# H.S.Bumang P.eic.cusms. <br> CONSIDERATION FOR REIMBURSEMENT FOR CERTAIN HIGHWAYS ON THE INTERSTATE SYSTEM 

LETTER

FROM THE

## SECRETARY OF COMMERCE

TRANSMITTING

DATA REGARDING REIMBURSEMENT FOR CERTAIN HIGHWAYS ON THE NATIONAL SYSTEM OF INTERSTATE AND DEFENSE HIGHWAYS, PREPARED BY THE BUREAU OF PUBLIC ROADS IN COOPERATION WITH THE SEVERAL STATE HIGHWAY DEPARTMENTS, PURSUANT TO SECTION 114 OF THE FEDERAL-AID HIGHWAY ACT OF 1956


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## LETTER OF TRANSMITTAL

## The Secretary of Commerce, Washington, January 7, 1958.

Hon. Sam Rayburn,
Speaker of the House of Representatives, Washington, D. C.
Dear Mr. Speaker: I transmit herewith data regarding reimbursement for certain highways on the National System of Interstate and Defense Highways, prepared by the Bureau of Public Roads in coopaeration with the several State highway departments.

This report has been prepared in compliance with section 114 of the Federal-Aid Highway Act of 1956, which declares the intent of Congress to determine whether or not reimbursement should be made to the States for highways, toll or free, which have been completed or put under construction on the Interstate System between August 2, 1947, and June 30, 1957.

This report, as directed by the legislation, includes information on the mileage of highways eligible for consideration for such reimbursemont, their cost, and depreciation.

Sincerely yours,
Sinclair Weeks, Secretary of Commerce.

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# CONSIDERATION FOR REIMBURSEMENT FOR CERTAIN HIGHWAYS ON THE INTERSTATE SYSTEM 

## SUMMARY

In the Federal-Aid Highway Act of 1956, the Congress indicated its intent to determine whether or not reimbursement should be made to the States for highways, toll or free, completed or put under construction on the National System of Interstate and Defense Highways between August 2, 1947, and June 30, 1957. For that purpose, the Secretary of Commerce was directed to determine which highways might be eligible for consideration for such reimbursement, their cost, and depreciation.

With the cooperation of the State highway departments, the Bureau of Public Roads of the Department of Commerce undertook this study and here reports its findings.

Of the 38,548 miles of approved detailed locations on the Interstate System as of September 1957, it was found that 10,859 miles, or 28 percent, met the criteria for consideration for reimbursement. In this mileage were included 1,950 miles of toll roads in 26 States and 8,909 miles of free roads in 47 States . Only 1,955 miles of the 10,859 -mile total were fully completed.

The total cost of the highways eligible for consideration for reimbursement amounted to $\$ 6.09$ billion, of which $\$ 2.59$ billion was for toll roads and $\$ 3.50$ billion for free roads. Federal-aid funds accounted for 32 percent of the latter.

Since only highways completed or undertaken in the last 10 years were considered, their average life span was short: 37 percent of the costs represented work under construction or awarded to contract on June 30, 1957; 30 percent represented completed work less than 2 years old; 33 percent represented completed work 2 to 10 years old.

As a consequence, the computed depreciation of the total $\$ 6.09$ billion cost amounted to only $\$ 174$ million. The total cost less depreciation for the 10,859 miles eligible for consideration for reimbursement amounted to $\$ 5.92$ billion, of which $\$ 2.52$ billion was accounted for in toll roads and $\$ 3.40$ billion in free roads.

## PURPOSE AND SCOPE OF STUDY

The purpose and scope of this report are set forth in section 114 of the Federal-Aid Highway Act of 1956, which reads as follows:

[^0]following a study which the Secretary of Commerce is hereby authorized and directed to conduct, in cooperation with the State highway departments, and other agencies as may be required, to determine which highways in the Interstate System measure up to the standards required by this title, including all related factors of cost, depreciation, participation of Federal funds, and any other items relevant thereto. A complete report of the results of such study shall be submitted to the Congress within ten days subsequent to January 2, 1958.

The 1956 act, in section 108 (d), also called for an estimate of the cost of completing the Interstate System, to be used as a basis for apportioning interstate funds among the States. A report of that work, A Report of Factors for Use in Apportioning Funds for the National System of Interstate and Defense Highways, as required by section 108 (d) of the Federal-Aid Highway Act of 1956 (Public Law 627, 84th Cong.), is now being submitted to the Congress.

Close correlation between these two studies was necessary and was carefully observed. For purposes of both studies, it was necessary to determine the locations of the Interstate System routes in detail. It was also necessary to determine what improvements already made on these routes would be incorporated in the ultimate stage of development of the system in 1975. By July 1957, the States had submitted such information to the Bureau of Public Roads. Immediately thereafter the study called for in section 114 of the 1956 act was initiated.

COOPERATION OF STATES
The cooperation of the State highway departments, as called for in section 114, was solicited by the Bureau of Public Roads and was received with thorough effectiveness. At the request of the Bureau, the American Association of State Highway Officials established an advisory committee, which met with representatives of the Bureau in July 1957 to consider study procedures and report content. Every State highway department participated individually by supplying the information called for by the study. The Bureau worked directly with the State highway departments on all matters pertaining to the assembly of the requested data for both free and toll facilities.

## INTERPRETATIONS

Although the general intent of section 114 is clear, certain interpretations of the language were necessary in the interest of uniformity.

## Highway

While the language of section 114 specifically referred only to "highways," it seemed evident that highway facilities in total were intended. Consequently, the study encompassed bridges and tunnels, both toll and free, as well as highways in the strictest sense. Hereafter, in this study, when "highways" or "roads" are mentioned it should be understood that bridges and tunnels are included.

## Portion of highway

The term "portion" as it applies to a highway may involve a small segment of less than 100 feet in length to a complete highway over 100 miles long.
It is common practice to build free roads in stages. For example, the grading and structures may be completed in one year, and the surface added in the next year. Relatively short sections of a route
may be built in successive years, as funds become available. On a projected divided highway, the second roadway may be built some years after the first roadway was completed.

By way of contrast, toll roads are usually built in long stretches and the time from beginning to completion of construction is relatively short. Since toll roads are commonly financed by revenue bonds (which make all of the needed funds available at once), it is vital to financial success that the road be opened to revenue-producing traffic as quickly as possible.

In this study, all improvements were included irrespective of length, provided they met the other criteria set forth in section 114.

## Location

The general locations of the Interstate System routes, to the extent of the 40,000 miles authorized by the Federal-Aid Highway Act of 1944, had been selected and approved in 1947 and 1955. Selection of detailed locations of these routes by the States, completed by September 1957, revealed that the extent of the approved system totaled only 38,548 miles. It is upon these routes and this mileage that the two reports called for by sections 108 (d) and 114 of the 1956 act have been based.

In October 1957, action was taken with respect to new routes in the amount of 1,102 miles within the original 40,000 -mile limitation, and of 1,000 miles authorized as an expansion of the system by the Federal-Aid Highway Act of 1956 . The 2,102 miles involved in this action were not included in this study.

Portions of routes in this report were classified as being either on "specific" or "tentative" locations depending upon whether or not the locations had been established by engineering studies and approved by the Bureau. Inasmuch as 93 percent of the mileage covered by this study was on "specific" location, the data for both types of locations were combined in this report.

## Completion; completion dates

Section 114 relates to construction "completed subsequent to August 2, 1947, or which is either in actual use or under construction by contract, for completion, awarded not later than June 30, 1957." (The date August 2, 1947, was specified in the act because it was the date of original designation of the Interstate System pursuant to section 7 of the Federal-Aid Highway Act of 1944.)

The foregoing phraseology, raised certain questions as to the meaning of the term "completed." In many cases, some elements of roads eligible for consideration were already completed and in use, whereas other elements had not yet been constructed. A common example illustrating this point is the present existence of only 2 lanes of an ultimate 4-lane facility. In this case, a considerable amount of construction had been completed but the portion of road, as a whole, was only partially complete. Such partially completed portions were included in this study and are separately identified in this report. The following specific criteria were employed with respect to defining the term "completion" and the completion dates in this study:

Contracts completed prior to August 2, 1947.-Contracts completed (date work accepted or opened to traffic, whichever was later) prior to August 2, 1947, were excluded. In the case of acquisition of right-
of-way only, the date of completion was the date right of entry was acquired and applied only to the parcels involved.

Contracts awarded after June 30, 1957.-Contracts for work awarded after June 30, 1957, were excluded. In the case of long routes or route sections which were definitely scheduled for completion, but for which only segments were let to contract by June 30, 1957, only those segments actually let to contract by that date were included. Further, if the right-of-way only had been acquired by June 30, 1957, then only the right-of-way for the parcels involved was included.

Interstate funds involved.-Some recent improvements, or parts thereof, utilized interstate funds authorized by the 1956 act on a 90 -percent Federal, 10-percent State matching basis. The Federal-aid interstate funds and the State matching funds involved in the financing of such improvements were not included.

## Standards

Section 114 refers to highways which "measure up to the standards required by this title." Since the standards refer to minimum dimensions and likewise provide for certain latitude in their application to local conditions, this term has been interpreted as meaning "reasonable compliance" with the standards for each facility included in the study. It seemed altogether proper to take this position, for it would obviously be economically unsound to consider construction of a new highway closely paralleling one already in existence and serving traffic well, yet deficient according to the interstate standards in relatively small degree, or to incur unjustifiably large expenditures to effect full compliance with the standards. The same standards were used in both this report and the report required by section 108 (d).

Stage improvements were included provided they form a part of, and are to be retained in, the ultimately developed interstate highway. Improvements that are clearly temporary and are not a part of the ultimate improvement were excluded.

## Construction costs

All costs in this report were obtained directly, by the State highway departments or other agencies concerned, from contract and project records. Properly, these costs should be increased by about 10 percent as an allowance for engineering costs and administrative expenses of acquiring right-of-way. However, these latter items were not separately developed because of the difficulty in searching the records to obtain the precise amounts involved.

No adjustment was made for price level changes.
Costs reported excluded so-called nonhighway costs. These nonhighway costs, which are most commonly encountered on toll road work, include:

1. Financing costs such as interest payments, bond discounts, financing fees, and other administrative costs.
2. Costs attributable to toll operation such as toll gates, collection facilities, buildings, and highway facilities solely for toll purposes.
3. Costs of service facilities such as those for maintenance operations and for food and fuel.
Included, therefore, are costs representing all public funds from State and local sources including proceeds from all types of bond issues together with all Federal funds regardless of specific class, i. e., inter-
state (prior to 1956 act apportionments), primary, urban, secondary, forest highway, etc., for highway facilities of direct service to traffic.

Costs were segregated according to source as Federal and nonFederal funds, and were further segregated into four items of expenditure: right-of-way, grading and miscellaneous, surface and base, and structures.

Included in the costs of right-of-way were those for purchase of land, property damage, costs in lieu of purchase, and the like. The administrative expense of acquisition was excluded.

The "grading and miscellaneous item" includes costs of all excavation, minor drainage, shoulders, landscaping, traffic services, retaining walls, sidewalks, and other work not included elsewhere.

Costs of structures, including grade separations, bridges, and tunnels, are for those over 20 feet in length. Those of lesser length were included in grading and miscellaneous costs.

## Depreciation

Depreciation rates used in this study were applied uniformly for all States and to the costs of toll roads and free roads alike. The original cost of each portion of highway was broken down into cost items and identified as to age on June 30, 1957. The cost items and their depreciation rates are as follows:

Percent per year




These percentages were arrived at by the deliberate judgment of the Bureau of Public Roads and the Advisory Committee of the American Association of State Highway Officials, based on consideration of all available information on experience in the depreciation of investment on high-type primary highways.

The depreciation rates were applied directly to the original cost new without adjustments for price changes or increases in value. Thus, for a portion of road completed in October 1953, the average age on June 30, 1957, was 3.7 years. The depreciation for the various cost items would be zero for right-of-way, 3.7 percent for grading and miscellaneous, 11.1 percent for surface and base, and 7.4 percent for structures.

Total depreciation for all work covered by this study was rather small, less than 3 percent. This is because about two-thirds of the construction costs covered by this study were less than 2 years of age.

## FINDINGS OF THE STUDY

In the approximate 10 -year period covered by this study, from August 2, 1947, to June 30, 1957, improvements were made in varying degrees on 10,859 miles of the Interstate System at a cost of $\$ 6,096$ million. A number of nationwide summary tables are presented in this section of the report. Corresponding State-by-State tabulations will be found in the appendix.

## Mileage

Twenty-six States reported construction on 1,950 miles of toll roads incorporated into the Interstate System. All of the States, except

Delaware, reported construction of free roads, totaling 8,909 miles. Distributions of this mileage are shown in table 1.

General locations of the improvements are shown in figure 1.
The distribution in the upper part of table 1 shows the mileage by status of completion: 100 percent complete, and partially complete, with the latter being subdivided into 5 general groups. The distribution in the lower part of the table shows the mileage by rural and urban classifications.

In a press release of August 21, 1957, the Bureau of Public Roads announced 2,102 miles of toll roads were included in the Interstate System. The major reasons for the differences between this 2,102 miles and the 1,950 miles shown in table 1 are: (1) the mileages in table 1 do not include the original Pennsylvania Turnpike or other sections completed prior to August 2, 1947; (2) the press release of August 21 does not include the mileage of separately financed toll bridges and tunnels; and (3) certain portions of the Connecticut Turnpike can be used without payment of tolls and were classified in the "free" road category for purposes of the section 114 study.

Table 1.-Distributions of mileage ${ }^{1}$
BY STATUS OF COMPLETION

| Distributions | Mileage of - |  |  |
| :---: | :---: | :---: | :---: |
|  | Toll roads | Free roads | Total |
| 100 percent complete.. | 1,572 | 383 | 1,955 |
| Partially complete: |  |  |  |
| 80 to 99 percent. | 294 57 | 538 1,009 | 832 1,066 |
| 40 to 60 percent. | 16 | 1,701 | 1,717 |
| 20 to 40 percent | 1 | 3, 311 | 3,312 |
| 0 to 20 percent. | 10 | 1,967 | 1,977 |
| Subtotal.. | 378 | 8, 526 | 8, 904 |
| Total. | 1,950 | 8, 009 | 10,859 |

BY LOCATION

| Rural | 1,527 423 | 7,405 1,504 | 8,932 1,927 |
| :---: | :---: | :---: | :---: |
| Total | 1,950 | 8,909 | 10,859 |

${ }^{1}$ Tables A-1a, A-1b, and A-1c in the appendix show these data by States.


## Funds

The Federal-aid and other funds used in making these improvements are summarized in table 2. Table 2 shows a small amount of Federal aid for toll roads. This was reported by Georgia in the amount of $\$ 1.7$ million for a toll bridge which will eventually become free. For free roads, a substantial portion of the construction cost, 32 percent, represented Federal-aid contributions.
As a result of these improvements, some portions of the mileage were totally complete as of June 30,1957 , and no further work will need to be done to make them adequate for 1975 traffic. Other portions were only partially complete; even though they have been opened to traffic, more work will be required after June 30, 1957, to make them adequate for 1975 traffic. These future costs are not included in this report, but are included in the separate report being submitted to the Congress as required under section 108 (d) of the Federal-Aid Highway Act of 1956 .
Costs
Distributions of the costs of the improvements in the toll and free categories are shown in table 3. The upper and middle portions of this table correspond to those on table 2, reporting distributions by status of completion and by location. The bottom portion of table 3 gives the amount for each of the four cost items: Right-of-way, grading and miscellaneous, surface and base, and structures.

Table 2.-Distributions of costs; non-Federal aid and Federal aid ${ }^{1}$
[In millions]

| Funds | Toll roads | Free roads | Total |
| :---: | :---: | :---: | :---: |
| Non-Federal aid. Federal aid. | \$2,590 | $\$ 2,377$ 1,127 | $\begin{array}{r} \$ 4,967 \\ 1,129 \end{array}$ |
| Total. | 2, 592 | 3, 504 | 6,096 |

[^1]Table 3.-Distributions of costs by status of completion, location, and cost item ${ }^{1}$ by status of completion
[In millions]

| Distributions | Toll roads | Free roads | Total |
| :---: | :---: | :---: | :---: |
| 100 percent complete. | \$1.550 | \$806 | \$2, 3E6 |
| Partially complete: |  |  |  |
| 80 to 99 percent. | 875 | 916 | 1,791 |
| 60 to 80 percent | 67 | 510 | 577 |
| 40 to 60 percent. | 95 | 572 | 667 |
| 20 to 40 percent. | 1 | 505 | 506 |
| 0 to 20 percent. | 4 | 195 | 199 |
| Subtotal. | 1, 042 | 2,698 | 3,740 |
| Total | 2, 592 | 3, 504 | 6,096 |

BY LOCATION


BY COST ITEM

${ }^{1}$ Tables A-3a, A-3b, and A-3c in the appendix show these data by States.

## Depreciation

The distribution by cost items shown in the bottom portion of table 3 was essential to computing depreciation. For purposes of this computation, the depreciation rates previously listed in this report were to be applied to these cost items in accordance with their age on June 30, 1957. A summary of these costs by age groups is shown in table 4.

The relatively large amounts in the zero age group are due to the inclusion, in this study, of costs for work which was under construction or awarded to contract on June 30, 1957. (Work financed under the 90-10 Federal-aid provisions of the 1956 act is not included.)

The computed depreciation on the amounts in table 3 was $\$ 174$ million, of which $\$ 74$ million was on toll roads and $\$ 100$ million on free roads. No attempt was made in this study to investigate bondfinanced projects for purposes of comparing the amounts of this depreciation with the amounts of bonds called or sinking fund accruals for bond redemption.

In table 5 are listed the amounts of cost new less depreciation for the same distributions as shown for the cost-new amounts in table 3.

Table 4.-Distribution of total cost by age group
[In millions]

| Cost item | Age group, in years |  |  |
| :--- | ---: | ---: | ---: | ---: |

1 Table A-4 in the appendix shows the distribution of these totals separately for toll roads and free roads.

> Table 5.-Distributions of cost less depreciation ${ }^{1}$ BY STATUS OF COMPLETION
> [In millions]

| Distributions | Toll toads | Free roads | Total |
| :---: | :---: | :---: | :---: |
| 100 percent complete.- | \$1,500 | \$785 | \$2,285 |
| Partially complete: |  |  |  |
| 80 to 99 percent. | 857 | 899 | 1,756 |
| 60 to 80 percent. | 66 | 496 | 562 |
| 40 to 60 percent | 90 | 553 | 643 |
| 20 to 40 percent. | 1 | 481 | 482 |
| 0 to 20 percent. | 4 | 190 | 194 |
| Subtotal. | 1,018 | 2,619 | 3,637 |
| Total. | 2,518 | 3,404 | 5,922 |

## BY LOCATION



## BY COST ITEM

| Right-of-way | \$252 | \$847 | \$1,099 |
| :---: | :---: | :---: | :---: |
| Grading and miscellaneous. | 755 | 1, 024 | 1,779 |
| Surface and base.---.-.-- | 399 | 554 | 953 |
| Structures. | 1,112 | 979 | 2,091 |
| Total. | 2, 518 | 3,404 | 5,822 |

[^2]
## APPENDIX

The tabulations contained in this appendix show the State-by-State amounts that comprise the nationwide totals presented previously in this report.

All tables in this appendix have the letter $A$ as the first designation in the table number. The second designation is a number that corresponds to the table number in the previous pages. Thus table A-2 refers to a table in this appendix which shows a State-by-State listing of the data summarized in table 2 in the preceding portion of this report.

Because of the large amount of information in some of the tables in the appendix, they are subdivided into three parts: Part a refers to toll roads; part b to free roads; and part c to toll roads plus free roads, combined. These parts are indicated by the suffix $a, b$, or $c$, following the table number. The tables included are as follows:

[^3]Table A-1a.-Distribution of mileage: Toll roads



[^4]Table A-1b.—Distribution of mileage: Free roads

| State |  | Distribution of mileage |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | By status of completion |  |  |  |  |  |  | By location |  | Grandtotal |
|  |  | 100 percent complete | Partially complete |  |  |  |  |  | Rural | Urban |  |
|  |  | 80 to 99 percent | 60 to 80 percent | $\begin{aligned} & 40 \text { to } 60 \\ & \text { percent } \end{aligned}$ | 20 to 40 percent | 0 to 20 percent | Subtotal |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }_{\text {Aremen }}^{\text {Arizona }}$ |  |  | 0.1 |  | 1.6 | 37.4 | 388.4 | 30.4 | 457.8 | 448.7 | 9.2 | 457.9 |
| California. |  | 1.7 | 62.9 | 88.1 | 113.8 | 1499 289 | 14.1 292.8 | 34.8 847.5 | 37.8 516.2 | 14.8 333.0 | 52.6 849.2 |
| Colorado |  |  | 17.9 | 37.3 | 886.6 | 110.7 | 20.2 | 272.7 | 256.6 | 16.1 | 272.7 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 27.1 | 27.7 13.1 | ${ }_{34.7}^{58.0}$ | 7.8 64.9 | 2.8 <br> 5.0 | 123.4 117 | 102.6 111.0 | 34.2 6.7 | ${ }_{117.7}^{136.8}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 41.0 6.5 | 15.5 <br> 21.3 <br> 1 | 22.1 | 2.5 | 86.0 | ${ }^{167.1}$ | 117.5 | 49.6 | 167.1 |
|  |  |  | 20.0 | ${ }_{11.3}$ | 48.9 | 26.7 | 146.9 | 24.8 238.8 | 221.8 | ${ }_{64.5}$ | 36.2 286.3 |
|  |  |  | 8.3 | 15.4 | 41.3 | 83.1 | 11.3 | 159.4 | 130.0 | 29.4 | 159.4 |
|  |  |  | 277 |  | 14.8 | $\begin{array}{r}46.9 \\ \\ \hline 1285\end{array}$ | +30.8 | 92.5 | 73.6 | 18.9 | ${ }^{92.5}$ |
|  |  |  | 8.9 | 33.8 | 64.4 | 98.8 | 1.0 | 206.9 | 205.7 | 1.2 | 366.9 |
|  |  |  | 2.5 | 3.6 | 25.5 | 15.19 | 40.2 | 12.9 226.9 | 12.9 |  | 12.9 |
|  |  |  |  |  |  |  | 40.2 |  | 5.3 | 4.8 | 226.9 ${ }_{10.1}$ |
|  |  |  | 10.8 17.0 | 1.6 | 4.8 66.4 | 177.7 | 2.8 60.4 | 24.81.8 | 17.9 319.3 | 16.4 <br> ${ }_{2} .2$ | 34.3 321.5 3 |
|  |  |  | 51.2 | 1.6 | 66.4 <br> 10.4 | 17.7 | 60.4 9.2 | ${ }_{7} 72.1$ | 319.3 16.0 | 2.2 94.9 | 321.5 110.9 |
|  |  |  | 8.4 | 51.1 |  | 117.1 | 27.6 | ${ }^{270.4}$ | ${ }_{\text {cher }}^{236.5}$ | 33.9 | 270.4 |
| Ohio |  |  |  |  | 11.2 | 58.2 | 15.1 | 145.4 146.7 | 146.4 116.5 |  | 145.4 153.9 |
|  |  | 22.6 |  | ${ }_{49}^{27.3}$ |  | 8.9 ${ }^{8}$ | 16.6 | 53.9 | 30.6 | 45.9 | 76.5 |
|  |  | 34.3 | 36.1 | 49.9 | 163.3 | 72.5 | 21.9 | 343.7 | 354.8 | 23.2 | 378.0 |


${ }^{1}$ Less than 0.05 mile.
Table A-Ic.-Distribution of mileage: Toll and free roads combined


${ }^{1}$ Less than 0.05 mile.
Table A－2．－Distribution of costs：Toll roads and free roads；non－Federal aid and Federal aid

| $\begin{aligned} & \text { ज్ఞ } \\ & \text { है } \end{aligned}$ | $\begin{aligned} & \text { W } \\ & \stackrel{y}{0} \\ & \hline \end{aligned}$ |  <br>  |
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Table A-3a.-Distributions of costs by status of completion, location, and cost item: Toll roads


${ }^{1}$ Less than $\$ 50,000$.
Table A-3b.-Distributions of costs by status of completion, location, and cost item: Free roads


${ }^{1}$ Less than $\$ 50,000$.
State
Table A-3c.-Distributions of costs by status of completion,


${ }^{1}$ Less than $\$ 50,000$.
Table A-4.-Distribution of total cost by age group


1 Zero age represents work under construction or awarded to contract as of June 30, 1957.
Table A-5a.-Distributions of cost less depreciation: Toll roads

| State | By status of completion |  |  |  |  |  |  | By location |  | By cost item |  |  |  | $\begin{aligned} & \text { Grand } \\ & \text { total } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 100 \text { per- } \\ \text { cent } \\ \text { complete } \end{gathered}$ | Partially complete |  |  |  |  |  | Rural | Urban | Right-of-way | Grading and miscellaneous | Surface and base | Struc- |  |
|  |  | 80 to 99 percent | 60 to 80 percent | 40 to 60 percent | 20 to 40 percent | 0 to 20 percent | Subtotal |  |  |  |  |  |  |  |
| Alabama |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Arizons-a.- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| California. | \$3.0- | 23.4 |  |  |  |  | \$23.4 |  | \$20.4 | \$0.3 | \$7.9-9 | \$1.1-1 | \$17.1 | \$28.4 |
| Colorado-- | 46.3 |  |  |  |  |  |  | \$11. 1 | 35.2 | 9.6 | 13.7 | 4.4 | 18.6 | 46.3 |
| Delaware... |  |  |  | \$34.9 |  |  | (1) ${ }^{4}$ | 34.9 |  | 2.2 | 1.3 | 1.1 | 30.3 | 34.9 |
| Florida | $\begin{array}{r} 20.3 \\ 7.5 \end{array}$ |  |  |  |  | (1) |  | 12.3 | $\begin{aligned} & 8.0 \\ & 7.5 \end{aligned}$ | 2.0 | 4.0 | 3.8 | 10.5 7.5 | 20.8 7.5 |
| Idaho.-- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Illinois.- |  | 268.5 | ---.----- | ---------- | -------- | \$4. 3 | 272.8 | 112.8 | 160.0 | 31.0 | 73.5 | 56.1 | 112.2 | 272.8 |
| Indiana. | 147.0 |  |  | 1.1 | --------- |  | 1.1 | 82.0 | 65.0 | 4.1 .1 | 51.3 .2 | 39.3 .2 | 52.3 .6 | 147.0 |
| Kansas.-. | 87.7 |  |  |  |  |  |  | 69.8 | 17.9 | 9.6 | 23.2 | 35.9 | 19.0 | 87.7 |
| Kentucky | 25.6 |  |  |  |  |  |  | 22.9 | 2.7 | 3.2 | 10.0 | 8.6 | 3.8 | 25.6 |
| Maine... | 26.3 | 1.3 |  | - | ---- |  | 1. ${ }^{-7}$ | 19.6 | 8.0 | 1.4 | 14.3 | 3.8 | 8.1 | 27.6 |
| Maryland.-.-- | 886 |  |  |  |  |  |  |  | 86.6 | 3.3 | 11.5 | 2.8 | 68.9 | 88.6 |
| Massachusetts Michigan | 37.0 | $\begin{aligned} & 85.9 \\ & 73.3 \end{aligned}$ | \$48. 1 |  |  |  | $\begin{array}{r} 134.0 \\ 73.3 \end{array}$ | $\begin{array}{r} 100.8 \\ 73.3 \end{array}$ | 70.2 | 20.1 | 65.0 | 20.7 | 65.2 73.3 | 171.0 73.3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Missouri. <br> Montana | 15.2 | 4.0 |  |  |  |  | 4.0 | 4.0 | 15.2 | 2.2 | 2.0 | 1.3 | 13.7 | 19.2 |
| Nebraska |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| New Jersey | 33.5 | 255.4 | 5.6 | 1.3 |  |  | 262.3 | 3.1 | 292.7 | 21.0 | 78.8 | 27.1 | 168.9 | 295.8 |
| New York. | 528.4 | 34.7 |  | 24.5 | \$0.6 |  | 59.8 | 271.9 | 316.3 | 70.4 | 200.9 | 87.3 | 229.6 | 588.2 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | 8.0 | 15.9 |  | 31.3 | 44.6 | 161.5 |
|  |  |  |  |  |  |  |  | 70.6 |  | 4.0 | 22.8 | 24.2 | 19.6 | 70.6 |
|  |  | 43.7 | 4.1 |  |  |  | $\begin{array}{r} 4.1 \\ 43.7 \end{array}$ | 109.0 | 95.3 | ${ }^{(1)}{ }_{25.8}$ | 61.6 | 33.3 | 4.1 83.6 | 4.1 204.3 |
| Pennsylvania Rhode Island |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


${ }^{1}$ Less than $\$ 50,000$.
Table A-5b.-Distributions of cost less depreciation: Free roads


Table A-5c.-Distributions of cost less depreciation: Toll and free roads, combined

| State | By status of completion |  |  |  |  |  |  | By location |  | By cost item |  |  |  | Grand total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 100 percent complete | Partially complete |  |  |  |  |  | Rural | Urban | Right-of-way | ```Grading and miscel- laneous``` | Surface and base | Structures |  |
|  |  | 80 to 99 percent | 60 to 80 percent | 40 to 60 percent | 20 to 40 percent | 0 to 20 percent | Subtotal |  |  |  |  |  |  |  |
| Alabama. |  |  | \$2.6 | \$7.5 | \$5. 3 | \$2.8 | \$18.2 | \$18.2 | (1) | \$1.5 | \$7.8 | \$6.3 | \$2. 6 | \$18.2 |
| Arizons... | \$0.6 |  | 1.0 | 2.9 | 30.6 | 6.8 | 41.3 | 36.3 | \$5.6 | 3.6 | 21.2 | 10.4 | 6.7 | 41.9 |
| Arkansas | 5.3 | \$3.2 | 1.2 | . 4.4 | 3.2 | . 7 | 8.7 | 7.9 | 6.1 | 1.9 | 2.7 | 4.1 | 5. 3 | 14.0 |
| California | 6.4 | 153.7 | 80.4 | 43.4 | 62.0 | 34.0 | 373.5 | 70.0 | 309.9 | 123.2 | 105. 9 | 48.5 | 102.3 | 379.9 |
| Colorado. |  | 4.9 | 13.6 | 17.3 | 9.7 | .3 | 45.8 | 28.8 | 17.0 | 9.3 | 21.1 | 8.0 | 7.4 | 45.8 |
| Connecticut | 309.7 |  | 4.0 | 10.0 | 2.3 | . 6 | 16.9 | 63.9 | 262.7 | 75.7 | 99.0 | 27.2 | 124. 7 | 328.6 |
| Delaware.-. |  |  |  | 34.9 |  |  | 34.9 | 34.9 |  | 2.2 | 1.3 | 1.1 | 30.3 14 | 34.9 |
| Florida. | 26.1 |  | 6.3 |  | 1.9 | 1.2 | 9.4 397 | 14.9 | 20.6 | 7.9 18.3 | 7.1 21.8 | 5.8 11.3 | 14.7 17.3 | 35.5 68.7 |
| Georgla | 29.0 | 16.2 | 9.9 4.6 | 7.6 2.6 | 5.8 | .2 .5 | 39.7 11.8 | 22.3 10.4 | 46.4 1.4 | 18.3 1.4 | 21.8 6.8 | 11.3 3.0 | 17.3 | 68.7 11.8 |
| Idaho.. | 35.5 | 334.6 | 4.6 41.6 | 2.6 58.2 | 74.1 | 5.5 | 11.8 514.6 | 10.4 181.1 | 1.4 369.0 | 1.4 142.4 | 6.8 122.5 | 3.0 111.5 | 173.7 | 11.8 50.1 |
| Indiana. | 147.0 | 10.0 | 12.6 | 5.6 | 1.4 | 4.0 | 33.6 | 97.9 | 82.7 | 9.5 | 61.4 | 50.1 | 59.6 | 180.6 |
| Iows. |  | 1.7 | 7.2 | 1.1 | 2.1 |  | 12.1 | 10.4 | 1.7 | 1.4 | 4.4 | 1.8 | 4.5 | 12.1 |
| Kansas | 87.7 | 7.3 |  |  | 14.0 | . 3 | 21.6 | 82.4 | 26.9 | 14.2 | 30.0 | 43.5 | 21.6 | 109.3 |
| Kentucky | 36.9 |  |  |  | . 7 |  | . 7 | 22.9 | 14.7 | 6.3 | 12.9 | 11.1 | 7.3 | 37.6 |
| Louisiana. | 7.1 | 1.5 | 12.8 | 1.3 | 9.6 | 1.0 | 26.2 | 8.2 | 25.1 | 2.9 | 10.7 | 2.2 | 17.5 | 33.3 |
| Maine. | 28.5 | 9.4 |  | . 8 |  |  | 10.2 | 24.8 | 13.9 | 2.6 | 17.9 | 5.8 | 12.4 | 38.7 |
| Maryland. | 86.6 | 34.3 | 7.4 | 20.2 | 4.7 | 12.1 | 78.7 | 35.6 | 129.7 | 22.2 | 39.7 | 17.0 | 86.4 | 165.3 |
| Massachusetts | 41.8 | 184.8 | 62.7 | 2.7 |  |  | 250.2 | 110.8 | 181.2 | 49.8 | 76.7 | 26.4 | 139.1 | 292.0 |
| Michigan. | 2.1 | 115.9 | 53.7 | 78.6 | 9.3 | 23.5 | 281.0 | 132.2 | 150.9 | 82.5 | 42.5 | 29.7 | 128.4 | 283.1 |
| Minnesota |  | 1.7 | 6.6 | 7.5 | 8.4 | 1.7 | 25.9 | 18.4 | 7.5 | 4.8 | 9.5 | 8.1 | 3.5 | 25.9 |
| Mississippi |  |  |  | 4.8 | 7.1 | . 6 | 12.5 | 7.3 | 5.2 | 1.8 | 4.7 | 3.7 | 2.3 | 12.5 |
| Missouri. | 19.9 | 34.7 | 29.2 | . 6 | 18.2 | 11.2 | 93.9 | 61.2 | 52.6 | 14.0 | 27.8 | 30.6 | 41.4 | 113.8 |
| Montana. |  | 2.7 | 2.4 | 2.9 | 6.9 | . 1 | 15.0 | 14.4 | . 6 | 1.0 | 7.8 | 5.4 | . 8 | 15.0 |
| Nebraska. |  |  |  | . 6 | . 8 |  | 1.4 | . 8 | . 6 | . 1 | . 2 | . 4 | . 7 | 1.4 |
| Nevada. |  | 1.2 | 1.1 | 2.2 | 5.2 | 1.2 | 10.9 | 10.9 |  | .2 | 6.3 | 4.3 | . 1 | 10.9 |
| New Hampshire | 6.1 |  | 4.0 |  |  |  | 4.0 | 7.6 | 2.5 | 1.4 | 4.9 | 2.3 | 1. 5 | 10.1 |
| New Jersey | 47.4 | 290.4 | 9.0 | 6.1 | 2.3 | 1.2 | 309.0 | 19.7 | 336.7 | 28.4 | 102.4 | 34.5 | 191.1 | 356.4 |
| New Mexico |  | 2.7 |  | 6. 1 | 9.4 | 1.8 | 20.0 | 19.9 | 755.1 | 1878 | 10.4 | 5.7 | 3.1 | 20.0 |
| New York. | 664.3 | 258.0 | 5.4 | 69.3 | 20.8 | 18.4 | 371.9 | 280.8 | 755. 4 | 187.8 | 357.2 | 120.7 | 370.5 | 1,036.2 |
| North Carolins |  | 9.4 | 11.8 | 16.7 | 16.3 | ${ }^{18} 4$ | 58.5 | 42.8 | 15.7 | 14.4 | 17.8 | 10.4 | 15.9 | 58.5 |
| North Dakota. |  |  |  | 3.1 14.5 | 3.8 13.9 | ${ }^{(1)} 2.0$ | 6.9 125.0 | 6.9 198.8 |  | 45. 4 | 2.2 103.0 | 4.2 57.6 | 94.3 | 6.9 3001 |
| Ohio ......- | 175.1 87.5 | 51.3 | 43.3 11.2 | 14.5 .3 | 13.9 1.0 | 2.0 1.7 | 125.0 14.3 | 198.8 81.2 | 101.3 20.6 | 45.4 10.2 | 103.0 30.0 | 57.6 32.2 | 94.1 29.4 | 300.1 101.8 |
| Oklahoma.. | 87.5 | . 1 | 11.2 | . 3 | 1.0 | 1.7 | 14.3 | 81.2 | 20.6 | 10.2 | 30.0 | 32.2 | 29.4 | 101.8 |


| Oregon $\qquad$ Pennsylvania. | 13.7 | 11.6 | 17.2 | 50.6 | 10.6 | 2.3 | 92.3 | 85.3 | 20.7 | 15.9 | 51.6 | 17.4 | 21.1 | 108.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pennsylvania.- | 304.8 | 86.2 | 26.7 | 40.1 | 4.5 | . 3 | 127.8 | 169.8 | 262.8 | 53.0 | 138.1 | 66.5 | 175.0 | 432.6 |
| South Carolins. |  |  | . 7 |  |  |  | 4.7 | 4.7 | 14.5 | 6.1 | 3.6 | 1.8 | 7.7 | 19.2 |
| South Dakota. |  | 1.6 | 1.4 | . 3 | 6. 6 | 1.2 | 9.5 9.8 | 9.5 | 2 | 1.0 | 2.9 | 2.2 | 3.4 | 9.5 |
| Tennessee. | 10.7 |  |  | 1.0 | 2.5 | 1.2 | 9.8 4.1 | 9.6 4.4 | 10.4 | 2.1 | 2.8 2.7 | 5.8 1.3 | 8.4 | 9.8 14.8 |
| Teras.. | 83.9 | 57.7 | 26.1 | 43.5 | 43.0 | 30.9 | 201.2 | 116.4 | 168.7 | 76.6 | 88.6 | 64.7 | 55.2 | 285.1 |
| Utah. |  |  | 1.6 | 4.4 | 11.6 | . 7 | 18.3 | 16.7 | 1.6 | 2.0 | 9.1 | 5.8 | 1.4 | 18.3 |
| Varmont |  |  | 3.2 |  |  |  | 3.2 | 3.2 |  | . 5 | 1.4 | 1.3 |  | 3.2 |
| Virginia. |  | 69.4 | 3.5 | 44.6 | 4.9 | . 6 | 123.0 | 35.6 | 87.4 | 19.9 | 30.1 | 13.9 | 59.1 | 123.0 |
| W ashington | . 3 | 21.7 | 26.5 | 13.1 | 19.0 | 9.7 | 90.0 | 50.4 | 39.9 | 22.1 | 31.2 | 17.7 | 19.3 | 90.3 |
| West Virginia |  | 6.3 |  | 3.2 |  |  | 9.5 | 3.2 | 6.3 | 1.8 | 1.9 | . 4 | 5.4 | 9.5 |
| Wisconsin.... | 2 |  | 3.3 |  |  | 6.5 | 12.5 | 7.1 | 5.6 | 5.8 | 2.5 | 1.7 | 2.7 | 12.7 |
| W yoming |  |  | 4 | 12.7 | 10.0 | --- | 23.1 | 22.3 | . 8 | .8 .5 | 14.0 | 5. 8 | 2.8 | 23.1 |
| District of Columbia | 6.2 | 1.5 |  |  | 5.6 | 2.9 | 10.0 |  | 16.2 | 1.5 | . 9 | 1.7 | 12.1 | 16.2 |
| Total. | 2,284. 9 | 1,756.1 | 562.1 | 643.3 | 481.9 | 193.9 | 3,637.3 | 2,322. 8 | 3,599.4 | 1,098.9 | 1,779.0 | 952.9 | 2,091.4 | 5,922. 2 |

${ }^{1}$ Less than $\$ 50,000$.


[^0]:    It is hereby declared to be the intent and policy of the Congress to determine whether or not the Federal Government should equitably reimburse any State for a portion of a highway which is on the Interstate System, whether toll or free, the construction of which has been completed subsequent to August 2, 1947, or which is either in actual use or under construction by contract, for completion, awarded not later than June 30, 1957: Provided, that such highway meets the standards required by this title for the Interstate System. The time, method, and amounts of such reimbursement, if any, shall be determined by the Congress

[^1]:    ${ }^{1}$ Table A-2 in the appendix shows these data by States.

[^2]:    ${ }^{1}$ Tables A-5a, A-5b, and A-5c in the appendix show these data by States.

[^3]:    Table
    A-1a_-.-.-. Toll-road mileage
    A-1b------- Free-road mileage
    A-1c.-.----- Total mileage
    A-2----------- Funds used for construction
    A-3a_-..-.- Distributions of cost new for toll roads
    A-3b....... Distributions of cost new for free roads
    A-3c-------- Distribution of total cost new for toll and free roads, combined
    A-4.-.-. . Distribution of total cost new by age groups
    A-5a-n.-. Distributions of cost new less depreciation for toll roads
    A-5b_-.-.-. Distributions of cost new less depreciation for free roads
    A-5c...-. Distributions of cost new less depreciation for toll and free roads, combined

    ## Description

[^4]:    ${ }^{1}$ Less than 0.05 mille.

