TRB PLANNING AND ENVIRONMENT GROUP

Annual Report of Committee Activities

Each year, TRB staff fills in items below from TRB databases for committee review and editing. The committee chair submits the Annual Report to the Section Chair by March 1 of each year.

Committee Name and Number: Environmental Analysis in Transportation, ADC10

Committee Chairperson: Charles “Muggs” Stoll (mst@sandag.org)

Year: 2015

1. Current Committee Scope: This committee is concerned with issues relating to the environmental impacts of transportation projects and systems. Emphasis is placed upon planning, decision-making, and mitigation strategies, policies, and processes, as well as multidisciplinary impact considerations.

2. Committee Membership

   A. Number of members at current time.
      1. Total: 31 + 5 Emeritus
      2. Young: 4
      3. Emeritus: 5
      4. International: 2

The Committee completed its membership recommendations for the 2015 – 2018 Term. Interest in the Committee remains strong, particularly among young candidates, with the number of interested candidates exceeding Committee openings. Ten current members completed their service to the Committee. Six new members, three current Young Members and one current International Member were recommended to replace the ten rotating off, maintaining member totals at the 25 maximum. In addition, four new Young Members, the Committee maximum, and two new International Members were recommended.

3. Paper Review:

   A. Number of papers reviewed during the last year: 8
   B. Number of papers recommended for publication: 1

The Committee recognizes the importance of all transportation and environmental research and has successfully championed raising the awareness and importance of TRB poster sessions. Requests for posters were solicited with four presented during the Annual Meeting’s Environment and Energy Poster Session.
4. **Annual Meeting Sessions Sponsored** *(Lists of sessions for the last year are attached)*

   A. Number of paper or conference sessions at the last annual meeting: 1
   B. Number of workshop sessions at the last annual meeting: 2
   C. Number of poster sessions at the last annual meeting: 1
   D. Number of co-sponsored sessions at the last annual meeting: 5
   E. Number of published meetings at the last annual meeting: 3
   F. Number of unpublished meetings at the last annual meeting: 0

5. **Research Problem Statements**

   A. Number of problem statements submitted last year: 0

   No research problem statements were submitted, but the Committee is actively working through the Liaison and Strategic Issues subcommittees to identify critical and cross-cutting issues to identify research problem statements for further synthesis and possible research.

6. **List of Critical and Cross-Cutting Issues**

   The Research Topics Subcommittee facilitated a Research Symposium during the 2013 Mid-Year Workshop in New Brunswick, NJ. The interactive session fostered small group discussions to highlight cross-cutting environmental topics. Five emerging research issues were identified:
   1. Emissions (including climate change)
   2. Health and safety
   3. Stormwater
   4. Communication and engagement
   5. NEPA

   The Strategic Issues Subcommittee continued actively identifying critical and cross-cutting issues of importance with other TRB Planning and Environment Group Committees. Most recently, the Subcommittee has been actively discussing the “planning nexus” with the ADA10 (Statewide and Multimodal Planning) Critical Issues Subcommittee.

   The Liaison Subcommittee is re-asserting its liaison efforts with other TRB Committees to focus on building strategic relationships and synergy for identifying emerging and cross-cutting issues.

7. **Other Activities Sponsored During the Last Year:**

   A 2014 Mid-Year Workshop “Transportation Innovation – Planning Inspiration” was held at the Music City Center in Nashville, Tennessee, Aug 26-29, 2014. The workshop was co-hosted by the Tennessee Department of Transportation (TDOT), Nashville Area MPO and the Tennessee Chapter of the American Planning Association (TAPA). This was the Committee’s first partnering with the APA. AICP CM credits were available, which greatly increased planner participation. This was one of the more successful workshops held, with more than 180 practitioners participating in 29 workshop sessions.
8. Appendix – Annual Meeting Sessions:

ADC10 - Environmental Analysis in Transportation

Paper or Conference Session (S)s

264 (CGS15-031)

California Environmental Innovations: New Ways of Assessing Transportation Environmental Impacts and Mitigation
Kenneth J. Hess, Parsons Transportation Group Inc., presiding
Sponsored by Committee on Environmental Analysis in Transportation

Redefining Transportation Impact: Comparison of Emerging Methodologies (15-2435)
Timothy Black, University of California, Los Angeles

Switching from LOS-Based to VMT-Based Traffic Impact Analysis: What Should the Threshold of Significance Be? (15-3790)
Kevin Fang, University of California, Davis

Experimentation and Innovation in Advance Mitigation: Lessons from California (15-3733)
Gian-Claudia Sciara, University of California, Davis
Jacquelyn Bjorkman, University of California, Davis
Jaimee Lederman, University of California, Los Angeles
Melanie Schlotterbeck, Conservation Clarity
James H. Thorne, University of California, Davis
Martin Wachs, University of California, Los Angeles
Stuart Kirkham, California Department of Transportation

Assessing Regional Transportation Environmental Impacts in California Using the RAMP Approach (15-1625)
James H. Thorne, University of California, Davis
Jacquelyn Bjorkman, University of California, Davis
Patrick R. Huber, University of California, Davis

606 (CGS15-032)

Learning from the Curve: Effective Strategies Used to Prevail in Recent FHWA and FTA NEPA Litigation
Fred R. Wagner, Beveridge & Diamond, P.C., presiding
Sponsored by Committee on Environmental Analysis in Transportation; Committee on Environmental Issues in Transportation Law

This session looks at National Environmental Policy Act litigation risk from the perspective of actual case studies--some wins and maybe some losses too. It builds on the “Seeing Around the Curve” session (Session 569), which focused on looking at risk prospectively. Risk will be considered retrospectively on the basis of how litigation actually played out in court. It will be shown how decisions made in the NEPA process actually helped the agency prevail in court.

Overview of Successful and Unsuccessful NEPA Litigation (P15-6405)
Fred R. Wagner, Beveridge & Diamond, P.C.

Litigation Lessons from Washington State DOT (P15-6406)
Deborah Cade, Washington State Attorney General’s Office

California Perspectives on NEPA Litigation (P15-6407)
Robert D. Thornton, Nossaman LLP
Current Issues in Environmental Analysis in Transportation

Charles "Muggs" Stoll, San Diego Association of Governments, presiding
Sponsored by Committee on Environmental Analysis in Transportation

Environmental Analysis in Transportation Committee (P15-5433)
Charles "Muggs" Stoll, San Diego Association of Governments

Interplay of Environmental and Historic Preservation Requirements in Urban Transit Planning: Case Study (15-0558)
Constantinos Symeon Papacostas, University of Hawaii

Smart Growth Emissions Outcomes and Compliance with Title VI (P15-5465)
Frank Wen, Southern California Association of Governments
Simon Choi, Southern California Association of Governments
Kimberly Martin Clark, Southern California Association of Governments

Overview of Center for Environmental Excellence by AASHTO Website: Comprehensive Resource on Environmental Issues in Transportation (P15-5466)
Amy Phillips, Bloomberg BNA
Jenny O'Connell, American Association of State Highway and Transportation Officials

Superstorm Sandy Waterway Debris Removal: Lessons Learned and Best Practices for Future Storms (P15-5467)
Andrea Burk, Dewberry
Lawrence Smith, Dewberry

Roger Martin, Los Angeles Metropolitan Transportation Authority
Irena Finkelstein, Parsons Brinckerhoff
John Gahbauer, Parsons Brinckerhoff
Rebecca Kalauskas, Parsons Brinckerhoff

Published Meeting - Committee (M)s

Environmental Analysis in Transportation Committee
Charles "Muggs" Stoll, San Diego Association of Governments, presiding
Sponsored by Committee on Environmental Analysis in Transportation

Research Topics Subcommittee, ADC10(2)
Carissa Schively Slotterback, University of Minnesota, presiding
Sponsored by Committee on Environmental Analysis in Transportation

Strategic Issues Subcommittee, ADC10(1)
Richard Record, RL Record, LLC, presiding
Sponsored by Committee on Environmental Analysis in Transportation

ADC10 Cosponsored Sessions (only editable by the primary committee sponsor)

Meeting Environmental Commitments in Design-Build Projects
Karel Cubick, MS Consultants, Inc., presiding

**Interstate 15-Interstate 215 Improvement Design-Build Project (Devore Interchange)** (P15-5975)
Brian Calvert, ICF International

**Presidio Parkway Project, South Approach to Golden Gate Bridge: Public-Private Partnership** (P15-5976)
Josh Channell, HNTB Corporation

**Making Environmental Compliance Work for Design-Build Highway Projects: California Perspective** (P15-5981)
Stephanie Blanco, Parsons Transportation Group Inc.

**Due Diligence and Contamination Management in Design-Build Projects** (P15-5983)
Cyrus F. Parker, North Carolina Department of Transportation

**Maintaining Final Environmental Impact Statement Noise Mitigation Commitments Through Design-Build Process** (P15-5978)
Kevin J. Keller, PB Americas, Inc.

**Design-Build Noise Wall Contract Terms in Virginia** (P15-5985)
Paul Kohler, Virginia Department of Transportation

**CGS15-023**

Jean-Daniel Maurice Saphores, University of California, Irvine, presiding

**Analyzing Impacts of Global Transport CO2 Emissions Using Multisectoral Tool** (P15-6400)
Erin Cooper, EMBARQ/World Resources Institute
Benoit Lefevre, EMBARQ/World Resources Institute
Julien Pestaiaux, Cornell University

**Envisioning an Emission Diet: Application of Travel Demand Mechanisms to Facilitate Policy Decision Making** (P15-6401)
Timothy F. Welch, Georgia Institute of Technology
Sabyasachee Mishra, University of Memphis

**Understanding Co-benefits of Strategies to Reduce Greenhouse Gases: Overview of FHWA and AASHTO Activities** (P15-6402)
Shari M. Schafflein, Federal Highway Administration
Michael Culp, Federal Highway Administration
Stefan M. Natzke, Federal Highway Administration
Mark Anthony Ferroni, Federal Highway Administration
Gary Jensen, Federal Highway Administration
Joyce Brenner, American Association of State Highway and Transportation Officials
Jennifer Brickett, American Association of State Highway and Transportation Officials

**Co-benefits of Carbon Mitigation in the Transportation Sector from Fine Particles, Black Carbon, Methane, and Hydrofluorocarbons** (P15-6403)
Drew K. Kodjak, International Council on Clean Transportation
Ray Minjares, International Council on Clean Transportation

**Analysis of Cost-effectiveness of Clean Trucks Program in Southern California** (P15-6404)
Jean-Daniel Maurice Saphores, University of California, Irvine
Tammie Kuo, University of California, Irvine

**CGW15-004**

**Geospatial Tools and Applications to Optimize Multidiscipline and Multi-Jurisdictional Decision Making**
Joseph A Burns, USDA Forest Service; Elizabeth B. Rushley, Lawhon & Associates, Inc., presiding
How do we make better decisions (faster and with less staff and lower budgets) for projects expected to last 50 years or more into an uncertain future? The workshop begins with a panel session of subject matter experts from three diverse disciplines exploring geospatial needs, followed by open workstations showcasing existing or emerging technologies, and poster sessions that use geospatial tools and applications. A world cafe captures ideas.

Welcome and Introduction (P15-6347)
Joseph A Burns, USDA Forest Service
Elizabeth B. Rushley, Lawhon & Associates, Inc.

Plenary Session (P15-6342)
Stephen J. Andrle, Transportation Research Board
Leslie Honey, NatureServe
Jane Meconi, Delaware Valley Regional Planning Commission
Zhong Ren Peng, University of Florida

Tools for Evaluating Greenhouse Gas Reduction Strategies
Robert Chamberlin, Resource Systems Group, Inc., presiding

With growing interest in tools for evaluating transportation-based greenhouse gas (GHG) emissions, such emissions are becoming part of the MPO and DOT planning process at multiple levels—from corridor planning and transportation improvement plans to statewide climate action plans. In response, several software tools have been developed to meet the needs of these plans. This workshop illustrates the capacity of these tools to broaden and simplify analysis.

Introduction (P15-5861)
David Lloyd Greene, University of Tennessee, Knoxville

Climate Initiatives Program: Meeting the Bay Area’s GHG Emission Reduction Goals (P15-5862)
David Vautin, Metropolitan Transportation Commission

The Baltimore Metropolitan Council’s “How Far Can We Get?” Initiative (P15-5863)
Hejun Kang, Baltimore Metropolitan Council

Washington State GHG Modeling (P15-5864)
Natarajan Janarthanan, Washington Department of Transportation

Vermont GHG modeling (P15-5865)
Sommer Roefaro, Vermont Agency of Transportation

Maryland GHG modeling (P15-5868)
Hejun Kang, Baltimore Metropolitan Council

The Infrastructure Carbon Estimator (P15-5869)
John Davies, FHWA

Using GREET for Insights on Life-Cycle GHG Reductions (P15-5870)
Michael Q. Wang, Argonne National Laboratory

Estimating Life-Cycle Emissions from Transportation Construction Projects: New Jersey’s GASCAP Model (P15-5872)
Robert B. Noland, Rutgers University

Wrap-Up - Synthesis of Workshop (P15-5874)
Robert B. Noland, Rutgers University

Integrated Land-use, Travel Demand, Air Quality, and Exposure Modeling: the Future of Regional Transportation Planning?
Gregory Rowangould, University of New Mexico; Marianne Hatzopoulos, McGill University, Canada, presiding

Exciting advances in land-use, travel demand, and air quality modeling provide new methods to assess the air quality and health effects of regional transportation plans. Integrated systems of these models are sensitive to a wide range of contemporary land-use and transportation policies and provide spatially
resolved output but will this help us make more sustainable and health protective planning decisions?

Experts and participants will explore the potential, limitations and challenges.

**Introduction to Integrated Modeling and Workshop Goals** (P15-5928)
- Gregory Rowangould, University of New Mexico
- Marianne Hatzopoulou, McGill University, Canada

**Accommodating the multidimensional nature of integrated models: emerging methods and challenges in capturing cause-effect relationships** (P15-5929)
- Chandra R. Bhat, University of Texas, Austin

**Activity-Travel Scripts as Linking Pin Between Land Use, Transportation, Energy Consumption, Air Quality, Exposure and Health: Theoretical Considerations and Selected Empirical Evidence** (P15-5930)
- Soora Rasouli, Eindhoven University of Technology, Netherlands
- Harry J. P. Timmermans, Eindhoven University of Technology, Netherlands
- Dujuan Yang, Eindhoven University of Technology, Netherlands

**What do we need for our benefit assessments? Three levels of modeling** (P15-5931)
- Kay W. Axhausen, Swiss Federal Institute of Technology, Zurich

**Challenges in modeling health effects in land use transportation interaction models** (P15-5932)
- Dick Ettema, Utrecht University, Netherlands

**Effects of Scale and Scope in Modeling and Decision Making** (P15-5933)
- Alex Karner, Arizona State University
- Deborah Niemeier, University of California, Davis

**A New Model for Models: Thinking Differently about Forecasting and Policymaking** (P15-5934)
- Martin Wachs, University of California, Los Angeles

**Panel Discussion** (P15-5935)
- Chandra R. Bhat, University of Texas, Austin
- Harry J. P. Timmermans, Eindhoven University of Technology, Netherlands
- Dujuan Yang, Eindhoven University of Technology, Netherlands
- Kay W. Axhausen, Swiss Federal Institute of Technology, Zurich
- Dick Ettema, Utrecht University, Netherlands
- Alex Karner, Arizona State University
- Deborah Niemeier, University of California, Davis
- Martin Wachs, University of California, Los Angeles

**Seeing Around the Curve: Anticipating and Managing Legal Risk in the National Environmental Policy Act Process**

Edward V. A. Kussy, Nossaman LLP, presiding

The NEPA risk management session focuses on ways to evaluate and mitigate legal risk during the NEPA process, especially early in the process. Panel members will discuss an early warning system that project managers can use to identify projects with elevated levels of legal risk, as well as strategies for mitigating risk. Litigation examples will not be given.

**Panel Discussion** (P15-5480)
- William G. Malley, Perkins Cole LLP
- Timothy M. Hill, Ohio Department of Transportation
- James J. Bednar, MS Consultants, Inc.