

Special Sessions

SCB Symposium on Conservation/Transportation Planning



RECONCILING CONSERVATION AND TRANSPORTATION PLANNING ON A REGIONAL SCALE: A SYMPOSIUM OF THE SOCIETY FOR CONSERVATION BIOLOGY NORTH AMERICAN SECTION

The North American Section of the Society for Conservation Biology served as a co-sponsor of ICOET 2007 and conducted its annual meeting in conjunction with the conference. This meeting included a half-day symposium on "Reconciling Conservation and Transportation Planning on a Regional Scale." Abstracts of the presentations from the symposium are provided below, along with contact information for the key speakers.

An Approach to Integrating Transportation and Conservation Planning: Examples From Florida

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An important objective of conservation planning and reserve design is the provision for functional landscape connectivity. For instance, a well-connected network of reserves might support viable populations or metapopulations of species that might not be supported within single, isolated reserves. Roads present significant obstacles to achieving this objective. Recent research on the ecological effects of roads has demonstrated the range and intensity of impacts to landscapes and biodiversity. Results from four separate studies in Florida are discussed. We employed a broad approach to examine the overall effects of roadways on landscape connectivity for wildlife. Methods included road-kill and track surveys, mark-recapture and telemetry studies, and GIS models. Different taxa (e.g., carnivores, ungulates, selected herpetofauna, and small mammals) were used to examine effects of roads at multiple scales. This multi-species approach was used to determine presence/absence, movement patterns, and landscape use in proximity to roads. Empirical data and landscape models for different taxonomic groups suggest distinctly different types of sensitivity to traffic, roads, and road-related habitat fragmentation; hence, they require different conservation planning strategies. This research approach can provide transportation planners with the information needed to minimize negative impacts of roads on native biodiversity, landscape patterns, and ecological processes, such as fire and hydrology.

Effects of Roads and Traffic on Populations of Small Animals: Implications for Transportation Planning

Lenore Fahrig (613-520-2600, lenore_fahrig@carleton.ca), Geomatics and Landscape Ecology Research Laboratory, Department of Biology, Carleton University, 1125 Colonel By Drive, Ottawa, ON K1S 5B6 Canada

I summarize our research on the impacts of roads and traffic on populations of small animals – amphibians and small mammals – and provide recommendations for transportation planning based on the results. Traffic density within a landscape has large effects on population sizes of several amphibian species. These effects are of the same order of magnitude and often larger than the landscape-scale effects of habitat loss. Traffic density affects amphibian population sizes up to distances of at least 2 km. Small mammals avoid crossing roads, with the result that roads limit small mammal movements across landscapes. However, there is a positive net effect of increasing road density within the landscape on small mammal population abundances. We hypothesize that this is due to negative effects of road density on predators of small mammals. I conclude with some suggestions for road design and regional planning.

Applications of Local-Scale Research for Planning and Evaluating Measures Designed to Restore Regional Landscape Connectivity

Anthony P. Clevenger (403-760-1371, tony.clevenger@pc.gc.ca), Wildlife Biologist, Western Transportation Institute, Montana State University, P.O. Box 174250, Bozeman, MT 59717 USA

Historically, planning of surface transportation generally considered a one-dimensional, linear zone along the highway. Thus, the engineering and design dimensions were the primary concern for planners. In the past, we also find that mitigation for transportation impacts tended to be site-specific, with little consideration of how the project fits into the context of the surrounding ecosystem. Because of the broad landscape context of road systems, it is essential to incorporate landscape patterns and processes in the planning and construction process. Federal and state transportation agencies have recognized now that ecosystem approaches and early stakeholder involvement in identifying issues and areas of concern are essential if their projects are to be environmentally sustainable, streamlined, and garner public support. Partnering and collaborative approaches are essential when developing ecosystem and habitat conservation initiatives. Transportation agencies today need sound science-based information to guide the planning and design process. Like any developing or nascent area of applied science though, initial concepts arrive from theoretical investigations. The strength and validity of these concepts are tested and compared with results from empirical research that help to incrementally refine the concepts and form basic principles. These concepts and principles are generally the basis from which managers and practitioners evaluate their objectives and goals, and ultimately make

their decisions regarding a specific project or management scheme. Our presentation will address some practical guidelines for integrating transportation planning and landscape-scale conservation management. Learning through an adaptive management process and long-term monitoring research are ways that transportation and land management agencies can utilize science-based information to guide future projects and make them more cost-effective. We draw upon examples from 25 years of incremental highway mitigation projects in Banff National Park, Alberta, and the developing Interstate 90 Snoqualmie Pass project in Washington State. Practical management questions that relate to pre-construction data requirements, monitoring intensity, performance goals, and ecological indicators of mitigation performance in a landscape context are discussed. Last, we present a framework for developing practical guidelines to meet variable transportation standards and performance goals that range from the lowest level of genes/individuals to higher levels of populations and ecosystem concerns.

Effects of Roads on Carnivore Behavior and Ecology in Southern California: Movements, Mortality, and Gene Flow

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R. M. Sauvajot, J. P. Pollinger, E. C. York, S. Ng, and R. K. Wayne, Department of Ecology and Evolutionary Biology, UCLA, Santa Monica National Recreation Area, 401 W. Hillcrest Drive, Thousand Oaks, CA 91360 USA

Mammalian carnivores range over large areas and exist at low densities, so they can be particularly vulnerable to the effects of habitat loss and fragmentation. Southern California is one of the country's most heavily developed regions, including an extensive road network and many wide and heavily traveled freeways. We have been studying the effects of urban development and roads on the behavior and ecology of bobcats, coyotes, and mountain lions since 1996. Freeways represent a significant barrier to movement for carnivores, although all three species do cross them, particularly when suitable crossing points are available. Roads can also represent a significant source of mortality for bobcats and coyotes, particularly larger secondary roads. The largest freeways may present a greater barrier than secondary roads, but less of a direct mortality threat: roadkill surveys on three freeways revealed that mortality was inversely related to traffic volume. Over the long-term, an important question is whether freeways also disrupt gene flow. For both bobcats and coyotes, we found that genetic differentiation was significantly greater across a freeway as opposed to along it, and that the degree of differentiation was greater than would be expected based on genetic and telemetry estimates of the number of migrants. Carnivore home range boundaries often run along roads and development. In territorial animals, these hard boundaries may represent social barriers to gene flow as migrants, often young animals, are unable to find empty territories across the road and therefore do not contribute genetically. Our results confirm that maintaining connectivity across roads is critical for the long-term conservation of carnivore populations in urban landscapes, and that techniques are available to facilitate cross-highway movement by carnivores.

Bighorn Sheep and Interstate Highways: Using Genetics to Optimize Connectivity Models for Managing the Landscape of the Future

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Steven G. Torres, California Department of Fish and Game, Wildlife Investigations Laboratory, 1701 Nimbus Road, Suite D, Room # 170, Rancho Cordova, CA 95670 USA

Proliferating road networks are thought to have fragmented habitat for many species. However, dispersal and gene flow are often poorly understood, making it difficult to develop planning tools to analyze or mitigate disruption of landscape connectivity by transportation networks. Least-cost GIS analyses are frequently employed to estimate the relative cost of dispersal between habitat patches, identify likely movement corridors, and analyze the connectivity of human-affected landscapes. However, without detailed data on animal movements, such models may be little better than untested hypotheses. Here, we optimize and extend such an approach using genetic and radio telemetry data from 26 populations of desert bighorn sheep *Ovis canadensis nelsoni*. We test hypotheses about the effects of distance, topography, and human-made barriers on gene flow by incorporating those predictor variables into series of least-cost models in which we vary the relative cost of different habitat types. We apply matrix-based regression techniques to identify the model that best correlated with estimates of gene flow among these populations. The best-fit model is then used to predict which populations are connected by active corridors and to identify the least costly paths for dispersal among populations. Known inter-population movements compare well with those predicted by our model. We apply the model to examine the effects of existing highways, future highway projects, and population translocations on landscape connectivity for this species. We also discuss the implications of these findings in the context of climate-related fluctuations in habitat quality.

Eight Reasons Not to Use GIS Analysis for Corridor Design

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As advocates for using GIS tools to design corridors based on needs of focal species, we must admit that skeptics have several legitimate objections, including (a) Corridors for focal species can fail to conserve ecological processes, (b) Corridors are typically designed for highly mobile habitat generalists (large carnivores) and won't serve less mobile habitat generalists, (c) Corridor models uncritically assume that animal movement follows the same rules as habitat selection, (d) Corridor models rely on land cover maps, digital elevation models, and road overlays simply because these data layers are available – not because these factors explain animal movement well, (e) Climate change will render corridor designs useless, (f) GIS models always produce a “best” corridor – even if the best is not good, (g) These movement models fail to consider the fact that many species will need generations to move their genes through a corridor, and (h) These models ignore practical issues such as stakeholder involvement and transaction costs. Based on our experience designing 30 wildland linkages in Arizona and southern California, we developed an approach and GIS toolkit (available free at www.corridor-design.org) that honestly acknowledge and confront these issues. Key elements in our approach include using multiple focal species (including sedentary habitat specialists and species tied to ecological process), sensitivity analysis to disclose impacts of key assumptions, involvement of stakeholders throughout the design process (including the involvement of non-scientists in scientific issues), providing plans that integrate habitat conservation and highway crossing structures, and tools to allow implementers to evaluate alternative corridor designs.

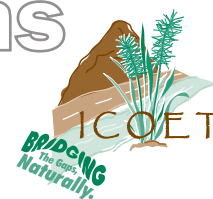
Road Ecology in the Southern Rockies –Science, Policy and Outreach

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The Southern Rockies span from southern Wyoming, through Colorado and into northern New Mexico. They contain a wealth of biological diversity, with over 500 vertebrate species, thousands of natural plant communities, and rugged wildlands. Mountain lions still roam the region's majestic mountain country, native cutthroat trout can be found in the purest mountain streams, and grand old stands of ponderosa pine can still be found in the most remote foothills. These biological treasures are threatened by human population growth, a history of destructive land use, road widening and development, and poor land management decisions. To address habitat fragmentation in this region, the Southern Rockies Ecosystem Project (SREP) has been developing programs in the emerging field of Road Ecology that include sound science, policy, as well as education and outreach. Through our *Linking Colorado's Landscapes* project, SREP conducted in-depth assessments in high priority wildlife linkages. Assessments included roadway engineering inventories, wildlife movement data, land status, and a range of mitigation measures to ensure safe passage for wildlife. As an on-the-ground component to this work, SREP spearheaded the construction of a wildlife bridge at West Vail Pass to reconnect habitat for a diversity of species in the White River National Forest as well as improve driver safety. CDOT is currently developing a scope of work that will begin planning for the wildlife bridge. As a wildlife monitoring component to this project, SREP is engaging Citizen Scientists to collect wildlife movement data along I-70 through the use of motion-triggered cameras. With sound science in place, SREP is now beginning to address real policy change at the local, state and federal level to ensure safe passage for wildlife is a priority at all levels of government. Finally, affecting change on the ground requires educating the public as well as professionals in the engineering and biological fields. To accomplish this goal, SREP is: 1) offering a continuing education course for transportation professionals and biologists, 2) developing a “Safe Passage” technical wildlife crossings handbook for engineers, biologists and conservationists, 3) distributing tens of thousands of driver safety tip sheets across Colorado in conjunction with semi-annual press releases that reach millions of people, and 4) offering a Wildlife Crossing Field course in Washington in 2008, focusing on the I-90 corridor.

Special Sessions

Public-Private Partnerships



ENVIRONMENTAL CONSIDERATIONS IN PUBLIC-PRIVATE PARTNERSHIPS PANEL DISCUSSION

The objective of this session, organized by the ICOET 2007 Program Committee, was to increase awareness of public-private partnerships (PPPs) in transportation and to prepare transportation and ecology professionals to effectively engage and support partnerships that improve the efficiency of transportation systems while maintaining and enhancing the quality of the natural environment. Current issues of concern regarding the use of PPPs include ensuring adequate environmental protection/regulatory compliance and monitoring; understanding the value of ecological assessments and strategic habitat conservation planning tools to address uncertainty associated with future environmental concerns; addressing administrative procedures and challenges related to multi-organizational coordination and logistics; balancing government “sunshine laws” with private entities’ proprietary information and intellectual property rights, and linking land use and transportation needs.

Panel discussants included the following:

David Williams, Vice President/Senior Program Manager, Carter-Burgess

What are public-private partnerships? Mr. Williams provided a welcome, introduction of speakers, and brief overview of PPPs.

Randy Blankenhorn, Executive Director, Chicago Metropolitan Agency for Planning

Highly respected by the FWS as the leading planner for one of the largest U.S. metropolitan areas, Mr. Blankenhorn described his philosophy and experiences, including how to manage traffic congestion, from over two decades of partnering with Federal, state and local agencies. He described the potential roles that PPP’s can play now and in the future. CMAP is a new regional agency created by merging metropolitan Chicago’s previously separate organizations for land-use and transportation planning.

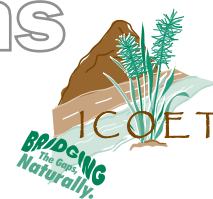
Bruce A. Stein, Vice President and Chief Scientist, NatureServe

Dr. Stein shared his organization’s experience in incorporating ecological considerations into transportation, infrastructure planning, and resource management efforts. NatureServe coordinates a nationwide public-private partnership that provides scientific information and technology tools at local, regional, and national scales. These information products and services are designed to help agencies and private-sector industries not only meet legal requirements, but to go beyond compliance and promote positive conservation outcomes. In particular, decision support tools, such as NatureServe Vista software, can provide agencies and private investors with a defensible and transparent means to understand ecological values and reduce environmental/project risks.

David Greenblatt, Analyst, Living Cities Program, Environmental Defense

Mr. Greenblatt discussed why a public-private partnership on a toll road is not necessarily a good or bad proposition. Well-designed PPP deals have the potential to save motorists time, raise revenue, boost transit choices, and curb fuel use and emissions. The flip side is that PPPs can also spur pollution, fragment the transportation network and facilitate sprawl for years to come. The final outcomes of a PPP depend, in large part, on what a public agency is contracting for. Is the goal simply to increase short-term cash flow? Or is it to create better, more sustainable communities for all? Or some combination thereof?

Special Sessions



FHWA Environmental Excellence Awards

AWARDS LUNCHEON FOR THE RECIPIENTS OF THE 2007 FEDERAL HIGHWAY ADMINISTRATION ENVIRONMENTAL EXCELLENCE AWARDS PROGRAM

ICOET 2007 was pleased to host the 2007 FHWA Environmental Excellence Awards ceremony. This awards program recognizes the people, organizations, and projects that forge creative solutions and innovations for balancing the needs of a safe and efficient transportation network with environmental sensitivity. This year 13 winners were selected from 12 categories. A panel of four judges also named four honorable mentions from the 174 entries submitted. Following opening remarks by Arkansas Division Administrator Sandra Otto, FHWA Administrator Richard Capka and FHWA Associate Administrator for Planning, Environment and Realty Gloria Shepherd presented the awards, with assistance from Carol Adkins and Patricia Cazenias of FHWA's Natural Systems Unit. For more information on the 2007 awards program and winners, please refer to FHWA's Web site at <http://www.fhwa.dot.gov/environment/eea2007/index.htm>.

Excellence in Environmental Streamlining

Arizona's Wildlife Linkages Assessment

(Arizona Department of Transportation, Arizona Game and Fish Department, Bureau of Land Management, Federal Highway Administration Arizona Division, Northern Arizona University, Sky Island Alliance, The Wildlands Project, USDA Forest Service, U.S. Fish and Wildlife Service)

Working together, these Federal, State, and non-profit organizations conducted a statewide assessment to ensure a level of consistency and uniformity toward conservation and highway safety goals, while accommodating the growth of Arizona's population, an expanding economy, and associated infrastructure. This assessment identifies large blocks of protected habitat, the potential wildlife movement corridors through and between them, and the factors that could possibly disrupt these linkage zones. Recognizing that habitat connectivity is a landscape issue involving multiple land jurisdictions, the assessment has been distributed statewide. It provides a starting point for detailed consultation between State and federal agencies, county planners, land conservancies, tribes, private landowners and other organizations for a cohesive, comprehensive, landscape-scale approach. By integrating wildlife considerations into the forefront of transportation and regional planning processes, it is possible to achieve the greatest advantage to wildlife and the traveling public while reducing delays and costs in project development. This project has engaged in unprecedented interagency cooperation, facilitated discussions, and formed partnerships to promote a unified approach to wildlife linkage conservation and management.

Caltrans Cumulative and Growth-Related Impacts

(California Department of Transportation, Federal Highway Administration California Division, Environmental Protection Agency Region 9, Carter Burgess, Karen Bahus Technical Writing and Research, and Fox Mediation)

A strong partnership consisting of Caltrans, FHWA, and EPA, consulting with USACE, worked collaboratively to develop key guidance for conducting cumulative and growth-related indirect impacts analysis for California surface transportation projects. The objectives of this effort were to reduce project and process delays, protect and enhance the environment, and integrate and enhance interagency coordination. This successful partnership resulted in two key guidance documents - Guidance for Preparers of Cumulative Impacts Analysis and Guidance for Preparers of Growth-related, Indirect Impacts Analyses - that provide agencies, local government, and the public with a clear set of expectations about when and how to perform cumulative and growth-related indirect impacts analysis. The guidance documents reflect long-term discussions among the partnering agencies encompassing their various perspectives on vocabulary, definitions, and methodologies, which led to agreement on reasonable analytical approaches. The documents provide decision makers with a systematic approach for analyzing complex environmental issues for transportation projects in a consistent and comprehensive manner and offer a "practical, how-to approach" to cumulative and growth-related impact analysis. The important collaborative effort of developing the guidance documents built trust between the partnering agencies and greatly enhanced the ability of future practitioners to work collaboratively to develop feasible avoidance, minimization, and mitigation measures that protect the public trust.

Excellence in Cultural and Historical Resources

Scattered Village Exhibits and Curriculum

(North Dakota Department of Transportation; Mandan Public Library; Mandan, Hidatsa, and Arikara Nation; Mandan Public Schools; Color and Design; Whattadame Productions)

The Scattered Village Exhibits and Curriculum Project is an outreach program providing interpretive and educational materials resulting from the discovery of a significant pre-historic village during the construction of a street in Mandan, North Dakota. The site, adjacent to an elementary school, provided a unique opportunity to educate the local children about their heritage. The children would question the archaeologists each day to find out what was being unearthed. Bringing this information back to the public is an important way for people to truly understand and appreciate their heritage. Together, the project sponsors have involved a wide audience in the development of museum quality displays and educational curriculum to honor the inhabitants of Scattered Village. The exhibits located in the Mandan Public Library recreate the story of the archaeological dig, the recovered artifacts and the valuable information discovered at the site. Then taking it a step further, they took the opportunity to draw on the oral traditions of the Three Affiliated Tribes to fit the scientific facts to the traditions and history of the tribes, linking the historical site to the past. Through these truly outstanding efforts, this unique project provides many outreach and educational exhibits, including maps, brochures and information on local historic sites which promote tourism while preserving historical data and information for future generations.

Excellence in Air Quality Improvement

I-5 Corridor: Saving Fuel and Reducing Pollution

(Cascade Sierra Solutions)

Cascade Sierra Solutions (CSS), a non-profit agency, is taking an innovative regional approach to reducing diesel emissions and fuel consumption for long-haul trucks that operate on the I-5 corridor. They are providing a single stop shopping place where truckers can learn about currently available emissions and fuel reduction technologies, have the technologies installed, learn about potential financial incentives, gain insight into air agency regulations and policies, and obtain information on a low-interest loan program structured to meet their financial situations. These incentives and amenities have produced a dramatic decrease in idling fuel consumption and reduced emissions by over 75 percent, which includes reductions in NOX, CO2 and more than 40 toxic substances found in diesel exhaust. The success of this program relies on its numerous public and private stakeholders while providing a national model that uses technology improvements combined with incentive-based programs to reduce the consumption of fuel and reduce pollution from the long-haul fleet operating in Washington, Oregon and California.

Excellence in Roadside Resource Management and Maintenance

Tennessee Roadscapes – Cultivating the Road Ahead

(Tennessee Department of Transportation)

A new initiative from the Tennessee Department of Transportation provides opportunities for a variety of environmental stewardship and beautification programs along the interstates and highways of Tennessee. Under a comprehensive program, emphasis was placed on combining maintenance specific needs with environmental obligations as a way of enhancing and improving the state's roadways. This effort focused on decreasing maintenance costs through the use of sustainable native vegetation, which requires less maintenance and mowing, and increasing additional transportation resources through community involvement and volunteers. Volunteers help with litter removal and plantings and commit to long-term maintenance agreements to improve the aesthetic appeal of Tennessee roadways. Landscaping has helped promote tourism, developed community pride, enhanced economic development and improved the quality of life for the traveling public. This program shows what can be done to develop and implement an outstanding state-wide program that utilizes partnerships to integrate widely separate functions into a comprehensive roadside management plan for plantings, maintenance and environmental stewardship.

Excellence in Scenic Byways

Grand Rounds Wayfinding Program

(Minnesota Department of Transportation, Minnesota Park and Recreation Board)

The "Wayfinding" program's main focus is to provide residents and visitors with a friendly orientation to the byway through a means of communication that includes interpretation, environmental education and recreational opportunities by providing accurate mapping and guidance along the way. The byway's qualities are enhanced through the dedication of local and community participation and stewardship efforts. The "Wayfinding" project was completed in 2004, with 53 kiosks located throughout the byway and over 200 directional signs that are strategically located. Involving the local community to participate in identifying the byway's natural qualities has created a sense of ownership and stewardship. The program is a cost-effective way to promote and disseminate information using a non-traditional method. This service to visitors has enriched the appeal of the Twin Cities to visitors, contributing to the vitality of the area's tourism industry. The byway provides a tremendous resource, explaining the activities and history of the area in an easy to use format. The success of this project is shown by the increase in byway usage, now serving over 15 million visitors annually.

Excellence in Environmental Research

Alaska Way Viaduct and Seawall Replacement Project

(Washington State Department of Transportation, Seattle Department of Transportation, Federal Highway Administration Washington Division, Parsons Brinckerhoff, Parametrix, EnviroIssues)

At an early stage of development, sound decision-making and building public consensus are at the forefront of having a successful environmental planning process. The Alaskan Way Viaduct and its support structure, the Alaskan Way Seawall, have a reader-friendly EIS that informed the public of the project's tradeoffs and environmental considerations to generate support for a \$4 billion dollar project that will take years to construct in the heart of Seattle's densely developed downtown. By using innovative approaches and inter-agency coordination and advanced planning, the project transportation team blended state, city and consultant staff to create a collaborative, interactive venue for everyone to understand the emerging project issues and offer advice and suggestions that will ultimately make regulatory approval faster and easier. The computer simulations included in the environmental documentation have advanced this approach to a new level by giving detailed, accurate simulations of the finished project and extensive depictions of the construction phase. The state-of-the-art simulations are educational and innovative, providing a jump start into planning and reducing the effects of the project on adjoining neighborhoods. These decision-making and leadership tools that support better public understanding and effective communication showcase a best practice in planning tools for NEPA documents.

Excellence in Recycling and Reuse

Reuse of Petroleum Contaminated Soil: The Mn/DOT Biomound Process

(Minnesota Department of Transportation)

Biomounding is an effective, environmentally friendly process for treating petroleum-contaminated soil. Minnesota Department of Transportation developed an innovative remediation technique that combines petroleum-contaminated soil, manure and low-grade wood chips into a reusable material which is used as a topsoil amendment. The biomound remediation process has resulted in the reuse of large volumes of waste materials. Since 1991, Minnesota has used the biomound treatment process to successfully treat over 30,000 cubic yards of petroleum-contaminated soil excavated from more than 15 projects and has produced a video encouraging the use of this proven treatment technique. This successful process has been effective and accepted by local agencies of government and the general public. The innovative combination of waste materials that are remediated, recycled and reused as topsoil amendments for use on future roadway construction projects continues to result in a practical, cost-effective and environmentally sound approach to dealing with contaminated soil.

Excellence in Nonmotorized Transportation

Massachusetts Highway Project Development and Design Guide

(Massachusetts Highway Department)

The new edge-to-center design approach recommended by the Massachusetts Highway Project Development and Design Guide is a breakthrough effort to mainstream non-motorized planning into the project development process. The needs of, and the methods to accommodate, non-motorized modes of transportation are no longer segregated into their own sections or chapters but now are addressed in every chapter of the guide. The guidebook directs the designer to begin at the edge with the pedestrian and work their way in, to ensure that the needs of non-motorized users remain integral to project planning and design. This change in thinking facilitates the use of context-sensitive design, environmental protection and the careful consideration of the safety and accessibility needs of pedestrians, bicyclists and non-motorized facility users. The statewide manual, which was developed in partnership with a task force composed of 28 members, addressed a broad range of constituency concerns but focused on adding streamlining measures and design flexibility in the project development process. By integrating multi-modal planning and design into every chapter of the development and design guide, the final result supports a transportation system providing seamless, functional and safe access for all users.

Excellence in Livable/Sustainable Communities

Maryland Route 45: York Road

(Maryland State Highway Administration)

This community-generated project was guided by the Maryland State Highway Administration and a multi-disciplinary task force comprised of agency representatives and community and business leaders, who worked together to blend transportation improvements with urban redevelopment. The partnering team consisted of State, local agencies and businesses, and nine communities who all were vital links in identifying the desires of the community and disseminating the project information. The revitalization work included: upgrading and interconnecting the traffic signal system, drainage improvements, improving pavement conditions and sidewalk accessibility, adding traffic calming elements, decorative lighting, street furniture and bus shelters, and extensive landscaping within the corridor. On a fixed budget the project team collaborated and partnered on many items to stay within the scope and budget of the project. The success of this project is measured by the continued involvement of the task force in monitoring the project's outcome through project surveys, site walks and interacting with the community, which demonstrates the strong commitment to promoting local cohesion, along with social and economic development.

Excellence in Ecosystems, Habitat, and Wildlife

Legacy Parkway and Nature Preserve

(Utah Department of Transportation, Federal Highway Administration Utah Division, and U.S. Army Corps of Engineers)

This 14-mile, four-lane, limited access divided highway provides an important alternate route for Northern Utah commuters. The project resulted in a unique environmental mitigation project: the Legacy Nature Preserve. A collaborative design team working with the public incorporated many unique and innovative features into the final parkway design. Some of the features included observation points and trailheads along with roadside pull-off lots, landscaping with native species, use of vegetated berms for screening, connections to other trails and communities and designing narrower paved portions of the roadway. UDOT found that they could meet their safety standards while also designing a roadway which was aesthetically compatible with the local communities and protected the environmental integrity of the area. The Legacy Nature Preserve, restores and preserves over 2,100 acres of important wetland and wildlife habitat from encroaching development and provides buffers that are important to the survivability of wildlife along the Great Salt Lake. By enhancing and maintaining the wetlands, habitat values, and uplands to maximize their use by a diverse array of vegetation and migratory species UDOT is ensuring that the outstanding environmental resources around the Great Salt Lake will be available for future generations.

Excellence in Wetlands, Watersheds, and Water Quality

Bob Jacobson Restoration Site (Wingard WMA)

(Minnesota Department of Transportation)

This comprehensive approach to ecosystem restoration started when a number of State agencies combined their resources to restore well over a hundred wetland basins in an area that was historically tall-grass prairie. Their cooperative effort resulted in an 1800-acre wetland restoration initiative situated on the flat expanse of historic Lake Aggasiz in the Red River Valley. Through these efforts the site is being restored to a natural condition that will benefit the local watershed in terms of water quality and flood storage. The success of the project can be documented by the wildlife already frequenting this area. They include migratory waterfowl, moose, sand hill cranes, trumpeter swans and bald eagles. This wetland bank was constructed to offset losses from federally funded State highway projects as well as other local developments. The enormous size of this ecosystem restoration area, which has produced valuable results in terms of habitat, wildlife, wetlands, and water quality, shows what can be done through a coordinated partnership effort to preserve and protect environmental values that will be utilized by generations yet to come. This restoration site is named in honor of Bob Jacobson (1958-2007), the Mn/DOT botanist who played a key role in the vegetative restoration of the site.

Excellence in Environmental Leadership

Benito (Buddy) Cunill III, Florida Department of Transportation

Mr. Cunill has led an outstanding and exceptional career with Florida Department of Transportation. He is an excellent example of the results that can be obtained by one individual's personal dedication to an area of environmental stewardship in the transportation field. He is responsible for developing, negotiating and managing the implementation of 21 interagency agreements among individual federal, State, and regional agencies to achieve statewide implementation of Florida's newly developed Efficient Transportation Decision-making (ETDM) process. He shaped how Florida DOT conducted business in satisfying the National Environmental Policy Act (NEPA) and defined the process and environmental analysis to be used in developing the transportation projects that fully satisfied federal and State environmental laws and regulations. Besides meeting criteria placed on projects at the national level, he has always placed a strong emphasis on "grassroots" citizen involvement and participation at the local level in all of Florida's transportation planning programs. One of these "grassroots" programs was Florida's Scenic Highway Program, under his management the program grew and today there are eleven designated scenic highways in Florida. His leadership and involvement at the State and National level proved instrumental in the development of a program known as Community Impact Assessment that increases the awareness of the needs of the human community and evaluating community impacts from a transportation project. This award recognizes his many accomplishments and distinguished career which has demonstrated a strong leadership role in developing programs to protect and enhance our human and natural environment, while still providing a safe and efficient transportation system for all to enjoy.

Honorable Mentions

Air Quality - 2006 Spare the Air/Free Transit Campaign

(Oakland Metropolitan Transportation Commission)

The Metropolitan Transportation Commission (MTC) and the Bay Area Air Quality Management District (BAAQMD) partnered with 26 Bay Area transit operators to offer free rides, all-day, on the first six, non-holiday Spare the Air weekdays to increase transit ridership and reduce emissions.

Nonmotorized Transportation - Great Streets

(District Department of Transportation)

The goal of the Great Streets program in the District of Columbia is to increase neighborhood livability, economic growth and encourage community interactions by building a safe, walkable community with streetscape improvements that allow for a range of transportation options.

Roadside Resource Management and Maintenance - Minnesota Biological Weed Control Program

(Minnesota Department of Transportation)

The Minnesota Department of Transportation proactively deploys biological control agents, typically beneficial insects, as a complement to traditional mechanical, cultural and chemical methods of managing vegetation in an Integrated Roadside Vegetation Management Program.

Wetlands, Watersheds and Water Quality - Highway Runoff Manual

(Washington Department of Transportation)

The Washington State Department of Transportation (WSDOT) developed the Highway Runoff Manual (HRM) to direct the planning, design and implementation of stormwater management facilities that require the involvement of multiple disciplines, to address the needs of its statewide transportation-related facilities.

2007 Awards Judges

- Paul Anderson, Transportation Liaison, USDA Forest Service
- Fred Bank, Senior Environmental Scientist, Mulkey Engineers & Consultants, Inc.
- David Burwell, Senior Associate, Transportation Project for Public Spaces
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