MONON STUDY

SUPPLEMENTAL APPENDICES

GENERAL ANALYSIS

January 1986
VOLUME # III

MONON
THE HOOSIER LINE

WILLIAM - LYNN - JAMES, INC.

TABLE OF CONTENTS

TABLE OF CONTENTS

APPENDIX NO.	TITLE
I	Visitor Estimation Model
II	Cost Benefit Analysis of Excursion Trains
III	Break Even Analysis Methodology
IV	Capture Rate Estimation Model
V	Market Projection Rate Equations
VI	Colt's Game Attendance Estimation Methodology
VII	Excursion Train Budgets
VIII	Property Rights 22nd Street to Union Station
IX	List of Shippers
X	Historical Maps
XI	Crime Trends
XII	Air Pollution
XIII	Census Tract Data
XIV	Industrial Development Site Data
XV	State Fairgrounds Master Plan
XVI	Ownership Assessment
XVII	SEABOARD SYSTEM MAP

APPENDIX I
VISITOR ESTIMATION MODEL

APPENDIX I Methodology for estimating the visitor population from hotel occupancy data

For each month in a given year, the city wide occupancy rate is available from Laventhol and Horwath's survey. The rate is computed as follows:

$$Om = \frac{\sum_{i=1}^{dm} ROi}{d_m \times TRA}$$

where,

O_m, is the occupancy rate for month m;

RO_i, is the number of rooms occupied on day i;

TRA, is the total number of rooms available;

dm, is the number of days in month m

By definition,

$$(2)\quad ROm = Om \times TRA = \sum_{i=1}^{dm} ROi/dm$$

where,

RO_m, is the mean daily number of rooms occupied in month m.

An estimate of the mean number of visitors per day (Vm) can be obtained from:

$$(3)\quad V_m = RO_m \times PPR$$

where,

PPR, is the average number of persons per room.

We then obtain the total number of room-nights spent in a month (TRM_m) as:

$$(4)\quad TRM_m = V_m \times d_m$$

which can be converted into an estimate of the number of visitors in month m (V_m) as:

$$(5)\quad Vm = \frac{TRMm}{ALS}$$

where,

ALS, is the average length of stay per visitor.

From equations (2) through (5) we see that the inputs necessary to convert Om into Vm are, TRA, PPR, and ALS. The data used to obtain V_m was:

TRA	10.717
PPR	1.35
ALS	2.30

Sources: Monthly reports prepared by Laventhol and Horwath, Certified Public Accountants for the Indianapolis Convention and Visitors Bureau, 1984 and 1985.

APPENDIX II

COST BENEFIT ANALYSIS OF EXCURSION TRAINS

APPENDIX II

Cost-Benefit Analysis

The cost-benefit analysis makes the following assumptions:

a) Indirect benefits should not be considered since estimation of such benefits would be extremely difficult.

b) The planning horizon commences in 1987 and, finishes in 2010. The land and rights-of-way will, it is assumed, be acquired by then, and also all track repairs and replacements of the 10th Street Bridge will have been completed.

c) Rolling stock and locomotives will be acquired and refurbished by 1988. The maximum rolling stock plan is assumed.

d) A start-up cost of $100,000 will be incurred in 1988, arising from miscellaneous expenses. These are treated under 'capital costs' in the succeeding analysis.

e) Both excursions will begin operating in 1988.

f) Debt service charges are excluded.

The salient details of the cost-benefit analysis are presented in Table 1 for the various alternative capture rate assumptions. (The tables are found at the end of this appendix.)

It should be noted that under fairly moderate assumptions, the combined operation is projected to generate an excess of current revenues over current costs. Thus, it seems reasonable to predict a residual from operating revenues which would go towards debt service charges. Further, the benefit-cost ratio could be enhanced in a number of ways.

a) Not purchasing the additional cars implied under the maximum plan;

b) Appropriate pruning of the current costs through, say, voluntary labor for track maintenance, etc.

We would also note that:

a) The revenue projections could be enhanced by applying a higher fare

b) There would undoubtedly be a number of indirect benefits associated with the excursion program such as:

*Multiplier effects due to the stimulation of consumer spending and percolation of wages, etc., through the local economy.

*The synergistic impact of the program on the overall attractiveness of Indianapolis as a convention and tourist center. This potential impact is inherently unmeasureable and was ignored in our market analyses.

Fairtrain and Colts Train Excursions

In this section the impact on the cost-benefit analysis of adding two excursion programs is evaluated. These programs are, the Fairtrain, which ferries passengers from Noblesville to the State Fair and operates only during the two weeks of the State Fair; and a series of 9 excursions from Noblesville to Union Station which could carry patrons of Colts games.

Fairtrain

Costs. The estimated current costs associated with this program are shown in Table 3. No maintenance costs are included as these are assumed under the WRP and restaurant train plans. Capital costs are also not considered for the Fairtrain as the stock serving WRP and the restaurant train is assumed to be available for the Fairtrain.

Revenues. The capture rate and average fare used in projected revenues for Fairtrain were based on past experience in running Fairtrain. The capture rate used was 4%. The average fare used was $3.4 combining these data with the projections of State Fair attendance shown in Table 5 of the Market Analysis, the following revenue projection equation was used:

$$FTR_t = (0.04 \times SFA_t) \times 3.4$$ where,

FTR_t, is projected Fairtrain revenue in year t;

SFA_t, is projected attendance at the State Fair in year t.

Cost-Benefit Analysis. The results of combining the Fairtrain costs and revenues with those projected for WRP and the restaurant train are presented in Table 4. As can be seen, the benefit-cost ratio under each of the alternative assumptions is enhanced by the addition of Fairtrain. Specifically, note that, with capital costs held constant, the average of discounted annual operating costs increases by $24,482. By comparison, projected average discounted annual revenues increase by $70,806 under each alternative concerning WRP and restaurant train capture rates. Thus, marginal revenues from Fairtrain are projected to exceed marginal costs, which suggests Fairtrain would be a viable component of an overall Monon Line program.

Colts Train

Costs. The estimated costs for the Colts Train were computed under assumptions similar to those used for Fairtrain--maintenance and capital costs assumed under the WRP and restaurant train excursions.

Revenues. In projecting revenues from the Colts Train excursion, a capture rate of 5% and an average fare of $6 were assumed. Thus, the revenue projection equation was:

$RCT_i = (0.05 \times MEC_t) \times 6.0$ where,

RCT_t, is projected revenue from the Colts Train in year t;

MEC_t, is projected market for excursions to Colts games in year t, as shown in the Market Analysis.

Cost-Benefit Analysis. The results of adding the projected revenues and costs associated with the Colts train to those projected for the combined WRP, restaurant train and Fairtrain program are presented in Table 5. The average annual additional discounted revenues and costs are, respectively, $16,346 and $13,806. The excess of revenues over costs indicate, a feasible excursion component, given the capital and maintenance cost assumptions.

Indiana Theme Park Excursions

In this section the cost and revenue implications of an excursion trip originating at the Indiana Theme Park are considered. This proposed venture has been analyzed as an alternative excursion to an excursion originating at WRP. This does not, of course, preclude a program which would confine Theme Park and WRP excursions. Such a program, in principle, could take two forms: separate, and therefore competing, operations; or a joint operation with WRP and the Theme Park functioning as load centers for one excursion trip. Lack of data precludes a model which would allow us to analyze a program whereby WRP and the Theme Park compete as two separate excursions, though undoubtedly such a program would negatively affect the revenue potential for each attraction considered separately. A similar constraint, i.e., lack of data, prevents us from distributing patronage over two sizeable load centers. These considerations have led us to analyze the proposed Theme Park as an alternative to WRP.

Projections and Analysis

Costs. The estimated current costs associated with the Theme Park are shown in Table 6. The line items were assumed to be the same as those accruing under the WRP plan detailed in Table 1, except for the item "miscellaneous" which was adjusted downward to take account of probable lower total current costs at

the Theme Park. Capital costs are those assumed under the maximum plan (i.e., 21 cars plus 3 locomotives) associated with WRP. Thus, the cost projections used are again set at a fairly high level and could be reduced in the ways discussed above.

Revenues. The revenue projections assume an average fare of $7.3. This fare was applied to each of three alternative capture rate assumptions, 10%, 15%, and 20%. The revenue projection equations used were:

$$RTP_t = (CR_k \times TPA_t) \times 7.3$$ where,

RTP_t, is projected revenue from Theme Park excursions in year t;

TPA_t, is projected attendance at the Theme Park in year t, from Table 13 of the Market Analysis;

CR_k, is to kth assumed capture rate.

The revenue projections are presented in Table 7.

Cost-Benefit Analysis. The results of the cost-benefit analyses are shown in Table 8. The benefit-cost ratio approaches 1.0 for a capture rate of 20%. This may well be a feasible rate given that excursions would undoubtedly be a primary attraction of such a Theme Park and would probably not have to compete with as many other attractions as would be the case with a WRP excursion centered on the proposed Indiana Gardens. Finally, similar caveats to those expressed with respect to the WRP/restaurant train excursions should be borne in mind in interpreting the results shown in Table 8.

Table 1: Current Costs for WRP Excursions and The Restaurant Train (MAX Plan)

	(a) WRP Only	(b) Plus Restaurant Train	(c) Marginal Restaurant Train (b) - (a)
CURRENT COSTS			
Administrative:			
a) President/PR	30000	30000	0
b) Office Manager	20000	20000	0
c) Secretarial	26000	26000	0
d) Other	0	10000	10000
Operational Costs:			
a) Engineer	25000	37500	12500
b) Conductor	20000	30000	10000
c) Trainman	16000	24000	8000
d) Fuel	40000	80000	40000
e) Insurance	85000	170000	85000
f) Marketing	100000	100000	0
Maintenance:			
a) Cars	105000	155000	50000
b) Track	200000	200000	0
c) Locomotives	30000	30000	0
Miscellaneous:	203000	233450	30450
Total	900000	1145950	245950

Table 2: Revenue and Cost Analysis for Excursions from WRP and a Restaurant Train--Capital Costs are Those Accruing Under Maximum Plan

Discount Rate = 10% Time Period = 1987 to 2010

WRP Capture Rate%	Restaurant Train Capture Rate%	Avg Yearly Revenues*	Avg Yearly Operating Costs*	Capital Costs	Benefit Cost Ratio	Present Value of Revenues/ Current Costs 1988	2010
10	1.0	263067	442597	2230000	.488	.583	.609
15	1.0	369344	442597	2230000	.685	.818	.856
20	1.0	475621	442597	2230000	.882	1.054	1.103
10	2.0	331843	442597	2230000	.615	.735	.765
15	2.0	438120	442597	2230000	.812	.971	1.011
20	2.0	544397	442597	2230000	1.009	1.206	1.258
10	2.5	354768	442597	2230000	.658	.786	.816
15	2.5	461045	442597	2230000	.913	1.021	1.063
20	2.5	567323	442597	2230000	1.052	1.257	1.310

* Discounted

Table 3: Operating Expenses for Colts Train and Fair Train

	(a) Colts Train	(b) Fair Train
Current Costs		
Administrative		
a) Pres/Pr	0	0
b) Office Manager	0	0
c) Secretarial	0	0
d) Other	5000	5000
Operational Costs		
a) Engineer	1125(a)	1389
b) Conductor	900(a)	1111
c) Trainman	720	889
d) Fuel	2000	5000
e) Insurance	10000	30000
f) Marketing	6000	10000
Maintenance*		
a) Cars	0	0
b) Track	0	0
c) Locomotives	0	0
Miscellaneous	10000	10000
Total	35745	63389

*Covered by WRP Excursion Costs

Table 4: Revenue and Cost Analysis For Excursions From WRP and a Restaurant Train Plus the Fairtrain--Capital Costs are Those Accruing Under Maximum Plan

Discount Rate = 10% Time Period - 1987 to 2010

WRP Capture Rate%	Restaurant Train Capture Rate%	Avg Yearly Revenues	Avg Yearly Operating Costs	Capital Costs	Benefit Cost Ratio	Present Value of Revenues/ Current Costs 1988	2010
10	1.0	333873	467079	2230000	.592	.701	.733
15	1.0	440150	467079	2230000	.780	.924	.967
20	1.0	546427	467079	2230000	.906	1.148	1.201
10	2.0	402648	467079	2230000	.714	.845	.881
15	2.0	508926	467079	2230000	.902	1.069	1.115
20	2.0	615203	467079	2230000	1.091	1.292	1.348
10	2.5	425574	467079	2230000	.755	.893	.930
15	2.5	531851	467079	2230000	.943	1.117	1.164
20	2.5	638128	467079	2230000	1.131	1.340	1.398

Table 5: Revenue and Cost Analysis For Excursions From WRP and a Restaurant Train Plus the Fairtrain and Colts Train--Capital Costs Are Those Accruing Under Maximum Plan.

Discount Rate = 10% Time Period = 1987 to 200

WRP Capture Rate%	Restaurant Train Capture Rate%	Avg Yearly Revenues	Avg Yearly Operating Costs	Capital Costs	Benefit Cost Ratio	Present Value of Revenues/ Current Costs 1988	2010
10	1.0	350219	480885	2230000	.606	.715	.746
15	1.0	456496	480885	2230000	.790	.932	.974
20	1.0	562773	480885	2230000	1.037	1.148	1.201
10	2.0	418995	480885	2230000	.725	.855	.890
15	2.0	525272	480885	2230000	.909	1.072	1.117
20	2.0	631549	480885	2230000	1.093	1.289	1.344
10	2.5	441920	480885	2230000	.765	.902	.937
15	2.5	548197	480885	2230000	.949	1.118	1.164
20	2.5	654474	480885	2230000	1.133	1.335	1.392

Table 6: Projected Annual Revenues From Theme Park Excursions For Alternative Capture Rates

Capture Rate (%)	10	15	20
1988	478616	717924	957232
1989	480943	721414	961885
1990	483288	724932	966576
1991	484542	726813	969084
1992	485796	728694	971592
1993	487050	730575	974100
1994	488304	732456	976608
1995	489558	734337	979116
1996	490588	735883	981177
1997	491619	737429	983238
1998	492650	738974	985299
1999	493680	740520	987360
2000	494711	742066	989421
2001	495670	743505	991340
2002	496629	744944	993258
2003	497588	746382	995177
2004	498547	747821	997095
2005	499507	749260	999013
2006	500303	750455	1000607
2007	501100	751650	1002200
2008	501897	752845	1003794
2009	502694	754040	1005387
2010	503490	755236	1006981

Table 7: Operating Expenses for Excursions From Indiana Theme Park

	Independent Event Alternative to WRP
I. Current Costs	
I.A. Administrative:	
a) President/PR	30000
b) Office Manager	20000
c) Secretarial	26000
d) Other	0
I.B. Operational:	
a) Engineer	25000
b) Conductor	20000
c) Trainman	16000
d) Fuel	40000
e) Insurance	85000
f) Marketing	100000
I.C. Maintenance:	
a) Cars	105000
b) Track	200000
c) Locomotives	30000
I.D. Miscellaneous	100000
Total	797000

Table 8: Revenue and Cost Analysis for Excursions From Indiana Theme Park--Capital Costs Are Those Accruing Under Maximum Plan

Discount Rate = 10% Time Period = 1987 to 2010

WRP Capture Rate%	Restaurant Train Capture Rate%	Avg Yearly Revenues	Avg Yearly Operating Costs	Capital Costs	Benefit Cost Ratio	Present Value of Revenues/ Current Costs 1988	2010
10		188752	307823	163000	.498	.600	.632
15		232128	307823	163000	.747	.901	.948
20		377504	307823	163000	.997	1.201	1.263

Notes:
a) Fare structure: same as for WRP
b) Capital Costs: Rolling Stock--See Maxplan for excursions from WRP:
cars = 21 @ 60000 i.e.
15 + 6 additional car as per Max plan.

LOCOS: 3.

APPENDIX III

BREAK EVEN ANALYSIS METHODOLOGY

APPENDIX III Breakeven Analysis Methodology

1) Summary of WRP and Restaurant Train Break-Even Analysis

Let Y_k = Market population for attraction k

X_k = Capture rate for attraction k

TC_i = Total costs for the ith set of cost assumptions

TR = Total Revenues

F_k = Average fare for attraction k

The Break-Even equation is:

$$TR = TC_i$$

$$(F_{wrp} \times Y_{wrp} \times X_{wrp}) + (F_{rt} \times Y_{rt} \times X_{rt}) = TC_i$$

$$X_{wrp} =$$

Using the 1988 market population projections of:

$Y_{wrp} = 741401$

$Y_{rt} = 2176196$

and, $F_{wrp} = 7.3$

$F_{rt} = 10.0$

Thus,

$$X_{wrp} =$$

The values of TC_i used are:

(i)	Operating	(Min Plan) =	987,500
		(Max Plan) =	1,205,300
(ii)	Rehabilitation	=	386,800
(iii)	Purchase	=	90,400

(ii) Amortized over 30 years at 10%
(iii) Amortized over 30 years at 6.9%

2) Including the Fairtrain

Assume that the current capture rate of about 4% can be attained in future years and an average fare of $3.4. for 1988, this gives revenues from Fairtrain of:

$$R_{ft} = Y_{ft} \times X_{ft} \times 3.4$$
$$= 942588 \times 0.04 \times 3.4$$
$$= 128192$$

The additional costs due to Fairtrain are estimated as Cft = 58,000.

This give a surplus of:

$$R_{ft} - C_{ft} = 70192$$

For Fairtrain to break even, need,

$$R_{ftpv} = C_{ft}$$

$$= R_{ft} = 58000$$

$$= (Y_{ft} \times X_{ft}) \times 3.4 = 58000$$

$$= Xft \times Yft = \frac{58000}{314} = 17059$$

For 1988, this implies a capture rate of 17059/942588 = 1.8%, which seems pretty feasible.

However, the "real" current costs of Fairtrain would include maintenance of way, etc., i.e., the items subsumed in the cost structure for WRP and the Restaurant train. So, the Fairtrain's estimated surplus of 70192 (conditional on the capture rate and the average fare) should be used to make a contribution to rehabilitation and purchase costs.

On that basis modify the breakeven equation for WRP and restaurant train as follows:

$$TR = TCi + Cft$$

$$= (Fpvwrp \times Y_{wrp} \times X_{wrp}) + (F_{rt} \times Y_{rt} \times X_{rt}) + R_{ft} = TC_i + C_{ft}$$

$$= X_{wrp} = TC_i + C_{ft} - R_{ft} - 4.02 X_{rt}$$

$$Y_{wrp} \times 7.3$$

$$= TCi - 70192 - 4.02Xrt$$

$$5412227.3$$

Using this equation, the breakeven analysis performed for WRP and restaurant train is repearted, but with the surplus from Fairtrain included. This issue is: will this surplus allow us to get the WRP capture rate down to a 'reasonable' level 2. Obviously, no. However, the analysis is there in the attached table.

Including the colts train

$$C_{ct} = 29{,}100$$

1988 Market population = 89380

$$F_{ct} \times Y_{ct} \times X_{ct} = 29100$$

$$= F_{ct} \times Xpvct_{ct} = 0.326$$

If $F_{ct} = 5.0$, then,

$X_{ct} = .0652$ is required to breakeven.

Assuming a capture rate of 10% gives a surplus of

$$5 \times 89380 \times 0.1 - 290100 = 15590$$

There doesn't seem to be much in the way of a significant surplus for this component so a table with fares and capture rates varying has been prepared.

Breakeven analysis for Theme Park.

Solve,

$$R_{tp} = C_{tp}$$

for ridership, i.e.,

$$Y_{tp} \times X_{tp} = C_{tp}$$

$$F_{tp}$$

$$[\text{Let } F_{tp} = 7.3] = C_{tp}$$

$$7.3$$

$$= X_{tp} = C_{tp}$$

$$tp$$

$$7.3 \times Y$$

Details are given for minimum and maximum plans in the attached table.

APPENDIX IV
CAPTURE RATE ESTIMATION MODEL

APPENDIX IV Methodology for estimating capture rates from the Fair Survey.

The raw data from the Fair Survey provides us with the following information for each market area:

N_k = The number of sample visitors originating in market area k, and

F_k = The number of visits made by sample visitors originating in k.

Given N_k and F_k, we estimate the mean frequency of visits to the Fair made by a person from k (r_k) as:

$$(1)\quad r_k = F_k / N_k$$

Also, the total number of visits made by the sample and originating in the resident market is:

$$(2)\quad F(s) = \Sigma_k N_k \times r_k = \Sigma_k F_k$$

We can then compute the distribution of the sample visits over the market areas as:

$$(3)\quad S_k = F_k / F(s),\ k = 1,..,4$$

where,

S_k is the proportion of sample visits originating in k.

The proportions, S_k, can be used to estimate the total number of visits to the Fair originating in each k. Assuming that the estimated proportions S_k correspond to the actual proportions,

$$(4)\quad O_k = S_k \times F$$

where,

O_k, is estimated number of visits originating in k;

F, is the resident market attendance at the Fair.

F is given by the published total State Fair attendance adjusted for nonresidents, workers, etc.

O_k can be used to provide an estimate of the proportion of k's residents visiting the State Fair (P_k) as follows:

$$(5)\quad P_k = \frac{O_k}{M_k \times r_k}$$

where,

M_k, is the 1985 population of k, taken from Table III-2.

The estimates, Pk, can be converted into capture rates (Ck) as:

(6) $C_k = P_k \times r_k$

Note that if $r_k = 1$, then $C_k = P_k$.

APPENDIX V
MARKET PROJECTION RATE EQUATIONS

APPENDIX V Market Projection Equations

Equation III.C.1: Projection of State Fair Attendance by the Resident Populations

$RPA_{k,t} = M_{kt} \times C_k$, where

$RPA_{k,t}$, is the resident population from the market area k attending in year t;

$M_{k,t}$, is projected population of market area k at time t (from Table 2);

C_k, is the estimated capture rate for market area k (from Table 6).

Equation III.C.2: Projection of State Fair Attendance from Outside the Resident Market Area

$VPA_t = (RPA_{k,t}) \times$ where,

VPA_t, is projected attendance at time t by people from outside the resident market area;

VPA_{85}, is the 1985 attendance by non-residents;

RPA_{85}, is the 1985 attendance by residents;

Equation III.C.3: Projection of Market for Colts Train Excursion

$MEC_t = 424{,}000 \times [Pit(k) \times X_{i(k)}]$ where,

MEC_t, is projected market for excursion to Colts games.

i = 1, 5, subscripts the counties defined in Figure 3.

$Xi(k)$, is the 1985 kth Indianapolis resident market area's share of attendance at Colts games applicable to county i (applicability is determined from Figure 1).

$Pit(k)$, is county i's share of population of market area k at time t.

Equation III.C.4: Projection of Market for Restaurant Train

$MR_{k,t} = (P_{k,t} \times 0.5) + (Vis_t \times 0.5)$ where,

MR_t, is the restaurant train market at time t;
k=1 is Marion County
k=2 is the Metro Counties

Equation III.C.5: Projection of Demand for WRP Excursion

$EXT_{t,wrp} = C_j \times WRPVIS_t$ where,

$EXT_{t,wrp}$, is projected demand in year t for excursion trips by visitors to WRP's Indiana Gardens.

$WRPVIS_t$, is projected visitation to WRP Indiana Gardens (from Table 9 of the Market Analysis).

C_j, is the jth assumed capture rate, where:

$C_1 = 0.10$
$C_2 = 0.15$
$C_3 = 0.20$

Equation III.C.6: WRP Excursion Revenue Projection

$REXT_{t,wrp} = \$7.30 \times EXT_{t,wrp}$ where,

$REXT_t$, is projected revenue in year t.

Equation III.C.7: Projection of Restaurant Train Trips

$EXT_{t,rt} = C_{k,j} \times P_{t,k}$ where,

$EXT_{t,rt}$, is trips made on the restaurant train in year t;

$P_{t,k}$, is projected population of market k in year t;

$C_{k,j}$, is the kth capture rate under assumption j;

k = 1 is Marion County;

k = 2 is Metro Counties;

k = 3 is visitors to Indianapolis;

j = 1,3

APPENDIX VI

COLT'S GAME ATTENDANCE ESTIMATION METHODOLOGY

APPENDIX VI Methodology for estimating attendance at Colts games

Assume that the gravity model can adequately predict flows from a market area to an attraction based in Indianapolis, i.e.

(1) $t_{ka} = g m_k^{m} a^{a} d_{ka}$

where,

t_{ka}, is the flow from market area k to an attraction A;

M_k, is the emissiveness of market area k;

M_a, measures the attractiveness of the destination;

d, is distance;

B, is a parameter which determines how quickly the flow decreases as distance increases;

g, is a constant.

If (1) is good, then the capture rate for place k can be represented as:

(2) $ck = \frac{t_{ka}}{m_k} = g\ ma\ dka$

For operational purposes, define:

M_A = attendance at attraction A;

M_k = population of k.

Let us now assume that the B derived from the Fair Survey is appropriate for flows originating at each k and destined for Colts games.

We then have:

(3) (a) $c_k^1 = \frac{t_{KA}^1}{m_k^1} = g_1 M_A^1 d_{KA}^B$

(b) $c_k^2 = \frac{t_{KA}^2}{m_k^2} = g_2 M_A^2 d_{KA}^B$

where, 1, superscripts the State Fair;

2, superscripts the Colts game.

If we further assume that $g_1 = g_2$, then,

(4) $\frac{c_k^1}{c_k^2} = \frac{g M_A^1 d_{KA}^B}{g M_A^2 d_{KA}^B} = \frac{M_A^1}{M_A^2}$

The only unknown in (4) is C_K^2, which is solved as:

(5) $$C_K^2 = \frac{M_A^2}{M_A^1} \times C_K^1$$

Substitute the known values, MA^1 and MA^2 in (5) yields the capture rate deflation factor: $\frac{540,000}{882,116} = 0.612$

Applying this factor to the rates shown in Table 6 yields the capture rates utilized in 2.D.

Note that the above method is consistent with the known average capture rate of 0.15. Applying the derived capture rates to the 1985 market area populations yields a projected attendance of 540,000, which yields an average capture rate for 1985 of 0.15.

Finally, note that the key to the application of the method described above is that we know MA for the Colt's games. An attraction factor was not available for the Indiana Gardens or Theme Park cases.

APPENDIX VII

EXCURSION TRAIN BUDGETS

EXCURSION TRAIN BUDGETS

APPENDIX VII

EXECUTIVE SUMMARY

Of the five excursion operations surveyed outside of Indiana, four of these had an annual ridership of 100,000 persons or more. These four excursion operations which include the Conway Scenic Railroad, Steamtown, Strasburg Railroad, and Valley Railroad, were surveyed a second time in order to more closely analyze their annual operating budgets. The Conway Scenic Railroad and Valley Railroad had annual budgets between $350,000 and $400,000, while Steam and Strasburg Railroad had annual budgets between $750,000 and $1,000,000. It should be noted that the average marketing budget for the excursion operations was approximately $100,000.

In addition to a review of the budgets of the four excursion operations, an analysis was made of one freight operation, the Madison Railroad, of Madison, Indiana. The Madison Railroad had an annual budget of approximately $200,000, less than half the budget of the excursion operations reviewed.

CONWAY SCENIC RAILROAD, North Conway, New Hampshire

The Conway Scenic Railroad has an annual ridership of around 95,000 persons. The annual operating budget for the railroad is around $350,000. What follows is a brief listing of some of the major budgeted operating expenses.

Marketing: $30,000

Insurance: $25,000

Track Maintenance: $50,000 - This figure includes labor.

Coach Maintenance: $25,000 - This figure includes labor.

Locomotive Maintenance: $35,000 - This administrative staff of the Conway Scenic Railroad consists of a President.

Train Labor: $100,000 - The standard excursion train crew consists of an Engineer, a Conductor, and one or two Trainmen. This figure includes in addition to the train crew all other office and contracted labor.

Fuel: $25,000 - The Conway Scenic Railroad runs both steam and diesel locomotives for motive power.

Other Expenses: $10,000 - These expenses were not outlined in detail.

STEAMTOWN, Scranton, Pennsylvania

Steamtown is planning for a ridership of 140,000 persons in 1986 and gross revenues of around $850,000. It was felt that the costs of running the excursion train in 1986 would also be around $850,000. These costs include the following.

Marketing: $150,000 - It was felt that this much was needed because 1986 will be the first full year of operating Steamtown at its new location in Scranton.

Insurance: $70,000 - This figure includes all types of insurance required for running the excursion. Mr. Gavigan expected that the costs of insurance may rise significantly in the next few years.

Track Maintenance: Mr. Gavigan could not provide me with a cost figure for locomotive maintenance. He acknowledged that it is significantly more costly to run steam locomotives, as they do at Steamtown, than it would be to run refurbished diesel locomotives.

Labor Costs: Mr. Gavigan could not provide a specific cost for labor but noted that the standard crew included a Conductor, Engineer, and Fireman; two Trainmen and a Concessionaire.

Other Expenses: It was noted that the largest cost in running the excursion train was labor, followed by maintenance, marketing, and insurance. Mr. Gavigan stated that it will cost around $300,000 this year and another $300,000 next year to refurbish the coaches and locomotives which they use for their train excursions. The money needed for coach and locomotive refurbishment is not included in the annual operating budget of Steamtown and will come from the

City of Scranton. Steamtown has a five year goal of reaching a ridership of 400,000 persons.

STRASBURG RAILROAD, Strasburg, Pennsylvania

The Strasburg Railroad has an annual ridership of around 300,000 persons and an annual operating budget of around $1,000,000. What follows is a brief listing of some of the major budgeted operating expenses.

Marketing: $130,000

Insurance: $75,000 - Mr. Bachman noted that the cost of insurance was expected to rise significantly in the next few years.

Coach Maintenance: $100,000 - This figure includes labor.

Locomotive Maintenance: $70,000 - This figure includes labor.

Administrative Labor: $200,000 - The Strasburg Railroad administrative staff includes a President, a Vice President in charge of administration, and a Vice President in charge of operations.

Train Labor: $77,000 - The standard excursion train crew includes an Engineer, a Fireman, a Conductor, and two Trainmen.

Fuel: $40,000 - The Strasburg Railroad runs steam locomotives for motive power.

Other Expenses: $308,000 - These expenses were not outlined in detail.

VALLEY RAILROAD, Essex, Connecticut

The Valley Railroad has an annual ridership of around 120,000 persons. The total operating budget for the railroad is around $400,000. What follows is a brief listing of some of the major budgeted operating expenses.

Marketing: $100,000

Insurance: $50,000 - Ms. Parrott stated that she expected that the insurance was likely to rise significantly over the next few years.

Track Maintenance: $46,000 - This figure includes labor but much of the track maintenance work is carried out by volunteers.

Coach Maintenance: $10,000 - This figure includes labor.

Locomotive Maintenance: $8,000 - This figure includes labor.

Administrative Labor: $60,000 - The Valley Railroad administrative staff includes an Office Manager who also does the bookkeeping, a Reservationist who is in charge of ticket sales, and a General Manager who is in charge of general operations.

Train Labor: $40,000 - The standard excursion train crew includes an Engineer, a Conductor, and a Fireman. On heavy passenger days a Trainman is added.

Fuel: $32,000 - The Valley Railroad uses steam locomotives for motive power.

Other Expenses: $54,000 - These expenses were not broken out in detail but include licenses, fees, taxes, etc.

MADISON RAILROAD, Madison, Indiana

The 1986 operating budget for the Madison Railroad is set for $181,000. What follows is more detailed breakdown of the 1986 budget. The expense categories are grouped somewhat differently than for the excursion train operations previously reviewed.

Track Maintenance: $27,300 - Expenses in this category include salaries, materials, transportation, tools, vegetation control, bridge repair, contract work, and other expenses incurred in maintaining the railroad's 30 miles of track.

Equipment Maintenance: $4,000 - Expenses in this category include materials and tools needed to repair and maintain the railroad's one locomotive.

Transportation: $37,000 - Expenses in this category include fuel, supplies, insurance and casualty insurance, contract work, other expenses, and car hire (car hire is a cost incurred for hauling the cars of another line on your railroad).

Administration: $23,600 - Expenses in this category include vehicle expense, supplies, accounting, utilities, medical and group insurance, and loan payments.

Salaries: $89,100 - Expenses in this category are the salaries of five persons including a General Manager, a Billing Agent, an

Engineer, a Conductor, and a Track Supervisor. The Engineer, Conductor, and Track Supervisor all work on track maintenance.

Other Expenses: Mr. Keith, the General Manager, indicated that the above outlined budget was deceptive in that for a number of years the railroad has been putting off a substantial amount of track work because of inadequate funds and that a more realistic overall budget which would include a reasonable amount of track maintenance would be around $225,000. Mr. Keith noted that the budget has been about the same over the last five years. Cars hauled on the line have varied from year to year and have ranged from as low as 100 cars to as high as 600 cars in a given year. Cars are hauled on an as needed basis. The more cars hauled the higher the transportation and track maintenance expenses. This particular stretch of track has some of the most steep grades in the State which makes maintenance of this track somewhat more expensive than that of other tracks. The City of Madison owns the track and the one locomotive and there are not outstanding loans on either of these capital items.

APPENDIX VIII

PROPERTY RIGHTS 22ND STREET TO UNION STATION

SEABOARD PROPERTY RIGHTS
(22ND STREET TO UNION STATION)

EXECUTIVE SUMMARY

The Monon Line has physical access to Union Station by way of the Belt Railroad where it connects with the Monon Line at 22nd Street or south on the Monon Line. The condition of the track of the Belt Railroad is poor, while the route south on the Monon Line has some trackage and a bridge missing. Seaboard has legal access to the Belt Railroad as a member of the Indianapolis Union Railway Company, and has legal access to the route south of 22nd Street by retaining an interest in the right-of-way. The three alternatives to restored access to Union Station include access by way of an upgraded Belt Railroad; access by way of an upgraded Monon Line south of 22nd Street and a new bridge and new track from 10th Street south; or access by way of an upgraded Monon Line south of 22nd Street, a new bridge at 10th Street and connection to the existing Conrail tracks from 10th Street south.

PHYSICAL ACCESS

From 22nd Street there are two points of access to Union Station from the Monon Line. The first of these the connection at 22nd Street with the Indianapolis Belt Railroad which forms a semi-circle around the southern half of Indianapolis and has access off of a Conrail Line to Union Station. The condition of this track is poor, with a 10 MPH speed limit.

The second approach is to head south along the Monon Line. At one time this route connected directly into Union Station. At the present time, there are the two parallel tracks of the Monon Line (Seaboard) and the Nickle Plate Railway (Norfolk & Western) from 22nd Street to 16th Street.

These tracks merge into a single track from 16th Street to 13th Street. There is no track at all from 13th Street to 10th Street where the bridge over the Interstate Highway has been taken out and not replaced. South of 10th Street, at one time there were four parallel tracks running through this section, of which one was owned by Seaboard. At present, all four of the original tracks have been removed and in the right-of-way, Conrail has constructed two replacement lines of high quality continuous welded rail.

LEGAL ACCESS

Besides having physical access to Union Station, there is also the issue of legal access. This issue is bound up in various agreements that Seaboard has with the Indianapolis Union Railway Company and statutory and case law on railroad right-of-ways. As a voting member of the Indianapolis Union Railway Company, Seaboard has a right of access at 22nd Street to the Belt Railroad. It is necessary that in the case of purchase or lease of the Monon Line, that an assignment be made of Seaboard's rights as a member of the Indianapolis Union Railway Company in order to insure continued access to the Belt Railroad.

As for the Monon Line south of 22nd Street, historically the Monon Railroad (Seaboard) and the Nickle Plate Railway (Norfolk &

Western) shared a right-of-way along this corridor which contained the parallel tracks of each railroad. In response to questions posed by the staff of the Indianapolis Department of Metropolitan Development (DMD) in November of 1984, Seaboard officials responded by stating that the real estate between 22nd Street and 10th Street was owned by Seaboard, though the company's records did not show that it owned any trackage south of 22nd Street. In a December 1984 engineering study on this section of the Monon Line, prepared by Howard, Needles, Tammen, & Bergendoff (HNTB), it was noted that Seaboard and the Norfolk and Western apparently shared a right-of-way interest in the section from 22nd Street to 10th Street. Later in the study, HNTB suggested that Conrail might have some interest in this section. In a September 1985 telephone conversation with Ron Yardrick of the real estate department of Conrail, Mr. Yardrick stated that according to his records, Conrail did not have a real estate interest in this section of track.

South of 10th Street there is no Monon trackage, it having been torn up and replaced by two Conrail lines. Based on conversations with Ron Yardrick of the real estate department of Conrail, and James Livingston of the Indianapolis Union Railway Company, it is generally felt that the Monon Line (Seaboard) retains a right-of-way interest from 10th Street to Union Station. At the present time in Indiana there does not appear to be either a clear definition or procedure for determining when a right-of-way, with trackage removed, reverts back to the original landholders. If no formal action has been taken by adjacent landholders to claim a reversionary interest in the right-of-way, and if the land has not been

so altered that a rail line could not again be established in the right-of-way, then at least under present Indiana Law, there appears to be a latent right-of-way interest which has the possibility of being reactivated with the construction of new trackage and the return of rail services.

The length of track from College Avenue to Union Station is part of the Indianapolis Union Railway, to be distinguished from the Indianapolis Belt Railroad. Both the Indianapolis Union Railway and the Indianapolis Belt Railroad are run by the Indianapolis Union Railway Company. Because Seaboard is a member of the Indianapolis Union Railway Company, it has access to the Indianapolis Union Railway. In 1983, the City of Indianapolis purchased in fee simple the real estate and trackage from Delaware Street to Capitol Avenue. The City then entered into an operational lease with Conrail. Because of its purchase, the City probably has the final say on access to Union Station.

ACCESS ALTERNATIVES

Access to Union Station by way of the Monon Line at 22nd Street offers the plus of having immediate physical access to Union Station. Arrangements would have to be made with Conrail to actually move cars on the Belt Railroad to Union Station. Serious consideration of use of the Belt Railroad for excursion or commuter activity would require a substantial upgrading of the existing trackage.

As for the Monon Line south of 22nd Street, at least some of the existing trackage between 22nd Street and 10th Street would need

to be upgraded for freight, excursion, or commuter use, and the trackage between 16th Street and 10th Street would probably need to be replaced along with the replacement of the bridge at 10th Street. As for the movement of trains from 10th Street to Union Station, the HNTB Study suggests two options. The first option would be for the Monon to build a third track for its own use that would run parallel to the two existing Conrail tracks. It was the opinionof the HNTB Study that there was sufficient room remaining in the right-of-way for a third track to be built. The second option would be for the Monon Line to hook directly into the rebuilt Conrail Line at 10th Street.

BLOCK SUMMARY

A. 22nd Street to 10th Street

1. Physical Description

a. 22nd Street to 16th Street: Two sets of track in poor condition. One set owned by Norfolk & Western and the other owned by Seaboard.

b. 16th Street to 13th Street: One set of track in poor condition. Ownership by either Norfolk & Western or Seaboard uncertain.

c. 13th Street to 10th Street: No track but track bed still present.

d. 10th Street: Track bed and bridge approach is present but bridge has been dismantled and not replaced.

2. Legal Description

a. A right-of-way exists for both Norfolk & Western and Seaboard in this corridor between 22nd and 10th Streets.

B. 10th Street to College Avenue

1. Physical Description

a. 10th Street to College Avenue: At one time there

were four tracks in this corridor, including one track owned by Seaboard. These four tracks have been replaced by two welded rail tracks owned by Conrail. There is track bed available in the corridor for the construction of a third track.

2. Legal Description

a. A right-of-way exists for Conrail, Seaboard, and Norfolk & Western in the corridor.

C. College Avenue to Union Station

1. Physical Description

a. There are two welded rail tracks from College Avenue to Union Station constructed by Conrail but operated by the Indianapolis Union Railway. There is track bed available in the corridor for the construction of a third track.

2. Legal Description

a. A right-of-way exists for Conrail, Seaboard, and Norfolk & Western in the corridor.

APPENDIX IX

LIST OF SHIPPERS

LIST OF PAST SHIPPERS

APPENDIX IX

A. E. Staley Manufacturing Company
2200 Eldorado Street
Decatur, IL 62425

ADI Distributors
430 W. Carmel Drive
Carmel, IN 46032

AgMax
1111 South Jackson
Frankfort, IN 46041

Agrico Farm Center
P.O. Box 23
Rossville, IN 46065

Anderson Lumber & Milwork Company, Inc.
1140 E. 46th Street
Indianapolis, IN 46205

Biddle Screw Co.
701 South Main Street
Sheridan, IN 46069

Builders Lumber Mart, Inc.
522 Range Line Road
Carmel, IN 46032

Chrysler Corporation
1100 S. Tibbs
Indianapolis, IN 46205

Crop Production Services
P.O. Box 23
Rossville, IN 46065

CROP Fertilizer Specialists
Route 1, Box 41
Rossville, IN 46065

Cyclone Grain Company
R.R. #4
Frankfort, IN 46041

Erbrich Products Company
1120 East 32nd Street/P.O. Box 55107
Indianapolis, IN 46205

E.R. Manufacturing
N. Illinois Street, P.O. Box 68
Kirklin, IN 46050

Frito Lay
R.R. #1, Box 30
Frankfort, IN 46041

Hall & House Lumber
6501 Bluff Road
Indianapolis, IN

Hamilton County Coop
P.O. Box C
Noblesville, IN 46060

Harmeson Manufacturing Company, Inc.
509 West Barner, P.O. Box 429
Frankfort, IN 46041

IMA Corporation
115 N. Pennsylvania, Suite 950
Indianapolis, IN 46204

Indiana Farm Bureau
120 E. Market Street
Indianapolis, IN 46204

Indianapolis Newspaper, Inc.
307 N. Pennsylvania/P.O. Box 145
Indianapolis, IN 46204

International Minerals and Chemical Corp.
421 E. Hawley Street
Mundelein, IL 60060

Precision Truss
P.O. Box 38/413 E. Madison
Kirklin, IN 46050

Sakret
P.O. Box 296
Westfield, IN 46074

Sears, Roebuck & Co.
68 N. Gale
Indianapolis, IN 46206

Southwest Forest Industries
6400 English Avenue/P.O. Box 19385
Indianapolis, IN 46226

Spickelmire Industries
1100 E. 52nd
Indianapolis, IN 46205

Sun Chemical
Route 6
Frankfort, IN 46041

Terhune Grain Corp.
Terhune, IN 46069

Truss Manufacturing Co., Inc.
P.O. Box 418/US 31 North
Westfield, IN 46074

U.S. Corregated Fiberboard Box
3200 Indiana National Bank
One Indiana Square
Indianapolis, IN 46204

Van Wingerden Greenhouses
(also known as Heartland Growers, Inc.)
Westfield, IN

Waitt Elevator Company
R.R. #1
Westfield, IN 46074

Wallace Grain Corporation
Sheridan, IN

Westfield Gas Company
606 W. Park
Westfield, IN 46074

Wickes Lumber Company
16708 North U.S. 31
Westfield, IN 46074

Woods Wire Products, Inc.
510 Third Avenue, S.W.
Carmel, IN 46032

Wooley Lumber Co.
1118 E. 30th
Indianapolis, IN 46205

Other shippers for which very little information was found.

AAA Warehouse, Indianapolis

ALA Intern, Frankfort

Carter Lee Lumber, Indianapolis

Central Soya, Indianapolis

Chemical Central, Indianapolis

DJ Lumber Sales, Indianapolis

Dunlap, Indianapolis

Electric Steel Casting, Indianapolis

Exelawn, Indianapolis

Furrow Lumber, Indianapolis

Grocer's Supply, Indianapolis

Indiana Art Clay, Indianapolis

Indiana Veneer, Indianapolis

Interstate Cold Storage, Indianapolis

International Paper, Indianapolis

J. Solotken Scrap, Indianapolis

Lowes Lumber, ?

Luntz Corporation, Indianapolis

McCloud Indiana, Indianapolis

Merchandise Warehouse, Indianapolis

MGA, Indianapolis

Nabisco Brands, Indianapolis

National Chemicals, Indianapolis

NORPAC (Broker Lumber), Indianapolis

Packaging Corp. Marica, Indianapolis

Paper Manufacturing, Indianapolis

Paris Lumber, Indianapolis

Rutgers Packaging, Indianapolis

Samson Midwest, Westfield and Indianapolis

Schuchman Metals, Indianapolis

Southern Forest Products, Indianapolis

Stecitlum, Indianapolis

S.W. Industries, Indianapolis

Terhune Elevator (maybe the same as Terhune Grain), Terhune

Ulrich Chemical, Indianapolis

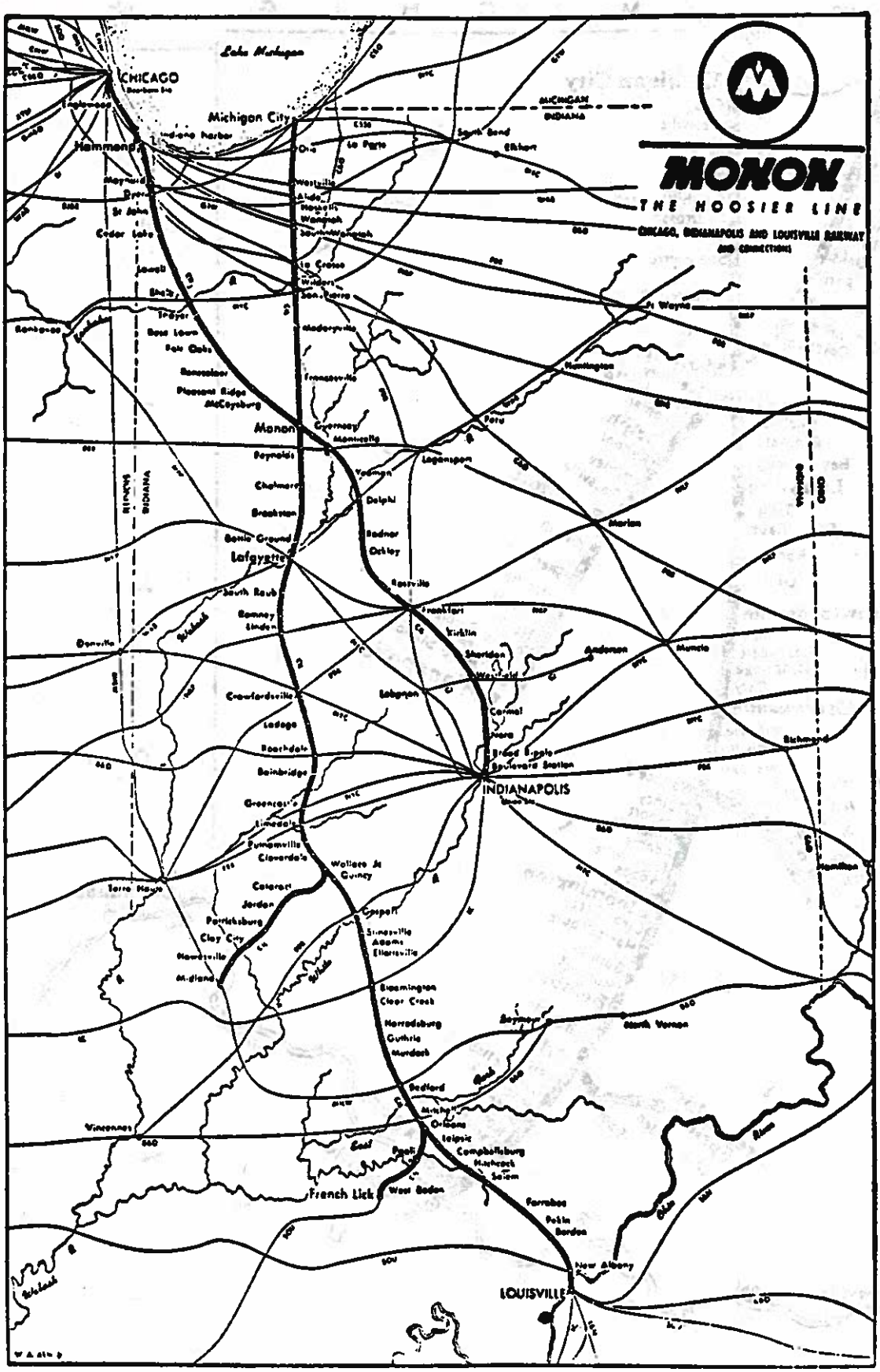
Willamette Industries, Indianapolis

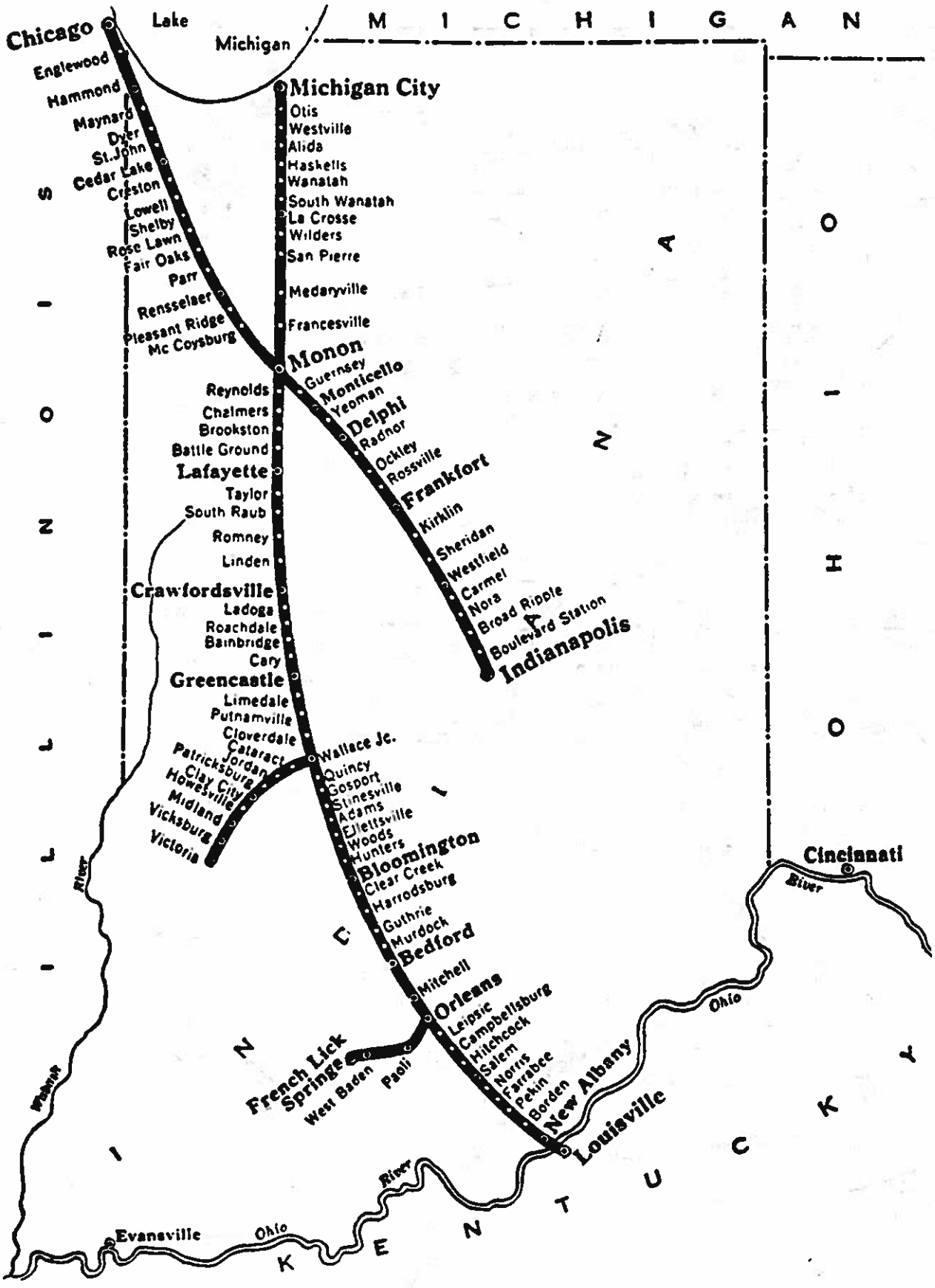
APPENDIX X

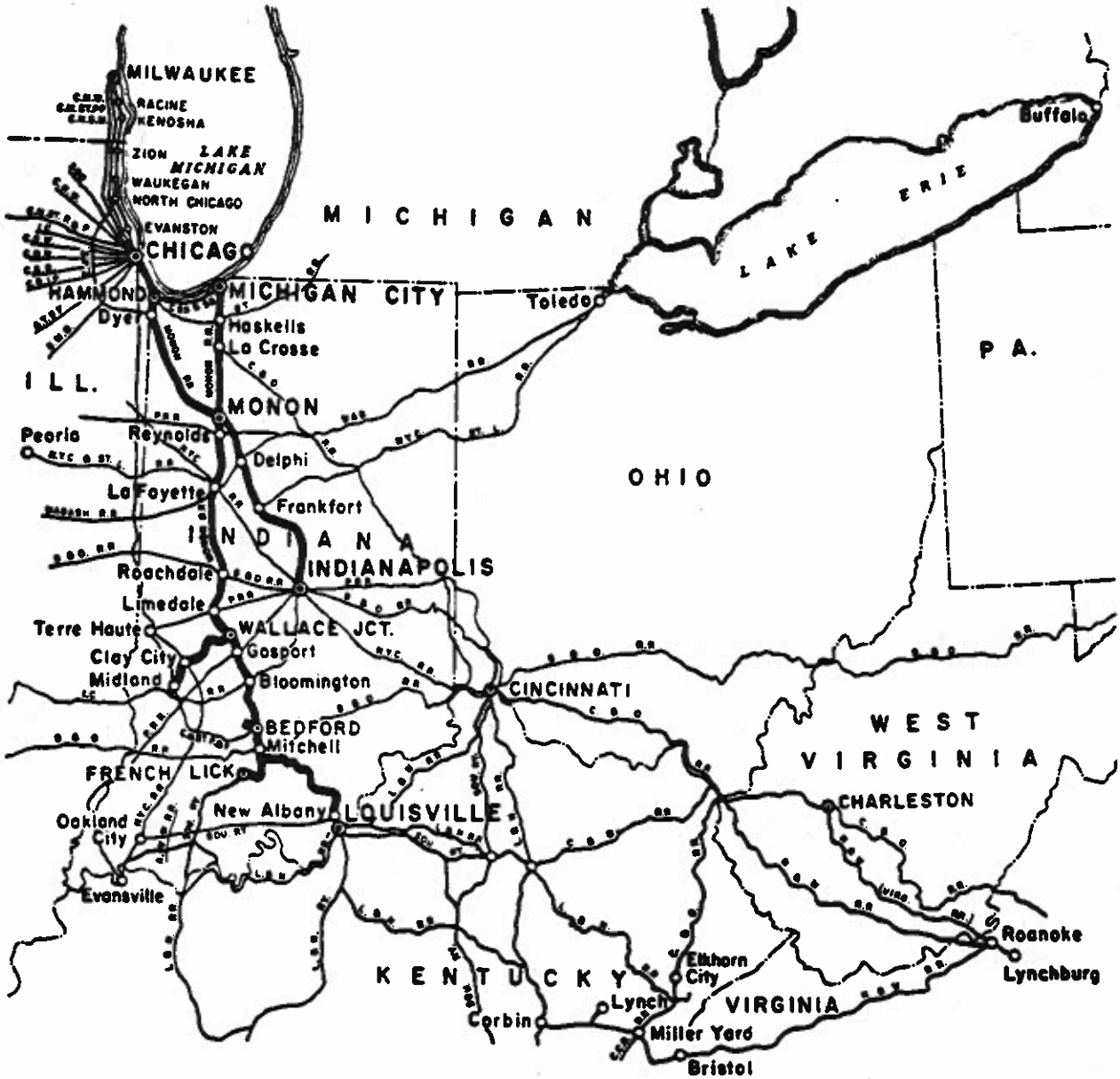
HISTORICAL MAPS

Historical Maps

APPENDIX X




Chicago
Lake Michigan
M I C H I G A N
Englewood
Hammond
Maynard
Dyer
St. John
Cedar Lake
Creston
Lowell
Shelby
Rose Lawn
Fair Oaks
Parr
Rensselaer
Pleasant Ridge
Mc Coysburg
Michigan City
Otis
Westville
Alida
Haskells
Wanatah
South Wanatah
La Crosse
Wilders
San Pierre
Medaryville
Francesville
Monon
Guernsey
Monticello
Yeoman
Delphi
Radnor
Ockley
Rossville
Frankfort
Kirklin
Sheridan
Westfield
Carmel
Nora
Broad Ripple
Boulevard Station
Indianapolis
Reynolds
Chalmers
Brookston
Battle Ground
Lafayette
Taylor
South Raub
Romney
Linden
Crawfordsville
Ladoga
Roachdale
Bainbridge
Cary
Greencastle
Limedale
Putnamville
Cloverdale
Cataract
Jordan
Patricksburg
Clay City
Howesville
Midland
Vicksburg
Victoria
Wallace Jc.
Quincy
Gosport
Stinesville
Adams
Ellettsville
Woods
Hunters
Bloomington
Clear Creek
Harrodsburg
Guthrie
Murdock
Bedford
Mitchell
Orleans
Leipsic
Campbellsburg
Hitchcock
Salem
Norris
Farrabee
Pekin
Borden
New Albany
Louisville
Cincinnati
French Lick
Springs
West Baden
Paoli
Evansville
Ohio River
Wabash River
I N D I A N A
I L L I N O I S
K E N T U C K Y


MILWAUKEE
RACINE
KENOSHA
ZION
LAKE MICHIGAN
WAUKEGAN
NORTH CHICAGO
EVANSTON
CHICAGO
HAMMOND
Dyer
MICHIGAN CITY
Haskells
La Crosse
MONON
Peoria
Reynolds
Delphi
La Fayette
Frankfort
INDIANA
INDIANAPOLIS
Roachdale
Limedale
Terre Haute
WALLACE JCT.
Clay City
Gosport
Midland
Bloomington
BEDFORD
Mitchell
FRENCH LICK
Oakland City
New Albany
LOUISVILLE
Evansville
KENTUCKY
Corbin
Lynch
Elkhorn City
Miller Yard
Bristol
VIRGINIA
Roanoke
Lynchburg
CHARLESTON
WEST VIRGINIA
CINCINNATI
OHIO
Toledo
LAKE ERIE
Buffalo
P A.
MICHIGAN
ILL.

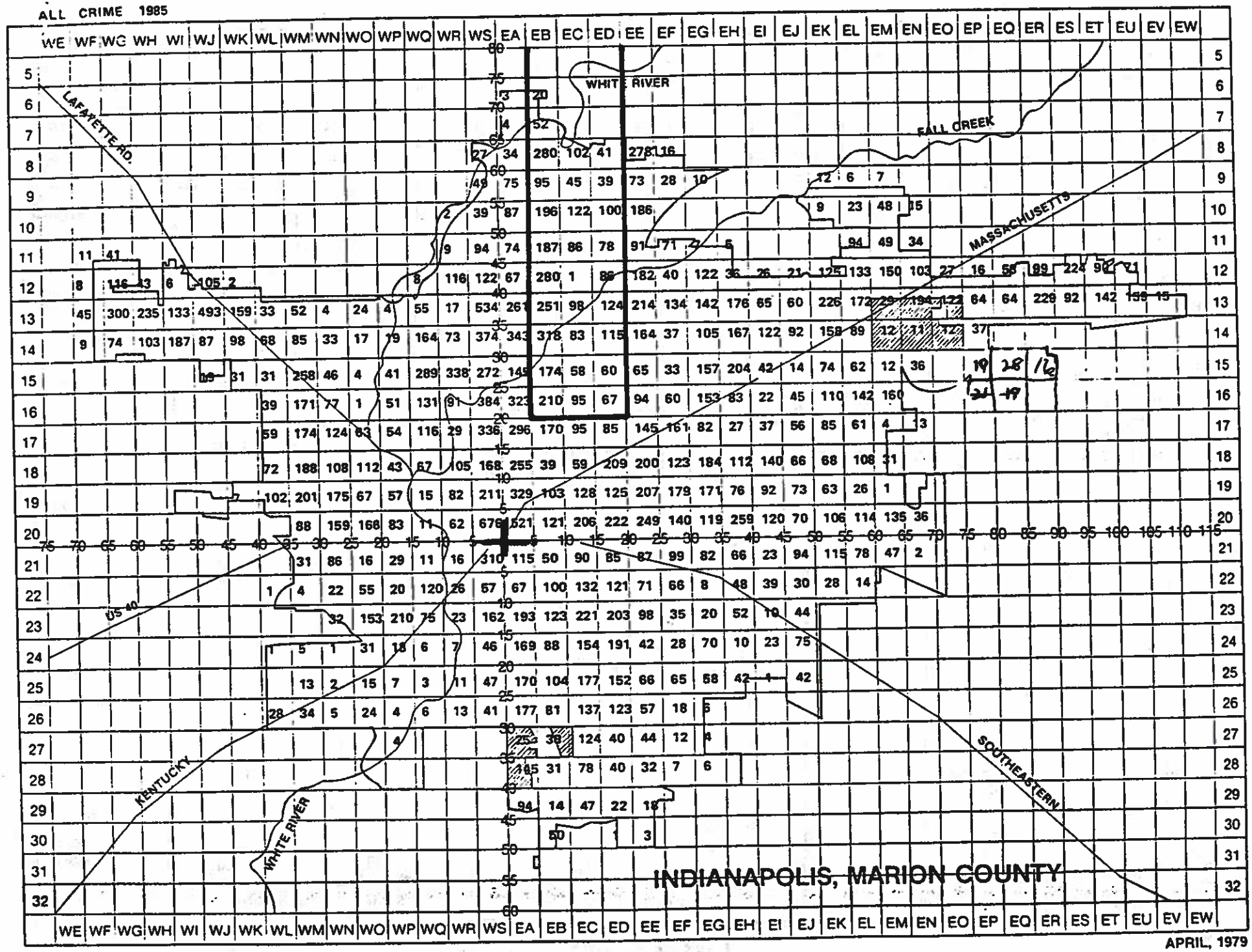
APPENDIX XI
CRIME TRENDS

INDIANAPOLIS POLICE DEPARTMENT
CRIME TREND

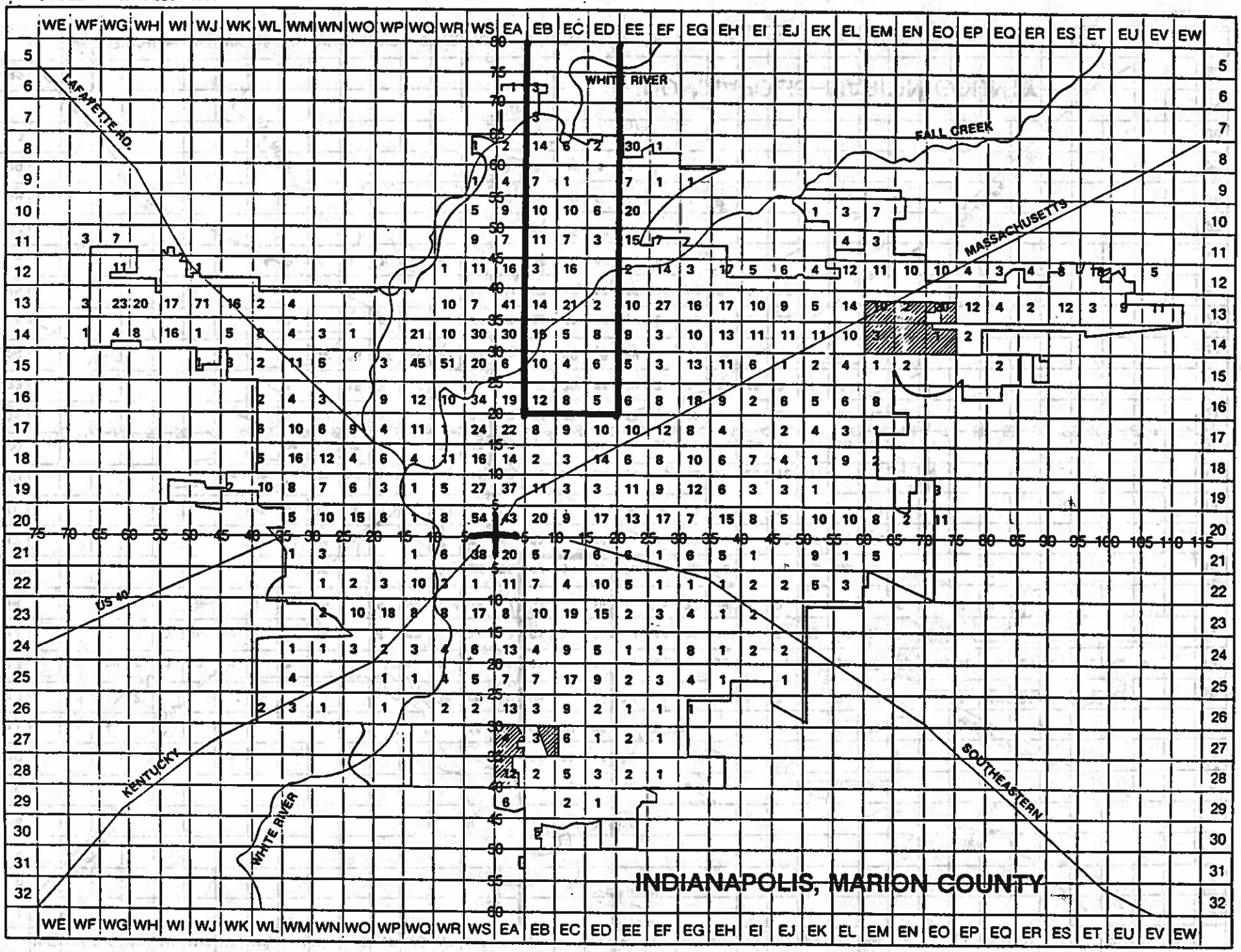
DECEMBER	REPORTED OFFENSES		DIFFERENCE		ARRESTS		CASES CLEARED	
OFFENSES	This Month	Same Month Last Year	Number	Percent	This Month	Same Month Last Year	This Month	Same Month Last Year
Murder Non-Negligent Manslaughter	9	3	+ 6	+ 200.0	2	2	7	9
Rape	18	16	+ 2	+ 12.5	1	0	32	16
Robbery	177	179	- 2	- 1.1	9	21	42	34
Aggravated Assault	205	199	+ 6	+ 3.0	96	85	61	64
Residence Burglary	728	648	+ 80	+ 12.3	23	23	74	78
Non-Residence Burglary	144	139	+ 5	+ 3.6	15	17	13	28
Larceny	1,108	1,171	- 63	- 5.4	262	312	135	164
Vehicle Thefts	280	296	- 16	- 5.4	13	15	25	31
TOTAL	2,669	2,651	+ 18	+ 0.7	421	475	389	424

1985	REPORTED OFFENSES		DIFFERENCE		ARRESTS		CASES CLEARED			
OFFENSES	This Year To Date	Last Year To Date	Number	Percent	This Year To Date	Last Year To Date	This Year To Date	Last Year To Date	Percent	Percent
Murder Non-Negligent Manslaughter	58	52	+ 6	+ 11.5	21	18	41	68	70.7	130.8
Rape	347	342	+ 5	+ 1.5	28	14	175	188	50.4	55.0
Robbery	1,796	1,826	- 30	- 1.6	175	243	403	408	22.4	22.3
Aggravated Assault	2,423	2,027	+ 396	+ 19.5	962	821	923	856	38.1	42.2
Residence Burglary	6,758	6,673	+ 85	+ 1.3	275	304	797	803	11.8	12.0
Non-Residence Burglary	1,454	1,768	- 314	- 17.8	158	189	224	274	15.4	15.5
Larceny	13,943	13,744	+ 199	+ 1.4	2,960	3,062	1,862	1,844	13.4	13.4
Vehicle Thefts	2,898	2,961	- 63	- 2.1	193	231	351	356	12.1	12.0
TOTAL	29,677	29,393	+ 284	+ 1.0	4,772	4,882	4,776	4,797	16.1	16.3

APPENDIX XI

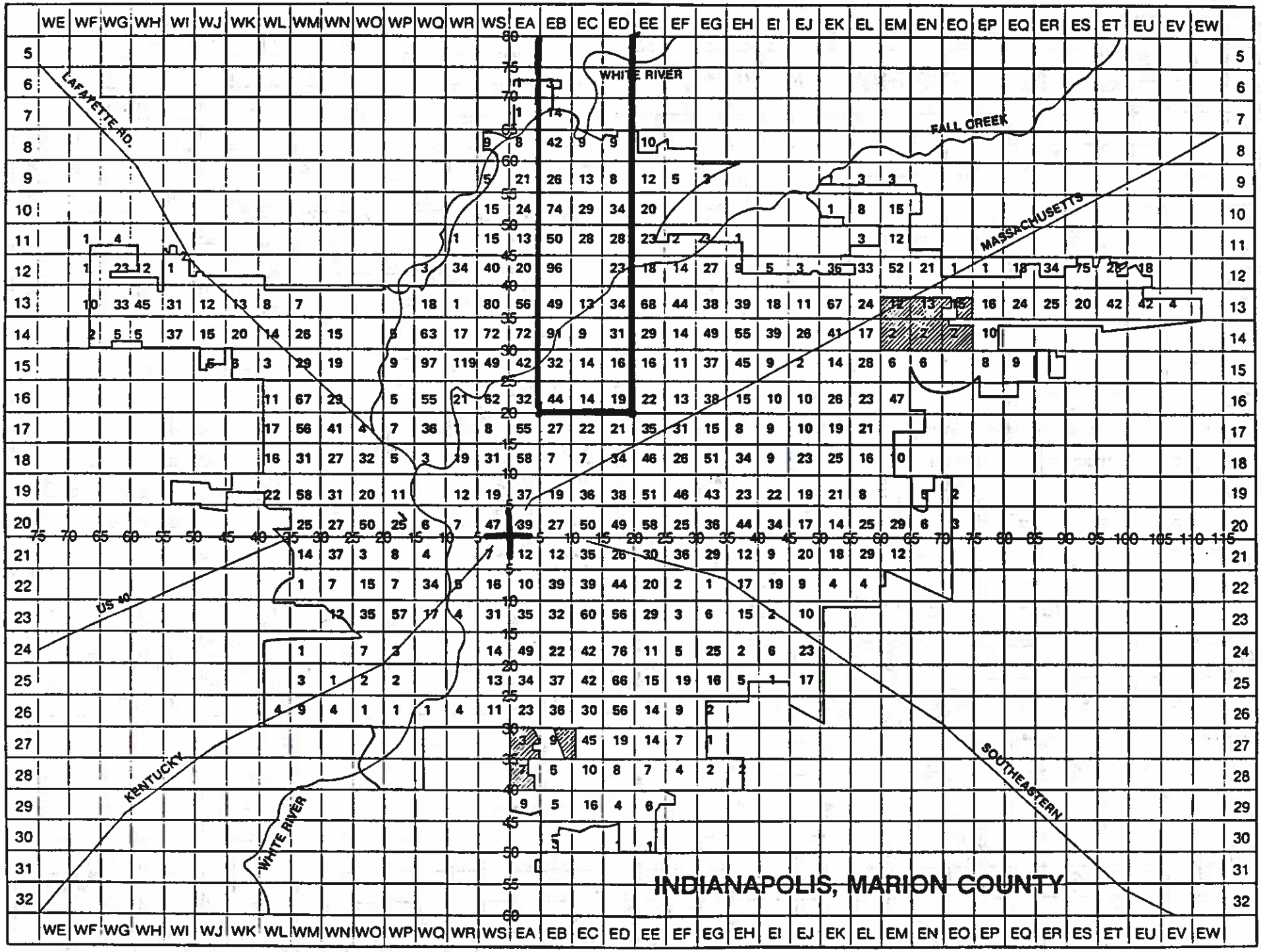

ALL CRIME 1985
WE WF WG WH WI WJ WK WL WM WN WO WP WQ WR WS EA EB EC ED EE EF EG EH EI EJ EK EL EM EN EO EP EQ ER ES ET EU EV EW
WHITE RIVER
LAFAYETTE RD.
FALL CREEK
MASSACHUSETTS
US 40
KENTUCKY
WHITE RIVER
SOUTHEASTERN
INDIANAPOLIS, MARION COUNTY
APRIL, 1979

STOLEN VEHICLES 1985



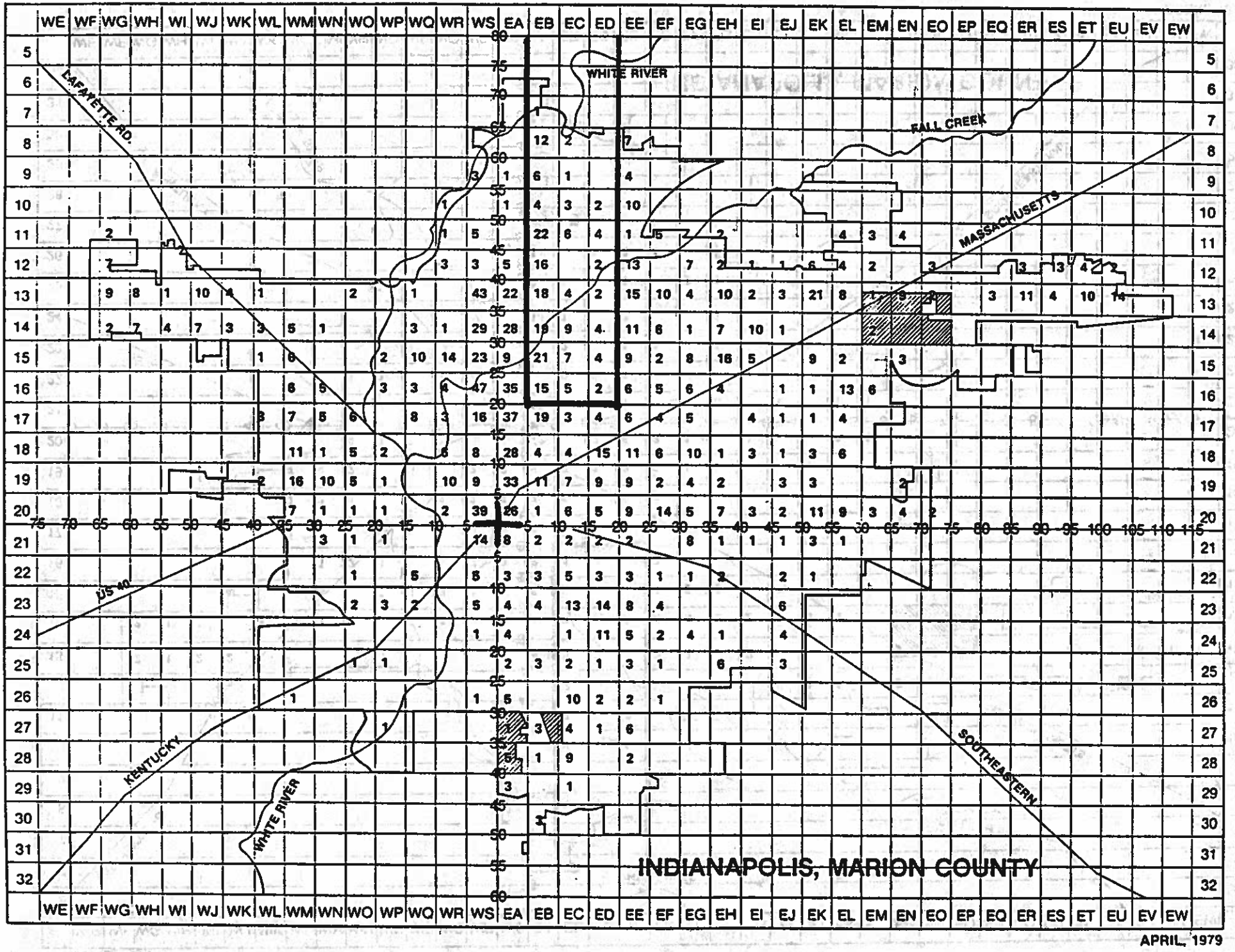
APRIL, 1979

BURGLARY 1985

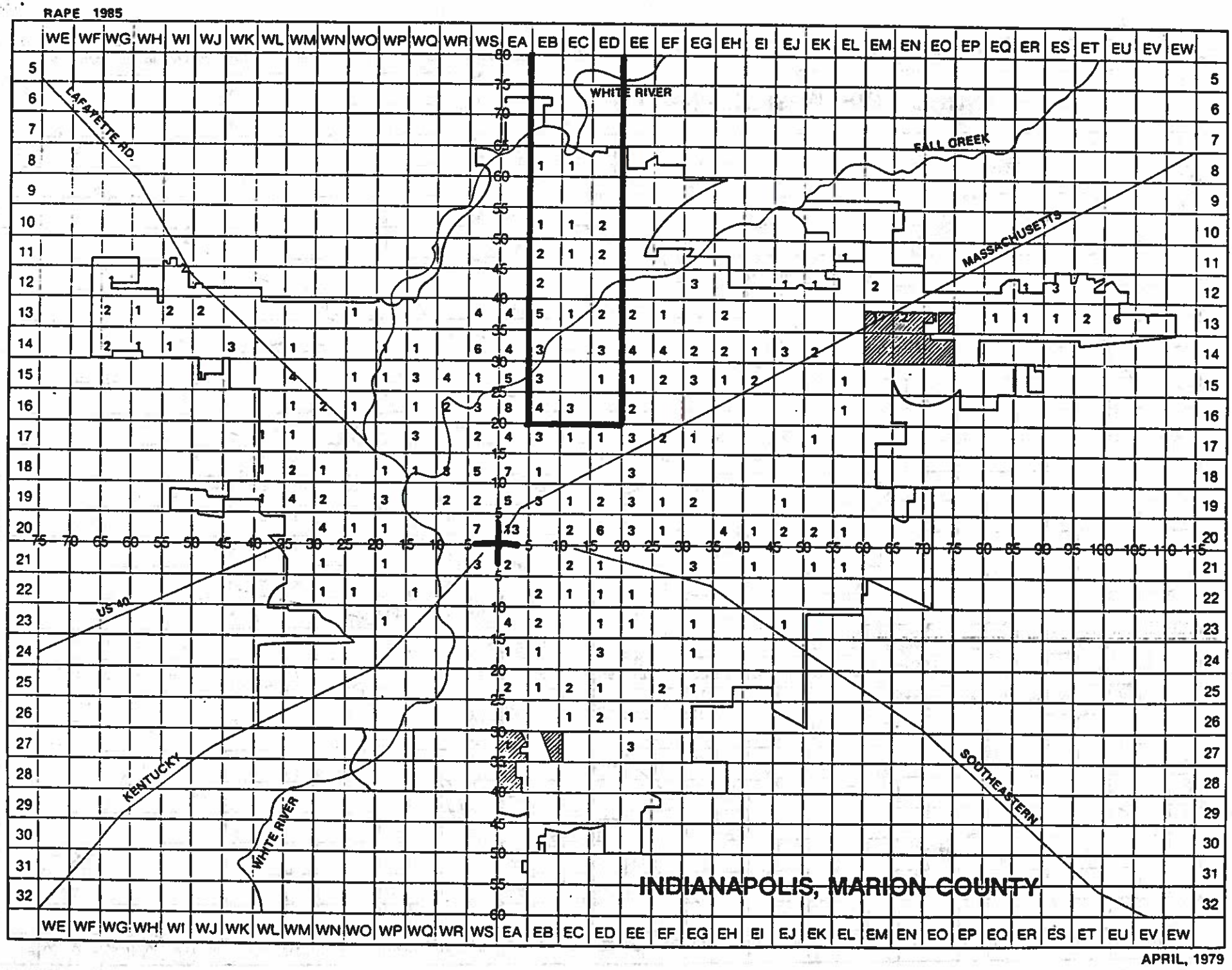


APRIL, 1979

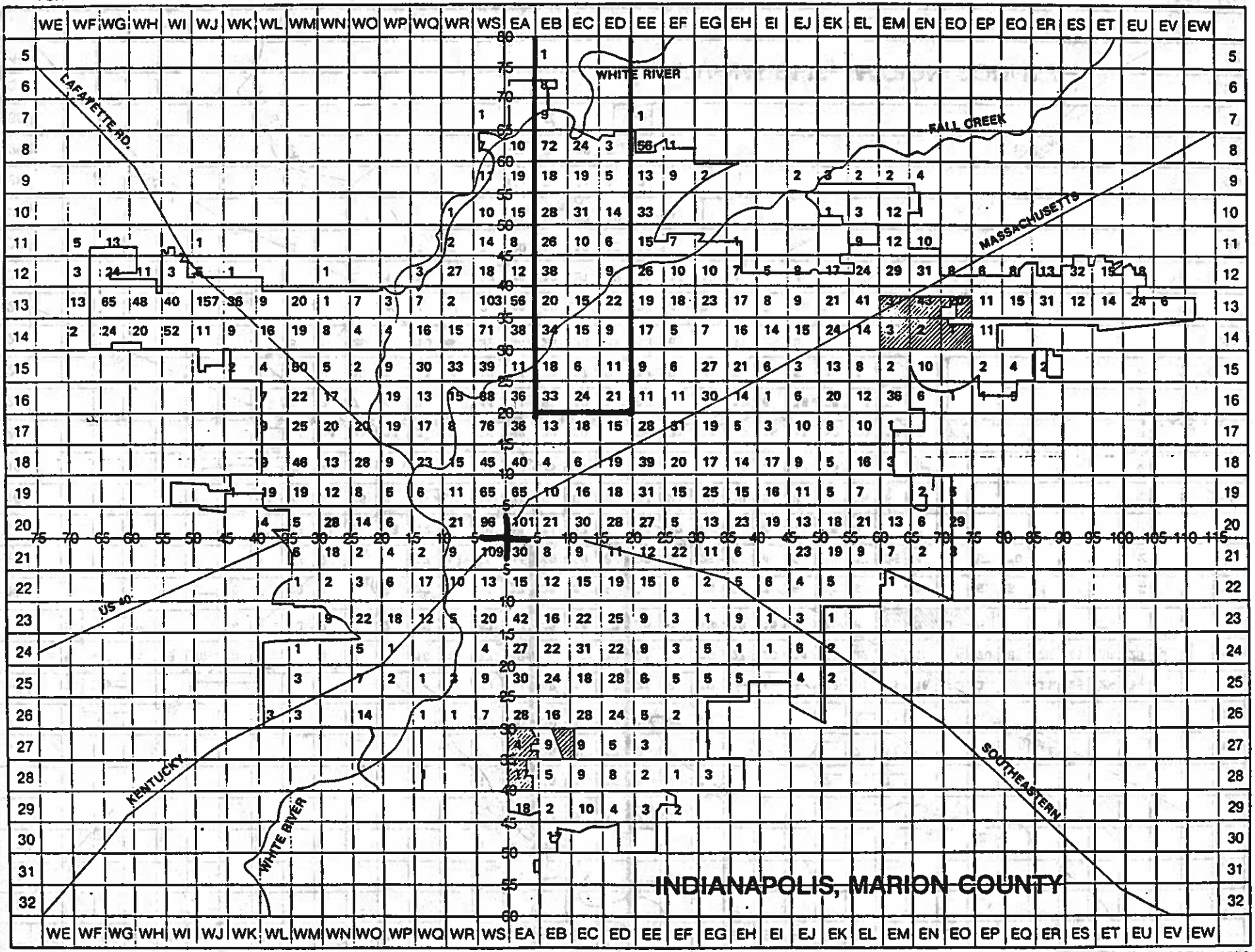
ROBBERY 1985



APRIL, 1979

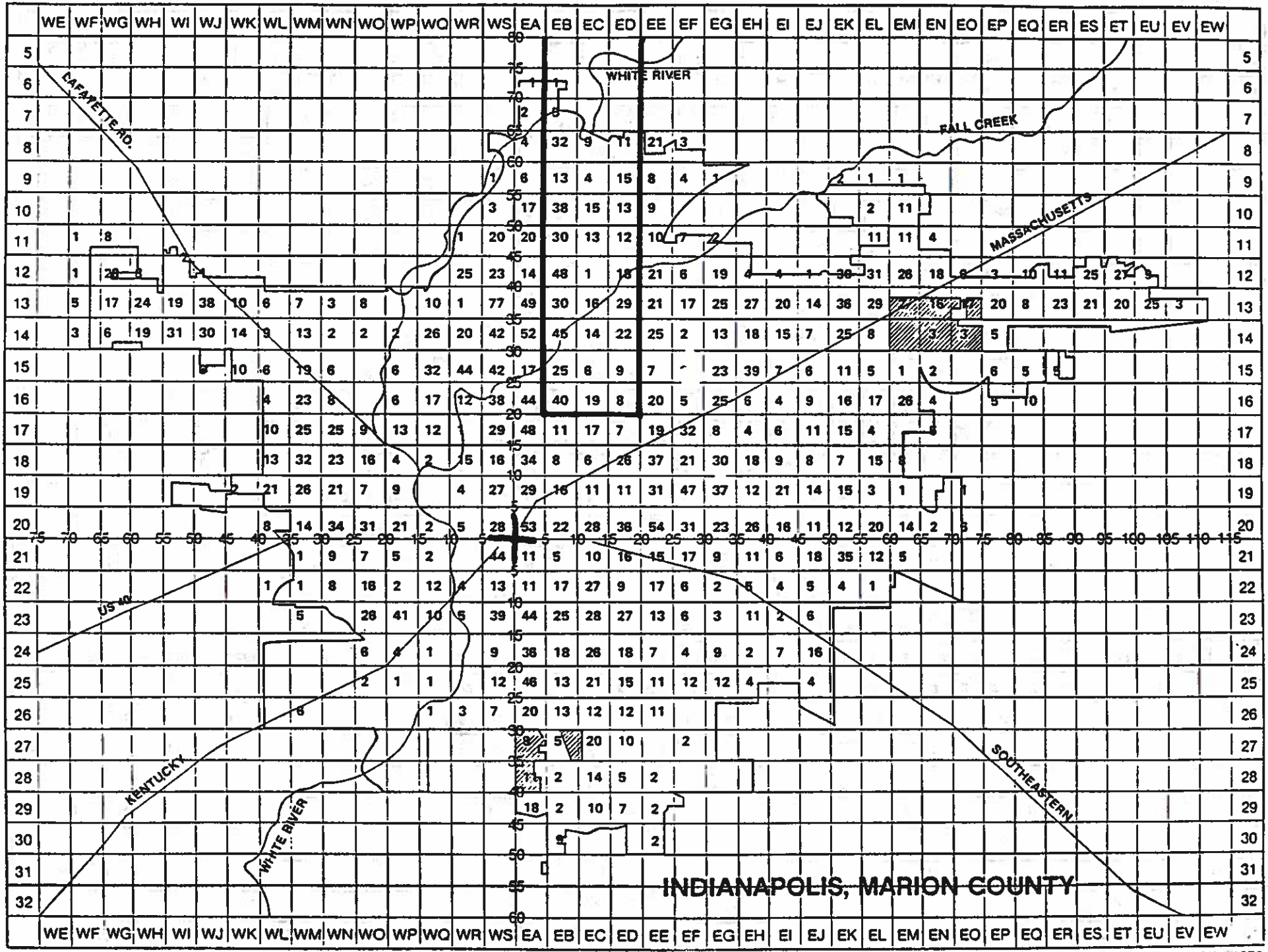

RAPE 1985
WE WF WG WH WI WJ WK WL WM WN WO WP WQ WR WS EA EB EC ED EE EF EG EH EI EJ EK EL EM EN EO EP EQ ER ES ET EU EV EW
LAFAYETTE RD.
WHITE RIVER
FALL CREEK
MASSACHUSETTS
US 40
KENTUCKY
WHITE RIVER
SOUTHEASTERN
INDIANAPOLIS, MARION COUNTY
APRIL, 1979

VEHICLE RELATED LARCENIES 1985



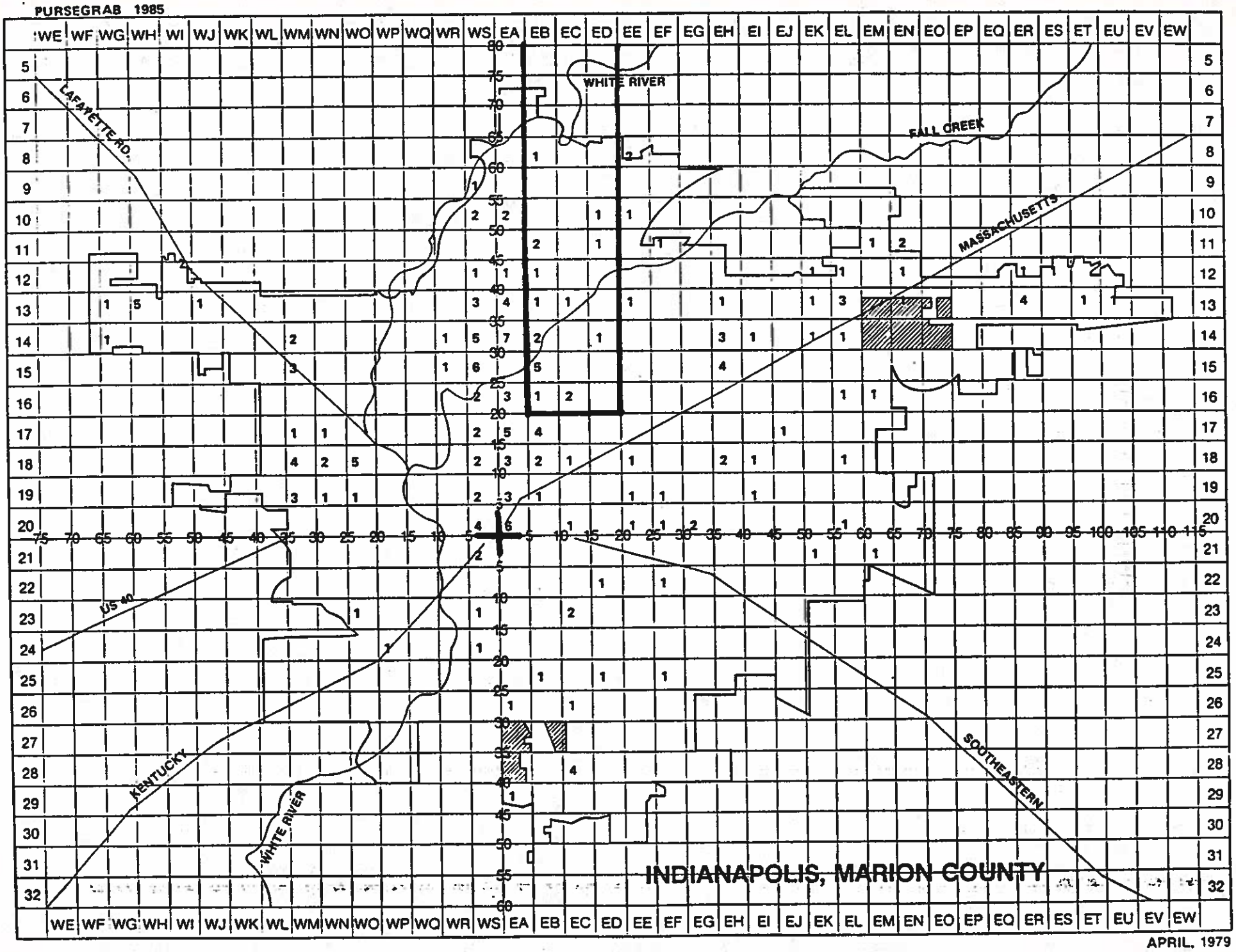
APRIL, 1979

VANDALISM 1985



APRIL, 1979

PURSEGRAB 1985



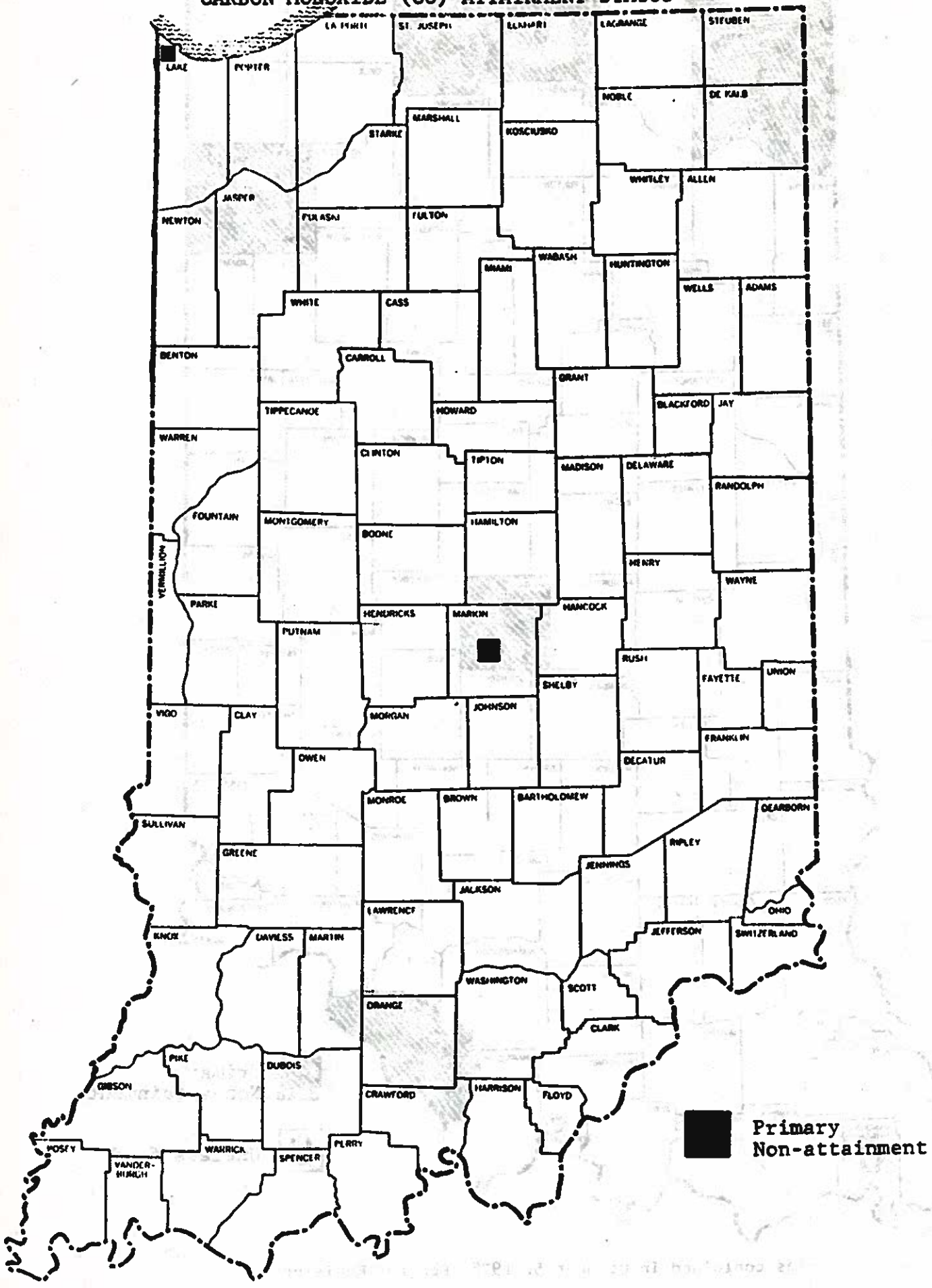
APRIL, 1979

APPENDIX XII

AIR POLLUTION

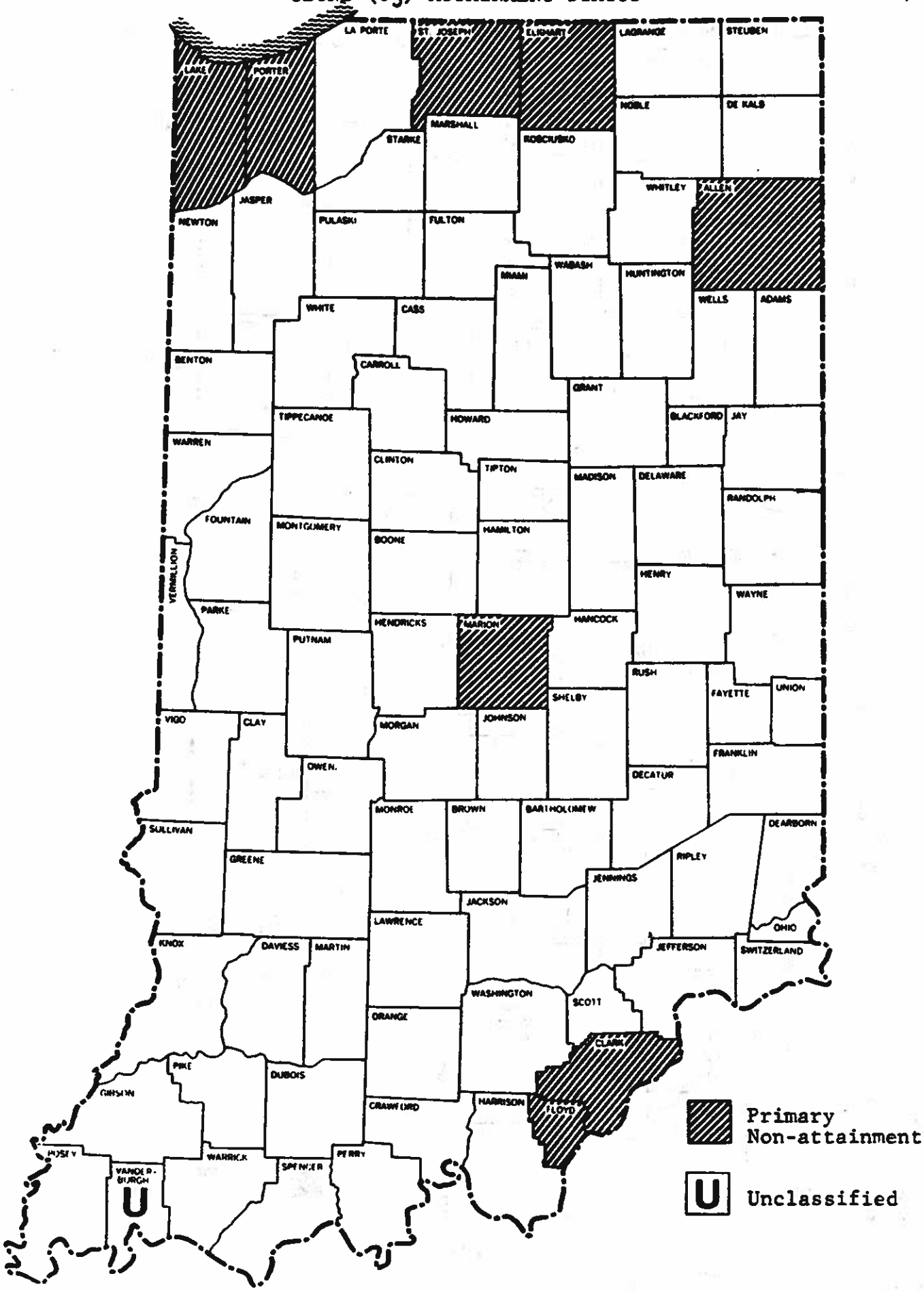
APPENDIX XII

CARBON MONOXIDE (CO) ATTAINMENT STATUS*

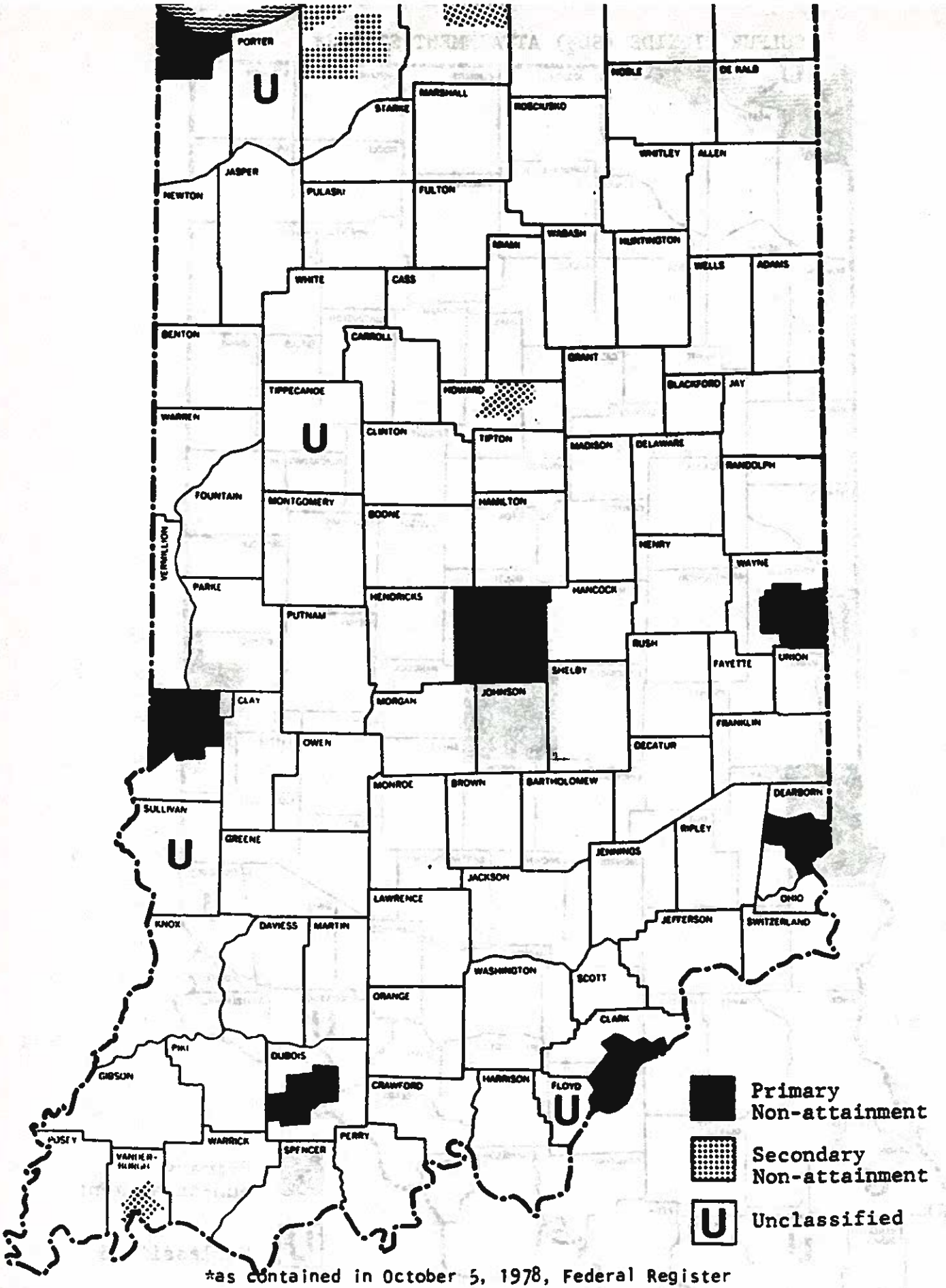


*as contained in October 5, 1978, Federal Register

OZONE (O_3) ATTAINMENT STATUS*

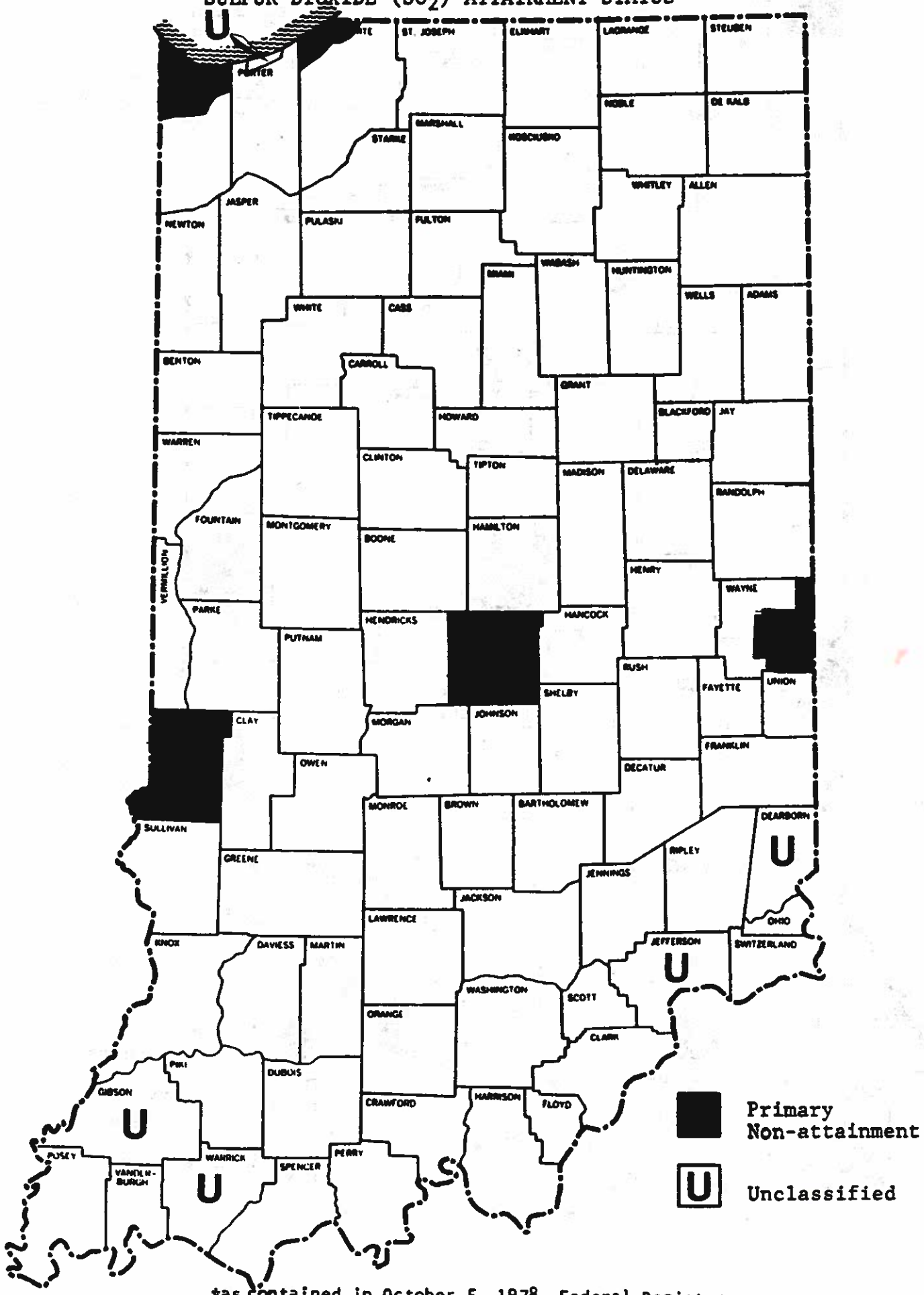


*as contained in October 5, 1978, Federal Register



*as contained in October 5, 1978, Federal Register

SULFUR DIOXIDE (SO_2) ATTAINMENT STATUS*



*as contained in October 5, 1978, Federal Register

APPENDIX XIII

CENSUS TRACT DATA

APPENDIX XIII

Census Tracts in each sub-area

	# of households	population	average income
North			
Pike Township			
3101.01 (northern half)*	649	1870	31,500
3101.02	1240	3532	25,473
3102	1256	2937	15,121
3103.01	2650	6058	20,860
Washington Township			
3201.01	1678	4832	26,408
3201.02	2009	4340	16,926
3201.03	1140	3020	28,750
3201.04	624	1721	28,047
3202.01	2136	4123	15,773
3202.02	1418	3515	23,250
3203.01	937	2324	29,625
3203.02	2306	5910	30,030
3204	1365	3254	23,733
3205	1443	3297	21,250
3206	1295	3469	18,500
3207	972	1942	17,000
3208	1144	3138	41,000
3209.01	2067	5449	27,580
3209.02	1294	3173	19,110
3209.03	1665	4468	15,953
3210.01	1135	3249	20,871
3210.02	1480	4253	30,500
3211	1472	3785	22,000
3212	2308	5431	22,970
3213	1357	2619	17,382
3214	2052	4734	24,433
3216	2223	4679	23,189
3217	2004	4476	18,984
3218	1693	4109	21,667
3219	1403	5166	22,200
3220	1747	4169	16,685
3221	1082	3847	19,487
3222	911	2929	18,125
3223	1191	3216	20,373
3224	1629	3659	14,865
3225	978	2220	10,698
3226	2432	5278	11,719
3227	1106	3214	22,000
Lawrence Township			
3301.01	2542	5902	22,750
3301.02	1674	5360	33,500
3302.01 (northern half)*	547	1800	21,250
3303 (northern half)	203	1547	13,222
3304.01	1794	5521	35,000

3304.02	1315	2587	19,500
3305	2656	7098	25,750
3306	2203	5704	20,222
3309	2205	6210	18,460
3310	1770	6367	22,442
WEST			
Pike Township			
3103.02 (southern half)*	649	1881	31,500
3103.02	3457	9058	16,640
Wayne Township			
3401.01	1434	4573	25,174
3401.02	2082	4232	16,212
3401.03	2059	5597	22,250
3401.04	2354	5008	19,500
3402	3290	8144	20,750
3403	2694	7121	19,500
3404	1420	4015	19,012
3405	1676	3888	18,986
3406	2079	5672	17,703
3407	1515	4113	16,250
3408	906	2252	22,574
3409	2636	6678	18,750
3410	893	2049	17,550
3411	986	2434	15,119
3412	1188	3699	11,342
3414	823	2383	14,092
3415	446	1647	11,563
3416	1026	3329	10,552
3417	2282	5813	13,500
3419.01	2905	5274	14,500
3419.02	1301	3648	26,361
3420	890	2723	18,768
3421	1108	3179	20,222
3422	2194	6169	16,817
3423	2708	7386	16,413
3424	683	1928	16,107
3425	1985	5498	15,500
3426	1545	4357	14,965
Decatur Township			
3701	677	2032	22,969
3702.01	1681	4996	20,000
3702.02	1922	5759	18,100
3703 (northwestern half)*	900	3000	24,768

Inner City

Center Township

3501	752	2059	10,938
3502	243	618	12,167
3503	1798	3513	9,459
3504	1396	4264	13,704
3505	1246	3949	16,056
3506	2224	7528	18,827
3507	858	2848	13,006
3508	1138	3697	10,654
3509	910	3534	12,017
3510	1615	4592	10,261
3511	1180	3512	12,702
3512	1773	4839	7,719
3515	1266	3194	6,557
3516	1022	2654	8,054
3517	1746	5257	7,425
3519	777	2579	18,919
3521	1276	4803	11,939
3523	764	2668	14,296
3524	1377	3560	16,417
3525	1629	3500	15,093
3526	2021	5731	13,476
3527	1666	4861	11,897
3528	892	2727	7,869
3531	448	1274	6,084
3532	836	2211	7,429
3533	2158	3843	7,062
3535	628	1540	9,946
3536	1325	4182	13,337
3538	836	2467	9,316
3539	111	1023	8,409
3544	845	2299	7,267
3545	1425	3760	9,611
3547	881	2796	10,781
3548	980	2910	12,190
3549	1404	3367	12,304
3550	1358	3552	9,243
3551	1092	2838	10,843
3553	1331	3072	14,480
3554	1504	3556	13,435
3555	1625	4026	16,055
3556	1054	2554	11,894
3557	1423	3865	12,021
3559	1402	4020	8,358
3564	974	2655	10,739
3569	1320	3879	10,451
3570	1268	3807	13,795
3571	1127	3222	9,107
3572	1619	4892	11,324
3573	1059	2693	11,169

3574	1783	5719	14,063
3575	1756	5490	17,750
3576	2715	8201	14,787
3578	967	2616	13,877
3579	1985	4371	14,449
3580	765	2323	11,723
3581	1495	4263	12,673

Downtown

Center Township

3541	1516	2097	5,439
3542	2443	3858	4,706
3562	508	2038	7,055
3563	279	858	6,462

EAST

Lawrence Township

3302.01 (southern half)*	800	2456	21,250
3302.02	1262	2865	11,000
3303 (southern half) *	203	1547	13,222
3307	2208	4996	14,799
3308.01	3063	8588	15,750
3308.02	2741	7312	17,250

Warren Township

3601.01	1055	2884	14,893
3601.02	1226	4135	15,954
3602.01	1675	4232	17,770
3602.02	1239	4063	25,118
3603.01	1445	4526	24,712
3603.02	1099	3019	15,387
3604.01	2000	5491	20,139
3604.02	757	2396	22,319
3604.03	2576	6634	17,730
3605.01	1313	4027	18,250
3605.02	1706	4832	24,633
3606.01	1889	5410	25,513
3606.02	1995	4921	22,836
3607	951	2252	17,000
3608	1476	2985	12,000
3609	2246	5712	17,286
3610	1027	2548	21,828
3611	1727	3807	14,250
3612	1480	4042	16,802
3613	1088	2970	18,595
3614	2134	6169	20,500
3616	597	2153	25,000

Franklin Township

3901 (northeastern half) *	890	2556	23,000
3902	605	1882	24,196
3903 (northern half) *	563	1801	25,121

South

Decatur Township			
3703 (southeastern half) *	1136	3639	24,768
Perry Township			
3801	1367	4389	24,694
3802	1351	3289	16,651
3803	1747	5489	16,500
3804.01	2385	7674	20,500
3804.02	1312	3440	19,250
3505.01	1155	2608	19,508
3805.02	1677	4111	17,174
3806	1813	4163	17,056
3807	1752	4415	19,747
3808	1084	2909	17,742
3809	1951	6365	26,443
3810.01	2483	6309	16,750
3810.02	1263	3382	24,750
3811.01	1481	4383	27,729
3811.02	1388	4265	28,571
3812.01	1594	5274	28,869
3812.02	2837	6020	14,989
Franklin Township			
3901 (southwestern half)*	891	2557	23,000
3903 (southern half)*	563	1802	25,121
3904	1768	5879	26,483

* Estimated figures for these divided census tracts

Township Demographic Data

	# of households	population	average income
Center	75,814	208,624	11,328
Decatur	6,316	19,426	21,333
Franklin	5,280	16,477	25,188
Lawrence	27,186	75,860	20,253
Perry	29,090	78,485	20,619
Pike	9,901	25,336	19,365
Warren	32,701	89,208	19,549
Washington	51,696	129,008	20,855
Wayne	47,108	122,809	17,397

Subarea Demographic Data

North

	# of households	population	average income
Pike	5,795	14,397	22,211
Washington	51,696	129,008	20,855
Lawrence	16,909	48,096	24,248
Total	74,400	191,501	21,732

West

Pike	4,106	10,939	18,989
Wayne	47,108	122,809	17,397
Decatur	5,180	15,787	20,511
Total	56,394	149,535	17,799

Inner City

Center	71,068	199,773	11,731

Downtown

Center	4,746	8,851	5,295

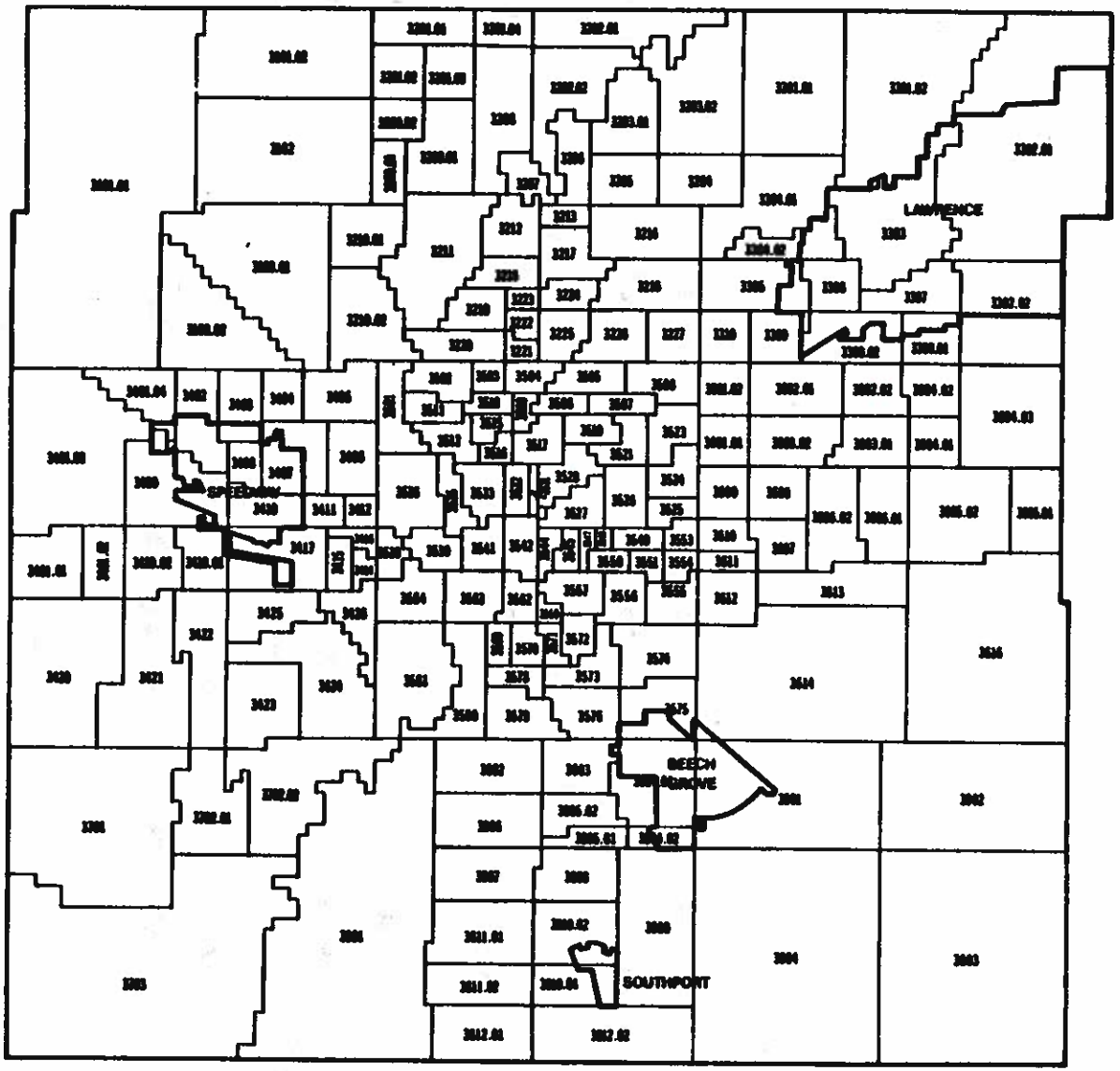
East

	# of households	population	average income
Lawrence	10,277	27,764	15,741
Warren	32,701	89,208	19,549
Franklin	2,058	6,239	23,932
Total	45,036	123,211	18,880

South

Decatur	1,136	3,639	24,768
Perry	29,090	78,485	20,619
Franklin	3,222	10,238	25,282
Total	33,448	92,362	21,209

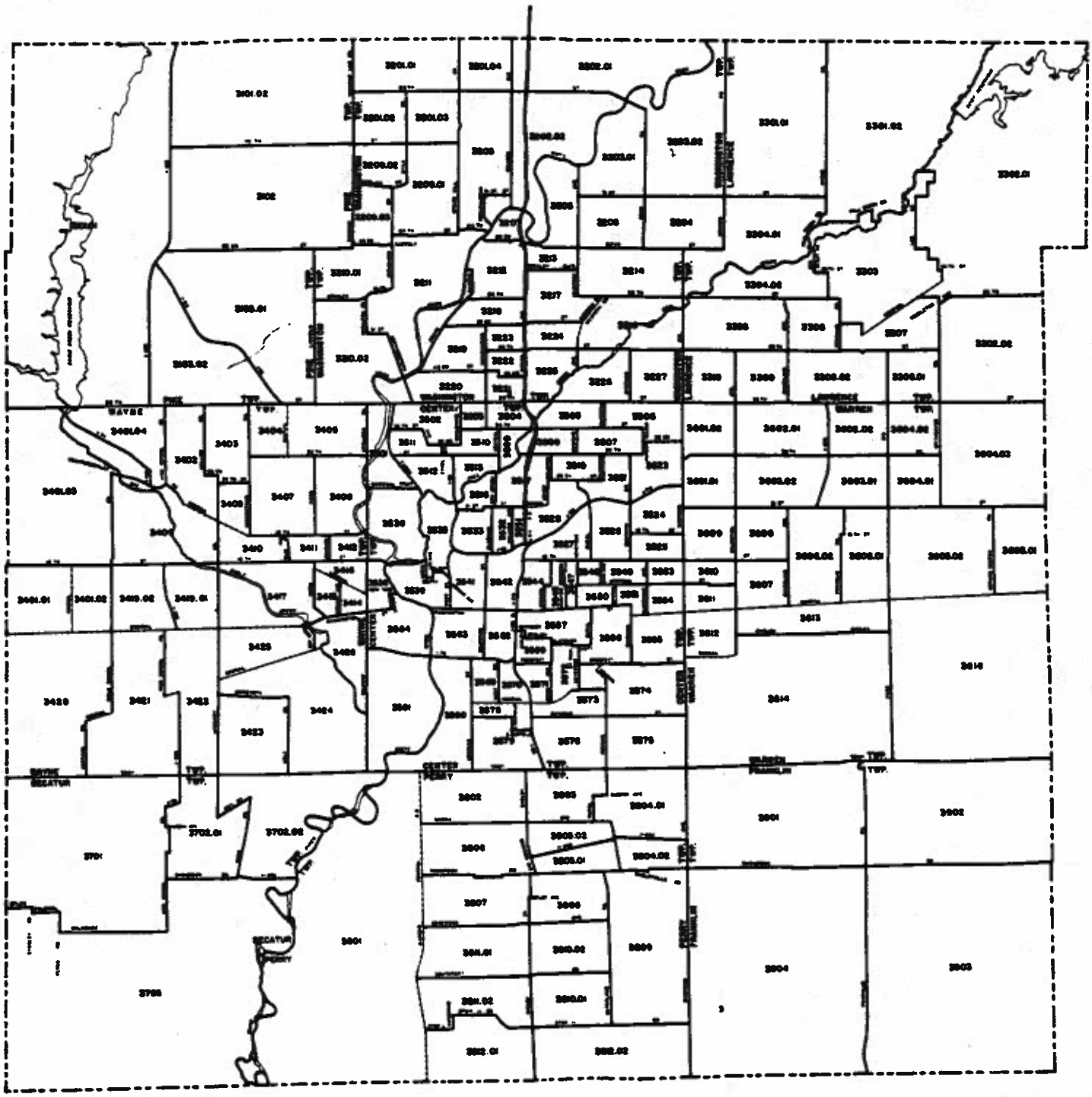
Map 2
1980 CENSUS TRACTS



N

The preparation of this map
was financed in part by
a Community Development Block Grant

April 1985
Department of Metropolitan Development
Division of Planning
Indianapolis-Marion County, Indiana



1980 CENSUS TRACTS

APRIL 1980
U.S. DEPARTMENT OF METROPOLITAN DEVELOPMENT
DIVISION OF PLANNING AND ZONING
INDIANAPOLIS-MARION COUNTY, INDIANA

APPENDIX XIV

INDUSTRIAL DEVELOPMENT SITE DATA

CITY OF INDIANAPOLIS
DIVISION OF PLANNING

INDUSTRIAL DEVELOPMENT SITE DATA

SITE: 491
INDUSTRIAL PARK (IP)/INDUSTRIAL ZONED (IZ)/PLANNED NOT ZONED (NZ): NZ
CENSUS TRACT: 3505.00 TOWNSHIP: CEN BASE MAP: 18
LOCATION: 3500 N. SUTHERLAND AVE. ACREAGE: 54
ZONED: D5 SECONDARY ZONING DISTRICT: FW
DEVELOPED ACRES: 20 UNDEVELOPED ACRES: 34

DESIGNATION	1	2	3	4
NORTH USE	PK1	D5		
EAST USE	D5			
SOUTH USE	I3U	PK1	C7	
WEST USE	PK1	I3U		
CURRENT LANDUSE	VAC	SF	RET	

MILES TO INTERCHANGE: 2.00
FRONTAGE ON INTERSTATE: NO FRONTAGE ON PRIMARY ARTERIAL: YES
RAIL SPUR: NO ADJACENT RAIL: YES
SANITARY SEWER: YES SEWER SIZE: 42
WATER MAIN: YES WATER MAIN SIZE: 12
GAS MAIN: YES GAS MAIN SIZE: 8
TRAVEL TIME TO AIRPORT: 18 LARGEST UNDEVELOPED TRACT:

NOTE:

CITY OF INDIANAPOLIS
DIVISION OF PLANNING

INDUSTRIAL DEVELOPMENT SITE DATA

SITE: 162
INDUSTRIAL PARK (IP)/INDUSTRIAL ZONED (IZ)/PLANNED NOT ZONED (NZ): IZ
CENSUS TRACT: TOWNSHIP: CEN BASE MAP: 25
LOCATION: 1501 E. 22ND ST. ACREAGE: 150
ZONED: I3U SECONDARY ZONING DISTRICT: NO
DEVELOPED ACRES: 87 UNDEVELOPED ACRES: 63

DESIGNATION	1	2	3	4
NORTH USE	D7	D5	I2U	I4U
EAST USE	D5	I4U		
SOUTH USE	I4U	D8	C7	D5
WEST USE	D8			
CURRENT LANDUSE				

MILES TO INTERCHANGE: .75
FRONTAGE ON INTERSTATE: NO FRONTAGE ON PRIMARY ARTERIAL: YES
RAIL SPUR: NO ADJACENT RAIL: YES
SANITARY SEWER: YES SEWER SIZE: 51
WATER MAIN: YES WATER MAIN SIZE: 36
GAS MAIN: YES GAS MAIN SIZE: 12
TRAVEL TIME TO AIRPORT: 20 LARGEST UNDEVELOPED TRACT: 10

NOTE:

CITY OF INDIANAPOLIS
DIVISION OF PLANNING

INDUSTRIAL DEVELOPMENT SITE DATA

SITE: 163
INDUSTRIAL PARK (IP)/INDUSTRIAL ZONED (IZ)/PLANNED NOT ZONED (NZ): IZ
CENSUS TRACT: TOWNSHIP: CEN BASE MAP: 25
LOCATION: 1901 N. MARTINDALE AV. ACREAGE: 31
ZONED: I4U SECONDARY ZONING DISTRICT: NO
DEVELOPED ACRES: 21 UNDEVELOPED ACRES: 10

DESIGNATION	1	2	3	4
NORTH USE	I3U			
EAST USE	I3U	D8		
SOUTH USE	C1			
WEST USE	I3U			
CURRENT LANDUSE				

MILES TO INTERCHANGE: 1.00
FRONTAGE ON INTERSTATE: NO FRONTAGE ON PRIMARY ARTERIAL: YES
RAIL SPUR: NO ADJACENT RAIL: YES
SANITARY SEWER: YES SEWER SIZE: 84
WATER MAIN: YES WATER MAIN SIZE: 12
GAS MAIN: YES GAS MAIN SIZE: 8
TRAVEL TIME TO AIRPORT: 20 LARGEST UNDEVELOPED TRACT: 6

NOTE:

CITY OF INDIANAPOLIS
DIVISION OF PLANNING

INDUSTRIAL DEVELOPMENT SITE DATA

SITE: 74
INDUSTRIAL PARK (IP)/INDUSTRIAL ZONED (IZ)/PLANNED NOT ZONED (NZ): IZ
CENSUS TRACT: TOWNSHIP: CEN BASE MAP: 18
LOCATION: 3100 N. MARTINDALE ACREAGE: 5
ZONED: I5U SECONDARY ZONING DISTRICT: NO
DEVELOPED ACRES: 5 UNDEVELOPED ACRES: 0

DESIGNATION	1	2	3	4
NORTH USE	I2U			
EAST USE	SU18	D5		
SOUTH USE	I2U			
WEST USE	I2U			
CURRENT LANDUSE				

MILES TO INTERCHANGE: 1.50
FRONTAGE ON INTERSTATE: NO
RAIL SPUR: NO
SANITARY SEWER: YES
WATER MAIN: YES
GAS MAIN: NO
TRAVEL TIME TO AIRPORT: 26

FRONTAGE ON PRIMARY ARTERIAL: YES
ADJACENT RAIL: YES
SEWER SIZE: 18
WATER MAIN SIZE: 6
GAS MAIN SIZE:
LARGEST UNDEVELOPED TRACT:

NOTE:

CITY OF INDIANAPOLIS
DIVISION OF PLANNING

INDUSTRIAL DEVELOPMENT SITE DATA

SITE: 161
INDUSTRIAL PARK (IP)/INDUSTRIAL ZONED (IZ)/PLANNED NOT ZONED (NZ): IZ
CENSUS TRACT: TOWNSHIP: CEN BASE MAP: 25
LOCATION: 2401 WINTHROP AV. ACREAGE: 28
ZONED: I4U SECONDARY ZONING DISTRICT: NO
DEVELOPED ACRES: 24 UNDEVELOPED ACRES: 4

DESIGNATION	1	2	3	4
NORTH USE	I2U			
EAST USE	I2U			
SOUTH USE	I3U			
WEST USE	I2U	C3		
CURRENT LANDUSE				

MILES TO INTERCHANGE: 1.25
FRONTAGE ON INTERSTATE: NO
RAIL SPUR: NO
SANITARY SEWER: YES
WATER MAIN: YES
GAS MAIN: YES
TRAVEL TIME TO AIRPORT: 20

FRONTAGE ON PRIMARY ARTERIAL: NO
ADJACENT RAIL: YES
SEWER SIZE: 12
WATER MAIN SIZE: 8
GAS MAIN SIZE: 24
LARGEST UNDEVELOPED TRACT: 3

NOTE:

CITY OF INDIANAPOLIS
DIVISION OF PLANNING

INDUSTRIAL DEVELOPMENT SITE DATA

SITE: 70
INDUSTRIAL PARK (IP)/INDUSTRIAL ZONED (IZ)/PLANNED NOT ZONED (NZ): IZ
CENSUS TRACT: TOWNSHIP: CEN BASE MAP: 18
LOCATION: 3300 SUTHERLAND ACREAGE: 6
ZONED: I3U SECONDARY ZONING DISTRICT: NO
DEVELOPED ACRES: 6 UNDEVELOPED ACRES: 0

DESIGNATION	1	2	3	4
NORTH USE	D5			
EAST USE	D5			
SOUTH USE	D5			
WEST USE	PK1			
CURRENT LANDUSE				

MILES TO INTERCHANGE: 2.50
FRONTAGE ON INTERSTATE: NO FRONTAGE ON PRIMARY ARTERIAL: YES
RAIL SPUR: NO ADJACENT RAIL: YES
SANITARY SEWER: YES SEWER SIZE: 48
WATER MAIN: YES WATER MAIN SIZE: 12
GAS MAIN: YES GAS MAIN SIZE: 8
TRAVEL TIME TO AIRPORT: 27 LARGEST UNDEVELOPED TRACT:

NOTE:

CITY OF INDIANAPOLIS
DIVISION OF PLANNING

INDUSTRIAL DEVELOPMENT SITE DATA

SITE: 73
INDUSTRIAL PARK (IP)/INDUSTRIAL ZONED (IZ)/PLANNED NOT ZONED (NZ): IZ
CENSUS TRACT: TOWNSHIP: CEN BASE MAP: 18
LOCATION: 3000 N. MARTINDALE ACREAGE: 71
ZONED: I2U SECONDARY ZONING DISTRICT: NO
DEVELOPED ACRES: 7 UNDEVELOPED ACRES: 64

DESIGNATION	1	2	3	4
NORTH USE	D5			
EAST USE	D5	C1	C4	
SOUTH USE	I4U			
WEST USE	D8	D5	C1	
CURRENT LANDUSE				

MILES TO INTERCHANGE: 1.50
FRONTAGE ON INTERSTATE: NO FRONTAGE ON PRIMARY ARTERIAL: YES
RAIL SPUR: YES ADJACENT RAIL: YES
SANITARY SEWER: YES SEWER SIZE: 21
WATER MAIN: YES WATER MAIN SIZE: 6
GAS MAIN: YES GAS MAIN SIZE: 6
TRAVEL TIME TO AIRPORT: 26 LARGEST UNDEVELOPED TRACT: 4

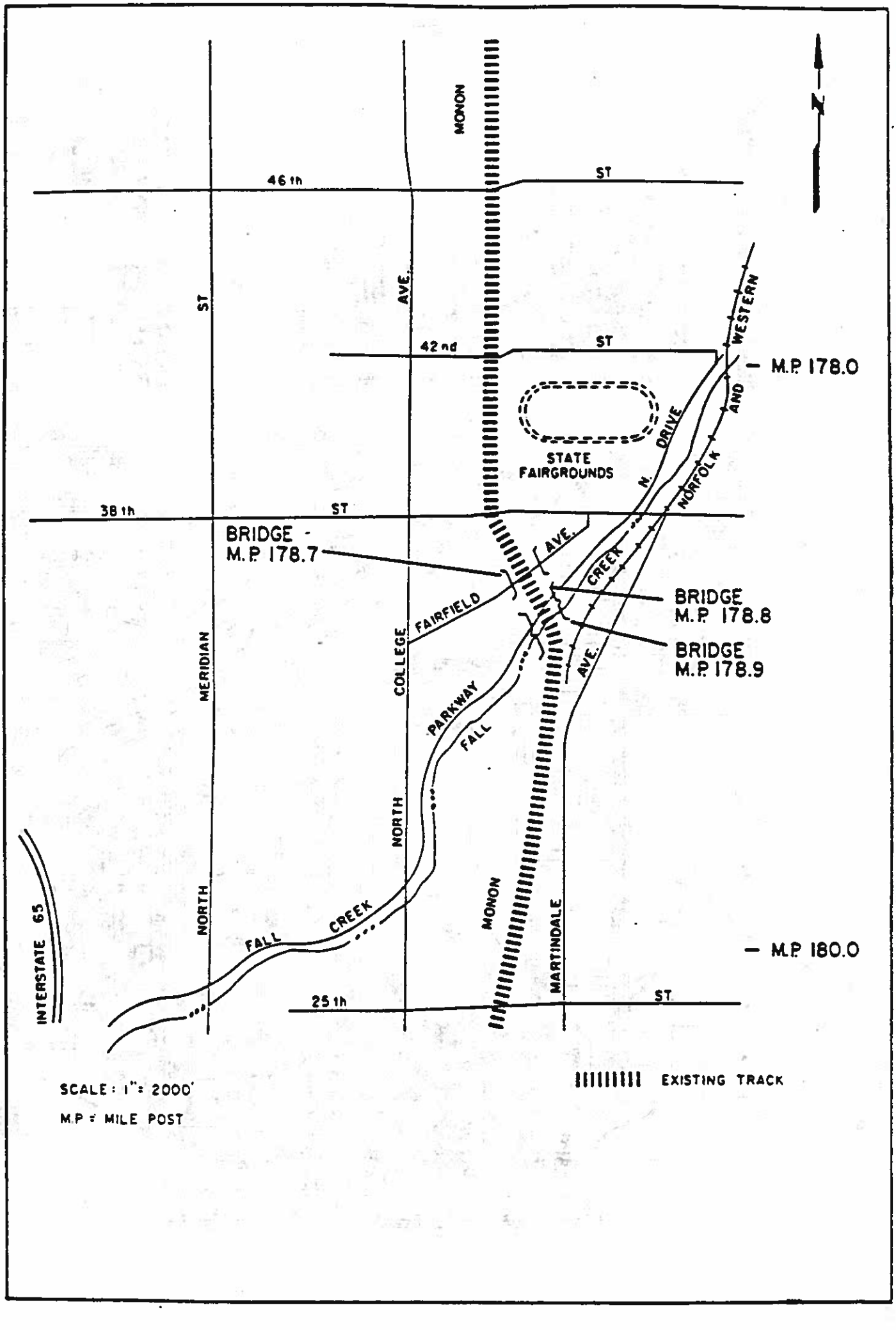
NOTE:

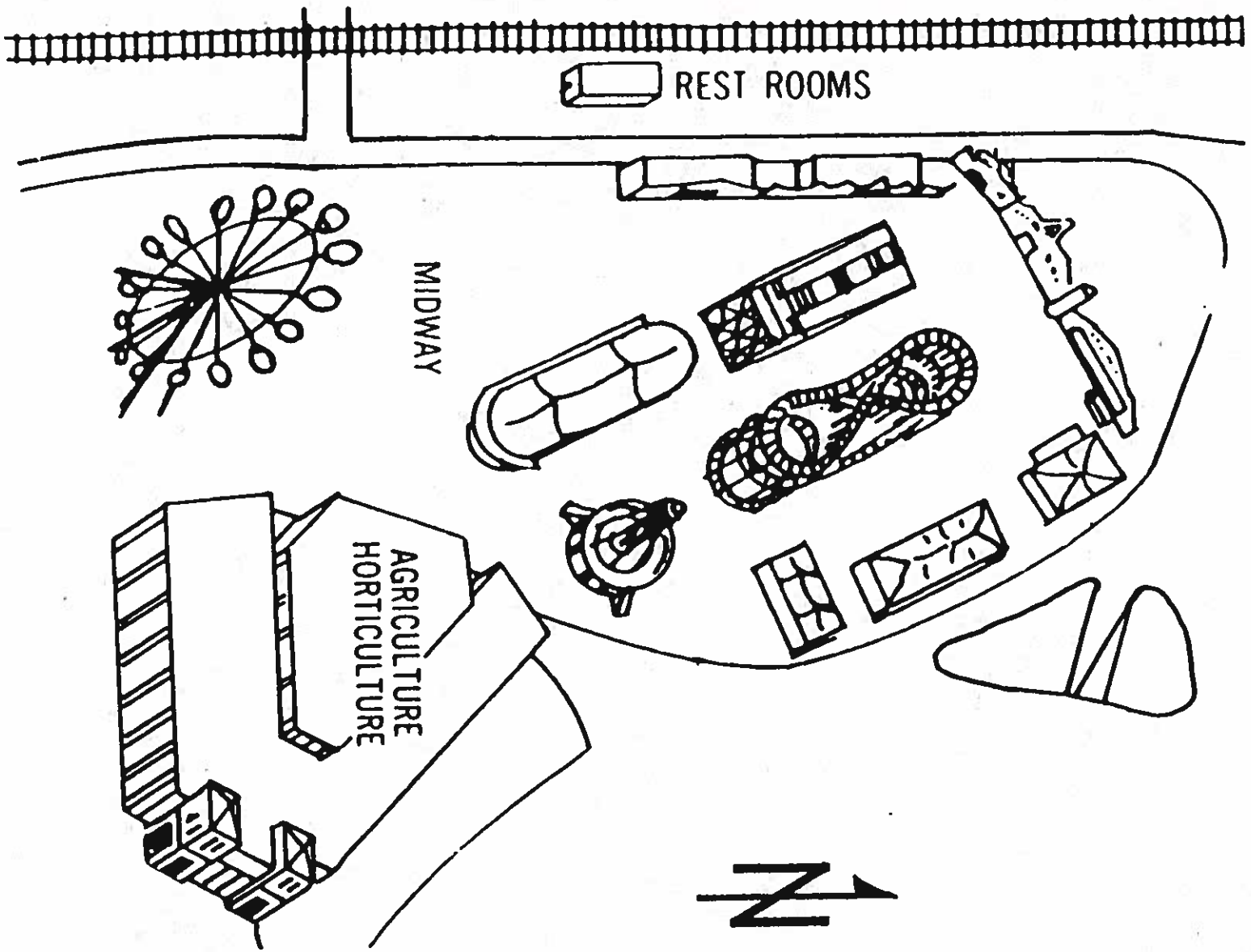
APPENDIX XV

STATE FAIRGROUNDS MASTER PLAN

APPENDIX XV

Illustrative Master Plan
INDIANA STATE FAIRGROUNDS MASTER PLAN
HNTB
pod
SRI
0 200 700 1000 feet


N
MONON
46th ST
ST
AVE.
42nd ST
WESTERN AND NORFOLK
M.P. 178.0
STATE FAIRGROUNDS
N. DRIVE
38th ST
BRIDGE M.P. 178.7
AVE.
CREEK
BRIDGE M.P. 178.8
BRIDGE M.P. 178.9
FAIRFIELD
COLLEGE
MERIDIAN
PARKWAY
FALL
AVE.
NORTH
NORTH
FALL CREEK
MONON
MARTINDALE
M.P. 180.0
INTERSTATE 65
25th ST
SCALE: 1" = 2000'
M.P. = MILE POST
EXISTING TRACK


REST ROOMS
MIDWAY
AGRICULTURE
HORTICULTURE

APPENDIX XVI

OWNERSHIP ASSESSMENT

APPENDIX XVI

OWNERSHIP ASSESSMENT
MILEPOST 154.50 to MILEPOST 180.45
INDIANAPOLIS BRANCH (U.S. 245 & 245-A)

SUMMARY

Map Location	Fee Ownership	Easement Rights	Outside of Right-of-Way
17	7.00	3.33	-0-
5-17-A	3.30	0.09	-0-
18	16.72	15.03	-0-
19	6.35	25.64	0.22
20	9.05	23.89	0.68
21	12.09	17.59	2.24
22	17.48	7.30	2.00
5-22-A	4.14	3.26	-0-
5-23-A	5.85	0.44	0.25
5-23-B	4.86	0.94	0.23
5-23-C	7.20	2.58	-0-
5-23-D	12.03	5.05	1.38
TOTALS	106.07 AC	105.14 AC	7.00 AC

TOTAL BREAKDOWN OF PROPERTY

Fee Ownership - 106.07 AC (4,620,409 square feet)

Easement Rights - 105.14 AC (4,579,898 square feet)

211.21 AC (9,200,308 square feet)

Fee Ownership - 50%

Easement Rights - 50%

Outside of Right-of-Way - 7.00 AC (304,920 square feet)

PARCEL NUMBER	OUTSIDE RIGHT-OF-WAY	TITLE	AREA IN ACRES WARRANTY	AREA IN ACRES EASEMENT
Valuation Station 245				
Map S-15-A				
(See Map 15 Parcels 6 through 23)				
Map 16				
1		No Record		0.13
2		Warranty	0.59	
3		No Record		1.58
4		Warranty	2.15	
5		Agreement		0.11
6		No Record		3.51
7		Suit		4.62
8		Warranty	2.61	
9		Warranty	1.92	
10		Warranty	2.19	
13		Agreement		0.08
14		Warranty	1.15	
15		Warranty	1.15	
16		Warranty	1.51	
17		Warranty	3.02	
18		Warranty	0.08	
18-A	0.09	Warranty		
19	0.55	Warranty		
20		Agreement		2.22
21		Warranty	1.89	
Map 17				
1		Warranty	0.42	
2		Warranty	2.60	
3		Warranty	0.91	
4		Warranty	2.32	
5		Warranty	0.76	
6		Warranty	2.73	
7		Warranty	1.09	
8		No Record		1.20
9		Agreement		4.65
10		Warranty	2.23	
11		Warranty	0.06	
12		Warranty	2.32	
15		Agreement		1.19
16		Warranty	1.44	
17		Quitclaim		1.07
18		Agreement		0.39
19		No Record		0.43
20		Warranty	0.41	
21		Warranty	0.40	

PARCEL NUMBER	OUTSIDE RIGHT-OF-WAY	TITLE	AREA IN ACRES WARRANTY	AREA IN ACRES EASEMENT
Valuation Station 245				
Map 17 (Continued)				
21½		No Record		0.04
22		Warranty	0.55	
23		Quitclaim		1.40
24		Warranty	0.04	
25		Warranty	0.69	
26		Warranty	1.16	
27		Warranty	2.31	
Map S-17-A				
1		Warranty	0.25	
2	(See Map 17)			
3	(See Map 17)			
4	(See Map 17)			
5	(See Map 17)			
6	(See Map 17)			
7	(See Map 17)			
8	(See Map 18)			
9	(See Map 19)			
13		Contract		0.05
14		No Record		0.04
17	(See Map 17)			
18	(See Map 17)			
19	(See Map 17)			
20	(See Map 17)			
21	(See Map 17)			
22	(See Map 17)			
23	(See Map 17)			
22-A		Warranty	0.52	
22-B		Warranty	1.26	
22-C		Warranty	1.27	
Map 18				
1		Warranty	3.12	
2		No Record		0.41
3		Agreement		0.27
4		No Record		0.66
5		Warranty	0.92	
5-A		Warranty	1.42	
6		Warranty	1.46	
7		Warranty	1.27	
8		Warranty	2.72	
9		Warranty	2.43	
10		Warranty	0.30	

PARCEL NUMBER	OUTSIDE RIGHT-OF-WAY	TITLE	AREA IN ACRES WARRANTY	AREA IN ACRES EASEMENT
Valuation Station 245				
Map 18 (Continued)				
11		Suit		4.87
12		Warranty	0.65	
13		No Record		0.24
14		Warranty	2.43	
15		Quitclaim		1.61
16		Agreement		0.82
17		Quitclaim		2.42
17-A		Quitclaim		0.90
18		Quitclaim		0.82
19		Quitclaim		1.78
20		No Record		0.23
Map 19				
1		Quitclaim		0.71
1-A		Quitclaim		1.15
1½		Quitclaim		1.94
2		Quitclaim		2.19
3		Quitclaim		2.16
4		Quitclaim		3.47
5		Quitclaim		0.09
6		Quitclaim		0.98
7		Quitclaim		2.11
8		Release		1.64
9		Quitclaim		0.85
10		Quitclaim		3.31
11		Warranty	4.82	
12	0.15	Warranty		
13		Quitclaim		0.94
14		No Record		0.17
15		Quitclaim		0.47
16		Quitclaim		0.50
16-A		Quitclaim		1.12
17		Warranty	1.53	
18	0.07	Warranty		
19		Quitclaim		0.79
20		Quitclaim		0.31
21		No Record		0.74

PARCEL NUMBER	OUTSIDE RIGHT-OF-WAY	TITLE	AREA IN ACRES WARRANTY	AREA IN ACRES EASEMENT
Valuation Station 245				
Map 20				
1		No Record		0.96
2		Quitclaim		0.42
4		Quitclaim		1.46
5		Quitclaim		0.49
6		Quitclaim		0.63
7		Quitclaim		1.19
8		Warranty	0.56	
9		Quitclaim		2.08
10		Quitclaim		4.09
11		Warranty	2.09	
12		Quitclaim		2.11
13		No Record		2.11
14		Warranty	2.14	
15		Warranty	1.40	
16		Agreement		2.74
17		Release		1.83
18		Condemnation		3.53
19		Warranty	0.30	
20		Warranty	0.16	
20-A		Warranty	0.16	
21	0.53	Warranty	2.03	
22		Street		0.04
23		Street		0.09
24		Street		0.02
25		Street		0.10
26	0.05	Warranty		
27		Warranty	0.01	
28	0.10	Warranty		
29		Warranty	0.05	
30		Warranty	0.15	
Map 21				
1		Warranty	2.15	
2		No Record		1.10
3		Warranty	1.05	
4		Conveyance		2.13
5		Warranty	2.45	
6		Agreement		1.28
7		Warranty	0.94	
9		Warranty	1.06	
10		Warranty	1.06	
10-A		Warranty	1.00	
11		Agreement		1.00

PARCEL NUMBER	OUTSIDE RIGHT-OF-WAY	TITLE	AREA IN ACRES WARRANTY	AREA IN ACRES EASEMENT
Valuation Station 245				
Map 21 (Continued)				
12		No Record		3.97
13		No Record		2.02
14		No Record		1.01
15		Release		1.01
16		Warranty	2.05	
17		Agreement		2.05
18		Release		2.02
19	2.24	Warranty		
20		Warranty	0.33	
Map 22				
1		Warranty	0.12	
2		Conveyance		0.54
2-A		Conveyance		2.15
3		Warranty	2.15	
5		Warranty	0.62	
6		Quitclaim		0.08
7		Warranty	3.32	
8		Warranty	2.02	
9		Warranty	3.01	
10	1.00	Quitclaim		
10-A	1.00	Quitclaim		
11		Warranty	2.02	
12		Quitclaim		4.48
13		Warranty	2.46	
14		Warranty	1.71	
15		Warranty	0.05	
16		Agreement		0.05
Map S-22-A				
1		Conveyance		0.72
2		Street		0.08
3		Quitclaim		0.58
4		Street		0.12
5		Street		0.55
6		Street		0.06
7		No Record		0.66
8		Grant		0.11
9		Street		0.09
10		Quitclaim		0.07
11		Alley		0.02
12		Warranty	0.17	
12-A		Warranty	0.21	

PARCEL NUMBER	OUTSIDE RIGHT-OF-WAY	TITLE	AREA IN ACRES WARRANTY	AREA IN ACRES EASEMENT
Valuation Station 245				
Map S-22-A (Continued)				
12-B		Warranty	0.41	
12-D		Warranty	0.88	
13		Street		0.01
14		Alley		0.05
15		Warranty	1.59	
16		Street		0.06
17		Warranty	0.88	
18		Street		0.08
Map S-22-B				
(See Map 22)				
Map S-22-D				
(See Map 22)				
Map S-22-E				
(See Map 22)				
Valuation Stations 245-A				
Map S-23-A				
1		Warranty	1.39	
2		Contract		0.16
3		Warranty	1.33	
4		Warranty	0.64	
5		Warranty	0.12	
6		Warranty	2.37	
7		Contract		0.13
8		Permit		0.01
9		Contract		0.04
10		Street		0.02
11	0.05	Warranty		
13	0.05	Warranty		
14	0.15	Warranty		
15		Street		0.04
16		Street		0.04

PARCEL NUMBER	OUTSIDE RIGHT-OF-WAY	TITLE	AREA IN ACRES WARRANTY	AREA IN ACRES EASEMENT
Valuation Station 245-A				
Map S-23-B				
1		Warranty	2.46	
2		Warranty	2.40	
3		No Record		0.31
4		Contract		0.23
5		No Record		0.34
6	0.23	Warranty		
7		Street		0.06
Map S-23-C				
1		Street		0.06
2		Warranty	2.04	
2-A		Warranty	1.49	
2-B		Warranty	0.46	
3		Warranty	2.14	
4		Warranty	0.91	
4-A		Warranty	0.16	
5		Street		0.11
6		Street		0.17
7		Street		0.09
8		Quitclaim		1.57
8-A		Quitclaim		0.22
9		Street		0.02
10		Contract		0.13
11		No Record		0.11
12		Quitclaim		0.15
12-A		Quitclaim		0.005
Map S-23-D				
0		Street		0.02
1		Quitclaim		0.77
2		Warranty	0.69	
3		Warranty	5.64	
4		Warranty	5.25	
4½		Street		0.24
5		Quitclaim		1.92
5-A		Quitclaim		0.25
5-B		Quitclaim		0.07
6		Street		0.07
7		Warranty	0.45	
8		Street		0.08
9		Street		0.45
10	1.38	Warranty		
11		Street		0.03

PARCEL NUMBER	OUTSIDE RIGHT-OF-WAY	TITLE	AREA IN ACRES WARRANTY	AREA IN ACRES EASEMENT
Valuation Station 245-A				
Map S-23-D (Continued)				
13		Contract		0.17
14		Contract		0.15
15		Contract		0.18
16		Contract		0.04
17		Contract		0.11
18		Contract		0.07
19		Contract		0.10
20		Contract		0.11
21		Contract		0.06
23		Street		0.13
23-A		Street		0.005
24		Street		0.02

SUMMARY BREAKDOWN

TOTAL WARRANTY	---	257.26 Acres	(11,206,245 square feet)
TOTAL EASEMENT	---	298.61 Acres	(13,007,452 square feet)
TOTAL WARRANTY & EASEMENT	---	555.87 Acres	(24,213,697 square feet)
TOTAL OUTSIDE RIGHT-OF-WAY	---	28.53 Acres	(1,242,767 square feet)
GRAND TOTAL	---	584.40 Acres	(25,456,464 square feet)

WARRANTY --- 46%

EASEMENT --- 54%

APPENDIX XVII

SEABOARD SYSTEM MIDWEST MAP


CHICAGO
CLEVELAND
TOLEDO
Fort Wayne
INDIANAPOLIS
COLUMBUS
DAYTON
CINCINNATI
LOUISVILLE
LEXINGTON
Frankfort
Bowling Green
Memphis Jct.
KNOXVILLE
Dale Hollow Lake
Wells Bar Lake
Pikeville
Harriman
Oakdale
Crossville
Rockwood
Greeneville
Bristol
Bryson
Athens
Englewood
Tellico Plains
Calhoun
Dyersburg
Union City
Fulton
Hickman
New Madrid
Mayfield
Paducah
Cairo
Metropolis
Brookport
Chester
Sparta
Dodge
Quebeck
Mimms
Antioch
Danley
Nashville
Franklin
Brentwood
Battlefield
Conasauga
Cleveland
Chattanooga
Lookout Mtn.
Ooltewah
Cleveland
Harrison
Maryville
Alcoa
Knoxville
Lone Mtn.
Jellico
Corbin
Somerset
Burnside
Glasgow
Campbellsville
Lebanon
Springfield
Bardstown
Elizabethtown
Owensboro
Evansville
Princeton
Hopkinsville
Guthrie
Clarksville
Cadiz
Eddyville
Kuttawa
Princeton
Madisonville
Hopkinsville
Russellville
Bowling Green
Glasgow
Campbellsville
Lebanon
Springfield
Bardstown
Elizabethtown
Owensboro
Evansville
Princeton
Hopkinsville
Guthrie
Clarksville
Cadiz
Eddyville
Kuttawa
Madisonville
Hopkinsville
Russellville
Bowling Green
Glasgow
Campbellsville
Lebanon
Springfield
Bardstown
Elizabethtown
Owensboro
Evansville
Princeton
Hopkinsville
Guthrie
Clarksville
Cadiz
Eddyville
Kuttawa
Madisonville
Hopkinsville
Russellville