Broadway-Cross Park Neighborhood Shopping Shuttle

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Prepared for:
Neighborhood Transportation Planning
Broadway Improvement Group Steering Committee

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Robert O’Meara
Human Resources Manager, Kmart, Iowa City
Broadway-Cross Park Neighborhood Shopping Shuttle

A Neighborhood Transportation Project Proposal for the Broadway-Cross Park Area

Project Background

During the months of June and July, 2000, The Neighborhood Centers of Johnson County organized several meetings of small focus groups consisting of a variety of stakeholders: members of Wetherby Friends and Neighbors Neighborhood Association, residents of Broadway, Taylor & Cross Park area, commercial property owners, apartment managers, business owners and institutional constituencies. These focus groups were to discuss and make recommendations on issues such as commercial needs, property management issues and neighborhood safety, image and perception.

From these meetings, several recommendations were made to the Broadway Improvement Group Steering Committee on ways to improve facilities, economic development and safety, image and sense of neighborhood.

One of the issues that surfaced as a result of the focus groups held with residents living in the Broadway-Cross Park area was having limited access to local grocery stores. After the closure of Econo Foods grocery store in Pepperwood Place in 1998, the problem was compounded, creating even greater accessibility issues for residents without access to vehicles. Currently, many residents facing this problem rely on pushing their groceries home in shopping carts.

As addressed in the focus groups, the problem is two-fold. As residents push their carts from the shopping centers, they are often left discarded in the residential area. This poses even greater issues for the neighborhood, including the physical appearance, safety and the overall perception of the neighborhood. Overall, it was felt that the discarded grocery carts present a safety hazard for children playing in the carts and that they detract from the physical appearance of the neighborhood.

From these recommendations made by residents and various constituencies, the Safety Image and Sense of Neighborhood task force group is focusing their efforts on improving the image, safety and perception of the neighborhood in addition to planning for services that increase the overall quality of life in the area.
Project Concept

The basic concept behind the Broadway-Cross Park neighborhood shuttle project is to provide a free shuttle will transport residents who live in the multi-family housing units on Broadway Street, Cross Park Avenue and Keokuk Street to the nearby shopping centers, Hy-Vee, Kmart and Aldi.

The purpose of this project is to provide a free, useful mode of transportation for persons and families without other forms of transportation. This project will also focus on ensuring the safety of neighborhood residents and children by providing a safe form of transportation for individuals with limited transportation opportunities. The shuttle will also promote a more positive neighborhood image and alleviate the persistent problem of discarded carts in residential living areas. Finally, it will promote and facilitate the patronization of neighborhood businesses, thereby adding to the economic development in the area.

The shuttle will be designed to pick up residents during peak shopping hours (assessed through a neighborhood survey) starting at the Broadway Street Neighborhood Center and make stops along Broadway Street and Cross Park Avenue to provide greater accessibility and efficiency for persons with disabilities and families with children. The shuttle will then transport residents to Kmart, Hy-Vee, and Aldi shopping centers.

The objectives of the Broadway-Crosspark Neighborhood Shopping Shuttle are to:

- Provide free, safe and useful transportation to local shopping centers for neighborhood residents
- Promote a clean and hazard free neighborhood by alleviating discarded grocery carts
- Facilitate resident support of local businesses
- Support healthy living and eating habits for families and children

Neighborhood Needs Assessment

To gain a better understanding of the transportation needs of the Broadway- Cross Park area, we examined a variety of factors. First, we documented existing research on the value of urban grocery stores and the consequences of losing an urban grocery store, including an assessment of nutritional deterioration, the increased cost incurred by individuals who shop primarily in convenience stores and the cost incurred by the increased trips necessary to meet family grocery needs.

Secondly, a major part of the needs assessment examines the neighborhood image and safety and the problems associated with the discarded grocery carts in the neighborhood.
This analysis will include interviews with the store managers of Kmart and Hy-Vee to assess their perception of the problem and the cost incurred by these businesses.

Lastly, to assess neighborhood perception of transportation issues we developed a short survey that addressed three factors: Transportation Issues, Shopping Routines and Family Structure. Within these three categories we specifically looked at the times when residents most frequently shop, what forms of transportation they typically rely on to perform their daily activities and general questions regarding their family structure.

**The Value of the Urban Grocery Store**

The underlying question of our project proposal is: Why is access to the grocery store so valuable? To illustrate why access to grocery store is an important tool of survival in any community, we have drawn from the report, *The Urban Grocery Store: An Opportunity for Cedar Rapids*, which was presented as a field problems study for the Graduate Program in Urban and Regional Planning at The University of Iowa in May, 1999.

The study indicates that grocery stores located in urban areas are critical to the healthy survival of the neighborhood. Supporting this is the fact that many residents of urban communities have limited access to vehicles and therefore rely on the immediate proximity of grocery stores to meet their household needs. And because urban areas often produce diverse communities, it is very important for the grocery stores locating in these areas to provide a diverse food selection that allows for a healthy, balanced diet. According to Carberry, Fabel and Wendt (1999), "A community’s nutritional diet is often dependent upon its access to sufficient products" (pg 2).

Another reason why urban grocery stores are so vital to the neighborhoods that they serve is to provide needed services at reasonable prices and provide competitive prices relative to suburban stores and the local convenience stores. What distinguishes urban grocery stores from stores found in suburban areas is that most urban grocery markets provide service to diverse economic classes. Lower income families, in particular are restricted by their grocery budget and limited resources and often rely on the services of urban markets. Importantly, these stores allow them to purchase goods that are both adequate in variety and affordable in price (Carberry et al, 1999).

**The Consequences of losing an Urban Grocery Store**

Another important question remains, when looking at how communities are affected by access to grocery stores: What happens when neighborhoods lose such a valuable resource? To address this question we must examine the consequences of the loss of an urban grocery store. First, due to the fact that many people in urban communities do not have access to transportation, the loss of a grocery store drastically intensifies the effects of not having access to needed goods and services. Often, the result is that community members find other ways to meet their household needs. They are often forced to do their grocery shopping at the more expensive local convenience stores and in some cases stores that may provide limited grocery items. There are two major consequences that arise from these types of shopping habits.
The first consequence comes from the difficulty in ensuring a nutritional diet while shopping at convenience or variety stores. Due to the limited and often nutritionally inadequate grocery selection that these stores provide, people who maintain these shopping behaviors run the risk of jeopardizing their health and well-being. In looking specifically at the Broadway-Cross Park area, many residents due to mobility issues, may choose to do grocery shopping at Kmart (due to its closer location), which provides only limited grocery items, not the extensive variety of fresh produce and grocery items that Hy-Vee or Aldi provides (Carberry et al, 1999).

The second major consequence is that when consumers choose to shop for convenience, costs rise. The increased cost is due to two factors: the inflated cost of each item at the convenience or variety store and the increased number of trips needed required to these locations. Further, the increased number of trips needed to meet household grocery needs for people without cars may inevitably increase transportation costs (via public transit or taxi) and increase the time spent travelling.

**The Problem of Discarded Shopping Carts**

One of the issues that came out of the Broadway Improvement Group focus group sessions was the issue of discarded shopping carts scattered throughout the neighborhood. In order understand more about the extent problem of discarded shopping carts, we decided to go into the neighborhood and document exactly where carts were abandoned, approximately how many carts were abandoned and how it physically impacted the neighborhood.

Our observations concluded that there were nearly a dozen carts abandoned throughout the entire neighborhood. As evident from the photographs below, cars were found in almost every part of the neighborhood including: residential property, parking lots, along curbs, near streets and even in playground areas.

The physical impact on the neighborhood was also evident. The shopping carts severely detracted from the aesthetic quality of the neighborhood. In addition, the carts posed another problem to neighborhood in terms of maintaining a safe environment for families with children. In one case, an abandoned cart created an obstacle in a children’s playground area. Not only do the abandoned carts take away from the overall appearance of the neighborhood, but it also furthers a *negative* perception in the Iowa City community as a whole.
Other documentation of the problem of discarded shopping carts came from interviews with Al Dix the General Manager for Hy-Vee and Robert O’Meara Human Resources Manager of Kmart. Robert O’Meara indicated that there is definitely a problem with carts being taken from the stores. Moreover, both managers have observed that the problem has worsened since the closure of Econo Foods in 1998. They mentioned that they spend a significant amount of time and money retrieving and replacing the carts.

Al Dix quoted the replacement of the carts at approximately $250 dollars per cart and $15 dollars per hour to staff employees to recover abandoned carts from the neighborhood. Robert O’Meara estimated that replacement carts ranged anywhere from $120 to $200 dollars. Yearly maintenance on the carts were estimated at $1,200 per year. These figures clearly indicate the increase in the cost of doing business due to the abandoned carts.

In addition, they indicated that they receive numerous complaints from neighbors and other local business and commercial property owners. Shown below is a picture of Kmart employees retrieving abandoned carts from the Broadway-Cross Park Area.

Photo 3: Kmart Employees collecting carts

Photo 4: Kmart Employees on other side

**Neighborhood Perception of Transportation Needs**

To assess neighborhood residents' perception of the need for a neighborhood grocery shuttle, we conducted surveys with 16 neighborhood residents and attended two monthly Neighborhood Advisory Council meetings at the Broadway Street Neighborhood Center to hold focus groups sessions to gather input regarding the neighborhood grocery shuttle proposal.

The survey was organized into three parts: Transportation issues, Shopping Routines and Family Structure (See Appendix 3: Neighborhood Survey). It consisted of both qualitative and quantitative questions, however, due to the limited size of the sample it will be used for a purely qualitative analysis of neighborhood perception of transportation needs. With the help of Neighborhood Center staff, our survey was conducted in the primary service area of the Broadway Street Neighborhood Center (See figure 1: Inset map of residential service areas). Below we have summarized the results for the section on Transportation Issues from the survey sample.
* Please note that the survey data do not represent a statistically significant sample

**Summary of Survey Results on Transportation Issues**

Of our 16 respondents, nearly 50% reported that they had access to a car when needed. Although nearly half of the respondents have access to a car when needed, the percentage is still relatively low. When asked to describe their concerns related to accessibility and availability of transportation, one resident responded, “before they had a car, mobility was severely limited and that public transportation is still used for a variety of everyday tasks.” Further, this person commented that “bus routes are complicated” and that “Hy-Vee is too far to walk, especially mothers with children.” Another resident mentioned “there were no problems when Econo Foods was there, now people walk with their kids.” Two residents mentioned that when their car broke down or in times that they had no access to vehicles, they had to walk to their destinations.

For over half of the residents who responded that they did not have access to a vehicle when needed, comments indicated that limited access to transportation was a major obstacle in their everyday activities. One resident commented, “I shop when I am not at work then it’s hard to get to the store when taking the bus, and I have two children.” Another commented, “during winter, everything is very hard. People walk to the grocery store.” Other comments expressed that families that rely on the bus for access to shopping centers often face the problem of waiting for return bus service and carrying grocery to the bus stop. Photos 5 and 6, shown below illustrate families relying on shopping carts to transport groceries.

Photo 5: Family carting groceries home

Photo 6: Woman pulling cart away from Kmart
Broadway-Cross Park Residential Service Area

Our neighborhood transportation proposal focuses on the area within the Southeast District of Iowa City. More specifically, the Broadway-Cross Park area which includes: Broadway Street, Cross Park Avenue and Keokuk Street located on the south side of Highway 6. Show below, figure 1.1 shows a map of the service area, the red colored parcels indicate the existing multi family-residential area.

![Figure 1: Inset map of the residential service areas](image)

One of the principle resources in the Broadway-Cross Park area is the Broadway Street Neighborhood Center of the Neighborhood Centers of Johnson County (NCJC). This is due to its central location in the neighborhood in addition to the variety of services that it provides and the number of people that it serves. The mission of NCJC is to serve neighborhood families and individuals who would otherwise have difficulty accessing needed services either because of transportation, childcare or financial constraints.

One of the physical characteristics of the Broadway-Cross Park area is that has a high concentration of multi-family housing. Below, Table 1 provides a summary of the multi-family housing units in the service area. Importantly, the table illustrates the relatively high numbers of multi-family housing units located within the service area and a significant number of project-based subsidized housing or apartments that accept section 8 housing assistance.
Summary of Multi-family Housing for Broadway Cross Park Neighborhood

<table>
<thead>
<tr>
<th>Apartment</th>
<th>Date Established</th>
<th>Number of Units</th>
<th>Guidelines</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cedar Wood</td>
<td>1982</td>
<td>63</td>
<td>Project-based Low Income</td>
<td>2000 Broadway Street</td>
</tr>
<tr>
<td>Coronet</td>
<td>1960’s</td>
<td>34</td>
<td>Section 8 Market Rate</td>
<td>1906 Broadway Street</td>
</tr>
<tr>
<td>Cross Park Apartments</td>
<td>1990’s</td>
<td>48</td>
<td>Market Rate</td>
<td>800 Cross Park Avenue</td>
</tr>
<tr>
<td>HACAP Public Housing</td>
<td>1986/1994-95</td>
<td>18</td>
<td>Subsidized Low Income</td>
<td>1926 &amp; 1946 Broadway Street</td>
</tr>
<tr>
<td>Keokuk Apartments</td>
<td>1995-96</td>
<td>100</td>
<td>Market Rate</td>
<td>2051 Keokuk Street</td>
</tr>
<tr>
<td>Villa Garden Apartments</td>
<td>1991</td>
<td>48</td>
<td>Project-based Low Income</td>
<td>1015 Cross Park Avenue</td>
</tr>
</tbody>
</table>

Table 1: Multi-family housing summary – Broadway Cross Park Area

Demographic Analysis of Service Area

In understanding the special needs of the Broadway Cross Park area it is necessary to understand the unique demographic characteristics of the neighborhood. Using data cited in the report, *Strengthening Neighborhoods Through Equity Planning: The Broadway-Cross Park Study*, conducted as a field problems study for the Graduate Program in Urban and Regional Planning in 1999, several findings are evident. As shown in Table 2, the racial composition of the Broadway study area has considerably higher percentages of racial minorities than both the South Planning District and Iowa City as a whole.

In addition, according to 1990 Census data, the Broadway study area has 28% of persons under the age of 18 years of age living in this area. When comparing this figure to the rest of Iowa City as a whole, which is composed of only 17% of children under the age of 18, it becomes clear that the Broadway study area has the highest concentration of children in Iowa City (see Table 3).
Race and Ethnicity (1990)

<table>
<thead>
<tr>
<th></th>
<th>Broadway Study Area</th>
<th>South Planning District</th>
<th>Iowa City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>1,715</td>
<td>6,310</td>
<td>59,737</td>
</tr>
<tr>
<td>Percent White</td>
<td>90%</td>
<td>93%</td>
<td>94%</td>
</tr>
<tr>
<td>Percent African American</td>
<td>5.3%</td>
<td>3.8%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Asian/ Pacific Islander</td>
<td>2.9%</td>
<td>2.4%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Percent Hispanic (all races)</td>
<td>.93%</td>
<td>1.2%</td>
<td>1.25%</td>
</tr>
<tr>
<td>Percent Minority</td>
<td>10%</td>
<td>7%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Table 2: Comparative Summary of Race and Ethnicity
Source: 1990 U.S. Census of Population and Housing, Block Statistics West North Central, CD90-IB5
Cited in *Strengthening Neighborhoods Through Equity Planning: The Broadway-Cross Park Study, 1999*

Age of Residents (1990)

<table>
<thead>
<tr>
<th></th>
<th>Broadway Study Area</th>
<th>South Planning District</th>
<th>Iowa City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent under 18 yr.</td>
<td>28%</td>
<td>25%</td>
<td>17%</td>
</tr>
<tr>
<td>Percent over 65 yr.</td>
<td>3%</td>
<td>8%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Table 3: Comparative Summary of Age of Residents
Source: 1990 U.S. Census of Population and Housing, Block Statistics West North Central, CD90-IB5
Cited in *Strengthening Neighborhoods Through Equity Planning: The Broadway-Cross Park Study, 1999*

In addition to the 1990 demographic data presented in the field problems study, a more specific demographic profile of the residents who participate in the Neighborhood Centers' program was put forth by NCJC. The results show that nearly 54% of the participants are teenagers or younger. Consistent with these findings, the neighborhood survey we conducted show that nearly 75% of the household had children (number of children ranged from 1-4 children per household)

Racially, the data cited in the NCJC brochure shows that 44% of the participants are from minority groups consisting of: African Americans, Hispanic (all ethnicities), Multi-racial and Asian (See figures 1 and 2). These statistics further support that the Broadway-Cross Park has unique characteristics that set them apart from the rest of the city. Because NCJC serves primarily low-income families, this reinforces the need for a variety of services to meet the needs of this diverse community.
Shopping Shuttle Route Proposal

In planning the shuttle route and scheduling for the grocery shuttle, we took into consideration many factors, specifically:

1. Comments and input of neighborhood residents
2. Interviews with the managers of Kmart and Hy-Vee
3. Accessibility issues within the designated service area
4. Existing Iowa City transit routes and bus stops and resident safety
5. Vehicle sharing

First, the surveys conducted with neighborhood residents and input gathered at the focus groups indicated that many of the residents tend to shop either during early evening during the week and during weekends. Of the sixteen households that we surveyed, many were families with children. Often, this was presented as a concern in terms of shopping habits including specific times of day and frequency of trips. For families who have children or work during the week, weekday evenings were consistently cited as the most convenient shopping time. Further, many of the families stated that typically make shopping trips during the weekend due to time constraints during the week.

Reinforcing these conclusions are the observations made by the information gathered from Al Dix and Robert O’Meara, that employees are sent to collect carts during the weekend because many of the grocery carts are taken from the grocery stores during that time.

Another factor that was considered in making the route recommendation is how far people would have to walk from the shuttle stop to their apartments. The goal was to minimize the distance from the drop off point and the apartments. For this reason the stops were designated at areas that are more convenient for people to walk home with their children while carrying groceries or any other household items. Another
consideration in locating designated stops within walking distance of the each residential complex within the study area was to ensure easier access for persons with disabilities.

Existing Iowa City bus stops were sought out for designation whenever possible. The reasons being these areas already have established curb access, lighting and in some cases shelters to provide protection from natural elements.

Lastly, for the purpose of the project proposal, it is assumed that an existing city vehicle will be used. For this reason, the scheduling of the shopping route must run outside of the times scheduled for normal City bus routes. In terms of vehicle capacity, the proposed vehicle is a twenty-two passenger, bus with standing room for 10-12 persons. To accommodate persons with disabilities, there is one wheelchair placement which reduces the total number of passengers to 15 persons. In an interview with the Transit Division for the City of Iowa City, it was stated that in the case of the designated vehicle not being in working order, a substitute vehicle may be available.

**Recommended stops**

**To shopping destinations:**
- Broadway Street Neighborhood Center
- Broadway Street & Cross Park Avenue
- Broadway Street (existing City bus stop)
- Kmart
- Hy-Vee
- Aldi

**Return from shopping destination:**
- Hy-Vee
- Kmart
- Cross Park Avenue & Keokuk Street
- Cross Park Avenue
- Broadway Street & Cross Park Avenue
- The Broadway Street Neighborhood Center

**Operating Hours of the Broadway- Cross Park Neighborhood Shopping Shuttle**

<table>
<thead>
<tr>
<th>Day</th>
<th>Hours of operation</th>
<th>Hours/week</th>
<th>Per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wednesday</td>
<td>4:45 P. M. -9:15 P.M.</td>
<td>4.5</td>
<td>234</td>
</tr>
<tr>
<td>Saturday</td>
<td>10:45 A.M - 3:15 P.M.</td>
<td>4.5</td>
<td>234</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td></td>
<td>468</td>
</tr>
</tbody>
</table>

Table 4: Operating Hours of the Broadway-Cross Park Neighborhood Shopping Shuttle

Shown below is a sample of the shuttle schedule for the Wednesday evening service. The outbound shuttle will begin at the Broadway Street Neighborhood center and make five stops including the two designated stops in the residential area on Broadway Street & Cross Park Avenue and on Broadway Street, and three stops at the shopping destinations. To provide greater convenience to the shuttle riders, the shuttle stop at an approved location along the front of the shopping centers and will remain for a brief period for riders to load their groceries. The Inbound service will begin at Aldi shopping center and make return stops at Hy-Vee and Kmart. The shuttle will then return riders to the
residential area making stops along Cross Park Avenue & Keokuk, Cross Park Avenue, Broadway Street & Cross Park Avenue and end at the Broadway Street Neighborhood Center (see Appendix 3: Shuttle Route).

<table>
<thead>
<tr>
<th>Wednesday Schedule (Evening Service)</th>
<th>Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outbound</td>
<td></td>
</tr>
<tr>
<td>Broadway Street Neighborhood Center</td>
<td>5:00 p.m.</td>
</tr>
<tr>
<td>Broadway Street &amp; Cross Park Avenue</td>
<td>5:03 p.m.</td>
</tr>
<tr>
<td>Broadway Street (existing City bus stop)</td>
<td>5:05 p.m.</td>
</tr>
<tr>
<td>Kmart</td>
<td>5:08 p.m.</td>
</tr>
<tr>
<td>Hy-Vee</td>
<td>5:12 p.m.</td>
</tr>
<tr>
<td>Aldi</td>
<td>5:15 p.m.</td>
</tr>
<tr>
<td>Inbound</td>
<td></td>
</tr>
<tr>
<td>Aldi</td>
<td>5:15 p.m.</td>
</tr>
<tr>
<td>Hy-Vee</td>
<td>5:20 p.m.</td>
</tr>
<tr>
<td>Kmart</td>
<td>5:25 p.m.</td>
</tr>
<tr>
<td>Cross Park Avenue &amp; Keokuk (existing City bus stop)</td>
<td>5:27 p.m.</td>
</tr>
<tr>
<td>Cross Park Avenue</td>
<td>5:30 p.m.</td>
</tr>
<tr>
<td>Broadway Street &amp; Cross Park Avenue</td>
<td>5:33 p.m.</td>
</tr>
<tr>
<td>Broadway Street Neighborhood Center</td>
<td>5:35 p.m.</td>
</tr>
</tbody>
</table>

Table 5: Example of Shuttle Service Scheduling

Shuttle Funding and Operating Costs

Summary of Costs

The capital cost of the Broadway-Cross Park shopping shuttle is assumed to be zero, because it is presumed that an existing city vehicle will be used. Based on estimates submitted by the Iowa City Transit Division, the cost of operating the shuttle for 9 hours per week will be approximately $15,888 per year. Table 1.4, shown below provides a summary of the estimated costs that the shuttle will incur per hour, week and year.

<table>
<thead>
<tr>
<th>Cost Estimate of Broadway-Cross Park Shopping Shuttle</th>
<th>Per hour</th>
<th>Per week</th>
<th>Per year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Labor costs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wages</td>
<td>$16.23</td>
<td>$146.407</td>
<td>$7,595.64</td>
</tr>
<tr>
<td>Fringe Benefits</td>
<td>$4.87</td>
<td>$43.83</td>
<td>$2,279.16</td>
</tr>
<tr>
<td><strong>Total labor cost</strong></td>
<td>$21.10</td>
<td>$189.90</td>
<td>$9,874.80</td>
</tr>
<tr>
<td><strong>Non-labor costs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>$10.00</td>
<td>$90.00</td>
<td>$4,680.00</td>
</tr>
<tr>
<td>Fuel</td>
<td>$2.85</td>
<td>$25.65</td>
<td>$1,333.80</td>
</tr>
<tr>
<td><strong>Total non labor cost</strong></td>
<td>$12.85</td>
<td>$115.65</td>
<td>$6,013.80</td>
</tr>
<tr>
<td><strong>Total cost of operation</strong></td>
<td>$33.95</td>
<td>$305.55</td>
<td>$15,888.60</td>
</tr>
</tbody>
</table>

Table 6: Cost Estimate of the Broadway-Cross Park Shopping Shuttle
Possible Funding Sources

It is recommended that the City provide the principle source of funding through possible Capital Improvement Program funds, Program for Improving Neighborhoods Grant Funding or Community Development Block Grant funding. The businesses Kmart, Hy-Vee, and Aldi will be the principal destinations of the proposed shuttle and would possibly share in the benefits of the proposed shuttle. Therefore each of these businesses should be considered as a possible source of funding for the project. It is recommended that these businesses be contacted and presented with the opportunity to contribute to this community project.

Project Viability

The underlying questions in evaluating the project’s viability are: Will the shopping shuttle receive neighborhood support? Will local businesses support and contribute to the project? And have other similar projects been successful? These questions were addressed through interviews with managers of local businesses, focus groups held with neighborhood residents and a review of the NCJC pilot shuttle project.

Neighborhood Support

One of the most important aspects of our project was to work with neighborhood residents to develop a project that adequately represents their needs and interests. A significant part of gathering neighborhood input came from the survey that we conducted in the neighborhood. Although the sample size of the survey was relatively small, the support for the project was overwhelming. Nearly all of the survey respondents indicated that the project would greatly benefit the area. Many residents also offered suggestions on times when the shuttle would be most effective to meet their household needs as well as their perception of the need for the shuttle service.

In addition to the individual surveys that were conducted, we attended two monthly Neighborhood Advisory Council meetings organized through NCJC during the months of September and November. During the September meeting, we presented the project concept to the council members and solicited their feedback. Much of the feedback consisted of suggestions as to when the shuttle service would be most needed and the constraints that many families have in accessing transportation. Everyone agreed that the shuttle would be a needed service in the area.

Local Business Support

During the interviews conducted with Al Dix and Robert O’Meara questions were asked concerning the whether these businesses would support and or contribute to the neighborhood shuttle service. Both managers indicated that they felt that the project would be a be an asset to the neighborhood in terms of meeting transportation needs and that it would help alleviate the carts being taken from the store. In addition, both
managers expressed a willingness to contribute monetarily to the project without stating specifically the amount of their suggested contribution. Unfortunately, numerous efforts to contact the management at Aldi were unsuccessful.

**Project Feasibility**

In order to foresee the challenges and more effectively work towards the success of the neighborhood shopping shuttle project, we can look at the project that is currently being sponsored by the Broadway Street Neighborhood Center to help residents with access to shopping centers.

Currently the Broadway neighborhood center is running a grocery shopping van that transports residents to shopping centers twice per month. Pat Meyer, Community Development Director for the NCJC began organizing the van service in November, 2000. The participation in this service, although limited, indicates the both neighborhood support and need for these services. Currently the van averages 3-4 participants per trip. In a phone interview with Neighborhood Center staff varies, it was expressed that the principle limitation to the program is reaching neighborhood residents and making them aware of the service. Staffing, and funding were other challenges facing the project.

Upon the possible future implementation of the Broadway-Cross Park Neighborhood Shopping Shuttle, we believe there are three main factors that will increase the likelihood of a successful shuttle program. First, securing funding from a principle funding source in addition to a variety of other funding sources, this will secure monetary support for the continuation of the project and allow various constituencies to support community project. The second major factor in securing a successful project is to increase and ensure community awareness and promote community outreach by making information available about the service. Most importantly, it is essential that the community members play a leading role in shaping the way the service is provided, so that it is tailored to meet the needs of the neighborhood.
Appendix 1. Residential Service Area

Designated service area color codes
Red = Residential service area

Existing Land-Uses
CC-2 = Community Commercial
RM-12 = Residential, Low Density Multi-Family
RM-44 = Residential, High Density Multi-Family
P = public (Park)
Appendix 2. Route Service Area

**SITE LOCATION:**

Designated Service area color codes
Red = Targeted Residential service Area (Multi-Family Residences)
Orange = Pepperwood Place (Former site of Econo Food Grocery Store)
Yellow = Kmart service area
Bright Green = Hy-Vee service area
Dark Green = Aldi service area
* Note-all commercial centers are designated CC-2

Existing Land-Use
CC-2 = Community Commercial
RM-12 = Residential, Low Density Multi-Family
RM-44 = Residential, High Density Multi-Family
P = public (Park)
Appendix 3. Shuttle route map
Broadway-Cross Park Shuttle Route Map: color codes
Blue Square = Starting point, Broadway Neighborhood Center.
Brown squares = Residential Stops (along Keokuk and Cross Park, Cross Park, Cross Park and Broadway and Broadway).
Gray Squares = Destination Stops
Light Blue = Outbound route only
Pink = Shared, Outbound to destinations and Inbound (to residential areas), turns north/south on Gilbert Street (not seen).
Dark Blue = Inbound (to residential areas)

Designated service area color codes
Red = Targeted Residential service Area (Multi-Family Residences)
Orange = Pepperwood Place (Former site of Econo Food Grocery Store)
Yellow = Kmart service area
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All Commercial Centers are designated CC-2

Existing Land-Use
CC-2 = Community Commercial
RM-12 = Residential, Low Density Multi-Family
RM-44 = Residential, High Density Multi-Family
P = public (Park)
Appendix 4. Neighborhood Survey

We are trying to understand more about transportation related issues in your neighborhood. We are going to ask a number of questions about the accessibility of transportation, your shopping routines and your family structure. During this interview, please feel free to be descriptive and ask questions at any time.

Transportation issues:
1. Do you have access to a car when you need it?
2. Generally, how do you get from place to place?
3. Where do you go via public transportation? Why? How often?
4. Describe your concerns, if any, related to accessibility and availability of transportation.

General Comments:

Shopping Routines:
1. In general, where and how often do you do your shopping (food, household item and toiletries)?
2. When do you typically do your shopping (be specific about times of day, weekday vs. weekend and frequency)?
3. How do you get to and from your shopping destination (and in general, how long does it take)?

General Comments:

Family Structure:
1. How many children are in your household?
2. Are there any persons with disabilities in your household?
3. If yes, how does the disability affect access to transportation?

General Comments:
Appendix 5: Questions For Business Manager Interviews

We are students in the Graduate Program in Urban and Regional Planning and we are working on a proposal for a Neighborhood Shopping shuttle to improve transportation access to local shopping centers for residents living in the Broadway-Cross Park area and to alleviate the discarded grocery carts in the neighborhood. We would like to ask you a few questions in order to understand more about problem.

1. How much does it cost replace one cart?
2. Do you have to replace many of the carts?
3. When do see a lot of carts disappearing?
4. During those times, about how many disappear?
5. Do you feel that there's a problem?
6. What do you think can be done to remedy the problem?
7. Have you notice a change in the number of customers or sales since the closing of Econo Foods? And how has it affected the number of cart being carted off the property?
8. Would you would you be willing to cooperate with and or contribute establishment and operation of the neighborhood shuttle?
Appendix 6: Broadway-Cross Park Neighborhood Shopping Shuttle Profile

Name: Broadway-Cross Park Neighborhood Shopping Shuttle, so that all the residents know the reason why it circulates the neighborhood and that it is there for their use.

Route: The shuttle will circulates through the Broadway and Cross Park neighborhood, takes people to Kmart, Hy-Vee, and Aldi grocery store than returns to Hy-Vee, Kmart and return people to the residences. The concentration of this route will be returning people home with their goods from the stores.

Schedule: Wednesday, 5pm—9pm, and Saturday, 11am—3pm.

Stops: 12 convenient stops

Fare Free

Vehicle Small Bus- Provided by the City of Iowa City.

Capacity: Twenty-two passengers with 10-12 persons standing, 1 wheel chair placement reduces number of passengers to 15.

Recommended Funding: The recommended funding sources are: The City of Iowa City, Johnson County, Transportation Equity Act for the 21st Century, Donations: Hy-Vee, Kmart, Aldi.
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