PLANNING AND ENVIRONMENT GROUP
Triennial Strategic Plan (TSP)
TRB Committee on Ecology and Transportation (ADC30)

Committee Chairperson: Mr. Alexander F. Levy
TSP Three-Year Period: April 15, 2017 to April 15, 2020
Date Prepared: December 8, 2016

1. Committee Future Outlook Statement

Scope: The committee stimulates research and communicates the results of recent and ongoing transportation ecology research to and throughout the transportation community. It engages in research, planning, evaluation, education and outreach associated with sound ecological principals and designs, and strives to integrate ecologically sound principles into transportation planning, decision-making, maintenance and design.

i. The committee last considered the scope in 2016 and it still accurately reflects the breadth of our committee’s interests and activities.

ii. The scope may be expanded to address the challenges ahead as we adapt our recognition and understanding of near and long term global climate change effects, shifts in transportation demand and patterns, and evolving environmental and transportation policy, particularly to address sustainability, livability, and economic vitality.

2. Committee Plan

a. As a Task Force on Ecology and Transportation, ADC30T underwent initial strategic planning in 2006 while becoming the Standing Committee on Ecology and Transportation (ADC30). We developed a mission and scope that remains timely, relevant, and adaptable and continuously make strides to forward that mission. As is noted in our annual reports, the committee evolves in the breadth and timeliness of transportation and natural resource themes as it endeavors to foster and promote research that is responsive to emerging science, practices, and policies. As a standing committee, we revisit our strategic direction at-least annually and have revisited strategic planning in 2009, 2013, and – again - in 2016, with the update and rededication of this TSP.

- ADC30 will address and track both long term and emerging issues, facilitating research and promoting results that respond to an inherently dynamic and changing environment and political landscape. In recognizing shifting paradigms in public policy, technical innovation, and communication, ADC30 will continue to:

- Explore and foster understanding about the adaptability of natural systems and the capacity for human innovation, including:
  - Incorporating adaptation and resiliency strategies for a changing climate into transportation planning/mitigation, specifically as they relate to ecological interactions and resource conservation;
○ **Habitat Connectivity**: Preserving and improving landscape connectivity for aquatic and terrestrial natural resources in an era of evolving and resolving climate change awareness and readiness.

○ **Ecological Asset Management**: Recognizing natural environments and naturally-occurring organisms as assets and evolving management science based on their adaptability to a changing climate and the sustainability of habitats induced or affected by transportation systems.

○ **Overcoming Barriers**: Alleviating challenges, from institutional obstacles and physical safety risks, while improving habitat connectivity for adaptation management and resource conservation.

○ **Wildlife vehicle collisions**: Leveraging safety and sustainability values.

○ **Roadside Vegetation**: Use and management of native species for wildlife and fiscal resource conservation, including human safety and economically-important pollinators, noxious weeds, and invasive species.

○ **Ecological decision making for recreational transportation**: Leveraging habitat connectivity objectives with non-motorized, multiuse trails to offer the public with access and recreation opportunities associated with a healthy lifestyle by connecting with a sustainably-managed natural environment.

- Advance the measurement of what matters:
  - Consideration of environmental functions, values, and features in the transportation planning process.
  - Improving understanding of the ecological effects and impacts of transportation.
  - Performance measurement of transportation systems at an ecosystem-level.
  - Developing support for existing and leveraging new ecological data tools, including geospatial data recovery, analytical, and decision making tools.

  c. ADC30 will address cross-cutting and emerging issues in active collaboration with other standing committees and task forces.

  In addition to regularly cosponsored lectern and poster sessions, ADC30 jointly plans interdisciplinary workshops each year at the Annual TRB meeting.

  - For the 2017 Annual meeting the committee is expanding on renewed and emerging interest in the use and management of transportation rights-of-way and surplus real estate in sponsoring one crosscutting session, one conference session, and cosponsoring at least two conference sessions related to vegetation management, resiliency, and the pollinator conservation.

  d. Near-term planned activities (2017-2020)

ADC30 continues to make strides in achieving and broadening the reach of its goals. The membership of ADC30 represents an active community of practitioners who individually and collectively demonstrate a commitment to partnerships and the identification of research needs, including cross-cutting issues, as is evidenced by the following recently-accomplished and planned activities for 2017 TRB Annual Meeting:
Leveraging the knowledge, skills, interests, and participation of new committee members from 2016 rotation.

Issuance and interdisciplinary promotion of a Call for Papers for the 2017 TRB Annual Meeting

Generation of semi-annual committee newsletter for internal and external publicity as well as dissemination of milestones, announcements, and perspectives on research needs, practice-ready results, case studies, and research-in-progress.

Collaborative engagement with subject-matter practice and research professionals during the committee’s mid-year meeting at the 2017 International Conference on Ecology and Transportation (ICOET) in Salt Lake City, Utah.

Revision/update of committee outreach and research needs poster for meetings and symposia.

Strengthening of committee liaisons to leverage cross-cutting issues and synergies.

Formalization and ongoing review of key research needs and statements in TRB’s Transportation Research Information Services (TRIS) Database

Lead sponsor of 2017 TRB Annual Meeting:
  - Crosscutting session on the roadside use of native vegetation;
  - Workshop on consultation, mitigation, and conservation of federally protected and imperiled bats

Sponsoring 2017 TRB Annual Meeting paper sessions featuring responses to our Call for Papers, in addition to offering a venue for unsolicited submissions responsive to the committee’s goals and interests.

Cospersonship of 2017 TRB Annual Meeting poster session featuring responses to our Call for Posters.

e. Ongoing and envisioned future activities

- Annually issue Calls for Papers for the TRB Annual Meeting
- Semi-annual publication and distribution of committee newsletter.
- Ongoing reinforcement and cultivation of inter-committee liaisons.
- Annually reevaluate and reconcile research needs with TRIS.

The Committee on Ecology and Transportation plans to continue sponsoring the biennial International Conference on Ecology and Transportation. ADC30 will continue active involvement in the TRB Annual meeting, including sponsorship of workshops and technical sessions as well as continued involvement of individual members in relevant research projects.


3. Committee History
   a. Membership characteristics
      i. There are a total of 32 members, which includes 1 committee chair, 3 young members and 3 international members. There are 13 female members (43%) and one minority member on the committee (Asian).
      ii. Membership geographic distribution:
          Eastern _17_ Central _2_ Western _9_ International _3_
      iii. Membership professional affiliation:
           State Government _9_ Federal Government _4_ Education _9_
           Private Sector _6_ Local Government _0_ nonprofit/other _3_
iv. In addition to membership, ADC30 has 164 “friends” of the committee listed on MyTRB.

v. **Liaison with other committees:**
   - Geographic Info Science & Applications (ABJ60)
   - Transportation Needs in National Parks and Public Lands (ADA40)
   - Environmental Analysis in Transportation (ADC10)
   - Archaeological and Historic Preservation in Transportation (ADC50)
   - Resource Conservation and Recovery (ADC60)
   - Low-Volume Roads (AFB30)
   - Landscape and Environmental Design (AFB40)
   - Task Force on Context Sensitive Design/Solutions (AFB50T)
   - Hydrology, Hydraulics and Water Quality (AFB60)
   - Culverts and Hydraulic Structures (AFF70)
   - Physicochemical Phenomena in Soils (AFP40)
   - [Joint] Subcommittee on Animal-Vehicle Collisions (ADC30-1/ANB20-2)
   - Subcommittee on Environmental Maintenance (AHD10(1))
   - Roadside Maintenance Operations (AHD50)
   - Environmental Issues in Transportation Law (ALO50)
   - Environmental Impacts of Aviation (AVO30)
   - Marine Environment (AWO30)

vi. **External organizations liaison activities:**
   - International Conference on Ecology and Transportation
   - The Wildlife Conservation Society – North American Program
   - Virginia Tech Transportation Institute (formerly the Virginia Transportation Research Council)
   - Montana State University: Western Transportation Institute
   - USDOT Federal Highway Administration, Office of Planning, Environment, and Real Estate (HEP)
   - AASHTO Center for Environmental Excellence
   - AASHTO Standing Committee on the Environment
   - North Carolina State University: Center for Transportation and the Environment
   - University of California at Davis: Road Ecology Center

b. **Subcommittees and Joint Subcommittees:**
   1. Communication – Jeffrey Simmons
   2. Liaison – Meghan Hedeen
   3. Steering – Vacant
   4. Research – Todd Williams
   5. Program – Julianne Schwarzer
   6. Animal Vehicle Collisions (ADC30-1/ANB20-2) - Joint Subcommittee with the Safety Data, Analysis and Evaluation Committee – co-chairs - Dr. Fraser Schilling/ Dr. Keith Knapp

c. **Papers reviewed and published:**
   1. 2014 - Papers reviewed _3_  Papers published _1_
   2. 2015 - Papers reviewed _0_  Papers published _0_
   3. 2016 - Papers reviewed _4_  Papers published _1_
d. Annual Meeting Workshops and Sessions

Reflecting just some of the breadth of cross-cutting and emerging issues, the following is a listing of co-sponsored workshops, as well as an enumeration of sponsored paper/conference sessions from Annual Meetings from 2014 through 2016 (for brevity, co-sponsored annual poster sessions and conference sessions lead by other committees are not enumerated):

**2014**

Conference Session: **Innovative Practices in Wildlife Crossings**  
*Committee on Ecology and Transportation; Committee on Culverts and Hydraulic Structures*

Paper Session: **Emerging Topics in Ecology and Transportation**  
*Committee on Ecology and Transportation*

Conference Session: **Programmatic Approaches to Environmental and Historic Preservation Review**  
*Committee on Ecology and Transportation; Committee on Historic and Archeological Preservation in Transportation; Committee on Environmental Analysis in Transportation; Committee on Geographic Information Science and Applications*

**2015**

Workshop: **Geospatial Tools and Applications to Optimize Multidiscipline and Multi-Jurisdictional Decision Making**  
*Sponsors: Committee on Ecology and Transportation; Committee on Geographic Information Science and Applications; Committee on Historic and Archeological Preservation in Transportation; Committee on Environmental Justice in Transportation; Committee on Environmental Analysis in Transportation*

Crosscutting Session: **Emerging Environmental Issues from Increases in Arctic Marine Transport**  
*Cosponsors: Committee on Ecology and Transportation; Committee on Marine Environment; Committee on Native American Transportation Issues*

**2016**

Workshop: **Pollinators on the Verge: Policies, Practices, and Implications for Conservation in Roadside Habitats**  
*Co-sponsors: Subcommittee on Alternative Use of Transportation Right-of-Way (ADC60-2), Committee on Roadside Maintenance Operations, Committee on Landscape and Environmental Design*

Paper Session: **Hot Topics and Emerging Themes in Ecology and Transportation**

Conference Session: **Animal-Vehicle Collisions: Understanding and Reducing Risk for Driver Safety and Sustainability**  
*Co-sponsors: Joint subcommittee on Animal Vehicle Conflict (ADC30-1/ANB20-2)*
e. Annual/Mid-Year Committee Meeting Attendance

<table>
<thead>
<tr>
<th>Program Year</th>
<th>Annual Meetings</th>
<th>Midyear Meetings</th>
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</thead>
<tbody>
<tr>
<td>2014</td>
<td>38</td>
<td>6 at NETWC (+3 call-in)</td>
</tr>
<tr>
<td>2015</td>
<td>31</td>
<td>32 at ICOET</td>
</tr>
<tr>
<td>2016</td>
<td>37</td>
<td>4 (+4 call-in)</td>
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f. Communications tools: Website, Conference Calls, and Newsletter

In May 2016 ADC 30 relocated and remodeled its webpage from its former host at a university transportation center to an open-source domain at: www.ecologyandtransportation.weebly.com. The webpage includes the mission and scope of the committee, information on TRB and its annual meeting, list and contact information for the ADC30 committee members, a listserv, links and resources, and the ADC30 newsletter.

The former ADC30 Listserv was discontinued in 2016 due to the loss of a host-domain to moderate and facilitate communication among the members and friends of the TRB ADC30 Committee on Ecology and Transportation regarding committee activities and sponsored events. Loss of this venue has been offset with the emergence of the distribution lists made available via My TRB.

The Committee on Ecology and Transportation periodically uses teleconference capabilities provided by TRB, as well as the combined teleconference and desktop-presentation sharing capabilities of Skype for Business. These tools are particularly helpful to involve members unable to be present for meeting attendance.

Since the spring of 2004, the committee has published a newsletter approximately twice per year. The newsletter includes findings and summaries from recent studies, information about upcoming events and meetings, recent news, and original content from renowned research professionals in ecology and transportation. For the outstanding quality and value of the newsletter, at the 2016 TRB Annual Meeting the committee was recognized with a Blue Ribbon Committee honorable mention in the category of Communications.

4. List shared activities during the past three years:

Northeast Transportation Wildlife Conference, Burlington, Vermont
NETWC (www.netwc.org) is a biennial opportunity to learn from and network with experts from all disciplines related to wildlife and transportation. The conference began in 2004 and focused on wildlife and transportation issues in the northeastern United States. Since that time, the range of topics and participants has grown to include participation from Canadian provinces and other U.S. states. The 2014 conference at which ADC30 held its mid-year business meeting focused on planning adaptability and resilience into transportation infrastructure for the mutual sustainability of natural systems and constructed assets. The 2016 NETWC followed suit with Mile Markers of Road Ecology: Paved Ways and New Paths that focused on planning climate readiness for terrestrial and aquatic ecosystems, leveraging emerging technologies and tools, and respecting the big picture at the project-level.
**2015 International Conference on Ecology and Transportation, Raleigh, NC**

With an attendance of over 500 people, ICOET ([www.icoet.net](http://www.icoet.net)) is one of the very best information exchanges for practice-oriented research and case studies from all 50 United States and over 20 other countries. The Committee on Ecology and Transportation is closely aligned with ICOET and is well-represented in the Steering Committee for the biennial symposium. In September 2014, the Committee on Ecology and Transportation held its summer meeting at ICOET in Raleigh, North Carolina. Several Committee on Ecology and Transportation members presented at ICOET, as well as participated on conference committees, abstract reviews, and moderated sessions. Highlights from the 2014 ICOET were brought to the 2015 TRB Annual Meeting in committee meetings and sponsored/cosponsored sessions.

**2016 TRB Joint Summer Meeting, June 24-27, Salt Lake City, Utah**

Led by the Committee on Archaeological and Historic Preservation in Transportation (ADC50) and co-sponsored by the Committee on Environmental Analysis in Transportation (ADC10) and the Committee on Ecology and Transportation (ADC30), the midyear workshop had a strong focus on innovative approaches to assessing and mitigating transportation effects on cultural resources, but with a particular nexus to environmental analysis, stewardship, and natural resources. A breakout session focused on identifying and articulating emerging research needs, as well as populating the 2017 annual meeting with a workshop on the innovative use of LiDAR technologies for resource impact assessment and monitoring change for sustainability and resiliency planning. Also provided was a unique opportunity to preview the setting and hosts of the 2017 mid-year meeting that will be held along with the Committee on Environmental Analysis in Transportation at the International Conference on Ecology and Transportation.

**Infra Eco Network of Europe (Biennial conference):**

**September 16-19, 2014 Malmö, Sweden & August 30 – September 2, 2016 Lyon, France**

Representation and presentations by committee membership continues to occur at the biennial Infra Eco Network of Europe conferences. IENE is a pan-European, biennial conference on ecology and transportation provide a recurring interdisciplinary forum for the exchange of new scientific findings and practical experiences between the sectors of environment and transport in Europe.