

## INTRODUCTION

Fuel and energy conservation concerns have placed new emphasis on the problem of empty backhauls and their impact on the operating efficiency and productivity of the motor carrier transport industry [Moser, 1978; Williams, 1977]. Empty backhauling creates resource use inefficiencies which result in higher costs to shippers, lower farm prices, and higher social costs through higher fuel consumption.

In 1979, transportation costs were relatively high for fresh fruits and vegetables (FF&V), representing 10 to 25 percent of the retail price for selected produce [USDA-ESCS, 1980, p. 48]. Fuel prices were the leading factor in increasing transportation costs during 1979, accounting for 20.5 percent of the total cost per mile in January 1979 and rising to 29 percent by January 1980 [USDA, ESCS, 1981, p. 88]. Diesel fuel prices paid by independent truckers increased by 114 percent between June 1976 and February 1980, with about two-thirds of that increase occurring after January 1, 1979 [USDA, ESCS, 1981, p. 88]. Rates paid for shipping FF&V increased by 10 to 15 percent during 1979 [USDA-ESCS, 1981, p. 88].

Trucking dominates FF&V transport in Florida. In 1979, only one percent of the perishable traffic from Florida was by rail, whereas truck transportation accounted for 99 percent of Florida FF&V shipments [Stegelin, 1981, p. 2]. Although no exact figures exist, we estimated that 30 to 50 percent of the trucks hauling Florida FF&V experienced empty backhauls.<sup>1</sup> One method of improving the cost efficiency of food distribution is to decrease the empty truck backhauls.

## OBJECTIVES

The objective of this study was to determine the economic impact on truckers and farmers of empty truck backhauls in the transport of Florida FF&V. Specific objectives were:

1. to determine the average empty backhaul miles per truckload in the transportation of Florida FF&V;
2. to determine the total empty backhaul miles for all truckloads during an average month in the transportation of Florida FF&V;
3. to determine the interstate potential for finding commodities to backhaul to Florida; and
4. to determine the potential reduction in transportation costs and the potential improvement in farm prices.

1. Estimated after conversations with several Florida truck brokers and Florida agricultural inspection officers.