

EMPLOYMENT, MOBILITY, AND PUBLIC TRANSPORTATION IN CHICAGO: A SURVEY OF ATTITUDES AND BEHAVIOR

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An interview survey was conducted in Chicago to determine the relationships between employment status and mobility and to determine whether the employed differed from the unemployed in terms of their attitudes toward and experiences with the public transportation system. Differences in accessibility to the transit system on the part of the two groups are investigated, and dependence on public transit for the trip to work is also studied. The influence of the transit system on job search patterns is determined, and comparisons are made between the employed and unemployed. The extent to which the two groups differ in knowledge of the system and the effects of this knowledge on their travel choices are examined. Finally, quality of transit service is rated along several dimensions for each group of respondents, and differences are analyzed. The results are reviewed in terms of their contribution to a project that has the objective of reducing unemployment in Chicago by improving the public transit system so as to provide a better linkage between the unemployed and available jobs.

•MUCH CONSIDERATION has been given in recent years to the transportation systems of U. S. cities as causal factors and possible sources of relief in the problem of chronic unemployment. Analyses based on economic theory and studies of aggregated travel data and transportation system parameters have demonstrated that unemployment rates and levels are related to levels and costs of accessibility between residences and job locations. It is generally agreed that during recent decades the poor, unemployed, and underemployed have become concentrated in the ring surrounding the downtown business districts of most U. S. cities. Although these areas are relatively well served by public transportation, most public transportation systems are oriented toward the downtown area. In addition to the residential concentration of the poor, however, the decades since the end of World War II have seen a marked decentralization of industry within major metropolitan areas. In particular, many of the firms relocating in outlying areas of the cities and in the suburbs appear to be those that employ large numbers of blue-collar workers and unskilled laborers, while those remaining in the downtown areas provide jobs principally for white-collar and more highly trained workers. Thus the poorer, unskilled workers, who are more dependent on public transportation, must use systems that provide access to the jobs for which they do not qualify but not to the jobs for which they do qualify. The higher income residents of outlying areas, on the other hand, are provided a choice between public transportation systems and their automobiles to get to downtown job concentrations.

Many large cities, including Chicago, are studying this situation to develop system modifications and new strategies to establish a better linkage between outlying employment sites and the concentrations of unemployed and underemployed. If these linkages are established, it is hoped that the unemployed will be able to search farther and more successfully for jobs, that employers will be better able to fill job vacancies when they occur, and that transit operators will be able to tap additional sources of

much-needed revenue. In several cities, including Chicago, federally aided demonstration programs have been implemented to determine whether these objectives can be met.

Important aspects of the problem of unemployment and transportation that have been relatively unstudied are the travel behavior and attitudes of the unemployed, their familiarity with existing transportation systems, and their personal experiences with transportation services as factors in searching for and holding jobs. The extent to which the behavior, attitudes, and experiences of the unemployed differ from those of the employed have important implications for the possible success of transportation-related solutions to the unemployment problem. For this reason, a survey of these factors was included in the study of transportation and unemployment in Chicago.

A major reason for the scarcity of previous studies of this nature is the difficulty of devising meaningful sampling strategies and the requirement of imposing lengthy interviews on citizens who have been surveyed often but have rarely seen benefits arise from their participation in such studies. The unemployed are not a homogeneous group in terms of location, experience, or attitude, and so any sampling technique is likely to introduce bias into the study results. The study reported on in this paper was conducted with recognition of these problems but with practical considerations of logistics and time dominating the survey strategy. The results, therefore, must be regarded as hypotheses, rather than firm conclusions.

SURVEY OBJECTIVES AND SAMPLING

The survey consisted of an interview of about 10 to 15 min duration. The interview was administered to unemployed and employed subjects at the Urban Progress Centers and Training Division facilities of the Chicago Committee on Urban Opportunity (CCUO). Separate questionnaires were utilized for employed and jobless respondents, and each questionnaire had essentially three portions. The first part of the survey, for both employed and unemployed, consisted of questions related to the social and demographic characteristics of the respondents and to the accessibility of their residences to the transportation system of Chicago. The second section of the survey differed for employed and unemployed respondents. For the employed it concentrated on mode, cost, and time aspects of the trip to work, and the effects of the transportation system in influencing patterns of search for alternate employment opportunities. For the jobless, the second portion of the survey concentrated on the influences of accessibility on previous and current job searches. The third and final portion of the survey was administered in the same form to both employed and unemployed subjects. This section of the study dealt with the respondent's perception of the quality of service provided by the public transportation system in Chicago and his familiarity with the transportation system and with the city itself. It also sought relationships between these responses and the relative mobility and travel experience of the subjects.

An attempt was made to interview a sample of respondents that included unemployed subjects who were fairly typical of the jobless citizens of Chicago, and employed persons who lived in areas that were proximate to areas of high unemployment and that, therefore, had similar overall accessibility. The CCUO provided support by allowing its staff members to conduct the resulting 297 interviews at three locations. These locations included their central city job-training facility, the Woodlawn Urban Progress Center on the south side of the city, and the Montrose Urban Progress Center serving the midnorthern section of the city. The areas surveyed thus include the three major residential concentrations of the unemployed in Chicago: the south-side and west-side black communities and the concentration of Appalachian whites in the midnorthern portion of the city. Table 1 gives the distribution of the interviews that were conducted by location and by employment status of the respondents.

It is important to recognize that by adopting the sampling technique described in the preceding a very special group of unemployed persons was contacted. These people had generally come to CCUO to seek assistance in finding work, and thus they represent that portion of the unemployed population that is actively seeking work and that would have a great deal to gain from transportation system improvements if, in fact, transportation is a major factor limiting their employment opportunities. Similarly, the

employed respondents were drawn from CCUO program participants and in some cases were employees of CCUO. This fact may bias the sample, but it should not make it impossible to compare mobility experiences and attitudes among the respondents for the sake of formulating some hypotheses about the differential impact of the transportation system on the employed and the jobless residents of similar neighborhoods.

TABLE 1
SUMMARY OF INTERVIEWS BY LOCATION AND
EMPLOYMENT STATUS

Location	Employed	Unemployed	Total
Woodlawn Urban Progress Center	27	46	73
Montrose Urban Progress Center	58	71	129
CCUO Training Center	53	42	95
Total	138	159	297

Characteristics of the Surveyed Population

Comparisons of the socioeconomic characteristics of the employed and unemployed respondents are given in Table 2. More than half of the unemployed sample consisted of men, and little more than one-third of the employed sample consisted of men. Although this distribution between sexes may have arisen because of the way in which the samples were contacted, it is not atypical of a population of job-seekers and employed persons in the economically disadvantaged areas of Chicago. For example, an in-depth survey of a west-side area of high unemployment by the U. S. Bureau of Labor Statistics showed that there are 100 females for every 74 males over age sixteen residing in that area (1), and one would expect a higher proportion of unemployed men to be seeking work actively.

The unemployed respondents were generally younger, having a mean age of 28 years, compared to 34 years for the employed. The age difference is further illustrated by the fact that nearly one-third of unemployed respondents were under 20 years of age, while only 5 percent of the employed subjects were under 20. The unemployed are seen to have significantly lower levels of education, with only one-fourth having completed high school, while more than two-thirds of the employed respondents had completed high school.

Data given in Table 2 show that racial composition of the employed and unemployed respondents were not significantly dissimilar. The proportion of black respondents in each case exceeded one-half, and the proportion of white, English-speaking subjects

TABLE 2
SUMMARY OF CHARACTERISTICS OF RESPONDENTS

Category	Employed			Unemployed		
	Men	Women	Both	Men	Women	Both
Age						
Avg number of years			33.7			28.2
Under 20 years, percent			5.1			32.9
Sex, percent	37.7	62.3		53.5	46.5	
Race, percent						
Black	57.7	60.5	59.4	45.9	62.2	53.5
White, English speaking	32.7	27.9	29.7	43.5	25.7	35.2
Spanish speaking	9.6	5.8	7.3	1.2	5.4	3.1
Other	0.0	5.8	3.6	9.4	6.7	8.2
Educational attainment, percent						
Eighth grade or less			2.1			15.8
Some high school			29.0			59.7
High school graduate			68.9			24.5
Family status						
Head of household, percent			65.9			59.7
Avg number of persons in household			4.2			3.8
Avg number of persons, excluding respondent, employed full- or part-time			1.1			0.9
Graduate of job-training program, percent			26.8			20.3

was about one-third for each group. Among both employed and unemployed groups, black women outnumbered black men, and white men constituted a larger portion of each sample than white women.

Data given in Table 2 also show that a slightly larger proportion of the employed respondents were heads of their households than were the unemployed; perhaps this reflects the larger proportion of the unemployed who were under 20 years of age. The employed tended to come from larger families, with an average household size of 4.2 people as compared to 3.8 for the unemployed. Excluding the respondents, an approximately equal proportion of the household members of each group of respondents were employed in full- or part-time jobs. About one-fifth of the unemployed were graduates of some type of job-training program, while more than one-fourth of the employed respondents had completed a job-training program.

The differences between the employed and unemployed survey samples were quite typical of the differences generally recognized to exist between the inner-city employed and unemployed. The unemployed were younger, exhibited lower levels of educational attainment and job training, and were less likely to be heads of households. The racial mixture of the samples appeared to be typical of Chicago inner-city dwellers.

RELATIVE MOBILITY OF EMPLOYED AND UNEMPLOYED

Because this survey was part of a study to estimate the possible benefits that might accrue to the unemployed as a result of increased accessibility to available jobs, a comparison was made of the two groups of respondents in order to uncover any obvious relationships between accessibility and employment status. The information that forms the basis for the comparison is given in Table 3.

It is clear from data given in Table 3 that the employed are significantly more mobile than the unemployed because of their access to automotive transportation. The proportion of the employed subjects having drivers' licenses (54.3 percent) was more than twice the proportion of the unemployed with licenses (25.2 percent). More than three-fourths of the unemployed stated that they never have a car available for use, while less than half of the employed reported that they never have access to a car. Furthermore, 23.2 percent of the employed respondents reported that they drove to work regularly. Because only 25.4 percent of the employed reported that they always have a car available, virtually every person in this group who can drive to work does so.

One cannot conclude from the foregoing data that car ownership is a causal factor in employment. Rather, it is more likely that being employed provides some with the financial means to acquire a car. Once obtained, however, it appears likely that a car will be used in the journey to work. Thus, the public transportation system may serve as a stepping stone to the acquisition of a car. If it makes work available to the unemployed, it is likely that these people may later, on achieving car ownership, choose not to continue to use the service that helped to make employment and car ownership possible. One may not conclude from these data, however, that investment in public transportation facilities to link the unemployed with jobs is bound to fail because of

TABLE 3
RELATIVE MOBILITY OF EMPLOYED AND UNEMPLOYED

Item	Employed	Unemployed
Percentage of respondents		
Holding drivers' licenses	54.3	25.2
Having automobiles always available	25.4	10.1
Having automobiles sometimes available	26.8	12.6
Having automobiles never available	47.8	77.4
Using bus stop nearest home	84.1	84.3
Walking to nearest elevated station	42.0	73.6
Taking bus to nearest elevated station	52.2	23.2
Taking automobile to nearest elevated station	5.8	3.1
Average number of minutes		
To walk to nearest bus stop	4.8	5.0
To nearest elevated station	12.5	10.9

declining ridership after jobs are obtained. About 64 percent of the employed respondents did use public transportation facilities in the journey to work.

Table 3 also gives information showing that the employed and unemployed respondents did not differ significantly in terms of the accessibility of their residences to the public transportation system. Both groups had to walk an average of about 5 min from their homes to the nearest bus stop, and about 84 percent of each group did use the nearest bus stop to their homes as the point at which they most frequently entered the system. Less than half of the employed walk from their homes to the nearest rapid transit station, while about three-fourths of the unemployed walk to the nearest rapid transit. The mean time of access to rapid transit, however, was found to be 10.9 min for the unemployed and 12.5 min for the employed. Detailed analysis of access time to rapid transit by mode of access showed no statistically significant difference in the time distributions by mode of access. The unemployed, who were more likely to walk to the rapid transit, were living closer to rapid transit facilities and, on the average, had a shorter trip to those facilities.

The employed and unemployed respondents, thus, appear to have about equal access to the public transportation system of Chicago. This is not surprising, because public transportation, and especially the rapid transit system, is focused on the central city and, thus, is likely to frequently penetrate the inner-city residential areas in which the respondents were concentrated. This finding does not mean, however, that the public transportation system provides adequate access to available jobs, because many jobs suitable for those with low skills are situated away from the central city focus of the transportation system. This situation will be investigated in the following section.

IMPACT OF MOBILITY ON EMPLOYMENT STATUS

Although the employed and the unemployed appear to reside in approximately equal proximity to the public transportation system of Chicago, it is possible that the characteristics of the system are still serving as a barrier between the jobless and jobs. Table 4 gives the skill categories of the jobs held by the employed and the skill categories in which the unemployed are seeking work. Notice that the employed respondents are concentrated in the white-collar positions, while the unemployed are principally seeking blue-collar positions. This difference is statistically significant at the 99.9 percent level. Because the routes of the Chicago Transit Authority are largely focused on the downtown area, where most of the jobs are in the white-collar categories, the data might imply that the system favors those who are qualified for white-collar positions. Perhaps equal access is not provided to the blue-collar positions that may be available but that are increasingly concentrated in the outlying areas.

Table 5 gives the findings of the survey that relate job-search patterns of the employed and unemployed respondents. About one-tenth of those currently employed were actively seeking new positions, and all of the unemployed respondents were looking for work. About half of the unemployed respondents and more than 90 percent of the job-seeking employed subjects said that they did want to find work in special areas of the city. Virtually every respondent seeking work in particular areas of the city cited reasons related to accessibility as accounting for their interest in particular locations. "It's close to home" or "it's easy to get to" were the principal reasons cited. It is not surprising that the employed job-seekers were likely to have an interest in special areas, because they were already employed and could therefore afford to be more selective about a new position.

About one-fifth of the unemployed and one-sixth of the employed respondents said that they now knew of jobs that they would take if they had ways of getting to them more easily. An even larger proportion (39 percent of the unemployed, and 17 percent of the employed job-seekers) reported that they had not applied for or taken jobs that they

TABLE 4
DISTRIBUTION OF SKILL CATEGORIES

Skill Category	Employed (percent)	Unemployed (percent)
Professional	18.8	5.0
White collar, nonprofessional	64.5	22.6
Blue collar, skilled	4.3	14.5
Blue collar, unskilled	12.4	57.9

TABLE 5
IMPACT OF MOBILITY ON JOB SEARCH

Item	Employed (percent)	Unemployed (percent)
Respondents actively seeking jobs	9.4	100.0
Respondents actively seeking jobs but looking in special areas of the city	92.3	48.1
Respondents knowing of other jobs they would take now if they could get to them more easily	15.9	19.6
Jobs known of located in the suburbs	64.3	54.2
Respondents not applying for or accepting jobs during the past year for accessibility reasons	17.4	39.2
Respondents not applying for or accepting jobs for accessibility reasons who said this was true of more than half the jobs they applied for	42.3	37.5
Reasons cited by respondents not applying for or accepting jobs (several reasons may have been cited by each respondent)		
Takes too long	75.0	66.1
Costs too much	41.7	46.9
Too many transfers	37.5	20.9
Waits too long	29.2	33.9
Need a car	20.8	54.8
Do not like to ride CTA	16.7	4.4
Have no way to get there	16.7	40.1
Other	12.5	16.1
Do not know location	4.2	25.8

had learned of during the past year because of accessibility problems. Of these respondents, approximately 40 percent of both the employed and unemployed groups reported that this problem occurred with respect to more than one-half of the jobs for which they applied. These relatively high proportions demonstrate that mobility is of great importance in seeking and retaining a job.

It is interesting to note that, of the jobs of which the respondents were now aware but which they were not taking because of accessibility problems, more than one-half were located in the suburbs of Chicago. Because the major proportion of the employed and unemployed groups relies on public transportation for the trip to work and because the CTA system serves very few suburban areas, long travel times and multiple fares are usually associated with transit trips to the suburban areas. The importance of this problem is clearly demonstrated by the foregoing data.

Among those who, for reasons of mobility, had not applied for or taken jobs of which they were aware, two-thirds of the unemployed and three-fourths of the employed cited travel time as a reason for not applying. The need for a car to reach job locations was cited by more than one-half of the unemployed respondents, and more than 40 percent of both groups responded that travel costs were among reasons for not taking these jobs. There is no doubt that job-seekers perceive the transportation system to be a major barrier to the finding of suitable employment.

It is important, in a city as complex as Chicago, to be aware of sources of information that are available to help one locate unfamiliar addresses. If, for example, one knows how to obtain information about an efficient means of travel to an unfamiliar destination at which a job might be available, chances for eventually finding satisfactory employment are improved. In order to determine whether the employed and unemployed differ in their knowledge of information sources about public transportation, each respondent was asked if he knew how to get from his home to 2700 North Berman Avenue—a fictitious address. If he answered that he did know how to get to this address, he was asked how he would get there by means of the CTA; if he did not, he was asked how he would find out about getting there.

Interestingly, about one-tenth of the unemployed and employed respondents said that they knew how to find this fictitious address. At first glance, this result might appear to invalidate the question, but actually it revealed part of the information system used in locating unknown addresses. When asked how to get to this fictitious location, these respondents generally said that they would take the north-south bus or rapid transit line

nearest to their home and get off at 2700 North. They would then ask someone (most often the bus driver) whether to walk east or west to Berman Avenue. Although this is a somewhat unreliable search pattern, it is quite rational and reflects knowledge of the regular grid and street numbering system of Chicago.

The remaining 90 percent of the subjects stated that they did not know how to get to the fictitious address and were questioned as to how they would find out about getting there. The results of this question are given in Table 6. The data show that the employed respondents were more likely than the jobless to telephone the CTA travel information number or to consult a published street guide or a map. The unemployed were more likely than the employed to rely on questioning a policeman, a bus driver, or a friend. The employed, therefore, appear to be more aware of "authoritative" information and are less dependent on personal contacts in finding out about how to utilize the public transportation system. (This interpretation may, of course, reflect the middle-class bias of the researcher.)

The extent to which the unemployed are relatively immobile with respect to the employed is further reflected by the finding that the unemployed were significantly less likely to have ever visited four well-known Chicago cultural and recreational landmarks. Table 7 gives information showing that a smaller percentage of unemployed than employed respondents had visited the Museum of Science and Industry, the Lincoln Park Zoo, a Lake Michigan beach, and the Museum of Black History. Chi-square tests showed that car availability was significantly related, at the 95 percent level, to the percentage of respondents who had visited each facility except the Museum of Black History. Table 7 also gives data showing that the employed were more likely than the unemployed to have traveled by automobile to visit these facilities. No other variable was as strongly related to these responses, although tenure of residence in Chicago was also positively related to the proportion of respondents who had visited the listed facilities. Once again, this finding points out the relationship of mobility to the cycle of poverty. Employed

TABLE 6
METHODS OF FINDING OUT HOW TO REACH
A DESTINATION

Method	Employed (percent)	Unemployed (percent)
Call CTA information	49.3	39.9
Look at map	32.6	23.4
Look at street guide	11.6	3.8
Ask a friend	13.3	14.5
Ask a policeman	4.3	11.4
Ask at Urban Progress Center	3.6	4.1
Ask bus driver	27.5	47.2
Do not know	0.0	3.8

Note: Respondents could cite several of the methods.

TABLE 7
VISITATION TO CHICAGO CULTURAL FACILITIES

Facility	Travel Mode	Employed (percent)	Unemployed (percent)
Museum of Science and Industry	Car	48.8	29.2
	Train	6.0	3.4
	Bus	33.5	36.8
	Other	3.7	3.4
	All modes	92.0	72.8
Lincoln Park Zoo	Car	51.1	34.5
	Train	4.0	2.2
	Bus	30.8	33.2
	Other	6.1	6.0
	All modes	92.0	75.9
Lake Michigan Beach	Car	50.5	31.5
	Train	3.4	1.1
	Bus	23.7	20.1
	Other	12.2	26.4
	All modes	89.8	79.1
Museum of Black History	Car	24.3	17.3
	Train	3.3	1.4
	Bus	13.4	11.6
	Other	2.5	0.7
	All modes	43.5	31.0

persons are much more likely to have access to an automobile that, in turn, makes it easier for them to travel to various parts of the city. The unemployed are less mobile, travel less, and therefore become less familiar with the city. This lack of familiarity may make it more difficult for them to find employment and thus to break out of the cycle.

ATTITUDES TOWARD PUBLIC TRANSPORTATION SERVICE

The extent to which the employed and unemployed citizens of Chicago differ in their evaluations of the quality of service provided by the CTA is of interest in this study for at least two reasons. First, these attitudes might serve as a causal factor in unemployment. If, for example, the CTA is perceived to be more costly, less comfortable, slower, and less safe by the unemployed than by the employed, it is possible that this view has made the unemployed reluctant to accept positions that would require extensive travel on the system. Similarly, such attitudinal differences might indicate that certain aspects of bus and transit service might require special attention in the implementation of public transportation improvements, if such improvements are to contribute to the reduction of unemployment.

All respondents were asked to rate each of eleven characteristics of CTA service on a 5-point scale ranging from 0, the most unfavorable rating, to 4, the most favorable rating. Table 8 gives the ratings for the eleven characteristics obtained by taking the mean of the responses to each characteristic.

Particularly low ratings of CTA service, by both employed and unemployed, were obtained in the cases of crowding and cost. Both of these groups gave the most favorable scores to the frequency with which transfers are required and to the safety of the system with respect to the probability of being involved in an accident.

The unemployed gave more favorable ratings to the CTA for eight of the eleven characteristics that were considered, with the differences in the other three being negligible. The Kolmogorov-Smirnov test showed that four of the variables had distributions that were significantly different at the 95 percent level. In each of these cases, the ratings of the unemployed respondents were more skewed toward the favorable end of the scale than those of the employed subjects. Thus, the unemployed generally rated CTA service more favorably than the employed, but they were especially more favorable in their consideration of waiting time for buses and trains, reliability of CTA service, comfort, and the chances of being the victim of a crime. It is difficult to estimate whether these differences result from greater exposure of the CTA to the employed, who are likely to make a greater number of trips than the unemployed or from greater exposure of automobile transportation to the employed, who have greater access to automobiles. A more favorable rating for travel time and reliability on the part of the unemployed may

reflect the importance to the employed of reaching work at a specific starting time or a higher value of time because of the opportunity to put their time to economically productive use. If these hypotheses are correct, one would expect the responses of those currently unemployed to be subject to change if they were to become employed. Either of these hypotheses is plausible but difficult to verify. In any case, one cannot conclude that an attempt to relieve unemployment through transportation system modification is unreasonable because of unfavorable attitudes toward public transportation on the part of the unemployed. They appear to be more favorably disposed toward the performance of the system than are the employed.

Further investigations were made to determine if characteristics, other than

TABLE 8
MEAN RATINGS OF THE QUALITY OF CTA SERVICE

Service Characteristic	Rating ^a	
	Employed	Unemployed
Speed of CTA	1.551	1.804
Waiting time	1.428	1.918 ^b
Frequency of transfers	2.471	2.348
Reliability	1.464	2.006 ^b
Cost	0.732	0.627
Cleanliness	1.210	1.500
Newness	1.630	1.709
Crowding	0.507	0.475
Comfort	1.355	1.880 ^b
Chances of crime	1.964	2.297 ^b
Chances of an accident	2.159	2.506

^a0 = most unfavorable and 4 = most favorable.

^bDifferences between employed and unemployed that were statistically significant at the 95 percent level.

employment status, strongly influenced the respondents' evaluations of the services provided by the CTA. Chi-square tests were performed to determine whether variables such as age, sex, car availability, educational attainment, and tenure of residence in Chicago were significantly related to ratings of the CTA service. Very few significant relationships were found, but the few that were discovered are of interest. Educational level was positively related to ratings of reliability, crowding, comfort, and frequency of transfers but was negatively related to speed of CTA service (all at the 95 percent level of confidence). In general, the respondents with higher levels of education, within both employed and unemployed groups, were more favorably disposed toward public transportation than those with less education. This finding is consistent with the results of previous surveys of residents of the Chicago metropolitan area (2).

CONCLUSIONS

The results of the survey delineate several aspects of the complex relationship between unemployment and transportation that may not be obvious from the study of aggregated statistics. Several widely held hypotheses about these relationships are upheld by the data, and a few new insights may be drawn from them. Finally, some recommendations may be made, based on the survey results, with respect to the possibility of implementing changes in the public transportation system of Chicago to help remove the mobility barriers between geographic concentrations of the unemployed and locations of job concentrations for which these unemployed groups are suited.

First, the data uphold the hypothesis that the unemployed are significantly less mobile than the employed and that this difference in mobility may be a cause as well as an effect of unemployment. Although both groups of respondents appear to be equally accessible to public transportation, the public transportation systems appear to provide insufficient access to concentrations of jobs, particularly those concentrated in suburban areas. In addition, the unemployed are definitely less accessible to automobile transportation than are the employed, with the resulting consequence that the unemployed are significantly hampered in searching for and taking jobs.

The survey data alone do not permit the conclusion that new links in the public transportation system will significantly decrease unemployment or that such links will be heavily utilized. The findings do show, however, the quality of service provided by the CTA is viewed as favorably by the unemployed as by the employed. If new links do perform as well as existing routes and if they connect areas of unemployment with concentrations of available jobs, it is likely that they will provide the opportunity for many unemployed persons to seek jobs now not accessible to them.

Results of the study also demonstrate the likelihood that the unemployed are less knowledgeable than the employed as to the characteristics of the CTA system and the available ways by which to find out about the system. It, therefore, seems reasonable to suggest that improvements to the system be widely publicized and that efforts be made specifically to bring information to the communities in which the unemployed, who are potential beneficiaries of these improvements, may be residing.

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REFERENCES

1. Poverty: The Broad Outline. Bureau of Labor Statistics, U. S. Department of Labor, Report 2 of the Urban Employment Survey, Chicago, March 1970.
2. Wachs, M. A Survey of Citizens' Opinions of the Effectiveness, Needs, and Techniques of Urban Transportation Planning. Highway Research Record 229, 1968, pp. 65-76.