TO MEET THE DEMAND; AND THAT REGULATIONS AND TECHNICALITIES ARE SHIFTING LIKE SAND DUNES, DESPITE GOOD INTENTIONS TO KEEP THE PROGRAM SIMPLE. THESE AND SIMILAR ASPECTS OF HOUSING AND COMMUNITY DEVELOPMENT SHOULD BE KNOWN TO THE ELECTED OFFICIALS AND INTERESTED CITIZENS OF THE CLINTON COUNTY COMMUNITY.

(4) THAT A SYSTEMATIC CODE ENFORCEMENT PROGRAM BE ESTABLISHED FOR ALL GOVERNMENTAL AGENCIES IN CLINTON COUNTY.

THE FOUNDATION FOR DECENT, SAFE, AND SANITARY HOUSING IS THE EXISTENCE OF ADEQUATE CODES AND ORDINANCES EFFICIENTLY ENFORCED. MODERN CODES AND ORDINANCES, ALTHOUGH REPRESENTING MINIMUM STANDARDS PROVIDE A SOUND BASIS FOR NEW CONSTRUCTION. MOST OF THESE CODES ARE NOT RETROACTIVE AND, CONSEQUENTLY, PROVIDE LITTLE HELP WITH THE LARGER NUMBER OF STRUCTURES THAT WERE BUILT WITHOUT CODE ENFORCEMENT. GENERALLY, HEALTH CODES ARE RETROACTIVE AND MORE RECENTLY, MODERN HOUSING CODES HAVE ALSO INCLUDED RETROACTIVITY CLAUSES.

AT PRESENT, NO COUNTY COMMUNITY HAS A HOUSING CODE. SINCE IT IS AN EXTREMELY VALUABLE TOOL IN PROGRAMS FOR THE PREVENTION AND ELIMINATION OF BLIGHT, IT IS STRONGLY RECOMMENDED THAT HOUSING CODES BE ADOPTED AS SOON AS POSSIBLE. FURTHER, IT IS RECOMMENDED THAT ALL OTHER HOUSING-RELATED CODES BE REVIEWED FOR POSSIBLE UPDATING AND PROVISION BE MADE FOR REVIEW AND UPDATING ON A CONTINUING BASIS.

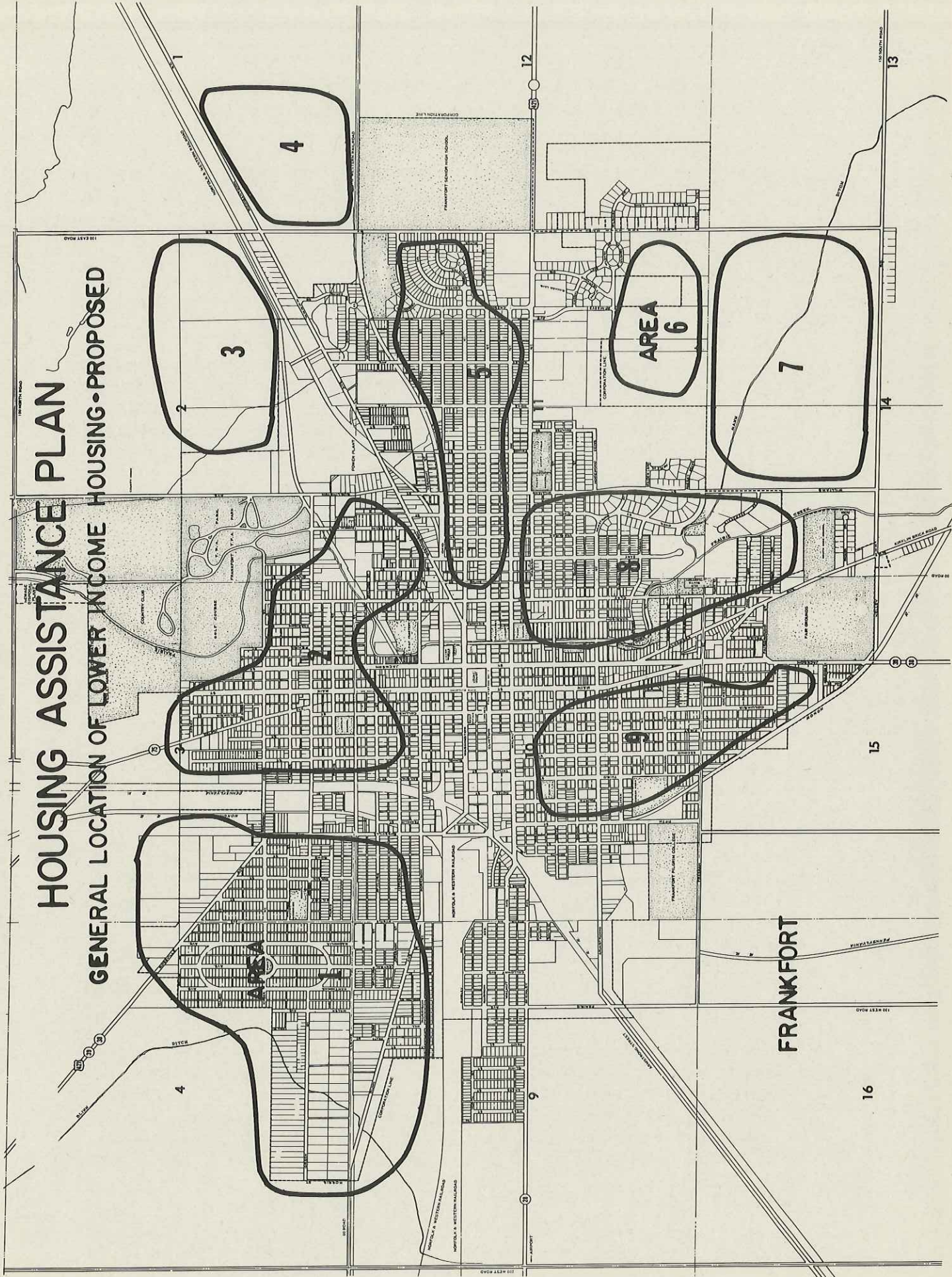
THE EXISTENCE OF ADEQUATE CODES AND ORDINANCES DOES NOT INSURE THEIR VALUE. ADEQUATE ENFORCEMENT IS A NECESSITY. ALTHOUGH NEW STRUCTURES AUTOMATICALLY RECEIVE REVIEW AS TO THEIR CODE CONFORMANCE, CODES THAT HAVE RETROACTIVITY ARE GENERALLY ENFORCED ONLY ON A COMPLAINT BASIS. VERY OFTEN, TENANTS WILL NOT COMPLAIN ABOUT SUBSTANDARD UNITS FOR FEAR THEY MIGHT LOSE LOW-RENT QUARTERS. NEIGHBORS TEND NOT TO BECOME "INVOLVED". THE RESULT IS THAT MANY UNSANITARY AND UNSAFE UNITS REMAIN IN EXISTENCE. CONSEQUENTLY, A SYSTEMATIC CODE ENFORCEMENT PROGRAM IS NECESSARY--A PROGRAM WHICH WILL EXAMINE ALL UNITS IN A COMMUNITY OVER A PERIOD OF TIME.

IN ADDITION TO ADEQUATE CODES, THE SECOND MAJOR COMPONENT OF SYSTEMATIC CODE ENFORCEMENT IS WELL-QUALIFIED CODE ENFORCEMENT PERSONNEL SUFFICIENT TO ADEQUATELY COVER THE AREA ON A REGULAR BASIS AND PERFORM THE NECESSARY FOLLOW-UP WORK. IT IS RECOMMENDED THAT SUFFICIENT STAFF BE HIRED TO PERMIT THE PERIODIC INSPECTION OF ALL STRUCTURES AND THAT A CITIZEN EDUCATION PROGRAM REGARDING CODE ENFORCEMENT BE INITIATED. IT IS FURTHER SUGGESTED THAT INSPECTION SCHEDULES BE SO STRUCTURED AS TO GIVE PRIMARY ATTENTION TO THOSE AREAS WHERE DEFICIENCIES ARE MORE CONCENTRATED ("2" AND "3" AREAS) WHILE ENSURING THAT EVERY HOME IN THE AREA IS INSPECTED ON A REGULAR BASIS. IN THIS WAY, THE DEFICIENCIES THAT EXIST CAN BE GRADUALLY ELIMINATED AND HOMES PRESENTLY IN STANDARD CONDITION WILL BE MORE LIKELY TO CONTINUE TO BE WELL-MAINTAINED.

THE MOST DIFFICULT PROBLEM IN SUCH A PROGRAM IS TO AVOID WORKING UNDUE HARDSHIP ON PROPERTY OWNERS WHOSE BUILDINGS MIGHT NEED EXTENSIVE REPAIR BUT WHO DO NOT HAVE THE RESOURCES TO MAKE THESE IMPROVEMENTS, AND WHO ARE NOT LOCATED IN OFFICIAL RENEWAL PROJECT AREAS AND ARE NOT, THEREFORE, ELIGIBLE FOR SPECIAL LOW-INTEREST, LONG-TERM LOANS. MANY OF THESE ARE PENSIONERS AND, ALTHOUGH BELOW

HOUSING ASSISTANCE PLAN

GENERAL LOCATION OF LOWER INCOME HOUSING-PROPOSED



STANDARD HOUSING IS DEPLORABLE UNDER ALL CIRCUMSTANCES, WITHOUT SPECIAL ASSISTANCE, MANY FAMILIES WOULD HAVE DIFFICULTY IN MEETING MINIMUM CODES.

THE PROBLEMS INVOLVED IN ESTABLISHING A CONTINUING CODE ENFORCEMENT PROGRAM SHOULD DETER NEITHER THE URBAN OR RURAL AREAS FROM DOING SO, BUT SHOULD STIMULATE A SEARCH FOR SOLUTIONS TO PROBLEMS.

PUBLIC UTILITIES PLAN

PUBLIC UTILITIES PLAN

INTRODUCTION

THE PURPOSE OF THE PUBLIC UTILITIES PLAN IS TO DETERMINE THE ADEQUACY AND CONDITION OF EXISTING WATER AND SEWER SYSTEMS AND TO DELINEATE THE AREAS THAT MAY REQUIRE SERVICE WITHIN THE NEXT TWENTY OR MORE YEARS. THE INVENTORY DATA OF PART I OF THIS ARE USED AS THE BASIS FOR ESTIMATING FUTURE SERVICE REQUIREMENTS.

THE CONTINUED GROWTH AND PROSPERITY OF THE URBAN PLACES IN CLINTON COUNTY IS TO A CONSIDERABLE DEGREE DEPENDENT ON THE AVAILABILITY OF A POTABLE SUPPLY OF WATER AND ITS DISTRIBUTION AND COLLECTION SYSTEM TO MEET THE SERVICE NEEDS OF THESE AREAS. WITH THE GRADUAL GROWTH OF FRANKFORT (AND ROSSVILLE, ACCORDING TO A RECENT SPECIAL CENSUS) INTO THE ADJACENT UNINCORPORATED AREAS, EXTENSION OF MAIN LINE LATERALS AND INTERCEPTORS WILL BE A GRADUAL BUT CONTINUING REQUIREMENT.

THIS UTILITIES PLAN SHOULD NOT BE CONFUSED WITH AN ENGINEERING PLAN. THE INFORMATION ON THE LAND NEEDED TO BE SERVED BY SEWER AND WATER, TOGETHER WITH THE INFORMATION CONTAINED IN PART I ARE THE NECESSARY GENERAL INFORMATION WHICH FORMS THE INITIAL REQUIREMENT, A POINT OF BEGINNING FOR ENGINEERING STUDIES.

PLANNING COMMISSIONS PLAY ONLY A SMALL PART IN THE DETAILED TECHNICAL ASPECTS OF SEWER AND WATER SYSTEM ENGINEERING, BUT THEY PLAY AN EXTREMELY IMPORTANT ROLE IN GENERAL POLICY PLANNING BY CONTRIBUTING TO THE CONDUCT OF ANY SEWER AND WATER STUDY BY PROVIDING BASIC INFORMATION TO THE ENGINEER AND BY HELPING TO MAKE UTILITY PLANS USEFUL IMPLEMENTATION DEVICES THAT WILL GUIDE URBAN GROWTH PATTERNS.

WATER UTILITIES PLAN

FRANKFORT:

MAP I PORTRAYS THE EXISTING WATER SYSTEM AND PLAN FOR FRANKFORT. TABLE I OF UTILITIES CHAPTER, PART I - PUBLIC WATER SYSTEMS - 1974, SHOWS AN EXISTING MAXIMUM DEMAND OF 4,250,000 GALLONS PER DAY, AND A TOTAL SUPPLY CAPACITY OF 7,000,000 GALLONS PER DAY SERVING, AT THAT TIME THE CITY AND WESLEY MANOR. WATER SUPPLY, TREATMENT, STORAGE AND DISTRIBUTION APPEAR GENERALLY

ADEQUATE FOR EXISTING AND PROJECTED NEEDS. EXPANSION TO NEWLY DEVELOPED AREAS SHOULD BE MADE WITH NOT LESS THAN SIX INCH MAINS WHERE FEASIBLE.

TOWNS:

MAP 2 SHOWS THE EXISTING SYSTEM AND WATER PLANS OF THE INCORPORATED TOWNS IN THE COUNTY. (MICHIGANTOWN HAS NO WATER UTILITY.) TABLE I (ABOVE) REVEALS TOTAL SUPPLY FOR EACH TOWN TO BE SUBSTANTIALLY IN EXCESS OF TOTAL DEMAND AND THE FORSEEABLE NEED FOR ADDITIONAL FACILITIES IS NOT ANTICIPATED. WITH THE PROBABLE EXCEPTION OF ROSSVILLE, THESE COMMUNITIES ARE NOT EXPECTED TO INCREASE IN POPULATION BUT TO REMAIN ESSENTIALLY STABLE. GROWTH THAT MAY OCCUR, HOWEVER, CAN BE SERVICED BY SMALL EXTENSIONS TO THE ADJACENT AREAS.

SEWER UTILITIES PLAN

FRANKFORT:

MAP 3 PRESENTS THE EXISTING SEWER COLLECTION SYSTEM AND PLAN FOR FRANKFORT. CAPACITY OF THE TREATMENT PLANT IS 3,132,000 GALLONS PER DAY WITH CURRENT DEMAND REPORTEDLY APPROACHING THAT FIGURE. THE EXISTING SYSTEM PLANS ANTICIPATE TREATMENT PLANT EXPANSION AND IMPROVEMENT TO CORRESPOND WITH A GRANT FROM THE ENVIRONMENTAL PROTECTION AGENCY. COSTS (IN 1974 DOLLARS) RANGE BETWEEN \$6.5 MILLION TO \$7.7 MILLION FOR UP-GRADING THE OLD PLANT; \$975,000 FOR POSSIBLE SEWER LINE EXTENSIONS AND \$250,000 FOR ADVANCED TREATMENT FACILITIES.

TOWNS:

MAP 4 PRESENTS THE EXISTING SEWER COLLECTION SYSTEMS FOR THE OTHER INCORPORATED COMMUNITIES IN THE COUNTY. MICHIGANTOWN HAS NO SYSTEM AND THE MAP SHOWING SEWER LINES FOR COLFAX IS REPORTEDLY NOT COMMITTED TO PRINT AND RELATIVE INFORMATION WAS NOT AVAILABLE TO THE CONSULTANTS.

MULBERRY: MULBERRY WASTEWATER TREATMENT PLANT HAS A 160,000 GPD CAPACITY BUT ONLY HALF THE POTENTIAL USERS WERE ON HOOKUP AND THERE IS NO ESTIMATE AS TO WHEN CAPACITY WILL BE REACHED.

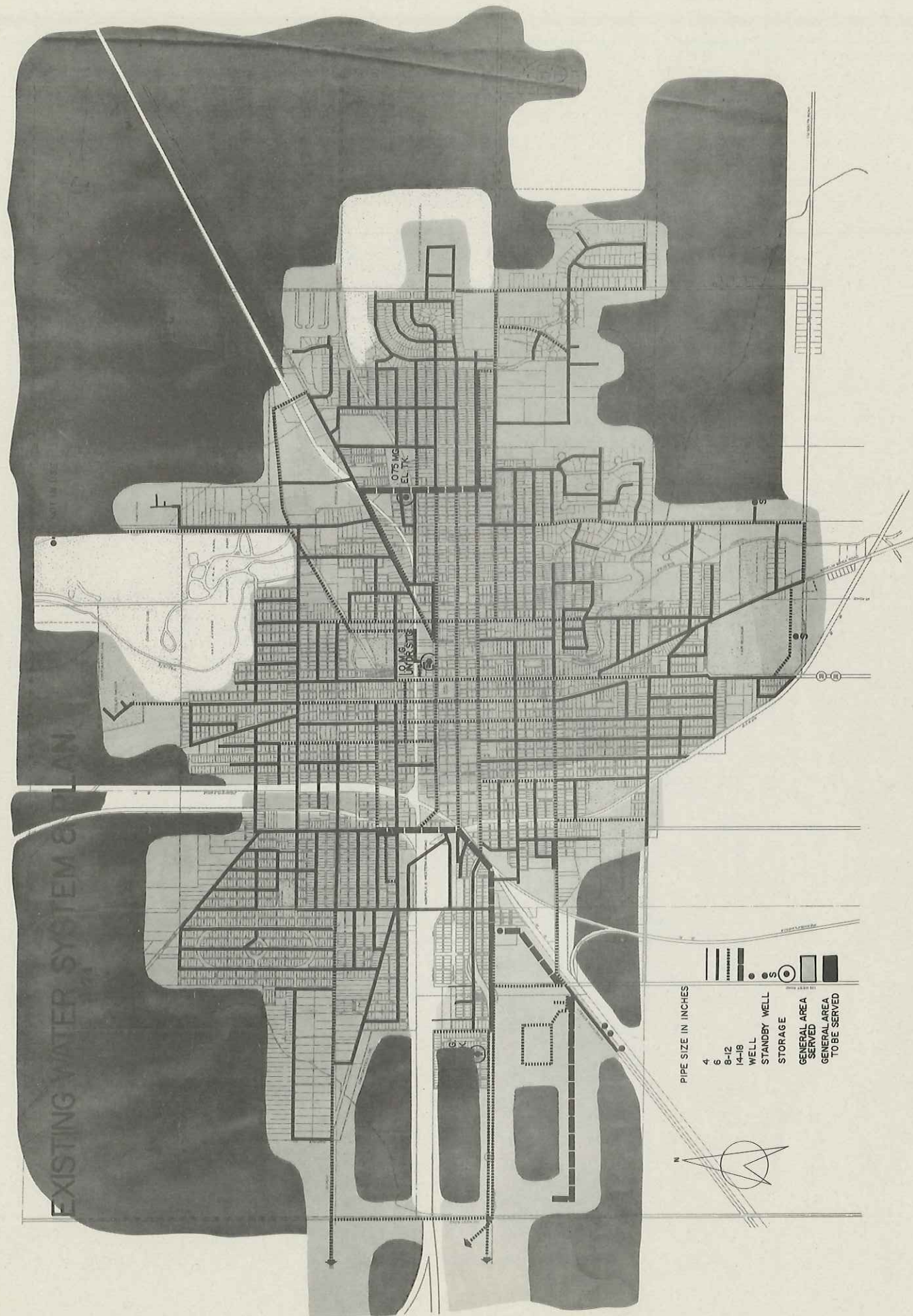
KIRKLIN: THE GPD CAPACITY IS 142,000 WITH CURRENT (1974) DEMAND AT 34,000 GPD AVERAGE.

COLFAX: TREATMENT CAPACITY IS 160,000 GPD WITH DEMAND FIGURES NOT AVAILABLE AS ABOUT ONE HALF THE POTENTIAL USERS HAVE YET TO BE HOOKED INTO THE SYSTEM. DEMAND ESTIMATES ARE 50,000 TO 60,000 GPD ACCORDING TO UTILITY PERSONNEL.

ROSSVILLE:

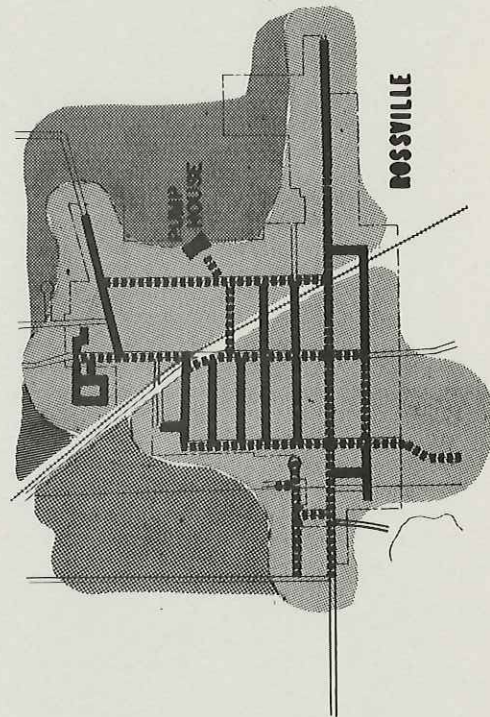
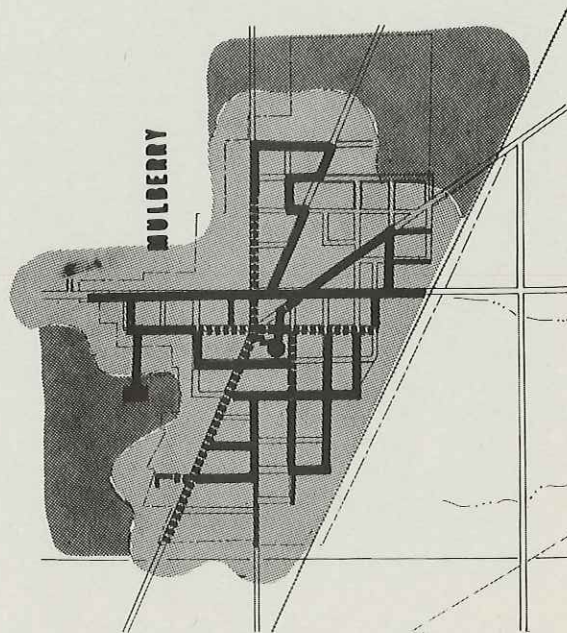
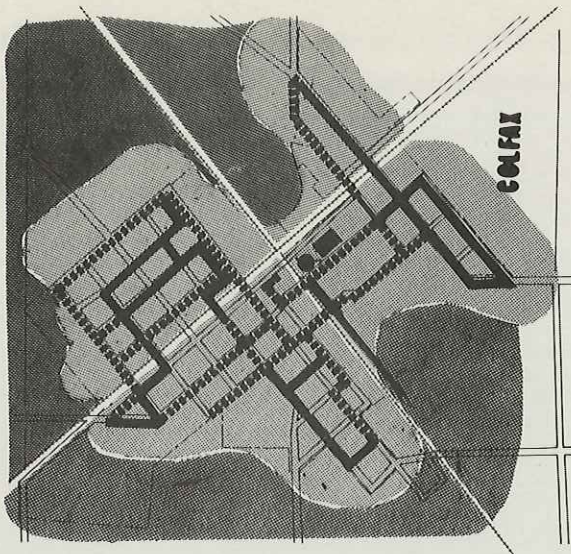
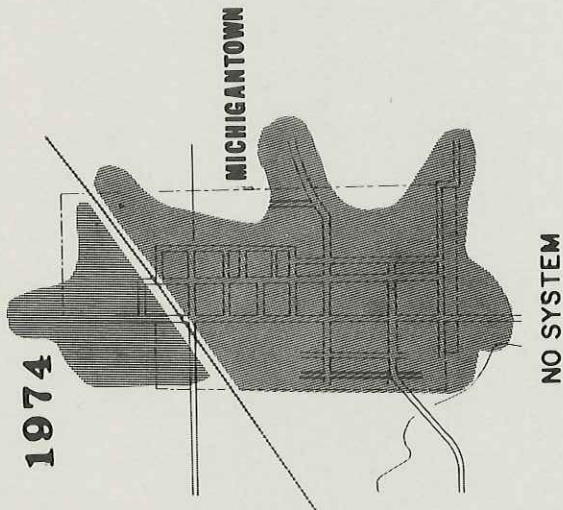
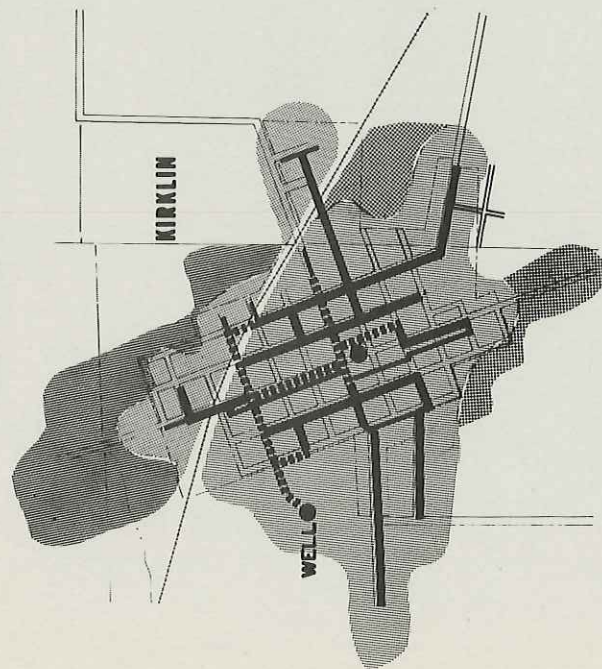
THE ROSSVILLE PLANT IS DESIGNED AT 100,000 CAPACITY; DEMAND IS 74,000 GPD.

EXISTING WATER SYSTEM & PLAN

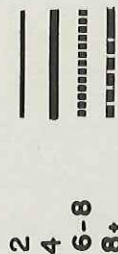


EXISTING WATER SYSTEM & PLAN

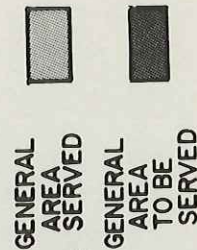
MAP 2



PIPE SIZE IN INCHES

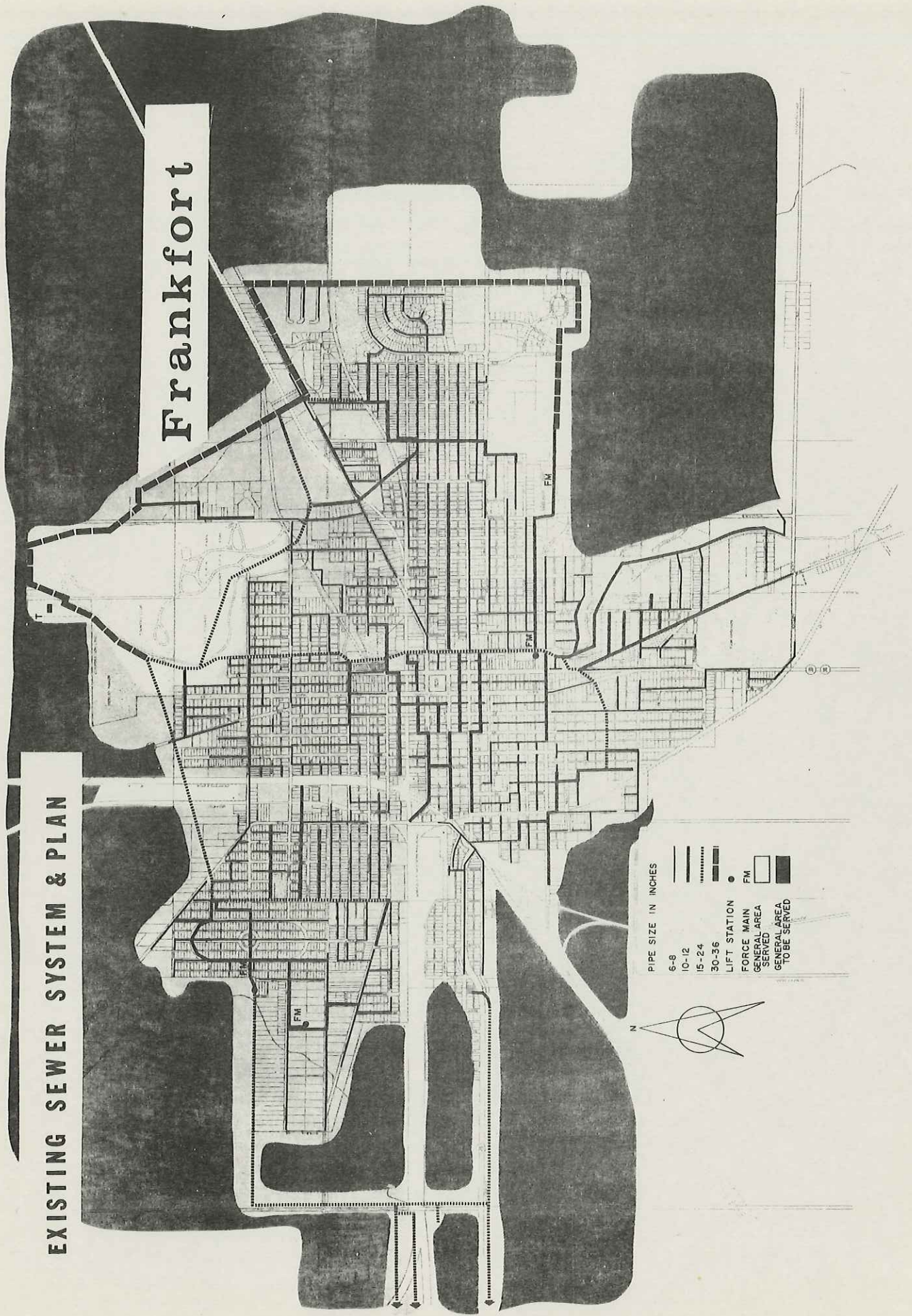


STORAGE
TANK
WELL FIELD &
PUMP HOUSE



EXISTING SEWER SYSTEM & PLAN

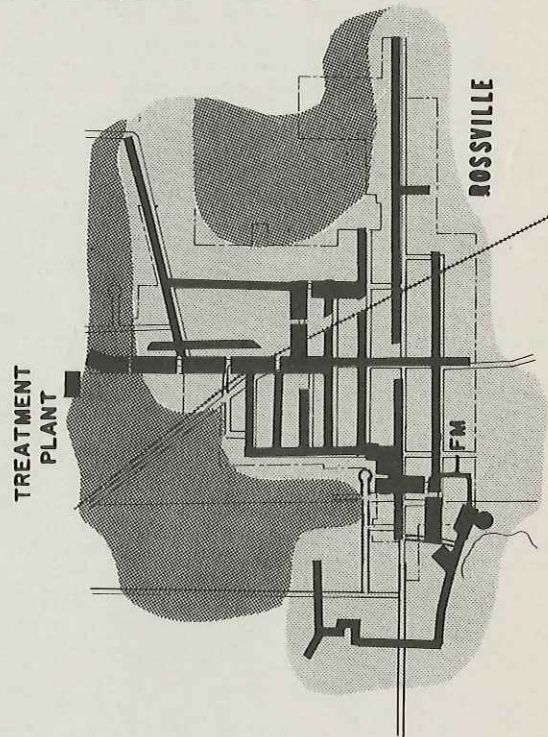
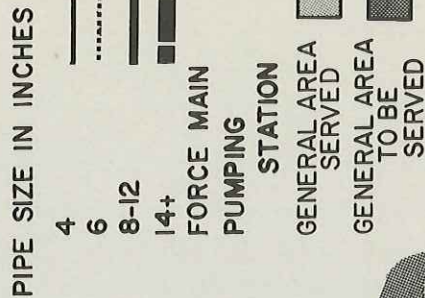
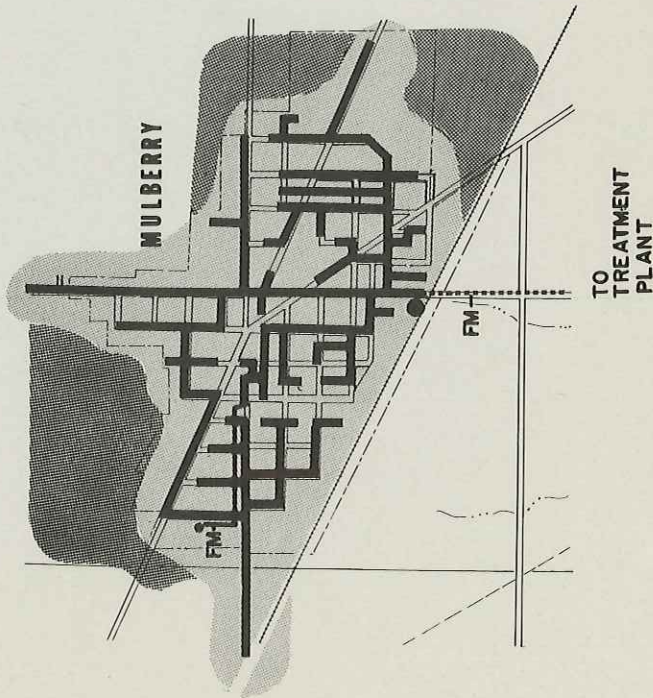
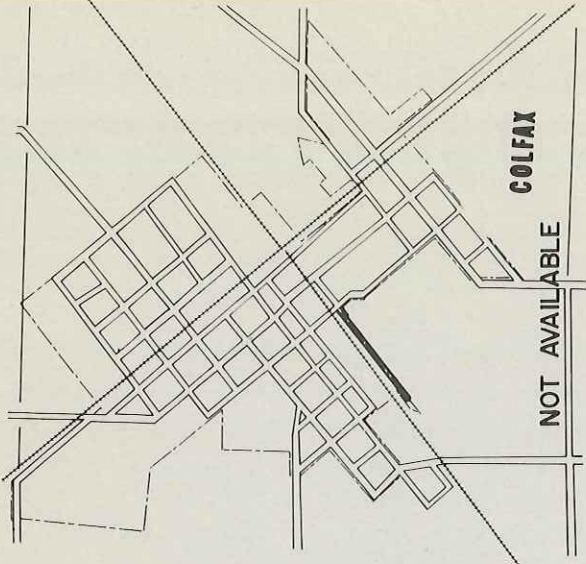
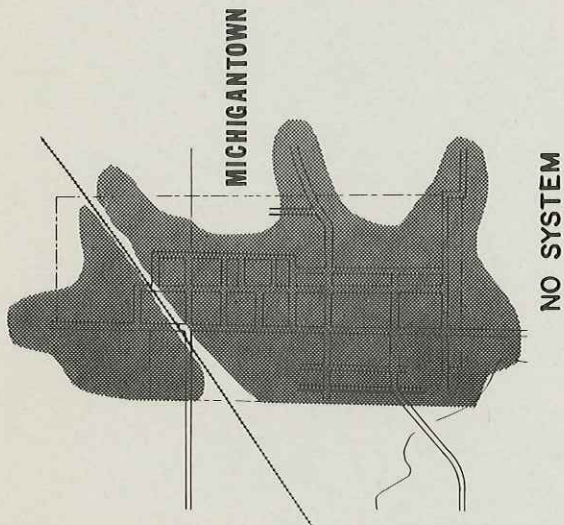
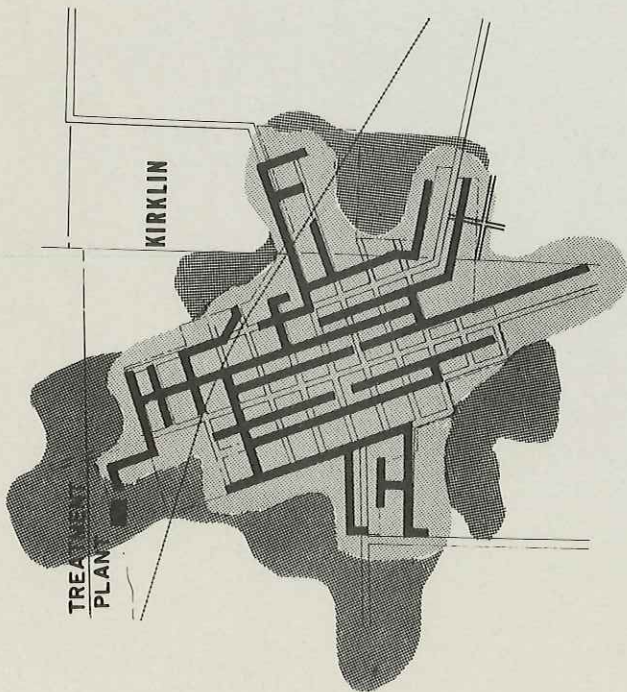
Frankfort



EXISTING SEWER SYSTEM & PLAN

1974

MAP 4



CAPITAL IMPROVEMENTS

CAPITAL IMPROVEMENT PROGRAM

ONE OF THE MOST IMPORTANT ELEMENTS, YET LEAST UNDERSTOOD AND THEREFORE LEAST USED, OF THE VARIOUS IMPLEMENTATION MEASURES WHICH CAN BE USED TO EFFECTUATE THE COMPREHENSIVE PLAN IS THE CAPITAL IMPROVEMENT PROGRAM.

IT IS IMPORTANT BECAUSE, IF PROPERLY USED, IT CAN PROVIDE A MEANS BY WHICH THE PHYSICAL IMPROVEMENT PROPOSALS OF THE PLAN ARE OBTAINED WHEN THEY ARE NEEDED IN KEEPING WITH THE ABILITY TO PAY. ALSO BECAUSE IN THE PROCESS OF PREPARING SUCH A PROGRAM, IT IS NECESSARY TO REVIEW ALL FACETS OF GOVERNMENTAL OPERATION, BOTH IN COST AND IN SCOPE, IN ORDER TO PROJECT FUTURE OPERATING REQUIREMENTS. SECONDARY BENEFITS ACCRUE FROM THE FACT THAT A LONG-RANGE APPROACH TO CAPITAL FINANCING MUST BE ADOPTED AS OPPOSED TO THE USUAL YEAR-TO-YEAR OPERATION.

IN TERMS OF OVERALL FINANCIAL MANAGEMENT, THE CAPITAL IMPROVEMENT PROGRAM HAS THREE OBJECTIVES: (1) TO REDUCE YEARLY FLUCTUATIONS IN EXPENDITURES; (2) TO MAKE IMPROVEMENTS ACCORDING TO THEIR PRIORITY OF NEED; AND (3) TO MAKE OPTIMUM EXPENDITURES CONSISTENT WITH THE RESOURCES AVAILABLE, NEITHER SPENDING WHEN ECONOMY IS IN ORDER NOR FAILING TO SPEND WHEN IMPROVEMENTS AND SERVICES ARE NECESSARY. IMPROVEMENT PROGRAMMING IS A MEANS OF PLAN EFFECTUATION GUIDING PUBLIC ACTIONS JUST AS ZONING AND OTHER ORDINANCES GUIDE PRIVATE DEVELOPMENT; IN FACT, PUBLIC PROGRAMMING OF SUCH FACILITIES AS SCHOOLS AND UTILITIES CAN ATTRACT, DETER, OR PRESERVE PRIVATE DEVELOPMENT. THE RELATIONSHIP BETWEEN PUBLIC IMPROVEMENTS, PHYSICAL DEVELOPMENT AND PLANNING IS SO CLOSELY ALLIED THAT LOCAL PLANNING AGENCIES ARE OFTEN MADE RESPONSIBLE FOR THE PREPARATION AND MAINTENANCE OF THE PROGRAM. WHEN THIS RESPONSIBILITY IS PLACED ELSEWHERE, THE PLANNING AGENCY CUSTOMARILY REVIEWS THE PROGRAM.

THE LONG-TERM FINANCIAL PLAN

IN REALITY, THE CAPITAL IMPROVEMENT PROGRAM IS BUT ONE OF FOUR INTERRELATED ELEMENTS WHICH CONSTITUTE A COMPREHENSIVE LONG-TERM FINANCIAL PLAN, USUALLY ENCOMPASSING A TWENTY TO TWENTY-FIVE YEAR PERIOD. THE FOUR ELEMENTS WITH A BRIEF DESCRIPTION OF EACH FOLLOWS:

PUBLIC SERVICE PROGRAM:

A LONG-RANGE PLAN FOR ALL PUBLIC SERVICES TO THE DEVELOPED AREAS, REPRESENTING A PROJECTION OF THE ANNUAL OPERATING BUDGET.

CAPITAL IMPROVEMENT PROGRAM:

A COMPREHENSIVE LIST OF PROJECTS AND FACILITIES TO BE PROVIDED IN CARRYING OUT THE PUBLIC SERVICES PROGRAM. THE CAPITAL IMPROVEMENT PROGRAM IS CLOSELY RELATED TO THE PUBLIC SERVICES PROGRAM AND BOTH ARE BASED UPON THE COMPREHENSIVE PLAN.

LONG-TERM REVENUE PROGRAM:

A POLICY WHICH BALANCES CURRENT REVENUES, RESERVE (CUMMULATIVE) FUNDS, AND VARIOUS MEANS OF BORROWING IN ORDER TO FINANCE THE PUBLIC SERVICES PROGRAM.

THE OPERATING BUDGET:

THE ANNUAL PROJECTION OF REVENUES AND EXPENDITURES FOR THE REGULAR AND RECURRING OPERATIONS. IT IS THE PRIMARY INSTRUMENT OF FINANCIAL PLANNING AND CONTROL.

THERE ARE THREE TIME INTERVALS IN THE FINANCIAL PLAN. THE FIRST INTERVAL IS THE ANNUAL BUDGET WHICH, ONCE ADOPTED, IS THE ONLY UNCHANGEABLE COMPONENT. THE BUDGET CONSISTS OF OPERATING AND CAPITAL EXPENDITURES AND REVENUES FOR ONE FISCAL YEAR AND IS THE BASIS FOR ANNUAL APPROPRIATIONS.

SECOND, THERE IS THE INTERMEDIATE INTERVAL IN WHICH THE COMPONENTS ARE MORE PROPERLY LABELED PROGRAMS. THE CAPITAL IMPROVEMENT PROGRAM PORTION IS A LIST OF IMPROVEMENTS WITH COST ESTIMATES AND PRIORITY RATINGS BY YEAR. THIS LIST IS REVIEWED ANNUALLY AND REVISED WHERE NECESSARY; ONE YEAR'S PROGRAM PASSES INTO THE NEW ANNUAL BUDGET AND A NEW YEAR'S PROGRAM IS ADDED FROM THE LONG-RANGE COMPONENT.

PROJECTS AT THIS LEVEL ARE NECESSARILY RELATED TO THE GENERAL SERVICES PROGRAM (A NEW SCHOOL, FOR EXAMPLE, IS MERELY THE SHELL IN WHICH SERVICES ARE PROVIDED) AND TO THE REVENUE PROGRAM (A NEW SCHOOL WILL REQUIRE TEACHERS, CREATING ADDITIONAL OPERATING EXPENSE AND LIMITING THE MONEY AVAILABLE FOR OTHER CAPITAL EXPENDITURES, BUT IT ALSO WILL BRING IN SCHOOL AID MONEY).

FINALLY, THERE ARE THE LONG-RANGE ELEMENTS OF THE FINANCIAL PLAN, THE SERVICES AND CAPITAL PROGRAMS WHICH PROJECT FROM THE INTERMEDIATE PROGRAMS. THESE ARE THE 20 TO 25 YEAR ESTIMATES OF DEPARTMENTAL NEEDS AND LONG-RANGE PROJECTS FROM THE COMPREHENSIVE PLAN. NATURALLY, COST ESTIMATES, PERSONNEL NEEDS, AND, IN THE CASE OF CAPITAL ITEMS, PROJECT PLANS ARE KEPT ON A VERY GENERAL LEVEL. EACH YEAR, THESE ARE REVIEWED AND REVISED, AND ITEMS TRANSFERRED TO THE INTERMEDIATE PROGRAMS.

THE PUBLIC SERVICES PROGRAM, IN EFFECT, IS A LONG-RANGE DETERMINATION OF THE NATURE AND EXTENT OF SERVICES WHICH WILL BE PROVIDED, WHILE THE CAPITAL IMPROVEMENT PROGRAM LISTS THOSE PHYSICAL ELEMENTS OF THE PUBLIC SERVICE PROGRAM. THE REVENUE PROGRAM BALANCES EXPECTED REVENUES BETWEEN OPERATING REQUIREMENTS AND CAPITAL REQUIREMENTS ACCORDING TO NEED AND FUNDS AVAILABLE. THE SIX-YEAR CAPITAL BUDGET REDUCES THE CAPITAL IMPROVEMENT PROGRAM TO A SHORTER, WORKABLE TIME PERIOD AND THE ANNUAL OPERATING BUDGET ACTUALLY PLACES THE PROGRAM INTO EFFECT YEAR-BY-YEAR. THROUGH THIS PROCESS, FUTURE REQUIREMENTS ARE ANTICIPATED AND EXPENDITURES CAN BE BALANCED BETWEEN OPERATING AND CAPITAL REQUIREMENTS AS NEEDED.

PROCEDURES

THE CAPITAL IMPROVEMENTS PROGRAM, WITH WHICH THIS ANALYSIS IS MAINLY CONCERNED, CONSISTS OF (1) A LISTING OF ALL CAPITAL PROJECTS FOUND IN THE COMPREHENSIVE PLAN, (2) THOSE PROJECTS NOT NORMALLY FOUND IN THE PLAN BUT ORIGINATING FROM MUNICIPAL OPERATING DEPARTMENTS, (3) AN ESTIMATE OF THE APPROXIMATE COSTS, WHERE KNOWN, AND (4) A SUGGESTED ORDER FOR PROVISION BASED UPON PRIORITY. A CAPITAL PROJECT IS DEFINED AS ANY FACILITY WHICH IS RELATIVELY EXPENSIVE AND/OR OF RELATIVE LONG LIFE. REAL ESTATE, BUILDINGS, AND MAJOR PIECES OF OPERATING EQUIPMENT USUALLY FALL INTO THIS CATEGORY.

PROJECT PRIORITY USUALLY IS BASED UPON THE FOLLOWING CRITERIA IN ORDER OF RELATIVE IMPORTANCE:

1. PROTECTION OF LIFE
2. MAINTENANCE OF PUBLIC HEALTH
3. PROTECTION OF PROPERTY
4. MAINTENANCE OF EXISTING FACILITIES
5. PROVISION OF PUBLIC SERVICES
6. REDUCTION IN OPERATING COSTS

WHEN THE FIRST YEAR OF THE SIX-YEAR CAPITAL BUDGET IS INCORPORATED INTO THE ANNUAL OPERATING BUDGET, ANOTHER YEAR IS ADDED SO THAT AT ANY GIVEN TIME THERE IS A SIX-YEAR PLAN IN EFFECT. AS THE CAPITAL BUDGET IS EXAMINED ANNUALLY, ALL PROJECTS CAN BE REEVALUATED IN TERMS OF CURRENT CONDITIONS, AND PROJECTS ADDED OR REMOVED AS WARRANTED.

THE ADVANTAGES TO BE GAINED FROM CAPITAL BUDGETING ARE:

IT REQUIRES OPERATING DEPARTMENT HEADS TO LOOK AHEAD AND ANTICIPATE EXPENDITURES BEFORE THE REQUIREMENT CONFRONTS THEM.

IT PROVIDES THE GOVERNING BODY AN OPPORTUNITY TO REVIEW ANNUALLY THE MERITS OF VARIOUS FUTURE PROJECTS WELL BEFORE THEY ARE NEEDED.

IT AVOIDS OVERLAPPING OF PROJECTS, AND PERMITS CO-OPERATION WITH OTHER GOVERNMENTAL UNITS IN COORDINATING PROJECTS.

IT PERMITS STAGING OR PROGRAMMING OF PROJECTS IN LOGICAL SEQUENCE. FOR EXAMPLE, PLANS CAN BE DRAWN IN ONE YEAR, THE SITE ACQUIRED IN THE NEXT, AND ACTUAL CONSTRUCTION IN THE THIRD; ALSO, SITES MAY BE ACQUIRED WELL AHEAD OF NEED THUS REDUCING LAND COSTS BECAUSE OF DEVELOPMENT.

IT PROVIDES A DEFENSE AGAINST PRESSURE GROUPS FOR SPECIAL PROJECTS.

COMMENT

THE FOREGOING HAS PRESENTED AN ACADEMIC DESCRIPTION OF GENERALLY ACCEPTED PRINCIPLES INVOLVED IN LONG-TERM FINANCIAL PLANNING, AND HAS PLACED THE CAPITAL IMPROVEMENT PROGRAM INTO PERSPECTIVE BY SHOWING THE RELATIONSHIP BETWEEN THE IMPROVEMENT PROGRAM AND THE FINANCIAL PLAN. THESE PRINCIPLES GENERALLY WOULD APPLY TO ANY SIZE GOVERNMENTAL UNIT LOCATED IN ANY STATE; HOWEVER, THEY MUST BE MODIFIED AND TAILORED TO FIT ENABLING LEGISLATION OF INDIVIDUAL STATES AND FISCAL PRACTICES OF INDIVIDUAL AREAS. THE AMOUNT OF DETAIL REQUIRED FOR THE SUBSTANTIVE PORTION OF THE PLAN IS ALSO RELATED TO THESE FACTORS AND TO THE COMPLEXITY AND SCOPE OF SERVICES AND FACILITIES PROVIDED.

BECAUSE THE FOUR-YEAR ELECTED TERM OF OFFICE IS COMMON THROUGHOUT THE COUNTRY, AUTHORITIES IN THE FIELD OF IMPROVEMENTS PROGRAMMING RECOMMEND SIX-YEAR PROGRAMS IN ORDER TO DISCOURAGE THEIR BECOMING INVOLVED IN PARTISAN POLITICS (THIS IS NOT TO SAY THE IMPROVEMENTS PROGRAMMING SHOULD BE ENTIRELY DIVORCED FROM POLITICS). AND, BECAUSE PLAN COMMISSIONS GENERALLY ARE NON-PARTISAN, AND MEMBERS' TERMS ARE STAGGERED, THEY USUALLY ARE GIVEN THE RESPONSIBILITY FOR PREPARATION AND MAINTENANCE OF THE CAPITAL IMPROVEMENTS PROGRAM TO INSURE CONTINUITY. WHEN THE PLAN COMMISSION IS GIVEN THIS RESPONSIBILITY AND WHEN IMPROVEMENTS PROGRAMMING IS ACCEPTED, THE FOUR-YEAR OBSTACLE IS OVERCOME.

ANOTHER PROBLEM ENCOUNTERED IN RELATING THE MUNICIPAL ACCOUNTING SYSTEM (AS PRESCRIBED BY STATE STATUTES) TO THE MODEL LONG-TERM FINANCIAL PLAN IS FOUND IN THE INDIANA SYSTEM ITSELF. THIS SYSTEM FOCUSES ATTENTION TO INDIVIDUAL ACCOUNTS, CALLED "FUNDS," RATHER THAN TO FUNCTIONAL CATEGORIES OF EXPENDITURES. WITHIN THE FUNDS, FUNCTIONAL CATEGORIES ARE ESTABLISHED; HOWEVER,

THERE IS NO CLEAR-CUT DISTINCTION BETWEEN OPERATION/MAINTENANCE EXPENDITURES AND CAPITAL EXPENDITURES WHEN VIEWING THE TOTAL BUDGET, THUS THE TERM "CAPITAL IMPROVEMENT PROGRAM" LEADS TO CONFUSION.

THE APPROACH TAKEN BY THE MODEL SYSTEM FOR LONG-RANGE PLANNING PURPOSES IS TO VIEW GOVERNMENTAL OPERATION BY TWO BOARD TYPES OF ACTIVITIES, THOSE WHICH FALL INTO OPERATION AND MAINTENANCE AND THOSE WHICH PROVIDE NEW FACILITIES. EXPENDITURES FOR OPERATION AND MAINTENANCE OCCUR ANNUALLY AND ARE RELATIVELY FIXED BY THE SCOPE AND LEVEL OF SERVICES PROVIDED; THE ONLY WAY TO REDUCE THESE COSTS IS TO REDUCE THE LEVEL OF SERVICE. EXPENDITURES FOR CAPITAL ITEMS, ON THE OTHER HAND, ARE A ONE-TIME COST, AND THE BENEFITS RECEIVED FROM THE EXPENDITURES ARE SPREAD OVER A RELATIVELY LONG TIME SPAN. ONCE THIS DISTINCTION IS MADE CLEAR, CAPITAL BUDGETING BECOMES EASIER.

MUNICIPAL DEBT

INDIANA STATUTE PERMITS MUNICIPALITIES AND COUNTIES TO BORROW FROM A VARIETY OF PURPOSES WITH CERTAIN RESTRICTIONS AS TO PURPOSE, RATE OF INTEREST, AND LENGTH OF INDEBTEDNESS. THE FOUR MOST COMMON MEANS ARE:

GENERAL OBLIGATION BONDS

GENERAL OBLIGATION BONDS MAY BE ISSUED FOR A VARIETY OF PURPOSES WITH STREET PURPOSES BEING A NOTABLE EXCEPTION. THEY ARE RETIRED FROM A PROPERTY TAX LEVY, AND THE AMOUNT WHICH MAY BE ISSUED IS LIMITED TO TWO PERCENT OF ASSESSED VALUATION.

REVENUE BONDS

THESE BONDS, AS THEIR NAME IMPLIES, ARE ISSUED ON THE BASIS OF AND ARE RETIRED FROM PROJECTS WHICH PRODUCE REVENUE. MOST COMMONLY, REVENUE BONDS ARE USED TO FINANCE UTILITY CONSTRUCTION AND EXPANSION; HOWEVER, THEIR USE IS NOT LIMITED TO UTILITY PURPOSES. THEY MAY BE ISSUED TO ANY AMOUNT BUT THEIR SALE AND INTEREST RATES ARE AFFECTED BY THE CONDITION OF THE COMMERCIAL BOND MARKET.

BARRETT LAW BONDS

A FORM OF SPECIAL ASSESSMENT BONDS, THEY ARE USED TO FINANCE PROJECTS BENEFITING A LIMITED NUMBER OF PROPERTIES (STREET AND LOCAL SEWER PROJECTS, USUALLY), AND ARE RETIRED FROM ASSESSMENTS TO THE AFFECTED PROPERTIES. A RECENT STATE LAW ENABLING MUNICIPALITIES TO ESTABLISH A PUBLIC IMPROVEMENT REVOLVING FUND IS USED BY SOME CITIES IN LIEU OF BARRETT LAW PROCEDURES.

TEMPORARY LOANS

ALSO CALLED TIME WARRANTS, TEMPORARY LOANS ARE USED USUALLY TO FINANCE GOVERNMENTAL OPERATION IN ANTICIPATION OF PROPERTY TAX COLLECTIONS.

FINANCING IN GENERAL - REVENUE SHARING

THE FINANCING OR REVENUE SOURCES OF STATE AND LOCAL GOVERNMENT HAS UNDERGONE A RELATIVELY SUBSTANTIAL SERIES OF CHANGES. THE COMPLICATED AND BURDENSOME PROCESS OF PETITIONING THE FEDERAL GOVERNMENT FOR GRANTS AND LOANS FOR VARIOUS PURPOSES HAS AT LEAST IN PART, BEEN REPLACED BY BLOCK GRANTS TO GOVERNMENTAL AGENCIES THROUGH THE REVENUE SHARING PROGRAM.

THE PROGRAM HAS TWO CATEGORIES: GENERAL REVENUE SHARING AND SPECIAL REVENUE SHARING.

THE SPECIAL CATEGORY PROVIDES FUNDS FOR CAPITAL IMPROVEMENTS, URBAN RENEWAL, OPEN SPACE, AND SIMILAR PROGRAMS. THIS IS THE HOUSING AND COMMUNITY DEVELOPMENT ACT OF 1974 (SEE DISCUSSION IN HOUSING PLAN CHAPTER.). HOWEVER, THE FEDERAL GOVERNMENT CONTRIBUTES 100 PERCENT OF THE COST OF VARIOUS PROGRAMS UNDER SPECIAL REVENUE.

IN THE PRECEDING FOUR YEARS, THE FEDERAL GOVERNMENT HAS EXPERIMENTED SUCCESSFULLY WITH "ANNUAL ARRANGEMENT CONTRACTS" AS A PRELUDE TO REVENUE SHARING.

IN GENERAL, THE PROCEDURE IS THAT MAYORS, THE BOARD OF COUNTY COMMISSIONERS, OR TOWN BOARDS, WILL MEET WITH REPRESENTATIVES OF THE AREA OFFICE (INDIANAPOLIS) OF THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (DHUD), DISCUSS THE VARIOUS PROJECTS OF MOST BENEFIT TO THE GOVERNMENTAL AGENCY, AND NEGOTIATE A ONE-YEAR FINANCING CONTRACT. PRIOR TO THIS, HOWEVER, THE LOCAL GOVERNMENT MUST HAVE COMPLETED A COMPREHENSIVE DEVELOPMENT PLAN AND A CAPITAL IMPROVEMENT PLAN WITH RECOMMENDED PRIORITIES. CONTRACTS ARE, OF COURSE, RENEWABLE FROM YEAR TO YEAR. WE MUST CAUTION, HOWEVER, THAT CONGRESSIONAL ACTION AND CERTAIN POLICY DECISIONS ARE BEING AND WILL CONTINUE TO BE FORMULATED, AND IT WILL CONTINUE TO BE A REQUIREMENT THAT LOCAL ADMINISTRATORS BE INFORMED THROUGH THE FEDERAL REGISTRAR AND PROFESSIONAL ASSOCIATIONS.

FUTURE DEBT LIMITS

AS ASSESSED VALUES CHANGE, THE PERMITTED BONDED DEBTS CORRESPONDINGLY CHANGE. GENERALLY, TOTAL ASSESSED VALUE TENDS TO INCREASE GRADUALLY, AS VALUE ADDED BY NEW CONSTRUCTION GRADUALLY INCREASES. AS WITH MOST STATISTICAL PROJECTIONS, THE VALIDITY IS DIRECTLY RELATED TO THE SIZE OF THE BASE. CONVERSELY, THE RELIABILITY AND ACCURACY OF THE PROJECTIONS INCREASES AS THE SIZE OF THE BASE INCREASES. IN LARGE GEOGRAPHICAL OR DEMOGRAPHIC AREAS, SUBSTANTIAL DEVELOPMENTS ARE ABSORBED WITHIN THE NORMAL DEVELOPMENT PATTERNS WITHOUT APPRECIABLE IMPACT ON OVERALL TRENDS. IN SMALLER AREAS, A SINGLE DEVELOPMENT MAY HAVE A SUBSTANTIAL EFFECT ON THE RELATIVELY SMALL BASE.

IT IS EVIDENT FROM AN EXAMINATION OF TABLE 1 THAT NO CONSISTENT PATTERN HAS EXISTED IN ASSESSED VALUES IN THE COUNTY. GENERALLY, EACH MUNICIPAL AND SCHOOL CORPORATION AND THE TOTAL COUNTY REFLECTS A RELATIVELY STABLE VALUATION IN THE PRECEDING SIX YEARS.

AN INCREASE OR DECREASE IN ASSESSED VALUES DOES NOT NECESSARILY REFLECT OR IMPLY A CORRESPONDING VARIATION IN TAX REVENUES. THE AMOUNT OF FUNDS AVAILABLE TO LOCAL GOVERNMENTS THROUGH PROPERTY TAXES IS A PRODUCT OF THE ANNUALLY ESTABLISHED TAX RATE (A VARIABLE) AS APPLIED TO THE TOTAL ASSESSED VALUE (ALSO A VARIABLE). THE GENERAL OBLIGATION DEBT LIMIT, ON THE OTHER HAND, IS DETERMINED SOLELY ON THE BASIS OF THE TOTAL ASSESSED VALUE OF PROPERTY.

ALTHOUGH IT IS IMPROBABLE TO PROJECT ASSESSED VALUES WITH ASSURANCE, IT IS REASONABLE TO ASSUME THAT OVER THE LONG RUN TOTAL VALUES WILL RISE AS A RESULT OF INFLATION, INCREASES IN NON-RESIDENTIAL CONSTRUCTION, AND, TO MAINTAIN A RATIO IN ASSESSED VALUES, BEING ONE-THIRD THE "CURRENT" MARKET VALUE IN REFLECTING LONG TERM INFLATIONARY TRENDS. THE EXACT AMOUNT THAT BECOMES AVAILABLE IS RELATIVELY UNIMPORTANT SINCE INDIANA COMMUNITIES AND PREDOMINANTLY RURAL COUNTIES TRADITIONALLY PREFER A PAY-AS-YOU-GO METHOD AS CONTRASTED TO INTEREST DRAWING GENERAL OBLIGATION BONDS FOR FINANCING PROJECTS WHICH ARE NOT SELF-SUPPORTIVE. THE GENERAL BONDING CAPACITY OF SUCH AREAS CONSTITUTE A RESERVE FUNDING SOURCE SHOULD THE NEED ARISE FOR EARLY OR EMERGENCY FINANCING.

THE CAPITAL IMPROVEMENT PROGRAM

THERE ARE SEVERAL FACTORS AFFECTING THE COMPILATION OF CAPITAL IMPROVEMENT PROJECTS FOR THE TOWNS AND THE COUNTY. PRIMARY CONSIDERATIONS WHICH INFLUENCE THE DETAIL AND RELIABILITY OF SUCH A COMPILATION ARE:

INDIANA COMMUNITIES THE SIZE OF FRANKFORT AND RURAL

COUNTIES IN GENERAL DO NOT HAVE MAJOR PUBLIC IMPROVEMENTS IN SUFFICIENT NUMBERS TO REQUIRE ELABORATE LONG-TERM FINANCIAL PLANNING.

BECAUSE OF THE LIMITED FUNDS AVAILABLE BEYOND OPERATING COSTS, EVEN MODEST IMPROVEMENTS ASSUME MAJOR SIGNIFICANCE WHEN ABSORBED IN A RELATIVELY SMALL BUDGET.

EXCEPT FOR UTILITY EXPANSION (REVENUE BONDS), THERE HAS BEEN LITTLE HISTORY OF EXTENDED IMPROVEMENT FINANCING.

EXPENDITURES

DEFINITIVE FIGURES FOR TOTAL ANNUAL EXPENDITURES FROM THE APPROPRIATIONS AND RECEIPTS LISTED IN THE TABLE ABOVE WERE NOT AVAILABLE FROM THE SUBJECT LOCAL GOVERNMENTS IN FINAL FORM. TO ARRIVE AT EXPENDITURES, AN ITEM BY ITEM COMPILATION WOULD BE REQUIRED, AN EFFORT FAR BEYOND THE CONTRACTURAL REQUIREMENTS OF THIS PROGRAM. CAREFUL DISCUSSIONS WITH EACH INDIVIDUAL REPRESENTATIVE OF LOCAL GOVERNMENT REVEALED WHAT WAS, OF COURSE, TO BE EXPECTED: APPROPRIATIONS AND RECEIPTS ESSENTIALLY EQUALED EXPENDITURES. THERE WERE NO DEVIATIONS FROM THIS PRACTICE.

FUTURE FINANCIAL CONDITIONS

THE FOREGOING TABLE REFLECTS, WITH SOME OBVIOUS BUT MINOR EXCEPTIONS, A STEADY RATE OF EXPENDITURE, WITH INCREASED DOLLAR AMOUNTS THE RESULT OF DIMINISHING DOLLAR VALUE. THESE APPROPRIATIONS AND RECEIPTS ARE EXPECTED TO CONTINUE IN AMOUNTS (OF CONSTANT DOLLARS) MUCH AS THE TABLE SHOWS FOR THE LAST FIVE OR SIX YEARS. RECEIPTS FROM FEDERAL REVENUE SHARING, A FIVE YEAR PROGRAM, WITH ESSENTIALLY TWO YEARS REMAINING, MAY BE DISCONTINUED AFTER 1977, REDUCED GRADUALLY, OR KEPT MUCH AT PRESENT LEVELS; THE LATTER, HOWEVER, MAY BE LESS THAN LIKELY WITH THE ADVENT OF THE OMNIBUS HOUSING AND COMMUNITY DEVELOPMENT ACT OF 1974. THIS ACT MAKES SIGNIFICANT SUMS AVAILABLE TO COMMUNITIES FOR THE PURPOSES ENUMERATED IN THE TITLE OF THE ACT--HOUSING AND COMMUNITY DEVELOPMENT.

REVENUE FROM STATE TAX REBATES AND FROM LOCAL PROPERTY TAXES ARE NOT EXPECTED TO CHANGE MUCH IN THE IMMEDIATE FUTURE. POPULATION PROJECTIONS TO 1990 SHOW A SLIGHT DECLINE. FUTURE ASSESSED VALUATIONS ARE, THEREFORE, EXPECTED TO REMAIN SUBSTANTIALLY UNCHANGED. VALUATIONS OF AGRICULTURE LANDS (WHICH SHOULD BE TIED TO RECENT SOIL SURVEYS) MAY BE EXPECTED TO REMAIN STABLE (AGAIN IN 1975 DOLLARS).

THE INCREASE IN TAX RATES FOR ALL LOCAL GOVERNMENT AGENCIES IS EXPECTED TO GENERALLY REFLECT THE DECREASING VALUE OF THE DOLLAR. MOST NEW CAPITAL EXPENDITURE DOLLARS ARE ANTICIPATED TO COME FROM REVENUE SHARING AND COMMUNITY DEVELOPMENT FUNDS.

NET ASSESSED VALUATION (DOLLARS)

TABLE 1

	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	1975 BONDED INDEBTEDNESS LIMIT	OUTSTANDING INDEBTEDNESS	BALANCE AVAILABLE
FRANKFORT	19,889,810	19,797,985	20,014,795	20,595,400	21,970,875	439,418	NONE	439,418
MULBERRY	1,425,235	1,385,040	1,418,960	1,402,110	1,497,320	29,946	NONE	29,946
ROSSVILLE	1,208,920	1,207,525	1,262,800	1,373,050	1,442,010	28,840	1,000	27,840
COLFAX	1,015,580	1,073,340	1,131,835	1,041,650	1,221,390	24,428	NONE	24,428
KIRKLIN	1,012,400	983,560	988,120	995,830	1,069,935	21,399	NONE	21,399
MICHIGANTOWN	568,280	551,590	535,392	562,285	545,680	10,914	NONE	10,914
CLINTON COUNTY	77,049,095	74,989,840	75,792,685	77,543,845	82,349,695	1,646,994	NONE	1,646,994
SCHOOL CORPORATIONS *								
FRANKFORT	32,020,790	30,573,525	30,775,060	31,998,880	34,140,000	682,000	555,000	127,000
CL. CENTRAL	20,215,740	19,768,135	19,922,540	20,016,455	20,939,715	418,794	NONE	418,794
CL. PRAIRIE	18,363,000	18,206,490	18,354,880	18,639,335	19,879,030	377,581	NONE	377,581
**ROSSVILLE	6,449,565	6,441,690	6,740,205	6,889,175	7,390,950	147,819	NONE	147,819
LIBRARIES								
FRANKFORT	32,020,790	30,573,525	30,775,060	31,998,880	34,140,000	682,000	NONE	682,000
COLFAX	4,554,340	4,676,705	4,555,495	4,469,020	4,861,665	97,233	NONE	97,233
KIRKLIN	4,230,470	4,100,330	4,228,000	4,266,350	4,554,450	91,089	NONE	91,089

* ALL FOUR CORPORATIONS HAVE OUTSTANDING INDEBTEDNESS UNDER LEASE RENTAL PAYMENTS.

** DOES NOT INCLUDE CLAY TOWNSHIP IN CARROLL COUNTY.

SOURCE: MARY BETH SUTTON - COUNTY AUDITOR

CAPITAL IMPROVEMENT PROGRAM

CLINTON COUNTY

- *G-1 LANDFILL - COUNTY SUBSIDY FOR 1976. ESTIMATED COST \$75,000.
- G-2 EMS - COUNTY SUBSIDY FOR AMBULANCE SERVICE FOR 1976.
ESTIMATED COST \$150,000.
- G-3 COURT HOUSE RENOVATION - PHASE I, INCLUDING ROOF, NEW COURT-
ROOM, AND GENERAL REPAIR. ESTIMATED COST \$266,000.
- G-4 HOSPITAL IMPROVEMENT - ALL CONSTRUCTION, REMODELING, AND ETC.
ESTIMATED COST ? MILLION. (UNABLE TO DETERMINE AT TIME OF
PUBLICATION.)
- G-5 ADDITIONAL COUNTY OFFICES - REMODELING, FACILITY PURCHASE,
LEASE, NEW CONSTRUCTION, MOVING EXPENSES, ETC. ESTIMATED
COST ? THOUSANDS.
- G-6 COMMUNITY CENTER - REMODELING CLINTON HALL, NEW ADDITIONS,
AND ETC. ESTIMATED COST \$150,000.
- S-1 FIRST KELLY ROAD EXTENSION - LAND AQUISITION FIRST YEAR
AND NEW CONSTRUCTION 2ND YEAR (SR 39, WEST TO Co. Rd. 80
WEST). ESTIMATED COST \$115,000.
- S-2 CLINTON STREET BRIDGE - NEW CONSTRUCTION AND APPROACHES.
ESTIMATED COST \$135,000.
- S-3 SECOND KELLY ROAD EXTENSION - LAND AQUISITION FIRST YEAR
AND NEW CONSTRUCTION 2ND YEAR (Co. Rd. 80 WEST, WEST TO
Co. Rd. 130 WEST). ESTIMATED COST \$173,000.
- S-4 FREEMEN STREET UNDERPASS - LOWERING PAVEMENT AND PROVIDING
PROPER DRAINAGE. ESTIMATED COST \$35,000.
- S-5 COUNTY ROAD 300 WEST EXTENSION - NEW CONSTRUCTION OF
PAVEMENT, RR CROSSING, AND ETC. (Co. Rd. 00, SOUTH TO
SR 28). ESTIMATED COST \$310,000.
- S-6 COUNTY BRIDGES - REPAIR AND REPLACEMENT OF COUNTY BRIDGES
BY ORDER OF PRIORITY. ESTIMATED COST ? THOUSANDS.

*G - GENERAL PROJECTS
S - STREET PROJECTS
PR - PARK AND RECREATION PROJECTS
CR - CONSERVATION AND RECREATION PROJECTS

CAPITAL IMPROVEMENT PROGRAM

FRANKFORT

- G-1 1975 COMMUNITY DEVELOPMENT BLOCK GRANT - SIDEWALKS AND CURBING, PLAYGROUND EQUIPMENT, AND NEW TENNIS (GREEN STREET PARK). GRANT RECEIVED \$66,761.
- S-1 HOKE AVENUE EXTENSION - LAND ACQUISITION, NEW CONSTRUCTION, ETC. (RISSE OFFICE COMPLEX, SOUTH TO MAIDEN LANE).
ESTIMATED COST \$60,000.
- S-2 STATE ROAD #28 EAST PROJECT - LOCAL SHARE OF STATE HIGHWAY IMPROVEMENT PROJECT (HOKE AVE., EAST TO HIGH SCHOOL)
ESTIMATED LOCAL SHARE \$75,000.
- S-3 ROSSVILLE AVENUE TO FIFTH STREET - LAND ACQUISITION FIRST YEAR, LAND ACQUISITION SECOND YEAR, BEGIN CONSTRUCTION THIRD YEAR, AND COMPLETE CONSTRUCTION FOURTH YEAR.
ESTIMATED COST \$585,000.

ROSSVILLE

- S-1 WELKUM LANE SURFACING - ASPHALT SURFACE APPLIED TO PROPOSED ROAD BED. ESTIMATED COST \$8,000.
- S-2 EAST STREET SURFACING - ASPHALT SURFACE APPLIED TO PROPOSED ROAD BED. ESTIMATED COST \$8,000.

MULBERRY

- G-1 AMBULANCE GARAGE - BUILDING TO HOUSE EMS AMBULANCE.
ESTIMATED COST \$20,000.

KIRKLIN

- G-1 TOWN EQUIPMENT GARAGE - CONSTRUCTION NEW POLE BUILDING FOR TOWN EQUIPMENT. ESTIMATED COST \$20,000.

TABLE 2

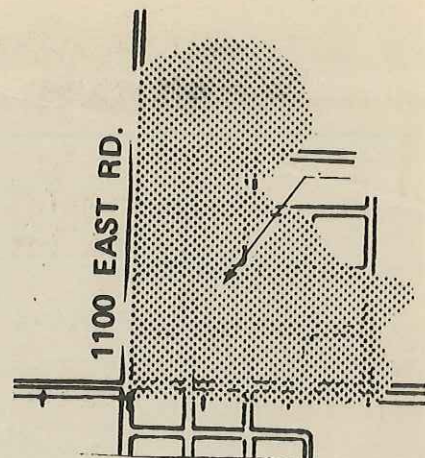
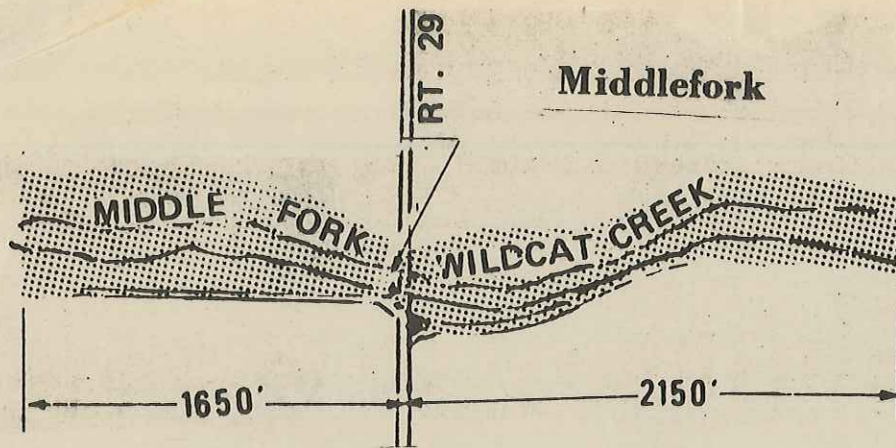
ILLUSTRATIVE SIX YEAR CAPITAL IMPROVEMENT PROGRAM - CLINTON COUNTY PUBLIC AGENCIES

UNIT OF GOVERNMENT	PROJECT IDENTIFICATION	SOURCE OF FUNDING & COST ESTIMATE	1975	1976	1977	1978	1979	1980
G-1 COUNTY	LANDFILL	GF \$ 75,000		75,000	*	?	?	?
G-2 COUNTY	EMERG. MED. SERVICES	GF 150,000		150,000	*	?	?	?
G-3 COUNTY	COURT HSE. RENOVATION	F, GF 266,000	75,000	181,000	*	?	?	?
G-4 COUNTY	HOSPITAL IMPROVEMENT	F, GO, GF, D ? MILLION		*	?	?	?	?
G-5 COUNTY	ADD. COUNTY OFFICES	F, GO, GF ? THOUS.			?	?	?	?
G-6 COUNTY	COMMUNITY CENTER	D, GO, CD 150,000			75,000	15,000	15,000	15,000
S-1 COUNTY	1ST. KELLY RD. EXTEN.	RS, GF 115,000		15,000	100,000			
S-2 COUNTY	CLINTON STREET BRIDGE	F, CBF 135,000		135,000				
S-3 COUNTY	2ND. KELLY RD. EXTEN.	RS, GF 173,000				23,000	150,000	35,000
S-4 COUNTY	FREEMAN ST. UNDERPASS	F, RS, GF 35,000						
S-5 COUNTY	300 WEST EXTENSION	F, CD 310,000		310,000				
S-6 COUNTY	COUNTY BRIDGES	CBF, F, RS ? THOUS.		*	*	?	?	?
G-1 FRANKFORT	1975 CD BLOCK GRANT	CD 66,761	66,761					
S-1 FRANKFORT	HOKE AVE. EXTENSION	GRS, GF 60,000		60,000				
S-2 FRANKFORT	SR-28 EAST PROJECT	GRS, GF, CD 75,000			75,000			
S-3 FRANKFORT	ROSSVILLE AVE-5TH ST	F, RS, GF 585,000			35,000	100,000	100,000	350,000
S-1 ROSSVILLE	WELKUM LANE SURFACING	GRS, RS 8,000	8,000					
S-2 ROSSVILLE	EAST STREET SURFACING	GRS, RS 8,000	8,000					
G-1 MULBERRY	AMBULANCE GARAGE	F, GF 20,000		20,000				
G-1 KIRKLIN	TOWN EQUIPMENT GARAGE	GF, GRS 20,000		10,000	10,000			

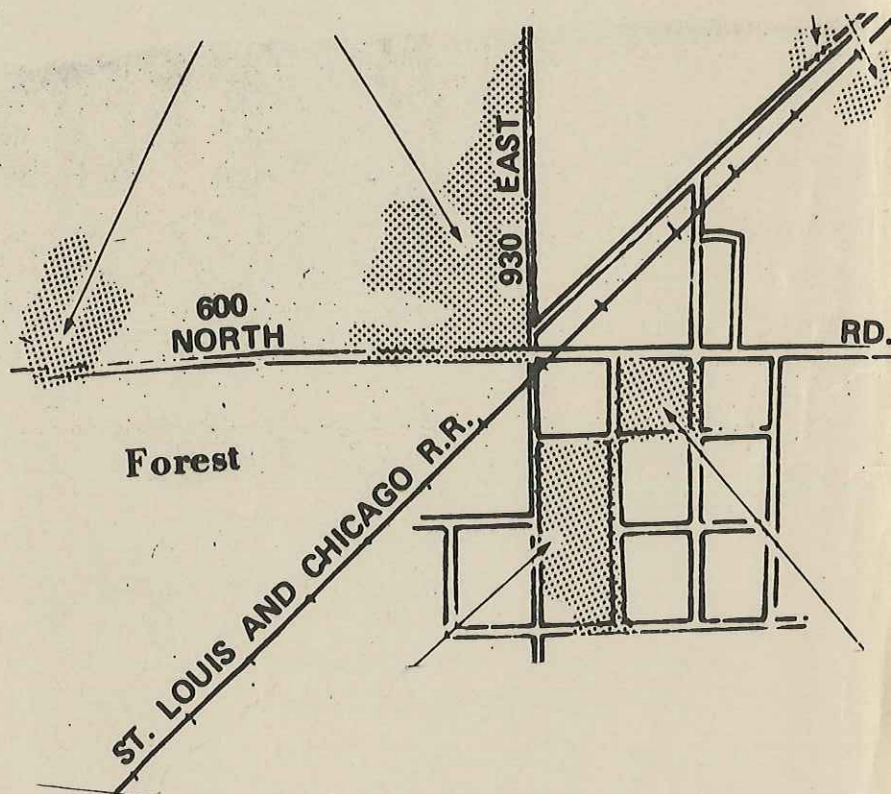
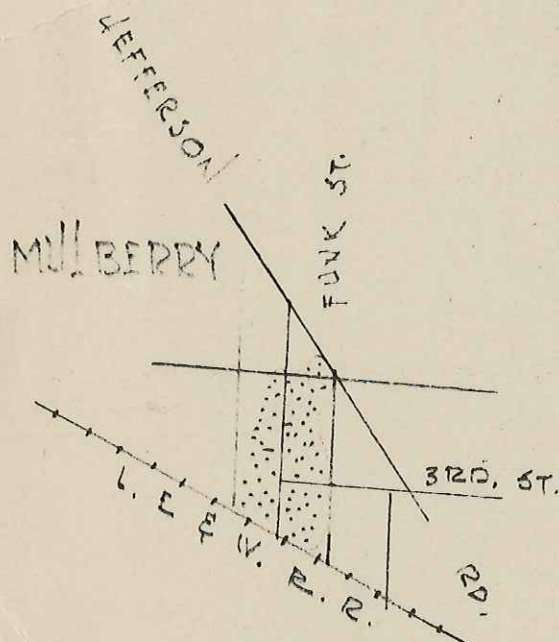
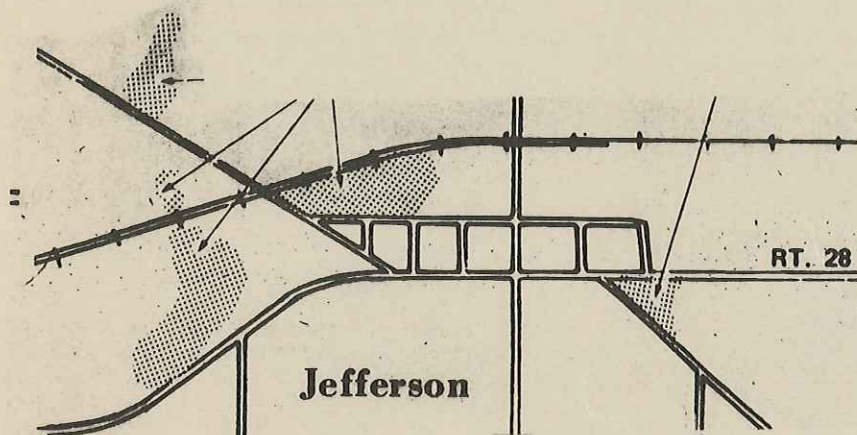
NOTE: REVENUE BOND PROJECTS ARE NOT INCLUDED IN THE CIP AS TAX RATE (TAX MONIES) IS NOT INVOLVED.

G - GENERAL PROJECTS
 S - STREET PROJECTS
 PR- PARK & RECREATION PROJECTS
 CR- CONSERVATION/RECREATION PROJECTS
 E - EDUCATION PROJECTS
 GF - GENERAL FUND (ANNUAL BUDGET)
 GRS - GENERAL REVENUE SHARING
 RS - ROAD & STREET FUNDS
 CD - COMMUNITY DEVELOPMENT FUNDS
 GO - GENERAL OBLIGATION BONDS
 F - FEDERAL AID
 D - PRIVATE DONATION
 CBF - CUMULATIVE BRIDGE FUND

* FOR VARIOUS REASONS THESE PROGRAMS, WHICH ARE NOT FOR THE MOST PART DIRECTLY INTERFACED WITH THE COMPREHENSIVE PLAN, ARE NOT AMENABLE TO EVEN PRELIMINARY COSTS ESTIMATES AT THIS TIME. EVERY EFFORT WAS MADE TO DO SO BUT POLITICAL DISCRETION SUGGESTED EVEN A ROUGH COST FIGURE BE OMITTED IN THIS FIRST ANNUAL PROGRAM.



Scircleville



DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Federal Insurance Administration

CLINTON CO., IN
(UNINC. AREAS)

500 0

APPROXIMATE SCALE
1000 2000

FIA FLOOD HAZARD BOUNDARY MAP
No. H04

Effective Date
DECEMBER 13, 1974

