Transportation Research Board

Committee on Accessible Transportation and Mobility ABE60
Triennial Strategic Plan 2009-2012
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Committee Scope:</td>
<td>1</td>
</tr>
<tr>
<td>2. Committee Strategic Planning</td>
<td>2</td>
</tr>
<tr>
<td>3. Critical and Cross-Cutting Issues</td>
<td>5</td>
</tr>
<tr>
<td>4. Committee Goals and Activity Plans</td>
<td>6</td>
</tr>
<tr>
<td>5. Committee Organization and Membership</td>
<td>7</td>
</tr>
<tr>
<td>6. Interaction with Other TRB Committees and Technical Societies</td>
<td>9</td>
</tr>
<tr>
<td>7. Business Meeting Attendance</td>
<td>10</td>
</tr>
<tr>
<td>8. Annual Meeting Sessions Sponsored</td>
<td>11</td>
</tr>
<tr>
<td>9. Identify Additional Activities Sponsored During the Past Year</td>
<td>12</td>
</tr>
<tr>
<td>10. Identify Additional Activities Scheduled for the Coming Year</td>
<td>12</td>
</tr>
<tr>
<td>11. Technology Transfer</td>
<td>12</td>
</tr>
<tr>
<td>12. Research Needs</td>
<td>13</td>
</tr>
<tr>
<td>13. Please Detail the Proposed General Committee Direction for the Next Three years:</td>
<td>15</td>
</tr>
<tr>
<td>14. General Remarks and Comments Offered by the Committee:</td>
<td>15</td>
</tr>
</tbody>
</table>
1. Committee Scope:

(This area should include the statement from the TRB Directory)

Scope: To study problems relating to the transportation disadvantaged and the services that various modes of transportation should provide for them as well as an assessment of the impact and value of programs directed at improving their mobility.

Staff Officer from April 2005, Martine Micozzi

A. Date that committee last considered scope?

The scope was reconsidered in January 2009 at the Annual TRB Meeting in Washington DC when we discussed the Triennial Strategic Plan.

B. Does the current scope statement accurately reflect the committee's activities?

No

Should the scope be modified?

Yes

C. What changes are proposed and why are these changes necessary?

In 2002, a revised scope statement was proposed, but no action was taken by TRB. The scope was reviewed again in 2009, and the following revised scope statement is proposed:

Scope:
- To study factors that limit people's mobility, especially those with limited transport options (persons with disabilities, frail and elderly persons, the economically disadvantaged);
- To analyze ways in which various modes of transportation and mobility options could best meet their needs, particularly those incorporating the principles of universal and inclusive design;
- To encourage new approaches to improve mobility and to evaluate the impact of mobility improvement programs; and
- To disseminate best practice for accessibility and mobility world wide, with particular emphasis on system performance and user behaviour.
2. Committee Strategic Planning

2.1 Introduction

Since 1995, the focus of the TRB Committee on Accessible Transportation and Mobility has changed significantly from that of the original Committee on Specialized Transportation. This is mainly because accessibility has become a feature of mainstream public transportation and not a separate specialised activity.

Accessible transportation through universal and inclusive design is one of the most important messages that the committee is currently discussing with the various groups involved in providing seamless accessible transportation. An aspect of this is the importance of safe and accessible provisions for pedestrian mobility, without which other types of accessible transportation are much less effective. This Committee’s mandate is to open up informed debate and provide technical leadership on issues relating to the mobility needs of individuals and groups with limited transport options (people with mobility, sensory and cognitive disabilities, older adults, and those without private transportation). To this end, we are delighted to recognise the achievement of TRB staff in entering the proceedings of all the TRANSED conferences (Transport and Mobility for Elderly and Disabled People) since 1978 into the TRIS database, to provide a unique literature on the development of accessible transportation worldwide.

With the growth in the ageing population in most countries, the committee is also dedicated to ensuring mobility options that will provide people with disabilities, older people and others with limited options a high level of service while remaining affordable and sustainable. This is necessary to enable people to participate fully in an active community life. Because many European countries already have the percentage of older people that the USA will have in 2025 or 2030, the Committee looks to share experience internationally.

We have cooperated with other TRB Committees, particularly with the Paratransit and Pedestrian Committees, in joint activities. In the past few years we have
developed stronger links with the Committee on the Safe Mobility of Older Persons, and in January 2009 are holding a joint session at the Annual Meeting.

2.2 Committee Strategic Plan

2.2.1 Membership Issues

The committee has widened its membership in the following categories, and should continue to strengthen and broaden its membership base:

a) Professionals with disabilities: to foster the understanding of existing mobility problems, from the user’s prospective.

b) Manufactures and suppliers: This group can help to implement practical and practicable accessible technologies and to disseminate research results.

c) Young professionals: Active involvement of young professionals working in the transportation field will ensure new ideas, vitality, commitment and continuity into the future.

d) Government: Government involvement is important for funding, promoting and monitoring accessible transportation at all levels (local, regional, state/provincial, and national). It also provides resources for researchers.

e) Diversity: Consideration to be given to attract members in terms of ethnicity, gender, disabilities, geographical representation, both nationally and internationally.

f) Linkage to other TRB Committees: Accessibility is a horizontal concern to many modal committees. Members drawn from committees such as transportation data, tribal transportation, non-motorized transportation, safe mobility of older persons, etc. would enable cross-fertilization of ideas and concerted action.

2.2.2 Research Issues

The committee should actively pursue research in the following areas:

a) Factors and solutions for improving accessibility and mobility for groups with:
   - Cognitive impairment and mental health problems: Because these impairments are often not apparent or visible to others, they may cause particular problems. It is important that people with these challenges are able to travel with dignity and in comfort..
• Older people: The average age of populations are rising all over the world, so it is important to provide better service for older people.

• Economically disadvantaged: Choice and use of transportation is determined by economic position for many people. It would be important to find ways of servicing these groups adequately, especially in job access issues, employment, and transportation. This is also tied to environmental justice issues.

• People with disabilities who are unable to travel independently: establish the extent mobility is affected due to lack of personal attendants.

b) Identify the key elements of good access solutions and develop ways of assessing how to transfer them between areas, countries and continents.

c) Accessible pedestrian infrastructure: The older age population is rising dramatically in many countries. It is necessary to have a barrier free pedestrian environment. Some older people are unable to walk for long distances or drive for a long time, so it is necessary to have an environment in which walking is safe, convenient and has good amenities (the conflicting needs of various disability groups must be addressed).

d) Explore the application of concepts such as ‘inclusive design’, ‘universal design’ and ‘barrier-free’ environments to the entire trip chain, including accessible terminals and infrastructure, accessible travel information, (in print and in electronic means).

e) Demonstrate new technologies on public transportation as well as private and individual modes.

f) Demonstrate the application of advanced technologies on accessible transport, e.g. Intelligent Transportation Systems (ITS), smart cards, security systems, cellular phones and Global Positioning Systems (GPS).

g) Through international participation in TRB and US activities, identify international examples of best practice for wider dissemination. In particular, continue to support the triennial TRANSED conferences as the principal showcase of accessible transportation worldwide.

h) Examine the common aspects of land use developments and transportation systems that provide independent mobility for older people and people with disabilities, with those that are environmentally sustainable and with those that are resilient to possible future threats to energy supplies.
i) Quantify the economic and social benefits of enabling people with disabilities and other disadvantaged people to lead independent and economically active lives.

j) Develop research problem statements and propose them to relevant organisations for implementation.

2.2.3 Awareness issues

Raise the awareness of accessibility for all in TRB activities, for example,

a) Encourage other TRB committees with modal focus to take account of accessibility in their service and operational plans.

b) Disseminate the concept that accessibility is no longer a specialised topic, but a mainstream part of the planning, design and operation of all passenger transport services.

c) Perform accessibility audit on TRB meeting facilities and information material, including accessible rooms, video conferencing facilities, sign language interpretation, travel scholarships for disabled delegates, accessible TRB web page, TTD, etc.

d) Suggest that TRB include the symbol of accessibility on the front page of the TRB program brochure, provided the facilities for the meeting achieve a satisfactory standard of accessibility.

3. Critical and Cross-Cutting Issues

Because accessibility is central to making transportation easier and more attractive for everyone to use, the activities of the Committee on Accessible Transportation and Mobility touch on the activities of all transportation providers and on the provision of safe and accessible pedestrian infrastructure.

The Committee has supported the work of the Committee on Complete Streets and has cooperated with the Committee on Pedestrians to provide sessions on topics such as accessible pedestrian crossings and the implications for accessibility of roundabouts. We also cooperate regularly with the Paratransit Committee on the provision of workshops or sessions at TRB Annual Meetings, and in 2009 cooperated with the Committee on the Safe Mobility of Older Persons in sponsoring a session at the Annual Meeting.

We see this kind of cooperative working with other committees increasing. The complementary requirements of communities planned for accessibility and independent mobility for older people, those planned for environmental
sustainability, and those planned to be resilient to future difficulties over energy supply, is becoming recognised. We have not yet attempted to develop links to committees involved with environmental sustainability and future energy supply, but this is a potential linkage that deserves recognition.

4. Committee Goals and Activity Plans

4.1 Current Goals

1. To foster and contribute to the development of new accessible transportation technologies and innovative practices internationally,

2. To strengthen TRB’s activities in the accessible transportation and mobility area while maintaining TRB’s role in contributing to improve highway transportation for elderly and disabled drivers.

3. To advance professional knowledge and the application of good practice worldwide in the fields of accessible transportation and mobility.

4.2 Identify planned (up to 2 years) activities to achieve stated goals.

Planned Activities for Goal 1 in accordance with our committee Strategic Plan 2009-2012:

- Encourage members and friends of the Committee to participate in regional and national conferences on accessible transportation to disseminate good practice.

Planned Activities for Goal 2:

- Propose at least one Synthesis Topic per year;

- Propose at least one TCRP/ESPA/NCHRP Research Statement per year;

- Continue Committee and Subcommittee meetings and sponsor at least two sessions at Annual Meetings;

- Develop cooperation with other TRB Committees and sponsor joint sessions at Annual Meetings in collaboration with other Committees;
- Encourage members to serve on TCRP Research Panels. The committee executives should nominate at least one member to serve on it per year;

- Publish research papers in Transportation Research Records.

### Planned Activities for Goal 3:

- Encourage members to contribute papers and presentations to journals, conferences and other meetings on accessible transportation and mobility;

- Support a Conference on Mobility and Transportation for Elderly and Disabled People (TRANSED) every three years and develop a mechanism to sustain it beyond the 2010 conference in Hong Kong;

- Encourage members to provide peer review to non-TRB journals;

- Increase liaison and co-operative activities with related TRB standing committees, (e.g. Paratransit, Safe Mobility for Older Persons, Rural and Intercity Bus Transportation, ITS, etc.) to exchange ideas and information;

- Encourage TCRP/ Project ACTION/ NHSTA management to involve members from our committees in research programs;

- Continue to administer the William Bell Award in recognition of members with significant contribution in the field;

- Survey members and friends to solicit ideas on Committee-building;

- Continue to Update the Committee Strategic plan

### 5. Committee Organization and Membership

#### A. Number of Members at January 2009

Currently there are 30 members and 3 Emeritus Member in the full committee. This includes 8 non-North American members and 4 young members.

#### B. Geographical distribution:

8 outside of N. America, 3 in Canada plus 1 Emeritus in Canada, 19 in the US plus 2 emeritus in US. A significant international orientation.
North East: 9
Mid West: 1
Southwest: 2
South: 1
West Coast: 2
North West: 3
Canada: 4
U.K.: 4
France: 1
Netherlands: 1
Portugal: 1
South Africa: 1

C. Professional Category:
- university/research institute
- consultants
- national government
- state (provincial) governments
- non-profit organizations
- research institutes
- manufacturing industry

D. Number of Friends associated with the committee: 50

E. Level of Individual Member Involvement: The committee executives contribute, on average, over 40 hours per year to committee activities. About 12 members had high involvement whereas 17 had medium involvement. Four had low or no involvement in 2008.

F. Committee Morale: High

G. List Subcommittees and their Chairs:

ABE60 (1) Subcommittee on International Activities
   Co-Chairs: Tom Rickert and Ann Frye

ABE60 (2)-Subcommittee on Advanced Technology and Accessible Transportation
   Chair: Uwe Rutenberg

A1E09 (3)-Joint Subcommittee on Transportation Options for Seniors
   Chair: Kathy Freund. This is a joint Subcommittee of TRB’s Committees on Safe Mobility for Older Persons and Rural and Intercity Bus
A1E09 (4)-Subcommittee on Research
Co-Chairs: Lalita Sen and Russell Thatcher

Paper review and publications:
The Research subcommittee has reviewed papers that were submitted in response to our annual call for papers. For the TRB Annual Meeting in 2006, 16 papers were reviewed, of which 8 were recommended for presentation, 7 were recommended as posters and 3 were recommended for publication. For 2007, 9 papers were reviewed, of which 4 were recommended for presentation, 2 were recommended as posters and none were recommended for publication. For 2008, 3 papers were reviewed, of which 1 was recommended for presentation and publication, and 1 was recommended as a poster. For 2009, 8 papers were reviewed, of which 3 were recommended for presentation, 1 was recommended as a poster and one for publication.


6. Interaction with Other TRB Committees and Technical Societies

A. List of other TRB Committees and designated liaison members are:

<table>
<thead>
<tr>
<th>Committee</th>
<th>Liaison Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITS</td>
<td>Carol Schweiger and Bill Crandall</td>
</tr>
<tr>
<td>Safe Mobility for Older Persons</td>
<td>Kit Mitchell</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>Lois Thibault and Beezy Bentzen</td>
</tr>
<tr>
<td>Paratransit</td>
<td>Betsy Buxer and Russell Thatcher</td>
</tr>
<tr>
<td>Rural &amp; Intercity</td>
<td>Jon Burkhardt</td>
</tr>
<tr>
<td>Rail</td>
<td>Frances Chung</td>
</tr>
<tr>
<td>Airport Terminals and Ground Access</td>
<td>Harry Wolfe</td>
</tr>
<tr>
<td>Non-Motorized</td>
<td>Tom Rockert and Lalita Sen</td>
</tr>
<tr>
<td>Women’s Issues</td>
<td>Maryvonne Dejeammes</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Tribal Transportation</td>
<td>Lalita Sen</td>
</tr>
<tr>
<td>School Bus</td>
<td>Ted Finlayson-Schueler (friend)</td>
</tr>
<tr>
<td>Passenger Ferry</td>
<td>David Chapman</td>
</tr>
<tr>
<td>International</td>
<td>Ling Suen and Lalita Sen</td>
</tr>
</tbody>
</table>

B. List Outside Organizations which your committee maintains ongoing liaison representation:

- Government Departments etc: FTA, NHTSA, US Access Board, Project Action, UK Department of Transport, European Conference of the Ministers of Transport (ECMT), Ministry of Transportation, Ontario, Canadian Transportation Agency
- Research Laboratories: Transportation Development Centre (Transport Canada), INRETS (France), TRL (UK)
- Professional Institutions: ITE, UK Institution of Highways and Transportation, ITS America, ITS Canada
- Associations of Transportation Operators: CTAA, APTA, Canadian Urban Transit Association
- Advisory Committees: Disabled Persons Transport Advisory Committee (UK), Advisory Committee on Accessible Transportation to the Minister of Transport (Canada).

C. Shared Activities during the past three years:

- Input and participation in the May 2007 TRANSED conference in Montreal, Canada
- Co-sponsored TRB sessions in TRB Annual Meetings (see 7 below)
- Annual Joint Meetings on research with Paratransit Committee during TRB Annual Meetings 2004 and 2005.
- Cooperation with Committee on Rural and Intercity Bus on the Roger Tate Award 2004.

7. Business Meeting Attendance

A. Annual Business meeting attendance

|----------|---------------|---------------|---------------|


<table>
<thead>
<tr>
<th>ABE60 Main Committee</th>
<th>18 members 21 guests</th>
<th>17 members 16 guests</th>
<th>22 members 22 guests</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABE60 (1) Subcommittee on International Activities</td>
<td>14 members, 14 guests</td>
<td>13 members, 13 guests</td>
<td>15 members, 15 guests</td>
</tr>
<tr>
<td>ABE60 (2) Subcommittee on Advance Technology and Accessible Transportation</td>
<td>8 members, 6 guests</td>
<td>13 members, 4 guests</td>
<td>20 members, 16 guests</td>
</tr>
<tr>
<td>ABE60 (3) Joint Subcommittee on Transportation Options for Seniors</td>
<td>15 members and guests</td>
<td>12 members and guests</td>
<td>12 members and guests</td>
</tr>
<tr>
<td>ABE60 (4) Subcommittee on Research</td>
<td>12 members, 9 guests</td>
<td>14 members, 15 guests</td>
<td>15 members, 8 guests</td>
</tr>
</tbody>
</table>

B. Summer Business meeting attendance:

No summer meeting planned for 2009.

8. **Annual Meeting Sessions Sponsored**

A. Number of annual meeting paper sessions sponsored

- 2006: 2
- 2007: 2 (of which 1 jointly with another Committee)
- 2008: 2 (of which 1 jointly with other Committees)
- 2009: 1

B. Number of annual meeting conference sessions sponsored

- 2006: 4 (jointly with other Committees)
- 2007: 2 (jointly with other Committees)
- 2008: 1
- 2009: 1 (jointly with other Committees)

C. Number of annual meeting poster sessions sponsored

- 2006: 1
- 2007: 1
- 2008: 1
D. Number of annual meeting workshops sponsored

- 2006: 2 (jointly with other Committees)
- 2007: 1 (jointly with another Committee)
- 2008: 1 (jointly with another Committee)
- 2009: 1 (jointly with another Committee)

9. Identify Additional Activities Sponsored During the Past Year.

- The 11th TRANSED conference in Montreal, Quebec, Canada, June 2007.
- Joint Caucus (three TRB committees) Meeting on Paratransit, Accessible Transportation and Mobility, Safe Mobility for Older Persons, June 2007 at the 11th TRANSED conference.

10. Identify Additional Activities Scheduled for the Coming Year.

- None

11. Technology Transfer

A. Transportation Research Record: One paper was recommended for publication in January 2009

B. Conference Proposed: 12\textsuperscript{th} TRANSED conference, Hong Kong, 2010.

C. Proceedings of all TRANSED conferences since the first in Cambridge England in 1978 have been entered into TRIS and form a unique literature of the development of accessible transportation.
12. **Research Needs**

A. Most recent submission of Research Problem Statements

In 2008;
Submitted two (2) Synthesis Statements to TCRP:
- ADA Complementary Paratransit Rider Assistance Policies
- Accommodating Pedestrians with Disabilities and Transit Vehicles in Shared-Space Schemes

Submitted two (2) Full Research Topics to TCRP:
- Maximising Benefits and Addressing Challenges of Volunteer Driver Transportation Programmes
- Wheelchairs Crossing Flange Way Gaps at Railroad Crossings

In 2007;
Submitted four (4) Synthesis Statements to TCRP. These were developed cooperatively by the Committee on Accessible Transportation and Mobility, the Paratransit Committee, the Disability Rights Education and Defense Fund, Maricopa Association of Governments, Rensselaer Polytechnic Institute, Smith-Kettlewell RERC, and Accessible Design for the Blind.
- ADA Complementary Paratransit Rider Assistance Policies
- Accommodating Pedestrians with Disabilities and Transit Vehicles in Shared-Space Schemes
- Advanced Technologies for Pedestrian Detection and Accident avoidance
- Applying Universal Design Principles to Transit Schedules and Information

Submitted three (3) Full Research Topics to TCRP.
- Maximising Benefits and Addressing Challenges of Volunteer Driver Transportation Programmes
- A handbook for Lighting Transit and Pedestrian Environments
- Measuring and Understanding the Use of Fixed Route Services by Riders with Disabilities

In 2006;
Submitted seven (7) Synthesis Statements to TCRP.
- ADA Complementary Paratransit Rider Assistance Policies
- Transportation Terminal Lighting for an Aging Population
• Stop Announcement and Vehicle Identification Practices (selected for funding by Project ACTION)
• Technology for Accessible Transport – Worldwide Convergence
• Bus Rapid Transit and Accessibility for Riders with Disabilities (selected for funding by Project ACTION)
• Metadata on Travel by Persons with Disabilities
• Advanced Technologies for Pedestrian Detection and Accident Avoidance

Submitted three (3) Full Research Topics to TCRP.
• A Handbook for Planning and Operating Flexible Public Transportation Systems (selected for funding by TCRP)
• Impacts of Trends Toward More Rigorous ADA Paratransit Eligibility Assessments on Riders with Disabilities
• Driver Recruitment, Retention and Performance in ADA Complementary Paratransit Operations (selected for funding by TCRP)

In 2005;
Submitted five (5) Synthesis Statements to TCRP.
• Transportation Terminal Lighting for an Aging Population
• Accessible Fare Vending, Collection and Adjustment Machines and Fare Payment Systems Used in Transit
• Programs and Approaches for Achieving Bus Stop Accessibility (selected for funding by Project ACTION)
• Stop Announcement and Vehicle Identification Practices
• ADA Complementary Paratransit Rider Assistance Policies

Submitted one (1) Full Research Topics to TCRP.
• A Handbook for Planning and Operating Flexible Public Transportation Systems

B. No. of Research Statements developed in the last year

See 11A above.

C. Research Problem Statements currently under development:

In 2009, seven research problem statements are being developed.
D. Number of Research Problem Statements funded during the past three years.

Of proposals submitted in 2006, two (2) Full Research Topics were selected for funding by TCRP, and two (2) Synthesis Topics by Project ACTION.

Of proposals submitted in 2005, one (1) Synthesis Topic was selected for funding by Project ACTION.

It takes about two years for decisions on funding to be taken, so it is not yet known which topics proposed in 2007 and 2008 will be funded.

13. Please Detail the Proposed General Committee Direction for the Next Three years:

- Update the Strategic Plan for 2009-2012, discuss the Committee scope and perform Triennial Self Evaluations;
- Develop Research Problem Statements and Synthesis for TCRP, Project Action and similar granting programs;
- Increase effort in developing sessions and soliciting papers for the annual meeting;
- Identify sources for funding research problems that do not fall under the ESPA, TCRP or the NCHRP (See Section 11);
- Establish a source of guidance on good practice for accessible transportation.
- Support the organisers of the 12th TRANSED conference in Hong Kong in 2010, and seek potential organisers for the 13th TRANSED conference in 2013.

14. General Remarks and Comments Offered by the Committee:

A. The Committee should continue in its present form and with its present title.

B. Yes, the Joint Subcommittee on Transportation Options for Seniors, now listed as a subcommittee of ABE60, should be listed instead as a subcommittee of the Committee on Safe Mobility for Older Persons. Kathy Freund, Chair of this subcommittee requested this change in January 2009 and the change is supported by ABE60.

C. No, it should not be merged with other standing committees.
D. No, consideration should be given to moving the committee from the Policy and Organization Group to the Public Transportation Group. ABE60 committee members voted at their meeting in January 2009 to request this change. It is believed that the change will facilitate greater interaction with the modal committees in the Public Transportation Group.

E. It is inevitable that other TRB Committees concerned with public transportation, mobility and seniors will be located in other TRB Sections and Groups. Active liaison between Committees and TRB staff officers largely overcomes any potential problems this might cause. There are still schedule conflicts between meeting and session times for our Committee and the Committees on Paratransit and on the Safe Mobility of Older Persons. Furthermore, the Committee on Safe Mobility of Older Persons meets in a different hotel (the Marriott) that makes it more difficult to switch between sessions.

It appears that accessibility and transportation options are gradually becoming accepted as concerns in other modal and planning committees. Our Committee intends to continue to work towards “mainstreaming” accessibility and mobility concerns. Co-sponsoring sessions and joint caucus and meetings with related TRB Committees have proved to be effective means to establish closer linkage.

In the past, some of the research needs and problem statement developed had no “homes”, since they are related to the air mode or are multimodal in nature (See Section 11). There is now a funding program for research on issues of air transport, but it is still difficult to find federally funded programs to address multimodal and mobility issues.