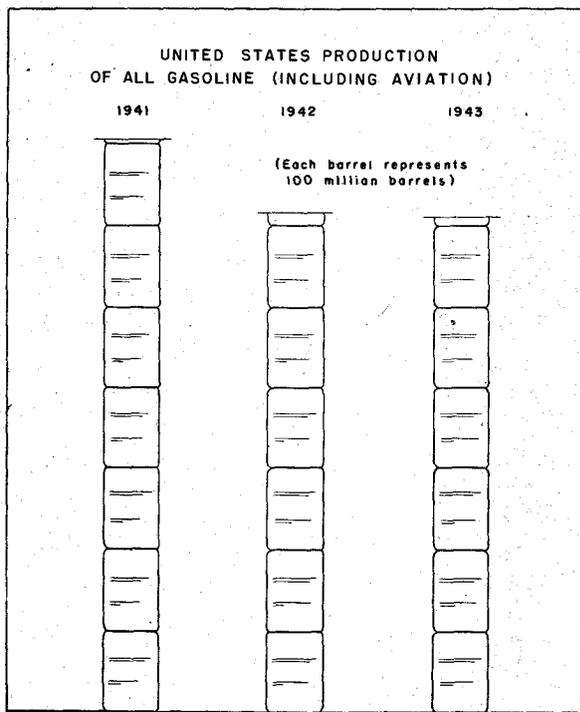


Farm TRANSPORTATION Facts

1944

A Leaders' Handbook

By Paul Carpenter



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GASOLINE SHORT

WHEN gasoline rationing was imposed in November 1942, as a rubber conservation measure, there was no shortage of gasoline as such. Today the rising tempo of motorized warfare so presses on gasoline supplies as to make necessary for the war effort the most rigid conservation of motor fuels.

Crude oil production in the United States in 1943 increased 6.7 per cent over the output of 1941, but ALL gasoline produced for all uses including aviation declined 13.7 per cent during the same period.

Figures on production of aviation gasoline are not subject to release, but obviously the output has increased many times over since the opening of the war. With less of all gasoline being manufactured, aviation demands press more and more heavily upon the fuel supplies for automobiles, trucks, and tractors.

The declining supplies of gasoline for civilian use are reflected by the allocations of the Petroleum Administrator for War for the Portland District of the Office of Price Administration comprising the most of Oregon and the southern counties of Washington.

	1943 Consumption per Day	1944 Quota per Day	Percentage Reduction 1944 under 1943
	<i>Barrels</i>	<i>Barrels</i>	<i>Per cent</i>
Second Quarter	15,400	14,200	7.8
Third Quarter	17,200	14,700	14.5

What, then, has become of the additional crude oil taken from the ground? The production of synthetic rubber requires large quantities of crude oil, as does production of certain explosives. The vastly expanded Navy cuts heavily into oil sources.

There is no prospect for increasing the supplies of gasoline for civilian use before the close of European operations.

NON-HIGHWAY GASOLINE

The issue of necessary, and only necessary, gasoline supplies to farmers is one of the most difficult among the many difficult duties of

the Office of Price Administration and cooperating agencies. And no wonder, what with positive requirement for fuel if food is to be produced in the war-needed quantities, and the contents of the same farm barrel or storage tank coming in through what amounts to three rationing procedures. The farm passenger car is on a card classification system with coupons issued by the War Price and Rationing Board. The farm truck fuel is authorized by the Office of Defense Transportation and a different coupon issued by the War Price and Rationing Board. The tractor is supplied on a still different coupon series issued by the War Price and Rationing Board with or without recommendation of the County Farm Transportation Committee. The involved system can and does work, however, but only to the extent that there is general knowledge that gasoline is ammunition, is precious, is short in supply, while farms must continue to produce.

Mistakes have been made by everyone involved in allocating gasoline supplies. Experience and better understanding of agricultural needs are improving the rationing system. There have been three outstanding needs to protect the war effort:

1. Understanding of agricultural needs by those issuing rations. Progress has been made.

2. A better and more accurate picture, in writing, of the requirements of each farm. More careful estimates of needs are being made by applicants, and in a number of areas local rationing people are putting into use schedules worked out to fit local farming practices and conditions.

3. THE RETURN TO BOARD OF ORIGIN OF UNUSED COUPONS. Little such return has been made to mid-1944. The Office of Price Administration by districts is authorized to "coupon out" only an exact amount of gasoline for each quarter. The "A," "B," "C," "T," "E," and "R" coupons all are charged to the district. They draw on the same supply. The return of unused coupons BEFORE THE DATE OF EXPIRATION results in cancellation and the issue of a corresponding quantity of fuels to hardship areas and cases. The effect of returning coupons is to make somewhat more and needed gasoline available.

Will such return result in a reduction of rations to the user in the next period? It already has so resulted. In May 1944, however, both the Office of Price Administration and the Office of Defense Transportation adopted policies of looking on coupon return as evidence of good faith, evidence that puts applications for rations for later periods in the best of standing.

Gasoline rationing is necessary. To relate the use of gasoline to the war needs, such rationing must be "close." Since food equals ammunition in importance, farmers should not hesitate to appeal for at-

ditional supplies when necessary for full food production. Assistance on such appeals is available from the County Farm Transportation Committee with headquarters at the County Agricultural Adjustment Agency office.

TIRES CRITICAL

The program for the production of synthetic rubber is succeeding. There is no shortage of this raw material. The program for the production of tires with the newer material is lagging. Shortages of labor, of tire cord and some compounding materials, and of equipment, coupled with the longer time needed to process the new materials, have precipitated a tire situation that challenges the resourcefulness of the tire industry and of all motor vehicle operators. Tires of synthetic rubber, moreover, do not equal in performance those of the natural product.

PASSENGER CAR TIRES

The *demand* for passenger car tires for 1944 is estimated at 80 million. The *minimum requirements* were computed at 30 million. The *production* in 1944 will be 22 million or less. With the sharp restrictions on gasoline use, however, care of tires now on wheels including recapping and "re-recapping," and giving the "war tires" the consideration they must have, it is believed that all absolutely necessary personal passenger cars can be kept "shod."

Current output of passenger car tires is all-synthetic. The prospect for 1945 is better than for the remainder of 1944.

TRUCK TIRES

The tire industry required 40 years to develop the modern truck tire. It has not succeeded in duplicating that performance in two years with the use of synthetic rubber. Synthetic is not rubber at all, but a soft plastic that, so far, will do the work of true rubber only in part. The truck tires provide the supreme test of the new material and the test has not yet been met. There can be no assurance that the production and performance of truck tires in 1944 will meet the essential needs.

All truck tires for civilian use in sizes from 8.25 cross section down and the smaller sizes of military tires are built with practically all-synthetic rubber, and with cotton cord. The large-sized truck tires still cannot be built successfully without the use of substantial quantities of natural rubber.

The great handicap of heavy tires of synthetic is heat. The higher the content of synthetic and the larger the tire, the greater the need for rayon cord instead of cotton inasmuch as rayon retains its strength under heat much better than cotton. Production of heavy tires is now definitely limited by the inadequate supplies of rayon cord. The time required to manufacture a tire of synthetic is substantially greater than for tires of natural rubber.

Manufacturers have struggled not only with new materials and processes, but with shortage of labor (tire making still is much of a handicraft) and of equipment.

The tires made entirely or mostly from synthetic that have gone into service already have shown that motor transportation is confronted by a situation that will take constant care, watchfulness, and consideration to meet.

Experience by operators to mid-1944 indicates that the truck tire of all or mostly synthetic, loaded to 75 per cent of the capacity of the tire of natural rubber, driven at not to exceed 35 miles an hour, kept fully inflated, and given all the "breaks" can be expected to run about two-thirds the usual mileage.

In the present stage of development of the tire industry, two truck tires will be required to do the work of one of natural rubber. There will not be twice the tires in 1944, or in 1945.

WHAT MUST BE DONE

Keep in service by care, repair, and recapping the tires now on trucks. Any sound prewar tire, recapped, even "sectioned" with a good job, is a better tire than the best of all synthetic. Recap repeatedly. Make small spot repairs promptly. Do not hesitate to have blow-outs repaired by vulcanizing in an entire section. The American people are not accustomed to having major repairs on tires. Prewar tires must be kept in service as long as humanly possible if trucks are not to be tied up for lack of "rubber." The all-synthetic recap wears well on a natural rubber carcass.

Truck tires of synthetic will not stand the loads of corresponding sizes of prewar tires. Know tire load ratings. A 7.50-20 eight-ply tire of natural rubber on a seven-inch rim has a rated capacity of 2,250 pounds. While the natural rubber tire will stand substantial overloads, the tire of synthetic definitely will not.

The new tires, being much more sensitive to under-inflation, call for more frequent checking of pressures. Since synthetic is less flexible than rubber, bruises are a greater risk. A peculiarity of synthetic is frequency of large blow-outs, occasionally from bead to bead; fewer "blown" tires can be repaired.

Among the "musts" in handling the new tires is true alignment of the front wheels, even application of brakes, straight rear axles, and dual tires matched so that each of a pair divides the load evenly. Synthetic tires may be sectioned, and recapped.

NEW TRUCKS

In 1941, there were bought and placed in service in the United States 700,000 new motor trucks. Of this number 500,000 went to replace vehicles that were junked.

The critical shortage of new trucks for civilian users is shown by the total number of trucks released and to be released from the national pool and from later manufacture.

NEW TRUCK SUPPLY 1942-44	
1942	
Released from pool	32,799
1943	
Released from pool	76,883
1944	
In pool January 1	5,000
Authorized for Manufacture	88,219
Released by Army, used	10,000
	<u>103,219</u>
Total supply of trucks 1942-1944	212,901

Had the normal rate of replacement continued, 1,500,000 new vehicles would have been put into civilian service in this three-year period. The actual releases will have been less than ONE-SEVENTH of the normal replacement.

The 1944 truck production program of 88,219 vehicles calls for 64,271 medium duty units with the remainder in heavy duty types. No pickups are to be made. On June 30 the production was ahead of original schedule, 33,733 trucks having been manufactured in the first six months of the year.

Certificates for the purchase of new trucks are issued by the Allocation Office of the Office of Defense Transportation. Applications by farm users are filed with the local County Farm Transportation Committee. It is obvious that with certificates held to numbers of vehicles to be available, favorable action can be taken only on the applications involving the greatest need. In most cases, the present truck, old as it is, must continue to carry the load.

TRUCK PARTS

During 1942 and 1943, the nation largely lived off its "fat," depended for replacement parts for motor vehicles of all kinds on in-

ventories accumulated before the opening of the war. Parts shortages became generally critical by 1943. Many parts made up later, notably bearings and valves, were of inferior quality because of the short supplies of tin, chromium, nickel, cadmium, and other alloy materials. Labor for installation of parts, rebuilding, and routine servicing of motor equipment became increasingly scarce.

Despite the elaborate and highly useful service of the Office of Defense Transportation in FINDING parts, regardless of location, for installation in down vehicles, something had to be done, and was done, to avert a threatened breakdown of motor transportation.

The war pressure on several metals eased sufficiently to permit the use of copper again in radiator cores, and several alloy materials in other parts. Better valves became possible. Engine bearings were improved.

The War Production Board authorized the production of automotive parts in 1944 in an amount about twice that of 1941. Of course, the demand has risen to a high level and there is no expectation of an "easy" parts condition in 1944, nor at any time before the conclusion of the war in Europe. As to any specific part, one cannot be certain the dealer will have it when needed. Care, forehandedness, and cooperation with service people and government agencies will continue to be needed if trucks are to be kept in service.

TO OBTAIN TRUCK PARTS

1. Try locally through the regular dealer, other dealers, and parts houses within reach in the area. Insist on dealer advice as to what differently numbered parts of other makes are interchangeable with the one needed. (Many parts are interchangeable among several makes.)

2. Explore the locally available supplies of used parts.

3. From the maintenance member of the County Farm Transportation Committee, the Agricultural Adjustment Agency, or Extension office get a copy of ODT Form M-100.

4. Take this form to dealer or supplier and with him fill it out COMPLETELY.

5. Send form to Office of Defense Transportation district office.

6. When the Office of Defense Transportation locates part and advises operator of location (it may be as distant as Butte or New Orleans) move fast and order shipment by wire, not by letter.

7. Notify Office of Defense Transportation when part has been obtained.

TRUCK MAINTENANCE

The actual hauling capacity of the motor trucks of the United States is not more than 80 per cent of what it was in 1941. The demands and needs for hauling are higher than during that year. Since for every new truck delivered in 1944, perhaps three will go out of service permanently, there is no alternative for keeping trucks in the best possible condition and operating in the most careful manner. Any experienced truck operator KNOWS maintenance. The war needs require its PRACTICE, and all this at a time when it never has been more difficult to hire others to do needed work. When a vehicle breaks down in the busiest season, it may be down for some days (many have been down for weeks) because of parts and service labor situations.

Aircraft make daily, scheduled, routine flights the world over. Some of these ships are old. Yet very few drop into the sea. They are so serviced as to avoid breakdowns. They are given PREVENTIVE MAINTENANCE.

KNOW CONDITION

Again, truck operators must "get out and under," must inspect fully, carefully, and frequently to detect evidence of wear. Everyone knows how, but too few do. Examine rear axle assembly for bent wheels, bent axles, bearing wear, gear wear and back lash, lubrication level, grease leakage, and brake wear and adjustment. Check universal joints, radiator, temperature gauge, engine oil pressure, battery level, battery terminals, generator charging rate, oil level, age of oil filter, gasoline filter, air filter, gasoline leaks, radiator hose, water pump leaks, fan and generator belts, and loose parts, fittings or nuts anywhere. Mostly, these are jobs left heretofore to service stations and shops, but to a greater extent now must be done by operators.

LUBRICATION

Every operator knows motor vehicle upkeep to be 90 per cent oil and greases of the correct kinds, at the proper places, in time. No one knows the life of a modern gasoline engine properly lubricated.

Farm trucks operate under such a variety of conditions as to load, roads or no roads, grades, mud, plowed fields, ditches, and dust that "commercial" lubrication schedules do not necessarily suffice. A combine needs greasing twice a day. Certain points on trucks in farm service need frequent attention regardless of what

the chart says. The grease gun might well be substituted for the plow or cradle as the symbol of modern successful agriculture.

DRIVING CARE

Given his gait and an occasional rest, the old horse will plow many a long furrow. So with old equipment; if maintained and shown consideration as to load, speed, and other operating conditions, it still can serve as is being demonstrated by many farm operators and other truck users. Unloading, or getting out the team or tractor to help a truck out of a hole, may add years to its service life.

USE EXISTING FACILITIES

War needs call for keeping scheduled truck operations under full load. Despite the handicaps under which common and anywhere-for-hire motor carriers are operating, they are not at capacity at all times and still can ease somewhat the load on farm trucks.

Cooperation with dairy products plants in the procurement of milk and cream under "area plans" sponsored by the Office of Defense Transportation, rather than delivery by the dairymen, is highly important. The tonnage of product involved is large and equipment mileage high. These "area plans" save trucks, fuel, tires, and labor. The market outlet of the dairymen is not changed without his consent regardless of who or what firm picks up his product.

HAUL FOR NEIGHBORS

With the hope of nearly every farm operator to own his own truck, hauling for neighbors was not highly developed before the Pearl Harbor attack. The sharp increase of hauling for neighbors since then has served to stave off a breakdown in farm hauling and has held to low figures the loss of crops in the fields.

"F" plate registry authorizes the following hauling by an Oregon farm truck operator:

(1) He may transport to market anywhere in his own truck his own agricultural crops and livestock that were produced on his own farm, and transport from any point to his own place farm supplies that are consumed and used there.

(2) Infrequently and for a nominal consideration, he may so haul such crops and livestock produced, and supplies consumed and used, by other farmers in his immediate neighborhood. "Infrequently" as used here is defined by statute as meaning any number of

trips not exceeding 20 in any one month and not exceeding 40 trips in any one year. "Immediate neighborhood" is subject to a common sense interpretation and the rule of reason, depending on the "lay of the country" and the practice of "neighboring." The area covered by a neighborhood will vary widely in different parts of the state.

(3) For a nominal consideration BUT WITHOUT LIMIT AS TO FREQUENCY (number of trips in a month or a year) he may so haul to any market the agricultural commodities produced by neighbors, and from any point so deliver farm supplies to be used by them, PROVIDED such neighbors are within a radius of five miles of the place of the farmer furnishing the hauling service, if the operation is west of the summit of the Cascade Mountains, or within a radius of ten miles if east of the summit.

Under "nominal consideration" any charge mutually agreeable is authorized. To an increasing extent, farmers hauling for other farmers are charging the published rates permitted common and anywhere-for-hire carriers. Such rates are accessible at the several offices of the Public Utilities Commissioner, and many such carriers have indicated a willingness to make rate information available to any farm truck operator.

No restrictions as to distance, frequency, or consideration apply when an "F" plate operator hauls farm products from a farm adjoining that of his own. A farmer operating under "F" plate registry may haul wood for his own consumption from any forest reserve or from his own wood tract.

Operating privileges in Oregon are more liberal than generally appreciated. Most violations by "F" plate operators arise from unsafe equipment on the highways, and from hauling nonagricultural products or supplies.

FULL LOADS

In agricultural hauling it is impossible to arrange full loads at all times, both ways. More tonnage moves to market than returns to the farm. However, the cooperative attitude, watchfulness, war-need consciousness, and local organization have increased average loads.

Loads increase when neighbors know when a truck is going "in." Many ingenious methods have been devised to assure full loads, from telephoning around the day before by some committeeman (or woman, or 4-H Club member), and rotating scheduled trips by day of the week among the farm truck operators, to a "call" flag on the front gate or the windmill. The shortage of time, help, equip-

ment, gasoline, and tires, while seeming to discourage joint or pooled hauling, makes it all the more necessary.

Second in sadness only to the use of a ton-and-a-half truck for personal transportation is rolling to town with a few bags of seed or a calf or two, with other small lots ready but left in the same community.

USE CAR MORE—TRUCK LESS

It is in the war interest to do more light hauling with the farm passenger car, or car and trailer, provided the truck is thus released. Passenger car supply is less tight than that of trucks, and the tire situation not so critical. Many farm passenger cars can qualify for "B" and "C" rations with a corresponding reduction of truck mileage with light loads. War Price and Rationing Boards have been advised of the need in many cases for greater passenger car use by farmers.

LEASING TRUCKS

An outstanding need in the war period is greater mobility of trucks, making such equipment available to meet seasonal peak needs beyond the usual area of operation.

In a highly technical sense, a truck under an "F" plate may not be leased to another farmer to operate under the same plate. The effect of leasing may be had, however, by transfer of title in accordance with an agreement covering the use, the period of use, and the return to the original owner. The original owner appears on the new title as the "Legal Owner." His rights are fully protected by the covering contract. The cost of the two transfers involved is one dollar each. Applications for such transfers are filed with the Secretary of State who is represented locally by the County Sheriff. Before any such transfer, contact must be made with the representative of the insurance company covering the vehicle in question.

FARMERS QUALIFYING AS COMMON CARRIERS

Farm trucks may be used to meet any emergency situation in agricultural (or other) hauling by being qualified for common carrier usage under the jurisdiction of the Public Utilities Commissioner. Virtually all such emergency needs involve "contract carrier" classification such as hauling for a cannery, creamery, or livestock operator. Such qualifications can be made for the third and fourth

quarters separately, the seasons of heaviest crop and livestock movement. The steps are:

1. Notify insurance representative.
2. Secure inspection for safety by any State Police operative. No charge.
3. Register for a "T" plate, at office of Sheriff.
4. Apply for permit to Public Utilities Commissioner with offices in Salem, Portland, Eugene, Medford, Klamath Falls, Marshfield, Pendleton, and Ontario. "T" plate application, safety certificate, contract, and public liability and property damage insurance are required. Cargo insurance is not required for contract service. The permit cost is \$2.50.

Procedure by the Public Utilities Commissioner has been streamlined as far as possible to meet war needs. Many such permits have been issued by telegram after a telephone call (preferably to the Salem office) giving the necessary information. Such a telegram is recognized by the State Police pending receipt of the certificate.

Operating fees are computed by any one of three methods as elected by the permittee:

- (1) One mill per ton-mile, the weight including the vehicle, and trailer if any, in addition to the maximum load as declared by the applicant and approved by the Commissioner, *or*
- (2) Six per cent of the gross earnings, *or*
- (3) An annual fee payable quarterly in advance. On a vehicle, the combined weight of which is not more than 6,000 pounds, the annual fee is 45 cents per 100 pounds of the combined weight. On vehicles, the combined weight of which is more than 6,000 pounds but less than 12,000 pounds, the corresponding fee is 70 cents.