

BEST PRACTICES AND CASE STUDY: SENIOR MOBILITY AND THE CITY OF  
OAKLAND

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BEST PRACTICES AND CASE STUDY: SENIOR MOBILITY AND THE CITY OF  
OAKLAND

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OAKLAND

A Thesis

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Abstract  
of  
BEST PRACTICES AND CASE STUDY: SENIOR MOBILITY AND THE CITY OF  
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*Statement of Problem*

The nation and the state of California are facing a growing crisis: they must address the growing deterioration of existing infrastructure and related services, while providing increased services and infrastructure improvements to a constantly expanding population. Transportation is one of the critical infrastructure needs of the country and the state. Throughout the state of California, the needs for road and bridge repairs, transit services and other critical transportation improvements are staggering. As California's population continues to grow, one segment of the population continues to emerge. Older Californians represented by the baby boomers who are now approaching retirement age, will continue to have rising transportation needs that will require accessibility to seniors of all ages, incomes, and abilities.

*Data and Methods*

This study is based on best practices and case study research conducted by the author. The research outlined and evaluated successful senior transportation practices nationwide. I also conducted a case study of senior transportation options available in the City of Oakland, California and the City of Portland, Oregon. The best practices research approach helped to identify current and past efforts in senior mobility and transportation, and apply the more effective practices to the City of Oakland. A team of evaluators examined a set of best practices that surfaced in existing research and other publications.

### *Findings and Recommendations*

This research has shown that a variety of options combined will yield the best results. Although financial resources are the most important component to delivering transportation and related services, local, regional, state and federal agencies need to develop integrated strategies that include public/private partnerships. All approaches should include high levels of public involvement and participation, with high levels of visibility in the decision-making processes. Studying local models, such as the planning, prioritization, and services developed in the City of Portland, can help other governmental entities implement plans that will improve the existence and delivery of senior transportation options. The research provides a set of recommendations that should be implemented by governmental and other agencies providing for senior transportation and mobility needs. The research also provides recommendations that should be considered by the City of Oakland in order to improve the availability and delivery of senior transportation and mobility options.

\_\_\_\_\_, Committee Chair  
Robert J. Waste, Ph. D.

\_\_\_\_\_  
Date

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## Chapter 1

### INTRODUCTION

#### Purpose of the Study

The nation and the state of California are facing a growing crisis: they must address the growing deterioration of existing infrastructure and related services, while providing increased services and infrastructure improvements to a constantly expanding population. Transportation is one of the critical infrastructure needs of the country and the state. Throughout the state of California the need for road and bridge repairs, transit services and other critical transportation needs are staggering. (Hill, 2006. MTC, 2004. Ernst, 2005) The recently passed American Recovery and Reinvestment Act of 2009,<sup>1</sup> included \$8 billion for transit related projects, and \$27 billion for highways and bridges.<sup>2</sup>

As California's population continues to grow, one segment of the population continues to emerge. Older Californians represented by the baby boomers who are now just passing or approaching sixty, and approaching retirement age, will continue to have rising transportation needs that will require accessibility to seniors of all ages, incomes, and abilities.

Based on U.S. Census data, the under 50 population nationally will grow by 4% between 2005 and 2020. During this same time period, the population of individual 50 to 64 will increase by 21 percent, and the 65 and older population will grow by 33 percent. (Kochera, Guterbock, Straight, 2005, p. 5). By 2030, the population of Americans 65 and

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<sup>1</sup> P.L. 111-5

<sup>2</sup> P.L. 111-5

older should double to 35 million individuals, and those over 85 will total 9 million.

(Rosenbloom, 2003)

In 2000, it was estimated that 31% of Americans aged 35-54 lived in suburban areas and were likely to remain in these communities. These individuals, as do current older and elderly individuals, rely primarily on private cars to meet their transportation needs. (Rosenbloom, 2003). Older Americans also face unique transportation needs based on their changing lifestyles and related needs. Many are retired and travel at non-traditional times, require special needs to access transit or other services, focus trips on medical/health related services, and have the need for increased safety precautions. Many of the challenges facing our aging society – environmental pollution and energy consumption, metropolitan decentralization, congestion and traffic safety, disproportionately-- affect older Americans. (Rosenbloom, 2003). Many of these societal issues are exacerbated by suburban sprawl, which puts greater demand for additional governmental resources and other infrastructure needs further away from already developed urban cores. This has also created a generation of older Americans that live in outer ring suburban areas, especially that next generation of older Americans characterized by Baby Boomers who were born from 1946-1964.

The 2001 National Household Transportation Survey (NHTS) results (DOT, 2005) show that older Americans make up a greater percentage of their trips as drivers than do younger people. These trips are also of shorter distances. They also make 22% fewer trips than younger people. It would appear that alternative transportation modes could address many of these car trips and provide safer, more affordable and healthier

transportation alternatives for older Americans. (DOT, 2005) The NHTS surveyed 26,000 households regarding public transportation opinions, patterns and uses. The NHTS data was analyzed by DOT because it provides a profile of public transit users and markets (DOT, 2005)

The make-up of older Americans is also changing. People of color are increasingly making up the membership of older Americans and should double in numbers over the next twenty years. (Rosenbloom, 2003). Not only are people of color more likely to have serious health issues that impede mobility, they are less likely to have resources to buy assistance, services and goods to deal with mobility needs, putting increased demand for public support for mobility needs. In addition, these individuals are more likely to live in the urban core, versus the suburbs. It is clear that as our society ages, the transportation problems of the country will grow. Rosenbloom's research uses demographic data to show the disproportionate impact of the transportation system on communities of color, seniors and women.

More specifically, the San Francisco Bay Area, often praised for its leadership in the area of transportation alternatives, and its various transportation providers could increase transportation funding and alternatives that serve this population, allowing seniors to remain in their communities while aging. In the City of Oakland, many seniors remain isolated by unsafe and unreliable transportation options. (Communities for a Better Environment et al, 2006) Low-income and minority populations are particularly at risk. Metropolitan Transportation Commission (MTC), Bay Area Rapid Transit District (BART), Alameda County Transit (AC Transit) and private providers are the primary

transit providers in the region and currently provide some level of senior transportation services through existing services, discount programs and subcontracting to private and non-profit entities. However, senior related transportation services often face cuts or elimination in tough economic times.

BART, which provides train service throughout the Bay Area in the past few years, reduced discounts for senior riders. (Fulbrith, 2005) These cuts reduced the ability of many low-income seniors to utilize their services. Providing increased transit service to older Americans in the City of Oakland/Alameda County will help remove barriers that seniors face accessing services, improve their quality of life and allow seniors to remain in their communities as they age. Many detractors of providing increased funding and services to seniors cite budgetary constraints that have forced all of the region's transportation agencies to make tough fiscal decisions. (Fulbrith and Buchanon, 2005) Fulbrith and Buchanon covered the regional cuts and fare hikes for the *Oakland Tribune* in 2005.

The key issues facing mobility and transportation options for older Americans: are the absence of adequate planning and land use decisions in our communities to plan for the emergence of Americans over the age of 50; adequate funding at all levels for related transit and programs; a meaningful and active citizen involvement process in the planning and implementation process; and the existence of safe and reliable transit, pedestrian and bicycling options.

I will conduct further research, which will require surveying representatives of advocacy groups, local and regional governmental officials, relevant program staff in

agencies, and transportation planners to assess what has worked and failed in the area regarding providing substantial transportation options for seniors. Additional analysis will also look at the funding decisions of the federal government, CALTRANS, MTC and AC Transit and how the prioritization of fund distribution and program development has affected the provisions of viable mobility options for an aging community. Ultimately, I will attempt to determine which best practices have the largest impact on improving and providing adequate senior mobility and transportation options. This will build on work previously conducted by AARP, STPP, MTC and others. (Kochera, 2005, MTC, 2004, Bailey, 2004).

## Chapter 2

### LITERATURE REVIEW

The focus of this research is to illustrate best public transportation practices for serving senior citizens nationwide and to do a comparative case study on the City of Oakland and Portland, Oregon another area praised for its commitment to alternative transportation policies and practices. The City of Portland is often viewed as a model for alternative transportation and providing transportation choices for all of its citizens, including seniors. Oakland, though it has addressed alternative and senior transportation successfully in some areas, has failed to provide sustained funding and planning. The source materials for this research have been primarily derived from professional reports that in some cases have been developed in partnership with academics. AARP and the Surface Transportation Policy Project (STPP) have been strong contributors to this research area (AARP PPI, 2005, Bailey, 2004). AARP in its research has focused on working with other advocacy groups, and government agencies like the Federal Transit Administration and the Federal Highway Administration. (AARP PPI, 2005)

In *Aging American: Stranded Without Options*, Bailey analyzed the 2001 National Household Travel Survey (NHTS 2001), which consisted of a national travel survey and travel diary that tracked daily mobility across a geographic and regional representative sample. The research confirmed the dramatic shift in the aging population over the next 25 years, and the lack of adequate transportation choices in place to address the rapidly aging population. Academic support for research in this area has come through institutes at the University of Michigan (Eby, Miller and Molnar, 2005, Kochera,

Guterbock and Straight, 2005) and through partnerships with advocacy groups and government agencies. Eby et al, through the work of the University of Michigan Transportation Research Institute, published its guide as a resource for community professionals to assist in developing programs to improve elderly mobility. The report was a direct response to the projected boom in the senior populations, which is estimated to be 1 in 5 Americans by 2030. (Eby et al)

In *Beyond 50.5: A Report on the Nation on Livable Communities: Creating Environments for Successful Aging*, Kochera, Guterbock and Straight, working on behalf of the AARP Public Policy Institute was also concerned with the exploding population of older Americans in the next 20-30 years. The report explored the connections between a livable community and community engagement and found that both have an impact on creating successful aging in a community. As defined in the report, “a livable community is one that has affordable housing, supportive community features and services, and adequate mobility options, which together facilitate personal interdependence and the engagement of residents in civic and social life.” DOT’s web-based toolkit (2000) was designed to provide best practices to communities nationwide, and is primarily a government-generated document. Though considerable input was provided from state and local agencies, advocacy groups, newspaper accounts, and think tanks, no research information was directly derived from peer reviewed academic data.

Little research has emerged to focus on the specific subject of senior transportation. Though advocacy groups such as AARP and STPP have put significant attention to this area of research, little academic or think tank research exists that focuses



specifically and adequately on the issue and policy area. What research was discovered often looked at older Americans as exclusively retirees and often excluded a wider analysis of the total 50+ population and other older American populations, including low-income communities and communities of color. However, the advocacy-based research often attempted to include a considerable peer review process through academic and other partnerships. This has included the above referenced work by the Brookings Institute (Rosenbloom, 2003) that was designed to influence the reauthorizations of TEA-21 (Transportation Equity Act for 2001) federal transportation funding reauthorization. Rosenbloom based her research on findings from the NHTS and census and other data, as well as, research compiled by AARP and other Brookings Institute reports. The research cumulated in legislative and policy solutions that expressed a strong need for greater planning for mobility needs for the elderly; public transit services and facilities for the elderly; continued support for alternative transportation; and the improvement of highway and street infrastructure. (Rosenbloom, 2003)

Data from the federal, state, regional and local transportation agencies were also important to conducting this research. (MTC, 2004) In addition, varieties of other social justice organizations have weighed in on the subject. (Communities for a Better Environment, Urban Habitat, Public Advocates, 2006) The research data was derived from toolkits, written reports and funding histories, as well as interviews with key staff members in the relevant agencies. The overall data has been presented utilizing both quantitative and qualitative methods, as well as journalistic approaches. Quantitative

efforts have been utilized even in the advocacy driven research to bring greater validity, and reduce bias in the research efforts.

MTC was seeking to develop a toolkit that expanded on previous studies<sup>3</sup> with an emphasis on encouraging other local agencies, community and advocacy organizations, and state and federal agencies to review and model some of the best practices outlined in the toolkit. MTC utilized existing research and known best practices to inform the development of and recommendations in the toolkit. The toolkit was designed to address the increasing size of the senior population in the San Francisco Bay Area. The toolkit's findings encourage the use of conventional public transportation options that are most useful to older Americans and that ADA and related services do not address the needs that are not met by public transportation. The toolkit recommends and puts forward best practices that fill the gaps between conventional public transportation and ADA services.

Three organization entities stood out in the research as the leading researchers, conveners, and overall authorities on senior mobility. AARP and STPP emerged as advocacy and service oriented groups that have conducted considerable research on senior mobility and the challenges facing older Americans. (AARP PPI, 2005. Bailey, 2004. Ernst, 2005. Kochera, 2005. Koffman, 2004. Novelli, 2006) AARP through its annual membership conference and other meetings promotes senior mobility options.<sup>4</sup> STPP as a transportation alternative advocacy group continues to promote and advocate for mobility options through research, advocacy, trainings, conferences, seminars and

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<sup>3</sup> *Older Adults Transportation Study*, completed by MTC in December 2002. OATS identified ways to help maintain and improve the mobility of older adults in the San Francisco Bay Area. The report included a Regional Mobility Strategy with actions to benefit senior mobility.

<sup>4</sup> American Society on Aging and the National Council on Aging also hold a yearly conference with several seminars that focus on senior mobility.

partnerships with other organizations and government agencies. The U.S. Department of Transportation is the major governmental agency working in the area of senior mobility. The DOT has collaborated with AARP and STPP, and has provided considerable data through its NHTS and other documents. (DOT, 2000. DOT, 2005).

The overall literatures indicates that some considerable thought has gone into the subject of senior transportation options, but the dedication of sufficient resources nationally to programs and infrastructure have been lacking. Funding issues have resulted in the elimination of existing programs and made it difficult to implement new programs, especially the lack of operating funds needed to run transit services. Most critical is the need to plan, develop and redefine cities so that its citizens can age in place, with access to family, friends, services, affordable housing and transportation options. (Novelli, 2006)

The model best practices should look to illustrate options that improve transportation and mobility program for older Americans. Several articles articulated a general set of best practices for government and private agencies to adopt or consider in enhancing mobility options for older Americans. (AARP PPI, 2005. Bailey, 2004. Kochera, Guterbock and Straight, 2005. Eby et al, 2005) Bailey's (2004) research included considerable analysis of federal National Transportation Survey (NHTS) data that included representative samples of individuals completing travel survey's and travel diary's regarding mobility across a range of geographies and regions. In addition, this research looked at regional census data at the metropolitan level. Similar to many of the documents written by advocacy related organizations, Bailey relied on the editorial

review of colleagues and the members of other organizations that are concerned with mobility and aging issues. It arrives at a similar conclusion of much of the other research that the United States is not prepared to deal with the growth of the over 65 population in the next twenty years, and the impact this will have on our communities, and specifically mobility options.

AARP PPI's (2005) publication grew out of a convening of over 40 experts, policy makers, and practitioners involved in aging and transportation issues. The research was driven by the need for greater coordination between national, state and local interest regarding mobility as you age. Like other articles, it is spurred by the premise that as the baby boomers age there will be greater demand for mobility options. Different from the work by Kochera and Bailey, the AARP PPI document derives most of its finding and recommendations from the participants at its 2004 convening and advocacy pieces, and less on peer review and other data. However, it does use research to support its recommendations.

Kochera et al (2005) builds upon Bailery's (2004) and other existing research work from STPP to focus more on the particular needs of AARP's over 50 membership. Additional analysis of the NHTS and American Housing Survey (AHS) data was included, while adding data from the United States Environmental Protection Agency (EPA) and input from think tanks and advocacy groups. Key front line contributors included researchers from the University of Michigan and additional assistance from AARP's Public Policy Institute. The report was designed to articulate the vision of creating livable communities for individuals of all ages with a focus on the people who

are fifty or older. Utilizing NHTS, AHS and United State Census data the research emphasized the need for increased focus on creating livable communities for the emerging 50 plus population, with a focus in creating physical and social environments that support this growing and often vulnerable population. Researchers created two indexes, the Community Attachment Index (measures ties to neighbors and community), and the Community Engagement Index (provides a summary measure across a range of activities that engage a person in a community around them). (Kochera, 2005)

The Community Attachment Index assigned scores (0-7) to a series of questions that identified a person's attachment to their community. Homeownership, length of residence, and marriage correlated with higher levels of community attachment. Rural areas reported highest levels of community attachment, and urban areas had the lowest levels. (Kochera, 2005) The Community Engagement Index looks at the relationship between community engagement and successful aging. An individual's degree of engagement was scored (0-37.5) based on a 19 questions that measured each component of community engagement: community attachment, neighborhood relationships, organizational memberships, volunteering, charitable giving, and involvement in community affairs. (Kochera, 2005)

In one of several research partnerships on the subject of senior mobility, AARP and STPP partnered on a survey and best practices for legislation and legislating mobility options. (Ernst, McCann, 2005) This research collaborated with the University of North Carolina, School of Public Health, the Metropolitan Transportation Commission, AARP, American Public Transportation Association, and others. It included a survey of 525

relevant state laws on mobility options and established a list of best practices. The methodology included a review of state level legislation nationwide, selection and analysis of case studied, and development of criteria for evaluating the potential effectiveness of state laws. Eight categories (funding, enabling, system design, goal setting, enhancement coordination, integrated planning, and legislative barriers to improving mobility options) were established to identify government approaches (or lack of approach) to supporting mobility options. A series of questions were identified to determine laws that resulted in the improvement or expansion of mobility options, and then applied by a panel of experts. A case study was then conducted on four model state programs (California, Colorado, Maine and Oregon), with the understanding that funding, enabling, coordination and integrated planning were the most important factors in creating a mobile society for older Americans.

STPP's research marked the first comprehensive survey of state laws that promoted mobility options, and put focus on the importance and significance of states laws that have an impact on whether communities undertake transportation alternative improvements. California's State Transportation Improvement Program Reform Act (STIP) provided regions with control of 75 percent of state's transportation funds versus the state's control of 25 percent. This move has led to a 22 percent growth in transit ridership, which is partially attributable to regional decision-making that has resulted in greater dedication of funds to alternative transportation. (Ernst and McCann, 2005)

In Colorado, the establishment of the Regional Transportation District (RTD) created the ability of the RTD to levy taxes. This led to the eventual development of the

light rail system in the City of Denver. In addition, the local entity utilized federal funds to add an extension to service, and encouraged the passage of state laws to allow other counties to levy taxes for public transportation systems. The state of Maine, in 1991 passed the Sensible Transportation Policy Act that led to the prioritization of public transportation in the consideration and other transportation alternatives as part of the planning process, and has led to continued emphasis on rail, transit, bike and pedestrian facility development statewide. Finally, the state of Oregon in 1991 implemented the Transportation Planning Rule that codified the inclusion of transit integration into community plans. Transit Oriented Development and other principles were emphasized in the statute. (Ernst and McCann, 2005)<sup>5</sup>

In order to bring greater validity to research, advocacy groups sought to survey academic, governmental and other experts in the field. AARP (2005) looked at how to enhance the mobility option for adults, which emerged out of a June 2004 convening of over forty experts, policy makers, and practitioners involved in aging and transportation issues. Additional research (Koffman, Raphael, and Weiner, 2004) utilized quantitative and qualitative research to analyze federal funding for senior transportation. Koffman's (2004) analysis utilized information in published reports, agency web reports, interview data, a roundtable with federal and state officials, survey data, and a review of federal transportation programs and policies that have a major component that impacts older persons. Additional information was gathered from individual states and localities to fill

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<sup>5</sup> A transit-oriented development (TOD) is a mixed-use residential or commercial area designed to maximize access to public transport, and often incorporates features to encourage transit ridership. (www.wikipedia.com)

in gaps in national data. The report addresses the limitations of federal programs to address mobility options for older Americans and their ability to meet future needs and fill current gaps in programming.

The report identified the following U.S. Department of Transportation (DOT) and U.S. Department of Health and Human Services (HHS) programs with the greatest relevance to the mobility of older persons: Formula Grants for the Elderly and Persons with Disabilities (Section 5310); Formula Grants for Other Than Urbanized Areas (Section 5311); Urbanized Area Formula (UAF) Grants (Section 5307); and Capital Investment Grants (Section 5309). In addition, DOT's oversees transportation-related American's with Disabilities Act (ADA) requirements, and compliance. (Koffman, et al, 2004)

Eby (2005), created a best practices model for the development of senior mobility options through the University of Michigan, Transportation Research Institute. The research was initially supported by the State of Michigan and the U.S. Department of Transportation. The publication was developed as a guide to community professionals developing programs that enhance senior mobility. The guide utilized expert interviews, and extensive literature reviews. The guide surveys and suggests some best practices derived from model programs in the United States and abroad. The best practices model for this research is outlined in the methodology section. (Keehly, 1997) It includes a Meta study of best practices, which is designed to review current senior mobility best practice studies, based on this review, an overall model or approach that might be helpful to adopt as policy in the City of Oakland/Alameda County.



In reviewing the existing literature, it is clear that considerable thought has gone into the overall research area of mobility and transportation, with lesser focus on the mobility and transportation needs of older Americans. Expected groups, such as AARP, who represent the 50+ population, with over 40 million members, have done more research in this area than others have. However, most of the current research is advocacy or government based. The importance of my own research is to provide an objective analysis of the best practices for senior mobility and transportation, looking at not only advocacy and government-based research, but also to include survey of professionals and the reviewing of think tank, academic and other sources. The results of this best practices research will help not only local government, and particularly the City of Oakland, in reviewing its senior transportation programs, but also inform advocacy groups, citizens, and governmental and other entities.

### Chapter 3

#### GENERAL METHODOLOGY (BEST PRACTICES AND MODELS)

I chose a best practices research approach to help identify current and past efforts in senior mobility and transportation, and apply the more effective practices to the City of Oakland. Though other studies have looked at best practices, few have evaluated the practices that existed in toolkits and other publications, and listed model programs or projects around the country. Most studies have simply compiled best practices that existed in toolkits and other publications, and listed model programs or projects around the country. In having evaluators look at a set of best practices that surfaced in existing research and other publications, and evaluating them, we might get closer to establishing a set of programs and policies that will ultimately effectively promote senior mobility and transportation alternatives.

In developing this list, I built upon the existing research used to develop this paper and my profession experience as a transportation and social equity advocate, political organizer, lobbyist, and representative of municipal governments and non-profit associations. This unique perspective provided me with access to relevant information from a variety of sources and a viewpoint on how to compile and evaluate the research that is different from other perspectives. My research is also not geared towards any advocacy or governmental agenda. Instead, this thesis is strictly focused on pulling together a set of best practices that can assist the City of Oakland and other municipal governments improve senior mobility and transportation.

It is likely that a problem encountered by a governmental agency had occurred elsewhere. Research into current practices is an organized attempt to learn from the experience of others. (Eglene, 2000) Looking at other agencies, organizations and research results helps to determine the effectiveness of best practices and study what worked in other organizations. The conducting of best practices research allows for the investigation of a problem from multiple perspectives. It also allows the opportunity to identify similar problems incurred by others, and how to evaluate what may and may not work for your agency. (Eglene, 2000)

Generally, three broad steps should be taken in a best current practices survey:

- formulate the questions,
- gather preliminary information, and,
- interview selected individuals. (Eglene, 2000)

Accordingly to Keehly, (1997) a best practice is, “anything better than your Current practice,” for organizations and programs in both the private and public sectors. The criteria for defining best practices, according to Kelley are the following:

- Successful over time
- Quantifiable results
- Innovative
- Recognized positive outcome
- Repeatable
- Has local importance
- Not linked to unique demographics

A successful best practice should have a proven track record, at least six months with quantifiable results. The existence of quantifiable data will help to compare examples. Often quantifiable results are hard to establish, however, a strong positive result has occurred. In this case, peers must accept that this resulted in successful best practices. It is also important that any best practice can be repeated in other jurisdictions, with modification as needed, and has relevant importance to the local community that it is occurring. Finally, many practices result because of unique circumstances in a community and may not be duplicable. A best practice should be transferrable even in these unique circumstances.

Individuals and organizations selected to participate in the best practices survey should include the public and political leaders who can provide significant contributions through insight and expertise. The second group should come from career managers and political appointees. (Keehly, 1997) The selection of these partners in the research should be knowledgeable in the subject area and be able to provide additional recommendations of best practices and potential other partners. Partners should be identified from research done on existing literature, and personal contacts. This would include those that have been cited for using innovative ways to handle the issue being research to include new technologies, and organizations identified with recognized customer service. According to Keehly (1997), the personal contacts should include key stakeholders, elected or appointed officials, individuals met at professional conferences, express, and existing research.

In working with your survey participants, Keehly (1997) suggest that the following guidelines be followed:

- Behave in a straightforward and unequivocal manner.
- Carry out the project with integrity.
- Never misrepresent yourself or your organization.
- Identify all parties who will have access to partner information and the extent of that access. If a partner request confidentiality, make every effort to honor that request.
- Be sensitive to any potential touch issues, and consult your partner on any intended changes to the game plan.

Keehly (1997) argues that in analyzing the best practices that are identified data analysis should be done to identify which are feasible. It is important that the research avoid over analysis, be systematic, be prepared for surprises and focus on the differences in the practices. Where possible the analysis should include quantitative and qualitative comparisons. The evaluation should attempt to answer the following questions (Keehly, 1997).

- How innovative is the practice?
- How cost-effective?
- How will the practice affect the delivery of services?
- How will it affect the performance gap?
- Is there a credible documentation that attests to customer satisfaction or success?

The relevant scoring instrument for the survey should provide some indication of how well the practice is meeting expectations or projected expectations.

In conducting surveys related to collecting data best practice the American Association for Public Opinion Research recommends the following evaluative steps:

- Consider alternatives to using a survey to collect information.
- Select samples that well represent the population to be studied.
- Use designs that balance costs with errors.
- Take great care in matching questions wording to the concepts being measured and the population studied.
- Pretest questionnaires and procedures to identify problems prior to the survey.
- Train interviews carefully on interviewing techniques and the subject matter of the survey.
- Construct quality checks for each stage of the survey.
- Maximize cooperation or response rates within the limits of ethical treatment of human subjects.
- Use statistical analytic and reporting techniques appropriate to the data collected.
- Carefully develop and fulfill pledges of confidentiality given to respondents.

Disclose all methods of the survey to permit evaluation and replications. (American Association for Public Opinion Research, 2007)

*What are the Best Practices for Senior Mobility?*

In reviewing the literature a series of best practices emerged in one, several or all the writings that referred to best practices (AARP PPI, 2005. Bailey, 2004. Eby, 2005. Ernst, 2005. Hardin, 2003. Kochera, 2005. Koffman, 2004. MTC, 2004. Rosenbloom, 2003) The following is a list of best practices that I determined to most relevant towards the promotion and execution of senior mobility options: (See Appendix 4)

- Local advocacy
- Increased funding (Local/Regional)
- Increased funding (State/Federal)
- Laws/Regulations/Policies supporting/promoting mobility/transportation options
- Driver Safety/We Need To Talk programs in place (insert footnote with definition)
- Public participation, communing engagement/involvement in planning process
- Innovative planning locally (i.e., Smart Growth principles; environmental justice; TOD; mix-use; long range planning; livable communities)
- Existence of pedestrian master plan
- Street, sign and sidewalk design
- Consistently funded and operated programs (5 years of more)
- Public/Private partnerships in community

- Local summits/convening's to address issue
- Senior shuttle, taxi, vouchers or car services
- Reduced transit fares
- Public education/training programs
- Cross-agency service integration (paratransit, human services, shuttle's, transit, etc.)
- Research

I selected these best practices based on the frequency they were mentioned and judging what overall trends and future trends may be: funding (at any government level, however, coordination across governmental levels and agencies is most effective); integrated local planning; existence of mobility facilities and services (Pucher and Dijkstra, 2003) and laws and regulations that promote senior mobility and alternative transportation options (Koffman, 2004), (Ernst, 2005, p. 5-6) Ernst et al discuss four key areas that were apparent in states that promoted mobility options: the existence of a dedicated revenue stream; mobility option facilities or services; local regulatory control of investment decisions and clear implementation guidelines from state governments. Other research reinforced the need for regional and local control for improvement of arterial roads and local streets with funding attached (Hill, 2006) Improved mobility is achieved through increased options through existing services and infrastructure, and the continued establishment of new services. (AARP PPI, 2005)



Alternative transportation options should include safe walking and bicycling, transit, and specialized transportation (taxi, car services, and human services vehicles). (Kochera, 2005. Koffman, 2004. Pucher and Dijkstra, 2003). Pucher (2003) in comparing the pedestrian and bicycling facilities of the United States to Germany and the Netherlands, insist that the existence of facilities that support bicycling and pedestrian are important towards promoting mobility options. Individuals over 65 account for the highest rates of pedestrian deaths (40% in 2000). (MTA, 2004)

The promotion of alternative transportation should be coordinated in the planning process, with considerable community input. The promotion of urban design oriented towards people and not cars will help develop planning objectives that promote alternative modes of transportation (Pucher, 2003) Land use decision have a profound impact on the availability of transportation options. Decisions regarding location density, mix of use and zoning can determine whether communities are created that promote walkability and accessibility to other mobility options. In the NHTS survey, 53% of respondents had no sidewalk in front of their homes. (Kochera, 2005) In planning to provide transportation options for seniors, integration of these options across government agencies is important, especially the integration of paratransit, public transit, human services and other forms into all planning. (AARP PPI, 2005) This practice is further enhanced by the support of federal, state and local policies that expand and enhance mobility options.

Key federal programs operated through the U.S. Department of Transportation, such as Section 5310 (Elderly and Persons with Disabilities Transportation Program)<sup>6</sup>, Section 5311 (Non-urbanized Area Formula Grants)<sup>7</sup>, Section 5307 (Urbanized Areas Formula Program)<sup>8</sup>, Section 5309 (Capital Program)<sup>9</sup>, have been critical towards promoting best practices at the state, regional and local level for senior transit and mobility. The U.S. Department of Health and Human Services also delivers critical services through Older American Act Supportive Services, and medical transportation programs through Medicaid and Medicare. (Koffman, 2004) However, there is still a need for an increase in funding to have a more significant and meaningful impact on senior transportation and mobility. This would include increased investment in the 5310, 5311, 5307 and 5309 programs. In addition, increased federal funding towards older driver research, home and community based medical transportation, supportive services under the Older Americans Act and the expansion of Medicare coverage for medical necessary transportation (Koffman, 2004)

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<sup>6</sup> The Section 5310 program makes funds available to meet the special transportation needs of elderly persons and persons with disabilities. These funds are apportioned to the states annually by a formula that is based on the number of elderly persons and persons with disabilities in each state. (USDOT)

<sup>7</sup> The Section 5311 program provides funding for public transportation in non-urbanized areas. From fiscal year 1979, when the program was authorized, until fiscal year 1991, Congress appropriated \$65-85 million annually for the program. (USDOT)

<sup>8</sup> The Section 5307 Urbanized Area Formula program grant is administered by the Federal Transit Administration, or FTA, for urbanized areas, providing capital, operating, and planning assistance for mass transportation. (USDOT)

<sup>9</sup> Administered by the Federal Transit Administration, Section 5309 Capital Program funds provide assistance for the establishment of new rail transit projects, improvement and maintenance of existing rail transit and other fixed-guideway systems, buses and other bus-related capital projects. (USDOT)

<b>SCHOOLS OF THOUGHT</b>	<b>direct advocacy (citizen/organization)</b>	<b>innovative planning processes</b>	<b>governmental intervention and partnerships</b>	<b>research/public education programs</b>	<b>Provision of direct services</b>
<b>Characteristics</b>	local, regional, state, federal advocacy; public participation; environmental justice; social justice	pedestrian master plans; alternative transportation, transit oriented development; smart growth; environmental justice; social justice; street design	changes in law and regulations; funding; governmental changes; increase funding; changes in policy; cross-agency coordination	supportive research; toolkits; driver safety; We Need To Talk; other senior counseling programs	public transit; fare reduction; car services; taxi services; shuttle services
<b>Players</b>	Environmental justice groups; social justice groups; environmental groups; grassroots senior organizations; TEA4America, Urban Habitat, PolicyLink, Surface Transportation Policy Project, TRANSFORM, Transportation Equity Network, Ubuntu Green	academia; Europe; bike and pedestrian advocates; AARP; Local Government Commission; Surface Transportation Project; Smart Growth America; Ubuntu Green	national groups; advocacy groups; regional transit agencies; private transportation providers; state agencies; transit organizations; AARP; Surface Transportation Policy Project; Brookings Institute; TEA4America	USDOT; academia; Brookings Institute; regional and local governments; Alameda County Transit; AAA; Alameda County Transit; Metropolitan Transportation Commission; AARP; Surface Transportation Policy Project	All, paratransit

Table 1 Schools of Thought

## Chapter 4

### RESEARCH/SURVEY DESIGN/FINDINGS

I selected a list of experts and leaders in the field of senior mobility/transportation that could be surveyed to rank a set of best practices. (This was not a representative sample.) This list was created through identification of individuals through the literature review and my own personal knowledge as transportation professional. I conducted the survey electronically using Survey Monkey ([www.surveymonkey.com](http://www.surveymonkey.com)). Through this secure password protected site, evaluators ranked each of 16 options on a one to five scale from (1) most effective to (5) least effective. Second, they ranked each of the 16 options in terms of their effectiveness 1-16. A brief definition/overview of each of these best practices was attached to the survey.

I contacted the respondents via email regarding the Survey Monkey, survey. No face-to-face or phone interviews were conducted. I was partly interested in the response rate, not just by sector, but also through the use of electronic media. I did not, however, have a comparison sample of individuals surveyed that were conducted via phone, mail or in person to compare this response rate. I initially anticipated a 10% response rate and a low response rate from elected officials or their staffs.

I did consider advance and follow up email notification of the survey. I choose not to do the advance notifications; but did conduct follow up email alerts. According to Kaplowitz et al, survey response rates can be increased through a preceding mail alert of the pending survey and to a lesser extent an email alert. In addition, follow up emails, like those conducted with this study, help to improve response rates. (Kaplowitz, 2004)

The response rate is defined as the percentage of survey or invitations that result in a response. (Hamilton, 2003) In a representative sample (Sample size < 1000), Hamilton showed that the total response rate in analyzing over 500,000 online surveys sent to individuals that the average response rate is around 26% for online surveys sent to individuals that the average response rate is around 26% for online surveys conducted by organizations. Hamilton cautioned that organizations should avoid large samples and keep samples at a represented size of the target or overall population. Surveys should also be sent out earlier in the day and have at least a two week durations to ensure the best response rate. (Hamilton, 2003) This survey was sent at random times of the day and sometimes on the weekend. Respondents were given up to 5 weeks to respond; all respondents were given at least 2 weeks to respond. I believe if the surveys had been sent to respondents early in the workday, there may have been an increase in overall response rates for this survey.

The survey was distributed via email to 90 respondents over a five-week period.<sup>10</sup> I provided respondents with a cover letter describing the survey that included a link to the survey and an attached consent form. The emailed survey was followed up by phone calls in some cases and three reminder emails to all survey targets to ensure timely responses, and for clarifying questions. Evaluators also were given the opportunity to suggest additional best practices not captured in the survey, and to provide one sample project/program in the country. The research was evaluated and the results of the survey identified the six best practices for senior mobility and transportation.

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<sup>10</sup> A list of organizations surveyed and responding organizations in Appendix A.

### **Selection of Evaluators**

The evaluators were chosen based upon expertise or work in the fields of transportation, mobility, gerontology, land use, planning, social justice and environmental justices. I selected evaluators from academia, government agencies, non-profits, foundations, think tanks, consultants and community groups. Potential evaluators came from a mix of national, state, regional and local individuals/organizations.

### **Best Practices (16)**

1. Local Advocacy
2. Increased funding (Local/Regional)
3. Increased funding (State/Federal)
4. Laws/Regulations/Policies supporting/promoting mobility/transportation options
5. Driver Safety/We Need To Talk programs in place
6. Public participation, community engagement/involvement in planning process
7. Innovative planning locally (Smart Growth principles; environmental justice; TOD; mix-use; long range planning; livable communities)
8. Existence of pedestrian master plan
9. Street, sign and sidewalk design
10. Consistently funded and operated programs (5 years or more)
11. Public/Private partnerships in community
12. Local summits/convening's to address issue
13. Senior shuttle, taxi, vouchers or car services
14. Reduced transit fares

15. Public education/training programs

16. Cross-agency service integration (paratransit, human services, shuttle's, transit, etc.)

17. Research

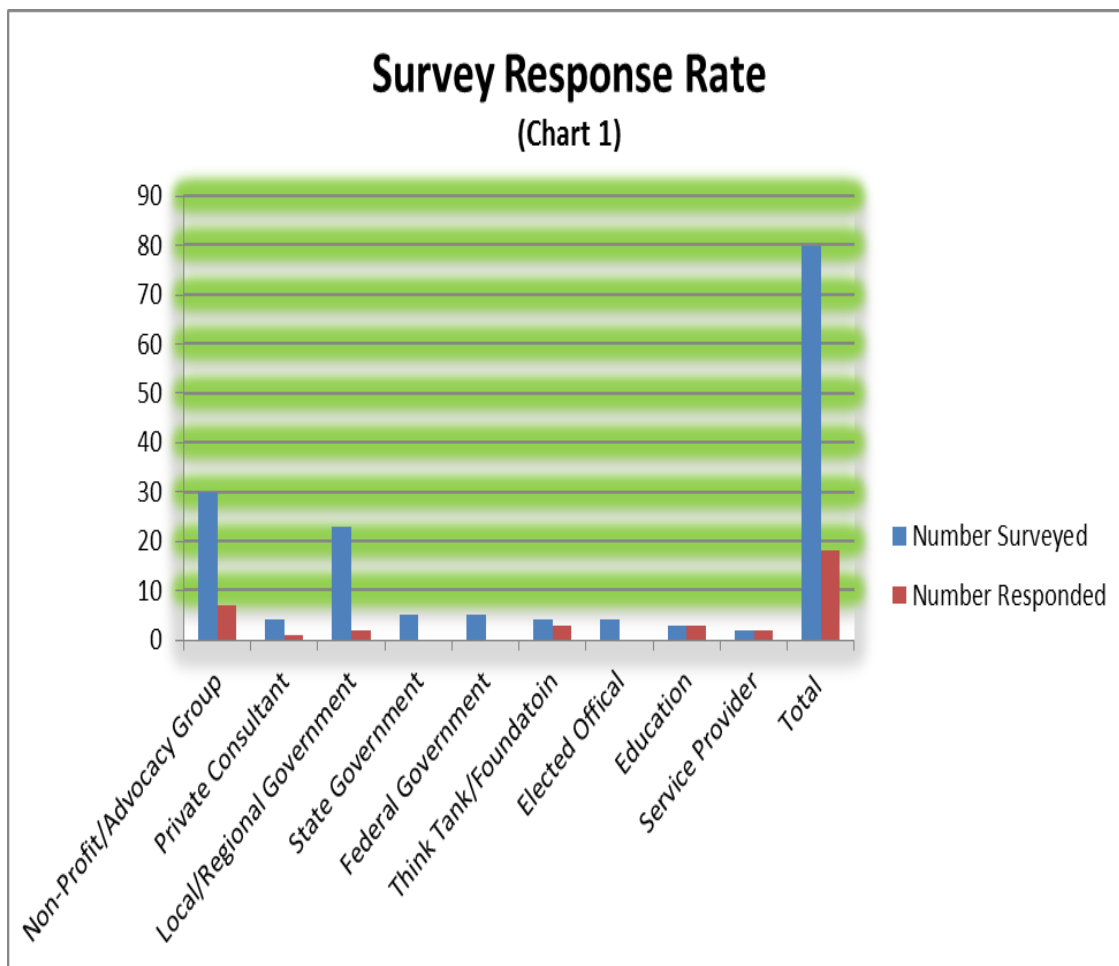
### **Survey Instrument – (Cover letter and questionnaire)**

(See Appendices B and C)

### **Survey Responses**

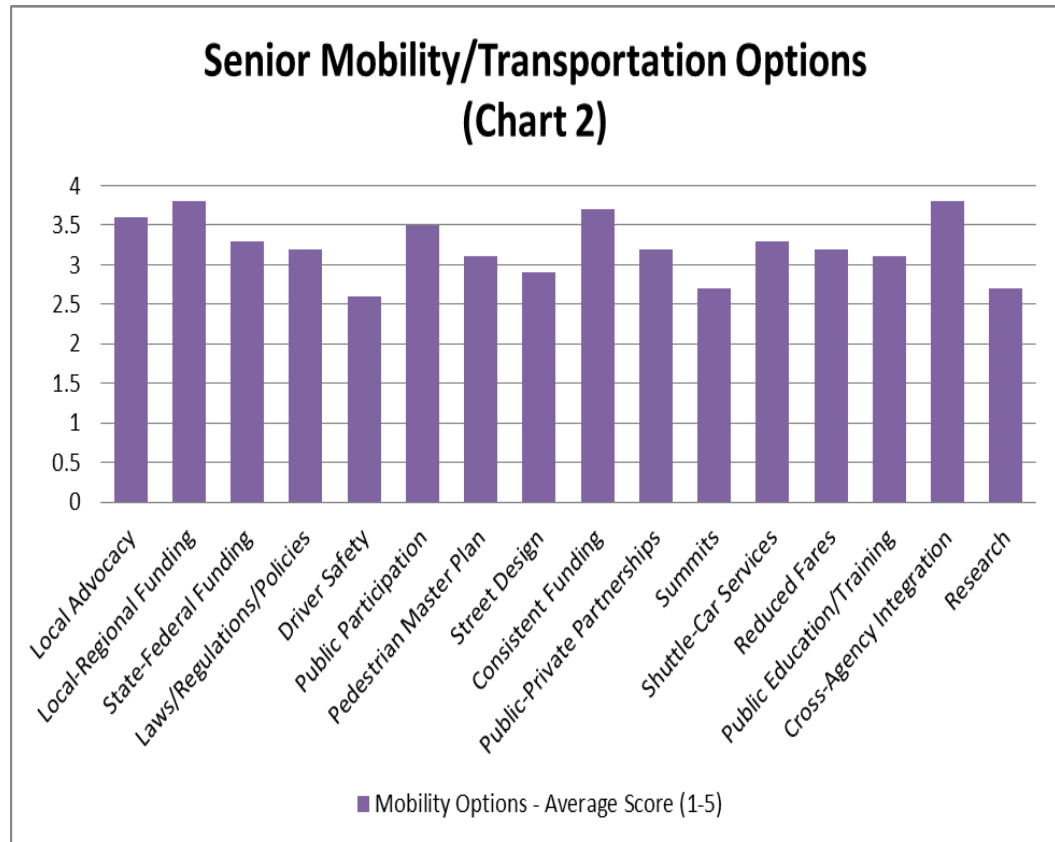
As mentioned previously, I submitted the survey via email to eighty potential research participants. The participants had up to 5 weeks to participate in the survey and were sent two follow up reminders. I also encouraged participants to volunteer others who may be interested in participating. Only two survey targets submitted referrals. A total of five additional participants were recommended. A total of twenty participants responded, with fifteen responding to question number one, and eleven each to questions two through four. This amounted to a twenty percent overall response rate. (See Chart 1)

The majority of those surveyed were from the non-profit sector (30) and local regional governments (27), there were only seven and two respondents respectively. Both independent service providers responded as did all but one of the foundations/think tanks targets. None of the surveyed individuals from state and federal governments responded to the questionnaire, and expected outcome.



Question number one of the survey asked respondents to rank each of the sixteen senior mobility/transportation options on a 5-1 scale. They were ranked from Extremely Effective to Not Effective. Chart 2 displays the ranking of each option based on their average rating score. Increased local/regional funding and cross-agency services integration received the highest average score of 3.8, followed by consistently funded and operated programs (3.73), and local advocacy (3.60). The lowest rated options were Driver Safety/We Need To Talk (2.60) and local summits/convening's and research both scoring (2.67).





It is important to observe that a score of 3.0 or higher would represent a Moderately Effective or average score for this survey. The lowest score was 2.6, which was slightly lower than average. It appears that the respondents saw some significant level of value in all the options provided in the survey.

	<b>Table 2</b>	
<b>Mobility Options Surveyed</b>	<b>Rating Average</b>	<b>Overall Ranking</b>
Local-Regional Funding	4.5	1
Local Advocacy	5.6	2
Consistent Funding	6.5	3
Street Design	6.7	4
State-Federal Funding	7	5
Laws/Regulations/Policies	7.1	6
Public Participation	7.5	7
Shuttle/Car Services	7.8	8
Pedestrian Master Plan	8.7	9
Cross-Agency Integration	9.2	10
Reduced Fares	9.5	11
Public Education/Training	9.7	12
Summits	10.4	13
Driver Safety	10.6	14
Public-Private Partnerships	11.4	15
Research	13.8	16

Table 2 Mobility Options Surveyed

Question number three asked respondents to rank the sixteen option in order from 1-16. (See Table 2) Local/regional funding (1), local advocacy (2), and consistent funding (3) still ranked highly in this scenario. Cross-agency integration, which had the highest score in the weighted responses in questions one, placed tenth when ranked against all the other options in questions three. Driver safety programs (14) and research (16) still ranked at or near the bottom of the survey.

### *Analysis of Findings*

Overall twenty percent of respondents replied to the survey. Response was highest from members of the non-profit community, followed by local government. No elected officials or members of their staff responded to the survey. This could be

attributed to the *non-survey response policy* that many elected officials employ, and the follow-up needed to ensure responses. The findings may be skewed by this factor, but the response rate from service providers and academia help bring more credibility to the results. The responses also trend towards the best practices as outlined in the literature and exemplified in the case studies. It is clear that funding, consistent programming, and coordination help to foster greater senior mobility options.

The survey findings suggest that funding that is consistent and provided at the local/regional levels are the keys to successful senior transportation options. In addition, other key factors appear to be local advocacy, public participation and cross-agency integration. As noted before, most of the options provided were considered significant with scores close to or above 3.0 in Table 1. Practices such as street design, driver safety, summits and research fell below the 3.0 mark of being moderately effective options. It is important to note that street design ranked fourth in Table 2 when respondents were asked to rank the sixteen options provided.

In the final analysis, the survey findings were consistent with the assumptions I made before starting the research. Funding issues of all types were the expected number one need to provide consistent senior mobility options. I also expected to find lower scores for programs that promoted driver safety, etc., since these were typically run by advocacy groups, such as AARP and that more practical solutions, such as improving road safety would be evaluated as a more viable alternative. The one area which was used in much of the literature, but ranked among the bottom in both rankings, was the use of summits and the other convening's. More meetings is not the solution, unless involves

cross agency integration or clear discussions on direct allocation of monies, which substantial public participation. The response rate of 20% was greater than the 10 % expected, and lower than the 30% that I had targeted. I believe some modifications in survey design and delivery would have improved the response rate, especially a notification mailer or email alerting potential respondents.

## Chapter 5

### CASE STUDIES

I know turn from an analysis of my survey of experts to more in-depth consideration of sharply differing senior transportation efforts in two cities: Oakland and Portland. The most significant data comes from profiles of best practices nationwide, and in California. (Hardin, 2003. MTC, 2004) MTC's survey of best practices provided a comprehensive look into model senior mobility services that included several examples in the City of Oakland and Alameda County. MTC in its work commissioned Nelson/Nygaard a transportation consulting firm to conduct the research and draft the document. Much of the work was an outgrowth of MTC's Older Adults Transportation Study conducted in 2002. The toolkit was specifically developed to help local transportation and other relevant agencies, local advocates and elected officials in developing and implementing senior mobility programs.

Communities for a Better Environment (CBE), Public Advocates, and Urban Habitat (UH) (2006), two regional advocacy groups and a legal group located in Oakland, developed and advocacy document directly targeted at MTC, as the lead transportation agency regarding the lack of transit service in the East Bay. The research stood in contrast to the MTC and other best practices toolkits, and focused on the deficiencies of the policies of local transportation agencies in meeting the needs of low-income communities and communities of color in the East Bay. CBE, Public Advocates and UH (2006) also utilized legal and community based research that involved the use of personal

stories. It also illustrated the relative lack of academic or other peer reviewed research analyzing the availability of transportation options in the City of Oakland/Alameda County, especially as it pertains to seniors.

#### *Case Study – City of Portland*

The model program for the promotion of mobility option is in the City of Portland, Oregon. (MTC, 2004) The efforts in the City were spearheaded by the development and implementation of the *Portland Pedestrian Master Plan*. The plan, which promotes walking as a preferred mode of transportation for short trips, developed a twenty-year framework for the improvement of programs. This included implementing pedestrian policies, pedestrian street classifications, pedestrian design guidelines, pedestrian funding strategies, and pedestrian capital projects. As part of the plan, the City engineer developed the *Portland Pedestrian Design Guide*, which all development projects in the City must conform. The Guide established four pedestrian environmental factors (MTC, 2004):

1. Ease of street crossings,
2. Sidewalk continuity,
3. Street connectivity, and,
4. Topography.

The plan included two tools to measure pedestrian safety in the city; the *Pedestrian Potential Index*, and the *Deficiency Index*. They also employ a full-time pedestrian coordinator, with the needed resources to implement activities. Though the

*Master Plan* is not specific, many of the objectives and tools promote senior mobility. Evaluation tools look at Americans with Disabilities Act (ADA) compliance, curb ramps, and the ease of streets and sidewalk crossings, and access.

The Portland area has also developed programs to incorporate regional coordination of regional transit providers that includes senior related travel. (MTC, 2004) The region coordinated regional and local providers with volunteer transportation providers. The efforts led by Ride Connection, not-for-profit organization, work with the four-county Portland metro area, and the regional metropolitan transportation agency, Tri-County Metropolitan District of Oregon (Tri-Met). There are thirty partner agencies (half of which use volunteers) and citizens active participation in the coordination of efforts. This includes representatives from religious, ethnic, medical, senior, youth, public agencies and social services agencies. Federal funds are leveraged through the use of Section 5310 dollars, and the program employs 253 paid staff and 405 volunteers. (MTC, 2003)

Programs offered as part of the cities pedestrian programs include, Senior Strolls, Walk to Wellness, and the Ten Toe Express. These programs are designed to encourage seniors and others to walk for a healthier lifestyle, recreation and as a mode of everyday transportation. The Senior Strolls program is designed to offer seniors an easy, pleasant, social walking experience. These one to two mile strolls, are aimed at restoring or giving seniors the confidence to consider walking as a transportation options.<sup>11</sup>

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<sup>11</sup> City of Portland, Department of Transportation. Senior Strolls 2008. <http://www.portlandonline.com/Transportation/index.cfm?c=41541>. Retrieved 12/12/08.

City of Portland also runs the Ride Connection, Inc., which assists to seniors and people with disabilities who do not have alternative transportation. The program was created in response to community assessment needs and employs both full and part-time employees, and volunteers. The program is funded by the Oregon Department of Transportation and Tri-Met, and does not charge a fee, but accepts donations. (Eby et al) The program has been identified as an award-winning program by the Beverly Foundation.

The City of Portland in May of 2008 instituted a senior bike school. As part of its overall Portland By Cycle program, which encourages biking for fun, exercise, commuting, and shopping, the bike school teaches or re-teaches seniors in the community biking skills and safety. The free program focuses on use of the three-wheeled recumbent trike and provides free helmets and bikes to use as part of the classes.<sup>12</sup> This program stems from the city's *Bicycle Master Plan*, which was originally developed in 1973, and regularly updated. The plan is overseen by staff and a thirteen member volunteer Bicycle Advisory Committee.<sup>13</sup>

The City of Portland has taken a comprehensive approach to its city and regional planning incorporating various modes of transportation into its long-term planning. Senior transportation and related supporting modes of transit, pedestrian, and bike transportation are highly prioritized and encouraged in planning and funding decisions. This leads to consistency and improvement in programs, which leads to increased usage

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<sup>12</sup> City of Portland, Office of Transportation. Senior Cyclist Program. <http://www.portlandonline.com/transportation/index.cfm?a=155167&c=37401>. Retrieved 12/13/2008.

<sup>13</sup> City of Portland, Oregon. *Bicycle Master Plan: Making Bicycling an Integral Part of Daily Life in Portland*. July 1, 1998. <http://www.portlandonline.com/shared/cfm/image.cfm/image.cfm?id=40414/>.



among its senior population. What is missing in the analysis of the City of Portland, unlike the City of Oakland, CA are how these services are linking to and supporting low-income communities and communities of color, which does not seem to be issue in the approach taken by the City of Oakland.

*Case Study – City of Oakland/Alameda County*

The City of Oakland, (2007) and Alameda County Transit (2007) provide some data on their websites promoting senior transportation options and programs. The City of Oakland has a website link to programs currently provided by the Department of Human Services that serve the elderly and disabled. It acknowledges the current City efforts, with a service focus on elderly (over 70) population and lack of focus on older Americans between the ages of 50 and 70.

Paratransit for the Elderly and Disabled (OPED) is a program operated by the City's Department of Human Services. The OPED program assists frail individuals and people with disabilities with their transportation needs. OPED offers a door-to-door subsidized transportation service to eligible program participants who cannot access public transportation, providing them with the availability of taxicab or wheelchair van service to their medical appointments, shopping trips, and daily excursions. Applicants must be 18 years of age or older and have a mobility disability. To apply for services, individuals should call to request a registration form. Applicants 70 years of age or older need only complete the front page of the registration form and then attach a copy of their California ID Card or California Driver's License to the back of the form. The program

offers taxi script, van vouchers and senior shuttles. The senior shuttle contracts with the Community Services of the Bay Area, and provides service to adult day care, BART, grocery stores, senior citizen residents, bus stops and other locations.

AC Transit includes information regarding environmental impact surveys (EIS) and environmental impact reviews (EIR) studies done in partnership with federal agencies that assessed traffic, parking, ridership and commute times as it relates to seniors. However, there appears to be little evidence of effective partnering between the City of Oakland and Alameda County on addressing senior transportation. Significant deeper research is needed in this area to assess what has been successful in the past and how best practices and resources have been applied.

In 2002, the City of Oakland adopted the *Oakland Pedestrian Master Plan* as part of the City's general plan, Land Use and Transportation Element. (MTC, 2004) The plan was designed to improve pedestrian conditions in the City. It includes a summary of existing conditions in the City, including a collision analysis. The plan also included an implementation plan for a pedestrian route network, and policy, engineering and design recommendations. The development of the plan included direct outreach to older adults through input from neighborhood associations, crime councils, retirement homes and senior centers. Key groups in the partnership included United Seniors of Oakland/Alameda County and Asian Health Services.

The City of Oakland operates the West Oakland Senior Shuttle that connects 14 senior housing complexes to a variety of shopping and meal programs. The service is funded by the 7<sup>th</sup> Street/McClymonds Neighborhood Improvement Initiative, which is

supported by foundation and City funds provided by a local tax obligated for seniors and individuals with disabilities. The shuttle is operated by Bay Area Community Services and serves a low-income neighborhood of seniors, with little access to quality, affordable food. Funding was originally guaranteed through 2004.

There is a lack of direct academic or other research that has focused on the particular issues affecting the City of Oakland and Alameda County. Newspaper and other media accounts have helped in illustrating the public response and outcry for greater senior transportation and mobility options in the region. (Cabanatuan, 2006. Lelchuck, 2005) Most available research revealed the struggle to keep funding for senior transit fares and other related programs as a key issue in maintaining programs. (Fulbrith, 2005. CBE, Public Advocates, Urban Habitat, 2006) The U.S. Department of Transportation (DOT) (2000) in its collection of case studies, also cite the Fruitvale Transit Village as a model project of public partnerships and involvement that included housing and mobility options for seniors. Ultimately, some of these programs have yet to be developed.

The City of Oakland seems to struggle with prioritizing and consistently funding transportation programs for its older population. Though a pedestrian master plan is in pace, components to support and promote senior pedestrian safety and walking are either absent or inconsistent. However, the City's programs related to senior transportation consistently focuses on reaching out to low-income communities and communities of color. Coupling this focus with consistent funding and diversity of options will strengthen the City's transportation programs targeting seniors. This includes merging

the transportation decision-making at the transit and regional level, with local and regional planning agencies and public and private human service agencies specifically with a focus on older American's. The result of these collaborations should not just be the promotion of safe and reliable senior mobility options, but also generate integrated communities designed for individuals to live in place with as little dependence on the automobile, as possible.

## Chapter 6

### CONCLUSIONS AND IMPLICATIONS

By 2011, the first of the Baby Boomers will turn the age of sixty-five. It is critical that these and other older Americans have the ability to live safely and independently for the remainder of their lives. Over seven million older drivers are currently on the roads, with an estimated doubling of this number by the year 2025. This increase in the aging population and aging drivers will have significant implication on planning, design, and operation of our transit systems, roads and bicycle and pedestrian facilities. (AARP, 2009)

In this country, non-drivers have few transportation alternatives, and public transportation is limited in rural areas and in most suburban areas where older Americans are concentrated. An AARP survey indicated that over 60 percent of people above the age of 50 do not live within in ten minutes of public transportation, and nearly half could not safely cross the main roads in their communities. Over forty percent of all pedestrian fatalities are individuals over the age of 50. (AARP, 2009) These issues are coupled with high-operated costs, especially for gasoline that threatens the transit programs that serve rural and other older Americans as the same time demand is on the rise.

In 2006, traffic crashes killed 42,642 people in the United States, about 117 deaths per day. According to FHWA, in 2005 dollars, the per-person cost of a fatality was \$3,246,192 and the cost for an injury, \$68,170. The Insurance Institute for Highway Safety (IIHS) estimates that by 2030, the annual number of older driver crash fatalities will more than double. (IIHS, 2007)

Community design is important in determining how older Americans are able to move about their neighborhoods and get to their desired destinations, such as grocery stores, recreation, friends and family and doctors. Those living in areas where transportation is better integrated with housing are more likely to make trips outside their homes, and more on foot and by public transportation than their counterparts who do not live in such locations. Communities that provide a wide variety of transportation options enable older individuals to retain their independence and stay engaged, which is critical to maintaining quality of life, reducing health and other burdens on society caused by isolation and inactivity. Absent transportation, prolonged social isolation by older individuals often leads to depression, alcoholism, obesity, and related diseases. (AARP, 2009) Medicare, Medicaid, and other federal programs bear a substantial portion of the cost of addressing these problems. The cost to the nation will rise considerably and incrementally if these transportation, and providing a multimodal, accessible, safe, and affordable transportation system, we can save lives, resources, and improve the quality of life for all Americans. (AARP, 2009)

Based on the existing research and survey results, the following recommendations should be implemented by governmental and other agencies providing for senior transportation and mobility needs:

- Strengthen public involvement in state and local planning processes, and increase accountability and transportation programs and funding.
- Federal, state, regional, and local transportation providers should create long-term plans for senior mobility options.

- Planning should include adequate and long-term funding and funding recommendations to address mobility needs of the growing senior populations.
- A national commission should be formed to address land use and infrastructure decisions affecting older Americans and produce planning, infrastructure, environmental, and funding recommendations to federal, state, regional and local governments.
- The federal government and state governments that have not already done so should pass and aggressively implement Complete Streets legislations.<sup>14</sup>
- A senior transportation official should be placed in the Office of the United States Secretary of Transportation to oversee all agency efforts regarding transportation and mobility funding, research, planning and administration.
- Incorporate older driver safety design principles in new and reconstructed road, street and highway infrastructure projects.
- Increase funding for the federal Formula Grants for the Elderly and Persons with Disabilities (section 5310); Formula Grants for Other Than Urbanized Areas (section 5311); Urbanized Area Formula (UAF) Grants (section 5307); and Capital Investment Grants (section 5309).

The following recommendations should be considered by the City of Oakland in order to improve the availability and delivery of senior transportation and mobility options:

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<sup>14</sup> Introduced in 111<sup>th</sup> Congress in 2009 by Congresswoman Doris Matsui (CA), and Senators Tom Harkin (IA) and Tom Carper (DE)

- Do a comprehensive review of mobility and transportation related services for seniors in their community.
- Revise the pedestrian master plan to include the 50+ population to include planning for the baby boomer growth.
- Convene agencies (non-profit, private, local, regional, state and federal) with influence over the delivery of transportation, mobility and other services in the community to address senior mobility options. This should include diverse and representative representation from individual community members and advocacy groups.
- Include an updated and comprehensive senior transportation plan in next updated in the City's general plan.
- Develop a multi-year plan to acquire local, regional, state and federal funding to address senior mobility in the City. This includes proposing specific project priorities that will aggressively target and plan funding for the long term.
- Develop mobility and transportation service deliver for low-income seniors in West and East Oakland.
- Integrate recently passed Complete Streets law<sup>15</sup> immediately into the City's general plan and yearly planning process.

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<sup>15</sup> CA Assembly Bill No. 1358, Chapter 657, September 30, 2008.



- Send key decision-making staff (not just elected officials, or directors) to visit the City of Portland or other area (outside of Northern CA) that is known as a model for public, bike and pedestrian transportation.
- Conduct public meetings throughout the community, and at a diversity of times and days to assess the current opinion of senior mobility options and to receive recommendations on how to improve service. This should include a visioning process.
- Prioritize and consistently fund senior mobility and transportation options.

Below is a suggested list of research areas that would have better informed this research and should be the focus of future research:

- The economic and social impact of isolation of older Americans in suburban and rural communities and what role can or does public transportation play in reducing that isolation;
- How governmental agencies are coordinating human services delivery toddler Americans across jurisdictional and functional boundaries and the economic impact of not doing so;
- The California state history of funding senior transportation programs at the local level;
- Evaluate the effectiveness of transportation planning and funding visioning process conducted in the Sacramento, San Francisco Bay and other regions;

- A best-practice survey of what other countries are doing to address senior mobility and transportation needs, and how they can be applied to the United States.

There are a variety of paths that can be taken to ensure that older Americans can safely, efficiently, and economically retain mobility and are provided transportation options in their communities. This research has shown that a variety of options combined will yield the best results, and though financial resources are the most important component to delivering transportation and related services, local, regional, state and federal agencies need to develop integrated strategies that include public/private partnerships. All approaches should include high levels of public involvement and participation, with high levels of visibility in the decision-making processes. Studying local models, such as the planning, prioritization, and services developed in the City of Portland, can help other government entities implement plans that will improve the existence and delivery of senior transportation options.

APPENDICES

## APPENDIX A

## Target Evaluators of Options

1. AARP – Bob Prath, Volunteer
2. AARP – *Charles Mason, Jr., Senior Legislative Representative, Livable Communities*
3. AARP – *Connie Nero, State Operations, Livable Communities*
4. AARP – Debra Alvarez, Senior Legislative Representative, Livable Communities
5. AARP – Elinor Ginzler, V.P., Livable Communities Strategies
6. AARP – Nina Weiler-Hartwell, Program Coordinator-CA Office
7. Alameda County Area Agency on Aging, Linda Kretz, Assistant Agency Director, [LKertz@acgov.org](mailto:LKertz@acgov.org)
8. Alameda County Supervisor, Keith Carson – Amy De Reyes, Staff (510) 272-6685
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71. Tim Frank, Land Use Consultant
72. TRANSFORM – Jeff Hobson, Policy Director
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78. Urban Habitat – Bob Allen, Transportation and Housing Program Director, [bob@urbanhabitat.org](mailto:bob@urbanhabitat.org)
79. Urban Habitat – Juliet Ellis, Executive Director, [jre@urbanhabitat.org](mailto:jre@urbanhabitat.org)
80. *WALKSacramento/AARP – Lavada DeSalles, Board Member*
81. Whistle Stop, Marin County – Don Morgan, Executive Director, [don.morgan@thewhistlestop.org](mailto:don.morgan@thewhistlestop.org)

## APPENDIX B

Dear Survey Participant:

I am conducting research to evaluate and establish a set of best practices that will promote senior/older American transportation and mobility options. The list of options will be used to evaluate senior transportation/mobility options/practices at the local government level.

You/your organization has/have been selected based on your expertise in senior/older American/gerontology, mobility, transportation, social justice, land use, planning or other related issues. The results of the research will be shared with all respondents, as well the final research product.

The research will be collected and results organized through April 2008. In April 2008, the results will be analyzed and compiled into an academic research document that is not planned for publication, at this time.

The following link to SurveyMonkey.com ([http://surveymonkey.com/s.aspx?sm=UAWueojMUddboDwdUMhamg\\_3d\\_ed](http://surveymonkey.com/s.aspx?sm=UAWueojMUddboDwdUMhamg_3d_ed)) will take you to the survey that includes a preset list of options that would move towards the goal of greater transportation/mobility options for seniors. First, you will evaluate each option on a 1-5 scale regarding the overall effectiveness of the option. Second, you will rank the list from 1-16 (1 = 's most effective)

Please submit results via Survey Monkey by April 9, 2008. Also, please find the *attached* consent form and email back to me at [cmasonjr@yahoo.com](mailto:cmasonjr@yahoo.com). Thank you for your cooperation and interest in this effort!

Sincerely,

Charles L. Mason, Jr.

**Note: There are two a comment section at the end of the survey where you can suggest mobility/transportation options that were not included in the survey, and provide us with a model senior/older American mobility/transportation project and/or program.**

Deadline for Submittal: April 9, 2008

Contact: Charles L. Mason, Jr., [cmasonjr@yahoo.com](mailto:cmasonjr@yahoo.com). 415-986-3468 or via cell at 415-269-0572

### Definition of Options

**Local advocacy** – Citizen and organizational advocacy directed at influencing local, regional and federal decision-making.

**Increased funding (Local/Regional)** – An increase in funding by local and regional government agencies.

**Increased funding (State/Federal)** – An increase in funding by state and federal government agencies.

**Laws/Regulations/Policies** supporting/promoting mobility/transportation options - The implementation or enforcement of laws, etc. that promote mobility/transportation options.

**Driver Safety/ We Need to Talk** programs in place – The Driver Safety Program is a partnership with AARP, motor vehicle departments and other agencies that educate and train older drivers. We Need to Talk is an AARP program in partnership with AAA and other partners that trains family and friends on how to talk to older drivers on how to give up the keys.

**Public participation, community engagement/involvement** in planning process; innovative planning locally (Smart Growth principles; environmental justice; TOD; mix-use; long range planning; livable communities)

**Existence of pedestrian master plan** – Several cities, including the City of Portland have in place a pedestrian master plan that incorporates pedestrian transportation options into local planning.

**Street, sign and sidewalk design** – The existence of ADA compliance, signage, curbs, sidewalks, etc. that make streets safe for all users.

**Consistently funded and operated programs** (5 years or more)

**Public/Private partnerships** in the community – The existence of public/private partnerships to fund senior transportation/mobility services and projects.

**Local summits/convening's** to address issue – The existence of a public/private partnership to fund senior transportation/mobility services and projects.

**Senior shuttle, taxi, vouchers or car service**

**Reduced transit fares** for seniors and persons with disabilities



**Public education/training programs** – The existence of programs that educated older Americans on how to utilize transit and other transportation options.

**Cross-agency service integration** (paratransit, human services, shuttle's, transit, etc.) – An open process exist at the government level between departments designed to serve the needs of older Americans.

**Research** – Additional research on the subject area.

## APPENDIX C

### List of Mobility/Transportation Options (16)

- Local advocacy
- Increased funding (Local/Regional)
- Increased funding (State/Federal)
- Laws/Regulations/Policies supporting/promoting mobility/transportation options
- Driver Safety/We Need To Talk programs in place
- Public participation, community engagement/involvement in planning process; innovative planning locally (Smart Growth principles; environmental justice; TOD; mix-use; long range planning; livable communities)
- Existence of pedestrian master plan
- Street, sign and sidewalk design
- Consistently funded and operated programs (5 years or more)
- Public/Private partnerships in community
- Local summits/convening's to address issue
- Senior shuttle, taxi, vouchers or car service
- Reduced transit fares
- Cross-agency service integration (paratransit, human services, shuttle's transit, etc.)
- Research

*First, evaluate each practice will individually on a scale of 1-5*

1. Most Effective
2. Very Effective
3. Moderately Effective
4. Somewhat Effective
5. Not Effective

*Second, rank each of the 16 best practices in order from 1-16 based on overall effectiveness. (1-most effective to 16 –least effective)*

### **Comments Sections**

1. Please include brief comments on how to improve mobility/transportation options of older Americans.
2. Please list a model program/project that you/organization is/are aware of or have developed.

### **Personal/Organizational Information**

Please provide the following personal/organization information for our records.  
Individual survey results will be kept confidential.

Organization  
Type/Description of Organization  
Name  
Title  
Contact Information

Address  
Email  
Phone

The following is the link to the SurveyMonkey.com version of the questionnaire:

[http://www.surveymonkey.com/s.aspx?sm=UAWueojMUddboDwdUMhamg\\_3d\\_3d](http://www.surveymonkey.com/s.aspx?sm=UAWueojMUddboDwdUMhamg_3d_3d)

## BIBLIOGRAPHY

- AARP. (2009) Issue Brief: Transportation and the 110<sup>th</sup> Congress. Washington, DC
- AARP Public Policy Institute. (2005). *Enhancing Mobility Options for Older Americans: A Five-Year National Action Agenda*. Washington, DC  
[www.aarp.org/ppi](http://www.aarp.org/ppi)
- Alameda County Transit. (2007. Spring). East Bay Bus Rapid Transit. Retrieved October 1, 2007. [www.actansit.org/pdf/BRT\\_English\\_07.pdf](http://www.actansit.org/pdf/BRT_English_07.pdf).
- American Society for Public Opinion Research. *Best Practices for Survey and Public Opinion Research*. <http://www.aarpor.org/bestpractices>. 2007. Retrieved 1/31/09.
- Bailey, Linda. (2004, April) *Aging Americans: Stranded Without Options*. Surface Transportation Policy Project. Washington, DC [www.transact.org](http://www.transact.org).
- Cabanatuan, Michael. (2006, January 17). Summit to address challenges of aging drivers as first Boomers turn 60, agencies focus on safety. *San Francisco Chronicle*. [www.sfgate.com](http://www.sfgate.com).
- CHANGE.GOV. The Office of the President-Elect. [www.change.gov](http://www.change.gov). Retrieved January 10, 2009
- City of Oakland, Department of Human Services, Programs for Children & Families, Youth, Adults & Seniors. *Paratransit for the Elderly & Disabled*. Retrieved October 12, 2007.  
[www.oaklandhumanservices.org/services/seniorsdisabled/oped.htm](http://www.oaklandhumanservices.org/services/seniorsdisabled/oped.htm)
- City of Portland, Oregon. Bicycle Master Plan: Making Bicycling an Integral Part of Daily Life in Portland. July 1, 1998.  
<http://www.portlandonline.com/shared/cfm/imag.cfm?id=40414/>.
- City of Portland, Department of Transportation. Senior Strolls 2008.  
<http://www.portlandonline.com/Transportation/index.cfm?c=41541>
- City of Portland, Office of Transportation. Senior Cyclist Program.  
<http://www.portlandonline.com/transportation/index.cfm?a=155167&c=37041>. Retrieved 12/13/2008.

- Communities for a Better Environment, Public Advocates, Inc. and Urban Habitat. (2006, December 20). *"MTC, Where Are Our Buses?" Challenging the Bay Area's Separate and Unequal Transit System*. San Francisco
- Eby, D., Miller L., Molnar, L. (2005, October). *Approaches for Enhancing Elder Mobility*. University of Michigan, Transportation Research Institute and AARP. Ann Arbor, MI. [www.untri.umich.edu](http://www.untri.umich.edu)
- Eglene, Ophelia. *Conducting Best and Current Practices Research: A Starter Kit*. Center for Technology in Government. Albany, NY. January 2000
- Ernst, M. & McCann, B. (2005, September). *Legislating Mobility Options: A Survey of State Laws Promoting Public Transit, Walking, and Bicycling*. (2005-12). Surface Transportation Policy Project. AARP Public Policy Institute. Washington, DC [www.aarp.org/ppi](http://www.aarp.org/ppi)
- Fulbirth, L. & Buchanon, W. (2005, May 27). BART OKs fare hike, parking fees surcharge of at least 10 cents added per trip; seniors, youth disabled also must pay more. *San Francisco Chronicle*. [www.sfgate.com](http://www.sfgate.com)
- Hamilton, Michael Braun. *Online Survey Response Rates and Times: Background and Guidance for Industry*. [http://www.supersurvey.com/papers/supersurvey\\_white\\_paper\\_response\\_rates.pdf](http://www.supersurvey.com/papers/supersurvey_white_paper_response_rates.pdf). Retrieved March 28, 2009
- Hardin, Jane, et al. (2003, May). *Senior Transportation: Toolkit and Best Practices*. Community Transportation Association of America. Washington, DC
- Hill, Elizabeth, (2006, January). *A Primer: The State's Infrastructure and the Use of Bonds*. State of California, Legislative Analyst Office. Sacramento, CA. [www.lao.ca.gov](http://www.lao.ca.gov).
- Insurance Institute for Highway Safety (IIHS). [http://www.iihs.org/research/fatality\\_facts\\_2007/olderpeople.html](http://www.iihs.org/research/fatality_facts_2007/olderpeople.html). Retrieved 12/16/2008
- Kaplowitz, Michael D., Hadlock, Timothy D. and Levine, Ralph. (2004) *The Comparison of Web and Survey Response Rates*. Michigan State University. <http://poq.oxfordjournals.org/cgi/content/full/68/1/94>. Retrieved 3/28/2009.
- Keehley, P., Medlin, S., MacBride, S. (1997). *Benchmarking for Best Practices in the Public Sector: Achieving Performance Breakthroughs in Federal, State, and Local Agencies*. Jossey-Bass Inc. San Francisco

- Kerschner, Helen. (2003. Summer). A Low-Cost, Low-Maintenance Approach: The Pasadena Pass Ride Pilot. *Generations*. (27 no. 2 63-7, Summer 2003). San Francisco, CA. [www.asaging.org/ASA\\_Home\\_News5.cfm](http://www.asaging.org/ASA_Home_News5.cfm)
- Kochera, A., Guterbock, T., Straight, A. (2005) *Beyond 50.5: A Report to the Nation on Livable Communities: Creating Environments for Successful Aging*. AARP. Washington, DC. [www.aarp.org](http://www.aarp.org).
- Koffman, D., Raphael D., Weiner R. (2004. December). *The Impact of Federal Program on Transportation for Older Adults*. AARP Public Policy Institute. Washington, DC
- Lelchuck, Ilene. (2005. April 13). Senior escort program revived private donor steps in with \$100,000 to save slashed service. *San Francisco Chronicle*. [www.sfgate.com](http://www.sfgate.com)
- Local Government Commission. (2005. December 13). *Healthy Transportation Network: Revitalizing Neighborhoods and Town Centers, Success Stories: Fruitvale Transit Village*. [www.lgc.org](http://www.lgc.org) Sacramento, CA.
- Metropolitan Transportation Commission. (2004, September). *Senior Mobility Toolkit: Final Report*. Nelson/Nygaard. San Francisco, CA. [www.mtc.ca.gov](http://www.mtc.ca.gov).
- Novelli, Bill. (2006, October). *50+: Igniting a Revolution to Reinvent America*. AARP. St. Martin's Press. New York.
- Palmer, K., Dessouky, M., Abdelmaguid, T. (2004, August). *Impacts of Management Practices and Advanced Technologies on Demand Responsive Transit Systems*. Transportation Research: Part A: Policy Practice, v 38, 7 pp.495-509. University of Southern California. Los Angeles, CA.
- Pucher, J., Dijkstra, L. (2003. September). Public Health Matters: Promoting Safe Walking and Cycling to Improve Public Health, Lessons from the Netherlands and Germany. *American Journal of Public Health*. Vo. 93, No. 9. Washington, DC
- Rosenbloom, Sandra. (2003. July). *The Mobility Needs of Older Americans: Implications for Transportation Reauthorization*. Brookings Institute, Center on Urban and Metropolitan Policy, Transportation Reform Services. Washington, DC
- U.S. Department of Transportation. (2000. December). *Transportation and Environmental Justice Case Studies*. (Pub. No. FHWA A-EP-01-010). Retrieved October 15, 2007. [www.fhwa.dot.gov/environment/ejustice/case/ejbooklt.pdf](http://www.fhwa.dot.gov/environment/ejustice/case/ejbooklt.pdf).
- U.S. Department of Transportation. (2005. September). *Public Transit in America:*

*Results from the 2001 National Household Travel Survey.* Center for Urban Transportation Research, University of South Florida.  
<http://www.nctr.usf.edu/pdf/527-09.pdf>

U.S. House of Representatives, Transportation and Infrastructure Committee.  
<http://transportation.house.gov/> Retrieved January 10, 2009