Finding Transportation Solutions for the Emergency Housing Project

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Field Problems in Planning 102:210
Graduate Program in Urban & Regional Planning
The University of Iowa

May 2002
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Prepared for: Emergency Housing Project
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Executive Summary

The Emergency Housing Project (EHP) is the only general homeless shelter in Iowa City, Iowa. EHP staff has expressed concern that access to transportation is a barrier to sustained economic independence for EHP clients. This report examines this problem and attempts to determine appropriate solutions.

Several steps were completed to determine the needs of EHP clients and where transportation gaps exist. First, our group conducted a literature review to identify some general theories and ways to solve problems faced by individuals with low- and very low-income. This section does not appear in the final report; however, it is worth mentioning here because it did help in guiding the direction of the project.

The second step was developing a methodology for completing primary data collection. There were three major components to the methodology: travel diaries, focus groups, and expert interviews. EHP staff members as well as our research group conducted the travel diaries. This component was attempting to determine the every-day travel patterns of EHP clients. We found through the diaries that clients access a variety of different places in the Iowa City area. Clients mainly access transportation for travel to employment and social service agencies. In addition to these necessary trips, many individuals reported using Iowa City’s downtown public and quasi-public facilities (i.e. the Iowa City Public Library and Old Capital Town Center) due to their proximity to the shelter. Most clients used public transportation or walking to get to their destinations. However, some received rides from friends or family members as well as hiring taxis. According to the travel diaries, problems were limited. However, this may be due to recall problems and time constraints. Some clients mentioned that walking was difficult during the winter months. Also, it was found that persons with young children had more difficulty making trips.

Focus groups comprised the second component of the methodology. Our group conducted this research. Two focus groups were held at EHP and consisted entirely of their clients: one with primarily single persons and one comprised of families. The aim of this component was to gather further detail on the problems identified in the travel diaries. Also, the focus groups were meant to provide discussion, which may help solve recall problems. This research provided us with some additional information on the problems clients faced in their day-to-day travel. First, many clients stressed that coordination between area transit providers has been poor at best. Second, there was a general concern from clients that not enough information was available regarding transit routes and schedules. Clients also expressed displeasure with the frequency (or lack thereof) of service especially during the weekend.

Finally, expert interviews were conducted with area transit agencies, social service agencies, and businesses. This component of the methodology attempted to gain a better understanding of how experts felt about either transporting or hiring EHP clients. They also helped us to determine the services that clients accessed on a regular basis. We found that many businesses are open to hiring EHP clients for entry-level positions. We
interviewed transportation agencies and experts to determine the state of the overall system and what was being done to help EHP clients. This research revealed that transportation agencies were helping to transport EHP clients by distributing free and half-priced bus tickets to the agency. There are no current plans to expand public transit service due to budget constraints.

From the methodology we identified three transportation gaps — spatial, temporal, and client specific gaps. Spatial gaps refer to the layout of Iowa City and how it constrains clients' travel patterns. Temporal gaps focus on a client's ability to access a destination at all hours that it is in operation. Finally, client specific gaps refer to the specific characteristics of EHP clients that magnify shortcomings of the transportation system. For example, mental and physical disabilities constrain some clients' ability to use transportation effectively.

We have also identified major destinations of EHP clients from the research that was conducted. Clients are making trips to work, social service agencies, health care facilities, housing appointments, and other miscellaneous trips (i.e. to the grocery store and downtown public and quasi-public facilities). Four major employment centers were discovered during this process. They are: Coral Ridge Mall Employment Center, First Avenue (Coralville) Employment Center, North Dodge Employment Center, and Southeast Industrial Employment Center. Major non-employment destinations were also identified; however, there is not as much of a clustering effect in these instances. We found that specific gaps exist for each of the clusters and analyzed how they affected transportation to these areas.

From all of our research, findings, and instructions from the client we have determined a set of recommendations. There are two sets of these recommendations — transportation-based and non-transportation-based solutions. The transportation solutions include starting a shuttle service, using limited amounts of taxi service, and continuing to encourage usage of the transit system. It is also important to note that our group recommends that EHP pursue any efforts to expand the existing transit service. The non-transportation solutions include increasing information to clients, continuing to provide free and low-cost bus tickets, increasing the number of these tickets, and pushing for better scheduling of client appointments so the transit system could be used more efficiently. All of these recommendations were put through a feasibility analysis and met the six goals of our project. These goals are ability to fill the existing gaps, low cost to EHP, flexible, reliable, low risk to EHP, and high degree of control by EHP.

Overall, our project met these goals with few shortcomings. There were some problems primarily with completeness of information. Virtually no current demand information is available for the area's transit service. Also, the fluidity of cliental make it difficult to predict what problems will appear on a consistent basis. Overall, the set of recommendations will provide a general supplement to the existing transportation system and should help to ease the difficulties clients' experience traveling around the Iowa City area.
I. INTRODUCTION

The Emergency Housing Project (EHP) is the only general use shelter in Johnson County, Iowa. Local faith communities, the City of Iowa City, and various human service agencies founded EHP in 1983. The Emergency Housing Project provides shelter to 30 men, women, and children every night of the year. Approximately 700 homeless persons come through EHP’s doors every year. Residents can stay at EHP for a maximum of 90 days and must abide by house rules, such as saving 75% of any money then earn while living at EHP. The mission of EHP is to alleviate problems of the homeless and provide access to the resources that will lead to the empowerment of the individual.

EHP staff has identified lack of access to transportation as a barrier to sustained economic independence for EHP clients. The majority of EHP residents do not have access to a car and taxis are an unaffordable alternative. Therefore, clients generally must walk, bike, or use public transportation in order to meet their travel needs. According to EHP staff, these transportation options are inadequate for EHP clients.

In order to help clients connect with local jobs and services, EHP has requested that our Field Problems group investigate the inadequacies of the current transportation system. Our group is charged with ascertaining the transportation needs of EHP clients and making recommendations on how EHP could effectively and cost-efficiently provide transportation services that fit their needs. Thus, the purpose of our project is to identify transportation gaps faced by EHP clients and to recommend solutions for filling those gaps.

EHP staff requested that we focus on the transportation needs of EHP residents, but also consider the needs of a broader constituency whose transportation needs are not adequately met. EHP already provides supportive services to other individuals in need—not just persons living at EHP—who could also stand to benefit from improved transportation. According to EHP Services Coordinator Kafi Dixon, the transportation service is most important for increasing access to jobs and secondly, for accessing medical appointments, child care services, and social service agencies. Our Field Problems group incorporated this priority into our project by focusing on the accessibility of major employment clusters separately from the issue of accessibility to the other non-employment destinations.

Project Research Questions: Who? Why? What can be done?

Through focus groups, interviews, travel diaries, and other research, our group answered the three research questions: Who? Why? What can be done? We identified who was falling through the cracks of the existing transportation systems. We identified why these persons were inadequately served by looking at their characteristics, the spatial layout of their activities, and the existing transportation services. Finally, we recommended an appropriate transportation solution for EHP based on our findings.
II. BACKGROUND

The Background section of our report is intended to provide the context for understanding the physical, social, economic, and political environment in which our project is rooted. This section provides a brief description of the relevant background information for our project. Special attention is paid to EHP client characteristics, EHP facilities and resources, the Iowa City area, and local transportation systems.

EHP Client Profile

EHP reported that 668 of the 835 (80%) persons residing at EHP throughout 1998 were adults living alone. On October 5, 1999, only about 42% of EHP’s residents were adults living alone. These very different percentages indicate the fluidity and ever-changing demographics of EHP residents. EHP served 82 children and their families and approximately 148 (20%) of EHP clients were women in 1999. EHP reports that a growing number of single mothers are being sheltered, representing a deviation from the past when single adult males were the primary clients. Nationally, children and families make up the fastest growing segment of the homeless population (Institute for Children and Poverty, 2001).

EHP client characteristics will be an important factor in determining the appropriateness of different transportation options. Based on EHP records from years 1998 through 2000, approximately 75% of EHP clients are male, 15% are women, and 10% are children. Also, approximately 69% of clients are new to the Iowa City area, about 17% of clients are transients (the remaining 83% would like to make Iowa City home), and about 40% of clients have special needs (including mental illness, substance abuse, and/or a medical disability).

National data provides a more detailed picture of homelessness. A 1996 survey of 2,938 homeless persons nationwide found that about 57% of the homeless struggle with mental health issues, 62% struggle with alcohol addiction, 58% struggle with drug addiction, 46% suffer from other health problems, and 55% have no medical insurance. In this same survey, 19% of persons reported that transportation assistance is one of the things they need the most. Another 42% reported that assistance finding a job was what they needed the most. The average income of homeless clients was $367 per month (Burt, 1999).

Employment Characteristics of EHP Residents

Between 66% and 75% of EHP clients are employed at any given time (EHP, 2001). EHP staff work primarily with local temporary agencies to find employment for clients. At any given time, 6 people may be working second and third shift jobs. Clients find jobs at a variety of different firms in multiple employment centers in the Iowa City area. Clients usually must walk, ride a bike, use public transit, call a cab, or get a ride in order to reach jobs. Our Field Problems group researched work travel patterns and destinations of EHP clients in detail and our findings are discussed in findings section of this report.
Impact of EHP Client Profiles on Transportation Needs

The very limited financial resources and high proportion of special needs groups are defining factors for assessing the transportation needs of EHP clients. The majority of EHP residents do not have access to a car or money to afford a cab. As a result, EHP residents must generally rely on public transportation and walking to get around town. However, many EHP clients have health problems, physical disabilities, or are traveling with young children, which impacts their ability to walk and use public transportation effectively. Thus, our recommended mobility strategies will address these characteristics of EHP clients.

Homelessness in the Iowa City Area

Over the entire year of 1999, the City of Iowa City estimates that there were approximately 1,173 individuals in Iowa City’s two adult emergency homeless shelters: EHP and the Domestic Violence Program’s emergency shelter (City of Iowa City, 2000). According to EHP data, more than 65% of all homeless persons in Iowa City are from places other than Johnson County. Persons that are from Johnson County usually become homeless because of job loss and family break up (MacDonald, 2000). Homeless persons in Iowa City are also characterized by substance abuse problems, mental illness and physical disability (MacDonald, 2000).

The homeless that come from outside Iowa City often come to receive medical attention from one of Iowa City’s three hospitals, to access the highly regarded school system, to enjoy the community’s high quality of life, or to obtain good jobs and decent, affordable housing. Unfortunately, many newcomers find that they are competing with students for the limited affordable housing, that many of the available jobs are low-paying and temporary service jobs, and that some of the community’s health services have long waiting lists. Thus, a move to Iowa City may involve a transition period in EHP, Johnson County’s only general use homeless shelter.

EHP Programs and Resources

EHP is located in a large single-family style home near downtown Iowa City and within a ten-minute walk of the central transit exchange. EHP’s facility is inadequate for serving all the homeless in Iowa City and persons must be turned away everyday. EHP’s facility is also insufficient for serving families due to lack of privacy and space. There also is no parking lot on EHP property, so staff must park on the streets. EHP faces severe financial constraints and very limited resources.

EHP operates Johnson County’s only evening drop-in center, serving dinner to all who “drop-in” between 5PM and 10 PM daily. EHP collaborates extensively with other local agencies to meet the diverse needs of clients. Community Mental Health, Mid-Eastern Council on Chemical Abuse (MECCA), and University of Iowa nursing students provide weekly outreach on-site. Alcoholics Anonymous meetings are also held on-site every week. Thus, EHP is able to provide clients access to substance abuse treatment, health
screenings, and mental health services. EHP staff provide extensive one-on-one counseling and assistance with employment, housing, and day care, referrals, and other supportive services as needed.

EHP collaborates with over 20 agencies to provide coordinated job training, preparation, and placement for chronically homeless residents through its Supported Training and Access to Resources (STAR) program. Clients receive training wages for up to 3 months and have access to resources (i.e. childcare, transportation, and substance abuse treatment) to overcome barriers to employment. The goal of the program is to provide job skills and job references. This comprehensive program is an excellent employment resource, but unfortunately only about 2 or 3 EHP clients are permitted into the program at any given time.

EHP Funding

EHP operates on a $299,525 yearly income and has no reserve funds (Canganelli, 2002). Approximately 34% of EHP funding comes from local funding sources. The largest local funders are United Way ($31,250 in 2000) and faith groups ($28,754 in 2000). Less than 13% of their budget comes from the City of Iowa City, Johnson County, and the City of Coralville. Approximately 27% of EHP funding comes from grants through the state and federal government. The state of Iowa contributed $40,525 in 2000 and in many years, EHP receives Community Development Block Grant (CDBG) funding. Approximately 39% of EHP funding comes from individual and corporate contributions and fundraising efforts. Individual gifts contributed $33,867 in 2000 (EHP, 2001).

Local Study Area

The relevant region for our study is the greater Iowa City area, consisting of Iowa City and Coralville. These two contiguous cities make up the urban core of Johnson County and are growing rapidly. Total housing units in Johnson County increased from 37,210 in 1990 to 45,831 in 2000 (City of Iowa City, 2001). Total population in Johnson County reached 111,006 in 2000, up 15.2% from 1990. Between 1990 and 2000, Iowa City’s population grew by 4.2% to reach 62,220. Coralville’s population reached 15,123, an increase of 46% since 1990 (City of Iowa City, 2001). Current forecasts estimate that Johnson County will have 120,240 residents in 2010 and 135,390 residents in 2020 (US Bureau of the Census, 2000).

Iowa City is a unique community in Iowa. The University of Iowa (UI) and UI Hospitals and Clinics (UIHC) dominate the local economy and bring economic stability to Johnson County. These two public institutions employ 23,596 persons and attract some 29,000 students to the area (City of Iowa City 2001). Students comprise about 36% of Iowa City’s resident population. The university has helped Johnson County to maintain a low unemployment rate of 2.1%, compared to 2.5% for the state (City of Iowa City 2001). The affluence of Iowa City’s university community has acted in combination with population growth to drive up housing costs in the Iowa City area. Iowa City has the highest housing costs as a percentage of income of any community in Iowa (City of Iowa
City, 2000). In 1997, the median sale price of a single-family home was $122,500 in Iowa City and $158,000 in Coralville (City of Iowa City, 2001). The median value of a single-family home is $73,200 in Coralville and $79,000 in Iowa City. In comparison, the median value of single-family homes in Iowa was $45,900 (U.S. Bureau of the Census, 1990).

The large student body creates unusual age, household type, income, and other demographic characteristics for Iowa City. The median age in Iowa City is 25 compared to 28 for Johnson County, and 36 for the U.S. (U.S. Census Bureau 2000). The influence of students on the local economy is evident by the large service sector in downtown Iowa City and the high percentage of household renters. While only 28% of households statewide are renters, 54% of households are renters in Iowa City (City of Iowa City 2001). As a result, students drive up local rental housing costs and keep vacancy rates low. Vacancy rates for rental units are 2.5% in Iowa City and 4.3% in Coralville compared to 6.4% for the state (U.S. Bureau of the Census, 1990). Median monthly rent is $368 in Iowa City and $361 in Coralville. In comparison, median rent for the state of Iowa is $261 (U.S. Bureau of the Census 1990).

Maxfield Research Group performed a housing needs assessment for the City of Iowa City in 1998. They found that Iowa City needed at least 395 more affordable units available to households earning less than 30% of median area income. "Affordable" units is housing with rents at no more than 30% of household income. This study factored out the student population. Including students, Iowa City would actually need 3,438 more affordable units.

Area Transit Systems

The City of Iowa City, the City of Coralville, and the University of Iowa operate separate transit operations with buses running on fixed routes and schedules. The University of Iowa's Cambus is a free service that primarily just circles the UI campus, and therefore is not very useful to non-UI faculty, staff, or students. Johnson County also operates a paratransit service for disabled persons called Johnson County SEATS. The service is not very flexible or convenient because trips must be reserved well in advance and cannot be provided on a daily basis. Furthermore, stringent requirements for meeting the disability requirements make this service inaccessible to most EHP clients.

With a high concentration of jobs in downtown and approximately 29,000 students attending the University of Iowa, transit usage rates in Iowa City are two times the national average. Iowa City and Coralville have transit usage rates of 10.2% and 10.1% respectively, compared to 5.3% nationally (U.S. Census Bureau 1990). In Iowa City, the percentage of residents who walk to work is three times higher than the U.S. rate and the mean travel time to work is only 65% of the national rate (U.S. Census Bureau 1990). Despite high transit usage rates, most Iowa City area residents also have access to private vehicles. In 1990, 11.5% of American households and 8.9% of households in the study area had no access to a vehicle (U.S. Census Bureau 1990). According to EHP staff, more than 90% of EHP residents do not have regular access to vehicles. Whereas Iowa
City residents enjoy relatively easy commutes and utilize multiple forms of transportation, EHP clients have fewer transportation options.

The City of Iowa City and the City of Coralville operate separate transit agencies that run buses on fixed routes. Iowa City transit is designed on a hub system with all routes but one beginning and terminating downtown at the Washington Street Interchange. Sixteen routes are scheduled Monday through Friday. For most of these routes, buses run every half hour between 6am to 9am and 3pm to 6:30pm, and every hour the rest of the day. Nine of the sixteen routes run Monday through Saturday and have night schedules. Bus service is more infrequent on Saturdays and the latest night service is the 10:30 PM Broadway Route bus. Iowa City transit offers no Sunday service.

Coralville bus routes also originate in downtown Iowa City. Coralville runs three daytime routes Monday through Friday with varying frequency. One night route runs Monday through Friday until 11:45 PM. One Saturday route provides service at hour intervals. Coralville transit also offers no Sunday service.

Limited routes and schedules, infrequent buses, and fragmented service have left transportation gaps for the transit dependent that do not work downtown. High transit usage rates can be accounted for by the convenience of service for UI employees and students who have downtown destinations. However, the extent of job accessibility for EHP clients appears to be quite limited because many of their employment opportunities are second and third shift, require weekend work, or are not situated downtown (DeBoer, 2002).

Local Studies of Transit Ridership

Our research has been unable to identify a single study about the transportation needs of low-income persons in Johnson County. In fact, only one study was found on transit ridership in the Iowa City area and unfortunately, it is fifteen years old. The 1987 Iowa City Transit On-Board Ridership Survey was prepared by the Johnson County Council of Governments (JCCOG) and provides some insight into the profile of Iowa City transit users. In 1987, 27% of Iowa City Transit (ICT) users were dependent on ICT for transportation, 57% of transit users were low-income, and 44% of transit-dependent persons had family incomes of less than $10,000. These statistics demonstrate the dependency of low-income persons on Iowa City Transit and the need to fill transportation gaps.

Transit Subsidies

Iowa City distributes free and discounted bus tickets to human service agencies in order to assist low-income persons access transportation. During the 2001 fiscal year, 12,660 free bus tickets were dispersed to local non-profits for distribution to the needy (Table 1). According to Linda Severson, Human Services coordinator at Johnson County Council of Governments (JCCOG), the city sells about 1,075 discounted strip tickets per month. Individuals also can receive a $5 discount on 31-day bus passes if he or she qualifies for
food stamps, FIP (Family Investment Program), Social Security Income, or Iowa Rent Reimbursement. Monthly bus passes are $20 with the discount. Every month the Emergency Housing Project receives 115 free bus tickets and purchases 150 tickets at half price for a total cost of $48.75. According to EHP staff, the free tickets are gone within two weeks. Also, EHP is only able to purchase the half-price tickets nine out of 12 months.

Coralville does not provide low-income bus passes and it does not accept Iowa City’s free bus passes. As a result, persons who are traveling between Coralville and Iowa City cannot utilize Iowa City’s free bus passes. For example, retail workers at Coral Ridge Mall can board an Iowa City bus with a free pass and get a transfer to Coralville, but they cannot use the free pass to board a Coralville bus for return to Iowa City. This is an example of a negative consequence of fragmented services provided by multiple transit agencies. Coralville does accept Iowa City transfers and monthly bus passes.

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<td>600</td>
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<td>Nest of Johnson County</td>
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</table>

Total: 12660
Summary

The socioeconomic profile of Iowa City, the explanation of existing transit systems, and the description of EHP clients provide the background information for conceptualizing the transportation problems of the transit-dependent. At first glance, it appears that gaps likely exist in the transportation system due to limited bus schedules and routes, fragmented transit services, and special needs of EHP clients. Through focus groups and travel diaries with EHP residents as well as interviews with EHP staff, our group was able to clarify what transportation gaps existed and how they impacted EHP clients. In the following sections, we explain our methodology, identify transportation gaps, and follow up with recommendations on how to fill those gaps.
Map of Iowa City and Coralville

Emergency Housing Project
III. METHODOLOGY

Our project methodology incorporated two major elements: (1) to identify any and all transportation gaps, which hinder EHP residents’ ability to achieve economic self-sufficiency and (2) to develop a set of effective and cost-efficient transportation options that we could recommend to EHP in order to fill the identified transportation gaps. Through interviews, focus groups, and surveys we determined what problems EHP residents most commonly encounter. This information helped us define the goals of our project and provided the framework for the design of the transportation alternatives.

Project Components

In order to identify the transportation gaps encountered by EHP residents, we utilized a variety of existing research as well as primary research. Our methodology is broken into five main components: an analysis of existing research, interviews, travel diaries and focus groups, identification of transportation gaps and a feasibility analysis. These components are described more in depth in the following sections.

Analysis of Existing Research

The existing research we used was included in our literature review and helped us construct a framework for the following portions of the project. It also helped us create a list of common types of destinations for homeless persons. The research utilized includes academic publications, demographic data, government reports and research describing best practices. Our research then continued with a review of the local study area. Using existing reports and data sources we created a profile of the Iowa City area in terms of income, housing and more general economic data. We also collected information that allowed us to create a profile of the existing transportation system in the area. This data included transit routes and schedules as well as interviews with area experts.

Interviews

With the profiles of the area providing a framework for later analysis, we continued with a set of interviews that helped us prioritize transportation needs, identify potential transportation options and also create a list of potential employers for EHP residents. We interviewed human resource managers at local employers, staff of social service agencies serving EHP residents and local government officials in human services and transportation. Employers were selected based on their potential for creating jobs for low-income persons. We identified such employers based on projected annual job openings for the industry and specific jobs that were identified as being most in tune with the skills of EHP residents. The list of potential employers identified through the interviews was combined with the destinations revealed in the travel diaries and focus groups to be the final list of destinations studied in our report.
Travel Diaries and Focus Groups

Two of the main components of our project were the travel diaries and focus groups. EHP staff and group members conducted in-depth interviews with EHP residents in order to create travel diaries. The diaries were used to create a profile of EHP residents’ transportation patterns. In March we facilitated two focus groups with EHP residents. One group was composed mostly of unmarried residents. The other group was composed primarily of families. The questions for the focus groups (see Appendices) were designed to elicit conversations about problems encountered using the existing transportation system and goals for any improved system. This discussion played a primary role in our study and allowed us to identify the transportation problems faced by EHP clients.

Identification of Transportation Gaps

Our review of existing research and the results of the focus groups and travel diaries gave us enough information to categorize the transportation gaps. Special attention was focused on the gaps related to finding and maintaining employment. We focused the results in this manner because the primary purpose of the report was to facilitate sustained economic independence, which is, of course, largely dependent on employment. The focus groups, however, revealed that there are other important needs of the EHP clients. These include shopping for necessary goods, access to social services, health care, and finding affordable housing. As our project progressed we realized that these other needs are also important to maintaining employment. EHP residents are particularly dependent on social services during their search for employment as most of them have little financial resources currently available to them. Furthermore, the residents have many health care concerns that need to be met before they will be able to maintain steady employment. Finally, the main purpose of EHP is to help clients find more stable and permanent housing situations. Our recommendations, therefore, include when feasible suggestions on how to serve health care, necessary shopping, social service needs and searches for housing.

The results of the travel diaries and focus groups indicate that there are three common types of gaps for the homeless in the Iowa City area. These are “spatial”, “temporal” and “client specific gaps.” The gaps are described in our findings section by the nature of the gap, the extent of the gap and the source of the gap. The level of attention each gap receives in our recommendations is based on how direct is the connection to achieving economic independence, the extent of the gap, i.e. how many EHP residents report this gap and also the degree to which the gap can be met by the options being studied.

Our categorizations are based on certain definitions. Spatial gaps are said to exist when destinations are located further than a quarter-mile from an existing bus stop and outside circles indicating 10 minute walking or biking (for good weather) and 20 minute walking or biking (for bad weather) distances from EHP. To some extent we also considered the nature of the trip for certain spatial gaps. For example, we assumed that persons would be less willing to walk for discretionary trips than for necessary trips. We also said
spatial gaps exist for trips involving children or carrying large packages (e.g. grocery shopping) for shorter distances than other trips.

A temporal analysis was conducted to determine the hours when each desired destination could be reached by the existing transportation system. A temporal gap was said to exist when destinations could not be reached at all hours that the destination was needed to meet EHP clients' needs. Because social service agencies, shopping and health care are primarily accessed during the day we found no temporal gap for these trips. As explained in our findings section we found limited temporal gaps for certain second and third shift jobs. As part of our temporal analysis, we also considered the frequency of transit service to the particular destination.

Client specific gaps, includes by definition many varied needs. These include physical disabilities, mental disabilities, and substance abuse problems. They also include the need to make multiple trips in a day for clients attempting to access social service agencies and for clients searching for jobs and housing. Recognizing these needs we decided that a spatial and temporal analysis would be inadequate for identifying all transportation gaps. Thus, working with the focus group and travel diary data, as well as other statistics about EHP clients, we identified the most common client specific gaps and the necessary accommodations from the transportation system. The overall theme of these gaps was flexibility and our later analysis focuses heavily on the degree of flexibility in the suggested options.

After identifying the most common gaps, we created a list of transportation and non-transportation options that could possibly fill the gaps. We presented this list to the EHP staff un-ranked. The staff helped us narrow down the list of options based on the overall project goals described below. The final set of options was then subjected to a more in-depth feasibility analysis.

Feasibility Analysis

Our feasibility study was designed to analyze each of the final options based on their ability to meet the goals identified by EHP staff and residents. The ultimate goal of this feasibility study was to determine what options, or set of options, would best be able to help EHP residents achieve economic independence. In consultation with EHP staff we decided that any proposed solution should minimize costs and risks, maximize reliability, flexibility and EHP control and most importantly effectively fill the identified transportation gaps.

One of the key barriers to economic independence for EHP clients is their lack of reliable transportation. EHP clients are in particular need of a reliable system because their transportation patterns are irregular and they have few back-up means of transportation. They are largely transit dependent. Access to transportation must be ensured at times and to destinations many other persons do not require. Our recommendations only include those improvements that can ensure transportation on short notice and gets the rider to the destination in a reasonable time period. We define short notice as meaning on-demand or
not requiring scheduling before the day the service is needed. Reasonable time periods are defined as being no more than one hour for waiting and transportation.

EHP clients have changing needs. Whereas one day may be devoted to signing up for government benefits, the next day may be spent getting medical care and the third day spent applying for jobs. EHP clients need a flexible transportation system. Therefore, our recommendations include a set of strategies and do not rely on any one option, which may or may not be as flexible as needed. Related to the need of flexibility, is the need for EHP control over the option. A high level of such control helps ensure both flexibility and reliability.

It almost goes without saying that funds are very limited for general operations of any homeless shelter. The client expressed a strong desire for a low-cost solution to the transportation gaps. The employment and major non-employment trips were mapped and we estimated the costs of providing transportation via each option to each of the major clusters. The start-up (capital) costs are outlined separately. We chose to make this separation because for most of the options there are significant start-up costs that could probably be make or break it determinants. The operating costs best reflect the long-term viability of the option.

In addition to low-costs, the client expressed a strong desire for low-risk options. The options are analyzed for legal risk issues, general liability and burden to be placed on EHP and any other parties involved in implementing the proposed recommendation. Options involving a high level of risk that we discarded included those requiring remedial actions to comply with the Americans with Disabilities Act and similar statutes. Although the goals of these statutes are commendable, EHP can neither afford nor has the expertise to manage such remediation projects. Because we weren’t able to quantify the ADA remediation costs for each option we decided to exclude entirely any options that would require any ADA remediation. We also excluded any options requiring special certifications like Commercial Drivers Licenses and compliance with taxi/livery regulations. The resulting set of options is low-risk and should be relatively easy to implement.

**Problem Constraints**

The purpose of our project is primarily to identify the most common transportation barriers affecting EHP clients’ ability to achieve sustained economic independence and propose a set of solutions to overcome these barriers. To make the project manageable and to guarantee a high level of success for the project we incorporated certain definitions and constraints.

Homeless persons are very difficult to track because of their fluid lives including their changing home locations and jobs. In order to effectively provide enhanced transportation services for homeless persons in the Iowa City area we found it necessary to limit the expected clientele of the project primarily to EHP residents and allow for services for near-homeless persons in the Iowa City area as a secondary market. It is
expected that the number of clients will thus generally be around 30 persons, the average number of persons staying at EHP. We also found it necessary to limit the study and service area to Iowa City and Coralville. Our research indicates that virtually all of the employment, housing, medical and social services utilized or desired by EHP residents are located in these two cities. Limiting the project to this area greatly increases the feasibility of the recommended options.

Summary

EHP clients have unique transportation needs due in part to their economic situation, unstable employment and housing situations and also higher than normal rates of disability and health care problems. To meet their client specific needs a transportation system needs to be reliable and flexible. In order to meet the needs of EHP the system needs to be low-risk and easy for the agency to manage and control. In order to meet both the organization’s needs and the clients’ needs the system needs to be low-cost. We were charged with developing such a transportation system that also would assist EHP clients in their quest to become more economically self-sufficient.

In order to develop the desired transportation system we engaged in a multi-stage project. Our methodology included secondary research, interviews with experts and travel diaries and focus groups. Using the information gathered from these stages we then developed a set of transportation solutions that were presented to EHP staff. Options remaining after staff critique were then subjected to a feasibility analysis using the criteria that determined the goals for the project. The final set of options is reliable, flexible, low-cost, low-risk and easy to manage and control. Most of all it is a set of options that meet the spatial, temporal and client specific gaps that currently exist.
IV. FINDINGS

The research described in the methodology section helped us identify the travel patterns of EHP clients. It also helped us identify the problems these persons encounter in their daily travels. This section presents the findings in an analysis of the focus groups and travel diaries and describes the major transportation gaps identified through the travel diaries and focus groups. Also included in our findings are estimates of costs for the major transportation options included in our recommendations. The final section focuses on other research we conducted on employment opportunities in the Iowa City area and planned transportation improvements for the area.

Analysis of Focus Groups and Travel Diaries

We conducted two focus groups with EHP clients. Each group presented some differences due to their different make-ups. One focus group consisted of families and the other consisted of single individuals. The transportation problems experienced by the participants in the two focus groups were similar in some ways but different in many other ways. The family group had to get their children to school and daycare, as well as, themselves to employment, social services, and other destinations. The necessity of multiple trips in one day led the participants in the family group to express strong client specific transportation gaps and a desire for a reliable and flexible transportation system. The single group consisted of mainly males, which is the predominant population at EHP.

EHP clients travel patterns can be divided into six categories: work related, housing related, recreational and social related, social services related, shopping, and medical related. The following will briefly discuss our findings from the focus group surveys and the travel diaries. The analysis of both the travel diaries and the focus group surveys can be found in the addendum.

Work Related

Work related would include employment, searching for employment, and job training. The travel diaries, focus groups, and the focus group surveys reveal that the most commonly used mode of transportation was public transit. One common destination was Eastdale Plaza, located on the southeast side of Iowa City. EHP clients utilize many of the employment and human services agencies that are located here. Goodwill Employment, STAR, Cambridge Staffing, Wheels-to-Work, and the Iowa Workforce Development Center are some of the work related places that are accessed. EHP clients use public transit, the Free Shuttle, and walking to reach Eastdale Plaza. The most common complaint about accessing employment centers was the bus schedule. Many of the single residents are actively seeking employment and desire a transportation system that facilitates their job search process by being reliable, flexible and convenient. The current system is inadequate because it doesn’t allow for multiple trips in a day nor does it easily serve persons going to work-related agencies at Eastdale, or elsewhere, and then going to far-flung locations to apply for jobs. Some EHP residents expressed concern that they were having difficulty finding employment in Coralville due to infrequent bus
service, the refusal of Coralville Transit to accept free bus tickets, and for a few locations a spatial gap.

**Social Service Related**

This category includes numerous agencies that are used on a regular basis by EHP clients. Four destinations are visited most frequently. Twelve different clients listed the Wesley Center, located in downtown Iowa City, on their travel diaries. These clients, and probably others, utilize the free lunch program and free medical clinic that is provided at Wesley. EHP clients bicycle, walk, drive, or receive rides to the Wesley Center. We identified no spatial, temporal or client specific gaps for any of the downtown locations because of their close proximity to EHP, predominant use during the day and the lack of any indicated client specific problems. Four clients indicated Department of Human Services, which is located at Eastdale Plaza, as a common destination. Another four clients mentioned they walked or drove to the Salvation Army, located in the Gilbert Court cluster. Eight clients mentioned EHP as a common destination. These clients were probably former residents who are still utilizing EHP’s services. Some other social service agencies that are visited are the Social Security Office, the Women Infants and Children (WIC) office, the Crisis Center, and Hawkeye Area Community Action Program (HACAP).

**Housing Related**

EHP clients used the public transit service to search for housing, primarily apartments, in both Iowa City and Coralville. Clients mentioned Town and Campus Apartments, Cedarwood Apartments (accepts Section 8 certificates), Lakeside Apartments, Keystone Property Management, and the Iowa City Public Housing Authority (ICPHA). EHP clients reported few transportation problems related to their housing searches. However, some stated that they were limited in geographic choices for housing by spatial or temporal gaps. Locations accepting Section 8 housing certificates are located in two main clusters. Both of these clusters are reasonably well served by the existing transportation system. However, for some of these locations it would require a long trip on a bus to get to any of the most desired locations. For example, the Coral Ridge Mall area is expected to have many new jobs available to EHP residents in the upcoming years. However, one of the most common destinations for EHP clients to move to after leaving the shelter is the Broadway area. A trip from Broadway to Coral Ridge Mall via transit could take 2 hours, including waiting times, each way. It is reasonable to assert that EHP clients are facing significant spatial gaps once they leave EHP. These gaps may hinder the ability of these persons to achieve sustained economic independence.

**Health Care Related**

EHP clients reported using all three of Iowa City’s hospitals: Mercy Hospital, Veterans Administration (VA) Hospital and the University of Iowa Hospitals and Clinics (UIHHC). Clients walked, used public transit, taxi, and the Cambus to access these places. Mercy Hospital is the only one that is relatively close to EHP. The other two are on the other
side of the Iowa River. Both the VA Hospital and the UIHC are serviced by all three public transit services (Cambus, Iowa City, Coralville). About 50% of the single group was in Iowa City for medical reasons. These persons had special needs for a transportation system. Whereas most health care destinations had no spatial or temporal gaps the persons with health problems suggested that from time to time they are unable to use the existing transportation system.

Recreational and Social Related

This category includes not only recreational and social activities but also family related activities. The most common destinations were the Iowa City Public Library and the Robert A. Lee Recreation Center. Some other destinations were: the Ped Mall, College Green Park, Napoleon Park, City Park, Old Capital Town Center, and the University of Iowa Main Library. Coral Ridge Mall was another destination given that was hard to determine if it was visited for social or shopping related reasons so it is included in both. Some family related activities were visits to family member’s houses and to schools (Horace Mann School in Iowa City and Northwest Jr. High in Coralville). Walking was the most common mode of transportation used by EHP clients. Bicycling, public transit, and receiving rides were other modes used.

Shopping Related

Coral Ridge Mall was the most common destination given on the travel diaries. As mentioned above this could also have been for social related reasons. Hy-Vee Grocery stores and John’s Grocery were mentioned for food related items. “Malls” were given as a response on the focus group surveys and could also be social related destinations. Some other destinations given were: K-Mart, Payless, Crowded Closet, and Stuff Etc. Public transit (including the Free Shuttle) and walking were the most common modes of transportation used to access these destinations. Our recommendations include suggestions on how to help EHP residents access stores for necessary goods. There is a strong client specific gap regarding for such shopping trips. EHP clients, especially those with physical limitations cannot be expected to walk long distances or ride the bus for grocery shopping. Being able to achieve sustained economic independence in part requires being able to access needed goods and services. This presumes an adequate transportation system.

The travel diaries identified some problems that EHP clients generally encountered while attempting to access the above six categories using the existing modes of transportation. These can be organized into four categories: Health Related, Transportation Related, Financial Related, and Other. The following list details these comments as they were reported on the travel diaries.

Health Related
1. Bad knee and asthma
2. Driving is difficult due to back problems
3. Health problems

16
4. Walk is too far
5. Physical inaccessibility

Transportation Related
1. Bus doesn’t run at night, which prevents client from working later in the evening
2. Missed appointments because of lack of transportation
3. Wait time is too long
4. Bus doesn’t go where client wants to go
5. Travel mode not available at time client wants
6. Commute takes too long

Financial Related
1. EHP ran out of bus tickets and client had to pay for bus in cash
2. Cost of taxis too high
3. Cost of public transit too high
4. Cost of maintaining a car is too much for client

Other
1. Driver’s license suspended
2. Bad weather
3. Doesn’t have driver’s license

Transportation Gaps

This section explores the transportation gaps that EHP clients face in their daily travel. As discussed in the Methodology section, three gaps have been identified: spatial, temporal, and client specific. This analysis describes how the current transportation system is failing homeless persons in Iowa City.

Spatial Gaps

Spatial gaps seek to explain how the spatial characteristics of the Iowa City area constrain travel for EHP clients. A gap is said to exist if the destination is greater than one quarter-mile from EHP or a bus stop and outside the identified walking and biking zones.

During our research, we discovered that almost all work destinations can be accessed via public transit. Social service and health services are also well served by this system. Thus, there are no real spatial gaps for trips of this nature. Some exceptions include the employment cluster focused around Coral Ridge Mall. This area is under-served by the transit system and is located about four and one-half miles from EHP. The combination of distance and poor bus service creates a spatial gap in this case. Residents and EHP staff have expressed a desire for better access to this area. They believe that good employment and shopping opportunities exist in this section of the Iowa City area. A similar problem exists for the First Avenue employment cluster. This location is two and one-half miles from EHP and is poorly served by the public transit system.
The problem with these two places is that residents may be able to access them during regular transit hours (8 am to 6 pm), but outside of that time period taxi service or access to a private vehicle is needed. There is really no possibility for foot travel especially to the Coral Ridge Mall area. Also, bicycle travel is only possible to the First Avenue area. This problem is common in Iowa City. That is, transit goes to the destination, but service is not regular enough and this is complicated by the auto-oriented development that has occurred.

Regular trips (such as work trips and those to social services) are easier to schedule around the infrequent bus schedule than non-regular trips (e.g. shopping or emergency health care). A definite spatial gap exists for all grocery stores in the area. Most clients described making these trips using taxis. Only a few have bus stops near them. Clients must either walk long distances with packages or spend money on a taxi to make these trips.

Spatial gaps do exist in Iowa City. They tend to be aggravated by poor transit service. Also, more irregular trips highlight Iowa City’s auto-oriented development. Thus spatial gaps become more of a problem when combined with other shortcomings of the Iowa City transportation system.

**Temporal Gaps**

A temporal gap was said to exist if a location could not be accessed at all hours of operation. Frequency of service is also addressed in this section. As most social service trips and shopping trips are made during the day there is no temporal gap for these trips. However, significant temporal gaps exist for employment trips.

EHP staff members and clients expressed a desire to access more work opportunities that primarily take place during second and third shift. Staff and clients described problems of flexibility in scheduling as a problem for accessing jobs that begin and/or end when transit stops. Staff members described one individual who had to take taxis back to EHP after every shift because the job was located far from the shelter and transit was no longer running. These trips got expensive; however, the destination could still be reached. Despite this fact the person was still suffering from a temporal gap.

Almost all employment clusters suffer from this gap. Perhaps the most problematic area of Iowa City is the Southeast Industrial area. Through our research, we found that the firms located in this area have the most unstable work shifts. Proctor and Gamble is one example. Company officials explained that persons often have different work schedules on a weekly basis. Thus employees must have extremely flexible transportation (i.e. a car or a ride from a reliable person) in order to fulfill their employment duties. Some of the other employment centers suffer from this same problem, but not the degree of the Southeast Industrial cluster.

Frequency of service is a problem when making trips as well. Clients expressed displeasure in going for a fifteen-minute appointment and having to wait forty-five
minutes for the bus. In the focus groups, several participants were frustrated that these waits limited the number of errands they could perform in one day. This aspect of the temporal gap is most constraining in the ability to make non-work trips. Clients are forced to make appointments and shop around inadequate transit schedules. Thus they are unable to access many places during all hours of operation.

Temporal gaps may be the biggest constraint on EHP client travel. Individuals are forced to settle for jobs that can be accessed by transit during its operating hours. Also, trips must be planned around bus schedules. Taxis can be used to supplement transit, but even these services are busy during peak travel times and around 2 am (when the downtown bars let out). Also, the cost of taxi trips adds up quickly. Due to operation times and frequency of service, transit, as it currently exists, is inadequate in filling the temporal gaps.

**Client Specific Gaps**

Client specific gaps refer to the characteristics of EHP clients that constraint their ability to travel in the Iowa City area. These characteristics include very low incomes, mental and physical disabilities, substance abuse, skill levels, and little knowledge of Iowa City. These gaps become most visible in more irregular, non-work trips. However, some characteristics aggravate clients’ ability to make trips for employment purposes.

In the focus groups and travel diaries, clients explained that lack of familiarity with the Iowa City area created many problems in using the transportation system. They felt that there was little information about transit routes and schedules. This lack of information aggravated the existing frequency problems. Clients were unsure when buses were leaving and/or arriving. Also, many were unsure which routes to use to get to their desired destination. Individuals did confirm that bus drivers were helpful in guiding clients on how to use the transit system.

All of EHP’s clients have very little income. Thus any use of taxis puts a large strain on residents’ budget. As mentioned above, these services are often used to fill the gaps left by the public transportation system. However, clients have to be conservative in the use of taxis due to their high costs ($3 for the first mile, $.75 each addition one-half mile, and $1 per extra passenger). Thus taxis may not always be appropriate in fulfilling clients’ needs especially if the trip requires regular use of this service.

Skill level is also a problem for some clients. EHP staff members have mentioned to our group that they would like their clients to pursue jobs at the nearby North Dodge employment center. Currently, some clients receive temporary jobs when business is at its peak in this cluster. However, few permanent jobs are available to some EHP clients due to the individual’s training, and experience. The North Dodge employment center is well served by transit and is also relatively close to EHP; however, some of the jobs require higher levels of skills. Thus, there is a skill mismatch since clients can access this area fairly easily, but acquiring a job may be more difficult.
Finally, many clients suffer from a disability or substance abuse. According to EHP staff members, these problems hinder the client’s ability to use the transportation system. Also, clients may have to make more trips as a result of these problems. Disabilities and substance abuse simply magnify the other problems that EHP clients face when using Iowa City’s transportation system.

Client specific gaps put further strains on the travel patterns of EHP’s residents. This group of problems is probably the largest barrier to transportation for individuals. Many clients expressed that these problems were the root of their transportation difficulties during focus groups and travel diaries.

All of the transportation gaps faced by EHP clients hinder their ability to use the existing system. The Iowa City transportation system has many faults. These faults are magnified when discussing persons like EHP clients. The main shortcomings of this system are: auto-oriented development that creates spatial constraints, infrequent transit service, inadequate late-night transit service, expensive taxi operations, and poor information regarding transit routes and schedules. All of these problems highlight how the transportation system is failing homeless persons in Iowa City.

**Other Research**

After finishing our focus groups and travel diaries, it became apparent that further research would be needed in order to make sound recommendations for meeting EHP client travel needs. First, we needed to carry out more thorough research about local employment opportunities for EHP clients. Second, we needed to determine the costs of various transportation solutions. We also conducted research to determine the likely improvements expected to be made in the study area in the near future so that our options could be coordinated with these plans.

**EHP Employment Opportunities**

We used data from Iowa Workforce Development (IWD) to identify local industries with the most estimated job openings over the next decade. This data also provided information about the wages and education level required for each job. According to EHP staff and secondary research as many as 50% of EHP clients may have no more than twelve years of education (MacDonald, 2000). Thus, we focused on identifying the fastest growing industries, which offer jobs that match the education level of EHP residents.

According to Iowa Workforce Development, the ten industries with the highest number of expected job openings in the Iowa City area in the next decade are (1) business services, (2) health services, (3) educational services, (4) construction, (5) self employed, (6) electronics, (7) eating and drinking establishments, (8) trucking and warehousing, (9) food stores, and (10) social services. For a closer analysis, we also looked at the individual occupations with the highest number of expected job openings for individuals with less than a high school degree. These top ten occupations are (1) retail salespersons,
(2) cashiers, (3) waiters and waitresses, (4) food preparation workers, (5) general office clerks, (6), janitors and cleaners (7) combined food prep/ service workers, (8) hand packers and packagers, (9) guards, and (10) maintenance repairers (general utility).

We then interviewed human resource managers at the largest employers in the Iowa City area with jobs matching the skill and education level of EHP clients. We never identified ourselves as working for EHP in order to obtain the most truthful and open information. In these interviews we asked questions designed to elicit whether EHP clients would make good candidates for the jobs. The questions involved the number of entry-level positions, necessary level of flexibility for working hours and other considerations. Employers reported that they highly value reliability, provide little assistance with transportation and need employees with flexible work schedules. All of these comments from employers indicated to us that reliable transportation is a necessary component of maintaining employment in the industries open to EHP clients. Focus groups and interviews with EHP staff, temporary employment agencies and social service agencies validated our information about the best potential employers of EHP clients. The interviews and focus groups revealed that many EHP residents worked in eating and drinking places, hotels, warehousing, construction, and food stores and that EHP residents work as salespersons, cashiers, waiters/waitresses and general office clerks. Employers with the greatest potential for hiring EHP clients were categorized into clusters according to spatial location and analyzed for transportation gaps.

According to the 2001 Iowa City Community Profile, there are 65 transportation and warehousing firms that employ 1,924 persons, 498 retail trade facilities that employ 7,536 persons, 17 hotels that employ 578 persons, and 228 restaurants and bars employing 5,020 persons. Our interviews with human resource managers suggest that each of these industries has relatively high turnover rates, which combined with the large numbers of total jobs, implies even higher job openings than estimations may predict. A complete list of the largest employers in the Iowa City area is included in the Appendices.

Johnson County has a 2.1% unemployment rate, which is lower than the statewide average of 2.5%. Indeed, the Johnson County unemployment rate has been lower than the state rate in each of the past ten years. This low level of unemployment, combined with the large number of expected job openings and a slowly growing population base, suggests that EHP residents have job opportunities.

Transportation Costs

In consultation with EHP staff we identified transit, taxis and shuttle services as the most viable transportation options. The following table presents the one-way, one-vehicle, costs for each mode to the center of each of the major clusters.
Table 2: Costs of Accessing EHP Destinations by Mode

<table>
<thead>
<tr>
<th>Distance from EHP (miles)</th>
<th>Transit</th>
<th>Taxi</th>
<th>Shuttle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coral Ridge Mall</td>
<td>$23.67</td>
<td>$8.25</td>
<td>$2.60</td>
</tr>
<tr>
<td>First Avenue</td>
<td>$11.52</td>
<td>$5.25</td>
<td>$1.30</td>
</tr>
<tr>
<td>North Dodge</td>
<td>$10.52</td>
<td>$4.50</td>
<td>$1.16</td>
</tr>
<tr>
<td>SE Industrial</td>
<td>$10.52</td>
<td>$4.50</td>
<td>$1.16</td>
</tr>
<tr>
<td>Eastdale Plaza</td>
<td>$10.52</td>
<td>$4.50</td>
<td>$1.16</td>
</tr>
<tr>
<td>Gilbert Court</td>
<td>$5.26</td>
<td>$3.00</td>
<td>$0.58</td>
</tr>
</tbody>
</table>

We did not account for per-person costs for transit and shuttle options because the expected usage level will vary significantly during the different times of day and different days of the week. However, taxis are usually used by only one person at a time and thus their costs are best reflected on a one-passenger basis. Taxis charge $3.00 for the first mile and $1.50 for each additional mile. It should also be noted that taxis charge $1 for each additional passenger and as much as 25 cents per grocery bag. This pricing system for taxis makes them inefficient for short-term trips, especially for two or more persons. It also makes them of only moderate value for shopping trips. They are best for longer trips and shorter trips if only used by one person.

Estimates of costs for the shuttle option were derived from information provided by United Action for Youth, which operates 5 vans for transporting clients, and the University of Iowa, which operates a vanpool service for employees. The costs of operating a shuttle include fuel, maintenance, insurance and labor. These operating expenses equal 58 cents per mile. Start-up costs could vary widely depending on the size and quality of the vehicle as well as where the vehicle is purchased. United Action for Youth purchased an 8-passenger van at a state auction for only $4,000, but a new van could cost as much as $25,000-$30,000. The shuttle capital costs are obviously significant and may be make it or break it determinants in whether EHP can offer the service. Overall, the shuttle is a viable option because its costs are very low compared to other operations.

After calculating the costs for the transportation options we then identified the times and locations when each option would be most efficient. The high-cost high-capacity nature of transit makes it the best option for peak travel periods with a large ridership all going along the same route. The medium costs low-capacity nature of taxis makes primarily useful during low-demand times such as late nights. Also, there availability on an on-call basis makes them best for emergency situations. The low-cost medium density nature of a shuttle makes it best for times when more than one client is going to/from the same destinations but the number isn’t high enough to justify transit. Shuttles are also good for picking up/dropping off persons in distant locations when transit isn’t a viable option. In
our recommendations section we more fully describe the specific times and locations we think each transportation mode should be used.

Future Transportation Improvements

The Johnson County Council of Governments (JCCOG) recently released a draft transportation plan for the Johnson County urbanized areas. In this report, JCCOG indicates that most expansions of the transportation system in the near future will be on the road network, and not the transit system. Most of these improvements will be tied to plans for development on the outskirts of Iowa City in areas where the current Iowa City Comprehensive Plan contemplates additional housing and limited commercial development. The report also suggests that expansion of transit services is highly unlikely in the near future. The lack of transit improvements is due to high costs, a lack of political and public support and a perception that most new development will be in areas more easily served by cars. JCCOG anticipates that transit will not be expanded to new employment locations on the fringes of Iowa City because most such employers are expected to provide significant quantities of free parking. Obviously, the report is assuming that cars are the primary means of transportation and transit is a secondary means.

The draft transportation plan does anticipate an expansion of biking and walking paths in the Iowa City and Coralville areas. Although these improvements are quite desirable they will do little to serve EHP clients’ needs. The major employment clusters in Coralville will still be too far for walking or biking access. The North Dodge and Gilbert Court areas are already accessible adequately by biking. Adequate sidewalks already serve Eastdale Plaza but it is too far for a reasonable walk or bike trip. The final cluster, SE Industrial Area, is too far for biking and walking and anyway no non-motorized improvements are anticipated for this area. In summary, the draft transportation plan does little to meet the spatial, temporal or client specific gaps of EHP clients.

In cooperation with the local transit agencies, JCCOG has studied the possibility of consolidating transit services in Johnson County. This is a suggestion that many have voiced, including some EHP clients. The draft transportation plan explains why transit consolidation is unlikely and of only limited possible benefit. Consolidation is primarily ruled out because of a lack of public and political support. However, according to JCCOG consolidation would result in little fiscal or operating benefits because the agency considers the current transit providers to be operating at maximum efficiency. EHP clients expressed two main goals for transit consolidation. First, that they will be able to use their free bus tickets on all bus routes. Second, they desired a unified transit system, which will ease access to information. Each of these goals goes un-served without consolidation.
Non-employment Trips Made by EHP Clients

[Map showing various locations and points of interest in a city, including HACAP Head Start, Hy-Vee, Emergency Housing Project, VA Hospital, Downtown Iowa City, Mid-Eastern Iowa Community Mental Health Center, 4-C's Home Ties, Gilbert Court Agencies, Sycamore Mall, Hy-Vee, MECCA, Broadway Area Housing, HACAP Head Start, Eastdale Plaza.]
V. RECOMMENDATIONS

Based on the literature review, focus groups, travel diaries, and interviews we identified nine possible transportation options to study. The options were presented to the client un-ranked and they critiqued the options based on the overall goals of reliability, flexibility, cost, risk and level of control. The remaining options are modifications to transit service, increased utilization of taxi services and implementation of a shuttle service. In addition we have identified many non-transportation options. These include block scheduling of appointments, increasing allocation of bus tickets, and providing more information to clients. Below we discuss each of these options and make recommendations.

Transportation Options

Option One: Public Transit System Modification

One possible solution to EHP’s transportation problem is to modify the current public transportation system. There are four ways this could be done.

The first way is to extend the current operating times for the buses. The bus runs every hour from 9am to 3pm and from 6:30pm to 10:30pm Monday through Friday. These hours are a little misleading because only five of the sixteen Iowa City routes run after 6:30pm. During the Monday through Friday “peak hours” of 6am to 9am and 3pm to 6pm the bus runs every half hour. On Saturday the bus runs every hour from 6am to 7pm. There is no Sunday service. These current operating times pose major problems for EHP clients.

The low frequency of transit service negatively impacts EHP clients’ ability to reach their destinations in a timely manner. The hour-long headway during many times of day on the Iowa City and Coralville systems can cause conflicts for clients trying to arrange transportation to multiple appointments. For example, a client may have a doctor’s appointment at 10:15am, which would not be problem using the current schedule. However, if the client has to drop off children at day-care after 9am then they have to wait an hour before the next bus comes. As JCCOG reports in its most recent draft transportation plan, headway times greater than half an hour discourage the use of this option by all except transit-dependent persons.

Another problem is that transit service is infrequent or non-existent during evening and overnight hours. EHP clients who work second shift might be able to catch a bus going to work but not returning home and vice versa. Limited service combined with the inability to find a ride home, walk, or use a taxi due to expensive fare make it difficult to find and/or hold some jobs. The current schedule does not serve clients who work second or third shift jobs. Increased frequency of service and expanded hours of service would greatly benefit EHP clients.
Extending the current operating times would open up employment possibilities that are currently closed either because clients cannot interview for them or get to work on time consistently. Part of this solution could include changing the running times to every half-hour instead of every hour. Unfortunately, interviews with transit providers reveal that the expansion of the transit system is highly unlikely in the near future. In the long-term we recommend that transit agencies consider an expansion of evening and weekend service and increased frequency of transit service during the day.

The second way to modify the existing transit system is to alter transit routes spatially. The desired destinations should include major employment centers, temporary employment firms, work training centers, and social service agencies. An example of one such place is the industrial area on the southeast side of the city. Only two routes go in that area and this service is inadequate. Due to financial and political reasons it is unlikely that any Iowa City or Coralville transit routes will be expanded spatially. However, it may be possible to change the existing routes in minor ways to serve more employment centers. The city has made some of these minor adjustments in the past year particularly in the southeast section of town.

Option Two: Taxis

One alternative for transporting homeless persons is using taxi service. Taxis provide an excellent option because of their flexibility. However, there are some issues that hinder this option’s ability to fully serve Iowa City’s homeless population. This section looks at taxi service by examining the service’s reliability, efficiency, flexibility, costs, accessibility, level of cooperation needed, and risks that encompass taxis.

Reliability is an area where taxis may have some difficulty in servicing the homeless population. According to interviews with EHP staff, getting taxis on weekends and at bar closing times can be a difficult task. It is generally thought by EHP staff that taxis have slower response times than are desired for their clients. Although taxis generally provide on-demand transportation, in a smaller market, like Iowa City, advanced scheduling may be the only way to assure reliable, timely service for EHP’s clients. Overall, it can be said that taxis have moderate reliability; however, during peak times this component of the option is greatly reduced.

Efficiency is harder to measure for taxis since vehicle size and trip length vary. However, Iowa City covers a small geographic area so it is unlikely that any trips will take more than 15-20 minutes. This assumes that patrons are not going outside of the immediate area. Due to the door-to-door nature of these services, taxis are fairly efficient. The number of passengers may cause some inefficiency since most cabs carry only one rider at a time. This condition may be improved if a group of persons were heading to the same place at the same time. Obviously, a taxi cannot compete with the transit system in terms of capacity. The characteristics of the individual trip determine the overall efficiency and therefore make this condition hard to measure for taxis.
Taxis may be the most flexible mode of transportation. These vehicles have the ability to travel anywhere in the Iowa City area and beyond (as long as the passenger is willing to pay). Also, at least two of the three major operators in Iowa City are available twenty-four hours per day.

Cost is probably the most restrictive condition of taxi services. Taxis use the following cost schedule: $3.00 for the first mile and $.75 for each additional half-mile. The high cost for the first mile makes this option expensive per mile because most EHP trips are relatively short (2.5 miles or less). These costs would need to be absorbed by either the client or EHP. Another alternative is to negotiate discounted rates using a voucher system. According to interviews, taxi companies are open to the idea of offering discounted rates at off-peak hours. The high costs make taxis a solution that may only be best suited for their current use in EHP’s case – emergency situations.

Many of EHP’s clients have physical or mental disabilities. These disabilities may hinder the client’s ability to use taxi services. Physically challenged clients may have a hard time getting into and out of taxis, which are usually no more than a four-door sedan. Mentally challenged individuals may have problems communicating where they want to go. Client characteristics complicate the implementation of a taxi solution, but do not disqualify the option entirely.

Taxis are fairly low-risk especially for EHP. The taxi company absorbs any risks associated with this mode. This option does not require the organization to purchase any additional insurance or provide extra staff that would be required to get the proper licensing. Thus, taxis look like a good option as far as legal risks are concerned.

Overall, taxis provide a flexible form of transportation. However, as mentioned above, there are high costs included in this option. Currently, EHP uses taxis as an emergency transportation solution. There is some prospect at expanding this use to provide transportation to the limited number of late night jobs.

Option Three: Shuttle Service

The Emergency Housing Project should purchase a vehicle in order to provide rides to EHP residents. The vehicle should have less than 16 seats so that the driver would not be required to have a Commercial Drivers License nor would the shuttle require remedial actions to comply with the Americans with Disabilities Act. Ideally, the shuttle would be driven by volunteers and be operational 24 hours a day, 7 days a week. Like the taxi, a shuttle would provide door-to-door service for EHP clients and could make direct runs to destinations, thus providing convenient and timely service. A paid staff person would likely have to coordinate the shuttle service and the volunteers. In order to be conservative our analysis presumes that the driver will be paid.

The shuttle should operate as a combination of fixed route, on-demand, and scheduled service. A demand response service would provide the flexibility required to meet the transportation needs of EHP residents. EHP residents often have erratic transportation
needs because persons are searching for jobs, daycare, and housing. Furthermore, EHP residents access a variety of social services. Residents may have to go to multiple agencies in a single day and a shuttle service could meet this need for flexibility.

On the other hand, a demand response service may make it difficult to have volunteer drivers. A volunteer may not be as willing to “wait and see” if a ride is needed, especially during late night hours. EHP has a 10 PM curfew Monday through Friday and an 11 PM curfew on the weekends. Thus, any trips past those hours must be for work or for an emergency. Work trips can be scheduled as soon as the resident’s work schedule is known. So, shuttle trips after curfew could run more of a fixed route because travel needs would be known at least a few days in advance and trips before curfew could still be provided on short notice.

A shuttle service provides exceptional flexibility and the benefit of full control by EHP staff. However, there are also some potential concerns with this option. If EHP is going to rely on volunteers, attracting and coordinating volunteers may be time-consuming. For example, EHP will need to develop guidelines for what is an acceptable driving record because insurance companies will do a motor vehicle records check on all volunteer drivers. Also, it is imminent that the shuttle will not always be operational due to repairs and maintenance needs. And unlike taxis, EHP would be liable for any damages resulting from operating the service.

The shuttle service is intended supplement existing transit service available to EHP clients. The service would be available for service at times when buses do not run and to places where the bus does not go within a quarter-mile. The service would also be available for situations when the bus would not be able to get the person to an appointment on time. EHP would have complete control over use of the shuttle and full discretion for determining if a certain situation warrants use of the shuttle. The best opportunities for shuttle service are for an on-call service during daytime hours and a route based service during evening hours when transit runs infrequently or not at all. The evening service would primarily serve employment centers with second and third shift jobs. The shuttle would also be available for certain easy to schedule and regular trips such as grocery shopping and social service appointments. The shuttle would be a more efficient means of transporting a group of EHP clients to and from a grocery store than either taxis or transit. Of course, it is anticipated that the destinations served by the shuttle will change based on the changed circumstances of EHP clients lives.

Start-up and operating costs of a shuttle service will be high unless arrangements can be made with another entity to help with cost of purchase, repairs and maintenance. There is also the potential for EHP to receive a grant to cover the purchase cost of a vehicle. Insurance and fuel will also be an on-going expense for a shuttle service. Unlike taxis, the cost per person of using the shuttle decreases as the number of passengers increases. A detailed description of the shuttle costs is provided in the Appendices.

We recommend that EHP utilize transit, taxis and shuttle service to serve their clients needs for accessing employment, health care, housing searches and needed social
services. A combination of transportation modes best meets the efficiency, reliability, flexibility, cost, risk, and control goals of the project.

Non-Transportation Options

In addition to the transportation-based recommendations, our group has developed some non-transportation solutions that should help ease the travel constraints faced by EHP clients. Improvements not centered on transportation are also needed to make residents’ trips more efficient. These recommendations are increasing free and half-price bus ticket allotments, providing more information about the transportation system to clients, and working with social service agencies to set up blocks of time for EHP clients’ appointments.

EHP should look to increase its allotment of free and half-price bus tickets. As mentioned earlier in this report, the shelter often runs out of these tickets early in the month. Increasing bus ticket allotments may help more clients travel around the city via transit. Linda Severson, of JCCOG, has mentioned that increasing this allotment is possible by simply asking the city for such a change. Ms. Severson claims that Iowa City’s City Manager makes the final decision on matters such as this one and he has been reasonable when such requests have been made in the past. This solution will help to ease the demand transportation puts on residents’ pocketbooks.

One major problem for clients is the lack of knowledge about Iowa City and its environs. It would be beneficial for clients if EHP provided some information on common destinations and the most efficient way to travel to those locations. Currently, the shelter provides a bulletin board displaying transit routes and schedules. This board should be enhanced by providing locations of and directions to the common destinations as well as scheduled shuttle trips. Also, EHP should try to work with the city to provide more transit information at major pick-up and drop-off points.

Finally, many clients also complained about poor scheduling of social service appointments. EHP should work with these agencies to develop a system of block scheduling for residents or at minimum scheduling appointments around transit schedules. This solution may help to allow for more efficient use of the transportation system. Block scheduling would also help EHP use a shuttle service to transport clients to and from social service agencies.

Effectively filling EHP clients’ needs requires utilization of transportation and non-transportation solutions. The options described in this section should help alleviate some of the problems currently faced by EHP clients while imposing minimal new costs or risks on EHP. The non-transportation options should be implemented in conjunction with taxi and shuttle services. Expansion of transit should be considered as a future goal for further improving transportation for homeless persons.
VI. CONCLUSION

In conclusion, there are three major gaps affecting EHP clients in their attempt to secure economic self-sufficiency. Through research, interviews, focus groups, and travel diaries we have identified these gaps as being spatial, temporal, and client specific in nature.

We identified three transportation options that when combined fulfill the required goals necessary to allow EHP clients to access desired destinations. The three options that provide cost efficient, flexible, reliable, low-risk, and EHP control orientated transportation solutions are: shuttle service, continued use of and future expansion of public transit, and taxi usage. The centerpiece of our transportation recommendations is the implementation of a shuttle service to fill the gaps of the current transportation system.

We also identified three non-transportation options for EHP. Providing EHP clients with increased information regarding transit services and directions to common destinations will fill an existing information gap. EHP should promote block scheduling of appointments around the transit schedules. EHP should also request more free and half-priced bus tickets from the City of Iowa City to help its clients with their daily travel needs. Finally, included in this recommendation is a suggestion for EHP to approach the City of Coralville and request that they accept the free bus tickets and strip tickets issued by the City of Iowa City.

Used in conjunction, these solutions will provide EHP’s clients with greater ability to access the services that are essential to securing their economic self-sufficiency.
APPENDICES
### Employment Ranking of Iowa City Area Employers With 125 or More Employees

<table>
<thead>
<tr>
<th>Business</th>
<th>Number of Employees</th>
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<tbody>
<tr>
<td><strong>Over 2,000 Employees</strong></td>
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<tr>
<td>University of Iowa, Iowa City</td>
<td>17,803</td>
</tr>
<tr>
<td>University of Iowa Hospitals and Clinics, Iowa City</td>
<td>5,793</td>
</tr>
<tr>
<td><strong>2,000-1,000 Employees</strong></td>
<td></td>
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<tr>
<td>Iowa City Community School District, Iowa City</td>
<td>1,600</td>
</tr>
<tr>
<td>Veteran’s Administration Hospital, Iowa City</td>
<td>1,320</td>
</tr>
<tr>
<td>Hy-Vee Food Stores, Iowa City and Coralville</td>
<td>1,320</td>
</tr>
<tr>
<td>National Computer Systems, Iowa City</td>
<td>1,208</td>
</tr>
<tr>
<td>Mercy Hospital, Iowa City</td>
<td>1,150</td>
</tr>
<tr>
<td>ACT, Iowa City</td>
<td>1,100</td>
</tr>
<tr>
<td><strong>1,000-500 Employees</strong></td>
<td></td>
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<tr>
<td>Lear (formerly United Technology Automotive)</td>
<td>940</td>
</tr>
<tr>
<td>Oral B Laboratories, Iowa City</td>
<td>800</td>
</tr>
<tr>
<td>Rockwell International-Collins Aviation &amp; Communications Division</td>
<td>792</td>
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<tr>
<td>MCI Mass Markets, Iowa City</td>
<td>612</td>
</tr>
<tr>
<td>City of Iowa City, Iowa City</td>
<td>580</td>
</tr>
<tr>
<td>Procter &amp; Gamble, Iowa City</td>
<td>560</td>
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<tr>
<td><strong>500-250 Employees</strong></td>
<td></td>
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<tr>
<td>Systems Unlimited, Iowa City</td>
<td>470</td>
</tr>
<tr>
<td>Johnson County Government, Iowa City</td>
<td>465</td>
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<tr>
<td>Moore Business Forms, Inc., Iowa City</td>
<td>381</td>
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<tr>
<td>Wal-Mart, Iowa City</td>
<td>375</td>
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<tr>
<td>Heartland Express, Coralville</td>
<td>352</td>
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<tr>
<td>GEICO Direct Auto Insurance, Coralville</td>
<td>365</td>
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<tr>
<td>Hawkeye Food Service, Coralville</td>
<td>344</td>
</tr>
<tr>
<td>Hills Bank &amp; Trust, Iowa City</td>
<td>320</td>
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<tr>
<td>Company Name</td>
<td>Employees</td>
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<td>-------------------------------------------------------------------</td>
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<tr>
<td>Fresh Food Concepts, Iowa City and Coralville</td>
<td>248</td>
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<tr>
<td>Iowa City Press-Citizen, Iowa City</td>
<td>211</td>
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<tr>
<td>North Liberty Plastics, North Liberty</td>
<td>205</td>
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<tr>
<td>Goodwill Industries, Iowa City</td>
<td>200</td>
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<tr>
<td>Rexam Release, Iowa City</td>
<td>200</td>
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<tr>
<td>Target, Coralville</td>
<td>200</td>
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<tr>
<td>United States Postal Service, Iowa City and Coralville</td>
<td>200</td>
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<tr>
<td>Blooming Prairie Warehouse, Iowa City</td>
<td>200</td>
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<tr>
<td>Iowa State Bank, Iowa City</td>
<td>185</td>
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<tr>
<td>City of Coralville, Coralville</td>
<td>180</td>
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<tr>
<td>Seabury &amp; Smith, Iowa City</td>
<td>175</td>
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<tr>
<td>Sheraton, Iowa City</td>
<td>170</td>
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<tr>
<td>Clear Creek Amana School District, Tiffin</td>
<td>170</td>
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<tr>
<td>Dillards, Coralville</td>
<td>162</td>
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<tr>
<td>Scheel's Coralville</td>
<td>158</td>
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<tr>
<td>Sears, Coralville</td>
<td>150</td>
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<tr>
<td>L.L. Pelling, North Liberty</td>
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<tr>
<td>Menard's, Iowa City</td>
<td>150</td>
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<tr>
<td>Firstar Bank, Iowa City</td>
<td>140</td>
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<tr>
<td>Banker's Advertising/Tru Color Art Graphics, Iowa City</td>
<td>140</td>
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<tr>
<td>Cub Foods, Iowa City</td>
<td>132</td>
</tr>
<tr>
<td>J.M. Swank Co., North Liberty</td>
<td>130</td>
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<tr>
<td>The Radisson, Iowa City</td>
<td>130</td>
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</tbody>
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*Source: Iowa City Area Development Group, April 2001.*
<table>
<thead>
<tr>
<th>What places do you go?</th>
<th>Where is that? (general location)</th>
<th>Day (Circle all that apply)</th>
<th>Travel Mode (1=Para-Transit; 2=Bus Transit; 3=Driver; 4=Ride; 5=Taxi; 6=Walk; 7=Bike)</th>
<th>Activity Time (I.E. 8-5)</th>
<th>Travel Time (In Approx. Minutes)</th>
<th>Weekly Problems Encountered (See Prompts)</th>
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SUPPLEMENTAL TRAVEL DIARY QUESTIONS

If Client Used Public Transit:
1. Which bus routes did you use for the activities listed on the travel diary?
2. How did you pay for those rides? (EHP provided ticket, pass, cash, etc.)

If Client Used Paratransit:
3. Did you have to schedule in advance?
4. Who paid for the trips?

If Client Received Ride:
5. Who provided the ride(s)?
6. How frequently did that person provide you with a ride?
7. Did you pay for any of those ride(s)?
8. Did you need to schedule the ride(s) in advance?

If Client Used Taxi:
9. How much did you pay for the taxi rides listed on the travel diary?
10. Who paid for the trips? (client, EHP, another agency, etc.)

Potential Problems Encountered Using Transportation:
(enter all applicable codes in “Problems Column”, answer in general terms, not specific to each activity)

1. Wait time
2. Bus Doesn’t Go Where Client Wants to Go
3. Travel Mode Not Available At Time Client Needs
4. Commute Takes Too Long
5. My Car Isn’t Reliable
6. My Ride Isn’t Reliable
7. I Don’t Have a Driver’s License
8. Cost of Maintaining Own Car
9. Taxi Cost
10. Public Transit Costs
11. Walk Too Far
12. Physical Inaccessibility
13. Other (please describe)

Other Questions

1. If Client Has A Disability: Are there any travel modes you have trouble using because of your disability? (please specify)
2. Do you have a driver’s license?
3. If client doesn’t have drivers license, is client eligible for drivers license?
4. What activities have you engaged in that aren’t reflected on the travel diary? (specify nature of activity, location, problems encountered)
5. Are there places you want or need to go but have trouble because of transportation problems?
(1) What places (not including EHP) do you visit most often in the Iowa City area?

1. ____________________ 2. ____________________

3. ____________________ 4. ____________________

(2) Do you have any disabilities that hinder your ability to do any of the following? (circle all that apply)

a. Use the Bus  
   b. Walk  
   c. Use a Taxi  
   d. Ride a Bike  
   e. Drive a Car  

(3) Do you have young children that accompany you on your trips? (circle one)

   No  
   Yes

(4) What form of transportation do you use most? (Circle one)

a. Bus  
   b. Drive a car  
   c. Get a ride  
   d. Taxi  
   e. Walk  
   f. Bike  
   g. Other (explain): ____________________

(5) Please rank how well each of the following meets your transportation needs? (1= does not meet my needs, 2 = somewhat meets my needs, 3 = completely meets my needs)

   a. Buses  
   b. Taxis  
   c. Walking/ Biking  
   d. Getting a Ride  
   e. Driving a Car

(6) On average, how many times a week do you use taxis? (circle one)

   a. Zero times a week  
   b. One time a week  
   c. Two times a week  
   d. More than two times a week

(7) Who pays for your taxis most often? (circle all that apply)

   a. I pay  
   b. EHP pays  
   c. Other agency or person pays: ____________________

(8) Do you ever get free bus tickets anywhere besides EHP?

   No  
   Yes  
   If yes, where? ____________________

(9) Has lack of adequate transportation hindered your ability to find housing?

   No  
   Yes

(10) Has lack of adequate transportation hindered your ability to find a job?

   No  
   Yes

(11) Do you have a car or regular access to one?

   No  
   Yes

Thank you for filling out this survey!!
Introductions:

Hi! We’re all here from the university of Iowa urban and regional planning department. We are here to learn about the transportation needs of persons living at EHP in order to help EHP to improve access to transportation for you and others. We’re interested in learning about the places you go, the places you would like to go, and about transportation problems you face everyday. We will be recording the conversations unless anyone objects. Does anyone object to being recorded?

First, I’d like to ask everybody to fill out this short questionnaire. These questions are meant to get you thinking about transportation and to help us guide the conversations. The questionnaire is strictly voluntary, and all information will be kept anonymous and confidential. (hand out surveys and pencils).

Next we will have a very informal conversation. I’ll just throw some questions out there, anyone can respond in any order, just please be polite to others and not interrupt. When it seems you are all done talking, I'll throw out another question, and so on and so forth. Participation once again is completely voluntary and anything you say will be kept confidential and anonymous. No specific results or information about you will be shared outside this location.

Before we start are there any questions?

O.k. let’s first introduce ourselves and say where we are from. My name is X and before I moved to Iowa, I lived in X.

(1) Tell me about your transportation situation. How do you get around town? Do you have any transportation problems?
   a. Feel free to share a story or some of the frustrations you face everyday trying to get around town. What do you like or dislike about, for example, about using buses, taxis, walking, and traveling around town. Does anyone have family or friends in the area who give you rides? How familiar are you with getting around town- do you know where places are and how to get there?

(prompt with questions about the adequacy and convenience of transportation options, ie. does the bus go to places you need to go? Do buses run at the times you need them? The buses generally leave the bus station every hour. Is this often enough for you or does this cause problems for you? Are you ever stuck without a way to get somewhere? are bus stops far from your final destination, does the bus take too long, are you late or do you have to miss appointments because of a bus or taxi? Have you had any problems using a taxi? Is walking difficult for you for any reason (busy and dangerous streets you have to cross, cold weather, young kids, disability)?

   b. I imagine many of you use the free bus tickets from EHP. Have you ever not been able to get a bus ticket from EHP because they run out? What
did you do? How did you get where you needed to go? How often does that happen? Are there any other agencies that help you with transportation- JC SEATS, DHS, etc...

(2) Now I know some of your general transportation issues, I’d like to know more specifics about the places you regularly go. From your questionnaires, I notice that many persons need to go to X. How often do you go there? How do you currently get there?
   a. What (other) places do you go- (ie. Eastdale Plaza, work, Salvation Army, Wesley Center, doctor appointments, school, social service agencies, etc…)
   b. How do you get to these places and what problems do you face getting there?

(3) Now I’ve heard about places where you go, what about places you want to go but can’t. What are some other places that you can’t get to because you have no way of getting there or because it is very difficult to get there? What happens if you’re not able to get there? What places would you like to go to more frequently if you had better transportation?

(4) How has your current transportation situation affected your job opportunities? Have you ever been forced to turn down a job because you didn’t have a way to get there? Is it difficult for you to look for a job because of transportation?
   a. The bus doesn’t run overnight or on Sundays. Do you think you would work third shift or Sundays if you had better transportation? Are there places where you would like to work but the bus doesn’t go there now? Have you ever lost a job because you couldn’t get there in a timely manner because of transportation?
   b. How has your current transportation situation affected your search for housing? Is it difficult for you to check out apartments because you can’t get around town? How many apartments can you manage to see in one day?

(5) What can be done to make it easier for you to get around the Iowa City area?
TRANSPORTATION COSTS ESTIMATES

Taxi

$3.00 for the first mile
$.75 for each additional half-mile
$1.00 for each additional passenger
$.25 for each package

Source: Old Capitol and Yellow Cab Companies, 2002

Transit

$5.35 per revenue vehicle mile (Coralville)
$5.26 per revenue vehicle mile (Iowa City)

Source: FY2001 Iowa Department of Transportation Statistical Reports

Shuttle

Fuel Costs = $.0975/mile (12 mpg and $1.17 per gallon)
Maintenance = $.11/mile
Repairs = $23/month ($.03/mile)
Wages = $8.50/hour ($.34/mile at 25 mph)
Total = $.5775/mile

Source: University of Iowa Parking and Transportation Department and United Action for Youth, 2002

Notes:

Taxi costs are the rates charged by Old Capitol and Yellow Cab Companies. These are the highest rates for taxi services in the area.

Transit costs are the actual operating (labor, maintenance and fuel) costs for the full size buses. We used the Iowa City costs in our report.

Shuttle costs are estimates of actual operating expenses for the university’s vans and for the vans operated by United Action for Youth. The cost of fuel is the average fuel cost for regular unleaded gasoline in the State of Iowa for the last ten years. Using this average reduces the variance caused by the large fluctuations that occurred in the fuel prices in each of the last few years. Wage costs for the shuttle are the starting wage for Cambus, the lowest paying transit operator job in the area.
REFERENCES


Iowa City, City of. *2001 City Steps.* Iowa City, IA.

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