



The 2009 International Conference on Ecology & Transportation Adapting to Change

September 13-17, 2009 • Duluth Entertainment Convention Center • Duluth, Minnesota



Final Conference Program Agenda

Updated August 24, 2009

NOTE TO PARTICIPANTS: This is the final agenda as published in the conference program booklet. Any changes made after the above date will be announced at conference and / or included as an addendum in your registration packets. We look forward to seeing you in Duluth!

SPECIAL INTEREST SESSIONS: Technical sessions which feature topics of special interest are noted by the following symbols:



Landscape
Architecture



Birds



Herpetofauna



Engineering/
Facility Design



Policy and
Process

TIME	SUNDAY, SEPTEMBER 13, 2009
3:00 PM – 7:00 PM	Conference Registration and Check-in open Speaker Ready Room open (Board Room)
5:00 PM – 7:00 PM	ICOET Steering Committee Business Meeting (by invitation) (St. Louis River Room)
7:00 PM – 8:15 PM	Division Street Documentary Film Screening (Lake Superior Ballroom L) <i>Moderator: Trisha White, Habitat & Highways Campaign Director, Defenders of Wildlife</i>

TIME	MONDAY, SEPTEMBER 14, 2009
7:00 AM – 5:30 PM	Conference Registration and Check-in open Speaker Ready Room open (Board Room)
8:30 AM – 9:30 AM	Conference Welcome and Opening Remarks (Lake Superior Ballroom J) <ul style="list-style-type: none"> ▪ Paul Wagner, Washington State DOT, ICOET 2009 Conference Chair ▪ James Martin, PE, Associate Director, Center for Transportation and the Environment ▪ Thomas Sorel, Commissioner, Minnesota Department of Transportation ▪ Don Ness, Mayor of Duluth
9:30 AM – 10:30 AM	Plenary Session 110: US / International Policy Updates (Lake Superior Ballroom J) <i>Moderator: Thomas Sorel, Commissioner, Minnesota DOT</i> <ul style="list-style-type: none"> ▪ Carol Adkins, Acting Director, Office of Project Development and Environmental Review, FHWA, Washington, DC ▪ Lars Nilsson, Environmental Director, National Road Administration, Sweden ▪ Thomas Duffus, Upper Midwest Director, The Conservation Fund, Duluth, MN
10:30 AM – 11:00 AM	Break in Sponsors Hall (Lake Superior Ballroom O) Edmund Fitzgerald Exhibit Hall open for Poster Set-up until 5:30 PM



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TIME	MONDAY, SEPTEMBER 14, 2009
11:00 AM – 12:30 PM	<p>Plenary Session 120: Moving Toward Sustainability – Case Studies in Integrating Land Use, Conservation, Transportation, and Community Planning (Lake Superior Ballroom J)</p> <p><i>Moderator: Debra Nelson, Water and Ecosystems Section Manager, New York State DOT</i></p> <ul style="list-style-type: none"> ▪ Integrating Conservation and Long-Range Transportation Planning Using a Strategic Assessment Framework (<i>Craig Casper, Pikes Peak Area COG, Colorado Springs, CO, USA</i>) ▪ Looking to the Future with Retrofit Options from Lessons Learned (<i>Bruce Eilerts, Arizona DOT Office of Environmental Services, Phoenix, AZ, USA</i>) ▪ Long Point World Biosphere Reserve Causeway Improvement Plan, Port Rowan, Ontario, Canada: Benefits for Wildlife Movement, Species at Risk, Traffic, and Pedestrian Safety (<i>Geoffrey Gartshore, Ecoplans Limited, Ontario, Canada</i>)
12:30 PM – 2:00 PM	<p>FHWA Environmental Excellence Awards Luncheon (Lake Superior Ballroom K)</p> <p>Thanks to our official sponsor Federal Highway Administration!</p>
2:00 PM – 3:30 PM	<p>CONCURRENT SESSIONS</p> <p>Session 131: Climate Change – Understanding the Impacts and Developing Mitigation Strategies   (Lake Superior Ballroom J)</p> <p><i>Moderator: Shari Schaftlein, Office of Project Development and Environmental Review, FHWA, Washington, DC</i></p> <ul style="list-style-type: none"> ▪ How will Climate Change affect the Design and Management of the Highways Agency Soft Estate? (<i>Lucia Collinwood, Parsons Brinckerhoff, Cardiff, Wales</i>) ▪ The FHWA Carbon Sequestration Pilot Program: Economics, Environment and Policy (<i>Stephen Earsom, FHWA, Washington DC, USA</i>) ▪ Potential Impacts of Climate Change on Urban Flooding: Implications for Transportation Infrastructure and Travel Disruption (<i>Heejun Chang, Portland State University, Portland, OR, USA</i>) ▪ Washington State Department of Transportation Interim Approach to Project-Level Greenhouse Gas and Climate Change Evaluations For Transportation Projects (<i>Tim Sexton, Washington State DOT, Seattle, WA, USA</i>) <p>Session 132: Citizen Science – Effective Strategies and Stakeholder Involvement (Lake Superior Ballroom L) </p> <p><i>Moderator: Susan Hagood, Wildlife Issues Specialist, Humane Society of the United States, Washington, DC</i></p> <ul style="list-style-type: none"> ▪ Road Watch in Pass: Web-based Citizen Involvement in Wildlife Data Collection (<i>Tracy Lee and Danah Duke, Miistakis Institute for the Rockies, Alberta, Canada</i>) ▪ Wildlife Tunnels Under a Busy, Suburban Boston Roadway (<i>Lydia Rogers, Wildlife Passages Task Force, Concord, MA, USA</i>) ▪ Motorists as Citizen Scientists: The Benefits of a Wildlife Reporting Website (<i>Angela Kociolek, Western Transportation Institute at Montana State University, Bozeman, MT, USA</i>) ▪ Can Citizen Science Represent Wildlife Activity Along Highways? Validating a Monitoring Program (<i>Kylie Paul, University of Montana, Missoula, MT, USA</i>)
3:30 PM – 4:00 PM	<p>Break in Sponsors Hall (Lake Superior Ballroom O)</p> <p>Edmund Fitzgerald Exhibit Hall open for Poster Set-up until 5:30 PM</p>








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TIME	MONDAY, SEPTEMBER 14, 2009
<p>4:00 PM – 5:30 PM</p>	<p>CONCURRENT SESSIONS</p> <p>Session 141: Adapting Agency Relationships in a Changing Regulatory Environment  (Lake Superior Ballroom J) <i>Moderator: Derrell Turner, Administrator, FHWA Minnesota Division</i></p> <ul style="list-style-type: none"> ▪ Interagency Partnering for the Development of Stream Crossing Standards in New York State (<i>Brandon Greco and Debra Nelson, New York State DOT, Albany, NY, USA</i>) ▪ Endangered Species Act Section 7 Consultation and the US Fish And Wildlife Service's Information, Planning, and Consultation (IPaC) System (<i>Michael Horton, US Fish and Wildlife Service, Arlington, VA, USA</i>) ▪ Intercounty Connector (ICC): Environmental Compliance Management Using Integrated Technologies to Provide Context Sensitive Solutions (<i>Holly Shipley, KCI Technologies, Inc., Sparks, MD, USA</i>) <p>Session 142: Technical Tools for Integrating Ecological Considerations in Planning and Construction   (French River Room) <i>Moderator: Cameron Bump, Transportation Liaison, Wisconsin Department of Natural Resources</i></p> <ul style="list-style-type: none"> ▪ Traffic Volume as a Primary Road Characteristic Impacting Wildlife: A Model for Land Use and Transportation Planning (<i>Barbara Charry, Maine Audubon, Falmouth, ME, USA</i>) ▪ Integrating Environmental Concerns with the Planning and Construction of the South Extension of Interstate 355 into Will County, Illinois (<i>Angela LaPorte and Brian Smith, AECOM, Chicago, IL, USA</i>) ▪ Ecological Effects of Road Construction on Regional Ecosystem (<i>Shyh-Chyang Lin, National Kinmen Institute of Technology, Kinmen, Taiwan</i>) ▪ Incorporating Road-Mortality Hotspot Modeling and Connectivity Analyses into Road Mitigation Planning in Ontario, Canada (<i>Kari Gunson, Ontario Road Ecology Group, Ontario, Canada</i>) <p>Session 143: Advance Mitigation and Mitigation Banking Programs (Lake Superior Ballroom L)   <i>Moderator: Sarma Straumanis, Wetland Program Coordinator, Minnesota DOT</i></p> <ul style="list-style-type: none"> ▪ Use of Habitat Credit Trading as a Mitigation Tool for Transportation Projects: A FHWA Pilot Project in Arkansas (<i>Andrew Peck, Department of Environmental Sciences, Arkansas State University, AR, USA</i>) ▪ Regional Advance Mitigation Planning: A Pilot Study Integrating Multi-agency Mitigation Needs and Actions Within a Comprehensive Ecological Framework (<i>Patrick Huber, University of California, Davis, CA, USA</i>) ▪ Status of Mitigation Banking for Transportation in the Upper Midwest (<i>Thomas Mings, US Army Corps of Engineers, St. Paul, MN, USA</i>)
<p>5:30 PM</p>	<p>Monday Sessions Adjourn Edmund Fitzgerald Exhibit Hall closes</p> <p>US Fish and Wildlife Service Transportation Biologists Peer Exchange Meeting (by invitation) (St. Louis River Room)</p>
<p>6:00 PM – 8:00 PM</p>	<p>Welcome Reception and Cash Bar at Great Lakes Aquarium Thanks to our Silver co-sponsor ARCADIS!</p>









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TIME	TUESDAY, SEPTEMBER 15, 2009
7:30 AM – 5:30 PM	Conference Registration and Check-in open Speaker Ready Room open (Board Room) Edmund Fitzgerald Exhibit Hall open for Poster Set-up until 3:30 PM
8:30 AM – 10:00 AM	<p>CONCURRENT SESSIONS</p> <p>Session 211: Integrating Ecology and Transportation Planning at the Landscape Scale    (Lake Superior Ballroom J) <i>Moderator: Mary Gray, Environmental Protection Specialist, FHWA, Olympia, WA</i></p> <ul style="list-style-type: none"> ▪ California Essential Habitat Connectivity Planning (<i>Amy Pettler, Caltrans, Sacramento, CA, USA</i>) ▪ Establishing the Legacy Nature Preserve through Collaborative Planning and Adaptive Management (<i>Michael Perkins, HDR, Inc., Salt Lake City, UT, USA</i>) ▪ Nebraska Department of Road's Plan for the Roadside Environment (<i>Arthur Thompson, Nebraska Department of Roads, Lincoln, NE, USA</i>) ▪ Similar Impacts, Similar Solutions? The Effects of Transport Infrastructure on Outdoor Recreation and Wildlife (<i>Jan Olof Helldin, Swedish Biodiversity Centre, SLU, Uppsala, Sweden</i>) <p>Session 212: Ecological Considerations for Planning and Designing Bridges (French River Room)  <i>Moderator: Peter Leete, Hydrologist, Minnesota Department of Natural Resources</i></p> <ul style="list-style-type: none"> ▪ Road Infrastructure and Stream Habitat Connectivity: Research Tools to Aid Management and Conservation Plans in a Changing Environment (<i>Keith Nislow, US Forest Service Northern Research Station, Amherst, MA, USA</i>) ▪ MassHighway Guidance Handbook: Design of Bridges and Culverts for Wildlife Passage (<i>David Nyman, Comprehensive Environmental Inc., Milford, MA, USA</i>) ▪ Do Bridges Affect Migrating Juvenile Salmon: Tracking Juvenile Salmon and Predator Fish Movements and Habitat Use Near the SR 520 Bridge in Lake Washington (<i>Philip Bloch, Washington State DOT, Seattle, WA, USA</i>) ▪ Are Non-Wildlife Underpasses Effective Passages for Wildlife? (<i>Andreas Seiler, Swedish University of Agricultural Sciences, Uppsala, Sweden</i>) <p>Session 213: Wildlife Habitat Connectivity – Innovative Tools and Techniques   (Lake Superior Ballroom L) <i>Moderator: Hans Bekker, Senior Ecologist, Rijkswaterstaat Centre for Traffic and Navigation, Zuid-Holland, The Netherlands</i></p> <ul style="list-style-type: none"> ▪ Are We There Yet? A Case for Spatially Explicit Linkage Modeling for Integrative Conservation Planning (<i>Julia Kintsch, ECO-resolutions, LLC, Denver, CO, USA</i>) ▪ Monitoring Wildlife Overpass Use by Amphibians – Do Artificially Maintained Humid Conditions Enhance Crossing Rates? (<i>Edgar Van der Grift, Alterra Wageningen UR, Gelderland, The Netherlands</i>) ▪ New Concepts in Wildlife Habitat Linkage Assessments To Focus Mitigation Measures and Reduce Wildlife Crossing Costs (<i>Bill Ruediger, Wildlife Consulting Resources, Missoula, MT, USA</i>) ▪ Washington's Habitat Connectivity Highway Retrofit Initiative (<i>Kelly McAllister, Washington State DOT, Olympia, WA, USA</i>)
10:00 AM – 10:30 AM	Break in Sponsors Hall (Lake Superior Ballroom O) Edmund Fitzgerald Exhibit Hall open for Poster Preview and Set-up until 3:30 PM









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10:30 AM – 12 NOON	<p>CONCURRENT SESSIONS</p> <p>Session 221: Wildlife Habitat Connectivity – Planning and Design    (Lake Superior Ballroom J) <i>Moderator: Jennie Ross, Environmental Assessment Unit Chief, Minnesota DOT</i></p> <ul style="list-style-type: none"> ▪ Idaho Statewide Wildlife / Transportation Database (Brent Inghram, FHWA Idaho Division, Boise, ID, and Gregg Servheen, Idaho Department of Fish and Game, Boise, ID, USA) ▪ Judd Road Connector: Lessons Learned in Ecological Mitigation – Wildlife Crossings, Habitat Preservation, Wetlands and More (Ed Frantz, New York State DOT, Utica, NY, USA) ▪ Avian Protection Plan for the Nebraska Department of Roads (Eric Zach, Nebraska Department of Roads, Lincoln, NE, and Dionne Gioia, US Dept of Agriculture APHIS Wildlife Services, Union, NE, USA) ▪ How Do Major Roads Affect Barn Owls? Distribution, Space Use, Food Source and Mortality (Joana Sousa, Centro Biologia Ambiental, Lisboa, Portugal) <p>Session 222: Wetland Mitigation and Ecological Considerations for Stormwater Management  (French River Room) <i>Moderator: Wesley Saunders-Pearce, MS4 Specialist, Minnesota DOT</i></p> <ul style="list-style-type: none"> ▪ The Proposed I-69 Crossing of the Ouachita River and Associated Wetlands In Southern Arkansas: A Comparison of the Charleston Method vs. West Gulf Coastal Plains Hydrogeomorphic Method to Determine Mitigation Requirements (Henry W. Langston, Arkansas Highway and Transportation Department, Little Rock, AR, USA) ▪ Wetland Mitigation in Abandoned Gravel Pits – Creating Fresh Meadow and Shrub Swamp (Kurt Johnson, University of Minnesota Natural Resources Research Institute, Duluth, MN, USA) ▪ Regenerative Stormwater Conveyance (RSC) as an Integrated Approach to Sustainable Stormwater Planning on Linear Projects (Joe Berg, Biohabitats, Inc., Baltimore MD, USA) ▪ Oregon DOT Stormwater Treatment and Management Program: A Framework for Adapting to Changing Pollutants, Regulations, and Practices (Zak Toledo, HDR, Inc., Salem, OR, USA) <p>Session 223: Wildlife-Vehicle Collisions – Data Collection, Monitoring and Modeling   (Lake Superior Ballroom L) <i>Moderator: Cheryl Martin, Environmental Engineer, FHWA Minnesota Division</i></p> <ul style="list-style-type: none"> ▪ Arboreal Mammals Use an Aerial Rope Bridge to Cross a Major Highway (Rodney van der Ree, Australian Research Centre for Urban Ecology, Victoria, Australia) ▪ Using Global Positioning System Technology to Determine Wildlife Crossing Structure Placement and Evaluating Their Success in Arizona (Jeffrey Gagnon, Arizona Game and Fish Department, Phoenix, AZ, USA) ▪ Bozeman Pass Wildlife Pre-and Post-Fence Monitoring Project (April Craighead, Craighead Environmental Research Institute, Bozeman, MT, USA) ▪ Predictive Models of Herpetofauna Road Mortality Hotspots in Extensive Road Networks: Three Approaches and a General Procedure for Creating Hotspot Models (Tom Langen, Clarkson University, Potsdam, NY, USA) 	
	12 NOON – 1:30 PM	<p>Keynote Speaker Luncheon (Lake Superior Ballroom K)</p> <ul style="list-style-type: none"> ▪ Rick Ridgeway, Vice President of Environmental Initiatives, Patagonia, Inc. <p>Thanks to our Bronze co-sponsors Connectivity for Wildlife LLC, ElectroBraid Fence, and Great Lakes Maritime Research Institute!</p>






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1:30 PM – 3:00 PM	<p>CONCURRENT SESSIONS</p> <p>Session 231: Mitigating Highway Impacts on Ecosystems (Lake Superior Ballroom J)  <i>Moderator: David Weirens, Land and Water Section Manager, Minnesota Board of Water and Soil Resources</i></p> <ul style="list-style-type: none"> Evaluation of a Rapid Assessment Protocol to Assess Road-Stream Crossings for Aquatic Organism Passage (<i>Scott Jackson, UMass Department of Natural Resources Conservation, Amherst, MA, USA</i>) Where the River Meets the Road: How Washington State is Providing Habitat while Protecting Highways (<i>Paul J. Wagner, Washington State DOT, Olympia, WA, USA</i>) Effective Mitigation: The Cumulative Impact of Climate Change on Transportation Network and its Implications on Aquatic Biodiversity of Ganges Headwaters, Garhwal Himalayas (<i>Ramesh C. Sharma, Departmental of Environmental Sciences, H.N.B. Garhwal University, Uttarakhand, India</i>) Adapting Relationships for Agencies and Institutions: The I-90 Snoqualmie Pass East Project's Collaborative Approach to Identifying a Preferred Alternative and Mitigation Strategy (<i>Jason Smith, Washington State DOT, Yakima, WA, USA</i>) <p>Session 232: Improving Data Collection and Monitoring Methods (French River Room)  <i>Moderator: Leonard Sielecki, Environmental Management Section, University of Victoria, British Columbia, Canada</i></p> <ul style="list-style-type: none"> Reducing Road-Based Habitat Fragmentation: An Eastern Box Turtle (<i>Terrapene c. carolina</i>) Case Study (<i>Susan Hagood, The Humane Society of the US, Washington DC, USA</i>) Re-evaluating the Needs for Animal Passages in Israel: Towards a Long-term Monitoring Scheme (<i>Tamar Achiron-Frumkin, Ecological and Environmental Advisors, Israel</i>) Restoring Ecological Networks Across Transport Corridors in Bulgaria (<i>Edgar Van der Grift and Vanya Simeonova, Alterra Wageningen UR, Gelderland, The Netherlands</i>) Development and Utilization of a Regional Invasive Plant Species Database at the New York State Department of Transportation (<i>Christine Colley, New York State DOT, Buffalo, NY, USA</i>) <p>Session 233: Wildlife-Vehicle Collisions – Effective Mitigation Strategies (Lake Superior Ballroom L)  <i>Moderator: Joe Burns, National Transportation Ecology Program Leader, US Forest Service, Washington, DC</i></p> <ul style="list-style-type: none"> Using Specialized Tunnels to Reduce Highway Mortality of Amphibians (<i>Cyndi Smith and Katie Pagnucco, Parks Canada – Waterton Lakes National Park, Alberta, Canada</i>) A Quantitative Comparison of the Reliability of Animal Detections Systems and Recommended Requirements for System Reliability (<i>Marcel Huijser, Western Transportation Institute at Montana State University, Bozeman, MT, USA</i>) Evaluation of an Animal-Activated Highway Crosswalk Integrated with Retrofit Fencing Applications (<i>Norris Dodd, AZTEC Engineering, Phoenix, AZ, USA</i>) Effectiveness of Mitigation Measures to Reduce Road Mortality in the Netherlands: Badger <i>Meles meles</i> (<i>Hans Bekker, Rijkswaterstaat Centre for Traffic and Navigation, Zuid-Holland, The Netherlands</i>)
3:00 PM – 3:30 PM	<p>Break in Posters Hall (Edmund Fitzgerald Exhibit Hall)</p>
3:30 PM – 5:30 PM	<p>Session 240: Poster Presentations (Edmund Fitzgerald Exhibit Hall) 50 posters showcasing innovative projects, applications, and research in progress will be on display. Authors representing 10 countries will be available to discuss their work with fellow participants.</p>



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TIME	TUESDAY, SEPTEMBER 15, 2009
5:30 PM	Tuesday Sessions Adjourn Dinner (on your own)
	BUSINESS MEETINGS These meetings are open to all ICOET participants unless noted as (<i>by invitation</i>).
5:00 PM	Deer-Vehicle Crash Information and Research Center Technical Advisory Committee (Gooseberry Falls Room 1) FHWA Transportation Liaison Peer Exchange Workshop (<i>by invitation</i>) (Gooseberry Falls Room 3) TransWild Alliance Meeting hosted by Defenders of Wildlife (<i>by invitation</i>) (Comfort Suites Conference Room)
7:00 PM	TRB ADC30 Committee on Ecology and Transportation (St. Louis River Room) TRB AFB40 Committee on Landscape and Environmental Design (Split Rock Room 1)

TIME	WEDNESDAY, SEPTEMBER 16, 2009
7:30 AM – 5:00 PM	Conference Registration and Check-in open Speaker Ready Room open (Board Room) Edmund Fitzgerald Exhibit Hall open for removing Poster displays until 12:00 Noon
8:00 AM – 9:00 AM	Plenary Session 310: Field Trips Overview by Minnesota Department of Transportation (Lake Superior Ballroom J) <i>Moderator: Frank Pafko, Environmental Services Director, Minnesota DOT</i> <ul style="list-style-type: none"> ▪ Dwayne Stenlund, Erosion Control Specialist, Minnesota DOT ▪ Scott Bradley, Director of Context Sensitive Solutions, Minnesota DOT ▪ Paul Sundberg, Manager, Gooseberry Falls State Park, Minnesota Department of Natural Resources
9:00 AM – 9:30 AM	Pick up Box Lunches and Board Buses (Atrium Lobby)
9:30 AM – 4:00 PM	Field Trips (Atrium Lobby – buses depart promptly at 9:30 AM) <ul style="list-style-type: none"> ▪ Trip 1: North Shore National Scenic Byway ▪ Trip 2: Aquatic Habitat Reconstruction Tour
6:00 PM – 9:00 PM	Dinner and Cash Bar at Grandma's Sports Garden Thanks to our Gold co-sponsor HDR Engineering, Inc.! Please Note: Your ICOET name tag is required for admission – be sure to wear it!

