

OPERATIONS AND MAINTENANCE GROUP

Committee Triennial Strategic Plan (TSP)

Committee Name and Number: AHB70, TRB Access Management Committee

Committee Chairperson: Kristine M. Williams, Center for Urban Transportation Research, University of South Florida

TSP Three-Year Period: April 2011 – April 2014

Date Prepared: August 2011

Committee Future Outlook Statement:

Current Committee Scope

The committee will share the latest knowledge, expertise and experience to facilitate leadership and partnerships to advance the state-of-the-practice in access management and its integration into established planning, policy and design processes.

Factors and influences that will shape the committee's activities

Access management has the potential to significantly improve the safety and operation of the transportation system at relatively low cost. It is the careful consideration of the location, type and design of access to a roadway and adjacent land development and involves a range of strategies to reduce conflicts among the various facility users. It grew from a recognition that vehicular maneuvers and volumes at each access point or intersection have measurable and cumulative impacts on the safety and operation of the transportation system. The concept concentrates on restricting the number of direct accesses to major surface streets, providing reasonable indirect access, effectively designing driveways, enforcing safe and efficient spacing and location of access, providing medians on major roadways, and introducing auxiliary lanes for left and right turns. The practice is expanding to integrate access management principles into all modes of travel, including strategies for safe and efficient pedestrian, bicycle, and transit access.

Factors and influences that support access management include: worsening congestion in urban areas and lack of funding for major capital improvements is leading to growing interest in strategies to maintain and manage the existing system; the push for improved safety and safety research funding; budget deficits in all levels of government and the fact that access management is a low cost strategy; growing interest in strategies for integrating transportation and land use; growing interest and need to integrate access management principles and strategies into non-auto modes of travel and other community interests, such as livability, economic development, and multimodal needs.

Factors and influences that impede access management include: a general lack of familiarity with contemporary practice of access management and its benefits; lack of nationally accepted guidelines; limited tools to predict the impacts of access management techniques; lack of case studies and examples of successful practices; lack of federal policy support; the need for numerous agency functions, jurisdictions and levels of government, to coordinate in planning and implementation; local stakeholder opposition, particularly by the business community; lack of

resources along with a continuing need for outreach and education of agency management, staff, consultants, public officials, and the general public.

Given these factors, the Access Management Committee will continue its aggressive and proactive approach to developing new research, marketing, and mainstreaming access management, with mainstreaming as our overarching goal. Our primary strategic objectives for the future are:

1. Increase agency and public awareness and use of access management, nationally and internationally, including its benefits and relationship to livability and sustainability;
2. Identify unmet access management research needs and promote needed research
3. Maintain and update the Access Management Website as the primary portal for access management information and guidance, and increase its utility as an outreach tool.
4. Maintain and update the Access Management Manual and developing supporting national guidelines.

The Committee is optimistic as it has successfully achieved funding of two key NCHRP projects – NCHRP 03-99 Development and Application of Access Management Guidelines and NCHRP 15-43-Second Edition of the TRB Access Management Manual. We are concerned by the elimination of the access management program within FHWA and corresponding diminished funding support for our website, conference, and outreach activities even as the need for outreach and training on access management continues to grow. FHWA's National Highway Institute will continue to present a 3-day short course on access management. However, the Committee must branch out to other sources, including state-funded research and pooled-fund efforts, to support our outreach and training objectives. We also must continue to seek support through universities, professional organizations, and foundations.

Committee Plan:

Emerging issues inside and outside the committee scope

Performance measures and monitoring of access management, along with tools or methodologies for evaluating access management impacts, are sorely needed. The operational benefits of access management techniques, in particular, have not been sufficiently documented. Research and development of predictive tools and analysis methods is essential. This may be addressed through liaison activities with other Committees in the Operations and Maintenance Group, including the Highway Capacity and Quality of Service Committee (AHB40), Operational Effects of Geometrics Committee (AHB65), Geometric Design Committee (AFB10), and Intersections Joint Subcommittee.

Maximizing modal opportunities within a balanced complete streets framework has emerged as a consideration in the planning, design and maintenance of transportation corridors. Access management's strategic position between policy and technical considerations places it in the forefront of safety, air quality, energy and livability decision making. The relationship of access management to non-auto modes, sustainability, and livability, is a topic of growing importance that would benefit from additional research and liaison activities with several other Committees at TRB in the Public Transportation Group (AP000) [e.g. Bus Transit Systems (AP050), Transit Management and Performance (AP010), Public Transportation Planning and Development (AP025), and Major Activity Center Circulation Systems (AP040)] and the Pedestrians and Cycles Section (ANF00) [e.g. Pedestrians (ANF10), Bicycle Transportation (ANF20)].

The Access management Committee is well suited to contribute to several critical and cross cutting issues identified by the Policy and Organization Group, and especially the following:

- Safety – still inadequate (in part because access management has not been sufficiently mainstreamed!)
- Congestion – growing (access management offers a relative low cost strategy for reducing bottlenecks and delay)
- Infrastructure – enormous aging, capital stock to maintain (access management offers numerous strategies for improved management of *existing* facilities)
- Institutions – adopting a systems perspective, emphasizing operations, integrating priorities across levels of government (this is what we do!)

Workforce development is another critical issue that we actively address on several levels (e.g. university access management courses and materials, conference workshops, webinars, marketing of the National Highway Institute short course.)

Projects and Activities

The committee has four subcommittees to advance its scope through the following projects and activities:

1. Research: identify research needs and develop research statements for NCHRP and other funding sources; peer review of access management research papers; coordinate sessions at TRB Annual Meeting; issue calls for papers; disseminate research findings; identify opportunities for joint paper sessions.
2. Outreach: maintain and update the national website, provide national teleconferences and webinars, promote and support training and workforce development; encourage presentations and sessions at conferences; collect case studies/examples/photographs of effective access management projects; develop outreach materials; develop strategies to mainstream access management (e.g. promote integration of AM in federal regulations, MPO prioritization processes).
3. Conference: coordinate national (every two years) and international (every 5 years) access management conferences and workshops; develop conference technical programs; identify corporate and agency co-sponsors; coordinate student poster competitions.
4. Manual: seek continued funding to maintain and update the Access Management Manual; seek the establishment of national standards and guidelines that are endorsed by AASHTO, ITE and others; solicit Manual user comments and suggestions; assist in identifying research needs.

Committee members are encouraged to become liaisons with other related TRB Committees and to communicate cross-cutting issues and opportunities to the full Committee (and vice versa). Appendix A contains our current liaison list and a history of key activities. We are currently shifting the website platform to Drupal to increase its utility as an outreach and information tool. The Committee is positioning the website to support the NCHRP 03-99 AMAG (access management application guidelines) and hopes to also host the second edition of the TRB Access Management Manual.

Membership Strategies

The Committee will continue to actively seeks a geographically diverse membership that represents various disciplines, levels of government, universities, and the private sector. We continually seek out access management champions through various networks, conferences, and activities, enlist them as Committee “friends” and encourage their membership. We select members from groups that are underrepresented on the Committee during each rotation. Friends are encouraged to become members of subcommittees to aid them in obtaining travel approval and to serve as an active pool for future Committee membership. We actively seek out young and

international members and increased female membership from two in the mid-1990s to six in 2011. However, we have not achieved an acceptable increase in minority membership and continue to have difficulty attracting state, MPO and local agency members due to travel restrictions and tight budgets.

Communication

Much of our effort will continue to be focused on communication and outreach. We have hosted several national conferences, an international conference, conducted conference presentations and sessions, offered workshops and webinars, engaged in national teleconferences, produced and disseminated DVDs, promoted the NHI short course on access management, and developed an access management logo and identity brand. We are shifting the website to a Drupal platform to increase its utility and positioning it to host the NCHRP 03-55 access management guidelines and the updated TRB Access Management Manual. We created an access management listserv in 2011 to facilitate discussions and information sharing and may organize a “virtual” conference in 2014.

Proposed changes in scope

No changes are proposed.

Optional: Additional Products

The Committee adopted a strategic plan in 2004, and amended it in 2006. A copy appears in Appendix B.

Appendix A – Committee History

Subcommittees

The following are subcommittees for the TRB Access Management Committee and their respective chairs as of 2011.

- Conference Subcommittee – AHB70(1) – Chair: Eddie Shafie
- Research Subcommittee – AHB70(2) – Chair: Grant Schultz, Ph.D., P.E., P.T.O.E
- Outreach Subcommittee – AHB70(3) – Chair: Philip Demosthenes
- Access Management Manual Subcommittee – AHB70(5) – Chair: Marc Butorac

Communication Coordinator

Our Communication Coordinator is Frank Broen, Teach America, Inc.

Membership

Membership diversity

The Committee presently has four young members and 6 female members. The Committee is racially homogeneous, except for two minority members.

Geographic distribution of membership

Northeast: 4 Midwest: 3(1) South: 9(3) Western: 8
International: 3 (Greece, China, South Africa)

NOTE: Does not include Emeritus members. Young members shown in ().

Professional affiliation distribution of membership

The Committee currently has 24 total members and is seeking a local/MPO or federal representative to fill its open membership slot. The Committee also hopes to increase its international membership in the coming years in light of growing international interest in access management. Below is a breakdown. (NOTE: some members fall in more than one category)

- Federal - 1
- State DOT - 7
- Local Government - 1
- MPO - 2
- University - 4 (Young 2, International 2)
- Private (consultant) - 9 (International 1, Young 2)

NOTE: The Committee has three Emeritus members, 3 international members, and 4 young members.

Friends

The Committee maintains a list of approximately 176 friends that includes individuals in the US, as well as Canada, Poland, United Kingdom, Turkey, Greece, South Africa, Saudi Arabia, and Australia.

Interaction with Other TRB Committees

The Access Management Committee maintains formal liaisons with the following Committees:

- Transportation and Land Development
- Task Force on the Highway Safety Manual, A3B05(1)
- Eminent Domain and Land Use Committee, AL060
- Highway Capacity Manual
- Geometric Design, AFB10
- Safety Conscious Planning Subcommittee, ANB10(3)
- HOV Systems Committee, A3A06
- Traffic Signals Committee
- Roundabouts A3B05(4)
- Performance Measures Committee, A5022
- Statewide Data Committee
- Statewide Planning Committee
- Pedestrian Committee, ANF10
- Public Involvement in Transportation, ADA60
- Metropolitan Policy, Planning and Processes Committee, ADA20

Interaction with Other Organizations

- FHWA
- Committee members are very active in ITE, APA and AASHTO and there have been Access Management sessions at conferences held by these groups. Members and friends are also active participants in the activities of:
 - ULI
 - NARC
 - APWA
 - AMPO

Committee Conferences

- 1st International Access Management Conference in Athens, Greece (2011)
- 9th National Access Management Conference in Natchez, MI (2010)
- 8th National Access Management Conference in Baltimore, Maryland (2008)
- 7th National Access Management Conference in Park City, Utah (2006)
- 6th National Access Management Conference in Kansas City, MO (2004)
- 5th National Access Management Conference in Austin, TX (2002)

- 4th National Access Management Conference in Portland, OR (2000)
- 3rd National Access Management Conference in Ft. Lauderdale, FL (1998)
- 2nd National Access Management Conference in Vail, CO (1996)
- 1st National Access Management Conference in Vail, CO (1993)

Co-Sponsored Conferences and Sessions (2008-2012)

- Session 203: Legal Considerations in Corridor Projects and Access Control (TRB 2010, CoSponsored with Eminent Domain and Land Use Committee)
- Graduate Student Research Summaries and Hot Topics in Geometric Design (TRB 2009)
- Safety and Security in the Metropolitan Planning Organization Planning Process (TRB 2009)
- Session 361: Transportation-Related Right-of-Way Issues (TRB 2008) (with Committee on Utilities; Committee on Pedestrians; and the Committee on Eminent Domain and Land Use).
- Session 592, Intersection Mega Session, Part 2: Sharing Advancements in Design, Safety, and Operations, (TRB 2008) [Perspectives from the Access Management Committee], in coordination with the Committees on Visualization in Transportation, Geometric Design, and Operational Effects of Geometrics.
- Session 265: Land Use and Related Issues, panel discussion by AM Committee members and friends, Chris Huffman, Donna Lewis, and David Plazak (TRB 2008)
- Cosponsored the 3rd Urban Street Symposium held in Seattle, WA (June 2007)
- Workshop 146: State of Affairs of Visualization Research (TRB 2011)
- Texas Transportation Planning Conference/Access Management Conference (2012)

Additional Training, Workshops and Outreach Activities

- Participated in quarterly national access management teleconferences for state transportation agencies and other interested parties 3 times a year since 1991. The invitation list is 105 and average attendance is 22.
- Access Management pre-conference workshops at each national and international conference
- Committee members and friends developed special issue of the Institute of Transportation Engineers Journal on Access Management, Vol. 80, No. 1, 2010.
- ITE Webinar "Access Management at Intersections: Part I & II," 2010 and 2011
- ITE Webinar Series "Access Management" 2009, 2010, 2011
- ITE Webinar "Advanced Access Management for the Transportation Planner," ITE Professional Development Webinar Series, February 24, 2011 (approximately 60 sites, very positive evaluations)
- The NHI Access Management Course was taught in 6 locations in 2010.
- Joe Bared, Session 158: Workshop on Alternative Intersections and Interchanges: An Informational Report (2010)

Website and Communication Tools

The Access Management Committee developed and maintains a national website at www.accessmanagement.info. During the past year, the website averaged 329 visitors each month, with an average viewing length of over 15 minutes. There were 892,155 hits from July 2010 to June 2011. Approximately 1/3rd of the documents viewed are presentations from the 2004, 2006, 2008,

and 2010 conferences. Approximately 80% are from North America, 17% from Asia, and the rest primarily from Australia, Europe, South America and Africa. The number of international visitors is increasing, up about 10% from a year ago. The committee is exploring new web delivery content management systems to improve the functionality of the website, to incorporate social media elements and provide a better way to find information.

The Access Management Committee also established new Access Management listserv in 2011.

Subscribe at:

http://lists.cutr.usf.edu/read/all_forums/subscribe?name=accessmanagement&page=all_forums

Research Problem Statements

An overview of recent research statements developed by the Access Management Committee, as well as those that we have cosponsored with other Committees, is provided below, along with a summary of those that were funded.

TRB Access Management Committee (AHB70) Research Subcommittee (AHB70(2)) Research Priorities

NCHRP and FHWA Funded Projects (published, awarded, or pending)

Title	Project No.	Contractor	Completion Date
Guide for the Geometric Design of Driveways*	NCHRP 659	Jim Gattis (U. of Arkansas)	Published
State of the Practice in Highway Access Management (<i>Synthesis</i>)	NCHRP Synthesis 404	Jerry Gluck (Urbitran)	Published
Modeling Operating Speed (<i>Synthesis</i>)	Trans. Research Circular E-C151	Operational Effects Committee	Published
Guidelines for Ramp and Interchange Spacing*	NCHRP 03-88	Brian L. Ray (Kittelson & Assoc.)	Completed <i>awaiting publication</i>
Design Guidance for Channelized Right-Turn Lanes*	NCHRP 03-89	Ingrid Potts (Midwest Res. Inst.)	Completed <i>awaiting publication</i>
Left-turn Accommodations at Unsignalized Intersections	NCHRP 03-91	Kay Fitzpatrick (Texas Transp. Inst.)	Completed <i>awaiting publication</i>
Transportation Systems Operation and Management Guide*	NCHRP 03-94	Steve Lockwood (PB Consult)	April 2011
Guidelines on the Use of Auxiliary Through Lanes at Signalized Int.*	NCHRP 03-98	Brandon Nevers (Kittelson & Assoc.)	May 2011
Development and Application of Access Management Guidelines	NCHRP 03-99	Karen Dixon (Oregon State Univ.)	June 2011
Evaluating the Performance of Corridors with Roundabouts*	NCHRP 03-100	Lee Rodegerdts (Kittelson & Assoc.)	February 2013
Design Guidance for Intersection Auxiliary Lanes*	NCHRP 03-102	Kay Fitzpatrick (Texas Transp. Inst.)	July 2013
Second Edition of the TRB <i>Access Management Manual</i>	NCHRP 15-43	Kristine Williams (Univ. of South FL)	May 2013
Safety Evaluation of Access Management Policies and Techniques	FHWA	Frank Gross (VHB)	December 2012

* Topic submitted by another TRB Committee

Access Management “Science” and Standards

NCHRP Research Needs Statements

Title	Project No.	Champions	Submitted/Updated
Access Management in the Vicinity of a Freeway Interchange	G-29 (2010)	Butorac, Stover, Sokolow	Submitted 2010 Resubmit 2011
How Variations in AM Affect Motorist Workload and Safety	N/A	Eisele, van Schalkwyk	Needs to be developed
Access Management Near Modern Roundabouts	N/A	Demosthenes, Huntington, Bared	Needs to be developed
Sight Distance for Driveway Spacing and Location in Access Management	N/A	Needs a champion Hold for now...	Needs to be developed
Functional Intersection Area for Access Management	N/A	Needs a champion Hold for now...	Needs to be developed
Other Transportation Modes in Access Management (<i>Synthesis</i>)	N/A	Needs a champion Hold for now...	Last updated 08/29/2007
Best Practices for the Dev. of Small Sites Abutting Arterials (<i>Synthesis</i>)	N/A	Demosthenes	Submitted 2011

Impacts of Access Management

NCHRP Research Needs Statements

Title	Project No.	Champions	Submitted/Updated
Access Management as a Sustainable Transportation Technique	G-42 (2010)	Samberg, Schultz	Submitted 2010 Resubmit 2011
Operational Impacts of Access Management	G-43 (2010)	Eisele, Schultz Hold for now...	Submitted 2010
Quantifying the Air Quality Impacts of Implementing Access Management	N/A	Eisele, Zietsman	Submitted 2009
Transportation Impact Mitigation Practices of State Transportation Agencies (<i>Synthesis</i>)	N/A	Williams	Submitted 2011
Crash Modification Factors for Access Management Techniques (<i>Synthesis</i> or Full NCHRP Report?)	N/A	Schultz	Needs to be developed
Access Management Metrics and Performance Measures: Relationship of Access Management to Asset Management	N/A	Eisele, Frawley, Dixon <i>Hold pending AM Manual project</i>	Needs to be developed
Access Management, Climate Change, Greenhouse Gases, and Energy	N/A	Ismart, Levinson, Yazersky	Needs to be developed
Effects of Access Management on Business	N/A	Eisele, Frawley, Schultz	Needs to be developed

Research Emphases for Conference Papers, Presentations, Workshops, Peer Exchange

Title	Project No.	Champions	Venue
Using Crash Databases and Other Geospatial Data in Access Management Analysis	N/A	Plazak, Souleyrette, Hans	Workshop at 2008 Conference Still a need?
Impacts of Access Management on Freight Transport and Logistics	N/A		Papers

Access Management Outreach, Marketing, and Visualization**NCHRP Research Needs Statements**

Title	Project No.	Champions	Submitted
Using Visualization to Communicate the Benefits of Access Management to the Public	N/A	Broen, Manore, Pack, Gluck	Needs to be revisited
Best Practices in Public and Stakeholder Involvement in Access Management (<i>Synthesis</i>)	N/A	Needs a champion <i>Hold for now</i>	Last updated: 07/17/2007

Research Emphases for Conference Papers, Presentations, Workshops, Peer Exchange

Title	Project No.	Champions	Venue
The Role of Non-Traditional Stakeholders in Advocating Access Management (e.g., law enforcement, health care, insurance)	N/A		Papers
Using Microsimulation Techniques to Analyze Access Management Alternatives and Communicate Benefits to Stakeholders	N/A		Papers Conference Workshop
Case Studies of Access Management Implementation: Getting the "Tough Stuff" Done	N/A		Papers Conference Workshop
Effectiveness of the TRB Access Management Manual	N/A		Papers Conference Workshop
Expanded Access Management Peer Exchanges	N/A		Papers Other sources?

Key TRB Access Management Reports (by date of publication)

Gattis, J.L., J. S. Gluck, J. M. Barlow, R. W. Eck, W. F. Hecker, and H. S. Levinson, *NCHRP Report 659: Guide for the Geometric Design of Driveways*, Transportation Research Board, Washington, D.C., (2011)

Gluck, J. *NCHRP Synthesis 404: The State of the Practice in Roadway Access Management*, Transportation Research Board, Washington, D.C., (2010)

Rose, D.C., J. Gluck, K. Williams, and J. Kramer, *NCHRP Report 548: A Guidebook for Including Access Management in Transportation Planning*, Transportation Research Board, Washington, D.C., (2005)

Huntington, D. and J. Wen, *NCHRP Synthesis 351: Access Rights—A Synthesis of Highway Practice*, Transportation Research Board, Washington, D.C. (2005)

Williams, K., *NCHRP Synthesis 337: Cooperative Agreements for Corridor Management*, Transportation Research Board, National Academy Press: Washington, D.C., (2004)

Butorac, M., and J. Wen, *NCHRP Synthesis 332: Access Management on Crossroads in the Vicinity of Interchanges*, Transportation Research Board, Washington, D.C. (2004)

Potts, I.B, D. Harwood, D. Torbic, K. Richard, J. Gluck, H. Levinson, P. Garvey, and R. Ghebrial, *NCHRP Report 524 – Safety of U-turns at Unsignalized Median Openings*, Transportation Research Board, Washington, D.C. (2004)

Access Management Manual, Transportation Research Board, National Research Council, Washington, D.C. (2003)

Williams, K., *NCHRP Synthesis of Highway Practice 304: Driveway Regulation Practices*, Transportation Research Board, National Academy Press: Washington, D.C., (2002)

Williams, K., *NCHRP Synthesis of Highway Practice 289: Corridor Management*. Transportation Research Board, Washington, D.C.: National Academy Press, (2000)

Gluck, J., H.S. Levinson, and V. Stover, *NCHRP Report 420: Impacts of Access Management Techniques*, Transportation Research Board of the National Academies, Washington, D.C. (1999)

Gluck, J., S. J. Bellomo, H. S. Levinson, V. G. Stover, G. Yazersky-Ritzer, “Driveway and Street Intersection Spacing,” *Transportation Research Circular 456*, Transportation Research Board, Washington, D.C. (1996)

Williams, K. and R. Forrester, *NCHRP Synthesis of Highway Practice 233: Land Development Regulations that Promote Access Management*. Transportation Research Board, Washington, D.C.: National Academy Press, (1996)

Koepke, F.J. and H.S. Levinson, *NCHRP Report 348: Access Management Guidelines for Activity Centers*, Transportation Research Board, Washington, D.C. (1992)

Strategic Plan Dedication

The TRB Access Management Committee 2011-2014 Strategic Plan is dedicated to the memory of Ronald K. Giguere, first Chair of the Committee who led the effort to produce our initial Strategic Plan and who authored the 1999 Millenium Paper for the Access Management Committee. Many of Ron’s thoughts and comments are reflected herein and we greatly appreciate all of his contributions to the field and to the Committee.

**Appendix B - 2006 Strategic Plan
(to be appended)**