

# Barriers to Using Fixed-Route Public Transit for Older Adults



MTI Report 09-16



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# **BARRIERS TO USING FIXED-ROUTE PUBLIC TRANSIT FOR OLDER ADULTS**

June 2010

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<b>16. Abstract</b>  <p>For older adults, unmet transportation needs are linked to reduced well-being (Cvitkovich and Wister 2001). Current research indicates that, as a society, we are ill-prepared to provide adequate transit for the growing increasing population of older adults (Millar, 2005). Although public transit is available for many older adults, actual and perceived barriers prohibit its use. Thus, the research presented here examines what do older persons perceive as barriers to using fixed-route public transit?</p> <p>Four focus groups were conducted with older adults in order to gain insights into what they perceive as barriers to use of fixed route transit. Findings from these focus groups informed the development of a mail-out survey sent to 1800 older adults—half each in Erie County, New York and the City of San José, California. A total of 775 (43.1%) surveys were returned. Despite concerns of response bias, data analyses reveal that older adults perceive fixed-route public transit as a viable option to their preferred mode of transit, the automobile. However, older adults note significant barriers to the use of fixed-route transit. This report summarizes findings and presents a behavior change model that may be used as an intervention and even a guide to market the strengths of fixed-route public transit while encouraging older adults to use transit.</p>				
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## EXECUTIVE SUMMARY

In the United States, many challenges exist about safe and adequate transportation for the increasing population of adults aged 65 years and older. Currently, we are ill-prepared to provide transportation that is adequate for the growing older adult population. For older adults, transportation needs are associated closely with other needs. Lack of access to transportation can prohibit completion of instrumental activities of daily living, including visiting friends and family, grocery shopping, and obtaining and managing medications and healthcare. If transportation is limited, an older adult may have poor quality of life.

Current transportation challenges also are exacerbated because of increased longevity and the increasing older adult population, that is, the “Graying of America.” Now, in the U.S., there are about 40 million persons 65 years of age and older. By the year 2030, the population of persons 65 years of age and older is expected to reach 72 million. By 2050, older adults will comprise 21 percent of the population, compared to 12 percent of the population in 2000. The most rapid growth will be in the oldest old cohort; the population aged 85 years and older will double to 9.6 million in 2030.

For many aging adults, fixed-route public transit is available; however, private vehicles are used for 90% of all older adult transportation needs. Thus, the research presented here examines *what do older persons perceive as barriers to using fixed-route public transit?*

To ascertain answers to this question, we use a mixed-methods design to study older adults and their perceptions of fixed-route in Erie County, New York, and the City of San José, California. The first step in the research was to conduct two focus groups in each site and to gather perspectives and viewpoints of older adults about the barriers to using public transit. Each focus group examined issues related (1) access to fixed-route public transit, (2) physical challenges in reaching stations and stops, (3) physical challenges in using vehicles, (4) accessing information about the transit system, and (5) safety and security.

Utilizing findings from the focus groups and an extensive literature review, a 12-page survey was developed and distributed by mail to 1800 older adults. A total of 775 (43.1%) of 1800 surveys were returned. After data input and exclusion of cases, the final sample included 737 cases. In Buffalo, there were 451 (61.2%) cases, and in San José there were 286 (38.8%) cases for the final analyses.

Results found a significant response bias noted in the assessment of older adults’ perceptions of transit. This response bias highlights the elusive nature of assessing perceptions. Perceptions represent a complex cognitive appraisal process that may or may not lead to behaviors. The primary finding is that older adults prefer to travel by automobile, but perceive fixed-route public transit as a viable option.

Finding that older adults perceive fixed-route public transit as a viable option suggests that older adults with the requisite physical capacity are primed to change transit-behaviors and ride transit. Thus, this leads to a critical question: *How do we get older adults to increase their usage of public transit?*



In this report, there exists an extensive summary of research findings, including descriptive data about the sample, aggregated data about barriers to use and perceptions of transit, and findings about the likelihood of older adults to ride public transit. These findings must be interpreted with caution, due to the bias found in the data. However, the implication is that by reducing perceptions of barriers—whether or not the perception is accurate and the barrier is as severe—may lead to increased ridership of fixed-route public transit by older adults.

After reviewing these findings, a model of behavior change is presented. This model presents one way to think about how to get older adults to increase their usage of public transit. The model presented suggests ways to market the strengths of fixed-route public transit.

Finally, limitations of the research are discussed, including challenges related to response bias. Implications for future research are presented.

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## ACCESS AND MOBILITY FOR OLDER ADULTS

### INTRODUCTION

For decades, United States demographers predicted a population shift as post-World War II baby boomers age, and that this dramatic demographic shift would pose many challenges (Wachs 1986). This future has arrived.

### Older Adults and the Need for Adequate Transportation

Planners, policymakers, and caregivers in the U.S. face many challenges as concerns rise about safe and adequate transportation for the increasing population of older adults (aged 65 years and older). Studies conducted since the mid-1990s by the Surface Transportation Policy Project (STPP), the American Association of Retired Persons (AARP), the American Public Transportation Association (APTA), and other researchers have arrived at the same conclusion: we are ill-prepared to provide adequate transportation for the rapidly growing number of older adults in the U.S. (Millar 2005).

The outlook for older adult access and mobility in many urban areas is bleak. In response, researchers have focused attention on policy devoted to access and mobility for older adults (Burkhart 2002a, Burkhardt 2002b, O’Gara 2002, Rosenbloom 2003, Bailey 2004 and Millar 2005). These studies repeatedly identify transportation as the primary challenge for older adults. Santa Clara County, California—one of the study sites for this project—provides a relevant example. Researchers, scholars, leaders in social service delivery, and older adults themselves, advocate for (1) an overall increase in access to public transportation for older adults; and (2) an additional increase in assistance as they board transit (MGT, 2005).

### Transportation Challenges Facing Older Adults

Transportation needs for older adults are closely associated with other needs. For example, lack of access to transportation can prohibit completion of perfunctory tasks and instrumental activities of daily living (IADLs). IADLs include activities such as visiting friends and family, grocery shopping, and managing medications. To complete IADLs may require travel, such as to the pharmacy and medical appointments. In this regard, several studies conclude that older adults have poorer quality of life if access to transportation is limited (Peel, Westmoreland and Steinberg 2002).

Transportation challenges also are exacerbated because of increased longevity. As people live longer, the gap between the age when a person stops driving (driving expectancy) and life expectancy continues to increase (Dollemore 2002). This gap is almost twice as long for women (6 years) than that for men (10 years) (Dollemore 2002).

Further, the demand for rides by non-driving older adults exceeds the supply of caregivers and family members able and willing to provide such services (U.S. DOT 1999). Many older adults report feelings of embarrassment, uneasiness, and imposition when asking others for rides (Ritter, Straight, and Evans 2000). Such feelings imply that ridesharing,

as a transportation alternative, may degrade independence and dignity for older adults (Straight 2003).<sup>1</sup>

When family members, friends, and caregivers cannot provide transportation, some older adults rely on paratransit service, also called demand response. Demand response services operate in the manner that follows: (1) passengers call a transit operator; (2) the operator then dispatches a vehicle to pick up passengers; and (3) the vehicle transports passengers to their destinations. Most U.S. demand response services are offered by public transit operators. These operators use non-fixed route buses that are reserved for customers, such as those with certified disabilities, who cannot use traditional fixed-route transit.

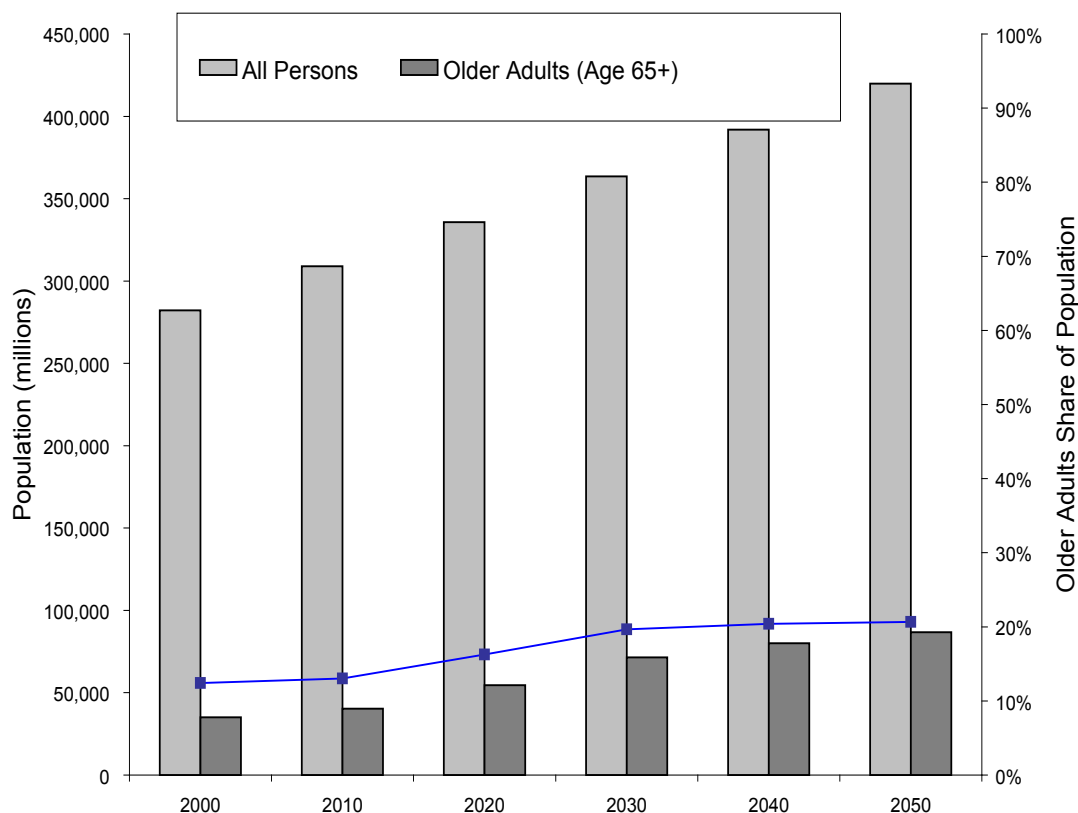
The demand for paratransit service increasingly exceeds both the budget and capacity of most transit operators (Millar 2005). Researchers predict that the gap between the supply and demand of older adult paratransit will continue to widen. In addition, trends in family structure may complicate reliance on adult children for assistance. Compared to previous generations, families tend to have fewer, if any, children. This trend has created smaller nuclear families with fewer adult children to provide for an older parent. Additionally, high divorce rates have led to fragmented families that offer less support (Wallace and Franc 1997).

Thus, one can reason that if older adults neither drive nor are driven by others, then they use other modes of transportation, in particular riding public transit. However, older adults' use of these alternative modes has declined (Wallace and Franc 1997). For example, only 1.6 percent of American older adults use public transit on a daily or almost daily basis (Burkhardt 2002b). Today, older adults walk, ride public transit, and ride with others less frequently than those of previous generations. Travel behavior studies suggest that they are driving to meet daily mobility needs; private vehicle satisfies 90 percent of all transportation needs for older adults (NPTS 1995).

## **DEMOGRAPHICS OF OLDER ADULTS**

Currently, in the U.S., there are about 40 million persons 65 years of age and older (see Figure 1). By the year 2030, the population of persons 65 years of age and older is expected to reach 72 million. By 2050, older adults will comprise 21 percent of the population, compared to 12 percent of the population in 2000. The most rapid growth will be in the oldest old cohort; the population aged 85 years and older will double to 9.6 million in 2030. Figure 1 shows population projections for older adults in the U.S. (Wan, Sengupta, Velko & DeBarros, 2005).

In addition to the rapid "graying of America," the older adult population is becoming more diverse than ever before. Of the non-white populations, the older adult populations of Latinos (Hispanics) and Asians are growing most rapidly (Wan, Sengupta, Velko & DeBarros, 2005).



**Figure 1 Projected Population of Older Adults in the United States: 2000 to 2050**

While the older adult population is increasing rapidly, older adults are not uniformly distributed across metropolitan areas. Differences between the older adult populations of “New Sunbelt” and “Rustbelt” suburbs have been noted. Suburbs in the Sunbelt tend to be comprised of more youthful, older adults who have either aged in place or settled in the area during their migratory years. These older adults require fewer services than that of those in the Rustbelt. Rustbelt suburbs are largely home to older retirees who moved to the area long ago, or older adults with lower-incomes who have perhaps been “left behind” in areas of population and economic decline (Frey 2003).

To characterize the diversity of aging-related needs scholars often divide older populations into distinct cohorts (Wachs, 1986). These demographic groups of older adults include: (1) the “youngest old” between the ages of 65 and 74 years, (2) the “middle old” between the ages of 75 and 84 years, and (3) the “oldest old” adults age 85 or greater. Important for transportation planning and policy are differences among these groups in income, mobility capacity, trip patterns, and mode preferences (Burkhardt 2002a).

Women have greater longevity than men, and older women are three times more likely than men to live alone (Wallace and Franc 1997). This is particularly true among the oldest old, who also may be frail and may survive on limited incomes. Consequently, safe mobility for older women living alone is a major concern for planners (Burkhardt 2002a).

Along with demographic changes, metropolitan patterns of settlement also have shifted. Some suburbs contain an increasing number of older adults and a decreasing number of “young adults” (aged 35 years and younger). This is particularly true in older, northern metropolitan regions. For example, Buffalo, New York ranks fifth among U.S. metropolitan areas with suburbs that have the greatest decline in young adults (Frey 2003). Reductions in the number of young adults result in smaller proportions of working professionals who contribute to a local tax base. A local tax base helps to finance public services and programs utilized by older adults.

In other metropolitan areas, proportions of young adults continue to grow in both cities and suburbs, and planners and public officials continue to have many challenges.. This is particularly true for metropolitan areas such as San José, California, where the suburban population of both young and older adults continue to grow. In addition, San José is composed of an increasing share of ethnic minorities, both young and older. However, the generation gap between young and older ethnic minorities is amongst the highest in the nation (Frey, 2003). Such generation gaps in suburban areas historically have resulted in age-related conflicts over community resources, such as access to health care, affordable housing, and transportation services. Intergeneration conflicts may increase as generation gaps continue to grow.

While the majority of older adults live in suburban areas, a significant proportion resides in central cities. Racial and ethnic minorities represent a growing portion of older adults who live in the largest cities. For example, many Asian-American older adults live in “ethnic enclaves” or segregated districts (Marcuse and van Kenpen 2000), such as Chinatowns or Koreatowns. Older minorities may have difficulty accessing services due to poor transportation options and undeveloped social networks outside the enclave (Joo and Price 1994). Policymakers and planners must understand how diverse persons perceive travel and access, including culture-specific roles that family members have in regard to mobility assistance for aging parents and relatives (Rosenbloom 2003).

## **MOBILITY FOR OLDER ADULTS**

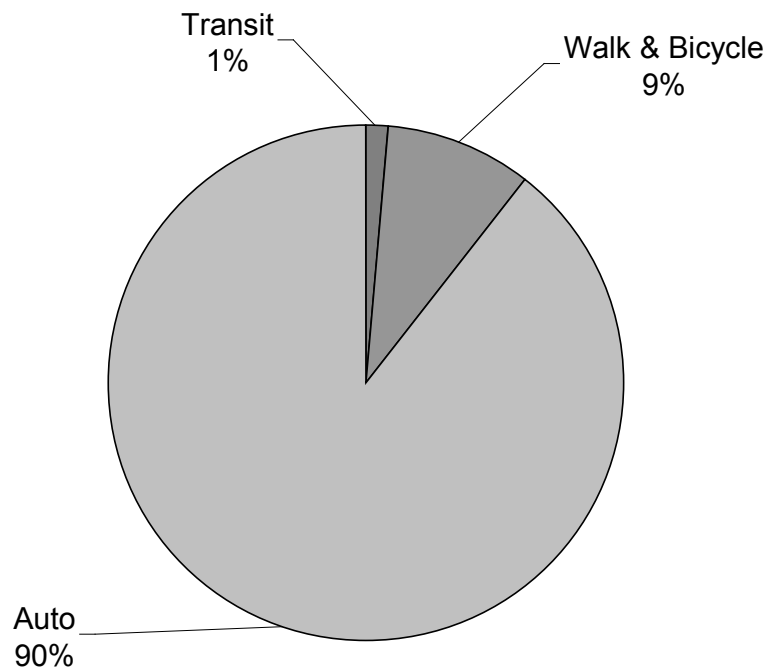
Within the context of urban transportation, “mobility” is usually defined as the ability to move throughout the transportation system (Hanson 2004). The ability to drive a vehicle *significantly* increases mobility. Mobility enhances access to goods, services and activities that heighten the quality of life. Recent travel behavior research indicates that trip rates—the number of times a person engages in activity that requires travel—for older drivers are significantly higher than trip rates for older non-drivers. Further, the median number of trips for older drivers is three times that of older non-drivers (Straight 1977). More than 50 percent of older non-drivers, 3.6 million Americans, stay home on any given day because, in part, they lack transportation options. Compared to older drivers, older non-drivers make about 15 percent fewer trips to the doctor and 65 percent fewer trips to social and religious activities (Bailey 2004).

### **Older Adults and Automobile Dependency**

The U.S. can expect dramatic increases in the number of older drivers in the coming years; nearly 80 million older drivers are projected for 2050 (Rosenbloom 2001). This can

be attributed to the aging of the U.S. population and the fact that the U.S. has the highest rate of licensing in the world (Rosenbloom and Morris 1998). Transportation researchers must undertake dedicated analyses for older populations, including those that forecast future trip patterns (Rosenbloom and Morris 1998).

How reliant are older adults on automobile use? Figure 2 demonstrates that automobile trips (as both driver and passenger) account for approximately 90 percent of all trips made by older adults. By comparison, public transit captures only 1.3 percent of all trips made by older adults. Public transit trips rank lower than walking and biking trips which capture a combined 8.7 percent of the mode share (Rosenbloom 2003).



**Figure 2 Transportation Mode Choice for Older Adults, 2001**

### **Older Adults and Public Transit**

Older adults of today demonstrate increased automobile dependency and length of license retention (Straight 2003). In addition, the changing demographics also indicate an increase in the number of people who will need alternative modes of transportation—including public transit (Straight 2003). A planning report from Santa Clara County, California lists increased access to public transportation for older adults as a primary concern (MGT 2005).

Public transit managers need to make significant systemic improvements to increase ridership among older adults. Older adults recognize that in most metropolitan areas travel by transit takes longer than travel by automobile. A trip on public transit is estimated to be more than two times longer in duration than an automobile trip (Rosenbloom and Morris 1999).

Researchers have found that riding transit—despite longer travel times—may be safer than driving. In a National Health Interview Survey conducted by the National Center for Health Statistics in 1994, 10.7 million older adults made daily or almost daily trips in their automobiles. Of these older adults, a significant number were identified as having activities of daily living (ADL) limitations (Burkhardt, 2002b). In a Community Transportation Survey conducted by AARP (Straight, 1997), one in five older drivers report that they cannot get to a nearby grocery store on a low-speed residential street. This forces them to travel on faster-moving, multi-lane arterial routes. Clearly, older adults may not have many choices in terms of safe and easily navigable transportation routes.

The majority of today's older adults—both men and women—have been driving for most of their adult lives (Burkhardt 2002a). Driving may be a life-long habit that is hard to break. For many, taking public transportation has never been a part of their life experience—unlike previous generations that frequented streetcars and buses. Fear of the unknown may prevent older adults from learning the public transportation system late in life (Burkhardt 2002b). Asking older adults to change fundamental parts of their daily routines—especially their travel habits—may be seen by many as burdensome and unacceptable (Rosenbloom and Morris 1998).

## **LOSS OF MOBILITY**

Independent older adults who are able to travel on their own can easily maintain their mobility; however, older adults who depend on others for rides experience a significant loss in mobility (Straight, 1997). Some older adults with mobility limitations may have reduced “footprints”—or areas surrounding their homes that are easily accessible. Areas of access may be reduced to one square mile surrounding a home (O’Gara 2002). This is especially true for the increasing number of older adults who live alone and do not have a spouse or other family member to act as a driver. The loss of physical mobility may ultimately have significant psychological consequences and implications for older adults (Burkhardt, Berger and McGavock 1996).

## **Driving Cessation**

Research indicates that, despite the risks, a significant number of older adults in the U.S. fail to voluntarily stop driving (U.S. DOT 1999). As a result, many driving cessation programs are instituted by local health, social service, and motor vehicle departments. For example, programs like the Erie County Driver Family Assistance Help Network in Buffalo work to educate older adults and family members on the challenges of driver safety (Road Management & Engineering Journal 1997). The majority of these programs report only modest success rates. Experts note gender differences associated with driving cessation. Overall, women tend to self-regulate more than men (Burkhardt, Berger and McGavock 1996); yet, surprisingly, in a National Household Transportation Survey in 1995, 82 percent of women over age 65 report themselves as active drivers up until age 80 (Wallace and Franc 1997). A study conducted in Illinois (Benekohal 1997) reports that many older drivers simply adapt to changes in sensory, cognitive and motor functions.

With regard to discontinuing driving, most health care examiners are reluctant to insist that a patient to stop driving due to a perceived lack of available transportation alternatives for



older adults (Volpe 1997). The private automobile remains the preferred travel mode for a majority of older adults; however, many studies report that public transit is a safer mode for them (Mitchell and Suen 1999).

### **Low Levels of Public Transit Ridership**

Older adults tend to look for transportation options that fulfill the “five A’s” Burkhardt (2002a): availability, accessibility, affordability, acceptability, and adaptability. If a public transportation system fails to meet one or more of these criteria, older adults are less likely to utilize that system.

Lack of availability is significant. In the U.S., only 45 percent of American households have access to public transportation (U.S. DOT, 1999). This is a greater challenge for older adults who live in non-metropolitan areas. Half of all U.S. adults do not have the option of using public transportation because service is not available in their area (Bailey 2004).

Older adults may disregard transit as a viable travel option based on their perceptions of unfavorable service characteristics. The same factors that make driving difficult for many older adults also make transit difficult for them (Burkhardt 2002a); physical limitations may impair an older adult’s access to and use of public transit. Some older adults may not feel comfortable walking to a bus stop two blocks away because of the strain of walking that distance (Wallace and Franc 1997). Those older adults who can make the walk report that there is limited off-peak transit service. Low off-peak service levels are particularly challenging because older adults may rely on transit for “off-peak” events such as visiting friends and family members or attending worship services on the weekend. Additionally, many older adults cannot physically tolerate long waits or travel times.

Transportation researchers conclude that transit agencies can gain ridership by tailoring their service to the needs of older adults. They suggest reduced fare programs, expanded use of low-floor vehicles, and policies that allow drivers to deviate from regular transit routes to collect passengers closer to their homes and deliver passengers closer to their destinations (Millar 2005).

Based on the options available to them, older adults make rational transportation choices (Millar 2005). A successful public transportation system should provide control, autonomy, and choice (Burkhardt 2002a). Transit agencies that have tailored their service to meet the needs of older adults and riders with disabilities have, indeed, seen ridership increases (Hess *et al.* 2002, Rosenbloom 1998, Taylor *et al.* 2002).

### **THE CHALLENGE**

Some U.S. municipalities have increased access to public transportation for older adults. While these small improvements are encouraging, many large-scale changes are still necessary. Far-reaching improvements to public transit for older adults may need to begin with expanded housing options. Many older adults live in low-density, sprawling areas (Frey 2003 and Rosenbloom 2003). In recent years, much has been written about the “aging-in-place” phenomenon; many older adults choose to remain in the suburban homes where they raised their families. They choose not move to other settings that might better



accommodate their transportation needs as their physical abilities change. Approximately 82 percent of older adults who remain in single-family detached homes are ill-served by public transportation (Volpe Transportation Center 1997).

## RESEARCH DESIGN

### Overview

The demographic realities described in this study suggest that access to public transit is critical to maintaining the health, safety, and welfare of older adults who constitute an increasing share of the total population. Considering all modes of travel, older adults today travel more frequently than that of previous generations (Hu and Young 1999), and public transit systems should strive to accommodate their travel needs. However, in a survey conducted by the American Association of Retired Persons of 3,000 older adults, the greatest concerns about riding public transit are safety and access (Straight *et al.* 2002). In order to make immediate and long-term policy decisions, a more in-depth understanding of older adults' perceptions of public transit is needed.

Thus, the primary research question for this study is *what do older persons perceive as barriers to using fixed-route public transit?* The specific aim of this research is to assess older adults' perceptions of (1) safety on public transit; (2) safety traveling from home to public transit stops and stations; (3) the ease of using public transit facilities and vehicles; (4) the ease of traveling from home to public transit stops and stations; and (5) the availability and accessibility of public transit information. The study also assesses the factors that inform older adults' decisions to use public transit.

As a starting point, we hypothesize that personal and demographic characteristics (for example, economic status, physical characteristics, and cognitive abilities) and public transit service characteristics negatively affect older adults' perceptions about riding public transit. We also hypothesize that discrepancies between perceived barriers and actual situations negatively affect older adults' beliefs about their ability to use public transit. In relation to these hypotheses, existing public transit interventions may improve older adults' perception of public transit, increase transit ridership (Hess *et al.* 2002), promote autonomy and independence, and improve older adults' well-being. Because little is known about what factors inform these older adults' appraisals of public transit, this research is both innovative and timely.

### Methodology

This study occurs in two phases; comparable and simultaneous processes are carried out in Buffalo, New York and San José, California. The locations of the study areas are shown in Figure 3. Table 1.1 shows that New York tends to have higher shares of older adults than the national average while California tends to fall below the national average. In 2000, 12.9 percent of New York State residents were age 65 years and older, but the share may grow to 20.1 by 2030. The share of older adults in California may grow from 10.6 percent of the population in 2010 to 17.8 percent of the population in 2030. Long-term projections suggest that the population in California is aging, while the opposite is true in New York.



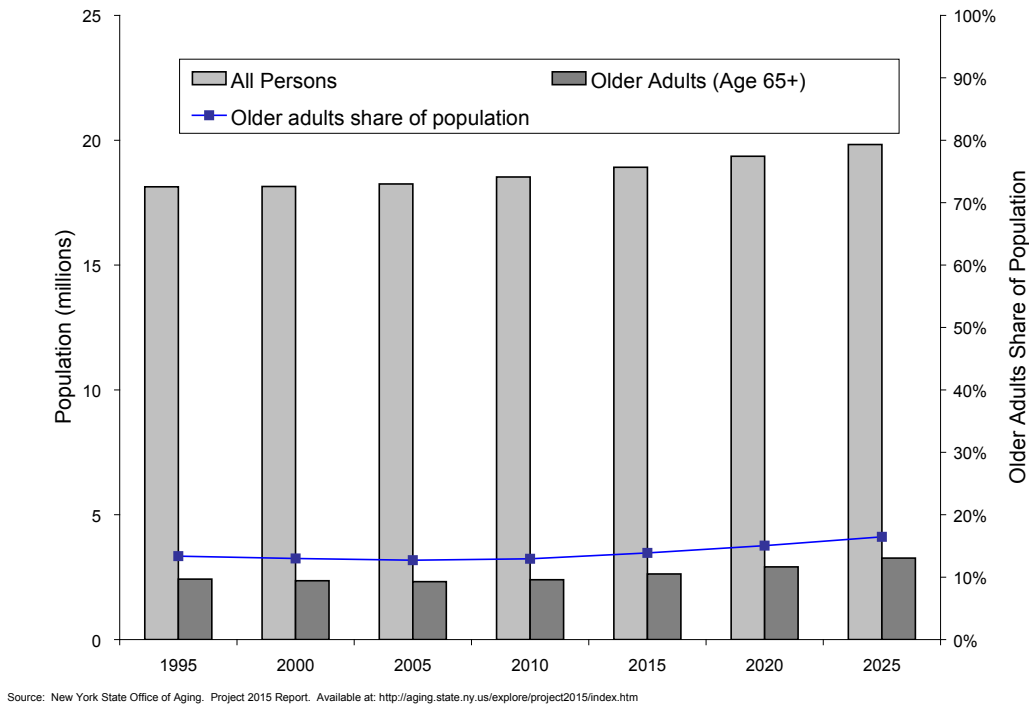
**Figure 3 Study Area Location**

**Table 1 Ranking of California and New York Among States by Projected Share of Population of Older Adults: 2000, 2010, and 2030**

Source: U.S. Census Bureau, Population Division, Interim State Population Projections, 2005.

	2000		2010		2030	
	Share	Rank	Share	Rank	Share	Rank
United States	12.4	-	13.0	-	19.7	-
California	10.6	46	11.5	45	17.8	43
New York	12.9	24	13.6	25	20.1	28

The share of older adults is projected to continue to grow in New York State. Figure 4 shows that while the population of New York State is projected to grow 9 percent between 1995 and 2025, the *share* of older adults may grow by 23 percent.



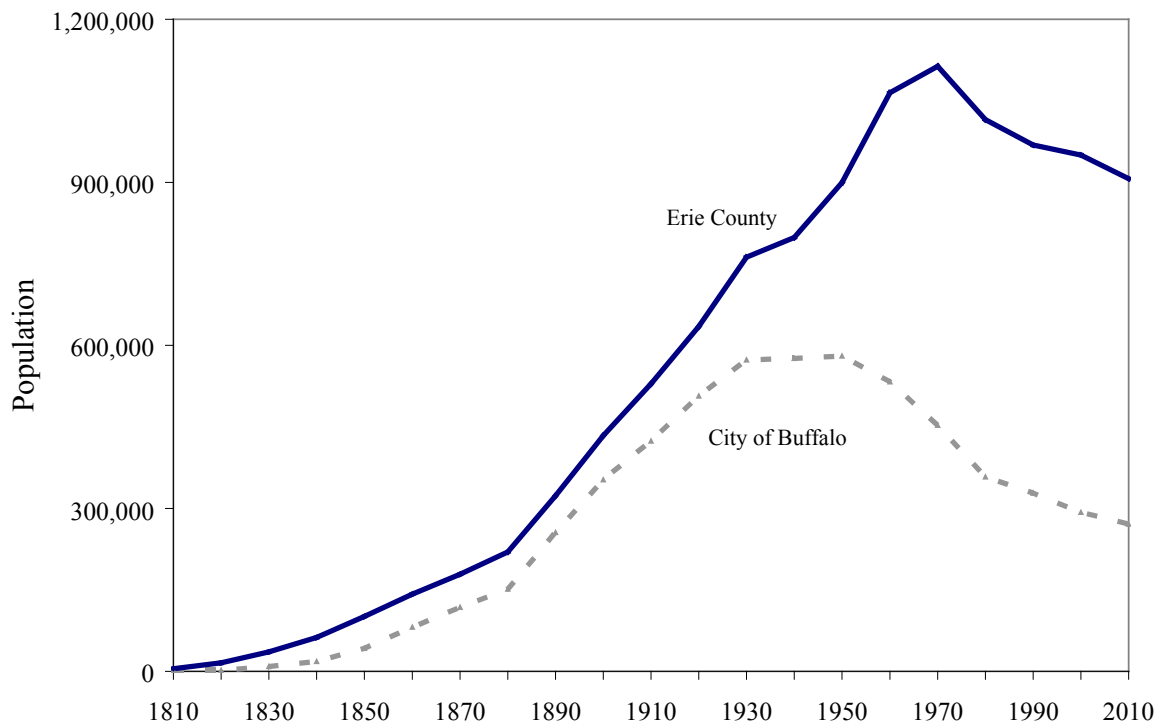
**Figure 4 Projected Population of Older Adults in New York State: 1995 to 2025**

## Description of Study Areas

### *Buffalo and Erie County*

The Buffalo region is a natural laboratory for research on the processes and outcomes of population aging, both for communities and individuals. Western New York has a population that is older than the national average. Older adults in this region are economically and socially diverse. The region possesses a varied urban structure meaning that older adults reside in urban, suburban, and rural places. The Buffalo region provides a unique setting for the study of older adults in a four-season climate.

Like many Northeastern and Rustbelt cities, Buffalo has experienced abandonment and economic decline—especially a loss of blue-collar employment—since the 1950s as its manufacturing and industrial base became obsolete. Population declined by 50 percent between 1950 and 2000 and 2000 marked the first time since 1890 that the city’s population fell below 300,000 people. Demographic data reveal that the median annual household income is \$24,500 and 21 percent of working-age adults are in poverty (Hess 2005, U.S. Census 2000). Like other Rustbelt cities, Buffalo experiences racial segregation, poverty, low incomes, low automobile ownership, and limited access and mobility for many segments of the population (Buckham 2004, Hess 2005). In fact, 90 percent of the region’s non-white population lives in the City of Buffalo.<sup>2</sup> Figure 5 shows a period of staggering decline in both the city and county—characterized by outmigration of population and intraregional suburbanization (Banister and Berechman 2000)—that unarguably dampens housing demand.<sup>3</sup>



**Figure 5 Population of City of Buffalo and Erie County, 1810 – 2010**

Source: U.S. Census Bureau

The Buffalo region has also seen sluggish job growth, loss of high-income jobs, population decline, and high outmigration in the important 20- to 34-year old age group (Fiscal Policy Institute 2003, Pendall 2003).<sup>4</sup> The Buffalo metropolitan area lags behind the U.S. in both earnings and investment (Pendall and Christopherson 2004). High local and county taxes along with persistent tax increases have hurt the competitiveness of the region in attracting businesses and residents (Duncombe 2002). As these patterns become entrenched, they may negatively affect property values citywide (Potepan 1996). These property values are further depressed by expectations of little growth (Capozza and Helsley 1989).<sup>5</sup>

As the largest city in Erie County, Buffalo is a prototypical medium-sized “ring” city of the Great Lakes region. It is composed of a central core and inner-ring suburbs surrounded by outer-ring suburbs. Population density is high in the central city, yet because of dispersion and declining population, it is not as high as it was in the middle part of the 20<sup>th</sup> century. Distances between suburbs and the central city are, for the most part, relatively short—the average travel time to work for residents of both the city and suburbs is 21 minutes. The Buffalo area has one of the shortest average commutes among medium- and large-sized metropolitan areas. The commute time is shorter than the nationwide average commute time of 25.5 minutes (U.S. Bureau of Census 2000). The Buffalo city and suburbs are each well-served by a network of grid and radial streets, highways and expressways, and transit routes (Ernst 1999).

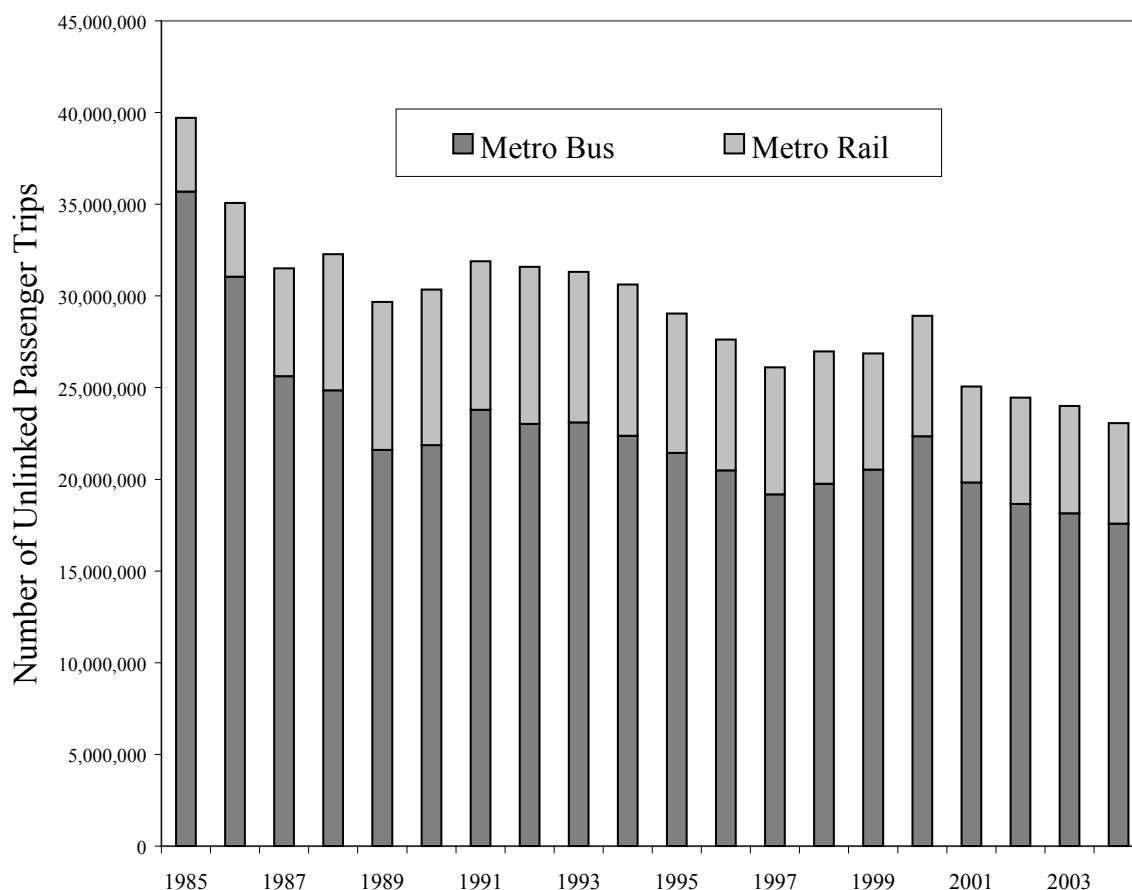
Since the 1950s, the region's population has exhibited decline and abandonment in the central cities along with slow growth in surrounding areas (Goldman 1983, 1990). The population of the City of Buffalo declined 50 percent between 1950 and 2000 while the population of Erie County increased 6 percent during the same 50-year period. The county reached a peak population in 1970 that exceeds today's population (U.S. Census Bureau 2000). During the second half of the 20<sup>th</sup> century, the region's dwindling population left Buffalo, Niagara Falls and their inner-ring suburbs and sprawled outward to suburban towns such as Clarence, Lancaster, Lockport, Orchard Park, and beyond (Cervantes 2000).

Presently, similar trends continue as the population in Buffalo fell by 11 percent between 1990 and 2000. At the same time, it increased by three percent in the suburbs. As the Buffalo metropolitan area lost about two percent of its population during the decade, suburban growth comes at the expense of prosperity in the urban core (U.S. Census Bureau 1990 and 2000). Niagara County mirrors the Erie County patterns of growth and decline. While the population in Niagara Falls fell by ten percent during the last decade, it also increased three percent in the suburbs.

Traditional fixed-route transit service provided by the Niagara Frontier Transportation Authority (NFTA) is, for the most part, oriented toward commuting to the city center; low population densities in the suburbs make frequent transit service there impractical. Like many aging places, the Buffalo-Niagara metropolitan area has experienced suburban sprawl and a shift of jobs and residences outside of the central city. Nevertheless, Buffalo and Niagara Falls have large transit-dependent populations needing access to employment that is now more spatially diffused. An increasing number of activities and opportunities (retail, services, healthcare, and entertainment) are available in suburbs throughout Erie and Niagara counties, although public transit generally under serves these markets.

Despite a presumed high degree of transit dependency—31 percent of households do not have a vehicle available (U.S. Census 2000)—ridership on Metro Rail has declined steadily (Lakamp 1999). Figure 6 shows the annual unlinked trip on bus and light rail between 1985 and 2004; ridership has declined 42 percent in the last twenty years. Demand response transit, in service since 1994 through a dedicated system called Paratransit Access Line, accounted for 0.3 percent of all unlinked trips in 2004.

Pedestrian access around stations is generally enriched with mature street networks and sidewalks, although station amenities—especially retail and commuter services—are lacking (Hess and Lombardi 2004). MetroRail riders can make direct transfers to bus routes at all eight of the below-ground stations and from the six at-grade stations. From MetroRail stations, riders can transfer to 46 of the system's 55 bus routes. Free parking is provided at park-and-ride lots for the two stations furthest from the central business district; no other Metro Rail stations possess adjacent parking lots.



**Figure 6 NFTA Annual Unlinked Passenger Trips: 1985 - 2004**

Source: National Transit Database (2006)

### *Older Adults in Buffalo and Erie County*

Demographic studies of older adult populations in the city of Buffalo and Erie County highlight trends that may be useful to both transportation planners and transit authorities. Table 1.2 provides a “snapshot” of the older adult population in the Buffalo/Erie study area. It reveals that older adults comprise less than one quarter of the total populations in both the city of Buffalo and the county of Erie. In recent years, the older adult population of Buffalo city has significantly decreased by almost 20 percent as compared to the rather stagnant county population. The “young old” adults, age 65-74, are the largest proportion—slightly over half—of older adults in both Buffalo and the county. The “old old” and the “oldest old” combine to form the other half of the older adult population.

Buffalo and Erie County demonstrate similar age and gender distributions. Figure 7 displays gender differences that may be useful in future planning for older adults. The age pyramid shows that females outnumber males after age 60. It further uncovers the imbalance of women to men by a factor of three to one after age 75. The age pyramid also shows that the largest population in both the city of Buffalo and Erie County is the age range of 40 to 44 years old. Transportation planners and transit authorities may want to heed these

trends in order to effectively plan for these “market segments”—namely, older women and the next wave of older adults moving up the age pyramid. Researchers may want to focus future studies on access and mobility of these market segments.

Older adult populations in the Buffalo and Erie County region are overwhelmingly white; yet, the city has a significantly higher concentration of blacks/African Americans as compared to the entire county. The older adult population in city of Buffalo is more than 25 percent black/African American. Hispanics, Asians, and Pacific Islanders comprise a minimal proportion of the older adult population.

An alarming number of older adults in the Buffalo and Erie County region classify themselves as having a disability. For example, almost 50 percent of the older adult population in the city of Buffalo reports a disability. Poverty also strikes many older adults within this study area. It tends to concentrate within the city and lessen on a county-wide level. In fact, the city experiences almost double the percentage—13 percent—of poverty-stricken older adults as the entire county.

Older adult households comprise approximately one quarter of the total households in the Buffalo and Erie County region. There are significantly more households in the city without vehicles than those in the entire county. Thirty-eight percent of all older adult households in the city of Buffalo have no vehicle while 62 percent have at least one vehicle or more. Conversely, the county has a significantly higher percentage—79 percent—of households with at least one car.

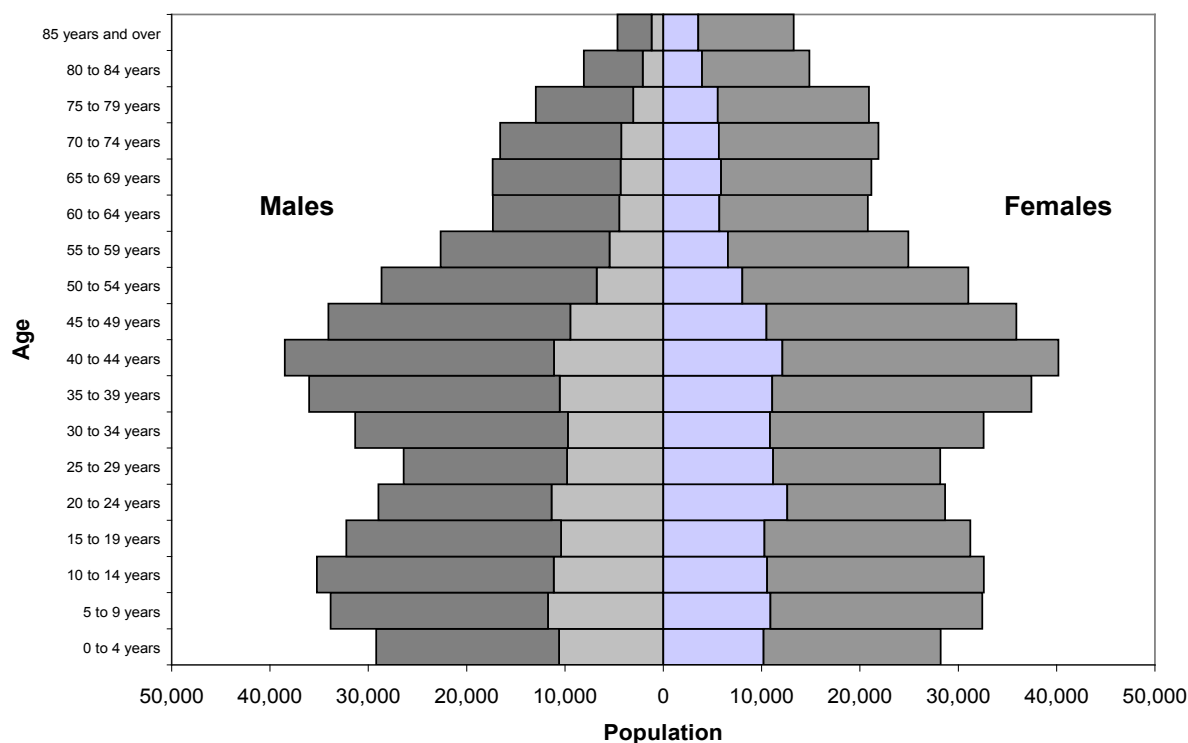
The previous demographic analysis demonstrates that the older adult populations in the city of Buffalo may be at a disadvantage in terms of access and mobility. As a result, further detailed studies of these particular demographic characteristics in the Buffalo and Erie County area—especially within the city—should be pursued.

**Table 2 Socio-demographic Profiles of Older Adults in Study Areas: 2000**

	City of Buffalo	Erie County	City of San Jose	Santa Clara County
<b>Population</b>	292,648	950,265	894,943	1,682,585
<b>Older adults (age 65+)</b>	39,524	151,712	73,860	160,527
Share of population	13.5 %	15.9 %	8.3%	9.5%
Young old (65-74)	51 %	51 %	57%	54%
Older old (75-84)	37 %	37 %	33%	35%
Oldest old (85 and over)	12 %	12 %	10%	11%
With disability	48 %	39 %	42.8	39.3
Below poverty	13 %	7 %	7.4%	6.4%
White	70 %	91 %	63%	72%
Black/African American	28 %	8 %	2%	1%
Asian/Pacific Islander	<1 %	<1 %	25%	20%
Hispanic/Latino	2 %	1 %	16%	12%

Source: 1990 and 2000 U.S. Census, Summary Files 1 and 3.





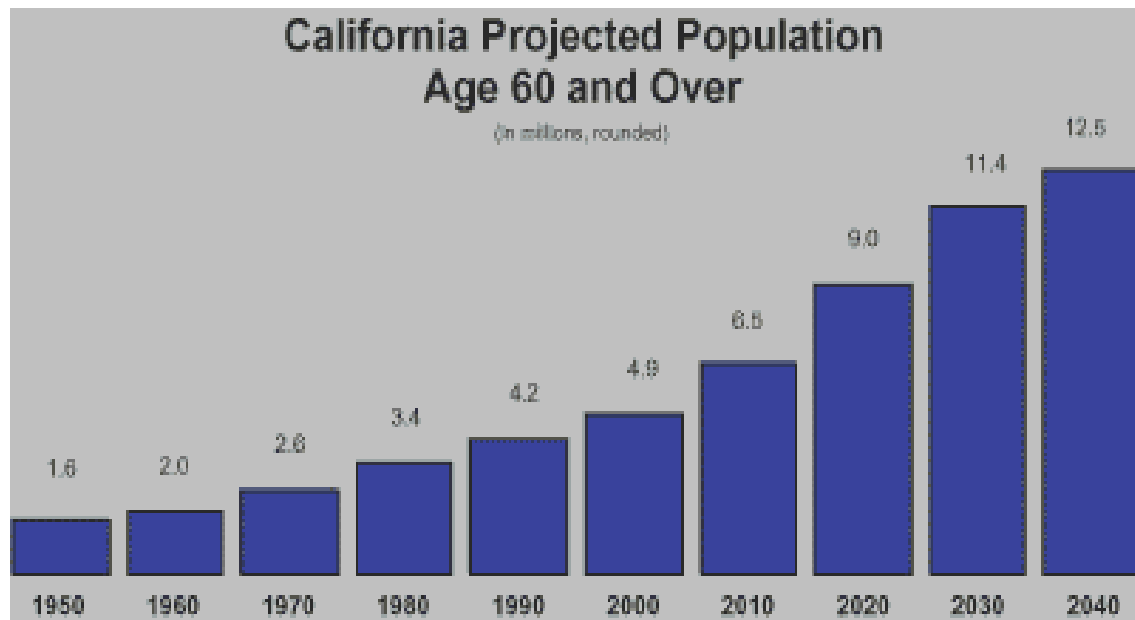
**Figure 7 Age Pyramid by Gender, City of Buffalo (Inside Pyramid) and County of Erie (Outside Pyramid)**

### *San José*

As the 10<sup>th</sup> largest city in the nation and the third largest city in California, San José is known as the center of high technology—the heart of the “Silicon Valley.” San José also contains a diverse population and culture, which includes 34.3% of Caucasian, 31.4% of Hispanic, 28.4% of Asian, 2.6% of African American, and 3.3% of other (City of San José, n.d.). This diversity makes the city a unique place to study older populations.

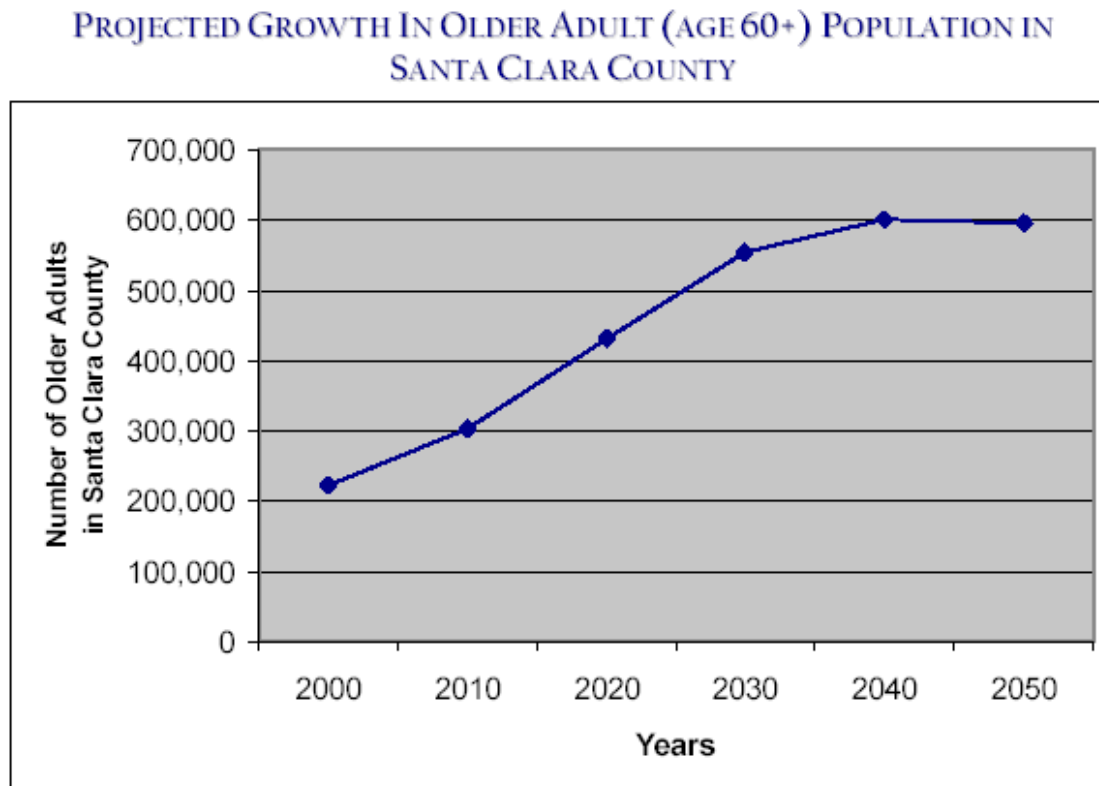
San José is the largest city in Santa Clara County. The County is the fourth largest in California, following Los Angeles, San Diego and Orange Counties. The County is located in the San Francisco Bay Area, around 50 miles south of San Francisco. It includes 15 cities: Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Palo Alto, Sunnyvale, Santa Clara, Saratoga, and San José. Santa Clara County is best known as Silicon Valley. Because of its physical attractiveness, economic and cultural diversity, and the Mediterranean climate, the county is the largest county in the Bay Area with a population nearly 1.7 million (Santa Clara County, n.d., Aboutus Section). As one of the fastest growing states in the nation during the next 20 years, California’s population of older adults is expected to grow more than twice as fast as the state’s overall population, and this growth is the most significant within Santa Clara County (The Strategic Plan Advisory Group & MGT, 2005). Figure 8 shows the projected growth of older adults in the state of California, and Figure 9 shows that for Santa Clara County. Table 1.3 displays the historical population and future population projections of the City of San José and Santa Clara County.





**Figure 8 Projected Population of Older Adults in California State: 1950 to 2040**

Source: California Department of Aging



**Figure 9 Projected Growth in Older Adult Population, Santa Clara County**

Source: The Strategic Plan Advisory Group & MGT (2005)

**Table 1.3 Historical Populations and Future Population Projections for City of San José and Santa Clara County**

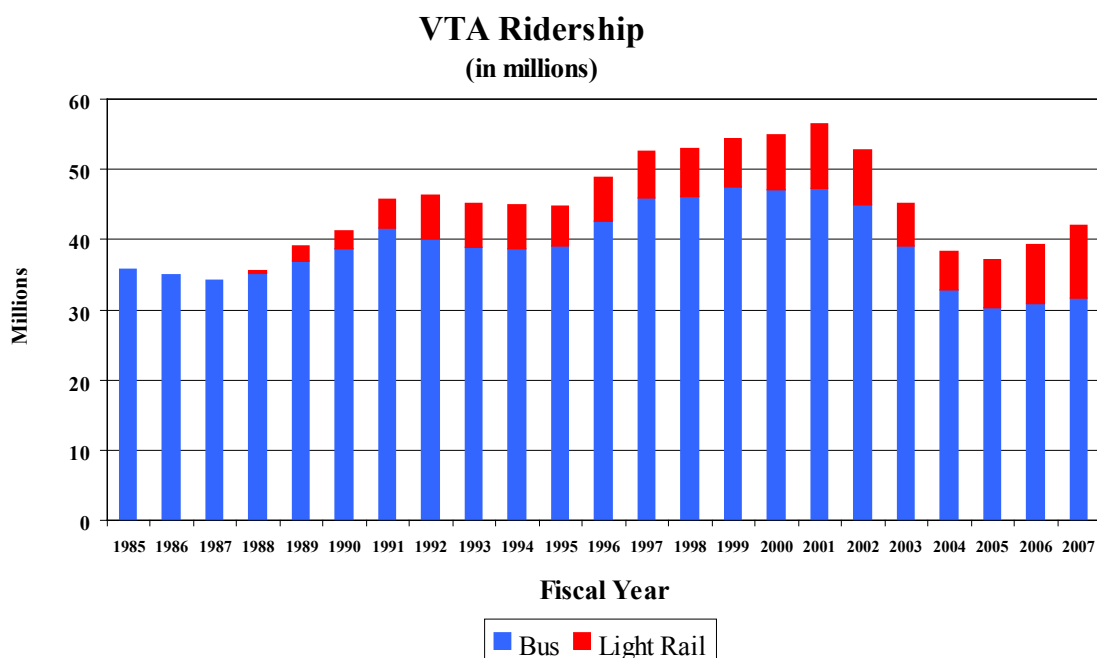
Year	City of San José	Santa Clara County
1900	21,500	60,216
1910	28,946	83,539
1920	39,642	100,676
1930	57,651	145,118
1940	68,457	174,949
1950	95,280	290,547
1960	204,196	642,315
1970	459,913	1,064,714
1980	629,442	1,295,071
1990	782,248	1,497,577
2000	894,943	1,691,183
2010	995,900	1,844,146
2020	1,137,600	2,006,992
2030	1,273,200	2,152,963
Source: U.S. Census Bureau or CA Department of Finance		

Santa Clara County is one of the most diverse regions in the nation. There are about 100 different languages and dialects spoken in Santa Clara County, including about 52 different languages in city of San José (Santa Clara County, n.d., About Section; City of San José, n.d.). This represents the rich racial and cultural diversities, including 31.4% Hispanic population and 28.4% Asian population (City of San José, n.d.).

In 1972, the Santa Clara Valley Transportation Authority (VTA) was created as a County department to oversee the region's transportation system. The original responsibility was developing, operating and maintaining bus and light rail system within the county. In January 1995, VTA separated from Santa Clara County and merged with the region's Congestion Management Agency. Besides the original task, VTA now has responsibility to manage the county's blueprint to reduce congestion and improve air quality. VTA oversees the county's public transportation system and highway, transit capital improvements, and county-wide transportation planning (VTA.org, InsideVTA Section).

VTA's responsibility for public transportation includes regional transportation within San José and Santa Clara County and connections with other inter-county transportation systems. VTA operates 430 buses on 69 routes throughout the urbanized area of Santa Clara County; 3 light rail services, which cover 42 miles and 62 stations; 5 shuttle services that connect other inter-county transportation, such as Caltrain; and, it oversees a contracted paratransit service, called Outreach. VTA also manages 16 transit centers throughout Santa Clara Counties, and operates 46 park-and-ride lots with approximately 12,000 parking spaces at light rail stations, transit centers and Caltrain stations.

For the fiscal year (FY) of 2005, the ridership of VTA was 37,077,149 (VTA.org, Service Section). However, this is the fourth year of ridership decline since year FY 2002. The system wide average weekday ridership in FY 2005 declined approximately 35% from FY 2001 (Santa Clara Valley Transportation Authority, 2006). There are many reasons why the ridership has sharply declined. The main reason was because of economic downturn, the dot-com bust, and increasing unemployment rate. Even though by June 2005, the unemployment rate had declined to 5.5%, Santa Clara County had lost over 200,000 jobs since 2001, when unemployment was 8.9% (Santa Clara Valley Transportation Authority, 2006). Due to a sharp decrease of the passengers, VTA faced major financial challenges; it cut 20% of its bus and light rail service since the year 2000, and raised the fare by 35% to offset increasing expenses and decreasing revenues (Transcoalition.org). Service cuts and fare increases might account for ridership declines because 54% of the riders earn less than \$35,000 per year, including many older adults. Finally, figure 9 displays VTA unlinked passenger trips for recent years. While ridership dipped by about 20% from its highest point, recent years show a trend toward increased ridership.



**Figure 10 VTA Annual Unlinked Passenger Trips: 1985 – 2007**

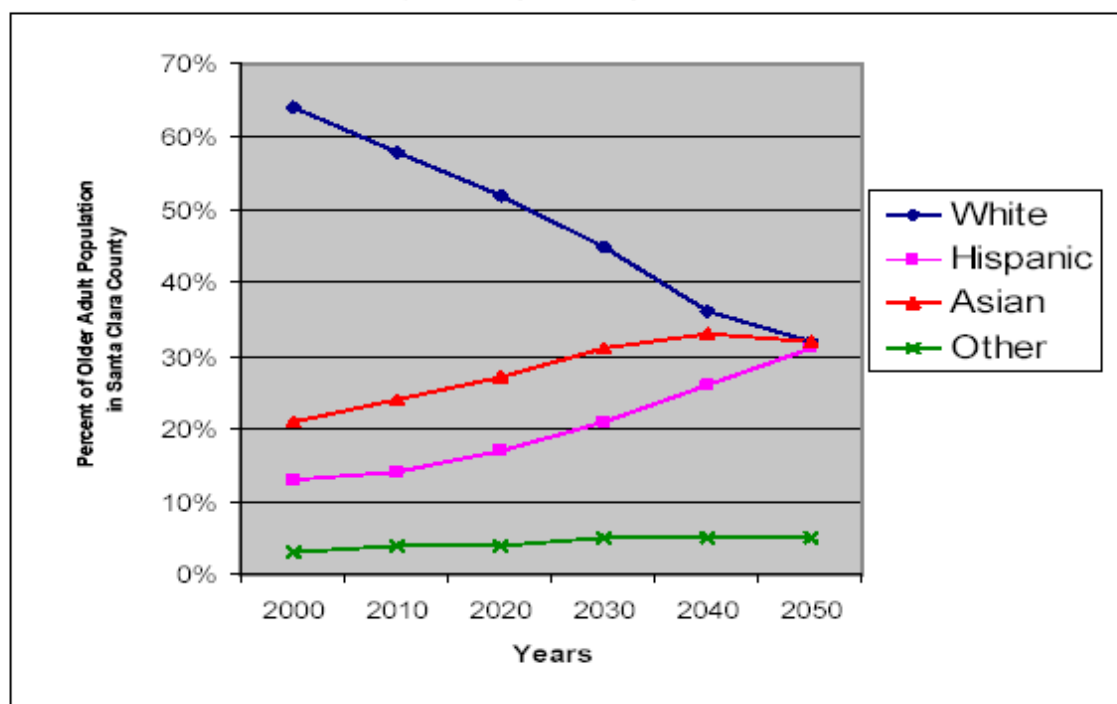
Source: Valley Transit Authority (2007)

### *Older Adults in San José*

California is one of the fastest growing states in the nation. In 1990, California comprised 12% of the nation's population and is expected to have 14% of the nation's population by 2020, an increase of 15.7 million people. Nevertheless, California's older-adult population (60 years of age and older) is expected to grow more than twice as fast as the state's overall population, with a 112% increase from 1990 to 2020. Santa Clara County is one of the 11 California counties with the greatest anticipated older adult population growth. The older adult population in San José is expected to have the fastest rate of growth in Santa Clara County.

Between the years 2000 and 2020, the population of older adults in Santa Clara County is expected to almost double from approximately 220,600 to 428,300. In 2000, older adults represented 13% of Santa Clara County's population, compared to the expected 21.3% in 2020. By 2040, the older adult population is expected to peak at roughly 600,000, which will be 27% of the county's total population (The Strategic Plan Advisory Group & MGT, 2005).

### PROJECTED RACIAL DISTRIBUTION OF OLDER ADULT (AGE 60+) POPULATION IN SANTA CLARA COUNTY



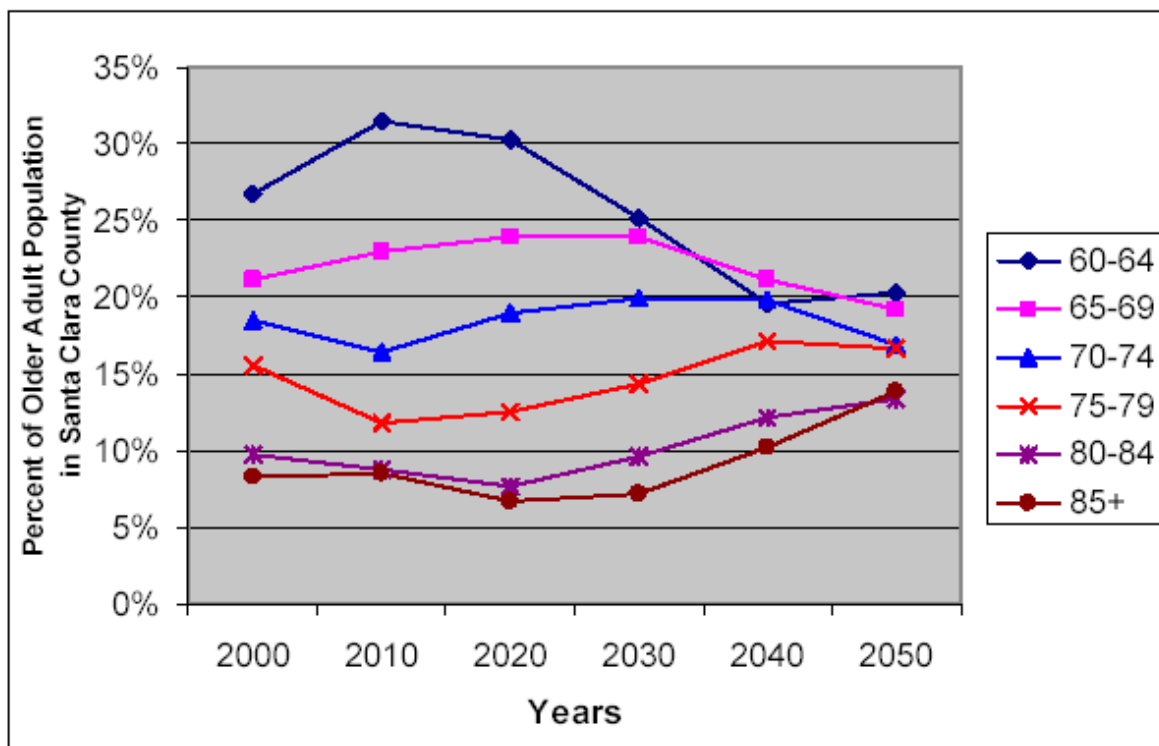
**Figure 11 Santa Clara County, Projected Racial Distribution of Older Adults**

Source: The Strategic Plan Advisory Group & MGT (2005)

With twice as many older adults living in Santa Clara County by 2020, the demand for senior services will increase as well. Many service needs are similar to other regions, including services such as housing, health care, and social supports. However, Santa Clara County and the City of San José have a unique demand for services that are culturally sensitive and available in multiple languages. As a way of depicting this need, Figure 10 displays the racial distribution of older adults in Santa Clara County.

The fast growing older-adult population is largely driven by the “baby boomers,” an age cohort that classifies persons born between 1946 and 1964. The oldest of the baby boomers will turn 60 in 2006, the youngest baby boomers will turn 60 in 2024. Between now and the year of 2020, Santa Clara County will experience a surge of younger seniors, and then proportional growth in its older senior population in the later years, as baby boomers age further. The following chart shows the change in age distribution of senior population over time in Santa Clara County.

### PROJECTED AGE DISTRIBUTION OF OLDER ADULT (AGE 60+) POPULATION IN SANTA CLARA COUNTY



**Figure 12 Projected Age Distribution of Older Adults, Santa Clara County.**

Source: The Strategic Plan Advisory Group & MGT (2005).

According to the U.S. Census Bureau, the average life expectancy in the U.S. is approximately 80 years for women and 74 years for men; by 2050, women in the U.S. are projected to live to an average age of 87 and, for men, to age 81. It is no surprise that between the years 2030 and 2050, the population of Santa Clara County's oldest adults (85 years and older) will experience significant growth. However, the oldest adults will still remain a comparatively small percentage among older adults. Based on the age characteristics of this trend, the use of and need for public services and transit services might increase.

As of 2000, one-third of the county's population was foreign-born. The percentage of the foreign-born population had increased from 23% in 1990 to 36.5% in 2003. In the general population, the low English language proficiency increased from 21% to 23% between the years of 1990 and 2002. Further, in 2000, the population of older adults who speak English 'very well' or 'well' decreased from 65% in 1990 to 57%.

The growing cultural diversity and declining of English proficiency in Santa Clara County's senior population will impact the needs of senior and how to deliver effectively a variety of services, including public transit. Language inefficiency might be the most significant barrier for older adults to access services. A study was conducted in June 2004 by the Strategic Plan Advisory Group regarding the County wide needs assessment of older adults. Among 1,100 participants, language barriers were the sixth most common concern and is related to other issues including lack of information.

Transportation was the most common issue raised in the study. It includes the cost of transportation, lack of accessible transportation, and a lack of coordination between bus and light rail schedules; and among senior centers, a lack of escorted transportation (paratransit) for seniors, including those without disabilities, and lack of assistance boarding public transit. Over 10% of surveyed older adults reported that they have difficulty or need assistance using transportation. Among these 10% of adults, 55% stated that no one is helping them get around. As the age increases, the needs of transportation assistance increase: 6.4% of 60- to 74-year-olds reported this need, 14.7% of 75 to 84-year-olds, and 24.2% of adults 85 and older. In addition, non-English speakers were more likely need help using public transportation compared with English speakers: 27.4% versus 7.6% reported that they sometimes, rarely, or almost never get where they want to go.

Despite the difficulties of sharp increased demand of senior services for the near future, how to culturally competently plan and implement the related services to seniors will be one big challenge for San José and Santa Clara County.

## **Synthesis**

In general, the population of Erie County is roughly the size of the City of San José, and there are similar challenges related to transportation. However, San José is ethnically more diverse than Erie County, and the weather in each city poses different challenges. In the suburbs of Buffalo, older adults constitute 16.6 percent of residents (Frey 2003), and in San José, older adults constitute 13% (The Strategic Plan Advisory Group & MGT, 2005). Both Buffalo and San José share in a common tremendous growth of older adults in the suburbs, where public transit service is sparser than central, denser places (Burkhardt 2002a).

## **STRUCTURE OF THIS REPORT**

The remainder of this report is organized as follows: Section 2 provides an in-depth literature review. It summarizes research about access and mobility for older adults and focuses specifically on impediments to public transit use. Section 3 outlines the research methodology for this project. It details our process for conducting focus groups with older adults and developing a written survey questionnaire. Section 4 presents results of univariate, bivariate, and multivariate analyses. Finally, Section 5 discusses the quantitative findings, including implications when considering these findings in conjunction with the qualitative focus group findings. The section ends with discussions of policy implications, limitations to our research, and implications for future research.



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## LITERATURE REVIEW

Previous research about access and mobility issues for older adults has been multidisciplinary. Such research has been by scholars in transportation planning, urban planning, health services, and gerontology. This research identifies access and mobility as the primary challenges in planning for older adults.

Researchers tend to use quantitative methods—U.S. census data, activity and travel surveys, and stated preference surveys—to describe travel behavior and diagnose transportation challenges for older adults. These methods present shortcomings for planners since they rarely provide useful data sets for research about transit for older adults. For instance, U.S. census data related to transportation planning focuses on the journey to work; however, many older adults are out of the labor force. Furthermore, there are limited data sets that assess common older adult activities—such as those involving healthcare, shopping and personal services, socialization, entertainment, and recreation—and their relation to travel behavior.

Because of physiological changes related to aging, there exists an abundance of published work that centers on safety and cessation programs for older drivers. This research documents unmet needs among the older adult population. For example, many older adults report that they often desire to leave home to engage in activities, yet limited transportation access—particularly options other than an automobile—prevents them from doing so.

There is minimal research exploring issues related to older adults and public transit. Research about barriers to public transit for older adults requires more attention. The literature review that follows summarizes the broad range of gaps and needs for older adults in terms of access and mobility. Sources for the literature review include scholarly journals and planning and policy publications from non-profit organizations and advocacy groups. The remainder of this section is organized as follows: First, we provide background on the evolution of public transit research along with an overview of access and mobility for older adults. We then detail previous research that concentrates on older adult barriers to public transit. The barriers are divided into four broad categories: 1) physical barriers; 2) service barriers; 3) perception barriers; and 4) information barriers. Finally, we present a variety of innovative approaches that transit managers currently use to counteract these barriers.

### EVOLUTION OF PUBLIC TRANSIT RESEARCH

Transit systems have been moving people about the United States for centuries. The first omnibus and street railway companies appeared in early 19<sup>th</sup> century cities (Schaeffer and Sclar 1980). During the 20<sup>th</sup> century, transit deprivatization occurred as city governments began to assume control and ownership of bus and rail companies (Jones 1985). Currently, the majority of urban transit systems are operated as public authorities.<sup>1</sup>

Prior to the 1970s, planning activities for public transit operations were often oversimplified—transit managers provided bus and railway service while residents paid a fare to use these services. Early public transit evaluations focused on basic variations among transit users;



not surprisingly, a majority of consumers were commuters who traveled daily from home to office. Researchers paid little attention to the complexities of supply and consumption.

More recently, transit managers and transportation researchers have begun to pay careful attention to customers and their riding behavior. As such, they have produced various socio-demographic and geographic studies that involve transit routes and users. Recent studies have primarily focused on the following populations: (1) women; (2) university students; (3) people with disabilities; and (4) older adults, age 65 and over. The research is largely aimed at uncovering inequities in access to urban transportation in the U.S. It also explores how to provide transit service that better matches the travel needs of certain “market segments.”

Much of this current research gains the support of public officials who seek to increase transit ridership and decrease the negative effects of automobile use. Automobile dependency is unfavorably linked to oil shortages, air pollution, and increasing sprawl. Many researchers argue that attractive and convenient public transit systems may serve a dual-purpose: (1) mitigate automobile use; and (2) provide access and mobility for people without personal vehicles.

## **ACCESS AND MOBILITY FOR OLDER ADULTS**

Currently, there is limited research concerning access and mobility for older adults (Rosenbloom, 2003; Wallace, & Franc, 2000). While the majority of published works focus on commuting patterns from a travel behavior perspective, this investigation closely examines access and mobility for older adults using fixed-route transit. Researchers identify several characteristics of access and mobility for older adults that are important to all urban transportation systems (Alsnih and Henshner 2003; Banister and Bowling 2003; Cvitkovich and Wister 2001; Wallace and Franc, 2000): access to destinations of desire; access to transportation options that enhance social, physical, and mental well-being; maintenance of independence and employment opportunities; and ease of movement from place to place. These are characteristics that should be more closely examined by researchers, transportation planners, and transit managers in order to better serve the increasing population of older adults.

### **Access and Mobility Versus Disability**

Can older adults with disabilities use public transit? A literature review conducted by the University of Iowa, College of Medicine focused on access and mobility along with transportation requirements for older women. The authors conclude that there has been some confusion surrounding the distinction between disability and mobility. As stated earlier, mobility is the ability to move throughout the transportation system. Disability, on the other hand, is defined as a physical or mental impairment that substantially limits one or more major life activities. Research has focused on disability rates among older women with an emphasis on the limitations of physical movement or function as a result of detrimental physical conditions (Wallace and Franc 2000). Contrary to popular thought, advanced age and the onset of chronic medical conditions do not stand as precursors for successful independent access and mobility (Burkhardt McGavock and Nelson 2002). Some people with disabilities may successfully use public transportation—either

paratransit or regular fixed route transit—independently.

## Performance Indicators

The 1994-95 “Supplement on Aging” portion of the *National Health Interview Survey (NHIS) on Disability* specifically addresses a socio-demographic and epidemiological concept known as activities of daily living (ADLs) (Burkhardt *et al.*, 2002). ADLs are performance indicators associated with the ease in performance of such everyday activities as, “bathing, dressing, eating, transferring between bed and chair, toileting, and getting around inside the home.” (Burkhardt *et al.*, 2002, 17). Many national health organizations and researchers use ADLs as benchmarks to determine whether or not older adults can live independently. They may also be used to characterize the typical symptoms of aging and chronic disease. Poor performances in ADLs and decreased cognitive abilities may be associated with cessation of driving for older adults (Burkhardt *et al.*, 2002). As a result, those older adults who are not fit for driving because of ADLs may consider public transit as a travel mode.

Older adults commonly report difficulties in the performance of at least two of the previously mentioned ADLs. Often the inability to perform these tasks in the home is linked with the more complex performance indicator known as instrumental activities of daily living (IADLs). IADLs are associated with the performance of tasks such as shopping for essential items and the preparation of meals. IADLs also take into account “functional limitations such as difficulty walking, understanding speech, seeing or using stairs” (Burkhardt *et al.*, 2002, 16). Clearly, many older adults face barriers to fixed route transit because of compromised ADLs and IADLS.

## Multiple Disabilities and At-Risk Older Adults

Instances of multiple disabilities are not evenly distributed throughout older adult demographic groups. The *NHIS* reports that there is a greater occurrence of multiple disabilities among older adults who are Black/African American, female, low-income, and residents of urban centers. It is important for transportation planners to be aware of the greater concentration of these at-risk and difficult-to-serve older adult populations in the central cities of the United States.

## Americans with Disabilities Act of 1990

Recent research focuses on a movement away from defining disabilities based solely on the presence of debilitating medical conditions. It now favors assessment of the functional capacity of the disabled population to engage in mainstream society (Burkhardt *et al.* 2002). The Americans with Disabilities Act of 1990 (ADA) provides solid evidence of this trend. The stated goals of the ADA are (Burkhardt *et al.* 2002, 16): equality of opportunity, full participation in society, independent living, and economic self-sufficiency.

Through legislation such as the Americans with Disabilities Act of 1990 and the American National Standards Institute (ANSI) standards (ANSI 2003), advances have been made in the design of buildings and the built environment. These improvements accommodate the access and mobility of individuals with special needs, such as those having chronic or permanent disabilities. The intent of the ANSI guidelines is to allow a person with

a physical disability to independently get to, enter, and use a site, facility, building, or element; although the guidelines are aimed at people with disabilities, those older adults who may have limited or reduced physical mobility may also benefit.

The new inclusive approach toward the built environment also includes public transit vehicles and stations. Consequently, an important outcome of the ADA and ANSI has been the mandated retrofitting of trains, buses and stations to accommodate wheelchair users. Additional outcomes include accessible vehicle boarding features, accessible ramps in lieu of stairs, elevators and escalators in lieu of stairs, and tactile surfaces with Braille signage. Most buses and rail vehicles also provide reserved seating at the front for people with disabilities and older adults.

Based on the ADA in 1990, public transit systems in the United States now have to provide services—such as paratransit—for people with disabilities who cannot independently use regular fixed route transit. People with disabilities must be certified to ride paratransit. Paratransit provides individual rides on an on-call basis from customer-specified origins to destinations. This service is much more expensive to operate per ride compared to fixed-route transit. Therefore, shifting ridership from costly paratransit to cheaper fixed route may save operating costs.

### **Natural Loss of Access and Mobility**

Although design codes in public places now require accessibility for people with disabilities, the same cannot be said about design features for individuals who are experiencing loss of ability due to the natural progression throughout the course of life (Scott-Webber and Marshall-Baker 1998, Steinfeld 2001). Many researchers have argued that urban design in Nordic countries tends toward a more inclusive design of public spaces to accommodate the changing physical needs and abilities of the population from early childhood to older adulthood (Scott-Webber and Marshall-Baker 1998).

## **FINDINGS OF PREVIOUS RESEARCH**

Academic and scholarly research highlights a variety of barriers—physical, service, perception, and information—that may reduce public transit ridership for older adults.

### **Physical Barriers**

Public transit is accessed at nodes—or bus and rail stations—located at strategic points along the route. Patrons use various means to access transit stations from their origins and destinations. Usually, bus or train station access is accomplished by walking from home; however, it may involve the use of a bicycle, a personal automobile, or another mode of public transit.

#### *Distance*

One of the greatest impediments to public transit use for older adults is the ability to get from home to a bus or rail station. A 1999 study conducted in Baltimore determined that older adults' ability to walk three blocks is the strongest predictor of travel frequency

(KETRON 1999). Most experts agree that the preferred maximum walking distance for older adults to access public transit is one-quarter mile (Unterman 1984). Consequently, many older adults simply live too far from existing transit routes to have reasonable access (Rosenbloom 2003). In focus groups of 42 nationwide transportation systems, 100 percent of managers respond that shorter walking distances from home to bus stops are identified as positive service attributes of an ideal transit system (Burkhardt *et al.* 2002).

Research demonstrates that the presence of pedestrian infrastructure located along a travel route from home to a transit station may lessen the burden of distance on older adults (Burkhardt 2003). Beneficial pedestrian infrastructure includes sidewalks, curb ramps, street lighting, street crossings, and rest areas. Findings from a nationwide telephone survey conducted by International Communications Research in cooperation with the American Association of Retired Persons—with 710 respondents age 75 years and older—highlights the potential effectiveness of pedestrian infrastructure. The study concludes that 50 percent of non-driver respondents cannot walk to a bus stop if they want to; yet, 32 percent report that the trip may be possible if a resting place exists along the way.

### *Automobile-Dominated Infrastructure*

The evolution of the built environment since the mid-20<sup>th</sup> century has been dominated by the addition of infrastructure that accommodates personal automobiles. This trend—combined with population migration from city centers to suburbs—has left many neighborhoods “trapped” in a maze of fast moving traffic. Newer residential developments typically lack continuous sidewalks from home to neighborhood amenities, such as grocery stores and post offices (Evans, 1999). Furthermore, many modern suburban roads stretch over a considerable distance. They often lead from sprawling, low-density residential developments to sprawling, low-density corporate office parks or “big box” retail plazas. These patterns of sprawl are rarely pedestrian-friendly.

Many new office and retail developments have large setbacks that create large travel distances for pedestrians—especially older adults—to overcome. Newer developments often display large expanses of turf and asphalt parking that separate building entrances from street traffic. Rarely do these developments mirror our perceptions of the classic “Main Street U.S.A.,” where shoppers disembark from transit or park their cars within steps of shopping destinations. Clearly, the lack of pedestrian-friendly areas within an automobile-dominated society can present insurmountable physical obstacles for older adults to overcome (Iwarson and Stahl 1999).

### *Unfriendly Urban Streetscapes*

Because most urban infrastructure caters to automobiles, pedestrians must carefully negotiate their environments. Street crossings pose a particular challenge. Walking across multiple lanes of traffic before a traffic light changes may be challenging (Iwarson and Stahl 1999; Lavery Davey Woodside and Ewart 1996). This may be especially true during commuter rush hours (Patterson 1985).

Older urban environments are especially challenging for many pedestrians. The original

public and private buildings in these environments were often built long before the concept of “universal design” was implemented. Universally-designed features—such as accessibility ramps for individuals using wheeled mobility devices—were nonexistent. Today, pedestrian access and mobility in older urban environments is additionally hampered by surface deterioration that compromises safety. (Scott-Webber and Marshall-Baker 1998). The unfavorable conditions of older urban sidewalks can present challenges for older adults using mobility assistance mechanisms such as canes, walkers, wheelchairs, or power scooters.

Older adults may encounter additional challenges while navigating urban streetscapes: steep grades, high curbs, excessive stairs, and dangerous entrances into busy roadways to cross streets or access buses (Iwarson and Stahl 1999). Often, the challenge of navigating the urban streetscape is magnified by the onset of vision, hearing, or other sensory loss associated with the natural aging process (Walter Althouse Humble Leys and Odom 2004).

### *Climactic Challenges*

The aforementioned physical barriers are present year-round in a variety of climates. In cold weather climates, however, the presence of snow- or ice-covered streets and sidewalks may present significant challenges for older adults. This is especially true for those who use canes, walkers, wheelchairs, or power scooters (Evans 1999; Burkhardt *et al.* 2002). Cold temperatures, snow, and winter storms may keep many older adults from leaving their homes on certain days.

Researchers have identified unique demographic trends in certain climactic regions that make transportation planning even more challenging. A comparison of the southern “Sunbelt” region to the northern “Rustbelt” region highlights the challenge. “Younger” older adults with fewer disabilities and more income characterize the older adult population in the Sunbelt. On the contrary, older adults in the Rustbelt are characterized as lower-income seniors “left behind in areas of economic and population decline” (Frey 2003, 11). Furthermore, the majority of older adults in Rustbelt metropolitan areas are older women—many of whom are widowed and living alone. In comparison, more married, active, high-income retirees are located in the South and Southwest.<sup>2</sup>

### *Transit Vehicle Design*

For many decades, transit vehicle design was driven by technology and not by users’ needs and abilities. Nonetheless, a number of researchers conclude that vehicle design plays a role in the ability of older adults to use transit (Burkhardt 2002, Burkhardt 2003, Glasgow 2003, Lavery *et al.* 1996, Peel Westmoreland and Steinberg 2002). For example, a survey of 225 older adult bus riders in Philadelphia reveals that 65 percent of respondents report difficulty with stepping up onto a bus and negotiating steps while in motion (Patterson, 1985).

We find that far-reaching improvements in transit vehicle design focus on the initial entrance into the vehicle. As mentioned earlier, the ADA now requires wheelchair access on bus and rail vehicles, elevators between levels, and no change of grade to board rail vehicles.



Many cities have swapped the conventional bus with three steps leading up to a central aisle for a low-floor bus that has only one step up from the street. This modern entrance is more universally accessible to the entire population of transit consumers. While the first step up onto a conventional bus ranges from nine to twelve inches, a “kneeling” bus typically reduces the height of the first step to a more manageable three inches (Burkhardt 2002). Burkhardt (2002) argues that the most far-reaching “improvements to vehicle accessibility are likely to be gained from changing to low-floor vehicles.”

Research from Sweden and other European countries uncovers that their vehicle design improvements include lower initial entrance steps and well-designed handrails. Other improvements include reserved seating at the front of the bus for older adults and people with disabilities, poles and grasps, skid-resistant and well-marked floors, bright lighting, and easy-to-read signage. Newer buses in the United States are gaining in popularity, but they have not reached the level of implementation seen in other countries (Burkhardt 2002).

### *Overcrowded Conditions*

While advances in transit vehicle design may improve comfort levels, peak commuting environments may produce discomfort because of traffic congestion and crowded conditions aboard buses and rail cars. The conditions may make it difficult for older adults to find a seat, stand for long periods, or move around while on overcrowded buses in motion. Additionally, older adults in the United States are increasing their non-work related trips. The majority of these trips are being taken between 6am and 6pm. Based on interviews with 1,000 older adults, a similar study in the United Kingdom found that the older adult population experiences highly mobile activity during daylight hours. After dark, the situation reverses with little activity outside the home. This behavior may contribute to traffic congestion and crowded buses during peak commuting hours (Alsnih & Henshner, 2003).

We find that a potential solution may be reserved seating in the front of buses for older adults. Reserved seats may alleviate concerns among older adults about overcrowding, and they lessen the need for walking while the bus is in motion (Glasgow & Blakely, 2000; Patterson, 1985).

### **Service Barriers**

It would be nearly impossible to transform the collective public transit system from a service for the masses into one for individuals. Fixed-route transit, by nature, is not designed to serve individual travel needs as much as it is designed to move large numbers of customers on a system-wide basis (Burkhardt *et al.* 2002).

### *Convenience and Flexibility*

The inability of fixed route transit to address individual preferences presents a significant challenge in increasing mobility for older adults. The flexibility afforded by automobiles, in terms of freedom of route and time of travel, helps to explain a finding from the 2001 National Household Transportation Survey. It states that 89 percent of trips made by older

adults are by car. Surprisingly, older adults have the largest driving mode share among all age groups (Pucher and Renne 2003). Additionally, research has found that the median number of trips taken by older adult drivers is three times higher than by older adults who do not drive (Stowell-Ritter *et al.* 2002).

To address service deficiencies in fixed route transit systems may appear simple at first. It seems that a logical first step would be an adjustment to fixed-route transit that mirrors the freedom and amenities of the private vehicle (Giuliano 2003). However, it would be prohibitively expensive to design a public transit system that offers the same convenience—door-to-door service, route flexibility, and scheduling independence—as the personal automobile.

Previous to the baby boom generation, a large share of older adult travel was by bus and streetcar; automobiles were not as ubiquitous as they now are. The older adults of today spent most of their adulthood as automobile drivers. Travel by car may be as much a function of habit as it is a function of convenience and expediency.

### *Travel Times and Destinations*

Like any consumer-driven industry, public transportation is guided by the law of supply and demand. Transit service is generally supplied in response to the large number of commuters traveling to and from homes and offices during peak travel hours. Unfortunately, travel conditions during these hours—congestion, fast moving traffic and crowded buses—are the very conditions that older adults prefer to avoid (Ritter 2002).

For older adults, activity outside the home is greatly reduced after dark (Banister and Bowling 2003). Older adults perform much of their travel during the midday and on weekends. During these times, transit service tends to be less frequent than it is during weekday peak hours (Nelson 2002, Glasgow 2000, Hayden, 2004). Thus, it may seem that to increase off-peak service might lead to an increase in older adult ridership. However, one barrier to doing so is the lack of cost-effectiveness for transit operations to provide more vehicles and drivers during periods of low ridership. Between three and eleven percent of older adults use public transit. Given these consistently small shares, a paradigm shift in service delivery seems unlikely due to limited system resources (Taylor Garrett Iseki 2001).

Many communities now use buses as “moving billboards” in an attempt to generate more revenue for transit systems. “Bus wraps” are advertisements displayed on the outside of buses. These wraps often cover the entire exterior of the vehicles. Bus wraps that cover the windows can block light and darken the view for passengers. They may create difficulty and confusion for older adults by making destination locations and landmarks less recognizable from inside the buses (Nelson 2002). In a 1985 study in Philadelphia, 68 percent of 225 respondents report that dirty windows obscured their views from inside the buses (Patterson 1985). Dirty windows can reduce the ability of older adults to clearly spot familiar landmarks that they commonly use to identify approaching bus stops. This confusion may contribute to a fear of getting lost or taking the wrong transit bus (Burkhardt 2002).

### *Connectivity and Coordination*

Very rarely, but occasionally, does fixed route transit offer service from a front doorstep directly to an important destination like a medical office or bank. Consequently, the automobile serves a greater number of destinations than public transit (Wachs 1986). Even under ideal conditions, travel by public transit is more time-consuming than travel by auto (Wallace 2000).

To reach destinations, transit riders are often required to combine several transit modes and routes. For example, a typical route may include a bus to point A, a transfer to light rail to reach point B, and then a transfer to another bus to reach point C. Complicated trips on public transit, especially when there is a transfer between modes, can present a number of challenges for older adults. Challenges are both physical (walking to stations, waiting, ascending or descending stairs) and mental (reading schedules and maps, following directional signage, keeping track of time).

Public transit systems should be designed to be as “barrier-free” and seamless as possible in order to provide accessible and convenient travel for all customers—especially older adults (Burkhardt, 2002). Many solutions for seamless travel on public transit involve new technological innovations. Electronic payment cards are designed to speed boarding (Mitchell 1988, Burkhardt 2002). Likewise, fare payment systems that allow consumers to purchase round-trip tickets at initial entrance points may assist older adults. Tickets or fare cards that are valid on various transit systems may also be beneficial. Such arrangements may aid older adults by (1) reducing the need for prior knowledge of costs for each travel mode and (2) lessening the time spent fumbling through purse or pocketbook for exact change.

### *Physical Isolation*

A 2005 transportation study by AARP determined that only 45 percent of households in the United States have access to any kind of public transportation (Millar 2005). Recent demographic trends reveal that the majority of older adults live in suburban and rural areas where transit service is either limited or is completely lacking. In 2000, three-quarters of older adults lived in suburban or rural areas (Burkhardt 2000). These areas of dispersed low-density development require more resource expenditure and more infrastructure to maintain mobility (Giuliano 2003). Perhaps not surprisingly, the greatest share of transit ridership by older adults takes place in areas of concentrated population with efficient urban infrastructure (Evans, 1995).

In rural Iowa, transit system managers reported that a significant number of rural older adults are in need of transit services that are not available to them (Cvitkovich 2001). Similarly, in a 1195 study conducted in rural central New York State, only four percent of 737 older adult respondents report that they travel by bus. When asked if they are able to travel as often as they wanted, 85 percent of respondents able to drive reply “yes,” compared to only 56 percent of non-drivers (Glasgow 2000).

### *Social Isolation*



The United Nations Commission for Social Development has recognized worldwide access to transportation “as an essential component of quality of life for older people” (Westmoreland 2003, 23). In the United States, a lack of adequate public transit access in suburban and rural areas results in a greater likelihood of social isolation (Glasgow, 2000).

An analysis of population demographics conducted by the National Highway Transportation Safety Association has identified a large share of older adults that have few family members available to provide social and transportation support (Wallace 2000). There is a desire among older adults to live among friends and family in order to maintain familiar social networks. This trend has given rise to a rather ubiquitous term, “naturally occurring retirement communities” (NORCs). NORCs are characterized by: (1) residential- and mixed-uses within walking distance of each other and (2) densities sufficient to support frequent transit service. As an example, dense spatial arrangements of residences in relation to libraries, post offices, healthcare facilities, and churches encourage independent living, and they also provide ample opportunity for social networks. Burkhardt refers to these amorphous communities as “assisted living communities without formal assistance programs” (Burkhardt *et al.* 2002, 11). Within NORCs, older adults rely on friends, nearby family and familiarity with their environment to assist them in remaining independent. In this sense, older adults may experience less isolation in NORCs than they would in newer low-density and automobile-oriented suburbs.

### *Economic Isolation*

Social isolation is not only detrimental to personal well-being, but it may lead to economic isolation within a local community. Besides travel for shopping, personal services, medical appointments, and social engagements, older adults often travel in order to volunteer their time. For example, they may care for friends or relatives and donate time to local community organizations. In the Denver metropolitan area, the value of unpaid hours for older adults is estimated at \$1 billion annually (Hayden 2004). In order to capitalize on the contribution of older adults to the economy, it is recommended that regional- and community-based transportation and service hubs are developed. These hubs could better connect older adults with opportunities in their communities.

In recent years, gentrification of urban neighborhoods has increased due to the presence of inter-modal transportation centers, arts and entertainment venues, and rising home values. This combination of forces has displaced many poor and elderly residents. The locations where older adults take up residence determine how adequately they are able to fulfill their mobility needs (Burkhardt 2002). Along with a broad trend toward decentralization of public housing, gentrification has significantly contributed to lower transit ridership by low-income groups and older adults (Pucher 2003). Trends such as these deserve attention from housing and transportation policy planners. A coordinated effort by planners is required to ensure older adult access to public transit.

### *Value and Comfort*

Many older adults survive on limited incomes. Social security and retirement savings can

constitute a large share of their income. As a consequence, the cost of using public transit can present a barrier to use—especially for less affluent older adults. A study that focused on willingness-to-pay found older adults to have a low transit fare elasticity of -0.14. In other words, this fare elasticity translates into a 1.4 percent decrease in ridership for every 10 percent increase in fare (Litman 2004). This relatively low elasticity, compared to an elasticity of -0.33 to -0.22 for all transit riders, demonstrates that older adults using public transit are dependent on it. It also suggests that older adults are not “choice” transit riders because they may not be able to absorb fare increases due to limited options.

Public transit fares tend to be based on a “one size fits all” model in which the cost of riding transit during off-peak hours is the same as peak commuting hours. This model highlights the failure of transit systems to establish market-sensitive service concepts. Reduced fares during off-peak hours—mid-day and weekend hours—would encourage older adult ridership when there is excess capacity (Burkhardt 2002, Taylor Iseki and Garrett 2001).

Several studies have investigated transit passenger comfort. Comfort features of public transit include: comfortable seating on vehicles and in stations, shelter from inclement weather, reasonable waiting times, convenient transfers between routes or modes, convenient access to understandable information about routes and schedules, and noise reduction. While these features may be important to most passengers, they may be particularly so for older adults who tire easily and cannot sit or wait for long periods of time. In general, older adults may be more sensitive to characteristics of comfort than other groups of public transit customers. Research has found that many older adults are inconvenienced by having to wait for bus service without shelter from inclement weather (Patterson 1985, Cozens 2004). Further research suggests that public restrooms at transit stations and transfer points would increase passenger comfort (Millar 2005).

## **Perceptual Barriers**

Public transportation systems, by nature, provide public access in various public places. As such, they are used by large volumes of travelers who are constantly on the move. Many people have access to public transit systems (Boyd and Sullivan 1997 Committee on Transportation and Infrastructure 2004, Hess 2006, Szyliowicz 2004). However, negative perceptions of public transportation may limit potential ridership.

### *Safety Perceptions*

Many transit riders fear transient individuals who may seek shelter from the elements or may engage in activities such as panhandling and public intoxication in transit stops and stations. Once in motion, crowded buses or trains are enclosed environments that offer few opportunities to exit vehicles if confronted with social deviance (Fleetwood, 2004). Unrestricted access to public transit makes buses and trains vulnerable to radical disruptions. The recent terror bombings in London provide a relevant example. The perception that public transit does not provide safe and secure travel can curb ridership for certain groups—especially older adults (Cozens 2004).

The perception of crime and safety—as compared to actual crime rates—deserves further investigation. In a national study conducted by the AARP of 2,422 adults over age 50,

one in five respondents cites a fear of crime associated with travel on public transit (Ritter 2002). A fear of crime may result from media representations of ill-behaved youths and gangs. Similarly, in telephone surveys and on-board interviews of 817 people in Greensboro, North Carolina, three times as many non-transit riders (versus transit riders) perceive problems relating to crime and personal safety issues on transit buses. The most commonly perceived problems are “soft crimes” such as disorderly conduct, drunkenness and panhandling. However, only 8.2 percent report an actual crime-related experience in the two years prior to the study (Ingalls 1993).

Many researchers conclude that a lack of certain safety features surrounding transit stations or bus stops serve as barriers to public transit for older adults. The following are often cited as characteristics contributing to fear among older adults (Ritter 2002, Patterson 1985, Cozens 2004): lack of emergency call boxes, poor lighting around stops, lack of police or security presence, and overgrown vegetation obstructing views at stops.

### *Prevalence of Crime*

The prevalence of criminal activity coupled with a fear of victimization—particularly in central city neighborhoods—prevents many older adults from using public transit (Loukaitou-Sideris 1999).

Further research should assess the relationship between incidence of crime and the built environment of neighborhoods surrounding bus and train stops. In Los Angeles—where bus ridership is high in many low-income neighborhoods—a two-year investigation reveals that crime incidence is correlated with certain characteristics of the built environment. Ten “hot spots” of crime incidence are identified among the city’s 19,000 bus stops. At these bus stops a rider is between 20 and 30 times more likely to be the victim of a crime than at other Los Angeles bus stops (Loukaitou-Sideris 1999).

Attributes of the built environment found in these ten “hot spots” of crime were multiple combinations of the following undesirable or “negative” land uses (Loukaitou-Sideris 1999): check cashing establishments, bars and liquor stores, vacant buildings, adult bookstores, pawn shops, surface parking lots, and alleyways. Such places often attract undesirable activities including prostitution, drug sales and drinking in public. Alleyways provide convenient areas for criminals to hide or use as routes for escape.

Research finds that concentrated commercial activity may result in “eyes on the street” (Jacobs 1961), providing an added measure of security for pedestrians and transit patrons. Consequently, this security is largely absent from commercial strips with vacant buildings. The prevalence of crime at bus stops is an important consideration and cause for alarm in inner-city residential areas. This is especially true as the bus system may represent the primary mode of transport for the elderly and poor (Loukaitou-Sideris 1999).<sup>3</sup>

### **Information Barriers**

Just as many older adults may experience physical barriers to the use of fixed-route public transit, they may also face cognitive and information barriers.

### *Lack of Awareness*

Clear comprehension of timetables, schedules and maps is paramount to successful use of public transit systems by all populations. This is especially true for those who transfer between transit routes and modes. Various research projects have found that graphic presentation of information on maps, timetables and schedules has been identified as a barrier to older adults using transit systems (Nelson 2002, SEMCOG 1999, Burkhardt 2003, Rosenbloom 2003). Individuals with limited visual capacity or first time transit users may find it challenging to decipher transit schedules and route information.

Perhaps a broader concern is the general lack of awareness about public transit options. This may preclude extensive use of services available to older adults (Foster 2004, Glasgow 2000). In telephone interviews with fifteen of sixteen regional transit managers and eleven of thirteen managers of aging agencies in rural Iowa, adults over the age of 75 cite information as the greatest barrier to public transit use. Of the 800 adults over age 75 interviewed, 48 percent are not aware that public transit is available in their areas (Foster 2004). The study concludes that adults over age 75 are unaware of transit services available to them. It also finds that transit managers have difficulty tailoring services to this group.

### *Limited Information Exchange*

Enhanced information exchange between older adults and transit providers should be vigorously pursued as a means to increase transit use (Rosenbloom 2003). For example, notification of changes in service due to vehicle breakdowns may lessen the discomfort of older adults while waiting for a bus or train.

Data from a survey of 2000 adults over age 60 in the metropolitan Denver area reveals that the ability of older adults to access up-to-the-minute information via the Internet seems to be on the rise. In 2004, 44 percent of respondents reported using the Internet as a source of information at least some of the time as compared to a smaller share of 19 percent in 1999 (Hayden 2004). Most likely, these Internet user rates do not apply to all income levels of older adults; yet, the Internet certainly provides a source to dispense up-to-the-minute information concerning transit system scheduling and functionality. This form of communication is worthy of future research.

After boarding a bus or train, older adults still face challenges in accessing transit information. Rolling destination signs on the front of buses and bus wraps may confuse riders about destinations and routes (Nelson 2002). Transit operators often rotate bus drivers to ensure that drivers know multiple routes in case of absences. However, the presence of new faces behind the wheel may confuse some older adults and lessen the comfort and communication levels associated with the familiar face of a regular bus driver (Burkhardt 2002).

### *Minimal Access to Planning Process*

A lack of coordination among urban designers, transit providers, social service professionals and senior housing advocates may contribute to unfriendly street environments, inaccessible

and inconvenient transit service, and decentralized service and housing.

Too often, the transportation planning process lacks input from human service agencies that may advocate on behalf of older adults and other groups. This occurs even though these human service advocates may have significant interest in the expenditure of funding to meet community transportation needs. In some cases, a lack of participation is due to a lack of knowledge about planning processes. At the same time, transportation planners are not often versed in the subtleties of health and human service programs. As a result, initiatives often advance towards completion in parallel without coordination among interest groups. These initiatives may subsequently fall short of their potential outcome.

## **INNOVATIVE APPROACHES IN ACTION**

The key conceptual weakness inherent in both research and practice of public transit is quite apparent—a “one size fits all” approach fails to meet the service preferences and travel needs of older adults. Although it may be impossible for public transit managers to cater to the service needs of specific “market segments,” we argue that reduction of barriers to public transit for older adults may also benefit other populations—such as the poor and those with mobility limitations (Steinfeld 2001). The mitigation of barriers to public transit use by older adults could potentially increase transit ridership for *all* customers. This may subsequently warrant the resource expenditures necessary for the removal of these barriers. Many researchers and policy analysts have argued that the increasing older adult population represents a largely untapped source of ridership for public transit. If older adult ridership levels increase substantially, then an increase in revenue may follow.

Here we present some innovative solutions undertaken by transit managers to reduce the barriers to fixed route public transit that many older adults face. We organize the approaches around three central themes: educational, fare payment, and service improvements.

### **Educational Improvements**

Unlike driving a personal automobile, public transportation requires no prerequisites such as testing and training; yet, some may argue that it should. As anyone new to the public transit system knows, the initial journey into the “unknown” can be a daunting experience.

As a way to educate older adults about the use of fixed route transit, travel training programs have been established in various regions. Peer “travel buddies” or “ambassadors” lead orientation sessions that explain routes and schedules, boarding and alighting, and fare payment. Travel buddies may even accompany first-time or returning riders on transit rides. Furthermore, assistance from a travel buddy in the same age cohort may ease the apprehension of an inexperienced transit rider.

In a 2002 study of transportation access for older adults, Burkhardt and McGavock provide profiles of best practices in travel training initiatives. Two highlights include (Burkhardt 2002):



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*Austin Resource Center for Independent Living, Napa, California*

“Travel ambassadors” ride alongside fellow older adult transit trainees and answer their questions and concerns. In exchange for offering eight hours of training assistance per month, ambassadors are given a year of free transit service.

*Fort Worth Transit Authority (FWTA), Fort Worth, Texas*

The goals of travel training are (1) to educate older adults and others about fixed-route transit and (2) to encourage riders to choose fixed-route transit over complementary yet costly paratransit services. If schedules or routes change, follow-up training is provided as a “refresher.” According to FWTA estimates from the 1996 program inception, ridership among those who received training has increased from between 25,000 and 32,000 annually to between 55,000 and 70,000 annually.

**Fare Payment Improvements**

Because of driver subsidies, a price of three-dollars in fuel does not capture the total cost associated with an automobile trip from work to home. Similarly, a three-dollar transit fare does not cover all the costs involved in transporting a transit rider from home to office. State and local governments (and to a smaller degree, the federal government) provide financial operating assistance to transit systems. This assistance provides access and mobility, relieves congestion on roads, and improves air quality in urban centers. Transit systems themselves also raise revenue through other means—such as advertising with bus wraps and signage—to cover costs.

Even with operating subsidies in place, many older adults may still find it difficult to afford transit fares. Some transit authorities offer reduced fares, also known as “senior fares,” for older adults. Other transit authorities provide reduced fares for off-peak travel. Older adults who are regular transit riders may purchase a monthly pass (generally for a lower per-ride cost than individual cash fares.) Additionally, they may receive a pass from a social service organization or a volunteer society. Other older adults may carry a card supplied by a municipal or county senior service organization that allows for a reduced fare. Older adults that occasionally ride transit are likely to pay the full cash fare. While older adults tend to take shorter transit trips than commuters, most transit systems charge a fixed fare that does not vary by distance (Taylor Garrett Iseki 2001) or time of day.

Older adults can experience confusion or difficulty while paying transit fares in rail stations or while boarding buses. Light- and heavy-rail systems generally use ticket agents or ticket vending machines from which passengers purchase proof of fare. Buses require passengers without passes to pay cash fare into a fare box. The purchasing of fares on fixed route transit may be difficult for those older adults experiencing mobility limitations, using canes or walkers, or carrying parcels. Passengers need to know how to use fare payment machines, and in some cases, they need to be prepared with exact change. Many older adults may lack prior knowledge of costs associated with transit trips. Burkhardt and McGavock provide useful examples of fare payment programs intended to alleviate the stress associated with fare payment while boarding transit (Burkhardt, 2002):

### *Contactless Smartcards, Leeds, England*

New fare cards are similar to EZ Pass receivers used along U.S. interstate highways at toll plazas and on bridges. The contactless smartcard—which can be read while still in purse or pocket—contains a microchip that deducts the appropriate fare from the holder’s account upon boarding. This eliminates needless fumbling and searching through purse or wallet for a swipe card or correct change. Although smartcard systems may be an effective way to quicken passenger boarding, Burkhardt is quick to point out that the program in Leeds is too new to quantify its benefits for older adults. The high capital costs of installing infrastructure for a new smartcard system may be cost-prohibitive, except in large metropolitan areas.

Burkhardt suggests additional fare payment improvements including prepaid fare cards and transportation accounts. Prepaid fare cards may be purchased in advance of travel, and fares are then deducted upon use. Alternatively, individuals may maintain personal transportation accounts while transportation operators adjust accounts based on fare deductions and account deposits. The labor hours associated with maintenance of these accounts may be too costly for systems outside of large metropolitan areas.

### **Service Improvements**

One of the most frequently cited barriers to public transit for older adults is lower service levels during off-peak hours, as compared to peak hours (Nelson 2002, Glasgow 2000, Hayden 2004). During off-peak hours when congestion is generally lower, there are less frequent transit services and fewer passengers. Many older adults may avoid travel during the morning and evening peak commuting hours, and instead, travel during the mid-day off-peak. Furthermore, older adults generally avoid unnecessary travel at night and after dark. Several transit authorities have experimented with service adjustments during off-peak hours (Burkhardt 2002):

### *Capital Metro Transportation Authority, Austin, Texas*

Capital Metro service amenities consist of (1) reserved seating at the front of buses for older adults and (2) drivers able to provide assistance to persons utilizing canes and walkers. Older adults with a Capital Metro Senior ID card may ride any of the Capital Metro buses free of charge.

In some places, human and social service organizations have addressed mobility challenges for older adults by becoming involved in the provision of transportation service. When carried out well—and in a spirit of cooperation—the results have been favorable. Transportation service has been more responsive to and inclusive of the travel needs of older adults.

### **CONCLUSION**

There is no shortage of literature that explains the transportation challenges faced by older adults; yet, literature rarely specifies their barriers to public transit. Clearly, there

are significant, but not insurmountable, barriers to public transit ridership for all riders—especially older adults. In the United States, metropolitan areas are experiencing two trends that demand improvements to public transportation services: (1) a significant increase in the share of adults over age 65 and (2) the increase in life expectancy of the population. In failing to reduce the barriers to public transportation use, transit managers and municipal planners have encouraged continued reliance on the automobile. By reducing the barriers to public transportation, there is enormous opportunity to increase transit ridership, lessen automobile dependency, reduce social isolation, improve access, enhance mobility, and improve quality of life in our communities. Public transit systems should think beyond a “one-size fits all approach” and better target and market services toward specific segments of the population—including older adults.





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## RESEARCH METHODOLOGY

To supplement knowledge obtained in our literature review, we facilitate focus groups of older adults to assess perceptions about public transit and perceived barriers to utilization of public transit—including those related to safety and accessibility. In the second phase of the study, we develop a survey instrument to be mailed to a larger sample of older adults.

This section details the steps of this research process. We begin by describing the focus group process and findings. Then, we detail the development of the survey questionnaire instrument and the process of mailing. This section concludes with a brief overview of the data analysis process.

### FOCUS GROUPS

Four focus groups were conducted to gather perspectives and viewpoints of older adults about the barriers to using public transit. The focus groups unfolded as brainstorming sessions and were intended to gain insight in the areas of (1) access to public transit (including buses and trains), (2) physical challenges in reaching stations and stops, (3) physical challenges in using vehicles, (4) accessing information about the transit system, and (5) safety and security.

Focus group participants, who were recruited with the help of staff at the various locations, signed an informed consent to participate in the focus groups and received \$5 compensation for their time. The focus groups were recorded, and the audiotapes were later transcribed for analysis. To ensure that participants were comfortable and to encourage discussion, focus groups were held in quiet environments with appropriate lighting and comfortable seating.

In the Buffalo area, one focus group was held at the Amherst Senior Center (in the suburbs) and another was held at Baptist Manor (near downtown). In the San José area, both focus groups were held at senior centers under the purview of the City of San José, Department of Parks and Recreation; one focus group was held in Berryessa and the other in Willow Glen. Both Berryessa and Willow Glen are suburbs of downtown San José. The focus groups lasted between 60 and 90 minutes. Included among the participants were older adults users and non-users of public transit. Table 1.4 presents an overview of the focus groups and the locations and participants.

Two focus groups were held in Erie County, with a total of 19 participants. Of them, 61% were white, 22% were African American, and 22% reported being “other.” The percentage for ethnicity totals more than 100% because respondents could select multiple ethnic identity options. The age of the Erie County attendees was 77 (*SD* 6, range 72-83) years. The Erie County focus group also included a range of transit users including 33% who use buses and light rail daily, 11% who use them monthly, and 56% who never use them.

**Table 1.4 Overview of Focus Groups**

	Buffalo		San José	
Location	Baptist Manor	Amherst Senior Center	Berryessa Senior Center	Willow Glen Senior Center
Neighborhood Setting	City	Suburban	Suburban	City
Date	August 25, 2005	July 28, 2005	August 18, 2005	August 19, 2005
Number of participants	11 (1 man, 10 women)	8 (4 men, 4 women)	9 (4 men, 5 women)	14 (5 men, 9 women)

The other two focus groups were held in San José with a total of 23 participants, 20 (87%) were white, 1 (4.3%) was American Indian, 1 (4.3%) was Asian, and 1 (4.3%) was Latino. The age of the San José attendees was 75.9 years (*SD* 10.7, range 59-95). The San José focus group also included a range of transit users including 2 (8.7%) riders who use buses and daily, 1 (4.3%) who uses them weekly, 2 (8.7%) who use them monthly, 6 (26.1%) who use them rarely, and 12 (56.2%) who never use them.

### Focus Groups: Process & Questions

In each focus group, special consideration was given to strategies and techniques for interviewing older persons, including issues related to hearing and comfort. At the beginning of each session, project staff explained the scope of the study and described various characteristics of access to public transit. Then, the facilitator asked a series of questions, giving each participant an opportunity to respond. To elicit responses from all participants, the focus group questions were open-ended (Fowler 2002), and included the following:

1. Thinking about public transit (buses and light rail), tell me what works and what doesn't (what are your barriers)?
2. What might make public transit, compared to other modes of travel, difficult for older adults?
3. What might make it difficult or inconvenient for older adults to ride public transit for shopping, errands, or doctor visits?
4. In what ways may older adults have difficulty boarding and riding buses and light rail vehicles?
5. What makes driving or being driven in a car or van more convenient for older adults than riding public transit?

6. What changes would allow older persons to ride public transit with greater ease? Finally, at the beginning or end of the session, participants filled out a survey to provide demographic information about themselves, such as age and frequency of transit use.

## **Focus Groups: Key Findings**

This section presents summaries of the four focus groups. Transcripts of the audiotapes of the focus groups can be found in the appendix to this report.

### *Amherst Senior Center, Amherst, New York, July 28, 2005*

There were eight participants in the focus group: four men and four women. The participants ranged in age from 74 years to 84 years. Two of the male participants had disabilities: one was legally blind and another used a power scooter. Of the eight participants, only one could recall taking a trip on public transit in recent years, and two other participants reported that they *have never* ridden on public transit. Two participants talked of earlier times in their lives when they were transit dependent.

Several of the respondents reported that they use the Amherst senior van to get to the senior center, and some respondents reported that they use the senior van for all of their travel needs, including healthcare and shopping. Users of the Amherst senior van reported that the door-to-door service it provides is a necessity, and they contrasted this with using public transit, for which they would have to walk to reach the bus stop, board the bus without assistance and after disembarking from the bus, walk to reach their destination.

Throughout the focus group, the greatest barrier to using public transit heard was the lack of transit service in the suburbs. Most participants reported that there is no NFTA service on their streets, and many reported that they would have to walk up to a mile to reach the nearest NFTA bus stop, and this was considered a barrier to use. In fact, public transit does not serve the Amherst Senior Center or anywhere that is walkable from John James Audubon Parkway. The participants also perceived service levels for suburban service—infrequent service, long waits for buses, long travel times because of great distances between suburbs and city—to be a barrier to public transit use. The participants reported that they felt that this was unlikely to change, as they recognized the logistical difficulties of routing buses into their neighborhoods on narrow roads, and they felt that the NFTA should not provide unprofitable service.

Using transit vehicles presented a few barriers for participants. They reported that the boarding process—negotiating steps and finding a seat—seems daunting. They also reported that older adults using canes or walkers could have difficulty paying their fare or carrying packages onto buses. Respondents reported that mini-buses seem less daunting than traditional 40-foot buses. The participants who rode Metro Rail reported that riding on the train was bumpy.

The participant who uses a power scooter reported that boarding the bus would be difficult without assistance, but more importantly, exiting his own house without assistance is

impossible. That is, if a senior van comes to collect him at his house there is someone [a driver] who can help him get out of the house, but if he were embarking on a trip on public transit, he would have to exit his house without assistance, which was seen as a barrier.

One participant raised the issue of safety fears about using public transit, and reported that he was fearful of going underground on Metro Rail because of the threat of attack by terrorists. Other participants reported a general fear of other groups of people on public transit. One participant said that if she were riding public transit she would travel during daylight hours only to avoid traveling with young kids at night.

None of the participants indicated that they had any barriers to obtaining or using information about transit service. All participants said that if they were contemplating a trip, they would call the NFTA for route and schedule information. No one mentioned other ways of obtaining information besides the telephone.

One participant reported that he shares a car with a son with whom he lives. This older man complained of being stranded at home—unable to go anywhere—when he son is using the car. He went on to say that there is a bus route on his street that stops in front of his house. He reported that he could think of no barriers that would keep him from using public transit. But when asked why he does not use public transit, he said, “I still drive. I’ve never had to.” For him, it seems, public transit is not considered an option—with no explanation why—although he reported no barriers and public transit seems to offer convenient service.

When participants who drive compared public transit to auto travel, they pointed out that there is greater freedom with driving—they can travel when and where they want without depending on anyone else. Drivers also mentioned the convenience of carrying items with them in the car. One driver mentioned that the high cost of auto fuel made him think twice about how much he drove, but he added that he would not consider substituting public transit for auto trips because public transit is too inconvenient.

For the most part, the participants seemed to have a positive perception of public transit, at least during the course of the focus group, and considered it a travel option, although only one has actually ridden in recent years. One participant who had never ridden public transit said that the first ride would be challenging, and said that if someone accompanied him and showed him how to ride, it would be easier. Another participant agreed, adding that if she learned the routes near her home and when to get off to reach destinations, she could ride. That is, learning how to use public transit was seen as a necessity—but not a barrier—for riding.

Finally, differences between younger and older participants seemed less relevant than those about physical capacity. The participants were concerned about whether or not they could physically access transit and be safe on transit. The issue of age seemed to enter only as a factor when related to physical capacity. However, it appeared that amongst the attendees some younger adults may have been less physically fit than that of older attendees and vice versa.

*Baptist Manor, Buffalo, New York, August 25, 2005*

The focus group consisted of eleven racially diverse participants between the ages of 68 and 90 years. There were ten women and one man. The group was, for the most part, highly mobile, although participants reported during the course of the focus group having mobility impairments, vision impairments, and hearing impairments. The participants had a great deal of experience with public transit—some are life-long riders—and had many thoughts and comments about older adults' difficulties with using public transit. Many in the group used transit regularly, and one woman worked full-time as a volunteer and rode the bus every day of the week.

Baptist Manor is located on Linwood Avenue, a major north-south residential avenue in Buffalo that is not served by a bus route, although buses are available on the parallel avenues—Main Street and Delaware Avenue—immediately to the east and west of Linwood Avenue. Residents of Baptist Manor can also use nearby cross-town buses on Bryant Street and Utica Street. There is a Metro Rail station at the intersection of Main Street and Utica Street. Because Baptist Manor is situated mid-block, however, residents must walk to reach transit stops and stations. Residents reported apprehension about crossing busy streets to reach transit, especially crossing Main Street to reach the Metro Rail station.

Participants mentioned that after boarding buses, they often have difficulty finding seats at the front of the bus and finding seats before the bus begins moving. Some participants complained that bus drivers were discourteous and unhelpful, while other participants reported that they were satisfied with the interactions with bus drivers.

Bus riders reported that stop announcements were helpful in navigating throughout the system. Limited weekend service makes traveling about on Saturday and Sunday difficult for older adults, especially those who wish to attend worship services on Sunday morning. In general, participants felt that transferring from one bus route to another was difficult because of long waits to make connections.

Participants reported that winter weather presents enormous challenges for older adults who use public transit. In particular, unshoveled sidewalks, icy streets, and snow banks blocking bus stops make riding transit in winter months extremely difficult. Several participants had personal experiences with dangerous situations involving wintry conditions when trying to get to public transit. Focus group participants were decidedly outspoken and in complete agreement about the difficult of using public transit when there is snow on the ground.

Those who used Metro Rail reported that unclean stations, non-working elevators, and broken escalators made the subway unpleasant or impossible to use. Those who cannot negotiate stairs do not use Metro Rail when elevators and escalators are broken at stations. Participants also reported difficulty using ticket vending machines, and expressed concern over the absence of restrooms in subway stations.

Participants were concerned about the presence of rude passengers—especially groups of youths—and panhandlers in and around Metro Rail stations, and an overall lack of presence of security guards throughout the rail system. Nevertheless, some participants reported that they preferred Metro Rail over Metro Bus. Metro Rail riders enjoy the pleasant ambiance created by classical music that is piped throughout the system.

Most participants access information about routes, fares, and schedules using the NFTA's telephone customer service department, but they complained that the unavailability of this service on weekends is inconvenient, and they strongly preferred talking to an operator over getting recorded information from a push-button menu. Participants also mentioned that printed schedules are often missing from distribution centers and aboard buses.

*Berryessa Community Center, San José, California, August 18, 2005*

This focus group included nine participants: four men and five women, including one Latino male and eight white participants. The participants were aged 69.3 (*SD* 5.4, range 62-77) years. All participants ambulated independently into the room where the focus group occurred. Of the nine participants, one rode bus and light rail monthly, two rode them rarely, and six never rode them. For these participants, the walking time to the nearest bus stop is less than 5 minutes (1 participant), 5-10 minutes (6 participants), or more than 10 minutes (2 participants). For these participants, the walking time to the nearest light rail station is either 5-10 minutes (3 participants) or more than 10 minutes (6 participants). All nine participants have a driver's license, and at least eight of them drive; one participant failed to respond to this question.

In this focus group, primary issues and barriers included challenges with access to transit, lack of convenience, costs, wait time, and fears and safety concerns related to transit travel. A general consensus existed that using a private vehicle, car, is easier for travel. However, suggestions were offered about how to promote use of fixed-route public transit and to make transit easier to use. The next few paragraphs summarize these findings.

At the beginning of the focus group, one participant described fixed-route public transit as “a pain in the neck.” This statement related to the participants concern that one lacks convenience compared to that of using a car for travel; this concern was shared with many in the group. The return trip was noted as an inconvenience, and, in general, participants reported that transit was a “waste of time.”

One woman also told a story about the intersection of inconvenience and cost; she described the increased costs related to switching lines now that a once convenient bus line (route) had been cancelled. Another comment about this same line noted how difficult it now was to access the airport via the bus. In general, one critical issue for this group was the lack of convenient bus stops—not in the needed areas, stops too far apart, and inability to get to essential appointments, such as the doctor.

In addition, there were fears and concerns about safety and the lack of assistance provided by transit operators and station agents. For example, participants commented about fears about being on the bus at night. One gentleman noted that the presence of



graffiti, such as gang symbols, on the light rail makes him particularly nervous.

This group presented multiple concerns about buses and light rail; however, some very positive sentiment and beliefs about public transit also existed. In fact, one woman stated that VTA needs to “motivate” people to ride, just as she felt motivated to ride light rail because of the positive statements shared about it by one group participant. This man spoke enthusiastically about the use of light rail, however he also commented that he can drive now; he describes fixed-route transit as his future option. However, another man noted that it seems that light rail is not used. In general, these comments reflect back to the idea that the car is easier than fixed-route transit. One other woman noted that older adults figure out how to drive each other (“chauffeuring”) so that fixed-route transit can be avoided.

Finally, there were positive suggestions for marketing the use of fixed route public transit. One gentleman noted that a website like “Mapquest” for public transit should be developed. His comment, along with the previously noted comment about “motivating,” implies that education about fixed-route public transit is critical.

#### *Willow Senior Center, San José, California, August 19, 2005*

This focus group included nine participants: five men and nine women, including one Asian male, one American Indian male, and 12 white participants. The participants were aged 80.1 (*SD* 11.2, range 59-95) years. Although the 59-year-old was slightly younger than the target population, she remained in the focus group because she was a public transit rider with physical disabilities, which made her appropriate for this group.

In this group, participants ambulated independently into the room where the focus group occurred, except for one gentleman who used a cane and appeared to benefit from limited assistance with transfers (getting up and down from his chair). Of the 14 participants, two rode the bus daily, one rode the bus weekly, one rode the bus monthly, 4 rode the bus rarely, and six never rode the bus. Of these participants, 1 rode light rail daily, one rode light rail monthly, six rode light rail rarely, and six never rode light rail. For these participants, the walking time to the nearest bus stop is less than 5 minutes (2 participants), 5-10 minutes (8 participants), or more than 10 minutes (3 participants); one participant failed to respond to this question. For these participants, the walking time to the nearest light rail station is either 5-10 minutes (1 participant) or more than 10 minutes (11 participants); two participants failed to respond to this question. Insofar as having a driver's license, 10 of these participants do have one and report to be drivers; one woman without a license reported that she travels by car with her husband.

In this focus group, primary issues and barriers included challenges with access to transit, lack of knowledge about transit, concerns about drivers, lack of convenience, lack of restroom, wait time, and fears and safety concerns related to transit travel. Again, a general consensus existed that using a private vehicle, car, is easier for travel. Suggestions were offered about how to make transit easier to use. The next few paragraphs summarize these findings.



One finding in this focus group was the concern about the time it takes to walk to a transit stop. As noted by one female participant, the time to a stop is the product of the distance one lives from the stop and the speed at which one walks. Further, this participant was discouraged from using buses and light-rail because of the lack of restrooms at transit stops.

In the group, three women noted physical limitations as barriers to utilizing public transit. One woman presented concerns about her visual impairment; she sounded frustrated as she described her inability to see stops and her need to rely on the drivers. This visually impaired woman described rude behaviors of some drivers that made her travels difficult. The two other women noted that degenerative arthritis has made public transit difficult, including walking to transit; one of these women noted her increased reliance on paratransit.

A man in the group commented on the infrequent buses in San José. This gentleman reported that in larger {more densely populated} cities the buses run more frequently. Later, a woman in the group made a similar comment, comparing San José to Chicago, and reporting that San José needs more buses. Others in the group noted the need for more frequent buses, the need for stops to be closer together, and the need for shaded areas at stops.

Another man in the group described a story about a friend who receives limited access to the bus when she has a cart for shopping with her. He describes this cart as “big.” However, one woman in the group notes that she sees carts daily on the bus.

As with the previous San José focus group, those present discussed their preference for the convenience of an automobile for most travel. Interestingly, of the male participants, the one who appeared most physically disabled reported being a frequent driver—particularly driving with his wife.

Finally, some positive statements about public transit and suggestions to improve access were made. For example, one man noted that the prices for public transit are reasonable. Another woman noted that there should be a way for riders at a bus stop to learn if they missed their bus and to get information about travel. Another participant reports that more conspicuous signs noting public transit stops are needed.

## **SURVEY METHODOLOGY**

### **Sample Selection**

In Buffalo, the Erie County Department of Senior Services selected a random sample of 500 older adults, aged 65 years and older, from their client service list. To be part of the client services list, an older adult had to register at some point for or participate in a senior program related to the Department. Approximately 35,000 older adults (of the County’s roughly 150,000 older adults) are on the client services list. The Department also drew a second sample of 400 individuals who received a Comp Card and live in the City of Buffalo. The Comp Card provides senior discounts, including a reduced fare on NFTA buses and rail, and the Department estimates that a large share of those who request a

card and who live in the City of Buffalo (as opposed to suburban or rural areas) are transit riders.

For the City of San José sample, the Council on Aging, Silicon Valley, sampled randomly 870 older adults from clients who had used the nutrition services program in the previous 12 months. As the county's Area Agency on Aging, the Council on Aging receives funds from the Older Americans Act to provide nutrition programs for adults aged 60 years and older; the computer program used to track service recipients cannot sort out recipients by age. Because transportation issues are likely similar for those seniors aged 60-64 years, they will be included in the sample unless initial data analyses find them to be significantly different than those aged 65 years and older. The remaining 30 older adults included older adults who received a bus pass from the Council on Aging as part of a senior job placement program. This purposive sample of 30 older adults was chosen to increase the sample of known transit riders.

## **Survey Design**

After reviewing findings from the focus groups, and the concurrent literature reviews, the mail survey was developed. The survey included:

The survey, distributed by mail (with stamped response envelope), provides a standardized stimulus to all respondents and at the same time provides a systematic way of recording their answers (Alreck and Settle 1995, Rea and Parker 1992). To enhance response rates, we administer the survey in a manner similar to Dillman's (2000) tailored design method. This includes (1) sending an introductory postcard that invites older adults to participate, (2) sending a survey and a \$1 incentive to complete it to identified participants, and (3) sending a thank you postcard to respondents. The following sections describe the various steps in survey development and administration.

A detailed description of the survey methodology can be found in the appendix. This process details the development of the survey, and the processes of survey delivery and receipt.

## **Data Analysis**

Analysis began with descriptive statistics, including response frequencies. These univariate analyses allowed for detailed descriptions of the sample and its characteristics. Independent sample T-tests were used to compare findings for Erie County and San José.

The next step is data reduction via exploratory factor analysis (EFA) with the extensive list of public transit perceptions. This allows us to examine if multiple questions are measuring collectively a larger theoretical construct. If many questions measure one construct, then we can reduce risk of statistical error by aggregating the scores of these questions (variables) into one score.

Then we move to bivariate analyses. We use crosstabs, or Chi-Square analysis, to examine barriers to utilizing public transit versus demographics. We conclude with multivariate analysis in which we use hierarchical linear regression to examine the most significant

predictors of transit use.

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## RESULTS

The first set of surveys was sent in December 2005 to the sample in Erie County, NY, and the second set of surveys was sent from San José, CA, in January 2006. On December 15, 2005, the first batch of completed surveys was received at the Buffalo research office. The first completed surveys were received in the San José research office on January 23, 2006. Respondents seemed quite eager to provide their input; in fact, a few surveys were hand-delivered by the respondents to the San José research office. Surveys arrived as late as April 26, 2006; and, by then, a total of 775 surveys were received.

The sections that follow summarize the findings from these surveys. We begin by providing an overview of the data, including response rates, preparation of data for analysis, exclusion of cases, and missing data. Then, we divide our summary of findings into four sections as follows: (1) sample demographics, which include descriptive univariate analyses, (2) bivariate analyses and trends, and (3) multivariate analyses.

However, prior to reporting our findings, it is critical to note the limits to this report. Because of the length of our mailed survey and our impressive response rate, we have a large amount of data. In the first sections, we attempt to provide ample summaries, so that readers get a clear sense of the data received. Then, we focus our analyses on answering the research questions posed in our study. Future publications will address additional questions for which our data can provide insights. Our goal is to offer a report with findings summarized that can influence future policy decisions; a glut of data is overwhelming and has limits in applicability to policy.

### OVERVIEW OF DATA

*Response rates.* A total of 775 (43.1%) of 1800 surveys were returned. From each research site, 900 surveys were mailed. In Erie County, 478 (53.1%) of 900 surveys were returned. In San José, 297 (33.0%) of 900 surveys were returned.

*Data input.* Data from all returned surveys were entered into an SPSS dataset. To prepare for analysis, frequency distributions for all variables were examined. This allowed us to locate errors in data input. By returning to the original surveys we corrected any errors found. These errors were limited; only about seven surveys had impossible values input.

Next, a random sample of approximately 10% of the surveys was selected. From the surveys selected, we double-checked all data input. No data input errors were found, so we had confidence that the dataset was ready for initial analyses and we, again, ran frequency distributions for all variables. This time we examined missing data.

*Exclusion of cases.* Our goal was to send surveys only to persons considered to be older adults, aged 60 years and older. However, some adults who are younger do utilize services at Area Agencies on Aging, and, in other cases, a younger adult chose to complete a survey sent to an older adult. In fact, one respondent noted that she chose to complete the survey because she rides transit, unlike the person to whom the survey was sent. Nine surveys were received from people younger than 60 years of age—1 from Buffalo and 8 from San José. All nine cases were excluded.

A few respondents sent in incomplete surveys, perhaps stopping after providing only a few responses. Other surveys were returned with absolutely no responses. These cases with most data missing were excluded. In Buffalo, 26 such cases were excluded and in San José, 3 such cases were excluded.

The remaining sample includes a total of 737 cases. In Buffalo, there are 451 (61.2%) cases for our final analysis. In San José, there are 286 (38.8%) cases for our final analysis.

*Missing data.* An examination of missing data occurs to consider the possibility of placing probable values into the missing slots. This occurs because statistical procedures typically exclude cases with missing data. Missing data replacement procedures allows such cases to be used in analysis, thus, preserving valuable data. Procedures, such as multiple imputation, estimate the probable value for this missing data. However, to do so, data must be missing at random, referred to as *MAR*.

Therefore, we analyzed missing data. Unfortunately, the data did not appear to be *MAR*. There were multiple cases where it appeared that respondents skipped entire sections of the survey. For example, surveys were returned with all questions completed except for pages 7 and 8, which included Likert-type responses for questions about barriers to transit. In such a case, there may have been a factor as to why the page was not turned properly, such as visual impairment or other disability. In addition, a few surveys seemed to have the final page, or pages, left uncompleted, as if the respondent no longer wanted to respond. The respondent may have decided that she or he had enough or was too tired to finish the survey. Thus, we concluded that patterns existed in the missing data and we chose to use the data as is; no data replacement procedures were used.

## **SAMPLE DEMOGRAPHICS AND UNIVARIATE ANALYSES**

### **Sample Demographics**

The final sample includes 737 cases (451 in Buffalo, 286 in San José). Table 1 displays sample characteristics for the entire sample and separated by research site.

Examining the demographics, one observes that the mean age in San José is slightly older than that of Erie County. An independent samples T-test confirmed a significant difference in age ( $p < .01$ ) between the two groups.

**Table 3 Sample Demographics for Total Sample and by Research Site**

	Total Sample (N=737) <sup>1</sup>				San José (n=286) <sup>1</sup>				Erie County (n=451) <sup>1</sup>			
Variable	N	%	M (SD)	Range	n	%	M (SD)	Range	N	%	M (SD)	Range
Age in Years	737		76.23 (7.2)	60-98	286		77.35 (7.0)	60-97	451		75.5 (7.2)	60-98
Race												
White	468	63.5			88	30.8			380	84.3		
Black	63	8.5			8	2.8			55	12.2		
Native American	1	.1			0	0			1	.2		
Pacific Islander	1	.1			1	.3			0	0		
Asian	142	19.3			142	49.7			0	0		
Latino/a	39	5.3			37	12.9			2	.4		
Other	14	1.9			7	2.4			7	1.6		
Gender												
Male	253	34.3			114	39.9			139	30.8		
Female	465	63.1			167	58.4			298	66.1		
Monthly Income												
< \$500	47	6.4			29	10.1			18	4.0		
\$501 - \$1000	174	23.6			78	27.3			96	21.3		
\$1001 - \$2000	231	31.3			80	28.0			151	33.5		
\$2001 - \$4000	144	19.5			50	17.5			94	20.8		
> \$4001	55	7.5			25	8.7			30	6.7		
Housing												
Apt / Condo	172	23.3			87	30.4			85	18.8		
House	537	72.9			187	65.4			350	77.6		
Assisted Living	11	1.5			8	2.8			3	.7		
Living Situation												
Alone	317	43.0			86	30.1			231	51.2		
With Spouse/ Partner	299	40.6			135	47.2			164	36.4		
With Children	76	10.3			45	15.7			31	6.9		
With Other Relatives	17	2.3			5	1.7			12	2.7		
With Friend(s)	8	1.1			1	.3			7	1.6		
With Personal Asst.	6	.8			4	1.4			2	.4		

The differences continue in the distribution of race among the cities. The sample in Erie County is predominantly white, whereas in San José the sample is more racially mixed with Asian and white predominant. However, in San José there are significantly fewer respondents identifying as Black than that of Erie County.

The proportion of men to women in San José is also greater than that of Erie County. Insofar as income and housing, there are similarities between the two samples; however,

the sample in San José appears more likely to have lower income and to live with a spouse or partner than those of Erie County. Respondents in Erie County are more likely to live alone than those in San José.

## **Functional Ability**

Table 2 explores functional ability for the full sample and each sub-sample. There are two groupings of variables used to examine functional ability. The questions serve as proxies for functional status by assessing two categories. The first is the need for adaptive equipment due to physical disability; these questions ask about the use of assistive devices, including cane, walker, wheelchair, power scooter, eyeglasses or contacts, and a hearing aid. The second set of questions ask about frequency of assistance received from family or friends, Meals on Wheels, a social worker or case manager, and In-Home Support Services. To receive services from these programs, individuals must have a degree of disability and need.

Examining Table 2, one sees that respondents in San José have more frequent use of canes, walkers, and wheelchairs compared to those of Erie County respondents. However, respondents in Erie County have greater use of eyeglasses and hearing aids than those of San José respondents. In general, between 4 and 15% of the respondents would be using a cane or walker when riding transit. At least 65% of respondents would be wearing glasses.

Insofar as assistance from others, respondents are most likely to be getting that from family or friends. More than half (55.6%) of the sample get some assistance from family or friends; however, of that 55.6%, less than half require assistance weekly and only 10.2% need it daily. A greater percentage of respondents in San José than in Erie County need regular assistance from family and friends.

Assistance from sources other than family and friends is infrequent in this sample. Please see the second page of Table 2 for more information about assistance from service providers.



**Table 4 Functional Ability of Respondents, Total Sample and by Site**

		Total Sample (N=737) <sup>2</sup>		San José (n=286)		Erie County (n=451)	
Question <sup>3</sup>	Response	N	%	n	%	n	%
How often do you use a cane?	Never	427	57.9	150	52.4	277	61.4
	Rarely	52	7.1	21	7.3	31	6.9
	Sometimes	116	15.7	49	17.1	67	14.9
	Always	71	9.6	32	11.2	39	8.6
How often do you use a walker?	Never	512	69.5	175	61.2	337	74.7
	Rarely	38	5.2	17	5.9	21	4.7
	Sometimes	50	6.8	26	9.1	24	5.3
	Always	29	3.9	19	6.6	10	2.2
How often do you use a wheelchair?	Never	562	76.3	201	70.3	361	80.0
	Rarely	26	3.5	15	5.2	11	2.4
	Sometimes	23	3.1	12	4.2	11	2.4
	Always	7	.9	5	1.7	2	.4
How often do you use a power scooter?	Never	587	79.6	215	75.2	372	82.5
	Rarely	7	.9	4	1.4	3	.7
	Sometimes	6	.8	1	.3	5	1.1
	Always	2	.3	1	.3	1	.2
How often do you use eyeglasses or contacts?	Never	65	8.8	27	9.4	38	8.4
	Rarely	7	.9	4	1.4	3	.7
	Sometimes	147	19.9	57	19.9	90	20.0
	Always	475	64.5	173	60.5	302	67.0
How often do you use a hearing aid?	Never	522	70.8	196	68.5	326	72.3
	Rarely	7	.9	4	1.4	3	.7
	Sometimes	33	4.5	16	5.6	17	3.8
	Always	67	9.1	19	6.6	48	10.6

Table 2 (Continued)

		Total Sample (N=737)		San José (n=286)		Erie County (n=451)	
Question	Response	N	%	n	%	n	%
How often do you get assistance from family or friends?	Never	327	44.4	119	41.6	208	46.1
	Few Times a Month	210	28.5	77	26.9	133	29.5
	Few Times a Week	95	12.9	38	13.3	57	12.6
	Almost Daily	75	10.2	44	15.4	31	6.9
How often do you get assistance from Meals on Wheels?	Never	637	86.4	235	82.2	402	89.1
	Few Times a Month	13	1.8	10	3.5	3	.7
	Few Times a Week	7	.9	5	1.7	2	.4
	Almost Daily	17	2.3	7	2.4	10	2.2
How often do you get assistance from a Social Worker or Case?	Never	621	84.3	221	77.3	400	88.7
	Few Times a Month	42	5.7	32	11.2	10	2.2
	Few Times a Week	4	.5	1	.3	3	.7
	Almost Daily	2	.3	2	.7	0	0
How often do you get assistance from In-Home Supportive Services?	Never	623	84.5	222	77.6	401	88.9
	Few Times a Month	15	2.0	13	4.5	2	.4
	Few Times a Week	13	1.8	9	3.1	4	.9
	Almost Daily	18	2.4	13	4.5	5	1.1

## Travel Patterns

Moving to Table 3, we examine the patterns of travel for our sample. In general, about 4/5 (79.9% of total, 84% in San José, 77.4% in Erie County) of the sample goes out on a regular basis—that is three or more times per week. In fact, almost half of the sample (48.6% total, 45.5% San José, 50.6% Erie County) goes out more than five times per week.

When they go out in San José, fewer respondents always drive themselves (41.3%) than those in Erie County (59.9%). In fact, in San José, it appears that respondents are less likely to drive themselves (35.0% never drive in San José) than that of those in Erie County (20.4% never drive themselves). However, driving fails to be the only travel option.

In San José, a greater percent of our sample mostly (18.9%) walk than that of those in Erie County (11.1%). In each site, more than half the sample walks sometimes and more often (San José: 58.1%, Erie County: 52.3%). While there may be a significant amount of walking by older adults, the data reveal that more respondents walk in San José than in

Erie County ( $p < .01$ ). Table 3 reveals that options such as bicycling and riding in a taxi are used infrequently by respondents.

The story with public transit, however, differs; 31.8% of our sample report being transit riders (14.0%, mostly/always; 17.8% sometimes). There are a significantly greater number ( $p < .01$ ) of transit riders in San José (24.1%, mostly/always; 17.8% sometimes) than that in Erie County (7.5%, mostly/always; 17.7% sometimes).

When asked to note how many times they have ridden public transit in the past year, only 20.2% of the total sample has ridden public transit. Examining this data by site, we still see that significantly more ( $p < .01$ ) people ride transit in San José than in Erie County. The second page of Table 3 delineates the frequency of transit ridership in the past year.

The next question in Table 3 asks respondents “why” they did not ride transit in the past year. The majority of respondents report that they “prefer to drive.” Others noted most frequently that “Public transit not convenient” or “other” for the reason why they have not used transit. Other common reasons include having nearby family and friends who drive, being unable to travel alone—including because of health conditions—and reporting public transit is inconvenient.

## Automobile Access

Considering that the primary desire for travel of our respondents is via automobile, Table 4 summarizes their access to automobiles. Approximately two-thirds (66.4%) of the respondents possess a driver’s license, significantly more in Erie County. In the past month, a majority of our total sample (60.2%) has driven a car (Erie County: 66.5%, San José: 50.3%). Similarly, a majority of our total sample (59.4%) has access to a car (Erie County: 66.3%, San José: 48.6%).

**Table 5 Travel Patterns and Choices, Total Sample and by Site**

	Total Sample ( $N=737$ ) <sup>4</sup>		San José ( $n=286$ ) <sup>4</sup>		Erie County ( $n=451$ ) <sup>4</sup>	
Variable	$N$	%	$n$	%	$n$	%
How Often: Go Out						
Rarely	32	4.3	13	4.5	19	4.2
1-2 Per Week	91	12.3	30	10.5	61	13.5
3-5 Per Week	231	31.3	110	38.5	121	26.8
>5 Per Week	358	48.6	130	45.5	228	50.6
How Often: Drive Self						
Never	192	26.1	100	35.0	92	20.4
Rarely	17	2.3	5	1.7	12	2.7
Sometimes	52	7.1	22	7.7	30	6.7
Mostly/Always	388	52.6	118	41.3	270	59.9

How Often: Ride with Person with whom Live						
Never	280	38.0	90	31.5	190	42.1
Rarely	67	9.1	32	11.2	35	7.8
Sometimes	144	19.5	66	23.1	78	17.3
Mostly/Always	95	12.9	47	16.4	48	10.6
How Often: Ride with Person with whom Don't Live						
Never	150	20.4	54	18.9	96	21.3
Rarely	181	24.6	77	26.9	104	23.1
Sometimes	224	30.4	86	30.1	138	30.6
Mostly/Always	52	7.1	18	6.3	34	7.5
How Often: Walk						
Never	116	15.7	38	13.3	78	17.3
Rarely	110	14.9	34	11.9	76	16.9
Sometimes	298	40.4	112	39.2	186	41.2
Mostly/Always	104	14.1	54	18.9	50	11.1
How Often: Bicycle						
Never	534	72.5	206	72.0	328	72.7
Rarely	39	5.3	12	4.2	27	6.0
Sometimes	34	4.6	11	3.8	23	5.1
Mostly/Always	4	.5	4	1.4	0	0
How Often: Take Taxi						
Never	444	60.2	163	57.0	281	62.3
Rarely	119	16.1	46	16.1	73	16.2
Sometimes	46	6.2	21	7.3	25	5.5
Mostly/Always	3	.4	0	0	3	.7
How Often: Ride Transit						
Never	262	35.5	81	28.3	181	40.1
Rarely	150	20.4	50	17.5	100	22.2
Sometimes	131	17.8	51	17.8	80	17.7
Mostly/Always	103	14.0	69	24.1	34	7.5
How Often Riding Transit during Past Year?						
0 Times	378	51.3	121	42.3	257	57.0
1-2 Times	93	12.6	33	11.5	60	13.3
2-10 Times	87	11.8	40	14.0	47	10.4
Once/Month	20	2.7	5	1.7	15	3.3
Once/Week	25	3.4	11	3.8	14	3.1
Several Times/Week	76	10.3	50	17.5	26	5.8
Nearly Every Day	28	3.8	19	6.6	9	2.0

If Never Rode (0, above) Transit in Past Year, Why?						
Prefer to Drive	230		74		156	
Transit not Avail	22		4		18	
Transit not Convenient	76		25		51	
Transit too Expensive	11		5		6	
Other	65		28		37	
How Often: Commun. Van						
Never	504	68.4	179	62.6	325	72.1
Rarely	41	5.6	23	8.0	18	4.0
Sometimes	65	8.8	28	9.8	37	8.2
Mostly/Always	17	2.3	6	2.1	11	2.4
How Often: Paratransit						
Never	543	73.7	186	65.0	357	79.2
Rarely	25	3.4	10	3.5	15	3.3
Sometimes	34	4.6	28	9.8	6	1.3
Mostly/Always	18	2.4	18	6.3	0	0
In Past Year, Paratransit?						
0 Times	636	86.3	224	78.3	412	91.4
1-2 Times	15	2.0	12	4.2	3	.7
2-10 Times	21	2.8	14	4.9	7	1.6
Once/Month	10	1.4	9	3.1	1	.2
Once/Week	5	.7	4	1.4	1	.2
Several Times/Week	13	1.8	12	4.2	1	.2
Nearly Every Day	7	.9	5	1.7	2	.4

**Table 6 Automobile Access, Total Sample and by Site**

		Total Sample (N=737)*		San José (n= 286)*		Erie County (n=451)*	
Question	Response	N	%	n	%	n	%
Do you have a valid driver's license?	No	213	28.9	112	39.2	101	22.4
	Yes	489	66.4	158	55.2	331	73.4
In the last month, have you driven a car or other motor vehicle?	No	66	9.0	36	12.6	30	6.7
	Yes	444	60.2	144	50.3	300	66.5
Which describes your access to a car?	Never have access	28	3.8	16	5.6	12	2.7
	Rarely have access	10	1.4	4	1.4	6	1.3
	Sometimes have access	34	4.6	15	5.2	19	4.2
	Always have access	438	59.4	139	48.6	299	66.3
Drive Myself†	Never	192	26.1	100	35.0	92	20.4
	Rarely	17	2.3	5	1.7	12	2.7
	Sometimes	52	7.1	22	7.7	30	6.7
	Mostly/Always	388	52.6	118	41.3	270	59.9
Ride with Person with whom I Live†	Never	280	38.0	90	31.5	190	42.1
	Rarely	67	9.1	32	11.2	35	7.8
	Sometimes	144	19.5	66	23.1	78	17.3
	Mostly/Always	95	12.9	47	16.4	48	10.6
Ride with Person with whom I Don't Live†	Never	150	20.4	54	18.9	96	21.3
	Rarely	181	24.6	77	26.9	104	23.1
	Sometimes	224	30.4	86	30.1	138	30.6
	Mostly/Always	52	7.1	18	6.3	34	7.5

## Environmental Barriers to Travel

Table 5 offers a summary of environmental barriers to travel. In the first five environment-related questions, respondents were asked how often they remain at home due to temperature, rain, snow or ice, other reasons, and darkness. The latter two questions ask about difficulty getting to public transit because of the weather being too hot or too cold.

Approximately 35% of the total sample stays home because of temperature (*Always* 4.2%, *Sometimes* 31.1%). The final two questions ask about difficulty getting to transit because of weather; of the total sample, 27.5% have difficulty when it is too hot and 36.5% have difficulty when it is too cold.

In general, the largest environmental barriers to public transit appear to be snow or ice, rain, and darkness. In Erie County, snow is a barrier for 60.3% of the sample (*Always* 15.7%, *Sometimes* 44.6%). In San José, rain is a barrier for 55.6% of the sample (*Always* 11.9%, *Sometimes* 43.7%) and darkness is a barrier for 53.1% of the sample (*Always* 13.6%, *Sometimes* 39.5%).

Considering the distribution of weather related variables, a mean score for environmental variables was created. To do so, we gave each response a numeric value as follows: *Never* '0,' *Rarely* '1,' *Sometimes* '2,' and *Always* '3.' Thus, the mean score for each respondent could range from 0 to 3. A score of 0 represents no environmental barriers to public transit, and a score of 3 represents always having environmental barriers. The final two questions represent trouble getting to transit and not choosing to stay home; thus, they measure a different construct and were not part of this secondary analysis.

The mean score of environmental barriers for the full sample is 1.26 (*SD* .81). For Erie County the mean is 1.22 (*SD* .81), and for San José the mean is 1.32 (*SD* .81). There exists no statistically significant ( $p=.09$ ) difference in the means between the two cities; the means are statistically similar.

## Access-Related Barriers to Travel

Table 6 expands our examination of barriers into the realm of access, which includes perceived convenience, availability, and accessibility of public transit. We ask respondents about staying home because of inconvenient transit, about knowing where to access transit, and ability to get to transit.

Examining the results in this table, the daily inconvenience may be relatively small. Of the respondents, 1.1% in Erie County and 3.5% in San José remain home almost daily because of lack of convenient access. However, the frequency of access-barriers monthly is 13.7% of respondents in Erie County, and 22.7% of respondents in San José. Respondents in San José also appear to have more trouble than those in Erie County knowing where to locate transit, having to cross busy streets, perceiving stops as too far apart, and understanding transit schedules or maps.



**Table 7 Environment-related Barriers to Public Transit, Total Sample and by Site**

		Total Sample (N=737)*		San José (n= 286)*		Erie County (n=451)*	
Question†	Response	N	%	n	%	n	%
How often do you stay at home when you wanted to go someplace because of temperature?	Never	242	32.8	71	24.8	171	37.9
	Rarely	150	20.4	65	22.7	85	18.8
	Sometimes	229	31.1	103	36.0	126	27.9
	Always	31	4.2	15	5.2	16	3.5
How often do you stay at home when you wanted to go someplace because of rain?	Never	225	34.6	56	19.6	199	44.1
	Rarely	155	21.0	60	21.0	95	21.1
	Sometimes	215	29.2	125	43.7	90	20.0
	Always	44	6.0	34	11.9	10	2.2
How often do you stay at home when you wanted to go someplace because of snow or ice?	Never	189	25.6	130	45.5	59	13.1
	Rarely	127	17.2	36	12.6	91	20.2
	Sometimes	225	30.5	24	8.4	201	44.6
	Always	115	15.6	44	15.4	71	15.7
How often do you stay at home when you wanted to go someplace because of other reasons?	Never	218	29.6	74	25.9	144	31.9
	Rarely	166	22.5	68	23.8	98	21.7
	Sometimes	214	29.0	86	30.1	128	28.4
	Always	28	3.8	12	4.2	16	3.5
How often do you stay at home when you wanted to go someplace because it was too dark?	Never	209	28.4	61	21.3	148	32.8
	Rarely	111	15.1	45	15.7	66	14.6
	Sometimes	241	32.7	113	39.5	128	28.4
	Always	107	14.5	39	13.6	68	15.1
Do you have trouble getting to public transit because of difficulty in the weather being too hot?	Yes	203	27.5	85	29.7	118	26.2
	No	396	53.7	142	49.7	254	56.3
	Don't know	56	7.6	21	7.3	35	7.8
Do you have trouble getting to public transit because of difficulty in the weather being too cold?	Yes	269	36.5	95	33.2	174	38.6
	No	333	45.2	131	45.8	202	44.8
	Don't know	61	8.3	25	8.7	36	8.0

**Table 8 Access-related Barriers to Public Transit, Total Sample and by Site**

		Total Sample (N=737) <sup>9</sup>		San José (n= 286) <sup>*</sup>		Erie County (n=451) <sup>*</sup>	
Question	Response	N	%	n	%	n	%
Because you DID NOT have access to convenient transportation, how many times have you stayed home in the last 12 months when you wanted to go someplace?	Never	357	48.4	117	40.9	240	53.2
	Once or twice	132	17.9	52	18.2	80	17.7
	Once a month	46	6.2	18	6.3	28	6.2
	Once a week	39	5.3	19	6.6	20	4.4
	Many times a week	27	3.7	18	6.3	9	2.0
	Almost daily	15	2.0	10	3.5	5	1.1
	Not sure/don't know	97	13.2	49	17.1	48	10.6
Do you have trouble getting to public transit because of difficulty in knowing where to find bus or rail stop?	Yes	154	20.9	82	28.7	72	16.0
	No	462	62.7	157	54.9	305	67.6
	Don't know	49	6.6	18	6.3	31	6.9
Do you have trouble getting to public transit because of difficulty in crossing busy streets?	Yes	213	28.9	97	33.9	116	25.7
	No	412	55.9	141	49.3	271	60.1
	Don't know	37	5.0	17	5.9	20	4.4
Do you have trouble getting to public transit because of difficulty in no sidewalks being present?	Yes	151	20.5	53	18.5	98	21.7
	No	430	58.3	159	55.6	271	60.1
	Don't know	54	7.3	27	9.4	27	6.0
Do you have trouble getting to public transit because of difficulty in stops being too far?	Yes	211	28.6	91	31.8	120	26.6
	No	384	52.1	134	46.9	250	55.4
	Don't know	59	8.0	23	8.0	36	8.0
Do you have difficulty understanding transit schedules or maps?	Yes	155	21.0	72	25.2	83	18.4
	No	541	73.4	199	69.6	342	75.8

## **Ability to Walk to Transit**

Table 7 expands our examination of access by asking respondents about their ability to walk to public transit, including when carrying bags and when in need of assistive devices.

About 10.6% of our total sample could not walk to public transit, and 9.6% find it very difficult. Although it appears that those in Erie County may have slightly more difficulty walking to public transit, there exists no statistical difference between that in Erie County versus San José ( $p=.61$ ).

It is important to note that almost half (45.6%) of the sample finds it difficult getting to public transit when carrying bags or packages. Further, one-fifth (20.0%) of those in Erie County, and one quarter (25.2%) of those in San José have trouble getting to public transit because of use of a cane or walker.

**Table 9 Ability to Walk to Transit Stop for Total Sample and by Site**

		Total Sample (N=737)*		San José (n= 286)*		Erie County (n=451)*	
Question	Response	N	%	n	%	n	%
Which of the statements below best describes how you feel about walking to a bus or rail stop?	I would have no difficulty walking to a bus stop	378	51.3	152	53.1	226	50.1
	Walking to a bus stop would be strenuous, but I could do it	129	17.5	50	17.5	70	17.5
	Walking to a bus stop would be very difficult	71	9.6	24	8.4	47	10.4
	I would not be able to walk to a bus stop	78	10.6	28	9.8	50	11.1
	None of the above	65	8.8	30	10.5	35	7.8
Do you have trouble getting to public transit because of difficulty in carrying bags or packages?	Yes	336	45.6	137	47.9	199	44.1
	No	262	35.5	89	31.1	173	38.4
	Don't know	56	7.6	19	6.6	37	8.2
Do you have trouble getting to public transit because of difficulty in using a cane or walker?	Yes	162	22.0	72	25.2	90	20.0
	No	426	57.8	150	52.4	276	61.2
	Don't know	72	9.8	34	11.9	38	8.4

### Reliance on Public Transit and Satisfaction with Transportation Options

Table 8 summarizes respondents' concerns if they had to rely on public transit and their satisfaction with transportation in general. If they no longer drove, more than one in two (57.8%) respondents report that it would be difficult to take public transit. Similarly, more than two in five (43.5%) respondents report that it would be difficult to reside in their current home if they relied only on public transit.

Also included in Table 8 are responses to a question about satisfaction with all the transportation options available to a respondent. About two in three (66.1%) respondents report satisfaction with their current travel options. Table 3 reports about current transportation usage for respondents. Table 3 shows that 14% of respondents rely mostly or always on public transit.

**Table 10 Reliance on Public Transit and Satisfaction with Current Transit, Total Sample and by Site**

Question	Response	Total Sample (N=737)*		San José (n= 286)*		Erie County (n=451)*	
		N	%	n	%	n	%
If I were no longer able to drive, it would be difficult for me to take public transit for the majority of my travel needs.	Strongly agree	201	27.3	56	19.6	145	32.2
	Agree	225	30.5	97	33.9	128	28.4
	Disagree	149	20.2	68	23.8	81	18.0
	Strongly disagree	26	3.5	7	2.4	19	4.2
	Not sure/don't know	88	11.9	43	15.0	45	10.0
If I relied only on public transportation, it would be difficult for me to continue to reside in my current home.	Strongly agree	155	21.0	40	14.0	115	25.5
	Agree	166	22.5	76	26.6	90	20.0
	Disagree	224	30.4	91	31.8	133	29.5
	Strongly disagree	61	8.3	20	7.0	41	9.1
	Not sure/don't know	105	14.2	49	17.1	56	12.4
Considering all transportation that is available to you, which indicates how satisfied you are with your ability to get around your community.	Very Dissatisfied	71	9.6	25	8.7	46	10.7
	Dissatisfied	52	7.1	20	7.0	32	7.4
	Satisfied	328	44.5	135	47.2	193	44.8
	Very Satisfied	159	21.6	62	21.7	97	22.5
	Not Sure/Don't Know	105	14.2	42	14.7	63	14.6

## Making It Easier

Table 9 summarizes things that might make public transit easier to use. Learning from a mentor program, and traveling with a relative, friend or neighbor both may be helpful. Interestingly, compared to the respondents in Erie County, those in San José report that these may be more beneficial methods.

One challenge for older adults may be getting to the transit stops. Closer stops, better street lighting, and resting places on walking routes may increase the access of fixed route transit for older adults. More respondents from San José than Erie County report that closer stops and better street lighting would facilitate access to transit stops. In Erie County, the need for more snow clearance is an important issue, too. Finally, it is important to note that our respondents report that a telephone call to the transit office is the preferred method of obtaining information about transit; and, printed maps and

schedules is the second most preferred. Only about 3 percent report that the Internet is the preferred method to receive information.

**Table 11 Making it Easier to Ttilize Public Transit, Total Sample and by Site**

		Total Sample (N=737) <sup>12*</sup>		San José (n= 286)*		Erie County (n=451)*	
Question	Response	N	%	n	%	n	%
Would you find it helpful to have access to a training or mentoring program to learn more about public transit and how to ride?	Yes	225	30.5	126	44.1	99	22.0
	No	279	37.9	85	29.7	194	43.0
	Don't know	207	28.1	69	24.1	138	30.6
Traveling on transit with a relative, friends, or neighbor would be helpful.	Strongly agree	214	29.0	98	34.3	116	25.7
	Agree	331	44.9	135	47.2	196	43.5
	Disagree	58	7.9	13	4.5	45	10.0
	Strongly disagree	11	1.5	2	.7	9	2.0
	Not sure/don't know	91	12.3	29	10.1	62	13.7
Would it be possible for you to walk to a bus stop if the bus stop was within five blocks of your home?	Yes	408	55.4	167	58.4	241	53.4
	No	190	25.8	76	26.6	114	25.3
	Don't know	71	9.6	18	6.2	53	11.8
Would it be possible for you to walk to a bus stop if there was better street lighting?	Yes	386	52.4	163	57.0	223	49.4
	No	180	24.4	60	21.0	120	26.6
	Don't know	87	11.8	29	10.1	58	12.9
Would it be possible for you to walk to a bus stop if there were better sidewalks?	Yes	388	52.6	158	55.2	230	51.0
	No	198	26.9	72	25.2	126	27.9
	Don't know	71	9.6	23	8.0	48	10.6

Would it be possible for you to walk to a bus stop if there was better snow clearance?	Yes No Don't know	371 141 125	50.3 19.1 17.0	47 87 93	16.4 30.4 32.5	324 54 32	71.8 12.0 7.1
Would it be possible for you to walk to a bus stop if there was a resting place along the way?	Yes No Don't know	324 241 91	44.0 32.7 12.4	135 83 33	47.2 29.0 11.5	189 158 58	41.9 35.0 12.9
Would it be possible for you to walk to a bus stop if routes were not along busy streets?	Yes No Don't know	276 220 153	37.4 29.9 20.7	108 85 54	37.8 29.7 18.8	168 135 99	37.3 29.9 22.0
If you wanted to learn about public transit routes and schedules, what would you do?	Phone calls to Transit Internet website Printed maps and schedules Ask a friend Other	457 22 144 68 10	62.0 3.0 19.5 9.2 1.4	115 10 92 49 8	40.2 3.5 32.2 17.1 2.8	342 12 52 19 2	75.8 2.7 11.5 4.2 .4
During the past 12 months, have you seen or heard any advertisements or public service announcements about public transit?	Yes No	382 333	51.8 45.2	148 130	51.7 45.5	234 203	51.9 45.0

## Transit Perceptions

Table 10 details positive and negative perceptions of public transit. The table summarizes the mean scores, with standard deviations in parentheses, of the various perceptions that older adults have about public transit. To facilitate interpretation, the scores are divided into positive and negative perceptions.



**Table 12 Positive and Negative Perceptions of Transit for Total Sample and by Site**  
**Mean scores and standard deviations for responses to 4-point Likert-type questions. The final column identifies the factor upon which the variable loads.**

1= Strongly Disagree 2= Disagree 3= Agree 4= Strongly Agree	Total Sample <i>N</i> =737* <i>M</i> ( <i>SD</i> )		San Jose <i>n</i> =286 <i>M</i> ( <i>SD</i> )		Erie County <i>n</i> =451 <i>M</i> ( <i>SD</i> )		TP = Transit
	Positive Perception	Negative Perception	Positive Perception	Negative Perception	Positive Perception	Negative Perception	
Service on public transit is generally reliable.	2.96 (.56)		3.04 (.51)		2.91 (.58)		TC
Buses and trains can generally get me where I need to go.	2.78 (.75)		2.84 (.69)		2.74 (.78)		TC
Riding public transit is a good value for the fare.	2.95 (.65)		2.93 (.66)		2.95 (.64)		TC
Buses are easy to board.	2.89 (.67)		2.98 (.59)		2.82 (.71)		TC
Light Rail/ Metro rail is easy to board.	2.94 (.65)		3.04 (.58)		2.87 (.69)		TC
I am concerned about getting seated before the bus or rail car starts moving.		2.79 (.81)		2.79 (.83)		2.78 (.79)	SC
I am concerned about my general physical comfort while riding.		2.67 (.80)		2.72 (.79)		2.63 (.80)	SC

I feel comfortable with the cleanliness of transit vehicles.	2.92 (.64)		3.00 (.62)		2.87 (.65)		TC
I feel comfortable with the cleanliness of stations and stops.	2.79 (.68)		2.90 (.62)		2.72 (.71)		TC
I am less likely to ride public transit if I have to transfer to a second bus or light rail train during my trip.		2.85 (.76)		2.85 (.73)		2.85 (.79)	SC
The bus comes regularly and I won't have to wait a long time.	2.77 (.71)		2.73 (.70)		2.80 (.71)		TC
Public transit does not provide early morning or late night service to fit my needs.		2.57 (.82)		2.52 (.79)		2.61 (.83)	SC
Public transit does not provide weekend service to fit my needs.		2.60 (.81)		2.50 (.80)		2.67 (.81)	SC
Compared to driving or being driven, public transit takes too long.		2.98 (.76)		3.12 (.70)		2.88 (.78)	SC
In the next 30 days, I am likely to ride public transit.	2.20 (1.02)		2.50 (1.03)			2.01 (.97)	<i>n.a.</i>

Public transit is useful for getting to medical appointments.	2.32 (.92)		2.40 (.90)		2.27 (.93)		<i>n.a.</i>
I am concerned about missing my stop.		2.67 (.78)		2.79 (.69)		2.58 (.81)	SC
I am concerned about being late for my appointment.		2.85 (.77)		3.00 (.74)		2.76 (.78)	SC
I am concerned that I will not know where I am going on the bus, light rail, or subway.		2.53 (.82)		2.69 (.78)		2.42 (.83)	SC
I am concerned about needing to use a restroom.		2.80 (.84)		2.96 (.79)		2.70 (.85)	SC
I am concerned about traveling in crowds.		2.56 (.78)		2.55 (.77)		2.57 (.79)	SC
I am concerned about inconsiderate passengers.		2.85 (.77)		2.83 (.74)		2.86 (.79)	SC
I am concerned about my personal safety.		2.89 (.80)		2.89 (.79)		2.90 (.80)	SC
I fear getting lost.		2.42 (.83)		2.59 (.81)		2.31 (.81)	SC
I fear that I may fall down.		2.55 (.84)		2.69 (.83)		2.46 (.83)	SC
Riding public transit at night makes me nervous.		3.03 (.82)		3.06 (.78)		3.02 (.86)	SC

I am concerned about having the correct change to pay my fare.		2.72 (.79)		2.73 (.76)		2.71 (.81)	SC
Traveling with strangers makes me feel apprehensive.		2.54 (.74)		2.55 (.68)		2.53 (.77)	SC
I am concerned that I am not healthy enough for a transit trip.		2.41 (.83)		2.55 (.80)		2.32 (.84)	SC
If I need help while using a bus or train, someone will help me.	2.75 (.68)		2.77 (.65)		2.74 (.70)		<i>n.a.</i>
Police and security are present in adequate numbers to make me feel comfortable.	2.53 (.78)		2.61 (.75)		2.48 (.80)		<i>n.a.</i>
Access to public transit influences my overall life satisfaction.	2.59 (.83)		2.74 (.77)		2.49 (.85)		<i>n.a.</i>

The mean scores indicate a general agreement with transit being reliable, a good value, easy to board, and clean. In Erie County, respondents perceive the reliability of, ease to board, and cleanliness of public transit less positively than those of San José respondents. This pattern exists for other variables in this table. In particular, the San José respondents appear more likely to ride public transit in the next 30 days than that of those from Erie County.

Insofar as negative perceptions of public transit, the biggest concerns appear to be with needing to transfer buses, excessive travel time compared to driving, inconsiderate passengers, personal safety, and nervousness riding at night. The difference in travel time appears more of an issue in San José than that in Erie County.

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## EXPLORATORY FACTOR ANALYSIS (EFA)

EFA is a process of data reduction that allows researchers to group variables that measure the same construct. In this research, the list of perception variables was reduced to two cohesive, statistically strong, and theoretically relevant constructs.

One group of variables, known as a factor, included measures of “self capacity,” such as ability to get a seat and falling down. The other group measures “transit capacity,” such as belief that it is easy to use and vehicles are clean. The final column of table 10 identifies the factor which each variable is grouped. Those variables that are not included are marked with an ‘*n.a.*’ Rather than using the many individual questions, future analyses can use each single factor, such as the mean (average) score of all questions included in that factor.

It is important to note that some of the items listed under *Self Capacity and Concerns* may sound like transit concerns more than self concerns. For instance, a concern with having to transfer buses is a concern with self, such as will one be able to get on the right transfer and will one be able to get where she wants on time.

### Interpret with Caution.

When examining results from the factor analyses, we found one intriguing fact. Each factor seemed cohesive—the interpretation of variables makes theoretical sense and each factor has relatively high statistical reliability. However, the variables on one factor included only questions that were reverse coded (variables that had to be recoded because the question was written in negative format) and the variables on the other factor included only questions that remained in original form (variables did not have to be recoded because the question was written in positive format). This prompted a second examination of responses to these questions.

There exists limited variability in how respondents answered the perception variables. Regardless of the question, regardless of whether it indicated a positive or negative perception, and regardless of the respondent’s location (Erie County, San José), the mean score for most all items with standard deviation considered, is about a three (3). Essentially, the bias is that respondents most likely selected the “*agree*” response to any and all transit perception questions. Issues of validity and bias will be discussed in the final section of this report.

## BIVARIATE ANALYSES AND TRENDS

The primary method used in bivariate analyses was crosstabs (chi-square analyses). This process allowed us to compare categorical variables. However, prior to reporting findings, research caveats should be made. First, completing multiple crosstabs increases the risk of chance findings. Because of the suspicions about the EFA, we chose to do bivariate analyses with individual perception variables with the hope to identify trends that will inform future transit policy choices. The final caveat is that given the many variables in this study, we must limit the number of bivariate comparisons and look at data that will help to answer research questions.

*Bivariate findings.* For these analyses, we wanted to examine the likelihood of riding public transit. Respondents were asked to indicate how likely they were to ride public transit in the next 30 days, and could provide one of four responses: (1) *Strongly Disagree* (2) *Disagree* (3) *Agree*, and (4) *Strongly Agree*. Then, we ran crosstabs to compare variables about public transit perceptions, physical abilities, and use of assistive devices.

To better assess responses, the sample data was divided into two groups. First, we looked at only those who have ridden public transit in the past, and then examined those who have not ridden public transit. Tables 4.11 and 4.12 show the results of bivariate analyses. Each of these tables display significant results with brief comments about the trends observed. The final column of the table provides brief notes about the relation found between variables.

**Table 13 Crosstabs of Factors Related to Likelihood of Using Public Transit in the Next 30 Days for Those who Have Used Public Transit in the Past. Only Significant Chi-Squares<sup>1</sup> are Reported.<sup>23</sup>**

<b>Variable<sup>4</sup></b> (crosstab by likelihood to ride public transit in next 30 days.)	Total Sample <sup>5</sup> (n=329)		San José (n= 158)		Erie County (n=171)		Trends Noted
	X <sup>2</sup>	p<	x <sup>2</sup>	p<	x <sup>2</sup>	p<	
Service on public transit is generally reliable.	27.67	.01		ns		ns	A majority (63%) agree or strongly agree is reliable and agree or strongly agree they are likely to travel.
Buses and trains can generally get me where I need to go.	50.75	.01	33.92	.01	25.23	.01	In all analyses, more than ½ (50%) agree or strongly agree will get them, and agree or strongly agree are likely to travel.
Riding public transit is a good value for the fare.	34.44	.01	24.61	.05	19.79	.01	In all analyses, more than ½ (50%) agree or strongly agree is good value, and agree or strongly agree are likely to travel.
Buses are easy to board.	40.50	.01	23.26	.01	22.92	.01	In all analyses, more than ½ (50%) agree or strongly agree easy to board, and agree or strongly agree are likely to travel.
Light Rail/Metro rail is easy to board.	27.27	.01	20.09	.05		ns	Majority (60%) of full sample and (70%) of San José agree easy to board and agree or strongly agree are likely to travel.

I am concerned about my general physical comfort while riding.	26.66	.01	23.52	.01		<i>ns</i>	For full sample, 43% agree or strongly agree, while 25% disagree or strongly disagree with comfort concern and agree or strongly agree are likely to ride. In San José, 54% agree or strongly agree, while 23% disagree or strongly disagree with comfort concern and are likely to ride.
I feel comfortable with the cleanliness of transit vehicles.	27.19	.01		<i>ns</i>		<i>ns</i>	For full sample, 43% agree or strongly agree, while 25% disagree or strongly disagree with comfort concern and agree or strongly agree are likely to ride. In San José, 54% agree or strongly agree, while 23% disagree or strongly disagree with comfort concern and are likely to ride.
I feel comfortable with the cleanliness of stations and stops.	29.00	.01		<i>ns</i>	19.9	.05	For full sample, 49% agree or strongly agree with station and stop cleanliness and agree or strongly agree they are likely to travel. In Erie County, 42% agree or strongly agree with station and stop cleanliness and agree or strongly agree they are likely to travel.
I am less likely to ride public transit if I have to transfer to a second bus or light rail train during my trip.	21.62	.05		<i>ns</i>	24.53	.01	For full sample, 62% are less likely to travel if they have to transfer; however more than half of these persons (63%) still report they are likely to use transit in the next 30 days. In Erie County, 60% are less likely to travel if they have to transfer; however half of these persons (51%) still report they are likely to use transit in the next 30 days.
The bus comes regularly and I won't have to wait a long time.	26.83	.01	17.07	.05	20.29	.05	In all analyses, more than ½ (50%) agree or strongly agree that busses come regularly, and agree or strongly agree are likely to travel.
Public transit does not provide early morning or late night service to fit my needs.		<i>ns</i>		<i>ns</i>	22.36	.01	In Erie County, 55% disagree or strongly disagree that public transit provides service to meet their needs. However, 69% of these specific respondents still plan to use public transit in the next 30 days.



Public transit is useful for getting to medical appointments.	134.31	.01	84.83	.01	60.61	.01	<p>For full sample, 60% agree or strongly agree that public transit is useful for medical appointments; and, 81% of them are likely to use transit in the next 30 days. For full sample, 40% disagree or strongly disagree that public transit is useful for medical appointments; and, less than ½ of them (48%) are likely to use transit in the next 30 days.</p> <p>For San José, 59% agree or strongly agree that public transit is useful for medical appointments; and, 90% of them are likely to use transit in the next 30 days. For San José, 41% disagree or strongly disagree that public transit is useful for medical appointments; however, 59% of them are likely to use transit in the next 30 days.</p> <p>For Erie County, 60% agree or strongly agree that public transit is useful for medical appointments; and, 73% of them are likely to use transit in the next 30 days. For Erie County, 40% disagree or strongly disagree that public transit is useful for medical appointments; and, only 38% of them are likely to use transit in the next 30 days.</p>
I am concerned about missing my stop.	27.34	.01		<i>ns</i>	18.23	.05	<p>For full sample, 37% disagree and 46% agree; the remaining is split between strongly disagree (6%) and strongly agree (10%). However, almost 1/3 (32%) of the sample remain unlikely to ride transit in the next 30 days.</p> <p>In Erie County, 51% disagree or strongly disagree while 49% agree or strongly agree. During the next 30 days, 59% of the sample expect to ride public transit.</p>
I am concerned about being late for my appointment.	24.13	.01		<i>ns</i>		<i>ns</i>	<p>In the full sample, 64% of respondents agree or strongly agree with this concern; yet 67% of those concerned still report that they are likely to ride transit in the next 30 days.</p>

I am concerned that I will not know where I am going on the bus, light rail, or subway.	18.15	.05		<i>ns</i>	19.59	.05	In the full sample, 61% of respondents disagree or strongly disagree with the concern; however, of those specific respondents, 2/3 (65%) still are likely to ride public transit in the next 30 days. In the full sample, 73% of respondents disagree or strongly disagree with the concern; however of those specific respondents slightly less than 2/3 (61%) still are likely to ride public transit in the next 30 days.
I am concerned about needing to use a restroom.	27.25	.01		<i>ns</i>		<i>ns</i>	A total of 63% of the full sample agrees or strongly agrees with this concern; yet 70% of those with the concern are likely to ride public transit in the next 30 days.
I fear getting lost.	18.15	.05		<i>ns</i>	19.59	.05	In the full sample, 67% of all respondents disagree or strongly disagree with the concern; however of those specific respondents 1/3 (61%) still are not likely to ride public transit in the next 30 days. In Erie County, 76% of all respondents disagree or strongly disagree with the concern; however of those specific respondents 2/5 (41%) still are not likely to ride public transit in the next 30 days.
I fear that I may fall down.	33.43	.01	19.90	.05	20.93	.01	In all analyses, more than ½ (50%+) of the respondents disagree or strongly disagree with this fear (have no fear of falling down). Respondents who lack this fear report that they will ride transit in the next 30 days more than that of those with fear.
Riding public transit at night makes me nervous.	21.65	.05		<i>ns</i>	17.54	.05	In the full sample, 72% and in Erie County 69% note that riding at night makes them nervous. However, of those who are nervous to ride at night, more than ½ of them (66% full sample, 56% Erie County) still report they are likely to ride public transit in the next 30 days.

I am concerned about having the correct change to pay my fare.	26.14	.01		<i>ns</i>		<i>ns</i>	More than half the sample (54%) agrees or strongly agrees with this concern. However, the trend is to have this concern and to be likely to ride public transit in the next 30 days (35% of full sample, 65% of those with fare concern).
Traveling with strangers makes me feel apprehensive.	19.53	.05		<i>ns</i>	16.97	.05	In the full sample, 43% and in Erie County 40% have this concern. Of those with concern, 62% in full sample and 50% in Erie County report likely to ride transit.
I am concerned that I am not healthy enough for a transit trip.	19.08	.05	20.65	.05		<i>ns</i>	In the full sample, 34% of respondents have this concern, but 75% of those with concern are likely to ride transit in the next 30 days. This trend is similar in San José (44% lack concern, 83% of those with concern likely to ride transit).
If I need help while using a bus or train, someone will help me.	19.10	.05		<i>ns</i>		<i>ns</i>	Of the respondents, 1/3 (33%) agree with this statement and agree that they will ride transit in the next 30 days. A total of 79 respondents (26%) disagree or strongly disagree that someone will help them; of this subgroup, 65% still plan to ride public transit in the next 30 days.
Police and security are present in adequate numbers to make me feel comfortable.	18.01	.05	19.28	.05		<i>ns</i>	In the full sample, 55% agree or strongly agree; and 75% of those respondents plan to ride transit in the next 30 days. Of the 45% who disagree or strongly disagree, 60% plan to ride public transit in the next 30 days. In San José, 60% agree or strongly agree; and 84% of those respondents plan to ride transit in the next 30 days. Of the 40% who disagree or strongly disagree, 66% plan to ride public transit in the next 30 days.

Access to public transit influences my overall life satisfaction.	76.20	.01	43.61	.01	32.57	.01	<p>In the full sample, 71% agree or strongly agree; and 77% of those respondents plan to ride transit in the next 30 days. Of the 29% who disagree or strongly disagree, 44% plan to ride public transit in the next 30 days.</p> <p>In San José, 77% agree or strongly agree; and 85% of those respondents plan to ride transit in the next 30 days. Of the 23% who disagree or strongly disagree, 50% plan to ride public transit in the next 30 days.</p> <p>In Erie County, 66% agree or strongly agree; and 69% of those respondents plan to ride transit in the next 30 days. Of the 34% who disagree or strongly disagree, 41% plan to ride public transit in the next 30 days.</p>
I stay home because of temperature ('0' Never to '4' Always)	20.35	.05		<i>ns</i>		<i>ns</i>	<p>A total of 41% of respondents sometimes stay at home because of temperature, while 5% always stay at home because of temperature; in these two groups, 75% of the respondents plan to ride transit in the next 30 days.</p> <p>Of the 54% of respondents who never or rarely stay at home because of temperature, 61% plan to ride transit in the next 30 days.</p>
I stay home because it is dark ('0' Never to '4' Always)	24.44	.05	25.45	.01		<i>ns</i>	<p>In the full sample, 55% agree or strongly agree; and 74% of those respondents plan to ride transit in the next 30 days. Of the 45% who disagree or strongly disagree, 58% plan to ride public transit in the next 30 days.</p> <p>In San José, 62% agree or strongly agree; and 82% of those respondents plan to ride transit in the next 30 days. Of the 38% who disagree or strongly disagree, 66% plan to ride public transit in the next 30 days.</p>

**Table 14 Crosstabs of Factors Related to Likelihood of Using Public Transit in the Next 30 Days for Those who Have NOT Used Public Transit in the Past. Only Significant Chi-Squares<sup>1</sup> are Reported.<sup>23</sup>**

Variable <sup>4</sup> (crosstab by likelihood to ride public transit in next 30 days.)	Total Sample (n=378) <sup>17</sup>		San José (n= 121)		Erie County (n=257)		Trends Noted <sup>6</sup>
	x <sup>2</sup>	p<	x <sup>2</sup>	p<	x <sup>2</sup>	p<	
Riding public transit is a good value for the fare.	19.87	.05		ns		ns	Of the full sample, 71% agree and 10% strongly agree; of these two groups, 11% are likely to ride public transit in the next 30 days.
Buses are easy to board.	36.7	.01	41.44	.01		ns	In the full sample, 65% agree and 9% strongly agree; of these two groups, 11% are likely to ride public transit in the next 30 days.  In San José, 68% agree and 10% strongly agree; of these two groups, 18% are likely to ride public transit in the next 30 days.
Light Rail/Metro rail is easy to board.	23.05	.05	27.50	.01		ns	In the full sample, 68% agree and 8% strongly agree; of these two groups, 12% are likely to ride public transit in the next 30 days.  In San José, 75% agree and 9% strongly agree; of these two groups, 18% are likely to ride public transit in the next 30 days.
I am concerned about my general physical comfort while riding.		ns		ns	17.11	.05	In Erie County, 62% agree or strongly agree; from this group who agree, only 8% report that they are likely to ride transit in the next 30 days.
I feel comfortable with the cleanliness of transit vehicles.	26.86	.01		ns	20.68	.05	In the full sample, 70% agree and 11% strongly agree; of these two groups, 14% are likely to ride public transit in the next 30 days. Of the 19% who disagree or strongly disagree, only 3 (5%) respondents are likely to ride public transit in the next 30 days.  In Erie County, 71% agree and 8% strongly agree; of these two groups, 8% are likely to ride public transit in the next 30 days. Of the 21% who disagree or strongly disagree, only 2 (5%) respondents are likely to ride public transit in the next 30 days.

I feel comfortable with the cleanliness of stations and stops.	23.20	.01		<i>ns</i>	19.30	.05	<p>In the full sample, 61% agree and 11% strongly agree; of these two groups, 12% are likely to ride public transit in the next 30 days. Of the 28% who disagree or strongly disagree, only 2 (3%) respondents are likely to ride public transit in the next 30 days.</p> <p>In Erie County, 60% agree and 8% strongly agree; of these two groups, 11% are likely to ride public transit in the next 30 days. Of the 31% who disagree or strongly disagree, only 1 (2%) respondent is likely to ride public transit in the next 30 days.</p>
I am less likely to ride public transit if I have to transfer to a second bus or light rail train during my trip.	33.57	.01		<i>ns</i>	31.40	.01	<p>In the full sample, 58% agree and 23% strongly agree; of these two groups, 10% are likely to ride public transit in the next 30 days. Of the 18% who disagree or strongly disagree, 6 (11%) respondents are likely to ride public transit in the next 30 days.</p> <p>In Erie County, 58% agree and 24% strongly agree; of these two groups, 7% are likely to ride public transit in the next 30 days. Of the 18% who disagree or strongly disagree, only 3 (8%) respondents are likely to ride public transit in the next 30 days.</p>
The bus comes regularly and I won't have to wait a long time.	19.29	.05		<i>ns</i>		<i>ns</i>	<p>In the full sample, 57% agree and 9% strongly agree; of these two groups, 13% are likely to ride public transit in the next 30 days. Of the 33% who disagree or strongly disagree, 6 (6%) respondents are likely to ride public transit in the next 30 days.</p>

Public transit does not provide early morning or late night service to fit my needs.	30.08	.01	21.89	.01	25.78	.01	<p>In the full sample, 45% agree and 16% strongly agree; of these two groups, 12% are likely to ride public transit in the next 30 days. Of the 38% who disagree or strongly disagree, 10 (9%) respondents are likely to ride public transit in the next 30 days.</p> <p>In San José, 40% agree and 17% strongly agree; of these two groups, 20% are likely to ride public transit in the next 30 days. Of the 43% who disagree or strongly disagree, only 6 (16%) respondents are likely to ride public transit in the next 30 days.</p> <p>In Erie County, 48% agree and 16% strongly agree; of these two groups, 9% are likely to ride public transit in the next 30 days. Of the 36% who disagree or strongly disagree, only 4 (7%) respondents are likely to ride public transit in the next 30 days.</p>
Public transit does not provide early morning or late night service to fit my needs.	30.08	.01	21.89	.01	25.78	.01	<p>In the full sample, 45% agree and 16% strongly agree; of these two groups, 12% are likely to ride public transit in the next 30 days. Of the 38% who disagree or strongly disagree, 10 (9%) respondents are likely to ride public transit in the next 30 days.</p> <p>In San José, 40% agree and 17% strongly agree; of these two groups, 20% are likely to ride public transit in the next 30 days. Of the 43% who disagree or strongly disagree, only 6 (16%) respondents are likely to ride public transit in the next 30 days.</p> <p>In Erie County, 48% agree and 16% strongly agree; of these two groups, 9% are likely to ride public transit in the next 30 days. Of the 36% who disagree or strongly disagree, only 4 (7%) respondents are likely to ride public transit in the next 30 days.</p>



Public transit does not provide weekend service to fit my needs.	17.88	.05		<i>ns</i>		<i>ns</i>	In the full sample, 51% agree and 14% strongly agree; of these two groups, 12% are likely to ride public transit in the next 30 days. Of the 36% who disagree or strongly disagree, 10 (10%) respondents are likely to ride public transit in the next 30 days.
Public transit is useful for getting to medical appointments.	116.44	.01	82.85	.01	34.87	.01	<p>In the full sample, 24% agree and 6% strongly agree; of these two groups, 12% are likely to ride public transit in the next 30 days. Of the 69% who disagree or strongly disagree, 12 (6%) respondents are likely to ride public transit in the next 30 days.</p> <p>In San José, 25% agree and 7% strongly agree; of these two groups, 34% are likely to ride public transit in the next 30 days. Of the 68% who disagree or strongly disagree, only 6 (9%) respondents are likely to ride public transit in the next 30 days.</p> <p>In Erie County, 24% agree and 6% strongly agree; of these two groups, 70% are likely to ride public transit in the next 30 days. Of the 36% who disagree or strongly disagree, only 6 (4%) respondents are likely to ride public transit in the next 30 days.</p>

I am concerned about being late for my appointment.	31.35	.01	21.94	.01	17.13	.05	<p>In the full sample, 62% agree and 20% strongly agree; of these two groups, 10% are likely to ride public transit in the next 30 days. Of the 18% who disagree or strongly disagree, 6 (11%) respondents are likely to ride public transit in the next 30 days.</p> <p>In San José, 64% agree and 23% strongly agree; of these two groups, 15% are likely to ride public transit in the next 30 days. Of the 14% who disagree or strongly disagree, only 4 (31%) respondents are likely to ride public transit in the next 30 days.</p> <p>In Erie County, 61% agree and 18% strongly agree; of these two groups, 8% are likely to ride public transit in the next 30 days. Of the 20% who disagree or strongly disagree, only 2 (5%) respondents are likely to ride public transit in the next 30 days.</p>
I am concerned about needing to use a restroom.	26.58	.01		<i>ns</i>	21.62	.05	<p>In the full sample, 52% agree and 19% strongly agree; of these two groups, 11% are likely to ride public transit in the next 30 days. Of the 29% who disagree or strongly disagree, 9 (11%) respondents are likely to ride public transit in the next 30 days.</p> <p>In Erie County, 51% agree and 18% strongly agree; of these two groups, 7% are likely to ride public transit in the next 30 days. Of the 32% who disagree or strongly disagree, only 5 (8%) respondents are likely to ride public transit in the next 30 days.</p>

I am concerned about traveling in crowds.	36.65	.01	34.07	.01	19.01	.05	<p>In the full sample, 56% agree or strongly agree; of these two groups, 13% are likely to ride public transit in the next 30 days. Of the 44% who disagree or strongly disagree, 8% of the respondents are likely to ride public transit in the next 30 days.</p> <p>In San José, 53% agree or strongly agree; of these two groups, 24% are likely to ride public transit in the next 30 days. Of the 47% who disagree or strongly disagree, 12% of the respondents are likely to ride public transit in the next 30 days.</p> <p>In Erie County, 57% agree or strongly agree; of these two groups, 8% are likely to ride public transit in the next 30 days. Of the 43% who disagree or strongly disagree, 7% of the respondents are likely to ride public transit in the next 30 days.</p>
I am concerned about inconsiderate passengers.	25.11	.01	22.65	.01	18.35	.05	<p>In the full sample, 75% agree or strongly agree; of these two groups, 11% are likely to ride public transit in the next 30 days. Of the 25% who disagree or strongly disagree, 7 (9%) of the respondents are likely to ride public transit in the next 30 days.</p> <p>In San José, 75% agree or strongly agree; of these two groups, 24% are likely to ride public transit in the next 30 days. Of the 25% who disagree or strongly disagree, 5 (21%) of the respondents are likely to ride public transit in the next 30 days.</p> <p>In Erie County, 60% agree or strongly agree; of these two groups, 8% are likely to ride public transit in the next 30 days. Of the 40% who disagree or strongly disagree, 6 (8%) of the respondents are likely to ride public transit in the next 30 days.</p>

I am concerned about my personal safety.	24.12	.01		<i>ns</i>	21.90	.01	<p>In the full sample, 79% agree or strongly agree; of these two groups, 10% are likely to ride public transit in the next 30 days. Of the 21% who disagree or strongly disagree, 7 (11%) respondents are likely to ride public transit in the next 30 days.</p> <p>In Erie County, 79% agree or strongly agree; of these two groups, 8% are likely to ride public transit in the next 30 days. Of the 21% who disagree or strongly disagree, 7% of the respondents are likely to ride public transit in the next 30 days.</p>
I fear getting lost.	21.09	.05		<i>ns</i>		<i>ns</i>	<p>In the full sample, 49% agree or strongly agree; of these two groups, 16% are likely to ride public transit in the next 30 days. Of the 51% who disagree or strongly disagree, 6% of the respondents are likely to ride public transit in the next 30 days.</p>
I fear that I may fall down.	22.56	.01		<i>ns</i>		<i>ns</i>	<p>In the full sample, 54% agree or strongly agree; of these two groups, 12% are likely to ride public transit in the next 30 days. Of the 46% who disagree or strongly disagree, 9% of the respondents are likely to ride public transit in the next 30 days.</p>

Riding public transit at night makes me nervous.	41.81	.01	22.65	.01	33.86	.01	<p>In the full sample, 83% agree or strongly agree; of these two groups, 9% are likely to ride public transit in the next 30 days. Of the 17% who disagree or strongly disagree, 18% of the respondents are likely to ride public transit in the next 30 days.</p> <p>In San José, 82% or strongly agree; of these two groups, 15% are likely to ride public transit in the next 30 days. Of the 18% who disagree or strongly disagree, only 5 (29%) respondents are likely to ride public transit in the next 30 days.</p> <p>In Erie County, 83% agree or strongly agree; of these two groups, 7% are likely to ride public transit in the next 30 days. Of the 17% who disagree or strongly disagree, 12% of the respondents are likely to ride public transit in the next 30 days.</p>
I am concerned about having the correct change to pay my fare.	28.76	.01		<i>ns</i>	34.72	.01	<p>In the full sample, 73% agree or strongly agree; of these two groups, 11% are likely to ride public transit in the next 30 days. Of the 27% who disagree or strongly disagree, 10% of the respondents are likely to ride public transit in the next 30 days.</p> <p>In Erie County, 74% agree or strongly agree; of these two groups, 8% are likely to ride public transit in the next 30 days. Of the 26% who disagree or strongly disagree, 6% of the respondents are likely to ride public transit in the next 30 days.</p>

Traveling with strangers makes me feel apprehensive.	36.39	.01	24.95	.01	32.42	.01	<p>In the full sample, 60% agree or strongly agree; of these two groups, 11% are likely to ride public transit in the next 30 days. Of the 40% who disagree or strongly disagree, 11% of the respondents are likely to ride public transit in the next 30 days.</p> <p>In San José, 59% agree or strongly agree; of these two groups, 18% are likely to ride public transit in the next 30 days. Of the 41% who disagree or strongly disagree, 18% of the respondents are likely to ride public transit in the next 30 days.</p> <p>In Erie County, 60% agree or strongly agree; of these two groups, 8% are likely to ride public transit in the next 30 days. Of the 40% who disagree or strongly disagree, 8% of the respondents are likely to ride public transit in the next 30 days.</p>
I am concerned that I am not healthy enough for a transit trip.	34.68	.01	22.77	.01	21.85	.01	<p>In the full sample, 49% agree or strongly agree; of these two groups, 12% are likely to ride public transit in the next 30 days. Of the 51% who disagree or strongly disagree, 9% of the respondents are likely to ride public transit in the next 30 days.</p> <p>In San José, 59% agree or strongly agree; of these two groups, 13% are likely to ride public transit in the next 30 days. Of the 11% who disagree or strongly disagree, only 13% of the respondents are likely to ride public transit in the next 30 days.</p> <p>In Erie County, 44% agree or strongly agree; of these two groups, 7% are likely to ride public transit in the next 30 days. Of the 56% who disagree or strongly disagree, 8% of the respondents are likely to ride public transit in the next 30 days.</p>

If I need help while using a bus or train, someone will help me.	19.21	.05		<i>ns</i>	17.05	.05	<p>In the full sample, 68% agree or strongly agree; of these two groups, 14% are likely to ride public transit in the next 30 days. Of the 32% who disagree or strongly disagree, 5% of the respondents are likely to ride public transit in the next 30 days.</p> <p>In Erie County, 70% agree or strongly agree; of these two groups, 9% are likely to ride public transit in the next 30 days. Of the 30% who disagree or strongly disagree, 3% of the respondents are likely to ride public transit in the next 30 days.</p>
Police and security are present in adequate numbers to make me feel comfortable.	25.82	.01		<i>ns</i>	17.20	.05	<p>In the full sample, 52% agree or strongly agree; of these two groups, 12% are likely to ride public transit in the next 30 days. Of the 48% who disagree or strongly disagree, 11% of the respondents are likely to ride public transit in the next 30 days.</p> <p>In Erie County, 50% agree or strongly agree; of these two groups, 7% are likely to ride public transit in the next 30 days. Of the 50% who disagree or strongly disagree, 9% of the respondents are likely to ride public transit in the next 30 days.</p>
Access to public transit influences my overall life satisfaction.	44.02	.01	25.22	.01	21.71	.05	<p>In the full sample, 48% agree or strongly agree; of these two groups, 16% are likely to ride public transit in the next 30 days. Of the 52% who disagree or strongly disagree, 7% of the respondents are likely to ride public transit in the next 30 days.</p> <p>In San José, 57% agree or strongly agree; of these two groups, 23% are likely to ride public transit in the next 30 days. Of the 43% who disagree or strongly disagree, only 13% of the respondents are likely to ride public transit in the next 30 days.</p> <p>In Erie County, 44% agree or strongly agree; of these two groups, 12% are likely to ride public transit in the next 30 days. Of the 56% who disagree or strongly disagree, 5% of the respondents are likely to ride public transit in the next 30 days.</p>



## MULTIVARIATE ANALYSES

For multivariate analyses, stepwise linear regression was chosen because it is the best method of insuring that accurate predictors of outcomes. In stepwise regression, variables, or predictors, are entered into the equation based purely upon statistical criteria. Essentially, the good predictors are entered, or kept, and the poor predictors are removed, or not kept, from the final regression equation. The outcome is a model that shows best predictors of a given outcome—for instance, what factors predict whether a person will travel via public transit. Thus, the outcome of interest in these multivariate analyses is having traveled on public transit.

The next step is to choose variables from our study that predict whether a person is likely to travel via public transit; these include environmental barriers, physical ability, perceptions and socio-demographic variables. Excluded from the list of predictor variables is having a driver's license. Our previously mentioned findings, which are consistent with previous research, indicate that private car remains the preferred transit choice. By excluding this variable we hope to remove it as a potential confound to other predictors of public transit use.

The section that follows outlines findings from multivariate analyses. Findings are shown for the full sample and for each research site. The outcome of interest is having traveled via public transit. For this analysis, having traveled is treated as a continuous variable for which respondents can report travel from '0 times' to 'nearly every day.'

*The full sample.* For the full sample, with "have traveled via public transit" as the outcome, the model is significant ( $p < .01$ ). We can predict about 30% of the variance in this outcome ( $R^2 = .30$ , adjusted  $R^2 = .27$ ). The variables in the list indicate, in descending order the predictors of whether someone will travel via public transit. The " $\Delta R^2$ " indicates the how much the variable adds to our prediction. So, for example, being white contributes 13% overall likelihood that one will ride public transit. The independent variables that predict traveling on public transit include the following:

1. being white ( $\Delta R^2 = .13$ ,  $p < .01$ ),
2. living in an apartment or condo ( $\Delta R^2 = .07$ ,  $p < .01$ ),
3. having a greater degree of self capacity ( $\Delta R^2 = .03$ ,  $p < .01$ ),
4. being more likely to stay in because of climate ( $\Delta R^2 = .03$ ,  $p < .01$ ), and
5. being Asian ( $\Delta R^2 = .01$ ,  $p < .01$ ).

The higher self capacity score is the mean of all indicators in the self-capacity factor discussed above, and being more likely to remain at home because of weather is a mean score of the questions that inquire about staying at home because of temperature, rain, snow or ice, other weather, and darkness.

*Erie County.* For Erie County, with "have traveled via public transit" as the outcome, the model is significant ( $p < .01$ ). We can predict about 25% of the variance in this outcome ( $R^2 = .25$ , adjusted  $R^2 = .24$ ). The independent variables that predict traveling on public transit include the following:

1. living in an apartment or condo ( $\Delta R^2 = .11$ ,  $p < .01$ ),
2. being white ( $\Delta R^2 = .06$ ,  $p < .01$ ),
3. having a greater degree of self capacity ( $\Delta R^2 = .05$ ,  $p < .01$ ),
4. being more likely to stay in because of climate ( $\Delta R^2 = .03$ ,  $p < .01$ ), and
5. being Latino ( $\Delta R^2 = .01$ ,  $p < .01$ ).

*San José.* For San José, with “have traveled via public transit” as the outcome, the model is significant ( $p = .01$ ). We can predict about 25% of the variance in this outcome ( $R^2 = .22$ , adjusted  $R^2 = .21$ ). The independent variables that predict traveling on public transit include the following:

1. being Asian ( $\Delta R^2 = .13$ ,  $p < .01$ ),
2. living in an apartment or condo ( $\Delta R^2 = .04$ ,  $p < .01$ ),
3. being more likely to stay in because of climate ( $\Delta R^2 = .03$ ,  $p = .01$ ), and
4. having a greater degree of self capacity ( $\Delta R^2 = .03$ ,  $p = .01$ ).

Further discussion of these findings, and some post hoc analyses, will be discussed in the final section.

## SUMMARY OF QUALITATIVE FINDINGS

Survey respondents were given the option to provide additional comments. These comments have been grouped into six categories, which are (1) Issues for Those who Do Not Use Public Transit, (2) Patterns of Public Transit Use, (3) Perceptions of Public Transit, (4) Barriers to Use of Public Transit, (5) What Works & Used to Work for Public Transit, and (6) Recommendations for Public Transit. Summaries of the comments are provided next.

*Issues for Those who Do Not Use Public Transit.* The majority of respondents that did not use public transportation did not provide a reason to explain their lack of use. Many others indicated that they did not use transportation because they were able to drive. Others indicated that there were barriers to accessing public transit; for example, many of the Erie County respondents lived in rural areas where there were no public transit options available to them. Other respondents commented that they were unable to use public transportation due to physical disabilities and limitations.

*Patterns of Public Transit Use.* The patterns of use identified by the participants included those who always used transportation, those who did not use transportation but may use it in the future, and those who use transportation for special events. For example, comments such as “I really don’t use public transit now, but I know I will need it in the future. Right now I can use my own driving” were a common theme. Similarly, many older adults still drive, but will use transportation on occasion, particularly if they are going to an event where parking may be an issue “that way I don’t have to worry about parking or heavy traffic.”

*Perceptions of Public Transit.* There were a range of both positive and negative perceptions of public transportation; for example “May they never take my car keys away” or “I think public [transit] is a good thing.” Respondents also expressed a belief in the need for transportation, “If only people would use the public transportation it would help congestion.”

However, some participants in both Erie County and San José noted that they often observed the buses and light rail systems as being “empty.”

*Barriers to Use of Public Transit.* Many of the themes that were evident in the previous categories were revisited in this section: no access, uneasiness with youth, and difficulty due to physical limitations. Many participants with physical disabilities believed that issues such as snow piles accumulating at bus stops prevented them from accessing transportation.

The barrier of safety also was mentioned. Many older adults simply did not feel safe, either walking to the bus stop or while riding the bus. This is a significant issue for older adults, as well as any individual who may feel unable to defend him or herself.

*What Works & Used to Work for Public Transit.* This category is very simply defined by one word: accessibility. Those who felt that the bus was accessible were satisfied with public transit. These participants mentioned bus stops near their homes, a variety of bus lines to access, and punctuality. Participants also identified old bus lines or bus stops that have since been removed, but were very useful.

*Recommendations for Public Transit.* The majority of the recommendations focused on access issues, in particular regarding improving bus schedules and routes. Many participants commented on the lack of frequency of buses; for example wanting “More buses operating on Saturdays.”

Another theme noted by both Erie County and San José respondents regarded youth on the buses. Many respondents indicated that they felt uncomfortable on the bus with adolescents, and that the youth often took seats reserved for older adults. One respondent noted that “I would like if the kids, riding the bus on [a] school day give seat[s] in front to [the elderly], because they will sit there and not move at all.” In addition, regarding safety, respondents requested more awareness of their physical limitations, including waiting for them to sit down, shoveling the snow from the stops, and wanting other passengers to offer their seats.

A final theme, which clearly is indicative of the current issues, were recommendations for services that used less oil. Many seniors identified wanting smaller buses as a desired change. The reasons for this change cited were either to use less oil, or to have more frequent buses running.

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## DISCUSSION

In the previous section, a significantly large amount of data is reported. Data itself represents concepts and ideas, beliefs and opinions, facts about respondents and momentary reactions of respondents. Depending upon the analytical choices, the “story” that data tells can be skewed. Thus, the extensive overview of findings in the previous section increases the transparency of this discussion. It provides the reader ample information to critically analyze statements made in this section.

The role of this section is to discuss how we interpret the research findings. We make every effort to make claims only justified by our research. We guide the reader to specific conclusions while also discussing alternate explanations. In addition, we discuss the implications of our findings, or lack thereof, by presenting practical and theoretical explanations.

This section is organized by first discussing the data and analyses used, and then discussing critical topics and issues elucidated by the findings. We relate these discussions to our research questions: to identify barriers to use of fixed route public transit and to understand how older adults’ perceptions of fixed route transit influence its use. The sections integrate findings from univariate, bivariate, and multivariate analyses and limitations and implications discussed within sections. Then, we provide an overview of a theoretical model for intervention and suggest some ways that the theoretical framework can be utilized. This section concludes with a general summary of critical issues and implications.

### ABOUT THE DATA AND ANALYSES

In our research, we gathered a significant quantity of quantitative data considering the number of surveys sent. A 43.1% response rate (775 out of 1800 surveys) is unusually high. This should give us ample statistical power for various analysis techniques. However, much of the data is categorical (categories of response that lack linear and incremental measures between response categories), which limits the types of analysis appropriate to use.

The next concern is variability in response, or distribution of the data. We have a relatively high functioning active older adult population. While this presents some limits to our analyses—for example, we lacked significant findings based on disability—we have data that represents the population of older adults with the physical capacity to ride public transit. In fact, the split of the data between those who have traveled and those who have not traveled via public transit informed decisions for bivariate and multivariate analyses.

*Parsimony.* No matter what the research model and questions or the topic of study it is critical to maintain parsimony. This means that the methods are appropriate for the data and as un-complex as possible. By using overly complex methods, particularly for data that fails to meet dispersion and variance requirements, findings may overlooked, falsely manufactured, and impractical for any policy implication. Therefore, we used analysis techniques appropriate to the data and that will provide insight toward answering our research questions.

## **THE RESPONDENTS**

The first success in this study was the remarkably high response rate for a mailed survey. A response rate of 53% in Erie County and 33% in San José represents a significantly high response rate. The method for sending the survey, beginning with an official letter announcing the survey and emphasizing its importance, sending the survey with \$1 incentive, and following up with a thank you and reminder post card, might have motivated respondents.

In both sites, respondents seemed honored to share their responses and recognized the importance of providing input. For example, in San José one woman brought her survey to the College office on the day it was due and told the research director how important it was for all seniors to help make a difference. Other surveys were received with the cash incentive affixed to the survey; a few of these had notes telling the researchers that providing this input was more important than receiving this money. In essence, older adults want to help make a difference in their world.

### **Disparity Between Research Sites**

A 20% higher response rate in Erie County compared to San José appears significant. Identical methods were used for delivering surveys. However, the environment where the surveys were delivered differs significantly. The surveys were mailed out to potential respondents during the winter. For those who live in San José, the weather was still quite pleasant for social outings, even at night. Erie County is much colder. Respondents in Erie County, particularly those who rely on public transit, may have an increased likelihood to be at home and have more time to complete the survey.

San José also has a more racially and ethnically diverse population than Erie County. In San José the survey may have been received by more respondents for whom English is a second language. In fact, one San José survey was returned, fully completed, with additional comments written in Chinese.

### **Age and Physical Ability Among Respondents**

In general terms, the older adults who responded to the survey are in the older-old age range, meaning that we received responses from a slightly older crowd than “Older Americans” on average. This may reflect the fact that as people age, the likelihood of contact with senior programs increases—that is, there is a greater chance that an older person will need age-related senior programs than a younger person. Our name and address list was acquired via some connection with senior programs, Area Agencies on Aging, and, thus, represent older adults with some social service needs. However, respondents do not report regular or frequent need for assistance, neither professional nor from family and friends.

Although the respondents may represent older-old Americans, in both research sites the population is relatively high functioning physically. Visual impairment corrected with eyewear, the most common impairment among our respondents, is relatively common

for aging adults. Otherwise, the respondents ambulate relatively independently. Less than one percent always relies on a wheelchair or power scooter, less than one in five relies on a walker part of the time and about one in three requires a cane part of the time. A significant number has the potential to ride public transit, an important quality if we are to generalize from these findings to other older adults who may ride transit.<sup>1</sup>

## **Transit Use Among Respondents**

The respondents typically do not ride public transit often. During the past year, slightly less than 50% of the respondents have ridden public transit. In San José, more have ridden public transit than those in Erie County; three times as many always ride public transit in San José (24%) compared to that of Erie County (8%). This may be due to differences in urban structure and municipal boundaries in San José and Erie County—public transit may be more accessible to residents of San José than it is to those in the rural areas of Erie County. In fact, about 50% of the respondents report it would be difficult to walk to a transit stop, and those in Erie County report that they would have more difficulty walking to a transit stop than those in San José.

## **Disability and Transit Use**

The variables to measure disability were examined in relation to transit use and likelihood to ride transit in the next 30 days. Findings were statistically not significant. Despite use of a cane or walker, there existed no trend in likelihood to ride transit. This may be due to the relative independence of our respondents. Or, it could be that our measurement of ability lacked specificity. If we were to track functional ability and functional symptoms—such as pain and joint stiffness—we may find day-to-day variability in a person's ability to ride public transit. For example, one day a person with rheumatoid arthritis may not perceive him- or herself capable of riding transit. The next day, he or she may be fine. This scenario creates only a delay in transit; this may be sufficient for many riders. The challenge occurs when transit needs are more frequent.

## **BARRIERS TO USE OF FIXED-ROUTE PUBLIC TRANSIT**

To consider barriers to use of fixed-route public transit we reviewed qualitative findings from the focus groups and survey comments and quantitative data from the surveys including the analyses completed.

Primary concerns included lack of transit service or stops nearby and concerns about waiting in uncomfortable weather. Interestingly, in bivariate analyses weather failed to be a significant indicator of likelihood to ride public transit. However, in multivariate analyses, we found that older adults who stay at home because of bad weather are more likely to be transit riders. Likely, this is because those with automobiles are less affected by bad weather. Reducing the barrier of weather, particularly storms and excessive heat, are difficult to mitigate. Future research can explore methods to reduce barriers that inclement

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<sup>1</sup> This does not suggest that older adults use non-fixed route transit, such as paratransit services, at an inappropriate rate. This merely suggests that our findings will be generalizable to older adults with the capacity to ride transit.



weather poses for older adults riding public transit.

Other issues included fears about riding public transit. These fears, such as personal safety relative to inconsiderate passengers, did emerge in bivariate analysis. Interestingly, the most compelling data was the existence of this fear in those who have not ridden public transit; the finding is the “perception” that public transit is unsafe. To mitigate this perception may require an increase in older adults’ perceived capacity to cope with fears and challenges. Further, in the multivariate analyses a greater degree of self-capacity—one’s own ability to manage the challenges of public transit—was a positive predictor of transit ridership. Self-capacity may be similar to self-efficacy in behavior change interventions discussed later.

Participants in the focus groups also mentioned that, after boarding buses, they often have difficulty finding seats at the front of the bus and finding seats before the bus begins moving. Some participants complained that bus drivers were discourteous and unhelpful, while other participants reported that they were satisfied with the interactions with bus drivers. Despite the limitations of the perception variables, the bivariate analyses do support these as potential concerns, particularly for those who have not traveled via public transit.

Other issues with public transit identified in the focus groups included challenges with access to and lack of knowledge about transit, the inconvenience of public transit, concerns about drivers, lack of restroom, wait time, and fears and safety concerns related to transit travel. Bivariate analyses show mixed support for these findings. For example, those who have not traveled do view public transit as good for getting to medical appointments; however, they do not show an increased likelihood to ride public transit. Perceptions can fail to translate into action. Regardless of the barrier or the perception, the car overwhelmingly seems to be the preferred transit choice.

## **AUTOMOBILE IS THE PREFERRED MODE FOR TRAVEL**

Previous research suggests that the automobile is the preferred mode of travel for older adults. Our literature review and findings from our focus groups and surveys reiterate this; the automobile is the preferred mode of transit. It is a non-fixed route, convenient, time-saving mode of travel compared to those of fixed route public transit. Our focus group participants and survey respondents know this and emphatically tell us about the freedom offered by the car. Older adults view driving a private car as a source of freedom and independence (Lindstrom-Forneri, Tuokko, & Rhodes 2007).

In the previous section, in the multivariate analyses section, results of a stepwise linear regression are presented. In this analysis, we identify characteristics of older adults who are more likely to ride public transit. We excluded as a predictor the variable whether or not someone had a license to drive. Our rationale was clear in that we wanted to examine who is most likely to ride transit regardless of driving, which suggests that we can identify predictive variables to using public transit that may even help us to get licensed older drivers to use transit. However, to satisfy curiosity, in a *post hoc* analysis a dichotomous variable representing the possession of a current driver’s license was added as a potential

predictor variable. Not having a driver's license became the number one predictor to use of public transit in both sites.

Essentially, it seems that for older adults, the car is viewed as status and independence, and the car is the most preferred mode of travel. The fact that those with lower socioeconomic status (SES), such as those who live in apartments or condos rather than houses, are more likely to ride transit may be a result of their not having a car. Or, these apartments and condos could be centrally located in denser city areas where public transit is more easily accessible.

## **RACIAL AND ETHNIC VARIABILITY**

It is intriguing to note that when removing the drivers' license as a predictor of public transit, being Asian becomes the number one predictor in San José. To fully understand this finding will require more research. However, San José is one of this country's most ethnically diverse cities and there are many older Asian adults who spent a majority of their lives in their countries of origin. These cultures may include norms that support older adults using public transit and older adults are generally revered and respected. It is interesting to question if the perceived value of older adults in society enhances an older adults' self-efficacy and, thus, capacity to manage public transit.

To make such conclusions would require much more information about these older adults, including self-perceptions and previous experiences with public transit. This type of information could be discerned with more detailed and ethnic-specific focus groups.

Critical in a decision to have such focus groups is the recognition that many cultures have norms that are supportive of and respectful to older adults. Thus, a series of ethnic-specific focus groups, including various cultural groups, may provide more answers to the questions of racial and ethnic variability.

## **CHANGING PERCEPTIONS AND CHANGING BEHAVIORS: INTERVENTION APPROACH**

Those who already rely on fixed-route public transit will continue to rely on fixed-route public transit—typically lower SES and racial and ethnic minorities. So, if the question is how to increase ridership among the non-users and infrequent users, then, we must examine how to change behaviors.

The field of health promotion and disease prevention has a long history of theoretical development related to, and empirical study about, how to help humans change. Selecting from this scholarly knowledge, a theory applicable to helping older adults change travel choices requires a theory that capitalizes on the cognitive and perceptual processes older adults use when making travel choices. This theory must be one that can be applied practically and that provides a framework for intervention.

Motivational interviewing is a technique initially used with persons wanting to change alcohol drinking behaviors and is based on a six-stage change model (Miller & Rollnick, 1991). The behavior change model has been applied in many settings and has assisted



effectively persons wanting to change behaviors.

In this case the stages are described and related to how one may make a choice about transit modality. In particular, the first five stages are critical to promoting behavior change, and are similar to some models of social marketing. Each stage is described briefly and connected to transit perception and choices. In addition, ideas are presented about how this model can be used in promoting the use of fixed route public transit.

The first stage is (1) **precontemplation**. This is when a person is considering change; a person may be open to the possibility. We found elements of precontemplation among older adult focus group participants and survey respondents. Older adults who have relied on an automobile are increasingly aware of the need for alternate transportation options. While older adults talk about finding others with automobiles to take them places, others recognize that fixed-route public transit may be an option. They seem to like the idea of buses and trains although many are unfamiliar with how to ride them. They are also uncertain about knowing the location of stops and feeling comfortable with the safety of travel. In fact, one focus group participant in San José noted that she was glad the option existed in case she needs it in the future. This statement is precontemplative; it represents openness to the possibility of change, the possibility of using fixed-route public transit.

From precontemplation people ideally move to (2) **contemplation**. This is where the choice to change behaviors may occur. During this stage, reasons are evoked for making a behavior change, risks of not changing are considered, and self-efficacy to carry out the change increases. If transit planners and policymakers consider enhancing marketing for fixed-route transit to older adults, the key may be to capitalize on these first two stages. Public transit can increase capacity of an older adult to access important resources, services, and social activities; the lack of such access can be devastating. Various marketing messages may address this contemplative process and encourage seniors to ride; possible messages include the following: “Don’t Get Stuck, Older Adults Ride Public Transit,” “Stay Active. Stay Independent. Take the Bus,” or “In Your Later Years, You Can Still Get Around!” Such messages attached with statements about what one can accomplish by riding public transit might motivate older adults toward behavior change.

The third stage of change is (3) **determination**. Determination is helping a person to identify the best course of action toward change. Public transit authorities can promote the safety of travel on buses and trains versus the risks related to driving. Further concerns identified by our research, such as inconsiderate passengers and lack of convenience, can be addressed with marketing campaigns that promote transit as a convenient viable option, with enforced regulations for travel—such as older riders get priority seating—and an option that will promote greater well-being and life satisfaction. There may be ways to combine determination with reinforcement of choices and modeling of taking action.

The fourth step is (4) **action**, in which a person take steps toward change. Programs that teach older adults, particularly those who rarely or never have used public transit, to ride public transit successfully promote “action.” Mentoring programs have successfully done this. Other creative approaches have included training videos (Shaheen & Rodier, 2007); and, with the increasing computer literacy of older adults, training videos can be placed online.

The fifth step is (5) **maintenance**. In terms of health-related behavior, change typically refers to relapse prevention. In terms of making choices about public transit, this can better be framed as reinforcement. Programs that reinforce older adults choosing public transit can reduce perceived barriers of transit being negative and for “others.” For example, incentives, such as discounts and rewards programs can be reinforcing. Data about the successes older adults have riding public transit, such as the numbers of older adults riding transit, may encourage use. Testimonials from older adults about their success with riding transit can be quite influential for both motivating change and maintaining change. In fact, during one of the San José focus groups, an outspoken advocate and frequent user of public transit inspired other participants to use transit. Inspiration from testimonials can inspire new users in the contemplation stages, and can re-inspire use amongst former users, which is like helping a person cope with (6) **relapse**, the final stage of the behavioral change model.

Relapse refers to a slip into previous behavior with the implication that the new behavior was desirable. Relapse may be a complex phenomenon in the case of an older adult who has ridden public transit and now returns to other modes of transit. What may appear as a withdrawal from fixed-route public transit may be the result of aging and physical decline; an older adult can no longer safely ride a bus or train and may need paratransit services. This relapse may be a permanent change or temporary—such as in the case of an injury from which the older adult recovers fully. Other relapses may be a result of situational factors—moving residences, a new friend who has a car, changes in location of transit stops or service routes and times, and weather-related issues. If the relapse is temporary, then opportunities exist to support a return to the newly learned behaviors. This could be done with marketing messages such as “*The winter storm has passed, do you have your bus pass?*” and “*Lost your ride? We’re still waiting for you... every 20 minutes or sooner.*” It is critical that messages are supportive rather than shaming or making one feel guilty for having stopped riding public transit.

While not developed as social marketing model, this model of behavior change may address ways to change perceptions of public transit long-term for older adults. It is clear from our research that older adults have perceptions of public transit that are less positive than their perceptions of automobile travel. Perceptions may be the most significant, or largest, barrier that older adults have regarding public transit. Changing perceptions only is sufficient if it includes methods geared toward behavior change. An older adult may think more positively about transit, but without motivation to ride transit the perceptual change is insufficient to encourage use of transit.

One way to tackle the development of behavior change strategies is to collaborate with experts about behavior change and about older adults, such as human service professionals. For example, in 1993, the Portage Area Regional Transportation Authority (PARTA), in Portage County, Ohio engaged local human service organizations in the establishment of a transportation demonstration project. Coordination with human service agencies resulted in a variety of transportation service contracts and a significant increase in ridership. Ridership increases were also influenced by marketing campaigns and user surveys. This inclusive approach advanced community support from both transit riders and non-riders, leading to greater resource commitments from government agencies.

Similarly, in Charlottesville, Virginia, JAUNT is a not-for-profit public service organization that provides a variety of public transportation options to older adults. These options are secured through aggressive recruitment of human service agency-transportation contracts. As a result of collaborative efforts, a local transportation planning agency has established a written policy that requires all human service agencies to coordinate transportation with JAUNT. This coordination has resulted in (1) service increases in more remote areas of the county and (2) lower costs for older adults. JAUNT, as well as PARTA, may be a model for collaborations to enhance older adult public transit ridership.

## **LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH**

As noted in the previous section and emphasized in the perceptions section, there existed a significant response bias in this data. Essentially on perceptions questions answered with a 4-point Likert-type response (*strongly disagree, disagree, agree, strongly agree*) there existed a predisposition to avoid responding with either extreme, and most responses were agree. In future surveys it will be important to reconsider the number of points in Likert-style responses; this may increase measurement specificity and validity.

Interestingly, the bias was toward a more positive perception about transit—even for those who do not ride public transit. Perhaps older adults want to appear neither negative about transit nor incapable of riding transit. This would be similar to providing socially desirable responses. However, it may also relate to pride; older adults may not want to be viewed as dependent or incapable.

Regardless of the cause of this bias, it means that the data received about transit perceptions lacks validity and reliability. Yet, throwing out all of the results is risky because we lose important data. Perceptions were a key focus of the bivariate analyses and part of the multivariate analyses. This is because perceptions are powerful insofar as our behavioral decisions. For example, it does not matter how safe public transit actually is, if I perceive it as unsafe, I will not ride transit. If I believe a car to be a greater symbol of independence than riding public transit, then my behaviors will follow those perceptions.

Future research may benefit from other forms of questioning and techniques other than survey. This is because perceptions represent complex cognitive processes that are difficult to measure. We have measured these with questions that assess issues such as fear and safety, and ability to walk to transit. How a person responds to a perception question may vary based upon psychosocial conditions such as how he or she feels that day, comfort while answering questions, and mood at the time of responding to questions. Future research regarding transit perceptions may benefit from more intensive qualitative techniques, such as 1-on-1 interviews during which researchers can explore fears and anxieties that older adults may have about riding public transit.

## **SUMMARY AND IMPLICATIONS**

It is possible that many adults will stop driving when they become physically unable to do so, and will then seek out services such as paratransit, as opposed to public transit. For instance, one respondent noted “I really don’t use public transit now, but I know I will

need it in the future. Right now I can use my own driving.” Such a theme was common; older adults, many who had been driving for a half century or longer, express extreme reluctance about losing this freedom.

While driving is often a preferred mode of travel, older adults are thinking about future changes and how they may address the loss of a private car. Similarly, many older adults still drive, but will use public transportation on occasion, particularly if they are going to an event where parking may be an issue “that way I don’t have to worry about parking or heavy traffic.” Marketing public transportation to older adults in a manner that emphasizes future independence and less hassle or stress may be critical to change the perceptions of transit!

Issues for policy makers/developers to address include increasing access to rural areas and addressing the physical limitations of older adults are significant concerns to provide viable transportation options. The question of feeling disrespected by the youth would require some innovative thinking, and would be an excellent barrier for social workers to address. Again, the idea of intergenerational education/intervention may be helpful here.

The barrier of safety also was mentioned. Many older adults simply did not feel safe, either walking to the bus stop or while riding the bus. This is a significant issue for older adults, as well as any individual who may feel unable to defend him or herself.

An idea for policy makers would be to determine how to make bus lines accessible to seniors—perhaps creating lines or adding stops that are in areas populated by seniors. Perhaps using smaller vans, like shuttle service from current stops to areas populated densely with seniors will mitigate the challenges some have with regard to walking to stops. These shuttle routes can change as population needs shift.

Another theme noted by both Erie County and San José participants regarded youth on the buses. Many participants indicated that they felt uncomfortable on the bus with adolescents, and that the youth often took seats reserved for older adults. One respondent noted that “I would like if the kids, riding the bus on [a] school day give seat[s] in front to [the elderly, because they will sit there and not move at all.” This theme was repeated with both Erie County and San José participants. A solution to this barrier may be intergenerational education or community development. Policy makers should investigate communities where large numbers of youth and seniors access public transit system and seek to identify ways for the two groups to utilize these much needed services in harmony.

## CONCLUSION

Flexible transportation alternatives are crucial for accessing health care services, creating and maintaining social contacts, and preserving independence and general well-being (Stowell-Ritter & Binette, 2008). Transportation for older adults can reduce the serious mental health and physical health risks associated with social isolation and lack of access to services. Because transportation remains such a critical issue in the most recent White House Conference on Aging (2008), transportation emerged as a “Top Ten” issue. Viable and practical policy choices, which increase access for our most needy older adults, has the potential to reduce significant long-term social costs. Utilizing behavior change theory

as part of a social marketing campaign may be one way to reduce negative perceptions about public transit and encourage older adults to choose public transit.

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## **APPENDIX A: BARRIERS TO USING FIXED-ROUTE TRANSIT FOR OLDER ADULTS FOCUS GROUP INTERVIEW**

**AMHERST SENIOR CENTER  
AMHERST, NY**

**JULY 28, 2005**

### **TRANSCRIPT**

Hess: How did you travel to the Senior Center today?

W1: I took the Amherst van.

M1: I drove.

M2: I came by the van today.

M3: I came by wheelchair, but I sometimes take the van.

W2: I drove here.

M3: Walking through the woods.

W3: I took the van.

Hess: So, let's see – we've got one, two, three on the Amherst van, two that drove, one that walked, and one that took wheelchair. But, what we see is that nobody actually rode public transit to get here. So, we'll think about that as we continue talking today.

Hess: So, let's think about the many ways that older adults would need to travel, the many reasons they would need to travel – for shopping, for errands, for doctor visits, for socializing – even for coming to the Senior Center and the many ways that they can get around. So, my first question is what would make public transit, compared to other modes of travel, difficult for older adults to use? So, what makes public transit difficult to use?

W1: The senior van comes right to the house, but to ride public transit you've got to go to the bus stop, right?

Hess: So, the Amherst van picks you up at your house, but to use public transit you'd have to go to the bus stop?

W1: Yes.

Hess: And what is difficult about getting to the bus stop?

W1: You don't know how what is the distance of it.

Hess: So, you might not know where the bus stop is?

W1: That's right.

W3: There's no public transportation that goes down my road. I'm on a country road and no public transportation will go out there. I live between Transit Road and New Road and it's too far for me to walk to either one. I don't think a bus goes on New Road anyway. It does on Transit Road, but I've got no way of getting there. It's too far, it's over a mile.

M3: I think that one of the obstacles of public transportation is irregularity of where and when. For example, here we have one bus #44 which makes it once in an hour. Sometimes if something happens it is two hours. So, this makes for distance between our trips which it very hard on our lives. For example, we have every 15 minutes then more people and people like me would use it. But, one hour – it is too much.

M3: One of the things I've found riding on the van is that I have to find another person and that's difficult to do at times.

Hess: Another person to help get you on besides the driver?

M3: Yes, they are supposed to accompany you.

Hess: So, often times the second worker on the bus isn't there and there's only the driver and that makes it difficult?

M3: No, I'm talking about leaving my home with another person.

Hess: I see. So, getting out of your house and getting ready to get on the bus.

M3: Yes.

M2: I don't have any questions on transportation because I never use it. All I know is that you get on at the front door and get off at the front door. That's it. I don't even know how much it is anymore. But, we have one car in the family now so that's inconvenient for getting around. My son uses the car and I've got to sit and vice versa.

Hess: Do you still drive?

M2: Yes, but I was in an accident a couple of months ago.

Hess: Ok, other comments about public transit?

M1: I've only used it a few times – the subway.

Hess: Did you use the University station?



M1: Yes, I went down the stairs there. Well, I've ridden the subway before and during the ride you bounce around a bit.

Hess: So, that's uncomfortable for you – the jostling and the ride?

M1: Yes. I've ridden during rush hour and had a bit of difficulty standing. But, basically it is nice to have it.

M3: As a concern of public transportation, I think the problem in Buffalo is the enormous distance. The city and the suburbs are spread so wide, so every trip takes too long.

M3: I've never used public transportation, but are all buses equipped to take a wheelchair?

Hess: They are required to since the American's with Disabilities Act in 1991.

M1: In order to use the bus I would have to walk three-quarters of a block to get there – and that's a problem. Buses don't come to your front door.

Hess: So, the distance from your house to the bus stop is a problem? But, you do know the distance, so do you know where the bus stop is?

M1: Yes, it's just down the street.

M2: The bus stops right in front of my house.

Hess: But, you don't use it?

M2: No.

Hess: What keeps you from using it?

M2: I still drive. I've never had to.

Hess: But, a minute ago you did tell us that when your son takes the car you can't go anywhere.

M2: Yes.

Hess: So there is a bus nearby, but you don't use it?

M2: Yes.

W3: I would use the bus if it would come down my road and got me to Transit Road where I would need to transfer, but as I said it don't come down my road and there's no chance of it coming down my road.



Hess: So, if there was a nearby bus you think you would use it?

W3: All the time. I've always used public transportation. I'm from Schenectady. I lived in Schenectady and worked in Albany so I always took public transportation. I loved it.

Hess: So, let's say there was a bus near you that took you to Transit Road, can you think of anything that might make it difficult for you to use?

W3: At this stage in my life I can handle steps, unless they are very narrow. Then it would be very difficult. But, if they've got places for me to hold on and walk up the steps I'd be alright.

Hess: Now let me ask you this, in what ways do you think older adults might have difficulty boarding buses, using buses and light rail vehicles? What would be the difficult parts of actually getting on the bus, paying your fare, finding a seat – actually using the bus. What do you think older adults might perceive as being difficult?

M1: Getting onto the bus itself. It's too high.

M2: The new ones lower down, don't they?

M3: I suppose it could be a bit of a problem getting the change if you've got a walker or a cane.

Hess: So, if your hands are full and you need to get your money out.

M3: What about safety on public transportation in Buffalo? Is there any thought concerning possible terrorists or an attack?

Hess: So, you would be concerned for your safety in getting on public transit?

M3: Especially going underground.

M1: In particular with the subway with certain rambunctious populations. The few times I've ridden I've been careful not to travel too late at night.

Hess: So, if we are talking about safety and security I've heard two different comments. M4 mentioned the fear of terrorists or something like that happening on the train or bus. M1 mentioned fear of other groups of people. Does anyone else have any more comments on those types of fears?

W3: Well, there's no guarantee with terrorists. No one can guarantee that. As for the problems with the younger kids on public transportation, you've got to go not at night. I wouldn't recommend going at night. Even in Schenectady I would never go at night. You never know. You've got to go during the daytime.

M2: They also have mini-buses out too, I think. Lots of times I see mini-buses take people over to the supermarket.

Hess: That's right.

W1: I've never traveled on the bus.

Hess: You've never been on the bus in Buffalo. Have you been on the bus elsewhere?

W1: No, my daughter drives me wherever I go.

M1: One of the difficult things when taking the bus or subway is if you are going shopping and you have things to carry and where do you put them? Especially if there is a lot of traffic on the subway, you have to stand up and nobody kind of says sit down.

[Enter W4]

Hess: Next question. What makes driving in a car or being driven in a car more convenient than riding public transit? So, when you think about driving verses actually taking the train what are the barriers to taking the train or the subway that make you choose to drive?

W2: You can go when you want to go. You don't have to wait for the bus.

M1: You can carry what you need to carry.

M3: There is a problem for us and that is about being in love with the car. Because it goes from the house to any destination.

M1: Right now, I think about the price of gasoline. I come from Main Street and drive all the way out to the Senior Center and that's about a 12-mile drive – 25 miles a day.

Hess: Do you ever think well, maybe I should take the bus because it is cheaper?

M1: No because it is too inconvenient.

Hess: It's too hard to get to?

M1: Yes, it would have to come right to the front door.

Hess: Well, my next question has to do with information. In order to plan a trip on a bus or the MetroRail you have to know where the stop is, when the bus comes, which route to get on, where to get off to get to your destination, so you need a lot of information. I'm wondering if that information is a barrier or how you might get that information about using the system.

W3: I'd first call the company. I'd tell them where I live and where I want to go and they would give me all the information.

Hess: So, that doesn't seem to be a problem for you. You could easily plan your trip?

W3: Right.

W2: I would do the same thing.

M3: I would call.

M2: I never use public transportation.

M1: I'd call them.

M2: I like the convenience of the car. It's more convenient to get in the car and go where I want to go. I never had to use transportation. Except ever since the subway I always wanted to take a ride on it one time to see what it is like. I never did yet.

Hess: Let me ask, what do you think would make older people able ride public transit with greater ease? So, what would really make it easier? So far some of the comments we heard from W3, for example, were if the bus route came a lot closer to the house or if there wasn't such a great distance to the station. But, try to think of what ways would make it easier for you to ride public transit.

W4: I would think convenience.

Hess: So, if it were more convenient you would ride public transit?

W4: Yes.

Hess: What specifically would you like to see be more convenient?

W4: What would I like to see more convenient? No comment.

W3: Like I said I would take it if it came on my road because I can walk a good distance, but not over a mile. So, if it came on my road I would go to the stop and take it and go where I wanted to – depending on van or the availability of my family to take me because I don't drive. But, like I said it won't come down Tonawanda Creek Road.

W4: I don't drive. I have to depend on the van first to come here. Now, this morning they were looking for Brook Path and they went down Brook Drive. So, that's why I was late. I find the Amherst van service very convenient.

W3: The van takes me to all my medical.

W4: I'm not worried shopping, but it is just the other things.

M3: Many of these buses are going on the wide roads and really in neighborhoods where there are cars and small roads they don't go there. If they would go a little bit deeper into the residential neighborhoods people would probably be happy to take the bus. But, the highways—this is what makes things difficult. I don't know if it is possible to

re-route some of the buses into the residential neighborhoods.

W3: They don't go on a route unless it is profitable. They have to be sensible about it. Not enough people ride – if they aren't making any income then they are going to discontinue that route. Most people on the country roads have cars and use their car – very few use public transportation. That happened in the city too where I lived. The route wasn't profitable, so they discontinued it.

M1: Even with the best of intentions in the world, they subsidize the routes and then you have someone like County Executive Giambra screwing things up so there is not money available. It's really a problem city planners and transit planners have to figure out how to finance it and how much they can afford to provide in the way of service if they don't get paid extra. They can't be too careless in terms of the service they provide. The finances are important.

M3: I haven't ridden public transportation in a long time. I would need help getting on the bus. I have had difficulty getting on our small vans here. I need a lot of help. I have fallen down the stairs too.

Hess: Ok, so we are just about wrapping up here in terms of the discussion. We are going to ask you to fill out a questionnaire. But, I would like to give every person here the opportunity to maybe make a summarizing statement or perhaps make a comment you haven't yet made. We are trying here to figure out ways to make public transit more convenient and easy for older people to ride. I know that some of you here don't ride transit at all, but if you can put yourself in the position that you had to depend on transit. W1 has told us that she has a daughter to drive her around, but what would you do if you didn't have a daughter or other family member to depend on and you actually had to find out about transit service?

W1: Go in Circles. To find out things I have to go in circles.

M1: Well, we're all in a sense we are prisoners to our physical disabilities, old people in particular. I can get around with a cane and so forth but it's very difficult. Even getting on public transit, it would be difficult having to climb up and sit down. I couldn't carry much with me.

Hess: So, you're saying if you really needed to make a trip in some sort of an emergency, you could do it now. But, if we made it a little bit easier for you, you might ride it more regularly.

M1: If I became more incapacitated then I would really have a problem. The more they subsidize the buses and add additional buses the better I like it. But, I know it's a fact of economics and they can't do it.

M2: I wouldn't have any problems getting on or off the bus. The only thing is that I would have to learn where I want to go and how I would get there. That's all.

Hess: Do you think you would have any difficulty in getting information about what bus to take?

M2: No, all I would have to call downtown and they would send it out to the house which is pretty convenient.

M3: Maybe I'm thinking too simple here, but it's always the first ride that is the most challenging. If there could be some type of arrangement, which I doubt that there is, for someone to ride with you the first time it would help out.

W2: It's just wonderful to have the transportation that we do have. As I said I have no use for it right now. Where I live the buses come down the street and that. But, it would be inconvenient for me to get on something like that because I use a cane.

Hess: Could you do it if you needed to?

W2: Yes, if I had to –with a little assistance.

M3: I think you can do nothing. No change.

W4: I have no trouble getting around. When I have to go I can either walk or take a bus. I don't drive. I live on Sheridan Drive and Evans and I'm not sure I know how to take a bus. If someone showed me how to take the bus – there is a bus somewhere around there. Then I would know whether to use the van or walk. For instance, I walk to the Eagle House. Which in my estimation isn't far, but to some people it is far. They make a big thing about it. I like to walk and right now I'm able to get around.

Hess: Now, did you say you only take the Amherst Van and you don't take the NFTA bus?

W4: No, I don't know. If someone would show me how, where to get off, where it stops then I would. There is a bus somewhere around where I live; I think it is across from Wegman's Supermarket. I'm not sure. It's really hard. When I lived in Buffalo I always took the bus or I walked – it was my only way of getting around. Now I depend on the van a lot.

W3: If it went down my road I would use them, otherwise it's impossibility – I have no way of getting to them.

Hess: Ok, thank you so much for your participation.

## **BARRIERS TO USING FIXED-ROUTE TRANSIT FOR OLDER ADULTS FOCUS GROUP INTERVIEW**

**BAPTIST MANOR  
BUFFALO, NY**

**AUGUST 25, 2005**

### **TRANSCRIPT**

Hess: In thinking about public transit, the regular buses and subway that you see moving around the city and that many of you use, I'd like to know what works and what doesn't work? What works for you and what are the barriers to using transit?

W1: Okay, the new buses, I don't know who designed them. But, when you get on them there is that cat's cage where someone gets in this way and faces that way. There is a barrier on the right-hand side if you want to call it that and by the time you get there and the bus driver starts up fast, you can be on your bottom. I don't know who designed the bus, but it was very poor thinking because when you used to get on the bus you were able to sit right down when you got on and not walk a mile and get knocked down. That's what I'm thinking.

W1: Do you want to know about the train? I had an appointment at 85 High Street and I can't walk because of tumors on the bottom of my feet. So, I had to wait a long time for the bus that took me to the train station. Only to get there and purchase my ticket and when I was walking to the elevator the woman said, "Oh, the elevator is not running, you're going to have to walk down the stairs." So then, it took me an hour and a half to get home because I had to stand at Main and Allen Streets with one bus going this way and one bus going that way. It took me an hour and 45 minutes to get home and that elevator was out for many, many months.

W2: I have something to say about the bus. In the first place when you go to get on the bus, in the front it's going to be seniors and then wheelchairs, but you can't sit. They've got these young kids with all these babies taking up the seats and you've got to try and get back to the back or stand to get a seat. It is not right. Those kids do not pay and when school starts they get on with their book bags and put their book bags on the seat. Then they take their feet and put their feet on the other seat. They won't let you pass, they talk nasty, they pay no attention to you and it is not right.

M1: The lack of courtesy on the part of the drivers. They see you get in and they start and you have to hang on for dear life not to fall down. It has happened to me many times. I say hey man, stop this and let me sit down. Because my arms are a little strong I was able to hold on. These drivers they are not all level-headed.

W3: I find the design of the buses okay, but the only problem is that you have a heck of a time trying to find a seat if the bus driver starts the bus. There's nothing to hold on to. Before, on the old buses, they had those metal posts. What if you can't reach those

straps? I can't reach them. Most of the time the bus drivers do wait for me and I find most of them very courteous. That's my experience and I go every day on the bus. You might find drivers like M1 said that just take off. But, I try to grab a seat in front so I don't have too far to go. There's nothing to hold onto; I don't know if you have ever noticed it.

W4: I was on a fairly new bus a couple of months ago and it was actually like an apartment building where there was actually a step to the next level. What if you're blind or semi-blind like I am, as you all know, and you don't see that step and you come walking off that step and fall flat on your face? There's no way there should be a step in the bus – inside the bus. That was a nice looking bus, but I felt unsafe.

W5: I take the buses every day too and the younger people be sitting in the front. It has the sign on there that the seats in front are for the seniors and the handicap. The handicap people get on and we seniors get on and they just sit and look at you. They won't move or anything. Some of the drivers make them get up and say, "Listen this is for the seniors, you get up and find a seat in the back." Most of the time that's what the problem is.

W6: I've had it all, I guess. Some of the young people did offer me a seat and other times there's a blank expression like, "what is she doing here and why is she standing there or whatever." So, I guess I've had it both ways. The barriers – I repeat what has already been said by the people here that sometimes these buses start launching down the street or avenue without you having the opportunity to be seated. So, you are swinging in the breeze and hopefully you land on a chair or seat. So, that's very troublesome.

W6: One of the things that I found that is very helpful, to speak on the positive side, for me is that I very much appreciate the bus driver speaking the approaching intersections, such as Amherst, Hertel, etc. Sometimes it is flashed over on the top of the bus, sometimes it is not. Sometimes they repeat what you are approaching and sometimes they don't. But, I've had some very wonderful bus drivers who have been so kind as to say that, "I'm running a little ahead of schedule, so I am slowing the bus down to follow the schedule." That's been very helpful.

W6: But, boarding these buses, I was so embarrassed once. I boarded the bus and someone asked me to put these seats together for handicap riders. Another passenger asked me to move up the seat for the handicap so they could board the bus. I would be glad to do it, but I had no clue.

W2: That's the driver's job. That's not your job.

Hess: Many of you told me in the beginning when you were filling out your form that you're not on a bus line here on Linwood Avenue and that you have to walk a couple of blocks in either direction to get the bus. How does that present a problem in actually getting to a bus or bus stop?

W2: It's more like when it snows. We're in trouble. They park on both sides. The snowplow comes and can't get through and when he does, he takes it to the corner and dumps it. Now, you've got to climb over that mountain. If the bus comes, he'll stop right there. Not all of them will pull up and wait for you to get on. Now, when you go up to get the train,



you're in trouble because I fell. The snowplow come by and through all that ice and I had nowhere to walk and I fell. Also, when you get to the four corners, nobody shovels. It's not my job, it is the city. Now the NFTA said it ain't nobody's job. But, you pay your money and you've got to stand in the street or try climbing a snow bank. It's not right.

Hess: The snow is a big problem, what other problems do you face in getting from here to the bus stop?

W4: Weather.

W6: Sidewalks.

W1: Unshoveled sidewalks and then the leaves – when the leaves are wet. All the people that own the property should rake them.

W4: Actually, the greatest barrier to get to the train station is trying to walk across Main Street without getting run over.

Hess: That leads us into our next question. We've been talking about the bus, but W4 just mentioned that you have to cross Main Street to use the MetroRail. What other barriers to exist to using the Metrorail?

W4: Other human beings that completely demoralize you in asking for money and the police allowing these people to stand in front of the subway station begging for money. It costs you and it is not right. You look around and there are police, transit police standing there and they do nothing about it. That's a problem.

W2: At the train station during the winter all four corners are full of ice and you've got to cross Main Street and the cars are going this way and they are not going to stop for you. Then when you get to the train station you can't go down because that is all full of ice. So you have to slip and slide. Once you get in there are all these kids cursing and doing whatever they want to do. You've got to put up with that because they'll knock you down. It's not safe. You don't have nobody there to help you.

M1: The bus and the rail both look alike to me. If I didn't ask a question – I thought I was on the bus when I was on the rail going somewhere. So, I would have been carried out. So, I had to stop short.

W2: To get the rail you have to go down the stairs.

M1: I was above ground and I was downtown.

W2: But you know a train from a bus?

M1: Oh yes? Well, my dear lady they all look alike to me.

W1: Some of the people that have to relieve themselves and go to the bathroom and that can be done at any corner of the station.



W4: When I was looking at the coin box that gave you instructions and it said do you want to go one way, both ways, to this section, to that section? Are you a senior? Sometimes you just push a button and hope for the best and that you get a ticket. Half the time I've seen people put money in there and not have it work. And the elevators don't work. Also, talk to my neighbor across the hall about the escalator.

W7: They are repairing the elevators at the Utica Station. Whenever I go shopping I've got two bags full, so I wasn't able to hang onto the rail. While I was halfway, the escalator stopped because the power was out or something. It happened suddenly and if there wasn't a man right behind me to grab me I would have had a bad accident. That happened just about a couple of weeks ago.

Hess: So, the power went out when you were riding the escalator?

W7: Right. Just for that time that it clicked fast and stopped. I could have fallen.

Hess: So, I've heard a couple of comments about MetroRail in terms of carrying items when you are riding on transit and difficulty in purchasing tickets on the machine. Anyone else want to comment on that?

W5: Something else I wanted to say about the train is that they do not have any restrooms there. Suppose someone has to go to the restroom? They have the bathrooms there, but they aren't for the passengers – the bus drivers use them. Supposing an older person needed to go, what are they going to do? I think they should have a public restroom for the passengers.

W4: Then the transit police would have to have someone there constantly to monitor the place.

W2: You can't use the bathroom because it is just like the elevators. They do their business on the elevators, they pee in them, and they throw up in them. And the elevators don't work 99% of the time.

W1: And say you are at the coin machine and you just had the right change and maybe you didn't take extra money with you and you put the money in and you then don't get your money back. You're not going to go up to a stranger and say, "Can I have some money?" So, when you don't get your coin returned some say call up the NFTA.

W1: Call up the NFTA? Well, that's a big joke. Now, on weekends, you cannot call for a schedule. It used to be great when you could call and say I want the Number 11 Bus and I'm picking it up at Utica Street and I want to go this way. Now I don't know where they are, instead you get this menu with ten things to do this and do that. Then, you think what did I want? It's very poor service. What about out-of-towners? What do they think of Buffalo when they can't get transportation information?

Hess: There are a few people we haven't heard from yet. W8, do you want to tell us anything?

W8: I guess everybody has said pretty much what I had, except for the snow. The city is supposed to keep that clean now, aren't they?

W2: Say you've got to get the bus. You've got to stand in the street with the cars, hoping the bus will stop. Then when the driver lets you out, he lets you out in a snow pile that you can't climb over.

W9: I agree with just about everything that has been said. I don't have anything new to put to it.

W3: I had a bad experience on the Utica Street bus. I had kind of a nasty bus driver. I won't say that for all of them. Most of them I think are really good. There was a big snow bank and he stopped and I was ready to get off and I said, "I can't get off here, sir. Would you please pull up a little bit?" He said, "I don't clean the streets." The people on the bus took my part and said don't you dare get off until he pulls up. He moved up finally and I thanked him. But, how stupid. I would have had to walk on that pile and maybe break my neck. I did take a fall this past winter and broke my wrist.

W10: I've had these problems too.

W2: They left a big pile of snow once and me and this other lady said, "I can't climb that." I said, "Can you pull up a little bit? This is the bus stop." Some of them are pretty nasty. They don't give you time to get off. They take right off. And they don't even want to let it down. The bus lets down for you to get on – the kneeling. They don't even want to be bothered with that. And when they hear the kids curse on the bus, they don't even say anything.

W6: I'm going to play devil's advocate. I'm not making anyone wrong here, but I'm going to be devil's advocate. If I were a bus driver—I'm really offended by lewd or obscene language—I really am. But, if I were the bus driver, this dame wouldn't have her lips sealed. In terms of trying to correct a bus full of adolescent snots, pardon the expression. I would regret having other people exposed to it. But if I were the bus driver, I'm not taking my life in my hands with those kids.

W2: Yes, but you can do like some of them do. They've got their phone and they call the police and let them know they are having trouble and to meet them at so and so and the police meet them. They make the kids get off too. I've seen it happen.

W1: One time I was on the bus and I had to go way to the back. There were some kids fighting and they were pulling knives. I said, "Can I get out of here? I want to go up front." "You're not moving lady." I said they have knives and the driver said so what. On Sycamore.

M1: A man was sitting where I should sit when I got into the bus. But, the driver was pretty rough – telling me to do so and so. Another gentleman sat down and watched me. I said nothing, I just held on. The other man turned to the bus driver and asked the bus driver if he was tired of working and if he was tired of working he should give up his job.

The man said about me that I wasn't doing anything and asked the bus driver, "why couldn't you be polite to him?" The passenger started like that and he couldn't even stop. So, I say there are rough people and there are people who don't like other people to be rough to those that can't help themselves. I appreciated that very much.

W5: I see now that the bus drivers have those little clubs now. They carry something for protection. Sometimes a few bus drivers have been attacked by some of these passengers. They carry clubs in their bags.

Hess: Let's think about the many reasons you would have to ride public transit. I've heard that some of you engage in volunteer activities. You've already mentioned that you take the bus to the doctor's office or for shopping. I'm sure you could also take the bus on your errands or maybe to go to the library – by bus or rail. When you think about all these different reasons you might have to travel, what sort of barriers to using public transit come to mind?

W4: Transferring from one bus to the other. When you have an appointment at 2:00pm and you can pick up your bus at 1:15pm and by the time you get to the next bus stop you've got to wait 40 minutes for the second bus. They don't connect. They never connect where you can get off one and rely on the fact that another one in a short amount of time will be waiting or will be coming along.

W1: I agree with W4 on that. Sometimes I have wanted to go over to Grant Street. I go up to the Elmwood bus by taking the Utica Street bus, only to see the tail end of the Elmwood bus going. Sometimes it is an hour and ten minutes! Where do you go? Where do you sit? Where do you hang out? Or even if the bus driver tries to toot the horn to signal to the other driver – off they go.

W5: I take the buses everyday. On Saturday and Sunday you can forget about it on the weekends. I mean come on – an hour on Sunday and 45 minutes on Saturday. And the train – I didn't know. I was going to church on Sunday and you have to come down and get a regular bus, the Main Street #8 bus, because the train doesn't start running until 10:00am on Sunday. That is very sad. Everybody is complaining about the weekend service. Saturday and Sunday it is terrible.

W6: One thing I would like to say is that weekends are a nuisance – it is really wild. But, I'd like to say one comment about the subway or train stations that I really appreciate and I'm not very much of a highbrow music person. They are doing this experiment and playing this music. And I know the kids don't like it, but I don't give a hoot. I think the music seems to me to be soothing. It just seems to me to be a more pleasant atmosphere.

W6: But, these elevators with the train system are wild. Many of them are out of order or they are being repaired. It really presents a problem for those people that cannot climb stairs.

Hess: W4 brought up a comment about bus-to-bus transfer when you need to get somewhere far. When you need to go to further places in our metro area, what about the actual connectivity of the bus or the destinations? Is the bus going to the destinations that

you want to get to and is it going near enough to the door of the places you need to go?

W1: Yes, if you can make connections. I wanted to go to dinner at Annunciation Church. I took the West Utica and I got off at West Ferry and Grant. I waited an hour and ten minutes. I said oh dear God let me see someone I know that can take me up from the bus stop. An hour and ten minutes sometimes on Sunday—that's crazy.

W6: Southtowns forget it. Blasdell, Eden, Hamburg – forget it. You are out on a limb. Service is not available.

W4: What always confused me are the zones. If you are in Buffalo and you want to go out to Sheridan Drive and you cross over Kenmore Avenue you have to pay another 20 or 25 cents. Then once you get past Sheridan Drive you have to pay some more. It is very confusing – all the different fares, especially if you are new.

W6: I've found that that is true. I like to know what is expected of me before I show up at the bus, so I feel calmer internally. What's the fare? What are the guidelines?

Hess: So, you like to plan the trip in your mind ahead of time?

W6: Yes.

W1: When you get off you pay the additional zone fare, but if you are coming back the other way you may be paying \$1.60 coming from Tonawanda or Lancaster. You have to be sure to have that much change. You might have a bus card for Zone 1, but you have to pay for each of the additional zones. Coming back you have to pay the full amount right in the beginning.

W5: (showing bus pass and picture ID) Let me show you something. You get this and some people put money with this. It is 65 cents. But, I am blessed with the volunteer service I am with. Just with our bus passes, this is a half-fare all-zone pass. You can go to Galleria Mall, Niagara Falls anywhere and you don't have to put anything in. Williamsville. You just show your picture and you have to slide that through and you don't have to pay.

W5: But then some people don't have this (volunteer card) and they show their picture and I think they put 65 cents in.

Hess: But, you said you got the other card because you're a volunteer.

W5: Yes.

W6: You're earning that. You deserve that as a volunteer.

W3: I've got a question. I have the complementary senior card. Why do I pay 15 cents for transfers? A man told me all he uses is his Medicare card and he don't pay for transfers. Why is that? Good question isn't it?

W3: Because I've got a Medicare card too, but I prefer showing this one (the complementary senior card) because it shows my picture.

Hess: My next question is about information about public transit. You've already mentioned that most of you telephone the NFTA to get information. Telephoning on the weekends is difficult, but what other barriers do you have to actually getting information about buses and trains and service?

W1: I'm sick of talking to a machine. There's no live body to answer your question. Now if you want to say your bus route, where you are loading and where you are disembarking and then if you still have a question you are at a loss because you've got nobody. You have a menu of ten or eleven things to listen to.

W4: It is the same whether you want to go to the doctor or get movie tickets. This is modernization.

W6: I'd like to respond to that and share my experience with that. I'm really quite impatient at times, most of the time actually. I go through this spiel with this automated stuff and there is a customer service person that I speak with. I ask the customer service person their name because I am asking a question about connecting buses or whatever. Or when is the departure. I press zero for customer service or something and so I talk with an actual individual.

Hess: Is it more helpful to talk to a person than a machine.

W6: Yes. There's no interaction with a machine. It is either yes or no.

W1: I'm hearing impaired and you try to press the special number and they don't help you.

Hess: What about picking up the schedules and maps? Are you able to read those and understand those?

All: Yes.

Hess: What about information in the metro rail stations or on a bus? Such as the next station coming. Are you able to hear and understand the information?

W1: Half the buses don't have schedules because someone grabs ten for their friend. There are hardly any bus schedules in the station or on the bus. And you are not going to trot down to Metro Rail to get them.

W6: I like to let my fingers do the walking. In other words, if I am downtown I will stop. Otherwise I call and ask them and they will send three bus schedules at a time in the mail. That's been my experience.

W6: The second thing I would like to share and maybe everyone knows this. But, once I started using public transportation this other friend who has always used public

transportation told me about the road map. The NFTA has a map and that has saved me a lot of angst about where do I go or how do I get there or what is this? That was helpful. But, only because I knew somebody who has been there and done that. I had no idea.

Hess: You've all mentioned the telephone as a way to get information on the buses or the trains. Does anyone use the internet to get information?

All: No.

Hess: We are getting more or less to the end, so I want you think of any more comments you want to tell. Now is the time to let us know what are your barriers to using public transit or things that make it difficult for older adults to use public transit.

W2: I just want them to do something about the snow because you've got a lot of old people trying to cross these streets. On the corner at the Rent-a-Center I asked the man and he said that it was not his job to shovel. Across the street at Burger King, forget it. Then you've got the station (Utica) and they don't do that. Then you've got the corner store. It is nobody's responsibility, but you have to cross the street. It ain't right. The way that corner is made, the cars come this way and you are trying to cross. Forget it – they'll get you.

W3: Last year I saw a group of men on Utica Street with shovels doing it on their own. Not workers, just people walking down the street and I said three cheers for them. They were doing the bus stops and that's where the problem is. It just piles right up. There are some good people out there.

W1: Okay, I'm crossing at Utica because I wanted to get over to go to church and it was icy. The bus started up and another car spun around and hit the ice patch. I got it mildly on the backside, but I was afraid after that. The bus driver could have stopped. The car had no control and she did a spin. You are taking your own life in your hands.

Hess: As we are coming to the end here why don't I give everyone a chance to make a final thought or statement. You can even reiterate something that has already been said. Please mention one or two key issues to us or what you think we could change to make public transit easier for older adults. I think we just took care of W2 and W1 to get us started. But, I would like to give everyone else a chance to make a final statement about what you would like us to know.

M1: I can't think of anything else.

W1: The synopsis is bring back the buses that you could sit down when you got on and fix the elevators because a lot of us cannot walk down those stairs.

W8: No comment.

W3: I kind of surmise the whole thing, what everyone says is true. I agree with her a whole lot what she says about the snow. But, I don't think it is the bus drivers really. They are trying to do the best they can. It is the people they've got to put up with. Some people,



even older ones are very, very rude. This is one experience I had a short time ago and I just shared this. She was a black, young bus driver. I got on and I sat up front. This older lady came on, she had a problem. I was trying to move over so she could sit in my seat. She had one of these push carts that fold up. She went over my foot with it. And I just says oops. I wasn't paying attention; I could have moved my foot. The bus driver was very concerned about me. I thought that was so nice of her. She asked me if I was okay. I told her that I was fine. This lady, she didn't even apologize to me or anything, but I wasn't thinking about it. When she got off, the bus driver said to me that that lady was very rude and asked me if I was okay. I said thank you for being so courteous.

W5: I do hope that we will get better service on the weekends. About the train, I wish it would start running earlier than 10:00am on Sunday. About the snow at the bus stops, they are passing the buck. The city says it is the bus company's place to keep the bus stop shoveled. The bus company has said and it has been on TV that it is the job of the city. People have been complaining, they were on the news and they were all standing in the street. They couldn't stand on the sidewalk until the bus came. They were all complaining and saying that if a car came by it could hit all of them. But, where were they going to stand? So, I think everybody should be concerned, the city and the bus company. Whoever is in charge should do something about it.

W7: I want to say that I love the rail. I prefer that to get downtown than a bus. I've never driven a car, so I'm grateful for this for all my life – taking the bus and the street car which was three cents then. In four years that I walked to Hutchinson High School, which took me a long way, longer than I had ever been before, I took the street car and walked every day.

W6: I would like to hitchhike on another thing – about weather conditions. We've talked about snow, but one of my nuisances is rain. I don't know about swimming the English Channel, but often right at those curbs, I don't know how to get around.

My other thought or question is what is the possibility in the middle of the day, especially with having these great big buses that are half empty, of having smaller buses and going more frequently? I don't know – it seems to me that it might work, but I'm not sure.

Lastly, there are some bus drivers that are very kind, very concerned and very caring. Then there are some others.

W4: For what it is worth, my father was a bus driver. My stepfather was a bus driver. Believe it or not, everything that has been said today, I have heard as a child all my life. Now that I am older I am exactly involved in the same thing. But, I can always remember my father talking about schedule, schedule, schedule. You had to meet the schedule and if you didn't meet the schedule and you didn't get from point A to point B, you were called on the carpet. If you laid hands on a child because he did something wrong you could lose your job. I heard about these things all my life.

I happened to think of something when we were talking and one of the most scary things is when I went downtown to see Chicago. I was downstairs in the subway and I was

all alone. These young whipper snappers got on and looked me over and I looked at them. Then I tried to look away, so there would be no eye contact. But, there was hair raised off the back of my head I was scared. I was scared. I had visions. The television probably did it, but I had visions of lying in the rails and getting run over by the subway and stuff like that. My purse was there, so you know the fear factor at this day and age with the kids of today not showing any respect to adults or anything anymore.

W8: You never see a security guard.

W2: It is dangerous during the daytime when you go down there and you are the only one there. Then all them kids come down and it is dark down there.

W9: I just want to comment about the snow. They do need to do something about the bus stops and keep them clear so people can get on and off safely. They really need to do something about that whoever is responsible. It is really important because you can't climb over snow banks to get on the bus. Someone is definitely going to fall if it is not clear to get on there. If they can't do every corner, do the corners where the buses stop.

W10: I've been using the public transportation since I was fourteen years old and I'm now ninety years old now. I've been through all kinds of the same problems that they have been voicing. They've voiced their opinions and they are right.

Hess: Good, I think we are just about done. Any final comments?

W6: I propose two buses - one bus for senior citizens and one bus for the other groups. The teenagers in school go on another bus.

W3: One more thing that nobody mentioned. I think they should clean out those bus stations where people sit. They are loaded with garbage. There should be a garbage can near every single bus stop. Downtown is really bad.

W8: The seats on the buses and the floors too.

Hess: Okay, I'm going to visit each one of you and give you a thank-you note from our research team. It has my contact information, so if you have any questions about this project or the focus group today you know how to reach me.



**BARRIERS TO USING FIXED-ROUTE TRANSIT FOR OLDER ADULTS  
FOCUS GROUP INTERVIEW****BERRYESSA SENIOR CENTER  
SAN JOSÉ, CA****AUGUST 18, 2005****TRANSCRIPT**

Peck: I want to welcome you. The first thing I would like to do is I would just like to make sure that I know who you are. So starting with the lovely young lady on my left, I'd just like for you to tell me your name and where you are from.

W1: OK, W1 \_\_\_\_.

Peck: First names are fine, I don't even need to know your last name.

W1: OK, W1.

Peck: Hi, W1.

W1: Hi, San Jose.

Peck: San Jose.

M1: My name is M1, I'm from San Jose.

Peck: Hi M1, Welcome.

W2: I'm W2, and I'm from right here in Berryessa, San Jose.

Peck: Oh. Welcome, W2.

M2: I'm M2 or M2 and I'm from this area of San Jose.

Peck: What do you prefer, M2 or M2?

M2: Either way, M2. They call me M2 here but it goes either way.

Peck: OK. And I noticed that M2 is a big jazz fan, I was at the jazz festival too, it was fabulous.

M2: In fact I took light rail for three days there.

Peck: All right. Wonderful.

W3: My name is W3, I live in San Jose.

Peck: W3?

W3: W3.

Peck: W3?

W3: Yeah.

Peck: Welcome.

W4: And I'm W4, from Berryessa also.

W5: W5 from Berryessa.

M3: M3 from Berryessa.

M4: M4 from Berryessa.

Peck: And M4. So let's see if I got this right. M4, M3, W5, W4, W3?

W3: M-hm.

Peck: M2 or M2, W2, M1 and W1. Welcome. What I would like to know is your thoughts about public transit. Fixed route transit. What do you think about it?

M1: It's a pain in the neck. (Laughter)

W3: No!

Peck: It's a pain in the neck.

M1: I mean, compared to a car, you get in a car and go. You can't do that with fixed route transportation. You have to go down there and wait and it makes all these stops before it gets to your stop, so that's what I'm saying. It's a pain in the neck.

Peck: A pain in the neck. (Laughter) By the way, you have blank paper and pens if at any point you want to make notes or you have a thought and you don't want to forget it, you can write it down. Yes?

W2: Well, I like the idea of being able to use public transportation when I'm older, when I'm no longer able to drive. But I was thinking what I might want to do is go down to the Center for Performing Arts and see a concert, and if I take the light rail I'll get there, but when I come home, it's dark, and getting from my home, getting from the light rail or the bus to my home at night, I would be kind of afraid to walk in the neighborhood. You know, not that we have a real dangerous neighborhood but it's, uh it's just the idea. So I had that thought about it.

Peck: OK. Yes M2?

M2: Mmm. I love the light rail. I ride it all the time downtown. I volunteer for all the concerts. I'm doing the tapestry last week, and I did the jazz, the grand prix. People who don't take light rail downtown are fools. I was talking to a friend of mine. He says "How'd you get here" I says, "I took light rail. I got here in forty minutes, it takes a little while but it beats driving." He says, "I prefer to drive my car and pay thirty bucks to park and walk a mile." I said, "Hey, that's your choice. I get on light rail, \$2.25 for a day pass." I said, "I take it all the time." My complaints with light rail is, I've had a couple of instances, a friend of mine, we go to Mountain View quite a bit to eat lunch there. It's a really great, we take the train right to downtown light rail. We caught a late train coming home one night and at the Great Mall some young kids got on the light rail, and they were a mixture, I don't want to use any racial terms, but they were a mixture of East Side kids. And as soon as they get on the light rail, my friend \_\_\_\_ and I were there, they start using this really foul language that I'm used to because I grew up on the streets. And, uh, every other word was a f-word, m-f-word, they were talking amongst themselves. One kid thought he was a monkey and he got up on the bars, you know, in the light rail

Peck: M-hm.

M2: They have you know when there's a crowd of people, you know the transit, and he starts swinging up on there and I told him, I says, "You know" I says, "Those bars aren't for monkey bars" I said, "You know, they are for people," and he looked at me and he said something to me, and I was going to say something to my friend, and I just told him to keep my mouth quiet, you know, and when we got off the train here at Hoss Center, she said that unless they improved things, she did, she would not ride at night again. Because at some of the stations you do have a station agent that comes on frequently.

Peck: M-hm.

M2: But it's generally to ask for your ticket. But at nighttime, like this lady says, there's a lot of kids that get on the light rail, especially at the Great Mall, and come to the East Side, and as soon as they get on there, they run up and down the light rail. And they don't care who's on the light rail, if you're a senior citizen or young, now they won't mess with young people, but if you're a senior citizen and you say something to them, they just tell you to go f-off.

Woman: Mmm.

M2: And it's very embarrassing and a lot of people around here will not ride that light rail at night and I don't blame them. And, that's my biggest complaint. I, you know, I can take care of myself, but, for elderly people it's very dangerous.

Peck: M-hm.

M2: And these street kids are very violent kids. And the other day, I was at the jazz festival, and already some of the trains have already got the graffiti on them. The gang signs are already on some of the seats. And it's really a shame, because light rail, I mean,

to me it's great, I love light rail. Light rail. I go downtown all the time, I know the routes. Uh, the only complaint is yesterday, public transportation is, I had my car in the shop and I was coming to the center, and I was taking the 45, I don't know if you're familiar, and it took me forty-five minutes at the bus station before it arrived. I could have walked here. There was three people there with me, senior citizens, and they said, "What time does this bus get here?" I says, "I don't know" I says "but it should be here pretty soon." Finally it arrived, and I told the bus driver, and he says "Well" he says, "my route consists of the 45, and it goes here and then it goes to into the \_\_\_\_ Valley." And I says, "well, thank god I didn't have an emergency appointment because I couldn't, I could have driven."

Peck: Mmmm.

M2: But after, the biggest complaint, two other people waiting for the bus, he said, "well, hey, I'm going to go back home and get my car. I can get to the doctor's quicker than the bus." And some of the bus drivers, I've had the experience that, uh, you ask them a question and they're very arrogant. They say, "Read the schedule." Some of the people, you know, you just ask them a simple question like how often do you run, and some of the drivers are very arrogant. I had incidents with the drivers, I said "Well, am I on the right bus line?" I'm taking the 47, and they say, "well, don't you know how to read?" I says, "Yeah" I says "I'm just asking a simple question." And that's the reason why a lot of people don't take public transportation.

Woman: Mmm.

M2: Because the drivers are rude, most of them, most of them, I mean there's a few of them that are very rude. Most of them are OK. But I ride public transportation all the time, I take it downtown, but I call up VTA and complain about this stuff.

Peck: M-hm.

M2: One time I was going to a festival downtown and a gentleman was there, and at the Great Mall, where they have the transit station, the bus driver, he pulled up the 71 and this guy had been waiting for him, and he asked the bus driver, "Is it OK to get on the bus?" and the bus driver says "I'm going to McDonald's to grab a hamburger. I'll be back in 25 minutes so wait." And the guy goes, "Hey I just asked the guy a simple question." And he got very arrogant because it was his break time. And the guys says, "I'll never take the bus again or the light rail." So that's my complaint. Other than that, I really enjoy light rail. I love it.

Peck: You brought up some wonderful points, points about how soon the buses get there, what occurs on light rail, the experiences with the drivers. I want to thank you for sharing and I hope you'll speak up some more, but I want to also make sure that we hear from some other people in the room, so so thank you.

M2: OK.

Peck: Anyone

else?

W3: Yes, I have something to share with you, what happened with me. I have my sister-in-law visiting me from Italy.

Peck: M-hm.

W3: So we went to San Francisco, I went to get the train in Santa Clara, and we went to San Francisco where my son pick me up. So it's coming back in the night, it's a little bit late, I get out of Santa Clara. It's been convenient because when I was working in University, I used the bus a lot. I take the 22, go to the Alameda, 62 takes me one block to my house in Sierra. They took it out. (Sounds of agreement from others). So I came to San Francisco, and take the 22 thinking there was still 62. No! Then, I take 62, they take me to the Depot, in Capitol. It was 9:30 at night. I paid the bus two times, and say, "What happened, they are no longer going to Sierra?" They say "No, you have to wait for the 45." We went to look at the schedule for the 45, and it was 45 minutes to the Depot here.

Peck: M-hm

W3: I said to the bus driver, "I live in Berryessa between Sierra and Capitol, so how I can go?" Because for me, Sierra, it was there one block from the 62, now no more. Then, so the bus driver says to me, "Well, I'm sorry, there's nothing I can do." I said to my sister-in-law, "What should we do? We need to go to start walking, it will take 45 minutes to go home. This bus driver was very nice, if I do say, he was very nice with us. I say, "I can give you twenty dollars if you change me I pay you another." He say, "No we not change. Go in the bus with me, it's OK." They leave me over there in the gas station USA in Berryessa, Sie- in Capitol. We get there over the ten o'clock at night, me and my sister-in-law, we need to walk home. It was not too bad, it was fifteen or twenty minutes. But the convenience for having the bus to the Alameda to Sierra for me was very, very good because I used it so many times when I worked at university Santa Clara. Now they take it out. They moved it. Now you need to go to the Depot, take another bus to go to Sierra. I think this is ridiculous.

Peck: It sounds like what you're saying is that they got rid of one of the buses

W3: Right.

Peck: That was very convenient for you.

W3: For a lot of people.

Peck: A lot of people.

W3: Because a little bit between Morello and Capitol, the bus would just stop over there at Sierra and for me I would just cross the line over there. Now I'm having nothing.

Peck: Thank you. Yes?

M4: I was basically going to bring up the same point that she's, that she's uh, um just brought up. I flew out of San Jose one time. And it was going to be a short flight,

overnight or something I don't remember exactly what. So I had a small carry on. So I decided, well, rather than take a taxi to the airport, I would take the light rail, I mean public transportation.

A Participant: The bus.

M4: So I walked down. I live off of, well you're not familiar with this area so it's hard for me to explain. Well, anyway, I don't live too far from catching the bus. Maybe five, ten minutes walk. So I walked up, caught the bus, 62, took me right down to the Metro station, Metro, I got bus to take me to the other station where there's a uh, uh, a bus that picks you up on takes you right to the airport.

Peck: M-hm.

M4: So it's real convenient. Real convenient. The shuttle bus. Real convenient. I think within forty minutes I was at the airport, and it costs me forty cents. (sounds of agreement) Which was really great. Coming back was a whole different story. (sounds of agreement) I won't get into that woman. But the point I'm trying to make is, they've eliminated that 62 bus.

Peck: M-hm.

M4: All right? So now I have to walk down to the same area, the basic area where I caught the bus. I'm catching the 45 I guess it is, and that takes me to the light rail station.

W3: M-hm.

M4: The terminal or whatever you want to call it, there on Capitol Ave.

W3: M-hm.

M4: From there now I have to take the light rail, that takes me who knows where and then from there, I have to take, you see how I'm saying?

Peck: M-hm.

M4: It becomes very confusing. Plus, it increases the cost, unless I get a day pass, which is \$2.25. One time, it was, whatever it was, forty cents, to go from here to the airport, because the rest of them are all free, the shuttle bus is free, the metro was free. So, people who can't afford, let's just say, people who can't afford to be transferring and, you know, getting that day passes and what have you, are not going to opt to do so.

Peck: M-hm

M4: That was my one thing in conjunction with what she had to say about that, they just eliminated that bus and I don't understand why. 'Cuz everything goes to the depot now, goes to the light rail depot, drops everybody off, where you transfer to another bus or grab the light rail and then proceed.

Peck: M-hm.

M4: Which is a big waste of time, because you've got to go down there, sit there and wait, like you said, what, like forty, forty-five minutes to catch something else and then you're, and then that forty minute trip now, turns into being over an hour trip down to the airport, OK? So that's just one incident that I can relate to.

Peck: M-hm.

W2: Which light rail depot are you talking about?

M4: The one on Capitol Ave.

W2: Oh.

M4: The one on Capitol and, what is it, Gladstone? What's that street?

W5: I don't know, but it's where the old Payless store used to be on Capitol.

W3: Gladstone. Gladstone.

M4: Where the uh, where the...

W5: Where you catch the expressway, right there the terminal.

M1: Yeah.

M4: Yeah. Actually I don't know...

W2: So it's practically the end of the line then.

M4: No, you know, you know, you know where the school district is there?

Peck: Right.

M4: The high school district is right there?

W3: Yeah.

M2: That's uh, uh, that's Penetencia.

M4: On Capitol Ave.

M2: That's Penetencia.

M4: That's Penetencia?

M2: Yeah, that's the one.



M4: OK.

M2: That's Penetencia.

M4: So that's the, it's one street over from Penetencia. But that's where you get, that's where the terminal is now.

(Woman makes sound of agreement)

M4: All the buses go there, they all meet there and then from there, they're dispersed to who knows where.

Peck: So you're often going to the terminal to get somewhere else.

M4: Right.

Peck: Rather than going a direct route.

M4: Going direct, exactly.

Peck: Before we get back to M2, I just want to know are there other people who have experiences or opinions about fixed route, about buses or trains that you want to share? Maybe people who, if you haven't been on it, to why you don't take public transit?

W3: Because it's more convenient, take the car and go. (laughter)

Peck: OK.

W4: I have a car and I can drive, so far, so I uh, just feel it's easier to get from here to there than go walk to the bus station or I don't even know where the bus station is, I know where uh, the, the terminal or whatever you call it, and I uh, I just go by my car.

Peck: M-hm.

W4: And everywhere I go, it's closer by me, I don't have to take any other transport, transportation.

M4: It takes, it takes, generally speaking, it takes twice as long to go anywhere with the... VTA, whether it be buses or light rail, whatever then it would be to drive.

Peck: So, in other words...

M4: I know we're trying to get people out of our cars and, for many reasons, to take VTA public transit, but uh, if time is an element than what do you do in a case like that? To go from my house to Kaiser, off the Lawrence Expressway, the new Kaiser there, I had to go there last week, I would have no clue as to how to get there. It may take me two hours to get there.

Peck: M-hm.

M4: If it was possible to get there.

Peck: That makes sense. Please.

W1: Just to get downtown from Capitol, you've got to go all the way into Milpitas and all the way around, and down First Street and there, when you can just go a straight shot down.

Peck: So what you're saying is in your car, it's a straight shot?

W1: Yeah. Right.

Peck: But it's very circuitous in public transit.

W1: But parking, to pay parking is astronomical. (Woman M-hm's in agreement) It's not as bad as San Francisco, but you know, but like if you want to go like during the weekend of course you don't pay for the parking downtown during the weekends. But during the week you could get it.

Peck: M-hm, just to get it, M1, would you like to add something?

M1: Well, I have a little thing, a little two cents. It seems to me that, you have this, there's something secure about having a car, rather than light rail or buses. I mean, when you pay a bus or a light rail, you don't know what time it's going to get there, what time it's going to get there, what time you're going to get home, but with a car you have the security of just jumping in the car and, and going.

Peck: I haven't forgotten about you M2.

M2: Laughs.

Peck: I just want to check over here with M3 and W5 and see if there is anything they want to add and then we'll get back to M2.

W5: It's easier to go to a doctor from this side of town in a car, our doctors are in Santa Clara and Sunnyvale, so we wouldn't know how to get there.

Peck: M-hm. Yeah. Knowing how to get there on public transit is something you don't necessarily know, particularly going to a different community.

(Others make sounds of agreement amongst each other.)

Peck: A different neighborhood or city. Anything you want to add M3?

M3: I don't use public transportation, uh, I think, I haven't found the need for it, except

for a couple of years ago, I took the bus on Memorial Day. I wanted to go for the parade downtown and I took the bus and it took me from here to downtown it took me about an hour. And I thought this is my first and probably my last. Because I could have walked down there in that time. It stopped, you know, it stopped at every street, and then there was a lay over, a ten-fifteen minute layover. I thought, you know, I missed the uh, the people, the parachuters coming down. I missed all the good things, and I left an hour early thinking well, that should be enough time. It wasn't. I should have taken the ten o'clock bus to get there at twelve o'clock in order to be able to do what I wanted to do. So I don't much use it much and firstly, and secondly, I don't know where the light rail goes. I've never taken light rail and I, I'd love to take my camera along and go to see, all the ride, and see where the thing goes. I have no idea where it goes or where it originates or where it ends.

Peck: I promised that I was going to get back to M2.

M4: Go ahead, M2.

M2: Oh, I was just going to say, I love light rail. I mean, it, I, it takes a little while to get familiar, but I mean most of us are retired and we got all the time in the world to get someplace. I mean like, for me, I just make arrangements, like when I go downtown, I pay to take the light rail, unless it breaks down, I'm going to be downtown in forty minutes, and you get on the light rail and you take a book or, and, you know, you're there. You don't have to worry about the stops you don't have to worry about parking downtown, or getting ripped off, or the garage. Like I'm going down there this week, and I'm going to \_\_\_ for three days, I'll get on the light rail, I'll take a lunch bag, and you don't worry about parking. I know on weekends it's free, but during the week it's a hassle to park. That's the hard part. For me, I'm retired. I got all the time in the world to get there. I mean, I understand for doctor's appointments. Things that I have to be there specifically at a time, I take my car. But when I got all the time in the world me and a friend, we might, we take light rail from here to Oakridge, we go to Elmo Park, you have to pay a fee to get in, it's great. But that's me. I mean, I enjoy, I grew up on the buses in Arizona, we never had a car. So I'm used to using a token and light rail is great to me. What I want to say is, back in June, when they opened up the new lines, the Elmo Park line, that's when they changed all these bus schedules. Like for me, I used to be able to grab the 71 and go places. But now, like they said, they made all the transfers at Vix, the Great Mall where all the buses get there, at Penetencia, and the bus driver told me, he says they thought that was the best way to do it, but it caused a lot of confusion because it killed a lot of lines, the 62 was killed; the 71.

(Man makes sound of agreement.)

M2: But it just takes a little while, you just got to be patient. Like yesterday, I stood at Crawford and Messina for forty-five minutes waiting for the 45. I could have walked to the Center. Two people said, I'm going back home to get my car. But, I just, you know, you just have to be patient.

W3: Yeah, but what happens is like if you're a woman coming from Santa Clara, for me it was a convenience, the 62.

M2: I know.

W3: But then, my kids would get the car, and I would take to work the bus. Take the 62, walk a block to my house, to the Alameda 22, in front of the Santa Clara. Now it's not there. Good thing I'm not working there anymore over there. But now, see, I need to take the bus. I need to go on Berryessa, all the way to Capitol, take the 62, so I want to go to the Alameda to go to Santa Clara. Because all the lines are over there. So it's very inconvenient for me. Now I drive. But eventually, everybody, we need to stop driving. What will happen? I live alone, so I don't want to call a friend and say, oh come pick me up or go. No, I say no. We depend on the public transportation, but it's not convenient.

Peck: It's not convenient.

W3: No.

Peck: It sounds like one of the big barriers that we're, I'm hearing is it's inconvenient.

W3: Yeah.

M4: What I don't understand is, that there was a study done, that they paid a lot of money to have the study done for the VTA, light rail was put in, in the proposed routes that the light rail takes, why didn't they run buses down there first? To see, with the population, how long it's going to be, to see what stops they possibly could have or should have going down. That's the thing that I didn't quite understand.

Peck: Hm.

M4: Run the buses down which are a little bit more convenient, if you will, rather than a fixed rail, OK. Run the buses down through a group and then say, OK, we need to go here, here, here, here. You know, does it make sense to put a fixed rail down this route, does it make any sense for the light rail to...Because the light rail is empty, as far as I'm concerned.

(Sounds of agreement.)

M4: There's very few people using the light rail. I mean, you see it go by and it's pretty much empty.

Peck: I see people nodding.

W3: It's empty.

M4: It's basically empty. You have to go down and actually watch.

M3: It was built for twenty-five years in the future.

M4: And...I was going to mention that. I'm from the east coast. Every light rail type system that was developed on the east coast is gone. They called them trolleys back then.

Peck: M-hm.

M4: Street cars. They're all gone. Why are they gone? Because they're inconvenient, they took too long, they don't go to the right places because they're fixed, you see what I'm saying? They make a lot of problems and I'll tell you one problem. In San Francisco, if you're on the light rail or a fixed rail system like that, when they come to a red light they stop. Here, they have the right of way, I mean lights change for them automatically. So they just go through. So, what happens is cars coming from the other direction have to go through maybe two or three changes of lights before it's their turn to go. It makes it very, very hard. How do I put this nicely? The uh, temperament of the people becomes very, very high, waiting, waiting and waiting and watching these light rails go through.

Peck: Ah. I see.

(Woman makes sound of agreement.)

M4: See what I'm saying?

Peck: So those empty light rails, people driving are frustrated because the light rail is empty.

M4: The light rail is empty. I mean, they're waiting at the light, you see these light rails going through, getting the right of way and they're empty, and they have to stand through maybe two or three changes of lights.

W3: Yeah.

M4: And that happens all the time. On the corner of Berryessa and Capitol Ave that's more frequent than not.

Peck: So then, let me ask, why do you think light rail is empty? What do you think prevents people, let me say older adults, from getting on the light rail?

M4: Inconvenient. Inconvenient.

W3: Convenience. That's it.

Peck: Are there other barriers to getting on to light rail?

W2: Well, I took a, a bus one time, and then when I was coming back from where I had gone there was a man who was drunk who had gotten on the bus and I guess he could get on the light rail too. You know, I just, if you're going alone, I think, I was frightened, you know?

W3: M-hm.

W2: I sat up close to the bus driver, but he was trying to talk to me, you know, and there

was no one else on the bus, you know, just the two of us. And, so I guess that frightening idea just kind of turned me off. Because I hadn't ridden the bus in a long time. I said, I'm going to try this, I'm going to go down to Tapestry and Town and I'm going to see it, and I'm going to come home.

Peck: M-hm.

W2: So that was my experience.

Peck: M-hm.

M4: I'm like M2, I personally like riding light rail. I've ridden it a number of times. I do volunteer work at the airport, I'm an airport volunteer.

Peck: Oh!

M4: So um, I've ridden the light rail a number of times. I like it. It's clean, it's convenient, it's nice and quiet, you know, you get a good view of what's going on. But it's inconvenient as far as getting to and from, you know what I mean.

Man: I do.

M4: If I want to go, like someone said, if I want to go downtown it takes forever and a day to get there on light rail.

M1: I think part of the problem is, we're so used to just jumping in our cars

(giggles)

M1: and taking off and getting to where we're going, and the light rail, you know, wait, you know it comes and it's got stops and it doesn't stop where you want to be. And you got to walk three or four blocks anyway to get to where you want to be. And it's inconvenient.

Peck: It is inconvenient. I'm hearing what you're saying, and what M2 is saying, it's partly about your attitude. We've gotten used to it being so convenient.

M1: Right.

Peck: Is some of this about our expectations when it comes to transportation?

M1: We're spoiled, yeah.

M4: Yeah

Peck: We're spoiled.

M1: We're spoiled.

Laughter.

M2: Well, the way I look at it, me personally, I mean I can drive right now, but in a few years, no, I may not be able to pass the driving test, I may not be able to get a drivers license, which could be near in the future. My eyes are bad, and to get around, even to the market, I better know how to get there on the bus. And that's what I'm doing right now. Right now, I can get to just about any place. And believe me, some of these people say the light rail's empty, you check the light rail going up to Mountain View, some of the people who are working up there, the bus I caught, or the light rail I caught the other day was packed. Man, it was standing room only. And when they have those festivals downtown, people say like when they had the Grand Prix, they had a letter written to the Mercury News about how people were so thrilled to get from Blossom Valley to downtown on light rail because light rail ran extra buses. They had problems of course, of course they're going to have problems, but it was so much more convenient to come from the \_\_\_\_ Valley...

Peck: M-hm,.

M2: To see the races on the light rail, then have to worry about, then have to pay thirty dollars to park, which is what they were charging. I mean, the light rail was packed. You get a festival downtown...

(Sounds of agreement in background.)

M2: Downtown right now has got a lot of activities, and you tell me you want to drive down there? I mean, if you got to walk four blocks, that's exercise. My God, I mean, you know, you get....

M4: So, how often M2? That's once a year.

M2: No, no, no, they're, they're...

M4: I'm saying, the races, that's once a year.

M2: Hey, there's festivals downtown.

M4: I agree.

M2: I'm not saying just the festivals. I'm saying you just want to go downtown; there are a lot of things going on downtown. Me personally, I'll pay \$2.25 for a day pass over fifteen dollars to park.

(Woman makes sound of agreement.)

M2: And those light rails going to Mountain View, those trains are packed some days. I don't know if it's paying off or not, but I think light rail. I'm looking at the future for me. Five years from now, I may not be able to have a driver's license; I may not have, you know, I don't want to be put on outreach. I'm gonna have to learn to get around on public transportation, that's what I'm doing right now. That's convenient for me.



Peck: Preparing for the future when you may not be able to drive to a car. What are some of the things that might incentivize or motivate others of you to take buses or light rail? What are some of the things that might help encourage you to do that?

(Murmurs of confusion or thought.)

W3: I took a lot of buses before. Because I was at University every day, and all summer, my kids were at home, no college, and for me, 62, walk half a block to my house, in thirty minutes I was at work. In the night, say it was late, sometimes I work until late, coming to Santa Clara to the Alameda, 62, over there, half a block to my house. Now, no chance. For me, for my house, where I live, I don't live close to the bus now.

W2: Well, it would encourage me to take the light rail or the bus, if it were easier to get from my house to the light rail, and if I had some place to go on the light rail. Because there may be functions downtown, but when you get there most of the time, if you're thinking about going downtown, there's not really a lot going on downtown. I mean, even just to go down to the art museum or something and to come back, you know it's far from the light rail or the bus to my house. So I don't know how you can solve that problem. I mean, I can walk but my husband has trouble with his feet. So if we try to go together, he can only walk a couple blocks and then his feet hurt, he has this neuropathy in his feet. So, you see, if there were a way to get from your home to the, to the bus or the light rail.

Peck: M-hm.

W2: If you're older.

W5: Well, they have parking lots at some of those spots where the light rail stops.

W3: Yeah, m-hm.

W1: Well, that's true.

W5: \_\_\_\_\_ to get you parked there.

W4: But if you cannot drive, you cannot get there.

W3: But what is this \_\_\_\_? How can she not drive?

W4: If you cannot drive.

M4: Now that's what I have to do, say if I want to go to the airport. I drive my car to the light rail parking area, park my car there, and then catch the light rail, that's what, I do that.

W2: Is it safe to leave your car there?

W3: Yes.

M2: M-hm.

M4: It's fairly safe. I mean, I wouldn't...

W2: Oh! Then that's a good idea. (Laughs, another woman laughs too.)

M4: Yeah. You drive right down there. But, you know, but then again, you're in your car and the object of light rail and public transportation is you're out of your car.

Peck: So, one option is driving to a light rail stop.

W2: Yeah. That's a good idea.

Peck: Or potentially a bus stop and then using public transit.

M4: Right. Taking public transit from there.

M2: You know, talking about the airport, I go to Arizona quite a bit, and my only complaint about the light rail is that I'm real close to the \_\_\_\_ Center station. I can get to the Health Center, take light rail, metro, and in an hour I'm at the airport take me right to the airport, Southwest or whatever I'm flying. My only complaint is that is that there's only very few stations, you know at the light rail station, where they allow you to park your car for more than three days. You have to make arrangements if you're gonna be, like if you go on vacation or something, you're gonna be gone for four or five days, and that's the only complaint. I wish they would makes something like, like at the \_\_\_\_ Center station, where you could leave your car there and get some sort of a pass that you're gonna be gone. There's only two or three stations here that I know of where you can actually leave your car if you're going to go on a flight someplace for a week or so, \_\_\_\_ station. There's none in this area, there's nothing in this area. You have to get permission and let them know you're going to be gone. But I think you can leave your car at the \_\_\_\_ center for up to seventy-two hours, for three days. But some of these, some of the stations, you can leave them up there for a week, and that would be great if you're going to the airport. Because see, there's ways to get to the airport taking light rail, if you know how to do it. You leave your car there, and there's security there, most of the, I've seen security police at the \_\_\_\_ station, and for me, without asking somebody for a ride, it's very convenient for me to get to the airport using the \_\_\_\_ Center and metro, the shuttle, I'm there in a hour. You've just got to allow yourself enough time to get there.

Peck: So what M2's getting back to again, is this is W4 of learning. How do we get the knowledge about some of the, let's call it tricks or the ways to do it. That's a real challenge. Yeah, we'll get to you, anyone else have anything, would like to speak up?

W3: Well, I like the light train. I take the light train a few times. A few times. It's when I was going to the jazz festival too. I went to the \_\_\_\_ in downtown San Jose. But, it's not convenient, we need to, I could walk to the light train from my house, it takes me fifteen minutes. I don't have the choice, I need to walk to or take the car now.

Peck: M-hm.

M4: I have a suggestion.

Peck: Yes.

M4: You may want to write this down.

Peck: OK.

M4: \_\_\_\_\_. Set up a website, a VTA website, similar to Mapquest, whereas, I can go in and say, I want to go from point A to point B, what buses or light rail do I take to go from Point A to Point B, what would be the cost? If people are interested in cost, what's the best way to do it, do I take a day pass, a night pass, what do you call it pass, pass don't go, Don't pass go.

Peck: Do not pass \_\_\_\_\_, right.

M4: \_\_\_\_\_. You know, I'm just being facetious now.

Peck: Laughs.

M4: But anyway, something like that I would be, would be very convenient for a lot of people because, because 80 percent of the people are online now.

Murmurs in the room.

M4: Something like that, so, if I wanted to go from point A to point B, like I said, how do I get there from my house. Similar to Mapquest, but a VTA type mapquest.

W2: That's a good idea.

Peck: VTA-quest.

M4: VTA-quest. There you go. I've invented it my name is Gore, so I just want you to know.

(Everyone laughs.)

Peck: Great sense of humor. \_\_\_\_ Gore.

M4: \_\_\_\_ Gore.

(Continued laughter.)

Peck: OK. Ways that we can help you utilize public transit, trains, buses?

W4: You can send them to our homes to pick us up.

(Laughter.)

M2: They did that one time here.

M4: They tried that once, yeah.

M2: It never worked.

M3: It's called taxi.

M4: Yeah, no, they did try that once.

M3: They did try it.

W3: Well, how about, how about the outreach? You familiar with outreach?

Peck: I am familiar with outreach.

W3: So, what, how does the outreach work, is it for the disabled people? The low-income people? I don't know.

Peck: Yeah, outreach is for disabled people.

W3: Oh, just for disabled.

Peck: I think primarily for disabled. People who cannot use fixed route. So the question is, and it's a good point, you know, there are programs like, there are taxis, there are programs like paratransit or outreach. But the question is, for people who can get on to public transit, what are some of the ways that might make it easier? Or might encourage you to get on the current system of buses or trains? What changes could be made?

W1: Closer bus stops.

W3: Yeah that's it. That's it.

Peck: Closer bus stops? More bus stops?

W2: Closer bus stops.

W1: More, yeah.

W3: Bring back the 62.\_\_\_\_\_.

(Laughter.)

Peck: Get that 62 back!

Woman: Get the 62 back.

W3: Yes! It's good for me

Peck: That's a good one.

W3: It's good for M4 too!

M4: The 62 and 71.

M2: The 71, mine.

Peck: So, for lack, so (interrupted by W3)

W3: So, before, you get the transfer, you buy one pass, one dollar when I was working in Santa Clara, it gives you one pass, and go to the Alameda with the same thirty cents, same forty cents, yeah, I'm going to Santa Clara. Now, you need to pay again, or it's going to be a day pass. So if they want to go it will be more money, can you spend it to travel? Let's say you go and take the 45, you take it over there and over there or whatever, you need to go there to depot, take the 62 go to the Alameda, take another one to go to Santa Clara. It's very inconvenient for me. I try to avoid it, I don't know how. Now I drive, I go. (Laughs).

(Women laugh with her.)

Peck: I'm just leaning and making sure my tape recorder is still going. This is all great stuff. What would help you take public transportation?

W5: By getting some more money out of Washington, D.C. to improve the transportation in California.

Peck: What are some of the improvements you think should be made?

W5: Well, they cut down on the drivers, that's why they got rid of the routes that are, missing, that people are complaining about, because they didn't have the money. They put in the light rail, because that money was already, passed that bond, so they had to use the money for light rail. So, if we get some more money from Mineta, we will be better off. Because he doesn't do too much for San Jose.

W3 and W4 are whispering together.

Peck: Ah. Other things that you think might help? I'm going to look over at MR and see if she has anything she would like to add.

MR: No I don't have any questions right now.

Peck: Not right now. OK. If you think of something, please.

MR: I will, definitely.

Peck: We've talked about some of the ways light rails and buses are less convenient than cars. Are there ways that light rails and buses are more convenient than cars? (Silence) W3's shaking her head no.

(Everyone laughs.)

W3: No.

W2: No, well, he just mentioned...

M4: I don't see how it could be.

W2: M2 just mentioned that when they were going to the Grand Prix or whatever it was, that race, it was easier to take the light rail because there were a lot of people going to down there and you were going to have to find a place to park, and you were going to a specific thing and then you were coming back, so that was convenient.

Peck: M-hm.

W2: When there's a function like that.

(People agree.)

Peck: So there may be some very specific periods of time or events that might make light rail or buses...

(W2 and other women make sounds of agreement.)

Peck: easier. But in general, it sounds like for some of the day-to-day things, it sounds like, no, the cars are easier.

W5: I think light rail is full in the morning and the night when people are going to and from work but during the day they're not busy at all.

Two Participants : M-hm.

Peck: Are there things, ways that might encourage you to use light rail during the day when it's not busy?

W5: Well, to me, there's nothing downtown to go to.

Peck: There's nothing downtown.

W2: Well, that true. There's hardly anything to go to.

M3: There's restaurants. You can go just about anywhere to eat, so that's not a premium to go downtown to eat.

M4: There's restaurants

W5: You can't go shopping down there.

M3: There's 200 restaurants, but they're all over the place, no matter what.

W2: Well, do they have benches at all the stops where you can sit down if you have to wait for the buses or light rail?

Man: M-hm.

W4: Yeah.

(Everybody speaks at one, affirming that you can sit while waiting.)

W2: It's just getting in a mode of being less, uh, rushed you know, and saying I'm going to take my time and live slower, and of course, that's not what America is about right now. We're always kind of in a rush or, you know, we don't have that....

M1: Well, in our case, our doctors are in Cupertino. Los Gatos.

W1: Los Gatos and Cupertino.

M1: And Cupertino. So, it'd be a pain in the neck to try and get on a bus to make a doctor's appointment.

M3: It doesn't go to Los Gatos.

W1: No it doesn't it.

M4: That 62 used to go pretty close.

M4: It went to Good Sam. Didn't it go to Good Sam?

W1: I don't know.

W1: You know, I've only been on a bus one time here in San Jose and we've lived here 32 years.

Woman: Wow.

(men laugh.)

M3: Same here.

W1: Once. So. I mean, a good example of taking light rail or the bus is coming up this month, for the RSVP luncheon, which is downtown at the Convention Center. But in order



to get there if you're going to go light rail, you have to go all the way around to get it. It will drop you right in front and I know there are people that are taking it. I know there's a lot of people who take the regular VTA down Key Road, which goes straight downtown. But that's a function that's coming up as opposed to paying for parking, but like in our case we have a van, so we usually take 8 people and for us it's convenient to use our van. We do, like an out to lunch once a month.

Peck: M-hm.

W1: and we drive at least 8.

Peck: Do you mean your personal van or the Berryessa van?

W1: No, our personal car.

Peck: Personal van.

W1: Car. Yeah.

Peck: Oh, OK.

W1: So we do a lot of, um, chauffeuring (everyone laughs), if you want to say.

M2: Sheesh.

W4: They're taking people in.

W1: I mean, we have the room, so why not, you know? Instead of just two people.

Peck: Well, next time I need a ride somewhere, I'll give you a call.

(Everyone laughs.)

M2: I know this is the future, but is there any chance, you know, they're gonna open up a new line this September? It's supposed to open up the fifth, but I guess they delayed it, the line it's going to go all the way to Vasona, through Campbell, that's going to be nice.

W2: It's going to go to Vasona.

M2: Yeah, the new line it's supposed to open the 12<sup>th</sup>, but they've had some delays. It's gonna open on the, in September, it's going to go all the way from Winchester Campbell all the way to Vasona. So I guess, is there any chance that light rail will at one time run 24 hours?

Peck: You know, I don't know. That's a very good question. I don't know. But I can tell you it does start pretty early, in the four o'clock hour, because I've been on it that early.

Woman: Oh!

M2: It all depends on what line you're going to take.

Peck: Yeah.

M2: Because I've called them about that. One starts, I think one starts at about five. You can up at the station and ask them. But I was just curious if they were going to go 24 hours. It'd really be empty then (laughs) but it would be convenient if you're coming back from the airport late at night or something, or you know, other things.

Peck: Yeah, m-hm.

W1: Are they going to continue it from Alum Rock?

Peck: I don't know the answers to those questions, but they're very good questions.

W5: They will.

W2: You know. Oh! You know, if you had motivational speakers, I'll tell you, just by being in this room and listening to M2 talk, now I'm kind of interested, I think I'm going to figure out a way, I'm going to go down on the light rail. So if you had motivational speakers going to the schools, with the parents clubs and the senior clubs, or whatever, kind of talking up and brining a panel and saying, well I ride the bus and I do this, and I read. And I knit, and you, you know, and if you motivate people to, to try it, you know...

Peck: M-hm.

W2: But in a group like this, you know, when you're hearing people talk about it, then all of a sudden you say, oh yeah, gee, maybe I'd like to ride the uh, the light rail to do this.

Peck: M-hm, Yeah.

W2: So I thought that might be something they could do.

M3: W1, have you tried light rail?

W1: No, I have not.

M3: I haven't either.

M4: It's nice. I, uh....

W1: And we got those free passes and everything, but we were away that weekend. You know when it opened?

M4: It's very clean and very comfortable. Quiet. Nice. I like light rail.

W1: Yeah, and I was telling M1, let's just go, let's just park the car and get on it and see where it goes.

M3: Yeah, that's nice, we should do that too.

M2: You know, my only complaint is that at a, you know at East Bay shopping Center? It's being renovated because they're having some theaters there. Why did they stop the line at Alum Rock?

Peck: Yeah, I honestly don't know the answer to that question, why they stopped it at Alum Rock.

M2: It leaves you, it leaves you, it leaves you nowhere. At that last stop, at Alum Rock, it stops at an apartment complex...

W3: Yeah.

M2: And you're only about, maybe another couple of miles till Eastridge, and if you were to go to Eastridge, it would have been great. But they leave you right there at Alum Rock; I mean, they leave you right there in the middle of nowhere.

(Woman speaks, can't hear her over M2.)

Peck: Yeah.

M2: And then to get the bus, you want to catch the bus, if you want to catch the bus downtown, you have to walk quite a distance to Alum Rock. I mean, the last line at Alum Rock, it just leaves you like in nowhere, in the middle of nowhere. And they should have gone, it would have made sense to go to Eastridge.

Peck: Yeah. I don't know.

W3: \_\_\_\_ with the bus, the Eastridge bus.

M2: I know that, but what I'm saying is, why didn't they just take that road straight to Eastridge?

Peck: I saw that W5 and M3 were chatting, was there something, some ideas that you had?

M3: She grew up over here, She's never been on a bus. I've taken on it once, she's taken it once. We've never taken the light rail.

W5: I haven't taken a bus since I was in school. I remember when we first moved up here, I used to take a bus home, occasionally. But even then, it was too far to walk.

Peck: So you have to want to take that walk, or have a way to get to that bus stop.

W5: Yeah.

Peck: So what I like about this group is that we have some real different experiences with public transit here in San Jose, Santa Clara County, or the communities where you're from. I like this idea of motivation, of how do we motivate people and encourage people to test it out? How do we plan, and do some of our planning for our future? Are there other things that you have taken away with you from this group, a new idea or a new thought about public transit? (silence)

M3: After this, I'm going to take it. I'm going to try it.

Peck: You're going to try it. (laughter from group.)

W2: And then you can go to the airport. Because, you pay, we pay 20 dollars in a cab to go to the airport.

M4: That's right.

(W3 is speaking, can't hear her.)

W2: So, if you can, I'd like to figure that out.

M4: Like I said, I went down there that one time, forty cents. Better than twenty dollars.

Peck: M-hm. So there are some prospects, it sounds like, for certain locations, for events that may be occurring downtown, for the airport, there may be some incentives to take public transit.

M4: Yeah.

W5: We have a son that is a driver for VTA.

Peck: Ah!

W5: And we still don't take it. (Laughs).

Peck: (Laughs) You mean, so you don't visit your son, is that what you're saying?

(Laughter.)

Peck: You don't see your son?

W5: Oh, I see him, but not on the bus.

M3: We see, we see...

Peck: Not on the bus. Oh, OK. (Laughter).

M4: Not on the bus.

Peck: What I would like to do is, I would like to go around the room and I would like to have each of you tell me what you think is the most important thing that VTA, the people who own public transit in San Jose, what's the most important thing that they need to know? Why don't we start, I'm going to save M2 for last, so why don't we start with, or M2, why don't we start with W2 and go around?

W2: Well, I think the most important thing I want them to know is that I'm concerned about the safety of getting from my house to the bus stop at night or even in the day sometimes; oh, I'm concerned, being an older person about the safety of walking in the neighborhood.

Peck: Thank you W2. M1.

M1: I guess they should know that many people are not taking their buses or light rail because it's inconvenient. So they have to make it more convenient, somehow, someway, and I guess that's it.

Peck: Thank you M1. (Women giggle). W1.

W1: Well, I think I feel the same way; it's inconvenient to get there, once you get there, you have to wait. Then you get on, then of course you have all these stops. If you're not going for an appointment, that's fine. But if you have an appointment you have to be sure that the schedules going to be on time and it's going to get you there on time. Where, if you have a car, you know you're not going to be late.

Peck: Thank you W1.

M4: I have just two comments, one is the one I brought up before, about the website, I think that would help a lot of people.

(People agree.)

M4: Coming up with some kind of a destination, how to go from point A to point B, so I could take what buses, the numbers, and all that. It would be very convenient for me.

W2: M-hm.

M4: The other thing, my second comment, would be that people who schedule the routes, who make up the routes, I think what they should do, themselves, which has always been a good indicator that I've heard, a long time ago, is take that route yourself. First. In other words, what would it take from your house to go to downtown San Jose? I don't know where you live, but I'm just saying.

Peck: I live downtown. (Laughs)

M4: OK, then, well, that's, that's...but I'm just saying. What would it take to go from my house to downtown San Jose? See what I'm saying?

Peck: Right, m-hm.

M4: And then this way, you get a better feel and idea of exactly what kind of route you really want to have. Either buses or, well, fixed rail you can't really do nothing about. But the buses, I think you would be able to do it. So it would be my suggestion that the people who do the route actually try it themselves.

(Laughter.)

Peck: Yeah. To get information and try it yourself.

M4: Right.

Peck: M3.

M3: All I can add, the need to know where the system goes, of course, that's all available in the printed matter, the only thing is it doesn't go anywhere where I need to go. It's not convenient, like if I want to go to Los Gatos for instance or, if I want to go to Campbell, it doesn't go where I need to go. So, I need to know where the line goes, and from there I could plan my trip. But right now, I have no idea, other than the fact that it goes downtown, and it goes here and it goes there, to the two extremities, but other than that I have no idea...and it's my fault because I need to go on the train and find out for myself. Well, now I know where, I'd love to go to that trestle over in Milpitas there overlooks that fifty feet high there, that they built over the Mountain View Expressway, I'd love to see what that looks like, so in my case, I need to study the system more and find out what the possibilities are.

Peck: Thank you, M3. W5.

W5: (Pauses) I've never ridden it, so I don't, it's not convenient for me at all.

Peck: It's not convenient.

W5: For what, for what I would do.

Peck: That's valuable input. Thank you W5. W4.

W4: For now, that I am able to walk and I am able to drive my car, I prefer to take my car and go. But if I wanted to take the light rail and if there was a few people and we could go together, and just for the fun of it, to go somewhere, I don't have to be there at 10:00 or I don't have to be back at certain time, I would like to take it. But for going from here to there, to do something at this special time, I would prefer to take my car.

Peck: Thank you W4. W3.

W3: I feel the same way. I don't mind, I like it, the light train, I like the bus, I ride it a lot in my time, so, but it's kind of the point, it's not convenient for me, I don't have any bus close to me, so I need to take the car. And go. Because the people who put it in Capitol over there, I think they made a mistake, because it don't go straight. So for me, it's no.

Peck: It's not convenient, there's not a stop by you, it's a no.

W3: M-hm. (giggles)

Peck: (Laughs) Thank you W3. And our motivational expert.

W3: Motivational speaker. (Laughter, applause).

Peck: M2.

M2: For me, the light rail is the best thing that every happened. I remember when it first started downtown it was a mess, but for me right now, hey, I'll take the light rail any day. I'll take, I know the bus systems, you know, I get a day pass. You have to know, you have to try it. You might get a little confused, but once you're on it, and you love it. Now the only thing I say is the problem I've had on light rail is with the kids. The kids on this East Side, Alum Rock line, they go to, especially on the weekends, they spend all day at the Great Mall, and they come back late on the late bus, and these kids get on there and if you're a senior citizen, watch your purses all the time, because these kids get on there, and they use all this foul language, and they run up and down, and they don't care who's on there, and they don't have enough security. Once in a while, you'll have somebody get on there, but at night time, even during the daytime, that's the one problem I've had with some of these kids. They just have no respect for people, seniors or what. And there could be some trouble on there. I've seen two fights, I'm just letting you know, I've seen two fights on the light rail.

Peck: M-hm.

M2: Because what they do, the kids do, is they get on there, and then at the next station, they get off right away.

W3: Oh!

M2: And half of them don't even have a ticket, because, you know.

W2: Oh, I see.

M2: That's the only problem I have. Because at nighttime or even on weekends, there's too many kids that come to the Great Mall from Eastside, because, it's convenient for them, and they spend all day, and when they get on, there might be twenty or thirty kids, fighting among themselves, and they don't care where you're at, or where you're sitting, and they're jumping all over you, like I said, they're using the, the rail – you know, the hang bars—as monkey bars, and that's the only thing I see.



Peck: M-hm.

M2: But other than that, you've just got to be careful. But that's the risk you take when you take the light rail.

Peck: You've got to be careful. All right.

W5: I have something to add.

Peck: Please.

W5: On the buses, there's the homeless people that get on and ride the bus all day long and then there's the other people won't ride the bus because they're on there.

Peck: Hm.

M3: They need to give them something to do or a place to sleep.

W5: Yeah.

Peck: Great! I want to say thank you. This has been very, very informative, exciting. I've enjoyed learning your names, listening to you, being motivated by M2, enjoying M4's humor. Thank you. I am turning off the tape recorder!

## **BARRIERS TO USING FIXED-ROUTE TRANSIT FOR OLDER ADULTS FOCUS GROUP INTERVIEW**

**WILLOWS SENIOR CENTER  
SAN JOSÉ, CA**

**AUGUST 19, 2005**

### **TRANSCRIPT**

Michael Peck: Today is August 19, 2005. It's a Friday. I want to say "Thank you" for giving us your time. I really, really appreciate your being here. We're going to end hopefully just before 11:30. Are you able to hear me well?

Participants: Yes. Yes. No.

Peck: No? You are having a hard time?

M1: He doesn't hear.

Peck: Would it help you to sit closer?

M2: Sit closer?

Peck: Why don't you sit closer? Okay, we can put a chair up here.

M2: Ok.

Peck: I'm going to start the other tape recorder. We have one gentleman who is moving his seat right now.

Ladies: (Talking among themselves) today is the 19th? Yes, the 19th. It is the 19th.

Peck: Yeah. Today is the 19th. Aug 19th, 2005. Am I correct?

W1: I put 18th on my form.

Peck: It's ok.

W1: Ha! Ha! (Laughs)

Peck: We'll get that taken care of.

Peck: What I'd like to do to begin...Well, let me back up. I want to tell you, we're here to talk about Public Transit. And specifically, we're here to talk about "Fixed rail public transit." And "Fixed rail" public transit is things like buses and trains. Buses and trains go to specific stops. They don't go on special trips for you. They are fixed route. Excuse me—Fixed

Route Public Transit. I think I said rail—Fixed rail. Things like taxis or Para transit, often called Outreach is non-fixed route. It will go to any two points that you want. So we are concerned about fixed route—about buses and about light rail. Things that VTA in Santa Clara County runs. We're going to spend a little time asking about what you perceive as barriers – what makes it difficult for you to use fixed route public transit. The research will help us to make future recommendations for policy and design of fixed route public transit. Because there are so many more older adults than there used to be per capita and it's increasing, these changes are critical. To help us get started, I'd like to begin by getting your names. And we'll start with this gentleman on my left. Can you tell me your name, please?

M2: M2.

Peck: Welcome, M2. Please tell me where are you from?

M2: Where am I from?

Peck: Yes.

M2: You mean now?

Peck: Where do you live right now?

M2: New port avenue, San Jose.

Peck: San Jose, New Port Avenue. Thank you

Peck: Hi!

W2: Hi! My name is W2 Howard.

Peck: Hi! W2

W2: And what else am I supposed to say?

Peck: Tell me where are you from? Right now, where do you live?

W2: I live in San Jose. I live in Campbell area.

Peck: Welcome, W2. I'm glad that you are here.

W2: Thank you.

Peck: HI!

W3: W3

Peck: W3?

W3: Yes, My name is W3. I live in San Jose.

Peck: Wonderful! Welcome, W3. Hi!

M4: My name is M4. Born in San Jose. I'm a native.

Peck: Native of San Jose! Sharks fan I see.

M4: Yeah, I was the second graduated class from Lincoln High School.

Peck: Wonderful, M4! Glad you are here, M4.

W4: W4.

Peck: Hi W4.

W4: Hi! I go by both names—W4. I live in Milpont , San Jose.

Peck: Welcome W4. I'm glad you are here.

W1: Hi! My name is W1.

Peck: Hi W5.

W1: And we drive

Peck: You drive. Welcome, W1. Glad you are here.

M1: My name is M1. I live in San Jose on Dolores way.

Peck: Hi M1. Welcome.

M1: Thank you.

W6: I'm W6. Another W6. Do you want my last name?

Peck: No. W6's fine.

W6: I live on Dolores way.

Peck: Do you live near M1?

W6: Yes. Three houses away! Same street.

Participants: Oh! Ha ha! (Laughter)

Peck: Welcome W6.

W6: Hi. I am W6. And I live off of Cherry.

Peck Hello W6. I am glad you are here.

W7: My name is W7. I moved to Los Gatos last month from San Jose. That's it? What else?

Peck: W7, I am glad you are here. Welcome.

W7: Me too.

M4: My name is M4 and I live in \_\_\_\_\_.

Peck: Hello, M4.

M5: My name is M5. I live in South San Jose.

Peck: Hi M5. Glad you are here.

W8: My name is W8. I live in Downtown San Jose.

Peck: W8? Welcome, W8. I live in Downtown as well. Good to have another downtown resident.

W9: W9 from \_\_\_\_\_.

Peck: Hi W9. Nice to have you. I am going to test myself. {Peck Repeats names}.

Participants: Ha ha! (Laughter) What a good memory! Ha ha ha! Oh! He's reading from a paper....oh! Ha ha ha! Smart man! I thought he remembered them!

Peck: Clearly you are a fun group. And you are going to have a lot to say. What I'd like to know from you is about Public Transit fixed route. Tell me about your experience. Why you use public transit? What makes it difficult to use public transit?

M1: I'd like to bring out one point. If you look at the corner of Foreplane and Wills, it's an ideal spot for a bus. Is it there? No. It's not in the center where people congregate. No bus. It's over there, 15 to 20 minutes away. Guess what you do, you take the car, crank it up and you go!

Peck: So part of what you are saying is the bus stop is not in a good place.

A Woman: Yeah....not in a good place.

M1: And yet it's an ideal spot for a bus.

Peck: Bus stops aren't placed.....

M1: City folks are not listening.

Participants: Ha ha! (People join in Laughter)

M1: They are building Taj Mahals.

Peck: Thank you, M1. Ha ha!

A Woman: That's true. I agree.

W9: I live farther than I would like to walk to the bus stop. I live in a Mobile home park, at the back, so I have to walk to the entrance and from there to the bus stop. It takes me about—I walk slower—15 minutes, 13 to 15 minutes. And from there on it's pretty good. But there used to be a stop right in front of the park entrance, and they cut that out. Also I have a particular complaint and that is I wonder why in the heck that they don't have some sort of restrooms or portable potties or something...urinals. When you get to Gilroy, nothing! I have to go to bathroom in the worst places because there is nothing there and I complained to the VTA and Ben called me and he had no clue what they could do about it. He didn't take a report from me or anything. I went there on Sunday and my choice was to either find a bush (other participants laugh) and turn my back and enjoy the scenery around or I had to beg somebody to open the greyhound restroom to let me in. That is unacceptable.

Peck: W8, you had your hand up?

W8: Yes. First I'd like to say that I do appreciate the service and I couldn't do without it. I would have to stay in the house. But also I have a main complaint all these years. It's very frustrating and it angered me and I feel that if there was any other way, I will not take the bus. I had it up to (points to her nose) with drivers, rude drivers. I've been sexually harassed, I've been physically attacked. The rudeness is unbelievable! And I have a question for VTA—why did they hire these people? And the reason ...they are so arrogant about it, they feel like VTA is not going to do anything about it because if you told them I am going to report, they say "here's the number. Go ahead. Do it. Here's my badge number." The arrogance is unbelievable. I don't know...I'm taking the bus...I'm kind of here almost full time in a week and I volunteer. I take the bus almost every day. Almost every day there is someone to spoil my day. They are rude. I ask for one thing. And they do not call the stops. And that is very critical for me. Because, if I am in an area that I am not familiar, I need them to call the stops. If you told them "you know you are supposed to call the stops," they make you feel stupid which happened yesterday morning. I said "Why didn't you call the stops?" "Which stop did you want?" I said "I am not asking which stop you want." I said "why didn't you call the stops?" (She shrugged and enacted the driver's reaction). Go to hell—like that. This is unacceptable. It's been, in a sentence, frustrating and apparently they have an attitude that nothing happened. I tell. I told sometimes to the driver "you know what, if you don't like this job, you should go drive light rail or a truck." One time I even told them, you know, because he forgot to call the stops and he said "I don't like this job, I'm here for the money." I said "you know what? Truck drivers get good money, good benefits."

Peck: What I am hearing you say, I am hearing a lot of frustration.

W8: A lot.

Peck: That being visually impaired and not providing the service that helps you to know what stops to get off at.

W8: Right. Right.

Peck: And that's a critical piece.

W8: That's one part and also the rudeness.

Peck: And the rudeness.

W8: The rudeness is unbelievable and also, quite frankly, I have to say that about 80% of the time, they are good drivers and I have a friend, I even dated one a long time back. I have friends that are drivers. But there are a lot of rude drivers, obnoxious.

Peck: I am hearing what you are saying, but fortunately I don't work for VTA, but you and I can talk for a couple of minutes after about some of the things you might be able to do to express that. But I think the important point is a barrier to using public transit might be employees who are not assisting some of the disabled and older adults to use the services they need.

W8: Yes. Also late drivers.

Peck: Yeah.

W8: Who are not on time and you have no way to find out and you are waiting and waiting. And another problem is...

Peck: W8?

W8: Yes?

Peck: I don't want to seem rude. I want to make sure we get time for everyone.

W8: Yes, yes. I apologize. I can talk for hours.

Peck: That's ok. Who else would like to tell me about their experience—the barriers to using buses and light rail?

M4: My name is M4. I still find that I need to drive to where I want to get to the public transportation. I need to drive to get to the light rail. If I want to go downtown, I still have to drive to light rail to get to downtown. So there are not too many instances that I actually depend on bus or connecting transportation to get to where I want to go without driving.

Peck: Thank you, M4.



M4: I am so lucky where I live over on Camden and Leigh Avenue. I could take the bus or ride the light rail. I take the light rail. On Saturday, I need to go to downtown, senior center over there and lets you off right over there. No problem at all. And then sometimes, I get on that light rail that takes me all the way to Sunnyvale. No problem. You know, and the important part is, it takes me about 10-15 minutes from where I live. And I have had....I bought a monthly pass 3 or 4 times and I am ready to get up and go.

Peck: So your experience is that you live in a location where you can...

M4: I am lucky. I am one of the lucky ones.

Peck: go on the public transit.

W2: It's very difficult for me to take public transit because my arthritis is quite advanced so I am just not in quite the physical state, you know, to take the public transit.

Peck: Tell me about your arthritis. What makes it difficult for you to be on public transit?

W2: Well, I have a hard time in walking very well now days. It seems to be digressing. I've gradually become, you could say, crippled, so to speak. I still can get up and go to senior center and do those things. I really have to depend on outreach.

Peck: You spend more time using outreach because it is difficult to get on the bus.

W2: Yes. Oh Yes. I mean, it's very slow to get up the stairs on the bus.

M4: Arthritis! Oh boy! I got it too. And they wanted to operate on me. I just had one operation and I am going for another one. But I make it. You know, and they try to help me. They even try to put down the ramp and I won't let them. I say I'll take care of myself.

Participants: Ha ha!

Peck: So some of them are willing to put the ramps to help you up and down.

M4: Yeah! They're willing to help. When they let me off they want to drop the ramp and I say, No, I don't want it. I'll get off.

Peck: Thank you, M4. Other people? Your experience or what you... (Someone raised his or her hand). Please (go ahead).

M5: Let me see...I am from back east, Philadelphia, that area. Back there, we had subway and the thing that I found was that buses ran more frequently to get you to elevated or subway stations. Then you can be in town, you know, in 15 to 20 minutes, you know and however, the buses did run more frequently. There was one usually right on top of another. New York, any other big cities back east...Chicago is also the same way. That's the only thing I say. I did not take the bus I usually drive home. Only, I can walk to two light rail stations

Peck: Umm uh.

M5: which is fine. I have taken the light rail for probably just special occasions like races and then we had an event downtown. I found out that Light rail was really really good for me. It's the way to go. I had no problem with that. Fortunately, I could walk to either light rail stations.

M1: Buses reportedly run every 15 minutes. Only time they run every hour is on Saturdays and Sundays.

M5: You see, I have not had any experience with the bus.

M1: Yeah, I am just saying, in case...

M5: However...

M1: it might take a minute.

M5: When you are in big cities like, I don't know, even San Francisco is the same way. I think that they run more frequently, however, I am not used to the bus. I just use the light rail. I have never had a problem. It's really a good facility.

Peck: Thank you, M5. Who else would like to share?

M1: Public Transportation is not airport friendly. We make trips, you know, to the airport several times a year. And I would like to take the light rail or bus but you just don't have that much, you know, the time to take the bus. It takes about one hour to get there if you are lucky but you have to transfer so many times. It would be pretty nice to Swishhhhhhh (he gestures to indicate one swift ride), go just right to it.

Peck: Who else would like to share their experience? Barriers to using fixed route public transit? Barriers to using buses, trains?

M2: I have to use a car. That is the only transportation I've always used. I've never tried any buses or outreach or anything. I have to have a car. To me they are my legs. Without the car, I will stay home. I can barely walk, but I can drive. And my wife also can hardly... she barely can walk just like myself. She is 94 and I am 95 years old. We have to either stay at home or use the car. If we did not have the car, I suppose I would go to outreach. That would be my next step, is outreach. I must have the car as long as I am able to drive. So I have a driver's license, which is good until I am 100 years old.

Participants: Laughter. Group laughs.

Peck: Thank you, M2.

M2: I need to have a car.

Peck: You have to have a car. You are very connected to the car. W3, is there anything you would like to add?

W3: Yeah, I would like to find light rail. I don't know where it is at. (Laughter among participants). I see signs somewhere once in a while—Light rail! Light rail! I have not found it yet. (More laughter among participants). I have boring news that I still don't know where's the light rail. I take the bus but I can't find the light rail. I can't find the station or how to get to it.

Peck: So tell me about your experience on the bus.

W3: Well, I have no problems with the bus. Sometimes they are late. Yeah, some buses are late. It takes a long time to reach.

Peck: Are there things that help you take the bus and make it easier?

W3: Like what?

Peck: Anything.

W3: Sure. If they were closer or they are to where I would like to go and maybe stop. You would have to walk too far sometimes. I take outreach.

Peck: So you use both bus and outreach depending on where you would go?

W3: Yes.

Peck: Thank you, W3. How about W4? Anything?

W4: Well, I tell you I am new to this area. So I don't know anything about buses or train lines or anything. I still drive and if I have to get very far and I don't know my way around, my daughter takes me, and so...I just moved up here after 50 years in Long Beach. So I am not really the one who should be giving my opinions. So I don't really know anything about transportation issues you are talking about. Fortunately, I am still able to drive.

Peck: Are there any things that might incentivize you or encourage you to take public transit to use buses or trains?

W4: Well, that time may come in the future. And ...but there is the time, you know? So I really think I should not be here because I don't have any opinions on it.

Peck: I think it is still great that you are here, that you hear the conversation and you may think of something creative that might encourage you. So I hope you sit with us for a little longer.

W4: I will.

Peck: Good. Good.

Peck: How about W7? Anything?

W7: How about W7? Well...I'm kind of in the same situation W2 is. I have...because of degenerative arthritis in my lower back, I have a difficult time walking from here to the other side of the office to my car. So that would be a situation getting to the bus at first place. And other than that, I drive. I don't think I have been on the bus since my 43 yr old son was little. But it seems like it takes quite a bit longer to get from point A to point B taking the bus than just getting in my car and driving there. So I don't know and of course, what I keep hearing over the years from other people too is, you know, why should I take the bus? it just takes a lot longer. So maybe there needs to be more pick-up spots... something...I don't know. But I came here originally in my head to gather information and see what's going on with VTA because I volunteer as receptionist in the office so I figured if I get questions from seniors I kind of know how to respond. So I am here for different reasons. (She laughs.)

Peck: But I am glad you are here. You are hearing the conversation and you are hearing us on the issues that seniors have.

W7: Yeah, and if I get to where I cannot drive, then I want to know what transportation would be available to me, I mean other than outreach.

Peck: Other than outreach. What about W5?

W5: I am with him (Points to M1). I think that buses should stop at the ...eh...more routine...

MP: More consistent?

W5: Yeah. Like he said...more...

SB: Frequently?

W5: Shorter uh...routes.

M5: Shorter periods of time.

W5: Yeah!

M5: Like back east, they run one right after the other.

W5: Right! Uh huh (Sound of approval), like in San Francisco. In 15 minutes, you can pick up a bus.

Peck: Are you able to, W5, getting on the buses, is that a problem?

W5: No. I don't ride the bus. Ha ha! (She laughs.)

Peck: No, but have you...

W5: Oh, I am able to get on them. But I drive. So.

A Woman: Actually they are very easy to get onto.

W5: Yeah.

A Woman: (Continues) all the buses now are....

W5: Yeah

A Woman: on ramps. You can go up and even with pavements are even easy to get on. I am amazed at how patient these drivers are letting in people with wheelchairs on, one after another. I am wary to go on a bus that does not have some of the wheel chairs (access). And they are very nice to them and very patient and I have noticed that they give other people time to get to their seat and sit down before they move on. I think that 99% of them are really nice.

Peck: W2, You have been quiet. Anything you would like to tell?

W2: I have the same problems that M1 does, since we live on the same street. It's just that bus stops are too far away.

M1: Bus stops are too far away.

W2: And they do not come often enough. I kind of realize they have a problem too because many times you see buses go by completely empty and people are not riding them, so it works both ways. Why would they want to put on more buses when they can't even fill out one? But is there a way they can get it started to get more buses coming and get people to ride. How does it work?

Peck: You know, I don't know the answer to that question, to be honest. But hearing that this is a need you have is an important piece, because we will take that information as we are hearing it, meaning it may end up in a report as we think about future recommendations on how to make buses more accessible time wise. (M4 raises his hand)

Peck: Please. (Go ahead)

M4: My daughter takes the BART train and bus to come to visit when she visits from Oakland. And she does not drive and my main concern is connected routes. Like when the bus comes in or light rail comes in, the VTA bus isn't there, so when you come in, you just have to wait a long time if you are not driving at all for the connecting bus to take you where you are going. For some reason, it is not coordinated. And I would like to see if they can coordinate the time of light rail arrival and time of VTA departure. It would be very nice and it would save a lot of time. I know that, money wise and cutting buses and all that. In fact, Los Gatos now has an express bus. And it's really nice. But my concern is, regardless of my daughter taking the BART, I still have to drive to Diridon to pick her up because the connecting bus from BART is so slow to come by and to ride. So it's a matter of timing.

Peck: Thank you. Thank you, M4. Who else? M1?

M1: Anyhow, as the elderly population is increasing, the engineers or whatever transportation folks, make a study of uh...this, the prices are right actually. Fares are right. They are reasonable. We need publicity to do something to expose the elderly to transportation. Is there a study of that?

Peck: A little bit of what we are trying to do right now. You brought the issue of exposing the elderly to transportation.

M1: Yeah.

Peck: How would we help you to learn about Public transit to utilize it? How would we help to expose it to you? What can we do?

M4: Can I make a quick comment on that?

Peck: Please.

M4: I have a friend that lives in the senior housing. And the entire group has a free bus pass. Half of them don't know how to use it because they never took the bus. And it's kind of like a waste of money. So this woman decided to start a club saying "Let's go Eco." She takes them to farmer's market and stuff like that on weekends to expose them to taking the bus where they like. As it turned out on one of the rides, they can now go to Campbell library, check out books, renew them and whatever they want. So that's how you get people to go places—by taking them on a bus!

Peck: Taking them on a bus. I like that idea. W8? Please (Go ahead).

W8: I will be short this time. One thing that I see as a problem also which, an example, I go to Kaiser in Campbell, and there is no shade or shelter. If there is rain, you get wet, if it's hot, you'll burn. It's hot. It's really hot. A lot of people go to Kaiser from there and this other building, lots of people take the bus, and there is no shade to protect from rain or the sun. And I just found out that they changed the route yesterday when I went to Kaiser. I find out that when I go on 160 from Los Gatos, before Kaiser was at much shorter distance from bus stop just across the street. Now they changed it. They put it way down half a mile down the street. Why in the world they want to put it so far away? Why not closer?

Peck: So getting to the doctor's office for a medical appointment is too far away.

W8: Too far away.

Peck: Yeah

W8: And also there is no shade at the bus stop.

Peck: Is that the experience others had?

A Woman: Yes. I agree with that.

Peck: Too far away from doctors?

A Woman: And too far away from shopping centers.

Peck: Too far away from Doctor's, too far away from shopping centers.  
(Group laughter)

Peck: What else do you think we could do or could be done to help expose older adults to public transit? Other thoughts?

A Woman: We could have meetings at senior centers and so on ...explaining exactly how you tell, you know 321-2300. You call that information number and they will help you. Unbelievable. They will tell you exactly what corner to go to. What's on that corner? Safeway is on that corner. Go there, stand on a bus stop and so on. They don't make an effort to get back into the older general population and tell them. Ask people what their particular preference is and they can tell you exactly what to do to get rid of that problem you have. They don't do that.

Peck: W8?

W8: And the other thing that I think would be very good for people who commute...they have, especially in places like community centers, want to know did you miss the bus or did it break down, so you can call, provide a free phone which, they would do at that time, now I find out that public centers have no longer free phone. I think providing free phone at major bus stops and so you can get this information because old people need that. I think providing free phone will be a good service.

Peck: So finding a way like a phone so somebody in a bus stop can get the information that they need.

W8: Yes. Yes.

Peck: By communicating with drivers.

A Woman: That sounds good.

Peck: You people are nodding your heads. Yes, please.

W7: Well, I was thinking you probably need to hit where seniors are to inform them. So maybe a representative or somebody can go to all senior centers and have all the senior centers put something in their monthly brochures on a regular basis, encouraging bus transportation. You know you got to go where information is needed.

Peck: Where information is needed.

W7: Yes.



Peck: You know, somebody brought up an issue of running errands like going to the shopping centers. Are there things to help you more easily do your errands using public transit?

M1: How often do they re-evaluate the bus routes, you know?

Peck: I don't know. Tell me why you are thinking about that. What are you thinking?

M1: You know, we just brought this up about shopping centers. You know, maybe, the bus could deviate from it's regular route, like say on Foreplane, just make them jog over to Safeway or whatever big shopping center or grocery store. One of the main reasons is that people need to get on to go to the grocery store just about every day or every week. The problem with doctor's once every six months, unless you have a problem you'd do more often, but it's usually six month at the doctor's. Dentist is another six month usually. But groceries, it's a regular.

W7: Safeway's deliver though

W5: Yeah!

W2: Yes. It's free too.

M1: I thought they stopped.

W7: No. They deliver. Because they delivered it to me last Saturday.

Peck: Getting...getting to the grocery store is something important to do regularly. Other things that might help you run errands using buses or light rail? Other thoughts?

A Woman: I have a complaint about Outreach. I know Outreach is run by VTA too.

Peck: I appreciate the thought. We are not studying Outreach. If its something that you think is connected to buses and trains, I would like to hear it.

A Woman: It's about outreach's policy, I know outreach is VTA.

Peck: I know that some work on Outreach policy has been done through City of San Jose senior citizen's commission. So, they may be good groups to talk with about Outreach's policy. Unfortunately because we are trying to focus on buses and trains, we can talk at the end, but I am going to get us back to buses, trains, running errands anything that might help you do it more easily? Other things that you can think of? If you have not been using buses or trains and you run errands, most of us do. Are there things that you think... Gosh! If the buses could do this or the train could do this, I will use it to do my errands?

M4: One of my friends has a huge cart, you know, like they go shopping. And she really has a problem getting it onto the bus. They kind of discouraged her, in the sense that, where she can only buy so much or use a smaller carry-on to get on the bus, despite



her struggling up the stairs and all that. But she's got this humongous; I'm having a wheel chair. They won't allow her, she can't get this huge grocery cart on the bus.

A Woman: But I see them get on with those grocery carts everyday! Those wheel things. They are very accommodating.

M4: This one is too big. She has a hard time. She buys more than one wine bottle.  
(Group laughs)

Peck: (Laughs). Yes W8?

W8: What I see as a problem for myself when I go shopping to a grocery shop is you have to carry the bags. They don't let you get the shopping cart to the bus stop. So you have to, kind of, grab the bags and walk to the bus stop and it gets even more complicated. I will say, like a Safeway, a major shopping center, that maybe, have a bus go up closely, kind of go around like in Valley Fair. Let the bus go inside the shopping mall and then stop at the door rather than walk up to the bus stop across the street, which I think will be a real challenge.

Peck: That's a good point. Thank you. Yeah...other people's thoughts about that? What might make it easier?

A Woman: I like buses.

Peck: You like buses.

A Woman: (continues) We need the buses. I am from Chicago. We had plenty of buses.

Peck: Good.

A Man: Here we go. (Laughs)

Peck: Plenty of buses in Chicago.

Another Woman: We should all go to Chicago. (Group Laughs)

Another Woman: They don't come often enough in San Jose.

Peck: They don't come often enough.

Another Man: Yeah. One right after the other when you are in it. They come one right after the other. In fact, they are backing up sometimes. You can get in any one you want.

Another Man: They ought to be proud of those because a lot of people use them and that's the way of getting around in San Francisco and New York. I have been to all of those but

A Woman: You know...but...San Jose is a big town. You know.

A Man: Agreed.

W5: I think they should have the bus service

A Man: (continues) Yes

W5: A little bit more...you know.

A Man: (continues) I could think of Detroit that has a pretty good train system. I probably would use the bus if they ran more often.

W5: Yeah. Yeah. I think so too.

A Man: (continues) If I wanted to get somewhere, I'd use it. Normally I drive.

W5: Especially the prices of gas.

A Man: (continues) Or just walk down if I have to. If the buses ran more often and stopped within walking distances.

W5: Yeah

A Man: I live in South San Jose around Oakridge Mall.

Peck: Uh Huh,

A Man: (continues) So I'm within walking distance of all bus stops and everything. So, I would take them.

W5: If they come more often.

A Man: (continues) If they come more often.

W5: Yeah.

Peck: SB, Is there a question you may have?

SB: Yes. I was wondering...you just brought up about the prices of gas.

W5: Uh huh. (Sound of approval) ha...ha...ha (she laughs)

SB: So, that seems to be...

W5: There'll be more driving ...uh umm....riding buses! Ha ha ha! (she laughs).

SB: Yes. So prices of gas seem to be a disincentive for you to drive. Is there something about buses that can be an incentive for you to take the bus?

W5: Well...yeah. I guess I could ride more. If they came more often. I have to stand in the corner and wait.

Peck: So thinking about the prices of gasoline increasing, is that enough to encourage you to use the buses or light rail?

M1: Not yet.

Peck: Not yet.  
(Group laughs)

W5: But if they got any higher, then we would have to

M1: Just cut down on something else. A little comment about light rail: Light rail is good for people that work downtown. They use it quite a bit. But the elderly go out only for social functions.

Peck: Um hmm

M1: That's about it. If there's something going for seniors out there, we'll take the light rail. Otherwise there is no need that I can see.

A Man: If there's a festival or something like that downtown, I can take it

M1: Boy, I like the light rail.

M4: Parking is very expensive. (Laughs)

Peck: Parking is expensive in some places.

M1: O yeah. That's also there.

A Woman: I work downtown. Some of the people I work with spend a \$100 a month for parking. Now, that's crazy!

Another Woman: Jeez!

A Woman: (continues) That should encourage more light rail or bus.

A Man: Uh Huh! (Sound of approval)

A Woman: (continues): I am amused by this. This one's in the new brochures. 10 years! 1995 to 05, they have increased the spread of transport till there's no more. It's not any more convenient than it was, it covers more territory. I have taken the buses here off and on since 1946 so I knew it pretty much for a population then, for a population now. It's all over the place. It's not very convenient. It's not fruitful now and we have to wait and wait. A week ago, Sunday I have many things to do. So I just walked into the first bus

stop and by the time I got back home I had spent 10 hours out walking around shopping centers or waiting for buses in what would have taken me two hours in the car. That's not convenient.

M4: I think the seniors have a different schedule too in regards to ridership. A lot of the buses are kind of shut down or less during different times of the day because they have already transported the working people. Now really to come and have fun at the senior center ...and for some reason the buses are not one hour or something because ridership is not there and they are not making money and so they cut back certain hours and since this is when we are on the bus (ha ha ha) I guess it made it so that they make profit off of working people and students and anybody else. And because of this the senior situation, we are not being considered as far as our time to go bus hopping.

A Man: Humm.

A Woman: Another thing they do at light rail stations—they cut off the—I'm sorry the... they cut the elevator if they don't have...

A Man: The escalator you are talking about.

A Woman: (continues) They cut it off. They stop.

A Man: Yeah.

A Woman: (continues) That's real nice. Isn't that nice?

Peck: They stop the escalator at light rail stations.

A Woman: (continues) Yeah. They stop the escalator to save two bucks while they'll spend a fortune on that thing downtown. It's crazy. (Group laughs) It doesn't make any sense at all. That's not accommodating people.

Peck: Not having an escalator for older adults.

A Woman: (continues) They say Oh! You've got the elevator. But you take the elevator, it takes a little longer and you still have more steps to take to get to where the escalator would let you off. It serves the budget, not the people who use it.

W8: I think...I think that every other hour is too long. Sometimes I just miss my bus and have to wait for an hour. It's too long. And again you don't want it like every 5 minutes, 'cause that will be too much. I think that every 15 minutes which some do like 22. But I think that most of the bus lines do every 15 minutes. That will be a lot easier or you would wait for a half hour if you just missed the bus. I'm like I'm going home! Forget it!

Peck: Anyone else have comments they want to make? People that haven't spoken lately, Ha ha ha...this is how I would teach, ha ha ha!  
(Group laughs)

Peck: SB, are there any other questions you have?

SB: Yes. I had one question for W3. You seem to take the bus a lot. So how do you pay on the bus? Do you have a pass or do you buy a ticket every time you go up on the bus?

W3: I would buy a ticket every time I rode.

SB: Ok.

W3: yeah

Peck: Is the cost an issue for anyone taking public transit? Taking the bus or light rail? Is the cost a barrier?

A Man: I think it's pretty reasonable.

Another man: It's pretty reasonable.

M4: In the good old days, we used to have transfers in a way we got on a bus.

W5: Yeah.

Another Woman: Yes.

Al: And we did a transfer. We could transfer to another...here when I go anywhere, if I'm going to the park or to a festival, I need to get an All Day Pass because if I'm going to change buses I have to pay another fee to change the bus. There is no transfer on buses.

A Woman: Yeah

A Man: When they started, they used to transfer. VTA transfer.

M1: I don't know why they stopped.

A Woman: Day pass has been great. I live back east and we used one charge to transfer, go one way and back the other. I think day pass for using the rest of the day is great. I like that. Find something positive here.

(Group laughs.)

A Woman: (continues) There is good...uh...lot of positive here.

Peck: Is there any other question?

M1: One more.

Peck: Please, M1.

M1: Instead of having a monthly pass, why don't they have an open pass? Say 30 dollars to 40 dollars and just let it run...you know...a monthly pass runs up in a month.

A Woman: You can get it, but yeah.

M1: Don't you?

M4: No.

M1: It works; it runs.

M4: They put a date on it.

M1: Ah. Bingo!

M4: That's what they did to me. They put a date on a monthly pass.

A Woman: What I don't understand is why they want a monthly pass...

Peck: Monthly pass would go for whatever dates...

M4: For certain prices, but you need to get to put a picture on the pass. You go to city center they put a picture on it. Take your picture for the pass you know.

A Woman: Ah I see, see there's this sticker. I've got one here. You pay \$5 for that, every month you put on one of these little stickers. You get for one month, it costs \$26 and you can go anywhere in 6 counties!

M4: Yeah

A Woman: (continues) That's a good deal!

Peck: Does the idea of the monthly pass encourage anyone to use

W5: I guess.

Peck: Let's...why we don't do something? I am looking at the time. What I would like to do is, I would like to go around the room and I would like to ask each of you to tell me what you think the most important thing we need to know about older adults and buses or light rail? What is the most important thing for us to know about older adults using the buses and the light rail? And because she has to leave in a minute, we will start with W5.

W5: I think they should have uh...the buses should...

An outside lady: Excuse me. Is {woman's name} in here? She left her personal things

A Woman: Not here.

W5: They should come more often.

Peck: Buses should come more often.

W5: Like every 15 minutes or something I think. And I think that will encourage a lot of people to use it more.

A Woman: To use it more.

W5: Yeah.

W5: I am sorry I have to leave. But I have to volunteer in the kitchen.

Peck: Ok. We'll move to W2. What's the most important thing, issues?

W2: I just thought of something and I think it would be very convenient after hearing somebody report that they couldn't find a restroom. I think there should be restrooms available somewhere within a region of bus stop. Ones that work. You know, just for emergency. That's the problem seniors have all the time.

Peck: Laughs.

SB: Trust me. Not just seniors. Trust me on that.  
(Group laughs.)

Peck: (laughs.) Not just seniors.

A Woman: That'll keep you from riding the bus too.

Peck: Ok fine. M1, what would you say is the most important thing?

M1: They should shorten up the bus stops. The distance between the stops. That might help a little bit. We don't have to walk this far for the next line because some of them are about 5 blocks away, which is long way to go. They should shorten the distance. It's a disadvantage again to them because more stops—more fuel. It's a catch 22. Can't win!

Peck: (Laughs.) Thank you, M1. So to the other W5, is there anything, the most important thing that we should know about seniors and buses and light rail?

W5: Well...I can't tell you very much about that because we drive all the time. To me, I'm used to...

Peck: You drive and you'd rather drive.

W5: He drives (She points to M2)

Peck: Ok. W4? Oh, I'm sorry, W5.



W5: He would be lost without his car. He's one of those guys who must go shopping about three, four and six times a day.  
(Group laughs.)

Peck: W4, What's the most important thing?

W4: Well. I can't give an honest opinion because as I said, I have not used the buses or anything you know. I travel. I use my car all the time. If I can't use my car, I use my daughter and, but, I will agree with the opinions that I have heard from some of these seniors here in today's presentation. So I can't really give you a honest opinion as I am not experienced.

Peck: What you just gave me was a very honest opinion. An honest opinion that you are not experienced but that you are agreeing with some of the barriers. Are any of the barriers that seem to you like being the biggest barriers or most critical?

W4: Not really. Because I, I have just not used it so much.

Peck: Let's move to M4.

M4: I can't complain too much. Like I said, I stay so close to the bus and then I go up on the light rail. I still drive. I drive the car, but anyway, I have no problems. And people always want to get up and give me their seats, I won't take it. I could stand up, you know.

Peck: (Laughs.)

M4: So I can't really complain. I take the light rail. I buy a monthly pass and I love riding the light rail. Every Saturday, like I said, I go eat over at the senior center downtown. I go to the courthouse. It lets me off right there. Why drive??

Peck: Wonderful!

M4: Yeah.

Peck: W3?

W3: I think they should give more signs.

A Woman: More signs.

W3: Probably where buses are and when they stop.

Peck: More signs.

W3: Yes.

Peck: And visible signs.

W3: Yes.

Peck: To know where they are. Thank you, W3. W2?

W2: You know I don't take public transportation because of my arthritis, which is getting worse and I have a difficult time walking all the time now a days. I will have to ask my daughter to walk me, to get on light rail, to take me there and I don't know she appreciates that so much. She's retired, she's at home. But still I don't want to be too much of a bother.

Peck: M2, is there anything you would have, most important thing?

M2: I can't hear a word what anybody is saying.

Peck: (Laughs.)

(Group laughs.)

M1: M2's going to drive.

Peck: So I think hearing is going to be a difficult thing, meaning, because if he were to hear better on public transit, it might change the experience; however, the most important thing that we need to know about seniors and public transit, W9?

W9: Well, I can't think of anything new that...

Peck: Doesn't have to be new.

W9: Well I mean that hasn't already been said.

Peck: So it's all.

W9: Yeah, so it's all.

Peck: It's all in there.

W9: I agree with one thing W3 said...sort of signs they use. They should say "light rail this way. Five blocks down." What does the sign mean? You know exactly what it means, it's not just "this way light rail"—that's not important at all. Clear specific signs.

Peck: Thank you. W8, most important thing we need to know about seniors and public transit?

W8: Well I think information is very important and uh...restrooms are very important.

Peck: Thank you, W8. M5?

M5: I feel like they should be more buses on its routes.

Peck: More buses.

M5: Light rail, I feel, is good when I use it. But I feel that there should be more buses as best as they can do.

Peck: Thank you. M4, most important thing?

M4: Basically, connected schedules. One bus to another, from light rail to a bus.

A Woman: That's true.

M4: Because there's so much waiting in between I think it's a waste of time.

Another Woman: That's another biggie!

Peck: Thank you and last, but not least, W7?

W7: Certainly not least. (She laughs). It sounds like one of the biggies is for seniors getting to the bus stop in the first place and then once you are on the bus, being able to get let off where you want to be and I'm not...I'm sitting here trying to figure out how transit could solve that other than going door to door like outreach does. But those are the two biggies that I hear for seniors. Yeah.

Peck: W7, thank you.

W7: You are welcome.

Peck: I would like to say thank you to all of you for taking your time to help us out. It's very, very much appreciated. I am going to turn off the tape recorder now.

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## APPENDIX B: DETAILED DESCRIPTION OF SURVEY METHODOLOGY

### Letter of Introduction

The introductory letter, mailed approximately one week prior to the survey, detailed the purpose of the study and the general procedures. The letter tells the respondent why the study is important and how the information will be used. The letter explains that the recipient was contacted because their name was drawn from a random sample of clients of the Erie County Department of Senior Services or the Council on Aging, Silicon Valley. Clear instructions are given about how to contact the principal researchers via telephone, fax, and email should the recipient have questions or comments. Because this survey depends on *voluntary* participation, the length of the letter is kept to one page, the format of the letter is aesthetically pleasing, and the tone of the letter motivates respondents to participate.

### The Survey Questionnaire

The questionnaire is the core of the mailing. It is the instrument that both presents questions and captures responses. Modeled after “A Healthy Future” (Patrick et al. 1999), the survey is designed in a manner that is easy-to-read and user-friendly for older adults.

The title page gives clear instructions for returning the completed questionnaire via U.S. mail. The instructions for completing the questionnaire, which can be found on the title page and throughout the questionnaire, are concise, short, and clearly visible. In addition to concise instructions, formatting aids—such as boldface, boxes, and arrows—are used. These items supplement the written directions and help the respondent comply with the instructions.

The survey questions provide a standardized stimulus to all respondents and at the same time provide a systematic way of recording answers. The questions are highly structured, and as such they clearly indicate the dimensions along which respondents are supposed to answer. The questionnaire is composed of the following types of questions:

- Yes/no questions
- Short answer questions
- Multiple choice questions - These questions require the respondent to choose an answer from a series of alternative answers that cover the range of alternatives. For some multiple choice questions, the possible responses are an all-inclusive list, and for others the possible responses are a mutually exclusive list. Consequently, the multiple choice questions are accompanied by the instructions “check only one answer” in most cases, although sometimes the instruction is “check all that apply.” A manageable number of categories is included with each multiple-choice question.
- Rating scales - Rating scales are used to collect respondents’ opinions using a graduate response scale, about relevant issues. In this survey these sections use a Likert scaling (Likert 1932), named for its inventor, in which respondents are presented

with a series of statements rather than questions and asked to indicate a degree to which they agree or disagree, usually on a five-point scale.

In all cases, the purposes of the questions are clearly stated. In addition, most questions, where appropriate, include the category ‘don’t know.’

The questions reduce the use of extraneous words, since brief questions are more likely to be answered and less likely to be misinterpreted, and longer questions make the response task more difficult (Mangione 1995). Key terms are defined in the questions, and the questions are written with clarity of focus, so that the meaning of the question is completely clear to all respondents.

Finally, the questionnaire was collated to form a booklet. Page numbers are printed on each sheet, there is a title header on each page (in case the sheets become unattached), and instruction to “go onto the next page” are printed at the bottom of the sheets. The last page thanks the respondent for participating and urges them to return the questionnaire promptly.

### **Pretesting the Questionnaire**

The objective of pretesting is to learn if there are confusing questions or unclear instructions, and then revise the questionnaire to improve those sections. There were two pre-tests. The questionnaire was first pretested on a small scale. For the first pre-test, a group of five urban planning and urban transportation professionals was assembled from contacts across the country in academia and in public planning agencies. This group read the introduction letter and questionnaire and made comments and suggestions. The suggestions from the pre-test group focused on organizing the flow of the questionnaire, improving the wording, and clarifying meaning of some questions.

After a series of improvements to the questionnaire, we conducted a second pre-test. For this pre-test, a group of fifteen urban planning academics at the University at Buffalo was gathered. They were asked to role-play as older adults and actually complete the questionnaire and record the length of time required to answer questions. This group was also encouraged to provide comments and suggestions. The second pre-test provided information about response patterns and the time required to complete the survey. With a group of completed surveys, the lead researchers began to develop a plan for coding the completed questionnaires.

As a result of the pretests, certain non-essential questions were omitted and new questions that the reviewers recommended were added. The structure of the questions and the writing style and flow were also improved.

### **Sequence of Mailings and Reminders**

The survey packets were mailed via U.S. mail in one wave (all 900 surveys were sent at once) in early December 2005 in the Buffalo area, and in early January 2006 in the San José area. The introductory letter preceded the survey questionnaires by approximately

one week. A requested return date for completed surveys was listed on the survey as two to three weeks after the surveys were estimated to be received. In addition to the letter of introduction and questionnaire, each survey packet contained a postage-paid return envelope.

Several introductory letters and surveys were returned via U.S. mail because the respondents were not at the address listed. No further attempts were made to contact these non-reachable people. A few days after the October return date, all non responders (at that point) were sent an email reminder [using the email address of the MPO director listed in the Profiles of Metropolitan Planning Organizations (AMPO 2000)]. This email message included the questionnaire itself attached as a Microsoft Word document and a .PDF document. A requested return date two weeks later was given. The last completed survey arrived approximately one week after the final return request date.

### **Potential Limitations of Survey Methodology**

This survey, like most survey research, has some potential sources of error. First, the responding sample may not be representative of the whole population. It may turn out that returns come mainly from people biased in a particular way. For example, older adults who respond may be more knowledgeable about public transit than those that do not respond. In addition, the failure of respondents to answer *all* individual questions may result in incomplete data. For example, respondents may leave certain questions blank, skip over questions, improperly follow instructions, or misunderstand the questions presented.

### **Collecting Survey Responses**

Survey responses were received via U.S. mail. The survey code number along with the responses to questions was entered into SPSS Statistical Software. To do this, all responses in the questionnaire were coded numerically.

The data were prepared for analysis by cleaning inconsistencies and correcting coding errors. Finally, surveys that were returned uncompleted and those received from respondents younger than 60 years were removed from the sample.



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## TRANSPORTATION RESEARCH SURVEY

### INTRODUCTION

We invite you to participate in a research study about public transit and older adults. Funded by the Mineta Transportation Institute, the research is being conducted by San José State University and the University at Buffalo. **Attached to this survey please find \$1** as our way of thanking you for making this helpful contribution to our communities.

**Your responses are important to improving the future of public transit.** The information you provide will help us learn ways to improve public transit to serve you and your neighbors. Even if you do not ride public transit or have not ridden in years, your responses are useful for the research. **We thank you for your time.**

### Consent To Participate In Research

In this survey, we ask questions about your use and non-use of local buses and trains. We also ask a few questions about you, such as your age. We do not ask for your name. Your responses are entirely confidential and anonymous. Your responses will never be associated with you, and your responses will never affect any services that you receive from the universities or the transit agencies. We do not anticipate any risks to you from participating in this research.

Completion and return of this survey questionnaire constitutes consent to participate. Please keep this page for your records. On the bottom right of this page is a code beginning with a letter "B" or "S." If you decide against participating after mailing your responses, simply telephone Dr. Hess and provide him with the code. Your data will then be removed from our database. Remember, **your answers are entirely confidential and anonymous.** If you have questions about this research, please contact:

**If you have questions regarding your rights in relation to this research, or if you believe you have been harmed by this research, please contact:**

Administrator  
Institutional Review Board for Social and Behavioral Sciences  
516 Capen Hall  
State University of New York at Buffalo  
Buffalo, New York 14260  
Phone: (716) 645-3321  
E-mail: [sbsirb@research.buffalo.edu](mailto:sbsirb@research.buffalo.edu)

### INSTRUCTIONS

1. Please **read each question carefully** and indicate your answers by either circling, checking, or filling in your response.
2. This survey contains various questions about public transit and older adults. There are no correct or incorrect answers. If you are unable to provide an exact response, please indicate your best estimate.



3. It will take approximately *30 minutes* to complete this survey.
4. Please **return your completed survey no later than December 16, 2005 in the prepaid addressed envelope** that has been provided.

Thank you for taking the time to help with this important project.

January 2006

Dear Erie County resident:

THANK YOU for taking part in the Transportation Survey. Your responses will make a valuable contribution to the future of public transit for older adults. Remember, we want to hear from you whether or not you ride public transit.

We have received many responses, but we need more ...

- If you have not yet mailed your survey, please do so as soon as possible. We want to hear from you!
- If you still wish to participate but misplaced your copy of the survey, you can receive another copy. Simply call Dr. Hess at 829-2133 extension 202.

Sincerely,

## APPENDIX C: SURVEY

### Section 1: Background Information

These questions tell us about the people completing the survey. **Remember, your answers are completely confidential and anonymous.** You will not be linked to your answers in any way.

- 
1. I live (*Check **all that apply***):
- ☐ alone
  - ☐ with my spouse/partner
  - ☐ with my children
  - ☐ with other relatives
  - ☐ with friend(s)
  - ☐ with a personal assistant
- 

2. Some people use devices that help them to manage various activities. Please circle the word that best describes how often you use the following:

How often do you use each of these?

(*Please circle **one** answer for each.*)

<b>Cane</b>	Never	Rarely	Sometimes	Always
<b>Walker</b>	Never	Rarely	Sometimes	Always
<b>Wheelchair</b>	Never	Rarely	Sometimes	Always
<b>Power Scooter</b>	Never	Rarely	Sometimes	Always
<b>Eyeglasses/Contacts</b>	Never	Rarely	Sometimes	Always
<b>Hearing Aid</b>	Never	Rarely	Sometimes	Always

---

Please **turn the page** to continue the survey.



Survey Code \_\_\_\_\_

**Section 2: Driving**

3. Do you have a valid driver's license? *(Please check **one**.)*

☐ NO, I do not.



**I DO NOT HAVE A LICENSE**

Have you ever been a licensed driver?



☐ No



☐ Yes

What year did you stop driving?

\_\_\_\_\_  
*(Fill in year.)*

I stopped driving because:

*(Please check **all that apply**.)*

- ☐ Physically unable
- ☐ Legally blind
- ☐ License expired
- ☐ Did not pass renewal exam
- ☐ No need to drive
- ☐ Could not afford to keep car
- ☐ Afraid to continue driving
- ☐ Other

\_\_\_\_\_  
*(Please specify.)*

☐ YES, I do.



**I DO HAVE A LICENSE**



In the last month, have you driven a car or other motor vehicle?

- ☐ No
- ☐ Yes

Which of the following describes your access to a car?

*(Please check **all that apply**.)*

- ☐ I never have access to a car
- ☐ I rarely have access
- ☐ I sometimes have access
- ☐ I always have access

### Section 3: Transportation

*(Please check **one**.)*

4. How often do you go out in a typical **week**? Going out means leaving your apartment, house, or yard to go someplace else.
- ☐ Rarely  
☐ 1 or 2 times per week  
☐ 3 to 5 times per week  
☐ More than 5 times per week

People use various ways of getting where they need to go. **Please circle the answer** that best indicates how often you do the following?

*(Please circle **one** answer for **each line**.)*

- |    |  |       |        |           |               |
|----|--|-------|--------|-----------|---------------|
| 5. | <b>Drive myself</b>                                      | Never | Rarely | Sometimes | Mostly/Always |
|    | <b>Get ride from a person who I live with</b>            | Never | Rarely | Sometimes | Mostly/Always |
|    | <b>Get ride from person who I <i>don't</i> live with</b> | Never | Rarely | Sometimes | Mostly/Always |
|    | <b>Walk</b>  | Never | Rarely | Sometimes | Mostly/Always |
|    | <b>Bicycle</b>   | Never | Rarely | Sometimes | Mostly/Always |
|    | <b>Take a taxi</b>                                       | Never | Rarely | Sometimes | Mostly/Always |
|    | <b>Ride public transit</b>                               | Never | Rarely | Sometimes | Mostly/Always |
|    | <b>Take a community van (e.g. senior ctr.)</b>           | Never | Rarely | Sometimes | Mostly/Always |
|    | <b>Ride paratransit</b>                                  | Never | Rarely | Sometimes | Mostly/Always |

*(Please check **one**.)*

6. Does access to public transit influence where you live or where you moved to?
- ☐ Not At All  
☐ A Little  
☐ Somewhat  
☐ A Lot

7.



During the past **12 months**, how many times have you traveled on public transportation? [Public transportation refers to public buses and light rail, as shown in the pictures above, but **NOT** taxicabs.]

☐ 0 times

- ☐ 1 or 2 times  
☐ 2 to 10 times  
☐ Once a month  
☐ Once per week  
☐ Several times a week  
☐ Nearly everyday

**If 0 times, why?**

- ☐ Prefer to drive  
☐ Public transit not available  
☐ Public transit not convenient  
☐ Public transit too expensive  
☐ Other \_\_\_\_\_

8.



During the past **12 months**, how many times have you traveled on Metro Paratransit Access Line (PAL) (similar to picture above), the service provided for people with disabilities who cannot use or get to other public transportation? [**Remember:** You must be **certified** to ride paratransit.]

- ☐ 0 times  
☐ 1 or 2 times  
☐ 2 to 10 times  
☐ Once a month  
☐ Once per week  
☐ Several times a week  
☐ Nearly everyday

9. How often do you stay at home when you wanted to go someplace because of the following conditions?

*(Please circle **one** answer for **each**.)*

<b>Temperature</b>	Never	Rarely	Sometimes	Always
<b>Rain</b>	Never	Rarely	Sometimes	Always
<b>Snow or Ice</b>	Never	Rarely	Sometimes	Always
<b>Other Weather</b>	Never	Rarely	Sometimes	Always
<b>Gets Dark too Early</b>	Never	Rarely	Sometimes	Always

*(Please check **one**.)*

10. Because you **DID NOT** have access to convenient transportation, how many times have you stayed home **in the last 12 months** when you needed or wanted to go someplace?
- ☐ I never stayed home
  - ☐ only one or two times
  - ☐ about once a month
  - ☐ about once a week
  - ☐ many times a week
  - ☐ almost daily
  - ☐ not sure/don't know

*(Please check **one**.)*

11. Considering all transportation that is available to you, which indicates how satisfied you are with your ability to get around your community?
- ☐ Very dissatisfied
  - ☐ Dissatisfied
  - ☐ Satisfied
  - ☐ Very satisfied
  - ☐ Not sure/don't know

#### Section 4: Public Transit

(Please check **one**.)

12. Which of the statements below best describes how you feel about walking to a bus or rail stop?
- ☐ I would have **no difficulty** walking to a bus stop
  - ☐ Walking to a bus stop would be **strenuous**, but I could do it
  - ☐ Walking to a bus stop would be **very difficult**
  - ☐ I **would not be able** to walk to a bus stop
  - ☐ None of the above

(Fill in answer or check box.)

13. To walk to the nearest bus stop or rail station, it would take: \_\_\_\_\_ minutes  
(Fill in number.)
- ☐ I could not walk.

Do any of the following present difficulties in **getting to public transit**?

14. (Please check **one** answer for **each line**.)

	Yes	No	Don't Know
Knowing where to find bus or rail stop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Crossing busy streets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No sidewalks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Too far	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Carrying bags or packages	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Using a cane or walker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weather is too hot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weather is too cold	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. We would like to know a little more about your opinions of public transit service. Please tell us how much you agree or disagree with the statements about public transit that follow:

*(Please circle **one** answer for **each line**.)*

	Strongly Disagree	Disagree	Agree	Strongly Agree
Service on public transit is generally reliable.	1	2	3	4
Buses and trains can generally get me where I need to go.	1	2	3	4
Riding public transit is a good value for the fare.	1	2	3	4
Buses are easy to board.	1	2	3	4
Light Rail/Metro rail is easy to board.	1	2	3	4
I am concerned about getting seated before the bus or rail car starts moving.	1	2	3	4
I am concerned about my general physical comfort while riding.	1	2	3	4
I feel comfortable with the cleanliness of transit vehicles.	1	2	3	4
I feel comfortable with the cleanliness of stations and stops.	1	2	3	4
I am less likely to ride public transit if I have to transfer to a second bus or light rail train during my trip.	1	2	3	4
The bus comes regularly and I won't have to wait a long time.	1	2	3	4
Public transit does not provide early morning or late night service to fit my needs.	1	2	3	4
Public transit does not provide weekend service to fit my needs.	1	2	3	4
Compared to driving or being driven, public transit takes a long time.	1	2	3	4
In the next 30 days, I am likely to ride public transit.	1	2	3	4
Public transit is useful for getting to medical appointments.	1	2	3	4



16. We would like to know about older adults' views of riding public transit. Please tell us how much you agree or disagree with the statements about public transit that follow:

*(Please circle **one** answer for **each line**.)*

	Strongly Disagree	Disagree	Agree	Strongly Agree
I am concerned about missing my stop.	1	2	3	4
I am concerned about being late for my appointment.	1	2	3	4
I am concerned that I will not know where I am going on the bus, light rail, or subway.	1	2	3	4
I am concerned about needing to use a restroom.	1	2	3	4
I am concerned about traveling in crowds.	1	2	3	4
I am concerned about inconsiderate passengers.	1	2	3	4
I am concerned about my personal safety.	1	2	3	4
I fear getting lost.	1	2	3	4
I fear that I may fall down.	1	2	3	4
Riding public transit at night makes me nervous.	1	2	3	4
I am concerned about having the correct change to pay my fare.	1	2	3	4
Traveling with strangers makes me feel apprehensive.	1	2	3	4
I am concerned that I am not healthy enough for a long trip.	1	2	3	4
If I need help while using a bus or train, someone will help me.	1	2	3	4
Police and security are present in adequate numbers to make me feel comfortable.	1	2	3	4
Access to public transit influences my overall life satisfaction.	1	2	3	4

---

**Section 5: Getting Information**

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17. If you wanted to learn about public transit routes and schedules, what would you do?  
(Please check **all that apply**.)
- ☐ Phone call to the NFTA  
☐ Internet website  
☐ Printed maps and schedules  
☐ Ask a friend  
☐ Other \_\_\_\_\_  
(Please specify.)
- 

18. Do you have difficulty understanding transit schedules or maps?
- ☐ Yes  
☐ No
- 

19. During the past 12 months, have you seen or heard any advertisements or public service announcements about public transit?
- ☐ Yes  
☐ No
- 

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**Section 6: Overcoming Barriers**

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20. Traveling on transit with a relative, friend, or neighbor would be helpful. (Please check **one**.)
- ☐ Strongly agree  
☐ Agree  
☐ Disagree  
☐ Strongly disagree  
☐ Not sure/don't know
- 

21. If I relied **only** on public transportation, it would be difficult for me to continue to reside in my current home. (Please check **one**.)
- ☐ Strongly agree  
☐ Agree  
☐ Disagree  
☐ Strongly disagree  
☐ Not sure/don't know
-

---

*(Please check **one**.)*

22. If I were no longer able to drive, it would be difficult for me to take public transit for the majority of my travel needs.
- ☐ Strongly agree  
☐ Agree  
☐ Disagree  
☐ Strongly disagree  
☐ Not sure/don't know

---

*(Please check **one**.)*

23. Would you find it helpful to have access to a training or mentoring program to learn more about public transit and how to ride?
- ☐ Yes  
☐ No  
☐ Don't know

- 
24. Would any of the following make it possible for you to walk to a bus stop?

*(Please check **one** answer for each line.)*

	Yes	No	Don't Know
Bus stop within five blocks of your home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Better street lighting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Better sidewalks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Better snow clearance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A resting place along the way to the bus stop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Routes that are not along busy streets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

---

### Section 7: Conclusion

Before you finish, please tell us a few more things about you. We would like to remind you that this survey is **entirely confidential**.

- 
25. I am: ☐ Male ☐ Female

- 
26. On my last birthday I turned \_\_\_\_\_ years old.

*(Fill in number of years.)*

---

(Please check **one**.)

27. In what type of housing do you reside?

**I live in a (an)...**

- ☐ Apartment or Condominium  
☐ House  
☐ Assisted Living or Board and Care facility  
☐ Skilled Nursing Facility

28. Some people get assistance from or use the services of various programs.

**How often do you get assistance from the following:**

(Please check **one** answer for each line.)

	Never Used	A Few Times A Month	A Few Times A Week	Almost Daily
Family or Friends to help you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meals on Wheels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social Worker or Case Manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In-Home Supportive Services (IHSS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

29. From all sources, what is your **average monthly household income** before taxes?

Income includes wages, social security, pensions, and interest or dividends on savings and investments.

- ☐ \$500 or less per month  
☐ \$501 - \$1,000 per month  
☐ \$1,001 - \$2,000 per month  
☐ \$2,001 - \$4,000 per month  
☐ \$4,001 or more per month

---

30. Which of the following best describes your racial identification?

*(Please check **one**.)*

- ☐ White
- ☐ Black/African American
- ☐ American Indian/Alaska Native
- ☐ Native Hawaiian/Pacific Island
- ☐ Asian
- ☐ Latina/Latino
- ☐ Other \_\_\_\_\_

*(Please specify.)*

---

31. Considering your life overall, which indicates how satisfied you are?

*(Please check **one**.)*

- ☐ Very dissatisfied
- ☐ Dissatisfied
- ☐ Satisfied
- ☐ Very satisfied
- ☐ Not sure/don't know

---

32. From where you live, what is the **nearest major intersection**? List the two streets nearest to you that cross each other.

*(Please enter street name for each.)*

\_\_\_\_\_ and \_\_\_\_\_

---

33. What is your ZIP code?

\_\_\_\_\_

---

34. Is there anything else you would like to tell us about your views on public transit? Use the space below to write your thoughts and ideas. (Attach separate sheets if necessary.)

**Thank you** for your time. Please **return the survey** in the enclosed postage paid envelope.

## APPENDIX D: TRANSIT CONCERNS RESPONSE RATES

**Table 13 Transit concerns response rates**

Question	Response	Total Sample <i>N</i> =737		San Jose <i>n</i> =286		Erie County <i>n</i> =451	
		N	%	n	%	n	%
Service on public transit is generally reliable.	Strongly disagree	19	2.6	4	1.4	15	3.3
	Disagree	58	7.9	16	5.6	42	9.3
	Agree	505	68.5	200	69.9	305	67.6
	Strongly agree	72	9.8	35	12.2	37	8.2
	Missing	83	11.3	31	10.8	52	11.5
Buses and trains can generally get me where I need to go.	Strongly disagree	49	6.6	13	4.5	36	8.0
	Disagree	124	16.8	45	15.7	79	17.5
	Agree	403	54.7	167	58.4	236	52.3
	Strongly agree	76	10.3	30	10.5	46	10.2
	Missing	85	11.5	31	10.8	54	12.0
Riding public transit is a good value for the fare.	Strongly disagree	29	3.9	12	4.2	17	3.8
	Disagree	67	9.1	28	9.8	39	8.6
	Agree	460	62.4	178	62.2	282	62.5
	Strongly agree	90	12.2	35	12.2	55	12.2
	Missing	91	12.3	33	11.5	58	12.9
Buses are easy to board.	Strongly disagree	30	4.1	5	1.7	25	5.5
	Disagree	97	13.2	31	10.8	66	14.6
	Agree	446	60.5	182	63.6	264	58.5
	Strongly agree	82	11.1	37	12.9	45	10.0
	Missing	82	11.1	31	10.8	51	11.3
Light Rail/Metro rail is easy to board.	Strongly disagree	25	3.4	5	1.7	20	4.4
	Disagree	80	10.9	22	7.7	58	12.9
	Agree	435	59.0	180	62.9	255	56.5
	Strongly agree	90	12.2	41	14.3	49	10.9
	Missing	107	14.5	38	13.3	69	15.3
I am concerned about getting seated before the bus or rail car starts moving.	Strongly disagree	42	5.7	20	7.0	22	4.9
	Disagree	171	23.2	61	21.3	110	24.4
	Agree	323	43.8	128	44.8	195	43.2
	Strongly agree	116	15.7	48	16.8	68	15.1
	Missing	85	11.5	29	10.1	56	12.4

I am concerned about my general physical comfort while riding.	Strongly disagree	47	6.4	18	6.3	29	6.4
	Disagree	207	28.1	70	24.5	137	30.4
	Agree	308	41.8	133	46.5	175	38.8
	Strongly agree	86	11.7	35	12.2	51	11.3
	Missing	89	12.1	30	10.5	59	13.1
I feel comfortable with the cleanliness of transit vehicles.	Strongly disagree	24	3.3	5	1.7	19	4.2
	Disagree	83	11.3	33	11.5	50	11.1
	Agree	440	59.7	168	58.7	272	60.3
	Strongly agree	82	11.1	44	15.4	38	8.4
	Missing	108	14.7	36	12.6	72	16.0
I feel comfortable with the cleanliness of stations and stops.	Strongly disagree	27	3.7	3	1.0	24	5.3
	Disagree	141	19.1	53	18.5	88	19.5
	Agree	388	52.6	159	55.6	229	50.8
	Strongly agree	66	9.0	34	11.9	32	7.1
	Missing	115	15.6	37	12.9	78	17.3
I am less likely to ride public transit if I have to transfer to a second bus or light rail train during my trip.	Strongly disagree	33	4.5	9	3.1	24	5.3
	Disagree	147	19.9	62	21.7	85	18.8
	Agree	354	48.0	141	49.3	213	47.2
	Strongly agree	114	15.5	42	14.7	72	16.0
	Missing	89	12.1	32	11.2	57	12.6
The bus comes regularly and I won't have to wait a long time.	Strongly disagree	33	4.5	13	4.5	20	4.4
	Disagree	145	19.7	63	22.0	82	18.2
	Agree	375	50.9	146	51.0	229	50.8
	Strongly agree	67	9.1	22	7.7	45	10.0
	Missing	117	15.9	42	14.7	75	16.6
Public transit does not provide early morning or late night service to fit my needs.	Strongly disagree	50	6.8	18	6.3	32	7.1
	Disagree	231	31.3	102	35.7	129	28.6
	Agree	242	32.8	89	31.1	153	33.9
	Strongly agree	75	10.2	25	8.7	50	11.1
	Missing	139	18.9	52	18.2	87	19.3
Public transit does not provide weekend service to fit my needs.	Strongly disagree	53	7.2	24	8.4	29	6.4
	Disagree	203	27.5	93	32.5	110	24.4
	Agree	274	37.2	98	34.3	176	39.0
	Strongly agree	71	9.6	22	7.7	49	10.9
	Missing	136	18.5	49	17.1	87	19.3

Compared to driving or being driven, public transit takes too long.	Strongly disagree	25	3.4	6	2.1	19	4.2
	Disagree	118	16.0	31	10.8	87	19.3
	Agree	352	47.8	147	51.4	205	45.5
	Strongly agree	152	20.6	75	26.2	77	17.1
	Missing	90	12.2	27	9.4	63	14.0
In the next 30 days, I am likely to ride public transit.	Strongly disagree	202	27.4	55	19.2	147	32.6
	Disagree	201	27.3	68	23.8	133	29.5
	Agree	164	22.2	86	30.1	78	17.3
	Strongly agree	85	11.5	49	17.1	36	8.0
	Missing	85	11.5	28	9.8	57	12.6
Public transit is useful for getting to medical appointments.	Strongly disagree	142	19.3	47	16.4	95	21.1
	Disagree	214	29.0	83	29.0	131	29.0
	Agree	229	31.1	98	34.3	131	29.0
	Strongly agree	59	8.0	25	8.7	34	7.5
	Missing	93	12.6	33	11.5	60	13.3
I am concerned about missing my stop.	Strongly disagree	43	5.8	5	1.7	38	8.4
	Disagree	204	27.7	75	26.2	129	28.6
	Agree	314	42.6	134	46.9	180	39.9
	Strongly agree	77	10.4	34	11.9	43	9.5
	Missing	99	13.4	38	13.3	61	13.5
I am concerned about being late for my appointment.	Strongly disagree	34	4.6	7	2.4	27	6.0
	Disagree	142	19.3	47	16.4	95	21.1
	Agree	352	47.8	138	48.3	214	47.5
	Strongly agree	116	15.7	61	21.3	55	12.2
	Missing	93	12.6	33	11.5	60	13.3
I am concerned that I will not know where I am going on the bus, light rail, or subway.	Strongly disagree	62	8.4	16	5.6	46	10.2
	Disagree	253	34.3	80	28.0	173	38.4
	Agree	254	34.5	121	42.3	133	29.5
	Strongly agree	73	9.9	34	11.9	39	8.6
	Missing	95	12.9	35	12.2	60	13.3
I am concerned about needing to use a restroom.	Strongly disagree	46	6.2	11	3.8	35	7.8
	Disagree	166	22.5	50	17.5	116	25.7
	Agree	305	41.4	127	44.4	178	39.5
	Strongly agree	127	17.2	61	21.3	66	14.6
	Missing	93	12.6	37	12.9	56	12.4



I am concerned about traveling in crowds.	Strongly disagree	46	6.2	15	5.2	31	6.9
	Disagree	256	34.7	106	37.1	150	33.3
	Agree	262	35.5	96	33.6	166	36.8
	Strongly agree	71	9.6	27	9.4	44	9.8
	Missing	102	13.8	42	14.7	60	13.3
I am concerned about inconsiderate passengers.	Strongly disagree	28	3.8	8	2.8	20	4.4
	Disagree	161	21.8	69	24.1	92	20.4
	Agree	327	44.4	127	44.4	200	44.3
	Strongly agree	120	16.3	42	14.7	78	17.3
	Missing	101	13.7	40	14.0	61	13.5
I am concerned about my personal safety.	Strongly disagree	27	3.7	9	3.1	18	40.0
	Disagree	161	21.8	66	23.1	95	21.1
	Agree	311	42.2	119	41.6	192	42.6
	Strongly agree	147	19.9	57	19.9	90	20.0
	Missing	91	12.3	35	12.2	56	12.4
I fear getting lost.	Strongly disagree	68	9.2	16	5.6	52	11.5
	Disagree	310	42.1	106	37.1	204	45.2
	Agree	193	26.2	92	32.2	101	22.4
	Strongly agree	72	9.8	36	12.6	36	8.0
	Missing	94	12.8	36	12.6	58	12.9
I fear that I may fall down.	Strongly disagree	58	7.9	15	5.2	43	9.5
	Disagree	268	36.4	94	32.9	174	38.6
	Agree	231	31.3	98	34.3	133	29.5
	Strongly agree	90	12.2	45	15.7	45	10.0
	Missing	90	12.2	34	11.9	56	12.4
Riding public transit at night makes me nervous.	Strongly disagree	30	4.1	7	2.4	23	5.1
	Disagree	118	16.0	48	16.8	70	15.5
	Agree	296	40.2	121	42.3	175	38.8
	Strongly agree	199	27.0	76	26.6	123	27.3
	Missing	94	12.8	34	11.9	60	13.3
I am concerned about having the correct change to pay my fare.	Strongly disagree	43	5.8	12	4.2	31	6.9
	Disagree	189	25.6	79	27.6	110	24.4
	Agree	317	43.0	123	43.0	194	43.0
	Strongly agree	95	12.9	36	12.6	59	13.1
	Missing	93	12.6	36	12.6	57	12.6
Traveling with strangers makes me feel apprehensive.	Strongly disagree	39	5.3	10	3.5	29	6.4
	Disagree	273	37.0	108	37.8	165	36.6
	Agree	271	36.8	112	39.2	159	35.3
	Strongly agree	55	7.5	17	5.9	38	8.4
	Missing	99	13.4	39	13.6	60	13.3

I am concerned that I am not healthy enough for a transit trip.	Strongly disagree	74	10.0	19	6.6	55	12.2
	Disagree	301	40.8	104	36.4	197	43.7
	Agree	199	27.0	98	34.3	101	22.4
	Strongly agree	70	9.5	30	10.5	40	8.9
	Missing	93	12.6	35	12.2	58	12.9
If I need help while using a bus or train, someone will help me.	Strongly disagree	30	4.1	9	3.1	21	4.7
	Disagree	154	20.9	59	20.6	95	21.1
	Agree	396	53.7	158	55.2	238	52.8
	Strongly agree	56	7.6	21	7.3	35	7.8
	Missing	101	13.7	39	13.6	62	13.7
Police and security are present in adequate numbers to make me feel comfortable.	Strongly disagree	57	7.7	17	5.9	40	8.9
	Disagree	230	31.2	83	29.0	147	32.6
	Agree	279	37.9	120	42.0	159	35.3
	Strongly agree	54	7.3	22	7.7	32	7.1
	Missing	117	15.9	44	15.4	73	16.2
Access to public transit influences my overall life satisfaction.	Strongly disagree	72	9.8	18	6.3	54	12.0
	Disagree	185	25.1	58	20.3	127	28.2
	Agree	309	41.9	139	48.6	170	37.7
	Strongly agree	69	9.4	31	10.8	38	8.4
	Missing	102	13.8	40	14.0	62	13.7



## APPENDIX E: SURVEY COMMENTS

<b>B97</b>	I hope I don't have to use it, I'm too old.
<b>B98</b>	I take real good care of myself and I'm very happy with my family and friends and sisters. Being handicapped hasn't held me up. I raised a beautiful family and had a wonderful husband and had several foster children who visit me often and call me on the phone often. I've been handicapped since my child hood but it never held me back. I've been blessed. Thank you. I answered this the best I could. My husband is deceased. He drove me everywhere we went. I didn't use the bus service at all.
<b>B110</b>	It would be very helpful to have bus service on Robin Rd., Amherst, NY and to have bus service to Bally Spa (on E. Robinson and Niagara Falls Blvd) from Robin Rd. without having to go all the way from Millersport Hwy to UB South to Niagara Falls Blvd to East Robinson and NF Blvd.
<b>B114</b>	Public transportation is a must for people without a car.
<b>B116</b>	Would like bus service from Sheridan and Millersport (north side) to go shopping (ie. Wegman's Supermarket and be returned to the same area. U.S. # 44 stops nearby but it is not handy for shopping.
<b>B117</b>	Look into the Pittsburgh, PA "Access" program that is available to Senior Citizens - anywhere, anytime, no waiting - a day's notice to anywhere for anything at anytime, not just appts. We in Amherst have nothing - you are stuck if you cannot drive!
<b>B119</b>	I have no views. I have not ridden public transit since 1970.
<b>B122</b>	At present, I do not need public transportation because I have a car and work. When I get older and unable to drive I would like public transit, especially the type you call and they pick you up at the door.
<b>B124</b>	Buses do not run often enough. Metro Rail only serves a small section of the area.
<b>B126</b>	I like the idea of a paratransit system. I believe I would use it if I could not drive anymore and qualified for it. Since we do not have a Sr. Van Services through the county and many other sources, this might be the way to go even if it was necessary to pay for the service, which I believe you do.
<b>B128</b>	Would use public transportation if available in the evening and on weekends to attend theater and other events at local colleges and in city.
<b>B134</b>	I have no need for public transportation, but if I did I would have no problems using it.
<b>B136</b>	Rode NYC subways 3 times in past year. Found them very efficient.
<b>B137</b>	I no longer need to use buses, but when I did I was always pleased with easy access to get where I had to go. A bus goes right past my house each day right across the street from my house (I live in the suburbs), so I have great access to go downtown and get back home without any problems. NFTA does a great job. Keep those buses rolling!

<b>B143</b>	Takes a lot of tax dollars for the number of people served. Buses could be a lot smaller. They are big from decades ago. Get modern.
<b>B145</b>	I have used public transportation all my life for I never had a driver's license. I now live in the Walden Senior Apts. Set back from the railroad. The long walk from my apt. to the bus stop on Walden Ave. near Stewart is ok with me, but the neighborhood has changed so much that I am afraid to wait for a bus at the stop. I truly miss taking the Sycamore bus downtown to church, movies, etc. Too many muggings and robberies going on now in this neighborhood. Again, I really miss taking public transportation.
<b>B147</b>	I answered these questions for me. My husband is disabled, uses a scooter or wheelchair. Buses are not handicapped accessible.
<b>B166</b>	I am legally blind in one eye which makes it hard for me to use the public transit. With the uneven sidewalks I am afraid of falling. It is hard for me to walk.
<b>B167</b>	Better snow removal at boarding sites.
<b>B176</b>	In our community we have the senior van if needed and rural transit service-48 hours advance and two weeks for medical appointments(for eligible residents of Erie County) May schedule two rides per week. In response to questions 15 and 16 resp. wrote- I do not have any public transit available-does not pertain to me I live in the country
<b>B178</b>	I really don't use public transit now, but I know I will need it in the future. Right now I can still do my own driving. Rarely, I have need to take a bus. I don't like driving in the city-but I have family to help out. Living in the country is a lot different than living in the city. Sooner or later, as we get older, we will all need help from public transit.
<b>B184</b>	Physically disabled and have not taken public transit in recent years.
<b>B205</b>	Yes I would appreciate it if the buses would run on time. And not have a bus pass you by for no reason. Or would not stop on top of a snow pile to let you off especially if you are disabled.
<b>B207</b>	I don't like taking the bus when the school kids are on it. They are very rude and disrespectful of people around them! More buses should be provided at this time so older people could avoid this! Thank you
<b>B212</b>	My view is that riding on public transportation you have to put up with people that don't have any respect for the older generation and it is not safe to be on some of the buses, you just don't feel safe. With me I have a number of health problems and I am 76 years old. I don't feel safe riding the buses now. So when my sister can't take me, I have to get a taxi or I have to stay home. In response to question 27 respondent wrote, I live downstairs, my sister lives upstairs.
<b>B215</b>	This survey was hard to answer. We live in N. Collins and don't have public transportation . You can't answer some of the questions you know nothing about.
<b>B218</b>	More buses operating on Saturday.
<b>B221</b>	I haven't used public transportation in many years, so I am not entirely aware of the problems that people encounter when they do use it. I don't know the schedule of the buses here in Orchard Park, but I have heard people say that if they ran at better times they might commute to work on them. If only people would use the public transportation it would help the congestion on roads and we wouldn't need so many parking lots that take up valuable real estate in downtown Buffalo.

<b>B230</b>	Seniors should not have to pay for transfer.
<b>B234</b>	I think and strongly approve of rapid rail transit to all areas outside Buffalo. This would help in traffic to and from the city. I cannot understand why this is not being done.
<b>B235</b>	Cannot tell you my views because have not been on one for five years.
<b>B239</b>	Transit system in general is not run properly. Schedules must be adhered to so rider may not have to wait as long at stops.
<b>B244</b>	Workers at Mercy Hospital have to take 3 buses, which is absurd. Seniors with no car can't visit doctor or patients in the hospital.
<b>B249</b>	I think you should have more shelters at the bus stops.
<b>B250</b>	More informed seminars needed. It would be nice to know the important routes. It would be nice to have information on the rail system (where it goes and the free routes). A guided tour would be nice for seniors (even if we had to pay) and perhaps offer a place for lunch afterward.
<b>B259</b>	For us Marine Drive Apartment Residents the train is great for traveling when it's busy downtown. but, when it gets dark it is frightening when kids are getting on and off in the free area. It is intimidating when they come to the end of the line and of course there are no houses around for them to live in.
<b>B264</b>	I think they are very comfy in the summer and winter. I Like.
<b>B268</b>	A person pays for convenience. I plan on getting my drivers license Sept. 2006. If I had insurance (auto) I could get the SR-22. Since I can't afford to purchase an auto nor the auto insurance on my present Social Security retirement, it is very important for me to become gainfully employed. I was just offered a position at Motorola in Elma, but no bus goes there. Also many jobs want a person to work 10-12 hours + weekends. Impossible if one takes public transportation. I want my own vehicle, so I have no choice.
<b>B275</b>	Very difficult getting on buses that have wheelchair access. Drivers do not lower for regular passengers and I have seen people fall in step in middle of bus. No good. (Should be straight no steps) (Even if driver lowers step it is still difficult getting on and off; too steep a step down and up.
<b>B278</b>	Used the metro bus system 5 days a week to go and return to downtown Buffalo for 18 years. Walked or drove 2 miles from home to board the bus. Had to terminate my employment because of knee problems. Could have continued working if bus stop had been closer to home. The bus stop is 2 miles from my home (no sidewalks).
<b>B282</b>	I think public trans is very good for a lot of people. In fact, I used it when on jury duty and would probably use it if I worked downtown. I can't use it for Dr. app. because bus doesn't run there. I couldn't use it when I worked because buses didn't run there the hours I need them. However I think public trans is a good thing. I drive the ambulance for Lanc. Vol Amb Corps about 60-80 a month, it does help me there.
<b>B288</b>	I hope in the future when I am no longer able to drive a car I can have a bus stop near my home or apartment.
<b>B290</b>	If the buses ran more frequently during the day to Dr. appointments, shops, dentists like visiting a friend I would use the service

<b>B293</b>	I find this survey really doesn't apply too much as I live in the country with very little public transportation. I help seniors and those in need so am aware of rural transit, Erie County van, etc. I drive and deliver MOW's. Do hope this helps. Sorry I hadn't returned this sooner!
<b>B298</b>	I have never used public transit.
<b>B303</b>	We need a stand, so we can stand out of the rain and snow. You get so cold waiting for the bus when it rains or snows; the sun is hot. It will be nice for people who wait with babies. Thank you.
<b>B306</b>	I ride public transportation because I have to, not because I like to. Some bus drivers are inconsiderate, bus seats are filthy. The newer buses are so uncomfortable, not enough room for two people to fit on a seat. Too much profanity, talking on cell phone and eating on bus should not be allowed. Buses are consistently 15 to 20 minutes late while waiting in cold, unshovelled bus stops.
<b>B316</b>	The snow mounds at bus stops makes boarding and exiting the bus very difficult in winter. Need better synchronization from original boarded bus to transfer buses so wait isn't so long. Need service to Lifetime Health Center on Sweet Home Road, Amherst, NY.
<b>B320</b>	Yes, I would like the buses that have no steps, as it is easy for me because I use a cane and a walker.
<b>B325</b>	I would like if the kids, riding the bus on school days give seats in front to elderly, because they will sit there and not move at all and they are a little loud and language.
<b>B327</b>	Friendlier drivers.
<b>B331</b>	I love the transit system. I use it all the time and go all over the city. In the summer I use it to get to the Erie Co. Fair and zoo. I'm at the downtown library all the time. Some drivers are very cordial and all around nice - others, oh well.
<b>B339</b>	Keep a decent railroad service - rebuilding America without railroad trains through the country is asinine and ridiculous! We should switch to smaller or mini buses on off-hour rush morning or evening dinner time. Save on diesel fuel. Shorter travel time - not wait too long on bus stop or at connections. No bus strikes either!
<b>B344</b>	The buses should kneel for seniors, without them having to ask them to.
<b>B354</b>	Sorry I am late with this survey. It was put away during the holiday season and forgotten until to-day 12/27. Up until now I have not thought much about public transportation as I am fortunate at the age of 86 to be in good health and still able to drive my car.
<b>B356</b>	As far as getting to a Doctor or shopping—I have a son that will take me there. But going to the CEM or any Senior Citz. Club would be difficult because once I get off a bus I wouldn't be able to walk blocks to the centers without help. My son works and I can't and won't depend on him to take me places unless he has a day off. I have no one else but myself. I'm all alone and no family left. It's a lonely life.
<b>B362</b>	I am very happy to live at the Timon Towers, because the bus stops by the house and the rail stops 2 minutes and most of all, the great blessing, the Blessed Sacrament Church is next to us.
<b>B363</b>	I have been pleased with my experiences on uses. The drivers on the Delaware and Colvin route have been very polite and helpful to me. I wish there were more shelters at bus stops. I have never tried to get bus transport to medical centers, but it would not be easy and I would not be likely to visit my older friends in nursing homes. I will be sad when I can no longer drive. Sorry to be so late. I was visiting family out of town.

<b>B368</b>	Sometimes I would like to use public transit, but the bus does not come by too frequently. Also, I can use a schedule when going to a doctor appointment, but when I leave the doctor I may get out and have to wait too long for the next bus.
<b>B373</b>	I think that during the after school closings the bus drivers should be able to discipline the kids more. The language and loudness is very disturbing to me. One bus driver did stop the bus and tell the kids to quiet down and stop the language or get off the bus. They quieted down. Most put up with it.
<b>B388</b>	I like public transit in Buffalo. I have been all over the United States and public transit is better than most places. I wish it could be less expensive. I can remember when it was a lot cheaper. Also as a senior, I don't have the income I used to.
<b>B393</b>	Mostly having correct fare to enter the bus. Loud noise from people riding the bus, not the rail. Need to respect elders getting on the bus.
<b>B403</b>	I haven't used public transit in years and would find it difficult to do so at my age.
<b>B406</b>	Haven't used public transit, but know if I had to, I would be most grateful.
<b>B409</b>	It is 2 miles to the nearest bus stop.
<b>B411</b>	Of course, I think we should have public transportation. However, where I live in North Boston, practically everyone has their own car. Besides my daughter, I use rural transit to get places.
<b>B412</b>	I am lucky to be able to drive to grocery, restaurants and medical appointments.
<b>B415</b>	When I was single and living in Cheektowaga, I always used public transportation and would do so again if it were more convenient.
<b>B417</b>	I do not know if there is public transit from Grand Island to Buffalo. What am I going to do when I stop driving? There is no taxi service on Grand Island, the nearest is in Niagara Falls. Grand Island has 3 newspapers and not one of them advertises the telephone number for senior services. In other parts of Buffalo, Medicare has volunteer drivers.
<b>B421</b>	I do not use public transit because I can't leave my wife home alone and I have family to drive me.
<b>B423</b>	This was hard for me to complete as I don't use public transit as there is none near me. If I could no longer drive, I would have to rely on the Hamurg Senior Van, friends or taxi cab. The nearest park and ride is at least several miles from my house.
<b>B429</b>	Question 15. Responses are a guess at best, since public trans. is not used.
<b>B434</b>	I am old and would like better bus service.



<b>B437</b>	I take the bus and subway to downtown Buffalo several times a week. I love rapid transit. When it was constructed about 20 years ago, the thought was that many additional routes would spring off soon after. Even the UB North campus line was cancelled (I didn't mind that). Years ago we had trains from all over connecting to downtown Buffalo. They ran to Niagara Falls, the Buffalo Airport, Amtrak (NY Central then) in Depew, Cheektowaga, Orchard Park, East Aurora, etc. It was known as the spider web. Why don't we have more rapid transit to the suburbs now?
<b>B439</b>	I tried using public transportation when I had jury duty: since there is no public transportation where I live, I tried the Park and Ride but could not find a parking space in the lot y UB at 8:00 a.m., so that did not work. When I broke my right arm almost 2 years ago, I had no way to get to my Dr.'s office or to therapy sessions. I had to ask various friends. I would have preferred to ride a bus and not bother my friends.
<b>B452</b>	I currently drive my own car, but if I no longer were able to, I would use the transit system.
<b>B453</b>	At this point and time it is not an issue, I use rapid transit going downtown.
<b>B462</b>	I have never used public transportation, so was hard to answer some questions.
<b>B466</b>	I have a bus stop 1/2 block from my house. If I need transportation there is bus service every 2 hrs. no service on Sunday and holiday.
<b>B468</b>	I do not wish to participate any more after this survey.
<b>B469</b>	It is a much needed mode of travel for many people.
<b>B471</b>	Since I never use public transit, I cannot answer all of your questions. I thank you for your interest in helping older adults.
<b>B477</b>	I myself haven't used public transportation for years because I own a car and drive. However, I know people who don't own a car, and yes, it is hard to go places for the reasons I checked. Many poor people can't afford to take public transportation also. There are no free rides. I don't know where you got my name, but I think the survey would be more accurate if the person answering the questions did not have a vehicle and depended on public transportation.
<b>B478</b>	I live in Clarence Center, NY. The nearest bus stop is 3 1/4 miles away. My wife filled this out. It would be different for me. She is handicapped, but we have a handicapped van.
<b>B479</b>	Rural transit service is the only public transit in my area.
<b>B482</b>	I am satisfied and secure at this time. Thank you.
<b>B483</b>	We live in the country. Public transportation is available for those who work in the City (from here to the City) but nothing is readily available for the places I need to go - and at my age, I prefer to drive or be driven.
<b>B494</b>	As long as I am able to drive, will not use transit except to the downtown area.

<b>B496</b>	Certain possible responses should be added from those taking survey who never use public transit and thus have no knowledge of some questions, particularly questions 15 and 16.
<b>B498</b>	There is no public transportation in this area. When going to the city, I drive. Don't feel safe using public transportation.
<b>B499</b>	Many years ago there was a shuttle bus that took people to the public service buses which ran across the middle of the island from bridge to bridge (which is now part of the thruway). I would like to see this service started again. Elderly would have to walk miles to get to public transportation.
<b>B500</b>	My village is too small to support a traditional public transportation system.
<b>B505</b>	I know little about public transit for I have had a car for 60 years.
<b>B513</b>	I like public transit for Allentown Festival, Taste of Buffalo and sporting events. Saves me high cost of parking downtown. Train is convenient. My idea for a good service is subway arteries. Look at Toronto and New York!
<b>B518</b>	Thanks for the dollar!
<b>B530</b>	There is no way to get to Sheridan and Williamsville Medical Eye Center, the van going places do not pick up in Buffalo and no uses go that direction.
<b>B538</b>	While working I used the Delaware Ave. bus for 55 years. I retired in August 2004.
<b>B544</b>	Never use public transportation.
<b>B553</b>	There are buses to go to McKinley Park Mall and in to Hamburg, N.Y. or Downtown Buffalo, N.Y. I desire to look for Dental Services at Univ. Dental Clinic. Waiting for Reply. Can't afford a Personal Dentist.
<b>B554</b>	Extension of rapid transit to the south needed
<b>B560</b>	I don't feel I've been very helpful regarding this survey due to the fact I have not been on a bus for quite some time. I am still able to get around driving my vehicle and at this point in time, I am happy to be doing so. P.S. I've always felt that it's nobody's business knowing or asking questions regarding income.
<b>B567</b>	I so rarely use it that I really have no solid opinion, if I depended on it I would have to say it is adequate for the suburbs.
<b>B574</b>	Consider local bus and metro rail services adequate for population of Buffalo area.
<b>B577</b>	I am returning the \$1 you sent with the questionnaire. I believe a citizen should be cooperative in assisting in surveys. I respect that you will keep this anonymous. Thank you.
<b>B584</b>	Some of these questions were difficult to answer because they did not pertain to me. I drive myself or carpool with friends. I do use the rapid transit to attend baseball games, Shea's Performing Arts, and doing things downtown.

<b>B586</b>	Too far to walk to stop and harder walking uphill on return.
<b>B589</b>	I haven't used public transit for a long time so I am not sure how to answer some of these questions on page 7. Since I am still able to drive and have my own car, I don't need the public transit at the present time.
<b>B592</b>	Thank you for the survey. The public transit should have been constructed all the way to Town of Amherst.
<b>B599</b>	I love the speed of the subway and the comfort of the buses.
<b>B623</b>	I do not use public transit. I worked for Worthington for 27 years and always drove my own car and have my own car now.
<b>B625</b>	At one time I did park my car on E. Amherst and Niagara Streets and would leisurely take the No. 40 Grand Island bus to Third St. in Niagara Falls - walk across the bridge, pay 25 cents to watch fireworks on Fridays. Occasionally, I will take the bus to the Seneca Buffalo Creek Casino just for fun when it opens in 2007. I also have an EZ pass to cross the Peace Bridge for bingo and big prize monies as well as the Grand Island Bridge to go to the casinos.
<b>B636</b>	From what I can see. Here where I live there is no public transportation. I really don't like driving. You can't view the scenery. Too many nuts driving cars. And all are uncourteous. Auto insurance is outrageous gas prices are legal stealing.
<b>B642</b>	I use Cheektowaga Van Service for doctor and hospital visits.
<b>B643</b>	Steps are too high for seniors. Difficult for us to pull ourselves up.
<b>B647</b>	I did not feel qualified to answer the bus questions. I haven't ridden a bus in over 30 years. We take van service to our appointments or get rides from family and friends.
<b>B654</b>	We need more shelters and bus stops shoveled and salted.
<b>B659</b>	When I have ridden public transit and parked at the park and ride sections it was a pleasant experience for me and my granddaughter.
<b>B675</b>	I live alone and drive myself everywhere I go. I rarely use public transportation.
<b>B676</b>	It would take me 2 buses to get to Wegman's on Amherst, but I can drive it in 3-4 minutes. If I took a Hertel bus to Elmwood, I would have a 7-8 minute walk to Tops, but I could drive there in 3-4 minutes. Then I have the problem of walking and getting on a bus with bags of groceries, which I find difficult to carry. Another issue is the multiple stops problem. Often I have 3-4 errands to do which would require a lot of walking and a great deal of time waiting for buses.
<b>B678</b>	Being alone I feel very unsafe - able to find an appropriate companion would help.
<b>B681</b>	One of the main reasons I live here is because of access of several bus routes. Although I can still walk to nearly every place I need to go, I know that in the future I'll need to use public transportation more. I used it every day before I retired and was mostly well satisfied with public transit.

<b>B682</b>	I assume the time will come when I will need to use public transit. At that time - if I am still able to walk and function easily, I would use public transit if it was <u>easily</u> available.
<b>B685</b>	Give senior adults a pass for exact fare. The exact change is not available and we can't run to get any.
<b>B692</b>	Since I don't use public transit, I don't know much about it and couldn't reply to a lot of answers.
<b>B694</b>	I'm sorry I'm late, Xmas season. At 85 years, nobody cares. I would like to see the metro involve the suburbs. I won't see it, but I think it will help the whole area.
<b>B699</b>	I use the Metro Rail to go downtown during the baseball and hockey games. I also use to go to the Buffalo Theatre when they have a show in town. I find it easier than driving my car because I don't have to worry about parking or heavy traffic. I am 72 years old and blessed with relatively good health and am comfortable enough to know how and where I am going. I am very happy that I can go to the above places with the Metro Rail.
<b>B704</b>	I would like to see you shovel the snow and ice from where we get on and off the buses. The bus stops are terrible in the winter months. You never remove the snow. We have to step up on snow that piled up.
<b>B705</b>	More convenience token locations to purchase.
<b>B708</b>	On Jefferson and East Utica we need bus stop shelters for peoples to stand in, out of the bad weather. It would help older senior people a lot.
<b>B715</b>	Public transit is a great asset if it is safe and efficient.
<b>B716</b>	The advertisements that are painted or printed on the exterior of the bus covering the windows make it very hard to see the ones bus stop during the day and almost impossible at night. This is a very bad idea and should be stopped.
<b>B718</b>	I use the bus to go downtown occasionally due to limited parking areas. I find it cheaper than parking lots. if it is right time I drive. There are many people in the area that depend on buses for shopping.
<b>B724</b>	I really am not qualified since I never use public transit. However, having said that, I think it is necessary and must be improved constantly. Routes should be residential, not just on main thoroughfares. I think that older people who use public transit are using it because they have no family to help them. As for us older people (I am 75) it is an absolute necessity, although my family is here for me, if for some reason I could not drive.
<b>B733</b>	Happy to have it.
<b>B740</b>	Weekend service—bus scheduled too far apart—loud and unruly school students and drivers say nothing to them! Some drivers do not bring bus to curb when getting on and off—have to tell drivers to raise or lower step! Drivers stop in middle of snow bank and shelters not shoveled—metro did respond promptly to repair broken shelters bus schedules not always available, phone numbers not accessible to complain about driver or problem bus route—or to sometimes compliment good service.
<b>B744</b>	Time when students are transported (early mornings) can be a pain.

<b>B745</b>	We never had complaints when using public transit unless it was very late at night - schedule was a long wait but for our present situation this does not apply.
<b>B747</b>	The service is quite good. Able to get almost anywhere in area. The senior fare is very reasonable. New buses are very easy to board. Bus drivers are helpful and courteous. Rail system is fast and frequent. Buses are seldom not on schedule.
<b>B762</b>	Too many young people and no facilities.
<b>B779</b>	I am disabled and have problems getting on and off the bus without some help.
<b>B785</b>	Make train (passenger) more available (get the federal or state government to do it, not private companies.) Our government should improve and take over our public transportation. Do not depend on the state, small town or city type of transportation.
<b>B788</b>	1) There is a need for shelters @ Utica and Fillmore or Utica and Humboldt by the church. 2) Seniors board the bus and the front seats are usually taken by youth. 3) Snow/ice removal from around bus stops.
<b>B789</b>	I strongly believe that each level of government and private industry should do everything possible to obtain some practical transportation for the elderly-medical care, pharmaceuticals, food and personal items are life sustaining. Please try to obtain help and guidance. Thank you very much.
<b>B804</b>	I live in a development quite a distance from Main Street. No sidewalks, no lighting, weather and darkness would definitively be factors as I grow older.
<b>B831</b>	I like the idea of a paratransit system. I believe I would use it if I could not drive anymore and qualified for it. Since we do not have a Sr. Van Services through the county and many other sources, this might be the way to go even if it was necessary to pay for the service, which I believe you do.
<b>B835</b>	I love public transit! Most drivers are very friendly. I know a lot of people that would not be able to travel without it. Thanks for the opportunity to share my views.
<b>B836</b>	The bus drivers are all very nice and helpful but it is hard to stand and wait for a bus some of the stops have a bench but most do not and when you cant walk good, standing is very hard to do especially when you have to use a cane
<b>B840</b>	Don't know. I haven't use a bus regularly for over ten years. I don't like the underground portion.
<b>B846</b>	The transit systems for our area are not sufficient to serve the people that cannot drive.
<b>B847</b>	Public transportation - an absolute necessity satisfying the needs of everyone - a formidable task.
<b>B852</b>	There is not enough public transit especially in rural areas for me to use.
<b>B854</b>	As I travel around my area, I never would seem to see where a bus stop is located. If I ever had to use mass transit, I wouldn't know where to look or where the bus goes.

<b>B857</b>	The answers to these questions regarding access to public transportation were from my home. The real problem with using public transportation in my opinion is getting back home. Are there stops close to where I am? Are the sidewalks clear? Is there adequate lighting? The major routes are good but making cross connections can be problematic. Also our young people need some education on courtesy and understanding the needs of the elderly and or disabled in general. They need to be more sensitive and patient! They will be elderly someday too!
<b>B860</b>	I live on a busy street, no sidewalks.
<b>B872</b>	Buses too large for streets, run small buses, double the number.
<b>B874</b>	Provides a very important service and is very much needed. Fortunately for me I have family/ friends and am able to care for myself. Many others young and older need this service to survive, ie. Groceries, doctors, drugstores, etc.
<b>B875</b>	I am fortunate not to need public transit at the present time. However, public transit is easily accessible but not to areas I go. It would be difficult for me to go from here to there.
<b>B878</b>	Getting proper fare from machines.
<b>B890</b>	Not to belabor the obvious, but a much more expansive light rail would make an enormous difference in the community. And whatever happened to "rails-to-trails" for bike-riders?
<b>B894</b>	When I was young and Buffalo was a booming city in 1940s (WWII days) Buffalo public transportation <u>was great - when Bflo had streetcar transportation it was excellent</u> (3 tokens for 25 cent) Thank God that I can still drive daily and still have a safe driving record but I must admit driving a vehicle today is no pleasure - I drive a car today for only one reason - "convenience"-even if gas reaches \$5.00 to \$6.00 a gallon I will still drive or take a cab-the only bus I ever take is the Delaware Ave. line which is great The Kenmore Ave. bus line is nothing to brag about. At one time I bought a bicycle because of the bad bus service in Buffalo. P.S. Thanks for the \$1.00. I will buy a New York State lottery ticket. P.P.S. The experts who sold Bflo on the rapid light rail killed downtown Bflo business and the genius that made Main Street a dead end was another idiot-Biz moved to the suburbs and downtown Bflo is a ghost town.
<b>B897</b>	I never ride public transportation so I couldn't answer some of your questions.
<b>B906</b>	I have lived here for 51 years and have never used public transportation. Probably never will.
<b>B907</b>	Would use public transit if we had more information.
<b>B916</b>	Government grants to permit existing train that runs from UB to continue to Buffalo Airport and existing streets.
<b>B922</b>	I live outside the village of Springville.
<b>B932</b>	I am very pleased with the service to downtown Buffalo, it eliminates the need to find a place to park-and the cost.
<b>B938</b>	I use the Metro (Park on Main St.) to go to events downtown. Make good time and save on parking.

<b>B945</b>	Buses are always trying to bully their way into traffic after they let passengers off.
<b>B946</b>	Every bus I see is empty. What a waste of taxpayer money. Using smaller buses would be a great savings. I bought this house 50 years ago because it was on a bus line. I have never used the bus in 50 years. But I do notice people struggling to get on and off the steps of the bus. Fixing that could help older adults. Looking forward someday to taking the bus to the Blvd. Mall just for fun.
<b>B948</b>	Subway shelters along Main street are totally useless. They offer zero protection from rain, snow and above all wind. The floor at the ground level of all subway stations are so slippery when wet, which is all winter, with people bringing in snow under their boots. I missed falling many times and I have seen other people, not so lucky, mostly elderly ladies, fall. I find these floors extremely dangerous. In winter the street plow piles up the snow on the sidewalks, sometimes 2 feet high at the bus stop. This snow becomes ice and people have to climb up the hill in order to get in the bus. For some old people, it is impossible to do it. Some bus drivers are kind enough to stop a few yards before or a few yards after the bus stop sign, where there is a driveway which has been cleared out, making it possible to enter the bus without the risk of falling off a mountain of ice. But other drivers just refuse to pick up passengers unless they are standing right next to the bus stop sign. Once we had to practically carry a lady up the icy mound and into the bus because the bus driver refused to move a few yards ahead. Up until 10 years ago, I did not own a car, consequently, I went to work by bus only, at first and then by bus and subway after I moved to another neighborhood. All winter long I was stressed out just thinking about those mounds of ice. I know that many people do not catch the bus in winter because of this problem of climbing up these mounds of ice, and worse yet I hate to climb down them. Any solutions for the slippery floors and the mountain climbing at the bus stops?
<b>B955</b>	May they never take my car keys away, unless I'm nuts.
<b>B962</b>	I like riding the bus-I always take it downtown, I parked at UB when I worked. I taught special ed and used public transportation to train them how to ride a bus(communitary based program-I loved taking 25D out to North Towanda and going to Ted's Hot Dogs-eating lunch and taking the bus back to Buffalo-perfect timing.
<b>B967</b>	My neighborhood, myself, and friends miss the Cross Town Bus-it takes us to Seneca Street-it was our transportation to Block watch, etc...
<b>B969</b>	Better snow clearance around bus stops and from bus stops to street when boarding the bus.
<b>B971</b>	Don't think it would be feasible where I live.
<b>B977</b>	Don't use.
<b>B978</b>	I like to ride the bus or travel by train. As a senior citizen, with the discount on fares, to go downtown makes me feel so relieved and I don't have to pay the high cost of parking. I always travel with a bus schedule. My wife and I of 49 years thank the good lord how we feel. We keep active, she with babysitting and I with a part time job of 20 hours or more per week.
<b>B982</b>	Get more bus service



<b>B984</b>	My idea is between the hours of 9 am to 2pm use smaller vehicles with not as many passengers to fill the larger vehicles you will save money. Use the money you save to employ people to clean the bus stops and get a CEO that will be satisfied with a reasonable wage.
<b>B987</b>	It would be very difficult for me to rely solely on public transportation. I am currently capable of driving myself to appointments, shopping etc. If I were unable to drive, I would need to rely on family to transport me or Senior citizen transportation which provides door-to-door services.
<b>B989</b>	Bus drivers will not wait for you if you are getting pretty close unless you are a young pretty and "thinnish" female. But the Hertel bus drivers will (mostly) they are the most polite. Not enough benches and enclosures, many drivers do not pull up to the curb.
<b>B1003</b>	Paratransit is not suitable. A blind person must go to and from house to curb.
<b>B1010</b>	Years ago you didn't have to wait for a bus very long and they were right on schedule. Many people relied on the bus to get to and from their jobs, so shopping, visiting friends. Etc. Now the bus schedules are so much longer in between, especially in the suburbs. If you're called for jury duty its almost impossible to take a bus because of the schedules.
<b>B1011</b>	I believe the metro-rail should be expanded, now it just serves Main Street.
<b>B1015</b>	I wish the underground transit went right through to Tonawanda's.
<b>B1016</b>	I can still drive. I drive to UB-Main Street and take rail downtown, concerts etc...When I worked, I took it every day...sometimes the lot was so full, I had to drive to Lasalle station to get a ride.

<b>S001</b>	Overall transit service is very good – considering majority of people in this valley do not take the time to explore the service.
<b>S002</b>	It's very convenient to have public transportation when you need it.
<b>S007R</b>	NO
<b>S009</b>	Q32: Willow Glen Way and Almaden Rd. Q34: More Routes. More frequent service.
<b>S010</b>	I don't use public transportation and I don't plan to anytime soon.
<b>S011</b>	I was born and raised in San Francisco. I never learned or needed to learn to drive a car in the city. I took a bus everywhere all day and all night. They have a good system. I wish San Jose had the same. I would use VTA, but it is too expensive.
<b>S013</b>	Bus #63 should run more often!
<b>S018</b>	I think it helps me a lot when I do take light rail or transit. I get a peace of mind and save money on gas. ☺ Happy day!



<b>S020R</b>	This country is mostly set up to use cars- and that will not change soon- good or bad-Public transit is good- I am glad it's available "Just in case" but would only use it in a worst case scenario Just because you cannot get along w/out a car- and once you have a car- that is the easiest for all transit needs.
<b>S025</b>	Some bus drivers get mad at ladies that have the fold up cart that carry their groceries or clothes that they have wash at a washing place. The driver doesn't want to use the lift at times. They said it makes them late, behind schedule. We as older riders need our carts, to carry our needs and things.
<b>S027</b>	October 2005 was the first time I rode a public transit bus since 1951. I was impressed by how prompt they were and how I was treated. I arrived at my destination on time and returned home on time. The people on the bus were my problem. Everyone was in another world of mystery. I guess I was in mine also. At 71 and in good health and of sound mind I am truly thankful for my purpose in life along with public transportation. You are welcome. It says you are concerned for all people.
<b>S029</b>	I think I will drive few more years. I have not been able to answer all questions because I never used public transit system. I don't like to answer personal questions. According to me transit system for old people should be safe and reliable. For disabled or very old, who are concerned about getting lost, nervous, feet to fall down, afraid and crowd, outreach service would be safe and convenient. Thank you.
<b>S032</b>	LIVE: Residential Care Home.
<b>S032</b>	Outreach Program has been very useful. The regular outreach drivers are courteous and helpful. The taxi drivers who substitute are not as congenial.
<b>S036</b>	WRITTEN ON FIRST PAGE OF SURVEY: * Since I, who received this form, do not take public transportation other than Outreach occasionally, I had a relative, who no longer drives and takes public transportation (and depends on it) complete this form.
<b>S039</b>	Trash bins should be provided for bus user to discard their junk or mess at all bus stops to maintain cleanliness.
<b>S045</b>	
<b>S048</b>	Most seniors need public transportation, if not all, and public transportation (bus) should have a stop at senior housing and low-income residences where bus service would be more useful. Specially on places like Mabuhay Court Apartments, where is 4 blocks away from Santa Clara Ave and 4 blocks from Faller St. Bus should also have or must have a stop on senior centers where old people go to past time.
<b>S049</b>	At the present, I am not taking any public transportation so I cannot tell you about my needs on public transit. Many of the questions were not applicable to me somewhat.
<b>S051</b>	I live in a mobile home.
<b>S063</b>	
<b>S065</b>	Public transportation should be free and people would give up their cars –see city of Denver.
<b>S073</b>	The public transit transportation is very important for all business, rich and poor people for success in San Jose California.

<b>S076</b>	Public transportation and outreach programs are good for elderly.
<b>S079</b>	The city bus should wait when the seniors get on the bus and get the seat safely then starts the cane. Several times the drive started the bus before I stand still. I was scared to take the bus since then.
<b>S083</b>	I would like to have a bus pass.
<b>S087</b>	It is very hard for my parents to get around they do not speak English, especially my mother, she would be lost.
<b>S091</b>	I would like to see cleaner bus seats, currency exchange machines on bus, continuous bus driver announce approaching bus stop. Some bus stop area have garbage bin at rear exist or shrub and news stand in the way. Better bus stop bench. Some buses drop off at shopping area but the return pick up bus stop is nowhere in sight.
<b>S097</b>	Whenever I see a public transit (bus or light rail) it appears to be empty.
<b>S099</b>	Not very confidential.
<b>S103</b>	66-line bus had 3 times obstacle per month occasionally.
<b>S113</b>	As a resident in S.V. for over 40 years. There has been much improvement. I just hope someday the expressway would be built between L.A. and the bay area.
<b>S122</b>	This is a very urgent need for a restroom at all major VTA transit centers like Great Mall Transit center in Milpitas. Thousands of passengers pass through Great Mall Transit and many of them are old, sick and traveling to the hospital/doctor. The restroom for about a hundred bus drivers is out of bounds for passengers. This needs urgent attention of VTA especially for seniors, elders and sick passengers. Survey read on 02/04/06.
<b>S125</b>	Need more frequent schedules, information services on weekend (customer service).
<b>S129</b>	It's a good service with rail and buses.
<b>S131</b>	It's not bad at all.
<b>S138</b>	I need more bus schedule besides bus #81 running along Julian St.
<b>S139</b>	Public transit is very important to me, especially as I age. P.T. allows me to maintain some semblance of INDEPENDENCE. However, taking P.T. after dark and or in inclement weather is very dangerous. At one time, VTA allowed drivers to let off people closer to their intersection on the route on dark and/or rainy evenings. They stopped that and also took away the stop which was closer, so my return stop is much further away.
<b>S148</b>	There used to be a bus stop on Redmond and was closed last year. This really affected me as I now have to walk much longer to get to the next bus stop.

<b>S150</b>	Q1: Respondent checked two boxes but spreadsheet was not set up for two answers. Answers # 2 and 3. Q8: Respondent wrote "Just approved and not use yet" next to question 8. Q27: Respondent wrote "Townhouse" next to question 27.
<b>S161</b>	I wish it would come more sooner or at least waiting in between bus schedule be 15 minutes only.
<b>S163</b>	When I move from my present residence I will make sure that I am fairly close to a bus stop.
<b>S165</b>	Daughter filled out form for participant – participant answered questions except questions in which participant cannot answer due to thought processing problems. Those were left blank.
<b>S168</b>	There should be a bus that passes by to the Jacinto "Tony" Siquig North side Community center to bring more people between Empire St. and Sixth St.
<b>S169</b>	Add the "next stop name" on every bus stop signal, so that old passengers can prepare to get off in advance.
<b>S178</b>	I find nothing wrong with our public transit except that it's getting too crowded.
<b>S182</b>	I was hospitalized for hip injury when a bicyclist ran over me trying to board the light rail train.
<b>S193</b>	Second intersection, Bascom and W. San Carlos, 95128. For the most part, I am satisfied; This is my only source of transportation. I can't afford to take a cab. The reason I gave you two street names is because sometimes, or a lot of times, I stay with my sister; if it gets too late for me.
<b>S205</b>	The public transit bus can use small car, it can save oil.
<b>S209</b>	I still drive so it was hard to answer public transit questions.
<b>S210</b>	The fare I feel is expensive than other cities; a very little drivers are no good.
<b>S222</b>	We live in a good and safe neighborhood.
<b>S233</b>	W think a lot of time the buses and the light rail run empty. Would it be more productive if you change the buses into the smaller buses? Like Europe and Asia that way you can save energy and run more buses, and have a more available schedule. (Non English speaker, indicated in survey).
<b>S235</b>	Q32: Yerba Buena and San Felipe Rd.
<b>S238</b>	Living in a senior community, there are only buses outside. The only way to get a bus, one needs to walk to the outside of this community. Walk 15-20 minutes and wait for a bus service. Then walk again after a bus ride, another 15-20 min. This is a hardship for on over 80 plus. We need a bus to pick us up at our residence to go shopping. Thank you.
<b>S247</b>	

<b>S248</b>	I'm still driving so I haven't used public transit. I note that the bus stop outside the gates of the San Jose Country Club has been removed. The next bus stop is a long way from my home.
<b>S251</b>	At the present time, I still drive my car. Maybe later on, I will turn to outreach if needed.
<b>S259</b>	Q32: Winchester and Hamilton.
<b>S260</b>	Overall, public transit is very accessible in my place of residence. I wish the bus stop is just opposite from where I live.
<b>S263</b>	Excellent.
<b>S274</b>	Sometimes it's difficult to have the exact change when riding bus/light rail.
<b>S296</b>	Get rid of all old buses with steps. Update all buses with display signs of each stop or announce it. I would like to see more clean bus seats. Sign to keep feet off seats, and no soft drinks. Some buses are dusty. Clear bus stop area so we can exit from rear exit. There are garbage bins, shrubs, news stands, etc.
<b>S299</b>	Because I am still able to drive, I have never used public transit, used light rail only once.
<b>S301</b>	I never use it. I would be afraid to ride a bus because of the type of people you see on the bus.
<b>S311</b>	Public Transit takes around 2 hours each way to go and return and more when bus frequencies once 30-60 minutes. (S601 & S311 have the same answer for question No. 32)
<b>S314</b>	I am still fine. But my husband is dead and we used the light rail. But my husband couldn't get to his seat on time before the train left.
<b>S319</b>	I sometimes use my car because I can still drive from sunrise to sunset if possible for convenience when I don't feel pain on my right leg.
<b>S327</b>	\$1 Thanks written on cover of survey. Q9: Respondent wrote "use outreach" next to question 9. Q34: As an able, healthy, person I never used to have trouble. Now, I am disabled and can't drive yet. Also, I drove up until 2003. I've had two total hip replacements, and I hope eventually maybe to get my driver's license when I can walk without cane, walker, etc.
<b>S335</b>	VTA Fares – Seniors (65+) / Disabled 2004      1989 \$26 / \$3 = 8.2/3 Does the salary or wages raise up to 8.2/3
<b>S336</b>	A way to get from the bus stop at Ford Rd to the light rail system (preferably Cattle Rd Stop).
<b>S337</b>	Q32: Capital Expressway and Aborn Square.

<b>S347</b>	Very helpful for senior citizen who cannot drive. Keep up the good work!!
<b>S356</b>	In all probability, I will move as soon as I can to a small apt. This is very expensive for me now. I have a meager income; too old to work. Expenses have tripled all over, food, rent, PGE, water, garbage, med. Prescriptions and doctor. Also, my Medicare and sup. Ins. Can't make it here anymore.
<b>S360</b>	None.
<b>S361</b>	1) It would be nice to have BART extended to San Jose. 2) Fast rail system from SF to LA.
<b>S373</b>	Outreach makes me independent and I would not be able to live alone without it. It is a wonderful service. Although you have to learn to be patient.
<b>S379</b>	Q32: Fruitdale and Saint Elizabeth Drive. Q34: I use it very seldom—I have always been satisfied.
<b>S385</b>	Does not speak English. Speaks Punjabi.
<b>S387</b>	The cost keeps going up even for seniors.
<b>S389</b>	Need help for seniors to use public transportation. If I am sick/unable to drive, I need the above.
<b>S391</b>	Q32: San Carlos and Market.
<b>S400</b>	There should be a public transportation that stops at the Jacinto "Tony" Siquig North side Community Center so more people should come.
<b>S405</b>	Since I still drive without taking public transit at all, no opinion on it at this moment. Thanks for the \$1.
<b>S411</b>	Everything is OK and nothing more, I could not walk five blocks from our home because I have a problem of my vascular muscles.
<b>S412</b>	Overall service is on schedule. However, there is usually delay when transferring. I now have two transfers instead of one and one transfer instead of none. When going to Kaiser Santa Clara and Milpitas respectively, (This since Capital Ave Light Rail) my #64 bus has broken down 3 times in the past couple of months. (I waited over an hour one time.) The "NEW" buses (no steps) are ok only if the driver gets close enough to the curb, otherwise I find it awkward to disembark. The #64 line should run an hour later at night (two hours later on Sunday). Weekend service is inconvenient.
<b>S416</b>	People over the age of 65 years of age should <u>never</u> have to pay for public transit. Whether white, black, yellow, brown or purple with green polka dots.
<b>S431</b>	We do not use public transportation but will make use of the free pass offered for the next two months. We live in East San Jose and our doctors are in Sunnyvale.
<b>S436</b>	I did not answer the question about public transit because I never use them.

<b>S441</b>	In summertime air conditioner is too cold for me.
<b>S444</b>	I am a 1957 graduate of San Jose State University. This training prepared me for a successful vocation and a happy lifestyle. Thanks.
<b>S446</b>	I don't know how or where you got my name because I have not ridden a bus in 30 years. I am in very good health – I belong to three clubs, volunteer at senior center, help feed the homeless. I feel like I am 73 going on 50!
<b>S452</b>	1) The driver should not start the vehicle until the passenger has gotten down. 2) Not to close the doors at once when a passenger is going down. 3) More vehicles on Saturdays and Sundays. 4) The intervals of vehicles should be shorter. 5) Drivers should stop passenger who are so noisy or talking loud in the bus.
<b>S466</b>	It's a waste of billions of dollars to bring BART down to San Jose when buses could fill the need so much cheaper.
<b>S469</b>	My wife and I love playing bingo as our pastime, but because there is no close bus stop where the bingo place is, we hardly go unless my daughter drive us over and picks us up. Same thing going to the community center. We would like to socialize, but no close bus stop, so we don't go. My daughter helped me fill this out.
<b>S470</b>	Q32: Capital Ave. and Sierra.
<b>S475</b>	No.
<b>S488</b>	We (self and Husband) do not utilize the bus system as we still drive. We have taken light rail on occasion and that was a positive experience.
<b>S490</b>	Before I had a stroke I used public transportation all time. For question No 12: Do not take public transportation for 6 month due to stroke. No 18: have difficulty understanding transit/ maps. No 17: Fuji towers provided bus schedule.
<b>S492</b>	Q32: Blossom Hill and Kooser..
<b>S494</b>	Transportation usage and needs have been changing in the past year or two. Example- in last few months restrict for driving at night- it is or must be very important for me to even consider. At younger age I did all of the driving- now I am even comfortable when others drive.
<b>S499</b>	When I first moved to San Jose I went all over the city by bus. Sometimes all went smoothly. But there were times of waiting too long and buses not stopping because they were full. It did not bother me unless when I needed to get where I was going at a certain time. I allowed myself plenty of extra time, I got to my destination early. That did not bother me. I always have a book or magazine to read.

<b>S512</b>	Most of my activities are in the St. James Senior Center in downtown. Because the place I live has no access to the bus or light trail. I have to get a lift from my daughter or son-in-law in the early morning when they go to work to get to the bus stop or light trail station, and from there I can transfer to get to the senior center. I always rely on the Outreach to get back home. I have no difficulty in taking buses as light trail. But the surcharge of Outreach is a problem. It charges me \$10.50 instead of an ordinary fee of \$3.50 for a one-way trip, only because my location is beyond ¾ of a mile away from bus lines. That is their policy and it is too much for me. I don't want to depend on Outreach. My wish is an extension of Bus 31 into San Felipe Rd and Fransworth Dr. where the Silver Oak Elementary School is located. Thus, the old people like me who live in the Silver Creek Valley Country Club and who do not drive can have the access to the public transportation within a walking distance.
<b>S514</b>	I eagerly anticipate the arrival of BART in San Jose. It should have been connected ages ago! Long overdue.
<b>S521</b>	Attached note: Dr Peck, Please remove from the database. I could not read and write properly due to weak vision. Thanks.
<b>S555</b>	Q25: Respondent included name: Patsy Chao. Q32: Santa Teresa and Lean Ave. Q34: There are two times when I rode on LRT during 10:30pm's arrival at Snell Station. I asked the LRT drivers to let the #66 bus, which stopped on 10:30pm at Snell Station also wait for me for transferring. I made it! I was so happy! I am satisfied with the San Jose transportation!
<b>S556</b>	Sometimes some VTA drivers are inconsiderate. No amount of waving my cane will they wait even for a minute or two. It is so difficult for residents coming from all directions carrying packages from groceries etc. without a bus stop between Capitol along Silver Creek up to Evergreen Valley. Bus 77 used to be, how about bus 31? I think this is a reason why cars from grocery stores are scattered along streets perpendicular to Capitol, especially Silver Creek. Thanks also for the dollar.
<b>S558</b>	Easier to purchase ride.
<b>S575</b>	Never use public transit so cannot comment. However, in case we need it, it is quite close.
<b>S576</b>	I just come to the US. I study English language at senior community center, but [my English skill is still] very poor. I was born in Mainland China and had lived in Hong Kong. According to my knowledge that passengers who are 70 years and older can ride public transportation for free in Mainland China. The American government is in a better situation fiscally compares with the Chinese. Therefore, please allow me to give some suggestion: It will be great if the American government can allow the passengers who are 68 years and old can ride public transportation for free. Thanks!
<b>S578</b>	Q32: Santa Teresa and Lean.
<b>S585</b>	If any person is physically and mentally able it's a good source for traveling from one place to another – gives you a sense of independence and not rely on somebody else. In other words, public transit is very good for able people.
<b>S593</b>	I don't know. I was operated on and have replacement in knee.



<b>S601</b>	Public transit besides involving strenuous walk, takes over 2 hours plus each way to go and return and more when bus frequencies are once every 30-60 minutes. (S601 & S311 have the same answer for question No. 32)
<b>S608</b>	Senior citizens should ride for free always.
<b>S610</b>	Incomplete
<b>S626</b>	My family completed most of this survey to try to be helpful. I rely on my spouse and daughter for anything if I could not have them available would have to move.
<b>S628</b>	Although public transit seems satisfactory and convenient, it needs a lot of room for improvement.
<b>S638</b>	I believe Portland, OR has better public transit (and of course New York City) than San Jose. I support European style rail transportation. I oppose the automobile culture with its bad effects on the nation's health. See the new book by Martin Krieg: "How America can Bicycle and Grow Rich."
<b>S640</b>	Public transit is accessible here in our place. It is easy for seniors to go around the city.
<b>S641</b>	Don't know
<b>S656</b>	No
<b>S658</b>	No convenient difficult to walk 2-3 blocks. Not certain which bus to take.
<b>S668</b>	Yes. My cousin got run over by public transportation while he was waiting for others to step into the bus. The bus driver closed door on him and bus wheels ran over his feet. He was picked up by ambulance and the bus driver never stopped, or bus company is not willing to take responsibility. Please help us with this case, the doctor's bills have not been paid because we cannot afford it. Thank you in advance if you could help we would appreciate it. Thanks again.
<b>S669</b>	As I age and if health needs change that I am limited in my driving then I would look to services available at that time.
<b>S669</b>	Since I don't ride on public transit, I am unable to answer question 15 & 16.
<b>S673</b>	I am a cancer patient and a recent stroke victim which severely limits my activities, especially walking.
<b>S680</b>	I can't see myself taking public transportation due to infirmities.
<b>S695</b>	I like the use of the Outreach Paratransit, but my concerns are the vehicles are not cleaned out daily. The odor is terrible like dead animal and the drivers are careless, reckless drivers.



<b>S704</b>	Q27: Respondent wrote “Mobile home” next to question 27. Q32: Blossom Hill Rd. and Beswick. Q34: It was hard answering questions because I still own my car and I do drive.
<b>S714</b>	Before I retired in 1998, I used public transportation to and from work in Menlo Park, CA which utilized CALTRAIN, Santa Clara County Buses, and Menlo Park Buses. I was able to utilize public transit very effectively, but the time was double my equivalent driving time.
<b>S724</b>	Public transit is good and convenient.
<b>S726</b>	As of right now, I have never used public transit. I am still able to drive where I need to go.
<b>S728</b>	There are some bus drivers that are considerate to seniors. Also, there are some that are not.
<b>S733</b>	Q14: Respondent did not check any boxes but did circle no. Q15: Respondent wrote “I don’t ride on busses—Always have my car transportation” instead of answering #15. Q16: Respondent wrote “The same answer as I wrote on previous page” instead of answering #16.
<b>S737</b>	In the near future, I will be using public transit. My location is good for bus service. I am thankful. More seniors should be aware of time schedules, like announcing on TV or newspapers. Shopping centers should make it known to customers on what time buses come by (every ½ hour or hour), so customers could be on time or aware of schedule. So they can be out to meet bus, Main Street bus goes by and stops, front entrance, side entrance, where available.
<b>S747</b>	Bus route and schedule more is better, sooner is [better]. Bus stop should have cover.
<b>S749</b>	I don’t use VTA.
<b>S749</b>	Pages 7-9 left blank. Respondent wrote “I don’t use VTA” on top of page 7.
<b>S750</b>	Response needs translation (Chinese/Mandarin?)
<b>S756</b>	Thanks for the dollar which convinced me to fill out this questionnaire. I gave it to my niece.
<b>S757</b>	Benches/Weather shelters and lighting lacking in my residential area.
<b>S758</b>	At the moment I don’t use the bus, I drive myself everywhere.
<b>S783</b>	9:00 am – 3:00 pm free for seniors are very good idea to take buses.
<b>S792</b>	None

<b>S800</b>	None
<b>S812</b>	It is hard to board buses with steps.
<b>S813</b>	Never use public transit except on trips and tours so it's hard to assess.
<b>S818</b>	I can see I may have to at some time give up driving. At that time, I will need to explore alternative transportation. Not too far from buses. But will they go to my destination? How many transfers? If I am not eligible for outreach, what other forms of low cost transportation are available to me? Am older and slowed down. How much longer will it take to go ....?
<b>S835</b>	Q1: Respondent checked two boxes but spreadsheet was not set up for two answers. Answers # 2 and 3. Q32: Tully Rd. and Capital Expressway. Q34: Thank you for including me to participate in your research study and survey for our public transportation. But I am sorry to inform your good office that I don't have too much to say about the past and present situation and hope and pray that this survey will be very successful. Thank you again.
<b>S839</b>	Q31: Two answers were marked so I entered a 9 for missing. Q32: Moorpark and Winchester Q34: Need better riding buses and trains! Shocks are poor on buses and if trains have them they are also very poor.
<b>S847</b>	Public transit car always use improvement.
<b>S852</b>	No comment. Just be sure you have the VTA schedule.
<b>S861</b>	Generally speaking, I am satisfied with my life here in America, however I feel lonely. If possible, an additional description in Chinese to the vending machine at LRT stations.
<b>S867</b>	Please add more routes and more buses on all routes. It would be easier and more appealing to ride public transportation to reduce the wait time between buses to ten minutes.
<b>S872</b>	Hope that the rent stops there.
<b>S878</b>	None
<b>S888</b>	It will be nice to have a public transit that takes me directly to De Anza College one straight way and back. By the way, De Anza College is in Cupertino, not in San Jose.
<b>S892</b>	<ul style="list-style-type: none"> <li>• Convenience</li> <li>• Safety</li> <li>• Regularity</li> <li>• Cost</li> </ul>
<b>S898</b>	To have drivers educated beyond a driver license, background check and C.P.R. training. Awareness of older riders needing [extra] time to disembark after bus comes to halt.



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## REFERENCES

- Alsnih, Rahaf and David Hensher. 2003. The Mobility and Accessibility Expectations of Seniors in an Aging Population. *Transportation Research (A)* 37: 903-916.
- American National Standards Institute (ANSI). *Standards on Accessible and Usable Buildings and Facilities*. ICC/ANSI A117.1-2003. Washington, D.C.: ANSI.
- Bailey, Linda "Aging Americans: Stranded Without Options." 2004. Washington, D.C.: Surface Transportation Policy Project [online] Available at <http://www.transact.org/report.asp?id=232>
- Banister, David and Ann Bowling. 2003. Quality of Life for the Elderly: The Transport Dimension. *Transport Policy* (11): 105-115.
- Benekohal, Rahim 1997. Traffic Congestion and Traffic Safety in the 21st Century. New York, N.Y.: ASCE.
- Buckham, Tom. 2004. "City Gets Unwanted Rank on U.S. List: Hardship Score Called Very High by Institute." *Buffalo News*. September 5, 2004. pg. B1.
- Buffalo and Erie County Public Library. 2005. Historical population estimates for the City of Buffalo and Erie County. Available at: <http://ah.bfn.org/h/bflopap.html>. (accessed on June 1, 2005).
- Burkhardt, Jon, Adam McGavock and Charles Nelson. 2002. "Improving Public Transit Options for Older Persons." V.1. (TCRP Report 82). Washington, DC: Transit Cooperative Research Program.
- Burkhardt, Jon, Adam McGavock, Christopher Mitchell and Charles Nelson. 2002. Improving Public Transit Options for Older Persons. V. 2. (TCRP Report 82). Washington, DC: Transit Cooperative Research Program.
- Burkhardt, Jon, A. Berger and Adam McGavock. 1996. *The Mobility Consequences of the Reduction or Cessation of Driving by Older Women*. Bethesda, MD: Esosometrics. [Online] Available at <http://www.fhwa.dot.gov/ohim/womens/chap22.pdf>
- Burkhardt, Jon. 2003. Critical Measures for Transit Service Quality in the Eyes of Older Travelers. *Transportation Research Record* 1835: 84-92.
- Brinkley, Alan. 2000. *The Unfinished Nation: A Concise History of the American People, Volume Two: from 1865*. New York: McGraw Hill.
- California Department of Aging. (n.d.). *Statistics and demographics*. [http://www.aging.state.ca.us/html/stats/oldest\\_old\\_population.html](http://www.aging.state.ca.us/html/stats/oldest_old_population.html) (accessed June 15, 2006).

- Capozza, Dennis and Robert Helsley. 1989. "The Fundamentals of Land Prices and Urban Growth." *Journal of Urban Economics*. vol. 26. no. 3. pp. 295-306.
- Cervantes, Niki. 2000. "Clogged Arteries: Buffalo-Area Traffic Congestion has Never Been Worse, a Study Shows, and Prospects for Improvement are Slim." *Buffalo News*. January 11, 2000. p. A1.
- City of San José (n.d.). *About San José*.  
<http://www.sanjoseca.gov/about.html> (accessed June 15, 2006).
- City of San Jose and the County of Santa Clara. 2005. "Community for a Lifetime: A Ten-Year Strategic Plan to Advance the Well-Being of Older Adults in Santa Clara County." San Jose, CA: City of San Jose and the County of Santa Clara. Prepared in Collaboration with: The Strategic Plan Advisory Group and MGT of America, Inc. [Online] Available at [http://www.sanjoseca.gov/prns/docs/STRAT\\_PLAN\\_MGT\\_Web%20version-Exec%20Summary.pdf](http://www.sanjoseca.gov/prns/docs/STRAT_PLAN_MGT_Web%20version-Exec%20Summary.pdf)
- Coughlin, Joseph F. and Annalynn Lacombe. 1997. "Transportation and Our Aging Population." Cambridge, MA: The Volpe Center Journal [Online] Available at <http://www.volpe.dot.gov/infosrc/journal/spring97/aging.html>
- Cozens, Paul, Richard Neale, David Hillier and Jeremy Whittaker. 2004. Tackling Crime and Fear of Crime While Waiting at Britain's Railway Stations. *Journal of Public Transportation* 7 (3): 23-41.
- Cvitkovich, Yuri and Andrew Wister. 2001. The Importance of Transportation and Prioritization of Environmental Needs to Sustain Well Being Among Older Adults. *Environment and Behavior* 33 (6): 809-829.
- Dillman, Don A. 2000. "Mail and Internet Surveys: The Tailored Design Method," Second Edition. New York: John Wiley & Sons, Inc.
- Dollemore, Doug. 2002. Questions Arise As More Older Americans Outlive Driving Privilege. National Institutes of Health (NIH) [Online] Available at <http://www.nih.gov/news/pr/jul2002/nia-29.htm>
- Duncombe, William. 2002. "Estimating the Cost of an Adequate Education in New York." Center for Policy Research Working Paper No. 44. Syracuse, New York: Maxwell School of Citizenship and Public Affairs.
- Ernst, Tom. 1999. "Good Marks Given to Area's System of Transportation." *Buffalo News*. February 15, 1999. p. B1.
- Evans, Edward. 2001. Influences on Mobility Among Non-driving Older Americans. Transportation Research Circular (E-C026). Washington, DC: American Association of Retired Persons.

- 
- Evans, Jennifer. 1999. Mobility and Safety Focus Group Research Report. Detroit, MI: Southeast Michigan Council of Governments.
- Fiscal Policy Institute. 2003. "The State of Working New York 2003: Unbalanced Regional Economies through Expansion and Recession." New York, New York: Fiscal Policy Institute.
- Fleetwood, Nicole. 2004. Busing it in the City: Black Youth, Performance and Public Transit. *The Drama Review* 48 (2). 33-48.
- Foster, Norman, Peter Damiano, Elizabeth Momany and Hermine Mcleran. 1994. Rural Public Transportation: Perceptions of Transit Managers, Directors of Area Agencies on Aging, and Elders. *Transportation Research Record* 1557: 58-63.
- Frey, William 2003. "Boomers and Seniors in the Suburbs: Aging Pattern in Census 2000." Washington, DC: The Brookings Institution.
- Gaber, John and Sharon Gaber. 2002. Using Focus and Nominal Group Techniques for a Better Understanding of the Transit Disadvantaged Needs. *Planning and Technology* 25: 103-120.
- Glasgow, Nina and Robin Blakely. 2000. Older Nonmetropolitan Resident's Evaluations of their Transportation Arrangements. *The Journal of Applied Gerontology* 19 (1): 95-116.
- Glynn, Matt. 2005. "Area's Affordable Homes at Low Risk of Depreciation." *Buffalo News*. March 13, 2005. pg. B7.
- Goldman, Mark. 1983. *High Hopes: The Rise and Decline of Buffalo, New York*. Albany, New York: State University of New York Press.
- Goldman, Mark. 1900. *City on the Lake: The Challenge of Change in Buffalo, New York*. Buffalo, New York: Prometheus Books.
- Giuliano, Genevieve 2003. "Travel Patterns of the Elderly: the Role of Land Use." (METRANS Project 00-8). Santa Monica, CA: METRANS Transportation Center.
- Hayden, Sharon, Kerry Luper, Erin Caldwell, Thomas Miller, Michelle Miller Kobayashi, Reid Reynolds, Steve Fisher, Lee Tyson, Hadley Spano and Gregory Diggs. 2004. "Strengths and Needs Assessment of Older Adults in the Denver Metro Area." (DRCOG). Boulder, CO: National Research Center.
- Hess, Daniel Baldwin. 2005. "Access to Employment for Adults in Poverty in the Buffalo-Niagara Region." *Urban Studies*. vol. 42. no. 7. pp. 1177-1200.
- Hess, Daniel Baldwin and Peter A. Lombardi. 2004. "Policy Support for and Barriers to Inner-City Transit-Oriented Development: A Literature Review." *Transportation Research Record: Journal of the Transportation Research Board* 1887. pp. 26-33.
-

- Ingalls, Gerald, David Hartgen and Timothy Owens. 1994. Public Fear of Crime and its Role in Bus Transit Use. *Transportation Research Record* 1433: 201-211.
- Iwarsson, Susanne and Agneta Stahl. 1999. Traffic Engineering and Occupational Therapy: a Collaborative Approach for Future Directions. *Scandinavian Journal of Occupational Therapy* 6: 21-28.
- Joo, Eunjee and Christine Price. 1994. *Asian American Older Adult*. Ohio State University Extension Senior Series [Online] Available at <http://ohioline.osu.edu/ss-fact/0194.html>
- Jones, David. 1985. *Urban Transit Policy: An Economic and Political History*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Lavery, Irvine, Shannon Davey, Alan Woodside and Ken Ewart. 1996. The Vital Role of Street Design and Management in Reducing Barriers to Older Peoples' Mobility. *Landscape and Urban Planning* 35: 182-192.
- Lindstrom-Forneri, Wendy, Holly Tuokko and Ryan E. Rhodes, R. E. 2007. 'Getting around town:' A preliminary investigation of the theory of planned behavior and intent to change driving behaviors among older adults. *The Journal of Applied Gerontology*, 26: 385-398.
- Litman, Todd 2004. Transit Price Elasticities and Cross-Elasticities. *Journal of Public Transportation* 7(2): 37-58.
- Loukaitou-Sideris, Anastasia 1999. Hot Spots of Bus Stop Crime: The Importance of Environmental Attributes. *Journal of the American Planning Association* 65 (4): 395-411.
- Mandich, M. 1975. *The growth and development of San Jose, California: Social, political, and economic considerations*. Unpublished master's thesis, San José State University, San José, CA.
- Millar, William 2005. "Expanding Mobility Options for Older Adults: Community Design Incentives." White House Conference on Aging Officially Designed Event, Transportation Solutions for an Aging Society. MIT Faculty Club, Cambridge, MA. April 14, 2005, [online] Available at [https://www.apta.com/government\\_affairs/infores/issues/older\\_adults.cfm](https://www.apta.com/government_affairs/infores/issues/older_adults.cfm)
- Miller, William and Stephen Rollnick. 1991. *Motivational interviewing: Preparing people to change addictive behavior*. New York: The Guilford Press.
- Mitchell, C. and S. Ling Suen. 1998. Urban Travel, Intelligent Transportation Systems and the Safety of Elderly and Disabled Travelers. *The Journal of Urban Technology* 5 (1): 17-43.



- Mitchell, C.G.B. and Suen, S.L.. 2000. *Accessible Transportation and Mobility*. Transportation Research Board Annual Meeting, 2000. Committee on Accessible Transportation and Mobility.
- National Transit Database. 2006. Annual Transit Profiles. Washington, D.C.: Federal Transit Administration.
- Nelson, N. 2002. "San Francisco Bay Area Older Adults Transportation Study." San Francisco, CA: Metropolitan Transportation Commission.
- New York Statistical Information System. 2005. New York State County population projections. Available at: <http://www.nysis.cornell.edu/>. (accessed 05/31/05).
- Office of Strategic Planning. 2004. "Queen City in the 21st Century: Buffalo's Comprehensive Plan." Buffalo, New York: City of Buffalo, Office of Strategic Planning.
- O'Gara, Mary Jane. 2002. "Transportation Solutions in a Community Context: The Need for Better Transportation Systems for Everyone." *Testimony before the U.S. House of Representatives Highways and Transit Subcommittee of Committee on Transportation and Infrastructure*: July 25, Washington, D.C. [Online] Available at <http://www.house.gov/transportation/highway/07-25-02/ogara.html>
- Patterson, Arthur 1985. Fear of Crime and Other Barriers to Use of Public Transportation by the Elderly. *Journal of Architectural and Planning Research* 2: 277-288.
- Peel, Nancye, Jacky Westmoreland and Margaret Steinberg. 2002. Transport Safety for Older People: A Study of their Experiences, Perceptions and Management Needs. *Injury Control and Safety Promotion* 9 (1): 19-24.
- Pendall, Rolf. 2003. "Sprawl Without Growth: The Upstate Paradox." Survey Series, Center on Urban and Metropolitan Policy. Washington, D.C.: Brookings Institution.
- Pendall, Rolf and Christopherson. 2004. "Losing Ground: Income and Poverty in Upstate New York, 1980-2000." Survey Series, Metropolitan Policy Program. Washington, D.C.: Brookings Institution.
- Potepan, Michael J. 1996. "Explaining Intrametropolitan Variation in Housing Prices, Rents, and Land Prices." *American Real Estate and Urban Economics Association Journal*. vol. 24. no. 2. pp. 219-245.
- Pucher, John and John Renne 2003. Socioeconomics of Urban Travel: Evidence from the 2001 NHTS. *Transportation Quarterly* 57 (3): 49-79.
- Rittner, Barbara and Alan Kirk. 1995. Health Care and Public Transportation Use by Poor and Frail Elderly. *Social Work* 40 (3): 365-73.



- Road Management & Engineering Journal. 1997. "Effects of Aging on Older Drivers." [Online] Available at <http://www.usroads.com/journals.rej/9708/re970803.htm>
- Rosenbloom, Sandra. 2003. "The Mobility Needs of Older Americans: Implications for Transportation Reauthorization." Washington, DC: The Brookings Institution.
- Rosenbloom, Sandra 2001. "Driving Cessation Among the Elderly: When Does it Happen and What Impact Does it Really Have?" *Transportation Research Record* 179: 93-99.
- Rosenbloom, Sandra and Jennifer Morris. 1998. "Travel Patterns of Older Australians in an International Context." *Transportation Research Record* 1617: 189-193.
- Santa Clara County (n.d.). *About the county*. Retrieved June 15, 2006 from <http://www.sccgov.org/portal/site/scc/chlevel3?path=/v7/SCC%20Public%20portal/County%20Connection/About%20the%20County>
- Santa Clara Valley Transportation Authority (2006). *Short range transit plan: 2006 – 2015*. Retrieved June 15, 2006, <http://www.vta.org/projects/>
- San José Chamber of Commerce (2006). *Unfinished report*. Retrieved June 15, 2006 from <http://www.sjchamber.com/>
- Schaeffer, Klaus. and Elliot Sclar. 1980. *Access for All: Transportation and Urban Growth*. New York, New York: Columbia University Press.
- Scott-Webber, Lennie and Anna Marshall-Baker. 1998. Two Contrasting Approaches to Urban Accessibility for Individuals with Disabilities or Special Needs. *The Journal of Urban Technology* 5 (1): 1-15.
- Shaheen, Susan and Caroline Rodier. 2007. *Video Transit Training for Older Travelers: A Case Study of the Rossmoor Senior Adult Community, California*. San José, CA: Mineta Transportation Institute, SJSU Research Center.
- Skinner David and Mary Stearns. 1999. "Safe Mobility in an Aging World 1999." John A. Volpe National Transportation Systems Center Annual Meeting of the Transportation Research Board. Washington, D.C.
- Stowell-Ritter, Anita, Audrey Straight and Ed Evans. 2002. "Understanding Senior Transportation: Report and Analysis of a Survey of Consumers Age 50+." Washington, DC: American Association of Retired Persons (AARP) Public Policy Institute.
- Stowell-Ritter, Anita and Joanne Binette. 2008. *2007 Colorado Transportation Survey. Aging and Mobility*. Washington, DC: American Association of Retired Persons (AARP) Public Policy Institute.

- 
- Straight, Audrey 2003. Public Policy and Transportation for Older People. *Generations*, Vol. XXVII, No. 2: 44-49.
- Straight, Audrey 1997. *Community Transportation Survey*, American Association for Retired Persons (AARP). Washington, D.C., [online] Available at [http://research.aarp.org/il/d16603\\_commtran\\_1.html](http://research.aarp.org/il/d16603_commtran_1.html)
- Steinfeld, Edward. 2001. "Universal Design of Mass Transportation." in *Universal Design Handbook* (W. Preiser and E. Ostroff, eds.) New York, New York: McGraw Hill. pp. 24.3-24.25.
- Strategic Plan Advisory Group & MGT, The (2005). *Community for a lifetime: A ten-year strategic plan to advance the well-being of older adults in Santa Clara County*. San José, CA: Author.
- The Buffalo News*. 2005. "Woman, 93, Dies After Car Goes Into Drainage Ditch", June 11, 2005.
- The Buffalo News*. 2005. "One Killed, One Injured in Single-Car Crash", June 1, 2005.
- Transportation and Land Use Coalition (n.d.). *Sustainable transportation: South Bay/ Santa Clara County*. [http://www.transcoalition.org/c/sus\\_vta/vta.html](http://www.transcoalition.org/c/sus_vta/vta.html) (accessed June 15, 2006).
- U.S. Bureau of Census. 1990. Decennial Census of Population and Housing, Summary Files 1, 2, and 3. Washington, D.C.: U.S. Bureau of Census.
- U.S. Bureau of Census. 2000. Decennial Census of Population and Housing, Summary Files 1, 2, and 3. Washington, D.C.: U.S. Bureau of Census.
- U.S DOT and FHWA. 2001. Travel Behavior of Population Subgroups in 1995 National Household Transportation Survey (NPTS) Databook [Online] <http://www.ornl.gov/~webworks/cppr/y2001/rpt/112442.pdf#search='NPRTS%201995%20travel%20behavior'>
- U.S. DOT NHTSA. 2001. *Older Road User Research Plan*. [Online] Available at <http://www.nhtsa.dot.gov/people/injury/olddrive/OlderRoad/>
- Wachs, Martin 1988. The Role of Transportation in the Social Integration of the Aged. *The Social and Built Environment in an Older Society*, Institute of Medicine and National Research Council, 169-189. Washington, DC: National Academy Press.
- Wallace, Robert, MD and Daniel Franc. 1997. "Literature Review of the Status of Research on the Transportation and Mobility Needs of Older Women." Washington, DC: National Highway Traffic Safety Administration [online] Available at <http://www.nhtsa.dot.gov/people/injury/olddrive/nscript.html>
-

Walter, Charles, Ronald Althouse, Homer Humble, Monique Leys and Vernon Odom. 2004. West Virginia Survey of Visual Health; Low Vision and Barriers to Access. *Visual Impairment Research* 6 (1): 53-71.

Wan, He, Manisha Sengupta, Victoria A. Velko, and Kimberly A. DeBarros. 2005. "U.S. Census Bureau, Current Population Reports, P23-209, 65+ in the United States: 2005." Washington, DC: U.S. Government Printing Office.

White House Conference on Aging. 2008. Report of the 2005 White House Conference on Aging: The Booming Dynamics of Aging: From Awareness to Action: Executive Summary. Washington, DC: U.S. Administration on Aging [online] Available at [http://www.whcoa.gov/Final\\_Report\\_June\\_14nowater.pdf](http://www.whcoa.gov/Final_Report_June_14nowater.pdf)

Williams, Deidre and Harold McNeil. 2004. "Suburbs in Black and White." *Buffalo News*. March 14, 2004.

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