

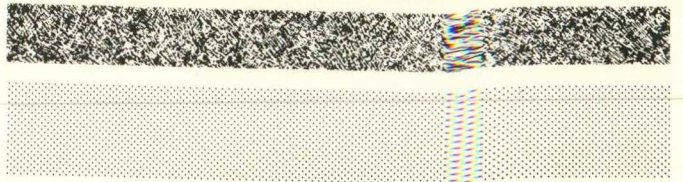
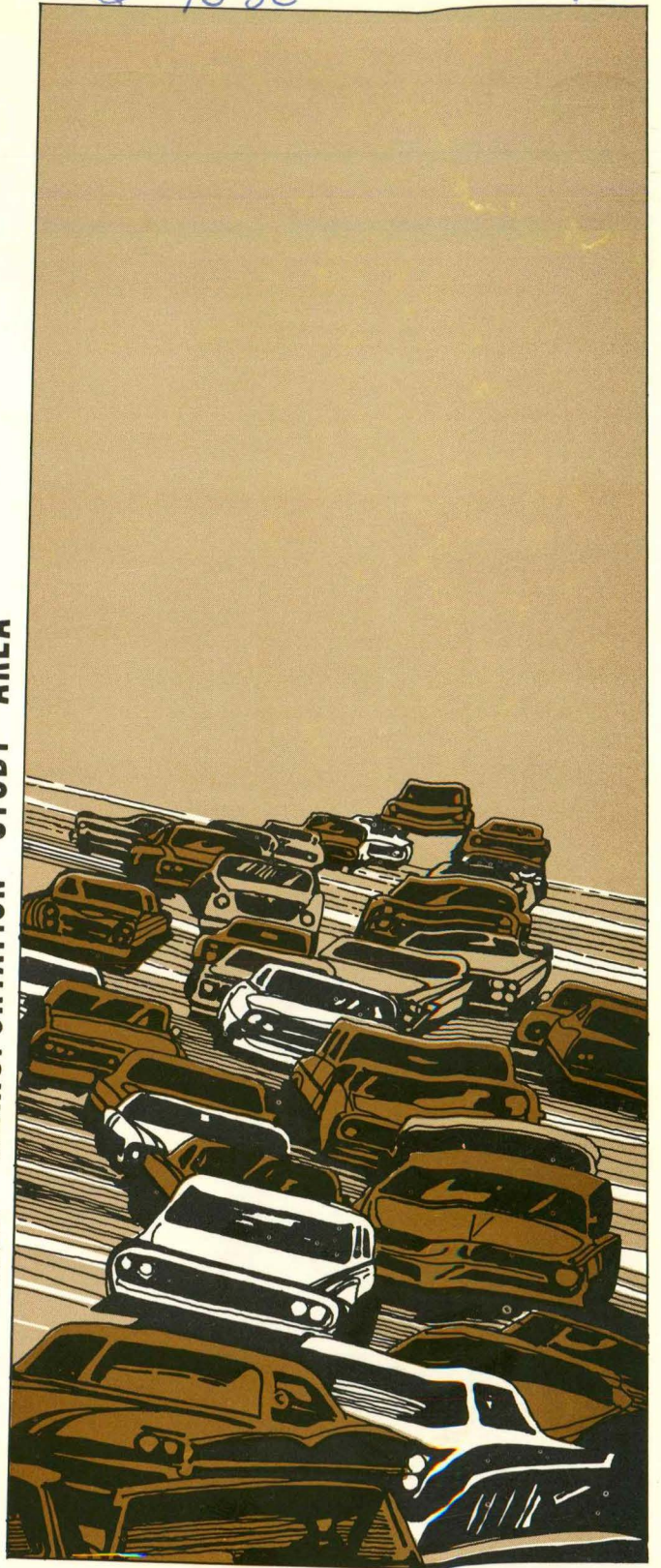
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TRAFFIC COUNT MANUAL 1979

For the: DES MOINES TRANSPORTATION STUDY AREA



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central iowa regional association of local governments

TRAFFIC COUNT MANUAL

for the

Des Moines Urbanized Area

I. INTRODUCTION

The purpose of this manual is to develop a coordinated, continuing traffic count program for the Des Moines Transportation Study Area. A coordinated effort will result in a more complete, uniform data bank and processing system, and will eliminate the duplication of manpower and equipment. It will also be beneficial by:

- 1) Providing an adequate sample for estimation of Vehicle Miles of Travel (VMT);
- 2) Monitoring Areas that are exhibiting rapid growth;
- 3) Evaluating the operation of the existing street and highway system;
- 4) Assisting in developing and verification of transportation modeling; and by
- 5) Monitoring changes in travel patterns.

This report describes the roles and responsibilities of the various agencies for collecting data, analyzing output and publishing results of the traffic counting program.

II. DATA COLLECTION

The following agencies will be responsible for collecting the data required to implement the traffic count program:

- 1) The Iowa Department of Transportation
- 2) The City of Des Moines
- 3) The City of West Des Moines
- 4) The City of Urbandale
- 5) The City of Clive
- 6) The City of Johnston
- 7) The City of Pleasant Hill
- 8) The City of Windsor Heights
- 9) Polk County

The Iowa Department of Transportation will be responsible for traffic counts along the Interstate Routes and along state routes passing through the Study Area. The Cities of Des Moines, West Des Moines, Urbandale, Clive, Johnston, Pleasant Hill, Windsor Heights, and Polk County will be responsible for traffic counts within their respective boundaries. Attached to this manual are maps showing the locations of counts, types of counts and the agency responsible for their collection.

III. DATA PREPARATION AND PRESENTATION

Counts and estimates of ADT's are to be collected in even years and are to be posted on base maps provided by CIRALG. These raw counts will be forwarded to the Iowa DOT who will assist in the processing of raw counts to ADT's and/or other seasonal averages. From this data, CIRALG produces a traffic flow map which is to be published in the odd numbered year. After review and approval by the CIRALG Technical Committee, copies of the map are provided to all interested parties.

IV. SUMMARY OF RESPONSIBILITIES

Des Moines, West Des Moines, Clive, Urbandale, Johnston, Pleasant Hill,
Windsor Heights, Polk County

1. Network Counts (even year)
2. Submit Data to CIRALG

Iowa DOT

1. Annually count Screenlines
2. State cordon line counts (even years)
3. Interstate and Primary counts (even years)
4. Develop Factors
5. Factor Data

CIRALG

1. Coordinate data collection
2. Calculate VMT by functional classification
3. Maintain data bank
4. Prepare traffic flow map
5. Distribute information

The sequence for traffic counting is:

1. Collect traffic data (even years)
2. Summary of base map provided by CIRALG
3. Submit map to CIRALG who will aggregate data for the study area
4. CIRALG submits data to Iowa DOT
5. Using seasonal Des Moines factors, Iowa DOT factors the information
6. Using factored counts, CIRALG prepares flow map (odd years)
7. Review by Technical Committee
8. Distribution.

Each agency will also be required to provide CIRALG with information concerning any change in the length of functional classification of roadway to which each ADT is applicable.

DES MOINES TRAFFIC COUNT LOCATIONS

47 Local Counts (6 Control Stations)

Virginia east of East 14th
Holcomb west of Second
Allison east of 44th

Maple east of East 15th
Ovid east of 53rd
16th north of Euclid

60 Arterial Collector Counts

31st south of Grand
Grand west of 56th
Ingersoll west of 42nd
University east of 56th
University west of Sixth
Hickman west of Sixth
Sixth south of Madison
Beaver north of Hickman
Lower Beaver north of Madison
Dean west of East 22nd
East 38th north of Easton
East 29th north of Madison
Hull Avenue east of Dixon
Delaware north of Guthrie
Grand east of East 19th
Cornell south of Hull
East 28th south of Easton
Indianola north of Park
McKinley west of S.E. Fifth
Fleur south of McKinley
Park east of S.W. 63rd
Bell east of Fleur
S.W. Ninth north of Park
Park east of S.W. Ninth
McKinley west of S.W. Ninth
S.W. 14th south of Watrous
South Union north of McKinley
South Union North of Park
S.E. Sixth north of Indianola
Indianola south of Hartford

42nd south of Grand
Grand west of 31st
42nd south of University
University east of 28th
Hickman east of Beaver
Harding south of Hickman
Sixth south of Hickman
Madison west of Lower Beaver
56th south of University
Easton east of East 38th
East Douglas east of East 38th
Hubbell east of East 28th
Dixon south of Hull
Guthrie west of Delaware
Hull Avenue east of Cornell
Hubbell south of Easton
Evergreen east of Indianola
Park West of Indianola
Park west of S.E. Fifth
Park west of Fleur Drive
Fleur north of Bell
S.W. Ninth south of McKinley
Park west of S.W. Ninth
McKinley east of Fleur
McKinley east of S.W. Ninth
Watrous west of S.W. Ninth
S.E. Fifth north of McKinley
S.E. Fifth south of Indianola
Hartford west of Indianola
S.E. Sixth south of Des Moines River

Bi-Annual Cordon Count

First Street Bridge
Seventh Street Bridge
Fleur Bridge
17th south of High
High east of 16th
Pleasant west of 12th
14th Place north of Woodland
Keo east of 12th

Fifth Street Bridge
Ninth Street Bridge
Grand west of 18th
16th South of High
Woodland west of 15th
Center east of 12th
15th north of Woodland
10th north of Center

Bi-Annual Cordon Count (continued)

Ninth north of Center	Eighth north of Center
Seventh north of Center	Sixth north of Center
Fifth north of Center	Third north of Center
Second north of Center	West River Bridge north of Keo
Grand Bridge	Locust Bridge
Walnut Bridge	Court Bridge

7 Air Quality Counts

18th north of Grand	Grand east of 18th
Grand west of 18th	Eighth north of Grand
Eighth south of Grand	Grand east of Eighth
Grand west of Eighth	

WEST DES MOINES TRAFFIC COUNT LOCATIONS

7 Local Counts (1 Control Station)

Buffalo Road West of 19th

28 Arterial-Collector Counts

University between 25th and 28th	University between 35th and 42nd
50th between Ashworth and I-235	Ashworth between Seventh and Eighth
Ashworth between 18th and 19th	Ashworth between 20th and 21st
Ashworth between Vine and 35th	Ashworth between 35th and 39th
Vine between 29th and 30th	Vine east of Grand
Vine between Fourth and Fifth	19th between Vine and Ashworth
19th between Vine and Grand	Grand west of 63rd
Grand north of Vine	Grand north of Railroad
Grand south of Delavan	Fuller south of Railroad
Railroad east of Grand	Railroad between Ninth and Tenth
Railroad east of Fourth	Eighth north of Elm
Eighth north of Vine	Eighth north of Ashworth
63rd south of Railroad	63rd south of Grand
63rd north of Maple	Westown Parkway west of 35th

URBANDALE TRAFFIC COUNT LOCATIONS

4 Local Counts (1 Control Station)

78th north of Hickman

URBANDALE TRAFFIC COUNT LOCATIONS (continued)

7 Arterial-Collector Counts

70th north of Douglas	75th north of Douglas
86th north of Douglas	Aurora west of 70th
72nd south of Douglas	Patricia north of Hickman
106th north of Douglas	

CLIVE TRAFFIC COUNT LOCATIONS

2 Local Counts (1 Arterial-Collector Count)

Harbach east of 86th

JOHNSTON TRAFFIC COUNT LOCATIONS

1 Local Street Count (2 Arterial-Collector Counts)

Beaver south of N.W. 62nd	N.W. 62nd west of Beaver
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PLEASANT HILL TRAFFIC COUNT LOCATIONS

2 Local Street Counts

WINDSOR HEIGHTS TRAFFIC COUNT LOCATIONS

2 Local Street Counts

POLK COUNTY TRAFFIC COUNT LOCATIONS

5 Local Street Counts (1 Control Station)

N.E. 58th east of N.E. 14th

17 Arterial-Collector Counts

N.E. 60th west of N.E. 14th	N.E. 51st east of N.E. 14th
N.E. 51st west of N.E. 14th	N.E. 22nd north of Broadway
N.E. 22nd north of Broadway	N.E. 54th east of Second
N.E. 54th west of Second	N.E. 29th north of Broadway
N.E. 29th south of Broadway	Broadway east of N.E. 22nd
Broadway west of N.E. 22nd	Broadway east of N.E. 29th
Broadway west of N.E. 29th	Aurora east of Second
Aurora west of Second	Second north of Aurora
Second south of Aurora	

IOWA DEPARTMENT OF TRANSPORTATION TRAFFIC COUNT LOCATIONS

102 Arterial-Collector Counts

S.W. 112th south of Highway 5	S.W. 84th south of 72nd Avenue
S.W. 42nd south of 72nd Avenue	Highway 5 between I-80 and S.W. 105th
Intersection of S.W. 74th and Highway 5	Intersection of S.W. 63rd and Highway 5
Intersection of S.W. 42nd and Highway 5	Intersection Fleur and Army Post Road
S.W. 21st south of S. W. 80th Avenue	S.W. 24th south of S.W. 80th Avenue
Intersection of S.W. Ninth and Army Post	Cloverhill Drive south of S.E. 80th Avenue
Intersection of S.E. Fifth and Army Post	Intersection of S.E. 14th and Army Post
Intersection of S.E. 14th and McKinley	Intersection of S.E. 14th and Indianola
Intersection of S.E. 14th and Park	Intersection S.E. 80th Ave. and Hwy 65/69
Intersection of Hwy 5 and Indianola	Highway 5 south of S.E. 72nd
S.E. 72nd east of Hwy 5	Intersection Hwy 5 and Hwy 46
Avon east of Hwy 46	Highway 46 north of S.E. 57th
East 40th Avenue east of Hwy 46	Highway 46 north of East 40th Avenue
Intersection of S.E. 43rd and Vandalia	Vandalia east of Pleasant Hill Blvd.
Intersection of S.E. 30th and Maury	Intersection of S.E. 30th and Scott
Intersection of S.E. 30th and Grand	Intersection S.E. 30th and East University
Intersection East University and Williams	Intersection E. Univ. and Pl. Hill Blvd.
East University east of N. Shadyview Blvd.	East University west of East 64th
Rising Sun Drive west of East 64th	N.E. 27th east of N.E. 56th
Highway 6 west of N.E. 63rd	Intersection Hwy 6 and N.E. 56th
Intersection of Hwy 6 and Hwy 65	N.E. 54th east of Hwy 65
Highway 65 north of I-80	N.E. 56th north of I-80
N.E. 46th north of I-80	N.E. Berick Drive north of N.E. 54th
N.E. 29th north of N.E. 54th	N.E. 22nd north of N.E. 60th
N.E. 14th north of N.E. 60th	N.W. Second north of N.E. 60th
N.W. Sixth Drive north of N.E. 60th	Intersection of Hubbell and East 42nd
Intersection of East Euclid and Hubbell	Intersection of East Euclid and East 29th
Intersection of Delaware and Euclid	Intersection of Euclid and East 14th
Intersection of East 14th and Broadway	Second Avenue north of Franklin
Sixth Avenue north of Arlington	Intersection of Second and Euclid
Intersection of Second and Broadway	Intersection of 14th and Euclid
Euclid Bridge over Des Moines River	Intersection of Eighth and Euclid
Intersection of Harding and Euclid	Intersection of Lower Beaver and Euclid
Intersection of Beaver and Euclid	Intersection of Merle Hay and Euclid
Intersection of Merle Hay and Aurora	Intersection of Merle Hay and Meredith
Intersection of Merle Hay and Hickman	Intersection of Hickman and 63rd
Intersection of Hickman and 73rd	Intersection of Hickman and 86th
N.W. 26th north of N.W. 54th	Beaver south of N.W. 66th
N.W. 58th south of N.W. 70th	N.W. 86th south of N.W. 70th
N.W. 100th south of N.W. 70th	Intersection of Highway 141 and N.W. 70th
Intersection of Highway 141 and N.W. 54th	N.W. 54th Avenue west of Highway 141
N.W. 46th Avenue west of I-35/80	N.W. 38th Avenue west of I-35/80
N.W. 23rd Avenue west of I-35/80	N.W. 12th Avenue west of I-35/80
Ashworth west of I-80	Delavan west of I-80
Highway 90 west of I-80	Intersection East 14th and East University
East University Bridge over Des Moines River	Intersection of East 14th and Grand
Intersection of East 15th and Grand	Intersection of East 14th and Walnut
Intersection of East 15th and Walnut	Intersection of East 14th and Court
Intersection of East 15th and Court	S.E. 14th Bridge over Des Moines River
S.E. 6th Bridge over Des Moines River	S.W. 48th Place west of Highway 90

TRAFFIC COUNT SUMMARY
CIRALG

DATE: _____ DAY OF WEEK: _____

CITY: _____

LOCATION OF COUNT: _____

TYPE OF COUNT: _____ WEATHER CONDITIONS: _____

SKETCH MAP (Show intersection details, location of station, and volumes on map)

DATE: _____ DAY OF WEEK: _____

CITY: _____









LOCATION OF COUNT: _____

TYPE OF COUNT: _____ WEATHER CONDITIONS: _____






SKETCH MAP (Show intersection details, location of station, and volumes on map)

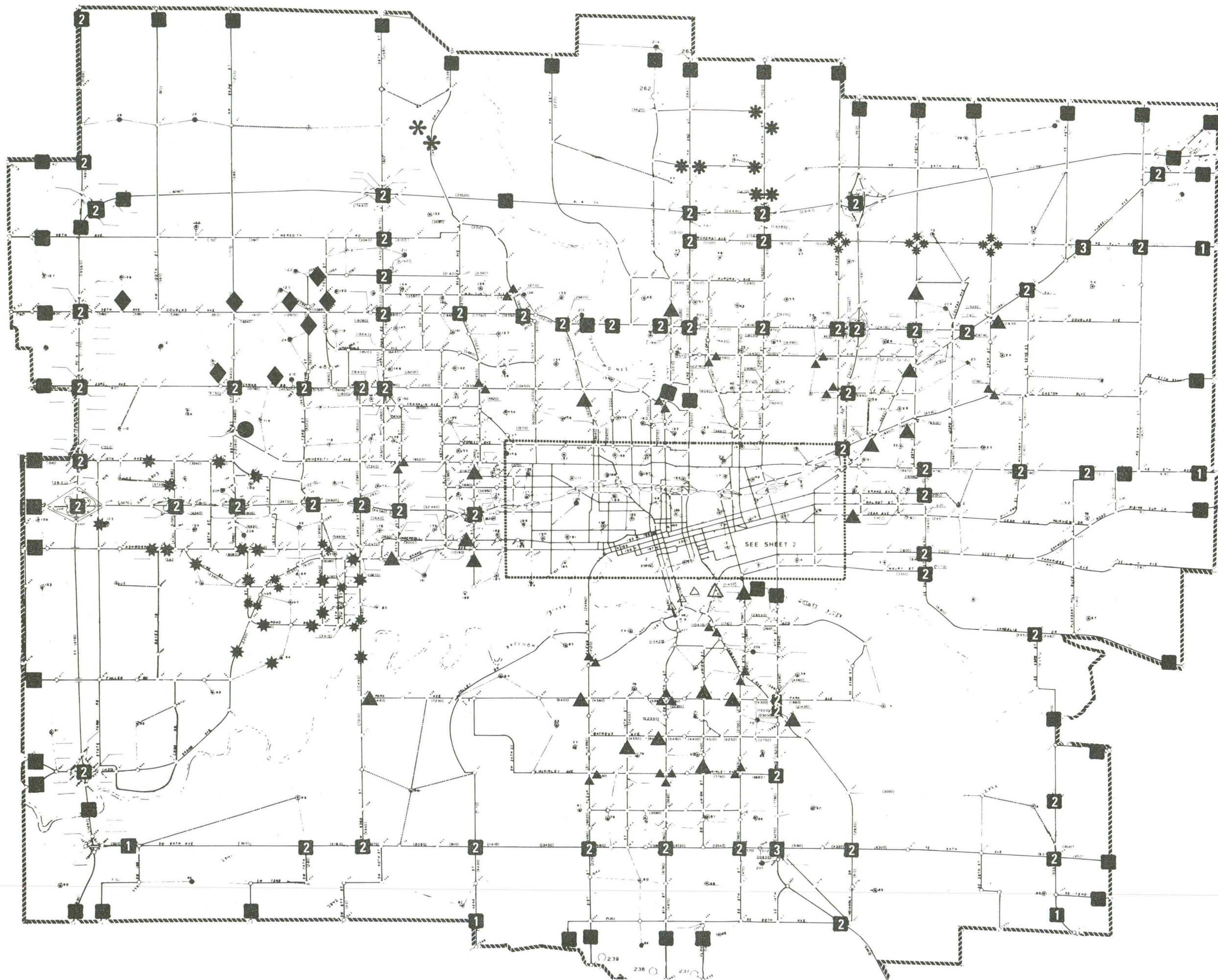
Legend for Des Moines Urbanized Area
Counting Program Map

Responsibility
of count:

-  Iowa Department of Transportation
-  Des Moines
-  West Des Moines
-  Urbandale
-  Clive
-  Johnston
-  Polk County
-  Joint Responsibility Between Des Moines
and the Iowa DOT

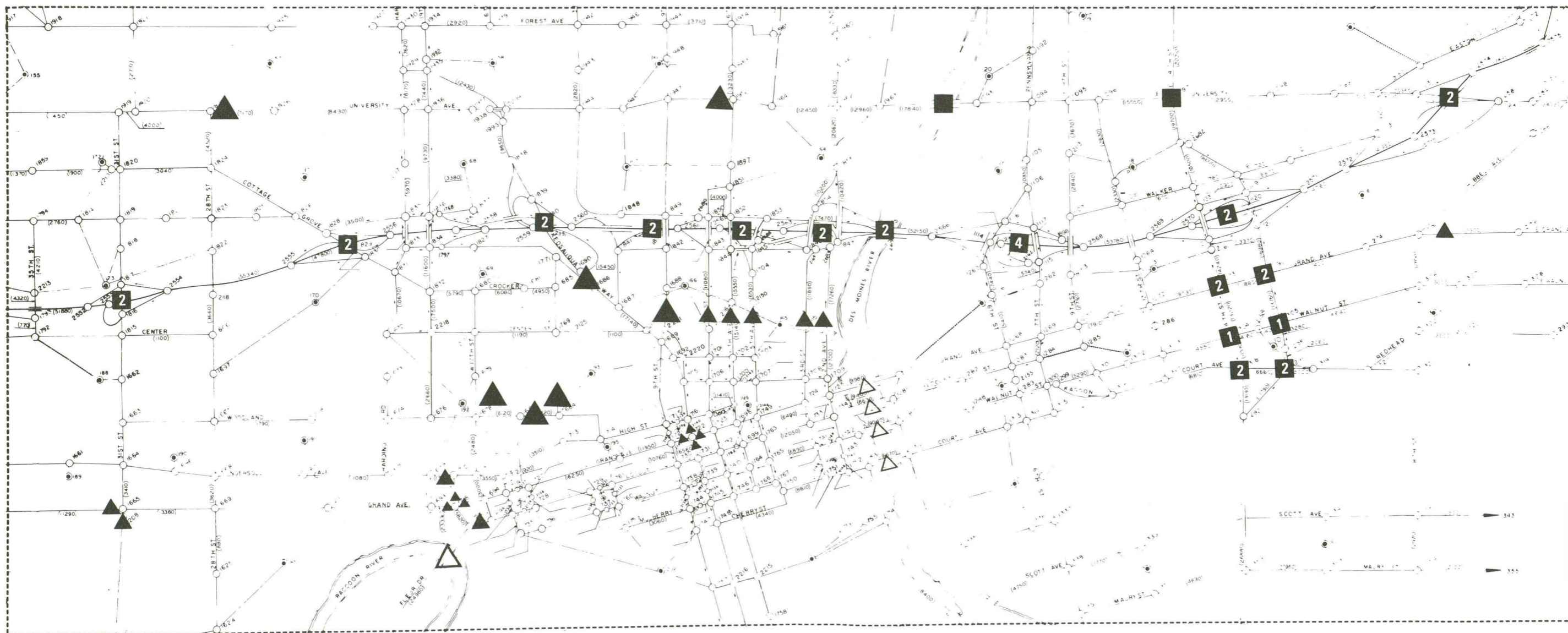
Type of Count:

-  24 Hour Recorder Only
-  48 Hour Recorder Only
-  8 Hour Manual Count
-  24 Hour Manual Count
-  Automatic Traffic Recorder



**LOCATION OF COUNTS
FOR THE
DES MOINES
URBANIZED AREA
COUNTING PROGRAM**

LOCATION OF COUNTS FOR THE DES MOINES URBANIZED AREA COUNTING PROGRAM



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