

**Issue Paper C:  
Community-Based, Context Sensitive Transportation Planning and Design**

# **MONTANA TRANSPORTATION CHOICES**

Transportation Choices  
to Enhance Community Character, Public Safety, Economic Vitality and Natural  
Landscapes in Montana

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A Policy Review  
Prepared for The Montana Smart Growth Coalition  
and the  
Western Montana Alliance for Sustainable Transportation

By  
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## Acknowledgments

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### Steering Committee ..

This project was organized and funded through WestMAST, in conjunction with the Montana Smart Growth Coalition. Work on the project was guided by a steering committee that devoted significant time and support for this effort.

The Steering Committee was chaired by Mayre Flowers with Citizens For A Better Flathead (Kalispell), who also serves as head of the Montana Smart Growth Coalition Transportation Committee.

Committee members included Tim Davis with the Montana Smart Growth Coalition (Helena), Jim Olsen with the Highway 93 Citizens Coalition for Responsible Growth (Hamilton), Thompson Smith and Harold Young with Flathead Resource Organization (St. Ignatius), Deb Kmon Davidson with American Wildlands (Bozeman), Mark Haggerty with the Greater Yellowstone Coalition (Bozeman), Anne Hedges with Montana Environmental Information Center (Helena), and Marga Lincoln with AREO (Helena).

The Steering committee wishes to thank the Turner Foundation, which provided the bulk of the funding for this project, along with the Bullitt Foundation and the Wilburforce Foundation.

### About the MSGC .....

The Montana Smart Growth Coalition (MSGC) is a network of organizations and individuals from across the state who share a commitment to just, affordable and sustainable communities. The Coalition advocates for sensible policy, both locally and statewide, regarding land use, transportation, housing, sustainable agriculture, conservation of habitat, cultural diversity, economic equity and the environment.

The MSGC includes forty member groups, representing a broad-based membership, including farming, ranching, affordable housing, local planning, and conservation organizations.

WestMAST (see below) members are now a part of the MSGC and provide key leadership on its transportation committee.

## About WestMAST.....

The Western Montana Alliance for Sustainable Transportation (WestMAST) is comprised of a coalition of organizations along US Hwy. 93 and is committed to achieving progressive transportation reform in Montana.

WestMAST's long efforts in this area contributed to the precedent-setting agreement between Tribal, Federal, and State officials on the reconstruction of US Highway 93 through the Flathead Indian Reservation, which resulted in a limited highway size, a thorough integration of landscape architecture concepts into the road's design, and perhaps the most extensive investment in wildlife crossings of any comparable highway in the nation.

WestMAST also saw recent successes in the development and implementation of an advisory group model used in the Bitterroot for greater citizen participation in transportation planning.

Steering committee members include Citizens For A Better Flathead, Flathead Resource Organization, and Highway 93 Citizen's Coalition for Responsible Growth.

## Technical Work .....

Technical work on this project was conducted by Charlier Associates, Inc. of Boulder, Colorado. Jim Charlier managed the project and prepared this report. Charlier Associates is nationally recognized for their work and for special awareness of, and sensitivity to, the unique transportation issues facing western mountain communities.

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## Introduction and Purpose

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This Issue Paper is one of three reports commissioned as part of the Montana Transportation Choices study. The results of all three issue papers are summarized in a Project Summary published under separate cover and available from the Montana Smart Growth Coalition and the Western Montana Alliance for Sustainable Transportation.

The three interrelated topics covered in Issue Papers include:

- Issue Paper A: Land Use and the Montana State Highway System
- Issue Paper B: Montana Transportation Funding and Prioritization
- Issue Paper C: Community-Based, Context Sensitive Transportation Planning and Design

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## Background

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Transportation agencies – state DOTs and local public works departments – have not been skilled at working with the public. There are exceptions, but in general the public feels alienated from transportation programs (especially roads and streets).

To some extent, state DOTs have earned the criticisms they endure. They have failed to engage the public in a fair, impartial assessment of program and project tradeoffs. They have couched the rationale for their decisions in technical jargon. They have been reluctant to empower people by helping them understand data and tradeoffs. As a result, agencies assume full responsibility for difficult decisions, and the outcome appears to have been imposed upon an unwilling public.

State DOTs have also been slow to address the impacts of their actions on wildlife, wildlife habitat and other natural areas. This neglect has been evident not only at the project level with project-specific impacts, but also at the system planning level where highway plans and programs are developed, prioritized and funded.

The Montana public does not wish to return to the days when road projects were “explained” at “public information meetings” held just prior to construction. Today’s public expects and demands a high degree of sincere public inclusion and participation in the planning and design of public facilities. They also increasingly expect projects to be sensitive to the environment, to wildlife resources, and to community values, including quality of life for Montanans.

Around the U.S., public agencies of all sorts – and more than a few private corporations – are honing their skills at fostering sincere, inclusive public consultation processes. Increasingly, the most successful agencies and entities will be those that have developed deep, ongoing relationships with their affected publics.

## Issues .....

The following specific issues emerged from focus group meetings and a survey conducted in 2002:

1. Applying Context Sensitive Design (CSD) principles in state highway projects.
2. Community Involvement in State Highway Projects.
3. Citizen Empowerment in Transportation.
4. Highways, Wildlife Corridors and Wildlife Habitat.

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## Context Sensitive Highway Design

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Context sensitive design (CSD) is a set of ideas and principles developed and promoted by the Federal Highway Administration (FHWA). According to FHWA:

*Context sensitive design is a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility. CSD is an approach that considers the total context within which a transportation improvement project will exist.*

*Engineering standards alone are inadequate*

To some degree the CSD idea grew out of a shared national experience with highway project development over the years beginning with the implementation of the 1970 National Environmental Policy Act and culminating with the discontinuation of the Interstate Highway System construction program in ISTEA.

In the eyes of many citizens, highway engineering practices in particular, and transportation engineering practices in general, are inflexible, uncreative, and destructive to surrounding resources and lands. All of the major engineering professional organizations, including the American Association of State Highway and Transportation Officials (AASHTO) and the Institute of Transportation Engineers (ITE) have wrestled with these perceptions.

The various engineering manuals and guides in use today (especially AASHTO's *A Policy on Geometric Design of Highways and Streets – The "Green Book"*) have been inadequate as a foundation for dealing with issues related to public acceptance of transportation projects, environmental quality, historic preservation, community character and quality of life.

In 1997, FHWA released a new publication – “Flexibility in Highway Design” – as a first step toward shifting transportation engineers away from “cookbook” approaches into more creative techniques. This book sought to change the highway design culture, stating:

*An important concept in highway design is that every project is unique. The setting and character of the area, the values of the community, the needs of the highway users, and the challenges and opportunities are unique factors that designers must consider with each highway project. Whether the design to be developed is for a modest safety improvement or 10 miles of new location rural freeway, there are no patented solutions. For each potential project, designers are faced with the task of balancing the need for the highway improvement with the need to safely integrate the design into the surrounding natural and human environments.*

*Why engineers  
use cookbook  
approaches to  
design*

However, the pace of progress on this front has been glacial at best as other forces conspire to prevent engineering professions from implementing this new guidance. These forces include:

- **Tort liability.** Engineers are extremely concerned about lawsuits attacking their design solutions. Tort claims are threatening both financially and professionally. In a litigious society, lawsuits against engineers are in fact a serious issue.
- **Training.** Civil engineers are not taught “design” the way architects or other design professions are. Instead of a creative, collaborative process that continuously seeks better solutions and new ideas, engineers are taught to use manuals and design guides in a formulaic process explicitly designed to discourage designs that differ from the accepted standard.
- **Cost.** Well-designed projects often cost more than cookbook projects. Resolving environmental issues, protecting historic resources, reflecting community values – these all change projects in ways that can add cost – if the original cost estimates failed to consider these elements. Also, the process itself becomes time-consuming and costly if the public is consulted and the project context is to be factored into design. Public works and highway departments measure performance in terms of timely delivery of “cost-effective” projects. In most agencies, “on time and under budget” is far more important than “well-accepted and creative.”

Real context sensitive design processes are those that:

- Balance safety, mobility, community, and environmental goals in all projects;
- Involve the public and affected agencies early and continuously;
- Use an interdisciplinary team tailored to project needs;
- Address all modes of travel;
- Apply flexibility inherent in design standards; and,
- Incorporate aesthetics as an integral part of good design.

## State Highway Projects

The Federal Highway Administration (FHWA) has been aggressively promoting context sensitive design since 1998. Courses have been organized around the country (including in Missoula in September, 2001). However, progress has been slow in changing the way state DOTs approach the design process.

The issue for Montanans is: how satisfied are they with the extent to which context sensitive design practices are being incorporated into MDT's planning and design processes?

*How to  
determine if a  
design process  
is "context  
sensitive"*

- Is the public being invited to play an active role in shaping projects and in making important design decisions, especially where tradeoffs are required? Does the process involve the public and affected agencies early and continuously?
- Are community values being considered?
- Are natural resources and affected environment fully understood before project decisions are made?
- Are issues of safety, mobility, community, and environmental goals being balanced in all projects?
- Does MDT use an interdisciplinary team tailored to project needs to develop its projects?
- Are all modes of travel addressed in every project?
- Does MDT apply flexibility inherent in design standards?
- Does MDT incorporate aesthetics as an integral part of design?

If the answer to these questions is negative, how would Montana go about improving the situation?

Recently, the FHWA began a partnering process with five pilot states – Connecticut, Kentucky, Maryland, Minnesota and Utah – to improve understanding of CSD's potential. The partners are working together to develop and implement CSD principles and to share them with other states. Some of these states represent current "best practices" in what is clearly a young field.

## Best Practices ..... Maryland

### *Thinking beyond the pavement*

In the mid-90s, then-Governor Glendening directed Maryland Department of Transportation (MDOT) staff to develop a process that would result in projects that were more sensitive to local communities and the environment. Prior to the Governor's directive, the state had seen many highway projects sent back to the drawing board after falling under public attack right before initiation of construction.

In response to the directive, MDOT determined that incorporating CSD principles into their highway design process was necessary and began an initiative they styled "Thinking Beyond the Pavement" (TBTP).

In May 1998, MDOT hosted the first national CSD conference: "Thinking Beyond the Pavement: National Workshop on Integrating Highway Development with Communities and the Environment While Maintaining Safety and Performance." This was a three-day workshop/conference including stakeholders, interest groups and staff members from across the country involved in highway design and projects. The workshop was co-hosted by AASHTO and FHWA and was intended to evaluate the qualities and characteristics of a context sensitive project.

Using perspectives gained from national participation at the workshop, in 1999 MDOT hired a full-time TBTP project coordinator and began a series of four full-day charrettes to identify the steps involved in realizing a context sensitive project in Maryland. In each of these, about 25-30 project stakeholders, including MDOT staff members, private citizens and developers, focused on completed and in-process highway projects in Maryland considered to be good examples. The charrettes lead to a further series of workshops focusing on improvements to MDOT's highway design process.

Based on recommendations from the charrettes and workshops, MDOT created four teams of internal staff to focus on one the following four areas: (1) organization and policy issues; (2) project development process; (3) project management; and, (4) community involvement.

MDOT's focus on internal staff rather than outside consultants added hands-on insight to the discussions and helped to streamline the transitions recommended by the process. The MDOT teams worked together to redesign a project development process, developing a three-day project management training and a community handbook on CSD principles. The staff is currently developing a citizen-training program. Some highway design policies were also updated

to include CSD principles identified in the process. For example, the utility policy now identifies potential funding sources for burying utilities and potential alternatives.

Maryland's work on context sensitive design has provided a list of CSD principles that are now in general use around the country:

### ***Qualities of Excellence in Transportation Design***

- *The project satisfies the purpose and needs as agreed to by a full range of stakeholders. This agreement is forged in the earliest phase of the project and amended as warranted as the project develops.*
- *The project is a safe facility for both the user and the community.*
- *The project is in harmony with the community, and it preserves environmental, scenic, aesthetic, historic, and natural resource values of the area, i.e., exhibits context sensitive design.*
- *The project exceeds the expectations of both designers and stakeholders and achieves a level of excellence in people's minds.*
- *The project involves efficient and effective use of the resources (time, budget, community) of all involved parties.*
- *The project is designed and built with minimal disruption to the community.*
- *The project is seen as having added lasting value to the community.*

### ***Characteristics of the Process Contributing to Excellence***

- *Communication with all stakeholders is open, honest, early, and continuous.*
- *A multidisciplinary team is established early, with disciplines based on the needs of the specific project, and with the inclusion of the public.*
- *A full range of stakeholders is involved with transportation officials in the scoping phase. The purposes of the project are clearly defined, and consensus on the scope is forged before proceeding.*
- *The highway development process is tailored to meet the circumstances. This process should examine multiple alternatives that will result in a consensus of approach methods.*
- *A commitment to the process from top agency officials and local leaders is secured.*
- *The public involvement process, which includes informal meetings, is tailored to the project.*
- *The landscape, the community, and valued resources are understood before engineering design is started.*
- *A full range of tools for communication about project alternatives is used (e.g., visualization).*

As a result of its TBTP program, MDOT feels it has improved internal and external communication during all project phases (planning, design and construction). In addition, there has been increased consistency among the quality of projects.

## Best Practices ..... Kentucky

Kentucky's CSD program began at the top-level of the Kentucky Department of Transportation (KYDOT) and was implemented through a reconfiguration of the agency's highway design process coupled with an exhaustive training program.

The KYDOT secretary, concerned about the agency's inability to complete highway projects, noted that environmental issues were holding up many projects. In an effort to remedy this, the agency's staff environmentalist was promoted to a top-level executive position. Two staff members, a public relations officer and environmental coordinator, were added to each DOT district. The public relations officer was responsible for increasing public participation in projects.

Next, the project development process was overhauled. Prior to the focus on CSD, each section (engineering, planning, environmental) looked at a project in a "silo" (in isolation) and then passed its finished product on to the next section. This was changed to involve "project teams" composed of a member from each section. The team followed each project from inception through construction.

KYDOT worked with the University of Kentucky and Kentucky Transportation Cabinet to develop a 2-day workshop on CSD principles as part of the FHWA pilot project. All KYDOT staff and consultants to the DOT (prior to bidding on a project) involved in highway projects are required to take the training. Key features of the training workshop include:

- Small numbers of people per workshop – 40 students is the maximum.
- Each workshop includes a hands-on case study in which four 10-person teams work together. This emulates the "Project Teams" KYDOT now employs in highway projects.

The Kentucky Transportation Cabinet (KTC) has since been invited to share the two-day CSD workshop in other states, including New York and Georgia.

Most recently, the KYDOT has noticed that while these changes have resulted in a successful context sensitive design and planning process with higher levels of public acceptance, the CSD principles are often lost during construction. In an effort to remedy this, KYDOT construction staff is now required to participate in a half-day workshop developed by the KTC to learn about CSD principles. The private construction industry has also been receptive to learning about CSD, and while it is not yet a requirement, many contractors also take the workshop.

*Kentucky's  
training  
program for  
project  
planners,*

## Best Practices..... Minnesota

Minnesota DOT (Mn/DOT) has developed and implemented a CSD training program with the University of Minnesota Center for Transportation Studies. While Kentucky and Maryland train most parties involved in the highway design process, Mn/DOT's three-day workshop focuses training on the interdisciplinary project managers, planners and program delivery support professionals. The success of the Mn/DOT project manager CSD training has inspired KYDOT to ask the University of Kentucky KTC to develop a similar course. The Mn/DOT has also begun offering a shorter workshop targeting local government and consultants.

## Best Practices ..... Project for Public Spaces

Over the past two years, an organization based in New York City, Project for Public Spaces (PPS), has provided context sensitive design training to state DOTs in New York, New Jersey and Wisconsin. PPS has just recently initiated comprehensive training for the design, planning and management professionals at Caltrans (California's state DOT). PPS prefers to use the phrases "context sensitive solutions" (CSS) and "placemaking" because it feels the "design" concept used in civil engineering is counterproductive with respect to these issues. PPS's program is the leading edge in CSD today, and its approach is described below using information provided with the CSS curriculum.

*PPS has worked with over 1,000 communities within the United States and abroad to help grow their public spaces, including streets, roadways and their surrounding environments, into vital, distinctive community places that are well-integrated into the community fabric, providing a foundation for healthy, livable communities.*

*The best approach to the improvement of streets and roads is holistic, working to balance their many functions – pedestrian, traffic, bicycle and transit – to create places that respond to community needs, where people feel safe and comfortable. When streets and roads work in this way, they can accommodate traffic while becoming important catalysts for improving urban, suburban, and rural communities – physically, economically, socially, and environmentally – as well as for enhancing scenic resources.*

*To ensure that transportation fulfills its potential for increasing community- and environmental-friendliness, PPS emphasizes a community-responsive "Placemaking" process. Placemaking, in essence, is alternative terminology for "context-sensitive design" – thereby emphasizing the place through which a road passes.*

*The Placemaking process allows diverse constituencies to identify how a street or road can be reshaped to make it a comfortable place for people. Placemaking is based on the belief that it is not enough to simply develop design ideas and elements to*

*improve or develop a public space, such as a street or road, but that improvements need to reflect community values and needs. The Placemaking philosophy centers on the belief that a public involvement process that defines and responds to community conditions and needs from the outset is one of the most critical factors in achieving design in transportation that is truly sensitive to its context.*

*Thus, Placemaking must begin with a thorough understanding of the dynamics, desires, and conditions within a community. It involves looking at, listening to, and asking questions of the people in a community about their problems and aspirations. Through systematic observations, interviews and surveys, time-lapse and documentary photography, project planners and designers study what is happening in and around a street environment as well as what people have to say about it and its future potential.*

*This information is then used in workshops to create a vision around this environment with local people. Project planners and designers also help communities implement their ideas beginning with short term, often experimental, improvements. For natural environments, placemaking involves a similar approach, although the community is defined in broader terms than a street passing through an urban neighborhood.*

## Bottom Line ..... CSD Principles in State Highway Projects

Context Sensitive Design represents a sweeping change in the way public works and transportation departments – and especially state DOTs – approach planning and design of projects. It is specifically intended to improve the process for designing highway projects and to fundamentally improve the resulting transportation facilities.

DOTs that have adopted CSD principles and procedures believe that the result is better projects – projects that provide greater value, are well-received by the public, and that enhance the agency's reputation and credibility with the affected communities.

If Montana were to decide to pursue incorporating these ideas and principles into its own state highway planning and design processes, it would be able to draw from a rapidly growing body of CSD experience and practice as developed and adopted by several of its sister state DOTs.

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## Community Involvement in State Highway Projects

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### The Issue .....

A particular challenge for public works and highway departments is the heightened expectation in today's society about opportunity for public involvement in design decision making.

*The real experts  
are the  
communities  
and  
neighborhoods*

Working with the public is difficult for project managers. People tend to attack rather than advise; they expect public servants to “stand still and take it” – not a very rewarding experience for engineers. Without public involvement, highway design projects can be relatively straightforward and predictable. With active public involvement they become complex and unpredictable. However, good public process principles are the most important aspects of context sensitive design. CSD is not a new manual of “sensitive” designs, but a process of consultation and collaboration with those who know the most about the “context” – the neighborhoods and communities affected by the proposed project.

Public involvement cannot succeed as a minor part of the project, or as a project task. It must be the backbone of the project. Public participation is the backbone of project development when:

- The schedule is organized around well-timed public events.
- Public consultation starts early in the project, before objectives are set or alternatives are identified.
- Public events are planned in detail and are an integral part of project decision-making.
- Deliverables are timed in anticipation of public events so that the right information is available.
- Public events represent a significant percentage of the planning and design budget.

The best ideas in well-managed transportation planning and design projects come from the community itself. It takes time to reach this point. The public involvement program must be routine, well-established, credible and sincere. Characteristics and symptoms of a sincere public process include:

- The process has the right objectives –
  - Short term – empowering people to shape the outcome of this plan or project;
  - Long term – sustained community learning.
- The outcome is uncertain.
- The conversation is not controlled (although the conversation environment is carefully controlled).
- The consensus plan may be something entirely new and unanticipated.

## Best Practices..... Vermont: Transportation Planning Initiative (TPI)

The Vermont Transportation Planning Initiative involves the public in the planning process for various improvements to the state's transportation system. The objective of this initiative is to encourage the expansion of local decision making and planning for a variety of transportation priorities, projects and long range plans.

The Vermont Agency of Transportation (VTrans), in association with Vermont's Regional Planning Councils and the Vermont League of Cities and Towns (VLCT) formed the TPI program as a way to organize a transportation planning process in which local municipalities, citizens and stakeholders could participate directly.

The goal of the TPI is to gain insight from local communities in order to influence the planning process of transportation policy and projects. Regional and local plans should be in accordance with the statewide Long Range Transportation Plan. The TPI is meant to serve as the foundation to bring all interests of local, regional and statewide representation to fruition.

The entire state of Vermont is represented by the TPI, except for Chittenden County, which is represented by its Metropolitan Planning Organization. An important aspect of the TPI is that the local, regional and state planning authorities coordinate their plans together.

Some examples of this may include:

- Planning, attending and facilitating meetings;
- Publicizing meetings and the TPI process;
- TAC meetings;
- Training for both staff and participants;
- Newsletters and publications;
- Interagency coordination;
- Citizen participation;
- Coordination with the transportation disadvantaged;
- Serving on various transportation related task forces and study committees;
- Access management outreach.

Local governments are actively involved in all projects from the point of inception to completion. Final work products are endorsed by the affected jurisdictions. The work program includes how the Transportation Advisory Committee (TAC) members, who are appointed by town representatives, communicate back with their local planning commissioners and selectboard members on a regular basis.

TAC members review the yearly work program with their towns. The TAC recommends approval and the RPC gives final approval. What is especially unique about the Vermont approach is the careful nurturing of public involvement in a formal manner that begins early in system planning, carries through program development and project development, and continues into follow-up monitoring and evaluation.

This represents a true and sincere commitment to public involvement in development of the state's transportation system.

## Best Practices..... Danville, Vermont – Example of Vermont Approach

VTrans (the Vermont Agency of Transportation), in affiliation with the Vermont Arts Council and the citizens of Danville, began a multi-year project to integrate artistic enhancements in the redevelopment of a portion of US Highway 2 through the village center of Danville, VT in 2000.

Drawing on the historic Vermont traditions of public meetings and civil discourse, a Local Review Committee (LRC) was formed in March 2000, on the basis that public meetings and civil discourse were a top priority. The LRC was comprised of volunteer members whose purpose was to oversee the project from initial design concept through construction and maintenance.

In mid-November 2000, an open-forum Community Meeting was held in Danville to gather input from the residents of the Town for incorporation into a Preliminary Design Proposal. The Preliminary Design Proposal was presented to the LRC in mid-January 2001 for analysis, discussion and refinement.

A hearing was held in Danville in late September 2001, defining the scope and limits of the capital construction project to all affected residents, business owners, landowners and holders of title, and soliciting comments from them for consideration and incorporation into the proposed Conceptual Plan.

This is the first-ever partnering between the Arts Council and VTrans. This project has expanded to include the Vermont Council on Rural Development, and has attracted considerable national attention as a model of a successful interagency partnership driven by an awareness of context-sensitive design. With such broad public, private and multi-agency support, the Danville Transportation Enhancement Project will be a pivotal experience in the ways rural communities

deal with "Quality of Life" issues as they relate to infrastructure in the 21st century.

## Best Practices ..... Minnesota DOT – Hear Every Voice

One of the nation's most progressive and comprehensive public involvement programs was implemented by Minnesota DOT (Mn/DOT) in 1997. The program is designed to encompass the department's business – from system planning, through program development, and through project planning, design and construction. The following is excerpted from Mn/DOT's program guidance, entitled "Hear Every Voice."

*In August 1997, Mn/DOT formed a Public Involvement Task Force for the purpose of developing a guide to public involvement at Mn/DOT, a comprehensive report that provides guidance to planners and program managers in order to achieve our vision of making the best possible transportation decisions promoting safety and enhancing the quality of life of Minnesota's citizens. In order to involve the public in the work of the task force, market research was conducted in selected areas around the state.*

*Citizen focus groups were conducted in the cities of Mankato, Grand Rapids, Minneapolis, and Marshall, during late January and early February, 1998. Two focus groups were held in each city. Persons identified to serve on these focus groups were selected at random and were asked to provide input on how Mn/DOT could improve the effectiveness of its current public participation techniques and strategies. Focus group results are given on pages 8-11.*

*The 25-member task force met over a period of 10 months to review federal and state requirements for public involvement and best practices nationwide. Membership primarily consisted of Mn/DOT staff. Persons serving on the task force represented both the transportation planning and project development disciplines.*

### ***PUBLIC INVOLVEMENT VISION STATEMENT***

*To proactively seek early and continuing public input and involvement so that Mn/DOT is responsive and accountable to its traditional and non-traditional stakeholders, communicates effectively with the public, and makes the best possible transportation decisions promoting safety and enhancing the quality of life of Minnesota's citizens.*

### ***DOCUMENT PURPOSE***

*To provide statewide guidance for Mn/DOT planners and project managers on designing and implementing public involvement programs to achieve Mn/DOT's strategic vision of putting our customers first and balancing their interests to achieve the greatest public good.*

**PUBLIC INVOLVEMENT GUIDELINES**

*The following public involvement guidelines were developed to assist Mn/DOT personnel in implementing public involvement plans and activities. They reflect the mandates of ISTEA, reinforced by TEA-21, as well as public agency best practices.*

1. *For all Mn/DOT plans and projects, public involvement plans should be developed and tailored to the complexities of the project.*
2. *Solicit public involvement as early as possible.*
3. *When possible and appropriate, Mn/DOT employees will plan for smaller, more informal group meetings and discussion.*
4. *Mailing lists, including known neighborhood associations, civic and cultural groups, environmental organizations, citizens advisory committees, and organizations and associations with low income, minority, elderly, and disabled constituents will be kept up-to-date as appropriate.*
5. *Mn/DOT employees will make an effort to go where the people are.*
6. *Communication must be two-way, continuing, and consistent.*
7. *Mn/DOT is committed to being clear about the process of public involvement and how it ties into decision-making.*
8. *Innovative tools and media will be used to communicate to the public.*
9. *Varying types of incentives may be necessary given the type of project, or plan, and the people who are invited to the meeting.*

Mn/DOT's "Hear Every Voice" policies and approaches are applied in its Context Sensitive Design program. The linkage between the two is demonstrated in the guiding principles contained in their CSD training materials:

***Mn/DOT's Commitment to CSD*** *Mn/DOT's policy is to use a Context Sensitive approach to create excellence in transportation project development – an approach that incorporates design standards and flexibility, safety, aesthetics, environmental stewardship, and community sensitivity. Mn/DOT's goal is to construct, operate, and maintain excellent transportation facilities that satisfy stakeholders and leave a positive and lasting public works legacy.*

***Keys to Success*** *CSD requires an early and continuous commitment to public involvement, flexibility in exploring new solutions, and an openness to new ideas. Community members play an important role in identifying local and regional problems and solutions that may better meet and balance the needs of all stakeholders.*

## Bottom Line ..... Community Involvement in State Highway Projects

State DOTs are getting serious about developing comprehensive public involvement approaches to help in development of their state highway systems. The fact is that citizens, given complete and

accurate information, and given an opportunity to be part of the process, often arrive at decisions similar to those the DOT might have recommended. It is also true that citizens are often capable of arriving at decisions that are significantly better than the DOT might have recommended.

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## Citizen Empowerment in Transportation

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### The Issue .....

*Today's citizens  
expect to be  
involved*

One of the most important mandates of ISTEA was the elevation of citizen participation in transportation planning into systematic citizen empowerment. Transportation is one of the most powerful forces shaping Montana's communities and influencing quality of life for all Montanans. How will people be consulted? How can we harness the energy, good intentions and wisdom of the State's citizens to the task of developing the kind of transportation system that matches our expectations for what kind of place Montana will be?

### Best Practices ..... Maine – Kids and Transportation Program

*Maine's program  
hopes that when  
children grow up,  
they will be more  
open to  
alternative forms  
of transportation*

Maine's Kids and Transportation Program was organized by Greater Portland Council of Governments (GPCOG), with \$80,000 in CMAQ funds. The program receives additional support from the National Highway Traffic Safety Administration; the member jurisdictions of GPCOG provide a match of \$20,000. Funding was programmed through the area MPO.

The KAT program teaches children and their parents about alternatives to car travel. Through school-based seminars and community field trips, the program teaches young people that bicycling, walking and riding the bus can be lifelong travel habits that improve personal fitness, make communities more livable, reduce road congestion and help maintain the quality of clean air.

The Kids and Transportation program uses a "train the trainer" approach that helps teachers to facilitate the concise message of alternative transportation. Each teacher must complete a safety course which emphasizes the importance of non-motorized transportation as a viable form of travel. Teachers are encouraged to integrate transportation education into their classroom teaching. The program also produced a Kids Map Guide, which identifies various transportation systems, routes and connections for kids to use to find their way through Greater Portland. The program assumes children have an influence on family travel behavior. The infectious attitudes of children who support non-motorized transportation, it is believed, can rub off on their parents' travel habits. Furthermore, the program's supporters hope that when the region's children grow up, they will be more open to alternative forms of transportation. Observers feel parents and students are also more aware of transportation safety as a result of the program.

## Best Practices..... Michigan

The City of Lansing, Michigan embarked on a reconstruction of I-496 with significant input from the public. The project started out as a vision to fix a few bridges along the I-496 corridor. The project blossomed into a rehabilitation of 33 bridges, 6 miles of road repairs and 2 miles of road rehabilitation.

The Michigan Department of Transportation (MDOT) has been widely praised by the American Association of State Highway and Transportation Officials (AASHTO) for work on this project. MDOT was awarded with the AASHTO SCoQ Award for the I-496 project. The SCoQ is AASHTO's Standing Committee on Quality Award.

MDOT worked with the public from inception to completion on this project. Initially MDOT identified project stakeholders, city government officials, General Motors, neighborhood groups and others as having a key impact in the success of this project. MDOT tried to meet individually with each of these groups to incorporate ideas, issues and concerns in to the project.

From this point, MDOT went as far as meeting with specifically identified neighborhoods in people's homes. The key message was clear, this project was going noise, and residents did not want this to happen. Prior to construction, MDOT officially received noise waivers from the City of Lansing, which meant that they would be able to work on this project 24 hours/day, 7 days a week. The residents were opposed to this and MDOT revised its request to meet the needs of the community. MDOT gained a high level of credibility in doing this, showing that they do in fact listen and respond to the stakeholder's and public's concerns

The overall project took place from February 2000 to October 2001. The construction of the project was completed in six months. MDOT attributes the success of this project to providing the public with awareness during the initial phase of the project. The impacts became an afterthought because the public was very well informed and were given the chance to voice their concerns on several occasions.

Since this approach to the I-496 project gained significant support from various stakeholders and the general public, MDOT decided to accept this approach as a new standard for general communication and public involvement.

## Best Practices..... Puget Sound Regional Council

The Puget Sound Regional Council (PSRC), formerly known as the Puget Sound Council of Governments is the regional planning agency for the central Puget Sound area in the State of Washington. Members include four counties, 57 cities and towns, three ports, and two state transportation agencies; the Washington DOT and the State Transportation Commission.

PSRC's mission is to "preserve and enhance the quality of life by preparing, adopting, and maintaining the goals, policies, and standards for regional transportation and regional growth management in the central Puget Sound area.

The PSRC adopted VISION 2020, in 1991, which is an innovative, long-range policy program that includes a progressive, realistic transportation plan designed to enable PSRC to predict and manage changes in transportation policy at the federal, state, and local levels. Previously, VISION 2020 was found to be difficult to implement under the existing MPO structure and process. The MPO was restructured in the early 1990s to provide better direction. Currently, PSRC is maintaining the strength and vision of the original plan while adopting new goals and strategies to comply with new federal and state laws, and state transportation statutes.

*Puget Sound  
Regional Council  
(PSRC) has a  
strong public  
involvement  
program that  
assures the  
development of a  
thorough, citizen*

The mission for the Future The Puget Sound Regional Council's VISION 2020 as established in the Interlocal Agreement and detailed Metropolitan Transportation Plan (MTP) is the result of innovative planning and management because:

- Each element of the MTP is managed with regard to PSRC's growth management objectives: the intention is to concentrate growth in urban areas, while preserving rural and open areas. The MTP aims to curb urban sprawl with a transportation system that reduces the need for automobile travel.
- The plan has a two-phase structure, which focuses on continued development of "key action" projects in the first phase (1996-2005) with consideration of new financing and policy strategies in the second phase (2006-2020).
- The policy program is based on a study of possible outcomes of different action strategies in implementation: no action (allowing current trends to continue until 2020), little new action the financially constrained status quo), preferred action (a plan to incorporate new financial concepts and technological advances), and a fall-back option (adhering to

conventional transportation system financing) if the preferred strategy is unable to be implemented. The performance success of each of these proposals is examined in a useful prediction report included in the MTP.

- A built-in monitoring system is being added to measure progress over time through tracking of implementation (steps taken to implement policies, such as urban growth boundaries) and performance (such as current travel time by mode...reduced travel time by mode) measures.
- PSRC has a strong public involvement program that assures the development of a thorough, citizen-tailored transportation system.
- PSRC planners examine new technology and its impacts on transportation system development.

The PSRC strives to achieve its goals by basing standards for regional transportation and growth management on local comprehensive plans. Much of PSRC's success can be attributed to the vital role that the Puget Sound community played. There was an enormous effort to discover the eminent needs of private citizens, public organizations, and the business community. A Metropolitan Transportation Plan was created with the idea that "local people understood problems better" and that a "better decision" was reached because the decision was made by the residents.

After the initial proposal of VISION 2020, five strategies of action were offered for public comment. VISION 2020 is continually updated due to public comment and changes in transportation policy.

There have been many ways that the PSRC reaches the local community:

- Providing an updated version of the VISION 2020 proposal to the public with an additional MTP "Selected Highlights" version;
- Holding public meetings in each PSRC county;
- Coordinating region-wide forums to encourage discussion between the public and regional planning authorities;
- Conducting open-houses at which displays of transportation projects are presented and project planners are available to discuss particular projects; and,
- Producing informative videos to present the ongoing vision for the region (Let's Get Moving and The Future Starts Now) which include input of community members.

*The goal of the PSRC's Public Participation Plan is to ensure early and continuous public notification about and participation in major actions and decisions by the*

## Best Practices..... Front Range, Colorado

Following loss of the Larimer and Weld Counties Council of Governments (due to political factors), the Cities of Greeley and Ft. Collins recognized the need for a regional Metropolitan Planning Organization in late 1986.

Soon after, some of the smaller surrounding cities in the region showed significant interest. The resulting North Front Range Transportation & Air Quality Planning Council (NFRT&AQPC) is an association of local governments formed in 1987 to address transportation and air quality planning issues in Colorado's North Front Range.

The North Front Range Transportation and Air Quality Planning is responsible for transportation planning and air quality control issues in the region that consists of Larimer and Weld Counties, including the cities of Fort Collins, Greeley, and Loveland, and the towns of Berthoud, Evans, Garden City, Johnstown, LaSalle, Timnath and Windsor.

The council is unusual in that it has been designated as a Metropolitan Planning Organization representing a large, diverse urban/rural area containing three significant non-contiguous cities (Ft. Collins, Loveland and Greeley).

The following Guiding Principles and Goals were established by the Council to guide the transportation planning process for the region:

The Council's guiding principles are to:

### *NFRT & AQPC Guiding*

- Assure that all residents have adequate access to the process of transportation and air quality planning and project selection.
- Foster a transportation system that will effectively address the current and future needs of the region within fiscal constraints.
- Encourage local governments to work together as a council to develop a balanced approach to providing:
  - System capacity
  - Alternative transportation choices
  - Interconnectivity with other regions
  - Integration of transportation, land use and air quality planning

Two Key Strategies have been established as means to reach the established Goals:

- The Council strongly believes that a principal strategy for achieving these goals should be to affect a reduction in the share of travel by single occupant vehicles (SOV's) by providing regional support for alternative travel modes including walking, bicycling, buses, passenger rail, carpooling, vanpooling, and telecommuting. Efforts to affect this shift from SOV's to alternative modes should focus on peak period travel; travel along strategic corridors; and travel to and from major activity centers, particularly the region's two major universities and its major employment centers.
- A network of Regionally Significant Corridors should be established based upon travel demand and connections between major North Front Range and surrounding communities and activity centers. Regional planning and transportation investments should focus on maintaining efficient, multi-modal mobility along these strategic corridors.

The Council also prepares annually a Transportation Improvement Program (TIP). This document contains a six-year program of projects, with a three-year action component. The final transportation planning document that guides the Council's work is the Unified Planning Work Program (UPWP). This program is a detailed annual management document for the Council's planning and administrative projects.

## Bottom Line ..... Citizen Empowerment in Transportation

These examples highlight some of the potential avenues for Montana to consider following in increasing citizen empowerment in transportation system development.

A truly effective system of citizen involvement requires a comprehensive approach mirroring all of the phases of transportation system planning, program development, project planning and design, implementation, and monitoring.

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## Highways, Wildlife Corridors and Wildlife Habitat

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### The Issue.....

Rural highways – especially wide, heavily-traveled highways – represent major barriers for wildlife. They affect daily circulation patterns and herd movement, and affect seasonal migration patterns.

Roads result in five distinct wildlife impacts:

1. Direct habitat loss from roads;
2. Introduction of humans, houses and development into previously less developed areas;
3. Fragmentation of habitat;
4. Alteration of behavior as animals seek to avoid roads; and,
5. Direct destruction of wildlife in roadway collisions with vehicles.

The Humane Society estimates more than a million vertebrates are killed daily on roadways in the U.S. – the number one way that humans kill wildlife. Of course, humans are killed in these accidents, too. More than 200 people die nationally each year in animal vehicle collisions.

According to MDT, there were 1,796 collisions between motor vehicles and wild animals on Montana’s roadways in 2002, resulting in 3 human fatalities.

Roads reduce the amount of contiguous habitat by dividing areas into smaller components. Often, these smaller pieces of a formerly large habitat area are too small to sustain indigenous species, especially large carnivores and ungulates.

Roads have a particularly significant impact on large carnivores with low reproductive rates, low population densities and large home ranges. Examples include the grizzly bear, wolves and mountain lions. Roads in Montana cut through home ranges of these species, fragmenting habitat and creating hazards and obstacles for migration.

These impacts are of special concern in Montana, where wildlife and wildlife habitat represents a unique and significant resource – both in terms of quality of life and in terms of the state’s economy.

The policy issue of particular importance to Montanans is: *What changes in state policies and processes are needed to reduce wildlife impacts associated with the rural highway expansion program?*

*More than a million vertebrates are killed daily on roadways in the U.S. – the number one way humans kill*

## Best Practices..... Washington

The Washington DOT has undertaken the task of identifying high priority wildlife habitats and potentially critical wildlife crossings at a statewide scale. WSDOT has engaged the Forest Service to model and identify large carnivore habitat and linkages.

The main goal of this effort is for WSDOT to be aware of critical habitat areas prior to the planning process for highway reconstruction or widening. The hope is that early knowledge would prevent WSDOT from learning about key concerns at a point in the process where work must be redone. In addition, this research should provide WSDOT, the US Fish and Wildlife Service and the Forest Service with the same working map of habitat areas and linkages, dramatically streamlining the highway project design process.

## Best Practices..... Banff National Park

Banff National Park contains the highest concentration of wildlife crossing structures in the world. It includes 21 underpasses and 2 overpasses across the Trans-Canada Highway. After crossings were constructed, mortality rates of elk decreased by 96%.

## Best Practices..... Florida

The Florida Department of Transportation (FDOT) has a dedicated budget ranging from one-half to one million dollars annually to fund wildlife conservation-oriented projects. Using this budget, FDOT has funded research by the Florida Game and Fish Department to identify high priority black bear and Florida panther habitat areas and corridors. The goals of this partnership are to avoid identifying priorities on a project-by-project basis, but instead to promote an understanding of sensitive areas and mitigation needs on a regional level, and before projects are started.

FDOT notes that its partnership with the Florida Game and Fish Department has encouraged public acceptance of FDOT policies on certain wildlife issues. For example, Game and Fish has supported FDOT in developing a policy to focus efforts to build wildlife crossings in areas of public ownership, rather than those under private ownership.

This policy is upheld even in areas of critical wildlife habitat and crossings because Game and Fish has documented that safe crossings are only effective in those areas where fencing can be put in place to direct wildlife to the crossings.

## Best Practices..... Second Nature

This recent report, a joint project of Defenders of Wildlife and the Surface Transportation Policy Project, documents a number of leading edge efforts to establish systematic collaboration and cooperation among transportation and resource agencies to protect wildlife, wildlife habitat and wildlife corridors at all stages of transportation corridor development.

The report provides a number of examples relevant to this discussion, including:

- Colorado’s Shortgrass Prairie Initiative. This collaboration between Colorado DOT and a number of state and federal resource agencies is designed to protect and preserve large tracts of rangeland, grassland and prairie along with the species that inhabit these places.
- Oregon’s Collaborative Environmental and Transportation Agreement for Streamlining (CETAS). This program is designed to provide a coordinated review process for highway construction projects.
- U.S. Highway 93 in Montana. This project is the result of the combined efforts of citizens, and local, state, federal and tribal governments. A 56-mile section of the highway will be rebuilt according to an innovative plan to respect “a spirit of place” by considering wildlife and land ethics while reconstructing the highway. (See also Best Practices – Montana, below.)

## Best Practices..... Sonoran Desert Conservation Plan

This local government initiative established the SDCP to “ensure the long-term survival of plants, animals and biological communities that are indigenous” to Pima County. The plan utilizes the concept of “bio-planning,” or natural resource assessment and planning, as a necessary first step in determining urban form. For information, see Second Nature, Surface Transportation Policy Project, 2003.

## Best Practices..... Riverside County, California

As part of the Riverside County Integrated Project (RCIP) the Community and Environmental Transportation Acceptability Process identifies needs and priorities for highways and transit systems, taking into account impacts on sensitive habitats and valuable open space. For more information, see [www.rcip.org](http://www.rcip.org).

## Best Practices..... Montana

In response to the widely accepted need for reconstruction of 56 miles of Highway 93, some of which travels through tribal lands, the Montana Department of Transportation completed an EIS for the roadway in 1996 that included a preferred alternative calling for a 4-lane highway. Tribal governments were displeased with the EIS recommendations, and their legal council was able to halt the EIS by noting many outstanding issues. In 1997, the MDT, FHWA, tribes and main engineering firm working on the project began the design process again from scratch. The group focused on design at the landscape level, protecting the tribe's natural and cultural resources.

Wildlife crossings were a main issue, and the team addressed five criteria to locate structures: 1) habitat; 2) animal-vehicle collision locations; 3) wildlife trails; 4) winter tracking; and, 5) engineering feasibility. The team also traveled to Banff to study structures there. Forty-two structures were proposed; forty-one under the roadway and one 150-foot wide overpass structure. In addition, about 14 miles of wildlife-proof fencing was proposed to support the structures.

Currently about 46 miles of the project is now in the design phase, and about 10 miles of the project that runs through a wildlife refuge is in a Supplemental EIS. The FHWA and MDT are funding the Western Transportation Institute to perform a case study of the design process and data collection to determine if the crossings and fencing reduce wildlife mortality and/or increase wildlife crossing rates. The FHWA is using streamlining funding for the case study.

MDT plans to incorporate fencing, cattle guards and landscape design modifications into the 2004 reconstruction of the Montana Rail Link overpass in the Bozeman Pass area in response to work by American Wildlands and other organizations and agencies. It is hoped that elk, deer, mountain lions, bears and other wildlife will cross under I-90 using the overpass and thus reduce the number of animals killed crossing I-90. Bozeman Pass is a key wildlife migration corridor connecting the Gallatin and Bridger Mountain Ranges on a local scale, and the Northern Continental Divide Ecosystem and the Greater Yellowstone Ecosystem on a regional scale.

## Bottom Line ..... Highways and Wildlife

State DOTs are beginning to address wildlife corridors and wildlife habitat loss more systematically than in the past. Specifically, they are working on the significant underlying issue of lack of comprehensive information about wildlife migration routes, habitat needs, and sensitivity to habitat disaggregation and habitat loss.

## Conclusions

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1. Highway expansion projects in Montana will inevitably be controversial because a significant part of the citizenry is knowledgeable and concerned about the negative impacts.
2. Context Sensitive Design represents a sweeping change in the way public works and transportation departments – and especially state DOTs – approach planning and design of projects. It is specifically intended to fundamentally improve the process for designing highway projects and to improve the resulting transportation facilities.
3. DOTs that have adopted CSD principles and procedures (e.g., Minnesota and Kentucky) believe the result has been better projects – projects that provide greater value, are well-received by the public, and enhance the agency’s credibility with the affected communities.
4. MDT has been slow to embrace context sensitive design either as a policy or as standard practice in highway development. MDT is one of the state DOTs yet to implement an aggressive CSD training program for its engineers and contractors.
5. MDT has demonstrated the ability to take a more progressive approach. For example, MDT’s efforts to rebuild Highway 93 on the Flathead Indian Reservation were stalemated by opposition. MDT worked creatively with the Confederated Salish and Kootenai Tribes and the FHWA to develop a plan that has garnered national awards.
6. The details of highway design – centerline alignment, cross-section, access – represent powerful forces shaping land development patterns. Local towns, cities, counties and the public they represent are the experts about “context” and must be involved throughout the highway design process to ensure that the development forces unleashed by the state’s highway investments are consistent with community plans and with environmental values.
7. If Montana were to incorporate these ideas and principles into its own state highway planning and design processes, it would be able to draw from a growing body of experience and practice developed and adopted by several of its sister state DOTs.

8. Successful and effective context sensitive design processes:
  - a. Balance safety, mobility, community, and environmental goals in all projects;
  - b. Involve public and agencies early and continuously;
  - c. Use an interdisciplinary team tailored to project needs;
  - d. Address all modes of travel;
  - e. Apply flexibility inherent in design standards; and,
  - f. Incorporate aesthetics as an integral part of good design.
9. One of the most important mandates of ISTEA was the elevation of citizen participation in transportation planning into systematic citizen empowerment.
10. A truly effective system of citizen involvement requires a comprehensive approach mirroring all of the phases of transportation system planning, program development, project planning and design, implementation, and monitoring.
11. Public involvement cannot succeed as a minor part of a project, or as a project task. It must be the backbone. Public participation is the backbone of a project when:
  - a. The schedule is organized around well-timed public events.
  - b. Public consultation starts early in the project, before objectives are set or alternatives are identified.
  - c. Public events are planned in detail and are an integral part of project decision-making.
  - d. Products are timed in anticipation of public events so that the right information is available.
  - e. Public events represent a significant percentage of the planning and design budget.
12. The best ideas in well-managed transportation planning and design projects come from the community itself. It takes time to reach this point. The public involvement program must be routine, well-established, credible and sincere.
13. Characteristics of a sincere public process include:
  - a. The process has the right objectives –
  - b. Short term – empowering people to shape the outcome of this plan or project;
  - c. Long term – sustained community learning.
  - d. The outcome is uncertain.
  - e. The conversation is not controlled (although the conversation environment is carefully controlled).
  - f. The consensus plan may be something entirely new and unanticipated.

14. State DOTs around the U.S. are beginning to address wildlife corridors and wildlife habitat loss more systematically than in the past. Specifically, they are working on the significant underlying issues of lack of comprehensive information about wildlife migration routes, habitat needs, and sensitivity to habitat disaggregation and habitat loss. These efforts have highlighted the need for inter-jurisdictional cooperation and innovative land use tools, including land banking and dedicated funding to address wildlife preservation needs.
15. MDT has encountered stiff opposition to construction of highways with inadequate attention to wildlife impacts. One example is the planned reconstruction of 56 miles of Highway 93, some of which travels through tribal lands. MDT is now working with the confederated Salish and Kootenai tribes and with the federal highway administration to develop a plan that will take wildlife impacts more fully into account. The parties are now putting the finishing touches on that plan.
16. MDT is also beginning to incorporate such project elements as fencing, cattle guards and landscaping modifications into projects around the state in an attempt to reduce wildlife impacts. There will be a need for a systematic, statewide approach to wildlife impacts, taking into account available comprehensive information about critical habitat and migration corridors, supported by increased funding and attention with work plans.

## Recommendations

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The State of Montana should implement the following policies and approaches, either as agency policies or through legislation.

1. Legislation should be adopted by the Montana Legislature establishing the policy that all highway planning and design by MDT shall adhere to principles of context sensitive design. These principles should be spelled out in the legislation to include:
  - a. Balancing of safety, mobility, community, and environmental goals in all projects;
  - b. Involving the public and affected agencies early and continuously;
  - c. Utilizing an interdisciplinary team tailored to project needs;
  - d. Addressing all modes of travel;
  - e. Applying flexibility inherent in design standards;
  - f. Incorporating aesthetics as an integral part of design.
2. MDT should undertake comprehensive context sensitive design training modeled after Kentucky, California, and Minnesota programs. Specific training elements should be phased and should be addressed to:
  - a. MDT staff (first two years);
  - b. Engineers and contractors (second two years).
3. The Montana Legislature should provide for establishment of a “Public Involvement Task Force” (similar to one undertaken by Minnesota DOT) that would:
  - a. Begin with statewide meetings;
  - b. Develop a vision statement;
  - c. Publish statewide guidance for public involvement in MDT’s planning and project development.
4. The Montana Legislature should create statutory requirements and standards for community involvement in transportation projects, at both the state and local levels.
5. The Montana Legislature should create statutory requirements for a local approval process for review and acceptance of certain types of proposed MDT projects by local jurisdictions. This could be limited to those local governments with adopted local land use or growth management plans, including transportation plans or could be limited to cities, towns and counties above a certain size.

6. MDT should make use of existing cataloguing of high priority wildlife habitat and critical wildlife crossings completed by American Wildlands, U.S. Forest Service, and the U.S. Fish and Wildlife Service. The goal should be for MDT, other agencies and the public to be aware of critical habitat areas prior to the planning of highway projects.
7. MDT should extend the example of US 93 at Flathead to all projects, where needed and appropriate: provision of wildlife crossings with fencing regimes, commitments to habitat protection in the corridor, and working closely with local people and governments in developing and carrying out these provisions. The US 93 experience at Flathead should become a model, not an exception. The State Legislature should provide leadership, direction and funding to support this program.
8. The State should work with its congressional delegation to pursue greater funding for wildlife habitat identification and preservation efforts in transportation corridor development as part of this year's update of the Surface Transportation Program.

## Glossary of Terms

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**American Association of State Highway and Transportation Officials (AASHTO)**

AASHTO is a nonprofit, nonpartisan association representing highway and transportation departments in the 50 states, the District of Columbia and Puerto Rico. AASHTO represents all five transportation modes: air, highways, public transportation, rail and water. Its primary goal is to foster the development, operation and maintenance of an integrated national transportation system.

**Congestion Mitigation & Air Quality Improvement Program (CMAQ)**

A categorical Federal-aid funding program created with the ISTEA. Directs funding to projects that contribute to meeting National air quality standards. CMAQ funds generally may not be used for projects that result in the construction of new capacity available to SOVs (single-occupant vehicles).

**Context Sensitive Design (CSD)** A collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility. CSD is an approach that considers the total context within which a transportation improvement project will exist.

**Federal Highway Administration (FHWA)** An agency within the U.S. Department of Transportation with responsibility for federal participation in the development and management of highways, roads and streets. FHWA administers the federal-aid Highway Program, providing financial assistance to states to construct and improve highways, urban and rural roads, and bridges. FHWA also administers the Federal Lands Highway Program, including survey, design, and construction of forest highway system roads, parkways and park roads, Indian reservation roads, defense access roads, and other Federal lands roads.

**ISTEA** Intermodal Surface Transportation Efficiency Act. The 1990 federal legislation that completely revamped the federal surface transportation program, ushering in the modern era in transportation planning and investment. ISTEA restructured funding for transportation programs; authorized an increased role for regional planning commissions/MPOs in funding decisions; and required comprehensive regional and statewide long-term transportation plans.

**MDT or Montana Department of Transportation** The state transportation agency in Montana responsible for building, maintaining and operating the states highways, and also responsible for planning and investing in multimodal transportation systems.

**Metropolitan Planning Organization (MPO)** Regional policy body, required in urbanized areas with populations over 50,000, and designated by local officials and the governor of the state. Responsible in cooperation with the state and other transportation providers for carrying out the metropolitan transportation planning requirements of federal highway and transit legislation

**Multimodal Transportation** The full range of travel modes, including motor vehicles, public transit, walking and bicycling, and variations of these.

**Transit** A general term applied in Montana to passenger bus and van services available for use by the public. Includes both demand response services and services operating on fixed routes with fixed schedules.

**Transportation Equity Act for the 21st Century (TEA-21)** This update to ISTEA made significant changes, including funding changes affecting Montana. Adopted in 1998, TEA-21 authorized federal funding for transportation investment for fiscal 1998-2003. About \$217 billion in funding was authorized, the largest amount in history, which is used for highway, transit, and other surface transportation programs.

**Transportation** Personal mobility, access, circulation, and freight movement.

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