

IOWA DEPARTMENT OF TRANSPORTATION

September 1, 1971

A DESIGN FOR GROWTH



IOWA
a place to grow

Prepared for
GOVERNOR ROBERT D. RAY
by the
OFFICE for PLANNING
and PROGRAMMING

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I O W A
D E P A R T M E N T O F T R A N S P O R T A T I O N

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The preparation of this report was financed in part through a comprehensive planning grant from the Department of Housing and Urban Development

PREFACE

This project was undertaken at the request of Governor Ray in the fall of 1970 to: 1) analyze the requirement for an Iowa Department of Transportation, 2) develop an understanding of the organizational and operational requirements of such an organization, and 4) identify issues which must be addressed in the decision making area requisite to organization implementation.

The project was begun in February of 1971 as part of an ongoing transportation program planning activity by the Office for Planning and Programming, Leroy H. Petersen, Director. The vast majority of field visits, information analysis, synthesis, and evaluation was conducted during several months of intensive research. We are particularly grateful for the services of Mr. John G. Martens and Mr. Paul C. Heitmann for their purposeful analysis, results documentation, program review participation, and the design of supportive display materials necessary to the preparation of a comprehensive presentation of the project results.

It is recognized that there are several recommendations which may be regarded as controversial. The purpose of this project was not so much to formulate concretized recommendations, but to provide the forum necessary to systematically resolve at the executive level the issues associated with the formation of a new organization within the State of Iowa which, if effectively implemented and developed, will have a significant beneficial effect on all of the people within the State.

R. A. Wilson

TABLE OF CONTENTS

<u>Chapter</u>	<u>Content</u>	<u>Page</u>
Preface		ii
I	INTRODUCTION	1
II	STUDY AND ANALYSIS APPROACH.	3
III	FUNDAMENTAL CONCEPTS IN THE CREATION OF A DOT	8
IV	IOWA'S TRANSPORTATION AGENCIES	15
V	THE NEED FOR A DEPARTMENT OF TRANSPORTATION.	25
VI	AN IOWA DEPARTMENT OF TRANSPORTATION	32
VII	IMPLEMENTATION OF AN IOWA DEPARTMENT OF TRANSPORTATION	62
VIII	ISSUES AND RECOMMENDATIONS	68
Appendix A	STATUS OF STATE DEPARTMENTS OF TRANSPORTATION.	73
Appendix B	BIBLIOGRAPHY	79

Chapter I

INTRODUCTION

This report has been prepared to provide a succinct documentation of the results of an intensive "finding" as to the requirement for an Iowa Department of Transportation, the recommended general organization characteristics, and the implementation process requisite to instituting an Iowa State Department of Transportation.

This report specifies, in summary, the systematic procedure employed in the analysis. The procedure is presented under the Study and Analysis Approach section. Subsequent chapters present the fundamental concepts associated with a department of transportation and document the "need" for a state department of transportation based on current and future transportation service planning, promotion and development requirements in Iowa. The majority of the report is devoted to presentation of a best judgment as to how an Iowa Department of Transportation should be organized and implemented. The proposed organizational discussion is developed at the generic functional level. It is maintained in discussion that the detailed organization of the proposed department must be assumed as the direct responsibility of the Office of the Secretary of Transportation.

The report concludes with a discussion of a recommended approach to the implementation of the department and issues and recommendations for review.

This report has been structured as an advisory or recommendations report and as such does not contain excessive footnotes associated with academic reports. The bibliography presented in Appendix B has been developed to provide a compendium of secondary source materials employed within the project

activity. Review of those materials may provide valuable insights and appreciation of the many critical issues and nuances associated with the development of a state Department of Transportation.

Chapter II

STUDY AND ANALYSIS APPROACH

The approach to the project was systematically structured to maintain both the program schedule and integrity of the programmed product. The project was designed as a sequence of interrelated tasks or building blocks within a management control framework. This provided maximum management and participant visibility in relation to schedule adherence and task restructuring. This procedure permitted periodic review by members of the Governor's Office as well as the necessary input required for program control and assessment.

The project was structured by phases and tasks as follows:

Phase I - Preliminary Analysis

- Task I-A - Review internal source data
- Task I-B - Collect, analyze and reduce secondary source materials

Phase II - Systems Analysis

- Task II-A - Interview through survey all existing state Departments of Transportation
- Task II-B - Personal interview with dominant state departments of transportation.
- Task II-C - Personal interface with federal DOT and National Service Agencies
- Task II-D - Examination of existing Iowa agencies including transportation functions

Phase III - System Requirements

- Task III-A - Generate organization requirements
- Task III-B - Design system performance requirements
- Task III-C - Documentation of recommendations

As stated in the preface, the objectives of this project were to: 1) determine the need for an Iowa Department of Transportation with respect to requirements existing today and in the future, 2) identify the unique organizational

and operational structure of the new organization, 3) specify the strategies for organization implementation, and 4) identify areas or issues requiring resolution. The project design outlined above was structured to satisfy these objectives. A short discussion of each phase/task is presented below to indicate the specific objective of each subtask and facilitate an appreciation of the process as it relates to the major project objectives.

The last section of this chapter cites the relationship of participation in the 1972 National Transportation Needs Study accomplished concurrently by OPP with this project.

Phase I

Phase I was designed and conducted to provide a current overview of the state-of-the-art in state transportation agency development and operation. This task provided the background requisite to formulating an informed set of current problem dimensions necessary for effective interfact and communication with state and federal transportation agencies and departments. Data sources collected, reviewed and analyzed as part of Task I-A and I-B are cited in the appendix under the section entitled bibliography (see Appendix B).

The results of Phase I were directly applicable to the evaluation of Department of Transportation organizational and operational parameters. Phase I activities also were designed to generate the perspective necessary to evaluate the potential benefits of a Department of Transportation and the potential problems associated with implementation.

Phase II

Phase II was designed to facilitate comprehensive analysis within the resource constraints of the study, of existing state department of transportation, federal agencies, and the existing Iowa agencies which perform trans-

portation functions.

Task II-A -- survey of existing state Departments of Transportation-- included a specific correspondence survey of 13 extant DOT's with respect to specific questions related to efficiency as observed by the administrators. A complete correspondence survey of all the other 37 states was conducted with respect to department of transportation activities and the status applicable.

Task II-B -- personal interviews with dominant state DOT's--were structured in concert with review of the survey responses and accepted recognition of dominant state agencies to facilitate personal visits to four (4) existing state departments of transportation. The states intensively interviewed included Connecticut, New Jersey, New York, and Wisconsin. An in-depth interview format was especially designed for each session within the interviews to facilitate the development of strong information level. The completed interview forms are available for review within the Office for Planning and Programming.

Task II-C --personal interviews--included structured interviews with various Federal Department of Transportation officials and interface with principal members of the Highway Users Federation task force responsible for review of existing state DOT's. During the Washington interviews, the comments of the National Governors Conference and the National Science Foundation with respect to "optimal" state transportation organizational framework and responsibility were solicited as background information.

Task II-D --review of existing Iowa agencies--included an examination of existing Iowa agencies which perform transportation functions. This examination was conducted through review of legislation, progress reports, and secondary source material. The results of this review are presented herein

under Chapter IV of this report.

The results of Phase II had directed background relationship to the major objectives of determining the organizational and operational requirements of an Iowa Department of Transportation.

Phase III

Phase III --generate organization requirements--was designed to enable the synthesis of generated information in the form of organizational requirements, operational relationships, and other recommendations resulting from the project.

Task III-A and III-B --design system performance requirements--were conducted as iterative activities. The results of these activities are presented as Chapter IV and form the basis for the recommendations provided within the report.

Iowa's participation in the 1972 National Transportation Needs Study (NTNS) provided valuable insight into the requirements of a state agency responsible for transportation service promotion, planning and development. The narrative report associated with Iowa's participation in the 1972 NTNS is available for review. A summary as to the background, impact, and results of the study is in preparation and will, as available, provide clear appreciation of the study's dimensions and implications with respect to the future of this valuable national planning activity.

It is reasonable to state that one of the primary objectives of the 1972 NTNS was the clarification at the state level of the necessity for multi-modal transportation service planning.

It is in this fundamental area of the 1972 Needs Study that the primary requirement for a state department of transportation became uncompromisingly

clear. In order to proactively address and plan for the future transportation service need in any state as well as at the federal level, multi-modal planning functions are required. The dimensions of the necessary element of a functioning state department of transportation is detailed in Chapter V.

Chapter III

FUNDAMENTAL CONCEPTS IN THE CREATION OF A DOT

Through the analysis approach described in the previous chapter, several concepts that are common or unique to existing DOT's were identified as required in the development of a "forward-seeking" department. This chapter delineates these fundamental concepts and briefly discusses each one. It is recommended that an Iowa Department of Transportation would evidence the incorporation of these concepts as guidelines for development.

1. The Office of the Secretary of Transportation must be delegated sufficient authority to accomplish the tasks for which it is made responsible.

The Secretary should not be required to share authority with any commission affiliated with a single mode. Such single mode commissions (Highway Commission, Aeronautics Commission) should be disbanded. If a commission is necessary, it should function as a multi-modal transportation commission sharing policy responsibilities with the Secretary for all modes.

Fragmented policy-making authority dispersed among commissions responsible for individual modes is found in several state DOT's. This situation has been a serious impediment to the establishment of a coordinated integrated transportation department. When the individual mode retains its individual commission with policy-making authority, it also retains its autonomy and very rarely functions as a part of a larger multi-modal transportation department.

2. The Secretary of Transportation should be appointed by and serve at the pleasure of the Governor.

Making the Secretary directly responsible to the Governor will facilitate

the coordination of transportation policy and programs with other statewide goals in economic and social development and environmental preservation.

"The Governor should have overall responsibility for the operation of the executive branch of state government and should be given the means to discharge this responsibility."¹ Without a direct line of authority to the Governor, a large department such as a DOT may attain a degree of autonomy beyond that which may be advisable for a state agency.

3. The Secretary of Transportation must be assigned responsibility for comprehensive transportation planning for all modes (multi-modal planning) and for the development of a state transportation master plan.

Multi-modal planning is the cornerstone of a DOT. The Planning function is the major tool of the Office of the Secretary for guiding the efforts of the department. It is through this planning process that the department of transportation service may interact proactively with the attainment of the state's economic, social, and environmental goals.

4. Transportation planning within a Department of Transportation must be coordinated with other statewide planning activities as well as with regional and local planning efforts.

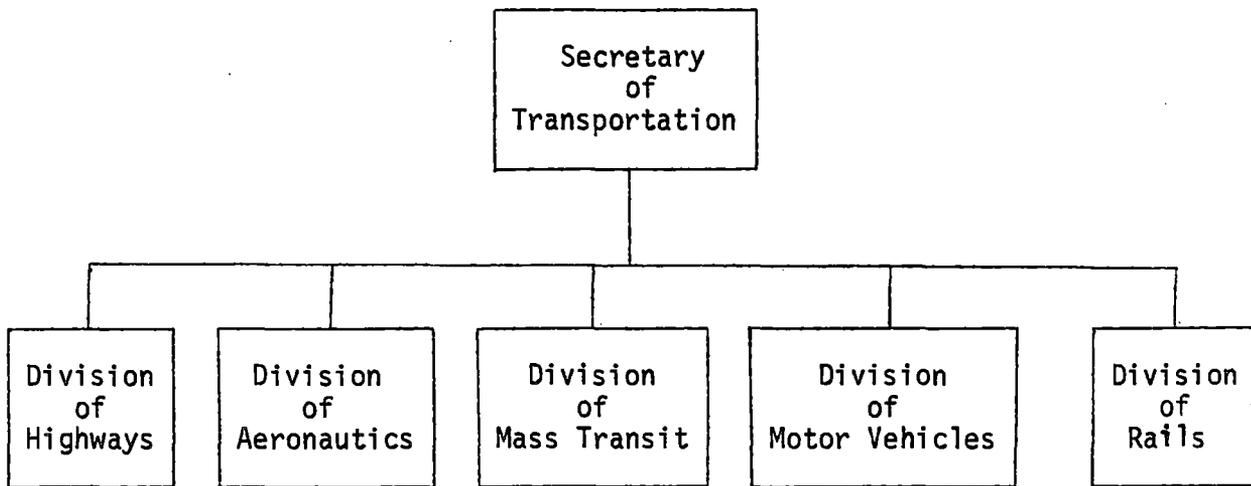
Regional and local coordination may be achieved through the broadening of district highway offices into district transportation offices. Personnel in these offices would provide multi-modal assistance in local problems and provide the necessary local input into the statewide transportation service planning process.

¹Public Administration Services, Inc., "Administrative Organizations of the Executive Branch of Iowa." 1966.

5. The optimum organizational structure of a Department of Transportation tends toward a functional responsibility framework.

There are two basic types of organizational structure for DOT's. Many variations are possible between the two extremes. The first of these is the mode oriented organization. In this type of organization the divisions of the department correspond to the transportation modes - highways, aeronautics, mass transit, rails, etc. (see exhibit below).

Example of a Mode-Oriented Department



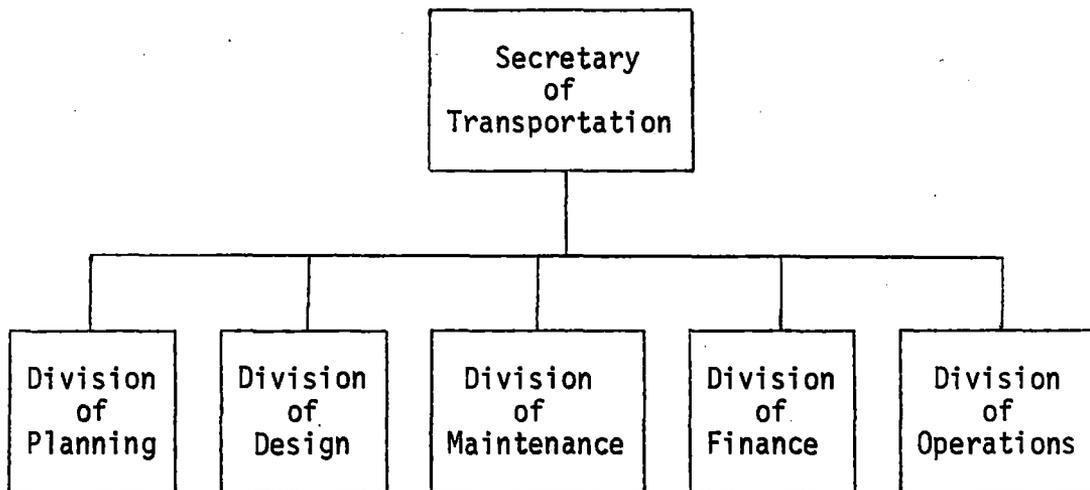
The mode oriented approach has the advantage of being the structure most readily appreciated by existing transportation agencies and the public. A given agency is placed into the DOT as a separate division and experiences little if any change in personnel, authority, or responsibilities. It is the least unsettling to existing agencies of the possible organizational structure alternatives.

The mode oriented approach has the disadvantage of being "too similar" to the conditions before the creation of the DOT. Without the impetus to do so,

employees of each mode will not develop the multi-modal approach and appreciation to the integrated transportation service responsibility that is the prime purpose of a DOT.

The alternative limit organization type is regarded as a Functional Organization. The primary functions of the department are identified and divisions are established along functional responsibilities such as planning, finance, design, construction, etc. (see exhibit below). Each division performs specialized functions for all modes. For example, the finance division is responsible for highway finance, airport finance, etc. The construction division is responsible for airport construction, highway construction, rail as well as highway bridges.

Example of a Functionally Oriented Department



The functionally oriented approach has the advantage of creating efficiencies in operation. The division of finance can, for example, handle the payroll for all modes instead of having a payroll handled in each current mode agency. Highway engineers are available to design airport access roads

and mass transit guideways and terminals. Most important is the potential advantage of the interface between mode oriented planners within a functionally oriented division of planning. Each specialist becomes aware of the planning parameters of other planners.

There appears to be an evolutionary development cycle for DOT's. Most DOT's begin predominantly as mode oriented departments. At least one state DOT is simply a collection of mode agencies under a transportation coordinator. This phenomenon may be regarded as a DOT in name only, for it provides little opportunity for multi-modal planning or coordination among the divisions of the department. As the organization matures, certain functions are removed from each mode division and performed by one division which would service all modes. This process is a conversion of mode identified divisions to functionally oriented divisions.

It is recommended that Iowa's "first generation" Department of Transportation be organized to take advantage of the merits of both types of organization. In Iowa, planning and administration for all modes should be accomplished by functional divisions. The existing modal agencies (Highway and Aviation) would continue and develop under corresponding divisions within the department. This approach should minimize the disruption to existing agencies and also provide for the efficiencies possible under unified administration and initiation of multi-modal transportation planning. The recommended Iowa DOT is presented in Chapter VI.

6. The Department of Transportation need not initially contain all transportation functions:

The evolutionary aspect of DOT's previously noted indicates that the initial organization of departments are not set in concrete. There is, however, a "threshold" level of functions that must be present before the organi-

zation can be legitimately considered as a Department of Transportation. These "threshold" functions for Iowa include multi-modal planning, administration, the functions of the Iowa State Highway Commission, and the functions of the Iowa Aeronautics Commission. The absence of any of these four reduces the DOT to a "paper" department of little impact and little value.

Conversely, the "threshold" DOT is the minimum possible. Enabling legislation should not impair the flexibility of the department to incorporate additional functions, develop new programs, and respond to new federal programs. This flexibility is necessary to reduce the current and forestall the future proliferation of transportation functions in numerous agencies.

7. The preferred implementation strategy for the Iowa DOT is developmental.

Implementation strategies range from initiating a threshold DOT to initiating a "fully formed" organization. Those advocating the "fully formed" approach consider that anything less allows a significant portion of the current activity to remain unchanged. This group also considers that the disruption to existing personnel and programs is acceptable to gain the expected benefits of a totally comprehensive department.

The developmental approach, however, advocates that: 1) the disruption should be kept to a minimum, 2) there is little likelihood that the first organization, even if fully formed, will accomplish or meet operational objectives for any significant period of time without modification, and 3) development of multi-modal transportation system planning capability is a gradual process. It is recommended that the developmental approach is a more realistic process for department implementation and development.

8. Transportation functions deemed as required although not now being performed must be assigned to the Department of Transportation.

In Iowa, with the exception of the Iowa Commerce Commission, there is no state agency responsible for mass transit, waterways, commercial aviation, rails and trucking. If a DOT is to be a functioning multi-modal agency, these transportation service areas must be represented functionally as well as in integrated elements within the planning responsibility. The DOT must be capable of addressing such problems as the transport of Iowa's agricultural commodities, rail abandonment, transportation for the elderly, and be responsive to changes in federal programs, legislation and postures over the full range of transportation areas.

Chapter IV

IOWA'S TRANSPORTATION AGENCIES

Iowa's Transportation system evidences an admixture of federal, state, local and private involvement. This short overview is primarily concerned with state and local government agencies involved in transportation and that portion of the private sector that may be the subject of public responsibility and/or support in the future. Fourteen separate state agencies have been identified as performing some transportation related function at the present time. The transportation functions of several of these agencies are candidates for transfer into a department of transportation. The functions of the two (2) existing modal agencies are obviously primary and necessary elements for inclusion within a new department. Several functions of other existing agencies have potential for inclusion over the developmental process anticipated for a new organization.

A detailed review of all agencies involved in transportation is included in a study conducted for OPP by Baxter, McDonald and Company in the fall of 1968.

IOWA HIGHWAY COMMISSION

The largest transportation agency in Iowa is the Iowa Highway Commission. It is administered by five (5) part-time highway commissioners appointed by the Governor and by a Director of Highways appointed by and responsible to the commissioners. The Highway Commission with annual expenditures of over \$150,000,000 and approximately 4343 full-time and part-time employees is many times larger than all other transportation related agencies in Iowa combined. Its responsibilities include the planning, design, construction and maintenance

of Iowa's highway and road system. Assistance is given to the counties responsible for the secondary road system, and to municipalities responsible for the city street system. The Highway Commission also has responsibility for the enforcement of weight and size restrictions for trucks and buses.

The Highway Commission has developed a high degree of competence in planning, management, design and maintenance of the highway system. The planning tools and techniques employed are the most sophisticated of any employed by other state transportation agencies and ranks competitively with the best in the nation. The Highway Commission is the only state transportation agency heavily involved in transportation planning activities. Transportation in Iowa can accrue significant benefit from multi-modal planning in which the expertise of highway planners is the fundamental basis of expertise.

A copy of the Iowa State Highway Commission organization structure is included as exhibit IV-1. Detailed description of the functions, organization, and operational procedure are available in the ISHC Management Manual and ISHC Administrative Policies and Procedures Manual.

IOWA AERONAUTICS COMMISSION

The Aeronautics Commission is composed of five (5) members appointed by the Governor who, in turn, appoint a Director of Aeronautics responsible to the Commission. They have annual expenditures of \$400,000** plus and 11** staff members. The Commission has responsibilities to the goal of promoting general aviation airports in all of Iowa's 99 counties. The Commission has been extremely successful in meeting its responsibilities. The potential benefits to Iowa from the planning, promotion and development of all civil aviation are appreciated today and are expected to become even more obvious

**July 1, 1971

IOWA STATE HIGHWAY COMMISSION ORGANIZATION STRUCTURE

JAN. 1, 1971

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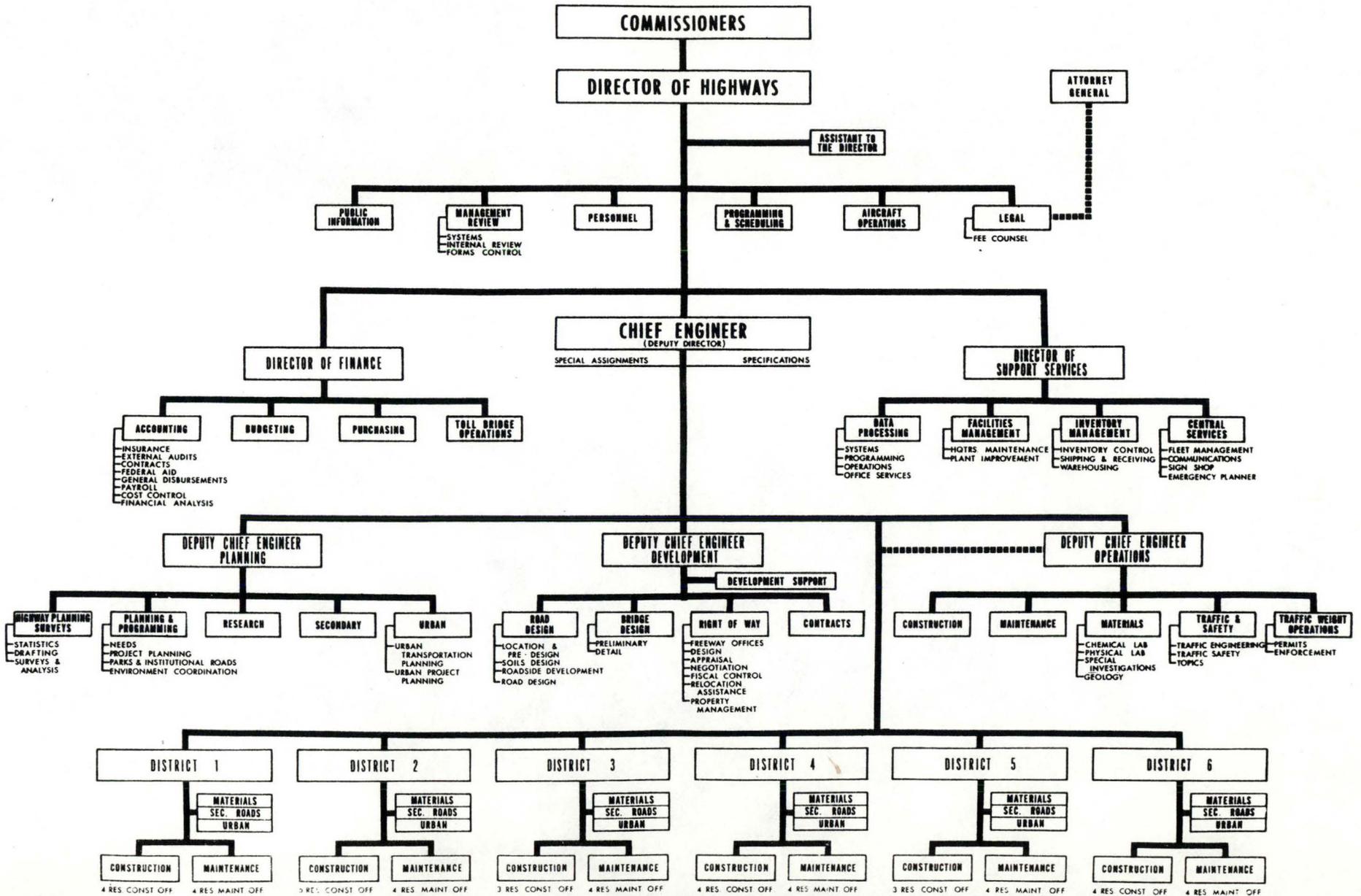


Exhibit IV-1

in the future.

The Commission presently perform four major functions: airport development and improvement, air age education, aviation safety, and the enforcement of state aviation law. Under the airport development and improvement division the Aeronautics Commission provides technical assistance and general advice to municipalities and private groups on the development of indigenous airports. In addition, the Commission provides financial assistance for airport development as match for funds available from the Federal Aviation Authority.

The Commission is responsible for the registering of all Iowa pilots, aircraft, aircraft dealers, air schools, and ground instructors. This registration is one main source of commission finances; the other is the unrefunded portion of the aviation gasoline taxes.

The organization chart of the Iowa Aeronautics Commission is presented as Exhibit IV-2 for reference.

A detailed description of the organizational responsibility of the IAC may be found in the enabling legislation and the Twenty-Fifth annual report dated June 30, 1970.

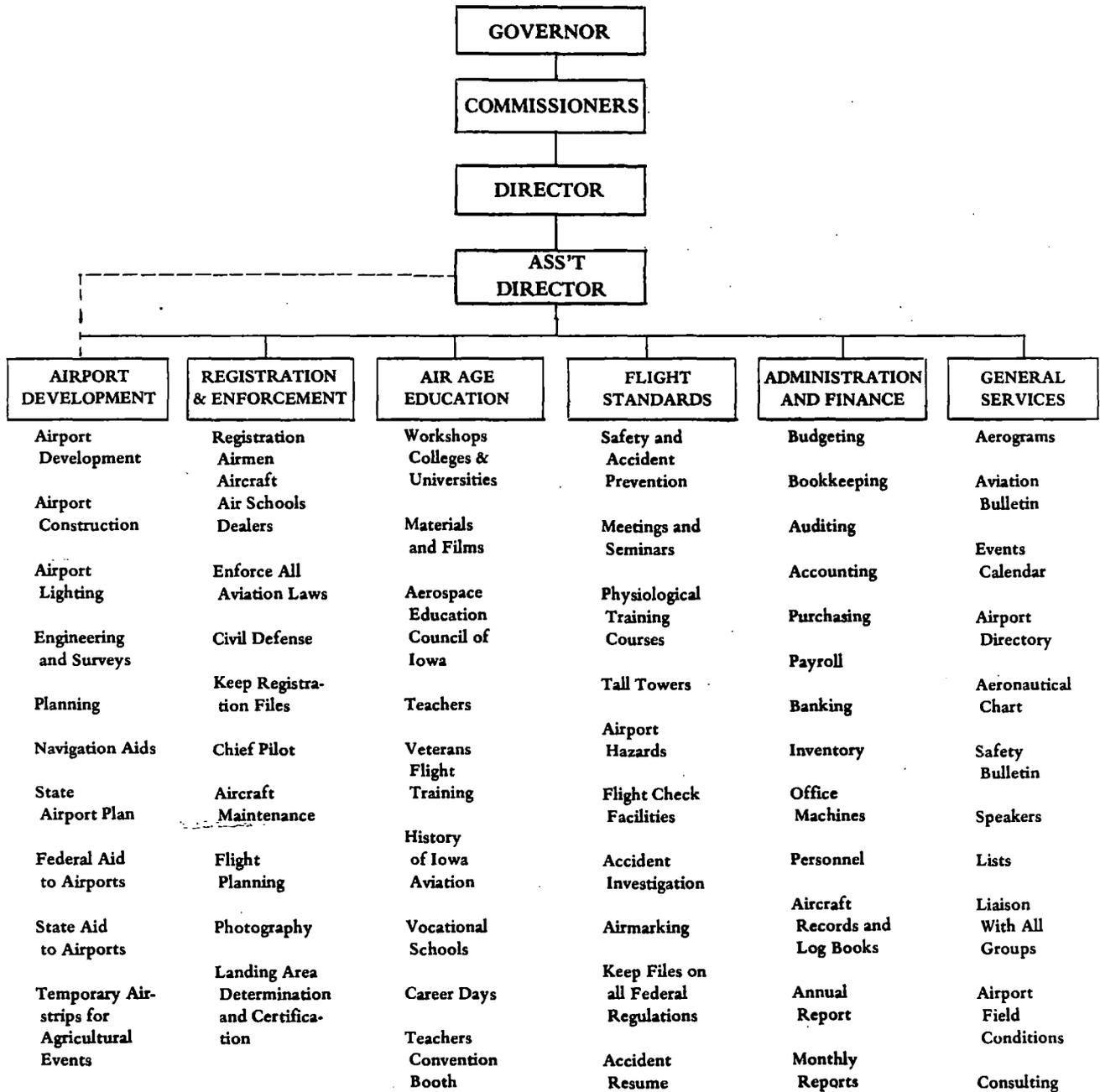
IOWA DEPARTMENT OF PUBLIC SAFETY

The Iowa Department of Public Safety is the second largest transportation related state agency in terms of personnel and is headed by a single executive officer appointed by the Governor.

A portion of the responsibilities and staff of this department are not directly related to transportation activities (i.e., Bureau of Criminal Investigation, Narcotics Division, State Fire Marshal, and Liquor Control). These functions are not considered as candidates for inclusion in a Department of Transportation. The arguments for inclusion or exclusion of the transportation functions of the Department of Public Safety will be considered in

IOWA AERONAUTICS COMMISSION

Organization Chart



Chapter VI. These functions are those of the Iowa Highway Patrol, which is the largest segment of DPS, safety and accident record keeping, driver licensing, dealer licensing, motor vehicle inspection (after January 1, 1972), motor vehicle registration and safety education.

OFFICE FOR PLANNING AND PROGRAMMING

The Office for Planning and Programming (OPP) is responsible for the National Highway Safety Program - a significant transportation related project supported by federal funds. OPP and other operational agencies cited below have primary and secondary responsibility for projects in the eighteen (18) safety standard areas.

In accordance with Section 402(a) of the Federal-Aid Highway Safety Act of 1966, the Governor of the State became responsible for the total state Highway Safety Program. The Governor, under the same Act, designated OPP as program coordinator and fiscal administrator of the Highway Safety Act. The Federal Secretary of Transportation transmitted eighteen Highway Safety Standards to the U.S. Congress to be utilized by the states in implementing the programs under the Act. The Governor then assigned the eighteen standards to various state agencies and charged them to bring the state into compliance with the Standards. By Standard Area, the agencies with primary responsibility are:

<u>Standard</u>	<u>Description</u>	<u>State Agency</u>
300	Planning and Administration	OPP
301	Motor Vehicle Inspection	DPS
302	Motor Vehicle Registration	DPS
303	Motorcycle Safety	DPS
304	Driver Education	DPI
305	Driver Licensing	DPS
306	Codes and Laws	Attorney General
307	Traffic Courts	Supreme Court
308	Alcoholism in Relation to Highway Safety	DPS

<u>Standard</u>	<u>Description</u>	<u>State Agency</u>
309	Identification and Surveillance of Accident Locations	DPS
310	Traffic Records	DPS
311	Emergency Medical Services	DPH
312	Highway Design, Construction and Maintenance	Highway Commission
313	Traffic Engineering Services	Highway Commission
314	Pedestrian Safety	DPS
315	Police Traffic Services	DPS
316	Debris Hazard Control and Cleanup	DPS
317	Pupil Transportation Safety	DPI
318	Accident Investigation and Reporting	DPS

IOWA RECIPROCITY BOARD

The Iowa Reciprocity Board, composed of three members - a Highway Commissioner, a Commerce Commissioner, and the Commissioner of Public Safety, has responsibility over the terms under which trucks and buses from other states may be licensed to use Iowa's highways. The Reciprocity Board presently has a staff of eleven (11) and a budget of \$158,130 for the fiscal year 1972.

A truck fleet pays license fees to Iowa in accordance to the percentage of their total miles driven in Iowa; or a vehicle licensed in another state is allowed to use the highways in Iowa provided Iowa licensed vehicles may use their highways. There has been concern for many years that Iowa does not receive its fair share of revenue from this reciprocity arrangement. The 64th General Assembly allocated funds for a "licensing and accounting procedure study" to attempt to improve the state's position in collecting our fair share of revenues.

IOWA STATE COMMERCE COMMISSION

Three Commerce Commissioners appointed by the Governor for staggered six year terms head the Iowa Commerce Commission. This agency has a budget of over \$1,000,000 and approximately one-hundred fifty (150) employees to

carry out its transportation and utility regulation responsibilities. The Commission has jurisdiction over intrastate passenger and freight carriers, pipelines, transmission lines, bonded warehouses, and public utilities. It also has some joint enforcement responsibilities with the federal government for violations of Interstate Commerce Commission rules and regulations.

It regulates the rates charged by carriers and the routes to be served by these carriers on the basis of the vague legislative directives of "reasonableness and non-discriminatory" for rates and "convenience and necessity" for awarding of routes. These vague directives are defined and policies formed upon a case-to-case basis as private disputes are settled before the Commerce Commission.

The Commission has rate and route jurisdiction over motor passenger carriers and carriers offering charter service, rate and route jurisdiction over motor carriers operating on scheduled routes, rate jurisdiction over contract carriers that sell their services to one client for a short period of time, and no jurisdiction over truckers who haul goods they own themselves, such as trucks owned and operated by farm cooperatives. In the case of rate regulation, the carrier is required to file a tariff or schedule of rates with the Commerce Commission which he may not violate. If this tariff is not unreasonably different from industry averages, or is not challenged by the public or shippers, the Commission does not usually become involved in rate cases. The requests for new routes and size or weight limitations, however, must be approved by the Commission.

In the case of railroads, the Commission approves intrastate rates filed by the railroads and approves requests for abandonment of rail service, depots, and trackage. The Commission also is in charge of the safety inspection of tracks, bridges, equipment, and operation of railroads. This safety inspec-

tion function is performed by a staff of only two at present.

The Commerce Commission also has the responsibility to supervise the transmission of liquids or gases by pipeline and to supervise the underground storage of gas with respect to safety and the welfare of the public. Eminent domain for pipelines must be exercised through the Commerce Commission. The Commission has the same responsibilities with regard to electrical transmission lines.

The addition to the Commission's responsibilities of utility regulation for over 1,000 water, electrical, and telephone utilities has seriously overburdened the Commission. There was an inadequate increase in size and expertise of staff to meet these additional responsibilities.

A number of other agencies, departments and commissions have responsibility for segments of transportation within the state. These are briefly enumerated below. A detailed understanding of their functions may be developed through reference to legislation and a survey report on administrative organization in Iowa¹.

IOWA DEPARTMENT OF PUBLIC INSTRUCTION

The Iowa Department of Public Instruction (DPI) has three transportation related functions: school bus inspection, driver education, and technical assistance to schools on transportation problems.

IOWA DEPARTMENT OF REVENUE

This department collects road use tax for the Road Use Fund and the aviation fund tax for the State Aviation Fund. It also has a small enforcement

¹Administrative Organization of the Executive Branch, State of Iowa, Public Administration Service, 1966.

force for the collection of these taxes.

DEPARTMENT OF AGRICULTURE

This department inspects passenger stations for sanitary facilities and participates in ICC and other cases involving agricultural interests. At present the Iowa Department of Agriculture is conducting a study of the potential for containerization in agricultural marketing.

IOWA CONSERVATION COMMISSION

This Commission regulates water transportation through the licensing of vessels, engineers and pilots. It also regulates the transportation of fish and game.

IOWA COMMISSIONER OF INSURANCE

The Commissioner regulates the issuance of insurance for liability and loss covering automobiles, aircraft, vessels, trucks, buses, and cargoes.

IOWA NATURAL RESOURCES COUNCIL

This Council considers matters of safety regarding pipelines across streambeds. It also has regulatory power over the development of waterways with respect to flood control programs.

Chapter V

THE NEED FOR A DEPARTMENT OF TRANSPORTATION

To this point we have reviewed several concepts that are fundamental to the consideration of the establishment of a state department of transportation and reviewed the functions of Iowa's existing state agencies having responsibilities in transportation. It is easily appreciated that Iowa state transportation responsibilities are fragmented and dispersed over many agencies. However, fragmentation is not in and of itself sufficient justification for the establishment of a DOT. The need to establish a DOT is more directly dependent upon a number of other issues impacting total transportation service today and in the future, and the relationship of these issues to current capability.

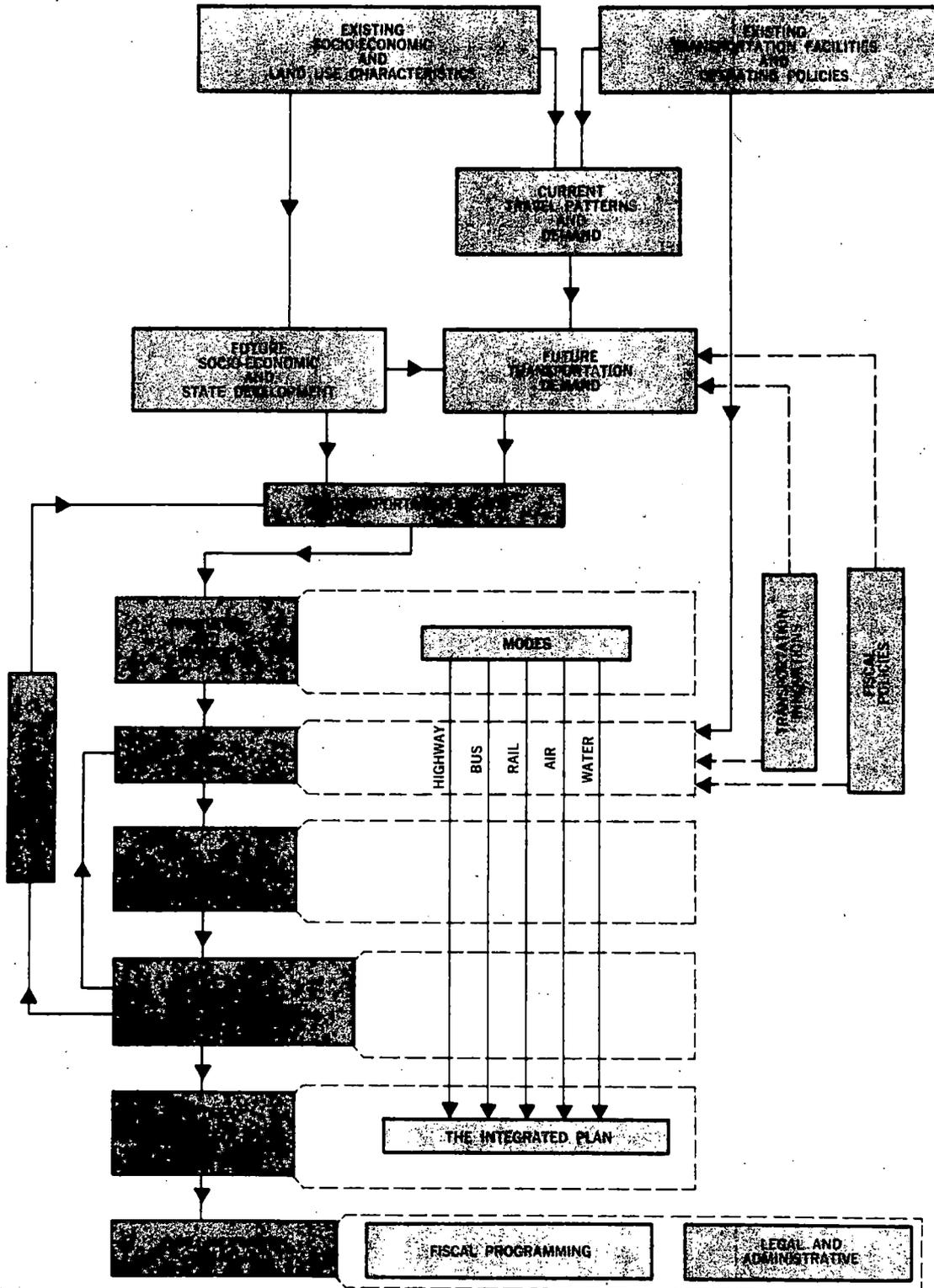
Throughout this study documentation and transportation literature, it is indicated that the first and foremost responsibility of a DOT is to provide the function of transportation service planning on a multi-modal basis. In simplified terms, multi-modal planning may be considered as a set of management tools and procedures to assist in determining: transportation service requirements, alternative solutions, programs that meet a set of objectives and constraints, and the preparation of documented results and recommendations necessary for decision-making. The transportation planning process has been the subject of extensive examination in many professional forums. It is not the intent of this section to assess the many facets of the current expertise that are similar or dissimilar and develop yet another examination. Throughout most discussions or presentations there is, however, a general agreement among experts as to the form of the general transportation planning process. Exhibit V-1 is included to indicate the

schematic flow most universally considered as representative of the dimensions of the planning process. This flow chart was extracted from a recent publication of the Connecticut Department of Transportation.¹

In abbreviated form, the necessity for a Department of Transportation may be stated in terms of the following objectives which are intimately related to the establishment of comprehensive multi-modal planning capability.

- To develop an integrated coordinated statewide transportation system providing service which is consistent with and proactive with existing and future socio-economic development goals and environmental goals.
- To promote the efficient reorientation of diverse private modal service systems into an integrated system of transportation service for both passengers and freight/commodities distribution.
- To provide an imaginative forum for analysis, evaluation, and potential adoption of technological, operational, and regulatory advances and "breakthroughs" within the system and the industry.
- To promote the development of responsible administrative and functional personnel in state government necessary to evaluate the spectrum of resources required for total transportation system development.
- To develop and implement the resource allocation tools necessary to conduct total system trade-off analysis and resource requirements evaluation.
- To develop the analytic capability necessary to development of an integrated financial program to meet development program objectives.

¹Connecticut Department of Transportation. Connecticut Master Transportation Plan - 1971. Hartford: State of Connecticut, 1971.



TRANSPORTATION PLANNING PROCESS

- To develop an agency responsive to, and proactively sensitive to, the potential social costs associated with transportation facility acquisition and operation.
- To develop the capability necessary to react creatively to the federal legislation and policy statements, and the activities of contiguous states, or other states with common economic structures, with respect to future transportation policies and programs.

The successful accomplishment of the above objectives of a department are dependent upon the resolution and preparation of state transportation goals. At present there are none! The Highway Department has stated goals for statewide highway development. The Aeronautics Commission has goals for general aviation development in the state. But what are the state's goals for mass transit development? What are the state's goals for its rail system? What are the goals for harbor and waterway development? What is the state's policy on transportation service to its rural areas? What is the state's policy regarding commercial aviation development? What are the state's goals for a grain distribution system? What policy guides the investment of tax dollars in transportation?

Iowa's recent participation in the 1972 National Transportation Needs Study (NTNS) made evident the dimensions of these questions as they influence capital allocation program planning over the next twenty years. As noted in the narrative report submitted to the Federal DOT upon completion of the 1972 NTNS. An expedient approach was developed to avoid direct confrontation with the fundamental issues of goals. This consensus process was adequate under the circumstances, but is not acceptable in terms of responsibility for the future.

Once statewide transportation policies and goals are initially developed as indicated in Exhibit V-1, the next module in the transportation planning process involved in service planning, analysis, prioritization and implementation strategy may be accomplished.

The establishment of an Iowa Department of Transportation will, as one of its first tasks, initiate a program to develop, analyze, and submit for review the state's first statement of Transportation policies and goals.

A department of transportation, however, does not operate as a closed system within a state. Federal agencies are beginning to assume an even greater role in the financing and sponsorship of state transportation systems. States are being assigned a greater and greater responsibility for determining the use of federal funds. Secretary Volpe in his statement on National Transportation Policy stated, "The overall objectives established by the Department of Transportation were originally summarized as the furtherance of economic efficiency and safety; the minimization of adverse environmental effects of transportation, and the support of other national interests, including national defense, economic growth, social development, and the advancement of scientific research. These objectives are as relevant and valid today as they were when first set forth in 1968, but they are no longer sufficient. Another objective must be added: the facilitation of the process of local determination by decentralizing decision-making and fostering citizen participation."

This leads to another set of fundamental questions: What is the capability of Iowa to respond to the implications and potentials of the 1970 Urban Mass Transit Act, the Federal Railroad Safety Act of 1970,

the 1970 Airports and Airways Act, and most importantly the impending Transportation Revenue Sharing bill(s)?

A department of transportation would be structured to meet the need for rationalized response and proactive action associated with existing and anticipated legislation.

In summary, an Iowa Department of Transportation would provide the capability to:

- Develop responsible comprehensive state transportation policies.
- Develop statewide multi-modal transportation master plans.
- Analyze and respond to the future public and private transportation system needs for Iowa.
- Identify the financial requirements for achieving state transportation goals.
- Responsibly allocate state funds for integrated multi-modal transportation service development.
- Develop those public transport systems under the direct responsibility of the state.
- Promote the development of public transport systems not directly within the responsibility of the state.
- Promote the planning, development, and operation of private transport systems vital to the state's transportation goals.
- Creatively examine the potential for "new" institutional formats for public and private cooperation in the development of grain distribution systems.
- Respond creatively to federal legislation in modal, multi-modal, revenue sharing, and regulatory areas.

Iowa needs the capability to accomplish these tasks. The capability to do so does not now exist. A department of transportation would provide this capability, leading to the conclusion that Iowa needs a department of transportation.

Chapter VI

AN IOWA DEPARTMENT OF TRANSPORTATION

It must be emphasized initially that the proposals and recommendations for the organization of an Iowa DOT are not based as much upon an in-depth evaluation of the accomplishments of the existing transportation related agencies or the quality of their internal management as it is upon the "need" to develop the organizational capability to promote, plan, and implement the development of an integrated transportation system, in accordance with state-wide transportation goals and objectives.

This chapter is divided into two sections. The first section presents discussion of those divisions and administrative functions required in the "first generation" or "threshold" Department. The proposed organization chart - Exhibit VI-1, presents the structure of a "later generation" Department inclusive of the Division of Transportation Safety and Division of Transportation Regulation. These two divisions are discussed in section two of this chapter, since they are not considered necessary to the implementation of a first generation DOT in Iowa.

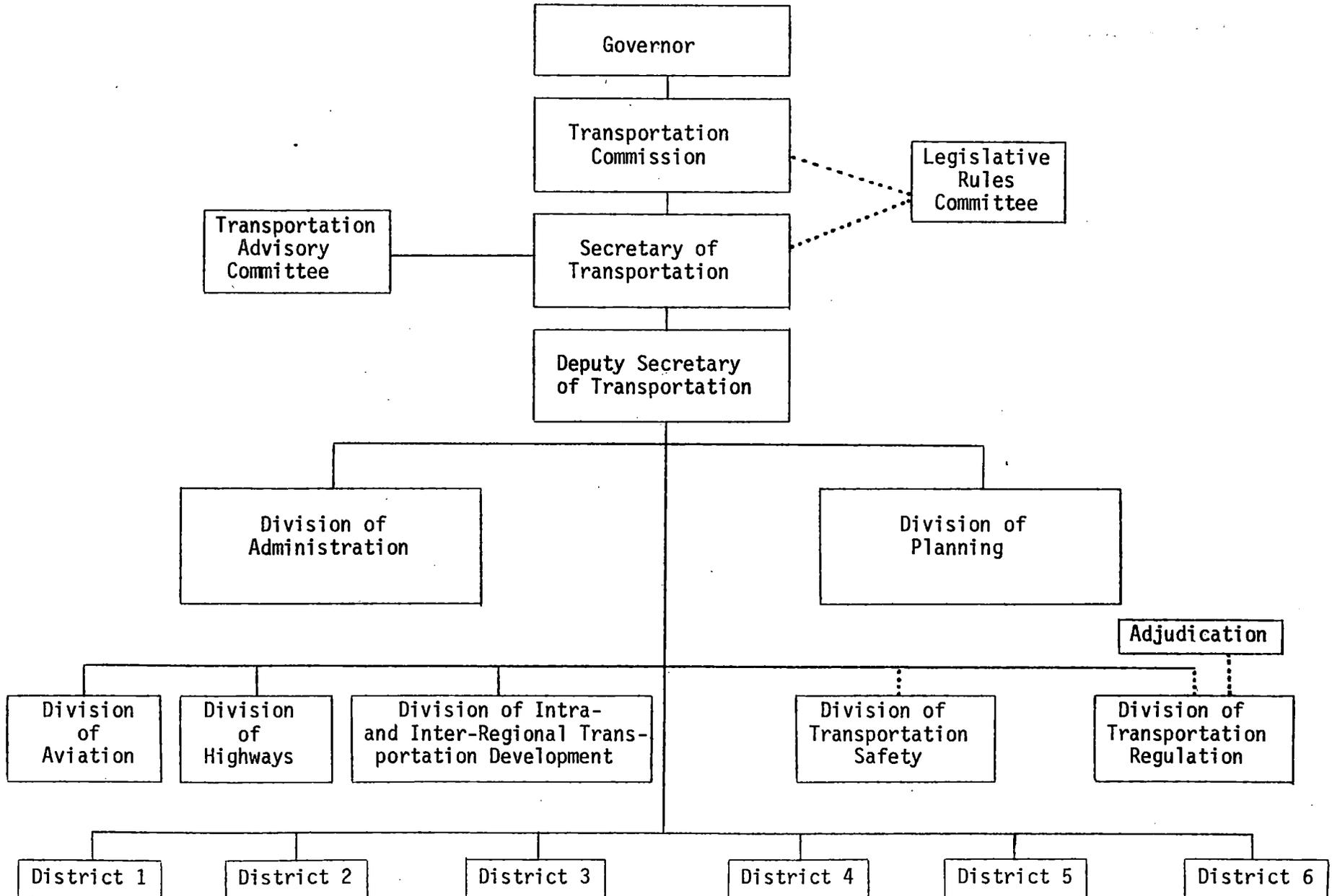
Divisions Required for a First Generation DOT

Secretary of Transportation

It is recommended that the Office of Secretary of Transportation be established as the chief-executive office in an Iowa Department of Transportation. The Office of the Secretary, in concert with the Transportation Commission, would be responsible for the general policy-making of the DOT. To assure the Department is responsible to legislative guidelines and requirements,

IOWA DEPARTMENT OF TRANSPORTATION

Proposed Organization Chart



and responsive to statewide goals and objectives, the Secretary should be appointed by the Governor and serve at the pleasure of the Governor. All 13 states with DOT's have recognized the importance of having the executive officer heading the DOT appointed by and responsible to the Governor.

The statutory powers and responsibilities vested in existing state agencies absorbed within a Department of Transportation should be transferred to the Transportation Commission and the Secretary of Transportation. This requires elimination of several existing commissions. It is important that the modal divisions (highways, aviation, etc.) below the Office of the Secretary of Transportation do not retain their policy-making powers. An integrated multi-modal department can only be developed by giving the Secretary and Transportation Commission control over the planning, promotion, and development of all modes within the Department.

As stated earlier, the formation of a Department of Transportation is a developmental process. The Office of the Secretary must have authority and responsibility for the administration and management of the department. It should have the authority to transfer functions and staff as it sees the need arise and to reorganize the department for the most efficient management. The Secretary must not be "locked" into any preconceived or inherited organizational structure. It is anticipated that there will be much reorganization and shifting of staff and functions during the early years of Iowa's Department of Transportation to achieve maximum efficiency. The Office of the Secretary should continually evaluate the effectiveness of the department's organization and effect modification as required.

In addition to department-wide planning, the budget process is a necessary tool of management for the Office of the Secretary of Transportation. The Secretary should have authority to present a department-wide budget to

the General Assembly for approval. In the process of preparing this budget he should have authority to review and modify the budgets of the divisions within the department.

The Secretary of Transportation is critical to the initial and ultimate success of a Department of Transportation. This job requires a man with experience and skill in the administration of a large public organization and a knowledge and appreciation of transportation systems as they relate to social and economic objectives. The Secretary should be capable of creatively resolving the inherent conflicts that may develop between modes of transportation. The Secretary should have skills in budgeting and financial management and a working knowledge of the skills involved in transportation planning. One could go into an endless description of the perfect individual to head a new department of transportation, but realistically the "perfect" administrator does not exist.

The competition for capable personnel at the higher administrative levels and for multi-modal planners is quite keen at the present time. All of the present departments of transportation are going through an internal reorientation period to expand the perspectives of individuals at the executive and functional level who were mode oriented. The most important characteristics are extensive skill as an administrator and intensive experience in at least one transportation area. The most promising background for the Secretary is most likely either chief administrator of a large Metropolitan Transit Authority - e.g. New York - or chief executive of a Highway Commission.

Transportation Commission

One of the major policy problems in organizing an Iowa Department of Transportation is deciding how much of the authority and responsibility for

operation of the department should reside in a Transportation Commission as compared to the Office of the Secretary of Transportation. There is a large spectrum of possible responsibilities of a Commission - from a purely advisory to general responsibility for all policy and administration of the department.

Most experts in the field of public administration are quite hostile to the concept of collegial commissions heading governmental agencies¹. They feel that governmental agencies should be headed by a single professional administrator acting under sufficient guidelines and standards established by the General Assembly and the Governor. They feel the place of the commissions is the advisory function or quasi-judicial and quasi-legislative functions, not general administration of a department.

It is recognized that in a state such as Iowa, with a long history of apprehension toward strong administrators and executives, the people may not feel confident that the Governor and General Assembly are capable of providing sufficient checks and balances on a Department of Transportation. It is therefore appreciated that a commission with sole powers over the department, as opposed to an advisory commission, is required.

Based on review of this issue, it is recommended to leave the internal management of the department in the hands of the Office of the Secretary and require all major policy decisions to be submitted to and approved by a Transportation Commission.

It is considered that the talents resident in the Iowa State Highway Commission and Iowa Aeronautics Commission should be considered as prime candidates for the Iowa State Transportation Commission.

¹Public Administration Service, "Administrative Organizations of the Executive Branch: State of Iowa, 1966" pp. 9.

Transportation Advisory Committee

On review of the dimensions of the class of transportation service problems and issues to be addressed by the new Department of Transportation, it becomes apparent that much benefit could be derived from the permanent establishment of a functional advisory committee. It should be noted that the transportation issues of today and the future are: 1) the significant advances in federal legislation in transportation as witnessed by the proliferation of Federal Transportation Acts in 1970, 2) the anticipated federal re-examination of transportation regulation, 3) the new pervasive appreciation that "transportation" must be regarded as an integrated system to provide service, 4) the emphasis on social-economic and environmental impacts or disbenefits resultant from, or attributable to, transportation, and 5) the potential revolutionary impact of Federal Transportation Revenue Sharing. These require the advice and counsel of many diverse specialists. It is, therefore, recommended that a permanent organization construct be established which can expeditiously, on a short term basis, be staffed with "on-call" and "other" experts and/or groups as required, as special task forces to address transportation issue/problems identified by the Office of the Secretary, the Governor, and/or the Transportation Commission individually or in any combination.

Staff Divisions of the Iowa Department of Transportation

Division of Administration

A Division of Administration should be established within the Department of Transportation and administered by an Assistant Secretary for Administration. This division will perform administrative activities such as purchasing, budgeting, accounting, data processing, etc., for all of the divisions within

the Department.

This division would encompass the following departments in the present Highway Commission: Accounting, budgeting, purchasing, public information, management review, data processing, facilities management, inventory management, central services, personnel and employee relations, toll bridge operations, department aircraft operations, and legal services (see Exhibit VI-2).

Iowa should find, as have state DOT's visited during this project, that the current Highway Department administrative personnel are adequate to handle the increased responsibilities placed in an administration division of a Department of Transportation with little increase in staff.

"Although dollar savings directly attributable to an integrated transportation organization have not yet been measured, it is certain that the level of personnel and ancillary expenses has remained essentially constant while a more efficient and higher-quality performance in each of the bureaus has resulted."¹

The major problem to be faced by the Administrative Division of the DOT will be the budgeting and control of funding for the Department.

In Iowa, as in many other states, there is a constitutional prohibition against the use of road use funds for other than highway activities.

"All motor vehicle registration fees and all license and excise taxes on motor vehicle fuel, except cost of administration, shall be used exclusively for the construction, maintenance, and supervision of the public highways exclusively within the state or for the payment of bonds issued or to be issued for the construction of such public highways and the payment of interest on such bonds."²

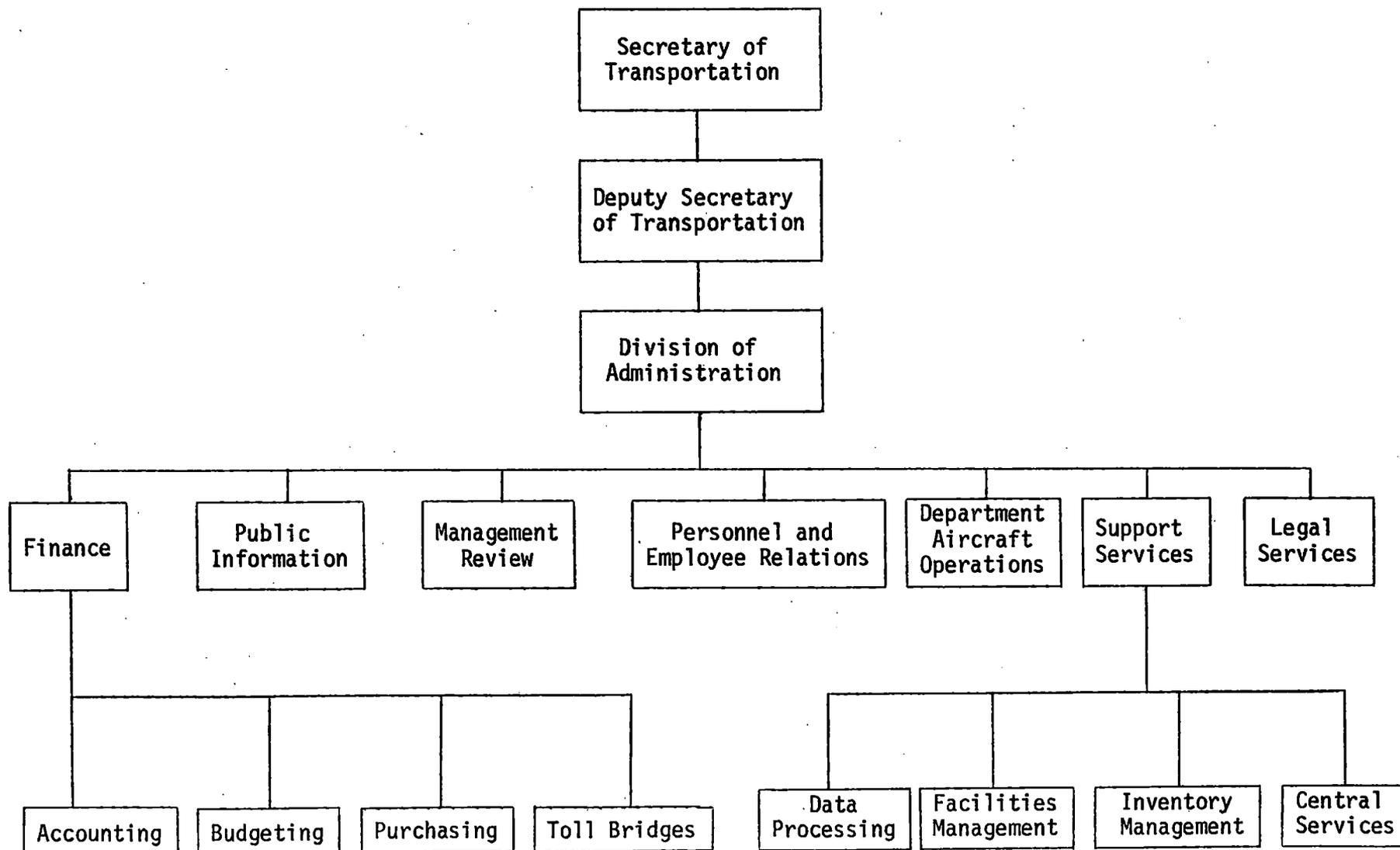
At present, since most highway related activities are in the Highway Commission at the state level, it is not anticipated as a difficult task to

¹June 22, 1971 Letter from Commissioner Earl A. Wood, Connecticut Department of Transportation in response to an OPP letter asking about advantages of a Department of Transportation.

²1942 Amendment to Article XII, Sec. 8 of the Iowa Constitution

PROPOSED

DIVISION OF ADMINISTRATION



allocate highway expenditures to the road use fund, compared to the problems inherent in a department of transportation. When one department is servicing several mode divisions of transportation, the difficulties of separating highway expenses and charging these to the road use fund are complex.

The cost for personnel involved in the design, engineering, and maintenance of highways can be easily identified in a DOT within a highway division, as can funds allocated to construction contracts for highway projects. Problems can arise, however, in the allocation of costs for such activities as data processing, budgeting and accounting, top level administrative personnel, facilities management, planning, and other functions that encompass all modes (highways, aviation, mass transit, etc.) within the department.

Transportation Planning

A Planning Division administered by an Assistant Secretary of Transportation is the essential ingredient within the department. Without this core division, implemented rationally, administered effectively and staffed competently, the entire concept of an Iowa Department of Transportation is meaningless. This division must be functionally oriented and responsible for the planning of all modes of transportation and for the development of an integrated transportation system to provide transportation service.

All transportation service planning for the entire department must be included within the planning division. It is appreciated that the distinction between design planning and system planning must be made. It is assumed, however, that the Office of the Secretary will be most aware of the most propitious separation and will organize such that the integrity of the engineering/design planning functions are maintained. The proposed organiza-

tion in terms of generic functional responsibility is included as Exhibit VI-3. A short discussion of each function follows to indicate the class of activity which must be included to ensure the performance essential to the recommended Iowa State Department of Transportation.

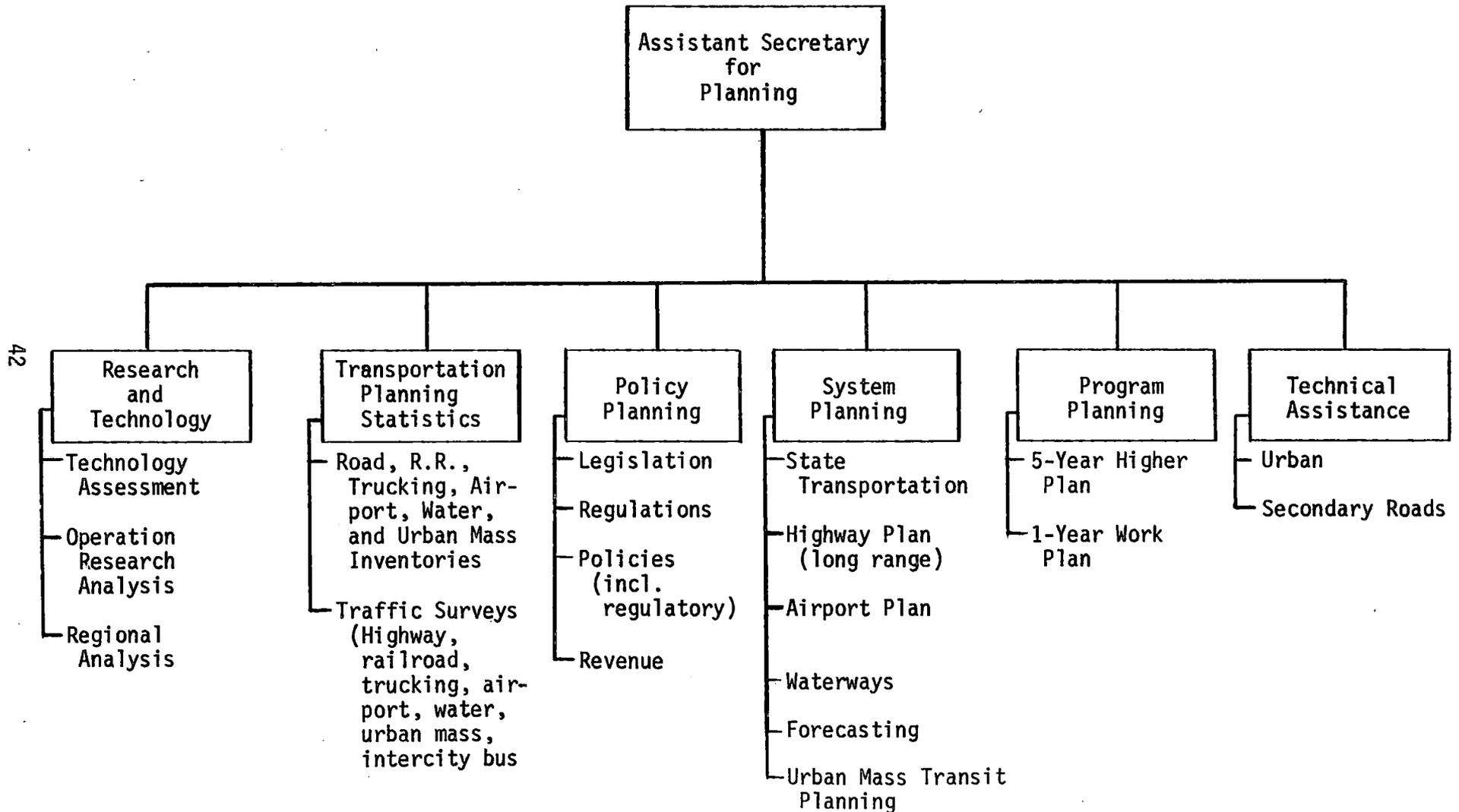
o Research and Technology

This department would be responsible for the same research function performed presently by the Research Department of the Iowa State Highway Commission, with added responsibility for all modes and to include separate sections for: 1) transportation technology review and assessment, 2) operations research - transportation, and 3) fundamental design of analytic tools to assist in regional analyses. The operations research section would have prime development responsibility for mathematical simulation and optimization models for alternative transportation plan evaluation. The regional analysis specialists would develop those modal constructs and frameworks for determination of social, economic, environmental and institutional impacts related to transportation service alternatives. This department will provide the tools necessary for system trade-off techniques, allocation methodologies and service optimization methodologies.

o Transportation Planning Statistics

The Transportation Planning Statistics Department would encompass the present Highway Planning Surveys department of the Highway Commission with the additional responsibility for developing a data base necessary to support the analysis of alternative total service transportation plans and programs in Iowa. If multi-modal planning is to be effective, there must be an adequate base of information to support the planning process for all modes such as highways, aviation, mass transit, grain distribution, port develop-

PROPOSED
DIVISION OF PLANNING



ment, etc.

o Policy Planning

The Policy Planning Department of the Planning Division would be responsible for suggesting needed changes in statutes governing Iowa transportation at the federal, state, and local level. They would formulate new regulations and policies governing both the external and internal operation of the department. The prime responsibility of this department would be to assist the Office of the Secretary establish, analyze and evaluate alternative state policies for transportation within the context of state economic and social goals. It would also be responsible for evaluating changes in federal transportation policy as they impact Iowa. The impacts of all policy in terms of resources, legislative requirements, and community reaction is a significant function of such a department.

o System Planning

The System Planning Department of the Planning Division would have major responsibility for one of the first tasks of a new Department of Transportation - the creation of a state transportation master plan incorporating all modes of transportation. This transportation master plan should provide a general guide for the Secretary, Governor, and General Assembly in the ongoing responsibility of establishing transportation policy, identifying transportation objectives, programs and budgeting.

Systems Planning would be involved in specific master plans for the various modes (e.g., a State Aviation Systems Plan). The master planning activity would interface and respond to policy alternatives and rely heavily on Research and Technology Department for alternative systems evaluation and support.

o Program Planning

The Program Planning Department would include the planners presently involved in the five-year work plan effort of the Highway Commission, plus project oriented planners in other modes as other programs are developed. The responsibilities of this section will be the most difficult to define in a Department of Transportation. The Office of the Secretary will have to determine which activities are most efficiently initiated at the modal level and which are the responsibility of this division. The Secretary of Transportation may initially wish to maintain the Program Planning Department and Technical Assistance Department in the Highway Division of the Department of Transportation. If this is done, the Secretary must insure that the planning done in this department conforms to the activities of the Office of the Secretary and the Office of the Assistant Secretary for Planning.

Planning is the keystone to the success of a Department of Transportation. This division must be given adequate staff and resources to effectively carry out their assigned responsibilities. It is interesting to observe that the state-of-the-art in transportation planning is most sophisticated in the highway planning disciplines. We must insure that Iowa takes full advantage of this valuable and mature resource and employ the highway planning specialists as the core of the planning division. These specialists may be augmented by several selected "other" mode specialists to provide total mode representation. In the limit, however, all the planners of this division under the leadership of the Office of the Secretary will develop into transportation service planners as opposed to mode specialists. Only through comprehensive multi-modal transportation planning can Iowa take full advantage of the potential for all modes of transporta-

tion - air, rail, water, highway, and mass transit. Only through full exploitation of all modes of transportation can Iowa reach its full economic and social potential.

Line Divisions of the Iowa Department of Transportation

This section of the study makes recommendations as to which line transportation functions should be included in a "first generation" Iowa Department of Transportation and more specifically which existing state agencies should be integrated into a DOT. Table A presents an overview of the responsibilities included within the thirteen states with functioning DOT's.

Table A	
Responsibilities Included in the Thirteen Functioning State Departments of Transportation	
Highways	All 13 DOTs
Aviation	All 13 DOTs
Mass Transit	11 of 13 DOTs
*Motor Vehicles	6 of 13 DOTs
Highway Patrol	2 of 13 DOTs
Waterways and Ports	7 of 13 DOTs
Pipelines	None
Transportation Regulation	1 of 13 DOTs
Development of a Transportation Master Plan	All 13 DOTs

*The DOTs visited who did not have motor vehicle registration and safety responsibilities felt that this function should be included in the future.

The organizational principle in the other states with DOT's is -- to be as comprehensive as possible in the assumption of transportation responsibilities. Multi-modal planning emphasizing a balanced and integrated transpor-

tation system cannot be fully accomplished when significant transportation modes, authority, and responsibilities are left outside a department of transportation. When transportation related responsibilities were maintained outside of a DOT in other states, the reason was usually attributable to political situations which precluded the inclusion of the particular agency or responsibility.

If a Department of Transportation is to promote the development of a balanced and integrated transportation system, the department must have responsibility for all of the major modes of transportation. This is the only way multi-modal planning and service development will be fully effective. It is therefore recommended that an Iowa Department of Transportation must include the highway, aviation, and inter-regional and intra-regional transportation development functions. A "first generation" DOT must therefore include the Highway Commission and the Aeronautics Commission in Iowa.

A division of Inter-Regional and Intra-Regional Transportation Development will have to be developed completely since there are no existing modal agencies candidates for inclusion. This division will be responsible for the development and analysis support necessary for multi-modal transportation planning in the area of mass transit, waterways and ports, and freight and agricultural distribution system facilities. As each of these mode oriented activities develops, it is anticipated that separate divisions may be initiated.

Other agencies that should eventually be integrated into a Department of Transportation can be brought into a DOT initially or at a later date. These include driver licensing, motor vehicle registration, safety and accident records, dealer licensing and motor vehicle inspection from the

Department of Public Safety; the Highway Safety Program from the Office for Planning and Programming; the Reciprocity Board; and Transportation Regulation from the Iowa Commerce Commission. These are discussed separately in the last section of this chapter.

Division of Highways

Given the spatial distribution of population it is doubtful that the role of highways in Iowa's transportation system will diminish significantly in the near or long term. The Highway Division of an Iowa Department of Transportation would be the largest division at the formation of the DOT and in foreseeable future. It would be administered by an Assistant Secretary of Transportation.

It is recommended that the Division of Highways be formed from the Development and Operations Division of the present Highway Commission with some possible changes (see Exhibit IV-1). There will have to be redefinition of planning responsibility between the design department of the Development Division and the Planning Division of the Department of Transportation. The first Secretary of Transportation will have to decide the exact level of planning to be included in the Planning Division. As a result of the organizational modification, a reassignment in staff between these two divisions may be required.

The Division of Highways in the Department of Transportation would perform essentially the functions of the Highway Commission, with the exception of the planning activities restructured into the Planning Division and the administrative functions performed for the DOT by the Administrative Division. The Division of Highway's responsibilities would include design, construction, and maintenance of the primary highway system and continuing assistance to the urban systems.

The source of funding for the Division of Highways will be the dedicated highway revenues in Iowa plus federal matching money for Federal-Aid Highway Projects.

Division of Aviation

The present Iowa Aeronautics Commission will be brought into the Department to form the core portion of the Division of Aviation.

The Division of Aviation will perform the functions as indicated in the Iowa Aeronautics Commission organization chart (see Exhibit IV-2). The registration of aircraft and pilots may also be done initially in this Division until it is felt that this function could be performed more efficiently in the same division that licenses automobiles, trucks, buses, and drivers - the Division of Transportation Safety. This shift could be made at a later time as the department develops into the second generation phase.

The Division of Aviation is one that will need to develop in terms of activity in the field of commercial aviation. The analysis and evaluation of air cargo service is one project the Department of Transportation may regard as a significant potential for economic growth in Iowa.

The initial activity of the DOT in commercial aviation will be in development of a State Aviation Systems Plan. As this planning process takes place, the DOT may elect to become more involved in providing technical and financial assistance to larger commercial airports, air centers or transportation centers development.

The problems associated with the identification of financing for the development of airports will be one of the first major tasks for the department. Municipalities are finding they do not have adequate resources to build the airport facilities to meet the needs of their areas. In Iowa,

as in most other states, it may be necessary for the state to assist in raising the necessary capital for large commercial airport facilities that serve regional areas.

Division of Intra-Regional and Inter-Regional Transportation Development

All activities anticipated to be performed by a Division of Intra-Regional and Inter-Regional Transportation Development are not presently functionalized at the state level. This Division will be small but is anticipated to be enlarged as state activity increases in providing assistance and specifying development programs for passenger and freight or commodity transportation service. It is expected that the Division will facilitate the development of service programs and the acquisition of federal funding for these projects.

The Division will be responsible for the identifying analysis and program alternatives stipulation in the areas of: 1) urban transportation, 2) urban/rural interface transportation, and 3) rural transportation, for passengers. The Division will also have the same primary responsibility in the areas of: 1) multi-modal freight terminals, 2) grain distribution systems, 3) rail and truck service, and 4) port and harbor facilities.

The decay of urban transportation in the urban areas is well appreciated. Rather than observing that "this-is-the-nature-of-things" the State must examine creatively what may be done to provide and expand service and then ensure that the programs are tested, implemented, and modified as necessary to ensure that a large segment of Iowa's population is not disenfranchised with respect to transportation service.

The problems of the mobility of the rural aged has recently been identified as a critical national problem. It is a more severe problem in Iowa, due to the rural nature of the state and the concentration of elderly

of organizational complexity as it impacts the philosophy of a state DOT, and in terms of most advisable staging with respect to the DOT development cycle. It is envisioned that although the Division of Transportation Safety is a requirement of a functioning agency entrusted with transportation responsibility, it need not be considered as essential to the "threshold" DOT - e.g., within the first year. A reorganizational program as specified in this section with respect to transportation safety may be stipulated as intended in the new DOT enabling legislation. The specific legislation, however, which would effect the reorganization may best be drafted after initial DOT formation as part of a second generation program. It should be firmly appreciated that transportation safety does belong in the DOT as soon as practicable!

The issue of Transportation Regulation is a problem of totally different dimension. The case for eventual inclusion is presented in this section. Inclusion of these functions today, however, is infinitely more complex in terms of philosophy, organization, and operational procedures than the DOT issue itself. It is recommended, however, that in the limit, as the DOT becomes established and demonstrates that anticipated effectiveness, that the issue of transportation regulation be addressed along the framework recommended.

Division of Transportation Safety

The State of Iowa's transportation functions are most fragmented in the areas of transportation safety, motor vehicle and driver licensing, regulation and enforcement and collection of highway user revenues. These activities are performed in seven different state agencies at the present time: The Iowa State Highway Commission, the Iowa State Commerce Commission, the Reciprocity Board, the Department of Public Safety, the Department of

Revenue, the Department of Public Instruction, and the Office for Planning and Programming (Refer Chapter IV). There is a strong case for rationalization of the distribution of responsibility and authority among these agencies. Some of these functions should come into a Department of Transportation to assure comprehensiveness of the organization over transportation functions; others should remain within their present agency or be integrated into another state agency.

These activities can be broken into three main groupings: law enforcement activities, motor vehicle and driver licensing, and promotion of transportation safety. All of these categories are interrelated since law enforcement impacts transportation safety and motor vehicle and driver licensing impact transportation safety. The object in the DOT organization recommendation is to reduce duplication of effort, provide for a smaller number of major program groupings, and assure a comprehensive Department of Transportation.

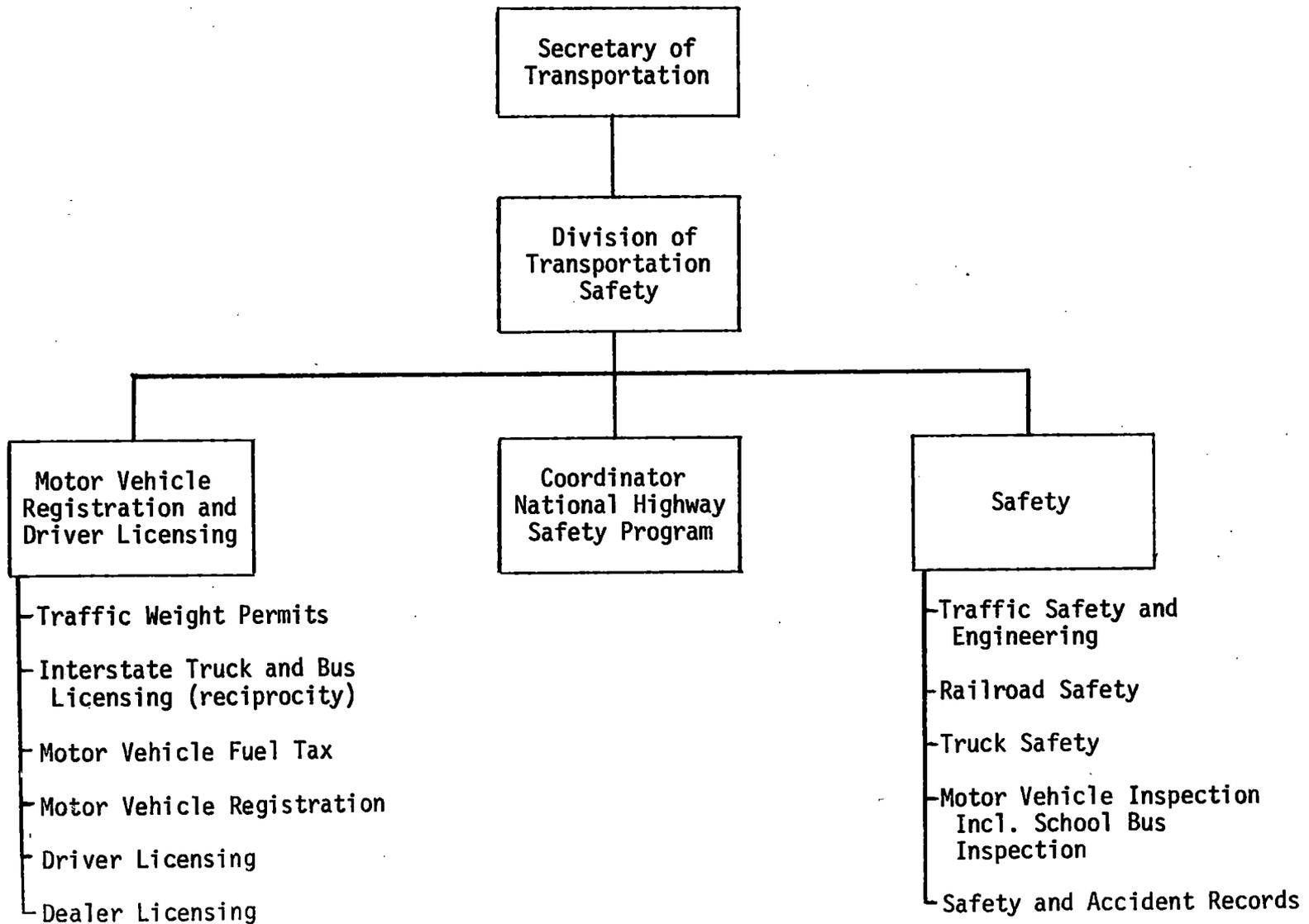
It is therefore recommended that those responsibilities grouped within 1) transportation safety and 2) motor vehicle and driver licensing be transferred to a new Department of Transportation, Division of Transportation safety (refer Exhibits VI-4 and VI-5). Safe and convenient service for transportation users will undoubtedly be a major goal for a new Department of Transportation. It is important that the new DOT have responsibility and authority for these program areas in order to effectively carry out comprehensive statewide transportation service planning.

It obviously follows, therefore, that the law enforcement responsibilities of the various departments not be included in a Department of Transportation. Only 2 of 13 operating DOT's at the present time perform law enforcement functions. As least one of these states has noted problems with having law

CANDIDATE FUNCTIONS FOR A DIVISION
OF TRANSPORTATION SAFETY

<u>Current Department Responsibility</u>	<u>Transportation Functions</u>
Iowa State Highway Commission	<ol style="list-style-type: none">1. Traffic Weight Enforcement2. Traffic Weight Permits3. Traffic Safety and Engineering
Iowa Commerce Commission	<ol style="list-style-type: none">1. Truck Operating Permit Enforcement2. Railroad Safety Inspection
Reciprocity Board	<ol style="list-style-type: none">1. Interstate Truck and Bus Licensing
Department of Public Safety	<ol style="list-style-type: none">1. Traffic Law Enforcement (Iowa Highway Patrol)2. Motor Vehicle Licensing3. Driver Licensing4. Safety and Accident Records5. Dealer Licensing6. Motor Vehicle Inspection
Department of Public Instruction	<ol style="list-style-type: none">1. Bus Inspection2. Driver Education
Office for Planning and Programming	<ol style="list-style-type: none">1. National Highway Safety Program
Department of Revenue	<ol style="list-style-type: none">1. Law Enforcement (motor fuel tax)2. Collection of Motor Vehicle Fuel tax

D I V I S I O N O F T R A N S P O R T A T I O N S A F E T Y



enforcement within the department. Most states view law enforcement activities as being separate from promotional and regulatory functions.

The General Assembly may wish to consider the redirection of the Iowa Department of Public Safety if and when the Motor Vehicle Registration, Driver Licensing and other non-law enforcement activities are absorbed within a Department of Transportation. The Bureau of Criminal Investigation, State Fire Marshalls, Iowa Highway Safety Patrol and Narcotics Division of the Department of Public Safety could form the basis of a reorganization. To this reorganized base could be added the traffic weight officers from the Iowa Highway Commission, the law enforcement officers from the Iowa Commerce Commission, and the law enforcement officers from the Department of Revenue.

It is recommended that collection of the state gasoline tax be placed into the Iowa Department of Transportation, since this function is closely related to the other responsibilities carried out under reciprocity agreements.

It is suggested that the integration of the functions presented in exhibit VI-5 into a Department of Transportation should eliminate duplication of functions and promote efficiency. There is little reason that truckers should have to deal with three or more state agencies to get authorization to operate on Iowa's highways. There is little reason for buses to be inspected both by the Department of Public Instruction and under the new motor vehicle inspection law by the Department of Public Safety. There is little reason to spread truck licensing authority and responsibility among the Iowa Highway Commission, the Reciprocity Board, and the Department of Public Safety. All of the above functions could effectively be performed in a Division of Transportation Safety in a Department of Transportation.

The new DOT may want to include aircraft and pilot registration in this same division, since there may be efficiencies involved. The same record keeping system could be used for cars, trucks, buses, and airplanes.

Division of Transportation Regulation

One of the most difficult issues for consideration in this study has been whether responsibility for transportation regulation is a candidate for inclusion in an Iowa Department of Transportation. Many problems have been evident in the regulatory process at both the federal and state level, the most important of which is the alleged failure to protect the "public interest" in transportation services^{1,2,3}. The important questions are whether a Department of Transportation would be able to do a more effective job of regulating transportation and whether this regulatory responsibility is necessary in a DOT to make its multi-modal comprehensive planning, promotion and development meaningful.

The recent Statement on National Transportation Policy which includes as a goal the re-examination of government's economic regulation of the transportation industry⁴ made evident that this issue is only just surfacing

¹Loren Veldhuizen, "The Administrative Process in the Iowa State Commerce Commission," Independent Research Project for Professor Arthur Bonfield, The University of Iowa College of Law, 1971.

²Robert Fellmeth, Ralph Nader's Study Group Report on the Interstate Commerce Commission and Transportation: The Interstate Commerce Commission, 1970.

³The President's Advisory Council on Executive Organization, "A New Regulatory Framework: Report on Selected Independent Regulatory Agencies," January 1971.

⁴A Statement on National Transportation Policy, DOT 1971.

as one of the major policy questions for the decade.

Only New York has included transportation regulation in its Department of Transportation. The transfer from the Public Services Commission took place on March 1, 1971, four years after the initial organization of their Department¹. The transfer did not, however, immediately introduce significant changes in procedures, policies, or personnel. Significant changes may evolve as the regulatory function is more fully integrated into the Department of Transportation, but at the present the New York DOT is operating under the same procedures and personnel as under the Public Service Commission. The Commissioner of Transportation has, however, replaced the Public Services Commission as the final arbiter of cases. A group of Hearing Examiners give initial hearing to the cases with possible appeal of their decision to the Commissioner of Transportation.

The following excerpt from a letter to the Office for Planning and Programming from Commissioner Parker gives an idea as to the attitude of New York toward the place of regulation in their Department of Transportation.

" . . . the New York State Department of Transportation (DOT) has evolved into a multi-modal agency recently with one of the final 'building blocks,' Regulatory Affairs, being added only last year. We have found numerous advantages - one being a sharing of support services which enables us to save through the avoidance of duplication. This form of organization also allows us greater flexibility in the meeting of transportation needs."²

Commissioner Parker has implied that a Department of Transportation is not comprehensive and complete without "Regulatory Affairs." New York

¹Chapter 267 of the New York Laws of 1970 transferred transportation regulation to the Department of Transportation.

²Letter from Commissioner T. W. Parker of the New York Department of Transportation to the Office for Planning and Programming dated June 8, 1971.

recognizes as we do in Iowa that there are many problems and needs that a Department of Transportation could not meaningfully address without responsibility for transportation regulation. The problems of railroad abandonments, rolling stock shortages, truck and rail service to rural areas, transportation rate structures, and many other Iowa transportation problems and needs are directly related to regulation.

Given the impact of regulation of rates, routes, etc., upon transportation in Iowa and other states, why was New York the only state to include this function in their Department of Transportation? The responses received were first that some states felt there may be some incompatibility between regulation of rates, routes, etc., and other promotional functions of their DOT. This response was best summarized in the Ash Report:

"To hold a regulatory agency responsible for the development of the industry it regulates distorts its responsibilities to both the industry and the public, making difficult the reconciliation of economic interests among contending parties. It places the agency in the position of advancing interests which fundamentally conflict."¹

Secondly, some states responded that the Public Utilities Commissions or Commerce Commissions in their states were very political organizations and that it was difficult to gain support for their inclusion in a DOT. The present regulatory agencies were able to resist any attempts to include them in a Department of Transportation.

Finally, there was a general comment that transportation regulation would be difficult to integrate into a Department of Transportation. It requires a more diverse type of administrative format than the other trans-

¹The President's Advisory Council on Executive Organization, "A New Regulatory Framework: Report on Selected Independent Regulatory Agencies." January 1971, pp. 80.

portation functions. An organization to handle regulation would be extremely difficult to implement in a first generation DOT.

The fact that most states and the federal government did not include regulation of transportation in their DOT's does not mean they are necessarily pleased with the present regulatory process. It is not hard to find criticism of most transportation regulatory agencies in existence at the present time. These criticisms range from indictments of the competency of these organizations and their personnel to criticisms of the basic philosophy supporting their existence. Some claim the competitive situation in transportation has changed so greatly that regulation, except for safety regulation, is no longer needed.

The major reason that prompted the conclusion that regulation should be integrated eventually into an Iowa Department of Transportation was the lack of planning and policy applied to those transportation problems affected by transportation regulation (e.g., rail abandonments, adequate transportation services to all areas, boxcar shortages, etc.). The present staffing and orientation of the Iowa Commerce Commission does not lend itself to planning or general policy formation except on a case by case basis. Regulatory policy evolving from a case by case settlement of disputes between private parties is not likely to adequately take into account the public interest in transportation. A passive regulatory agency such as the Iowa Commerce Commission, which limits consideration to problems brought to its attention by private parties, is not likely to provide solutions to the broad spectrum of regulation-related problems in Iowa.

The lack of planning appears over and over as a major criticism of various regulatory agencies.

"Many commissions engage excessively in case-by-case adjudication as a basis for policy formation rather than using less

formal procedures such as exchanges of information, informal regulatory guidance, or rulemaking."¹

The above criticism was echoed much more strongly by the Nader Report on the Interstate Commerce Commission.

"The ICC is now primarily a forum at which private transportation interests settle their disputes."

"The ICC chooses to define policy through its massive case-load, asserting itself directly only through a mere dozen or so rule-making proceedings each year."

"Only if the settlement of special interest disputes over the allocation of the transportation market complements the needs of the public, is the public interest served."

"Costs of making and presenting a case are substantial-- even for the minor expansion of operating authority-- and thus prohibitive for the public and for small businesses."

"As a passive forum, the ICC has failed to provide for any useful mechanism for the representation of the public interest in the development of the record."²

Transportation regulation is a very important element in the set of overall transportation goals and policies formulation and examinations. Eventually, Iowa should include regulation in a DOT so it will have the full capability to address all transportation needs and problems in Iowa. It has been considered that the transportation regulation authority within an Iowa DOT must be responsive to the impending revolutionary examination at the national level into the area of regulation, but must primarily be

¹The President's Advisory Council on Executive Organization, A New Regulatory Framework: Report on Selected Independent Regulatory Agencies, January 1971, pp.5.

²Robert Fellmeth, Ralph Nader's Study Group Report on the Interstate Commerce Commission and Transportation: The Interstate Commerce Commission, 1970, pp. 311.

designed to ensure the separation of case adjudication and regulation policy formulation. It is appreciated that there are many variations for implementing the separation of hearing examiners from department administrators. The fundamental recommendation is, however, that hearing examiners, responsible to the court or merit system, must be established as a distinct adjunct to a Division of Transportation Regulation. Initially, however, the new DOT would not be expected to develop an entirely new system for regulation in the Department at the same time that it is expected to integrate and develop all modes of transportation into a comprehensive transportation agency.

The Department of Transportation should develop as expeditiously as possible the capability to address regulatory problems even though not performing the regulation function. This will make the possible incorporation of transportation regulation less difficult at a later date if deemed warranted, and will in the near term enable the Department to take positions and develop policies in regulation-related areas in the meantime.

Chapter VII

IMPLEMENTATION OF A DEPARTMENT OF TRANSPORTATION IN IOWA

A number of legislative actions constitute the first phase in the process of establishing an Iowa Department of Transportation. The first and cornerstone decision is the determination of the transportation functions to be assigned to the new department as its responsibilities. Many of these functions would be transferred from existing state agencies. This would in some cases involve placing the entire agency into the DOT structure and in other cases only those parts that execute a transportation function would be transferred. It is also observed that "certain" transportation functions that are not being performed by any state agency could be initiated within the DOT.

The beneficial feature of a gradual implementation approach recommended earlier in the report is that one need not identify initially every function to be performed by the DOT from this day forward. However, there is a set of functions which must be assigned to establish a "threshold" department and without which the organization is not a department of transportation.

The first and foremost of the functions required is that of multi-modal transportation planning. The function of multi-modal planning as conducted by a DOT was described in Chapter VI.

Additional functions assigned to a "threshold" DOT are those currently performed by the Iowa Highway Commission and the Iowa Aeronautics Commission. As noted in the organization chart in Chapter VI, both these agencies would be entirely transferred into the DOT. The administration tasks of these agencies would be combined into the Administration Division of the DOT.

Functions in mass transportation and waterways would be performed by the division of Intra and Inter Regional Transportation Development.

It is quite apparent that there are many more transportation functions which could and/or should be assigned to the DOT. However, Planning, Administration, Highways, Aeronautics and intra and inter regional transportation development are the functions comprising that set of functions which constitutes a "threshold" DOT for Iowa.

It may be determined that additional functions should be included in Iowa's "first generation" DOT. These may include several transportation safety functions currently found in the Department of Public Safety or in the Office for Planning and Programming. They may include the transportation regulation function currently the responsibility of the Iowa Commerce Commission. Although not recommended by this report, these functions could be placed into the initial department. This inclusion would create a department above the "threshold" level.

Another first-step action is the determination of the scope of authority vested in the Transportation Commission and that vested in the Office of the Secretary of Transportation. It is recommended that the Transportation Commission undertake responsibility for matters concerning transportation policy for the state and that the Secretary share in the policy responsibility and be assigned full responsibility, as chief executive officer, for the administration of the department. In order to function effectively, the Secretary should have the authority to structure the department in what he finds to be the most productive manner. (See Chapter VI for a more detailed discussion.)

A third first-step action is the provision of a period of time for the

DOT, through the leadership of the Secretary, to prepare for the assumption of operational responsibility for the transportation system of Iowa. During this pre-operational period of six to twelve months, the Secretary would acquire the top level DOT staff and with the full assistance of existing state transportation agencies accomplish the following tasks:

1. Develop Transportation Policies for the state for consideration by the Legislature and Governor.
2. Develop the program for the first operational biennium of the department.
3. Prepare the department's budget for the first operational biennium of the department.
4. Prepare the staffing plan for the department and acquire the personnel required.
5. Develop the operating procedures of the department.

It is clear that to accomplish these five tasks the Secretary must draw heavily on the expertise and experience of existing transportation agencies' staffs. Therefore, this assistance should be provided for in the enabling legislation. The Secretary will also need, at the minimum, professional staff from the fields of management, finance, and planning.

The remaining first-step action is the provision of funds to conduct these pre-operational tasks. A potential source of funds for this pre-operational phase exists in several federal programs. Necessary matching funds for these programs and costs beyond those eligible for federal assistance must be obtained from the state's general fund, the road use fund, and the state aviation fund. The road use fund is under constitutional prohibition for use for any other than highway purposes. The state aviation fund has operated as if ~~it~~ were a dedicated fund. However, the portion of the DOT costs relating to highways and the portion relating to aviation may

legitimately be charged to the respective funds. A means of estimating these proportions of costs to be charged to these funds can be made on the basis of the number of personnel expected to be employed by each of these divisions. It is estimated that 90 percent or more of the pre-operational phase could be financed in this manner. Therefore, the combination of federal grants and dedicated funds leaves the financial impact of the DOT's pre-operational phase on the state's general fund quite minimal.

BUDGET FOR PRE-OPERATIONAL PHASE DOT

Secretary of Transportation	\$ 32,000
Under-Secretary of Transportation	27,000
2 Secretaries	14,000
Financial Analyst	20,000
Transportation Planner	24,000
	\$117,000
Office Space	*
Travel	\$ 4,000
Office Supplies and Equipment	6,000
Telephone	1,000
Report/Bill Preparation	3,000
Consultant Services	30,000
	\$ 44,000
TOTAL FIRST YEAR	\$161,000

*Assumed as inherited

The four first-step actions: determine DOT functions, identify scope of Commission and Secretary authority, provide lead time to accomplish pre-operational tasks, and provide pre-operational funds, constitute the substantive content of the bill to establish a Department of Transportation in Iowa.

There are a number of approaches to writing a bill establishing the

mental goals.

- WHY DOES IOWA NEED A STATE DEPARTMENT OF TRANSPORTATION?

A number of observations as to existing and future transportation service in Iowa as well as changes and anticipated changes at the federal level indicate the requirement for an Iowa State Department of Transportation. The projection of conditions within the state are by far the most significant of the determinant factors.

Participation in the 1972 National Transportation Needs Study made many, if not all, of the public and private participants aware that Iowa does not have a systematic, informed process through which the state's transportation policy, programs and projects may be formulated, analyzed, and evaluated. There are many concrete issues such as the impending abandonment of rail branch lines which demand a thorough evaluation and planning function to ensure that Iowa does not by default experience the loss of vital service. The implications of rail abandonment on the survival and growth of Iowa grain export position are distressing even to the casual observer. Issues identified in Iowa's participation in the national study in addition to the lack of multi-modal planning, policy stipulation and evaluation, and the significant potential grain distribution crisis are such concerns as rural transportation as impacting rural development and the decay of urban transportation service.

The state's potential for experiencing transportation service growth or transportation service crises is not totally within the control of the state. A significant number of pieces of legislation have passed or are in process at the federal level which can have positive, or in some cases potential for negative effect, on the state of Iowa if not addressed in a

"threshold" DOT. One approach is to completely revise the full range of statutes under which the existing transportation related agencies operate at the time they are incorporated into the DOT. An advantage of this approach is that it affords the opportunity to critically evaluate all the nuances of authority and responsibilities delegated to the agency. Such an evaluation would identify and afford the immediate opportunity to address the problems the agency may have had operating under the existing statutes. An attempt could be made to assure complete consistency in the total package of statutes under which the new DOT would operate.

A disadvantage in this approach is the potential for disruption and loss of continuity in state transportation function during the extensive transition to a department of transportation. If the employees work under both a new organization and under a completely revised set of statutes, their effectiveness may be impaired for several years.

A further disadvantage of a complete revision of statutes would be the likelihood that opposition to the establishment of a DOT would be significantly increased due to the departure from existing legislation. Transportation agencies as well as transportation interest groups may feel themselves compelled to oppose a DOT not because of opposition to the concept of a DOT but because of their opposition to the elimination or revision of a particular statute.

A second approach to drafting a DOT bill is to leave the existing statutes under which the current agencies operate essentially unchanged except for the transfer of authority and responsibility to the new department. This approach minimizes the potential for disruption of present transportation functions. Any necessary changes in legislation can be suggested by

the new department after having become familiar with operating as a department of transportation. This type of bill is consistent with the developmental approach to establishing a department of transportation. There is no model department of transportation and no model legislation for a department.

The passage of a bill drafted under the second approach would establish a "threshold" DOT. It will provide Iowa with the benefits of multi-modal planning. As time progresses it is expected, indeed it is necessary, for the DOT and the legislature to continue to examine and add, where appropriate, additional transportation functions to the DOT. As these functions are added, the effectiveness of the DOT and corresponding benefit to the State will increase.

Chapter VIII

ISSUES AND RECOMMENDATIONS

There are several issues which will be raised repeatedly in the public discourse associated with an Iowa Department of Transportation. This section is included to succinctly address the major issues and as a review of the recommendations resulting from this project.

Issues

- WHAT IS A STATE DEPARTMENT OF TRANSPORTATION?

This question is not as casually addressed as might appear. Each of the existing State Departments of Transportation are different in terms of organization and operational parameters. It is clear also that each is responsive with respect to intent, to the unique requirements of their regional and political environment. The spectrum of state DOTs extends from "paper" organizations to fully functioning departments responsive to public and private needs and wants. It appears the best description of a State DOT is within the context of its purpose. The individual state department is formulated in a unique manner which reflects the institutional and private and public admixture of mode service and needs extant within the region.

A State DOT is an organization formed to promote, plan and implement the development of an integrated transportation system of various interdependent modes that will provide the public with the optimum level of service, choice, mobility, convenience, and safety in such a way as to positively interact with and promote the satisfaction of social, economic, and environ-

creative and responsible manner. The 1970 Aviation and Airway Development Act, the 1970 Urban Mass Transportation Act are potential for positive impact on Iowa if integrated within a transportation service policy and development function. The potential impacts of Transportation Revenue Sharing without an integrated transportation plan may be serious. The impact of the impending Federal Surface Transportation Act of 1971, the Federal Railway Safety Act of 1970, and other impending legislative alternatives to revenue sharing may also have serious effect in Iowa if not approached in a responsive and proactive scenario. The best locus for developing this scenario is the DOT.

- WHAT FUNCTIONS ARE ANTICIPATED WITHIN IOWA'S FIRST GENERATION DEPARTMENT OF TRANSPORTATION?

As a result of an analysis of the requirements within Iowa and supported by surveys of existing state Department of Transportation, an organization of both modal and functional divisions is recommended. Iowa must design this new organization about the primary function of Transportation Planning within an appropriate division, a functional Division of Administration and three mode oriented divisions. The three divisions are the Division of Highways, the Division of Aviation, and the Division of Intra-Regional and Inter-Regional Transportation Development. Another division--the Division of Transportation Safety and consideration of a Division of Transportation Regulation should be regarded as candidates for department inclusion within the development process cycle as "second" and "third" generation departments evolve.

In order to efficiently initiate operation of a new department which will incorporate as large an organization as the Iowa State Highway Commis-

sion, it is recommended that the Office of the Secretary stage the transfer in such a way and at such time as to not degrade the effectiveness of existing organizations. The "staging" procedure and specific operation organization structure and staffing must be addressed by the Office of the Secretary during a pre-operational phase of approximately one year. Further responsibilities of the Office of the Secretary will include preparation of an operational budget and first priority programs for the next biennium. The Office of the Secretary will also have responsibility to initiate a program to develop transportation policies and goals in conjunction with the Office of the Governor and other state agencies. It is envisioned that the Secretary will require extensive support of his "core" or initial staff to effect the objective of defining recommended Iowa State transportation policies.

- WHEN COULD IOWA INITIATE A DEPARTMENT OF TRANSPORTATION?

The issue of when a Department can be initiated introduces the question of effective implementation. A bill establishing an Iowa DOT can be readied for passage in the second session of the 64th General Assembly. It is recommended that this bill should be structured as recommended in the description of a "threshold" or "first generation" department. It is further recommended the process of incorporating the two existing agencies--the Iowa Aeronautics Commission and the Iowa State Highway Commission--take place at the end of a one year pre-operational phase subsequent to passage of enabling legislation.

Recommendations

- It is recommended that the "first generation" Iowa Department of Transportation, as defined in Chapter VI, be employed as the organizational objective within to-be-drafted legislation. The questions of when to include,

APPENDIX A

REVIEW OF EXISTING STATE DEPARTMENTS OF TRANSPORTATION

California

California has the most complex organization of the existing DOTs. It began in 1961 as the Highway Transportation Agency. In 1969 the name and scope of activity was changed to the Business and Transportation Agency. Under this new agency there are seven business regulatory departments and four transportation related departments. Of the four transportation related departments, one deals with aviation, the other three deal with motor vehicle transportation.

The department of public works contains the Division of Administrative Services, the Legal division, the Division of Bay Toll Crossings and the Division of Highways. A State Highway Commission shares responsibility for highways and the Toll Bridge Authority directs the activities of the Division of Bay Toll Crossings. The Department of Public Works is financed by motor fuel taxes, vehicle registrations, weight fees, license fees, toll collections, federal aid, and revenue bonds.

The Department of Highway Patrol and the Department of Motor Vehicles are financed from the state motor vehicle fund.

The Department of Aeronautics assists non-commercial aviation. A State Aeronautics Commission assists in establishing policy and allocating funds. The department is financed by a general aviation fuel tax.

The State Transportation Board assists the Secretary and legislature in formulating and evaluating state plans and policies for transportation programs.

Connecticut

The DOT in Connecticut began operations in 1969. It consists of four advisory commissions, the Transportation Authority, the Aeronautics Commission,

either in legislative intent or in actuality, the Division of Transportation Safety, with its reorganizational complexity be addressed and resolved. The question of "if" and "when" a Division of Transportation Regulation should be included in subsequent department development should be resolved. Resolution may include deference to further investigation including the results of the current Commerce Commission Subcommittee of the Standing Committees on Commerce.

- It is recommended that a thorough survey of candidates for the position of Secretary of Transportation be initiated.

- It is recommended that legislation forming an Iowa State Department of Transportation be drafted for submission early in the second session of the 64th General Assembly.

- It is recommended that a public information program be designed to facilitate efficient accurate response to public inquiries as to issues associated with the formation of an Iowa Department of Transportation.

the Steamship Terminals Commission, and all the Harbor Boards and Commissions and six Bureaus, Administration, Planning and Research, Aeronautics, Highways, Rail and Motor Carriers, and Waterways.

Revenues are obtained from fuel taxes, registration fees, use charges, bonds, and the state general fund. Each modal bureau is basically funded in the same manner it was before the advent of the DOT.

Delaware

The legislature established a DOT in 1968 and amended the act to include highways in 1970. The current title is Department of Highways and Transportation. The Council on Highways advises the Governor, Secretary, and the Director of the Division of Highways on highway matters. It also has approval authority on the six year highway plans and corridor routes.

The department consists of four divisions, Administration, Planning, Research and Evaluation, Highways, and Transportation. The Division of Transportation handles mass transportation and aeronautics. Each division continues to be financed through the state general fund.

Florida

The Florida DOT was started in 1967 and was strengthened in 1969 during the reorganization of the executive branch. The Secretary reports directly to the Governor. The department consists of four divisions, Administration, Transportation Planning, Road Operations, and Mass Transit.

The Division of Mass Transit is financed by general revenue funds. The other divisions are financed through gasoline taxes, revenue bonds, toll collection, and investment interests.

Hawaii

The Hawaii DOT was established in 1959 as part of organizing the executive

branch of state government. A Commission on Transportation serves an advisory function to the Secretary. The department consists of four divisions, Director and Staff Offices, Airports Division, Harbors Division, and Highway Division. The Division of Director and Staff Offices performs the administrative and inter-modal planning duties of the department.

The department is financed by fuel taxes, use charges, rental fees, federal aids, general obligation and revenue bonds and general fund appropriations. The divisions are essentially independently financed from mode related sources.

Maryland

The DOT in Maryland went into effect in July of 1971. The Secretary is appointed by the Governor but must relate to three groups. The Board of Review recommends on department operations and handles appeals to certain decisions of the Secretary. The Maryland Transportation Authority assumes the duties of the former State Roads Commission and Maryland Port Authority concerning revenue bonds and use charges. The Maryland Transportation Commission advises the Secretary on transportation policy formation and program execution.

The department consists of five administrations: Aviation, Port, Public Transit, Motor Vehicles, and Highways. The financing of the Maryland DOT is unique. All funds accruing to previously independent departments now part of the DOT are combined in a Transportation trust fund. With the exception of 35 percent of the gasoline tax and motor vehicle revenue, which is earmarked one-half for Baltimore and one-half for the counties, all money is available for general use in the trust fund.

Massachusetts

The Massachusetts DOT was authorized in 1969 but officially came into existence in 1971. It, as California, has responsibilities other than

transportation. All state construction is also the Secretary's responsibility. The DOT consists of four divisions, Aeronautics, Highways, Mass Transit, and Ports. However, the Massachusetts Port Authority, the Metropolitan Transportation Authority, and the Metropolitan Boston Transit Authority retain considerable independent policy making capability.

New Jersey

New Jersey established a DOT in 1966. The New Jersey Turnpike Authority, the Expressway Authority, and the Highway Authority perform for the DOT the same functions they performed for the prior Highway Department. The department consists of five divisions: Administration, Planning, Highways, Public Transportation and Aeronautics. The DOT is financed through general fund appropriations. Fuel taxes, and the like, are placed into the general fund.

New York

The New York DOT was created in 1967. New York does not use a transportation commission. The department consists of divisions organized along functional lines rather than modal lines. These divisions, labeled offices, are Operations, Management and Finance, Manpower and Employee Relations, General Council, Public Affairs, and Planning and Development.

The DOT is financed through general fund appropriations and bonding. Motor fuel taxes and other fees are placed into the general fund. The New York DOT absorbed Transportation Regulatory Affairs from the Public Service Commission this year.

Oregon

The Oregon DOT was established in 1969. The department consists of six divisions, the Office of the Secretary, Aeronautics, Highways, Mass Transit, Motor Vehicles, and Ports. With the exception of Motor Vehicles and Secretary's

Office, each division has a commission. With the exception of the Secretary's Office each division retains its authority and financing status that it had before the establishment of the DOT. Each division retains its own planning function and submits its own budget to the Governor.

Pennsylvania

The Pennsylvania DOT was established in 1970. The Secretary is chairman of the State Transportation Commission which concerns itself with all transportation matters. The department consists of five divisions: Administration, Planning, Highways, Safety, and local and area transportation. Dedicated funds support highways and aviation (under local and area transportation) and the general fund and bonding supports the remaining divisions.

Rhode Island

The Rhode Island DOT was initiated in 1970. The State Traffic Commission and the Rhode Island Public Transit Authority remain independent of the DOT. The six divisions of the department are Administration, Planning, Public Works, Airports, Motor Vehicles, and Maintenance.

Wisconsin

The Wisconsin DOT was begun in 1967. The State Highway Commission, Motor Vehicle Department and Governor's Council on Traffic Law Enforcement were placed into the department but retain most of their powers, duties, and functions apart from the Secretary. The Aeronautics Commission was completely incorporated into the DOT.

The five divisions of the department are: Business Management, Planning, Aeronautics, Highways, and Motor Vehicles. The divisions of Highways, Aeronautics and Motor Vehicles are financed by dedicated revenues.

Maine and Illinois

Maine and Illinois have very recently passed legislation establishing Departments of Transportation. They have not completed the implementation process.

MATRIX OF CHARACTERISTICS

	California	Connecticut	Delaware	Florida	Hawaii	Maryland	Massachusetts	New Jersey	New York	Oregon	Pennsylvania	Rhode Island	Wisconsin
Aeronautics	x	x	x	x	x	x	x	x	x	x	x	x	x
Highways	x	x	x	x	x	x	x	x	x	x	x	x	x
Highway Patrol	x												x
Mass Transit		x	x	x		x	x	x	x	x			x
Motor Vehicles	x					x				x	x	x	x
Railroads	x						x	x		x	x		
Safety											x	x	
Ports and Waterways		x			x	x	x		x	x	x		
Commissions	x		x			x	x		x	x	x		x
Advisory Councils		x			x								
Integrated Planning		x		x	x		x	x		x	x		x
Dedicated Fund Financing	x	x		x	x		x			x	x		x

Information contained herein is based in part on A Quest for Integrated and Balanced Transportation Systems in State Government, Richard G. RuBino and A Status Report of State Departments of Transportation, Highway Users Federation for Safety and Mobility.

APPENDIX B
BIBLIOGRAPHY

- Albrecht, William P., Thomas F. Pogue, and Jerald R. Barnard. Iowa State Economic Development Policy Study. Iowa City: Institute of Urban and Regional Research, 1971.
- Alexander, Ben. "A Systems Approach to Surface Transportation." Prepared for Hearings before the Senate Commerce Committee, February, 1970, Washington, D.C.
- Balkus, Kazmas. "Theoretical Foundations for Studying State-Wide Transportation and Other Functional Systems." Prepared for presentation at 50th annual meeting Highway Research Board, January, 1971.
- Baxter, McDonald and Company. Transportation in Iowa; Reports on Four Special Studies. Vol. II. Berkeley: Baxter, McDonald and Company, 1968.
- Baxter, McDonald and Company. Transportation in Iowa; A Review of Key Policy Issues. Vol. I. Berkeley: Baxter, McDonald and Company, 1968.
- Burkhardt, Jon E. and Others. The Transportation Needs of the Rural Poor. Santa Monica: Resource Management Corporation, 1969.
- Carstens, R. L. and Ring, S. L. Organization and Coordination of the Highway Planning Function in Iowa. Ames: Engineering Research Institute, 1971.
- Committee for Economic Development. Developing Metropolitan Transportation Policies: A Guide for Local Leadership. New York: Committee for Economic Development, 1965.
- Connecticut Department of Transportation. Connecticut Master Transportation Plan-1971. Hartford: State of Connecticut, 1971.
- Connecticut Department of Transportation. Connecticut Master Transportation Plan-1971; A Summary. Hartford: State of Connecticut, 1971.
- Diamant, E. S. and Zimmerman, R. J. Alternatives in Transportation System Planning. Washington: TRIN Systems, n.d.
- Engelen, Rodney E. "Recommendations for a National Transportation Policy." Presented at AIP Sixth Annual Conference, January, 1971.
- Ernst and Ernst. Budgeting for State Highway Departments; National Cooperative Highway Research Program Part I. Washington: Ernst and Ernst, 1968.
- Governor's Committee for Transportation. Transportation and Pennsylvania's Future. Harrisburg: State of Pennsylvania, 1969.
- Governor's Committee on Transportation. Design for a Pennsylvania Department of Transportation. Harrisburg: Commonwealth of Pennsylvania, 1967.

- Governor's Task Force on Transportation. Maryland's Transportation Opportunity. Washington: Systems Design Concept, Inc., 1970.
- Governor's Task Force on Transportation. Report of the Governor's Task Force on Transportation. Sacramento: State of California, 1968.
- Haist, Douglas F. "The Wisconsin Experience." Edited Version of extemporaneous remarks given at Conference on "The State's Role in Transportation," September, 1970. Tallahassee, Florida.
- Hankerd, Marian T., (Compiler), Federal Aid for Urban Transportation. Washington: Automotive Safety Foundation, 1969.
- Hart, Thomas J. "Progress and Problems with a State Department of Transportation." Paper presented at the American Association of State Highway Officials meeting, October 30, 1969.
- Highway Research Record Number 326; Development of Wisconsin's Integrated Operation System, 5 Reports. Washington: Highway Research Board, 1969.
- Highway Research Record Number 264; Statewide Transportation Planning, 5 Reports. Washington: Highway Research Board, 1969.
- Highway Users Federation for Safety and Mobility. A Status Report of State Departments of Transportation. Washington: Highway Users Federation for Safety and Mobility, 1970.
- Iowa Aeronautics Commission. Twenty-Fifth Annual Report of the Iowa Aeronautics Commission. Des Moines: State of Iowa, 1970.
- Iowa State Highway Commission. Administrative Policies and Procedures. Ames: Iowa State Highway Commission, n.d.
- Iowa State Highway Commission. Management Manual. Ames: Iowa State Highway Commission, 1967.
- Iowa State Highway Commission. 1970 Annual Report/Iowa State Highway Commission. Ames: Iowa State Highway Commission, 1970.
- Kassoff, Harold and Gendell, David S. "An Approach to Multiregional Urban Transportation Policy Planning." Prepared for presentation at the Highway Research Board 50th Annual Meeting, January, 1971, Washington, D.C.
- L'Amoreaux, Ray G. "Overall State Transportation Planning." Paper presented at conference on the Role of the State in Transportation, September, 1970, Tallahassee, Florida.
- MacCrimmon, Kenneth R. Improving the System Design and Evaluation Process by the Use of Trade-Off Information: An Application to Northeast Corridor Transportation Planning. Santa Monica: Rand Corporation, 1969.
- Metropolitan Computer Transportation Authority. Metropolitan Transportation; A Program for Action. New York: Metropolitan Computer Transportation Authority, 1968

- Metropolitan Transportation Authority. 1969 Annual Report; Metropolitan Transportation Authority. New York: Metropolitan Transportation Authority, 1970.
- Mushkin, Selma J. and Harris, Robert. Transportation Outlays of States and Localities; Projections to 1970. Chicago: Council of State Governments, 1965.
- National Governors Conference Committee on Transportation, Commerce and Technology. State Departments of Transportation and Other State Transportation Coordinating Mechanisms. Lexington: The Council of State Governments, 1970.
- New York State Department of Transportation. Policies and Plans for Transportation in New York State. Albany: State of New York, 1968.
- Office for Planning and Programming. Iowa Annual Highway Safety Work Program. Des Moines: State of Iowa, 1971.
- Office for Planning and Programming. 1972 National Transportation Needs Study. Des Moines: State of Iowa, 1971.
- Pennsylvania Department of Transportation. Transportation Policies for Pennsylvania. Harrisburg: Commonwealth of Pennsylvania, 1970.
- President's Advisory Council on Executive Organization. A New Regulatory Framework: Report on Selected Independent Regulatory Agencies. Washington: Government Printing Office, 1971.
- Public Administration Service. Administrative Organization of the Executive Branch State of Iowa: A Survey Report. Part I and II. Chicago: Public Administration Service, 1966.
- Rhode Island Statewide Planning Program. A Department of Transportation for Rhode Island. Providence: State of Rhode Island, 1971.
- RuBino, Richard G. A Quest for Integrated and Balanced Transportation Systems in State Government. Tallahassee: Florida State University Transportation Center, 1971.
- Schimpeler, Charles C. "The Regional/Industrial Complex: An Opportunity and Challenge for Urban Systems Planning." Paper delivered at the 1970 AIP Confer-In, October, 1970, Minneapolis, Minnesota.
- Tanzler, Hans G. Intergovernmental Cooperation in Metropolitan Transportation. Jacksonville: 1970.
- Texas Office of the Governor. Goals for Texas; Phase Two. Austin: State of Texas, n.d.
- Thomas, Edwin N. and Schofer, Joseph L. Strategies for the Evaluation of Alternative Transportation Plans. Washington: Highway Research Board, 1970.

- U.S. Department of Transportation; Federal Aviation Administration. The National Aviation System Plan, 1971-1980. Washington: Government Printing Office, 1970.
- U.S. Department of Transportation. National Transportation Planning Manual (1970-1990). Washington: Government Printing Office, 1970 [revised January, 1971]
- U.S. Department of Transportation. Special Revenue Sharing Program for Transportation. Washington: Government Printing Office, 1971.
- U.S. Department of Transportation. A Statement on National Transportation Policy. Washington: Government Printing Office, 1971.
- Wahbe, Vladimir A. "Changing Concepts in Transportation Planning: Maryland's Response." Presented at AIP Sixth Biennial Conference on Governmental Relations and Planning Policy, January, 1971, Washington, D.C.
- Wisconsin Department of Transportation. Wisconsin Transportation Facts. Madison: State of Wisconsin, 1970.
- Wood, Donald F. "State-Level Transportation Planning Considerations," Traffic Quarterly, April, 1968.