# Texas Business Review <br> Bureau of Business Research <br> The University of Texas 

A Monthly Summary of Business and Economic Conditions in Texas and the Southwest Bureau of Business Research, The University of Texas, Austin, Texas
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Indexes of Business Activity in Texas AVERAGE MONTH OF $1930=100 \%$<br>







# Business Review and Prospect 

Physical volume of business in the Nation appears now definitely to have entered upon an upward trend. Barron's index, adjusted for long-term industry and population growth as well as for seasonal variation, has risen consistently during the past few weeks from 104.8, March 14, to 107.8, April 11. Although further confirmation will be necessary before definite conclusions can be drawn, it now seems quite certain that the increase in war production is more than offsetting the decline in production of goods for civilian use. As the conversion of peace-time industries into war industries proceeds, and as new plant capacity for the production of war equipment comes into operation, the upward trend in physical volume of business may be expected to gain momentum.
That war production is moving forward at an accelerated rate and in many instances is now far ahead of the output which was scheduled for this period is evidenced by recent statements of highly placed government officials. Speaker Rayburn in a talk delivered at Sulphur Springs, Texas, stated that airplane production is now at a rate exceeding 3,300 monthly, or fifty per cent greater than during last October; Donald Nelson speaking on this same subject stated that the automobile industry was two months ahead of schedule in converting to war production, and that on one badly needed piece of military equipment, on which only partial requirements were expected by November, auto industry engineers had found a way to provide more than the needed quantity by June.

Further confirmation of the favorable progress in the production of war materials is contained in a statement by the War Department to the effect that General Motors is seven months ahead of schedule in the production of thirty-ton tanks; and from the W. P. B. Tools Section came the report that delivery of new machine tools in February was sixty-three per cent greater than in the corresponding month of 1941. Many other reports of a highly optimistic character on war production have recently been issued by high government sources.

## Texas Business

Industry and trade in Texas continue at the high level noted over a period of many months, but the interruption to the sharp upward trend first shown in the February report has continued through March. It is expected, however, that the upward trend in the Texas business index will soon be resumed.

The composite business index increased slightly from February to March, all of the components having risen excepting runs of crude oil to stills and electric power consumption. Compared with March, 1941, the composite index rose more than twenty-eight points, or approximately twenty-six per cent.

| INDEXES OF BUSINESS ACTIVITY IN TEXAS (Average Month, $1930=100 \%$ ) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | March 1942 | March <br> 1941 | Feb. 1942 |
| Employment | 113.1 | 95.0 | 112.9 |
|  | 150.2 | 102.9 | 149.0 |
| Miscellaneous Freight Carloadings (Southwest District) | 110.7 | 76.6 | 104.2 |
| Crude Runs to Stills.- | 223.9 | 210.2 | 244.2 |
| Department Store Sales | 120.5 | 104.0 | 115.0 |
| Electric Power Consumption | 168.2 | 149.1 | 173.4**** |
| COMPOSITE | 136.4 | 108.1 | 136.0* |

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## Farm Cash Income

Cash income from agriculture in Texas during March, as computed by this Bureau (see note on bottom of following table), totalled nearly thirty-seven million dollars compared with twenty-one million dollars during the corresponding month last year, an increase of seventy-six per cent. For the first three months of the current year, the cash income from agriculture totalled nearly 11.3 million dollars, an increase of seventyseven per cent over the sixty-four million dollars during the first quarter of 1941.
Most of the gain in farm cash income was derived from cattle, hogs, eggs, milk, fruits, and vegetables. The cash income from these products during March, 1941, and 1942, respectively, were: catile, $\$ 4,266,000$ - $\$ 8,222,000$; hogs, $\$ 1,229,000-\$ 2,194,000$; eggs, $\$ 1,749,000-\$ 5,712,000$; milk, $\$ 3,274,000-\$ 5,536,000$; fruits and vegetables, $\$ 2,207,000-\$ 4,119,000$. Substantial increases were also recorded for wheat, rice, and mohair.

## INDEX OF AGRICULTURAL CASH INCOME IN TEXAS

| Average month 1928-32-100\% |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| District | $\begin{gathered} \text { March } \\ 1942 \end{gathered}$ | $\begin{gathered} \text { February } \\ 1942 \end{gathered}$ | $\underset{1941^{*}}{\text { March }}$ | Cumulative Incomo <br> Isn.-Mar., 1942 Jan.-Mar., 1941 $\dagger$ <br> (000 Omitted) |  |
| 1-N | 141.7 | 161.5 | 61.5 | 12,502 | 5,609 |
| 1-S | 439.4 | 294.4 | 267.9 | 11,699 | 6,471 |
| 2 | 225.4 | 195.0 | 136.1 | 11,607 | 7,547 |
| 3 | 189.6 | 188.3 | 111.3 | 4,805 | 3,262 |
| 4 | 219.1 | 232.1 | 86.3 | 19,586 | 8,720 |
| 5 | 111.2 | 115.2 | 60.2 | 3,602 | 2,374 |
| 6 | 233.6 | 203.7 | 231.9 | 7,244, | 5,610 |
| 7 | 169.1 | 199.7 | 111.2 | 5,334 | 3,740 |
| 8 | 193.2 | 192.4 | 98.0 | 8,153 | 4,547 |
| 9 | 230.8 | 272.5 | 155.0 | 12,446 | 7,419 |
| 10 | 181.3 | 142.5 | 92.7 | 2,582 | 1,466 |
| 10-A | 247.1 | 275.5 | 124.5 | 13,066 | 7,522 |
| STATE | 205.3 | 214.3 | 112.8 | 112,626 | 64,287 |

[^1]
## Family Expenditures

Attention is called to the chart on the outer cover page of the Review representing family expenditures for five essential items in twelve Texas communities and the average expenditure for these items in twenty-four Texas communities. By comparison with the similar chart on the cover page of the March issue of the Review, it will be noted that changes have been made
for three cities-El Paso, Abilene, and Wichita Falls. The errors occurred in the figures for food costs in these three cities as a result of a temporary mechanical defect in the tabulating machines which were used for the computations. The ratios of each item to the total of the five items have accordingly been corrected in line with the modified figure on food costs.

F. A. Buechel

## Special Meeting of the Texas Statistical Council

Members of the Texas Statistical Council and the Austin Chapter of the American Statistical Association will hold a joint meeting at The University of Texas, May first, 1942, in Room 311 of the Union Building.
"Texas' Part in the War Effort" is the general subject to be discussed at the one-day meeting by a group of business men and State and Federal authorities, all of whom are in some way engaged in the war effort.
Included on the program will be a report by Mr. I. H. Lloyd, AgricuItural Adjustment Administration, Agricultural and Mechanical College of Texas, on plans for an annual census of agriculture for Texas. Mr. B. F. Vance, also of the A.A.A. at College Station, will discuss the new requirements of agricultural production.
Mr. C. J. Crampton, State Director of Contract Distribution Division of the War Production Board, Houston, will speak on the vital question of war production -his subject will be "Production and Victory" FoIlowing Mr. Crampton's address, Mr. James H. Bond, State Director, United States Employment Service, Austin, will speak on the problems arising out of the scarcity of labor and the relation of these problems to the war effort.
"Defense Savings Bonds--Their Importance in Financing the War Effort and in the Control of Inflation" is the subject of an address to be presented by Mr. Frank Scofield, State Administrator, Defense Savings Staff, Austin. Mr. W. L. Pier, Vice President, Fort Worth National Bank, Fort Worth, will serve as discussion leader for the morning session of the meeting.
Mr. Hulen W. Black, Director, The University of Texas Development Board, will give the address at the lunch-
eon meeting, which will include members and guests of the American Statistical Association and the Texas Statistical Council.
The growing importance of chemical industries in Texas and the Southwest will be discussed in the address of Mr. Henry W. Rahn, Technical Director, Southern Alkali Company, Corpus Christi, whose subject is "Alkali Pioneers into the Southwest"; Mr. L. W. Worth, General Manager, Houston Paper Stocks Company, Houston, speaking on "Some Phases of the Paper Industry in Texas"; and Mr. Elmer H. Johnson, Bureau of Business Research of The University of Texas, whose subject is "Chemical Resources of Texas and the Southwest." Mr. Richard B. Johnson, Regional Business Consultant, United States Bureau of Foreign and Domestic Commerce, Regional Office, Dallas, will lead the discussion for the afternoon session.
The Texas Statistical Council, organized in December 1939, has for its chief purpose the coördinating and assembling of statistical information already available for the use of individuals or organizations seeking specific data concerning Texas; and also the compiling of other statistical information, now more than ever important.
Proceedings of the meeting will be published for the benefit of members and others interested in the organization; as however, only a limited number are reserved for distribution to other than members, those desiring copies should notify Dr. F. A. Buechel, Secretary of the Texas Statistical Council, Bureau of Business Research, The University fo Texas.

Clara H. Lewis

TEXAS COMMERCIAL FALLURES


# Essentials Toward An Understanding of Texas Economy 

We are becoming conscious, perhaps painfully so, at Iong last, of the tremendous need for a perspective, at once broad and inclusive, yet basic and substantial, of our national production and of just what it involves, and of what its implications are. National production, statistically considered, is nothing more or less than the aggregate of regional production and since Texas and the Southwest contribute so largely in agricultural and range output, in oil and gas, and chemicals, and substantially in pulp and paper, and even in metals refining, it behooves Texas leadership to comprehend the broader aspects of national production and the national market in order that the economic position of Texas be viewed comparatively. At no time has this comparative perspective been more necessary, in view of the demands of the war effort upon Texas resources and industries-a demand which will become even more insistent in the period after the war. This article is aimed at presenting briefly some of the larger and the more basic features that have to be considered in interpreting the more comprehensive relations of Texas to the realities of the world we live in.
The diversity of our national production, the aggregate size of the major fields of our national production, and the interdependent pattern of this production are features we find it difficult to envision in their broader inclusiveness; not because of any inherent difficulties but simply because we have not learned to look with care and discrimination at these realistic features of our economy.
The comparative breadth of our national production and its wide diversity embracing fields which in the aggregate are enormous within themselves, is a function of the natural resources pattern of the United States, and in this, the United States is the most favored of all nations. A comparative study of the continents, of their particular advantages and disadvantages, of their potentialities and handicaps, cannot be considered in the brief confines of this article. Since the present war is a global war, and since it has resolved itself into a struggle for continents, we may rest assured of an awakening interest in the world's continental features and of the oceans that separate them-things of which we are so delightfully ignorant. Natural resources constitute the basic long-tun assets of our economic life, and the swiftly advancing technology engaged in a more optimum utilization of these natural resources must be considered as one of the most significant factors in the institutional fabric in which production operates.
The dynamic interaction of technology, based upon advances in science, and the fuller, more all round, utilization of natural resources is, of course, one of the outstanding problems of today and this problem will not be less complex nor will it be less dynamic in the immediate future.

Three sorts of perspective must be considered in arriving at an overall view of our present situation as regards production: these are the geographic perspective, the historical perspective, and the economic perspective.

## Geographic Perspective

(I) The soncalled geographic perspective, which is more specifically the perspective of the major natural regions and their associated natural resources contained in the United States. The natural regions pattern and the associated natural resources constitute the bases, provide the ultimate potentialities, and establish the limits to the ultmiate growth of a country or continent.

## Historical Perspective

(2) The historical perspective which comprehends the salient features and interrelations of outstanding economic developments that have come with the advance and spread of the Industrial Revolution-the dominance of manufacturing, the outstanding lines of manufacturing from period to period, and the reasons why these major lines of industry developed as they did, and why they developed just where they did. Paralleling these developments, of the specific lines of interest, and their regional extent and geographic shifts, is, of course, the dynamic relationships of an advancing technology which applied to the utilization of the different groups of natural resources, created outstanding examples of regional specialization on the one hand (steel manufacturing centers, for instance), and on the other, raw materials producing regions, such as the Old Cotton Belt.
The growth and extension of this regional specialization, however, has not been confined merely to a straightline growth of a single group; there has arisen in the course of the time involved a wide diversity of major lines, the proportions of which change from time to time, with the coming in of new lines of development. Our national economy now as compared with what it was in 1870 exhibits not only the manifestations of enormous growth but a complexity which comprises numerous new important lines of development that simply were not in existence three quarters of a century ago.

It is a dangerous procedure to oversimplify complex trends, but the following statements seek to emphasize certain fundamental features manifested in the economic growth of the United States since 1870: Between 1870 and 1910 there occurred, except for the Old Cotton Belt, the dominant developments in what has been appropriately designated the Westward Movement. Of course, the large outlines of this movement which dominated American life for decades are generally known. The spread of population, the regional shifting of economic
activities, the advance of transportation, and the production of surpluses have received, if not adequate, at least a certain degree of consideration. But such factors as the growth of internal trade and its implications as related to the rise of a tremendous domestic market have by no means received the attention these things merit in analyses of our national economy of the various segments or sections of this economy.

The Westward Movement was marked particularly by the zone-like waves of settlement (and the concomitant forces closely associated therewith) through which was spread a more or less stable population over the Continental interior plains of the North American continent; and westward beyond the interior plains, population from various nucleii spread over the intermontane plains and lowlands.

In the United States this period was marked industrially by the remarkable expansion of the American steel industry, manifested first in a very few nucleii, and later by the expansion of these early centers and the growth of new centers (more or less under the umbrella of the old centers). This steel industry, being peculiarly depend upon coal, grew up on the coal bearing areas or at points having ready access to the coal fields, and the larger outlines of this picture have not changed substantially since. However, since this pattern was set, the availability of electric power by long-distance transmission and increased economies in the use of coal have given the bulk of manufacturing activities, including steel using enterprises a much greater latitude than was the case when only direct mechanical power was possible. To a certain degree this increasing mobility plus other factors has affected the steel industry itself. This period was also marked by the growth of industry in West-central Europe, the formation of modern Germany based primarily upon steel, and by the somewhat faint beginnings of modern industry in Russia.
In the United States the great market for steel in this period was for the building of railroads that opened up the interior parts of the country for economic growth, connecting these hitherto inaccessible regions with the growing industrial markets.
But steel and coal and railroads and the opening up of surplus raw materials producing regions, each marked by a particular type of regional specialization, do not make the full picture of developments prior to the period of World War I. In the United States the transforming forces of the electric light and power industry had been advancing rapidly since the early 1880 's. In addition, we have to consider the rise of a full-fledged chemical industry in Germany based primarily upon coal tar products-for Germany is relatively rich in coal and lignite.

Unquestionably, the decade of the 1870 's constitutes a turning point in the economic development of the United States; but it should also be noted that the decade of the 1870 's witnessed the beginnings of worldwide movements in which the shape of things to come
began to be perceived by those in a position to see the implications of new world-wide forces that seemed to have been suddenly set in motion.

It may be recalled that British Ieadership in trade and industry prior to 1870 was based primarily upon the economic development of maxitime oriented areas of the world-that is, upon areas peripheral to the continental interior lands of the earth.

After 1870 came the rather rapid development of the great continental plains of the Middle Latitudes, with the extension of railways and new instruments of production into vast regions which hitherto had played no prominent part in the course of economic developments set in motion around 1500, with the beginnings of long-distance overseas trade, and which were chiefly dominated by developments in maritime oriented areas. Economic development of the continental interiors after 1870 inroduced a new factor of the first magnitude into world affairs.

The mere fact that German economic development began with and paralleled the opening of the continental interiors with their rapidly growing demands for manufactured goods is of tremendous importance to an understanding of the rapid rise to economic power of that country. German economic development after 1870 was based primarily upon three things: the steel industry and the chemical industry, both dependent upon the relatively rich German coal resources, and the electrical industry, which served to facilitate operations in the bulk of German manufacturing activities. The fact is that nations were being transformed by the cumulative effects of forces literally set in motion first by the steam engine and the new developments of science.

And nowhere else were the impacts of these new factors of development manifested on a larger scale than in the United States. The economy of the United Statcs has been primarily a continental economy. The Westward Movement was a great colonization feature, which peopled the interior of the North American continent. The settling of the vast areas of the American Prairies and Western Plains and the utilization of their chemically rich dark-colored grasslands soils constituted one of the major historical developments of modern times. Of the broader aspects of the agricultural conquest of the grassland soils of the continental interiors, of which the American development was but one, Dr. Marbut wrote: "These areas possessed the combined advantages of high productivity, features promoting their rapid and cheap subjection to agriculture and their utilization on a large scale after subjection. None of these characteristics was possessed by any considerable areas of the lands that had been previously cultivated. Their utilization as it actually took place, introduced a factor into the world's agriculture incomparably more effective as a bread producer than any factor that had ever been introduced into the situation before, without regard to time or other circumstances. It was the world's greatest agricultural event, if the production of breadstuffs be regarded as the most important aim of agriculture."

Dr. Marbut also stated at various times that "we have failed to realize the vast potentialities for production of American agriculture." For the United States stands unique among the countries of the world in its inherent productive capacity not only for agriculture specialization in its great corn, cotton, wheat, range livestock, and sub-tropical products belts and regions but also in its capacity for wide diversification in its large humid Mid-Latitudes region.

Our modern agricultural development and our agricultural problems as well, are to be interpreted as functions of the rise of industry, the availability of modern agricultural machinery and the utilization of the darkcolored soils of the interior plains of the United States. It is to be noted that these factors also brought about striking changes in agriculture elsewhere in the world. And in Texas, for instance, an interpretation of agricultural achievements has to be considered as an adjustment to the light-colored timbered soils of the eastern part of the State, to the utilization of the rich soils of the extensive Black Prairies and later the extensive uses made of the vast areas of the Black Earth and Brown grassland soils of the western portions of the State.

With respect to the growth of manufacturing in the United States there is the fact that the great coal resources as well as the iron mines upon which the American steel industry is based lie west of the Appalachians. But we have to consider not only the great coal resources of the United States, which are associated with a plains (or dissected plains) environment but other great natural resources as well. There are, for instance, oil and gas, and the wide range of nonmetallics, to name but two big groups, all of which are associated with a plains environment.

Then came World War I with its forces shattering long-held concepts, relegating many of them to anthropological muscums. World War I made the world conscious of the economic power of the United States and it made the United States conscious of certain things we had and of certain things we then did not have. That cataclysm brought into relief the importance of petroleum in the United States and to those countries lacking this vital material; it brought into relief the fact that the United States had only the small beginnings of a chemical industry, which also came to be perceived as of vital importance to nations.
The decades following World War I witnessed momentous changes in the American economy, and some. what like the period following 1870, the setting of this economy became a thing of world-wide implications, but in which the United States was playing an outstanding role.

The automobile industry, which as an industry was non-existant in 1900, became the instrument of one of America's outstanding dovelopments in the post-War years-it became this because of four things: the sizo and importance of the automobile industry itself; the introduction of mass-production technique in the manufacture of automobiles; the effects of the automobile industry upon the American oil industry; and its re-
actions upon highway development throughout the length and breadth of the land.
But the automobile industry, outstanding as it was, did not fill the whole field of American development during this post-War period. America had had a long experience wilh machines and with the types of production that support a mechanical age. Thus it was that the development of the automobile industry and the things it set in motion were taken almost as a matter of course.
In the chemical industry, however, the problem was a different one. There was not the traditional background of things chemical such as had prevailed in various centers over Western Euxope for generations, and the chemical industry is based upon a different pattern of natural resources than is the case of iron and steel and the mechanical industries.

But the very exigencies of the post-War situation, in combination with our natural resources patterns and the available raw materials therefrom, set in motion the forces that have served to build the American chemical industry in the course of only a few years into one of the vital elements of our economic life.
Naturally, these things mentioned in this brief survey do not comprise the full picture, but they do shape the outlines of the larger picture of our economic developments.

We may emphasize again that power-driven machinery, modern methods of transportation and communication, the resulling division of labor, the progress of science, together with the large use of capital, and the appearance of the corporation bave created a new world so far as production of wealth is concerned and one which has only a remote resemblance to what existed a century ago. The important point to be given emphasis here is that it was during this period of developments carried out on a world-wide stage that the United States rose to importance as an economic power.

## Economic Perspective

(3) The economic perspective though related to the geographic perspective and to the background of historical development is of a different order. If the problems concerned in getting a substantial geographic perspective or of an interpretational historical perspective are difficult and complex, then the difficulties of obtaining a comprehensive cconomic perspective that is at once authentic and realistic are obviously even more numerous and complex.

A working economic perspective is necessary and fortunately enough of the broader features stand out so prominently that no special dispensation is required to see them. In regard to the United States our economic perspective must embrace two sets of conditions--those internal to the nation's economy, and those external factors that affect our present economy and which likely will affect the course of our economy in the future. Obviously this involves a world view for the external problems affecting us are global in extent and will continue to be world-wide in their consequences. Just
as provincialism, for instance, must be seen as a phase or sector of the national picture, so national interests of necessity have to be viewed comparatively in the wider perspective of world affairs. Can there be, any question that isolation today for any section of the world is anything but an anachronism?

Consider the fact, for instance, that those nations which in the past have adhered most closely to strong protective tariff policies have always been keenly concerned with and often had aggressive programs aimed at getting their own exportable surpluses into the markets of the rest of the world, in competition with goods from elsewhere.

These factors take on special meaning and added importance with reference to the world position the United States has come to occupy and will be challenged to fill, both as to the war and in the world reconstruction of the post-war period. And this is so simply because of the outstanding position and responsibilities of leadership in world affairs given the United States because of its advantageous combinations of natural resources patterns, its highly favorable physical environment conditions, and ita geographic position and orientation in comparison to other countries of the world.

It is not a matter of manifest destiny but simply a matter of the physical geography of countries in relation to the institutional factors that are dominant in world affairs: And barring cataclysmic upheavals these dominant institutional factors in their larger outlines will continue to be dominant for a long time to come. The United States, occupying the most favored portion of North America, and a great continental economy, dominated in the past by the conquest of its vast continental area, but fronting on two oceans, and these the most strategic of oceans-the North Atlantic and the North Pacific-will necessarily be vitally concerned henceforth with maritime affairs, and therefore with world affairs.

## Economic Development in Texas

The bases of economic development in Texas have to be considered in relation to the combinations of natural resources and the physical environment of the State as related to the State's chief lines of economic activities, on the one hand and to impacts of economic conditions elsewhere not only in adjacent regions but even in fairly remote areas and regions. The area of the State is so large, its regional environment so diverse, its soils and native grasses and forest resources so extensive, its oil and natural gas so outstanding, and its supplics of numerous nonmetallic minerals so immense that to present their basic features would require volumes; to this variety of highly important natural resources must be added the fact of the State's geographic orientation, particularly with reference to the Gulf of Mexico and the consequent ready access to markets outside the State.

## The Conservation Problem

In association with a consideration of the bases of economic developments in Texas two other groups of
factors have to be given attention. One of these relates to the permanency or temporary character of the factors which underlie present activities. This is of course the fact of conservation and it involves a careful consideration of those features that may be regarded as permanent and those that have well-defined temporary qualities; and with regard to the latter, it becomes necessary to give careful attention to the factors making for important changes of the temporary features, together with indications of when and how rapidly these changes may be expected to take place.
Obviously, the critical factor in Texas' natiural resources is that of petroleum and natural gas. The plain need for long-range studies of the salient factors of our oil and gas resources, of new technologies applied to their utilization, and of the benefits the State of Texas is to derive from them can hardly be over-emphasized.

## New Lines of Economic Activities

The other factor to be considered in conjunction with the bases of present economic developments in the State and the degree of permanency or temporary aspects of the factors that underlic present activities is that of potentialities in wholly or partly developed lines of economic activity. This obviously involves careful consideration of the other two factors - the economic bases and the problem of conservation-but it also involves a consideration of the circumstances which must be realized in order to bring the undeveloped lines of economic activities into operation.
To sum up: The bases of climates and geographic geology of Texas, together with its geographic orientation may be considered as unchanging factors so far as human time is concerned. Forests can be reproduced efficiently, the native grasses show a remarkable degree of persistence if grazed properly and even our soil resources can be improved if given adequate care. With reference to its position in the total money income of Texas, the agricultural and timber resources occupy a very important sector, and to say that the fundamentals of the Texas agricultural situation merit careful consideration and scientific studies is putting the matter mildly indeed. Oil and gas the world over are almost evanescent features from the long-time point of view. In its total reserves of these vital resources Texas is exceptionally well off. But from the long-range point of view, the time is coming when the demands for oil and gas will be greater than our capacity to supply them adequately.

The potentialities of Texas' economic activities lie in the greater development of its chemical resources.
This is of course a matter of tremendous importance and one of growing complexities. In a broad sense the growth of pulp manufacture for various uses is to be regarded as a chemical problem, and one which in its processes uses a wide variety of chemicals. And what about our vegetable oil resources and their potentialities as chemical raw materials?
Every important oil refinery in the State may be regarded as a huge chemical plant. Aviation gasoline for instance is a synthesized product, one which does not occur as such in nature. The strategic position of
oil refining plants now brought out in full perspective in producing toluene, butadiene, and industrial alcohol, also reffects their significance as great chemical industries. Here it may be noted that according to recent press dispatches the site for a $\$ 40,000,000$ synthetic rubber plant has been selected on a 700 -acre tract near Port Arthur, Texas. The utilization of natural gas for providing chemical raw materials has advanced far enough to demonstrate the potentialities in these lines. Furthermore, the use of refinery gases and natural gas by chemical concerns in the manufacture of a full line of synthetic organic chemicals is illustrative of the vast potentialities afforded by this relatively new chemical development.
And lastly, though by no means least, too much emphasis could hardly be placed upon the vast resources of Texas in the field of non-metallics upon which a tremendaus chemical industry can be based.

Summing up, the bases of Texas production and the primary sources of Texas income can be grouped into three large categories: the products of the soil and climate, the oil and gas resources, and the wide display of non-metallics which afford the foundation for a great heavy chemicals industry. Each of these categories is large enough, and this is an important item, to form a significant sector in the economy of the nation, and to play a very large part in the national market for the different lines of products they afford.
Naturally, they play an important part in our national production and because of that they are problems not only of national import but also spread over into the wider field of international affairs.
The potentialities of the chemical industry in Texas in transforming older industries and in creating new ones will be the subject of a forthcoming article.

Elmer H. Johnson

## The Nation Overlooks Significance of Cotton

The three "F's," Food, Fiber, and Feed, are not only vital sinews in winning a long, total war, but they can he made to have tremendous power in making the peace that follows. Cotton is the one commodity able to yield all three in great abundance in their most useful forms. Cotton lint is the fiber raw material for over seventy per cent of the world's textile manufacturing industry.. Cottonseed oil is the best, most valuable, and abundant of all of the vegetable oils; it alone constitutes over twenty per cent of all such oils, and vegetable oils are now the world's most important source of fats. Cottonseed meal and cake are a major source of high protein feed, the annual production in the United States alone being over two million tons; and concentrated protein feeds are basic to modern meat and dairy production. In addition to this, most farmers in the South feed whole cottonseed to their cows. Even all these do not tell the entire story, for cottonseed hulls are used as a substitute for hay and are as good as ordinaxy hay. Cotton linters, the production of which in a normal crop equals about $1,500,000$ bales or $750,000,000$ pounds, have no equal as a base for making high explosives.

The point of significance and vital concern is that policy makers are apparently measuring the importance of cotton in terms of only one of its many products, cotton lint, and that in an entirely too restricted sphere. In order that it may render maximum service in this hour of peril, the cotton-growing region insists that the importance of cotton be measured in terms of all its products. Cotton is not only the best yielder of any of the major crops in the South and Southwest, it is the surest crop, farmers are experienced in its production and
handling, and a supply of the types of equipment necessary for its production and processing is already intact.

The Government is urging farmers in the cottongrowing South to plant peanuts and soybeans as sources of increased supplies of the greatly needed vegetable oils, and many farmers are going into the production of these crops without the necessary background of knowledge of the techniques of their successful production and without having the necessary equipment for their production.
This is not to say that farmers in the South should not be encouraged to grow other oil seed bearing crops where they have had experience and know their lands are adapted to the crop, but it does mean to say it is time for all-out production of the most valuable crops and to restrict reform and such experimentation to the limit.

The United States has the land and the developed capacity and faciliites to produce more than fifty per cent of all the cotton and cotton products of the world. It is now using its ability to produce this important commodity at about seventy-five per cent of capacity. Not only the rest of the world, but the United States itself, is confronted with a shortage of all the products of cotton; but, notwithstanding this, the National Government continues its policy of restricting production and is thus reducing the nation's capacity to win the war and our economic strength in formulating the peace that follows.
A. B. Cox

## EMPLOYMENT AND PAY ROLLS IN TEXAS

March, 1942


## ESTIMATED NUMBER OF EMPLOYEES IN NONAGRICULTURAL BUSINESS

 AND GOVERNMENT ESTABLISHMENTS ${ }^{\left({ }^{(9)}\right)}$|  | $1940{ }^{(1)}$ | $1941{ }^{(4)}$ | 1912 |  | 1940(1) | $1941{ }^{(0)}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| January | 944,000 | 1,052,000 | 1,115,000 ${ }^{(1)}$ | July | 983,000 | 1,101,000 |
| February | 943,000 | 1,092,000 | 1,111,000 ${ }^{(8)}$ | August | 988,000 | 1,113,000 |
| March | 965,000 | 1,086,000 |  | September | 1,009,000 | 1,134,000 |
| April | 963,000 | 1,097,000 |  | Oetoher | 1,022,000 | 1,141,000 |
| May | 983,000 | 1,077,000 |  | November | 1,048,000 | 1,161,000 |
| June | 982,000 | 1,084,000 |  | December | 1,084,000 | 1,177,000 |

${ }^{-}$Does not incivde propiletorw, firm members, oficers of corporations, or other principal executiveq. Fäêtory employment excludet alao ofice, salos, technical ani pofessional personncl.
anfersional.
(9) Subject to reviaton.
${ }^{(8)}$ Less than $1 / 10$ of one per cent
${ }^{4}$ () Not available.
(9)
(6)
Based on taval unweighted figares.
${ }^{(6)}$ Based on unweigated fogares.
ersons, casual workers, or domestle servanth, and exclosive of military and maritime parsonnel. These fignes nra furniched
Statigtice, U.S. Department of Lahor,
prepared fromin reporte from representstive Texas eatablishmenta to the Burean of Business Research coöperating with the Bureau of Labor Statiantos.
Duo to the national emerseacy, publicetion of date for certain induatries if being withheld autil further motice.

## MARCH CREDIT RATIOS IN TEXAS DEPARTMENT AND APPAREL STORES

## (Expressed in Per Cent)

|  |  |  |  | Ratio of Collection to Outstendinge 1942 1941 |  | Ratio ofCredit SSIeriesto Credit Salos$1942 \quad 1941$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Stores | 57 | 64.0 | 66.0 | 40.8 | 40.8 | 1.0 | 1.0 |
| Stores Grouped by Cities: |  |  |  |  |  |  |  |
| Abilene | 3 | 56.2 | 51.9 | 38.2 | 39.3 | 1.4 | 1.4 |
| Austin | 5 | 57.4 | 59.9 | 48.3 | 48.0 | 1.1 | 1.1 |
| Beaumont | 3 | 67.3 | 70.1 | 43.3 | 39.1 | 0.8 | 1.1 |
| Dallas | 9 | 72.8 | 74.3 | 41.6 | 42.0 | 0.7 | 0.7 |
| El Paso | 3 | 55.3 | 56.8 | 40.1 | 40.5 | 1.3 | 0.9 |
| Fort Worth | 5 | 63.8 | 64.4 | 40.0 | 38.5 | 1.0 | 1.1 |
| Houston | 5 | 62.4 | 64.2 | 40.8 | 40.6 | 1.3 | 1.4 |
| San Antonio | 4 | 53.3 | 58.7 | 41.2 | 46.1 | 1.5 | 1.2 |
| Waco | 5 | 61.6 | 63.6 | 32.0 | 30.7 | 1.3 | 1.4 |
| All Others | 15 | 55.8 | 59.5 | 39.9 | 37.9 | 1.2 | 1.7 |
| Stores Grouped According to Type of Store: |  |  |  |  |  |  |  |
| Department Stores (Annual Volume Over $\$ 500,000$ ) | 17 | 63.6 | 65.6 | 41.5 | 41.9 | 1.0 | 1.0 |
| Department Stores (Annual Volume ùnder \$500,000) | 10 | 54.1 | 57.4 | 37.8 | 34.9 | 1.4 | 1.8 |
| Dry-Goods-Apparel Stores | 4 | 58.8 | 62.2 | 39.4 | 38.4 | 1.8 | 1.8 |
| Women's Specialty Shops | 14 | 67.2 | 69.6 | 38.5 | 39.0 | 0.6 | 0.7 |
| Men's Clothing Stores | 12 | 66.0 | 66.7 | 42.8 | 40.4 | 1.2 | 1.5 |
| Stores Grouped According to Volume of Net Sales During 1941: |  |  |  |  |  |  |  |
| Over $\$ 2,500,000$ | 11 | 63.7 | 66.9 | 41.0 | 42.5 | 0.9 | 0.9 |
|  | 8 | 64.1 | 65.7 | 41.9 | 38.9 | 1.1 | 1.2 |
| \$1,000,000 down to \$500,000 | 8 | 58.7 | 60.0 | 43.4 | 42.1 | 1.2 | 1.3 |
| \$500,000 down to $\$ 100,000$ | 26 | 55.4 | 58.2 | 40.6 | 39.5 | 1.4 | 1.5 |
| Less than $\$ 100,000$ | 4 | 56.1 | 61.5 | 38.7 | 31.7 | 2.4 | 5.2 |

Noxs: The ratios shown for each year in the order in which they appear froat left to right are obtained by the following computationa: (1) Credit Sales divided by Net Salos. (2) Colloctions during the month dividod by the total accounte unpaid on the first of the month. (3) Salarieg of the Crodit department divided by Credit Sales, The data are reported to the Burean of Buaineta Research by Texas retall atores.

MARCH SHIPMENTS OF LIVE STOCK CONVERTED TO A RAIL-CAR BASIS*

|  | Cattlo |  | Cilves |  | Hogs |  | Sheop |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1942 | 1941 | 1942 | 1941 | 1942 | 1941 | 1942 | 1941 | 1942 | 1941 |
| Total Interstate Plus Fort Worthi | 3,520 | 2,254 | 708 | 736 | 1,094 | 1,006 | 639 | 385 | 5,961 | 4,381 |
| Total Intrastate Omitting Fort Worth | 383 | 162 | 111 | 54 | 8 | 20 | 8 | 37 | 510 | 273 |
| TOTAL SHIPMENTS | 3,903 | 2,416 | 819 | 790 | 1,102 | 1,026 | 647 | 422 | 6,471 | 4,654. |

TEXAS CAR-LOT* SHIPMENTS OF LIVE STOCK, JANUARY 1-APRIL 1

|  | Catle |  | Calves |  | Hogs |  | Shoop |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1942 | 1941 | 1942 | 1941 | 1942 | 1941 | 1942 | 1941 | 1912 | 1941 |
| Total Interstate Plus Fort Worthil | 9,601 | 6,982 | 2,218 | 2,357 | 2,907 | 2,790 | 1,413 | 967 | 16,139 | 13,096 |
| Total Intrastate Omitting Fort Worth | 1,148 | 575 | 330 | 335 | 35 | 55 | 45 | 51 | 1,558 | 1,016 |
| TOTAL SHIPMENTS .-. | 0,749 | 7,557 | 2,548 | 2,692 | 2,942 | 2,845 | 1,458 | 1,018 | 17,697 | 14,112 |

[^2]
## POSTAX RECEIPTS



COTTON BALANCE SHEET FOR THE UNITED STATES AS OF APRIL 1
(In Thousands of Running Bales Except as Noted)

|  | Carryover Aug. 1 | $\begin{aligned} & \text { Imports } \\ & \text { Apo. }{ }^{\text {Apo }} \end{aligned}$ | Final Ginnings | Total | $\begin{gathered} \text { Consump. } \\ \substack{\text { inunt. } \\ \text { Apr. }} \end{gathered}$ | $\begin{aligned} & \text { Exports } \\ & \text { Aprill } 1^{*} \end{aligned}$ | Total | Aalance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1932-1933 | 9,268 | 88 | 12,710 | 22,480 | 3,749 | 6,085 | 9,834 | 12,646 |
| 1933-1934 | 8,176 | 100 | 12,664 | 20,940 | 3,945 | 6,098 | 10,043 | 10,897 |
| 1934-1935 | 7,746 | 74 | 9,472 | 17,292 | 3,034 | 3,573 | 6,607 | 10,685 |
| 1935-1936 | 7,138 | 90 | 10,420 | 17,648 | 4,081 | 4,814 | 8,895 | 8,753 |
| 1936-1937 | 5,397 | 139 | 12,130 | 17,666 | 5.298 | 4389 | 9,687 | 7,979 |
| 1937-1938 | 4,498 | 80 | 18,242 | 22,820 | 4,017 | 4,657 | 8,674 | 14,146 |
| 1938-1939 | 11,533 | 95 | 11,621 | 23,249 | 4,609 | 2,786 | 7,395 | 15,854 |
| 1939-1940 | 13,033 | 112 | 11,48I | 24,626 | 5,331 | 5,350 | 10,681 | 13,945 |
| 1940-1941 | 10,596 | 100 | 12,298 | 22,994 | 6,071, | 811 | 6,882 | 16,112 |
| 1941-1942 _-__-............... | 12,367 | + | 10,489 | 22,856 | 7,247 | $\dagger$ | 7,247 | 15,609 |

${ }^{*}$ In 500 .pound bales.
$\dagger$ Figure* not avaitahle.
Cotton Yeat begins Anguet 1.

## BANKING STATISTICS

## (In Millions of Dollars)

Debits to individual accounts
Condition of reporting member banks on-

| March, 1942 |  | March, 1941 |  |
| :---: | :---: | :---: | :---: |
| Datlag Distriot | United States | Daltur District | United States |
| \$ $1,507^{*}$ | \$57,018* | \$ 1,215* | \$51,929* |
| April | 1942 | April | 2, 1941 |



Asegts:


| 693 | 30,494 |
| ---: | ---: |
| 359 | 11,394 |
| 256 | 7,003 |
| 3 | 424 |
| 4 | 408 |
| 12 | 407 |
| 22 | 1,245 |
| 62 | 1,878 |
| 33 | 680 |
| 42 | 2,354 |
| 156 | 9,671 |
| 38 | 2,684 |
| 65 | 3,711 |
| 188 | 9,951 |
| 14 | 491 |
| 280 | 3,367 |
| 32 | 1,153 |
|  |  |
| 628 | 24,197 |
| 130 | 5,120 |
| 48 | 1,886 |
|  |  |
| 302 | 8,885 |
| 1 | 639 |
| 5 | 66 |
| 93 | 3,937 |


| 598 | 26,952 | 697 | 30,943 |
| ---: | ---: | ---: | ---: |
| 321 | 9,828 | 360 | 11,392 |
| 219 | 5,465 | 253 | 6,902 |
| 2 | 347 | 2 | 422 |
| 4 | 504 | 4 | 471 |
| 12 | 454 | 14 | 410 |
| 24 | 1,228 | 22 | 1,250 |
| 1 | 52 | $\ldots$ | 1,37 |
| 59 | 1,778 | 65 | 1,900 |
| 30 | 742 | 35 | 1,206 |
| 36 | 2,183 | 42 | 2,337 |
| 109 | 7,653 | 158 | 9,589 |
| 39 | 2,753 | 39 | 2,723 |
| 63 | 3,793 | 63 | 3,696 |
| 149 | 11,315 | 188 | 10,001 |
| 12 | 491 | 15 | 547 |
| 294 | 3,588 | 302 | 3,267 |
| 31 | 1,174 | 32 | 1,214 |
|  |  |  |  |
| 542 | 23,093 | 635 | 24,712 |
| 137 | 5,441 | 129 | 5,188 |
| 27 | 420 | 44 | 1,688 |
|  |  |  |  |
| 284 | 9,343 | 327 | 9,033 |
| 1 | 633 | 1 | 653 |
| 4 | 751 | 5 | 768 |
| 89 | 3,839 | 93 | 3,929 |

*Five weekg.
Nots: From Federal Rearye Board,

## MARCH, 1942, CARLOAD MOVEMENT OF POULTRY AND EGGS

## Shipments from Texas Stations



Origin

| TOTAL | . 5 |  | . 5 | - | 21 | 1 | 68 | 20 | 29 | 0 | 389 | 41 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intrastate | . 5 | - | . 5 | - | 14 | 1 | 60 | 20 | 29 | 0 | 366 | 41 |
| Interstate .. | 0,0 | -.- | 0.0 | --.- | 7 | 0 | 8 | 20 | 0 | 0 | 23 | 0 |

[^3]
## MARCH RETAIL SALES OF INDEPENDENT STORES IN TEXAS

TEXAS

| No. өfFirme Roporting | Porcentage Changos in Dollar Sales |  |  |
| :---: | :---: | :---: | :---: |
|  | tch, 1942 | March, 1942 | Year 194 |
|  | rch, 1981 | Fcb., 2942 | Year 1941 |
| 1,136 | +11 | +20 | + 7 |
| 123 | $+31$ | +35 | +23 |
| 31 | $+31$ | +45 | +28 |
| 44 | $+48$ | +44 | +26 |
| 14 | +28 | $+57$ | +26 |
| 34 | +21 | $+24$ | +20 |
| 79 | -73 | +9 | -68 |
| 75 | -75 | $+9$ | -70 |
| 109 | +24 | $+19$ | +22 |
| 57 | +16 | +32 | +17. |
| 147 | +13 | +8 | +11 |
| 24 | +23 | $+22$ | +26 |
| 51 | +4 | + 7 | +13 |
| 23 | $-2$ | +10 | $-10$ |
| 169 | +23 | +6 | $+26$ |
| 52 | $+30$ | + 6 | +24 |
| 109 | $+20$ | $+6$ | $+26$ |
| 74 | +18 | $+23$ | +11 |
| 62 | +19 | +22 | +12 |
| 31 | +3 | +2 | +14 |
| 214 | +38 | +24 | +22 |
| 9 | +39 | +22 | +34 |
| 73 | $+37$ | + 14 | +31 |
| 128 | +36 | +29 | +16 |
| 25 | $+10$ | $+10$ | +12 |
| 10 | +49 | +19 | +52 |

TEXAS STORES GROUPED ACCORDING TO POPU.
LATION OF GITY:
All Stores in Cities of -
Over 100,000 Population $50,000-100,000$ Population $\qquad$

| 177 | +9 | +26 | +5 |
| :--- | :--- | :--- | :--- |
| 126 | +8 | +24 | +3 |
| 559 | +3 | +19 | +4 |
| 274 | +21 | +16 | +15 |

*Group total includsa kinds of buginess other than the classificstions ligted.


## PETROLEUM <br> Daily Average Production

(In Barrels)

|  | $\begin{gathered} \text { Mareh h } \\ 1942 \end{gathered}$ | $\underset{\text { March }}{\substack{\text { March }}}$ | $\underset{\substack{\text { Feb. } \\ \mathbf{1} 942}}{ }$ |
| :---: | :---: | :---: | :---: |
| Coastal Texas* | 262,000 | 255,800 | 308,900 |
| East Central Texas ----- | 86,000 | 76,150 | 91,850 |
| East Texas | 312,300 | 392,100 | 386,000 |
| North Texas | 146,450 | 132,100 | 147,800 |
| Panhandle | 84,800 | 74,000 | 87,900 |
| Southwest Texas | 187,450 | 209,500 | 230,000 |
| West Texas | 213,250 | 239,750 | 313,350 |
| State | 1,292,250 | 1,379,400 | 1,565,800 |
| United States | 3,740,300 | 3,680,850 | 4,127,100 |
| Includes Conr |  |  |  |
| See accompanying map ehowing the oil producing distri |  |  |  |
|  |  |  |  |

Gasoline sales as indicated by taxes collected by the State Comptroller were: February, 1942, 106,415,000 gallons; February, 1941, 107,671,000 gallons; January, 1942, 122,555,000 gallens.


## MARCH RETAIL SALES OF INDEPENDENT STORES IN TEXAS

|  |  | Percentage Change in Dollar Sales |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Year-to-date |
|  |  | ${ }_{\substack{\text { March, } \\ \text { from } \\ \text { com }}}$ | ${ }_{\substack{\text { March, } \\ \text { from } \\ \text { d }}}$ | ${ }_{\text {l }}^{1942}$ fram |
|  |  | March, 1941 | Feb, 1942 | 1941 |
| TOTAL TEXAS | 1,136 | +11 | $+20$ | $+$ |

## TEXAS STORES GROUPED BY PRODUCING <br> AREAS:

District 1- $\qquad$

| 83 | +17 | +25 | +8 |
| :--- | :--- | :--- | :--- |
| 23 | -6 | +23 | +11 |
| 18 | +18 | +23 | +8 |
| 16 | +23 | +25 | $+(1)$ |
| 26 | +10 | +22 | +24 |

Plainview
District $\begin{gathered}\text { Lubbock }\end{gathered}$
$\qquad$
Lubbock $\qquad$ 34

District 2 $\qquad$ Abilene
Wichita Falls
$\qquad$
 23

Wichita Fa
$\qquad$ $\begin{array}{r}82 \\ 10 \\ \hline\end{array}$

District 3 —
District
Dallas $\qquad$ 41
$-\quad 238$

Denton
Fort Worth $\qquad$
Sherman Waco All Others
District 5 $\qquad$ Tyler
All Others

| +19 | +18 | +13 |
| :--- | :--- | :--- |
| +2 | +39 | +5 |

$+45+{ }^{+1}+22$
$+17 \quad+21 \quad+22$
$+13+45+6$
$+28+12+22$
$+12+16+30$
$+4+21 \quad-(1)$
$+13+24+13$
$\begin{array}{lll}+13 & +24 & +13 \\ +4 & +21 & +2 \\ +6 & +24 & +3\end{array}$
$\begin{array}{ll}+4 & +21 \\ +6 & +24 \\ +3 \\ +8 & +26 \\ +3\end{array}$
$\begin{array}{lll}+8 & +26 & +3 \\ +32 & +29 & +27\end{array}$
$\begin{array}{lll}+32 & +29 & +27 \\ +12 & +34 & +2\end{array}$
$+5 \quad+18 \quad+12$
$\begin{array}{lll}+15 & +20 & +9 \\ +16 & +29 & -7\end{array}$
$+11+14+13$
$\qquad$ $+4+21+5$

District 6
El Paso


All Others
District 7 San Angelo $0-\quad-\quad-\quad$
All Others $\qquad$
District 8 $\qquad$ Austin
Corpus Christi
San Antonio $+$ All Others
District 9 Beaumont $\qquad$ Galveston Houston $\qquad$ All Others $\qquad$
District 10 $\qquad$
District 10-A Brownsville $\qquad$ All Others -_-_-...-.
$\begin{array}{lll}+5 & +23 & -4 \\ +16 & -3 & +21\end{array}$
$\begin{array}{lll}+16 & -3 & +21 \\ +26 & +21 & +23\end{array}$
$\begin{array}{lll}+26 & +21 & +23 \\ +22 & +25 & +21\end{array}$
$+30+18+25$
$+24+27+20$
$+26+29+22$
$\begin{aligned} & +24+29 \\ & +53 \\ & +9\end{aligned}+40$
$+16+28+11$
$\begin{array}{lll}+16 & +28 & +11 \\ +8 & +19 & +10\end{array}$
$\begin{array}{ll}+26 & +32 \\ +68 & +19\end{array}$
$+68$
$+9+28+16$
$+13+34+6$
$+15+20+10$
$+12+17+10$
$+3+12+10$
$+15+15+16$
$-2+10+7$

## ${ }^{(1)}$ Change of less than $.5 \%$.

*The total number of firms reporting does not check exactly with the totals of the cities because some motor vehicle dealers whose sales varied radically from the sales of other stores in their respective cities were omitted when working the percentage changes for those cities. This was done only when the sales of motor vahicle dealers were an unusually large proportion of the total sales of a city.
Nors: Prepared from reports of independent retail stores to the Bureau of Business Research, coöperating with the U.S. Bureau of the Census.

## TEXAS CHARTERS



## COMMODITY PRICES



Nots: From Southern Pine Association.

## BUILDING PERMITS



## CONTENTS




[^0]:    *Revised.

[^1]:    - Dase period revised.
    $\dagger$ Rerieed.
    Norts: Farm cash fincome as compated by thin Buroan anderstater actand faym cash income by from 6 to 10 per cent. Thin situation rcsults from the faet that means of eecuring complete local marketinge, especiatly by truck, have that means of eecuriog complete local marketinge, especiaty by truck, have not ybt betn fully duveloped. In addition, means have tot yet been deveroped
    for computing eash income from all agricaltural operialtion of locsl importance ior computing cash income from all agrictitural opecinition of locs importance in seattered areas throughout the State. This aituation,
    impair the accuracy of the indexes to siny apprecianlen extant,

[^2]:    *Rail-car Basis: Cattle, 80 head per car; calves, 60; hoga, 80 ; and sheeg, 250.
    \#Fort Worth phipments are conbined with interatato forwardings in order that the bulk of market digappearance for the month mey be shown.
    Nors: These data are furgished the Agricultural Marketing Service, U, S.D.A. by raifway oficials throdgh more that 1,500 statlen agente, representing every live ntock shipping point in the State. Thed data are compiled by the Burean of Buainges Reseorab.

[^3]:    *The destination above is the first deetization as shown by the otiginal waybill. Changes in deatination broaght about by diversion orderg are not thown. $\dagger$ Dried efges and frozen eggs are converted to a ohall egg equivalent on the following basia: 1 rail cartoad of dried eges $=8$ carloads of shell eggs, and 1 carload of frozen cages $=2$ carloads of shell egga.
    gincIudes 2 carlogde of live chickens.
    Notz: These data are furnished to the Agricultural Markeing Service, U.S.D.A., by railroad offioials through agents at all atationa which originate and receive earload shipments of poultry and eggs. The data are compiled by the Bureau of Buginess Reaearch.

