servicemen. Should you send out one man in a truck with a washer-dryer and a second man in a second panel truck to plug it in?

In a retailing magazine called Stores Magazine, a columnist, who is a vice president, predicted that free retail parking facilities in parking lots of suburban shopping centers will totally disappear by 1980 and that not only will retail parking facilities downtown be posting charges in 5 to 10 years but also parking facilities for all types of traffic are likely to disappear. He says that the retailing industry should plan for the customer who will shop primarily by public transportation. Assuming that he is correct, it would indicate to me that beyond that time there will be a greater growth of shopping by phone or by cable television and that this will essentially cause considerable delivery problems for the U.S. Post Office or United Parcel Service.

THE U.S. POSTAL SERVICE

Ronald B. Lee

Probably because of the post office's traditional place in the President's cabinet it has been overlooked when basic industrial problems, such as moving goods in the urban environment, were discussed. For this reason, I welcome the opportunity to discuss some of these problems. My remarks deal with the practical problems involved in moving 85 billion pieces of mail a year, the institutional constraints under which we operate, and some of the things we are doing to solve the problems and remove the constraints.

PROBLEMS

The first practical problem is the immensity of the U.S. Postal Service. There are 44,000 facilities, many of which are located in the center of urban areas. Almost a quarter million vehicles move the mail. Some are contract-owned and some are our own. The latter collect mail, shuttle it between branches and the main office, and to a limited degree move it between cities. The U.S. Postal Service employs 730,000 people who work in 32,000 post offices. However, the 75 largest of these employ half of those 730,000, so that our urban presence is extensive indeed!

In addition to these problems of sheer size, the Postal Service has significant network problems. These are problems not only in intracity movements but also in the intercity links that end up being metropolitan problems when they get to the other end. Incidentally, we spend three quarters of a billion dollars annually buying intercity transportation from railroads, air carriers, and private trucking concerns with whom the Postal Service contracts directly.

Mail by and large does not move by rail anymore. In 1940, there were approximately 10,000 trains in this country on which mail moved. You have seen pictures of the arm that used to swoop the mail bag from the car, the mail already having been sorted to that particular crossroad. Today, there are less than 300 mail-moving trains in the United States. In 1940, mail volume was 27 billion pieces; today it is 85 billion pieces. This represents a 97 percent decrease in rail transportation and a 210 percent increase in mail volume. With the prolonged but basic alteration in the transportation network, new problems appeared. It now became necessary to do more distribution in post offices that had been ideally located for a rail-oriented transportation system but were not well suited to an air and highway operation.

Congestion is a major factor in impeding intracity movement. It particularly hampers our outgoing mail operation. In the first place, we are out on the street every evening during the peak of the rush collecting mail from boxes and building chutes and

from our branches and stations all over the city. During the same time, we are shuttling mail to the airport, and too often we miss flights and sometimes delay mail because our trucks are caught in the familiar airport-access traffic jam. We are not able to estimate precisely the cost of time lost because of congestion or to isolate its effect on service, but most big-city postmasters would agree that it is a serious problem.

Fortunately, our incoming mail operation is not similarly hampered. Vehicles bring the mail in from airports and railroad ramping yards over relatively empty streets. A concerted effort is made to keep this a late-evening and very early-morning operation. Several hours later, but well before the morning rush, the mail is moved out to the branches and stations for carrier delivery. Granted, our motorized carriers do confront heavy city traffic, but where congestion is acute our carriers travel on foot because nothing substantial can be gained by providing vehicles.

So, not only is the Postal Service big, but it travels a lot—the equivalent of 1 trip to the moon each day delivering city mail alone, and 8 trips to the moon each day delivering rural mail.

CONSTRAINTS

Many of the constraints that the Postal Service has faced center around its prior dependence on the Congress. The Postal Service is one of the greatest supporters of the American economy. It has been estimated that through the Postal Service each year travel transactions that total some \$5 trillion. In other words, the entire GNP turns over many times through the mail. The clearinghouse function in New York City alone is a \$3 trillion a year operation, and most of it goes through the mail. When postal operations are hampered as a result of congressional delay, the entire American economy suffers.

It is unfortunate that, too often in the past, our progress has been impeded because of traditional political mechanisms. There have been too many occasions when the Postmaster General has gone to Congress to request an adjustment to our product line or rate structure. Far too frequently no changes have been made or delays have made them almost ineffective. The appropriation process itself has been a constraint. Obtaining funds for investment capital, and indeed, for everything has entailed competition with the war in Vietnam, the war on proverty, and every other federal program.

As an operational organization that has a measurable product and whose total operational capability is tested daily in a real-world context, the Postal Service is unlike any of the other governmental departments and should not have to compete with them. Most other agencies receive their funds based on changing national policy and priorities. The Postal Service has a constant mandate to serve the public every day of the year, with no delays and few mistakes tolerated.

In a period of tight budgets, our doors cannot be shut with a declaration that the offices are closed for the duration or a statement to the public, "We are sorry but we did not get our appropriation; come back next year." You cannot do that when you represent a vital communication link as the Postal Service does. However, with the increased managerial flexibility we have gained under the postal reform law, it should be easier for us to develop new products, improve service, and increase revenue with little delay or burden to the public.

SOLUTIONS

Admittedly, a quarter of a million vehicles and 44,000 facilities can create a lot of pollution. Efforts are being made, however, to control it. All of our vehicles have been changed to include the new antipollution devices, and no vehicles are purchased unless they have these devices. In addition, low-lead and no-lead fuels are used in all of our vehicles.

The Postmaster General announced on November 5, 1970, that the Postal Service will test a natural gas engine. Under the program, \$65,000 has been allocated to modify 54 postal vehicles so that they operate on compressed natural gas. The project will be tested in 4 cities and evaluated over the next year. This pilot program is the result of a year-long study conducted by the Postal Service and 2 utility companies.

Finally, a directive was issued on cutting down the idling time of vehicles; employees are not allowed to let the vehicles idle while going for a coffee break or walking a long distance to the front of a house. Although this is not necessarily effective in cutting down the idling time of our employees, it is reasonably successful in cutting down the idling time of some of our vehicles!

To reduce street and terminal congestion, we are beginning a program of accelerated facility construction and improved site location. No longer are the huge colonnaded edifices being built that have served as landmarks since the beginning of the Union. Light-industry types of factories are being built near the confluence of highways where there is access to airports, the Interstate Highway System, and other major transportation arteries.

In addition, plans have been formulated to construct and operate a bulk-mail network that will consist of 21 highly mechanized bulk-mail centers and 12 auxiliary service facilities. The system will process parcel post and second-class and third-class mail. One desired effect of this network will be the disappearance of many postal vehicles from the overcrowded streets of the central business district. Now under study is the concept of whether the same principle is valid for preferential mail.

The Postal Service is also moving toward versions of the supermarket concept. You all can remember going down to the corner store and giving Mr. Jones the grocery order and watching him assemble the groceries. Now, of course, we stand in line for a carriage, push the carriage around the aisles, stand in line again to pay for items purchased, and thank the cashier for the "privilege." If the Postal Service can get its customers to do the equivalent, most if not all of our outgoing operation could be bypassed and thereby eliminate some of the urban congestion we cause.

In addition to internal changes the Postal Service has made (i.e., off-hour transport) are the external efforts that have been made. Through positive incentives and some negative ones, our customers are being induced to mail early, to use ZIP codes, and to presort by ZIP codes. Some positive trends in these areas are becoming noticeable.

Perhaps the best solution lies in reflecting on the fact that the current law creating the U.S. Postal Service in place of the U.S. Post Office Department carries on the post-road tradition. To refresh your memory, a post road is any road, highway, street, waterway, or railway over which mail must travel to be delivered. The law states that the U.S. Postal Service cannot be denied access to any post road. Therefore, it is reassuring to see that this conference was convened to figure out ways to get all those other vehicles off the post roads so that the U.S. Postal Service can deliver the mail!

A NONGOVERNMENTAL TRANSPORTATION PLANNING AGENCY

D. Reid Ross

I work for an industrial development organization that is nongovernmental in nature and character and that has an interest in transportation planning, principally because transportation facilities obviously can facilitate or impede economic growth and, therefore, urban growth.

A city like St. Louis or any other gateway city really functioned from its beginning as a freight city. It handled, collected, distributed, transshipped, broke bulk, consolidated, and interlined freight. In 1764 fur and lead were collected in St. Lous, and that is the only reason the city ever got started. Two hundred years later 70 million tons of freight valued at some \$10 billion were handled in the city, a little bit less per person than is handled in New York.