Transportation Planning Applications: To TRBAppCon and Beyond!

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INTRODUCTION
In June 2019, transportation professionals will gather in Portland, Oregon for the 17th TRB National Transportation Planning Applications Conference (Planning Applications Conference or TRBAppCon). The bi-annual conference is the product of dozens of volunteers, members and friends of TRB’s Standing Committee on Transportation Applications (ADB50), who began planning this conference as soon as the last one ended.

The idea for a national conference to discuss practical, tested, innovative, and timely planning applications came in the mid-1980s. Transportation planners were dealing with a broader range of issues than ever before. State and local planning agencies had to be resourceful in adapting existing planning procedures to fit individual needs. Often planning methods or data were not available when needed to adequately support planning and project decisions. Compromises between accuracy, practicality, simplifying assumptions, quicker responses, even quicker responses, and judgment often resulted in innovative analysis methods and applications.

Transportation planners in the mid-1990s, mid-2000s, and mid-2010s would probably make the same assertions as their predecessors – that they were dealing with a broader range of transportation issues than ever before. Beginning with the first Planning Applications Conference in April 1987, transportation planners, engineers, and researchers from the public sector, private sector, and academia have gathered every two years to showcase practice-ready planning applications at every level of the transportation planning process.

The Planning Applications Conference celebrated its 30th anniversary in 2017 in Raleigh, North Carolina. That anniversary provided conference organizers and attendees a chance to reflect on the past, present, and future of the conference. To get a sense of the issues of the day back in 1987, one can look to “A Compendium of Papers Based on Conference Held in Orlando, Florida in April 1987,” which was compiled, printed, and distributed by Edward Weiner (US DOT) in December 1987. In the summary, Mr. Weiner identified several important issues that surfaced during the first conference:

1. Urban transportation planning is no longer solely long-term and regional scale.
2. The microcomputer revolution has arrived, with the economics of planning changing.
3. Tighter budgets and increasing demands.
4. Quality of demographic and economic forecast.
5. A clear need to develop integrated analysis tools.
6. Problems exist in presenting the results of the analysis to public officials.
7. A new era has begun in which quick response and default applications have become commonplace, too often with little understanding of the appropriateness of the application.

Since then, computing technology has advanced a smidge beyond the “microcomputer revolution,” but otherwise, these basic issues are still relevant to transportation planners, although reframed slightly to capture the needs of our ever-changing world.

HISTORY OF THE PLANNING APPLICATIONS CONFERENCE
The idea of conducting a national conference on transportation issues was discussed with Frederick (Fred) Ducca, Federal Highway Administration (FHWA), and the Office of Planning of the Florida Department of Transportation (FDOT). TRB Annual Meeting participation by public agencies (cities, state DOTs, MPOs and others) had been dropping off in the 1980s. The feeling was that TRB submission requirements were too onerous for public sector practitioners to submit papers. There was a general feeling during the early discussions that there was a lot of good work going on in the public sector but it was not making its way into general distribution. This was a primary motive for considering a separate conference. However, the idea was initially dismissed due to a lack of interest and funds at the federal level. Prior to the annual Transportation Research Board (TRB) meeting in January 1985, Mr. Ducca learned that Edward Weiner, U.S. Department of Transportation (USDOT), had located $50,000 that was dedicated to advancing planning activities throughout the country. The USDOT funds required that a minority serving institution be the funding recipient and Florida A&M University (FAMU), located in Tallahassee, was selected.

Steering Committee
At the 1985 TRB annual meeting, staff from several different agencies met and agreed to help setup a steering committee. Gordon Shunk (North Central Texas Council of Governments) and George (Terry) Lathrop (City of Charlotte) were tasked with inviting transportation engineers and planners to join the steering committee. A conference steering committee was formed in April 1985. George Lathrop was elected as the first chairman. The remaining members of the committee represented cities, councils of governments, state departments of transportation, universities, TRB, and the federal government. A list of the initial steering committee members is shown below:

Chairman:
George Lathrop, City of Charlotte Department of Transportation

Members:
William F. Brown, U.S. Department of Transportation
Frederick Ducca, Federal Highway Administration
Jerry Faris, Florida Department of Transportation
Christopher Fleet, Federal Highway Administration
David Hartgen, New York State Department of Transportation
Frank Koppelman, Department of Civil Engineering, Northwestern University

Standing Committee on Transportation Planning Applications (ADB50)
Richard Marshment, Middle Rio Grande Council of Governments
A. Joseph Ossi, Urban Mass Transportation Administration
Norman Paulhus, U.S. Department of Transportation
George Reed, Florida Department of Transportation
James Scott, Transportation Research Board
Addis Taylor, Florida A&M University
Gordon Shunk, North Central Texas Council of Governments
Montie Wade, Texas State Department of Highways and Public Transportation
W. Tim Watterson, Puget Sound Council of Governments
Edward Weiner, U.S. Department of Transportation
George Wickstrom, Metropolitan Washington Council of Governments

The First Planning Applications Conference
The Conference Steering Committee began work on the structure, timeframe, guidelines, and criteria for the first Transportation Planning Applications Conference. Listed below are a few of the ideas developed by the Committee to help frame the Conference program.

1. Practical-tested innovative, timely, planning applications would be presented.
2. Final presentations would be selected from a “call for papers”
3. Papers would be required from all presenters.
4. Presenters would not receive pay or free registration from committee.
5. Conference would begin on Sunday and end on Thursday noon.
6. Registration and vendor fees would cover cost of conference.
7. Conference would not require federal TRB or USDOT funding.
8. A compendium of papers would be prepared after the conference.

The Committee decided the conference should be held in Florida with FDOT acting as the host. A contract was setup and signed between FAMU and USDOT for the initial funding and staff support. FDOT proposed Orlando as a central location with good ground and air transportation. Several hotels with space for 350 persons and three breakout rooms were evaluated. The new Peabody Hotel Orlando was selected and approved by the committee for the first National Conference on Transportation Planning Applications, which was scheduled for April 20-24, 1987.

The steering committee received over 145 possible presentations from the “call for papers”. A total of 69 presentations were selected and grouped into the following topics:

1. Regional Demographic Forecasting
2. Land Use Forecasting
3. Linking Planning with Project Development
4. Managing the Technical Process
5. Regional Planning (Data Collection)
6. Regional Planning (Forecasting)
7. Regional Planning (Implementation and Evaluation)
8. Corridor Analysis (Data Analysis)
Prior to the conference, a few members of the Steering Committee had reservations about the turnout and possible outcome of this first conference in Florida. Concerns such as: Will participants attend the sessions? Will registrations cover the costs of the conference? Will the participants attend all four and half days of the conference? In light of these concerns, TRB had enough misgivings to ask that reference to TRB be removed from all conference materials.

On Sunday, April 20, 1987 the first National Conference on Transportation Planning Applications was called to order with over 275 prepaid registrations, including several international participants. Also, a large number of the attendees were from public agencies, which further supported the steering committee’s initial thoughts of the gap the conference could fill. After a successful conference, TRB called the following week and indicated they would like to assist with any future conference.

### Conference Sites

2019 will mark the 32th year for the Transportation Planning Applications Conference. The conference has been scheduled on a two-year cycle and held at the following locations:

<table>
<thead>
<tr>
<th>Location</th>
<th>City, State</th>
<th>Date</th>
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<tbody>
<tr>
<td>Peabody Hotel</td>
<td>Orlando, FL</td>
<td>April 1987</td>
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<tr>
<td>Grosvenor Resort</td>
<td>Orlando, FL</td>
<td>April 1989</td>
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<tr>
<td>Hyatt</td>
<td>Dallas, TX</td>
<td>April 1991</td>
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<tr>
<td>Marriott Hotel</td>
<td>Daytona Beach, FL</td>
<td>April 1993</td>
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<td>Sheraton</td>
<td>Seattle, WA</td>
<td>April 1995</td>
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<td>Hyatt</td>
<td>Dearborn, MI</td>
<td>May 1997</td>
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<td>Park Plaza</td>
<td>Boston, MA</td>
<td>March 1999</td>
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<td>Omni Bayfront</td>
<td>Corpus Christi, TX</td>
<td>April 2001</td>
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<td>Radisson</td>
<td>Baton Rouge, LA</td>
<td>April 2003</td>
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<td>DoubleTree</td>
<td>Portland, OR</td>
<td>April 2005</td>
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<td>Hilton</td>
<td>Daytona Beach, FL</td>
<td>May 2007</td>
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<td>Hyatt</td>
<td>Houston, TX</td>
<td>May 2009</td>
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<td>Peppermill Resort</td>
<td>Reno, NV</td>
<td>May 2011</td>
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<td>Hyatt Regency</td>
<td>Columbus, OH</td>
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<td>Sheraton</td>
<td>Atlantic City, NJ</td>
<td>May 2015</td>
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<td>Sheraton Raleigh</td>
<td>Raleigh, NC</td>
<td>May 2017</td>
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<tr>
<td>Hilton Portland Downtown</td>
<td>Portland, OR</td>
<td>June 2019</td>
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FORMATION OF THE STANDING COMMITTEE

After the success of the first conference, the Conference Steering Committee was invited to become a TRB Task Force on Transportation Planning Applications on October 23, 1987 (A1C52). The Task Force Committee continued through the 2nd conference, which was held at Disney in Orlando, Florida in May 1989. After another successful conference, the existing Task Force was disbanded on January 1, 1991 and became a full TRB Standing Committee on February 1, 1991 (A1C07). The committee is currently referenced as the TRB Standing Committee on Transportation Planning Applications (ADB50) under TRB Planning and Forecasting.

Membership of any TRB standing committee is limited to 25 main members, with additional slots reserved for up to 5 international members, 2 state DOT members and 4 young members. Membership on a TRB standing committee is a great honor. It means the person is recognized as an expert in his or her field and is willing to work to help communicate current and practical applications to other planners and engineers throughout the country. Persons on the committees work without compensation. Tens of thousands of hours have been donated to the Committee over the years. Each committee is required to have an appointed member that serves as the committee chair. Under the rules of TRB, a standing committee chair is allowed two three-year terms. The ADB50 chairpersons from 1985 to present are noted below:

George Lathrop, Conference Steering Committee Chair, April 1985 to October 1987
Gordon Shunk, TRB Task Force Chair, October 1987 to January 1991
Gordon Shunk, TRB Standing Committee Chair, February 1991 to February 1997
Richard Marshment, TRB Standing Committee Chair, February 1997 to February 2003
Jerry Faris, TRB Standing Committee Chair, February 2003 to April 2009
Barbara Arens, TRB Standing Committee Chair, April 2009 to April 2015
Julie Dunbar, TRB Standing Committee Chair, April 2015 to April 2021

Members who had a long history of service on the committee are recognized by TRB and their peers as emeritus members. The following individuals are currently or have been recognized as Emeritus Members of the ADB50 Committee: Gordon Shunk, Richard Marshment, Jerry Faris, Montie Wade and Barbara Arens. Currently, Mr. Wade and Dr. Marshment are the only charter steering committee members still active and serving on ADB50.

The Committee meets and conducts a committee and conference planning subcommittee meeting during the TRB Annual Meeting. At the Annual Meeting, the committee generally sponsors two podium sessions, one poster session and a workshop. In addition, ADB50 often co-sponsors other workshops and sessions with other TRB committees, depending on the topic.

In addition to the meetings held during the TRB Annual Meeting, the Committee also meets in person at the conference site during the fall prior to a Planning Applications Conference. Members gather to discuss the submitted abstracts, draft the technical program and review the meeting space. The abstract review process has changed significantly over the years and is now conducted completely online. However, the strategic nature of the cross cutting conference topics makes the in person planning meeting still the most efficient way to draft the technical program.
The Committee’s scope, as stated in its current Triennial Strategic Plan (TSP), is as follows:

*This committee is concerned with the application of new or improved transportation planning methods and techniques and their practical application at the regional, corridor, and site level of analysis. The Committee promotes networking and the exchange of ideas among researchers, practitioners, and experts in other relevant fields of study and promotes research that has tangible benefit for real-world applications.*

ADB50 is part of the ADB00 Travel Analysis Methods Section and is focused on providing opportunities to showcase practice-ready planning applications at every level of the transportation planning process. The committee was honored with the Blue Ribbon Committee award at the 2016 TRB Annual Meeting for “Contributing to TRB and the Transportation Community for Planning and Organizing the Transportation Planning Applications Conference.”

THE EVOLUTION OF THE PLANNING APPLICATIONS CONFERENCE
Seventeen conferences later, ADB50 remains committed to not only developing a technical program that is relevant to the transportation planning issues of the day, but also providing a format for presentations to keep the conference fresh and relevant. The Call for Abstracts is updated for each conference to add topics of current relevance and preference is given to abstract submittals that offer practical and innovative solutions to contemporary planning challenges. Traditional podium presentations still have a place at the conference. In addition, lightning talks, hands-on tutorials, workshops, panel discussions, quick talk sessions with posters and even a debate have been introduced to the technical program. A conference app for mobile devices was introduced at the 2015 conference and has continued to be improved. The 16th Conference mobile app allowed for real time polling during sessions and attendee engagement at an unprecedented level.

Conference schedules have gone through several iterations over the years, with a Sunday to Thursday format being the most prevalent. Sunday is routinely the day for workshops and tutorials, with the podium, lightning, discussion, panel and quick talk sessions falling Monday through Wednesday into three general conference tracks (data, planning and modeling). Thursdays have been reserved for a variety of special programming and plenary sessions over the years. In order to minimize increasing registration costs, the 2019 conference in Portland will end on Wednesday afternoon. The Wednesday format will change slightly to include a variety of discussion, plenary, workshop and tutorial sessions, with hopes of encouraging attendees to stay for the full duration of the conference.

Conference organizers recognize the value of informal networking to conference attendees. The Planning Applications Conference is one of the most accessible TRB environments for new practitioners to learn, share, and make connections with the community. To ensure that new, and returning participants feel welcome and benefit from the personal connections that can originate at conferences, organizers now kick off each conference with a session of short, structured exchanges (i.e. speed networking.) The
speed networking opening session ensures that attendees know at least five other people heading into the conference and is enjoyed by both new and returning attendees.

The technology that supports conference planning and communications continues to improve the lives of the merry band of volunteer conference organizers. Early committee members have regaled the current cohort with tales of printing out each abstract and mailing packets between committee members for review. Those days have been replaced by online abstract submissions and review through the committee website (www.trbappcon.org).

PLANNING ISSUES OF TODAY
As stated in the ADB50 Triennial Strategic Plan, these are some of the issues that are influencing the committee’s programs and activities today and will likely continue for the next several years. While continuing the focus on applications and providing the practitioner greater opportunity to share and consider new techniques, other critical topic areas that have come to the forefront for ADB50 are:

- Big data sources and data science methods;
- Connected and automated vehicles;
- Changing demographics and increased urbanization.

Incorporating new data science methods and sources are critical to improving the modeling tools planners/practitioners are using to inform decision makers of future plan outcomes. Connected and automated vehicles (CAV) are clearly on their way into mainstream transportation, but mid- and long-range planning processes are challenged by the identification of impacts a more robust CAV fleet might provide. Trip/tour making characteristics are changing, with a greater demand for flexibility in modeling tools and stronger data for assessing travel behaviors. Other newer forms of mobility are also gaining popularity (e.g., dockless bikes, e-scooters, and ridesourced shared rides), whether used for trip making between activities or for accessing transit. Our ability as transportation planners to be able to accurately predict the myriad combinations of modes that transportation customers are now using and likely to use in the future, relies on our ability to access data that exhibits these patterns and trends. Business as usual is no longer appropriate when looking to the future. Modeling tools based on historic trends are likely missing the real and rapid change coming with the presence of millennials in the work place. Peaking characteristics are changing and urbanization is creating unanticipated transportation constraints. Car ownership, active transportation, virtual work spaces, and transportation network companies all create a changing demographic combined with a changing work dynamic that is challenging to measure. Critical to supporting these issues from the committee’s perspective is providing the ability for agencies and practitioners to learn new methods for evaluating the impact they represent. The discussion of real world applications and strategies for using new data sources, introducing connected and automated vehicles, and evaluating transportation impacts of changing demographics are central to the committee scope and supported by topic areas for the Planning Applications Conference series.
LOOKING TO THE FUTURE
The ongoing success of the Planning Applications Conference depends on transportation planners continuing to view the conference as the ‘place-to-be’ to learn about the latest transportation planning applications and methods, share successes and failures, promote knowledge transfer and transition research into practice. As technology has advanced, the pace of incorporating research into practice has accelerated, a trend that will likely continue and supports the need for venues like the Conference that foster information exchange. Conference organizers seriously consider the feedback from the conference attendee survey and make adjustments based on that feedback to continue to improve the quality of each conference.

Diversity and inclusivity continue to be of critical concern to the Committee, from the perspective of committee membership as well as conference participation. The conference provides abundant opportunities for participation by individuals at all stages of their professional career. Feedback from past conferences indicated a need for conference organizers to enhance these opportunities by providing more in depth moderator and presenter training prior to the conference. It is expected this training will help to ensure all participants are equipped with the tools needed to provide an open and nurturing environment for all attendees. ADB50 continues to be on the lookout for volunteers who represent diverse backgrounds and perspectives to ensure the work of the committee and the outcomes of the conference are reflective of today’s society. The upcoming conference will benefit from a specific focus on gender representation. In addition, the committee hopes to further enhance participation with mentoring programs for young or first time attendees such as the speed networking event described previously.

The committee notes that the economy continues to play a significant role in the success of the biennial Transportation Planning Applications conference. Public agencies are finding it necessary to limit the travel and conference participation budgets within their organizations. ADB50 has attempted to offset this with the provision of honorariums available to qualified public sector candidates in order to provide assistance with travel and registration expenses. The ongoing success of this conference can be linked to the networking opportunities provided across all sectors of the transportation planning field (public agency, private sector, government and education). Therefore, ADB50 will continue to seek partners (patrons, exhibitors, sponsors, contributors) to provide this financial assistance in hopes of maintaining this broad base of participation into the future.

Just like the transportation planners in the mid-1980s who envisioned the initial need for a national conference on transportation planning applications, transportation planners celebrating TRB’s centennial anniversary are dealing with an even broader range of issues than ever before. And likely so will transportation planners in the coming decades. The dedicated volunteers of ADB50 and the Planning Applications Conference remain committed to serving the evolving needs of the transportation planning community by providing a platform for sharing and networking. The knowledge transfer opportunities that occur during the conference serve as an important springboard to critical thinking for practitioners and researchers.
The authors would like to thank the following people for their contributions to this paper: Jerry Faris, Fred Ducca, Martin Milkovits, Jill Hough, Jonathan Ehrlich, Scott Smith and the late Ed Weiner.

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