BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, D.C. 20268–0001

POSTAL RATE AND FEE CHANGES, 1997

Docket No. R97–1

RESPONSE OF UNITED STATES POSTAL SERVICE TO INTERROGATORIES OF FLORIDA GIFT FRUIT SHIPPERS ASSOCIATION REDIRECTED FROM WITNESS BRADLEY
(FGFSA/USPS-T13-36(b) AND 37-39)

The United States Postal Service hereby provides responses to the following interrogatories of Florida Gift Fruit Shippers Association: FGFSA/USPS-T13-36(b) and 37-39, filed on July 28, 1997, and redirected from witness Bradley.

Each interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

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August 11, 1997

FGFSA/USPS-T-13-36

For each Intra-BMC and Inter-BMC highway transportation routes, please provide the interior vehicle dimensions and cubic foot capacity for the 3 most commonly used vehicles.

a. For each of the 3 vehicles, indicate the approximate proportion of total cubic foot capacity which those vehicles represent.

b. For each of the 3 vehicles, please indicate the maximum weight capacity of the lading in the vehicle. If the maximum weight varies from state to state, indicate the lowest maximum weight capacity and identify the state with such limitation.

Response to FGFSA/USPS-T-13-36.

a. Answered by Witness Bradley.

b. Tandem axle trailers generally have a Federal net weight limit of 34,000 lbs, and single axle trailers generally have a Federal net weight limit of 20,000 lbs. All USPS Vehicle Group 11 (48') trailers are tandem axle. Vehicle Groups 8-10 (27'-45', 1650-2700 CF capacity) can be either tandem axle or single axle.

The following two excerpts from the March, 1995 Federal Highway Administration report entitled "Comprehensive Truck Size and Weight Study", available in the National Transportation Library through the Bureau of Transportation Statistics, details the general Federal laws limiting truck load weight based upon axle configuration, but that some states have additional laws and "grandfather clause" exceptions, as summarized below. For all roads receiving Federal highway funding, the Federal standards apply. However, states, counties, and local governments can restrict the maximum weight on any particular road or bridge based on physical condition. There are too many of these restrictions in place to feasibly determine the lowest maximum weight limit. Contact individual states' transportation departments to receive publicly available information detailing state variances from the Federal legislation.

Excerpt 1: Summary of Federal Law

In 1982 Congress required that all States allow on their Interstate highways loads of 20,000 pounds on single axles, 34,000 pounds on tandem axles, 80,000 pounds total for a vehicle, and enforce the Federal Bridge Formula. The width limit was increased to 102 inches. States were required to allow 48-foot semitrailers and double combinations of two 28- foot trailers. The Federal length and width provisions were extended beyond the Interstate System to the designated National Network (NN) for large trucks and related access roads. States having grandfather rights were authorized to determine what vehicles and operating situations would be considered "grandfatherable".

Excerpt 2: Tabular Summary of Additional State Laws

	Federal Law	State Law
Vehicle Weight Limits		
- tire-related		
number of tires	No	Some
tire load limits	No	Some
load distribution between tires	No	None
- axle-related		
load limits by axle type	Yes	All
load distribution between axles in a group	No	Some
suspensions	No	None
lift axles	No	Some
- gross vehicle weight-related		
bridge formula	Yes	All
cap	Yes	All except Mich.

FGFSA/USPS-T-13-37

If a trailer used in Inter-BMC transportation is fully bed-loaded with Bulk Rate Regular Standard B mail, will the over-the-road weight limit of the loaded vehicle restrict or limit the cubic feet of the mail that can be loaded on the trailer? In your response, please provide the cubic foot capacity of the trailer (give the height, width and length measurements) and the weight limit of the lading in the trailer which you take into account.

Response to FGFSA/USPS-T-13-37.

Assuming a hypothetical tandem-axle 3,000 cubic foot trailer, of interior dimensions 48' length by 7' width by 8' height, fully bedloaded (presumably in sacks or on pallets) with Bulk Rate Regular Standard B Mail, with an average density of approximately 17.8 pounds per cubic foot (standard TRACS density), and a Federally-mandated 34,000 lb load limit on the truck, the bed-loaded mail would need to be stacked over 5 ½' high across the entire floorspace of the truck before breaking the 34,000 lb limit. Bulk Rate Regular Standard B Mail is not bed-loaded this high[1], thus the weight limit would, within the realm of realistic scenarios, not limit the cubic feet of mail that can be loaded onto the trailer.

[1] A review of the survey data from all 1,746 Inter-BMC tests taken by TRACS in FY96 reveals there was only one Inter-BMC TRACS test in which the truck was fully bedloaded with only Bulk Rate Regular Standard B Mail. The truck was bedloaded 70% with sacks stacked approximately 48" tall, and 30% with loose envelope trays stacked only 18" tall.

FGFSA/USPS-T-13-38

Confirm that the maximum allowable density of a trailer used in postal highway transportation can be properly calculated by dividing the cubic feet capacity of the trailer by the over-the-road weight limit of the lading of the trailer. If you do not confirm, please fully explain.

Response to FGFSA/USPS-T-13-38.

Confirmed, provided that the one adjusts for vertical space utilization before giving any relevance to this "maximum allowable density of a trailer" beyond the trailer itself. If, for example, a trailer has 3,000 cubic feet capacity, and the load limit is 34,000 lbs, the calculated maximum density would be .088 cubic feet per pound, or 11.33 pounds per cubic foot. This suggests that the truck will weigh out when fully loaded with mail weighing more than 11.33 pounds per cubic foot. However, when the "maximum allowable density of a trailer" is applied in this way, "fully loaded" must be taken literally, meaning that the trailer is fully loaded, from floor to ceiling, across all floorspace, with no empty space due to imperfectly stacked mail. This does not happen. In reality, this hypothetical truck could be fully loaded with mail weighing more than 11.33 pounds per cubic foot. Suppose that an 8' tall truck is fully loaded with containers that are only 6' tall. This means only ¾ of the true cubic capacity of the truck is utilized even though 100% of the floorspace is covered. Assuming that only ¾ of the height of the truck is used, the true maximum density would be, in this case, 4/3 of 11.33, or 15.11 pounds per cubic foot (or even higher when adjusting for the stacking-loss empty space within the containers themselves.) You can calculate any statistic you want, though the operational reality may bear no relevance to it.

FGFSA/USPS-T-13-39

If the density of a sub-class of mail transported in highway transportation exceeds the maximum allowable density of the vehicle transporting the mail:

a. Do you agree that the excess density of this sub-class of mail could limit or restrict the quantity of other mail that might be loaded in the trailer? Fully explain your response.

b. Do you agree that it would be reasonable and appropriate to reflect the excess density of this sub-class of mail, along with actual cubic feet, in determining the allocation of the costs of the highway transportation? Fully explain your response.

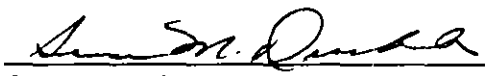
Response to FGFSA/USPS-T-13-39.

a. No. As explained in the response to FGFSA/USPS-T-13-38, comparing this calculated "maximum allowable density" to the density of a sub-class of mail is an apples-to-oranges comparison because trailers are not fully vertically utilized, thus trailers can be fully loaded (in terms of floorspace utilization) with mail of a density above any calculated "maximum allowable density" that considers only cubic footage of the truck and a legislated load weight limit.

b. No. Cubic foot miles are the cost driver in Intra-BMC and Inter-BMC highway transportation. Density in and of itself is not a cost driver. TRACS converts sampled weights to cubic feet using standard density factors. An additional distribution of cost based on density would be inappropriate.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon all participants of record in this proceeding in accordance with section 12 of the Rules of Practice.



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