# COSTS OF STORING AND HANDLING COTTON AT PUBLIC STORAGE FACILITIES, 1964 -65 

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# COSTS OF STORING AND HANDLING COTTON AT <br> PUBLIC STORAGE FACILITIES, 1964-65 

## Highlights

Accounting data and operational information relative to 1964-65 were collected from 133 public cotton storage facilities. These participating plants were selected randomly to represent principal areas and types of facility. The sample included 73 interior or port compresses and 60 warehouses (table 1). The total capacity of sample plants was about 30 percent of that of all plants approved for storing cotton loaned or owned by the Commodity Credit Corporation (CCC) .

Two types of costs were developed for each of the principal services performed by each participating plant: (1) Average total cost which includes the expenditures of firms on an accrual basis, plus standardized allowances for depreciation and interest on capital based on original acquisition cost; and (2) average out-of-pocket cost which excludes allowances for depreciation and interest on investment. Also shown for each area are estimates of (1) long-run competitive rates, based on the total replacement cost including depreciation and interest on capital for marginal firms operating at 85 percent of capacity; and (2) short-run competitive rates, based on the out-of-pocket cost of marginal firms.

The basic services routinely required for the in-and-out handling and storing of cotton are receiving, storage, break-out, and shipping. These services are defined in the appendix.

Total cost per bale for insured storage at all plants averaged $\$ 3.084$ annually ( $\$ 0.257$ per bale per month), varying from $\$ 2.760$ per year ( $\$ 0.230$ per month) in the South Central area to $\$ 4.068$ per year ( $\$ 0.339$ per month) in the West (table 2). Average out-of-pocket cost for storage for all plants in the Cotton Belt was $\$ 2.616$ per bale per year, or $\$ 0.218$ per bale per month.

For all plants the total combined cost of receiving, storage for 12 months, breaking out, and shipping ranged from $\$ 4.391$ per bale in the South Central to $\$ 5.585$ in the West; the Beltwide average was $\$ 4.798$. Generally, total costs for receiving, break-out, and shipping were lower at compresses than at warehouses; but for storage, the reverse was true.

In order to handle volumes equal to the peak storage requirements expected in 1966-67, the long-run competitive rate based on replacement costs for storage per bale was estimated at $\$ 3.733$ per year ( $\$ 0.311$ per month) for the Belt. The annual rate varied from $\$ 3.555$ ( $\$ 0.296$ per month) in the South Central to $\$ 4.319$ ( $\$ 0.360$ per month) in the Southeast. For storing and in-and-out handing combined, the annual long-run competitive rate for all regions and plants was
$\$ 5.943$, ranging from $\$ 5.337$ in the South Central to $\$ 7.243$ in the Southeast. For the short run, out-of-pocket storage costs for the marginal firms were estimated at $\$ 3.000$ per year ( $\$ 0.250$ per month) for the Belt, and varied from an annual rate of $\$ 2.952$ ( $\$ 0.246$ per month) in the South Central to $\$ 3.540$ ( $\$ 0.295$ per month) in the Southeast. For storing and in-and-out handing combined, the annual short-run competitive rate for all regions and plants was $\$ 4.975$. Distribution of costs used for determination of competitive rates is included in tables 18 through 29.

The total cost involved in receiving cotton for storage-- $\$ 0.897$ per bale at warehouses and $\$ 0.637$ per bale at compresses--has been affected adversely by the shortened harvest season resulting from the increased use of machines in gathering the crop (tables 3 and 4). Under such conditions, many interior plants must resort to separate night crews or considerable overtime pay.

Insured storage costs per bale per month averaged $\$ 0.252$ per bale at warehouses and $\$ 0.260$ at compresses (tables 5 and 6 ). Since most of the plant space is used for storage, fixed costs accounted for about 34 percent of total storage costs at warehouses and 30 percent at compresses.

Total costs for break-out chiefly involve expenses for labor and use of materials-handling equipment. Per bale break-out costs for warehouses varied widely by areas--from $\$ 1.093$ in the South Central area to $\$ 0.452$ in the Southwest (table 7). In contrast, the per bale cost for compresses was only $\$ 0.495$ in the highest cost area (Southeast) and $\$ 0.448$ in that with the lowest cost (Southwest) (table 8). 1/ Shipping costs per bale averaged $\$ 0.481$ at warehouses and $\$ 0.375$ at compresses (tables 9 and 10). The higher cost at port compresses among the compress group apparently was caused by the additional services often required in moving cotton to piers. When break-out and shipping are combined and considered as a single service, as is done by the Agricultural Stabilization and Conservation Service (ASCS) and some plants, the average total cost is $\$ 1.314$ per bale at warehouses and $\$ 0.843$ at compresses.

Other services which have some bearing on ASCS cotton sales activities are resampling and reweighing, either from stock or at time of other service. The services seldom are requested by owners of cotton other than successful bidders from CCC catalog sales. Total costs for resampling and reweighing from stock averaged $\$ 1.360$ per bale at warehouses and $\$ 1.108$ per bale at compresses (tables 11 and 12). This is an expensive service requiring much labor and machine use since it involves breaking out the bales and then returning them to storage. Resampling and reweighing ordered at the time of some other service, usually shipment, were performed at a total cost of $\$ 0.656$ at warehouses and $\$ 0.439$ at compresses (tables 13 and 14). The major cost element for this service was personnel.

Variations in costs for standard density compression among regions reflect differences in operating practices. Total cost for standard compresses was $\$ 0.985$ per bale in the South Central area, where practically all flat cotton is

[^0]pressed to standard density on arrival (table 15). In other areas where compression generally is performed at time of shipment, total costs per bale ranged from $\$ 1.370$ in the Southwest to $\$ 1.616$ at ports where crews handle very little of such density. In the case of high density compression, a service almost always done at time of shipment, costs among areas were very similar. South Central plants had the lowest cost-- $\$ 1.722$ per bale--but the highest cost was only $\$ 1.987$ per bale in the West and the average at all compresses was $\$ 1.830$ (table 16).

Monthly storage costs per bale for the Belt, as calculated on a replacement basis, averaged $\$ 0.276$ at warehouses and $\$ 0.303$ at compresses (table 17). Such replacement costs for storage exceeded standardized costs by $\$ 0.024$ per bale per month for warehouses and $\$ 0.043$ for compresses. For receiving, the increase was $\$ 0.043$ per bale for both types of plants. At compresses, replacement costs increased standard density compression by $\$ 0.105$ and high density by $\$ 0.156$ over standardized costs.
Table 1.--Sample plants included in survey: Capacity and services performed, by area and type of facility, fiscal 1964-65


[^1]Table 2.--Standardized weighted average costs and estimated competitive rates per bale for handing and storing cotton, by area and type of facility, fiscal 1964-65


[^2]Table 3.--Standardized per bale cost: Receiving cotton at selected warehouses, by area and United States, 1964-65


1/ Excluding materials handling equipment. Costs are based on standardized depreciation rates apolied to original acquisition costs.

2/ Calculated at 6 percent of half the acquisition costs of building and equipment plus full cost of land; actual expenditures of this nature were eliminated.

3/ Total operating and ownership costs for materials handling equipment. Wages paid drivers or operators appear under personnel expenses.

4/ Includes switching, demurrage, and nonrefundable hauling and freight.
5/ Calculated at 6 percent per annum, borrowed quarterly, of the "out-ofpocket costs;" actual expenditures of this nature were eliminated.

Note: See table 1 for delineation of areas.

Table 4.--Standardized per bale cost: Receiving cotton at selected compresses, by area and United States, 1964-65

| Cost item 1/ | Area |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | South Central |  |  | Ports | United States |
| : |  |  |  |  |  |  |
|  | - - - - | - - - D | llars pe | bale - | - - - | - |
| Fixed costs : |  |  |  |  |  |  |
| Depreciation............ | . 012 | . 010 | . 008 | . 015 | . 008 | . 010 |
| Insurance.............. | . 004 | . 004 | . 002 | . 002 | . 003 | . 003 |
| Taxes.. | . 011 | . 006 | . 002 | . 007 | . 008 | . 006 |
| Leases and rentals..... | . 006 | * | . 004 | .001 c | . 017 | . 004 |
| Other.................. | . 003 | . 002 | . 002 | . 003 | . 003 | . 002 |
| Interest on investment | . 025 | . 034 | . 050 | . 039 | . 048 | . 040 |
| Total fixed costs | .061/132 | .056.172 | .068.174 | .067.081 | .087.179 | . 065 |
| Variable costs |  |  |  |  |  |  |
| Personne1 expense. ..... | . 533 | . 385 | . 383 | . $398{ }^{271}$ | . 387 | . 392 |
| Handling equipment..... | . 063 | . 079 | . 058 | . 060 | . 050 | . 066 |
| Repairs \& maintenance..: | . 011 | . 007 | . 004 | . 006 | . 003 | . 006 |
| Utilities and fuel..... | . 008 | . 003 | . 002 | . 011 | . 004 | . 004 |
| Home office cost....... | . 008 | . 028 | . 035 | . 034 | . 012 | . 027 |
| Supplies (compress)....: | . 052 | . 053 | . 043 | . 057 | . 037 | . 048 |
| Office supplies and : expense. $\qquad$ | . 006 | . 005 | . 003 | . 003. | . 003 | . 004 |
| Claims................. | -- | -- | -- | . 002 | -- | * |
| Transportation expense.: | * | . 001 | . 013 | . 002 | . 006 | . 005 |
| Other.................. | . 014 | . 009 | . 014 | . 010 | . 015 | . 012 |
| Interest, working capital | $.007$ | . 007 | . 010 | . 006 | . 010 | . 008 |
| Total variable costs.: | . 702.904 | ( 5777.828 | . 565.697 | . $589,4 / 3$ | .527.857 | . 572 |
| Total fixed and variable costs.......... | .763/.036 | 6.6331 .000 | . 633.871 | . 656.497 | .6141,036 | . 637 |

1/ See footnotes, table 3, for explanation of various cost items.
*Less than . 0005 dollar per bale.
Note: See table 1 for delineation of areas.

Table 5.--Standardized per bale cost per month: Storage of cotton at selected warehouses, by area and United States, 1964-65


1/ See footnotes, table 3, for explanation of various cost items.
*Less than . 0005 do11ar per bale.
Note: See table 1 for delineation of areas.

Table 6.--Standardized per bale cost per month: Storage of cotton at selected compresses, by area and United States, 1964-65

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Cost item 1/} \& \multicolumn{6}{|c|}{Area} <br>
\hline \& $$
\begin{array}{cl} 
& \vdots \\
\text { South- } \\
\text { east } & : C \\
& : \\
\hline
\end{array}
$$ \& South :
Central

: \& South-
west

: \&  \& Ports \& United States <br>
\hline : \& \& \& \& \& \& <br>
\hline \& - \& - \& lars per \& bale - \& - - - \& - - <br>
\hline \multicolumn{7}{|l|}{Fixed costs} <br>
\hline Depreciation. \& . 017 \& . 017 \& . 022 \& . 037 \& . 028 \& . 023 <br>
\hline Insurance. \& . 008 \& . 005 \& . 004 \& . 006 \& . 006 \& . 005 <br>
\hline Taxes. \& . 022 \& . 013 \& . 012 \& . 031 \& . 028 \& . 017 <br>
\hline Leases and rentals \& . 009 \& . 002 \& . 016 \& . 001 \& . 036 \& . 011 <br>
\hline Other \& . 003 \& . 001 \& . 001 \& . 002 \& . 002 \& . 001 <br>
\hline Interest on inve \& . 022 \& . 020 \& . 022 \& . 027 \& . 023 \& . 022 <br>
\hline Total fixed cost \& .081.70 \& .058/14 \& .077.145 \& . $104.1 / 4$ \& .123.163 \& . 079.18 <br>
\hline \multicolumn{7}{|l|}{Variable costs} <br>
\hline Personne1 expense. ..... \& . 116 \& . 079 \& . 088 \& . 116 \& . 100 \& . 090 <br>
\hline Handling equipment..... \& . 022 \& . 015 \& . 014 \& . 021 \& . 012 \& . 016 <br>
\hline \multicolumn{7}{|l|}{Insurance, storage} <br>
\hline Repairs \& maintenance.. \& . 024 \& . 014 \& . 014 \& . 017 \& . 009 \& . 014 <br>
\hline Utilities and fuel. \& . 009 \& . 004 \& . 005 \& . 007 \& . 008 \& . 005 <br>
\hline Home office cost. ...... \& . 006 \& . 013 \& . 015 \& . 022 \& . 007 \& . 013 <br>
\hline Supplies (compress).... \& . 002 \& . 005 \& . 003 \& . 007 \& . 003 \& . 004 <br>
\hline \multicolumn{7}{|l|}{Office supplies and : 000} <br>
\hline Claims................. \& . 003 \& . 003 \& . 003 \& . 002 \& . 001 \& . 003 <br>
\hline Transportation expense.: \& . 019 \& * \& . 004 \& . 002 \& . 002 \& . 002 <br>
\hline \multirow[t]{2}{*}{} \& . 012 \& . 006 \& . 007 \& . 006 \& . 007 \& . 007 <br>
\hline \& . 005 \& . 003 \& . 002 \& . 004 \& . 004 \& . 003 <br>
\hline Total variable costs. \& .259,357 \& .174.27t \& .170,204 \& . 235.186 \& .161.208 \& . 181.27 <br>
\hline \multirow[t]{2}{*}{Total fixed and variable costs..........} \& \multicolumn{6}{|l|}{: $=$} <br>
\hline \& \& \& .24T, \& . 33.300 \& , \& , <br>
\hline
\end{tabular}

1/ See footnotes, table 3, for explanation of various cost items.
*Less than . 0005 dollar per bale.
Note: See table 1 for delineation of areas.

Table 7.--Standardized per bale cost: Break-out of cotton at selected warehouses, by area and United States, 1964-65

| Cost item 1/ | Area |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Southeast | South Central | South west | United <br> States <br> :pst |
| : |  |  |  |  |
| : | - - - - Dollars per bale - . - - |  |  |  |
| Fixed costs |  |  |  |  |
| Depreciation. . . . . . . . . . . . . . . . . : | . 002 | . 001 | * | . 002 |
| Insurance... . . . . . . . . . . . . . . . . . . | * | * | * | * |
| Taxes............................... | * | -- | -- | * |
| Leases and rentals............... | * | * | -- | * |
| Other........................ . . . . . . : | . 003 | . 003 | * | . 003 |
| Interest on investment | . 021 | . 023 | . 002 | . 020 |
| Total fixed costs.............. | .026.07 | .027,066 | .002.076 | 069.025 |
| Variable costs |  |  |  |  |
| Personnel expense................. | . 698 , | . 743 | . 321 | . 656 |
| Handling equipment.............. | . 089 | . 295 | . 115 | . 121 |
| Repairs and maintenance......... | * | -- | -- | * |
| Utilities and fuel............... | . 005 | . 003 | . 001 | . 004 |
| Home office cost.................. | . 011 | . 002 | -- | . 008 |
| Supplies (warehouse)............. | . 001 | . 006 | . 006 | . 002 |
| Office supplies and expense.....: | . 001 | . 001 | * | . 001 |
| Claims.............................. | -- | -- | -- | -- |
| Transportation expense.......... | . 005 | . 001 | * | . 004 |
| Other................................ | . 008 | . 011 | . 002 | . 008 |
| Interest, working capital | . 004 | . 004 | . 005 | . 004 |
| Total variable costs. | .822.651 1.066.775 |  | . 450.564 | 207.808 |
| Total fixed and variable costs..... | .848.724 | 1.093 .841 | . 452640 | 2776833 |

1/ See footnotes, table 3, for explanation of various cost items.
*Less than . 0005 dollar per bale.
Note: See table 1 for delineation of areas.

Table 8.--Standardized per bale cost: Break-out of cotton at selected compresses, by area and United States, 1964-65


1/ See footnotes, table 3, for explanation of various cost items.
*Less than . 0005 dollar per bale.
Note: See table 1 for delineation of areas.

Table 9.--Standardized per bale cost: Shipping cotton at selected warehouses, by area and United States, 1964-65


[^3]Table 10.--Standardized per bale cost: Shipping cotton at selected compresses, by area and United States, 1964-65

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Cost item 1/} \& \multicolumn{6}{|c|}{Area} \\
\hline \& \begin{tabular}{l} 
: South- \\
\(\vdots\) \\
east \\
: \\
: \\
\hline
\end{tabular} \& South
Central

: \& South-
west

: \& West \&  \& United States <br>
\hline \& \& \& \& \& \& <br>
\hline \& : - - - - \& ---- \& llars pe \& bale - \& - - - - \& - <br>
\hline \multicolumn{7}{|l|}{Fixed costs} <br>
\hline Depreciation. \& . 008 \& . 008 \& . 010 \& . 020 o \& . 009 \& . 010 <br>
\hline Insurance. \& . 003 \& . 002 \& . 002 \& . 003 \& . 003 \& . 002 <br>
\hline Taxes. \& . 008 \& . 006 \& . 005 \& . 009 \& . 007 \& . 007 <br>
\hline Leases and rentals. \& . 004 \& * \& . 004 \& . 001 \& . 019 \& . 004 <br>
\hline Other........ \& . 005 \& . 001 \& . 001 \& . 004 \& . 003 \& . 002 <br>
\hline Interest on investment \& . 029 \& . 017 \& . 024 \& . 042 \& . 051 \& . 027 <br>
\hline Total fixed costs \& . 057.134 \& . 034.135 \& .046./10 \& .079,147 \& .092,204 \& . 052 <br>
\hline \multicolumn{7}{|l|}{Variable costs} <br>
\hline Personnel expense. \& . 191 \& . 196 \& . 163 \& . 161 \& . 349 \& . 208 <br>
\hline Handling equipment..... \& . 037 \& . 062 \& . 061 \& . 050 \& . 114 \& . 068 <br>
\hline Repairs \& maintenance..: \& . 008 \& . 005 \& . 006 \& . 006 \& . 003 \& . 005 <br>
\hline Utilities and fuel.... \& . 009 \& . 002 \& . 003 \& . 010 \& . 004 \& . 004 <br>
\hline Home office cost....... \& . 007 \& . 009 \& . 016 \& . 037 \& . 012 \& . 014 <br>
\hline Supplies (compress).... \& . 002 \& . 003 \& . 001 \& . 009 \& . 001 \& . 003 <br>
\hline \multicolumn{7}{|l|}{Office supplies and} <br>
\hline Claims.................. \& --- \& -- \& -- \& . 002 \& -- \& * <br>
\hline Transportation expense.: \& . 010 \& * \& . 006 \& . 004 \& . 015 \& . 005 <br>
\hline Other................... \& . 018 \& . 005 \& . 007 \& . 008 \& . 017 \& . 008 <br>
\hline ```
Interest, working
capital...............

``` & . 008 & . 004 & . 005 & . 006 & . 010 & . 005 \\
\hline Total variable costs.: & . 296,548 & .289408 & . 270.328 & . 296,332 & . 528,540 & . 323 \\
\hline Total fixed and variable costs. \(\qquad\) & . 353.682 & . \(323.54 / 3\) & . 316.438 & . 375479 & . 620.744 & . 37 \\
\hline
\end{tabular}

1/ See footnotes, table 3, for explanation of various cost items.
*Less than . 0005 dollar per bale.
Note: See table 1 for delineation of areas.

Table 11.--Standardized per bale cost: Resampling and reweighing cotton from stock at selected warehouses, by area and United States, 1964-65


\footnotetext{
1/ See footnotes, table 3., for explanation of various cost items.
*Less than . 0005 dollar per bale.
Note: See table 1 for delineation of areas.
}

Table 12.--Standardized per bale cost: Resampling and reweighing of cotton from stock at selected compresses, by area and United States, 1964-65


1/ See footnotes, table 3, for explanation of various cost items.
*Less than . 0005 dollar per bale.
Note: See table 1 for delineation of areas.

Table 13.--Standardized per bale cost: Resampling and reweighing of cotton at time of other service for selected warehouses, by area and United States, 1964-65


1/ See footnotes, table 3, for explanation of various cost items.
*Less than . 0005 dollar per bale.
Note: See table 1 for delineation of areas.

Table 14.--Standardized per bale cost: Resampling and reweighing of cotton at time of other service for selected compresses, by area and United States, 1964-65


1/ See footnotes, table 3 , for explanation of various cost items.
*Less than . 0005 dollar per bale.
Note: See table 1 for delineation of areas.

Table 15.--Standardized per bale cost: Standard density compression of cotton at selected compresses, by area and United States, 1964-65
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Cost item 1/} & \multicolumn{6}{|c|}{Area} \\
\hline & South- :
east & South Central & Southwest & West & Ports & United States \\
\hline : & & & & & & \\
\hline & - - - & - - - - & 11ars pe & bale - & - - & - - \\
\hline \multicolumn{7}{|l|}{Fixed costs} \\
\hline Depreciation........... & . 031 & . 034 & . 057 & . 062 & . 061 & . 047 \\
\hline Insurance.............. & . 005 & . 006 & . 007 & . 008 & . 009 & . 007 \\
\hline Taxes... & . 008 & . 005 & . 006 & . 024 & . 014 & . 009 \\
\hline Leases and rentals & . 004 & . 001 & . 007 & . 003 & . 020 & . 006 \\
\hline Other... & . 008 & . 003 & . 004 & . 008 & . 006 & . 004 \\
\hline Interest on investment & . 087 & . 057 & . 1.06 & . 112 & . 107 & . 085 \\
\hline Total fixed costs & .143./59 & -106,307 & .187.320 & .217.348 & . 21737 & . 158 \\
\hline \multicolumn{7}{|l|}{Variable costs} \\
\hline Personnel expense...... & . 831 & . 553. & . 767 & . 775 & 1.034 & . 719 \\
\hline Handing equipment.. & . 054 & . 014 & . 029 & . 027 & . 004 & . 019 \\
\hline Repairs \& maintenance.. & . 020 & . 045 & . 062 & . 073 & . 065 & . 055 \\
\hline Utilities and fuel.. & . 102 & . 092 & . 086 & . 109 & . 076 & . 090 \\
\hline Home office cost....... & . 031 & . 031 & . 072 & . 063 & . 030 & . 045 \\
\hline Supplies (compress).... & . 186 & . 103 & . 084 & . 116 & . 121 & . 106 \\
\hline Office supplies and expense. & . 024 & . 009 & . 007 & . 011 & . 006 & . 009 \\
\hline Claims................ & -- & -- & -- & . 003 & -- & * \\
\hline Transportation expense.: & . 017 & . 002 & . 027 & . 003 & . 009 & . 010 \\
\hline Other................... & . 039 & . 017 & . 030 & . 028 & . 033 & . 025 \\
\hline Interest, working capital.................... & . 020 & . 013 & . 019 & . 015 & . 021 & . 016 \\
\hline \multicolumn{7}{|l|}{Total variable costs.: 1.324/.601.879/5331.183/.4811.223/7631.399/9/31.09} \\
\hline \multicolumn{7}{|l|}{```
Total fixed and
    variable costs.........: 1.467/.760 .985/.8401.370/80/1.4402,1111.616 2. 1.252
```} \\
\hline
\end{tabular}

1/ See footnotes, table 3, for explanation of various cost items.
*Less than . 0005 dollar per bale.
Note: See table 1 for delineation of areas.

Table 16.--Standardized per bale cost: High density compression of cotton at selected compresses, by area and United States, 1964-65


1/ See footnotes, table 3, for explanation of various cost items.
Note: See table 1 for delineation of areas.
Table 17.--Weighted total replacement costs per bale per month for storing cotton and per bale for handling, and other services, by area and type of facility, 1964-65 1/


\footnotetext{
1/ Replacement costs include out-of-pocket costs, plus depreciation and return on investment based on stimated replacement costs for plant and equipment, and use of present land area. 2/ At time of other service, usually shipment. Note: See table 1 for delineation of areas.
}

Table 18.--Cotton storage capacity of warehouses, by total storage cost based on volumes equivalent to 85 -percent occupancy, by area and United States, fiscal 1964-65
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow{5}{*}{Cost per bale (dollars) 1/} & \multicolumn{4}{|c|}{Storage capacity of plants in--} \\
\hline & \multirow[b]{2}{*}{South-} & \multirow{4}{*}{South Central} & \multirow{4}{*}{Southwest} & \multirow{4}{*}{United States} \\
\hline & & & & \\
\hline & east & & & \\
\hline & & & & \\
\hline \multicolumn{5}{|l|}{:} \\
\hline & \multicolumn{4}{|l|}{- - - - - - - - - - - - - - - - - - - - - - - - -} \\
\hline \multicolumn{5}{|l|}{Less than--} \\
\hline 1,60........ & -- & 396,670 & -- & 396,670 \\
\hline 1.80........ & -- & 396,670 & 77,330 & 474,000 \\
\hline 2.00.........: & 364,500 & 455,870 & 132,410 & 952,780 \\
\hline 2.20......... & 520,220 & 455,870 & 132,410 & 1,108,500 \\
\hline 2.40......... & 520,220 & 455,870 & 132,410 & 1,108,500 \\
\hline 2.60........ & 1,230,242 & 455,870 & 311,505 & 1,997,617 \\
\hline 2.80......... & 1,937,839 & 455,870 & 311,505 & 2,705,214 \\
\hline 3.00........ & 2,547,522 & 455,870 & 392,905 & 3,396,297 \\
\hline 3.20......... & 2,837,757 & 617,295 & 392,905 & 3,847,957 \\
\hline 3.40......... & 3,983,102 & 713,855 & 548,965 & 5,245,922 \\
\hline 3.60........ & 4,377,009 & 713,855 & 608,165 & 5,699,029 \\
\hline 3.80......... & 4,669,589 & 741,395 & 669,365 & 6,080,349 \\
\hline 4.00......... & 5,040,245 & 741,395 & 669,365 & 6,451,005 \\
\hline 4.20........ & 5,177,645 & 741,395 & 669,365 & 6,588,405 \\
\hline 4.40......... & 5,297,003 & \multirow[t]{2}{*}{\[
\begin{aligned}
& 763,526 \\
& 763,526
\end{aligned}
\]} & 761,165 & 6,821,694 \\
\hline 4.60........ & 5,297,003 & & 761,165 & 6,821,694 \\
\hline 4.80......... & 5,485,503 & \[
\begin{aligned}
& 763,526 \\
& 817,382
\end{aligned}
\] & 761,165 & 7,064,050 \\
\hline 5.00......... & 5,721,123 & \[
\begin{aligned}
& 817,382 \\
& 817,382
\end{aligned}
\] & 761,165 & 7,299,670 \\
\hline 5.20......... & 5,721,123 & 817,382 & 798,050 & \multirow[t]{2}{*}{\(7,336,555\)
\(7,336,555\)} \\
\hline 5.40......... & 5,721,123 & 817,382 & \multirow[t]{2}{*}{\[
\begin{aligned}
& 798,050 \\
& 798,050
\end{aligned}
\]} & \\
\hline 5.60......... & 5,721,123 & 817,382 & & 7,336,555 \\
\hline 5.80........ & 5,721,123 & 915,302 & 798,050 & \multirow[t]{2}{*}{\(7,434,475\)
\(7,434,475\)} \\
\hline 6.00......... & 5,721,123 & \multirow[t]{2}{*}{\[
\begin{aligned}
& 915,302 \\
& 915,302
\end{aligned}
\]} & 798,050 & \\
\hline 6.20......... & 5,721,123 & & 798,050 & 7,434,475 \\
\hline 6.40........ & 5,721,123 & \multirow[t]{2}{*}{\[
\begin{aligned}
& 915,302 \\
& 915,302
\end{aligned}
\]} & 798,050 & 7,434,475 \\
\hline 6.60......... & 5,721,123 & & \multirow[t]{2}{*}{\[
\begin{aligned}
& 798,050 \\
& 859,250
\end{aligned}
\]} & \multirow[t]{2}{*}{} \\
\hline 6.80......... & \multirow[t]{2}{*}{\[
\begin{aligned}
& 5,721,123 \\
& 5,721,123 \\
& \hline
\end{aligned}
\]} & \[
915,302
\] & & \\
\hline \multirow[t]{2}{*}{} & & 915,302 & \[
\begin{aligned}
& 859,250 \\
& 859,250 \\
& \hline
\end{aligned}
\] & \[
\begin{aligned}
& 7,434,475 \\
& 7,495,675 \\
& 7,495,675 \\
& \hline
\end{aligned}
\] \\
\hline & \multirow[t]{2}{*}{5,721,123} & \multirow[t]{2}{*}{1,036,126} & \multirow[t]{2}{*}{885,070} & \multirow[t]{2}{*}{7,642,319} \\
\hline : & & & & \\
\hline
\end{tabular}

1/ Includes per bale cost for 12 months' storage.
Note: See table 1 for delineation of areas.

Table 19.--Cotton storage capacity of compresses, by total storage cost based on volumes equivalent to 85 -percent occupancy, by area and United States, fiscal 1964-65
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow{5}{*}{Cost per bale (dollars) 1/} & \multicolumn{6}{|c|}{Storage capacity of plants in--} \\
\hline & \multirow[t]{4}{*}{\begin{tabular}{l}
South- \\
east
\end{tabular}} & \multirow[t]{4}{*}{\begin{tabular}{l}
South \\
Central
\end{tabular}} & \multirow{4}{*}{Southwest} & \multirow{4}{*}{West} & \multirow{4}{*}{Ports} & \multirow[t]{4}{*}{} \\
\hline & & & & & & \\
\hline & & & & & & \\
\hline & & & & & & \\
\hline & & & & & & \\
\hline & & & & s - - & & \\
\hline \multicolumn{7}{|l|}{Less than--} \\
\hline \multicolumn{7}{|l|}{1.60.........} \\
\hline 1.80........: & & & & & & \\
\hline 2.00.........: & & & 315,869 & & 276,377 & 592,246 \\
\hline 2.20.........: & & 270,360 & 1,550,638 & & 592,182 & 2,413,180 \\
\hline 2.40......... & & 495,660 & 1,773,523 & & 592,182 & 2,861,365 \\
\hline 2.60.........: & & 2,115,921 & 2,198,248 & -- & 592,182 & 4,906,351 \\
\hline 2.80........ & & 3,243,923 & 2,198,248 & 654,710 & 592,182 & 6,689,063 \\
\hline 3.00........ & & 4,804,369 & 2,198,248 & 654,710 & 744,117 & 8,401,444 \\
\hline 3.20......... & & 5,925,505 & 2,616,895 & 765,852 & 744,117 & 10,052,369 \\
\hline 3.40......... & & 6,099,813 & 2,616,895 & 874,422 & 1,787,464 & 11,378,594 \\
\hline 3.60......... & 278,822 & 6,725,979 & 2,616,895 & 874,422 & 2,562,355 & 13,058,473 \\
\hline 3.80........ & 400,480 & 7,136,570 & 2,616,895 & 1,106,988 & 2,562,355 & 13,823,288 \\
\hline 4.00......... & 400,480 & 7,136,570 & 2,794,623 & 1,349,718 & 2,562,355 & 14,243,746 \\
\hline 4.20......... & 400,480 & 7,427,082 & 3,180,094 & 1,517,118 & 2,562,355 & 15,087,129 \\
\hline 4.40......... & 400,480 & 7,427,082 & 3,180,094 & 1,517,118 & 2,562,355 & 15,087,129 \\
\hline 4.60........ & 400,480 & 7,427,082 & 3,391,174 & 1,517,118 & 2,562,355 & 15,298,209 \\
\hline 4.80........ & 400,480 & 7,427,082 & 3,816,998 & 1,517,118 & 2,562,355 & 15,724,033 \\
\hline 5.00......... & 400,480 & 7,427,082 & 3,816,998 & 1,517,118 & 2,824,175 & 15,985,853 \\
\hline 5.20......... & 400,480 & 7,427,082 & 3,816,998 & 1,517,118 & 2,824,175 & 15, 985,853 \\
\hline 5.40........ & 646,048 & 7,427,082 & 3,816,998 & 1,628,260 & 2,824,175 & 16,342,563 \\
\hline 5.60 . & 646,048 & 7,427,082 & 3,816,998 & 1,628,260 & 2,824,175 & 16,342,563 \\
\hline 5.80 & 646,048 & 7,427,082 & 3,816,998 & 1,628,260 & 2,824,175 & 16,342,563 \\
\hline 6.00......... & 646,048 & 7,427,082 & 3,816,998 & 1,628,260 & 2,824,175 & 16,342,563 \\
\hline 6.20........ & 646,048 & 7,427,082 & 4,064,648 & 1,628,260 & 2,824,175 & 16,590,213 \\
\hline 6.40......... & 646,048 & 7,427,082 & 4,064,648 & 1,628,260 & 2,824,175 & 16,590,213 \\
\hline 6.60. & 646,048 & 7,427,082 & 4,064,648 & 1,628,260 & 2,824,175 & 16,590,213 \\
\hline 6.80........ & 646,048 & 7,427,082 & 4,064,648 & 1,628,260 & 2,824,175 & 16,590,213 \\
\hline 7.00......... & 646,048 & 7,427,082 & 4,064,648 & 1,628,260 & 2,824,175 & 16,590,213 \\
\hline \multirow[t]{2}{*}{A1} & 646,048 & 7,427,082 & 4,341,113 & 1,818,037 & 2,824,175 & 17,056,455 \\
\hline & & & & & & \\
\hline
\end{tabular}

1/ Includes per bale cost for 12 months' storage.
Note: See table 1 for delineation of areas.

Table 20.--Cotton storage capacity of warehouses and compresses, by total storage cost based on volumes equivalent to 85 -percent occupancy, by area and United States, fiscal 1964-65


\section*{1/ Includes per bale cost for 12 months' storage.}

Note: See table 1 for delineation of areas. The port facilities of Louisiana are combined with the South Central, and the Texas port facilities are combined with the Southwest.

Table 21.--Cotton storage capacity of warehouses, by total handling and storage costs based on volumes equivalent to 85 -percent occupancy, by area and United States, fiscal..1964-65
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow{5}{*}{Cost per bale (dollars) 1/} & \multicolumn{4}{|c|}{Storage capacity of plants in--} \\
\hline & \multirow[b]{2}{*}{South-} & : & : & : \\
\hline & & South & South- & United \\
\hline & east & Central & west & States \\
\hline & & & & \\
\hline \multicolumn{5}{|l|}{:} \\
\hline : & - - - - & - - - - & - - - & - - \\
\hline \multicolumn{5}{|l|}{Less than--} \\
\hline 3.60......... & -- & 59,200 & 77,330 & 136,530 \\
\hline 3.80......... & 83,945 & 59,200 & 77,330 & 220,475 \\
\hline 4.00......... & 83,945 & 164,550 & 222,710 & 471,205 \\
\hline 4.20......... & 83,945 & 164,550 & 222,710 & 471,205 \\
\hline 4.40......... & 526,003 & 164,550 & 304,110 & 994,663 \\
\hline 4.60......... & 526,003 & 455,870 & 304,110 & 1,285,983 \\
\hline 4.80......... & 526,003 & 455,870 & 395,910 & 1,377,783 \\
\hline 5.00......... & 1,129,333 & 455,870 & 484,705 & 2,069,908 \\
\hline 5.20......... & 1,304,293 & 455,870 & 543,905 & 2,304,068 \\
\hline 5.40......... & 1,826,962 & 646,780 & 543,905 & 3,017,647 \\
\hline 5.60........ & 2,408,322 & 646,780 & 543,905 & 3,599,007 \\
\hline 5.80......... & 2,886,981 & 674,320 & 605,105 & 4,166,406 \\
\hline 6.00......... & 3,436,847 & 674,320 & 605,105 & 4,716,272 \\
\hline 6.20......... & 3,787,299 & 674,320 & 605,105 & 5,066,724 \\
\hline 6.40......... & 4,011,639 & 741,395 & 605,105 & 5,358,139 \\
\hline 6.60......... & 4,325,119 & 741,395 & 696,905 & 5,763,419 \\
\hline 6.80........ & 4,753,287 & 741,395 & 696,905 & 6,191,587 \\
\hline 7.00........ & 4,753,287 & 817,382 & 733,790 & 6,304,459 \\
\hline 7.20........ & 5,158,057 & 817,382 & 733,790 & 6,709,229 \\
\hline 7.40........ & 5,158,057 & 817,382 & 733,790 & 6,709,229 \\
\hline 7.60......... & 5,265,954 & 817,382 & 733,790 & 6,817,126 \\
\hline 7.80......... & 5,402,763 & 817,382 & 733,790 & 6,953,935 \\
\hline 8.00......... & 5,402,763 & 817,382 & 733,790 & 6,953,935 \\
\hline 8.20......... & 5,402,763 & 817,392 & 733,790 & 6,953,935 \\
\hline 8.40......... & 5,540,163 & 817,382 & 733,790 & 7,091,335 \\
\hline 8.60......... & 5,540,163 & 817,382 & 733,790 & 7,091,335 \\
\hline 8.80......... & 5,540,163 & 817,382 & 733,790 & 7,091,335 \\
\hline 9.00. & 5,540,163 & 817,382 & 794,990 & 7,152,535 \\
\hline All plants.: & 5,721,123 & 1,036,126 & 885,070 & 7,642,319 \\
\hline
\end{tabular}

1/ Includes per bale costs for receiving, 12 months' storage, break-out, and shipping. Total receipts are equal to . 34 times the average monthly storage volume for the Southeast, . 60 for the South Central, and .97 for the Southwest. Total shipments are equal to .55 times the average monthly storage volume for the Southeast, . 77 for the South Central, and 1.34 for the Southwest.

Note: See table 1 for delineation of areas.

Table 22.--Cotton storage capacity of compresses, by total handing and storage costs based on volumes equivalent to 85 -percent occupancy, by area and United States, fiscal 1964-65
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{3}{*}{Cost per bale (dollars) 1/} & \multicolumn{10}{|c|}{Storage capacity of plants in--} \\
\hline & & & : & & : & & . & & : & \\
\hline & Southeast & South Central & : & Southwest & : & West & : & Ports & : & United \\
\hline & & & : & & : & & : & & : & \\
\hline
\end{tabular}


All plants.: 646,048 7,427,082 4,341,113 1,818,037 2,824,175 17,056,455

1/ Includes per bale costs for receiving, 12 months' storage, break-out, and shipping. Total receipts are equal to .34 times the average monthly storage volume for the Southeast, . 60 for the South Central, . 97 for the Southwest, 1.53 for the West, and 1.96 for the Ports. Total shipments are equal to .55 times the average monthly storage volume for the Southeast, . 77 for the South Central, 1.34 for the Southwest, 1.61 for the West, and 1.72 for the Ports.

Note: See table 1 for delineation of areas.

Table 23.--Cotton storage capacity of warehouses and compresses, by total handling and storage costs based on volumes equivalent to 85 -percent occupancy, by area and United States, fiscal 1964-65
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow{5}{*}{```
Cost per bale
    (dollars)
        1/
```} & \multicolumn{5}{|c|}{Storage capacity of plants in--} \\
\hline & & & & & \\
\hline & South- & ut & South- & & ited \\
\hline & & Central & west & & tes \\
\hline & & : & & & \\
\hline \multicolumn{6}{|l|}{} \\
\hline & - - - & - & - Bales & - - - - & - - - - \\
\hline \multicolumn{6}{|l|}{Less than--} \\
\hline 3.60......... & -- & 329,560 & 1,867,458 & -- & 2,197,018 \\
\hline 3.80........ & 83,945 & 1,399,981 & 2,143,175 & 289,520 & 3,916,621 \\
\hline 4.00......... & 83,945 & 1,919,883 & 2,474,450 & 654,710 & 5,132,988 \\
\hline 4.20......... & 83,945 & 2,439,899 & 3,013,140 & 654,710 & 6,191,694 \\
\hline 4.40........ & 526,003 & 3,460,900 & 3,410,500 & 654,710 & 8,052,113 \\
\hline 4.60........ & 526,003 & 4,660,054 & 3,562,435 & 654,710 & 9,403,202 \\
\hline 4.80....... & 526,003 & 5,299,906 & 3,654,235 & 654,710 & 10,134,854 \\
\hline 5.00......... & 1,129,333 & 6,118,597 & 4,245,740 & 765,852 & 12,259,522 \\
\hline 5.20........ & 1,304,293 & 6,379,945 & 4,870,262 & 765,852 & 13,320,352 \\
\hline 5.40........ & 1,826,962 & 7,418,532 & 5,676,533 & 1,173,948 & 16,095,975 \\
\hline 5.60.........: & 2,408,322 & 8,007,700 & 5,676,533 & 1,291,128 & 17,383,683 \\
\hline 5.80......... & 2,886,981 & 8,035,240 & 6,123,204 & 1,291,128 & 18,336,553 \\
\hline 6.00......... & 3,558,505 & 8,325,752 & 6,394,693 & 1,291,128 & 19,570,078 \\
\hline 6.20........ & 3,908,957 & 8,325,752 & 6,549,028 & 1,416,678 & 20,200,415 \\
\hline 6.40........ & 4,412,119 & 8,392,827 & 6,549,028 & 1,416,678 & 20,770,652 \\
\hline 6.60........ & 4,725,599 & 8,392,827 & 6,851,908 & 1,416,678 & 21,387,012 \\
\hline 6.80......... & 5,153,767 & 8,392,827 & 6,851,908 & 1,517,118 & 21,915,620 \\
\hline 7.00.........: & 5,153,767 & 8,468,814 & 7,150,613 & 1,628,260 & 22,401,454 \\
\hline 7.20......... & 5,558,537 & 8,468,814 & 7,150,613 & 1,628,260 & 22,806,224 \\
\hline 7.40........ & 5,804,105 & 8,468,814 & 7,150,613 & 1,628,260 & 23,051,792 \\
\hline 7.60........ & 5,912,002 & 8,468,814 & 7,150,613 & 1,628,260 & 23,159,689 \\
\hline 7.80........ & 6,048,811 & 8,468,814 & 7,150,613 & 1,628,260 & 23,296,498 \\
\hline 8.00......... & 6,048,811 & 8,468,814 & 7,398,263 & 1,628,260 & 23,544,148 \\
\hline 8.20........ & 6,048,811 & 8,468,814 & 7,398,263 & 1,628,260 & 23,544,148 \\
\hline 8.40........ & 6,186,211 & 8,468,814 & 7,398,263 & 1,628,260 & 23,681,548 \\
\hline 8.60.........: & 6,186,211 & 8,468,814 & 7,398,263 & 1,628,260 & 23,681,548 \\
\hline 8.80.........: & 6,186,211 & 8,468,814 & 7,398,263 & 1,628,260 & 23,681,548 \\
\hline \multirow[t]{2}{*}{\[
9.00 \ldots \ldots \ldots
\]} & 6,186,211 & 8,468,814 & 7,735,928 & 1,717,597 & 24,108,550 \\
\hline & 6,367,171 & 8,687,558 & 7,826,008 & 1,818,037 & 24,698,774 \\
\hline & & & & & \\
\hline
\end{tabular}

1/ See footnote, table 22 , for ratio of receipts and shipments to average monthly storage volume.

Note: See table 1 for delineation of areas. The port facilities of Louisiana are combined with the South Central, and the Texas port facilities are combined with the Southwest.

Table 24.--Cotton storage capacity of warehouses, by out-of-pocket storage costs based on volumes equivalent to 85 - percent occupancy, fiscal 1964-65


1/ Includes per bale cost for 12 months \({ }^{\prime}\) storage.
Note: See table 1 for delineation of areas.

Table \(25 .-\)-Cotton storage capacity of compresses, by out-of-pocket storage costs based on volumes equivalent to 85 -percent occupancy, fiscal 1964-65
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{4}{*}{Cost per bale (dollars) 1/} & \multicolumn{11}{|c|}{Storage capacity of plants in--} \\
\hline & & : & & : & & : & & : & & . & \\
\hline & South- & : & South & : & South- & : & West & : & Ports & : & United \\
\hline & east & - & Central & : & west & : & West & & Ports & . & States \\
\hline & : & : & & : & & : & & : & & : & \\
\hline
\end{tabular}
Less than-- : 270,360 1,863,345 133,705
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline 1 & & 270,360 & 1,863,345 & & & 2,133,705 \\
\hline 1.8 & & 270,360 & 1,863,345 & & 592,182 & 2,725,887 \\
\hline 2. & & 1,673,796 & 2,198,248 & & 592,182 & 4,464,226 \\
\hline 2.2 & & 3,143,915 & 2,198,248 & 111,142 & 592,182 & 6,045,487 \\
\hline 2 & & 4,333,284 & 2,300,935 & 765,852 & 975,182 & 8,375,253 \\
\hline 2.6 & & 5,688,265 & 2,300,935 & 765,852 & 975,182 & 9,730,234 \\
\hline 2 & 278,822 & 6,099,813 & 2,300,935 & 765,852 & 1,877,323 & 11,322,745 \\
\hline 3.00 & 278,822 & 6,725,979 & 2,478,663 & 874,422 & 2,562,355 & 12,920,241 \\
\hline & 278,822 & 7,136,570 & 2,794,623 & 1,106, 988 & 2,562,355 & 13,879,358 \\
\hline 3.40 & 278,822 & 7,427,082 & 3,180,094 & 1,349,718 & 2,562,355 & 14,798, 071 \\
\hline & 400,480 & 7,427,082 & 3,180,094 & 1,517,118 & 2,562,355 & 15,087,129 \\
\hline 3.8 & 400,480 & 7,427,082 & 3,180,094 & 1,517,118 & 2,562,355 & 15,087,129 \\
\hline 4 & 400,480 & 7,427,082 & 3,391,174 & 1,517,118 & 2,562,355 & 15,298,209 \\
\hline 4 & 400,480 & 7,427,082 & 3,545,509 & 1,517,118 & 2,562,355 & 15,452,544 \\
\hline & 400,480 & 7,427,082 & 3,816,998 & 1,517,118 & 2,824,175 & 15,985,853 \\
\hline 4.60 & 400,480 & 7,427,082 & 3,816,998 & 1,517,118 & 2,824,175 & 15, 985,853 \\
\hline 4.8 & 646,048 & 7,427,082 & 3,816,998 & 1,517,118 & 2,824,175 & 16,231,421 \\
\hline 5.00......... & 646,048 & 7,427,082 & 3,816,998 & 1,628,260 & 2,824,175 & 16,342,563 \\
\hline & 646,048 & 7,427,082 & 3,816,998 & 1,628,260 & 2,824,175 & 16,342,563 \\
\hline 5.40......... & 646,048 & 7,427,082 & 3,816,998 & 1,628,260 & 2,824,175 & 16,342,563 \\
\hline 5.60......... & 646,048 & 7,427,082 & 4,064,648 & 1,628,260 & 2,824,175 & 16,590,213 \\
\hline 5.80......... & 646,048 & 7,427,082 & 4,064,648 & 1,628,260 & 2,824,175 & 16,590,213 \\
\hline 6.00 & 646,048 & 7,427,082 & 4,064,648 & 1,628,260 & 2,824,175 & 16,590,213 \\
\hline 6.2 & 646,048 & 7,427,082 & 4,341,113 & 1,628,260 & 2,824,175 & 16,866,678 \\
\hline 6 & 646,048 & 7,427,082 & 4,341,113 & 1,628,260 & 2,824,175 & 16,866,678 \\
\hline 6.6 & 646,048 & 7,427,082 & 4,341,113 & 1,628,260 & 2,824,175 & 16,866,678 \\
\hline 6.80 & 646,048 & 7,427,082 & 4,341,113 & 1,628,260 & 2,824,175 & 16,866,678 \\
\hline 7.00 & 646,048 & 7,427,082 & 4,341, 113 & 1,717,597 & 2,824,175 & 16,956,015 \\
\hline All plants.: & 646,048 & 7,427,082 & 4,341,113 & 1,818,037 & 2,824,175 & 17,056,455 \\
\hline
\end{tabular}

1/ Includes per baie cost for 12 months' storage.

Note: See table 1 for delineation of areas.

Table 26.--Cotton storage capacity of warehouses and compresses, by out-ofpocket storage cost based on volumes equivalent to 85 -percent occupancy, fiscal 1964-65
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow{6}{*}{```
Cost per bale
    (dollars)
        1/
```} & \multicolumn{5}{|c|}{Storage capacity of plants in--} \\
\hline & \multirow[b]{4}{*}{Southeast} & \multirow[b]{4}{*}{\[
\begin{aligned}
& \text { South } \\
& \text { Central }
\end{aligned}
\]} & \multirow[b]{4}{*}{Southwest} & \multirow[b]{4}{*}{West} & \multirow[b]{4}{*}{United States} \\
\hline & & & & & \\
\hline & & & & & \\
\hline & & & & & \\
\hline & : & : & & & \\
\hline : & & & & & \\
\hline & - & - - - - & - Bales & - - - - & - - - \\
\hline \multicolumn{6}{|l|}{Less than--} \\
\hline 1.60 & 727,292 & 726,230 & 2,029,470 & -- & 3,482,992 \\
\hline 1.80 . & 1,103,185 & 726,230 & 2,676,732 & -- & 4,506,147 \\
\hline 2.00. & 1,467,345 & 2,129,666 & 3,101,935 & -- & 6,698,946 \\
\hline 2.20......... & 2,161,639 & 3,599,785 & 3,183,335 & 111,142 & 9,055,901 \\
\hline 2.40........ & 2,301,999 & 4,789,154 & 3,669,022 & 765,852 & 11,526,027 \\
\hline 2.60 . & 2,637,849 & 6,238,485 & 3,760,822 & 765,852 & 13,403,008 \\
\hline 2.80......... & 3,991,564 & 6,970,943 & 4,562,073 & 765,852 & 16,290,432 \\
\hline 3.00 . & 5,193,117 & 7,650,965 & 5,424,833 & 874,422 & 19,143,337 \\
\hline 3.20......... & 5,193,117 & 8,150,762 & 5,740,793 & 1,106,988 & 20,191,660 \\
\hline 3.40 & 5,456,467 & 8,468,814 & 6,126,264 & 1,349,718 & 21,401,263 \\
\hline 3.60......... & 5,697,483 & 8,468,814 & 6,187,464 & 1,517,118 & 21,870,879 \\
\hline 3.80. & 5,697,483 & 8,468,814 & 6,187,464 & 1,517,118 & 21,870,879 \\
\hline 4.00......... & 6,073,513 & 8,468,814 & 6,398,544 & 1,517,118 & 22,457,989 \\
\hline 4.20 & 6,073,513 & 8,468,814 & 6,552,879 & 1,517,118 & 22,612,324 \\
\hline 4.40......... & 6,121,603 & 8,468,814 & 7,177,988 & 1,517,118 & 23,285,523 \\
\hline 4.60......... & 6,121,603 & 8,468,814 & 7,177,988 & 1,517,118 & 23,285,523 \\
\hline 4.80......... & 6,367,171 & 8,575,586 & 7,177,988 & 1,517,118 & 23,637,863 \\
\hline 5.00 & 6,367,171 & 8,575,586 & 7,177,988 & 1,628,260 & 23,749,005 \\
\hline 5.20......... & 6,367,171 & 8,575,586 & 7,214,873 & 1,628,260 & 23,785,890 \\
\hline 5.40 & 6,367,171 & 8,575,586 & 7,276,073 & 1,628,260 & 23,847,090 \\
\hline 5.60......... & 6,367,171 & 8,575,586 & 7,523,723 & 1,628,260 & 24,094,740 \\
\hline 5.80 & 6,367,171 & 8,575,586 & 7,523,723 & 1,628,260 & 24,094,740 \\
\hline 6.00.... . . . . & 6,367,171 & 8,575,586 & 7,523,723 & 1,628,260 & 24,094,740 \\
\hline 6.20......... & 6,367,171 & 8,575,586 & 7,800,188 & 1,628,260 & 24,371,205 \\
\hline 6.40......... & 6,367,171 & 8,575,586 & 7,800,188 & 1,628,260 & 24,371,205 \\
\hline 6.60. & 6,367,171 & 8,575,586 & 7,800,188 & 1,628,260 & 24,371,205 \\
\hline 6.80. & 6,367,171 & 8,575,586 & 7,800,188 & 1,628,260 & 24,371,205 \\
\hline 7.00 & 6,367,171 & 8,575,586 & 7,800,188 & \(1,717,597\) & 24,460,542 \\
\hline Al1 plants.: & 6,367,171 & 8,687,558 & 7,826,008 & 1,818,037 & 24,698,774 \\
\hline : & & & & & \\
\hline
\end{tabular}

1/ Includes per bale cost for 12 months' storage.
Note: See table 1 for delineation of areas. The port facilities of Louisiana are combined with the South Central, and the Texas port facilities are combined with the Southwest.

Table 27.--Cotton storage capacity of warehouses by out-of-pocket handling and storage costs based on volumes equivalent to 85 -percent occupancy, fiscal 1964-65


1/ Includes per bale costs for receiving, 12 months' storage, break-out, and shipping. Total receipts are equal to .34 times the average monthly storage volume for the Southeast, . 60 for the South Central, and .97 for the Southwest. Total shipments are equal to .55 times the average monthly storage volume for the Southeast, . 77 for the South Central, and 1.34 for the Southwest.

Note: See table 1 for delineation of areas.

Table \(28 .-\) Cotton storage capacity of compresses, by out-of-pocket handing and storage costs based on volumes equivalent to 85 -percent occupancy, fiscal 1964-65
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow{5}{*}{Cost per bale (dollars) 1/} & \multicolumn{6}{|c|}{Storage capacity of plants in--} \\
\hline & \multirow[t]{4}{*}{Southeast} & \multirow[t]{4}{*}{\begin{tabular}{l}
South \\
Central
\end{tabular}} & \multirow[t]{4}{*}{\begin{tabular}{ll}
\(:\) & South- \\
\(:\) & west \\
\end{tabular}} & \multirow[t]{4}{*}{West} & \multirow[b]{3}{*}{Ports} & \multirow[t]{4}{*}{\begin{tabular}{l}
United \\
States
\end{tabular}} \\
\hline & & & & & & \\
\hline & & & & & & \\
\hline & & & & & & \\
\hline & \multicolumn{6}{|l|}{\multirow[b]{2}{*}{- - - - - - - - - - - - - - - -}} \\
\hline & & & & & & \\
\hline \multicolumn{7}{|l|}{Less than--} \\
\hline 3.00 & & 883,010 & 1,789,468 & & & 2,672,478 \\
\hline 3.20 & & 1,755,333 & 2,012,353 & 289,520 & 276,377 & 4,333,583 \\
\hline 3.40 & & 2,740,201 & 2,198,248 & 654,710 & 276,377 & 5,869,536 \\
\hline 3.60 & & 3,392,069 & 2,198,248 & 654,710 & 276,377 & 6,521,404 \\
\hline 3.80 & & 3,734,601 & 2,198,248 & 765,852 & 592,182 & 7,290,883 \\
\hline 4.00 & & 4,788,538 & 2,198,248 & 765,852 & 592,182 & 8,344,820 \\
\hline 4.20 & & 5,873,083 & 2,478,663 & 765,852 & 1,477,892 & 10,595,490 \\
\hline 4.40 & & 5,873,083 & 2,794,623 & 765,852 & 1,629,827 & 11,063,385 \\
\hline 4.60......... & & 6,546,452 & 2,794,623 & 1,065,378 & 2,338,005 & 12,744,458 \\
\hline 4.80 & 278,822 & 7,136,570 & 3,180,094 & 1,065,378 & 2,562,355 & 14,223,219 \\
\hline 5.00......... & 278,822 & 7,427,082 & 3,180,094 & 1,291,128 & 2,562,355 & 14,739,481 \\
\hline 5.20 & 400,480 & 7,427,082 & 3,180,094 & 1,291,128 & 2,562,355 & 14,861,139 \\
\hline 5.40......... & 400,480 & 7,427,082 & 3,334,429 & 1,416,678 & 2,562,355 & 15,141,024 \\
\hline 5.6 & 400,480 & 7,427,082 & 3,816,998 & 1,416,678 & 2,562,355 & 15,623,593 \\
\hline 5.80 & 400,480 & 7,427,082 & 3,816,998 & 1,416,678 & 2,562,355 & 15,623,593 \\
\hline 6.00........ & 646,048 & 7,427,082 & 3,816,998 & 1,416,678 & 2,562,355 & 15, \(869,1.61\) \\
\hline 6.20.........: & 646,048 & 7,427,082 & 3,816,998 & 1,517,118 & 2,824,175 & 16,231,421 \\
\hline 6.40........ & 646,048 & 7,427,082 & 3,816,998 & 1,517,118 & 2,824,175 & 16,231,421 \\
\hline 6.60.........: & 646,048 & 7,427,082 & 3,816,998 & 1,628,260 & 2,824,175 & 16,342,563 \\
\hline 6.80........ & 646,048 & 7,427,082 & 3,816,998 & 1,628,260 & 2,824,175 & 16,342,563 \\
\hline 7.00.........: & 646,048 & 7,427,082 & 4,064,648 & 1,628,260 & 2,824,175 & 16,590,213 \\
\hline 7.20.........: & 646,048 & 7,427,082 & 4,064,648 & 1,628,260 & 2,824,175 & 16,590,213 \\
\hline 7.40.........: & 646,048 & 7,427,082 & 4,064,648 & 1,628,260 & 2,824,175 & 16,590,213 \\
\hline 7.60........: & 646,048 & 7,427,082 & 4,064,648 & 1,628,260 & 2,824,175 & 16,590,213 \\
\hline 7.80 & 646,048 & 7,427,082 & 4,341, 113 & 1,628,260 & 2,824,175 & 16,866,678 \\
\hline 8.0 & 646,048 & 7,427,082 & 4,341,113 & 1,628,260 & 2,824, 175 & 16,866,678 \\
\hline All plants.: & 646,048 & 7,427,082 & 4,341,113 & 1,818,037 & 2,824,175 & 17,056,455 \\
\hline
\end{tabular}

1/ Includes per bale costs for receiving, 12 months' storage, break-out, and shipping. Total receipts are equal to .34 times the average monthly storage volume for the Southeast, . 60 for the South Central, 97 for the Southwest, 1.53 for the West, and 1.96 for the Ports. Total shipments are equal to .55 times the average monthly storage volume for the Southeast, . 77 for the South Central, 1.34 for the Southwest, 1.61 for the West, and 1.72 for the Ports.

Note: See table 1 for delineation of areas.

Table 29.--Cotton storage capacity of warehouses and compresses, by out-of-pocket handling and storage costs based on volumes equivalent to 85 -percent occupancy, fiscal 1964-65
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{5}{*}{\[
\begin{aligned}
& \text { Cost per bale } \\
& \text { (dollars) } \\
& \text { I// }
\end{aligned}
\]} & \multicolumn{5}{|c|}{Storage capacity of plants in--} \\
\hline & \multirow[t]{2}{*}{South- :} & \multicolumn{2}{|l|}{} & \multicolumn{2}{|l|}{} \\
\hline & & \multirow[t]{2}{*}{South Central} & \multirow[t]{2}{*}{Southwest} & \multirow[t]{2}{*}{West} & \multirow[t]{2}{*}{United States} \\
\hline & east & & & & \\
\hline & : & & & & \\
\hline : & & & & & \\
\hline : & & - - - - & - Bales & - & - - - - - \\
\hline \multicolumn{6}{|l|}{Less than--} \\
\hline 3.00......... & 83,945 & 942,210 & 1,866,798 & -- & 2,892,953 \\
\hline 3.20.......... & 83,945 & 1,814,533 & 2,456,360 & 289,520 & 4,644,358 \\
\hline 3.40.......... : & 83,945 & 2,799,401 & 2,723,655 & 654,710 & 6,261,711 \\
\hline 3.60......... : & 216,838 & 3,451,269 & 2,778,735 & 654,710 & 7,101,552 \\
\hline 3.80.......... & 532,637 & 3,793,801 & 3,275,135 & 765,852 & 8,367,425 \\
\hline 4.00......... : & 1,386,188 & 4,953,088 & 3,275,135 & 765,852 & 10,380,263 \\
\hline 4.20.......... & 1,804,148 & 6,328,953 & 4,500,460 & 765,852 & 13,399,413 \\
\hline 4.40......... & 2,260,723 & 6,328,953 & 4,968,355 & 765,852 & 14,323,883 \\
\hline 4.60......... & 2,468,450 & 7,130,332 & 5,676,533 & 1,065,378 & 16,340,693 \\
\hline 4.80......... & 3,142,808 & 8,007,700 & 6,062,004 & 1,065,378 & 18,277,890 \\
\hline 5.00......... . & 3,562.304 & 8,298,212 & 6,062,004 & 1,291,128 & 19,213,648 \\
\hline 5.20......... : & 3,939,117 & 8,352,068 & 6,062,004 & 1,291,128 & 19,644,317 \\
\hline 5.40......... & 4,163,457 & 8,379,608 & 6,277,539 & 1,416,678 & 20,237,282 \\
\hline 5.60 & 4,470,345 & 8,401,739 & 6,760,108 & 1,416,678 & 21,048.870 \\
\hline 5.80......... . & 4,998,047 & 8,401,739 & 6,760,108 & 1,416,678 & 21,576,572 \\
\hline 6.00 & 5,243,615 & 8,401,739 & 6,760,108 & 1,416,678 & 21,822,140 \\
\hline 6.20.......... : & 5,432,115 & 8,401,739 & 7,021,928 & 1,517,118 & 22,372,900 \\
\hline 6.40......... . & 5,540,012 & 8,468,814 & 7,021,928 & 1,517,118 & 22,547,872 \\
\hline 6.60......... : & 5,756,282 & 8,468,814 & 7,113,728 & 1,628,260 & 22,967,084 \\
\hline 6.80......... . & 6,048,811 & 8,468,814 & 7,113,728 & 1,628,260 & 23,259,613 \\
\hline 7.00.......... & 6,048,811 & 8,468,814 & 7,459,463 & 1,628,260 & 23,605,348 \\
\hline 7.20.......... & 6,048,811 & 8,468,814 & 7,459,463 & 1,628,260 & 23,605,348 \\
\hline 7.40......... . & 6,048,811 & 8,468,814 & 7,459,463 & 1,628,260 & 23,605,348 \\
\hline 7.60......... & -6,186,211 & 8,468,814 & 7,459,463 & 1,628,260 & 23,742,748 \\
\hline 7.80 & 6,186,211 & 8,468,814 & 7,735,928 & 1,628,260 & 24,019,213 \\
\hline 8.00. & 6,186,211 & 8,468,814 & 7,735,928 & 1,628,260 & 24,019,213 \\
\hline A11 plants.. & 6,367,171 & 8,687,558 & 7,826,008 & 1,818,037 & 24,698,774 \\
\hline : & & & & & \\
\hline
\end{tabular}

1/ See footnote, table 28 , for ratio of receipts and shipments to average monthly storage volume.

Note: See table 1 for delineation of areas. The port facilities of Louisiana are combined with the South Central, and the Texas port facilities are combined with the Southwest.

\section*{Sampling}

The selection of plants to be studied was made independently for warehouse and compress storage facilities. Plants were stratified as to types, geographic areas, and capacity groups, and a random sample was drawn from each stratum.

A total of 133 plants was selected for study from a universe of approximately 1,200 plants approved by CCC. This sample represented approximately 30 percent of the approved capacity of the universe.

Warehouses were sampled at 5 capacity group levels and compresses at 3 size groups. Each capacity group was sampled at a rate expected to yield a representative sample. The sampling rate of each size group was used to weight the results for areas and expand the sample plants to the universe. The sampling procedure was developed in consultation with the Statistical Reporting Service, U.S. Department of Agriculture (USDA).

Cost and other data were obtained from each plant by an economist or an auditor assigned to the Economic Research Service (ERS) from other USDA agencies. The cost data and related volumes for each service performed were summarized and tabulated by plant, size group, area, and for the United States, according to the plan outlined in the following pages.

\section*{Standardized Depreciation and Interest}

In order to minimize the effects on costs of variations among plants in depreciation allowances and interest on investment, data were summarized using standardized rates as shown in the following rate schedule. These rates were applied to the acquisition cost of buildings and equipment. Interest allowance on capital investment of 6 percent for half the acquisition cost of buildings and equipment, plus cost of land, was computed for all plants.

STANDARD DEPRECIATION RATE SCHEDULE (Straight line method)
Buildings and improvements
Buildings (including sprinklers and foundations): Iron clad, wood frame ..... 2.5
Brick, concrete, or steel ..... 2.0
Wood ..... 3.3
Compress equipment ..... 3.0
Water tower and tanks ..... 2.5
Railroad sidings ..... 3.3
Roadways, pavement of grounds ..... 5.0
Handling and automotive equipment
C1amp trucks:
5,000非 and less ..... 14.3
6,000非 and over ..... 16.7
Tractors ..... 6.7
Trailers, warehouse, and yard ..... 6.7
Hand trucks ..... 4.0
Trucks, road ..... 14.3
Automobiles ..... 20.0
Conveyors ..... 14.3
Other
Office furniture and equipment ..... 10.0
Shop equipment ..... 6.7
Air compressor ..... 6.7
Scales. ..... 5.0
Fire equipment ..... 5.0
Personnel carriers ..... 10.0
Motorized sweepers ..... 14.3

\section*{Definition of Services}

Receiving--the unloading of bales arriving for storage, tagging, weighing, sampling as required, issuing of warehouse receipts, and movement of bales into a temporary storage block or to the press room.

Storage--moving bales into storage areas, stacking, locating, and the maintenance and custodial functions necessary during the period of storage.

Break-out--identifying bales ordered for shipment; removing and setting out from storage; and transporting to the shipping area, press room, or loading platform.

Shipping--segregating bales into shipping lots, checking, loading to car or truck, and rechecking (proof checking).

Functions involved in some services, particularly for break-out and shipping, differ within the industry and between ASCS and the industry. ASCS allows a charge for outhandling R/O cotton which covers both break-out and shipping. Some storage plants, especially in the West, make a charge variously termed "handlingshipping" or "outhandling" which is specified as covering both break-out and shipping. Plants in the Southeast generally make a separate charge for breakout (turn-out) and another for shipping (load-out). But in much of the rest of the Belt, most plants make only a shipping charge and consider break-out as a storage function. In late 1960, ASCS, in conference with representatives of the industry, accepted this latter definition for the purpose of a cost study. Results of the ASCS cotton storage cost study, first released in April 1961 and reworked by ERS as of February 1962, included break-out as a storage cost regardless of whether or not specific revenue was received by plants for break-out.

Allocation of cost items to services performed was according to the following plan:


\section*{Utilities:}

Fuel for compress..... Direct to compression
Other.................... Revenue
Transportation expense.. Revenue
Home office............. Revenue
Warehouse supplies...... Direct to service
Office supplies......... Revenue
Other misc. costs....... Revenue

\section*{Estimates of Demand for Storage Space}

The disappearance of cotton in \(1966-67\) was estimated at 15.4 million bales, including 5.8 million bales for export and 9.6 million bales for domestic consumption. Production for \(1966-67\) was estimated at 12.5 million bales. The carryover on August 1, 1966, was estimated at approximately 16.7 million bales. These projections were based on USDA estimates.

The seasonal movements in receipts and shipments and the carryover for each geographical area and for the United States were estimated on the basis of historical movements and distribution. Peak storage requirements for 1966-67 were calculated from these estimates. The peak storage requirement was estimated at approximately 5.67 million bales for the Southeast, 7.26 million bales for the South Central, 6.14 million bales for the Southwest, 1.49 million bales for the West, and 19.15 million bales for the United States. The peak requirements occur at different months among areas, resulting in a Beltwide peak of less than the sum of the areas.

\section*{Replacement Costs}

Replacement costs as shown in this report are based on a standard type construction, that is, the typical type currently constructed. Across the Belt the iron clad, wood frame predominates, except in the Southeast where the allsteel buildings are more common.

An average cost per square foot of building space, including covered platform, was developed from cost records of newly built facilities across the Belt. The square foot cost was estimated at \(\$ 2.15\) for warehouses and \(\$ 2.30\) for compresses. These costs included the cost of buildings, water systems, spur tracks, outside black-topping or paving, and other improvements.

In developing the building and improvement costs for each plant, the estimated cost was applied to the number of square feet of floor space as existed in 1964-65. In addition, all other assets at individual plants except presses and the land were replaced at 105 percent of their acquisition cost. Replacement on the presses was estimated at \(\$ 115,000\). An allowance equal to the original cost of land was allowed in estimating returns on investment.

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Replacement costs computed as outlined above were used to calculate depreciation and return to investment for individual plants. Uniform rates as shown in the standard depreciation rate schedule were used as a basis for estimating depreciation costs. Allocations of depreciation and return to investment were made according to the plan outlined in the method of allocation section.```


[^0]:    1/ If break-out had been included as a storage cost, as was done in the 1960 ASCS cotton-storage cost study, total storage cost per bale per month would have been increased by approximately $\$ 0.034$ at warehouses, by $\$ 0.061$ at compresses, and by $\$ 0.052$ overall.

[^1]:    1/ Includes space approved by CCC less space converted to other uses.
    Service performed requiring the removal of the bale from storage and return. Service performed at time of another service but usually at time of shipment. Includes Alabama, Georgia, North Carolina, and South Carolina.

    Includes Arkansas, Louisiana, Mississippi, Missouri, and Tennessee.
    ncludes Oklahoma and Texas excluding district 6 .
    $\overline{8}$ / Includes Arizona, California, New Mexico, and district 6 Texas.
    9/ Includes Gulf Port facilities of Louisiana and Texas.

[^2]:    1/ Includes standardized depreciation and allowance for interest on investment based on original acquisition costs. $\frac{2}{3}$ / Excludes depreciation and allowance for interest on investment.
     average monthly stocks projected for $1966-67$ equal 85 percent of the estimated 4/ Out-of-pocket costs of marginal firms operating at 85 percent of capacity.
     facilities are combined with the Southwest.

    Note: See table 1 for delineation of areas.

[^3]:    1/ See footnotes, table 3, for explanation of various cost items.
    Note: See table 1 for delineation of areas.

