Chapter XX

Routing and Transportation of Workers

HOW THE OFFICE MAY HELP IN ROUTING. Much has been said about economical operation within the office. In addition, the social agency usually has to consider its external operations from the point of view of economy. The question of the quality and quantity of professional service is beyond the scope of this book, but we must consider here the routing of field workers, nurses, and other professional workers, which often has to be planned in the agency office.

Workers should be helped to make their calls outside the office as quickly and as easily as possible. Often social workers are assigned on a district basis, and each worker is put in charge of a definite area. Even then, the supervisor has to make sure that the work is distributed fairly evenly. Further, he must see that no time is wasted in traveling on circuitous routes. Unless there is some reason for emergency calls, the workers should cover their territories with as little lost time and effort as possible. Some social agencies provide each worker with a small street guide of the city and a map on which routes may be planned. The route for each day may be discussed by a new worker with the supervisor. Sometimes work can be planned ahead for a whole week, so that each day the worker can cover a different part of his territory.

PIN MAPS OF VISITS. Much time in the actual visiting of clients and the cost of transportation can be saved by careful routing. In order to present graphically the problem of routing, the supervisor may indicate with pins on a map the addresses on which the nurse or visitor calls. The pins may be connected with strings, in the order in which the calls have been made, to show how much zigzagging and retracing there was. The most efficient route possible in view of available transportation systems can then be indicated by another string for the same group of calls.

The secretary of a family society has stated that in his larger districts cases were assigned to a considerable extent on the basis of their proximity to other families visited by the same worker. Mem-

bers of the staff were expected to plan their day's visits before leaving the office.

ALLOWANCE FOR PUBLIC TRANSPORTATION. The routing of workers raises the important question of transportation cost. Practically all social agencies pay this. In some agencies the staff member pays his own car or bus fare and turns in a bill each week or month for the amount spent. In other agencies the workers are given car or bus tokens to use on their visits. In some cities public transportation systems sell weekly passes, and the purchase of these may be an economy for the agency. Any number of workers may use one pass.

WHEN TO USE AN AUTOMOBILE. The automobile also is a vital factor in the transportation of social workers. No uniform rule has yet been worked out for its use, because the arrangements vary so much from agency to agency. Some organizations determine by actual experiment the difference in cost between transportation by street car or bus and by automobile. To this they add the value of the additional time available for actual visiting if the worker uses an automobile. They purchase or arrange to rent a car only when a clear saving is shown. (Our remarks, of course, apply to normal times and not to those of post-war shortages.)

In some organizations it is to be suspected that the enthusiasm for owning an automobile has run away with considerations of economy. In a congested district a car presents problems of parking—to say nothing of the expense of operation as compared with either walking or taking the street car or bus—which make operation of an automobile inadvisable. On the other hand, where transportation lines are poor and do not cover the main areas of agency service, or where the area to be covered is large and the cases widely scattered, an automobile may prove a good investment.

Before the organization goes to the expense of purchasing a car or making a worker an allowance for the use of his own, it is wise to consider whether equal advantages cannot be secured by renting "drive-your-self" cars or using taxicabs, either on a charge account or by the purchase of coupon books. This may afford a considerable saving. It is difficult to operate a machine, if depreciation is counted as a cost, for less than $50 a month. That sum buys a great deal of taxicab or "drive-your-self" riding. Although a social worker who had to lecture or attend meetings at night might like to have the agency buy a car for him, it might be found an economy to have him use taxicabs rather than burden the organization with the cost of owning and operating an automobile.

METHODS OF FINANCING AUTOMOBILE USE. Where the operation of a car by the agency is clearly demonstrated as an economy from the point of view of the saving in time and money, the question of the basis of operation will still have to be considered.

(*a*) *Allowance for Use of Workers' Cars.* In some organizations the workers buy their own cars. There are two chief ways of reimbursing the worker for the use of his car. First, he may be given a flat allowance, say $25 a month, based on an estimate of the average cost of operation in the interests of the agency. Second, he may be given a mileage allowance based on his statement as to the places he has gone and the distance he has covered on agency business as read directly from the speedometer and recorded in writing.

Common mileage allowance until after the Second World War was from five to ten cents a mile—generally the lower figure. The pre-war experience of several large corporations and groups of social agencies indicated that fleets of automobiles of moderate cost and good quality could be operated for as low as five or six cents a mile, including all costs of insurance, taxes, gasoline, oil, tires, interest on the investment, depreciation, and garage rent. Single cars owned by agencies might cost more because of less expert care and less concentrated use.

One advantage of mileage reimbursement is that the owner-operator is careful to keep costs down and not to misuse the car. He knows if it wears out he has to replace it. If the expense runs over the mileage allowance he has to make good the difference. This arrangement also makes it possible for him to use the car for his own personal needs without any danger of criticism. Furthermore, the cost of operating the car for personal activities is reduced, because the agency shares the fixed charges.

Instead of making a definite allowance by miles or by the month, one visiting nurse organization has reported that, in the smaller districts where the value of a car is not clearly demonstrated and the nurses want to drive their own cars for convenience, it allows for automobile expense what would have been spent for bus fare in making the same visits.

We are strongly in favor of the mileage plan as against the flat allowance. We have had several experiences with staff members who requested large automobile allowances. Their ideas (not the tires) were deflated when a mileage basis was authorized. The boys did not drive as much as they thought they did. Moreover, an economy-minded employee, given a flat allowance, may save himself money

but cost the agency time by using a bus or street car when he ought to be driving the car.

(*b*) *When the Agency Owns the Car.* Another situation exists when the organization buys the car and pays the expense of operation. Such an arrangement may be justified. Difficulties tend to arise, however, through careless operation of the car and through its unauthorized use for personal purposes after office hours. Both of these abuses incur extra cost for the agency. In the case of authorized personal use, it may be desirable to charge the worker at a cost-per-mile rate.

Some social agencies keep their cars in a central garage. From it workers take the cars in the morning and to it they return the cars at the close of the day's work. This arrangement provides for adequate control, but it may mean a considerable loss of time for the worker (and for the agency) in his going to and from the garage.

(*c*) *Helping the Worker to Buy a Car.* In order to make it possible for a worker to own a car, if he has no cash, social agencies have been known to advance him the purchase price (ceiling, not black market) and let him pay for it out of the mileage allowance. For example, if he drove the car 700 miles a month on agency business, at the rate of 7 cents a mile he would receive $49 from the agency. If an arrangement of this nature is made, however, the organization should have a contract, so that if the worker leaves its employ he would either turn back the car or pay the balance due.

(*d*) *Kind of Car to Be Purchased.* The purchase of standard makes of cars, with large and responsible corporations behind them and with the prospect of continued operation before them, so that expert repair service and good resale value may be assured, is obviously desirable. Everything else considered, the car produced by the company with the largest resources for research purposes and economical manufacture should give the best automobile value per dollar.

Certainly the social agency should avoid the appearance of extravagance and ostentation and should have in mind the use planned for the car. For example, it is only considerate to use an inexpensive car for field workers or nurses who work in poor neighborhoods where an expensive car in front of a client's door would be conspicuous. On the other hand, the car the executive uses to take distinguished visitors about the city and in going himself to the homes and offices of persons of circumstance should probably be of a better class.

The use to which the car is to be put will also make a difference in the model chosen. A nurse or field worker who has to carry around a considerable amount of equipment will probably find a coupé with a rear storage compartment best suited to her needs. A medical social worker who has to take children and their parents to clinics might find a two-door sedan best for carrying the gang and keeping the kids from falling out.

(e) Life of a Car. The probable life of an automobile is difficult to estimate. Much depends on the kind of car, the number of people who drive it and their different methods of driving, the care with which they drive it, the frequency with which the car is serviced—greased, tightened, and adjusted—and the severity of use to which it is subjected. Thus an automobile continually in use on city streets or on good paved roads in the suburban districts would probably last considerably longer and cost less to operate than would the same car driven over rough country roads. Before the war it often seemed that private owners of automobiles turned in their old machines on new ones more frequently than was economically necessary. A great deal of money can be spent on new tires, new batteries, painting, and general repairs which are necessary to put an old car in first-class shape, before this cost amounts to as much as the depreciation (estimated at 40 per cent of the cost price) which must be charged off on a new car in the first year of its life. The solution seems to be to keep a careful record of the cost of operation and to turn the car in on a new one when the cost of further operation would be greater than the heavy depreciation on a new car.

(f) Second-hand Cars. The purchase of second-hand cars is not generally recommended unless the agency can be certain that the car has been carefully run by its first owner and is in good shape mechanically. Our own practice "before the war" was to buy a good two-year-old used car from a reliable dealer, drive the car two years, and then turn it in on another two-year-old car.

Demonstration cars that have been used by automobile salesmen could in the good old days be purchased at a considerable saving, especially after a new model had been brought out. Perhaps that scheme may again be practicable.

(g) Economy in Automobile Supplies. Considerable money can be saved in the operation of a car through careful and judicious buying of supplies. Any social agency in normal times should be able to purchase tires at wholesale rather than retail prices. The driver should be instructed to keep the tires properly inflated to insure as long a

life as possible. One executive we know instructed each field worker to walk around the car once every time he intended to drive it and make sure that each tire was well inflated. That executive claimed he operated his fleet of two-years-old-when-purchased cars for three cents a mile.

Sometimes a saving has been possible in buying gasoline, either by getting it wholesale and storing it in the garage if the agency has a number of cars, by purchasing coupon books at a discount, or by arranging for charge accounts at a discount with a reputable firm. Oil can be bought in drums at wholesale. Then the car can be filled at the agency's garage much more cheaply than at filling stations.

The social agency with a large number of cars operated either by itself or by its staff members can save a large amount on liability and collision insurance by insuring on the "fleet" basis.

In automobile operation, as in every other phase of social agency management, vigilance and good judgment can save money and make funds go farther than would otherwise be possible.

QUESTIONS

1. In some typical social agency which has workers in the field, how does the office help in routing them?
2. What use is made of pin maps for visits?
3. What allowance is made for bus and taxi fare?
4. How does this agency decide when to use an automobile?
5. If the agency is buying a car, how does it decide on what kind to purchase?
6. How does it determine when to buy a new car to replace an old one?
7. What arrangement is made with workers if they use their own cars?
8. What methods are followed in the purchase of supplies and in servicing?
9. How might any of these practices be improved?