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UNITED STATES COMMENTS ON TRANSPORT STATISTICS: PART 2

Comments are identified by reference to the paragraph numbers used in the document, supplemented by page numbers where necessary. Repetition of material in the document is avoided whenever possible; so these comments are most useful when read in conjunction with the items in the document itself.

Page 8. Item 7 - List of Statistical Series.

The general comment on this list is that excluded are data on miles of railroad, waterways, roads and highways, and air navigation routes. Also omitted are accident data in the various fields. Consideration might be given to including pertinent items on these subjects. Pipeline transportation is important, and consideration should be given to including it within the scope of the document.

Comments on the statistical series proposed for each form of transport on page 8 are as follows:

For Railways

It is assumed that the items on railroads proposed to be published monthly will also be published annually. Two of the five monthly items, "goods loaded" and "goods unloaded", which presumably correspond closely with "originations" and "terminations" on United States railroads, are available in the Interstate Commerce Commission statistics quarterly rather than monthly. Presumably these items on "goods" will be expressed in some suitable measure of weight. It might be pointed out that data in the United States for electric railways and small steam railways are available on an annual basis only. It is suggested that statistics from the United States be restricted to the statistics of Class I railroads which perform approximately 99 percent of the rail service in this country. The item "total starting draw-bar pull" is not available from the Government railway statistics in the United States. The measure available is known as "tractive effort".

For Inland Waterways

The data called for on freight net ton-kilometres performed and on goods loaded and unloaded are not available on a monthly basis. Information on the number of dumb barges, self-propelled cargo vessels, tugs, goods capacity, and total horsepower are available in basic form. Compilations of this basic data are made on geographical breakdowns which do not separate inland from seagoing vessels.

For Seaborne Shipping

The general comment on these proposed series is that the United States Maritime Commission does not record statistics on a monthly basis nor does it record statistics on vessels or their cargoes of merchant vessels of less than 1000 tons.

For Civil Aviation

Most of the statistical material which the report recommends be assembled is now required to be furnished the International Civil Aviation Organization. That organization has begun the publication of the traffic data required to be filed with it and, it is understood, plans to publish operating and expense data as soon as practicable. It should be made clear, however, that the data which ICAO requires are that for the scheduled air carriers only. Traffic data for the international carriers are furnished ICAO on a monthly and year-to-date basis and for the domestic carriers are supplied yearly. Operating revenue and expense data for both international and domestic carriers are furnished on a yearly basis.

It is believed that the program which is ultimately recommended as a result of the present study should be wholly coordinate with the ICAO statistical reporting procedures as respects definitions employed, reporting periods, and total coverage. The subject report appears to contemplate the employment of ICAO definitions. Also, the reporting periods for traffic data correspond with those used by ICAO so far as international carriers are concerned. As indicated above, traffic statistics for domestic carriers are not

reported to ICAO on a monthly basis; they are, however, available in the Civil Aeronautics Board. With respect to coverage, the present report appears to contemplate the ultimate collection of material for carriers other than the scheduled operators and thus is apparently not coordinate with the ICAO program. It is noted from page 31 of the document, however, that only the collection of data relating to scheduled carriers is contemplated in the initial phase of the program.

It is assumed that full use will be made of the ICAO machinery for the gathering of the data proposed in this paper.

ANNEX 1  
THE ACHIEVEMENT OF COMPARABILITY

Page 13, Item 4--The forms of transport.

Pipe line transport has been omitted from the paper. Since it has become of substantial importance within recent years, it is suggested that suitable items pertaining to pipe line transportation be added to the paper. One item that might be added, traffic volume, could be reported in ton-kilometres for liquid products and thousands of cubic metres for gas.

Page 13, Item 5--Vehicle.

The last sentence in the paragraph defining "vehicle" might be revised to read, "'Vehicle', therefore, includes propulsion as well as carrying units such as locomotives, ships, wagons, tugs, planes, truck-tractors, and truck semi-trailers."

The definition of vehicle may become confusing with respect to combination vehicles such as tractors and trailers, tow-boats and barges. Under Item 81(e), page 39, it is noted that excess semi-trailers should be counted as trailers, so that a clearer definition of vehicles could be employed in which power units are separated from carrying units.

Page 14, Item 7--Types of carrier to be included in statistics.

The concept of the types of carriers as set forth here differs from that used in the United States. Contract carriers are not considered public carriers; they operate under special and

individual contracts or arrangements with shippers. In the United States both common and contract carriers are for hire. The term "public carrier" might be superseded by the term "carriers for hire."

Page 14, Item 9--Definition of the type of traffic to be included.

Commercial traffic as defined here corresponds roughly to railway revenue traffic in the United States. Service traffic closely resembles non-revenue traffic in the United States. As Government traffic is carried as revenue traffic there is no State traffic in the United States. It has been suggested that this definition might be used, "Commercial traffic is defined as traffic for which the carrier receives revenue."

It should be pointed out that non-revenue traffic, which resembles administrative traffic closely, will be reported as such only on the rail line for which the traffic is moved. Other railroads handling that traffic will report it as revenue traffic. As presently established, there is likely to be some confusion between service traffic and administrative traffic.

Page 14, Item 10--Definition of the distance through which traffic moves.

Traffic statistics for the railroads of the United States are reported on the basis of the mileage that the traffic actually moves. On the other hand, rates are made on a number of bases, important among which is the short line distance. This means that the rate-making route is the short line distance over which traffic can

move without transfer of lading from one car to another and applies in making the applicable rates, although the traffic may actually move over circuitous routes. Therefore, it seems that the statement contained herein, "the distance should be that on which the tariff is based," is somewhat confusing. It is suggested that it might be proper to allow each country to continue to base its traffic statistics on the method of reporting now in use, accompanied by a clear definition of the method. In European countries rate scales are based on distances to a much greater extent than they are in the United States where group rates and key point rates are common, and the tariffs do not reflect in many cases the distances between specific points.

Page 15, Item 11--Definition of traffic of special character.

One of the items proposed to be omitted from traffic statistics is urban traffic, i.e., "traffic within an urban unit." If a railroad of the United States handles such traffic, it is reported without separation from other traffic statistics. The same is true in connection with motor carrier statistics in the United States. Harbor traffic and river ferry traffic would be included in Interstate Commerce Commission water carrier statistics and to some extent in railroad traffic. Further possibility of confusion results from the definition of urban traffic. The Bureau of Public Roads computes ton-miles on rural roads without allowance for combining extensions on such roads. The Interstate Commerce Commission exempts separations within designated metropolitan areas.

On the other hand, the definition of urban traffic seems to exclude all traffic within an urban unit but allows the inclusion of traffic between a city and a suburb. The definition of a suburb is of course subject to a variety of interpretations because highway traffic, within a metropolitan or commercial zone, even though interstate in nature, is in many cases exempt from regulation and for-hire carriers in the United States are not always required to report such movements.

It is suggested that the definition of urban traffic be revised to read as follows: "Urban traffic, i.e., traffic within an urban unit, including suburbs in metropolitan zones but excluding areas which are not essentially contiguous to the major population center." As a practical matter it may not be possible to obtain statistical data on "traffic between a city and a suburb" in order that it might be excluded. Some of this sort of traffic would be performed by for-hire carriers; some by stores, fuel companies, and others delivering commodities sold, and the total volume would be very great.

Page 15, Item 12--Definition of the range of national traffic statistics.

United States railroad statistics are not confined to "goods loaded or unloaded within the boundaries of the United States" but includes traffic to and from Canada and Mexico moving on United States railroads. Some of these railroads have mileage in Mexico and Canada.



There may be conflicts between 12(a) in which it is provided that each country should collect statistics for goods loaded or unloaded within its boundaries, irrespective of the origin or destination of the goods or the nationality of the carrier, with 12(c) in which it is provided that in the case of civil aviation each country should collect statistics on goods carried by aircraft registered in that country regardless of where the movement takes place and irrespective of the origin or destination of the goods and passengers carried. The relationship between these two sections should be cleared up.

Page 16, Item 14--Units of Measurement.

In 14(b) the use of the word "containers" should be clarified. In the United States the shipper pays for the weight of containers in which items of freight are packed before being loaded. Consequently, weights of such containers constitute revenue traffic. This includes such containers as pallets and other devices to increase loading efficiency either when the container is loaded with the traffic or moves separately as a return movement. The return movement of such devices is covered by regularly published tariff rates.

If the term "containers" as used here means, however, railroad equipment in which less-than-carload shipments are placed for protection during shipments, it is agreed that the weight of such containers should be excluded.

Page 16, Item 15(a)--Goods loaded.

It appears that the practical assignment of "transloading from one vehicle to another belonging to the same form of transport is to be excluded" is an impossibility for highway and probably also for water transport in many instances. For example, an intercity truck hauls traffic into a freight depot, a local carrier may transport the traffic to ultimate destination a considerable distance from the urban territory. Also, it is not clear whether transshipment from rail to water, for example, at other than a warehouse, would be recorded as a separate loading.

Page 16, Item 15(b)--Goods unloaded.

If a load is transferred from rail car to motor truck for delivery by movement over the road, is such a load considered to be unloaded by rail or by truck? This same question might be raised for movements by rail and water, truck and air movement, and others.

Page 17, Item 15(e)--Freight net ton-kilometres.

In the Interstate Commerce Commission traffic statistics for railroads in the United States for a given period, the ton miles reported are not confined to goods which ended their journey during the period but cover the movements of shipments as recorded by each participating railroad upon handling the traffic regardless of the date at which the movements terminate.

Page 17, Item 15(f)--Passenger-kilometres.

A similar situation for that noted for freight net-ton kilometres also exists in regard to passenger-kilometres in the United States. The addition of the following sentence is suggested, "Where one passenger journey involves more than one carrier and the length of the entire journey is not readily obtainable, the passenger-kilometres on each carrier should be recorded."

Page 17, Item 16--Loaded vehicles carried on other vehicles.

There is a possibility of some confusion arising from operation of car ferries, both rail and highway, in the case of ferries such as the Sea Train, ferries on the Great Lakes, and such ferries as those that operate between Cape Charles and Cape Henry, and other such instances in which substantial hauls are involved in the ferry movement.

Page 18, Item 16(c).

In this item it is stated that "Wherever there is carriage, by one form of transport, of a loaded vehicle proper to another, the resulting traffic should be treated according to the principles illustrated above in the case of the railway car ferry." There is a question of whether this definition given in the case of railway car ferries should be made applicable to movements of loaded trailers and truck bodies, either on railroad freight cars, or on vessels.

Page 19, Item 18--Water-borne traffic.

The water carrier statistics of the United States do not follow all of the distinctions set forth here. For example, the Great Lakes are not considered as "Seas" in the computation of statistics.

The distinction between the different types of water-borne traffic contain substantial elements of confusion for movements by water that occur in the United States and its waters. For example, consider water movements from Birmingham, Alabama, by way of the Warrior-Tombigbee Rivers, inter-coastal waterway, Mississippi River, Illinois River to Chicago; and movements from points on the New York State Barge Canal down the Hudson to the Atlantic Ocean into the Chesapeake Bay and up the Rappahannock River to Fredericksburg. In these examples it would be difficult to determine under the definitions governing here what sort of water-borne traffic the movement constitutes.

In regard to the definitions contained under item 18 it is suggested particularly that (e) Sea Voyage, (f) International sea-borne traffic, and (g) Coastwise traffic need to be clarified in relation to one another.

Page 20, Item 18(g)--Coastwise traffic.

Under this item, how are movements to possessions of the United States such as Hawaii and Puerto Rico to be reported? Also,

how are movements which are mixed as movements to possessions and foreign countries to be reported?

Page 24, Items 22, 23, and 24.

The items pertaining to administrative service and commercial traffic may cause considerable confusion. Confusion between service and commercial traffic noted above is also found here.

Page 25, Item 25

Considerable difficulty will be encountered in the United States in furnishing traffic statistics for inter-urban railways, particularly under the definition of "urban" given in the paper, since, on many tramways and bus lines, through operations are conducted.

Page 27, Item 31

It is provided that urban traffic should be excluded from vehicle-kilometres. Again the confusion engendered by the definition of urban traffic elsewhere in the paper presents itself. Urban traffic, which is a part of the through movement, should be included, but urban traffic in the strict sense of the word should be excluded from the vehicles. It is admitted that an airtight definition in this field is difficult to establish.

Page 28, Section D.--Inland Waterways Traffic.

The definitions shown herein are not strictly comparable with definitions laid down by the portion of the Transportation Act of 1940 that establishes regulations over inland waterways traffic in the United

States. It is believed, however, that data collected under the definitions of the 1940 Act correspond sufficiently to serve the purposes outlined in the paper.

Page 29, Section E.--Coastwise Shipping.

The general comment on this section is that there seems to be some confusion in definitions arising from transportation operations in open water with those of movements predominantly on the inland waterways. No distinction is made between coastwise and intercoastal shipping. It is suggested that such a distinction be considered.

The general usage of the terms "entered", "cleared", "entrance" and "clearance", refers to overseas shipping; namely, the first port of entrance and the last port of clearance of a vessel engaged in foreign trade. The ports of call between the port of entrance and the port of clearance are designated as arrival and departure. In the case of coastwise and intercoastal shipping, a vessel is said to have arrived at a port or departed from a port, as the case may be. These distinctions might be considered.

As stated before, the Maritime Commission does not record statistics on a monthly basis, nor does it record statistics on vessels or their cargoes on merchant vessels of less than 1000 gross tons.

Page 30, Section F.--International Sea-Borne Traffic.

In item 47 dealing with definitions of entrance and clearance of vessels, it is felt that the intermediate ports of call within

a country should be listed and indicated by the terms "arrival" and "departure" as explained in Section 42, "Definitions of entrance and clearance of vessels."

Page 31, Section G.--Civil Aviation.

The definitions recommended for civil aviation are in substantial agreement with the ICAO definitions except and in respect to the reporting of non-scheduled and charter operations and cargo. The report contemplates separate reporting for non-scheduled and charter operations, whereas ICAO current reporting procedures require only a single total for these categories. The report defines cargo as all goods carried for remuneration (other than mail) whether on excess baggage, freight and express tariffs, or special contracts. It would appear that the report contemplates a single total for all cargo. Current ICAO reporting procedures require separate reporting for each type of cargo.

Page 31, Item 51--Definition of kilometres flown.

It is indicated here that the figures should exclude "deadhead" flights constituting movements for technical and operational purposes which are not considered commercial traffic. This is not consistent with the reporting of the "deadhead" movement of equipment in other forms of transportation. It is not clear why "deadhead" flights incident to the operation of an air line should not be reported the same as in other fields of transportation.

## CHAPTER II. VEHICLE STATISTICS

### Page 33, Item 63--Stored vehicles.

This definition of "stored vehicles" is not in agreement with the usage in the United States and apparently not in agreement with usage in Great Britain. The definition at present in the United States covers locomotives in serviceable condition, withdrawn from service and under white lead or otherwise stored. The following is offered as a substitute definition: "Stored vehicles -- Vehicles in useable condition or requiring only minor repairs, which have been set aside because of lack of current demand, due to seasonal or other fluctuations in traffic volume."

The following additional definition is offered in conjunction with that of stored vehicles: "Vehicles retired -- Vehicles which have been removed from active service permanently because of age, obsolescence, or the extent of repairs required, or other reasons."

It is believed that these two definitions are needed to provide an accurate measurement of the available supply of vehicles.

### Page 34, Item 64(a)--Passenger vehicles.

This item states that if special spaces other than aisles or corridors are provided for standing passengers their capacity should be included. This measure of capacity is not in general use in the United States.



Page 34, Item 64(b)--Goods vehicles.

It should be noted that the rated capacity measurement used for motor vehicles is not uniform. Further, it is difficult to use a "specific gravity" in conversion to tons-weight for rated capacity of motor vehicles.

Page 34, Item 65--Power.

The document provides that in international statistics power should, where possible, be expressed in metric horsepower. Horsepower is not in general available for steam locomotives on United States railroads. The horsepower of diesel locomotives is being reported as installations of diesels are made. The term "tractive effort" is ordinarily used as the measure and is available for both steam and diesel locomotives. It is not clear why metric horsepower referred to here and total starting draw-bar pull are included in item 7 on page 8.

Page 34, Item 66--Time of vehicle count.

It is suggested that vehicle count at the end of the year might be considered. This is a measure used a great deal in the United States.

Page 34, Item 68--Analysis of stock by capacity or power.

The analysis proposed in this paragraph would be a tremendous task for the transportation agencies of the United States.

Page 35, Item 69--The average speed of a ton of goods from consignor to consignee.

This information is not available in the United States.

Compiling the information would be a tremendous task.

Page 36, Item 71--The vehicles to be included.

Under this item, will confusion arise concerning the freight cars of the Canadian Pacific and National Railways of Mexico used in the United States or those of the United States operating on railroads in Mexico and Canada? Does this include vehicles unfit for use until repaired? It is probable that the percent of such vehicles would be high in some countries.

Page 36, Item 73--Vehicles owned by others than railway administrations.

This provides that vehicles owned by other than railway administrations but operated by those administrations are to be included as vehicles operated under the control of the administrations. From the viewpoint of national traffic statistics in the United States, privately-owned cars would offer no particular problem but for individual rail lines, however, they would offer a reporting problem.

Page 36, Item 74(a)(i)--Locomotives.

It should be made clear how multi-unit Diesels are to be treated. The same would apply to some electric locomotives operated as multiple units.

Page 36, Item 74(a)(ii)--Railcars.

"Railcars" are referred to as locomotives but are included in the definition of passenger carriages. This is confusing.

Page 36, Item 74(a)(iii)--Passenger carriages.

According to the International Railway Union definition pertaining to articulated stock, "the number of units to be included is not the number of bodies but the number of sets composed of two or more permanently articulated bodies." This does not conform to the method used in the United States at present. Interstate Commerce Commission statistics show articulated cars separately from other cars and also articulated trains, or the operating assemblage of the bodies.

Page 37, Item 74(b)--Definitions for general international use.

The definitions contained in this section conform more closely to the usage in the United States than do the definitions of the International Railway Union set forth in the preceding item, 74(a).

Page 37, Item 75--Capacity.

The second sentence stating that on some railways the goods carrying capacity of a wagon is in direct relation to the number of its axles does not apply in the United States.

Page 36, Item 76--Power.

The method suggested for estimating draw-bar pull ( $\frac{1}{4}$  of the total weight on the driving wheels of the vehicle) would be a doubtful measure for United States railways.

Page 39, Item 81--The types of vehicles.

It seems somewhat inconsistent to exclude trams and trolley buses, as provided in (a), from the vehicle statistics. If such vehicles are to be excluded, it seems that taxicabs, in (b), as well might be excluded since their use is confined almost exclusively to the city streets.

Page 39, Item 81(e)--Trailers.

In the case of trailers confusion will arise in the United States from small vehicles such as camp trailers. Also, it is felt that all farm and commercial type trailers should be counted as vehicles rather than including the tractors and trailers as a single vehicle.

Page 41, Section D. Inland Waterways.

The comments for inland waterways on page 8, item 7 are also applicable in large part here.

Page 44, Section F. Civil Aviation.

With respect to collection of data on aircraft, the breakdown suggested here does not seem particularly significant and it is suggested that consideration be given to classification of aircraft by types. Data on aircraft of scheduled and irregular carriers are available in reports submitted to the Civil Aeronautics Board annually. Aircraft data for scheduled carriers are furnished ICAO annually.

Specifically objection is offered to the classification of passenger aircraft shown under item 101(b) between small aircraft and

large aircraft. The line of demarcation indicated here is almost meaningless. It is suggested in the first place that a general adherence be continued to the statistical classifications maintained by International Civil Aviation Organization and its member countries. For purposes of the present United Nations document, the separation of the two classes (large and small) should be at least 10,000 kilograms gross weight instead of 1,000 kilograms as indicated.

### CHAPTER III. OPERATING REVENUE AND EXPENSE

Page 47, Item 107--The distinction between operating expense and revenue and other expense and revenue.

The statement under this paragraph is somewhat confusing. Is it intended to exclude so-called constant expense from operating expense?

The section reads, "It is suggested that those items of revenue and expense which, in the main, vary directly with amount of traffic should be classed as operating revenue and expense." This would perhaps be true of our operating revenues, but not of operating expenses. Under this definition "operating expense" would be what is termed in the United States as "out-of-pocket" expense", which can only be determined by elaborate formulae, such as those used in cost finding procedures.

Page 47, Item 108--Items which occur both as revenue and expense.

The second sentence reads, "The effect of including in operating revenue an item which must then also be included in operating expense is to bring the operating ratio nearer to the number one in value, that is to decrease its sensitiveness." This sentence is somewhat confusing since the effect of all expense should be reflected in revenue.

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