

PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

INFORMATIONAL MEMORANDUM

DATE: AUGUST 31, 1946

SUBJECT: TRAFFIC VOLUME TRENDS

During July 1946 traffic remained slightly below the level of 1941, the previous all-time high, but well above the 1940 level, the second highest traffic year. On the basis of preliminary estimates, total travel during July 1946 on rural roads was 7 percent below that of July 1941. Traffic on main highways was 6 percent below while that on local roads was 8 percent below the 1941 figures.

Traffic in the two western regions continued at a level considerably above that of 1941, being 25 percent greater than in the earlier year. That in the central regions was 12 percent below and that in the eastern regions was 15 percent below 1941 levels. In comparison with 1945 figures, traffic in the western regions increased 68 percent, that in the central regions 45 percent and that in the eastern regions 51 percent.

Comparisons of city traffic in July 1946 with corresponding traffic in July 1945 are as follows:

6 stations in Chicago, Illinois +15.4 percent
3 stations in Cleveland, Ohio +35.9 percent
3 stations in Detroit, Michigan +22.0 percent
1 station in Duluth, Minnesota +19.5 percent
1 station in Kansas City, Missouri +30.5 percent
1 station in Santa Fe, New Mexico +38.2 percent
5 stations in St. Louis, Missouri +34.3 percent
10 stations in Washington, D. C. +32.6 percent

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

Attachments

CONFIDENTIAL - SECURITY INFORMATION

TOP SECRET

CONFIDENTIAL - SECURITY INFORMATION

During the 1950s, the United States government conducted a series of experiments to determine the effects of high-altitude flight on human performance. The results of these experiments are classified as TOP SECRET. The experiments were conducted at various altitudes, ranging from 10,000 feet to 30,000 feet. The subjects of the experiments were trained pilots who were subjected to various physiological and psychological tests. The results of these tests are classified as TOP SECRET.

The results of these experiments indicate that high-altitude flight has a significant effect on human performance. The subjects of the experiments experienced a decrease in reaction time and a decrease in accuracy. The subjects also experienced a decrease in heart rate and a decrease in blood pressure. The results of these experiments are classified as TOP SECRET.

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TABLE 1.--PRELIMINARY SUMMARY OF AUTOMATIC TRAFFIC RECORDER DATA
FOR JULY 1946 INCLUDING 558 STATIONS IN 42 STATES¹

P-4282

Type of highway and State	Number of stations	Percentage change from July 1945	Type of highway and State	Number of stations	Percentage change from July 1945
<i>STATE HIGHWAYS</i>			<i>STATE HIGHWAYS</i>		
Arizona	5	+59.5	(Continued)		
Arkansas	16	+39.8	Vermont	7	+82.6
California	7	+67.1	Virginia	2	+51.5
Colorado	4	+66.6	Washington	10	+72.6
Connecticut	17	+74.9	West Virginia	11	+54.7
Delaware	6	+44.7	Wisconsin	9	+46.8
Florida	16	+38.9	Wyoming	5	+98.9
Georgia	3	+60.6			
Idaho	8	+82.2	<i>TOTAL - 42 STATES</i>	527	+57.3
Illinois	4	+50.8			
Iowa	26	+60.7	<i>LOCAL HIGHWAYS</i>		
Kansas	13	+41.0	Connecticut	3	+52.2
Kentucky	7	+54.6	Delaware	2	+ 2.2
Louisiana	5	+41.3	Georgia	3	+32.4
Maine	10	+76.0	Iowa	8	+24.4
Maryland	16	+51.4	Maryland	1	+13.3
Massachusetts	9	+55.9	Michigan	2	+49.2
Michigan	26	+58.8	Montana	2	+27.9
Mississippi	10	+43.2	Nebraska	1	+40.4
Missouri	22	+60.4	North Dakota	2	+31.4
Montana	11	+78.8	Ohio	2	+40.1
Nebraska	11	+55.6	Oregon	1	+71.9
Nevada	16	+93.8	Rhode Island	1	+39.1
New Mexico	9	+36.5	Tennessee	2	+38.5
North Carolina	19	+64.1	Wisconsin	1	+61.4
North Dakota	11	+105.6			
Ohio	20	+53.3	<i>TOTAL - 14 STATES</i>	31	+35.3
Oklahoma	20	+49.5			
Oregon	4	+80.7	<i>ALL HIGHWAYS</i>		
Pennsylvania	30	+62.3	<i>42 STATES</i>	558	+51.0
Rhode Island	3	+31.2			
South Carolina	1	+73.9	<i>3 EASTERN REGIONS</i>	160	+51.2
South Dakota	10	+67.5	<i>4 CENTRAL REGIONS</i>	306	+44.9
Tennessee	5	+25.4	<i>2 WESTERN REGIONS</i>	92	+67.7
Texas	73	+35.6			
Utah	10	+77.1			

¹Includes all States except Alabama, Indiana, Minnesota, New Hampshire, New York and New Jersey.

TABLE 2.—REVISED SUMMARY OF AUTOMATIC TRAFFIC RECORDER DATA FOR
JUNE 1946 INCLUDING 627 STATIONS IN 46 STATES¹

Region and State	Number of stations	Percentage change from June 1945	Region and State	Number of stations	Percentage change from June 1945
NEW ENGLAND			EAST SOUTH CENTRAL		
Connecticut	30	+79.9	Alabama	10	+42.3
Maine	10	+69.2	Kentucky	8	+44.8
Massachusetts	9	+62.1	Mississippi	10	+48.8
New Hampshire	13	+85.0	Tennessee	6	+18.7
Rhode Island	4	+35.1	Subtotal	34	+41.3
Vermont	7	+73.2	WEST SOUTH CENTRAL		
Subtotal	63	+72.4	Arkansas	18	+47.5
MIDDLE ATLANTIC			Louisiana	8	+49.0
New York	3	+75.2	Oklahoma	20	+57.8
Pennsylvania	30	+58.1	Texas	73	+38.8
Subtotal	33	+60.4	Subtotal	119	+43.6
SOUTH ATLANTIC			MOUNTAIN		
Delaware	8	+38.4	Arizona	5	+65.7
Maryland	18	+47.2	Colorado	6	+45.2
Virginia	2	+53.2	Idaho	8	+79.8
West Virginia	11	+51.4	Montana	13	+76.6
Subtotal north portion	39	+46.5	Nevada	16	+94.6
Florida	20	+49.3	New Mexico	14	+53.6
Georgia	7	+69.7	Utah	10	+66.9
North Carolina	19	+68.3	Wyoming	4	+97.6
South Carolina	1	+69.6	Subtotal	76	+67.8
Subtotal south portion	47	+61.7	PACIFIC		
Subtotal region	86	+53.2	California	8	+74.3
EAST NORTH CENTRAL			Oregon	5	+90.1
Illinois	5	+43.7	Washington	10	+76.8
Indiana	22	+77.5	Subtotal	23	+77.6
Michigan	28	+55.6	TOTAL ALL STATES²	627	+57.3
Ohio	24	+64.4	STATE HIGHWAYS²	593	+63.0
Wisconsin	10	+57.9	LOCAL HIGHWAYS	34	+43.5
Subtotal	89	+62.0	3 EASTERN REGIONS	182	+56.8
WEST NORTH CENTRAL			4 CENTRAL REGIONS	346	+51.8
Iowa	34	+59.3	2 WESTERN REGIONS	99	+73.6
Kansas	14	+35.4			
Missouri	22	+69.1			
Nebraska	12	+57.7			
North Dakota	12	+100.1			
South Dakota	10	+69.1			
Subtotal	104	+61.7			

¹Combined State and local highways.

²Includes all States except the following: Minnesota and New Jersey

STATE OF CALIFORNIA
 DEPARTMENT OF REVENUE

Year	Month	Description	Amount	Balance	Remarks
1914	Jan	...	...	...	...
1914	Feb	...	...	...	...
1914	Mar	...	...	...	...
1914	Apr	...	...	...	...
1914	May	...	...	...	...
1914	Jun	...	...	...	...
1914	Jul	...	...	...	...
1914	Aug	...	...	...	...
1914	Sep	...	...	...	...
1914	Oct	...	...	...	...
1914	Nov	...	...	...	...
1914	Dec	...	...	...	...
1915	Jan	...	...	...	...
1915	Feb	...	...	...	...
1915	Mar	...	...	...	...
1915	Apr	...	...	...	...
1915	May	...	...	...	...
1915	Jun	...	...	...	...
1915	Jul	...	...	...	...
1915	Aug	...	...	...	...
1915	Sep	...	...	...	...
1915	Oct	...	...	...	...
1915	Nov	...	...	...	...
1915	Dec	...	...	...	...

TABLE 3.—NUMBER OF VEHICLES, CLASSIFIED BY TYPES, USING TOLL FACILITIES IN JULY 1946
COMPARED WITH THOSE IN JULY 1945 AND 1941.

Facilities	1946			Percentage change from 1945			Percentage change from 1941		
	Total	Passenger cars	Trucks and busses	Total	Passenger cars	Trucks and busses	Total	Passenger cars	Trucks and busses
EASTERN REGIONS									
3 in the New England States	88,509	83,504	5,005	+95.7	+100.3	+41.5	-19.0	-20.6	+20.5
15 in the Middle Atlantic States	11,980,250	10,533,893	1,446,357	+54.8	+57.9	+35.4	+12.0	+9.3	+36.7
Fleetwood Viaduct, Westchester County, New York	516,723	516,723	---	+106.2	+106.2	--	-9.6	-9.6	--
Pennsylvania Turnpike	284,259	243,249	41,010	+105.4	+126.8	+31.6	-11.6	-17.5	+53.8
6 in the South Atlantic States	488,502	401,382	87,120	+57.8	+65.4	+30.1	-1.8	-4.2	+11.0
AL - 26 facilities ¹	13,358,243	11,778,751	1,579,492	+57.5	+61.1	+35.0	+9.5	+6.8	+35.3
AL - 29 facilities	14,389,070	12,724,348	1,664,722	+57.2	+61.3	+31.7			
CENTRAL REGIONS									
3 on the Great Lakes Canadian Border ²	702,930	683,262	19,668	+38.6	+38.9	+30.6	+37.7	+37.1	+63.0
2 in the Great Lakes Region	239,884	211,687	28,197	+90.9	+104.8	+26.7	+2.8	-0.2	+32.1
Subtotal - 5 facilities	942,814	894,949	47,865	+49.0	+50.3	+28.9	+26.7	+26.0	+43.3
8 on the Ohio River ³	1,047,790	904,790	143,000	+15.1	+14.7	+17.6	-11.0	-13.0	+4.0
1 in Kentucky	26,354	19,957	6,397	+43.7	+56.0	+15.3	+58.1	+56.2	+64.3
Subtotal - 10 facilities	1,074,144	924,747	149,397	+15.6	+15.4	+17.5	-10.1	-12.2	+5.6
6 on the Mississippi and St. Croix Rivers St. Louis and North	411,530	362,952	48,578	+51.9	+59.4	+12.2	+10.6	+13.4	-6.4
2 on the Mississippi River south of St. Louis	60,983	49,335	11,648	+51.7	+58.4	+28.7	+36.0	+30.6	+64.9
Subtotal - 8 facilities	472,513	412,287	60,226	+51.9	+59.3	+15.1	+13.4	+15.2	+2.2
5 on the Missouri River	296,004	222,449	73,555	+41.2	+44.4	+32.5	+33.1	+30.0	+43.5
2 in the Missouri River area	7,390	6,491	899	+71.1	+71.6	+67.7	+24.8	+22.7	+42.0
Subtotal - 7 facilities	303,394	228,940	74,454	+41.8	+45.0	+32.9	+32.9	+29.8	+43.5
1 on the Mexican Border	16,432	15,691	741	+32.6	+30.4	+107.6	+76.1	+73.2	+175.5
TOTAL - 31 facilities ¹	2,809,297	2,476,614	332,683	+33.8	+35.6	+21.8	+8.3	+7.4	+16.4
TOTAL - 34 facilities	3,003,351	2,635,438	367,913	+35.0	+36.3	+26.3			
WESTERN REGIONS									
2 in California	2,783,869	2,532,010	251,859	+31.5	+34.4	+8.0	+30.4	+28.7	+50.6
5 in the Oregon-Washington area	347,542	305,285	42,257	+13.6	+14.1	+10.2	+27.7	+24.5	+56.1
TOTAL - 7 facilities	3,131,411	2,837,295	294,116	+29.2	+31.9	+8.3	+30.1	+28.2	+51.4
UNITED STATES									
TOTAL - 64 facilities ¹	19,298,951	17,092,660	2,206,291	+48.4	+51.4	+28.6	+12.2	+9.9	+33.9
TOTAL - 70 facilities	20,523,832	18,197,081	2,326,751	+48.7	+52.0	+27.4			

¹These facilities have comparative data for 1946, 1945, and 1941 and are included in the larger total below.

²One of these facilities is in Western New York and therefore is related to similar facilities in the Central States.

³Three of these facilities are between Ohio and West Virginia.

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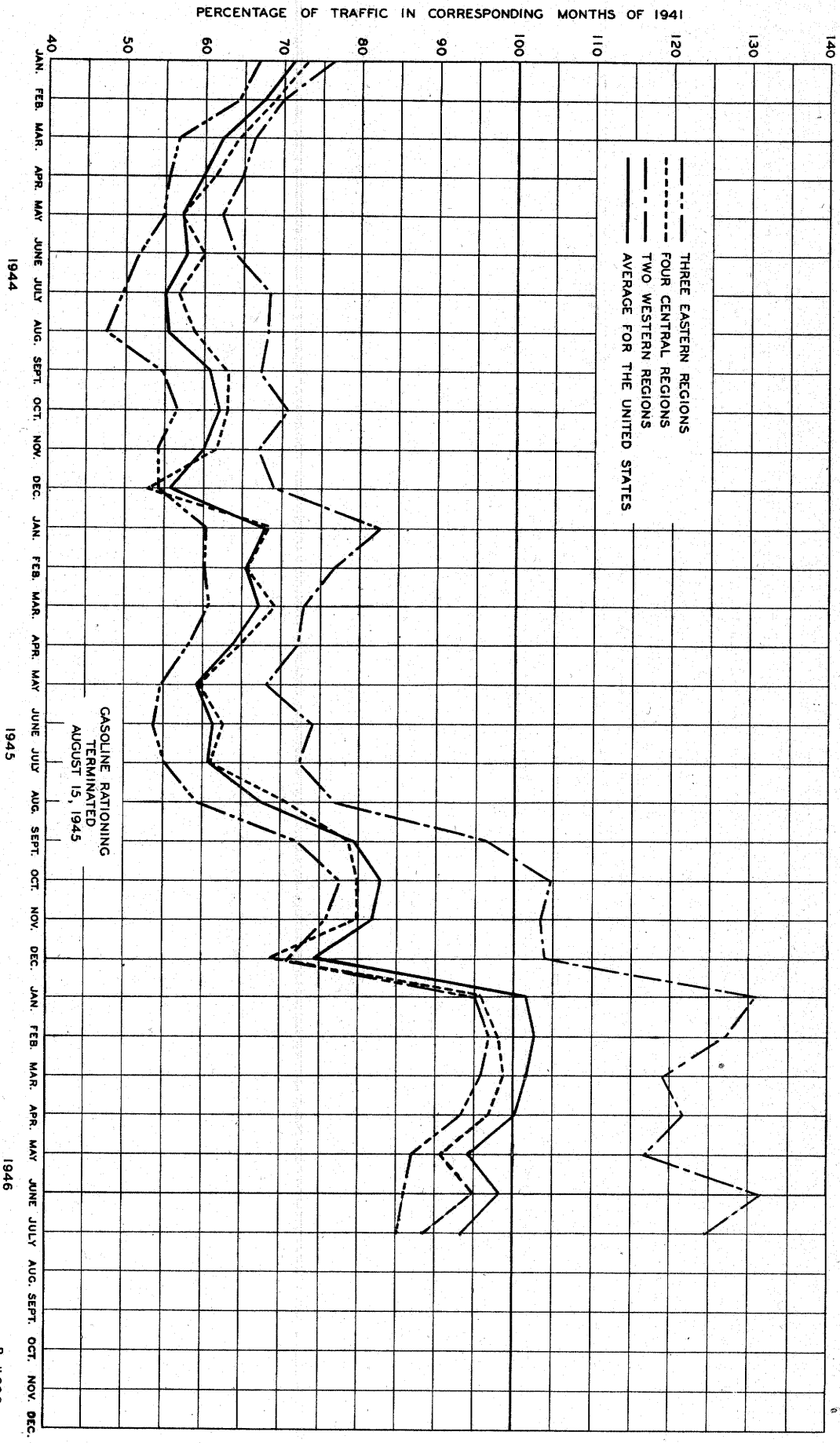
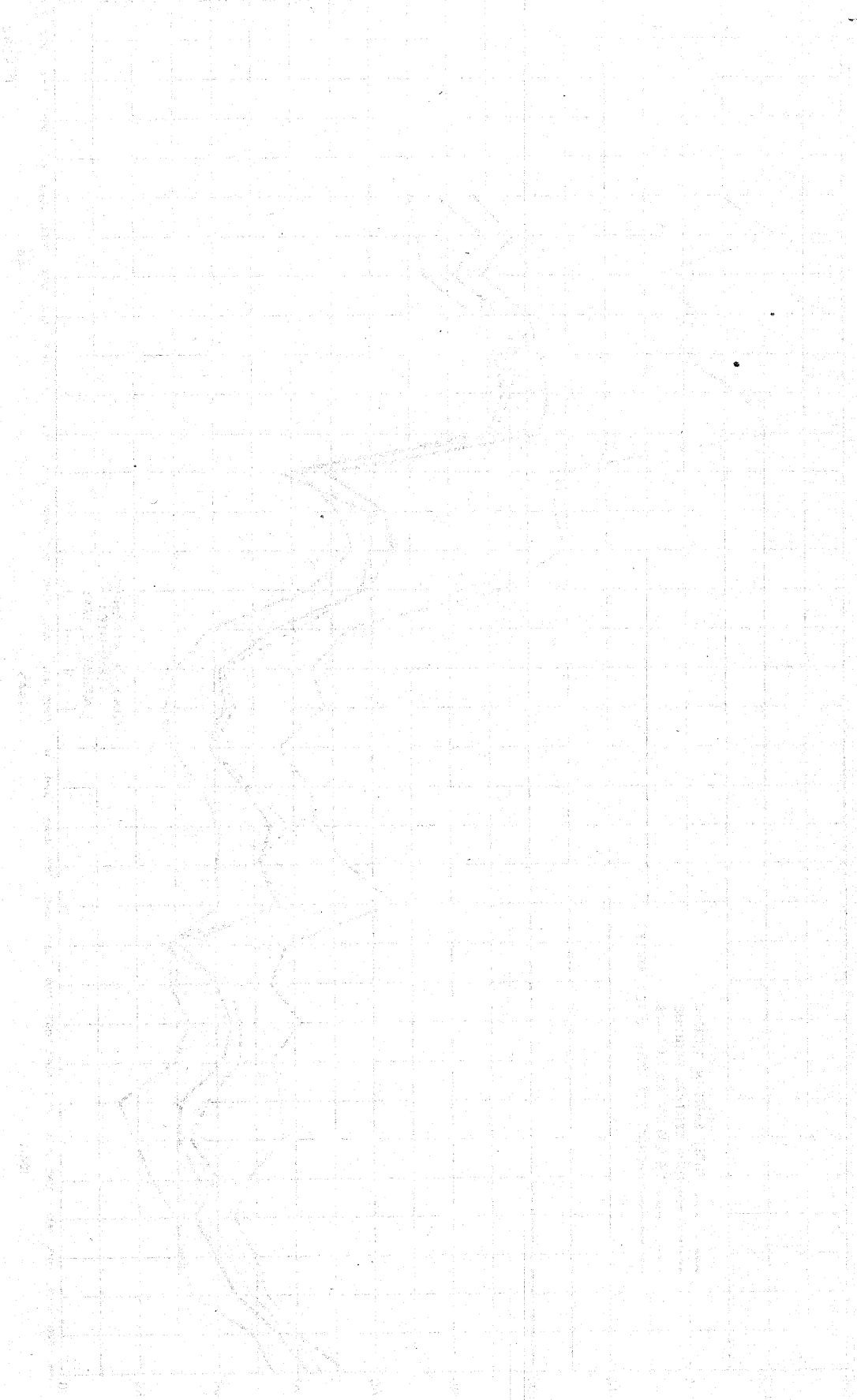


FIGURE 1. - PERCENTAGE RELATIONS OF RURAL TRAFFIC IN MONTHS OF 1944, 1945 AND 1946 WITH THAT IN CORRESPONDING MONTHS OF 1941.

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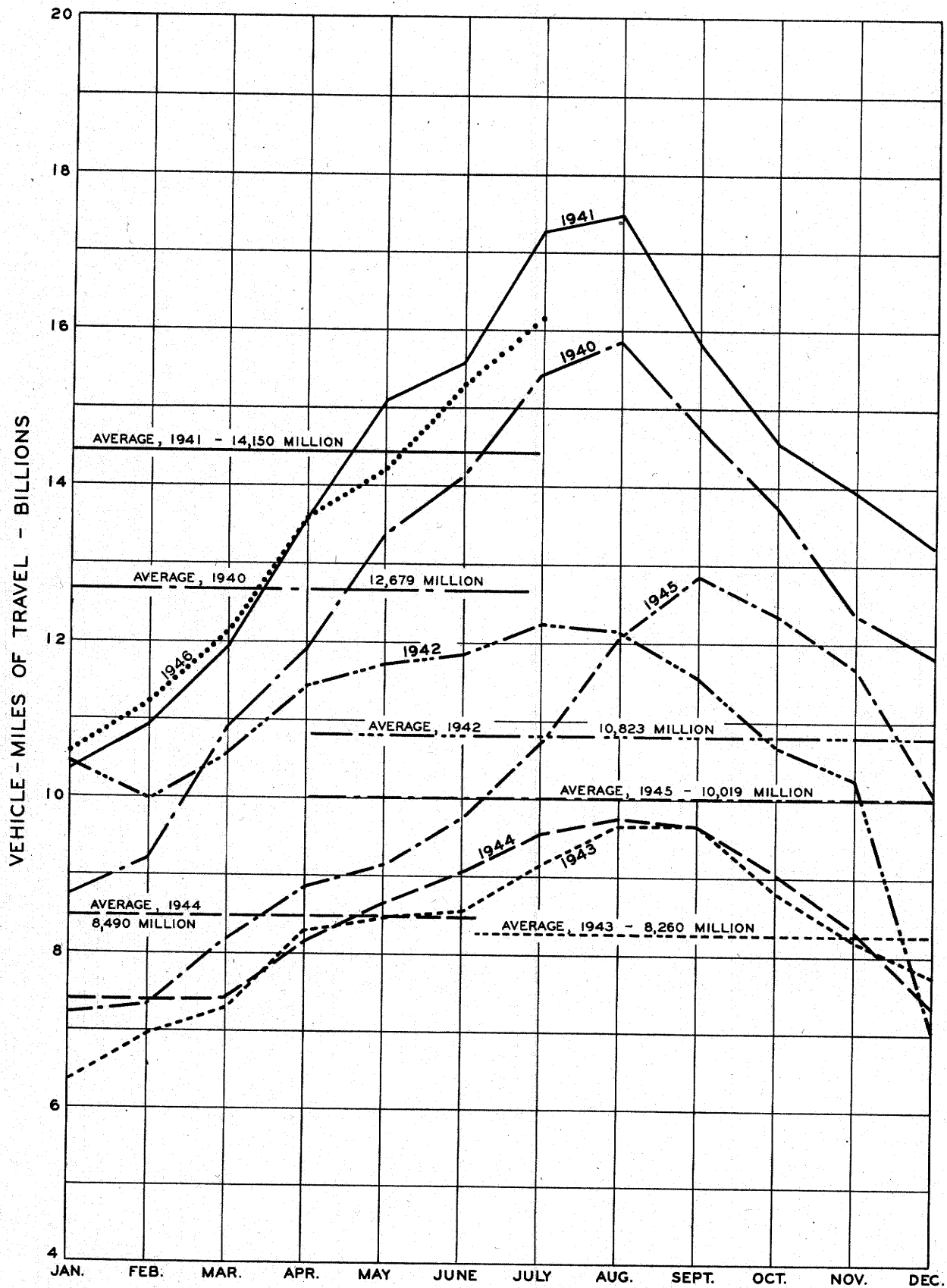
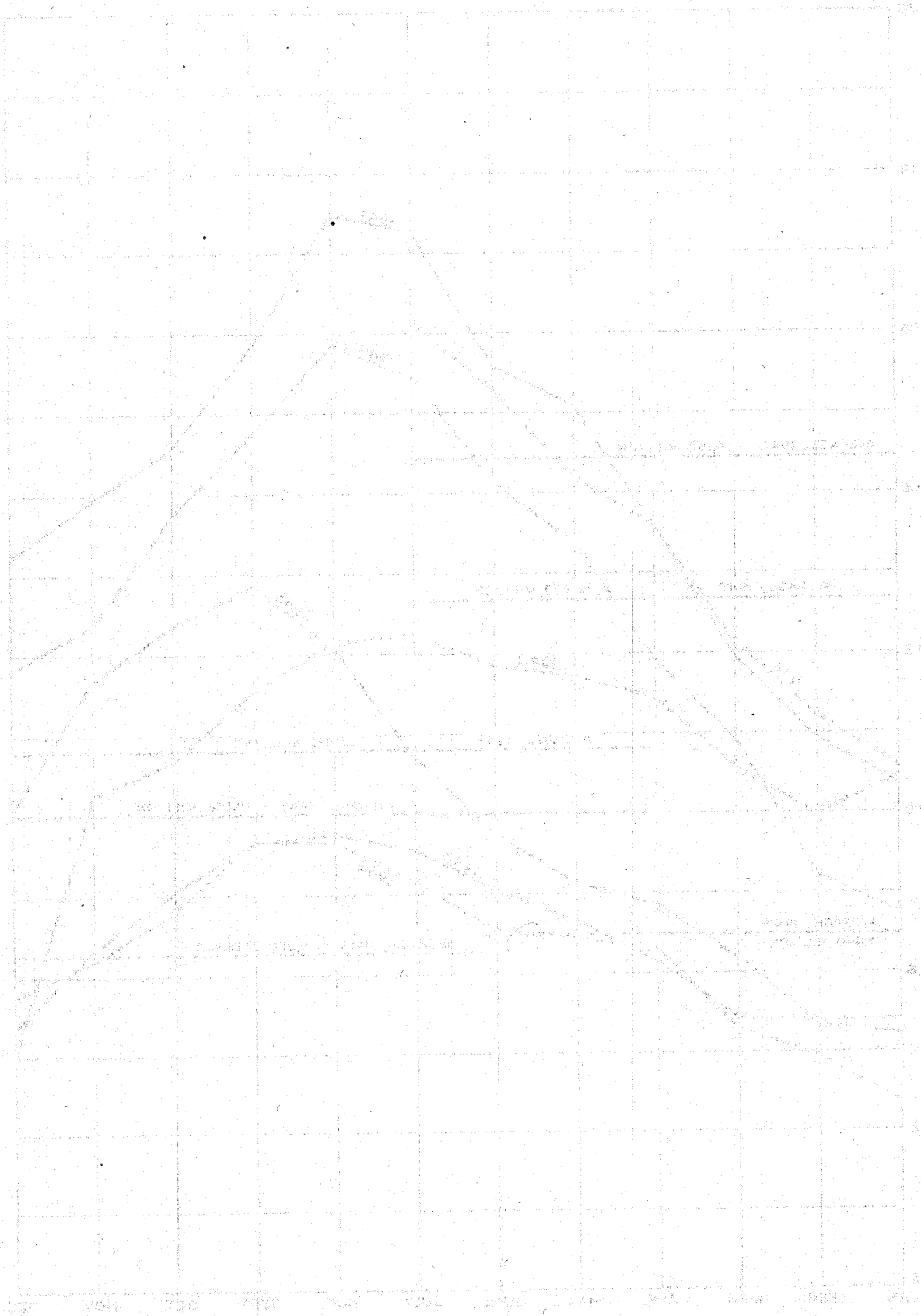


FIGURE 2.- VEHICLE-MILES OF TRAVEL ON ALL RURAL ROADS 1940 TO 1946 BY MONTHS.



MONTHLY - JANUARY TO DECEMBER

FIGURE 2 - VEHICLE MILES OF TRAVEL BY RURAL HOUSEHOLDS IN 1940 BY MONTH