

Standing Committee on Environmental Analysis in Transportation (ADC10)
Martin Palmer, Chair

Centennial Paper

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OUR PAST

Our committee is the Standing Committee on Environment Analysis in Transportation (ADC10). Originally known as the Standing Committee on Transportation Environmental Planning & Review (A1F02A), it came into existence on February 1, 1974—reaching back 45 years. This is nearly half of the Transportation Research Board’s own existence. A testament to the needs of our mutual professional calling. The inception of this committee coincides with the Highway Research Board broadening its role as well as its change in name to the Transportation Research Board (TRB).

Our committee neither was the first nor was it the only environmental committee that came into existence at this time. In our section alone, there was an advisory committee on highway and air quality, which convened in 1972. The advisory committee disbanded the following year. However, the committees now known as Transportation and Air Quality, Transportation Energy, and Transportation-Related Noise and Vibration began on February 1, 1974—at the same time as ours. The other four committees in our Environment and Energy section formed later. We know of only one committee that found its existence out of ours. This is the committee on Ecology and Transportation (ADC30). This committee had been a task force under ADC10. It came into its own as a standing committee in 2006.

We lack the records to explain exactly why this and the other environmentally focused committees formed at this time. However, it would be logical to assume that the occurrence of several notable ecological disasters followed by the passage of environmentally related acts, amendments and the creation of citizen-based environmental movements motivated much of the change. Events of note include: the publication of Rachel Carson’s book *Silent Spring* published in September 1962 which raised the national awareness of pesticide use; the much publically deliberated January 1969 Santa Barbara oil spill; and the 13th fire on the Cuyahoga River in June 1969, which drew the attention of Time Magazine and brought the troubling matter to national prominence. There is little doubt that these events led, at least in large part, to the passage of the National Environmental Policy Act of 1969. Clearly, the NEPA had an obvious and considerable effect on transportation plans and projects. With these, there also came a need for the TRB to turn its eyes toward this new national direction. Today, the TRB boasts 17 standing committees and 2 task forces dedicated to the numerous environmental challenges faced by various transportation modes.

Documentation of our committee's original scope is lost. Records prior to 1998 are scarce—limited mostly to documenting committee rotations and summer meeting agendas. We began storing records electronically and more abundantly in 2006. Hence, previous chairs and members stories are all we have to fill the gap in the records.

While the committee has had 10 chairs since its start, its mission (according to what we can find in the records) has remained remarkably consistent. Our predecessors and we have made only “clarifying” changes along the way. The current statement, revised in 2015 and approved in May 2016, reads as follows:

“The Standing Committee on Environmental Analysis in Transportation is concerned with the relationship between the natural and human environment as an integral part of the planning, design, construction and operation phases of all modes of surface transportation projects and programs. We are also concerned with the unique interrelationships among environmentally related disciplines, and their influence on project decisions and program outcomes. We have an interest in broad policy directions affecting the integration of environmental considerations in transportation decisions within a multidisciplinary setting. The Committee places emphasis on research needs; sharing best practices; project delivery tools; emerging and strategic issues; technology transfer; process innovation; management systems; and information sharing throughout the broad spectrum of categories linking transportation and the environment.”

OUR CONTRIBUTION

Our committee has a rich history of sharing information across boundaries to forward the practice of planning, building, and maintaining environmentally thoughtful transportation solutions. We have expended literally thousands of hours connecting practitioners with research outcomes, and transferring technologies and innovative practices to others in need. This is our strong suit. As our parent organization's middle name infers, we write and promote Research Need Statements (RNS). Finally, individual members, sparked by committee discussions, have contributed to interpretive policies at both the state and national levels.

For 38 consecutive years, our committee has hosted mid-year workshops. These conferences share leading-edge research and deliver best practices from one state or region to another. We have cohosted workshops in every corner of the country and in twenty-two different states. These cohosted events are a staple of our outreach efforts toward the transportation and resource communities. Our workshops are nearly always in association either with other TRB communities or outside environmental organizations. A full one-third of attendance at these events are from State DOTs. Nearly half of participants are from academia, resource groups and federal government agencies combined. Hence, we cover a broad spectrum of those involved in transportation.

While conducting both the summer and annual meetings, we have made a special effort to connect with other TRB committees as well as outside environmental organizations. In just the last two years, we have joined forces with 16 separate TRB committees and three environmentally focused organizations outside TRB. The TRB committees vary from the Standing Committee on Transportation and Economic Development to the Standing Committee (ADD10) on Ecology and Transportation (ADC30). The outside organizations include the Florida Association of Environmental Professionals (FAEP) with whom we met last September. In addition, we have had joint sessions with the American Association of State and Highway Officials (AASHTO) at the annual meeting for three years running. In 2017, we joined with the

International Conference on Ecology and Transportation (ICOET) to produce a mid-year event in Salt Lake City, Utah. We have shared our mid-year events with at least one other committee or institution for most of our 38 consecutive summertime gatherings.

Since our inception, we have enthusiastically engaged in developing and supporting a range of research needs related to transportation and the environment. Examples of the topics covered in research papers, journal articles, and webinars include: resources for environmental analysis and documentation, streamlining transportation decision making, planning and environmental linkages (PEL), integrated approaches for identifying potential environmental issues, post-NEPA monitoring of environmental impacts and mitigation commitments and expediting the NEPA process.

Some of the most recent paper presentations sponsored by ADC10 include:

- *Climate Change Considerations and Analysis in Environmental Documentation: A Review of FHWA Environmental Impact Statements Between 2010 and 2017* (Robbins 2018)
- *The Role of Measurement and Metrics in Balancing the NEPA Decision-making Framework-NEC FUTURE: Federal Railroad Administration's Tier 1 NEPA Assessment of the Northeast Corridor (NEC) Passenger Rail Line from Washington, DC to Boston, MA* (Gargan, Anderson, et.al. 2016)
- *Redefining "Transportation Impact": A Comparison of Emerging Methodologies* (Black 2015)
- *Switching from LOS-Based to VMT-Based Traffic Impact Analysis: What Should the Threshold of Significance Be? A Challenging Upcoming Question in California Environmental Review* (Fang 2015)
- *Life-Cycle Assessment for Transportation Decision Making* (Matute, Chester, Eisenstein, and Pincetl 2014)
- *Road Construction, Repair, and Maintenance: Review of the Impact on the Environment* (Rolle, Kobelo 2013)

Webinars expand our committee's reach beyond the physical summertime gatherings. These broadcast events can reach those who are unable to travel to either of our meetings. Here again, we stress introducing research outcomes and sharing breakthrough best practices with a touch of "do-it-yourself" flare. In the past couple of years, we have again picked up the practice highlighting the most relevant issues faced by our specialists in the larger field of transportation and the environment. Recently, our webinars focused on expediting the NEPA process and achieving success with the One Federal Decision rule.

Developing and promoting Research Needs Statements is a primary function of the committee. As with the summer meetings, coordination with other transportation and environmental research oriented organizations on this work is just as vital. If our strength is in our diversity then it is also in our inclusiveness. Other like entities increase our understanding of the full need for research and enhance our ability to find funding to move proposals forward. As an example, we have worked hard over the past year to reignite our working relationship with AASHTO regarding the development of joint Research Need Statements.

One undertaking internal to the committee yet essential to TRB success is in integrating young and diverse professionals into all facets of our business activities. Our committee has undertaken a considerable attempt to build meaningful roles for these underutilized groups. This past January, our committee received recognition from the Young Members Council (YMC) for

our achievements. The YMC named as the “*Outstanding Committee for Young Professional Involvement 2019*”.

One very tangible benefit and a common theme expressed by past committee members and friends is the ability to network with others in the same field. This provides the people associated with our committee a potentially invaluable resource to deal with challenges without the need to “reinvent the wheel”. Our committee’s activities—at both the annual meetings and the mid-year events—abound with opportunities to connect with people from all disciplines. Our various meetings and conferences include a wide range of social interactions. These dealings include direct deliberations with a wide range of environment organizations and resource agencies. As a part of our summer meetings, we include receptions and tours to promote interaction. We design many of our sessions to function as “town hall discussions” so fervent dialogue can abound. We pride ourselves on being a resource to connect people in need with people in the know.

Finally, individuals on the committee due to their own status in their respective organizations have been uniquely involved in some of the most influential movements in modern day. Some of what has appeared on government policies has its roots in committee discussions. Such is the nature with most TRB committees.

OUR FUTURE

For the foreseeable future, our committee will continue its fundamental role of analyzing the interrelationships among people and nature with the simple goal of enriching both through the lens of transportation. We foster both the needs of people and nature as a single aim. The NEPA, like many regulations of its ilk, has been an enigma. Organizations as well as generations interpret the act in ever changing ways. In concert, our committee will search to find ever-new ways to meet the challenge. To do so, we will continue our quest for diversity in both our members and our solutions. We will continue to use the strength found in our diversity to devise new methods to reach our goal. We will need to maintain careful vigil because what the future brings is far from certain.

The dawn of connected and automated vehicles calls for transportation authorities to forge a new approach in how we develop transportation plans and make modal decisions. This is uncharted ground. Presently, there is no clear way to analyze and determine either the impacts or benefits to the human and natural environment from these type of vehicle operations. The committee will need to devote much more study and attention to this matter.

The nation’s demographics are shifting. There is a slow but steady migration of people from rural areas to urban centers. This spells certainty for more urban transportation redevelopment contrary to past decades where new stretches of pavement often passed through remarkable rural landscapes. The Interstate Program was a clear example of the latter. There are also demographic changes—most notably in age and income—that will have a definite but yet unknown influence on investment strategies and mode choice. Our committee must adapt to these subtle changes. We must help elected officials and their agencies judge how best to transform this information into better public decisions.

For years, our committee has been considering the challenges of climate change. Our committee will continue efforts to help make transportation facilities resilient and their proximal environment productive. We must persevere in the battle to find sustainable alternatives as well as suitable planning, design and construction policies and procedures that achieve this goal. This goal will be elusive as climate change is an emergent science and funds to execute robust

projects that can address the harsh reality are hard to come by. Fortunately, we are not alone. Other TRB committees and task forces are considering issues albeit from a different perspective. This gives us an opportunity for collaboration.

To meet the anticipated challenges, our committee will need to reconsider our internal structure. Given these topic-specific problems, we can no longer fully rely on our current functional organizational structure to be effective. Given the grave and seemingly overwhelming nature of the problems, we must dedicate scarce committee resources and begin to focus on the larger, external issues at hand. This means that new subcommittees or perhaps even a committee task force may be needed to meet the challenge.

Some practices we must necessarily continue. We must unremittingly advance the practice of broad, diverse inclusion in our efforts and outcomes; continuously adapt and align existing processes to match the fluidity of regulatory and interpretive changes; steadfastly link field specialists with new and meaningful research outcomes; and finally, strive to instill the ethic that good transportation decisions can logically coexist with good environmental decisions. These are committee traditions that will remain.

Last but certainly not least, the Research Needs Statements that the committee issues must inevitably reflect the obligatory course of our committee as outlined. As must the summer meetings, which are vital to one of the main purposes for which we exist—the transfer of knowledge from research to practitioner and back again. Also, the development of Research Needs Statements must remain collaborative with other transportation and environmental organizations. With the future uncertain, we must continue to be diligent.

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