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REPORT BY THE U.S.

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General Accounting Office

Maze Of Food Regulations--Need For A Regulation Indexing System

Fourteen Federal agencies and commissions have issued 1,300 regulations for the transport of food, covering 9,752 sections of the Code of Federal Regulations. These regulations require some 30,000 separate actions to comply with the written law.

The difficulty of dealing with this web of regulations is compounded by the lack of an adequate index to determine which regulations apply in a particular situation.

To provide a means for locating applicable regulations, for analyzing regulatory overlap, and for better understanding the structure of Federal regulations, GAO recommends that the Regulatory Council, in conjunction with the General Services Administrations Office of the Federal Register, foster development of an indexing system. This system should permit easy identification of regulations pertaining to a specific subject, regulatory objective, and economic activity, and permit analysis of regulations to assess whether the sum of regulations in any specific area functions efficiently.



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UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

COMMUNITY AND ECONOMIC
DEVELOPMENT DIVISION

B-187797

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DLG-03807

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DLG-03808

This report summarizes our work relating to the scope of Federal food transportation-related regulation, the agencies responsible, and the parties affected. The report shows that improving the regulatory system will require development of an indexing system to improve accessibility and management of the maze of regulations. We are recommending that the Regulatory Council, in conjunction with the General Services Administration's Office of the Federal Register, foster the development of a computer-based indexing system that permits easy identification of regulations pertaining to a specific subject, regulatory objective, and economic activity, and permits analysis of regulations to assess whether the sum of regulations in any specific area is functioning efficiently.

We have compiled a computerized data base of the subject regulations and will make it available to you. If you wish to use this data base, please contact William E. Gahr on 275-5525.

As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to the House Committee on Government Operations and the Senate Committee on Governmental Affairs not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

B-187797

Copies of this report are being sent to the Chairmen, Senate Committee on Governmental Affairs, House Committee on Government Operations, and House and Senate Committees on Appropriations.

A handwritten signature in cursive script that reads "Henry Eschwege".

Henry Eschwege
Director

GENERAL ACCOUNTING OFFICE
REPORT TO THE CHAIRMAN,
REGULATORY COUNCIL; THE
ADMINISTRATOR OF GENERAL
SERVICES; AND THE DIRECTOR,
OFFICE OF MANAGEMENT AND
BUDGET

MAZE OF FOOD REGULATIONS--
NEED FOR A REGULATION
INDEXING SYSTEM

D I G E S T

GAO believes the full potential for improvement in the food regulatory system is not being realized because the Code of Federal Regulations is not organized in a readily accessible manner. An aggregate regulations index does not exist which would facilitate identification, coordination, and review of regulations from the standpoint of the parties affected and the total impact of the many different regulations. A regulations index should be designed to improve locating appropriate regulations in the Code of Federal Regulations. It should also be constructed to fit into Federal legal data base search and retrieval systems to improve management and analysis of regulations that overlap or compliment each other.

GAO recommends the Regulatory Council, in conjunction with the General Services Administration's Office of the Federal Register, foster development of a computer-based indexing system that permits easy identification of regulations pertaining to a specific subject, regulatory objective, and economic activity, and permits analysis of regulations to assess whether the sum of regulations in any specific area is functioning efficiently.

This report presents the relationships among the majority of Federal regulations which affect transportation in the food industry. GAO estimates that nearly 30,000 rules have been established by the 14 Federal agencies and commissions which cover the diverse activities of farmers, traders, railroads, watercarriers, manufacturers, wholesalers, retailers, and others involved in transporting food products.

CED-80-44

Following are some insights GAO uncovered from the general regulatory maze:

- 1,300 regulations cover some 9,752 sections of the Code of Federal Regulations and contain about 30,000 requirements which must be followed by those who are transporting food.
- Regulation of food transportation is spread over 14 Federal agencies, 9 of which are primarily concerned with the regulation and promotion of particular transport modes and 5 of which have responsibilities in the areas of food and worker safety, public health, and environmental protection.
- Regulation of food transportation is largely indirect. Only 128 of the 1,330 regulations are directed to food transportation as a specific entity.
- Enforcement of the regulations is largely based on complaints and unscheduled inspections, which assumes that those being regulated are aware of all the regulations.
- Independent and common carriers are the parties most frequently affected, yet farmers, wholesalers, retailers, manufacturers, and processors are also guided by many of these regulations.

GAO obtained oral comments from the Office of Management and Budget, the General Services Administration, and the Regulatory Council. The Office of the Federal Register was in general agreement with GAO's conclusions and recommendations and felt that the report would be valuable in performing its mission. In response to GAO's discussion of the thesaurus of the Code of Federal Regulations, the Office of the Federal Register commented that the thesaurus was as detailed as practical for its intended use.

Officials at the General Services Administration and the Office of Management and Budget expressed general agreement with the report and had no specific comments.

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- I Code of Federal Regulation titles used to
obtain food transport-related regulations
and dates of revision

ABBREVIATIONS

CAB	Civil Aeronautics Board
CCH	Commerce Clearing House
CFR	Code of Federal Regulations
CPI	consumer price index
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FDA	Food and Drug Administration
FHA	Federal Highway Administration
FILS	Federal Information Locator System
FMC	Federal Maritime Commission
FRA	Federal Railroad Administration
GAO	General Accounting Office
HEW	Health, Education, and Welfare
ICC	Interstate Commerce Commission
JURIS	Justice Retrieval and Inquiry System
MTB	Materials Transportation Bureau
OMB	Office of Management and Budget
OSHA	Occupational Safety and Health Adminis- tration
PHS	Public Health Service
USDA	United States Department of Agriculture

CHAPTER 1
INTRODUCTION

Interest in the impact of Federal regulation has emerged over the past several years in the Congress, the executive branch, and the private sector. The concerns of economists and others over the burdensome aspects of regulation have become well known. The principal concern expressed is the misallocation of resources, which results in higher costs of production and higher prices. The recent increase in inflation has increased concern over regulation's potential for raising prices.

To assist decisionmakers in understanding the impact of regulation, we have made an inventory of the regulations relating to one type of economic activity--the interstate transport of food.

Regulation of transportation within the food system was selected for examination because of the importance and interest in food prices; because it provides a good picture of the extent of indirect as well as direct impact of Federal regulation; and because it is not so large as to be impractical to complete in a reasonable amount of time. This was a pilot effort which tested the usefulness of defining, identifying, formating, and cross-indexing Federal regulation.

The food system is dependent, in part, on the efficiency of transportation. Most of the food we consume is transported to the store from beyond our local geographic area. In 1977 transportation costs for domestic food products in the United States totaled \$10.4 billion, or 8 percent of the total cost of \$129 billion for all food marketing activities. This is double the 1970* transportation cost of \$5.2 billion, which was 7 percent of the total cost for all food marketing activities. ^{1/} Any unnecessary transport costs contribute to increasing food costs and overall inflation. Food prices have increased over 70 percent during the last 7 years. In the 12 months ending July 1978, the food segment of the Consumer Price Index (CPI) increased 10.5 percent; a more rapid increase than any of the other major CPI segments.

^{1/}Marketing bill figures do not separate and identify all transportation costs, such as local hauling of food products.

Critics have complained that some inflation is directly related to the voluminous number of regulations. We found over 1,300 regulations covering such areas as the rates charged, the routes allowed, the sanitary requirements of the transport vehicles, the safety of the workers, and many other factors.

THE GROWTH OF REGULATION

Interstate regulation of the transportation of food and other commodities has existed since 1889 when the Interstate Commerce Commission was founded. However, until the 1900s the burden of regulation was limited to the railroads. During the early part of the 1900s, regulatory authority was extended to food safety.

In the last few decades new agencies have been created to regulate much broader areas, such as protection of the environment and worker safety. Recent additions to the regulatory ranks include the Environmental Protection Agency (EPA) (1970) and the Occupational Safety and Health Administration (1970). In most cases, as new problems have developed over the years, new regulatory programs and new agencies have been created--with little or no attention to coordinating existing programs and agencies with the new activities. This process of incremental growth has produced a wide range of organizations to deal with specific problems, and critics charge its piecemeal approach has resulted in an uncoordinated, fragmented tangle of regulation.

Recognition of this problem is not new. Solutions to the fragmented Federal role in transportation have been offered by several study commissions. One, the first Hoover Commission's task force on transportation (1947), recommended that the Interstate Commerce Commission (ICC) and the regulation of the airlines and merchant shipping be consolidated because of the lack of coordination between these commissions and departments. Another, the Doyle report issued in 1961, commented:

"The existence of separate agencies has led to jurisdictional disputes; * * * and to action by one regulatory agency without regard to the effect on modes of transport subject to regulation by another agency."

In 1962 President Kennedy proposed a transportation policy designed to free regulated common carriers from outmoded Federal regulation that put them at a disadvantage in competing with unregulated carriers. He also proposed

that no mode of transportation should be placed at a competitive disadvantage because of Federal subsidies to its competitors. The Congress, however, took no action on President Kennedy's recommended changes in regulation. And, more recently, the 1971 report of the President's Advisory Council on Executive Organization again criticized the lack of coordination that has allowed decisions to be made without consideration of the impacts on other modes of transportation. This, the 1971 report said, has

"impeded healthy economic competition and distorted resource allocation sometimes in favor of less efficient modes."

The Congress focused on airline regulation in 1978 and, for the first time, decreased regulation of air carriers. Public Laws 95-163 and 95-84 encourage the development of an air transport system which relies on competitive market forces to determine the quality, variety, and price of air carrier services. During 1978 the President issued Executive Order 12044 entitled Improving Government Regulations. The executive order requires that regulations be set forth clearly and simply and that they not impose an unnecessary burden. The President has also established the Regulatory Council, charged with reducing the inflationary effects of regulation and improving coordination among Federal regulatory organizations. These actions will lighten the burden of regulation; however, they may deal with only certain aspects of the regulatory system.

The dialog over regulation is hampered by the lack of specific information on regulation. Most studies have only broadly estimated regulatory impact or agency overlap. Analysis done by the academic community and the regulatory agencies thus far has been limited and piecemeal in nature and has failed to develop a common set of definitions and a framework suitable for dialog.

The compilation of this inventory of Federal regulation of food transportation was a pilot effort to test the usefulness of an inventory. The inventory shows a fairly massive, largely indirect, Federal involvement with about 1,300 citations containing nearly 30,000 discrete rules to be followed. The impact of each of those rules varies from minimal to quite significant. The inventory is contained in a GAO computerized data base.

LIMITATIONS AND SCOPE OF REVIEW

- The only regulations included in the inventory are those contained in the Code of Federal Regulations (CFR) with the titles and dates as shown in appendix I.
- Requirements specified in law but not included in the CFR are not included.
- Agency decisions, if not included in the CFR, are not included.
- Regulations not specific to food or transportation may have been omitted where their application in food transportation was not identified.
- The descriptions of the regulations are, of necessity, short.
- CFR sections have been grouped into single citations, and this is usually indicated by the span of sections shown on the inventory.
- Exemptions from particular regulations are not shown.
- Requirements of the Federal Trade Commission, the Saint Lawrence Seaway Commission and the Consumer Product Safety Commission as well as those of the Equal Employment Opportunity programs are not included, although they may have an impact.

In conducting our review, we contacted officials in 14 Federal agencies and 1 department in Washington, D.C.; Maryland; and California. Agency officials identified those parts of the CFR for which they are responsible and which were likely to contain food transport-related regulations, and later they reviewed the resulting inventory of regulations. The organizations contacted are listed below.

Civil Aeronautics Board
Coast Guard, Department of Transportation
Corps of Engineers, Department of Defense
Environmental Protection Agency
Federal Aviation Administration
Food and Drug Administration, Department of Health,
Education, and Welfare
Federal Highway Administration, Department of
Transportation
Federal Maritime Commission

Federal Railroad Administration
Interstate Commerce Commission
Materials Transportation Board
Occupational Safety and Health Administration
Public Health Service, Department of Health,
Education, and Welfare
Department of Agriculture
Regulatory Council
Federal Register

We also searched library systems and examined specified sections of the CFR to identify regulations impacting on the transportation of food. This search was limited to codified regulations of publication dates specified in appendix I. (See p. 35.)

CHAPTER 2

THE STATUS OF FEDERAL REGULATION

OF FOOD TRANSPORTATION

We began this examination of Federal regulations related to food transportation prior to the creation of the Regulatory Council. As a result of developing an inventory of food transport regulations, we found that it was extremely difficult to identify specific regulations with the Code of Federal Regulations. Only a few index references were directly related to food transportation, and finding specific regulatory requirements was very difficult. This experience with food transport regulations reflects the problem of identifying regulations within the CFR in general, leading to our recommendation for development of a system which permits identifying regulations.

The inventory data presented in this chapter shows that:

- Some 9,752 sections of the CFR include about 30,000 requirements which relate to transportation of food.
- Regulation of food transportation is spread over 14 Federal agencies, 9 of which are primarily concerned with the regulation and promotion of particular transport modes and 5 of which have responsibilities in the areas of food and worker safety, public health, and environmental protection. (See tables 1 and 2, pp. 13 and 14.)
- Regulation of food transportation is largely indirect. Only 134 of the 1,330 regulations specify product safety as an objective. Only 22 contain food handling requirements.
- Enforcement is largely associated with complaints and unscheduled inspections.
- The common and independent carriers are the parties most frequently controlled; however, farmers, wholesalers/retailers, and manufacturers/processors are each involved with some frequency.

THE AGENCIES INVOLVED IN FOOD TRANSPORTATION REGULATION

Of the 14 agencies whose regulations provide the basis

for this report, 9 are concerned primarily with transportation regulation and promotion. They share responsibilities related to passengers, ensuring fair competition; preventing abuse of monopoly power; and developing an efficient, accessible transport system. Two other agencies have been assigned responsibility for food safety, and the remaining three function in areas of public health, worker safety, and environmental protection.

Air carrier regulation

Two agencies--the Civil Aeronautics Board (CAB) and the Federal Aviation Administration (FAA)--are involved primarily with varying aspects of the airline industry. CAB is an independent regulatory commission with broad responsibilities for the promotion and economic regulation of the civil air transport industry within the United States and between the United States and foreign countries. The Board grants licenses to provide interstate and international air transport services, issues permits to foreign air carriers authorizing them to engage in air transportation between the United States and foreign countries, and approves proposed cargo rates and passenger fares. U.S. carriers must obtain Board approval for development of new passenger or freight services; discontinuance of existing services; or for proposed agreements, financial reorganizations, and mergers involving air carriers. Public Law 95-504 removes all CAB regulations by 1985 when CAB will cease to exist. Public Law 95-163 deregulates all cargo air freight service.

FAA, part of the Department of Transportation, administers several Federal programs intended to promote airline safety and air commerce development. In carrying out its activities, FAA issues and enforces rules, regulations, and minimum standards relating to the manufacture, operation, and maintenance of aircraft as well as the rating and certification (including medical) of airmen and airports serving air carriers certified by CAB.

Water carrier regulation

Shipping regulation is the province of two agencies. 1/ The Federal Maritime Commission (FMC) is an independent agency with the responsibility for the economic regulation of the international waterborne and domestic offshore

1/Jurisdiction over domestic water carriers operating along the U.S. Coast, intercoastally through the Panama Canal, or on inland waters belongs to the ICC.

commerce of the United States. Foreign and U.S. flag carriers engaged in U.S. foreign trade are required to file tariff with the Commission. In domestic offshore trade, FMC has authority to set minimum or maximum rates or suspend rates and regulates competition between carriers. The Commission issues licenses to engage in ocean freight forwarding activities, and approves agreements filed by common carriers including conference agreements and cooperative working agreements between common carriers, terminal operators, freight forwarders, and other persons subject to the shipping laws.

The U.S. Coast Guard, a component of the Department of Transportation, is charged with administering and enforcing various safety standards for the design, construction, and maintenance of U.S. commercial vessels. Also included are enforcement of safety standards on foreign vessels, subject to U.S. jurisdiction and administration, and enforcement of vessel personnel manning and crew qualification standards.

Surface transportation

Interstate surface transportation is the field of the Interstate Commerce Commission (ICC). Carriers under the Commission's jurisdiction include railroads; trucking companies; bus lines; freight forwarders; water carriers operating coastwide, intercoastally, and on inland waterways; transportation brokers; and express agencies, any of which are engaged in interstate commerce or in foreign commerce to the extent that it takes place within the United States. ^{1/} The regulatory law of the Commission varies with the type of transportation; however, it generally involves certification of carriers seeking to provide transportation for the public, rates, adequacy of service, purchases, and mergers.

The Federal Highway Administration (FHA), another Department of Transportation agency, is responsible for administering a wide range of Federal programs concerned with highway construction and safety. It administers Federal safety standards for operating and equipping

^{1/}Motor carriers excluded are noninterstate, agricultural, and privately operated trucking; water carriers excluded are private shippers carrying proprietary cargo, carriage of liquid bulk cargo, and bulk carriage of three or fewer commodities.

commercial motor carriers, and it exercises regulatory jurisdiction over the safety performance of all commercial carriers engaged in interstate commerce and over programs in noise abatement in motor carrier operations.

The authority for comprehensive safety regulation of railroads lies with the Federal Railroad Administration (FRA) of the Department of Transportation. FRA prescribes safety standards for all areas of rail operation including locomotives, signals, safety appliances, brakes, hours of service, and transportation of dangerous cargo.

Intermodal transportation

The Materials Transportation Bureau (MTB) enforces intermodal hazardous materials safety regulations and coordinates the Department of Transportation's administration of the hazardous materials safety program, assuring uniformity in the hazardous materials regulations of the Department's operating administrations including those for rail, highways, and waterways.

Navigation improvement projects

The Corps of Engineers directs the Army's Works Program, the Nation's major water resource development activity. The Corps constructs, operates, and maintains navigation improvement projects in U.S. harbors and inland waterways. It issues regulations for the use of U.S. navigable waters.

Food safety

The U.S. Department of Agriculture (USDA) has been assigned food safety and food marketing responsibilities and a variety of other food transportation-related programs. Its Agricultural Marketing Service is charged with obtaining fair and reasonable rates and essential service necessary for efficient transportation of agricultural commodities and farm supplies. It administers several regulatory programs designed collectively to protect producers, handlers, and consumers of agricultural commodities from financial loss or personal injury resulting from careless, deceptive, or fraudulent marketing practices. The Animal and Plant Health Inspection Service administers Federal laws and regulations pertaining to animal and plant health and quarantine, humane treatment of animals in transit, and eradication of pests and diseases. The Federal Grain Inspection Service establishes official U.S. standards

for grain and administers a nationwide system of official inspection. The Service also regulates the weighing of all grain going out of any export facility in the United States. The Food Safety and Quality Service certifies the grade, quality, and wholesomeness of meats and poultry, eggs and dairy products, and fresh and processed fruits and vegetables moving in interstate commerce.

The Food and Drug Administration (FDA) directs its activities toward protecting the public from unsafe and impure food, drugs, and cosmetics. It develops standards on the composition, quality, nutrition, and safety of foods and food additives and fillers, and issues regulations designed to prevent the manufacture and shipment of adulterated foods.

Public and worker safety

The Public Health Service (PHS) is charged by law to promote public health. In this role, and through the Center for Disease Control, it directs and enforces U.S. foreign quarantine regulations and activities.

The Occupational Health and Safety Administration (OSHA) has been given the duty of assuring every worker under its authority with a workplace free of recognized health and safety hazards. In carrying out its mission, OSHA sets and enforces standards for occupational safety and health, including protective equipment and controls.

The environment

The Environmental Protection Agency develops and administers Federal standards for environmental quality. Its mission is to control and abate pollution in the areas of air, water, solid waste, noise, radiation, and toxic substances. EPA develops performance standards for aircraft air pollution emissions and, jointly with FAA, is responsible for developing noise control regulations for aviation. EPA also sets standards for motor carrier noise and air emissions.

THE INVENTORY DATA BASE

Some 1,330 regulations issued by the agencies discussed in the preceding section form the data base of the present inventory of regulations and are composed of one or more sections of the Code of Federal Regulations. The material in the CFR is arranged by title-broad areas subject to Federal regulation, such as transportation; by chapter-

issuing agency, such as ICC; by part-specific regulatory areas, such as bills of lading; and finally by section. Some 9,752 separate sections were identified as impacting directly or indirectly on food transportation. These are grouped by subject areas within their respective parts. There are 1,330 of these section groups, each of which is treated as a regulation for the purposes of data analysis here.

The 1,330 regulations cited do not represent the number of discrete rules; rather each contain a varying number of rules. Since individual rules are what industry must act upon, an estimate was made of the actual number of rules. Each discrete rule was counted in a random sample of 50 CFR sections from the inventory. A total of 146 rules was identified, an average of 2.9 per section for a projected total of almost 30,000--the total number of rules that industry is subject to when transporting food.

For each of the 1,330 regulations in the inventory, a briefly worded description of its content and the name of its issuing agency were entered into the inventory data base along with coded information about the content. Thus, for each regulation, a determination was made as to the following items:

- Regulatory objective--worker safety, rate setting, etc.
- Regulatory category--specifying recordkeeping, reporting, posting, containing a design specification, etc.
- Transport mode affected--air, truck, etc.
- Party controlled or affected--farmer, common carrier, etc.

Information on methods of enforcement was supplied by the agencies involved. Concurrent with this, the agencies reviewed for reasonableness the information already entered for the above-listed items.

The frequency distribution tables utilized in the subsequent discussion summarize the detailed information coded in the inventory for each regulation. Since each regulation may contain more than one objective or enforcement method, or more than one entry for any of the other above items, the total entries in each table exceed the actual number of regulations coded.

It should be noted that the data is only a measure of the frequency with which regulations have particular

characteristics or affect particular modes or parties. As the inventory is currently designed, all regulations, regardless of the complexity of their individual requirements, receive equal weight. Thus, the tabulated data is not a true measure of the compliance burden imposed on affected parties.

THE REGULATIONS

Agencies vary widely as to the number of regulations inventoried for each, as can be seen in table 1. (See p. 13.) ICC administers the largest number, 595 or 45 percent of the total, followed by CAB with 290, or 22 percent. The remaining agencies administer up to 50 or so each, with the exception of USDA with 115. 2/

Table 1 also shows the number of sections associated with the inventoried regulations. This detail by section number alters somewhat the ranking of agencies in terms of quantity of regulatory items. The Coast Guard is responsible for the largest share--35 percent--while ICC takes second place with 25 percent. Each of the remaining agencies, including CAB, is responsible for between 1 and 9 percent of the section total.

Regulatory objectives

A distribution of regulations by regulatory objective and agency is shown in table 2. (See p. 14.) In the 1,330 inventoried regulations, the objectives of monitoring and controlling carrier rates, service, and schedules predominate. Together, they account for 53 percent of the total number of objectives coded.

Rates, service, and scheduling are by and large the concern of those agencies with regulation of the various transport modes--CAB, ICC, FMC, and FAA. However, USDA does specify service as an objective with some frequency.

All but two agencies--FRA and OSHA--have multiple objectives expressed in some portion of their regulations.

Ten different agencies cite worker safety as an objective. The entries in the "other" category reflect EPA's environmental protection mandate, ICC's concerns with carrier accounting rules and statistical reporting, and USDA's responsibility for prevention of the spread of plant and animal disease.

2/See CAB, p. 7.

TABLE 1

DISTRIBUTION OF REGULATIONS AND SECTIONS BY AGENCY

Agency	Regulations		Sections	
	Number	Percent	Number	Percent
CAB	290	22	293	3
CGRD	27	2	3,431	36
COE	1	-	158	2
EPA	36	3	145	1
FAA	30	2	449	5
FDA	36	3	24	-
FHA	46	3	301	3
FMC	31	2	117	1
FRA	35	3	647	7
ICC	595	45	2,462	26
MTB	1	-	394	4
OSHA	52	4	145	2
PHS	22	2	72	1
USDA	115	9	898	9
TOTAL	<u>1,317</u>	<u>100</u>	<u>9,536</u>	<u>100</u>

Percentages may not add due to rounding.

TABLE 2
DISTRIBUTION OF REGULATIONS BY REGULATORY OBJECTIVE AND AGENCY

<u>Agency</u>	<u>Number of regulations</u>	<u>Number of regulations with objectives concerning:</u>							
		<u>Consumer economic protection</u>	<u>Worker safety</u>	<u>Product safety</u>	<u>Rates</u>	<u>Service</u>	<u>Schedule</u>	<u>Revenue</u>	<u>Other</u>
CAB	290	-	1	-	199	187	86	-	17
CGRD	27	-	26	-	1	4	-	-	1
COE	1	-	1	-	1	1	1	-	-
EPA	36	-	-	3	-	-	-	-	33
FAA	30	1	25	-	3	28	6	-	-
FDA	36	5	-	30	-	-	-	5	1
FHA	46	-	1	-	-	1	-	1	43
FMC	31	23	1	-	29	25	6	5	12
FRA	35	-	35	-	-	-	-	-	-
ICC	595	125	4	1	228	132	76	7	295
MTB	1	-	1	-	-	-	-	-	1
OSHA	52	-	52	-	-	-	-	-	-
PHS	22	-	22	17	-	-	-	-	-
USDA	<u>115</u>	<u>1</u>	<u>-</u>	<u>83</u>	<u>1</u>	<u>26</u>	<u>-</u>	<u>3</u>	<u>44</u>
TOTAL	<u>1,317</u>	<u>155</u>	<u>169</u>	<u>134</u>	<u>462</u>	<u>404</u>	<u>175</u>	<u>21</u>	<u>447</u>

Regulatory category

The classification of regulations by regulatory category provides the means to differentiate between those regulations which incorporate requirements for positive action by the affected party or parties; those which prohibit some action; and those which simply contain a definition of terms, delineate the scope of other regulations, or provide enforcement authority, thereby being essentially neutral in terms of activity impact.

In the frequency distribution in table 3 (see p. 16), about one-third of the inventoried regulations contains some type of definition or statement of terms, and all 14 agencies produce at least some regulations with this characteristic, as might be expected. About one-fifth of the regulations prohibit some act. Again, all agencies are involved. Only about 5 percent provide authority for enforcement of the regulations themselves. Since the authorizing statutes for most agencies grant agency enforcement authority, regulations usually need not specify such information.

Within the group of regulations requiring some type of positive action 1/ by the party affected, food handling requirements are rare and occur only about 1 percent of the time. Design requirements--for hazardous material storage, loading equipment, etc.--are specified somewhat more frequently; about 2 percent of the time. Requirements for recordkeeping, reporting, and posting, primarily the sphere of those agencies committed to economic regulation, occur in almost one-half of the regulations and make up almost 35 percent of the requirements for positive action. Over one-half of the regulations issued by FAA, FMC, ICC, and USDA contain such requirements as do a substantial proportion of those of CAB. The two regulations of the Corps of Engineers and MTB each contain recordkeeping provisions as well.

The "general requirements" category--the largest--is made up of a wide range of provisions and includes requirements dealing with such things as working surfaces (OSHA), issuance of securities by carriers (ICC), and contents of tariff publications for air carriers (CAB). The content of this category is so varied that no general description can be given.

1/Excludes regulations setting forth definitions or prohibited acts.

TABLE 3

DISTRIBUTION OF REGULATIONS BY REGULATORY CATEGORY

<u>Agency</u>	<u>Number of regulations</u>	<u>Definition statement</u>	<u>Prohibited act</u>	<u>Inspection seizure enforcement</u>	<u>Food handling</u>	<u>Equipment design</u>	<u>Record-keeping reporting posting</u>	<u>General requirement</u>	<u>Special a/ Requirements</u>
CAB	290	90	91	1	-	-	112	200	4
OGRD	27	12	3	3	-	4	9	26	-
COE	1	1	1	-	-	-	1	1	-
EPA	36	15	11	-	-	1	-	25	1
FAA	30	17	23	6	-	-	20	30	-
FDA	36	5	6	1	1	1	5	27	1
FHA	46	11	3	6	-	-	5	25	-
FMC	31	9	1	2	-	-	18	6	4
FRA	35	2	1	1	-	-	5	34	-
ICC	595	143	39	10	2	10	390	424	58
MTS	1	1	1	1	-	-	1	1	-
OSEA	52	6	1	-	2	18	-	50	-
PHS	22	12	6	-	-	-	3	17	-
USDA	<u>115</u>	<u>75</u>	<u>60</u>	<u>38</u>	<u>17</u>	<u>1</u>	<u>60</u>	<u>92</u>	<u>3</u>
TOTAL	<u>1,317</u>	<u>398</u>	<u>247</u>	<u>69</u>	<u>22</u>	<u>35</u>	<u>629</u>	<u>958</u>	<u>71</u>

a/Special requirements are those which are unusual and are not readily assignable to another category. An example would be a requirement that the regulating body must perform an action.

Mode of transport

Regulations may apply to one or more particular transport modes or may be classified as multimodal. This latter classification is employed when two or more modes are specifically conjoined in the regulation, or when modes are not specified and more than one could be involved. Table 4 (see p. 18) summarizes the inventory transport mode data by agency.

The regulatory impact appears reasonably equally spread over the four specific and multimodal categories. As would be expected, the regulations issued by the agencies with specific transportation regulation mandates are most frequently associated with the mode(s) regulated by the agency. Thus, CAB and FAA regulations apply almost entirely to airplanes; those of the Coast Guard, Corps of Engineers, and FMC to vessels; FRA's to rail; FHA's to trucks; and ICC's to surface modes in general. What is interesting is that the "nontransport" agencies--EPA, FDA, OSHA, PHS, and USDA--do impact significantly on each of the various modes. The combined regulations of these five agencies account for 10 percent of the regulations affecting rail and truck transport, 15 percent of those affecting airplanes and vessels, and 51 percent of those applying to the multimodal category.

Enforcement method

Most agencies are legally empowered to employ a number of different enforcement methods and have considerable leeway as to which one or ones are actually used. The data in table 5 (see p. 19) is based on information received from the agencies themselves on the methods each can utilize in its enforcement efforts. Thus, the data indicates what can be done, not necessarily what is done in the enforcement process.

When all agency responses are combined, the complaint procedure and unscheduled inspections are the two methods most frequently reported, 30 percent and 28 percent of the time, respectively. Most likely there is some cause and effect relationship intended here; receipt of a complaint would frequently be followed by an inspection. The apparent popularity of these two methods indicates that enforcement in the food transportation field may in effect be largely reactive in nature.

While reliance on the honor system is rarely cited except by FMC, MTB, and ICC, it would seem that, given the

TABLE 4

DISTRIBUTION OF REGULATIONS BY MODE AND AGENCY

Agency	Number or regu- lations	Number of regulations applying to:					Multimodal
		Airplane	Vessel	Truck	Rail	Other	
CAB	290	282	-	8	8	-	8
CGRD	27	-	27	-	-	-	-
COE	1	-	1	-	-	-	-
EPA	36	13	8	6	6	1	2
FAA	30	30	-	-	-	-	-
FDA	36	-	-	-	-	-	36
FHA	46	-	-	46	-	-	-
FMC	31	-	31	-	-	-	-
FRA	35	-	-	-	35	-	-
ICC	595	25	272	301	337	27	163
MTB	1	-	-	-	-	-	1
OSHA	52	16	50	22	22	4	-
PHS	22	17	15	3	3	4	2
USDA	<u>115</u>	<u>-</u>	<u>3</u>	<u>12</u>	<u>12</u>	<u>1</u>	<u>110</u>
TOTAL	<u>1,317</u>	<u>383</u>	<u>407</u>	<u>398</u>	<u>423</u>	<u>37</u>	<u>322</u>

TABLE 5

DISTRIBUTION OF REGULATIONS BY ENFORCEMENT METHOD AND AGENCY

Agency	Number of regulations	Number of Regulations Enforceable by:							
		Audit	Scheduled inspection	Honor system	Unscheduled inspection	Complaints	Desk examination	Approval/licensing	Other
CAB	290	-	-	-	290	290	-	-	-
CGRD	27	-	16	-	1	1	-	16	-
COE	1	-	-	-	-	-	-	-	1
EPA	36	-	-	-	-	-	-	-	36
FAA	30	-	30	0	30	30	-	30	-
FDA	36	-	-	-	33	36	-	-	-
FHA	46	46	-	-	46	46	-	46	-
FMC	31	26	4	12	9	29	3	19	11
FRA	35	27	27	-	35	35	-	35	-
ICC	595	230	62	1	283	396	293	1	31
MIB	1	1	-	1	1	1	1	1	-
OSHA	52	-	-	-	51	51	-	-	1
PHS	22	-	-	-	22	22	-	-	-
USDA	<u>115</u>	<u>42</u>	<u>90</u>	<u>-</u>	<u>90</u>	<u>65</u>	<u>-</u>	<u>110</u>	<u>-</u>
TOTAL	<u>1,317</u>	<u>372</u>	<u>229</u>	<u>14</u>	<u>891</u>	<u>1,002</u>	<u>297</u>	<u>258</u>	<u>80</u>

Frequent occurrence of the complaint and unscheduled inspection citations, employment of the honor system is more widespread than the data indicates. Such might be the case with PHS, OSHA, FDA, and CAB where no routine or scheduled checks for compliance are indicated.

Party controlled or affected

As might be expected from the dominance of the transport regulating agencies in the number of regulations inventoried, the common and independent carriers are impacted by a very significant share of the regulations; common carriers by 96 percent, independents by 75 percent. Still, as can be seen in table 6 (see p. 21), nontransport parties--farmers, wholesalers/retailers, and manufacturers and processors--are impacted with equal frequency. Some ICC regulations touch the same groups.

The "other" category shows a significant number of entries, 214, or 16 percent, of all regulations. This category includes freight forwarders, terminal operators, and transportation brokers. Also, regulations are frequently directed to "owners" or "consignees" who are coded as "other" but who may, depending on the particular situation involved, be one or more of the identified parties.

Regulatory objective versus enforcement method

For every regulatory objective except product safety, complaints are the most common method of initiating enforcement, as can be seen in table 7. (See p. 22.) Unscheduled inspections are a close second, except for the product safety objective where they rank first.

In regulations designed to promote worker and product safety, both scheduled inspections and licensing are cited with some frequency as are desk examinations in the enforcement of consumer protection and rate setting regulations. The audit approach is significant only for the "other" category of objectives and reflects primarily ICC's ability to employ the audit in connection with its role in developing accounting and statistical reporting procedures for surface carriers.

Regulatory objective versus mode

The data in table 8 (see p. 24) reflects some already noted points--the heavy emphasis on economic regulation in the form of large numbers of regulations concerned with rate setting, service, and scheduling, and the reasonably equal

TABLE 6

DISTRIBUTION OF REGULATIONS BY PARTY CONTROLLED OR AFFECTED AND AGENCY

Agency	Number of regulations	Farmer	Number of Regulations Controlling of Affecting:				
			Common carrier	Independent carrier	Wholesaler/retailer	Manufacturer processor/	Other
CAB	290	-	289	289	-	-	15
CGRD	27	-	27	27	-	1	21
COE	1	-	1	1	-	-	-
EPA	36	2	36	36	2	-	-
FAA	30	-	30	30	-	-	3
FDA	36	6	23	9	20	26	15
FHA	46	46	46	46	46	46	-
FMC	31	-	29	1	-	-	6
FRA	35	-	35	-	-	-	-
ICC	595	29	579	386	28	24	78
MTS	1	1	1	1	1	1	1
OSHA	52	2	50	51	21	21	19
PHS	22	-	22	22	-	-	3
USDA	<u>115</u>	<u>65</u>	<u>96</u>	<u>94</u>	<u>33</u>	<u>69</u>	<u>49</u>
TOTAL	<u>1,317</u>	<u>151</u>	<u>1,264</u>	<u>993</u>	<u>151</u>	<u>188</u>	<u>210</u>

TABLE 7

DISTRIBUTION OF REGULATIONS BY REGULATORY OBJECTIVE AND ENFORCEMENT METHOD

Enforcement method	Number of Regulations with Objectives Concerning:							
	Consumer economic protection	Worker safety	Product safety	Rates	Service	Schedule	Revenue	Other
Audit	44	31	42	81	63	22	7	205
Scheduled inspection	6	68	83	33	61	9	4	74
Honor system	9	1	-	21	13	1	2	11
Unscheduled inspection	134	140	130	327	289	122	7	219
Complaints	150	141	92	409	350	148	19	217
Desk examination	70	3	1	170	77	51	7	131
Approval/licensing	17	79	83	30	66	8	4	99
Other	8	3	3	7	32	10	-	52

*Number of regulations enforceable by each method. Taken from Table 5.

spread of regulation in terms of mode affected. What has not shown up previously is that worker safety provisions are normally couched in terms of specific transport modes; the multimodal classification rarely applies here. On the other hand, product safety regulations are most frequently multimodal in character.

Regulatory category versus enforcement method

When regulatory category data are cross-tabulated with enforcement method data, as is done in table 9 (See p. 25), several things can be seen. First, each specific requirement category is associated with at least seven different enforcement methods, except where regulations specify food handling rules. Secondly, since the unscheduled inspection and complaint procedures are those most frequently cited on an agency basis (see table 5), it is no surprise that there is a similar occurrence with respect to nearly all regulatory categories. Only in food handling are other methods --scheduled inspections and licensing--more important than the complaint procedure. Thus, a more active agency posture may be in existence in food handling than in other areas.

Regulatory category versus mode

The distribution of regulations by regulatory and transport mode is shown in table 10. (See p. 26.) The heavy emphasis on regulations requiring some positive action as opposed to those prohibiting something or definitional in character appears as noted earlier.

Food handling requirements are biased toward the multimodal class, while those concerned with equipment design apply primarily to specific modes. Regulations specifying recordkeeping and reporting requirements and all other "action" requirements are spread quite evenly over the four specific modes and the multimodal class.

The airlines are the most frequent subject of those regulations prohibiting some act, followed by the multimodal group. This order reflects the fact that CAB and USDA are the two agencies issuing regulations of this type.

TABLE 8

DISTRIBUTION OF REGULATIONS BY REGULATORY OBJECTIVE AND MODE

<u>Mode of transport</u>	<u>Number of regulations</u>	<u>Number of regulations with objectives concerning:</u>							
		<u>Consumer economic protection</u>	<u>Worker safety</u>	<u>Product safety</u>	<u>Rates</u>	<u>Services</u>	<u>Schedule</u>	<u>Revenue</u>	<u>Other</u>
Airplane	384	9	59	12	196	216	86	0	35
Vessel	407	106	95	14	165	82	21	6	151
Truck	399	84	29	15	129	86	38	4	198
Rail	424	55	64	16	154	73	53	4	187
Other	37	14	8	5	21	0	0	0	14
Multimodal	322	60	4	114	108	72	25	10	124

Table 9

DISTRIBUTION OF REGULATIONS BY REGULATORY CATEGORY AND ENFORCEMENT METHOD

Enforcement methods	Number of Regulations in Category of:						
	Inspection seizure enforcement*	Prohibited acts	Food handling	Equipment design	Recordkeeping/ reporting posting	General requirements	Special Requirements a/
Audit	19	33	10	7	193	230	29
Scheduled inspection	40	92	18	5	121	177	15
Honor system	3	2	0	0	28	7	7
Unscheduled inspection	59	208	22	26	403	669	26
Complaints	33	186	14	29	452	713	46
Desk examinations	8	22	0	3	242	231	41
Approval/ licensing	54	89	17	1	116	197	7
Other	0	14	0	1	17	47	5

*See table 7.

a/Special requirements are those which are unusual and are not readily assignable to another category. An example would be a requirement that the regulating body must perform an action.

TABLE 10

DISTRIBUTION OF REGULATIONS BY REGULATION CATEGORY AND MODE

<u>Transport mode</u>	<u>Number of regulations</u>	<u>Definition/ statement</u>	<u>Prohibited act</u>	<u>Inspection/ seizure enforcement</u>	<u>Food handling</u>	<u>Equipment design</u>	<u>Recordkeeping/ reporting posting</u>	<u>General requirements</u>	<u>Special^a/ requirements</u>
Airplane	384	123	122	8	2	14	146	280	6
Vessel	421	93	34	14	3	26	238	319	18
Truck	399	94	31	15	8	24	205	273	25
Rail	424	98	28	9	8	24	234	330	33
Other	37	5	2	0	0	5	22	32	0
Multimodal	322	114	80	43	16	2	190	264	14

a/ Special requirements are those which are unusual and are not readily assignable to another category. An example would be a requirement that the regulating body must perform an action.

CHAPTER 3

IMPROVEMENTS NEEDED TO ACCESS THE CODE OF FEDERAL REGULATIONS

In starting this survey of regulations relating to one economic activity within the food system, we intended to explore whether a regulation inventory could be assembled and could be useful in analyzing regulatory overlap. We did develop an inventory of food transport regulations and it was useful in identifying and retrieving regulations. Moreover, it improved our ability to analyze regulatory impact by comparing regulation topic with parties affected and also with regulatory objectives.

We found no system available which would readily facilitate identification of regulations or allow cross impact analysis of the regulatory web. Our pilot effort demonstrated that without an adequate system for accessing regulations, the ability to determine the overall impact of Federal regulations on food transportation is nearly impossible. Because the indexing system for the CFR is inadequate, thorough research and comprehensive analysis of Federal regulations is not being performed. Partly due to the lack of ready access and partly because of the sheer volume of regulations today, only regulatory lawyers are familiar with the details of specific agency regulations. Moreover, the information tools necessary to conduct cross agency analysis do not exist.

PROBLEMS WITH ACCESS

During the course of our study of food transport-related regulations, we found that individual agencies are aware of only the more public regulatory acts of other agencies. We also found that comprehensive analysis of the overall impact of regulations on an industry is constrained by lack of an accessing and indexing system. As a consequence, many of the attempts to study overall impact of regulations require a time-consuming initial effort devoted solely to identification of applicable regulations, a process which is not only time consuming but also expensive.

Comprehensive studies or analysis of the overall impact of regulations on an industry have recently been attempted. A problem mentioned in these studies is the difficulty encountered in identifying applicable regulations in the CFR.

A recent study of Federal regulation illustrates the massive efforts being expended merely to identify applicable regulations for subsequent analysis of their impact and secondly why old regulations are seldom examined. A study of the economic and legal aspects of Federal, State, and local regulation of the production and sale of ground beef, sponsored by the National Science Foundation, sought to provide a basis for estimating the cost and benefits of specific types of regulation across industries.

The methodology in the ground beef study shows the considerable effort needed to access regulations. It cites well over 200 written and oral interviews seeking identifying data. The study also admits the serious fault of this procedure is to overlook the regulations which have been long established and are therefore not questioned. The process as described in the study text includes the following steps:

- Trade journals and technical journals were searched.
- Mail questionnaires were sent to the officials responsible for meat inspection and retail food inspection activities in each of the 50 States, to municipal health officers in 170 cities, to representatives of consumer organizations and labor organizations, and to State and local associations of retail distributors.
- Telephone interviews, like the mail questionnaires, asked the respondents to identify those regulations in their jurisdiction.

The result of the ground beef study is both a methodology and a limited compendium of regulations. Several important limits of the methodology were revealed.

- Regulations which have been in force for long periods of time become accepted even though their total impact upon the industry may be greater than the more controversial (current) regulations even though they may not have a favorable benefit-cost ratio. Thus, most groups surveyed take the existing Federal meat inspection system as given (and thus, not a controversial topic), and express little interest in proposed changes in inspection.
- Most regulation is in a state of constant change and the identification process must be repeated or it rapidly becomes obsolete.

We believe the Federal Government has the responsibility to make the regulatory system comprehensible. Yet, the existence of studies such as this indicates that this responsibility is not being met.

PRESENT METHODS OF ACCESSING THE CODE OF FEDERAL REGULATIONS

The Code of Federal Regulations is compiled by the Office of the Federal Register within the General Services Administration and printed four times a year. The general index to the CFR, which is printed each July, is primarily organized by agency with some broad subject headings included. The 1977 index is 192 pages long. The 50 volumes of the CFR contained 85,000 pages in 1977.

The index has limited utility. It contains only a small number of food and transportation citations. The 1977 index had about 60 subject headings for transportation and about 95 for food. The subject headings do not lead a user directly to food transport regulations.

Only a few references were directly related to food transportation, such as "Marketing Perishable Agricultural Commodities," which did not fit under the two headings listed above. General regulations like OSHA's workplace safety regulation, although indirectly applicable, are in most cases not indexed to the industries they affect.

As an example of a regulation search, we will assume that a government official wants to determine who is responsible for worker safety when grain is shipped by rail.

A cursory review of the GAO data base finds that there are 60 regulations concerning this problem. The Materials Transportation Bureau has 1 applicable regulation, the Interstate Commerce Commission has 3, the Federal Railroad Administration has 35, the Occupational Health and Safety Administration has 21 applicable regulations, and Public Health Service has 3. Using a data base such as this manually, the answer can be found in 20 minutes. This data base also provides the user with the appropriate CFR citation, the enforcement method used, and the sanctions that can be applied for each regulation.

The user can also try the current CFR index. If he looks up grains, he finds no entries that appear to deal with worker safety. If he looks up worker safety, there are no entries. Under railroads there are several entries that could be relevant, but the user is told to see also

FRA and ICC. Looking up FRA, the user, sees the heading "Workmen, protection of, 49 Part 21B." When the user looks up this citation, he finds that under the definition of "workmen" train or yard crews are not included. Looking up ICC does not provide any relevant references either.

Since the index has not lead to any relevant citations, the user's only choice is to review the 1,607 pages of OSHA and FRA regulations. Since the index also referred him to ICC, the user must decide whether he wants to review 1,635 pages of ICC regulations.

The CFR index also contains tables of (1) statutory authorities and rules, (2) Presidential documents, and (3) special indexes developed by the agencies. The table of statutory authorities and rules is of limited value because it simply links legal citations and implementing regulations. The table of Presidential documents does not assist in the identification of regulations. Indices developed by three agencies, an effort fostered by the Federal Register as a way to improve access in 1975, are being dropped. These indexes are more detailed but still not of much assistance in identifying regulations. According to officials of the Federal Register, they have not been maintained by the agencies.

A number of other systems provide access to the CFR. An example of the older manual systems is the Commerce Clearing House (CCH) publications, a private enterprise effort. In the area of food transportation, CCH publications cover the regulations of the Interstate Commerce Commission. CCH also covers FDA and OSHA. Other agencies are not covered. These older manual systems often do more than just index the CFR. Many, for instance, serve as interpretative guides of particular agency regulations.

According to several information experts, access to the legal material, including the CFR, is getting worse while automation in other fields is improving access in areas such as science and technology.

An automated system to access regulations, however, now exists and improvements are being recommended. The Justice Retrieval and Inquiry System (JURIS) begun in 1970 by the Department of Justice is a computer system that has the text of many laws and some regulations on file. The computer, when properly requested, will retrieve and print out the text of the law or regulation. Not only are the documents retrieved quickly, and according to

precise specifications, but also they may be viewed in several display formats. Citation lists and keyword-in-context excerpts are available, as well as the full text of documents. This improved access speeds up legal research and improves productivity.

The principal limits of JURIS are (1) the limited data base; for example, only a portion of the CFRs are in the computer store of documents, (2) searching methods permitted by the JURIS system, such as keyword-in-context, do not identify all appropriate citations (at best keywords in context cover approximately 50 percent of all citations), and (3) the system cannot be used for regulation maintenance.

WHAT IMPROVEMENTS IN ACCESS ARE BEING CONSIDERED

Three separate actions are underway to improve access. First, the Office of Management and Budget has studied the Federal legal system and recommends improving JURIS; second, the Federal Register is developing standard subject headings for better access and is seeking agency assistance; and third, the Department of Health, Education, and Welfare (HEW) has contracted for a regulation access system for regulation management. It is too early to tell if any of these efforts will join together and bring about the generally improved access desired to regulations.

In 1978 the Office of Management and Budget studied the Federal legal system. The study concluded that (1) agencies and departments consult each other on legal matters very little because few mechanisms exist with which agencies or departments can keep others informed and (2) Government attorneys now spend much wasted time researching areas also being analyzed by attorneys in other Government agencies because there is no current system to provide notice about pending efforts.

According to the study, communication and computer technology could provide a multitude of support services which would increase the efficiency of the Government's legal operations. These services have been widely accepted by the private bar, but the Federal Government has generally either ignored them or used them only to satisfy the needs of individual agencies.

One specific recommendation was to combine JURIS and other current systems and expand them to include all of the CFR. The proposed system would have the capability of providing a full range of research information as well as

of storing and transmitting large amounts of documentary materials. The shortcoming of the proposal is that it does not go beyond the requirements of lawyers and recognize the broader governmental needs for improved access. As a consequence the proposal may not result in a generalized system with greater utility. The proposal is awaiting Presidential action.

Currently, the Federal Register is also moving toward an improvement to access the CFR. In March of 1977, the Federal Register proposed the development of a list of terms with standardized definitions, known as a thesaurus, to be used by the Office of the Federal Register in indexing the Federal Register, Code of Federal Regulations, and related publications and to invite comments on the suitability of the subject headings to meet the needs of users of these publications. The utility of the thesaurus depends on whether the standardized terms are comprehensive and well selected. According to officials of the Federal Register, the thesaurus will have one subject reference for each part of the CFR.

The thesaurus is intended to support the public information function of Federal Register publications by standardizing the language used to describe Federal regulations. It could also serve to increase the accessibility of a JURIS type system. Using present search techniques like keyword, about 50 percent of the citations which are relevant are identified along with a considerable number of irrelevant citations. Using a thesaurus results in about 70 percent of the relevant cases being identified with little extraneous material. With these characteristics the thesaurus, if it is sufficiently comprehensive, will also be useful to Government agencies in drafting regulations and to the public in researching regulations.

A task force to develop the thesaurus was established October 1, 1978. Several firms have systems for accessing the Code of Federal Regulations. One firm has contracted with the Department of Health, Education, and Welfare to develop an accessing system. Although the contract work is in an early stage, a representative of the company said HEW agencies want a computer system that will enable them to access and revise regulations.

The Office of Management and Budget (OMB) is developing a Federal Information Locator System (FILS) which would contain a data profile for each public-use report, recordkeeping requirement, interagency report, and intra-agency report. This system, if implemented, would contain

data on those Federal regulations that require some type of written report. The system described in this report is different from FILS in that it contains data on all regulations in the CFR, not just those requiring reports.

Use of the GAO inventory

A GAO computerized data base contains the inventory of regulations identified by us. It exists on computer tape as a data base and can be printed. The data base can be searched on the basis of any item of information contained in the printout. The information contained in the inventory has been described on pages 11-26.

The data base can be used for a variety of purposes. For example, a congressional committee with oversight responsibility for a specific act could search the data base to identify all regulations issued under the authority of that act. Descriptive information on the regulation's objective, coverage, method of enforcement, sanctions, and other information would also be provided from the data base. Based on our work, we do not believe this information is otherwise available.

A Federal agency promulgating a regulation on worker safety, for example, could search the data base to identify any other regulations on worker safety. Once identified, the promulgator could review the other regulations in the CFR; judge whether there would be a potential conflict; and, if so, take appropriate action.

In the private sector, a trucking firm interested in hauling food products could quickly identify the Federal regulations with which it would have to comply. Today that firm would have to manually search thousands of pages of the CFR.

CONCLUSIONS

We believe the web of food transportation regulations described in chapter 2 illustrates how complex and interwoven the Federal regulatory system is today. Further examination of the Federal regulatory system is essential if Federal regulatory activities are to be effectively coordinated and their inflationary impact minimized. Access to the Code of Federal Regulations is a necessary first step in revealing the true impact of regulation. Access will be improved if the thesaurus-writing efforts of the Federal Register are broadened and incorporated with the improvements being considered for the JURIS system.

RECOMMENDATIONS

To improve access to the Code of Federal Regulations and facilitate identification, coordination, and review of regulations, we recommend that the Chairman of the Regulatory Council and the Director of the Federal Register develop a computer-based system for accessing the Code of Federal Regulations that would be readily available to the Congress, executive agencies, and the private sector. This system should contain the following capabilities:

--A system which provides for high probability of retrieval in searches.

--A system which can access regulations based on a variety of factors including subject, parties controlled, and regulatory objective.

We obtained oral comments from OMB, General Services Administration (GSA) and the Regulatory Council. The Office of the Federal Register was in general agreement with our conclusions and recommendations, and felt that the report would be valuable in performing its mission. In response to our discussion of the thesaurus of the Code of Federal Regulations, it commented that the thesaurus was as detailed as practical for its intended regular usage. Officials at GSA and OMB expressed general agreement with the report and had no specific comments.

CODE OF FEDERAL REGULATION TITLES USED
TO OBTAIN FOOD TRANSPORT-RELATED
REGULATIONS AND DATES OF REVISION

<u>Title</u>	<u>Description</u>	<u>Parts</u>	<u>Agency</u>	<u>Date of revision</u>
7	Agriculture	1.130-.151	USDA	1-4-77
		46-353	USDA	1-1-77
9	Agriculture	71-381	USDA	1-1-77
14	Aeronautics and space	60-199	FAA	1-1-77
		200-1199	CAB	1-1-77
21	Food and Drugs	1-199		
		600-1299	FDA	4-1-77
29	Labor	1900-1919	OSHA	7-1-76
33	Navigation and Navigable Waters	207	COE	7-1-77
40	Protection of the Environment	60-399	EPA	7-1-77
42	Public Health	1-306	PHS	10-1-76
46	Shipping	200-end	FMC	10-1-76
		1-69		
		90-109		
		110-147A		
		150-199	CGRD	10-1-77
49	Transportation	211-257	FRA	10-1-76
		301-398	FHA	10-1-76
		420-424	CGRD	10-1-76
		1000-1199	ICC	10-1-76
		1200-1299		
		1300-end		
		170-189	MTB	10-1-77

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