

Traffic Sign Inventory System



**Iowa Department
of Transportation**

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TRAFFIC SIGN INVENTORY SYSTEM

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The purpose of this manual is to provide cities with a method for developing a traffic control sign inventory and filing system. The filing system may be computerized or manual in nature depending on the desires and capabilities of each jurisdiction.

This inventory and filing system will provide cities with the means for maintaining information on traffic control signs, aid in providing a base for improvement programs for signing controls, assist in periodic inspection and maintenance programs, satisfy legal requirements for the maintenance and monitoring of traffic signing, and insure that City signing requirements meet the standards set forth in the Manual on Uniform Traffic Control Devices (MUTCD).

Through these means a properly maintained inventory and filing system can be developed that should aid in reducing the potential for traffic accidents and mitigate the risk of agency or personal tort liability.

The procedure for developing this system falls into three general steps: collecting existing traffic control sign inventory data; entering this inventory data into a computerized sign management system (SMS), or coding of the data onto manual file system (MFS) cards for manual filing; and utilizing work order forms to record sign changes for field repair crews and to update the data file.

To accomplish these steps a series of forms have been developed which provide an integrated inventory and filing system. These forms have been described and discussed in greater detail in the following chapters of this document. The Appendix has listed in it completed examples of each form discussed in the following chapters.

The purpose of this chapter is to describe in detail the manual collection method utilized in completing the field Sign Inventory Form. This chapter shall also help to insure completeness of the data collected at each sign installation and that the information is recorded on the form in a uniform manner.

A method of pinpointing sign locations with reasonable accuracy is very important to the overall effectiveness of the sign inventory program. As a base for the sign location process, a city should utilize existing street names and numbers as its route numbering system.

However, other successful methods have been developed for identifying routes for inventory purposes. One method, developed by the Iowa Department of Transportation, is a link-node identification system which is utilized in the Accident Location and Analysis System (ALAS) for the filing and analysis of traffic accident data. This system assigns a six digit node number to reference points (intersections, railroad crossings, bridges, etc.) which are identifiable on a city map. These reference points could also be used to locate traffic signs in the inventory procedure.

The route identification system used in a particular city's inventory could be either of the above systems, or some other system developed by the local staff. The most important aspect of whatever system is used, is that the system be understood and applied by all personnel who are involved in the sign inventory, sign record keeping, and sign maintenance activities of that city.

In larger communities it may be necessary to divide the city into a system of sectors which would be based on physical, natural, or other boundaries. Such a system would provide more manageable and workable sized areas with which to deal with. In many cases these sectors could be made to coincide with maintenance areas that are already developed in some of the larger cities.

The following instructions are provided to aid field personnel in completing the Sign Inventory Form.

A separate inventory sheet or series of sheets should be completed for each continuous route segment. Continuous route segments would typically extend from city limit to city limit or sector boundary to sector boundary depending on whether or not the city is to be divided into sectors. However, due to dead ends, T-intersections, physical boundaries, etc., route segments may not extend for a full city or sector width or length.

The heading of the Sign Inventory Form should be completed using the following instructions:

ROUTE - Record the name or number of the route being inventoried.

BEGIN AT - Enter the starting point (intersecting route or other definitive point) of the route segment being inventoried.

END AT:

SHEET _____ OF _____

DATE: _____

CITY/TOWNSHIP: _____

INVENTORY DIRECTION: _____

[illegible]

SIGN CONDITION
B. BENT
D. DAMAGED
E. EXCELLENT
F. FADED
G. GOOD
I. ILLEGIBLE
R. RUSTY
O. OTHER

END AT - Enter the ending point (intersecting route or definitive point) defining the other limit of the route segment being inventoried. The ending point when combined with the beginning point will define the route segment inventoried for a given inventory sheet or series of sheets.

Note: Several route segments could be encountered for a specific route within a city due to dead ends or T-intersections occurring along the route. For each such discontinuous route segment encountered an inventory sheet or series of sheets should be completed.

SHEET ____ OF ____ - Record the number of each sheet and the total number of sheets for the inventory forms completed for each route segment inventoried.

DATE - Enter the date the route was inventoried.

CITY/TOWNSHIP - Record the city or township name applicable to the route being inventoried.

INVENTORY DIRECTION - The direction of travel of the inventory team along the inventory route should be shown (north, east, south, or west).

The balance of the sign inventory form is to be used for recording of the inventory data for individual signs and sign assemblies. Where more than one sign is included in the sign assembly (one or more signs mounted on a post) several lines may be required to record the sign inventory data.

SIGN LOCATION - Record the location of the sign being inventoried by distance (in feet) from the most recent crossroad intersection. The inventory team should also record the centerline distances for intersecting streets, railroad crossings, bridges, and other topographic features as they are encountered. Each centerline distance should be recorded on a separate line of the inventory form.

DIRECTION FACING - Record the cardinal direction the sign faces using the codes shown on the form and as follows:

Code

- N - Sign faces North
- S - Sign faces South
- E - Sign faces East
- W - Sign faces West

LATERAL POSITION - The lateral position of the sign will be measured in feet referenced as shown in the codes listed on the form and as shown herein. Generally, the distance would be measured from the nearest edge of pavement or face of curb to the

nearest edge of the sign. Indications of left or right in the coding information refer to left or right as the inventory survey team views it and not necessarily as the motorist viewing the sign would see it.

Code

- R - Right side of route
- L - Left side of route
- O - Overhead
- M - Median

SIGN HEIGHT - Record the height (measured in feet, to the nearest one-half foot) from the bottom of the sign to the level of the pavement or roadway edge or sidewalk - whichever applies.

NUMBER IN ASSEMBLY - The number in assembly pertains to sign assemblies which are made up of two or more signs on a common post or mounting assembly. Signs in an assembly should be recorded 1, 2, 3, etc. (from highest mounted to lowest mounted sign) in the box provided. Each sign in an assembly will have its inventory data recorded on a separate line of the form; however, items pertaining to sign assembly location and sign post information should only be completed for sign number 1.

SIGN LEGEND - Record the legend of the sign in its entirety in the blank provided. If more space is required use the Remarks column or additional lines of the form. The MUTCD Number box should not be completed in the field. This information will be recorded in the office.

SIGN SHAPE - Record the shape of the sign using the codes shown on the form and as follows:

Code

- 1 - Diamond
- 2 - Rectangular
- 3 - Square
- 4 - Octagonal
- 5 - Triangular
- 6 - Round
- 7 - Crossbuck
- 8 - Pentagonal
- 9 - Trapezoidal
- 0 - Other

SIGN COLOR - Record the color of the sign legend and the color of the sign background using the codes shown on the form and as follows:

Code

- 1 - Black on white
- 2 - Black and red on white
- 3 - White on black
- 4 - White on red
- 5 - Red on white
- 6 - Green on white
- 7 - White on green
- 8 - Black on yellow
- 9 - Yellow on blue
- 0 - Other

SIGN SIZE - enter the sign size to the nearest inch in the spaces provided for the horizontal and vertical dimensions of the sign. The following criteria should be used for the measurements:

- a) Square and rectangular signs - measure along horizontal and vertical edges.
- b) Diamond shaped signs - measure along sign edge from bottom corner to side corner. Use this dimension for both horizontal and vertical measurements.
- c) Triangular signs - measure along the top of the sign and along the side. Pennant signs should also be measured along the top (long dimension) for horizontal and along the side (short dimension) for vertical dimension.
- d) Shields and octagon shaped signs - measure in a horizontal and vertical direction; enter the largest dimension in each direction.
- e) Round signs - measure diameter, record horizontal distance only.
- f) Pentagonal signs - measure along the horizontal edge and vertically from the bottom edge to the peak of the sign.

All dimensions recorded for signs should be the size of the sign as if the corners were not rounded.

SIGN REFLECTIVITY - Record whether sign is reflective or non-reflective using the codes shown on the form and as follows:

Code

- 1 - Reflective
- 2 - Non-reflective

SIGN VISIBILITY - The sign visibility should be recorded in the box provided by the code on the form, or shown herein:

Code

- 1 - Easily seen
- 2 - Hidden (remarks)

SIGN FACE MATERIAL - The sign face material should be recorded in the box provided using the codes shown on the form and as follows:

Code

- B - Buttons
- E - Enamel (paint)
- G - Engineer Grade Sheeting
- H - High Intensity Sheeting
- P - Prismatic Sheeting
- N - Non-reflective Sheeting
- O - Other

SIGN BLANK MATERIAL - The sign blank material should be recorded in the box provided using the codes shown on the form and as follows:

Code

- A - Aluminum
- S - Steel
- W - Wood
- O - Other

POST DATA - Data pertaining to sign post or mounting details should be recorded in the boxes provided for the post type and post condition. Use the codes shown on the form and as follows to record this data.

POST TYPE:

Code

- C - Channel or U Post
- L - Light Standard
- M - Mast Arm
- P - Pipe Post
- S - Signal Standard
- T - Telspar Post
- U - Utility Pole
- W - Wood Post (4"x4")
- X - Wood Post (4"x6")
- O - Other

POST CONDITION:

Code

- 1 - Satisfactory
- 2 - Leaning
- 3 - Bent (metal)
- 4 - Warped (wood)
- 5 - Damaged
- 6 - Other

Note: At locations where two or more signs are included in the sign assembly, the post data needs only to be completed for the line designated for sign number 1 in the Number in Assembly box. Also, if a sign assembly is mounted on 2 or more posts, this information should be indicated in the Remarks column.

SIGN CONDITION - Data pertaining to the condition of the sign should be recorded in the box provided utilizing the following codes.

Code

- B - Bent
- D - Damaged
- E - Excellent
- F - Faded
- G - Good
- I - Illegible
- R - Rusty
- O - Other

MAINTENANCE REQUIRED - This section of the Sign Inventory Form may be used to record maintenance actions necessary to bring existing signing into conformance with MUTCD standards and guidelines. The Maintenance Required section is designed to be utilized by placing an "X" in the appropriate maintenance action box as follows:

New Installation - Indicates a new sign installation (sign and post) which did not previously exist.

Satisfactory - Indicates the existing sign installation (sign and post) is satisfactory and should be retained.

Remove - Indicates the existing sign installation (sign and post) should be removed.

Replace Sign (same) - Indicates the existing sign should be replaced by the same type of sign.

Replace Sign (other) - Indicates the existing sign should be replaced by another type of sign. (Record other sign MUTCD Number in Remarks/Recommendations column).

Replace Post - Indicates the existing sign post should be replaced. (The existing sign would be either retained or replaced based on other maintenance actions checked.

Other - Indicates other maintenance actions which should be taken. (Such as clean sign; trim tree; trim bush; relocate sign 100' north; etc.).

REMARKS/RECOMMENDATIONS - This column should be used to write brief remarks concerning anything unique about a sign, its mounting, or location which are not adequately covered by the coded data. The Remarks column can also be used to record maintenance action comments and for overflow of the sign legend column and other items previously mentioned.

A methodology has been documented in this chapter by which the sign inventory process can be maintained on an up-to-date basis using computer data base techniques. The data base will provide readily accessible information on current sign inventory data, historical information based on sign replacements, and will allow signage and condition to be tracked and a systematic review process to be implemented.

The Sign Management System (SMS) has been developed by the Federal Highway Administration to provide State and local highway agencies with a tool for assembling and maintaining traffic sign inventory data. The SMS is designed to operate on an IBM, or IBM compatible, microcomputer with 512K RAM and either two 360K floppy disk drives or a hard disk (recommended).

The SMS is operated through utilization of a series of "menus" and input screens. The menus are used to move through the system while the input screens allow data to be entered and the inventory created.

The first menu is the Main Menu shown below as Figure 1.

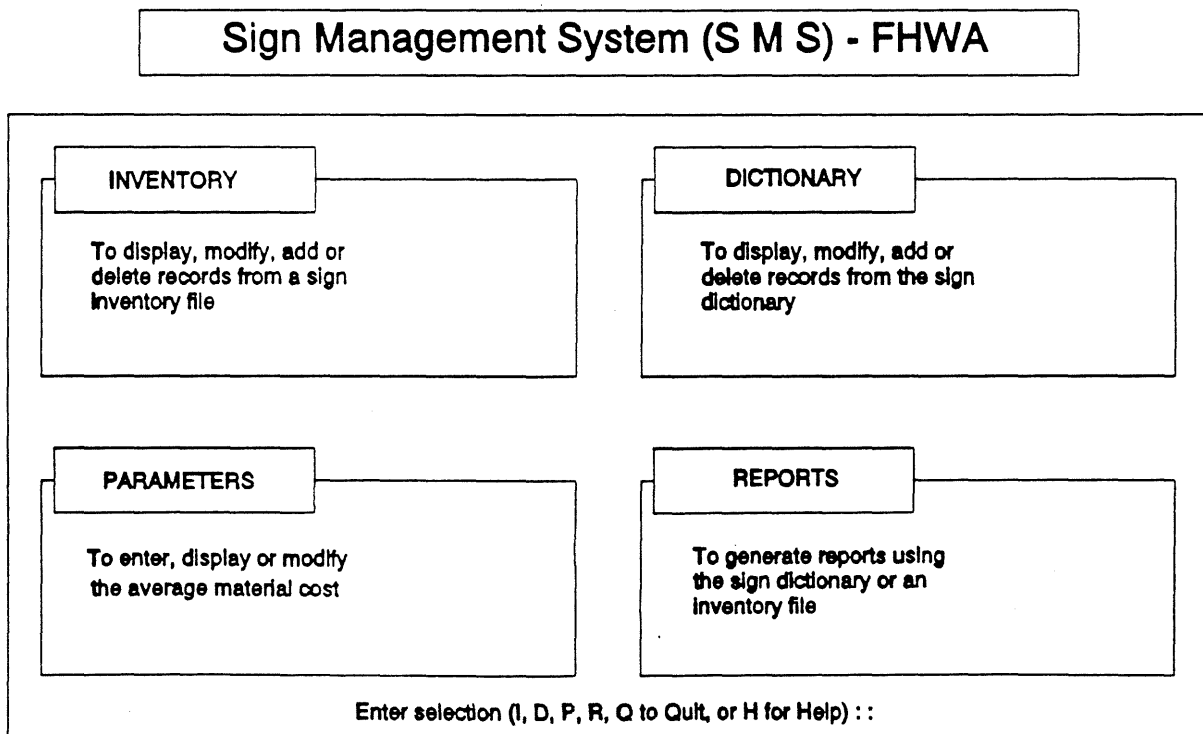


Figure 1, SMS Main Menu

From the Main Menu the user may select from four basic options: Inventory; Dictionary; Parameters; and Reports.

Inventory Module . . . The Inventory module is used to create a new sign inventory database, to add records to an existing database, to modify existing records, and to delete unwanted records.

The Add Screen of the Inventory Module is shown as Figure 2.

LOCATION		ID #	ROUTE NAME/#		
INTERSECT			STATION		DIRECTION
POSITION		OFFSET	HEIGHT		ORIENTATION
DATA	MUTCD	LEGEND			
SIZE:W H		SHEETING	BACKING	POST	CONDITION
INSTALL DATE //		INSPECT DATE //		SIA: L B	
COMPLEXITY		SPEED	CURVE	LANES	FLOW
COMMENTS					
RESULTS		AVAILABLE SIA		REQUIRED SIA	
RECOGNITION DISTANCE			REPLACEMENT DATE //		

Figure 2, Add Screen

Other screens in the Inventory Module include a Default screen and a locate option (current and sign history screens).

Sign Dictionary Module . . . The Sign Dictionary contains standard sign characteristics (colors, size, MUTCD number). The Sign Dictionary functions similar to the Inventory Module. The user can add records, or locate records to modify and/or delete them from the Sign Dictionary file.

The Sign Dictionary screen is shown below as Figure 3.

MUTCD CODE		LEGEND	
CHARACTERISTICS		SYMBOL (Y/N/P)	SHAPE
LEGEND COLOR		BACKGROUND COLOR	
DIMENSION (Inches)		LETTER SIZE RATIO	
STANDARD: W H		PRIMARY:	SECONDARY:
DATA	CLASS	MESSAGE LENGTH	
DECISION COMPLEXITY		MANEUVER	
DISTANCE BEFORE MANEUVER (ft)		FINAL SPEED	

Figure 3, Sign Dictionary Screen

Parameters Module . . . The Parameters Module is used to establish various parameters to be used in calculations. Currently, only the Sign Materials option is operational. The Sign Materials option allows sign material cost, per square foot, to be entered or modified. The information is then used to estimate replacement costs during report generation.

Reports Module . . . The Reports Module allows the user to generate three different types of reports. The reports include Inventory Report; Sign History Report; and Dictionary Report.

SIGN INVENTORY REPORT - DEMO

ID#	Intersection	Orn	Station	MUTCD	Install	Inspect	SIA		Cond
				Code	Date	Date	L	B	
ROUTE NAME: Duke Street									
2	Lee Highway	S	15.500	W3-3	11/14/86	07/15/90	0	38	G
2	Lee Highway	S	15.925	R4-7	09/01/84	07/15/90	0	45	F
10	Lee Highway	S	16.125	R2-1	03/20/89	07/15/90	0	68	E
ROUTE NAME: Glebe Road									
1	Elm Street	E	3.000	R2-1	06/01/85	09/09/89*	0	48	R*
3	Elm Street	E	3.500	W3-1A	02/10/88	08/01/90	0	54	E
4	Elm Street	E	3,820	R1-1	04/20/87	08/01/90	140	25	E
11	Elm Street	E	4.100	R2-1	06/01/85	08/01/90	0	39	F
12	Elm Street	E	4.250	W2-1	10/15/83	08/01/90	0	21	P
TOTAL RECORDS			8						

Figure 4, Sign Inventory Report

Future Enhancements . . . In its present form the SMS can be used to develop and maintain a sign inventory. A systematic review process can be established by tracking the age and condition of the signs. The final version of the SMS is being designed as a system that uses predictive models in conjunction with the sign inventory database to predict the signs which will require maintenance. In this way, an agency's limited resources can be used to inspect and replace those signs which are in the most serious need of maintenance.

This chapter will provide cities with a workable means of maintaining sign inventory data on an up-to-date basis. This file card method is simple and straightforward in nature and is applicable to communities without computer based capabilities (either equipment or staff). It is especially applicable to small cities whose staff, budget, and sign inventory is limited.

The manual file system (MFS) utilizes 5" x 8" file cards which should be completed using the following instructions. A separate file card should be completed for each sign assembly (could include one or more signs) identified during the sign inventory or for each new sign location.

File Card - Front Side . . . The heading of the file card indicates the basic data which determines the location of the sign assembly and the date the inventory data was obtained, or in the case of a new sign installation, the date it was first installed. Two items in the heading - "Sector" and "Sign #'s" should be left blank if the City has determined not to divide the City into sectors or assign sign numbers. If sign numbers are used, then list the numbers from left to right in the same order of mounting - top to bottom (for multi-sign assemblies).

The balance of the form is utilized for more definitive information regarding the sign assembly and should be transferred from the Sign Inventory form completed in the field. In the case of a new sign installation after the current inventory process is completed or a sign change due to a work order (Chapter 5) on an existing sign by a field crew, the data on the sign assembly should be completed using the codes and instructions outlined in the inventory instructions portion of this section. If the sign assembly contains one sign only, a single line needs to be completed. Several lines in the "Inventory Data" section of the form may be required where several signs are included in the sign assembly.

File Card - Back Side (Maintenance Record) . . . The reverse side of the sign file card should be used to record the chronological maintenance record of the particular sign assembly included on the file card. The following instructions are provided to complete the Maintenance Record items:

Date Reported - Enter the date need for maintenance action was reported (Same date recorded on the Work Order form in Chapter 5).

Condition - Record the condition of the sign assembly requiring maintenance action.

Recommended Improvements - Enter the recommended maintenance action to correct the deficient condition of the sign assembly.

Date Improvements Implemented - Enter the date the recommended maintenance action was accomplished.

Remarks - This column can be used for any brief remarks regarding condition or recommended improvement actions.

Route: _____

City: _____

Location: _____

Inventory Direction: _____

Sector: _____

Date: _____

Sign #'s: _____

Inventory Data

Dir. Facing	Lateral Position		No. in Assembly	Sign Legend	MUTCD Number	Sign								Post		Remarks
	Distance	Side of Roadway				Shape	Color	Size		Condition	Reflectivity	Visibility	Height	Type	Condition	
								Horizontal	Vertical							

FRONT SIDE

Maintenance Record

Date Reported	Condition	Recommended Improvements	Date Improvements Implemented	Remarks

BACK SIDE

The purpose of the Work Order form is twofold: it provides information to field crews to allow them to accurately locate the specific sign location and to perform the work required to make the sign change; and it provides a record of the new sign information for updating of either the computerized filing system or the manual filing system.

It should be noted that during the interim period between the beginning of the sign inventory and entry of the inventory data into the sign database (or transferring of the data onto MFS cards), the Work Order forms should be used to maintain an up-to-date record of sign changes.

A Work Order form should be completed for each sign installation on which work is completed - either maintenance of an existing sign or the installation of a new sign. The information recorded will be of the same nature that is recorded on the Sign Inventory forms included in the sign database.

When a work assignment is initiated by the engineering office, their personnel will complete the top portion of the form (non-shaded areas) and the field crew will complete the bottom portion of the form (shaded areas).

The field crew will complete both portions of the form (if the information is known) on those occasions when maintenance inspections reveal a problem that the field crew can remedy immediately without having to wait for a work order from the engineering office.

The Work Order form should be completed utilizing the following instructions.

Date - The date that the Work Order was initiated should be recorded in this space.

Ordered By - Record the name of the person ordering the work to be completed.

Assigned To - The crew leader who has been assigned this job should have his name recorded in this space.

Approved By - Record the name of the person who approved this work order.

Inventory Direction - Record the direction of travel (north, east, south, or west) of the original inventory team or field crew, whichever is applicable.

Sign # - The sign number that has been designated for the sign in question should be recorded here. As the City's sign upgrading program progresses, these sign numbers may be stenciled to each sign.

WORK ORDER

DATE: _____ ORDERED BY: _____

ASSIGNED TO: _____ APPROVED BY: _____

Inventory Direction: _____ Sign #: _____

Location: On _____, _____ feet _____

(north, east, south, or west) of _____.

Sign is facing _____, _____ ft. from edge of roadway/face of curb.

Sign is on the _____ side of roadway. Sign is # _____ in the assembly.

Sign Legend: _____.

Work Needed & Remarks: _____

_____.

Shape _____ Colors _____ on _____

Size _____ "x" _____ Condition _____

Reflectivity _____ Visibility _____

Height _____ Ft. Post Type _____ Post Condition _____

Work Completed _____

Reason for Work _____

Date of Work _____

Location - In the next four spaces provided record the following information: the name of the street on which the sign is located; the distance (in feet) that the sign is located from the most recent cross street; the direction (north, east, south, or west) that the sign is located from the cross street; and the name of the cross street.

It should be noted that a field crew may record this information in an inventory direction different from that originally recorded and different from that which is the computer. Therefore, the office personnel transferring this data into the computer should verify the original inventory direction and revise all location related information to correspond to the original location data.

Sign Is Facing - In these two spaces indicate the direction that the sign is facing and the distance between the edge of the sign and edge of the pavement or face of the curb (whichever is applicable).

Side of Roadway - Record left or right in this space indicating the side of the road that the sign is located as the inventory team or field crew (whichever is applicable) views it while traveling in the "INVENTORY DIRECTION" recorded previously.

Number In Assembly - Information in this space should be provided only for sign assemblies of two or more signs on a common post or mounting assembly. Signs in the assembly are numbered 1, 2, 3, etc. (from highest mounted to lowest mounted sign). Leave the space blank if the sign installation is single signed and not multi-signed.

Sign Legend - In this space record the legend of the sign in its entirety.

Work Needed & Remarks - Use these spaces to indicate what work needs to be accomplished to complete the work order. Write brief remarks concerning anything unique about the sign, its location, or its mounting which are not adequately covered by the other data on the Work Order.

The following information refers to the replacement sign and/or post and will therefore always be supplied by the field crew.

Shape - Record the shape of the sign in this space - diamond, square, pentagonal, etc. If unsure of the wording, sketch the sign's shape.

Color - In these spaces indicate the color of the sign's legend and the color of the sign's background. Example: a stop sign is white on red.

Size - In these two spaces record the horizontal sign dimension (to the nearest inch) and the vertical sign dimension (to the nearest inch). The following criteria should be used for these measurements:

- a) Square and rectangular signs - measure along horizontal and vertical edges.
- b) Diamond shaped signs - measure along sign edge from bottom corner to side corner. Use this dimension for both horizontal and vertical measurements.
- c) Triangular signs - measure along the top of the sign and along the side. Pennant signs should also be measured along the top (long dimension) for horizontal and along the side (short dimension) for vertical dimension.
- d) Shields and octagon shaped signs - measure in a horizontal and vertical direction; enter the largest dimension in each direction.
- e) Round signs - measure diameter, record horizontal distance only.
- f) Pentagonal signs - measure along the horizontal edge and vertically from the bottom edge to the peak of the sign.

All dimensions recorded for signs should be the size of the sign as if the corners were not rounded.

Condition - Record the condition of the sign in this space. Examples: satisfactory, bent, defaced, faded, map cracked, rusty, peeling, not legible, badly damaged, etc.

Reflectivity - In this space indicate whether or not the sign is reflective by recording yes or no.

Visibility - Indicate the sign's visibility in the space provided. Examples: easily seen, hidden by advertising sign, hidden by tree limbs, hidden by parked car, etc.

Height - Record the height (in feet to the nearest one-half foot) from the bottom of the sign to the level of the pavement or roadway edge or sidewalk - whichever condition applies. If the sign is overhead, record its height to the nearest foot.

Post Type - In this space indicate the type of post used. Examples: steel channel or U, steel pipe, street name sign post, wood 4" x 4", wood 4" x 6", overhead, signal post, wood utility pole, steel utility pole, etc.

Post Condition - Record the condition of the post. Examples: satisfactory, leaning, bent, warped, damaged, etc.

Work Completed - In this space, the field crew should record the work it completed. Examples: replaced sign, replaced post, installed new sign and post, etc.

Reason For Work - Record the reason for which the work was completed. Examples: vandalism, damaged by accident, rusty, faded, non-reflective, not legible, etc.

Date of Work - In these three spaces record the month, day, and year on which the work was accomplished.

A sketch area can be included on the back of the Work Order form to assist the field crew in identifying the sign location.

This manual has dealt with the development of an inventory and filing system that will provide to cities of all sizes a method or tool by which they can develop, monitor, and evaluate their own traffic sign program.

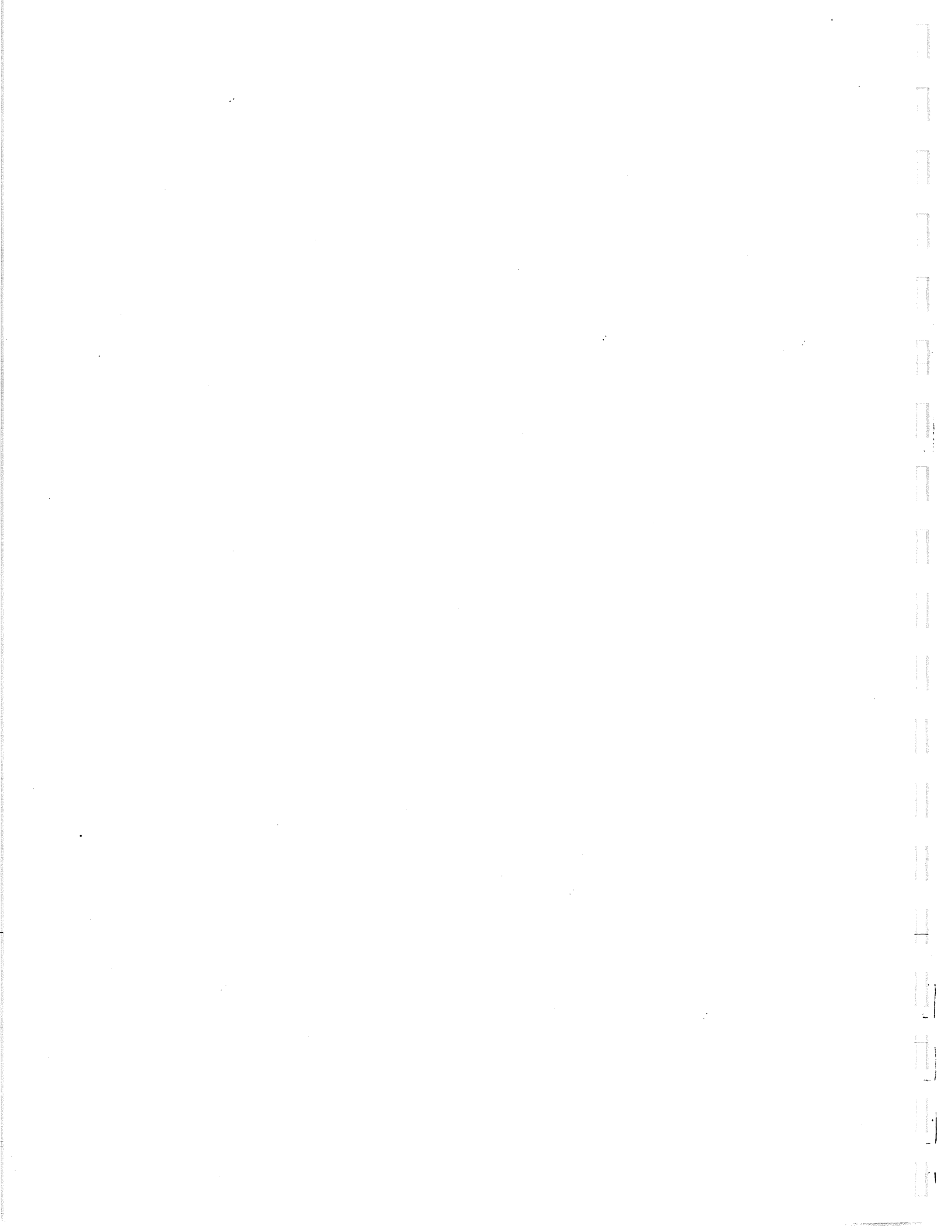
The system discussed in this section is based on three general steps: collecting the data base which consists of an inventory of existing traffic signs; entering this data into the computer or onto a form for manual filing; and utilizing work order forms to maintain and update the original sign inventory.

The manual file system is a simple and straightforward method of storing and retrieving data. For small sign systems it can be effective and efficient; however, a large city with an extensive sign system would find the manual filing method a very cumbersome and time consuming method for monitoring and evaluating its signing program.

Utilizing a computer which has been programmed to assist in maintaining a sign inventory makes information retrieval simple and rapid; permits a wide variety of analyses; and reduces the chance for errors that might occur through manual tabulations, loss of information, overlooking records, etc. In general terms a computer program can be designed in a manner that it can address the following functions.

1. Maintain an up-to-date inventory of all the City's signs conveniently available.
2. Provide a permanent record of all completed maintenance and new traffic sign work.
3. Develop and maintain a data base which can be used to identify trends in the type and quantity of sign improvement and maintenance work being accomplished.
4. Provide a means to quickly evaluate existing signing for condition and compare sign conformance to the Manual On Uniform Traffic Control Devices.
5. Assist in the development of spending priorities and budget requirements and purchasing of materials.
6. Permit more efficient scheduling of field work.

A city is not limited to any of the functions, goals, inventory data, output information, data collection procedures or any of the recommendations stated and described in this manual. A city may develop an inventory and filing system (whether manual or computer-based) as extensive and sophisticated as it needs to satisfy the parameters of its own particular signing program.



APPENDIX

ROUTE:

BEGIN AT:

END AT:

Jones Street

1st Street

4th Street

SIGN INVENTORY FORM

SHEET

1 OF 1

DATE:

9-14-82

CITY/TOWNSHIP:

Friendly

INVENTORY DIRECTION:

North

SIGN LOCATION	DIR. FACING	LATERAL POSITION		HEIGHT	NUMBER IN ASSY	SIGN LEGEND	MUTCD NUMBER	SIGN								POST		SIGN CONDITION	MAINTENANCE REQUIRED						REMARKS/RECOMMENDATIONS			
		DISTANCE	SIDE OF ROADWAY					SHAPE	COLOR	HORIZ. SIZE	VERT. SIZE	REFLECT.	VISIBILITY	FACE MAT'L	BLANK MAT'L	TYPE	CONDITION		NEW INSTALLATION	SATISFACTORY	REMOVE	REPLACE SIGN (SAME)	REPLACE SIGN (OTHER)	REPLACE POST		OTHER		
15' N. of 1st	N	10	L	7		Stop	R1-1	4	4	30	30	2	1	E	S	C	1	D				X						
125' N. of 1st	S	4	R	5		Speed Limit 25	R2-1A	2	1	2	30	1	1	G	A	P	1	G						X				
290' N. of 1st	S	8	R	7	1	Stop	R1-1	4	4	30	30	1	1	G	A	C	1	B							X		Straighten out Sign	
"	S	9	R	6	2	4-Way	R1-3	2	4	12	6	1	1	G	A	C	1	G										
25' N. of 2nd	N	12	L	5	1	Stop	R1-1	4	4	30	30	2	1	H	A	W	1	L				X		X				
"	N	13	L	4	2	4-Way	R1-3	2	4	12	6	1	1	H	A	W	1	G							X		Remount on New Post	
330' N. of 2nd	S	6	R	8		Stop	R1-0	4	4	2	2	1	1	G	A	U	1	G	X									
15' N. of 3rd	N	6	L	7		Stop	R1-0	4	4	2	2	1	1	G	A	P	1	G	X									
215' N. of 3rd	S	10	R	7		Stop	R1-1	4	4	30	30	1	2	H	A	C	1	G							X		Trim Tree	

DIRECTION FACING

N. SIGN FACES NORTH
S. SIGN FACES SOUTH
E. SIGN FACES EAST
W. SIGN FACES WEST

SIDE OF ROADWAY

R. RIGHT SIDE
L. LEFT SIDE
O. OVERHEAD
M. MEDIAN

SIGN SHAPE

1. DIAMOND
2. RECTANGULAR
3. SQUARE
4. OCTAGONAL
5. TRIANGULAR
6. ROUND
7. CROSSBUCK
8. PENTAGONAL
9. TRAPEZOIDAL
0. OTHER

SIGN COLOR

1. BLACK ON WHITE
2. BLACK AND RED ON WHITE
3. WHITE ON BLACK
4. WHITE ON RED
5. RED ON WHITE
6. GREEN ON WHITE
7. WHITE ON GREEN
8. BLACK ON YELLOW
9. YELLOW ON BLUE
0. OTHER

REFLECTIVITY

1. REFLECTIVE
2. NON-REFLECTIVE

SIGN VISIBILITY

1. EASILY SEEN
2. HIDDEN (REMARKS)

SIGN FACE MATERIAL

B. BUTTONS
E. ENAMEL (PAINT)
G. ENGINEER-GRADE SHEETING
H. HIGH INTENSITY SHEETING
P. PRISMATIC SHEETING
N. NON-REFLECTIVE SHEETING
O. OTHER

SIGN BLANK MATERIAL

A. ALUMINUM
S. STEEL
W. WOOD
O. OTHER

POST TYPE

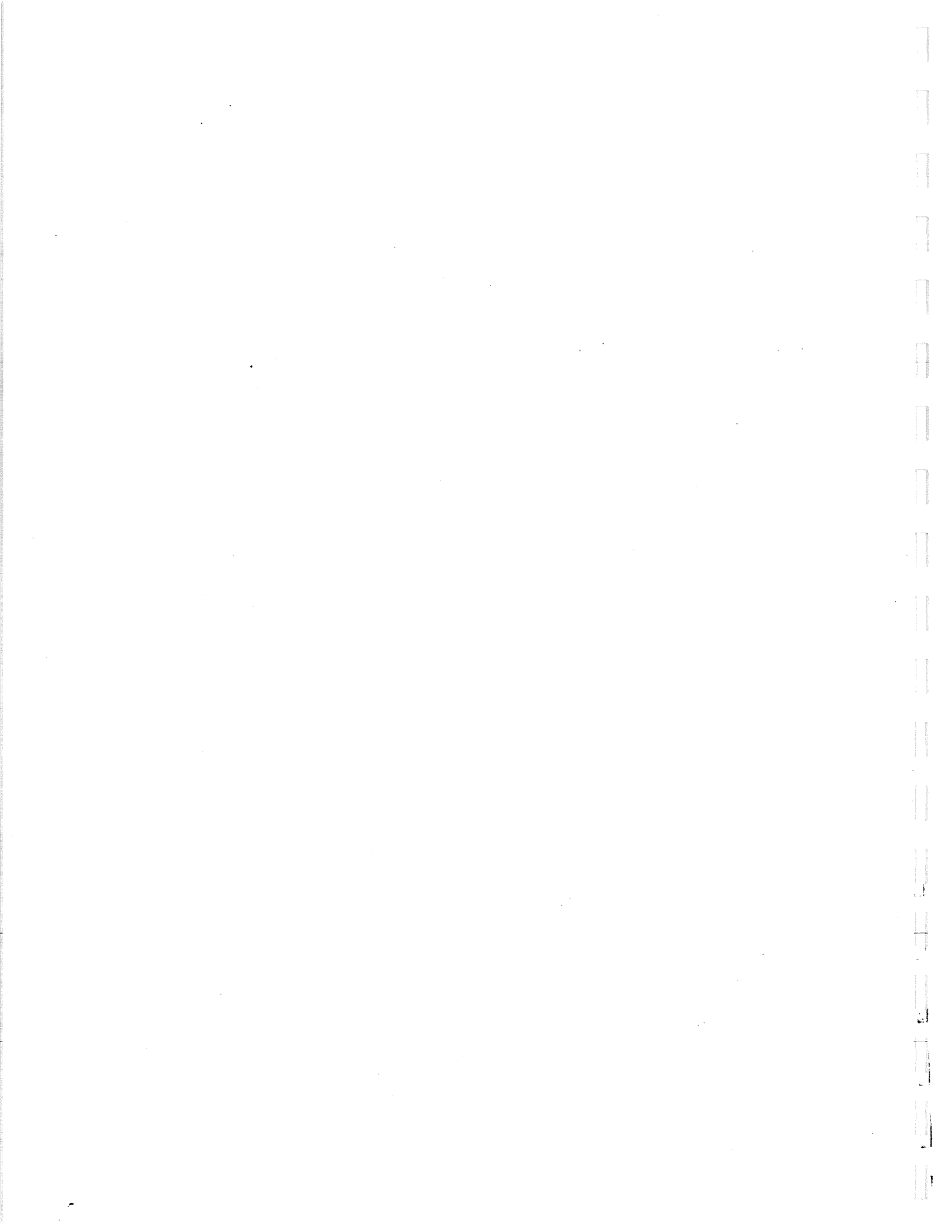
C. CHANNEL OR U
L. LIGHT STANDARD
M. MASTARM
P. PIPE
S. SIGNAL STANDARD
T. TELSPAR
U. UTILITY POLE
W. WOOD (4"x4")
X. WOOD (4"x6")
O. OTHER

POST CONDITION

1. SATISFACTORY
2. LEANING
3. BENT (METAL)
4. WARPED (WOOD)
5. DAMAGED
6. OTHER

SIGN CONDITION

B. BENT
D. DAMAGED
E. EXCELLENT
F. FADED
G. GOOD
L. ILLEGIBLE
R. RUSTY
O. OTHER



Route: Jones StreetCity: FriendlyLocation: 15' N. of 1stInventory Direction: NSector: 3Date: 9-14-82Sign #'s: 680

Inventory Data

Dir. Facing	Lateral Position		No. in Assembly	Sign Legend	MUTCD Number	Sign								Post		Remarks
	Distance	Side of Roadway				Shape	Color	Size		Condition	Reflectivity	Visibility	Height	Type	Condition	
								Horizontal	Vertical							
N	10	L		STOP	R1-1	4	4	30	30	D	2	1	7	1	1	

FRONT SIDE

Maintenance Record

Date Reported	Condition	Recommended Improvements	Date Improvements Implemented	Remarks
9-14-82	Sign Defaced	Replace Sign	9-28-82	Sign Size 30"x30"

BACK SIDE

WORK ORDER

DATE: 9-28-82

ORDERED BY: DRC

ASSIGNED TO: VJG

APPROVED BY: GLB

Inventory Direction: N

Sign #: 123

Location: On Jones Street, 15 feet north
(north, east, south, or west) of 1st Street.

Sign is facing north, 10 ft. from edge of roadway/face of curb.

Sign is on the left side of roadway. Sign is # 1 in the assembly.

Sign Legend: STOP

Work Needed & Remarks: Sign is defaced - replace
at 7' height

Shape Octagon

Colors White on Red

Size 30" x 30"

Condition Good (New Sign)

Reflectivity Yes

Visibility Good (easily seen)

Height 7 Ft.

Post Type U Channel

Post Condition Good

Work Completed Removed old sign & installed new
sign at 7' mounting height

Reason for Work Sign was defaced - hard to read

Date of Work September 28 1982

Statewide Inventory
Districts maintain own
Good for budgeting
Good management tool

Bar Codes

Lat/Long for Ramps

user friendly }
Make sure data is updated
How accurate do we need

STATE LIBRARY OF IOWA



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