LIVESTOCK TRUCKING SERVICES:

Quality, Adequacy, and Shipment Patterns

AGRICULTURAL ECONOMIC REPORT NO. 312
ECONOMIC RESEARCH SERVICE
U.S. DEPARTMENT OF AGRICULTURE

LIVESTOCK TRUCKING SERVICES: QUALITY, ADEQUACY, AND SHIPMENT PATTERNS, by L. A. Hoffman, P. P. Boles, and T. Q. Hutchinson. Economic Research Service, U.S. Department of Agriculture. Agricultural Economic Report No. 312.

ABSTRACT

For-hire truck service experienced by shippers of beef cattle and calves during 1972 was examined. Factors studied include major flow patterns of beef cattle, availability of for-hire truck service, extent of and reasons for shippers entering private carriage, channels through which shippers contact truckers, condition of animals after truck transport (including weight and death loss), and shippers' satisfaction with for-hire truck service.

Keywords: Transportation, livestock, weight loss, death loss, quality of service, seasonality.

Washington, D.C. 20250 October 1975

CONTENTS

SUMMARY

Livestock handlers and feedlot operators were generally satisfied with unregulated cattle trucking services received in 1972. Most cattle and calves arrived in "acceptable," "good," or "excellent" condition. Losses in transit were minimal, and resulted most often from poor animal condition prior to loading or accidental trampling in transit.

Livestock handlers and feedlot operators responding to a questionnaire reported 97 and 99 percent, respectively, of their cattle and calves were transported by truck. Of these cattle and calves, about four-fifths were moved by for-hire carriers.

The reason most often cited for supplying private livestock transportation was the inadequate service of for-hire livestock carriers. However, private carriage did not appear substantial, accounting for slightly less than one-fifth of the cattle and calves trucked.

Shippers reported that they most often learn of and contact truckers through the regularly hired trucker. Truck brokers were their least often reported source of information.

Seasonality of inshipments occurred in each of the five feeding States. Iowa, Nebraska, and Texas experienced heavy movements of cattle during September, October, and November. Colorado reported peak inshipments during May and June and again in October. California had peak movements during October, November, and December.

Nearly 47 percent of all livestock handlers and about 8 percent of all feedlots reported months during 1972 when services of for-hire truckers were especially hard to obtain. Larger shippers, in general, experienced more difficulty in obtaining truck service than did smaller ones. Difficulties were most frequently reported during those months of peak cattle movements, when livestock transportation capacity was apparently in relatively short supply.

Animal weight loss in transit was most frequently caused by the length of time in transit, animal condition prior to loading, and weather condition at time of loading. Excessive shrinkage occurred more with larger shippers than with smaller shippers.

Over nine-tenths of the feedlots in each firm size group and more than four-fifths of the handlers in nearly all size groups reported satisfactory for-hire service. Many shippers made favorable comments about the for-hire truckers used. Compliments most often given were: good attitude of the trucking firm, promptness of service, skillful drivers, and quality equipment furnished.

LIVESTOCK TRUCKING SERVICES:

Quality, Adequacy, and Shipment Patterns

L. A. Hoffman, P. P. Boles, and T. Q. Hutchinson 1/

INTRODUCTION

During the early 1970's, cattlemen, livestock dealers, and livestock truckers became increasingly concerned about the economics of livestock transportation. In 1971, the Economic Research Service (ERS) undertook a study of this topic. The first part resulted in Cost of Operating Trucks for Livestock Transportation, Marketing Research Report No. 982, issued in January 1973. This report on the level, kind, and quality of livestock transportation service is the second part.

Statement of Problem

Both livestock shippers and carriers have reported difficulties in livestock truck transportation. Problems reported by shippers include: trucks were unavailable when needed; drivers did not safeguard cattle during transit; and equipment was in need of repairs. Also, some shippers have alleged discriminatory transportation pricing. Several for-hire livestock carriers, on the other hand, have claimed that inadequate revenues have prevented them from offering dependable service or forced them to terminate business operations.

Some livestock carriers and other participants in livestock marketing have proposed regulating interstate shipments of live animals by truck. Under section 203(b)(6) of part 2 of the Interstate Commerce Act, interstate trucking of livestock is currently exempt from economic regulation by the Interstate Commerce Commission (ICC). Legislation proposing ICC regulation of interstate trucking of livestock was introduced in both houses of the 90th U.S. Congress, Second Session, but failed to be enacted.

1/ Agricultural economists, National Economic Analysis Division, Economic Research Service.

Objectives

The fundamental objectives of ERS' overall study are to determine whether (1) the level, kind, and quality of service provided by motor carriers is adequate and suitable to the needs of the industry; or (2) pricing of transportation services is frequently monopolistic, results in excessive profit levels for motor carriers, or is frequently discriminatory to shippers. Evidence that these conditions are widespread would justify research into the potentials for correcting them through economic regulation.

Specific objectives of this phase were to (1) determine the major flow patterns of beef cattle and test them for seasonality; (2) determine truck rates for beef cattle, test them for significant differences among major flow patterns, and compare them with estimated truck operating costs (rate data were collected in this phase of the study, but analysis has been deferred to a later time); (3) determine the quality of for-hire truck service for beef cattle by examining factors such as availability of service, condition of animals after truck transport, and shippers' level of perceived satisfaction with for-hire truck service; (4) determine the information channels through which beef cattle shippers learn of and contact truckers; (5) examine the extent and reasons for use of private carriage in the beef cattle marketing industry.

SCOPE AND METHODOLOGY

Livestock shippers were sampled to include a significant portion of U.S. beef cattle raised and fed and to offer broad geographic representation. Shippers were sampled from 13 States in the following regions: Southeastern States, Corn Belt, Northern Plains, Southwestern States, Mountain States, and Pacific States (fig. 1). Sample States accounted for about three-fifths of all fed cattle marketed and more than half of all cattle and calves marketed in the United States during 1971.

Shipper Listings

Listings of shippers included livestock handlers (commission firms, order buyers, dealers, and clearinghouses) and beef cattle feedlots. Representative livestock handlers engaged in interstate livestock marketing were obtained from a listing of all livestock handlers registered under the Packers and Stockyards Act in 1971. A feedlot sample was obtained from a listing of beef cattle feedlots maintained by the Statistical Reporting Service (SRS), U.S. Department of Agriculture.

Sample Procedures

A stratified random sample was drawn for both livestock handlers and beef cattle feedlots. ERS designed and drew the livestock handler sample. Livestock handlers were stratified according to annual gross revenue reported for 1971 (table 1).

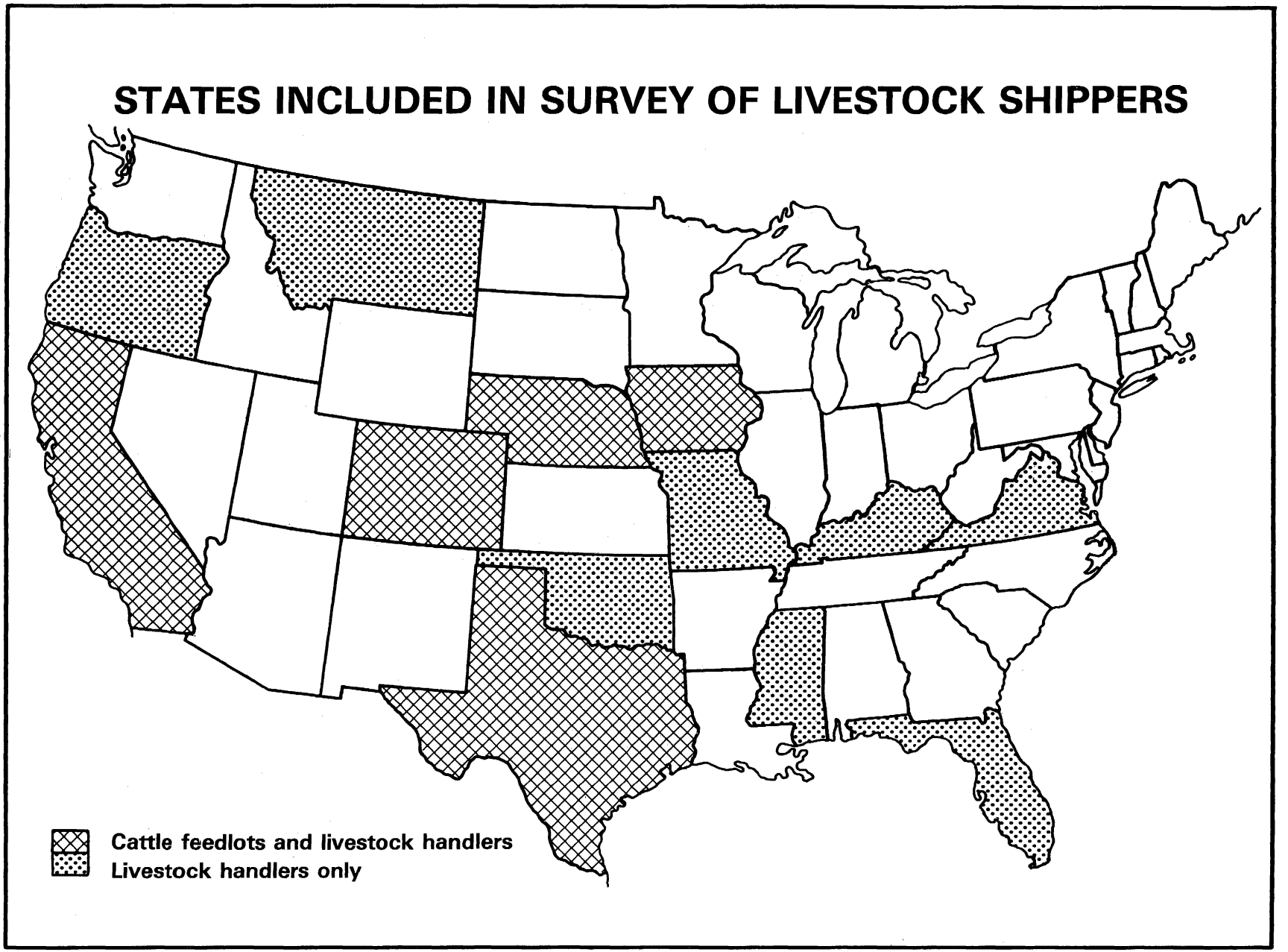
STATES INCLUDED IN SURVEY OF LIVESTOCK SHIPPERS
Cattle feedlots and livestock handlers
Livestock handlers only

Figure 1

Table 1--Livestock handler sample plan for 13 States

Firm size by annual gross revenue, 1971 (million dollars)	Handlers in population	Sample rate	Sample size 1/
	Number	Percent	Number
20.0 or more	57	100	57
10.0-19.9	116	50	63
5.0-9.9	163	20	34
2.0-4.9	442	10	46
1.0-1.9	581	5	34
Under 1.0	2,194	2	38
Total	3,553		272

1/ Based on all 13 States' livestock handlers by each stratum and their sample rate. The sample size for each stratum may be greater or less than the number expected. This difference was due to rounding at the State level. Expansion factors reflected the rounding effects for each State. Therefore, population estimates based on the survey are not biased by the roundings.

The feedlot sample was designed and drawn by SRS. Feedlots were stratified according to one-time capacity rather than annual revenue or throughput (table 2). Texas, Colorado, and California feedlots were sampled at the same rate for for each stratum (table 2). Sample rates for feedlots in Nebraska were similar except for the smallest stratum. Strata sample rates for feedlots in Iowa were somewhat different than in the other feeding States, since Iowa did not have any feedlots in the largest and second largest strata. To attain efficient use of enumerators, a greater proportion of large shippers were sampled than small shippers. There were fewer large shippers, but these shippers accounted for the greatest volume of cattle and calves transported in 1971.

Survey Response

Data on the transportation of cattle and calves during 1972 were obtained from personal interviews with livestock handlers and feedlot operators. (sample questionnaires are in the appendix). Of the 272 livestock handlers contacted, 221 supplied usable questionnaires (table 3). Of those questionnaires not used, 21 were refusals and 30 were "out-of-scope." Handlers who had died, had not handled cattle and calves in 1972, or no longer functioned as livestock handlers were considered out-of-scope.

Of the 605 feedlots contacted, 495 provided usable questionnaires (table 4). Nine of the 110 questionnaires not used were refusals and 101 were out-of-scope. Feedlot operators who had died, had not fed cattle in 1972, or had ceased to operate feedlots were considered out-of-scope.

Data from each shipper's questionnaire were expanded to population estimates. Expansion factors were not adjusted to compensate for refusals or shippers considered out-of-scope. These factors were unadjusted because there

Table 2--Cattle feedlot sample plan for 5 States

Feedlot size by capacity (head)	Feedlots in population	Sample rate 1/	Sample size 2/
	Number	Percent	Number
32,000 or more	46	100	46
16,000-31,999	80	50	41
8,000-15,999	127	24	31
4,000-7,999	214	13	27
1,000-3,999	890	7	66
Under 1,000	53,794	1	394
Total	55,151		605

1/ Sample rate by State by decreasing stratum size.
Texas-Colorado-California: 100.0, 50.0, 20.0, 10.0, 5.0, 2.0
Nebraska: 100.0, 50.0, 20.0, 10.0, 5.0, 0.66
Iowa: 0, 0, 100.0, 50.0, 20.0, 0.66

2/ Based on all 13 States' livestock handlers by each stratum and their sample rate. The sample size for each stratum may be greater or less than the number expected. This difference was due to rounding at the State level. Expansion factors reflected the rounding effects for each State. Therefore, population estimates based on the survey are not biased by the roundings.

Table 3--Survey response for livestock handlers, 1972

Firm size by annual gross revenue, 1971 (million dollars)	Total questionnaires	Usable questionnaires	Questionnaires not used	
			Non-cooperators	Out-of-scope
		Number		
20.0 or more	57	49	4	4
10.0-19.9	63	57	3	3
5.0-9.9	34	28	0	6
2.0-4.9	46	37	6	3
1.0-1.9	34	23	4	7
Under 1.0	38	27	4	7
Total	272	221	21	30

was insufficient information concerning the cause of refusals. It was assumed that out-of-scope shippers existed in the population in the same proportion as found in the sample.

Table 4--Survey response for cattle feedlots, 1972

Feedlot capacity (head)	Total questionnaires	Usable questionnaires	Questionnaires not used	
			Non-cooperators	Out-of-scope
		Number		
32,000 or more	46	45	0	1
16,000-31,999	41	36	3	2
8,000-15,999	31	27	1	3
4,000-7,999	27	23	0	4
1,000-3,999	66	52	4	10
Under 1,000	394	312	1	81
Total	605	495	9	101

SHIPMENT PATTERNS

Shipments to the five feeding States considered in this study were examined to determine major movement corridors and possible seasonal movements within these corridors. If seasonal movements of cattle do occur, one might expect peak demand periods for livestock truck service.

Livestock shipment data were obtained from SRS's State offices in the five feeding States for 1970-72. These and other SRS data were used to estimate livestock flows into these States and seasonality. Inshipment data for the five feeding States were grouped into areas for all States except for inshipments from one feeding State to another. Inshipments are primarily from nine areas, the five feeding States, Canada, and Mexico (fig. 2).

Major Flow Patterns of the Five Feeding States

Inshipments from States or regions included estimates of all cattle (stocker, feeder, and fat) and calves entering the State. Average volumes greater than 100,000 head were considered major inshipments.

Based on average inshipment data for 1970-72, Iowa received most of its cattle and calves from the following areas or States, in order of decreasing magnitude: Northern Great Plains, Corn Belt, Nebraska, Mountain States, Southern Great Plains, and Texas (table 5). About 90 percent of Iowa's incoming cattle and calves originated in these areas.

Nebraska received major shipments of cattle and calves from the following sources, in order of decreasing volume: Southern Great Plains, Northern Great Plains, Mountain States, Corn Belt, Iowa, and Texas. These origins accounted for about 86 percent of all inshipments to Nebraska, based on the 3-year average.

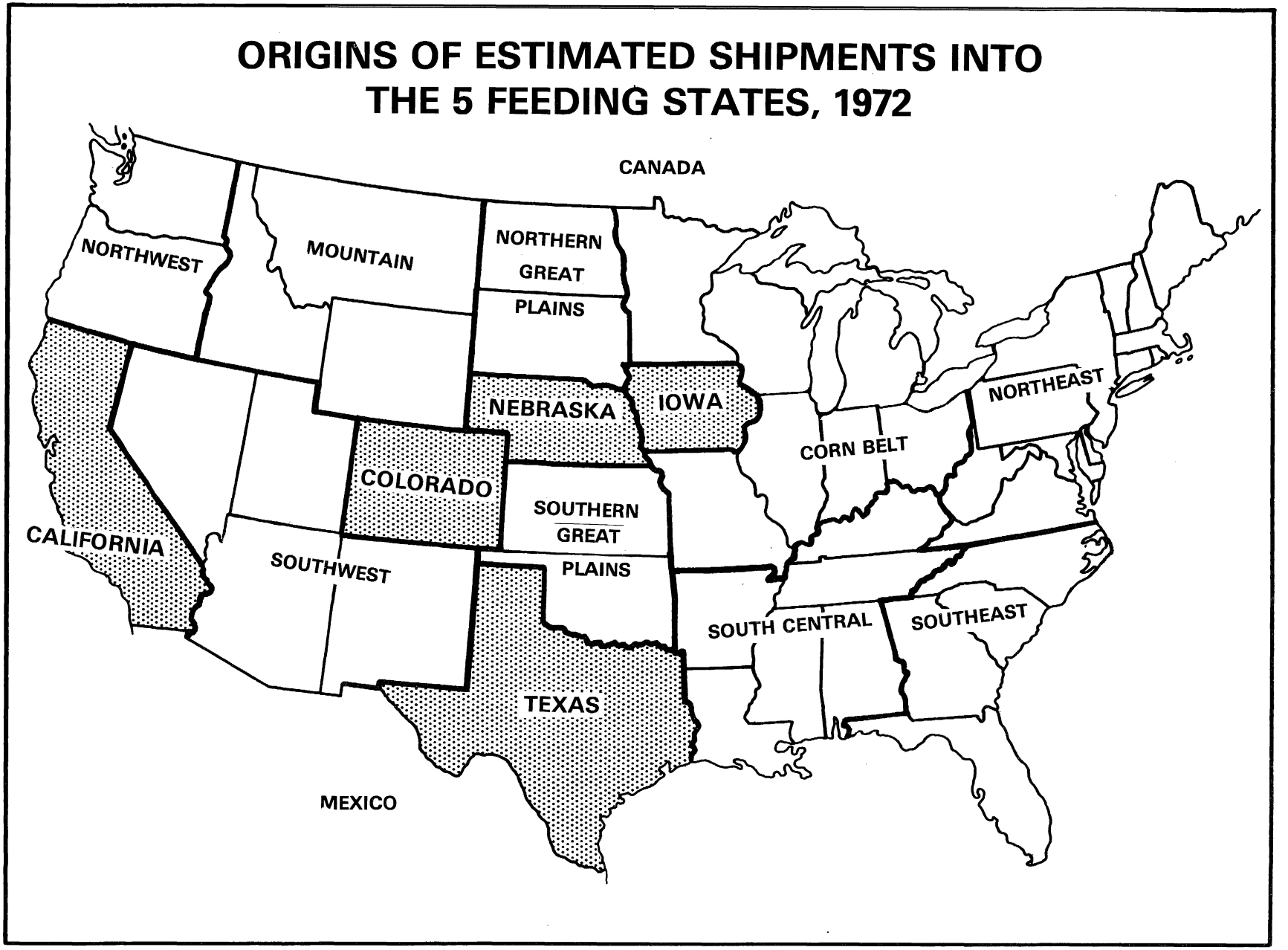
ORIGINS OF ESTIMATED SHIPMENTS INTO THE 5 FEEDING STATES, 1972
CANADA
NORTHWEST
MOUNTAIN
NORTHERN GREAT PLAINS
NEBRASKA
IOWA
NORTHEAST
CORN BELT
COLORADO
SOUTHERN GREAT PLAINS
CALIFORNIA
SOUTHWEST
SOUTH CENTRAL
SOUTHEAST
TEXAS
MEXICO

Figure 2

Table 5--Estimated inshipments of cattle and calves for the 5 feeding States by area of origin, 1970-72 1/

State and year	North-east	South-east	Corn Belt	South Central	Iowa	No. Great Plains	Nebr.	So. Great Plains	Texas	Mt. States	Colo.	South-west	North-west	Calif.	Canada	Mexico	Other States 2/	Total
								1,000 head										
Iowa:																		
1970	1	1	562	73	0	681	560	288	110	332	52	23	14	11	4	0	149	2,861
1971	1	1	612	70	0	826	546	196	99	429	41	24	13	5	8	0	154	3,025
1972	1	1	637	73	0	647	486	243	106	499	34	23	16	6	27	0	123	2,931
Average 1970-72	1	1	603	72	0	718	531	242	105	420	42	23	14	8	13	0	142	2,936
Nebraska:																		
1970	0	1	266	45	153	306	0	424	188	341	101	37	4	8	0	0	90	1,964
1971	0	0	268	58	182	396	0	395	113	400	97	30	8	6	0	0	89	2,041
1972	0	3	319	81	205	472	0	502	190	428	89	27	11	14	0	0	87	2,427
Average 1970-72	0	1	284	61	180	391	0	441	163	390	95	31	8	9	0	0	88	2,144
Colorado:																		
1970	0	0	108	67	0	31	98	460	500	217	0	374	5	95	0	0	76	2,029
1971	0	0	158	57	0	44	172	555	485	426	0	422	18	112	0	0	51	2,499
1972	0	0	167	67	0	79	187	620	619	475	0	310	49	19	0	0	58	2,650
Average 1970-72	0	0	144	64	0	51	152	545	535	373	0	369	24	76	0	0	61	2,393
California:																		
1970	0	0	10	110	0	0	1	31	782	139	24	842	205	0	0	97	33	2,274
1971	0	0	0	140	1	0	1	33	822	162	11	849	218	0	0	96	48	2,379
1972	0	0	8	143	4	0	2	44	810	110	14	828	237	0	0	80	78	2,356
Average 1970-72	0	0	6	131	2	0	2	36	805	137	16	840	220	0	0	91	53	2,336
Texas:																		
1970	0	185	39	508	5	1	2	511	0	7	23	546	0	2	0	0	72	1,898
1971	0	211	74	843	5	8	4	529	0	11	42	604	0	1	0	0	18	2,351
1972	0	329	124	1,129	19	14	21	970	0	44	64	540	0	4	0	0	58	3,315
Average 1970-72	0	242	79	827	10	8	9	670	0	21	43	563	0	2	0	0	49	2,521
Total: 3/																		
1970	1	187	985	803	158	1,018	660	1,714	1,580	1,035	199	1,822	228	116	4	97	419	11,027
1971	1	213	1,111	1,168	188	1,275	723	1,708	1,518	1,428	191	1,929	256	124	8	96	359	12,296
1972	1	333	1,255	1,492	227	1,211	695	2,378	1,725	1,556	201	1,728	312	43	27	80	403	13,669
Average 1970-72	1	244	1,117	1,154	191	1,168	693	1,933	1,608	1,340	197	1,826	265	94	13	91	394	12,330

1/ Estimates include all cattle (stocker, feeder, and fat) and calves.

2/ Cattle inshipment data into each of the 5 feeding States were for shipments from a limited number of States (Colorado--14, California--17, Texas--20, Nebraska--29, and Iowa--33) with the remainder from all other States. State figures were incorporated into a region where applicable.

3/ Numbers may not add to total due to rounding.

Source: Estimates computed from livestock shipment data obtained from the Statistical Reporting Service's State offices in the 5 feeding States and from table 7.

About 88 percent of Colorado's incoming cattle and calves were received from the following origins, in order of decreasing magnitude: Southern Great Plains, Texas, Mountain States, Southwest, Nebraska, and the Corn Belt.

Approximately 91 percent of California's inshipments were received, in order of decreasing volume, from the Southwest, Texas, Northwest, Mountain States, and South Central regions.

Texas received about 91 percent of its inshipments from the South Central, Southern Great Plains, Southwest, and Southeast regions (origins listed by decreasing inshipment volume).

Seasonality of Flows

Seasonality was determined by examining each month's inshipments as a percentage of annual inshipments (table 6). 2/

Average inshipments for Iowa, Nebraska, and Texas during 1970-72 were heaviest in September, October, and November. These States received about 44, 39, and 41 percent, respectively, of their average total inshipments during this period.

Inshipments for Colorado were heaviest during May, June, and October. Approximately 35 percent of the State's average yearly inshipments occurred during these months--24 percent during May and June and the remaining 11 percent during October.

About 45 percent of California's average inshipments occurred during October, November, and December.

Seasonality of Cattle Slaughter

Very little seasonality was found in total cattle slaughter in the five feeding States during 1970-72 (table 7). Slaughter in all five of the feeding States averaged slightly above the overall annual level in June, August, September, and October and slightly below in February. Texas had the most months with highs and lows in slaughter and Nebraska had the fewest.

The small amount of seasonality in slaughter indicates little seasonality in cattle movements from feeders to slaughter plants. This, with the considerable seasonality of inshipments, indicates that most of the seasonality in cattle trucking is the result of heavy feeder cattle movements during certain months.

2/ Iowa and Nebraska monthly inshipment data consisted of all cattle (stocker, feeder, and fat) and calves, while Colorado, California, and Texas data excluded fat cattle. The presence of inshipment seasonality, if any, should not be distorted by the inclusion or exclusion of fat cattle inshipments, since feedlot marketings are relatively consistent throughout the year.

MODE OF TRANSPORT

Shippers were asked whether their beef cattle moved via truck, truck-rail combination, or rail. Survey results showed that almost all beef cattle are transported entirely by truck. Of total cattle and calves purchased or sold by handlers during 1972, 97 percent moved by truck, 2 percent by truck-rail combination, and 1 percent by rail.

Little variation in transportation existed among size groups, except that handlers in the smallest group moved all of their cattle by truck. Cattle shipped via truck-rail combination were reported by handlers in Texas, Oklahoma, Iowa, Nebraska, Colorado, and California. Some handlers in Texas, Iowa, Missouri, Montana, and California reported shipping cattle solely by rail. However, the origins of these shipments were not specified.

Of the beef cattle marketed from feedlots during 1972, nearly 99 percent moved by truck and the remainder by truck-rail combination. The beef cattle moving by truck-rail combination were from several of the larger Texas feedlots, with capacities of at least 16,000 head.

PRIVATE CARRIAGE UTILIZATION

The use of privately operated equipment to transport shippers' cattle did not appear significant. Fewer than one-fifth of the cattle and calves transported for shippers were hauled by private carriers.

Shippers who entered private livestock transportation reported that they did so more because of a lack of adequate for-hire truck service than for cost-related reasons. Less frequently cited reasons for shippers using their own equipment were: more economical; part of the original enterprise and used for other needs as well as hauling cattle and calves; and miscellaneous.

FOR-HIRE CATTLE TRUCK SERVICE

Shipper Information System

Prior to the survey, little information existed concerning how the livestock shipper obtained his for-hire livestock truck service. One hypothesis was that an institutionalized marketing information system, such as truck brokers, existed. Such a system is common in the fresh fruit and vegetable industry, where brokers arrange for a large percentage of all shipments.

In an attempt to identify any such marketing information system, shippers in the survey were first asked whether they arranged for transportation of cattle and calves in for-hire trucks during 1972. Those shippers responding positively--about 79 percent of the handlers and nearly 87 percent of the feedlots--were asked who they contacted to arrange for-hire transportation. They could select one or more of the following sources: A truck broker or dispatcher; a regularly hired trucker; other truckers; or other sources (to be specified).

The information source most often used by both types of shippers was the regularly hired trucker (table 8). Other selections by decreasing order of frequency were: other truckers; other sources such as a maintained list of truckers; and truck brokers or dispatchers. Similar results were found in almost all shipper size groups.

Table 8--Percent of shippers reporting type of information system used to learn of and contact livestock truckers

Type of shipper	Type of information system				Did not arrange for transportation
	Truck broker or dispatcher	Regularly hired truckers	Other truckers	Other sources	
	Percent 1/				
Livestock handler	4	64	21	8	21
Cattle feedlot	1	80	10	2	13

1/ Percentages do not add horizontally to 100 since a shipper could select more than one type of information system.

Availability of Service

Shippers were asked if there were some months during 1972 in which services of for-hire truckers were especially hard to obtain. Of the usable shipper questionnaires, nearly half of all livestock handlers and about 8 percent of all feedlots gave an affirmative answer (tables 9 and 10).

In general, the larger shippers experienced more difficulty hiring truckers than did the smaller shippers. Possibly the smaller livestock handlers had less difficulty because they transported more of their cattle and calves in their own equipment than did the larger handlers.

Regardless of firm size, livestock handlers reported September, October, and November as the most difficult months of the year to obtain for-hire truck services (table 9). However, difficulties varied somewhat by State. In addition to the fall months, Oklahoma handlers reported May as a difficult month, Texas handlers reported April and May, and Colorado handlers reported April, May, and June.

September, October, and November were most often reported by feedlots as months in which services of for-hire truckers were especially hard to obtain (table 10). Similar results were found for each feedlot size group. Difficulties varied slightly by region. In addition to the fall months, Texas feedlots reported May, and Colorado feedlots reported January and February, as months when for-hire truck service was difficult to find.

Table 9--Percent of livestock handlers reporting services of for-hire trucks especially difficult to obtain, by months and size groups, 1972

Firm size by annual gross revenue, 1971 (million dollars)	Handlers reporting difficulties	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Percent 1/							
20.0 or more	69	2	2	8	12	24	10	6	12	47	65	39	8
10.0-19.9	48	0	0	5	7	14	5	2	7	38	47	33	7
5.0-9.9	69	0	0	7	14	17	7	10	17	48	66	34	7
2.0-4.9	70	8	5	11	14	14	8	8	11	38	65	46	16
1.0-1.9	61	13	9	4	9	9	9	4	17	35	61	48	26
Under 1.0	33	4	4	4	7	11	0	0	7	11	30	22	7
All handlers 2/	47	5	4	5	9	12	4	3	11	24	44	32	12

1/ Monthly percentages do not add horizontally to the percentage of handlers reporting difficulties, since a handler could select more than one month.

2/ All data in this table have been expanded to represent the population in table 1.

Table 10--Percent of cattle feedlots reporting services of for-hire trucks especially difficult to obtain, by months and size groups, 1972

Feedlot size by capacity (head)	Handlers reporting difficulties	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						Percent 1/							
32,000 and more	42	2	4	9	16	16	7	7	4	20	29	24	4
16,000-31,999	53	6	3	11	17	19	6	3	6	22	28	33	14
8,000-15,999	61	0	0	0	9	23	14	0	0	37	51	48	19
4,000-7,999	40	0	0	0	0	12	6	6	6	27	28	14	6
1,000-3,999	37	3	3	0	3	0	3	0	0	22	34	25	9
Under 1,000	7	2/	2/	2/	1	2/	0	0	0	1	5	4	2/
All feedlots 3/	8	2/	2/	2/	1	1	2/	2/	2/	2	6	4	1

1/ Monthly percentages do not add horizontally to the percentage of feedlots reporting difficulties, since a feedlot operator could select more than one month.

2/ Less than 0.5 percent.

3/ All data in this table have been expanded to represent the population in table 2.

Months when services of for-hire truckers were most often reported to be difficult to obtain coincided with peak inshipment movements. For example, September, October, and November were most often reported by shippers as difficult months to obtain for-hire truck service (tables 9 and 10). During these months, Iowa, Nebraska, California, and Texas received heavy inshipments (table 6). Colorado, Texas, and Oklahoma shippers reported for-hire truck service also difficult to obtain in April, May, and June. During these months, Colorado received heavy inshipments, primarily from the Southern Great Plains and Texas.

Although some shippers reported difficulties in obtaining service during each month of the year, most difficulties occurred only during the spring and fall peak demand periods. Therefore, it seems reasonable to conclude that demand for for-hire truck service during peak movement periods exceeded the readily available supply of equipment.

Weight Loss of Cattle and Calves Hauled by Truck

Factors Contributing to Weight Loss

Responses of livestock handlers and feedlots reporting factors contributing to cattle and calf weight loss in truck transit were grouped as follows:

(1) Length of time animals are on truck.
(2) Driver and/or equipment problems.
(3) Condition of animal before loading.
(4) Weather conditions and time of loading.
(5) Improper handling before loading, during loading and unloading, and after unloading.
(6) Crowding or overloading truck.
(7) Normal body function and stress.
(8) No answer or didn't know.
(9) Other.

In general, the larger handlers and feedlots cited length of time animals are on the truck as the most frequent reason for animal weight loss in transit. (tables 11 and 12). In contrast, the smaller handlers and feedlots cited factors 3 through 6 most frequently. Average length of the most common haul was greater for larger firms than smaller firms in most cases (tables 13 and 14). Assuming that the length of time animals were on trucks was primarily a function of distance and highway speed limits, cattle shipped by larger shippers would tend to be on board for more hours than cattle shipped by smaller shippers. Larger shippers could, therefore, be expected to cite length of time animals were on the truck more frequently as the principal source of weight loss, while smaller shippers would cite other reasons such as animal condition prior to loading or crowding.

Some shippers have claimed that carelessness of for-hire truckers contributed to excessive weight loss in transit. It is clear from these results, however, that improper handling by for-hire truckers was not considered the major cause of weight loss in truck transit and that, in most cases, weight loss was caused by factors beyond the control of the for-hire truckers.

Table 11--Percent of livestock handlers reporting factors contributing to cattle and calf weight loss in truck transit, by firm size, 1972

Factors	Firm size by annual gross revenue, 1971 (million dollars)						All handlers
	20.0 or more	19.9-10.0	9.9-5.0	4.9-2.0	1.9-1.0	Less than 1.0	
	Percent 1/						
Length of time animals are on truck	59	36	55	51	35	44	44
Driver and/or equipment problems	33	26	31	24	0	15	15
Condition of animal before loading	31	29	35	27	39	30	31
Weather conditions and time of loading	25	33	31	30	39	33	34
Improper handling before loading, during loading and unloading, and after unloading	16	7	10	14	17	26	21
Crowding and overloading truck	18	21	21	27	17	48	36
Normal body function and stress	10	19	21	3	9	11	10
No answer or didn't know	10	21	3	14	13	0	6
Other	18	16	17	11	13	30	22

1/ Percents do not add vertically to 100 percent because a livestock handler could report more than one factor.

Table 12--Percent of feedlot operators reporting factors contributing to cattle and calf weight loss in truck transit, by firm size, 1972

Factors	Firm size (1,000 head)						All feedlots
	32.0 or more	31.9-16.0	15.9-8.0	7.9-4.0	3.9-1.0	Under 1.0	
	Percent 1/						
Length of time animals are on truck	73	75	57	51	38	18	19
Driver and/or equipment problems	29	22	10	42	32	23	23
Condition of animal before loading	16	14	19	52	32	16	16
Weather conditions and time of loading	33	42	29	60	19	25	25
Improper handling before loading, during loading and unloading, and after loading	7	17	19	25	34	26	26
Crowding and overloading truck	13	22	14	13	30	25	25
Normal body function and stress	11	14	23	1	12	14	14
No answer or didn't know	0	8	5	1	4	15	15
Other	13	17	24	7	19	18	18

1/ Percents do not add vertically to 100 percent because a livestock handler could report more than one factor.

Incidence of Above-Normal Weight Loss

Cattle and calves lose weight during transit. By assuming that highway speed limits nearly determine the time required for specific trips, the incidence of greater-than-normal shrink during transit may indicate inattentive drivers, poorly maintained equipment, or other factors.

Shippers were asked what percentage of their most common hauls experienced above-normal shrinkage. As shown in table 15, most livestock handlers did not experience excessive shrinkage on their most common hauls. Forty-four percent reported experiencing only normal shrink. Of those handlers reporting excessive shrinkage, the larger handlers reported a greater incidence of shrink than did the smaller ones. Of those handlers reporting above-normal shrink, most stated that from 1 to 10 percent of the trips comprising their most common haul experienced greater than normal shrink.

Of those feedlots answering the question, most reported no above-normal shrinkage on their most common hauls (tables 16 and 17). Of those feedlots reporting greater than normal shrinkage, most mentioned that from 1 to 10 percent of their most common hauls were affected. Overall, slaughter cattle had less excessive shrinkage than did feeder cattle.

Table 13--Percent of livestock handlers reporting range of most common haul, by firm size, 1972 1/

Range (miles)	Firm size by annual gross revenue, 1971 (million dollars)						All handlers
	20.0 or more	10.0-19.9	5.0-9.9	2.0-4.9	1.0-1.9	Less than 1.0	
	Percent						
25 and under	6	8	5	0	6	17	11
26-50	9	24	10	0	13	17	13
51-100	6	8	9	16	19	22	19
101-299	31	18	24	20	12	28	23
300-500	11	11	33	28	31	5	16
501-1,000	23	18	10	12	13	11	12
1,001 and over ..	14	13	9	24	6	0	6
All handlers	100	100	100	100	100	100	100

1/ A most common haul was indicated by 154 handlers in the question concerning rates (see app. I).

Watering of Cattle and Calves During Transit

Livestock handlers reported 26 hours as the average length of time required before cattle and calves were watered during transit (table 18). This average varied very little among size groups. The amount of time required by handlers ranged from 12 to 36 hours.

Table 14--Percent of feedlot operators reporting range of most common haul, by firm size, 1972 1/

Range (miles)	Firm size (1,000 head)						All feedlots
	32.0 or more	16.0-31.9	8.0-15.9	4.0-7.9	1.0-3.9	Under 1.0	
	Percent						
25 and under	9	5	22	25	28	22	22
26-50	5	5	11	18	11	27	27
51-100	9	19	0	21	32	27	27
101-299	45	29	29	25	17	20	20
300-500	9	9	0	3	12	2	2
501-1,000	5	19	29	0	0	2	2
1,001 and over	18	14	9	8	0	0	2/
All feedlots	100	100	100	100	100	100	100

1/ A most common haul was reported by 343 feeders in the question concerning rates (see app. II).

2/ Less than one-tenth of 1 percent.

Table 15--Percent of handlers reporting above-normal shrinkage for their most common hauls, by firm size, 1972

Firm size by annual gross revenue, 1971 (million dollars)	Percent of hauls				Did not know or no answer	Total
	0	1-10	11-20	21-30		
	Percent					
20.0 or more	39	24	4	6	27	100
10.0-19.9	36	28	0	2	34	100
5.0-9.9	52	28	0	3	17	100
2.0-4.9	32	27	8	3	30	100
1.0-1.9	52	17	0	0	31	100
Less than 1.0	44	19	0	0	37	100
All handlers	44	21	1	1	33	100

Feedlot operators required cattle and calves in transit to be watered after an average of 19 hours (table 19). This average varied among size groups, ranging from 17 to 33 hours. The amount of time required by any feedlot operation ranged from 12 to 50 hours. Although there is no law establishing a maximum time that may elapse before cattle and calves must be watered during truck transit, many livestock handlers and feedlot operators

Table 16--Percent of feedlots reporting above-normal shrinkage for their most common hauls of slaughter cattle, by firm size, 1972

Feedlot size by capacity (head)	Percent of hauls				Did not know or no answer	Total
	0	1-10	11-20	21-30		
	Percent					
32,000 or more	42	13	0	0	45	100
16,000-31,999	47	14	0	0	39	100
8,000-15,999	43	21	9	0	27	100
4,000-7,999	60	16	9	0	15	100
1,000-3,999	65	23	3	0	9	100
Under 1,000	83	8	0	0	9	100
All handlers	82	8	1/	0	10	100

1/ Less than 0.1 percent.

Table 17--Percent of feedlots reporting above-normal shrinkage for their most common hauls of feeder cattle, by firm size, 1972

Feedlot size by capacity (head)	Percent of hauls				Did not know or no answer	Total
	0	1-10	11-20	21-30		
	Percent					
32,000 or more	13	31	4	7	45	100
16,000-31,999	31	17	11	3	38	100
8,000-15,999	29	31	9	5	26	100
4,000-7,999	31	34	0	12	23	100
1,000-3,999	57	25	9	1	8	100
Under 1,000	86	3	0	2	9	100
All feedlots	85	4	1/	2	9	100

1/ Less than 0.1 percent.

thought there was a statutory 36-hour maximum. Apparently, they were thinking of the law which requires railroads to water animals in transit for trips in excess of 36 hours. 4/

4/ The Twenty-Eight Hour Law (45 U.S.C. 71 et seq)(a) prohibits the confining of livestock in railroad cars or vessels for longer than 28 hours without unloading for feed, water, and rest for at least five consecutive hours except under specified unavoidable circumstances; (b) permits time of confinement to be extended to 36 hours upon request of the shipper.

Table 18--Length of time required by livestock handlers before watering cattle and calves during transit, by size groups, 1972

Firm size by annual gross revenue, 1971 (million dollars)	Percent of handlers watering cattle in transit	Length of time		
		Average	Range	
			Low	High
	Percent	Hours		
20.0 and over	33	26	12	36
10.0-19.9	24	27	12	36
5.0-9.9	7	28	24	32
2.0-4.9	21	23	12	36
1.0-1.9	17	29	20	36
Under 1.0	4	24	24	24
All handlers	10	26	12	36

Table 19--Length of time required by feedlot operators before watering cattle and calves during transit, by size groups, 1972

Feedlot size by capacity (head)	Percent of operators watering cattle in transit	Length of time		
		Average	Range	
			Low	High
	Percent	Hours		
32,000 and over	56	26	12	36
16,000-31,999	43	23	18	36
5,000-15,999	32	29	24	36
4,000-7,999	19	33	24	50
1,000-3,999	7	24	18	36
Under 1,000	1	17	12	24
All feedlots	2	19	12	50

Animal Loss in Transit

It has been alleged that many cattle are lost in truck transit due to trucker negligence. To determine the severity of this problem, shippers were asked how many head they lost in transit during 1972 and the causes of these losses.

Although one large firm reported losing 1,000 head, all livestock handlers lost an average of 6 animals per firm (table 20). Many firms experienced no losses. Average head lost per firm varied by firm size group, but tended to be larger for the larger firms.

Table 21--Percent of livestock handlers reporting animals lost during truck transit by cause and firm size, 1972

Causes of cattle loss in truck transit	Firm size by 1971 annual gross revenue (million dollars)						All handlers
	20.0 or more	19.9-10.0	9.9-5.0	4.9-2.0	1.9-1.0	Less than 1.0	
	Percent 1/						
Improper handling during preloading, loading, unloading and postloading	12	9	10	5	9	7	8
Crowding or overloading truck	14	10	21	19	17	11	14
Condition of animal before loading	24	17	38	14	26	4	12
Wrecks and unforeseen problems	16	16	3	--	--	4	3
Driver and equipment problems	10	2	3	5	13	--	4
Weather conditions and time of loading	20	10	14	11	--	4	5
Animals were trampled	16	20	17	22	17	7	13
No answer or didn't know	8	3	17	--	--	4	3
Handlers reporting a loss	71	53	83	59	48	30	42

-- = No response.

1/ Since a firm could report more than one cause of loss, the percentages will not add vertically to equal the percentage of handlers reporting a loss.

Table 20--Livestock handlers' cattle and calves lost in truck transit by size group, 1972

Firm size by annual gross revenue, 1971 (million dollars)	Average	Range	
		Low	High
	Head		
20.0 or more	52	0	1,000
10.0-19.9	15	0	100
5.0-9.9	23	0	107
2.0-4.9	7	0	75
1.0-1.9	3	0	18
Under 1.0	3	0	25
All handlers	6	0	1,000

Cattle and calves lost during transit represented only 35 of every 100,000 head of cattle and calves purchased or sold by all handlers. Losses per 100,000 head varied little by firm size group.

More large handlers experienced loss of animals in transit than did small handlers (table 21). The most frequent cause for animal loss differed by firm size group. Handlers in three size groups most often reported that the lost animals were in unsatisfactory condition before loading, two handler groups stated animals were trampled, and one group reported damage from crowding or overloading the truck.

Cattle and calves lost in truck transit by all cattle feeders averaged less than one animal per firm (table 22). Many feedlots experienced no losses, and the largest number of cattle lost by a single feedlot was 250. On the average, larger feedlots lost more cattle than did smaller feedlots.

Table 22--Feedlots' cattle and calves lost in truck transit by size group, 1972

Feedlot size by capacity (head)	Average	Range	
		Low	High
	Head		
32,000 or more	30	0	150
16,000-31,999	11	0	35
8,000-15,999	17	0	250
4,000-7,999	23	0	200
1,000-3,999	1	0	9
Under 1,000	1/	0	14
All feedlots	1/	0	250

1/ Less than one animal.

Causes of animal loss varied somewhat by feedlot size group (table 23). The reason most often given by feeders in the three largest groups was the unsatisfactory condition of the animal before loading. The three smallest groups most often mentioned that animals were trampled in transit.

As the survey results show, losses in truck transit did not appear excessive, and trucker negligence was seldom reported.

Both livestock handlers and feedlot operators reported the following methods of handling reimbursement for animals lost in transit: The loss was shared equally between shipper and trucker; the negligent party was responsible for the loss; the trucker was charged for all losses; or the shipper suffered all losses. Thus, not all shippers would be compensated for their losses. However, more than three-fifths of the handlers and feedlots reporting a loss in transit were reimbursed in whole or in part for their loss. Most of these shippers stated that compensation was made within 30 days of claim.

End-of-Trip Animal Condition

The quality of service provided by for-hire truckers was assumed to be measured, in part, by end-of-trip animal condition. Shippers were asked to rate the condition of animals moved by for-hire carriers as "excellent," "good," "acceptable," "fair," or "poor."

Almost all shippers reported end-of-trip animal condition in for-hire carriers as "excellent," "good," or "acceptable." Regardless of firm size, shippers most often reported a "good" animal condition (tables 24 and 25). One-fourth of the handlers and about one-third of the feedlots reported an "excellent" end-of-trip condition. Some of the larger feedlots did not rate animal condition as highly as did the smaller feedlots or most of the handlers.

Table 24--Percent of livestock handlers reporting end-of-trip condition of cattle shipped in for-hire carriers, by firm size, 1972

Firm size by annual gross revenue, 1971 (million dollars)	Animal condition					Did not answer	Total
	Excellent	Good	Acceptable	Fair	Poor		
	Percent						
20.0 or more	16	65	8	0	0	11	100
10.0-19.9	35	53	5	0	0	7	100
5.0-9.9	24	62	0	3	0	11	100
2.0-4.9	33	53	6	0	0	8	100
1.0-1.9	13	57	17	4	0	9	100
Under 1.0	26	59	4	0	0	11	100
All handlers	25	58	6	1	0	10	100

Table 23--Percent of cattle feedlots reporting animals lost during truck transit by cause and firm size, 1972

Causes of cattle loss in truck transit	Firm size capacity groups (1,000 head)						All feedlots
	32.0 or more	31.9-16.0	15.9-8.0	7.9-4.0	3.9-1.0	Under 1.0	
	Percent 1/						
Improper handling during preloading, loading, and postloading	2	6	5	--	6	1	1
Crowding or overloading truck	16	14	19	18	6	1	1
Condition of animal before loading	27	42	40	18	9	2/	1
Wrecks and unforeseen problems	11	3	5	--	9	1	1
Driver and equipment problems	18	3	14	8	7	2	2
Weather conditions and time of loading	20	17	19	18	7	1	1
Animals were trampled	22	36	28	31	19	3	3
No answer or didn't know	2	3	6	--	4	1	1
Feedlots reporting a loss	89	81	88	76	32	3	4

-- = No response.

1/ Since a firm could report more than one cause of loss, the percentages will not add vertically to equal the percentage of feedlots reporting a loss.

2/ Less than 0.5 percent.

Table 25--Percent of feedlots reporting end-of-trip condition of cattle shipped in for-hire carriers, by firm size, 1972

Feedlot size by capacity (million dollars)	Animal condition					Did not answer	Total
	Excellent	Good	Acceptable	Fair	Poor		
	Percent						
32,000 or more	4	47	40	4	2	3	100
16,000-31,999	11	64	14	11	0	0	100
8,000-15,999	2	67	18	5	4	4	100
4,000-7,999	8	86	0	6	0	0	100
1,000-3,999	21	72	1	3	0	3	100
Under 1,000	34	57	1	1/	0	8	100
All feedlots	34	57	1	1/	1/	8	100

1/ Less than 0.3 percent.

Shippers' Satisfaction With Service

Shippers were asked to rate their for-hire cattle truck service as satisfactory or unsatisfactory. They were also asked to state the factors which contributed to their level of satisfaction.

Regardless of firm size, most shippers of cattle and calves stated that for-hire truck service was "satisfactory." Of the usable livestock handler and feedlot questionnaires, about 86 and 92 percent, respectively, reported "satisfactory" service (tables 26 and 27). Approximately 4 percent of all handlers and less than 1 percent of all feedlots reported "unsatisfactory" service. The remaining 10 percent of handlers and 8 percent of feedlots did not answer the question.

Table 26--Percent of livestock handlers reporting level of service satisfaction, by size group, 1972

Firm size by annual gross revenue, 1971 (million dollars)	Level of satisfaction		Did not answer	Total
	Satisfactory	Unsatisfactory		
	Percent			
20.0 or more	90	0	10	100
10.0-19.9	93	0	7	100
5.0-9.9	76	14	10	100
2.0-4.9	89	5	9	100
1.0-1.9	87	4	9	100
Less than 1.0	85	4	11	100
All handlers	86	4	10	100

Table 27--Percent of feedlot operators reporting level of service satisfaction, by size group, 1972

Feedlot size by capacity (head)	Level of satisfaction		Did not answer	Total
	Satisfactory	Unsatisfactory		
	Percent			
32,000 or more	91	7	2	100
16,000-31,999	94	6	0	100
8,000-15,999	100	0	0	100
4,000-7,999	100	0	0	100
1,000-3,999	94	1	5	100
Under 1,000	92	1/	8	100
All feedlots	92	1/	8	100

1/ 0.1 percent.

Reasons the shippers gave for rating service as satisfactory were grouped into the following categories: Positive attitude of the trucking firm and the good job done by the firm; promptness of service; good courteous drivers; good equipment; sufficient cargo insurance; proper loading and unloading; animals arriving in good condition; no answer or didn't know; and miscellaneous. Those reasons given most often by all shipper size groups were: Positive attitude of the trucking firm and the good job done by the firm; promptness of service; good equipment; and good courteous drivers.

Reasons given for rating service as unsatisfactory were grouped into the following categories: Poor quality drivers; poor quality equipment; poor trucking firm management; lack of prompt service; insufficient number of trucks; no answer or didn't know; and miscellaneous. The reason given most often by medium-sized livestock handlers was poor quality drivers. The smaller handlers and larger feedlots most often reported poor quality drivers and lack of prompt service. Smaller feedlots most often cited poor quality equipment and lack of prompt service.

CONCLUSIONS

There were no substantial indications that subjecting interstate for-hire motor carrier service to economic regulation would improve performance for shippers. A great majority of shippers reported that present (unregulated) for-hire truck service was "satisfactory." Most cattle and calves arrived in "acceptable," "good," or "excellent" condition. Losses in transit were minimal, averaging six animals per handler and less than one animal per feedlot. The most frequent causes of loss were poor animal condition prior to loading or accidental downing in transit. For-hire cattle truck service appeared to be available in sufficient quantity throughout most of the year, except in the peak cattle movement periods of the fall and, for a few areas, in certain spring months. Lack of attention by for-hire truck drivers was infrequently reported to be the cause of animal weight loss in transit. Generally, the

most frequent causes were related to length of time animals were on the truck, animal's condition before loading, weather conditions, and time of loading and overloading. Shippers were generally complimentary concerning the attitude of the trucking firm, promptness of service, skills of the drivers, and quality of equipment furnished.

This study did not directly examine the profit margins of for-hire truckers of cattle and calves. It is possible to deduce, however, that these margins were not unreasonably high. If very large profits were available in the livestock trucking industry, one would expect to find a large number of shippers supplying their own transportation. Such was not the case. Slightly less than one-fifth of the feedlots and nearly one-half of the handlers engaged in some private carriage. More importantly, slightly less than one-fifth of all cattle and calves shipped by truck moved in shipper-controlled equipment.

It appeared that shippers considered unregulated for-hire truckers to be supplying the livestock industry with satisfactory service at reasonable prices.

UNITED STATES DEPARTMENT OF AGRICULTURE
Statistical Reporting Service

O. M. B. Number 40-S73017
Approval Expires 12-31-73

Livestock Transportation Survey

LIVESTOCK HANDLER QUESTIONNAIRE

The Statistical Reporting Service is acting as the collecting agent for the Economic Research Service on this survey. The full authority of these agencies will be used to prevent disclosure of your identity or individual answers to anyone outside these two agencies.

Firm Name _____

Person Contacted _____

Title _____

Address _____
Route or Street

_____
City *State* *Zip Code*

Phone _____

Appointment made for:

Date _____

Time _____

Questionnaire Completed:

Enumerator _____

Date _____

Time Interview Began _____

Time Interview Ended _____

I. D. NUMBER

01 | 1–5 | 6–11 Office Use | 12–17

EXP. FACTOR 18–23

1. Is this person or firm, _____ currently doing business as:
(Name on Face Page)

a. **SELLING ON COMMISSION** *(Selling Commission Firms, Auction Markets, Market Agency Selling on Commission)?* YES ☐ – 1 NO ☐ – 2 **Enter Code** 24–29

b. **ORDER BUYER** *(Buying on Commission)?*..... ☐ – 1 ☐ – 2 **Enter Code** 30–35

c. **LIVESTOCK DEALER** *(Buying or Selling)?*..... ☐ – 1 ☐ – 2 **Enter Code** 36–41

d. **CLEARING HOUSE OR CLEARER?**..... ☐ – 1 ☐ – 2 **Enter Code** 42–47

If **ANY** *of Items 1a, b, c, or d are checked YES, ask item 3.*

If **ALL** *of Items 1a, b, c, or d are checked NO, ask item 2.*

2. What does your firm's business consist of?

_____

_____

_____

_____ **CONCLUDE THE INTERVIEW**

3. How many of the following kinds of livestock did you or your firm **PURCHASE** or **SELL** during 1972?

a. Cattle and calves.....**Head** 48–53

b. Hogs and pigs.....**Head** 54–59

c. Sheep and lambs.....**Head** 60–65

d. Other *(Specify* _____*)*.....**Head** 66–71

If **NO** *cattle and calves reported,* **CONCLUDE THE INTERVIEW.**

4. What percent of the **CATTLE** and **CALVES** your firm **PURCHASED** or **SOLD** in 1972 were transported by:

a. Truck–rail combination?.....**Percent** 72–77

b. Truck only?.....**Percent** 6–11 02

c. Rail only?.....**Percent** 12–17

If 100 percent by **RAIL, CONCLUDE THE INTERVIEW.**

Now, I would like to ask about the cattle and calves you transport by **TRUCK.**

5. a. Did your firm own or lease truck equipment *(including leased owner–operator equipment)* used to haul cattle and calves **PURCHASED** or **SOLD** during 1972? *(Exclude pickups)* YES ☐–1 NO ☐–2 **Enter Code** [18–23]

If **NO,** *skip to item 14.*

b. How many of each of the following types of truck equipment used to haul cattle and calves did your firm own or lease on September 30, 1972?

Equipment Type	Owned	Leased*	Leased from Owner–Operators
	(Number)	*(Number)*	*(Number)*
Straight trucks	24–29	30–35	36–41
Flat bed livestock trailers – 1 deck	42–47	48–53	54–59
Flat bed livestock trailers – 2 deck	60–65	66–71	72–77
Pot trailers	6–11	12–17	18–23
Cattle box and pull trailer	24–29	30–35	36–41
Double trailer	42–47	48–53	54–59
Tractors	60–65	66–71	72–77

03

* *All equipment leased excluding leased from owner–operators.*

6. During 1972, what percent of the trips made by your owned or leased trucks with cattle and calves on board fell into the following one–way distances?

04

LOADED MILES

a. 25 and under ..... **Percent** [6–11]

b. 26 – 50 ..... **Percent** [12–17]

c. 51 – 100 ..... **Percent** [18–23]

d. 101 – 299 ..... **Percent** [24–29]

e. 300 and over ..... **Percent** [30–35]

100%

7. What percent of the cattle and calves **PURCHASED** or **SOLD** by your firm during 1972 were carried on trucks owned or leased by your firm? *(Include leased owner–operators)* ..... **Percent** [36–41]

8. a. What percentage of the time do you make a transportation charge to the buyer or seller for cattle and calves hauled in your trucks? ..... **Percent** [42–47]

If "0" percent, skip to item 9.

b. What was the usual one–way charge per unit made for each of the following distances?

UNIT CODE
1 – Head
2 – Hundredweight
3 – Full load
4 – Mile
5 – Other *(Specify_____)*

TRUCK TYPE CODE
1 – Straight truck
2 – Flat bed livestock trailers -- 1 deck
3 – Flat bed livestock trailers -- 2 deck
4 – Pot trailer
5 – Cattle box and pull trailer
6 – Double trailer

One –Way Miles	Amount Charged	Unit Code	Truck Type Code
25 and under (05)	48–53 per	54–59	60–65
	6–11 per	12–17	18–23
	24–29 per	30–35	36–41
26 – 50 (06)	42–47 per	48–53	54–59
	60–65 per	66–71	72–77
	6–11 per	12–17	18–23
51 – 100	24–29 per	30–35	36–41
	42–47 per	48–53	54–59
	60–65 per	66–71	72–77
101 – 299 (07)	6–11 per	12–17	18–23
	24–29 per	30–35	36–41
	42–47 per	48–53	54–59
300 and over (08)	60–65 per	66–71	72–77
	6–11 per	12–17	18–23
	24–29 per	30–35	36–41

c. How did you arrive at charges reported above?

_____

_____

_____

_____

d. Did the availability of **BACKHAUL** affect your usual rate? YES ☐–1 NO ☐–2 **Enter Code** 42–47

If **NO**, *skip to item 9.*

e. How did the presence of **BACKHAUL** affect your rate?

_____

_____

_____

_____

9. Now, considering all the trips made by your owned or leased trucks during 1972:

a. What percent of the trips did you have a **FOR-HIRE BACKHAUL**? ..... **Percent** | 48–53 |

b. What percent of the trips did you **BACKHAUL** commodities used by **YOUR FIRM**? ..... **Percent** | 54–59 |

c. Then, this makes (100% – (9a + 9b)..... **Percent** of the trips that your trucks **BACKHAULED EMPTY.** | 60–65 |
Is that right? YES ☐ NO ☐

If **NO**, *probe to make sure 9a + 9b + 9c = 100%.*

If 9c = 100%, skip to item 12.

sk Item 10 **ONLY** *if positive entry in Item 9a.*

0. Now, let's talk about the _____ percent of your trips that you had **FOR-HIRE BACKHAULS.**
(Item 9a)

a. Did you learn of the availability of these **FOR-HIRE** backhauls from a:

(1) Trucker? ..... YES ☐ – 1 NO ☐ – 2 **Enter Code** | 66–71 |

(2) Truck broker or dispatcher..... YES ☐ – 1 NO ☐ – 2 **Enter Code** | 72–77 |

(3) Other *(Specify* _____*)*.... YES ☐ – 1 NO ☐ – 2 **Enter Code** | 6–11 | 09

b. Did the availability of these **FOR-HIRE** backhauls in your firm's trucks differ among areas you haul to and from?
YES ☐ – 1 NO ☐ – 2 **Enter Code** | 12–17 |

If **YES**, *identify the areas that differ and state the reason.*

_____

_____

_____

c. What commodities made up your **FOR-HIRE** backhaul?

If livestock check:	Check		
(1) Cattle and calves.....	☐ - 1	**Enter Code**	18–23
(2) Hogs and pigs.....	☐ - 2	**Enter Code**	24–29
(3) Sheep and Lambs.....	☐ - 3	**Enter Code**	30–35
(4) Other *(Specify* _____*)*....	☐ - 4	**Enter Code**	36–41

_____

_____

If **CATTLE AND CALVES** *checked, ask Items d and e.*
If **CATTLE AND CALVES** *not checked, skip to Item 11.*

d. What was the usual one–way **BACKHAUL** charge per unit for **CATTLE** and **CALVES** for the following distances?

UNIT CODE

1 – Head
2 – Hundredweight
3 – Full load
4 – Mile
5 – Other *(Specify_____)*

TRUCK TYPE CODE

1 – Straight truck
2 – Flat bed livestock trailers -- 1 deck
3 – Flat bed livestock trailers -- 2 deck
4 – Pot trailer
5 – Cattle box and pull trailer
6 – Double trailer

One–Way Miles	Amount Charged	Unit Code	Truck Type Code
25 and under	42–47 _____ per	48–53	54–59
	60–65 _____ per	66–71	72–77
10	6–11 _____ per	12–17	18–23
26 – 50	24–29 _____ per	30–35	36–41
	42–47 _____ per	48–53	54–59
	60–65 _____ per	66–71	72–77
11	6–11 _____ per	12–17	18–23
51 – 100	24–29 _____ per	30–35	36–41
	42–47 _____ per	48–53	54–59
101 – 299	60–65 _____ per	66–71	72–77
12	6–11 _____ per	12–17	18–23
	24–29 _____ per	30–35	36–41
300 and over	42–47 _____ per	48–53	54–59
	60–65 _____ per	66–71	72–77
13	6–11 _____ per	12–17	18–23

e. How did you arrive at the **BACKHAUL** charges listed above?

_____

_____

_____

_____

Ask item 11 ONLY if positive entry in item 9b.

11. Now, let's talk about the _____ (item 9b) percent of your trips that you **BACKHAULED** commodities for **YOUR OWN USE.**

a. What commodities normally made up these **BACKHAULS?**

If livestock check:	Check		
(1) Cattle and calves	☐ - 1	Enter Code	24–29
(2) Hogs and pigs.....	☐ - 2	Enter Code	30–35
(3) Sheep and lambs.....	☐ - 3	Enter Code	36–41
(4) Other (Specify_____).....	☐ - 4	Enter Code	42–47

_____

_____

b. Did the availability of **BACKHAULS** of commodities used by **YOUR FIRM** differ among areas you haul to and from?

YES ☐ - 1 NO ☐ - 2 **Enter Code** 48–53

If YES, identify the areas that differed and state the reason.

_____

_____

_____

_____

12. Please rate the "end-of-trip" condition of cattle and calves hauled in trucks owned or leased by your firm: (Include leased owner-operator trucks.)

CHECK ONE

Excellent	☐ - 1	**Enter Code**	54–59
Good.....	☐ - 2		
Acceptable.....	☐ - 3		
Fair.....	☐ - 4		
Poor.....	☐ - 5		

13. Why did your firm decide to supply transportation with owned or leased trucks (include leased owner-operators)?

_____

_____

_____

_____

14. Did your firm arrange for transportation of **CATTLE** and **CALVES** in **FOR-HIRE** trucks in 1972?.....YES ☐ – 1 NO ☐ – 2 **Enter Code** [60–65]

If NO, skip to Item 17.

15. In 1972, did you use any of the following sources to arrange **FOR-HIRE** transportation?

If **YES**, *what percent of your firm's* **CATTLE** *and* **CALVES** *were moved as a result of this contact?*

	YES	NO		
a. A truck broker or dispatcher.....	☐	☐	.....**Percent**	[66–71]
b. A regularly hired trucker.....	☐	☐	.....**Percent**	[72–77]
c. Other truckers.....	☐	☐	.....**Percent**	[6–11]
d. Other sources (*Specify* _____) ..	☐	☐	.....**Percent**	[12–17]

14

16. In 1972, were there some months in which the services of **FOR-HIRE** truckers were especially hard to obtain? YES ☐ – 1 NO ☐ – 2 **Enter Code** [18–23]

If **NO**, *skip to Item 17.*

a. In what months did you find services of **FOR-HIRE** truckers especially hard to obtain? *(Circle one or more month codes.)*

01 – January	07 – July
02 – February	08 – August
03 – March	09 – September
04 – April	10 – October
05 – May	11 – November
06 – June	12 – December

OFFICE USE

[24–29] [30–35]

17. In 1972, did you pay or record **FOR-HIRE** truck rates for cattle and calves **PURCHASED** or **SOLD** by your firm? YES ☐ – 1 NO ☐ – 2 **Enter Code** [36–41]

If **NO**, *who paid the transportation charges?*

_____

_____

_____

If **NO**, *skip to item 19.*

Now, I need some information about truck **rates**, length of haul and type of truck used for which you paid or recorded the costs of hauling cattle and calves **PURCHASED** or **SOLD** by your firm.

Let's talk first about your most common haul in 1972, and then list other hauls.

18. TRIP LIST

UNIT CODE

1 = Head
2 = Hundredweight
3 = Full load
4 = Mile
5 = Other (Specify _____)

	a		b	c	d	e
	FROM Town or point of origin *(Please Print)*		**TO** Town or point of destination *(Please Print)*	**Approx. One-Way mileage** *Miles*	**Usual Rate Paid** *Dollars & Cents*	**Unit Code** *Code*
	6–11	12–17	18–23	24–29	30–35	36–41
15 1						Per
2						Per
3						Per
4						Per
5						Per
6						Per
7						Per
8						Per
9						Per
10						Per

Now, I would like to talk about weight and death losses of cattle and calves hauled by truck.

19. What factors contribute to cattle and calf weight loss in truck transit?

_____

_____

_____

_____

TRUCK TYPE CODE

1 = Straight truck
2 = Flat bed livestock trailer -- 1 deck
3 = Flat bed livestock trailer -- 2 deck
4 = Pot trailer
5 = Cattle box and trailer
6 = Double trailer

f	g	h	i	j
What type of truck made this trip? *Code*	**What was LOWEST rate paid?** *Dollars & Cents*	**What was HIGHEST rate paid?** *Dollars & Cents*	**What is the reason for the rate difference?** *Explain*	**Check most common haul**
42–47	48–53	54–59		

20. Considering your **most common haul** from _____ to _____ : (Checked in item 18)

16

a. What percent of your hauls experienced an **above normal** shrink percentage in truck transit? ..... **Percent** | 6–11 |

b. For these hauls, what was the shrink percent you considered to be above normal? ..... **Percent** | 12–17 |

21. Of the total cattle and calves **PURCHASED** or **SOLD** by your firm, how many head did you lose in truck transit during 1972? ..... **Number** | 18–23 |

If "0," skip to item 22.

a. What were the causes of these losses?

_____

_____

_____

_____

b. Was **compensation** made for cattle and calves **lost** in truck transit?

YES ☐ - 1 NO ☐ - 2 DON'T KNOW ☐ - 3 **Enter Code** | 24–29 |

If NO or DON'T KNOW, skip to Item 22.

c. Were these claims usually paid within:

30 DAYS OR LESS ☐ - 1 31 DAYS OR MORE ☐ - 2 **Enter Code** | 30–35 |

22. Were cattle and calves shipped for you by truck **watered during transit?**

YES ☐ - 1 NO ☐ - 2 **Enter Code** 36–41

If NO, skip to item 23.

a. How many hours in truck transit can elapse before you **require** cattle to be watered? ..... **Hours** 42–47

23. Please rate the "end-of-trip" condition of cattle and calves hauled in **FOR-HIRE** trucks during 1972.

Check ONE

Excellent ..... ☐ - 1

Good ..... ☐ - 2

Acceptable ..... ☐ - 3 **Enter Code** 48–53

Fair ..... ☐ - 4

Poor ..... ☐ - 5

24. Do you consider the service of **FOR-HIRE** cattle truckers you use satisfactory or unsatisfactory?

SATISFACTORY ☐ - 1 UNSATISFACTORY ☐ - 2 **Enter Code** 54–59

a. What factors make this service _____ (satisfactory or unsatisfactory)?

_____

_____

_____

_____

25. In order to conduct another phase of this transportation survey at a later time, it is necessary to compile a list of **FOR-HIRE** truckers.

Please give me the name and address of **FOR-HIRE** truckers who carried livestock for your firm in 1972.

Name *(Please Print)*	Complete Mailing Address	Telephone

UNITED STATES DEPARTMENT OF AGRICULTURE
Statistical Reporting Service

O. M. B. Number 40-S73017
Approval Expires 12-31-73

Livestock Transportation Survey

CATTLE FEEDER QUESTIONNAIRE

Firm Name _____

Person Contacted _____

Title _____

Address _____
Route or Street

_____
City *State* *Zip Code*

Phone _____

Appointment made for:

Date _____

Time _____

Questionnaire Completed:

Enumerator _____

Date _____

Time Interview Began _____

Time Interview Ended _____

O. M. B. Number 40–S73017
Approval Expires 12–31–73

I. D. NUMBER

01

1–5	Office Use 6–11	12–17

EXP. FACTOR 18–23

LIVESTOCK TRANSPORTATION SURVEY

Cattle Feeder Questionnaire

1. How many cattle and calves were marketed from your feedlot in 1972?

   a. Cattle and calves.....Head 24–29

If "0" cattle and calves reported, CONCLUDE THE INTERVIEW.

2. What percent of the **CATTLE** and **CALVES** coming into your feedlot in 1972 were transported by:

   a. Truck–rail combination?.....Percent 30–35

   b. Truck only?.....Percent 36–41

   c. Rail only?.....Percent 42–47

3. What percent of the **CATTLE** and **CALVES** marketed from your feedlot in 1972 were transported by:

   a. Truck–rail combination?.....Percent 48–53

   b. Truck only?.....Percent 54–59

   c. Rail only?.....Percent 60–65

If 100 percent by RAIL only for Items 2 and 3, CONCLUDE THE INTERVIEW.

Now, I would like to ask about the cattle and calves you transport by **TRUCK.**

4. a. Did you own or lease truck equipment *(including leased owner–operator equipment)* used to haul cattle and calves moved into or out of your feedlot during 1972? *(Exclude pickups)* ..... YES ☐–1 NO ☐–2 **Enter Code** 66–71

If **NO,** *skip to item 13.*

b. How many of each of the following types of truck equipment used to haul cattle and calves did you own or lease on September 30, 1972?

Equipment Type	Owned	Leased*	Leased from Owner–Operators
	(Number)	*(Number)*	*(Number)*
02 Straight trucks	6–11	12–17	18–23
Flat bed livestock trailers -- 1 deck	24–29	30–35	36–41
Flat bed livestock trailers -- 2 deck	42–47	48–53	54–59
Pot trailers	60–65	66–71	72–77
03 Cattle box and pull trailer	6–11	12–17	18–23
Double trailer	24–29	30–35	36–41
Tractors	42–47	48–53	54–59

**All equipment leased excluding leased from owner–operators.*

5. During 1972, what percent of the trips made by your owned or leased trucks with cattle and calves on board fell into the following one–way distances? Let's talk first about inshipments.

LOADED MILES	Inshipments	Outshipments
a. 25 and under ..... Percent	60–65	66–71
04 b. 26 – 50 ..... Percent	6–11	12–17
c. 51 – 100 ..... Percent	18–23	24–29
d. 101 – 299 ..... Percent	30–35	36–41
e. 300 and over ..... Percent	42–47	48–53
	100%	100%

6. a. What percent of the cattle and calves coming into your feedlot during 1972 were carried on trucks owned or leased by you? *(Include leased owner–operators)* ..... Percent 54–59

b. What percent of the cattle and calves leaving your feedlot during 1972 were carried on trucks owned or leased by you? *(Include leased owner–operators)* ..... Percent 60–65

7. a. What percentage of the time do you make a transportation charge for cattle and calves hauled in your truck? Let's talk first about inshipments ..... Percent

Inshipments	Outshipments
66–71	72–77

If "0" percent in both inshipments and outshipments skip to item 8.

b. What was the usual one–way charge per unit made for each of the following distances? First, let's talk about inshipments.

UNIT CODE

1 – Head
2 – Hundredweight
3 – Full load
4 – Mile
5 – Other *(Specify _____)*

TRUCK TYPE CODE

1 – Straight truck
2 – Flat bed livestock trailers -- 1 deck
3 – Flat bed livestock trailers -- 2 deck
4 – Pot trailer
5 – Cattle box and pull trailer
6 – Double trailer

One –Way Miles		Amount Charged	Unit Code	Shipped In	Shipped Out	Truck Type Code
25 and under	05	6–11 _____ per	12–17 _____	18–23 1	24–29 1	30–35
		36–41 _____ per	42–47 _____	48–53 1	54–59 1	60–65
	06	6–11 _____ per	12–17 _____	18–23 1	24–29 1	30–35
26 – 50		36–41 _____ per	42–47 _____	48–53 1	54–59 1	60–65
	07	6–11 _____ per	12–17 _____	18–23 1	24–29 1	30–35
		36–41 _____ per	42–47 _____	48–53 1	54–59 1	60–65
51 – 100	08	6–11 _____ per	12–17 _____	18–23 1	24–29 1	30–35
		36–41 _____ per	42–47 _____	48–53 1	54–59 1	60–65
	09	6–11 _____ per	12–17 _____	18–23 1	24–29 1	30–35
101 – 299		36–41 _____ per	42–47 _____	48–53 1	54–59 1	60–65
	10	6–11 _____ per	12–17 _____	18–23 1	24–29 1	30–35
		36–41 _____ per	42–47 _____	48–53 1	54–59 1	60–65
300 and over	11	6–11 _____ per	12–17 _____	18–23 1	24–29 1	30–35
		36–41 _____ per	42–47 _____	48–53 1	54–59 1	60–65
	12	6–11 _____ per	12–17 _____	18–23 1	24–29 1	30–35

c. How did you arrive at charges reported above?

_____

_____

_____

_____

d. Did the availability of **BACKHAUL** affect your usual rate? YES ☐–1 NO ☐–2 **Enter Code** 36–41 _____

If **NO**, *skip to item 8.*

e. How did the presence of **BACKHAUL** affect your rate?

_____

_____

_____

_____

8. Now, considering all the trips made both for inshipments and outshipments by your owned or leased trucks during 1972:

a. What percent of the trips did you have a **FOR-HIRE BACKHAUL**?..... **Percent** 42–47

b. What percent of the trips did you **BACKHAUL** commodities used by **YOU**?..... **Percent** 48–53

c. Then, this makes (100% – (8a + 8b)..... **Percent** 54–59
of the trips that your trucks **BACKHAULED EMPTY.**
Is that right? YES ☐ NO ☐

If **NO**, *probe to make sure 8a + 8b + 8c = 100%.*

If 8c = 100%, skip to item 11.

Ask Item 9 **ONLY** *if positive entry in Item 8a.*

9. Now, let's talk about the _____ percent of your trips that you had **FOR-HIRE BACKHAULS.**
(Item 8a)

a. Did you learn of the availability of these **FOR-HIRE** backhauls from a:

(1) Trucker? ..... YES ☐ – 1 NO ☐ – 2 **Enter Code** 60–65

(2) Truck broker or dispatcher..... YES ☐ – 1 NO ☐ – 2 **Enter Code** 66–71

(3) Other *(Specify* _____*)*.... YES ☐ – 1 NO ☐ – 2 **Enter Code** 72–77

13

b. Did the availability of these **FOR-HIRE** backhauls in your trucks differ among areas you haul to and from?
YES ☐ – 1 NO ☐ – 2 **Enter Code** 6–11

If **YES**, *identify the areas that differ and state the reason.*

_____

_____

_____

c. What commodities made up your **FOR-HIRE** backhaul?

If livestock check:	Check		
(1) Cattle and calves.....	☐ - 1	**Enter Code**	12–17
(2) Hogs and pigs.....	☐ - 2	**Enter Code**	18–23
(3) Sheep and Lambs.....	☐ - 3	**Enter Code**	24–29
(4) Other *(Specify* _____*)*....	☐ - 4	**Enter Code**	30–35

_____

_____

If **CATTLE AND CALVES** *checked, ask Items d and e.*
If **CATTLE AND CALVES** *not checked, skip to Item 10.*

d. What was the usual one–way **BACKHAUL** charge per unit for **CATTLE** and **CALVES** for the following distances?

UNIT CODE

1 – Head
2 – Hundredweight
3 – Full load
4 – Mile
5 – Other *(Specify_____)*

TRUCK TYPE CODE

1 – Straight truck
2 – Flat bed livestock trailers -- 1 deck
3 – Flat bed livestock trailers -- 2 deck
4 – Pot trailer
5 – Cattle box and pull trailer
6 – Double trailer

One–Way Miles	Amount Charged	Unit Code	Truck Type Code
25 and under (14)	36–41 per	42–47	48–53
	54–59 per	60–65	66–71
	6–11 per	12–17	18–23
26 – 50	24–29 per	30–35	36–41
	42–47 per	48–53	54–59
	60–65 per	66–71	72–77
51 – 100 (15)	6–11 per	12–17	18–23
	24–29 per	30–35	36–41
	42–47 per	48–53	54–59
101 – 299 (16)	60–65 per	66–71	72–77
	6–11 per	12–17	18–23
	24–29 per	30–35	36–41
300 and over (17)	42–47 per	48–53	54–59
	60–65 per	66–71	72–77
	6–11 per	12–17	18–23

e. How did you arrive at the **BACKHAUL** charges listed above?

_____

_____

_____

_____

Ask item 10 ONLY if positive entry in item 8b.

10. Now, let's talk about the _____ (item 8b) percent of your trips that you **BACKHAULED** commodities for **YOUR OWN USE.**

a. What commodities normally made up these **BACKHAULS?**

If livestock check:	Check		
(1) Cattle and calves	☐ - 1	Enter Code	24–29
(2) Hogs and pigs.....	☐ - 2	Enter Code	30–35
(3) Sheep and lambs.....	☐ - 3	Enter Code	36–41
(4) Other (Specify_____).....	☐ - 4	Enter Code	42–47

_____

_____

b. Did the availability of **BACKHAULS** of commodities used by **YOU** differ among areas you haul to and from?

YES ☐ - 1 NO ☐ - 2 **Enter Code** 48–53

If YES, identify the areas that differed and state the reason.

_____

_____

_____

_____

11. Please rate the "end-of-trip" condition of cattle and calves hauled in trucks owned or leased by you: (Include leased owner-operator trucks.)

CHECK ONE

Excellent	☐ - 1	
Good.....	☐ - 2	
Acceptable.....	☐ - 3	**Enter Code** 54–59
Fair.....	☐ - 4	
Poor.....	☐ - 5	

12. Why did you decide to supply transportation with owned or leased trucks (include leased owner-operators)?

_____

_____

_____

_____

13. Did you arrange for transportation of **CATTLE** and **CALVES** in **FOR–HIRE** trucks in 1972? YES ☐ – 1 NO ☐ – 2 **Enter Code** [60–65]

If NO, skip to Item 16.

14. In 1972, did you use any of the following sources to arrange **FOR–HIRE** transportation?

If **YES,** *what percent of this feedlot's* **CATTLE** *and* **CALVES** *were moved as a result of this contact?*

	YES	NO	
a. A truck broker or dispatcher.....	☐	☐ ..... **Percent**	[66–71]
b. A regularly hired trucker.....	☐	☐ ..... **Percent**	[72–77]
c. Other truckers.....	☐	☐ ..... **Percent**	[6–11]
d. Other sources *(Specify* _____*)* ..	☐	☐ ..... **Percent**	[12–17]

15. In 1972, were there some months in which the services of **FOR–HIRE** truckers were especially hard to obtain? YES ☐ – 1 NO ☐ – 2 **Enter Code** [18–23]

If **NO,** *skip to Item 16.*

a. In what months did you find services of **FOR–HIRE** truckers especially hard to obtain? *(Circle one or more month codes.)*

01 – January	07 – July
02 – February	08 – August
03 – March	09 – September
04 – April	10 – October
05 – May	11 – November
06 – June	12 – December

OFFICE USE

[24–29] [30–35]

16. In 1972, did you pay **FOR–HIRE** truck rates for cattle and calves? YES ☐ – 1 NO ☐ – 2 **Enter Code** [36–41]

If **NO,** *who paid the transportation charges?*

_____

_____

_____

If **NO,** *skip to item 18.*

Now, I need some information about truck **rates**, length of haul and type of truck used for which you paid the costs of hauling cattle and calves coming in or going out of your feedlot.

Let's talk first about the most common haul you paid charges for in 1972, and then list other hauls.

17. **TRIP LIST**

UNIT CODE

1 = Head
2 = Hundredweight
3 = Full load
4 = Mile
5 = Other (Specify _____)

	a		b		c	d	e
	FROM Town or point of origin *(Please print)*		**TO** Town or point of destination *(Please print)*		Approx. One-Way mileage *Miles*	Usual Rate Paid *Dollars & Cents*	Unit Code *Code*
	6–11	12–17	18–23		24–29	30–35	36–41
19	1						Per
	2						Per
	3						Per
	4						Per
	5						Per
	6						Per
	7						Per
	8						Per
	9						Per
	10						Per

Now, I would like to talk about weight and death losses of cattle and calves hauled by truck.

18. What factors contribute to cattle and calf weight loss in truck transit?

_____

_____

_____

_____

TRUCK TYPE CODE

1 = Straight truck
2 = Flat bed livestock trailer -- 1 deck
3 = Flat bed livestock trailer – 2 deck
4 = Pot trailer
5 = Cattle box and trailer
6 = Double trailer

f	g	h	i	j
What type of truck made this trip? *Code*	**What was LOWEST rate paid?** *Dollars & Cents*	**What was HIGHEST rate paid?** *Dollars & Cents*	**What is the reason for the rate difference?** *(Please print)* *Explain*	**Check most common haul**
42–47	48–53	54–59		

19. Considering your **most common haul** from _____ to _____ : (Checked in item 17)

20

	FAT CATTLE	FEEDER CATTLE
a. What percent of your hauls experienced an **above normal** shrink percentage in truck transit? ..... **Percent**	6–11	12–17
b. For these hauls, what was the shrink percent you considered to be above normal? ..... **Percent**	18–23	24–29

20. How many head of cattle and calves did you lose in truck transit during 1972? ..... **Number** 30–35

If "0," skip to item 21.

a. What were the causes of these losses?

_____

_____

_____

_____

b. Was **compensation** made for cattle and calves **lost** in truck transit?

YES ☐ - 1 NO ☐ - 2 DON'T KNOW ☐ - 3 **Enter Code** 36–41

If NO or DON'T KNOW, skip to Item 21.

c. Were these claims usually paid within:

30 DAYS OR LESS ☐ - 1 31 DAYS OR MORE ☐ - 2 **Enter Code** 42–47

21. Were cattle and calves shipped for you by truck **watered during transit?**

YES ☐ - 1 NO ☐ - 2 **Enter Code** 48–53

If NO, skip to item 22.

a. How many hours in truck transit can elapse before you **require** cattle to be watered? ..... **Hours** 54–59

22. Please rate the "end-of-trip" condition of cattle and calves hauled in **FOR-HIRE** trucks during 1972.

Check ONE

Excellent ..... ☐ - 1

Good ..... ☐ - 2

Acceptable ..... ☐ - 3 **Enter Code** 60–65

Fair ..... ☐ - 4

Poor ..... ☐ - 5

23. Do you consider the service of **FOR-HIRE** cattle truckers you use satisfactory or unsatisfactory?

SATISFACTORY ☐ - 1 UNSATISFACTORY ☐ - 2 **Enter Code** 66–71

a. What factors make this service _____ (satisfactory or unsatisfactory)?

_____

_____

_____

_____

24. **In order to conduct another phase of this transportation survey at a later time, it is necessary to compile a list of FOR-HIRE truckers.**

Please give me the name and address of FOR-HIRE truckers who carried livestock for you in 1972.

Name *(Please print)*	**Complete Mailing Address**	**Telephone**