



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

THE CHICAGO UNION STOCKYARDS—A BRIEF GLANCE AT CURRENT OPERATIONS

ROBERT H. T. SMITH

The Australian National University

INTRODUCTION

In the Australian export economy, products of primary industries, particularly livestock and livestock products, play an extremely important part. For the success of any such industry, adequate market facilities are vital. Unfortunately in Australia, and especially in the eastern States, the livestock industry is hampered by grave difficulties encountered in transporting livestock to coastal markets so that they arrive in prime saleable condition. In other countries as well, market facilities are vital to the success of the pastoral industry. This article deals with some aspects of one such market in the United States, the Chicago Union Stockyards.

The Chicago Union Stockyards, with their mid-continent location, and tremendous scale of operations, have no parallel in Australia. A total of approximately five million head of livestock is received at the yards annually for sale to local packing plants and off-the-market slaughterers, located primarily to the east of Chicago. In 1956 and 1957, livestock were consigned to the yards from 34 states of the Union, including states to the east, south and west of Chicago.¹ Of the four major livestock markets in the United States today (Chicago, Illinois; St. Paul, Minnesota; East St. Louis, Illinois; and Omaha, Nebraska), Chicago is by far the most important in terms of numbers handled.²

The Stockyards are located almost six miles south-west of the centre of Chicago. Industrial activities, together with poorer residential tenements, occupy the area immediately around the yards, but in 1865 when the yards were first opened in this location, they were then placed on the outskirts of the city. At this time, each of the major western Railroads abandoned its own stockyards in exchange for operating privileges over the Chicago Junction Railroad, which has more than adequate trackage to and within the yards.³

PLAN OF THE YARDS

It is difficult to believe that an undertaking of this magnitude carried out all of its operations in a one-square-mile area. In fact, the area available for yarding and shipping is smaller because, as one can see from Figure 1, almost the entire western half of the stockyards area is occupied by "Packing-Town",⁴ that portion given over to the buildings of the private packers. Nevertheless, in this comparatively small area, the Chicago Junction Railroad owns and operates 120 miles of track.

¹ *Origin of Truck and Rail Receipts*, Chicago Union Stockyards Statistical Office, 1956-1957.

² Press Release, Publicity Dept., December, 1957.

³ Harold M. Mayer, *The Railroad Pattern of Metropolitan Chicago* (Chicago: University Press, 1943), p. 98.

⁴ "Packing Town" is dominated by Armour and Swift.

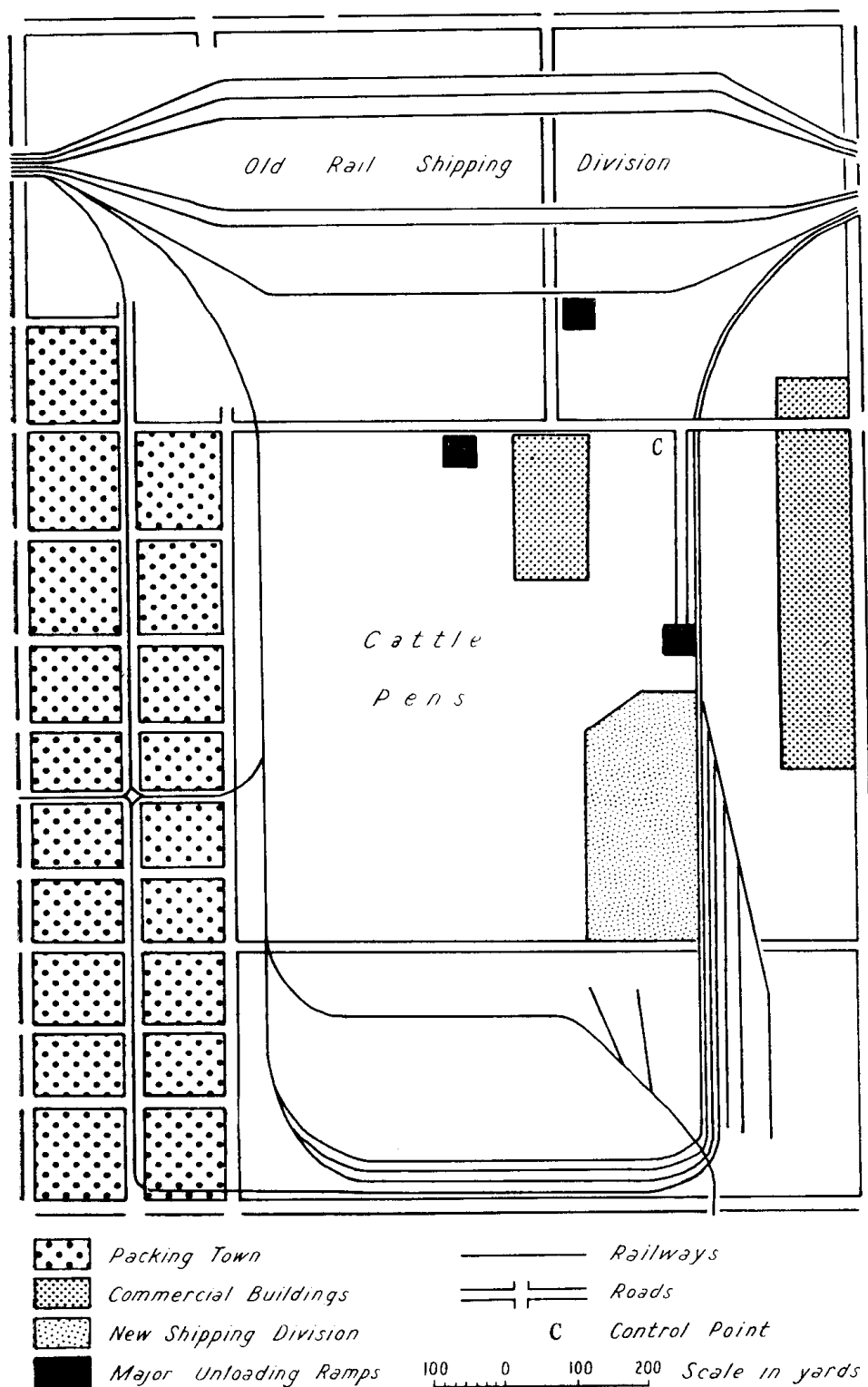


Fig. 1: Plan of the Chicago Union Stockyards (constructed from an Aerial Photograph provided by the Department of Research and Agricultural Relations of the Chicago Union Stockyards).

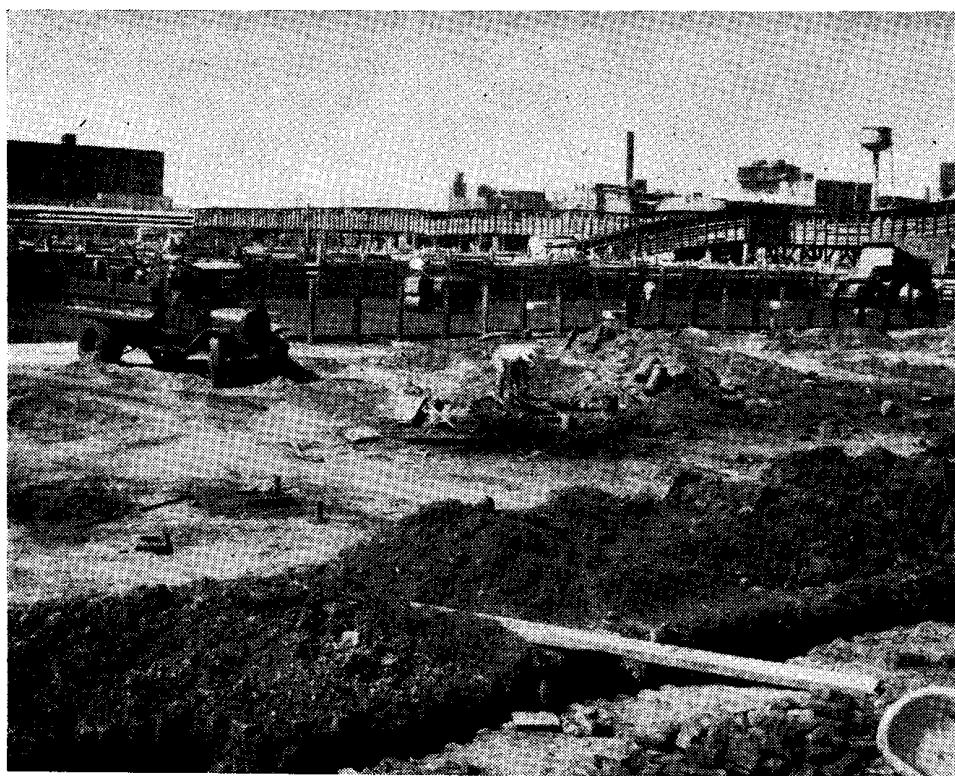


Fig. 2: Modernisation Programme in Progress (*Source: Chicago Union Stockyards, Department of Research and Agricultural Relations*).

At the present time, work is in progress for the alteration of some of the stockyards' facilities. In the past, the northern section has been the major location for receiving and shipping livestock. Overhead ramps connected this area to the cattle division of the yards, so that cattle could be unloaded quickly and walked to the pens, where they were offered for sale or, if consigned directly to a packer, held prior to slaughter. Over the years, both the railway loading and unloading facilities, and the overhead ramps, have deteriorated. A new shipping division has been planned and will be constructed in the south-eastern section of the yards (Figure 1). Equipment will be installed in this division which will facilitate simultaneous loading of 120 rail cars. After removal of the rail lines and obsolete loading ramps in the northern section, the land will be made available to light industry, preferably that associated with the general stockyards operation.⁵

Considerable work is also being done in modernising the central cattle pens. Figure 2 illustrates some of the work in progress in this modernisation programme. Figure 3 portrays some of the already completed pens. Features of these new pens are: split post construction with no projections;

⁵ Interview with Mr. B. H. Jones, Department of Research and Agricultural Relations, Chicago Union Stockyard, April 25, 1958.

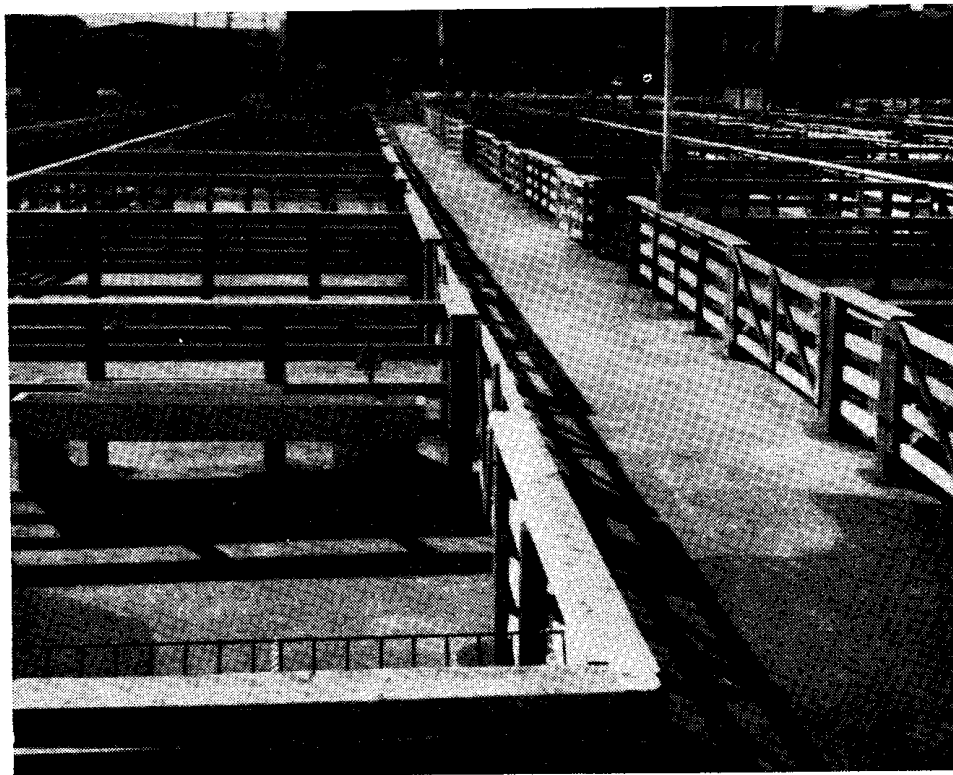


Fig. 3: New Cattle Pens in the Main Cattle Area (*Source: Chicago Union Stockyards, Department of Research and Agricultural Relations*).

new water troughs; new water mains and sewers; steel hay racks and aluminium gates; asphalt paved floors. The area of the stockyards on which this is taking place is shown in Figure 1.

Recently, the motor truck chutes, for unloading livestock transported to the yard by truck, have been rebuilt. There are six such ramps, and the location of three can be seen on Figure 1. Livestock moving from the holding yards to Packing Town are driven directly to the slaughter house. Livestock moving to packers in the Chicago area are either driven or trucked, depending on the distance of the packer from the yards. Such movements are supervised from the control point in the north-eastern section of the yards (Figure 1).

LIVESTOCK RECEIPT AT THE CHICAGO UNION STOCKYARDS

Over the past eight years, saleable receipts of livestock at the yards have been consistently in the order of five million head.⁶ Perhaps more interesting than the actual numbers is a consideration of the relative importance of truck and rail in transporting livestock to the yards. It is obvious from

⁶ *Chicago Market Shipments and Saleable Receipts*, Chicago Union Stockyards Statistical Office, April, 1958. (Mimeographed.)

Table I⁷ that in 1956 and 1957 at least, the motor truck accounted for the greatest percentage of livestock shipped to the stockyards. Undoubtedly, this accounts for the apparent lack of concern with rail unloading facilities; the part played by the railroads in assembling livestock at the yards has

TABLE I
Truck and Rail Receipts at Chicago Union Stockyards, 1956 and 1957

Year	Truck		Rail	
	No.	Per Cent	No.	Per Cent
1956 ..	4,865,258	92	423,065	8
1957 ..	4,564,764	94	291,368	6

become quite small and has been reduced to such proportions that it is no longer necessary to maintain existing facilities. It is not difficult to explain this rapid decline in importance sustained by the railroads. States of outstanding importance in providing livestock for the yards are the Corn Belt States adjacent to Chicago. Iowa, Illinois and Indiana are particularly important; Wisconsin, a little to the north, is also quite significant. The motor truck, with great flexibility and low running costs over short distances, encounters little competition from the railroads in this area.

Of the railroads transporting livestock to the yards, the Chicago Burlington and Quincy (CB&Q) carries the greatest number (see Table II).⁸ Next in importance is the Atchison, Topeka and Santa Fe (ATSF). Both of these lines run through Illinois and Missouri, two

TABLE II
Railroads Transporting Livestock to the Chicago Union Stockyards, 1957

Railroad	No. of Carloads					
CB&Q	4,010
ATSF	1,401
C&NW	1,269
IC	596
MILW	503
WAB	189
CRIP	131
SOO	76
C&EI	29

important livestock producing States. As well, the CB&Q extends through to Nebraska and Wisconsin, and has connections to Iowa and Minnesota. The Minneapolis-St. Paul & Sault-St. Marie Railroad (SOO), the Chicago, Milwaukee, St. Paul and Pacific Railroad (MILW), the Illinois Central Railroad (IC), and the Chicago and North Western Railroad (C&NW) are oriented a little further north, while the Chicago and Eastern Illinois

⁷ Statistical Office, Chicago Union Stockyards; publicity agents claim that this has been the case over the last ten or fifteen years.

⁸ Statistical Office, Chicago Union Stockyards, April, 1958.

Railroad (C&EI), Chicago, Rock Island and Pacific Railroad (CRIP), and Wabash Railroad (WAB) have a more southerly orientation. In the early 1940's the CB&Q and the ATSF were the leading shippers,⁹ and this position has been maintained through the years because of the coverage they have over an extremely productive area, and because of the service reputation which these railroads have built up.

Truck operations are not confined to the states immediately surrounding Chicago. As can be seen from Appendix I, a considerable number of livestock move to Chicago from states east of Illinois, not served by the C&EI or the CRIP. Important among such states are Michigan, Ohio, and Kentucky. Appendix I also indicates number and type of livestock provided by each state. One must risk repetition to point out the overwhelming importance of the Corn belt states.

Considerable diversity is present in the type of livestock provided by each state. In Wisconsin, Michigan, Indiana, Illinois, West Virginia, New Hampshire, and particularly Ohio, hogs predominate. Cattle comprise the greatest proportion of shipments from Minnesota and Iowa in the middle west; New York in the east; Kentucky, Tennessee, Arkansas, Oklahoma and Missouri in the south; North Dakota, Nebraska, Kansas, and Colorado in the central west; New Mexico in the south-west; and Oregon in the Pacific north-west. While cattle shipments from Montana and Wyoming do not account for the largest numbers, these states are important for providing replacement (store) cattle for Illinois and Wisconsin farmers. Such cattle are railed into the Corn Belt farm, fattened on improved pasture and corn, marketed in Chicago.¹⁰ Sheep are seen to be of major importance in shipments from Texas, Utah, California, Idaho, Washington, and South Dakota. Calves dominate shipments from Alabama, Mississippi, and Louisiana in the south; Montana in the central-west; and Virginia in the east. With the exception of Montana, the actual numbers involved are extremely small.

Two further observations remain to be made on the shipments of livestock to the stockyards. Firstly, one is impressed by the extent of the area tapped by the Chicago Union Stockyards. It is obvious that the yards play a significant part in the livestock economy of the entire United States. Secondly, in contrast to the situation in Australia, movements by stock route are completely absent. In the movement of beef cattle from Queensland to New South Wales in 1955-56, 53 per cent of the total entered the latter state by travelling stock route.¹¹ Because of the abundance of rail and road facilities in the United States no such parallel exists.

⁹ Mayer, *op. cit.*, p. 96.

¹⁰ Interview, Mr. Glenn James, landowner, Platteville, Wisconsin; August, 1957.

¹¹ Robert H. T. Smith, "Interstate Beef Cattle Movements in Eastern Australia", *Australian Geographer*, Vol. VII, No. 2 (November, 1957), p. 47.

LIVESTOCK SHIPMENTS FROM THE CHICAGO UNION STOCKYARDS

A consideration of the movements of livestock from the Chicago Union Stockyards indicates the importance of the latter as a live-market point between western and middle western pastures, and eastern markets. From Table III,¹² it is clear that while shipments as a percentage of receipts have been steadily increasing since 1950, almost two-thirds of the livestock

TABLE III
Shipments of Livestock as a Percentage of Saleable Livestock Receipts

Year	Cattle		Calves		Hogs		Sheep		Total	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
1950 ..	630,500	36	12,088	11	499,369	19	230,358	47	1,372,315	28
1951 ..	713,372	45	14,478	14	500,849	19	171,202	44	1,399,901	29
1952 ..	824,149	45	16,793	15	565,849	20	200,086	35	1,606,877	30
1953 ..	1,024,458	45	18,419	16	528,386	23	210,302	37	1,781,565	34
1954 ..	959,296	42	21,363	19	513,703	23	167,751	37	1,662,113	33
1955 ..	1,009,128	45	11,541	13	788,073	29	225,931	43	2,034,673	36
1956 ..	1,125,155	49	16,924	17	676,865	28	183,407	40	2,002,351	38
1957 ..	1,223,026	52	10,239	16	615,040	30	152,198	48	2,000,503	41

received at the yards are distributed to Packing Town or Chicago area packers. It is significant to note that while demand for cattle and, to a lesser extent, hogs, by the eastern packers has definitely increased since 1950, the increase in demand for calves has not been so strong; numbers do not seem to be sufficiently large to warrant sustained market interest. The percentage of sheep shipped east has not varied a great deal. Total figures indicate, however, that since 1950 there has been a 13 per cent increase in the percentage of total receipts which are shipped east.

In contrast to the diminutive part played by the railroads in shipping livestock to the yards, rail operations dominate shipments from the yards. Table IV¹³ shows that over the last eight years, at least 60 per cent—and usually more—of shipments from the yards have gone by rail. Calves are the only species of which the majority is shipped by truck. Although there has been a net decrease in the percentage of cattle, hogs, and sheep transported by rail in the last eight years, rail transport still dominates this activity. This explains the current construction of the new rail shipping division mentioned earlier in this discussion.

Quite a marked contrast in size of operations exists between receipts and shipments by rail; this is illustrated clearly by Table V.¹⁴ Three of the four trunkline railroads extending from Chicago to New York—the New York Central (NYC), Pennsylvania (PENN), and Baltimore and Ohio

¹² *Chicago Market Shipments and Saleable Receipts*, Chicago Union Stockyards Statistical Office, April, 1958* (Mimeographed).

¹³ *Shipments (Percentage of Head Shipped by Rail and by Truck)*, Chicago Union Stockyards Statistical Office, April, 1958 (Mimeographed).

¹⁴ Statistical Office, Chicago Union Stockyards, April, 1958.

(B&O)—dominate this movement. Presumably the majority of livestock carried by these railroads is consigned to meat packers in the New York area. The fourth trunkline, the Erie, is of minor importance only. The Grand Trunk Western (GTW) terminates at Detroit, while the New York, Chicago, and St. Louis railroad (Nickel Plate Road, NKP), serves Lake Erie shore cities. Clearly, the majority of livestock are shipped directly to New York. The C&O and C&IL are of minor importance only.

TABLE IV
Percentage of Shipments by Rail and Truck

Year	Cattle		Calves		Hogs		Sheep and Lambs		Total	
	Rail	Truck	Rail	Truck	Rail	Truck	Rail	Truck	Rail	Truck
	per cent		per cent		per cent		per cent		per cent	
1950 ..	67	33	27	73	66	34	87	13	70	30
1951 ..	64	36	9	91	69	31	85	15	68	32
1952 ..	63	37	9	91	62	38	79	21	64	36
1953 ..	65	35	19	81	51	49	86	14	63	37
1954 ..	66	34	7	93	52	48	85	15	63	37
1955 ..	67	33	6	94	62	38	90	10	68	32
1956 ..	68	32	7	93	71	29	86	14	70	30
1957 ..	63	37	5	95	60	40	76	24	63	37

TABLE V
Railroads Transporting Livestock from the Chicago Union Stockyards, 1957

Railroad	No. of Carloads						
PENN	15,115
NYC	11,175
B&O	6,875
NKP	1,883
GTW	1,134
ERIE	1,084
C&O	377
C&IL	6

Railroads have a decided advantage over trucks in this movement to New York. As well as being able to make the trip to the east coast in less than thirty-six hours,¹⁵ the railways are able to take advantage of the long-haul nature of this movement; motor trucks as yet cannot effectively compete on long hauls, but they are steadily encroaching on this section of transport operation which was formerly the province of the railways.

¹⁵ If this period is exceeded, a carrier is required by law to unload, feed, water, and rest livestock in transit.

MARKET CONDITIONS

A quotation from a December 1957 Press Release adequately summarises market conditions at the Chicago Union Stockyards.

During 1957 additional buyers for packers, formerly not represented here, bought regularly at the Chicago market. Packer buyers (i.e., off-the-market buyers), are attracted to Chicago because they know they can obtain the grade, quality and weight of livestock to fit their needs, and because of the ideal location for fast shipment of animals to major points of meat distribution. They know, too, that Corn Belt feeders produce the best livestock marketed.

TABLE VI
Percentage of Livestock Consigned to the Open Market and to Packers, 1956, 1957

Livestock	1956		1957	
	Open	Packer	Open	Packer
	per cent	per cent	per cent	per cent
Cattle	98.1	1.9	98.7	1.3
Calves	73.6	26.4	75.7	24.3
Hogs	75.5	24.5	77.9	22.1
Sheep	80	20	79.6	29.4
Total	84.6	15.4	87.2	12.8

Evidence for this increase in representation of packer buyers is shown in Table VI,¹⁶ which gives the percentage of livestock consigned to the open market, and direct to packers during 1956 and 1957. With the exception of sheep, the percentage of consignments to the open market increased for all branches of livestock between 1956 and 1957. This increase in open market consignments, and decrease in the percentage of livestock consigned to packers, is a direct indication of the dependability and popularity of the Chicago market. Many local Chicago packers buy all their livestock on the open market.

CONCLUSIONS

While the stockyards are orientated directly to the middle western states, the foregoing analysis has shown beyond doubt that the influence of the yards as a reliable market for livestock extends almost to every state of the Union. The effectiveness of the yards, however, is seen to depend very much on the excellent highways and railway systems of the United States, which facilitate rapid movement of livestock to and from the stockyards. If one can carry this example over to New South Wales, one can form some impression of the added effectiveness of the Bourke, Newcastle, and Sydney livestock slaughter works which would accrue from improvement to existing transport facilities, and particularly highways, in this State.

¹⁶ *Origin of Truck and Rail Receipts*, Chicago Union Stockyards Statistical Office, 1956-1957.

APPENDIX

Origin of Livestock Shipped to the Chicago Union Stockyards, 1957
(Number and Percentage)*

(Compiled from Origin of Truck and Rail Receipts, Chicago Union
Stockyards, 1957)

Area	State	Cattle		Hogs		Calves		Sheep		Total
		No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	
Middle West—	Illinois ..	1,512,546	42	1,709,131	47	37,067	0.2	305,857	0.7	3,564,699
	Iowa ..	739,901	61	397,502	33	7,327	2	53,178	4	1,197,930
	Indiana ..	118,492	33	182,644	52	5,555	2	44,662	13	351,354
	Wisconsin ..	47,551	17	213,502	74	907	1	24,050	8	286,010
	Minnesota ..	12,998	61	7,717	36	21	1	608	2	21,344
	†Michigan ..	8,497	17	37,243	78	94	1	2,182	4	48,017
	†Ohio ..	2,865	6	42,902	89	1,032	2	1,482	3	48,281
Central West—	Nebraska ..	35,083	61	819	3	599	1	20,529	35	57,049
	Colorado ..	14,084	77	....	..	922	6	3,227	17	18,233
	Kansas ..	7,711	93	....	..	325	4	209	3	8,245
	Montana ..	5,336	38	13	1	6,673	47	2,082	14	14,104
	South Dakota ..	2,858	48	38	1	21	1	2,925	50	5,842
	North Dakota ..	2,307	56	117	3	1,706	41	....	..	4,130
	Wyoming ..	1,203	23	2,381	45	....	..	1,711	32	5,295
	Idaho ..	273	2	1	0.1	5	0.9	10,477	97	10,766

Continued Overleaf

APPENDIX—continued

Area	State	Cattle		Hogs		Calves		Sheep		Total
		No.	Per cent	No.	per cent	No.	per cent	No.	per cent	
South—	Missouri ..	18,895	66	5,598	20	766	4	2,961	10	28,220
	Kentucky ..	6,818	63	897	8	1,121	10	2,062	19	10,898
	Texas ..	3,708	21	....	..	3,863	22	10,048	57	17,619
	Oklahoma ..	2,396	60	....	..	1,616	40	....	..	4,012
	Tennessee ..	811	53	333	22	383	25	....	..	1,527
	Alabama ..	155	9	679	44	715	46	2	1	1,551
	Arkansas ..	47	100	....	..	....	..	....	..	47
	Mississippi ..	20	32	....	..	43	68	....	..	63
	Louisiana ..	....	..	....	..	1,318	100	....	..	1,318

East—	New York ..	718	100	....	..	....	..	....	..	100
	Virginia ..	29	18	....	..	131	82	....	..	160
	West Virginia ..	....	..	83	100	....	..	....	..	83
	New Hampshire ..	....	..	51	100	....	..	....	..	51
West, South-West and Pacific North-West	New Mexico ..	164	100	....	..	....	..	....	..	164
	California ..	82	3	....	..	....	..	2,636	97	2,718
	Utah ..	....	..	....	..	....	..	1,874	100	1,874
	Washington ..	112	34	....	..	....	..	217	66	329
	Oregon ..	8	72	3	28	....	..	....	..	11

* Three minor categories excluded : Horses, Unknown origin, and Livestock originating in Canada.
 State groupings purely arbitrary.

† Eastern Middle West