

Mr. Hatcher

PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY
WASHINGTON

INFORMATIONAL MEMORANDUM NO. 32

DATE: APRIL 27, 1943

SUBJECT: TRAFFIC VOLUME TRENDS

Decreases in traffic during March 1943 are slightly smaller than those of February. Preliminary data for March, tabulated in table 1, indicate about 31 percent less traffic in 1943 as compared with 1942. On the local roads the comparable decline was 21 percent. These are the results of automatic traffic recorder operations at 518 points distributed throughout 42 States. Traffic in the area subjected to gasoline rationing in May 1942, decreased 39 percent; in the area rationed in December 1942, the decline was 27 percent. This reaffirms the tendency, noted last month, for traffic in the newly rationed area to show smaller declines than traffic in the eastern portion of the country.

A revised summary of the results for February 1943 is presented in table 2 and is virtually the same as that given in last month's bulletin, issued on March 30, so far as percentage change in traffic is concerned, although the number of stations is considerably increased.

Traffic volume at toll facilities in March 1943 (table 3) also shows smaller declines than comparable figures for February although comparisons may not be made with all the facilities reported in previous months because of failure to receive reports from some toll facility operators this month.

As noted in last month's bulletin, from February 1942 to date all traffic volume comparisons are so greatly influenced by war restrictions upon fuel, tires, etc., that comparisons with the prior year alone are insufficient for the formation of judgments as to the amounts of change. On the attached chart are shown the traffic changes from January 1940 to date, divided between the area in which gasoline was rationed in May 1942 (17 eastern States and the District of Columbia) and the remainder of the country, which was rationed in December 1942.

The traffic data are presented by months, as a ratio of each month's traffic to that of the corresponding month of 1941. Traffic in 1941, while high, was relatively unaffected by war and, of course, not at all affected by rubber, gasoline, or car rationing.

There are several interesting things about this chart. First, that in 1940 traffic in the two areas moved at about the same level. After 1941, however, this is not the case. The eastern area of the country, that in which gasoline was rationed in May 1942, has consistently shown greater traffic declines than the remainder of the country, which was rationed in December 1942. Traffic declined sharply in both areas after December 1941, but much more sharply in the eastern area, particularly after gasoline rationing was established in the East. The trends from May to December 1942, shown for both areas in the chart, illustrate this difference. The relative level of traffic in the East has been substantially below that in the remainder of the country ever since 1941 save for the single month of March 1942.

The gap between the two areas came nearest to closing in December 1942, when gasoline rationing was instituted in the Middle West and West, but since that first month the gap has again widened.

The eastern area, shown in the chart, is that of the New England, Middle Atlantic, and South Atlantic Census divisions. It is not quite coincident with the area first set aside by the Office of Price Administration for the rationing of gasoline, but the traffic stations in the eastern area as defined by the Census divisions are very close to those which fall in the areas first designated for rationing of gasoline.

Data shown in the chart for March 1943 are preliminary, although 42 States are represented therein (see table 1). However, some of these data are for but a portion of the month, some are reported in insufficient detail to permit complete adjustment for the number of Saturdays and Sundays in March 1943 as compared with March 1942. It is believed that subsequent changes in the chart resulting from the deficiencies just enumerated, will be slight. They will be made, if found to be necessary, in future editions of the traffic bulletin.

H. S. FAIRBANK, CHIEF,
DIVISION OF INFORMATION,
PUBLIC ROADS ADMINISTRATION.

• Attachments:

TABLE 3. --TRAFFIC VOLUME DATA FOR MARCH 1943. BY VEHICLE TYPES, COMPARED WITH SIMILAR INFORMATION FOR MARCH 1942 AT TOLL FACILITIES.

Area rationed May 1942

	March 1943			Percentage change from 1942		
	Total	Passenger cars	Trucks and busses	Total	Passenger cars	Trucks and busses
TOTAL - 16 facilities - Maine to Florida	1,601,607	1,277,750	323,857	-27.4	-32.1	+ 0.1
Miscellaneous locations not included above:						
43 drawbridges in eastern North Carolina (not toll) ¹	39,789	30,293	9,496	35.9	-42.0	- 3.0
12 stations in Washington, D. C. (not toll) ²	219,473			-29.8		
Woodward Viaduct, Westchester County, New York	82,139	82,139		-69.0	-69.0	
Pennsylvania	68,089	39,745	28,344	-41.0	-55.0	+ 5.2

Area rationed December 1942

4 facilities on Eastern Canadian Border	140,614	111,092	29,522	-21.3	-28.4	+26.2
1 facility in the Great Lakes area	2,823	2,177	646	-49.1	-51.4	-39.8
Subtotal - 5 facilities	143,437	113,269	30,168	-22.1	-29.1	+23.3
7 facilities on the Ohio River	612,785	534,221	78,564	-13.7	-14.2	-10.1
14 facilities in the Ohio River area ³	193,651	151,817	41,834	- 4.9	- 4.6	- 6.1
Subtotal - 21 facilities	806,436	686,038	120,398	-11.8	-12.3	- 8.8
1 facility in the Florida Gulf Coast area	17,761	12,856	4,905	+ 4.3	-10.1	+80.3
Subtotal - 1 facility	17,761	12,856	4,905	+ 4.3	-10.1	+80.3
facilities on the Mississippi and St. Croix Rivers, St. Louis and north	759,673	546,597	213,076	-27.7	-31.7	-14.8
4 facilities on the Mississippi River south of St. Louis	67,329	46,982	20,347	-20.0	-23.2	-11.6
Subtotal - 14 facilities	827,002	593,579	233,423	-27.1	-31.1	-14.6
5 facilities on the Missouri River	101,262	73,701	27,561	- 4.7	- 5.8	- 1.7
2 facilities in the Missouri River area	2,367	1,914	452	- 1.1	+ 3.7	-17.3
Subtotal - 7 facilities	103,629	75,615	28,014	- 4.6	- 5.5	- 2.0
3 facilities in California	1,668,002	1,466,989	201,013	-14.4	-16.7	+ 7.0
5 facilities in the Washington-Oregon area	179,413	149,871	29,542	-13.7	-17.3	+11.0
Subtotal - 8 facilities	1,847,415	1,616,860	230,555	-14.4	-16.8	+ 7.5
TOTAL - 56 facilities in area rationed December 1942	3,745,680	3,098,217	647,463	-17.1	-19.3	- 4.1
6 facilities reporting only total traffic	360,561			+ 1.3		

1. Total of two 8-hour counts, one Sunday and one weekday, at each location.
2. Based on weekday traffic.
3. Two facilities in West Virginia and 12 in Kentucky.

PERCENT OF TRAFFIC IN CORRESPONDING MONTH 1941

TRAFFIC VOLUME AT AD, OMAHA TRAFFIC RECORDERS, 1940-1943

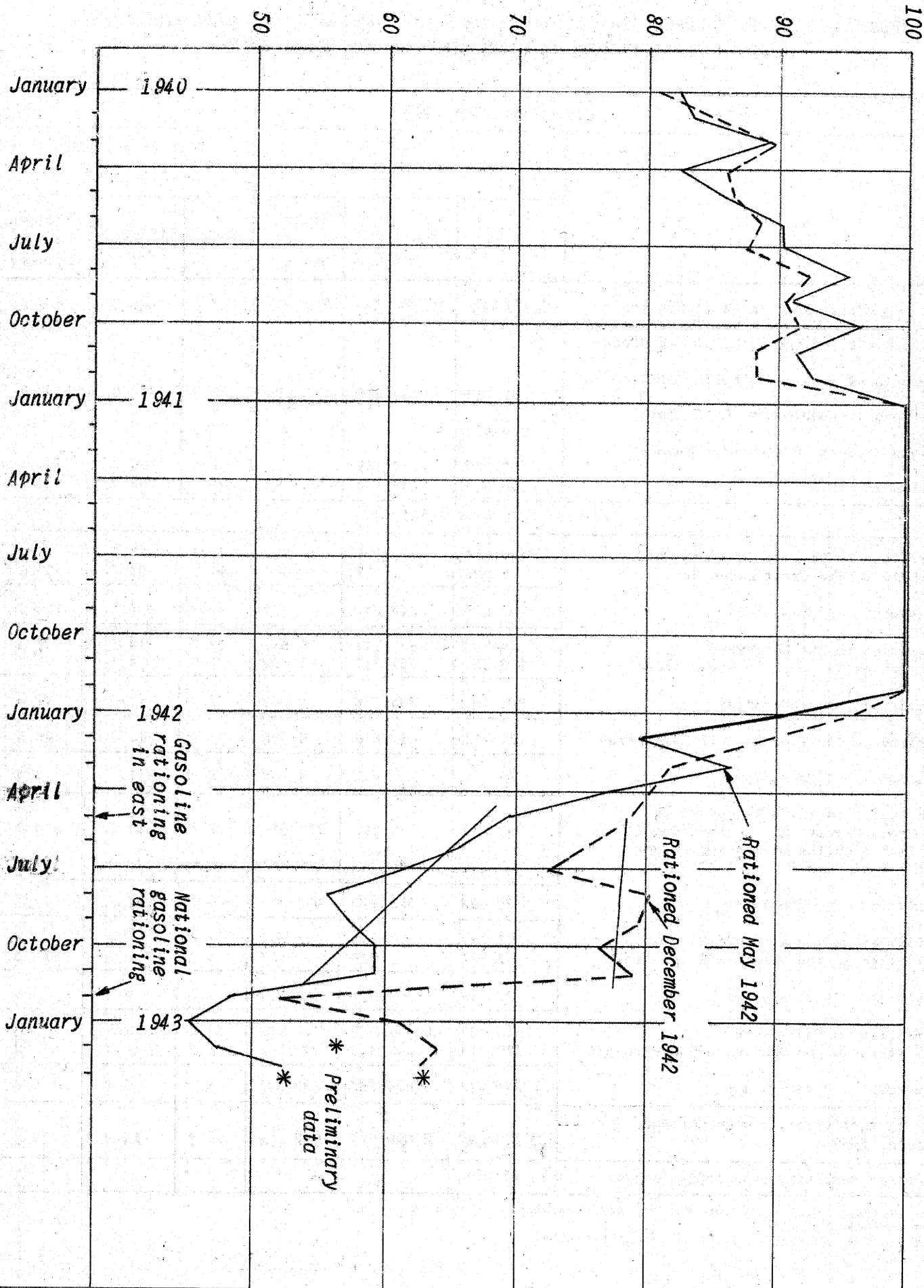


TABLE 1.—PRELIMINARY SUMMARY OF AUTOMATIC TRAFFIC RECORDER DATA.
FOR MARCH 1948 INCLUDING 516 STATIONS IN 42 STATES

Type of highway and State	Number of stations	Total daily traffic	Percent decreased ¹ from March 1942	Type of highway and State	Number of stations	Total daily traffic	Percent decreased ¹ from March 1942
<i>STATE HIGHWAYS</i>				<i>STATE HIGHWAYS</i>			
Alabama	7	8,553	29.4	Washington	9	13,507	31.9
Arizona	6	11,326	36.0	West Virginia	11	13,334	29.5
Arkansas*	22	13,117	33.6	Wisconsin	9	13,964	29.2
California*	10	15,506	30.7	Wyoming	3	1,574	36.0
Colorado*	5	4,593	21.6				
Connecticut	17	36,150	47.3	<i>TOTAL - 42 States</i>	483	632,114	30.2
Delaware	5	9,930	32.7	<i>LOCAL HIGHWAYS</i>			
Georgia	7	9,307	35.3	Alabama	1	365	38.2
Illinois*	3	4,258	30.9	Connecticut	2	549	32.7
Indiana	20	25,189	28.0	Delaware	1	235	20.6
Iowa	26	22,963	25.9	Georgia	4	758	15.1
Kentucky ⁴	13	12,954	22.6	Iowa	10	1,148	+ 1.7
Louisiana ³	7	13,545	23.0	Maryland*	1	204	30.4
Maine	10	8,260	30.8	Michigan	2	454	35.8
Maryland*	15	30,269	26.2	Montana	2	282	24.4
Massachusetts	9	20,223	42.0	Nebraska	1	132	20.0
Michigan	26	54,571	27.2	North Dakota	2	211	29.4
Mississippi*	7	6,032	34.1	Ohio	2	906	34.0
Montana	11	5,230	28.5	Oregon*	1	186	20.2
Nebraska	11	9,065	15.6	Rhode Island	1	353	1.4
Nevada*	11	4,892	29.8	Tennessee	2	808	3.2
New Hampshire*	7	5,078	41.6	Wisconsin	1	208	18.8
New Mexico ³	12	13,071	17.7				
New York*	5	9,671	37.0	<i>TOTAL - 15 States</i>	33	6,799	21.1
North Carolina ³	18	19,296	43.0	<i>A/L HIGHWAYS</i>			
North Dakota	8	1,919	31.8	<i>42 STATES²</i>	516	638,913	30.7
Ohio*	21	38,859	22.3	<i>RATIONED MAY 1942</i>	142	192,540	38.7
Oklahoma	20	27,238	24.1	<i>RATIONED DEC. 1942</i>	374	446,373	26.7
Oregon*	1	2,687	23.3				
Pennsylvania	30	38,010	36.5				
Rhode Island	3	4,377	28.6				
South Carolina	10	11,587	41.0				
South Dakota	9	5,000	21.2				
Tennessee	2	2,591	32.9				
Texas*	40	71,244	22.7				
Utah*	8	6,693	16.5				
Vermont	8	4,237	44.0				
Virginia	1	2,244	33.3				

* Subject to revision

1. Plus sign before percentage indicates increase.

2. Includes all States except the following: Florida, Idaho, Kansas, Minnesota, New Jersey, and Missouri.

STATIONS NOT INCLUDED:

3. Defense activity - 1 each in Louisiana, New Mexico, and North Carolina.

4. Road closed - 1 in Kentucky.

TABLE 2. --REVISED SUMMARY¹ OF AUTOMATIC TRAFFIC RECORDER DATA FOR FEBRUARY 1943.
INCLUDING 561 STATIONS AND 46 STATES.

Geographic division and State	Number of stations	Percent decrease from February 1942	Geographic division and State	Number of stations	Percent decrease from February 1942
<i>NEW ENGLAND</i>	50	50.2	<i>EAST SOUTH CENTRAL</i>	34	28.2
Connecticut	19	54.8	Alabama	9	30.1
Maine	9	39.0	Kentucky ⁶	11	19.0
Massachusetts	9	47.4	Mississippi	10	34.7
New Hampshire	6	46.9	Tennessee	4	25.4
Rhode Island	4	42.7	<i>WEST SOUTH CENTRAL</i>	88	25.3
Vermont	3	39.7			
<i>MIDDLE ATLANTIC</i>	40	41.5	Arkansas	22	32.6
New York ⁴	10	40.1	Louisiana ³	7	31.4
Pennsylvania	30	42.2	Oklahoma	20	24.2
			Texas	39	22.8
<i>SOUTH ATLANTIC</i>	84	39.8	<i>MOUNTAIN</i>	64	24.8
Delaware	6	37.4	Arizona	6	36.1
Florida	17	41.9	Colorado	6	14.1
Georgia ⁵	9	40.6	Idaho	4	18.5
Maryland ⁴	16	37.1	Montana	14	24.7
North Carolina	18	41.0	Nevada ³	11	25.3
South Carolina	9	46.7	New Mexico ³	12	24.6
Virginia	1	39.7	Utah	8	16.6
West Virginia	8	30.0	Wyoming	3	20.6
<i>EAST NORTH CENTRAL</i>	79	26.4	<i>PACIFIC</i>	21	33.7
Illinois	4	19.8	California	9	30.6
Indiana	20	29.0	Oregon	3	32.3
Michigan	28	27.5	Washington ³	9	36.9
Ohio ⁴	16	22.3	<i>TOTAL - 46 States²</i>	561	33.1
Wisconsin	11	27.6			
<i>WEST NORTH CENTRAL</i>	101	25.0	<i>STATE HIGHWAYS²</i>	527	33.2
Iowa	36	23.9	<i>LOCAL HIGHWAYS</i>	34	18.6
Kansas ³	9	21.0			
Missouri	27	29.5	<i>RATIONED MAY 1942</i>	152	44.4
Nebraska	12	11.4	<i>RATIONED DECEMBER 1942</i>	409	26.9
North Dakota	8	35.5			
South Dakota	9	21.5			

1. Combined State and local highways.

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

STATIONS NOT INCLUDED:

3. Defense activity: 1 station each in Kansas, Louisiana, Nevada, New Mexico, and Washington.

4. Detour: 1 station each in Maryland, New York, and 2 in Ohio.

5. Road construction: 1 station in Georgia.

6. Road closed: 1 station in Kentucky.