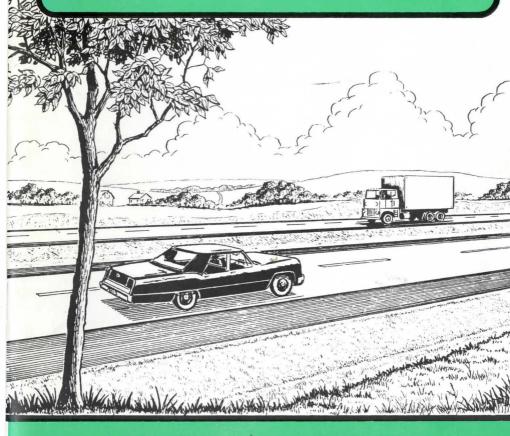
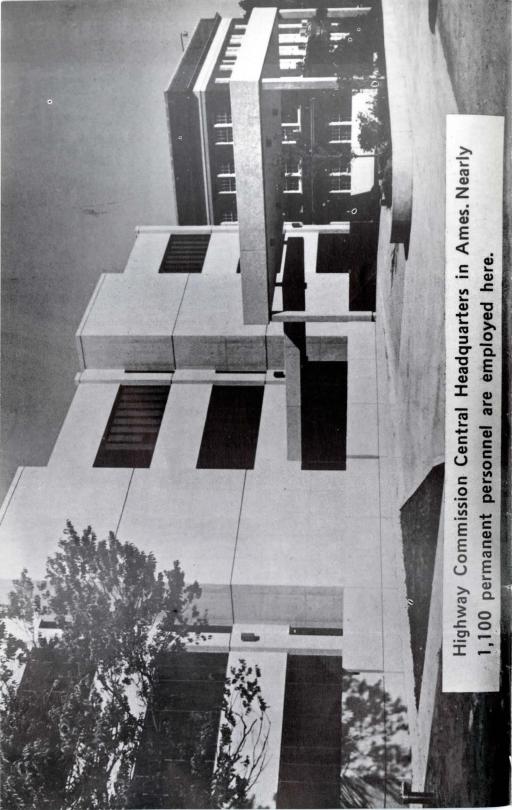
# IOWA STATE HIGHWAY COMMISSION

AMES, IOWA



DEDICATED to BETTER and SAFER HIGHWAYS



## Fellow Citizens:

The planning, construction and maintenance of its highways is the state's second higgest business, next only to education. Of the nearly 113,090 miles of roads and streets in lowa, the 10,271 miles in the Interstate and primary system are the direct responsibility of the Highway Commission:

During fiscal 1972, \$199 million was expended on the primary system. Highway construction that year accounted for more than \$135 million and maintenance more than \$27 million.

In that same year the Commission awarded nearly \$108 million in highway construction contracts and acquired \$12 million worth of right of way.

From its central headquarters in Ames, the Commission coordinates its statewide activities through facilities located in each of the 99 counties. These include six district offices, 47 resident offices and 165 maintenance garages. The value of the Commission's capital improvements and its inventory of equipment and material exceeds \$54 million. The payroll for its more than 4,000 permanent employees is approximately \$40 million annually.

This organization, with the support of the citizens of lowa, is dedicated to excellence in public administration and to providing the state with the finest highway system it is possible to develop with the resources available.

J. R. Coupal, Jr. Director of Highways



Commissioner -Robert R. Rigler



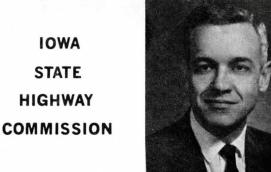
Commissioner -Stephen Garst



Commissioner -Jules M. Busker



Commissioner -Harry F. Reed



Commissioner -David O. Shaff



Director of Highways -J. R. Coupal, Jr.



Chief Engineer -Howard E. Gunnerson

# THE COMMISSION

Responsible for the policies and development of the Highway Commission program for highways are the five Commissioners, appointed by the Governor, subject to approval by the state legislature.

The Commissioners' duties include the approval of the establishment of, and any changes in, the organizational structure, the approval and submission to the Governor of the biennial budget, the approval of programming, including priorities, the allocation and distribution of financial resources to construction, maintenance and administration, and the general overall policy direction and guidance to the administrative staff through the Office of the Director of Highways.

The present members of the Highway Commission are Jules M. Busker, Sioux City; Stephen Garst, Coon Rapids; Harry F. Reed, Winterset; Robert R. Rigler, New Hampton and David O. Shaff, Clinton.

The Commissioners, together with the Director and the Chief Engineer, meet every two weeks in regular sessions.

The meetings are attended by representatives of the wire services, newspapers, radio and television stations.

This is in accordance with the Commission's policy of reporting the activities of the organization to the people of lowa.

### HISTORY

The law creating a State Highway Commission in Iowa was adopted by the General Assembly in 1904 and provided that Iowa State College (now Iowa State University) should act as a state highway commission.

Acting under this law, the State Board of Education appointed Dean Anson Marston of the Engineering Division and Dean Charles F. Curtis of the Agricultural Department of the college to be directors of the Commission. The directors appointed Thomas H. MacDonald secretary and engineer for the Commission.

The Commission's duties then were to make investigations and studies of highway conditions and to advise local authorities with respect to highway improvements.

This organization continued until 1913 when the Thirty-fifth General Assembly passed an act creating a State Highway Commission of three members and separated the Commission from the college. The Commission was composed of the dean of engineering of the college and one member appointed from each political party.

In 1927, the General Assembly passed an act creating a State Highway Commission of five members, all to be appointed by the Governor, but not more than three of whom could be from the same political party.

This law also placed the primary road system under the direct control and supervision of the State Highway Commission. Thomas H. MacDonald, who became secretary and engineer of the Highway Commission in 1904, was named Chief Engineer in 1913 and continued in that capacity until 1919 when he resigned to become chief of the United State Bureau of Public Roads. He was succeeded by Fred R. White.

E. F. Koch was appointed Chief Engineer in October, 1952, upon the retirement of Mr. White.

When Mr. Koch resigned on March 31, 1954, John G. Butter was named Chief Engineer. He served until his retirement February 1, 1960, when L. M. Clauson was appointed Chief Engineer. Mr. Clauson retired on December 1, 1966. J. R. Coupal, Jr., who was named by the Commission as the first Director of Highways on December 1, 1966, became the chief administrator of the Commission. H. E. Gunnerson was named Chief Engineer.

# REORGANIZATION

In December of 1966, a major reorganization of the Highway Commission's structure brought several changes in the assignments of top engineering staff members, and the creation of new positions and a strengthening of the Division of Planning.

In announcing the reorganization (see chart on page 10), Highway Director Coupal stated that its main objectives were to establish a careful separation of policy and administration, a delineation of staff and line functions, clear definitions of all functions and responsibilities and precise chains of command and channels of communication.

"The Commission," Director Coupal said, "indicated that it wished to establish a clear delineation between policy and administration, retaining to itself the overall policy determinations and delegating to the Director the responsibility for the administration of that policy."

"The reorganization will enable the Highway Commission to carry out its mission: The construction and maintenance of the finest highway system that can possibly be built and maintained for the citizens of lowa and for visitors to lowa."

# COMMISSIONERS

Robert R. Rigler Jules M. Busker Stephen Garst Harry F. Reed David O. Shaff Office of the Director of Highways Director of Highways and Chief Administrative Officer . . . . . . . . . . J. R. Coupal, Jr. Assistant to the Director .....L. A. Holland Office of the Chief Engineer Beautification Administrator . . . . . . . Walter McDonald Planning Division Deputy Chief Engineer of Planning .... Raymond L. Kassel Highway Planning Surveys Engineer . . . . . . . . E. R. Mills Planning and Programming Engineer .....R. L. Humphrey Research Engineer ..... Stephen E. Roberts Secondary Roads Engineer . . . . . . . . . James L. Stober Urban Engineer ..... Rex Wiant **Development Division** Deputy Chief Engineer of Development . . . . Robert H. Given Road Design Engineer ..... K. P. McLaughlin Bridge Design Engineer . . . . . . . . . . . . . . . . . C. A. Pestotnik Right of Way Director ...... Gordon Sweitzer Development Support Engineer .......Gerald T. Solbeck Contracts Engineer . . . . . . . . . . . Keith E. Davis Operations Division Deputy Chief Engineer of Operations . . . . . . D. E. McLean 

# Traffic Weight Operations ................ Dennis Ehlert

Maintenance Engineer ..... F. O. Bloomfield Materials Engineer ..... A. G. Calvert Traffic and Safety Engineer ..... Harold C. Schiel

# Administrative Division

Personnel Director	.Donald G. Wicklund
Director of Public Information	James E. Goodwin
Director of Management Review	LeRoy Butler
Special Assistant Attorney General	Asher E. Schroeder
Programming and Scheduling Engineer.	G. W. Anderson
Aircraft Operations	Earl Moore, Jr.

# **Finance Division**

Director of Finance	Richard D. Johnson
Chief Accountant	Virgil Raymond
Budget Director	Richard C. Fish
Director of Purchasing	
Toll Bridge Operations (acting)	Douglas R. Jensen
Comptroller's Auditor	J. H. Chalstrom

# Support Services Division

Director of Support Services Jon M. McCoy
Director of Central ServicesJ. H. Ford, Jr.
Director of Data Processing James F. Hoag
Director of Facilities ManagementS. J. Klassen
Director of inventory Management D. G. Carlson

# District Engineers

District No. 1, Ames	Robert C. Henely
District No. 2, Mason City	.Darrel D. Campbell
District No. 3, Sioux City	Walter L. Morris
District No. 4, Atlantic	Robert I. Bortle
District No. 5, Fairfield	Virgil Butler
District No. 6, Cedar Rapids	Van R. Snyder

# **GOALS AND OBJECTIVES**

In achieving the goal of building and maintaining the finest system of highways possible with the resources available, the lowa Highway Commission is organized to:

- Develop and maintain an up-to-date inventory of all highway facilities in the State of Iowa. This objective includes a constant inventory of highway facilities, the obtaining of origin and destination counts, traffic counts and related information.
- Analyze and project highway needs. This
  responsibility involves the evaluation of the
  raw statistical data gathered and the
  projection of these evaluations in terms of
  what long-range needs will be.
- Plan, program and design the new highway facilities to meet these needs.
- 4. Acquire the necessary right of way, let the contracts and supervise the construction of the new facilities, proceeding as rapidly as possible as resources are available in an effort to meet the needs already defined.
- Maintain and operate these facilities in a safe, clean, attractive condition for the benefit of the motoring public.

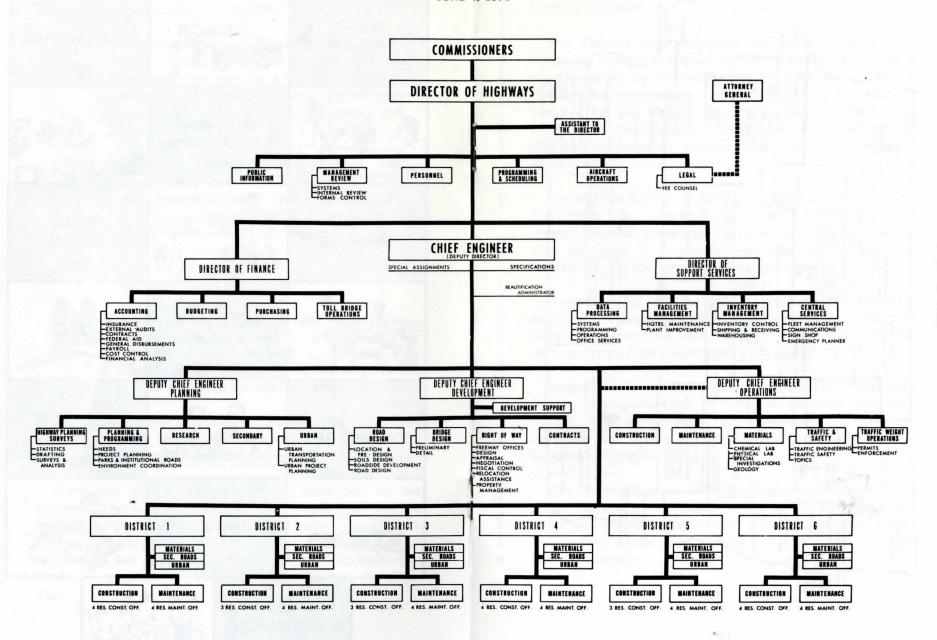
These five objectives constitute the hard core of the Highway Commission operation. These objectives can be reached only through the operational efforts of the six District Offices, 23 construction residencies, 24 maintenance residencies and 165 maintenance garages, geographically located throughout the State. (See District map on page 12.)

# STEPS IN PROVIDING GOOD HIGHWAYS FOR IOWA



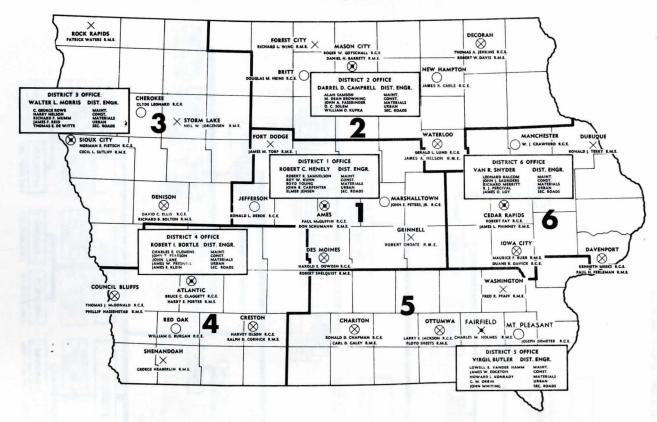
# ORGANIZATION STRUCTURE

JUNE 1, 1973



# IOWA STATE HIGHWAY COMMISSION DISTRICTS

MAY 1, 1973



DISTRICT OFFICE

(R.C.E.) RESIDENT CONSTRUCTION OFFICE

(R.M.E.) X RESIDENT MAINTENANCE OFFICE

Each District is headed by a District Engineer who is directly responsible to the Chief Engineer for the execution and performance of Commission policies. The Resident Construction and Maintenance Engineers report to the District Engineers.

The District and Residency offices are staffed with additional engineers assigned to specific duties. Their work is complemented by surveyors, materials men, inspectors and maintenance men whose responsibility is to see that all construction and maintenance work is accomplished in an effective manner. All other departments that make up the Highway Commission structure carry out their work in support of this primary mission.

Commission District Offices are located at Ames, Mason City, Sioux City, Atlantic, Fairfield. and Cedar Rapids. Each District Engineer is the highway administrator in his area and with his staff is responsible for the construction and maintenance of the highways within his district.

Preparation of the budget, maintenance of the fiscal accounts relative to Commission operations, purchasing of materials and supplies and Toll Bridge operations are the responsibility of the Commission's Finance Division.

Responsibility for the operation of the Data Processing Center, management of all physical facilities, inventory control, fleet management, communications and sign shop operation are among the functions of the Commission's Support Services Division.

The Administrative Division implements Commission policy coordinates and supervises the overall activities; hires, trains and maintains records on personnel; releases public information; renders legal services and constantly reviews all internal operations.

Highway Planning Surveys, Planning and Programming, Research, Secondary Roads and Urban Planning are all functions of the Commission's Planning Division.

The Development Division is responsible for the Road Design, Bridge Design, Right of Way, Contracts and the Development Support Departments.

Following the planning and development stages the actual construction and maintenance of highways, as well as the testing of materials, are functions of the Commission's Operations Division. This Division also is concerned with all aspects of Traffic and Safety and with Traffic Weight Operations on the primary system.

Carrying out the main objective of building and maintaining a highway system also requires the constant coordination of the Commission with the agencies of the federal government, state, counties, cities, towns and private Highway building is a demanding and an increasingly complex activity. Expanding cities and their school reorganizations. booming expansion, new recreational facilities and the increasing importance of preserving our heritages, all add their particular complications. These complicating factors and the continuing necessity of seeing that highway funds are wisely expended requires increasing coordination of all activities and cooperation by all agencies involved. The Commission cooperates with county authorities in approving plans and contracts for necessary road construction, approves budgets for secondary roads, provides engineering assistance to other state departments, constructs roads for state parks, the Board of Regents and Board of Control institutions. It reviews city programs, budgets and plans for street improvements. The Commission also exercises joint control with the 99 county boards of supervisors over the construction of the farm-to-market system and funds. It is also required to

approve secondary road budgets, construction programs and contracts for construction of roads and bridges when the cost of the work is estimated to be \$5,000 or more.

It works closely with the cities and towns, assisting in the preparation of long-range urban plans and programs, reviews city programs and budgets for street improvements, secures resolutions and ordinances for primary and Interstate urban projects and reviews city plans.

In addition to the Governor of the State, the Legislature and the Executive Council, there are more than 50 agencies and commissions which must concur in varying degrees with the Commission in some phases of the highway program. These include 29 other state departments, boards and commissions which are associated with the Commission's development of the road programs. Including the Federal Highway Administration, there are also eleven agencies which became involved in various phases of the program. In addition, there are 99 counties, 951 incorporated towns, six boundary states and five local toll bridge commissions which must also be considered.

The Highway Commission is also responsible for planning, constructing and maintaining lowa's 781 mile Interstate highway system scheduled for completion by 1979. By 1973, 647 miles were open to traffic.

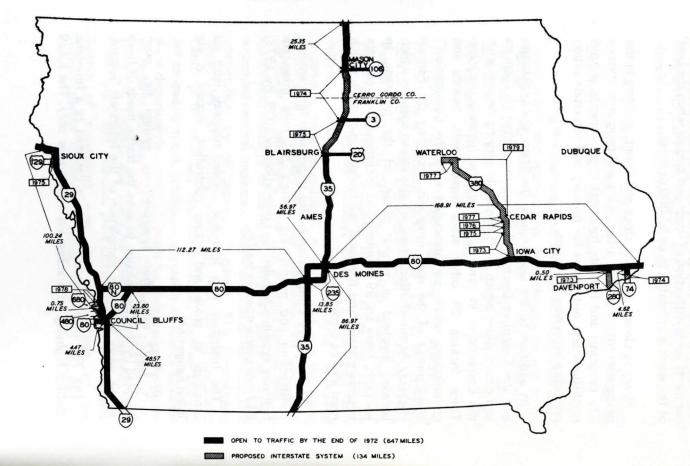
The Interstate is a four-lane divided highway with no crossings at grade and access controlled. Access is via interchange only.

A 1,877 mile, freeway-expressway system has been adopted by the Commission to serve the traffic needs of lowa in the years following completion of the Interstate System.

The 738 mile freeway system is designed as a four-lane divided highway with access via interchange only. The 1,139

# INTERSTATE PROGRESS IN IOWA

(TOTAL MILES IN SYSTEM - 781)



16

mile expressway system is also designed as a four-lane divided highway with access via interchange and at selected public road connections at grade.

# **FINANCING**

The cost of most primary highway construction projects is financed on a federal-state cost sharing basis. The government's share for the cost of construction comes from the Federal Highway Trust Fund.

The federal share of the federal aid highway program is wholly financed by highway users on a pay-as-you-build basis. The Highway Revenue Act levied or increased certain federal excise taxes on motor fuel and automotive products. and ear-marked their revenue specifically to a Highway Trust Fund, which is the source of money for federal highway aid to the states both for the Interstate and the primary, secondary, and urban programs. The taxes earmarked to the Trust Fund and their present rates are: motor fuel, four cents per gallon; new trucks, buses and trailers, ten percent on the manufacturer's wholesale price; highway vehicle tires and tubes, ten cents per pound; other tires and tread rubber, five cents per pound; heavy vehicle use, \$3.00 per 1,000 pounds annually on the total gross weight of vehicles rated at more than 26,000 pounds gross weight; parts and accessories, eight percent on the manufacturer's wholesale price of truck and bus parts and accessories; lubricating oil, six cents per gallon, if used for highway purposes.

lowa's source of income for these improvements and also for the maintenance of the projects after they have been completed comes from fees collected for vehicle registrations, licensing and from taxes levied on motor fuel.

The Iowa Code levies taxes on motor fuels, vehicle registrations and automotive products. These taxes are

designated specifically for the Iowa Road Use Tax Fund: gasoline and liquified petroleum, seven cents per gallon; diesel fuel, eight cents per gallon (one cent of these taxes go directly to the primary road fund). The balance becomes a part of the Iowa Road Use Tax Fund and is distributed to cities, towns and counties for highway purposes on the following basis; primary roads 47%, secondary roads 38% and cities and towns 15%.

The financing of the Interstate System is a federal-state venture with 90 percent of the construction cost furnished by the Federal Highway Trust Fund and the remaining ten percent of the cost paid by the state.

There is no federal participation in the maintenance of the highways after they are completed. All costs for this activity are paid from state funds.

# **STATISTICS**

The total length of all highways in the state of lowa is 113,090 miles. Of this total, 98,981 is rural mileage;13, 838 is city street mileage and 271 miles are state park and institutional roads.

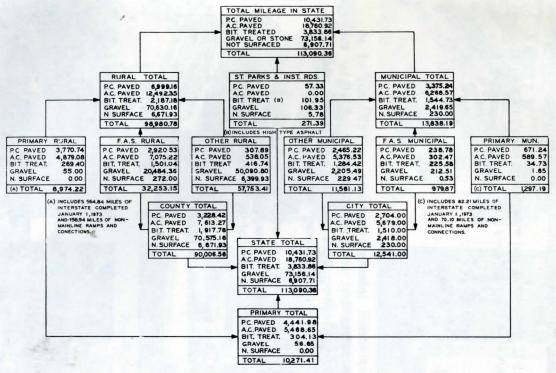
Of the total 113,090 miles, 10,432 are paved with Portland cement, 18,760 with asphaltic concrete, 3,834 are bituminous treated, 73,156 surfaced with gravel or stone and 6,908 miles are not surfaced.

In the 10,271 mile primary system, 8,974 miles are rural highways and 1,297 miles are primary extensions in cities and towns.

The county and federal aid secondary system totals 90,007 miles of which 32,253 miles are federal aid and 57,754 miles are county or secondary roads.

### HIGHWAY M'LEAGES IN IOWA BY SURFACE TYPE





### PREPARED BY

HIGHWAY PLANNING SURVEYS DEPARTMENT
DIVISION OF PLANNING
IOWA STATE HIGHWAY COMMISSION

IN COOPERATION WITH THE

UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

Of the 13,838 municipal mileage, 1,297 miles are primary extensions and 12,541 miles are city streets.

Highway mileages by surface type are shown on page 19.

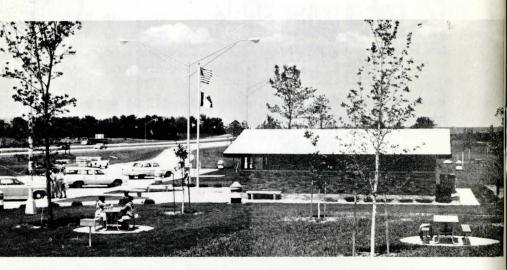
In 1972 the widths and mileages of lowa's rural primary highways were approximately as follows:

Widths	Mileage
18-Foot	1500
20-Foot	1000
22-Foot	1500
More than 22-Foot	5000

Along Iowa's Interstate highways are 17 pairs of all modern safety rest areas built and maintained by the Highway Commission. More than 200 wayside rest areas are located along the state's primary highways.

Nearly 1,106,000 acres of land are needed for lowa's 113,090 miles of highways, roads and streets, or approximately 3.07 percent of the state's land area.

Road users traveled more than 18 billion vehicle miles on lowa's roads and streets in 1972.



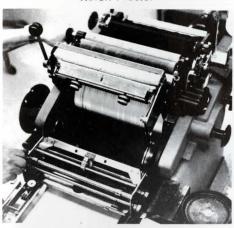
# TYPICAL CENTRAL HEADQUARTERS ACTIVITIES



Kelsh Plotter



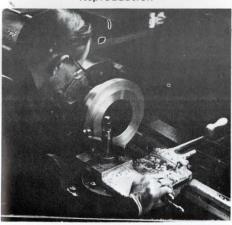
Materials Testing



Reproduction



Data Processing



Repair Shop



Sign Shop



## SIGNS OF LIFE

Symbols as well as the color and shape of signs help convey instant meaning to motorists using Iowa's streets and highways. Symbol signing will be uniform in all states by the end of 1974.

2M 7-73

Prepared by the

PUBLIC INFORMATION DEPARTMENT

IOWA STATE HIGHWAY COMMISSION