A Report To

The Iowa State Highway Commission

STATUS OF TRAFFIC ENGINEERING IN IOWA

This report was prepared through a grant provided by the National Highway Traffic Safety Administration pursuant to the provisions of Section 402 of Title I of the Highway Safety Act of 1966.

Transportation Safety Research Program
The University of Iowa
Iowa City, Iowa

December, 1970

THE UNIVERSITY OF IOWA
IOWA CITY, IOWA 52240

Transportation Safety Program
Accident Prevention Laboratory
Oakdale Campus

December 31, 1970

Mr. Harold Schiel
Traffic and Safety Engineer
Iowa State Highway Commission
Ames, Iowa

Dear Mr. Schiel:

We are pleased to submit herewith the report, Status of Traffic Engineering in Iowa, which was prepared in accordance with our agreement of June, 1970.

The conclusions and recommendations were developed after extensive field visitations and interviews with city, county and state officials who have traffic engineering responsibilities. Based on the results of this investigation, we are now able to proceed more intelligently with the establishment of a series of short courses in traffic engineering applications.

We are most appreciative of the assistance and cooperation of the various county and city governments which were included in our interview sample. We are especially grateful to the Iowa State Highway Commission for its cooperation and guidance throughout the entire investigation.

The scarcity of qualified Traffic Engineers in the State of Iowa at all governmental levels is a major finding of this study. The continued leadership of the Iowa State Highway Commission is vitally necessary to the upgrading of traffic engineering in Iowa.

Respectfully submitted,

James R. Berry
Director

JRB/lsg

ACKNOWLEDGEMENT

The collection of data and information essential to the findings and recommendations contained in this report depended to a great extent on the willing cooperation of many officials in Iowa who serve at the city, county and state levels. Without their candid collaboration this study would not have been possible.

To the extent that this report proves to be of value to the Iowa State Highway Commission in the planning of better roadway safety, the efforts of Iowa engineers and public officials will have contributed to the improvement of traffic engineering and accident prevention in the State of Iowa.

My thanks and appreciation to all who assisted in the completion of this project.

Lane H. Mashaw
Principal Investigator

TABLE OF CONTENTS

1.0 INTRODUCTION AND PURPOSE OF THE STUDY

This study of manpower needs is part of a larger project which is administered by the Transportation Safety Research Program of the University of Iowa. The project is funded by a Highway Safety Project Grant from the United States Department of Transportation and these funds are matched by in-kind traffic engineering services of the Iowa State Highway Commission. In Iowa, the federal funds for this type of project are received by the Director, Office of Planning and Programming and such projects proceed with his approval.

The basic aim of the larger project is to establish a program at the University of Iowa whereby short courses and workshops in traffic engineering applications will be developed. The selection of this aim is based on the assumption that the number of trained traffic engineering personnel in Iowa is limited. This limitation is one of the major deficiencies of the present overall state traffic safety program.

The study reported herein has resulted in a concurrance with the above assumption. It also has determined attitudes toward the desire for training in the area of traffic engineering by personnel of the state, county and city governments in Iowa.

It was unnecessary to conduct a study to determine that, in general, training programs for state and local government officials are inadequate. Experience with city, county and state engineering personnel points to the need for training that upgrades and makes current their skills.

There are many factors that tend to explain the training inadequacy, including:

a. the scarcity of funds for training purposes;

b. the lack of encouragement and stimulation from persons in authority;

c. the university structures do not encourage involvement with continuing education (training courses are not "scholarly activities"); and,

d. the rewards for undertaking a training course are not prompt and clearly defined.

The parent project, of which this study is a part, is designed specifically to overcome a portion of the factors cited above. The project was conceived in recognition of the obvious need to upgrade traffic engineering in Iowa and the absence of available funds to do so. The benefits that accrue to state, county and city governments as a result of this overall project, will be the increased quantity and quality of traffic engineering services in Iowa through organized training. Justification for additional Traffic Engineers will be discussed in this report.

2.0 RECOMMENDATIONS

The recommendations were based on the information derived from extensive field interviews, from library research into published data for similar studies and from comparisons of traffic engineering activity in the adjoining states. The deficiency of qualified Traffic Engineers in the State of Iowa at all governmental levels was found evident in all of these forms of investigation.

1. The proposed project to establish a program at the University of Iowa to develop short courses and workshops in traffic engineering applications should be pursued vigorously.

2. The existing expertise in the State should be used to assist in that program development.

3. Short courses and workshops should be designed recognizing the wide range of duties and educational background of those involved in the area of traffic regulation in the governmental units of the State of Iowa.

4. For those without advanced education and who have not recently been subjected to concentrated study, offerings should be once a week for several weeks rather than two or three days continuously.

5. Consideration should be given to workshops of more rigorous nature for those intimately involved in traffic engineering. These courses might be of a type that could be taken for graduate credit as well as non-credit continuing education seminars.

6. The people of Iowa would be better served if the elected officials could be made aware of the services that are not being performed through no fault of the existing professional staffs. An effort should be made to correct this situation.

7. There is an immediate need for an additional six Traffic Engineers to be located in the larger Iowa cities. The cities of Iowa, particularly those whose population exceeds 50,000, should reassess their need for Traffic Engineers, aides and technicians. Growing cities of slightly less than 50,000 population should consider the need for this expertise as future employment of engineers is contemplated.

8. A present deficiency of six county Traffic Engineers exists statewide. As counties become more urban in character, they should examine the need for a Traffic Engineer on their staffs.

9. The Iowa State Highway Commission should provide a Traffic Engineer in each of its six District Offices. These engineers should assist not only in the needs of the Commission but also provide service to the cities and counties of the district.

10. The Iowa State Highway Commission should consider the provision of these six Traffic Engineers as the first phase of correcting an obvious deficiency. The Commission should also re-examine the need at its central offices and should monitor the results of the activity of the six Traffic Engineers recommended above.

3.0 THE INFORMATION SOUGHT

The term, traffic engineering, has different connotations that vary from the installation of a stop sign to the more sophisticated areas of transportation planning. One of the most complete sets of job descriptions for the various levels of application of the principles of traffic engineering has been prepared by the Traffic Education and Training Committee of the Traffic Conference of the National Safety Council. The following excerpts are taken from its "Reference Manual".

3.1 JOB SPECIFICATIONS

A. State Traffic Engineer

I. Distinguishing Features of Work:

This is technical and administrative work in directing the Traffic Engineering Division of the State to provide safe and expeditious flow of street and highway traffic. He is responsible for (1) the collection, analysis and interpretation of all data needed to measure existing and estimate future traffic characteristics, (2) the preparation of plans and recommendations for the proper location, function and operation of traffic routes and terminals, (3) the geometric design of traffic facilities and (4) the application of uniform and effective regulatory, warning and information devices to traffic facilities. He shall report to the Chief Highway Engineer (or person holding equivalent position), or directly to the administrative head of the highway organization.

II. Illustrative Examples of Work:

1. Plans, directs and coordinates activities of the Traffic Engineering Division.

2. Formulates the administrative and fiscal programs of the Traffic Engineering Division.

3. Initiates necessary traffic engineering studies and investigations and reviews analysis and interpretation of compiled traffic data and recommendations for operational improvements.

4. Directs the engineering analysis of traffic accident data and reviews recommendations on accident prevention measures.

5. Guides programs and procedures for the design, installation, maintenance and operation of traffic control devices on state controlled highways.

6. Cooperates with and advises municipal and county officials on matters pertaining to design, operation and safety.

7. Directs preparation of traffic engineering reports and recommendations to superior authorities.

8. Reviews staff geometric design of traffic facilities.

9. Directs traffic planning and research program.

10. Cooperates with other state officials in the development of ways and means to improve traffic conditions.

11. Cooperates with all agencies in the promotion of traffic safety education.

12. Speaks on traffic engineering matters before interested organizations.

B. City Traffic Engineer

I. Distinguishing Features of Work:

This is technical and administrative work in directing the Traffic Engineering Division of the City to provide safe and expeditious flow of street traffic. He is responsible for (1) the collection, analysis and interpretation of all data needed to measure existing and estimate future traffic characteristics, (2) the preparation of plans and recommendations for the proper location, function and operation of traffic routes and terminals, (3) the geometric design of traffic facilities and (4) the application of uniform and effective regulatory, warning and information devices to traffic facilities. He shall report directly to the Mayor or City Manager.

II. Illustrative Examples of Work:

1. Plans, directs and coordinates activities of the Traffic Engineering Division.

2. Formulates the administrative and fiscal programs of the Traffic Engineering Division.

3. Initiates necessary traffic engineering studies and investigations, and reviews analysis and interpretation of compiled traffic data and recommendations for operation improvements.

4. Directs the engineering analysis of traffic accident data and reviews recommendations on accident prevention measures.

5. Guides programs and procedures for the design, installation, maintenance and operation of traffic control devices.

6. Directs preparations of traffic engineering reports and recommendations to superior authorities.

7. Reviews geometric design of traffic facilities.

8. Directs traffic planning and research program.

9. Cooperates with other agencies in the development of ways and means to improve traffic conditions.

10. Cooperates with all agencies in the promotion of traffic safety education.

11. Speaks on traffic engineering matters before interested organizations.

C. Traffic Planning and Design Engineer

I. Distinguishing Features of Work:

This is technical work in directing the planning and design activities of the Traffic Engineering Division. Under the supervision of the Traffic Engineer, he has charge of the preparation of plans and recommendations for the proper design, location, function and operation of traffic facilities.

II. Illustrative Examples of Work:

1. Directs and coordinates activities of the Planning and Design section.

2. Prepares plans for the safe facilitation of traffic movements thru measures such as channelization, changes in street and highway design, widening, realignment, separation of grades, traffic control devices and street lighting.

3. Develops standards for facilities such as pedestrian islands, traffic islands, transit loading zones, terminals and traffic control devices.

4. Reviews design and checks operational aspects of all plans for new construction or improvements, and prepares traffic control plans for the proposed projects.

5. Analyzes comprehensive traffic data and prepares plans, including long range plans for the location, function and operation of routes and terminals.

6. Makes recommendations as to the priority of projects to expedite safe traffic operation.

7. Supervises personnel of his section.

D. Traffic Operations Engineer

I. Distinguishing Features of Work:

This is technical work in directing, under the supervision of the Traffic Engineer, the installation and maintenance of traffic control devices such as signs, signals, markings and parking meters.

II. Illustrative Examples of Work:

1. Directs the installation and maintenance of traffic signals, including their proper operation and timing.

2. Directs the installation and maintenance of traffic signs and markers.

3. Directs the painting and maintenance of traffic markings.

4. Directs the installation and maintenance of parking meters.

5. Makes recommendations on the installation of appropriate traffic control devices to improve specific conditions.

6. Maintains records, prepares reports and develops budget estimates for the operations section.

7. Coordinates program to assist local transportation agencies with traffic problems involved in street projects.

E. Traffic Survey Engineer

I. Distinguishing Features of Work:

This is technical work in directing, under the supervision of the Traffic Engineer, the collection, compilation and analysis of factual data.

II. Illustrative Examples of Work:

1. Plans and directs the conduct of all engineering studies and surveys of vehicular and pedestrian traffic such as volume studies, speed studies parking studies, speed and delay studies, origin and destination surveys, law observance studies, and street use surveys.

2. Supervises the preparation of charts, graphs, tables and maps depicting the results of these surveys to afford accurate analysis and interpretation.

3. Conducts long range studies of traffic data to determine trends permitting forecasts of probable future developments.

4. Supervises accident studies and the compilation of statistical data pertinent to accident prevention activities.

5. Directs the conduct and analysis of detailed engineering studies of high accident frequency locations and recommends accident prevention measures.

6. Makes recommendations for improving traffic survey techniques.

7. Supervises personnel under his direction.

F. Traffic Analyst

I. Distinguishing Features of Work:

This is technical work, under the supervision of the Traffic Survey Engineer, in conducting traffic studies, compiling the data and preparing the results for analysis, interpretation and use.

II. Illustrative Examples of Work:

1. Studies traffic accident records and develops information on traffic accident causes to be used in determining accident prevention measures.

2. Supervises engineering studies of high accident frequency locations, such as volume, speed and law observance studies, to determine existing physical and traffic conditions.

3. Prepares collision diagrams, condition diagrams, flow charts and other graphic means of presenting traffic data.

4. Makes recommendations for improving traffic conditions at specific locations studied.

5. Develops pertinent information for use in selective enforcement and traffic safety education programs.

6. Supervises personnel under his direction.

3.2 DESIGN OF INTERVIEW

Study and discussion of the job specifications along with information from a large number of people and publications led to the decision to seek the following data:

1. Who collects the data such as traffic and pedestrian volumes, vehicle speeds, origin and destination data and accident statistics;
2. Who analyzes the data gathered in question 1;
3. Who recommends that action be taken on various types of traffic regulation devices such as parking limits or restrictions, loading controls, turning movement controls, one-way streets, traffic signals, traffic signs, pavement markings and access controls;

4. Who is responsible for the installation and/or maintenance of the devices listed in question 3;
5. Who recommends roadway lighting and who selects the type and location of the lighting;
6. Who makes the decisions regarding roadway alignment, gradient, cross section and intersection design;
7. How are land subdivisions controlled as they affect traffic;
8. Who performs the following transportation planning functions: traffic projections, traffic assignments, types of routes needed, route selection and economic justification;
9. Who is responsible for intergovernmental and public relations in matters affecting traffic engineering?

It was also our aim to appraise the general educational background of those officials whose names would be listed in answer to the above questions. This information will be used in the design of the courses that are to be offered. It is to be expected, for instance, that those who install and maintain traffic control devices and those involved in transportation planning will be widely divergent in this regard.

It was our desire that the interview would produce suggestions regarding the time of day, season, length of session, time between sessions and material to be presented by the instructional staff. In like manner, we hoped that the attitude of those interviewed toward this type of presentation could be ascertained. These factors were heavily weighted in deciding upon an interview procedure.

4.0 THE SAMPLE

It was the opinion of the study director that the type of response desired could best be obtained by face-to-face interviews. There were several reasons for this decision, including the following:

1. Hard data was not so much desired as was the opinion of those who make decisions in the area of traffic engineering;
2. It is difficult to pose written questions that bring valid responses when opinions are sought;
3. It was not proposed that the data would be tabulated and subjected to statistical analysis, hence large volumes of data were not necessary;
4. Data was not available for determining the person or persons to whom the questionnaire should be directed; and,
5. It was assumed that more than one person should be contacted in some locations (this assumption proved valid).

It was decided that the State Traffic Engineer, one District Highway Engineer and three Resident Maintenance Engineers would be interviewed as representatives of the Iowa State Highway Commission. The faculties of Iowa State University and the University of Iowa would be visited to determine current offerings of credit courses and workshops. The majority of the field investigation would involve visits to selected cities and counties. Although no basis for bias was obvious, it was decided that the selection of the cities, counties and Resident Maintenance Districts should be random within size classifications. Our opinion is that most of the problems facing the Traffic Engineer are somewhat proportional to traffic volumes. For this reason it was decided that all of the larger

cities and counties should be included and the sample was drawn as follows:

4.1 COUNTIES

a. 3 of the 15 having a population less than 10,000;

b. 6 of the 60 having a population between 10,000 and 25,000;

c. 4 of the 14 having a population between 25,000 and 50,000; and,

d. the 10 whose population exceeds 50,000.

4.2 CITIES

a. 5 of the 32 having a population between 5,000 and 10,000;

b. 4 of the 13 having a population between 10,000 and 25,000;

c. 4 of the 8 having a population between 25,000 and 50,000; and,

d. the 7 whose population exceeds 50,000.

Figures one and two in the Appendix indicate those cities and counties in which interviews were completed. Two counties that were drawn in the sample are not shown on Figure 2 because the field investigator was unable to mesh his schedule with the official to be interviewed. It will be disclosed in the discussion of the interviews that the data gathered in the counties was very homogenous and the probability of advance effects resulting from these two omissions is slight.

5.0 THE INTERVIEW

The interviews were conducted in a very informal and relaxed atmosphere. On some occasions, appointments were made and schedules arranged in advance. It was found that this process was more time consuming than the unannounced "drop in" approach. The latter process did result in a small amount of out-of-distance travel by the field investigator but did allow more calls per day to be completed. The investigator was acquainted with a number of those to be interviewed in each category; state, county, city and university. This fact made the informality a normal approach and also provided insights into how some decisions really are made that would have been difficult to obtain by mailed questionnaires.

The investigator can truly report that in almost every case he was welcomed and treated as a guest. Had he been unfamiliar with public officials and their staffs, he would have been surprised and impressed with the treatment he was accorded. Because he was not unfamiliar, he was only pleased to reinforce his long standing opinion of their dedication and determination.

6.0 THE INTERVIEW RESULTS

The officials who were interviewed direct and control three rather distinct road systems. All have similarities but can best be discussed in terms of their differences. Because they are different, the report of the interviews will be made on the basis of governmental subdivision rather than size, road mileage, traffic volume or some other parameter.

6.1 COUNTIES

A. Question 1 - Who collects the data such as traffic and pedestrian volumes, vehicle speeds, origin and destination data and accident statistics?

a. Larger counties - over 50,000 population:

The County Engineers of these counties do collect some of this data to augment data that is regularly collected by the Iowa State Highway Commission. The Commission provides a rather complete study every five years to each county and honors requests for additional study when able to do so. Those counties that are in metropolitan areas such as Pottowattamie, Polk, Woodbury and Scott are also part of area planning commissions and have access to additional data.

b. 25,000 - 50,000 population counties:

These counties have done some of this data collection but usually in connection with a special project such as new alignment of a roadway, as reported in Boone County, or a special condition arising from the development of Red Rock Dam in Marion County. Otherwise, the 5 year study of the Commission is the basic data source.

c. 10,000 - 25,000 population counties:

Same response as noted in (b).

d. Counties under 10,000 population:

The Commission data is not augmented by local studies.

The counties are uniform, regardless of size, in their source and use of accident data. The County Sheriff and the Iowa State Highway Commission provide them with data on traffic accidents. These data are retained in the County Engineer's office but are mostly unused. One county reported keeping an up-to-date map, showing accident locations. The others refer to the data on occasions when some other factor requires a review of that location.

B. Question 2 - Who analyzes the data gathered in question 1?

The various counties are uniform in that almost all analysis is done by the Iowa State Highway Commission. Occasional instances were mentioned of local work or possible use by a consultant. The filing of data or placing of map tacks to indicate accident locations is the only local use of the data on a regular basis. None professed to do any real analysis.

C. Question 3 - Who recommends that action be taken on various types of traffic regulation devices such as parking limits or restrictions, loading controls, turning movement controls, one-way streets, traffic signals, traffic signs and pavement markings and access controls?

Most of the items listed in this question have more application to cities than to counties. This is particularly true of turn controls, one-way streets and traffic signals. No counties reported any of these. The County Engineer is given almost complete responsibility in the area of traffic signs and markings

and is expected to make recommendations for parking restrictions. The law requires a resolution by the Board of Supervisors to legalize such traffic controls and this is generally accomplished upon recommendation. Most County Engineers work closely with their Sheriffs in these matters.

One item appeared to be a problem upon which all could speak and all had opinions. There are a multitude of methods used to regulate access from private property to public roads. In general, permission is required and the County Engineer has the opportunity to inspect the location to ascertain if problems exist that would affect highway safety. One reply was that the Board insisted on the granting of all requests and he did not know of any that were truly improperly located. A variety of methods of financing was reported... from the total cost being borne by the property owner, on one hand, to no cost on the other.

D. Question 4 - Who is responsible for the installation and/or maintenance of the devices listed in question 3?

Most counties have the maintenance work divided into geographic districts. Each of these is headed by a superintendent or foreman. This work is assigned to these men, usually with authority to follow the Manual on Uniform Traffic Control Devices for Iowa (Manual). Others reported having a sign crew, sign foreman, or sign inspector, and one county reported that no one specific person was responsible. Another county (not one of the smallest group) "takes care of signs on rainy days".

Those responsible for this function generally do not have formal education beyond high school. Their superiors report, almost without exception, that they are good employees who would welcome educational assistance and are

capable of gaining from short courses.

E. Question 5 - Who recommends roadway lighting and who selects the type and location of the lighting?

The County Engineer is responsible for and makes decisions concerning lighting installations.

The need for expertise in lighting rural intersections appears to be largely a matter of county size. Eight of the ten larger counties do have lighted rural intersections, whereas, only one of the counties in the smaller group sees a need for and participates in such lighting. Surprisingly, this one small county is very enthusiastic about this safety feature and has installed lights at several intersections.

It should be noted that county roads which intersect with the primary system are not included in this answer as the County Engineers consider the Iowa State Highway Commission to have prime responsibility at those intersections.

F. Question 6 - Who makes the decisions regarding roadway alignment, gradient, cross section and intersection design?

The answer in all cases is the County Engineer. One reported the use of a consultant occasionally. These decisions are subject to review by the Commission on the Farm-to-Market system. None indicated any conscious need for traffic engineering assistance in these decisions.

G. Question 7 - How are land subdivisions controlled as they affect traffic?

These problems are understandably related to population and proximity to larger cities and towns. Only one of the counties over 25,000 population does

not exercise control. Either the County Engineer informally approves plats before they are recorded, or a zoning ordinance regulates platting procedures and the County Engineer reviews the plats. Most of the counties that have zoning ordinances have Planning Commissions. In a few counties a zoning officer (other than the County Engineer) administers the zoning ordinance.

Half of the counties under 25,000 population exercise no control over subdivisions. These counties do not believe that any problems are arising due to lack of subdivision control.

H. Question 8 - Who performs the following transportation planning functions: traffic projections, traffic assignments, types of routes needed, route selection, and economic justification?

The Iowa State Highway Commission provides this planning service for counties. In addition, those counties in Regional Planning Areas will have studies made in conjunction and cooperation with the Commission. These studies may be made by Consultants or Planning Staff personnel.

I. Question 9 - Who is responsible for intergovernmental and public relations in matters affecting traffic engineering?

Most County Engineers are closely related to the total public relations picture of the county. Road maintenance and construction are responsible for significant percentages of the county budgets, hence public concern is obvious. A small number reported that the Board of Supervisors spoke for the county even in traffic matters and that the County Engineer, although not prohibited, was requested not to make public statements.

A similar situation exists regarding relationship with other governmental subdivisions.

It is a fair judgment that most County Engineers do not see traffic problems as a major concern. However, it is also quite clear in visiting with them that they desire to avail themselves of educational opportunities to improve their performance. They perceive the problems of administration as greater than their technological inadequacy. Since the interviews were not structured and no attempt was made to bring order to their suggestions by devices such as having them check a list of possible courses, a large number of different suggestions resulted. These include:

Management
Public Relations
Traffic Analysis
Planning
Accident Analysis
Signalization
Geometrics
Route Selection
Safety to Workmen
Manual Interpretation
Intergovernmental Relations
Communications
Records

There were other requests for courses directly related to civil engineering but not to traffic engineering.

The personnel of the counties can generally be placed in two categories of educational background. The County Engineers and their assistants are graduate engineers, usually civil engineers, and quite capable. The other group that is likely to attend and benefit from the proposed short courses are the maintenance foremen and superintendents. Few of these men have formal education beyond the high school level.

It is the opinion of the County Engineers that this second group will be better served by courses that are offered on a regular basis but for not more than one-half day at a time, perhaps once a week. Those who desire the more rigorous

courses in analysis and transportation planning will more likely benefit from intense seminar experiences that continue for two to three days.

There are several conflicts that may affect attendance. Summer is generally conceded to be the least desired season. Night attendance will be less than day attendance and afternoons appear to be preferred to mornings. Quite naturally, short travel distances are preferred and the number of men attending from a given county will be reflected by all of these factors.

6.2 CITIES

The cities interviewed were much more heterogeneous than were the counties. There are several factors that tend to explain this condition. Regardless of the size of the counties, as measured by area, road mileage or population, much of their engineering is performed or is reviewed by the Iowa State Highway Commission. This is not the relationship that exists between the cities and the Commission. As cities grow, they tend to annex areas in which problems occasioned by traffic volume and congestion are manifest. Hence, they remove some of this type of problem from the county and assume it themselves. Since the county responsibility does not extend into the cities and since less routine relationships exist between the cities and the Commission, it necessarily follows that more problems of traffic origin rest with the cities. The form of government and the interrelationship of governmental officials is more diverse in the cities and the way they assign responsibilities is much less uniform. These differences will be rather clearly evident as we discuss the results of the interviews with the cities. For ease of comparison, the same format will be followed as was used in the section relating to the counties.

A. Question 1 - Who collects such data as traffic and pedestrian volumes, vehicle speeds, origin and destination data and accident statistics?

The large cities all reported that they collect traffic and pedestrian volume counts. In Des Moines, Cedar Rapids, and Davenport the data is collected by the Traffic Engineer. In the other large cities, the collection is made by the City Engineer or the head of the Traffic Department (not an engineer).

The remainder of the cities show a marked relationship to size in their answers. In the 25,000 - 50,000 population group, all cities report some data collection with this responsibility divided among the City Engineer, Traffic Engineer, Public Works Director and the Police Department. In the smaller two groups, the answers are more general, i.e., statements such as "limited amount by City Engineer", "once in regard to a parking study" and "along with urban renewal". Only one (small city) said none was collected by the city.

The larger cities, plus Ames, Iowa City, and Decorah, reported that prevailing speed data had been collected by the cities for use in establishing speed limits. Many reported, however, that this was not done on an extensive basis.

With very minor exception, origin and destination studies have been undertaken only by the Iowa State Highway Commission. Some cities reported that this work had been done by area planning commissions. One city has conducted limited surveys.

More cities than counties report the collection of accident statistics. The police departments collect data in all cities. Only three cities reported any engineering involvement in data collection.

B. Question 2 - Who analyzes the data gathered in question 1?

In general, the city department that collects the data, analyzes it. This was true regardless of size and regardless of the type of data collected. The

only variance was that several cities reported no real use was made of the accident statistics.

C. Question 3 - Who recommends that action be taken on various types of traffic regulation devices such as parking limits or restrictions, loading controls, turning movement controls, one-way streets, traffic signals, traffic signs, pavement markings, and access controls?

Parking restrictions arise from the suggestions of the public, recommendations of the Traffic Engineer, City Engineer, Public Works Director, police or, in many cases, from a committee of elected and/or appointed officials. The smaller cities each gave a different answer. The larger cities all reported that this is the responsibility of the Traffic Engineer or City Engineer. All other cities fell in between those extremes.

The fact that 85% of the cities reported most of the initiative was with an official rather than the reliance upon citizen complaint or request was encouraging and will be surprising to some.

The establishment of loading zones and placing restrictions upon their use was done by Traffic Engineers in the larger cities and by the Police Department in the smaller cities. The City Engineer or Public Works Director was involved in making these decisions in all sizes of cities, but to a lesser degree.

One-way streets are established upon the recommendation of Traffic Engineers in the larger cities while this responsibility is divided between the City Engineer and a Traffic Committee in the others. The composition of the Committee varies from being dominated by the City Council in some cities to a reliance on professional staff in others.

Traffic signals are handled quite similarly to one-way streets except that City Engineers are relied upon more heavily for this service than is the Committee.

Traffic signs and markings have been remanded to Traffic Engineers in those cities that have them (larger cities) and to Departments of Public Works and Engineering in others. The trend from assigning this duty to Police Departments has been quite pronounced during the past decade. Only one city, of those interviewed, assigns this responsibility to the Police Department. One of the 25,000 - 50,000 cities was making the change from police to engineering responsibility during the period of the interview.

Most cities of all sizes control curb cuts (access) by means of a permit issued by the City Engineer or Public Works Director. Others who control this item in some cities are Traffic Engineers, Building Inspectors or Street Superintendents.

D. Question 4 - Who is responsible for the installation and/or maintenance of the devices listed in question 3?

Only in the larger cities which have Traffic Engineering or Transportation Departments is the installation and maintenance of traffic control devices not the province of the Street and Public Works Departments. As reported earlier, some street marking by Police Departments remains. In a significant number of cities the maintenance, in particular, and installation, to a lesser degree, are performed by a City Electrician or electrical contractor.

E. Question 5 - Who recommends roadway lighting and who selects the type and location of the lighting?

The problem of street lights is one of the greatest differences noted between the city and county in this study. All cities have the problem and show great divergence in their handling of it. The larger cities had five different answers;

Traffic Engineer, City Engineer, Public Works Director, Power Company, and the Electrical Inspector. Half of the other cities relied upon a committee to make the decision as to location of lights. Most of them placed the responsibility of choosing the luminaire upon the public utility company.

F. Question 6 - Who makes the decisions regarding roadway alignment, gradient, cross section and intersection design?

City Engineers, in almost all cases, are making the decisions referred to in this question. In two large cities, in cases of disagreement, it was evident that the Traffic Engineer would probably prevail. In almost all other cases, the City Engineer would use his best judgment without the advice from anyone especially trained in traffic engineering.

G. Question 7 - How are land subdivisions controlled as they affect traffic?

In the vast majority of the cities visited, the City Engineer reviews and makes recommendations regarding subdivision plats. Many of the cities have Planning Commissions and most of these citizen groups depend on the City Engineer to check submitted plats against long range plans, where they exist.

H. Question 8 - Who performs the following transportation planning functions: traffic projections, traffic assignments, types of routes needed, route selection, and economic justification?

Consultants provide these planning services to cities of all sizes in Iowa. Almost half of the cities reported employing consultants. The larger cities that are part of area planning commissions receive additional transportation planning services from the area planning commission.

I. Question 9 - Who is responsible for intergovernmental and public relations in matters affecting traffic engineering?

It was clear that in matters that are mostly technical, the professional staff meets with their counterparts in other governmental units. The officials most often mentioned were the City Engineer, Public Works Director and Traffic Engineer. In several cities, public statements concerning traffic engineering are made by the City Manager or Mayor. Some said simply that public statements are unnecessary since the city council meetings are so thoroughly reported by the news media.

There is little equivocation on the part of the city officials that they strongly favor instructional courses as proposed by this project. Most were involved in projects, or had been recently, which directed their immediate attention to specific courses. Overwhelmingly, the most desired courses involve signalization and data analysis. Other courses that were requested include:

Study Design (Data Gathering)	Statistics
Channelization	Network Analysis
Signing	Capacity Studies
Marking	Pedestrian Problems
Safety for Workmen	Parking
Accident Analysis	Federal and State Assistance Programs
"The Manual"	

There are more levels of educational experience in the cities than in the counties. The principal difference is the presence of several Traffic Engineers who have had graduate level and extensive short course education, specifically in traffic engineering (See Table 1 in the Appendix for Iowa members of the Institute of Traffic Engineers.) The engineers will be most interested in advanced courses

and courses designed to "keep current" with the state of the art. They also can serve as a source of advisors, instructors and catalysts to learning.

Besides members of the Institute, it was discovered that some cities have Civil Engineers on their staffs with undergraduate concentration in traffic engineering and who avail themselves regularly of short course type instruction. The cities of Ames, Dubuque, and Waterloo are examples. Sioux City has a Traffic Engineering Department which is now headed by the City Engineer until a Traffic Engineer can be hired. Council Bluffs and Iowa City have separate divisions in the Public Works Department headed by competent non-engineers.

The established divisions, departments, or bureaus in Des Moines, Cedar Rapids, and the cities mentioned above, will provide useful organizational models for the other cities of the state. The skillful personnel in these departments are valuable resources. Because the traffic function has been separated from other duties of parent departments where they were formally housed, technical competence has been developed in a number of personnel. The field investigator talked to a limited number of these men and they were interested in the short course idea. No inference should be made that these men are more interested in or more diligent in their jobs than the maintenance foremen and superintendents of the counties. The difference lies in the nature of the assignment. The county foremen have a wide range of maintenance responsibilities that are spread over a very large mileage. In the cities, the mileage is less, the traffic is greater and specialization becomes economically more feasible.

6.3 THE IOWA STATE HIGHWAY COMMISSION

Three levels of engineering responsiblity were included in the study of the Iowa State Highway Commission; three of the twenty-four Resident Maintenance Engineers, one of the six District Engineers and the State Traffic Engineer were

interviewed.

C. S. Carmean, the State Traffic Engineer, is one of three principal assistants to the State Traffic and Safety Engineer, Harold Schiel. Mr. Carmean's division is likewise sub-divided into three areas, two of which are headed by Traffic Engineers. Mr. Vance Brennan heads one and the other position is vacant at this time. These men perform most of the traffic engineering duties for the entire Highway Commission.

It has been previously mentioned that the Commission provides data collection and analysis services for the counties. Traffic volume counts are made each five years on all county roads. There are 56 permanently installed traffic counters located throughout the state. These collect data on the specific locations and also provide for trend analysis.

Carmean's responsibility also includes the design of traffic control measures; signs, signals, markings, passing zones and intersection plan review. Transportation planning does not fall into the purview of this department, but is assigned to the Urban Department, also located in the Division of Planning. The Commission provides requested services to the counties in the form of special traffic counts, recommends speed limits and designs intersection lighting, to indicate the general scope of services. Workloads do not permit the prompt honoring of all requests. Workloads do not permit routine route inspections by Traffic Engineers. The centralized location at Ames of all Commission Traffic Engineers precludes any regular appraisal of traffic safety conditions by those who consider this their prime responsibility.

When asked about how traffic matters are referred to his department, Carmean convinced the field investigator that there is no work shortage. The routine work described above and special project involvement are certainly sufficient to justify the present positions. Various Commission Engineers, the Iowa Highway Patrol

and other citizens suggest study needs on particular problems. There does not, however, appear to be any regular feedback from foremen, Resident Maintenance Engineers, and District Engineers concerning traffic problems.

The District Engineers do not have Traffic Engineers on their staffs. The services of data gathering and analysis are performed by the State Traffic Engineer or other Commission departments. The organizational plan does place the responsibility for certain functions with the District Engineer. Parking limits and restrictions may be recommended by the Resident Maintenance Engineer (RME), a County Sheriff or the Highway Patrol, but the decision rests with the District Engineer. Traffic signs and markings usually are specified by the "Manual" but discretionary authority rests with the District Engineer. The District Engineer signs access permits but the actual decisions are made by the RME except in rare, unusual cases.

The RME supervises and maintains the various control devices except for traffic signals. Most of the traffic signals on primary routes are inside cities and agreements for maintenance usually assign that responsibility to the city. Those not in cities, are almost always maintained from the central office at Ames.

Traffic signals and intersection lighting may be and most often are recommended by the District Engineer upon requests from various sources or on his own initiative. The design is performed at Ames. All design functions and decisions are made at Ames. (District Engineers are not excluded from the process). The alignment of responsibility regarding transportation planning is identical to that of traffic engineering and design - it rests at Ames.

The foregoing discussion has delineated in some fashion the duties of the RME. The RME is usually notified of accidents that occur in his district if it is believed that road conditions caused or contributed to the accident. Those

RME's interviewed did not feel they had any other particular responsibility.

The organization of the maintenance districts assigns a wide range of duties to a foreman in a limited geographical area. One RME, for instance, reported he has seven supervisors and nine garage locations. None of the three who were interviewed felt the need or advisability of having a Traffic Engineer on his staff. Each indicated, when specifically questioned, that his present workload is so great that, even if he had traffic engineering capabilities, time would not permit him to assume the additional responsibility.

Since the District and Resident Maintenance Engineers have limited responsibility in the area of traffic engineering, it is to be expected that their list of recommended courses would be small. They have an interest in extending their own range of capabilities and indicated a desire to attend the available courses. All indicated a need for improved management capability for themselves and their foremen. The educational backgrounds of the engineers and the foremen would be very nearly identical to those of the counties.

6.4 STATE UNIVERSITIES

Both Iowa State University and The University of Iowa have undergraduate and graduate programs in the field of Transportation and Traffic Engineering. These programs are available at Ames and Iowa City but have not yet been offered on an extension basis. Iowa State has short courses on a wide range of engineering subjects, transportation included. The University of Iowa does not offer as much of this type of instruction. Neither university has a program of courses offered on a regular basis.

The transportation education program at Iowa State University is located in the Department of Civil Engineering. Professors Carstens, Brewer, Fung and Ring handle the teaching assignments. The list of present courses offered is

shown in Table 2 of the Appendix.

The responsibility for the program in transportation education at the University of Iowa rests with the Department of Civil Engineering. Professors O'Mara, Wilson and Brown are currently charged with the teaching assignments. Brown, it should be noted, terminates his association with the Department in January, 1971. A list of courses presently offered at the University of Iowa is shown in Table 3 of the Appendix.

In both institutions, support for these programs is gained from other departments, disciplines, and colleges. No attempt will be made to document that support.

Both institutions offer extension courses in a wide range of subject matter. Details of those programs can be obtained from the Universities. Because some interest was indicated in management type courses, a brief description of courses offered by the University of Iowa Institute of Public Affairs is included as Table 4 of the Appendix.

7.0 THE TRAFFIC ENGINEERING NEED

The nature of the administrative organization of the various Iowa cities and counties differs so greatly that positive statements regarding precise numbers of Traffic Engineers needed by each governmental unit in Iowa cannot be made. No local published or unpublished studies are available which can help shed light on the matter.

A 1963 University of California, Institute of Transportation and Traffic Engineering, study entitled, "Traffic Engineering Organization and Staffing in California Cities and Counties", shows that at that time, California cities had from 1.73 to 2.08 Traffic Engineers for each 100,000 population. This would indicate that cities of 50,000 had one Traffic Engineer and cities of 160,000 population averaged three. Cities of less than 50,000 population were not included in the above sample. The results of the California study seem to be in line with the Institute of Traffic Engineers recommendation that all cities of over 50,000 should employ Traffic Engineers.

All experience indicates that the needs of 1970 are greater than in 1963 because of the growth in automobile registration and vehicle-miles of travel. However, the 1963 California data is the only concrete information from which we can base our recommendations.

The following table identifies the traffic engineering needs in Iowa's major cities. One must bear in mind that the figures are on the conservative side because they are based on somewhat outdated California statistics.

City	1970 Population	Traffic Engineers Needed
Cedar Rapids-Marion	130,000	2.3
Council Bluffs	60,000	1.0
Davenport-Bettendorf	120,000	2.2
Des Moines area	237,000	4.3
Dubuque	61,000	1.0
Iowa City-Coralville	54,000	1.0
Sioux City	84,000	1.5
Waterloo-Cedar Falls	110,000	2.0
	TOTAL	13.1

According to the 1970 ITE Yearbook, there are seven Traffic Engineers now practicing in the cities listed above. Based on conservative estimates, major Iowa cities are in need for an additional six Traffic Engineers.

The apparent deficiency in city Traffic Engineers should not be interpreted to mean that the investigator found a lack of concern on the part of the officials in the cities. All recognized the need for and attempted to provide the service. Able, young civil engineers are employed by some of these cities, and efforts to upgrade their capability through short courses and experience are evident. This effort is being expanded by both the cities and the engineers themselves. Even though some of the major cities are presently providing interim traffic engineering service, the need for an additional six city Traffic Engineers is nevertheless real and immediate.

In sampling traffic engineering involvement on a county-wide basis, the California study reported that counties in California were employing Traffic Engineers at a ratio of approximately 0.6 engineers per 100,000 population. By this measure we could recommend that counties of more than 160,000 population should

employ Traffic Engineers.

The California county system and population characteristics are different from Iowa's. The State of Iowa has 99 counties, of which 89 have population of under 50,000. The State of California has only 58 counties, and 24 of these have a population of under 50,000. The greatest number of Traffic Engineers in California counties of under 200,000 population appear to be concentrated in the population range of 50,000 to 200,000. An arithmetic extension of this would indicate the need for 6 or 7 county Traffic Engineers in the State of Iowa.

The State Highway Commissions of various surrounding states have different organizational structures. It is beyond the scope of this study to determine how these various highway departments deploy their Traffic Engineers, how many there are, and how their expertise is exercised. By simply looking at the membership rolls of the ITE in some of the adjoining states, one surmises that these states have considerably more Traffic Engineers than does Iowa. Unsupported statements tend to cast aspersions of irresponsibility; however, it seems clear to the investigator that there should be "several" more Traffic Engineers employed by the Iowa State Highway Commission--partially to make up for the deficiencies in county traffic engineering ranks, and partially to cope with the increase in traffic engineering work load at the State level.

8.0 SUMMARY AND CONCLUSIONS

Representatives of twenty cities, twenty-one counties, the two Colleges of Engineering in the State, and three Resident Maintenance Engineers, a District Engineer, and the State Traffic Engineer were interviewed in the study. Iowa officials are aware of the problems arising from highway traffic in the State. Those who have responsibilities in this area are desirous of having more opportunities to improve their capabilities through continued education. The most commonly expressed reasons for not doing a better job in traffic matters are shortages of personnel, lack of opportunity, insufficient funds and absence of recognition on the part of decision-makers.

The personnel who will attend short courses are diverse in desire and educational background. Courses will have to cover a wide range of technical and practical material and be directed to those with engineering degrees and also to those whose education does not go beyond high school.

While the provision of additional educational opportunities will be helpful, it will not be sufficient to overcome the shortage that is apparent. The many people who were interviewed expressed varied, yet consistent opinions regarding the need for additional expertise in traffic engineering. This study has indicated that the people of Iowa would be better served by the provision of that expertise.

Based on a University of California study and on our discussions with knowledgeable people at several levels of government, the following alternatives appear to be worthy of consideration:

1. Each governmental unit could provide traffic engineering services for

itself by hiring more staff or by employing consultants. There is an immediate need for an additional six Traffic Engineers to be located in Iowa cities whose population exceeds 50,000. A present deficiency of six county Traffic Engineers exists statewide.

2. Several cities and/or counties could jointly employ a Traffic Engineer and share his services and the resulting costs. The cost could be apportioned in a number of ways including (a) proration by population, (b) proration by roadway mileage, (c) proration by vehicle registration, (d) a charge could be placed upon services by an hourly rate or (e) by some other parameter.

3. It has been suggested by some that state government services should be dispensed under a new system of some 16 areas. Such a system would provide a new unit that could reasonably support one or more Traffic Engineers per area.

4. The Iowa State Highway Commission now concentrates traffic engineering services at the central office in Ames. An increase in the number of Traffic Engineers in the Ames office would increase the amount of service available not only to the Commission but also to the cities, counties, and area planning commissions.

5. Assign a Traffic Engineer to each of the six District Offices of the Commission and offer their services to the people of Iowa through the Commission, cities, counties and area planning commissions.

9.0 APPENDIX

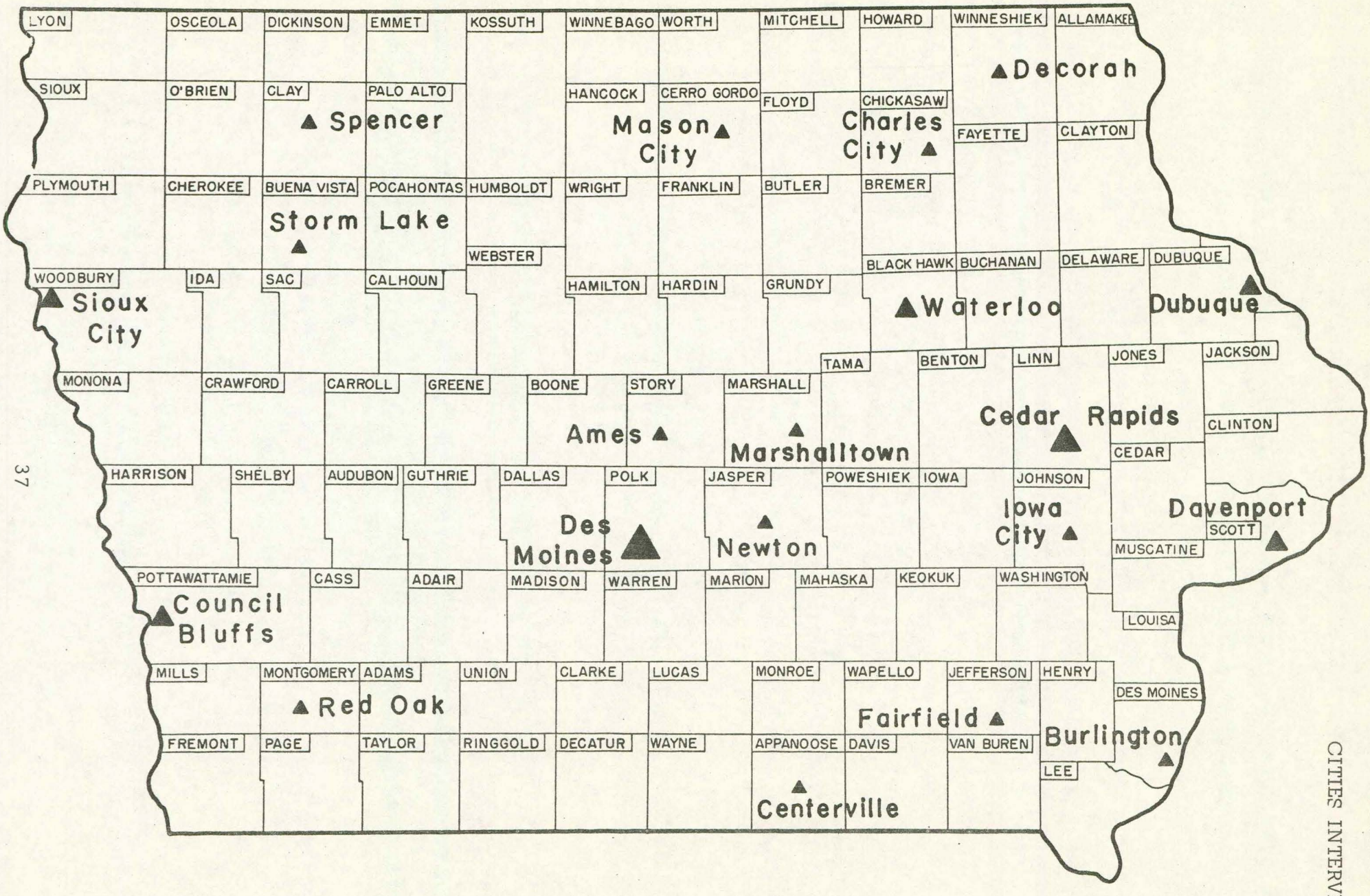

FIGURE 1
CITIES INTERVIEWED

FIGURE 2

COUNTIES INTERVIEWED

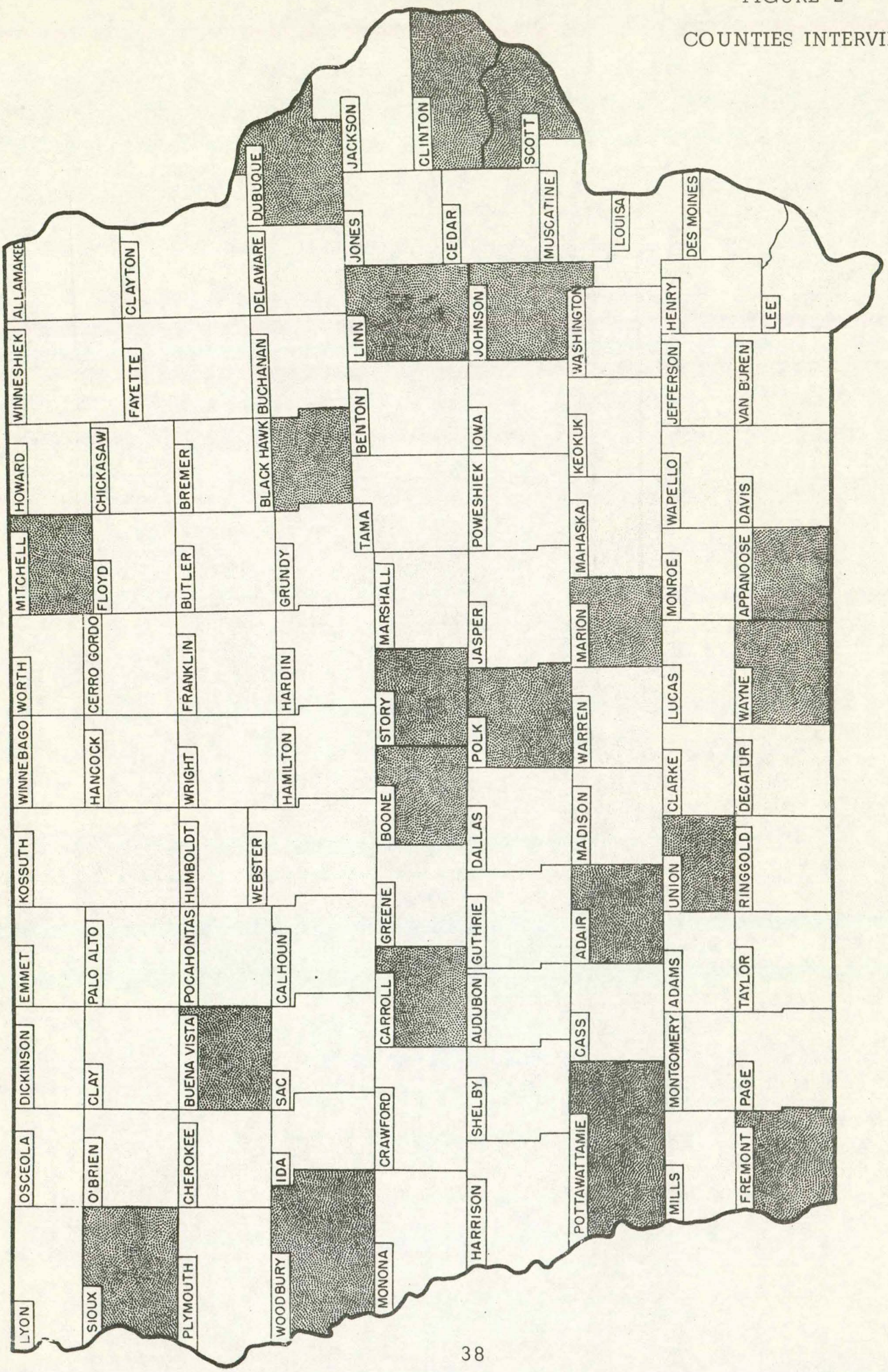

TABLE 1

INSTITUTE OF TRAFFIC ENGINEERS

IOWA MEMBERS

Ames

Brennan, Vance E. (J)
Traffic Control Engineer
Iowa State Highway Commission

Brewer, Kenneth A. (J)
Assoc. Professor, Civil Engineering
Iowa State University

Bryum, Oliver E. (J)
Urban Transportation Planner
Iowa State Highway Commission

Carmean, C. S. (A)
State Traffic Engineer
Iowa State Highway Commission

Carstens, Robert L. (A)
Associate Professor
Iowa State University

Csanyi, Ladis, H. (M)
Professor, Civil Engineering
Iowa State University

Lee, Dah-yinn (J)
Assistant Professor, Civil Engineering
Iowa State University

Ring, Stanley L. (A)
Assistant Professor, Civil Engineering
Iowa State University

Van Lueven, David P. (J)
Civil Engineering, Trainee
U. S. Bureau of Public Roads

Cedar Rapids

Green, Harry H. (A)
Supervisor, Traffic Engineering
City of Cedar Rapids

Meyer, Melvin B. (A)
City Traffic Engineer
City of Cedar Rapids

Davenport

Ehrmann, Walter R. (A)
Traffic Engineer
City of Davenport

Fieser, Garland E. (A)
Senior Design Engineer
Bliss-Eagle Signal, Davenport

Huppert, William W. (M)
Manufacturing Manager
Bliss-Eagle Signal, Davenport

Liebert, C. Patrick (A)
Traffic Engineer
G & W Eagle Signal, Davenport

Peterson, W. H. (A)
Quotation Manager
Bliss-Eagle Signal

Riddle, Ralph, M., Jr. (A)
Traffic Engineer - Systems
Bliss-Eagle Signal

Dubuque

Baule, Charles L. (A)
Consulting Engineer
Bartels, McMahan, LeMay, Haas & Baule

Weiland, Gerlad M. (S)
Civil Engineer - Trainee
U. S. Bureau of Public Roads

Des Moines

Batts, Herman M. (M)
Director of Traffic and Transportation
Des Moines, Iowa

Ellis, David C. (S)
Engineer in Training
Iowa State Highway Commission

Grubb, Robert W. (A)
Asst. Director, Traffic & Transportation
City of Des Moines

Snider, David G. (A)
Senior Traffic Engineer
City of Des Moines

Stedman, Harry E. (M)
Retired

Thompson, James A. (A)
Senior Traffic Engineer
City of Des Moines

Iowa City

Speer, Ralph E.W. Jr. (A)
Civic Center
Iowa City

Wilson, Eugene M. (S)
Assistant Professor
The University of Iowa

Oakdale

Bezkorovainy, Georgy (A)
Traffic Research Engineer
The University of Iowa

Sioux City

Meisner, Donald M. (J)
Director,
Siouxland Interstate Metro. Planning Council

Spirit Lake

Baumbach, Harold A. (A)
City Administrator
City of Spirit Lake

Member - M
Associate - A
Junior - J
Student - S

TABLE 2

COURSES OFFERED AT IOWA STATE UNIVERSITY

350 Collaborative Transportation Development

History, legal requirements, organizations, and coordination in national, state, and local development of transportation modes. The planning, regulation, safety, operation and circulation patterns of air, rail, water, pipeline, street and road systems. Population, land use, economic, social and other source data for use in the location of transportation routes, parking and terminal facilities.

404 Engineering in City Planning

Relation of sanitary works, transportation and other utilities to city planning; housing, building codes, real estate subdivision, land titles.

352 Planning of Transportation Facilities

Introduction of planning for systems of highway, rail, air, water and pipeline transportation. Selection of routes and modes based on economic and financial factors, technological characteristics, and other factors. Transportation terminals.

451 Traffic Planning

Planning of highway systems and terminals considered as a part of a complete planning approach; traffic studies, projections, analysis, plan formulation and programming.

450 Traffic Engineering

Elements of highway and street traffic circulation and planning. Driver and vehicle performance. Traffic analysis and traffic control. Parking, Lighting. Safety.

453 Designing Transportation Facilities

Location and geometric design of highway facilities. Earthwork and drainage related to highway, railway, and airport design. Design, construction and maintenance of pavements and stabilized bases.

553 Traffic Engineering Planning and Analysis

Principles of highway and street traffic planning, traffic analysis by electronic computer methods, driver, vehicle and roadway characteristics, location, safety and capacity of traffic ways.

554 Traffic Engineering Design and Control

Principles of street and highway traffic design for safety and control, arterial ways, one-way streets, traffic signals, signs, markings, and lighting, channelization, speed regulation and zoning.

555 Highway Administration and Finance

Organization and function of highway departments administrative procedures; financial plans, revenues, budgets and controls; sources of revenue.

556 Design of Aerospace Traffic and Transportation Facilities

Historical development, legislation, finance, zoning and operation of aerospace transport facilities. The installation of lighting and electronic traffic aids for taxiways, runways, approaches and airways. The planning, location and design of heliports, airports and spaceports.

653 Street and Urban Highway Design

Design of city streets, involving cross section, intersections, subsurface utilities, on-and-off street parking, mass transportation, loading facilities, widening, channelization, drainage and markings; design of urban expressways, service roads and their relationship to basic street system.

654 Highway Location and Design

Route selection, geometric design, economic aspects, traffic capacity, and roadway appurtenances of non-urban roads and highways.

656 Planning Highway Transportation Systems

Fundamentals and coordination of transportation systems. Regional planning, planning surveys, designation of road and street systems. Mass transportation and location and type of urban facilities.

TABLE 3

COURSES OFFERED AT THE UNIVERSITY OF IOWA

53:171 Traffic Systems Analysis

The formulation of analytic traffic models. The application of statistical theories in traffic. Trend, projection, and programming of traffic systems.

53:173 Transportation Engineering I

The location and design of routes of transportation; measurements and geometrics; topographic and hydrologic factors, photogrammetry and air photo interpretation; earthwork and drainage, property rights and acquisition.

53:174 Transportation Engineering II

Modes and systems of transportation; transportation in the United States; economics, regulation and control; financing, taxation, subsidy and public policy; traffic studies; design and construction of pavements, tracks and other ways, their appurtenances and foundations.

53:175 Transportation Safety

The safety function of various modes of transportation with emphasis on motor vehicle safety.

53:176 Accident Analysis

Analysis of accidents; physical forces operant in the accident event; resultant injuries to persons; strains and deformations in materials and structures.

53:177 Traffic Engineering I

The operation of rural and urban roads, streets and expressways, including the control of traffic for safety and efficiency.

53:178 Safety Aspects of Transportation Vehicles

Analysis and design of transportation vehicles with safety as the primary criterion. Emphasis is on the highway vehicle, but the airplane, train, and other transportation vehicles also are considered. The compatibility of the vehicle to the human and its adaptability to human control are included in design considerations.

53:272 Urban Transportation Planning

Services and systems based upon the analysis of traffic, land use, economic and other survey data, and the preparation of mathematical models.

53:273 Transportation Systems I

The design, construction and operation of unique and integrated transportation systems and their terminal and exchange facilities.

TABLE 4

UNIVERSITY OF IOWA

LOCAL GOVERNMENT IN-SERVICE TRAINING PROGRAM

Who is the program for?

Any person in city or county government. Those persons in administrative or supervisory positions who have not had professional administrative training are most likely to benefit from the training.

What will it be like?

The program is one of professional management and supervisory development rather than training in the mechanics or routine duties of any governmental position.

Persons can, over a span of several years, enroll in a series of courses rather than just one or two unrelated courses. This way participants can build on their knowledge and select courses that best fit their needs, and local governments can count on each course being offered periodically.

Persons will attend classes close to home, at an attendance center of their area school.

Three courses are offered each year, one in the fall, winter, and spring. Each course will have 8 to 12 sessions lasting approximately two hours, with the class meeting an afternoon or evening weekly. The course materials are prepared by the Institute of Public Affairs of the University of Iowa.

Instructors (discussion leaders) are practitioners or regular teachers, chosen locally.

Classes are kept at a size to permit adult type learning with plenty of opportunity for participants to express themselves and to exchange ideas.

Persons who enroll in the courses can count on learning things relevant to them in their jobs and in their own self-development.

When did it start?

In September, 1969. Six of the sixteen area school districts were chosen as the areas in which the program was held on a pilot basis. They were: Area X (Cedar Rapids), Area XII (Sioux City), Area V (Fort Dodge), Area I (Calmar), Area XIV (Council Bluffs), and Area XIII (Creston), Total class enrollments for the three courses offered the first year exceeded 800.

For the school year beginning September, 1970, the three starting courses will be available in all area schools except the six pilot areas, which will offer three new courses.

The first starting course is "Human Relations in Government," followed by courses in "Effective Supervisory Practices" and "Iowa Government: Today and Tomorrow." The second year courses are: "Management and Group Performance," "The Supervisor and Personnel Relations," and "Basic Management Practices."

Other courses will be developed as the program progresses in the light of experience and local needs.

How do participants benefit?

They are able to:

1. Learn about effective administrative and supervisory procedures that can be adapted to their local situations;
2. Sharpen their abilities to deal with others effectively in their own work situation and communities; and
3. Get a broader understanding of society, government, and current state and community problems.

They can improve themselves personally and in their chosen fields. Their jobs may become easier and more satisfying.

They can be part of a general upgrading of local government performances and an improved image of local government employment.

Recognition is given for completion of individual courses by the awarding of certificates, and special recognition will be given to those who complete six courses of the series.

How is the program financed?

Course development and other program development costs of the Institute of Public Affairs are financed through a grant from the U. S. Department of Housing and Urban Development under Title VIII of the Housing Act of 1964.

Other costs are paid by the participant or his local government and from state aid provided for persons enrolled in adult education programs in area schools. It is anticipated that the fee for the participant (or his local unit of government) will be ten to fifteen dollars a course.

Who is sponsoring this program?

The program is being spearheaded by the Institute of Public Affairs of the University, but a state-wide committee made up of persons from leading associations of city and county officials and persons from colleges, universities, and area schools assisted with the planning. Adult education directors of the area schools are administering the program locally.