

**National Capital Region
Transportation Planning Board**

**Regional Transportation Information Clearinghouse
Needs Assessment Analysis**

November 23, 2009



This document is available in an alternative format upon request. Please contact Wendy Klancher at wklancher@mwkog.org, (202)962-3321 or (202)962-3213 (TDD). Allow 7 working days for preparation of the material.

Prepared For
Metropolitan Washington Council of
Governments
National Capital Region Transportation
Planning Board

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1.0 Introduction

The Metropolitan Washington Council of Governments (MWCOG) National Capital Region Transportation Planning Board (TPB) engaged hodgsonConsulting to conduct a number of related studies, including a needs assessment and review of potential partners for a website which will become a one-stop resource to provide information about transportation services offered in the Metropolitan Washington area. This one-stop resource, while available to all, is targeted to the transportation disadvantaged, specifically people with disabilities, aging adults and low income commuters, all of whom rely on transportation services to navigate the region.

Currently, a wide range of transportation services are offered throughout the area, but the challenge remains educating consumers and social service providers about these services and their availability, as well as helping users understand eligibility criteria, accessibility options, and comparative costs of each program.

This document outlines the results of the Needs Assessment commissioned by TPB and looks at the specific needs of three user groups: people with disabilities, aging adults and low income commuters, as they relate to the development and design of this one-stop Regional Clearinghouse.

1.1 Revision History

Final draft approved—September 24, 2009

1.2 Research Methodology

In conducting this needs analysis, hodgsonConsulting reviewed current literature and studies regarding transportation needs in the region, specifically among the targeted user groups; conducted quantitative interviews with individuals who serve these populations and with similar transportation clearinghouses; reviewed industry site design and development standards for targeted populations; and applied their own analysis and expertise to studying the issues.

1.3 Overview

This document includes a thorough needs analysis for the Regional Clearinghouse including specific requirements for the targeted audiences. In this analysis, hodgsonConsulting:

- Reviewed regional clearinghouse models including www.stridesd.org, and www.findaride.org, to determine best practices and learn from their experience in creating and maintaining regional clearinghouses.
- Reviewed Clearinghouse Working Group (CWG) materials and met with CWG members to learn from their experience with transportation in the Metropolitan Washington area and in serving the targeted user groups.
- Interviewed subject matter experts for various targeted user groups to gain insight into user requirements and reviewed resource materials for the same groups. The

needs for low income populations had been least defined in previous work by TPB, and are the least documented in terms of industry standards and best practices, and so this population was the focus of qualitative interviews. Appendix E includes the results of these interviews. In addition, this document includes the results from previous work completed by the TPB, and new research and analysis into industry standards and best practices for older adults and people with disabilities.

During this analysis, hodgsonConsulting sought to answer the following questions:

- Who are the users and what are their transportation needs?
- What search criteria is important?
- What information on providers needs to be tracked and displayed?
- What content and features are essential to the website and which content and features may be viewed as nice, but not essential?

In addition, hodgsonConsulting explored website requirements from the administrative perspective including:

- How will data be managed and how often will it be updated?
- What is the most effective way to manage and update content on the website?
- What systems are most effective for providers to maintain their data?

2.0 User Group Characteristics

Approximately five million people live in the Washington, DC region, many who fall into at least one of the Regional Clearinghouse’s targeted user groups of people with disabilities, older adults, and low income commuters. Often termed the transportation disadvantaged, these users rely heavily, sometimes exclusively, on public and specialized transportation to travel to work, medical appointments, run errands, travel to training, shopping, day care or school.

Chart 1
Transportation-Disadvantaged Populations in the Washington Region

Population Group	Washington Region	Percent of Region
Below the Poverty Level	328,300	7%
Low Income	775,300	17%
Persons with Disabilities	629,500	14%
Older Adults (over 65)	403,000	9%
Limited English Speakers	193,600	5%
TOTAL POPULATION	4,544,900	100%

Source: Numbers are for the Washington DC-MD-VA MSA
Our Changing Region. Census 2000. Metropolitan Washington Council of Governments. Volume 1, Number 1.

2.1 General Characteristics of User Groups

While the targeted populations do represent specific user groups, there is a significant amount of crossover between the needs and characteristics of each group. Many members

of the aging and disability communities have low incomes. Many older adults are also disabled. It is difficult to segment needs as being unique to one population, when the three populations share so many similarities.

The section below outlines general characteristics and transportation challenges for the targeted populations. These characteristics should be accounted for in the overall design, navigation, and content development for the site.

2.1.1 People with Disabilities

Accessible transportation is a positive predictor not only of employment, but of several other important quality of life indicators, including political participation, access to entertainment, socializing and religious attendance for people with disabilities.

Trying to define user characteristics and requirements for people with disabilities is challenging, given the diversity of this population. The term, “people with disabilities” includes a wide variety of users, each with specific characteristics and needs relating to transportation and to technology use and access. However, some general conclusions can be made for this population:

- a. A comprehensive dataset is important: Many people with disabilities live in areas with limited or no public transportation, and often the organizations that serve people with disabilities, including vocational rehabilitation centers and independent living areas are outside the public transportation corridors. The Regional Clearinghouse database must be robust and provide information on as many transportation options as possible outside the traditional fixed route system.
- b. Robust search is a must: Human service agency-provided transportation is often limited to specific clients and trip purposes, limiting options for this group. People with disabilities often have very specific requirements for transportation service providers and require a search option that will allow them to filter on multiple criteria. Key search criteria include information on funding options, cost and accessibility and support options.
- c. Complex needs require access to additional help: Transportation-dependent in general, people with disabilities face significant coordination challenges, including the need to coordinate various public transport providers, multiple Medicaid transportation providers and need for coordination of schedules for long distance trips. Phone support and easy ways to access additional help should be prominently featured.
- d. Functionality must serve a diverse nature of disabilities. People with disabilities represent a wide variety of user groups—each with differing service needs and accommodations requirements. People who are deaf, who have a visual disability, those with physical or mobility disabilities, people with cognitive disabilities, etc., all have very different needs in terms of search criteria and in terms of site functionality and usability. The Regional Clearinghouse must reflect the diversity of criteria and functions that will best serve the varied needs of these populations.

2.1.2 Low Income

Transportation is a key resource in ensuring that low income commuters have access to job training, education and work opportunities. The low income population of the National Capital Region shares many of the challenges of people with disabilities, with a few subtle differences:

- a. Search criteria related to operating hours and fees are important: Like people with disabilities, low income commuters frequently live in areas not served by the fixed route system. In addition, low income commuters often have non-traditional work hours, starting work early in the morning, or working shift work. Search and display criteria must provide information on operating hours to be effective for this population, and information on transportation fees and the funding programs that a provider accepts are important to this population.
- b. Frequent Trip Chaining: Low income commuters often schedule multiple stops, such as to work, the doctor, child care, the grocery, etc. within one trip. Search criteria should identify if multiple stops are an option. Low income commuters often work more than one part time job, so the ability to travel between these jobs is important.
- c. Higher incidence of limited English speakers and lower literacy rates: Many low income commuters have a limited education, and/or limited English proficiency. A website that is too complex, or one in which language is too complicated, can prove frustrating. To ensure usability the Regional Clearinghouse site should include content written at a 4th or 5th grade literacy level. . According to the 2000 Census, twenty-three percent of the region's population speaks a language other than English at home, and ten percent speak English less than "very well". The language other than English that is most often spoken at home is Spanish, spoken by 10.5 percent of the population.

2.1.3 Older Adults

America's aging population is growing at a faster rate than any other US population group. The current trend towards aging in place means that older adults are located in suburban areas, which are often not well served by the fixed route transportation system. Older adults outlive their ability to drive by an average of ten years, which results in an increasing reliability on public transportation to retain their mobility and quality of life.

Older adults share many of the characteristics of people with low incomes and disabilities regarding the need for information on service providers outside the traditional fixed route system, as well as additional challenges:

- a. Search criteria relating to escort and service options are important: Like people with disabilities, older adults often have physical ailments that limit their mobility and their access to traditional fixed route systems. A robust database offering information on a variety of providers is important. In addition, older adults, like

people with disabilities, often face mobility and frailty challenges and are looking for transportation access beyond the door-to-door level to the higher level of service included by door-through-door providers. While important, these services are too often overlooked in standard community transportation planning efforts. Older adults require a database which includes information on multiple options including door-through-door services.

- b. The aging population's cognitive changes can impact retention and comprehension: Older adults may experience a decline in cognitive function, memory and retention, which will impact how easily they interact with the site. Older adults may also have difficulty reading certain fonts or distinguishing particular colors. The website should use simple language and navigation and use design principles designed to increase usability

3.0 Access to Technology

Understanding how the targeted user groups access technology is critical to determining the technical requirements of the website. Individuals with access to cutting edge computers and high speed internet access will have a very different web browsing experience than those working on a ten-year-old computer with dial-up access. Designating a baseline on which the Regional Clearinghouse will be developed is important to ensuring maximum accessibility.

In general, all three user groups have fairly good access to the internet. Individuals who do not have direct internet access in their home are familiar with accessing the internet at service agencies or through libraries and community centers. However, the following assumptions should be used regarding end users' access to technology:

- While there will be a wide range of internet access and computer quality across all population segments, MWCOG should assume that technology accessibility and quality will fall on the lower end of the spectrum.
- While the aging population is the fastest growing group of internet users, older adults often lack formal computer training and are unfamiliar with many standard internet protocols. The website content and navigation should be as intuitive as possible and offer clear direction regarding actions for the user. Each page should include clear direction on how to contact a live person to provide additional support.
- People with disabilities often access technology using a wide variety of accommodations. The website must be structured so that it is still useful when viewed through various accommodation options.

4.0 Site Design Criteria

Aging, or having a low income, or a disability are not necessarily hindrances to computer or internet use, but these factors may impact how people interact with technology. Age or disability related changes in vision impact how web pages, graphics and videos can be accessed. Cognitive abilities such as working memory, perceptual speed, text comprehension, spatial memory and attentional functioning will impact how individuals will experience the Regional Clearinghouse site.

MWCOG must develop a site that is accessible to visitors who are blind, have low vision, are unable to distinguish colors, or who are deaf, hard of hearing, have a learning disability, or motor skills problems, and who may be using a variety of assistive technology tools.

Use of the appropriate typeface, colors, content, navigation structure, and accessibility features are important to make the Regional Clearinghouse usable for its targeted populations. Overall, good web design is beneficial for web users of any type. Each section below outlines specific recommendations for increasing the effectiveness of the site, based on industry standards and best practices recommendations specific to the targeted populations. Appendix C includes a summary checklist of criteria.

4.1 Content

The following guidelines should be used when developing content.

- Content should use the active voice, and address users by “you” to make directions clear. Information should be broken into very short sections and paragraphs and sentences should be short and express one main idea.
- When instructions are included, they should be broken into the individual steps and each step should be numbered.
- Content should use words users know. Jargon should be avoided, for example instead of “Online Community,” site should say “Communicate with People Online”.
- Each page should include a phone number and email address so users know how to contact someone if they have questions.
- Content should be geared to a 4th or 5th grade reading level, based on the Lexile Framework for reading.
- The site should not include automatically scrolling text.
- Site should offer ability to translate content into Spanish.

4.2 Navigation

To ensure that the site’s navigation allows end users to quickly locate the services and information they require, the following guidelines should be used:

- The site should use a broad and shallow site hierarchy and navigation structure. It should take no more than three clicks to accomplish a specific task.
- Breadcrumbs should be used and users should be given clear information on how to find out more information and return to previously visited pages. Buttons such as “Previous Page” and “Next Page” should be used in multi-page forms.
- A link to a site map should be included on each page.
- If pull-down or fly-out menus are used, they should open and close on a click. Do not use menus that require users to slide the mouse and click all in one movement as this could be challenging for people with disabilities or older adults.
- Links should be predictable and clearly describe what happens next. Instead of “My Account” it should say “Go to My Account”. Make links obviously clickable through color and underlining. Do not underline anything on the site that is not a link. Visited links should change color.
- The site should use single mouse clicks to access information, rather than double mouse clicks, as double mouse clicks can be more confusing for older adults.

4.3 Page Layout

Page layout refers to the arrangement and design of the elements on a page. Consistency and clarity, with a focus on functional design, are critical for the targeted population. The site should incorporate the following best practices:

- The site should use consistent templates and keep all navigation items in the same place on all pages. The most important information should be located at the top of the page.
- White space should be used to ensure an uncluttered look and to help focus the user’s attention. Paragraphs should have space between them, and there should be adequate space between clickable targets such as links and buttons so that each one is easy to target and hit separately.
- Distracting pop-ups and visuals not directly related to the site content should not be used.
- Headers should be consistent, and H1-H6 headers should be used to ensure compatibility with screen readers.
- Pages should allow users to increase font size.

4.4 Typeface

Font style and size will impact how easily people with visual impairments can view the site. The following guidelines should be used:

- Site should use a Sans Serif typeface, one that does not have the small features called "[serifs](#)" at the end of strokes, and use a typeface that is not condensed.
- 12- or 14- point type should be used for body text, and users should have the ability to easily change the text size directly from the screen.
- Formatting should enhance, not detract, from the content. Italics should be avoided since they can be difficult to read. Use left justification.

4.5 Background and Contrast

Partial sight, aging and congenital color deficits all produce changes in perception that reduce the visual effectiveness of certain color combinations. The following practices will increase accessibility:

- Exaggerate lightness differences between foreground and background colors, and avoid using colors of similar lightness adjacent to one another, even if they differ in saturation or hue.
- Use high contrast color combinations such as black type against a white background. Avoid layering shades of the same color, such as dark blue type on a light blue background. Avoid color combinations that are adjacent in the color wheel, in favor of those that offer stronger contrast, and avoid yellow and green in close proximity as the differences in these colors can be difficult for some older people to see.

4.6 Icons and Buttons

Internet protocols which may seem standard to a frequent user can be confusing to people who do not access the internet often. The following design criteria should guide their use:

- Icons and buttons should be large, bright and in a color that contrasts with the background. Buttons should be obviously clickable and should be outlined.
- The site should use large buttons that do not require precise movements to activate to increase usability to people with disabilities and older adults. Allow enough space between clickable targets such as links and buttons so that each one is easy to target and hit separately.

4.7 Additional Media

Additional media such as audio and video clips are frequently added to sites to add interest and provide additional resources. These clips however, can be difficult for screen readers to process. The following practices should be followed to ensure accessibility:

- If animation, video or audio clips are to be used, they should be in short segments to reduce download time on older computers and dial-up connections. Captions should be used on videos.

- Include ALT text tags with meaningful descriptions for all images.
- Provide transcripts of video and audio for accessibility and include a speech function on the site that lets users hear text read aloud.

4.8 User Input/Forms

Web forms will allow users to select search criteria, fill in surveys and questionnaires and search for additional information on the site. Creating accessible forms is important for people who use screen readers, but a well-organized, highly usable form benefits people with cognitive disabilities and limited English. The following practices should be used when developing forms:

- The text of a prompt for a form should be close to the text entry field. Labels should be associated with all form elements. Text should be to the right of radio buttons and checkboxes.
- All forms should have a heading, descriptive caption, an ALT text and title attribute for input elements.
- Do not impose time limits on completing forms and limit the required fields and amount of information gathered so that it focuses only on essential elements. An asterisk or an asterisk and color should be used to designate required fields, rather than just color.
- Users should have the ability to save search results in text or html format. (Screen readers often have difficulty with pdf files.)

5.0 Regional Clearinghouse Overview

To assist TPB in developing the requirements for their clearinghouse, hodgsonConsulting researched two current websites, Puget Sound's FindARide, and San Diego's STRIDE, to learn from their experience and results when developing the database and operational structure of the Regional Clearinghouse. A summary of this research is included below, for a complete outline of these findings please see Appendix D.

Both websites were designed to function primarily as a web-based resource and both were created under the auspices of regional transportation coordinating groups. Among the lessons learned from the clearinghouses:

- **Initial data gathering is a challenge.** Staff from both STRIDE and FindARide reported that the task of gathering initial data from providers for the site was more challenging than anticipated. The more comprehensive of the sites estimated that over 600 hours in staff and consultant time was spent developing the database. The other site estimated about 200 hours in recruiting providers and ensuring data accuracy.

- **Maintaining data accuracy requires focus.** Both sites said that maintaining data accuracy on an ongoing basis required focus and attention. One site estimated spending 20 hours/month on site maintenance, including editing existing records and adding new providers. Technology can, and should be used to make the database maintenance process simpler. For instance:
 - Automated alerts can be sent on a regular basis to providers asking them to update their records. If a provider does not comply, their record can be flagged to not appear on the listing until they have updated their information.
 - When a user does a search that does not yield any results, an email can be sent to the site administrator. This email will alert administrators to try and research providers in that specific area for recruitment to the database.
- **An iterative, scalable approach may be the best solution.** Staff from both clearinghouses mentioned that after their sites were launched, user feedback identified additional features that would have been nice to include in the initial launch. The FindARide program has recently undergone an upgrade and was able to add point-to-point search capability (a capability that STRIDE would like to be able to add), reporting capability which allowed for additional information on user visits and habits and allowed administrators to put in place automated alerts to providers, and a function that allowed providers to create their own user surveys. Any platform that TPB adopts should be robust enough to allow for additional search and reporting criteria to be added as needed. Specifically, if not included in the original requirements, the platform should be able to support point-to-point search capability in the future. Point-to-point search capability allows a user to enter starting and ending addresses as search criteria.
- **User Feedback is critical.** Staff from both sites expressed a desire to know as much as possible about end users and their habits. The site should include opportunities for users to provide feedback and contact administrators easily, and should track users' visits and search habits to help refine the site on an ongoing basis. Research tools such as focus groups and online surveys should be used to learn more about visitors. TPB should consider offering a pilot launch and then gathering input from users before the final launch.
- **Don't assume certain groups won't use the web.** The STRIDE program reported that phone usage was much lower than anticipated. While it is currently assumed that older adults may be the most frequent users of the phone support, experience shows that plenty of older adults will also be using direct web access to find solutions to their transportation challenges. In developing the Regional Clearinghouse, MWCOG should ensure that the site meets maximum usability guidelines for all user groups.

6.0 Marketing the Site

There's no sense investing in a site that isn't used. The regional clearinghouses interviewed reported spending a modest amount on marketing their sites, although a recent grant acquisition by the San Diego site allows for additional marketing research. With limited resources however, it is important to allocate marketing dollars wisely.

The key to ensuring that the site receives maximum visibility is by reaching the social service providers who serve the targeted communities. Special training and information sessions, and targeted flyers and promotional brochures aimed at these providers will increase visibility and sustainability for the site. In addition, marketing efforts should be spent to ensure that eligible providers are aware of the site and understand the business benefits of maintaining their data.

MWCOG should ensure the site is developed to take advantage of organic Search Engine Optimization best practices, and should put in place programs to track users' browsing, viewing and search habits, so that this information can inform future development and marketing strategies.

APPENDICES

APPENDIX A – Recommended Search Criteria

DATABASE ELEMENTS FOR THE SITE		
Search Options	Must Have	Nice to Have
Address	X	
County	X	
Zip	X	
State	X	
Type of Transportation Provided		
Employment and Training Related	X	
Door to Door	X	
Curb to Curb	X	
Door Through Door	X	
Hand to Hand	X	
Escorted	X	
Fixed Route	X	
Wheelchair Accessible	X	
Medicaid	X	
Non-Medicaid	X	
Stretcher	X	
Information Available on Transportation Options		
Cost	X	
Office Hours		X
Advance reservation requirements	X	
Eligibility requirements	X	
Hours of service, days of operation	X	
Phone number/TTY	X	
Website URL	X	
Geographic service area	X	
Accessibility		
Wheelchair accessible?	X	
Service animals allowed?	X	
Family/children allowed? Companions/PDAs	X	
Trip Chaining		X
Age ranges		X
Limitations: number and size of packages, any assistance provided with them	X	
Are transportation subsidies allowed?	X	

APPENDIX B - Recommended Service Providers to be included in the website

Transportation Options to be Included	Must Have	Nice to Have
Fixed Route	X	
ADA Paratransit	X	
Other Paratransit	X	
Call and Ride Programs	X	
Non-profit transportation	X	
Private transportation	X	
Medicaid transportation	X	
Employer/Training Program provided transportation		X
Volunteer Programs		X
Accessible Charter bus service		X
Deviated fixed route services	X	
Commuter Rail (VRE and Marc)	X	
Van Pools		X
Commuter Connections Programs such as Regional Guaranteed Ride Home, Live Near Your Work, Commuter Connections Network Ridematching Services, Maryland Telework, Telecommuting, Employer Outreach	X	

APPENDIX C – Recommended Site Design Criteria

Site Design Criteria	Aging Adults	People with Disabilities	Low Income
Content			
Use the active voice when writing and address users by “You”.	X	X	X
Number each instruction step.	X	X	X
Choose words users know. Minimize jargon (“instead of Online Community” say “Communicate with People Online”).	X	X	X
Information should be broken into very short sections. Paragraphs and sentences should be short and express one main idea.	X	X	X
Phone number and/or email on how to contact someone with questions should be included on each page.	X	X	X
Content readability should be geared to a 4 th /5 th grade reading level	X	X	X
Site should offer ability to translate content into Spanish.			X
Navigation			
Site should use a broad and shallow site hierarchy and navigation structure. Structure navigation so that no more than three clicks are needed to accomplish a specific task.	X	X	X
Use breadcrumbs, and provide clear information on how to find out more information or return to previously visited pages. Breadcrumbs typically appear horizontally across the top of a web page, usually below title bars and headers, and provide links back to each previous page the user navigated through to get to the current page.	X	X	X
Include a link to a site map on every page.	X	X	X
Incorporate buttons such as “Previous Page” and “Next Page” for ease of navigation between related web pages.	X	X	X
Page Layout			
Use consistent templates and keep navigation items, headers, etc., in the same place on all pages.	X	X	
Locate most important information at the top of the page.	X	X	
Page should include sufficient white space to ensure an uncluttered look.	X		
Paragraphs should have space between them.	X		
Allow enough space between clickable targets such as links and buttons so that each one is easy to target and hit separately.	X	X	
Avoid features that might distract such as pop ups and	X	X	

visuals that are not directly related to the task.			
H1-H6 Headers should be used for people to ensure compatibility with screen readers.		X	
Pages should allow users to increase font size.	X	X	
Typeface			
Use Sans Serif typeface and use a typeface that is not condensed.	X	X	
Use 12- or 14- point type size for body text.	X	X	
Make it easy for people to change the text size directly from the screen.	X	X	
Italics use should be avoided. Use left justification.	X	X	
Backgrounds/Contrast			
Use high contrast color combinations such as black type against a white background. Avoid layering shades of the same color, such as dark blue type on a light blue background.	X	X	
Avoid yellow and blue and green in close proximity. The differences in these colors are difficult for many older people to see.	X	X	
Menus			
If pull down and fly-out menus are used, they should be keyboard accessible. Do not use menus that require users to slide the mouse and click all in one movement.	X	X	
Links			
Links should be descriptive and help people predict what will happen next. Instead of "My Account" use "Go to My Account".	X	X	X
Make links obviously clickable through color and underlining. Designate a specific, consistent treatment for links which is effective with all assistive technology. Visited links should change color.	X	X	X
Icons and Buttons			
Icons and buttons should be large, bright and in a color that contrasts with the background. Buttons should be obviously clickable and should be outlined.	X	X	
Use large buttons that do not require precise movements to activate.	X	X	
Mouse/Scrolling			
Use single mouse clicks to access information.	X	X	
Do not use automatically scrolling text.	X	X	
Additional Media			
Animation, video and audio: use short segments to reduce download time on older computers and dial-up connections.	X		X
Provide captions and transcripts of video and audio for accessibility.	X	X	
Put ALT text tags with meaningful descriptions on images so that screen-readers can be effective.	X	X	
Provide a speech function that lets users hear text read aloud.	X	X	

User Input/Forms			
No time limits on completing forms.	X	X	
Limit required fields and amount of information gathered. An asterisk or asterisk and color should be used to designate required fields, rather than just color.	X	X	X
Use an asterisk to designate required fields or asterisk and color.	X	X	X
Text prompts should be close to the text entry field and labels must be associated with all form elements. Form text should be to the right of radio buttons and checkboxes.	X	X	
All forms must have a heading, descriptive caption, ALT text and title attributes for all input elements		X	
Users must be able to save search results in text or html format.	X	X	X

APPENDIX D - Summary Research on Regional Information Transportation Centers

SITE	www.findaride.org Puget Sound, Washington State
Key Personnel	Michael Miller, Accessibility Manager, Sound Transit Michael.miller@soundtransit.org 206-689-4927
Site Overview/history	<p>FindARide was launched in 2005, and developed by Sound Transit, a regional transportation agency created to address regional transportation of three counties, representing 50 percent of Washington State's population. The program is targeted to older adults, persons with disabilities and low income consumers and the geographic area served is quite diverse, encompassing urban, rural and suburban populations. While there was discussion initially about adding phone support, it was decided that Sound Transit did not have the budget or staffing for this and the program was designed strictly as an online resource.</p> <p>In addition to information on transportation agencies and services, FindARide includes information on rideshare and vanpool information, home delivery and programs which lend, rent or purchase vehicles for people with special needs.</p> <p>The site was upgraded approximately one year ago to include point to point search capability. Also added capacity for reporting, which allows Sound Transit to see specific information about searches within the program, and the capacity to allow providers to create their own surveys for their users.</p> <p>The initial development budget was \$125,000. A subsequent upgrade/Phase II was \$250,000, which include some redevelopment of original site. Annual maintenance including consultant for technical assistance, licensing and hosting is \$15,000.</p>
Database	The database includes approximately 200 records.

SITE (con't)	www.findaride.org Puget Sound, Washington State
Data Maintenance	<p>Creating the initial database was a large challenge. A contractor was used for the process, but it was quite labor intensive. Now, the system is automated, so every six months providers receive an email prompting them to review their record and make any necessary corrections. If the provider does not take action, they receive one additional email reminder and then their record is flagged and will not display in searches until the provider certifies their information.</p> <p>Small providers were concerned that listing themselves on the program would result in more business than they could handle. Some providers also lacked the technical knowledge/equipment to update their own records, so there was a lot of handholding at the outset to update records. Experience has shown that requests for service are not overwhelming. The initial manpower required full time consultant support, plus significant staff involvement for four months. Now, the time commitment is approximately 3-4 hours of staff time/month, plus an additional 20 hours/month or so of volunteer time, primarily through work of Special Needs Transportation groups who keep track of providers in their county.</p>
Usage Statistics	<p>The website receives 2,000 – 2,500 hits/month, a number which has been steadily increasing. The population of the counties served is approximately 1.8 million.</p> <p>The system has been configured so that if someone does a search which yields no responses, administrators receive an email alert. This information is used to try and recruit providers who serve that specific area to be part of the program.</p>
Marketing Strategies/Resources	<p>The initial marketing budget was approximately \$6,000. The ongoing annual budget is very minimal.</p>
Major Challenges/Opportunities in development and operation	<p>Creating strong definitions at the outset is important. Much of the work of the original contractor had to be redone because technology and platform weren't suited to their needs. On the plus side, FindARide was able to use actual user feedback from the first version to enhance and significantly improve the service offerings in Phase II, including adding point to point capability.</p> <p>Miller strongly recommends incorporating real user feedback into the overall program design.</p> <p>FindARide staff was surprised at how hard it was at the outset to get providers online and listed in the database. Once the initial push was over, subsequent maintenance and updating has not been difficult.</p>

SITE	www.stridesd.org San Diego, California
Key Personnel	mcalder@factsd.org 760-967-4197 Max Calder Executive Director Full Access & Coordinated Transportation 410 S. Melrose Dr., Ste. 207 Vista, CA 92081
Site Overview/history	<p>STRIDE stands for Specialized Transportation Referral and Information for the Disabled and Elderly. It's been in existence since 2001, and was developed through the Consolidated Transportation Services division as a transportation clearinghouse. It is targeted towards the transportation disadvantaged, including people with developmental disabilities, low income, and aging adults, and those that serve these populations.</p> <p>STRIDE serves as a combination web- and phone based resource. Phone support is offered during standard business hours of 9:00 am – 4:00 pm.</p> <p>The main function of STRIDE is to provide information about specialized transportation services and programs in the San Diego area. The website has always been the primary method of delivering information, as there was no funding available at the outset to provide significant telephone assistance.</p> <p>STRIDE uses a Council on Access and Mobility that meets on a quarterly basis to serve as a user/focus group to recommend enhancements to services and resources.</p> <p>Initial costs to develop and launch the site were estimated at \$75,000. These costs were supplemented by technical support from three local technical companies. The current budget is \$105,000 which includes staff and office funding, so the program has been operating with a single person staff. They are in the process of developing a strategic plan to map out the future of the site and the potential for expanding the services.</p>

SITE (con't)	www.stridesd.org San Diego, California
Major Challenges/Opportunities in development and operation	<p>The major challenge is ensuring that the outreach to potential providers is strong enough, and that providers know about STRIDE as an opportunity for them to reach clients. Encouraging current providers to update their listings current is another ongoing challenge.</p> <p>In the future STRIDE would like to add point to point search functionality, and would like people to be able to search based on maximum affordable amount for trip. STRIDE staff spoke about the need to “minimize false hope” including developing a way to tie the searching into the funding programs accepted by various providers.</p> <p>STRIDE would like to implement a content management system that allows more systematic interaction with users. And, while STRIDE would like to enhance the amount of information tracked by provider, they are very aware of the delicate balance between what is desired and what providers can be reasonably expected to maintain.</p> <p>Given staffing limitations they don't want to get so complicated that provider compliance becomes an issue. The database and system improvements must maintain a test of reasonableness—while additional data on providers would be helpful, at what point will providers opt out of the listing because the demands of keeping their data fresh is unreasonable?</p>
Usage Statistics	From period of April 26, 2009 – May 27, 2009, STRIDE had 3,166 searches on the site, averaging 80 -100 searches/day. STRIDE recently acquired grant funding which will allow them to do more thorough tracking and measuring by user group. Call volume is approximately 5-10 calls/day, which is below initial expectations.
Database	STRIDE currently has over 100 providers in the database.
Data Maintenance	<p>Providers add and update their records. Due to low staffing levels, their data maintenance strategy is largely reactive—manual updating is done on an as needed basis, if the office receives word that information is not correct. The current director feels that data is fairly current; however, reports from previous staff indicated that data compliance had been a challenge in the past.</p> <p>The current system does not allow for any automatic notice to providers to update records, although they would like to add this capability in the future. Currently, data maintenance tasks require approximately five percent of one employee's time.</p> <p>STRIDE has recently received grant funding to update their faith-based provider listings, and plans to take a proactive approach in</p>

	<p>this area. Staff feels that providers are generally compliant in keeping information current on a regular basis. Providers receive an average of 4 or more referrals a month through the program, so they have a business interest in keeping information current. If staff hears feedback from referrals that information is not accurate, then they will make corrections. STRIDE also has a number of working groups that keep current with providers and which inform STRIDE when information is out of date.</p>
<p>Marketing Strategies/Resources</p>	<p>Marketing is a constant challenge and requires ongoing attention. STRIDE recently conducted a survey and found that seven in ten older adults were not aware of its existence.</p> <p>STRIDE currently markets through brochures, volunteers at senior groups, flyers, advertising in targeted publications. Marketing has been minimal in the past, and largely contingent on what was available in the budget (\$5,000-\$10,000/year). STRIDE has recently received a grant for \$30,000 in marketing funds and is in the process of determining how to allocate this money.</p>

APPENDIX E – Summary of Qualitative Research

Low Income Population Needs Assessment	
Key Contact	<p>Gwen Rubinstein Program Officer Washington Area Women's Foundation 202.347.7737 ext. 215 grubinstein@wawf.org www.TheWomensFoundation.org</p>
Background	<p>The mission of the Washington Area Women's Foundation is to foster a powerful wave of philanthropy to improve the lives of women and girls through expanding and leveraging women's philanthropy; providing grants, operational resources and technical assistance to local organizations; and, serving as a regional voice for women and girls. Gwen is specifically involved in Stepping Stones, which works to build the economic security and financial independence of low-income, women-headed families through initiatives such as job training, placement supports, debt reduction and education.</p>
Low income population transportation needs	<p>A primary challenge for low income women in the Metropolitan Washington area is that where they live is not where they work, and this challenge is particularly acute for people who live in Prince George's County and east of the Anacostia river.</p> <p>The fixed route system does not adequately serve these regions, and is often not sufficient for work or collateral travel (childcare, training, shopping) needs.</p> <p>Low income people often work shift work with non-traditional hours, and public transportation options may not be open, or the non-rush hour schedule may not provide sufficient service.</p> <p>The key barriers to employment for low income women are child care and transportation. Traditionally, there has not been a significant amount of advocacy centered on transportation. Funding from programs such as the Job Access Reverse Commute (JARC) can't be used for collateral trips, or can't be used for car purchase, which is sometimes needed because of the lack of sufficient public transportation options.</p>
Search Criteria	<p>Referred hodgsonConsulting to Mena Ponchick, 202-626-0700 x22, Kim Rim, 301-499-8872 for program specific information.</p> <p>In general, ability to offer trip chaining, and information on hours and cost will be critical.</p>
Access to technology	In general, low income population has adequate access to

	technology, either at home, or through service centers. Even many of the homeless now have access to email and voice mail accounts through innovative service provider programs.
Site Design Criteria	The simpler the site navigation, design and functionality can be, the better. Instructions should be explicit and broken into the smallest segments possible. Training should be provided for service providers and case workers, in addition to the end user.
Recommended Marketing Strategy	Educate service providers and case workers about the service and provide adequate training. This population is difficult to reach, because of their work load requirements. It may require an intensive communication campaign, including some webinars and some peer-to-peer marketing to encourage use.

Low Income Population Needs Assessment	
Key Contact	Keith D. Mitchell Executive Director Workforce Investment Council Phone: 202-698-5810 Email: Keith.Mitchell@dc.gov
Background	The DC Workforce Investment Council (DCWIC) is a group of public and private organizations empowered to advise the Mayor and District government on: developing, implementing, and continuously improving the District's Workforce Investment system; enhancing and developing accountability and performance systems; developing and encouraging private sector participation; and encouraging public input and support.
Low income population transportation needs	Members of the District's low income population are frequent users of public transportation. Lack of access or lack of awareness about transportation options are a big challenge to increasing employment opportunity for this population. The District's low income population has a large percentage of high school dropouts and content complexity should reflect that. The site should be able to be translated into Spanish at a minimum with additional languages preferred. Mitchell referenced a DC Language Hotline which translates government regulations into various languages, as a possible partner for MWCOG.
Search Criteria	The most relevant search criteria for this population include the cost of the service and the hours the service is available.
Access to technology	The low income population is more familiar with computers and has more access to computers than one might think.

	<p>While they may not have computers at home, they are familiar with accessing computers through Libraries, One Stop Centers and other access points. Mitchell's organization is developing a Memo of Understanding with the DC Housing Agency to provide access to One Stop Services including computer access at their locations.</p> <p>There are some generational differences in computer use, and the aging low income population may not be familiar with accessing online resources as their younger counterparts.</p>
Site Design Criteria	The site's content should be geared to the 4 th or 5 th grade reading levels to account for lower literacy rates. Content should be clearly organized and instructions should be very explicitly stated.
Recommended Marketing Strategy	To encourage site usage, promote it through public agencies, community and faith-based organizations where people are already accessing services.

Low Income Population Needs Assessment	
Key Contact	<p>Steve Greene Development Officer, Corporate and Foundation Relations Goodwill of Greater Washington 2200 South Dakota Avenue, NE Washington, DC 20018 O: (202) 715-2616 F: (202) 636-1062 M: (703) 674-8802 www.dcgoodwill.org</p>
Contact's Background	While currently in the development office, Steve also has experience in the training and education divisions working directly with clients
Low income population needs	The low income population needs vary significantly based on geography. In Virginia, a car is more essential because of the spread out nature of the community and distance from homes to worksites. In DC and MD, public transportation is more of an option.
Specific Needs for low income populations	<p>Trip chaining (the ability to link multiple destinations together) is important, such as linking a trip from job site to child care location to home.</p> <p>In addition, it's important to help low income users set realistic expectations. Some people in VA might turn down a job because of what they see as an unreasonably long commute, while the length of the commute might actually be within the norm for this region.</p>
Search Criteria	Low income population will want search criteria that tell them quickly the amount of time required for the trip, and the cost.

	<p>Most useful would be a site that generates multiple options, based on time and cost criteria.</p>
Access to technology	<p>Familiarity and use of computer seems to be more predicated on age/generation than on income.</p> <p>While many of the low income population may not access computers at home, they are familiar with accessing technology at libraries and other service centers</p>
Site Design Criteria	<p>Much of the criteria that apply to elderly or people with disabilities will apply to the low income population. In addition, the following criteria are very important:</p> <ul style="list-style-type: none"> • Site content should be in simplified language for non-native speakers. • Site should include translation options. • Site should be easy to navigate. The primary functions (such as search/trip planning capabilities), should be available from the home page and should be easily located. • Directions should be intuitive. Visual clues for non-native speakers should be direct and intuitive.
Recommended Marketing Strategy	<p>To encourage site usage, focus on advertising and promoting it where people are already going to access services. Develop relationships with case workers and service providers in the community, and make sure they are aware of the service and can recommend it to their clients. Consider advertising on Metro to increase awareness.</p>