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PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY
WASHINGTON 25, D. C.

Rec.

INFORMATIONAL MEMORANDUM NO. 56

DATE: FEBRUARY 1, 1944

SUBJECT: TRAFFIC VOLUME TRENDS

These informational memoranda showing traffic volume trends have been issued in their present condensed form for almost two years, and it is obvious that they fill a real need, since the demand for them has grown steadily. In view of the wide usage being made of the data, consideration has been given to possible improvements in the procedures and methods of presentation, and several changes are being made, beginning with this issue, which we believe will increase the accuracy and usefulness. In order to show the extent to which these changes might be expected to affect the continuity of the series, figures are presented herein on the old, as well as the new basis.

Since gasoline was first rationed in the East in May 1942, the boundaries of the OPA rationing areas have been changed and rather than continue to present data on the basis of an area which has lost its significance, it seems better to adhere to the boundaries of census regions. In the future, subtotals will be shown for the area comprising the three eastern regions, (which is nearly the same as the area rationed in May 1942), for the four central regions, and for the two western regions, but not for areas rationed in May 1942 and December 1942, respectively. This applies alike to the tabulations showing comparisons with the preceding year and to the curves showing comparisons with 1941.

With a view to simplifying computations so as to permit publication as quickly as possible after the data for a given month had been received, totals and subtotals have heretofore been unweighted; that is, the data from all stations within the area considered have been combined to form a single sample. Generally this procedure introduces no inaccuracies of importance, but sometimes unequal coverage in areas with materially different trends results in figures which are slightly biased. Beginning with this issue, in the revised summary, the three sectional totals and the United States total are computed by weighting the data for each region in accordance with the 1942 vehicle-miles of travel in the region. However, the data for each region are still combined to form a single sample and there is no weighting on a State basis, as the data from a single State are sometimes inadequate to constitute a representative sample. The regions used are the same as those of the United States Census, except that the South Atlantic region, in which there are divergent trends in the northern and southern portions, has been divided into two to increase the accuracy of the weighting.

Comparisons of totals and subtotals in the revised summary, on the old and new bases, are as follows:

	Percent change from Nov. 1942
South Atlantic Region, Undivided (Old basis)	- 3.9
South Atlantic Region, Divided (New basis)	- 2.7
Area rationed May 1942 (Old basis)	- 7.0
Three eastern regions (New basis)	- 9.5
Area rationed December 1942 (Old basis)	-22.7
Four central and two western regions (New basis)	-22.9
U. S. total (Old basis)	-18.4
U. S. total (New basis)	-18.7

The most interesting fact concerning the preliminary data for December 1943 from 541 automatic traffic recorders in 40 States (table 1) is that they show increases in traffic volume in 37 of these States. In Delaware, Vermont, and Virginia traffic volumes on rural highways still show declines from those of December 1942. The increase in traffic volume for all States is 15.3 percent; 15.4 percent on State highways; and 7.8 percent on local highways.

Gasoline rationing was instituted in the Midwest and West in December 1942, and the declines in traffic in that month were far more severe in these sections than in the East, which was first subjected to rationing in May 1942. On the other hand, the increase in the Midwest and West in December 1943, compared to December 1942, was considerably greater than in the East, the percentage increases being 20.2 percent and 10.7 percent, respectively, for the two areas.

Comparisons of city street traffic in December 1943, with that in December 1942, are as follows:

7 stations in Washington, D. C.	+ 9.7 percent
3 stations in Detroit, Michigan	+ 3.9 percent

Compared with 1941, however, Washington showed a 26.2 percent decline. These data will no longer be included in the toll bridge tabulation but will be given in the text, or if sufficient data can be obtained to justify, they will be shown in a separate tabulation.

H. S. FAIRBANK, DEPUTY COMMISSIONER,
PUBLIC ROADS ADMINISTRATION

Attachments.

TABLE 1.--*1* PRELIMINARY SUMMARY OF AUTOMATIC TRAFFIC RECORDER DATA
FOR DECEMBER 1943 INCLUDING STATIONS IN STATES

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Type of highway and State	Number of stations	Total daily traffic	Percent change from Dec. 1942	Type of highway and State	Number of stations	Total daily traffic	Percent change from Dec. 1942
STATE HIGHWAYS							
Arizona	4	10,974	+16.0	Washington	8	12,459	+15.6
Arkansas	21	13,045	+11.5	West Virginia	11	13,487	+31.5
California	9	18,150	+30.8	Wisconsin	9	14,362	+24.7
Colorado	5	4,562	+14.4	Wyoming	1	212	+27.7
Connecticut	18	45,097	+ 4.5				
Delaware	4	8,890	- 1.5	TOTAL -	505	701,349	+15.4
Georgia	3	6,443	+16.2	40 STATES			
Idaho	7	8,503	+34.5	LOCAL HIGHWAYS			
Illinois	5	5,231	+33.5	Connecticut	3	1,212	- 9.7
Iowa	26	21,481	+19.6	Georgia	4	881	+ 5.5
Kansas ¹	9	7,228	+21.4	Iowa	10	1,080	+ 7.5
Kentucky	8	7,303	+19.6	Maryland	1	295	+19.9
Louisiana ¹	6	12,235	+17.8	Massachusetts	1	131	-43.5
Maine	11	9,202	+ 4.7	Michigan	2	398	+12.7
Maryland	15	33,633	+ 8.8	Missouri	2	762	+28.7
Massachusetts	8	20,227	+ 8.6	Montana	2	327	+19.8
Michigan	26	54,203	+17.6	Nebraska	1	130	+ 8.3
Mississippi	10	12,632	+25.4	North Dakota	2	283	+21.5
Missouri	24	32,986	+20.2	Ohio	3	1,099	+13.1
Montana	12	5,781	+21.7	Rhode Island	1	302	+ 2.7
Nebraska	11	8,903	+19.3	Tennessee	2	843	+ 7.8
New Mexico	13	14,963	+12.1	Wisconsin	2	322	+21.0
New York	12	22,199	+ 8.3				
North Carolina	19	26,001	+18.4	TOTAL -	36	8,065	+ 6.9
North Dakota	11	3,586	+40.3	14 STATES			
Ohio	24	37,242	+15.0	ALL HIGHWAYS			
Oklahoma	20	27,995	+15.8	40 STATES²			
Pennsylvania	30	40,698	+10.5	3 EASTERN REGIONS	160	252,110	+11.3
Rhode Island	3	4,296	+ 3.8	4 CENTRAL REGIONS	312	374,641	+11.7
South Carolina	6	7,211	+27.5	2 WESTERN REGIONS	69	82,663	+20.7
South Dakota	9	5,669	+21.8				
Tennessee	2	4,965	+41.9				
Texas	67	100,657	+18.6				
Utah	8	6,732	+21.3				
Vermont	5	2,063	-16.2				
Virginia	5	9,843	-10.3				

¹One station in Kansas and 2 in Louisiana excluded because of abnormal war activity.

²Includes all States except the following: Alabama, Florida, Indiana, Minnesota, Nevada, New Hampshire, New Jersey, and Oregon.

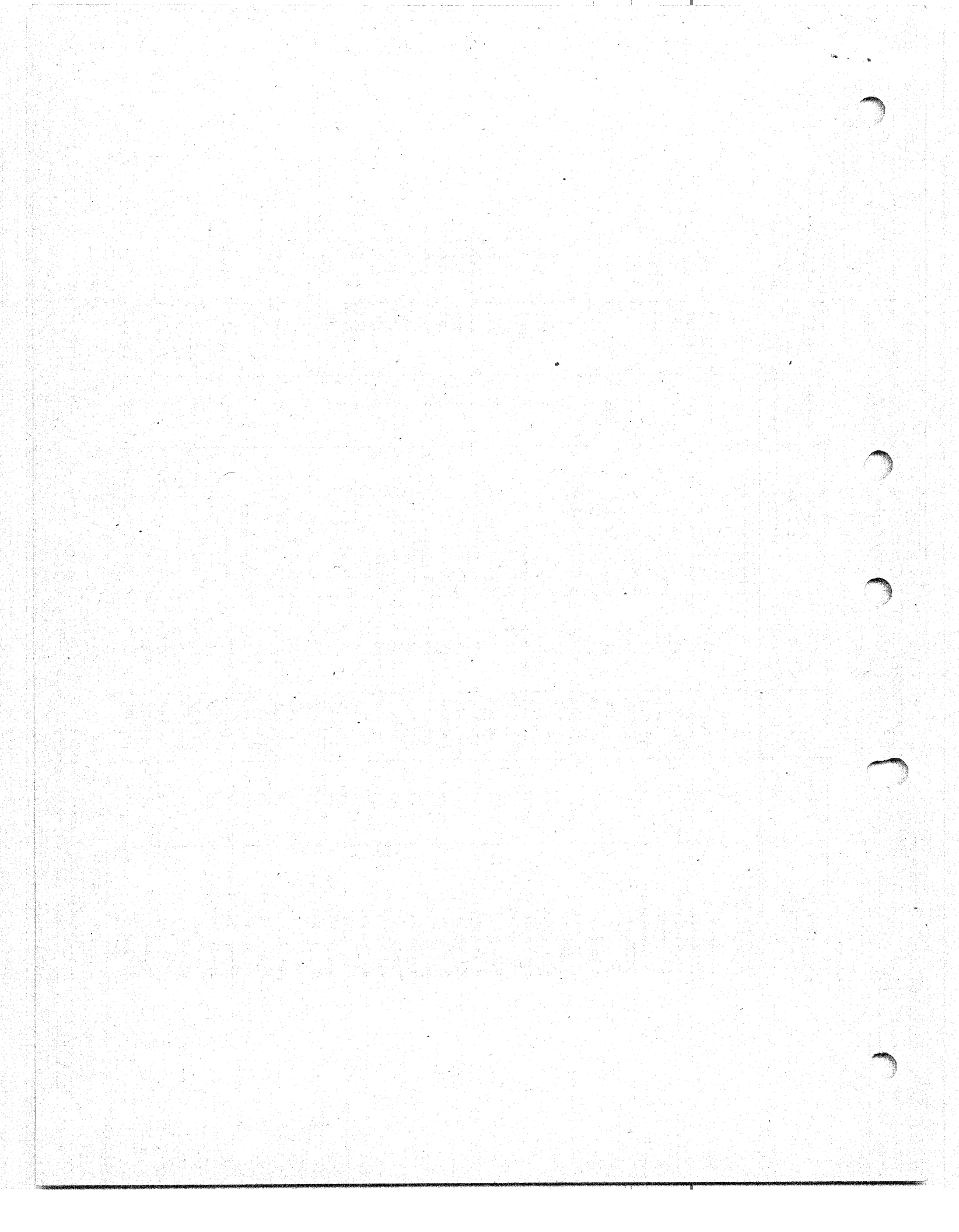


TABLE 2.--REVISED SUMMARY OF AUTOMATIC TRAFFIC RECORDER DATA
FOR NOVEMBER 1943 INCLUDING 624 STATIONS AND 46 STATES

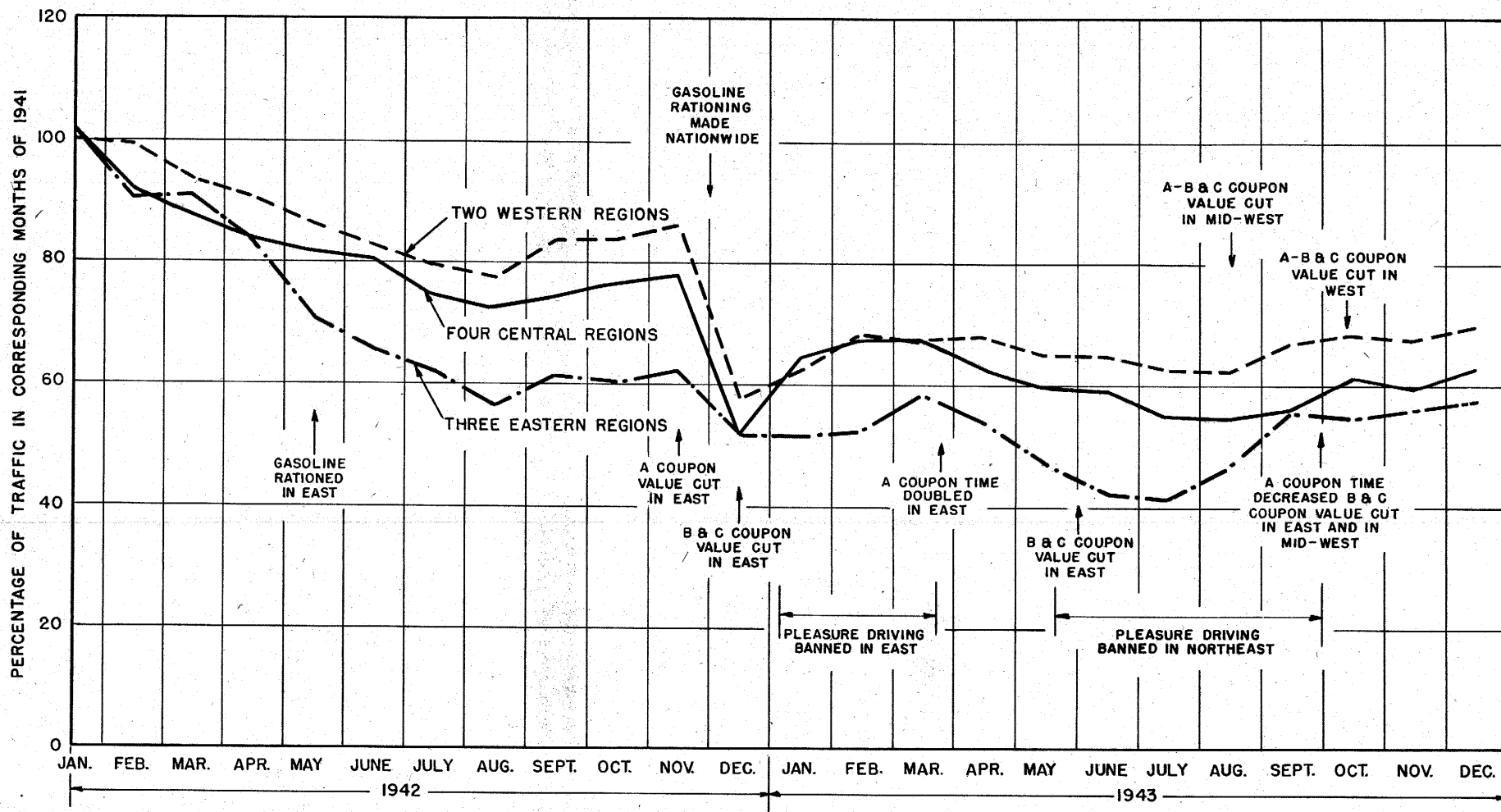
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Region and State	Number of stations	Percent change from Nov. 1942	Region and State	Number of stations	Percent change from Nov. 1942
<i>NEW ENGLAND</i>			<i>EAST SOUTH CENTRAL</i>		
Connecticut	21	-11.6	Alabama	9	-17.0
Maine	11	- 5.2	Kentucky	12	-22.7
Massachusetts	9	- 6.7	Mississippi	9	-12.3
New Hampshire	14	- 9.6	Tennessee	2	-14.3
Rhode Island	4	- 8.3	Subtotal	32	-17.3
Vermont	6	-17.8	<i>WEST SOUTH CENTRAL</i>		
Subtotal	65	- 9.8	Arkansas	22	-25.4
<i>MIDDLE ATLANTIC</i>			Louisiana ¹	6	-18.2
New York	12	-10.9	Oklahoma	20	-25.0
Pennsylvania	30	-19.2	Texas	64	-18.9
Subtotal	42	-16.2	Subtotal	112	-20.7
<i>SOUTH ATLANTIC</i>			<i>MOUNTAIN</i>		
Delaware	3	-15.5	Arizona	5	-23.8
Maryland	17	- 3.7	Colorado	5	-29.9
Virginia	3	-25.6	Idaho	7	-10.2
West Virginia	11	-16.1	Montana	14	-12.7
Subtotal north portion	34	-10.8	Nevada	13	-40.9
Florida	19	+ 8.4	New Mexico	13	-15.9
Georgia	7	+ 5.7	Utah	8	-17.4
North Carolina	19	+ 0.6	Wyoming	2	0.0
South Carolina	6	+ 4.7	Subtotal	67	-22.1
Subtotal south portion	51	+ 4.2	<i>PACIFIC</i>		
Subtotal region	85	- 2.7	California	10	-20.8
<i>EAST NORTH CENTRAL</i>			Oregon	3	-25.7
Illinois	3	-24.4	Washington	9	-22.3
Indiana	23	-22.1	Subtotal	22	-21.9
Michigan	28	-26.7	<i>TOTAL 46 STATES²</i>		
Ohio	30	-24.4	624 -18.7		
Wisconsin	11	-24.2	<i>STATE HIGHWAYS</i>		
Subtotal	95	-24.8	585 -18.8		
<i>WEST NORTH CENTRAL</i>			<i>LOCAL HIGHWAYS</i>		
Iowa	35	-28.1	39 -16.3		
Kansas ¹	9	-26.6	<i>3 EASTERN REGIONS</i>		
Missouri	27	-25.5	192 - 9.5		
Nebraska	12	-31.3	<i>4 CENTRAL REGIONS</i>		
North Dakota	12	-18.0	343 -23.2		
South Dakota	9	-19.2	<i>2 WESTERN REGIONS</i>		
Subtotal	104	-26.2	89 -22.0		

¹One station in Kansas and 2 in Louisiana excluded because of abnormal war activity.

²Includes all States except Minnesota and New Jersey.

DATE	DESCRIPTION	AMOUNT
1950-01-01	Balance	100.00
1950-01-15	Payment	50.00
1950-02-01	Receipt	25.00
1950-02-15	Payment	75.00
1950-03-01	Receipt	100.00
1950-03-15	Payment	150.00
1950-04-01	Receipt	200.00
1950-04-15	Payment	250.00
1950-05-01	Receipt	300.00
1950-05-15	Payment	350.00
1950-06-01	Receipt	400.00
1950-06-15	Payment	450.00
1950-07-01	Receipt	500.00
1950-07-15	Payment	550.00
1950-08-01	Receipt	600.00
1950-08-15	Payment	650.00
1950-09-01	Receipt	700.00
1950-09-15	Payment	750.00
1950-10-01	Receipt	800.00
1950-10-15	Payment	850.00
1950-11-01	Receipt	900.00
1950-11-15	Payment	950.00
1950-12-01	Receipt	1000.00
1950-12-15	Payment	1050.00
1951-01-01	Balance	1100.00



PERCENTAGE RELATIONS OF RURAL TRAFFIC IN MONTHS OF 1942 AND 1943 WITH THAT IN CORRESPONDING MONTHS OF 1941

LOS ANGELES, CALIF. 1941
MAY 10 1941
MAY 10 1941

1941

1941

1941