



ACKNOWLEDGEMENTS

The 2005 Butte-Silver Bow Transportation Plan Update was made possible through the cooperation and assistance of many individuals. The following principal study participants provided guidance and support through the course of this study:

BUTTE – SILVER BOW TRANSPORTATION COORDINATING COMMITTEE

Paul Babb	Chief Executive, Butte – Silver Bow
Bernard Harrington	Mayor, City of Walkerville
Jon Sesso	Director, Butte – Silver Bow Planning Department
John Van Daveer	Director, Butte – Silver Bow Dept. of Public Works
Dan Dennehy	Director, Butte – Silver Bow Health Department
Karen Byrnes	Director, Butte – Silver Bow URA and Community Development
Jeff Ebert	MDT Butte District Administrator
Lynn Zanto	MDT Statewide & Urban Planning Section
Jack Burke	Citizen Advisor
John Moodry	Citizen Advisor

BUTTE – SILVER BOW PLANNING DEPARTMENT

Jon Sesso	Director
Russ Connole	Assistant Director

BUTTE – SILVER BOW DEPARTMENT OF PUBLIC WORKS

John Van Daveer	Director
Gary Keeler	Director, Transit

BUTTE – SILVER BOW COUNCIL OF COMMISSIONERS

District 1	Mike Kerns	District 7	David Bud Walker
District 2	Joseph E. Lee	District 8	David B. Coleman
District 3	Jim Fay	District 9	Laura Lee Dunlap
District 4	John M. Sorich	District 10	Mike Sheehy
District 5	Charlie O’Leary	District 11	Ted P. Bury
District 6	Wally Frasz	District 12	Rocko Mulcahy

MONTANA DEPARTMENT OF TRANSPORTATION

Jim Lynch	Director
Jeff Ebert	Butte District Administrator
Joe Olsen	Butte District Engineering Services Supervisor
Lynn Zanto	Statewide & Urban Planning Supervisor
Sandra Straehl	Rail, Transit & Planning Administrator
Tom Kahle	TransCAD Modeler

BUTTE – SILVER BOW CITIZEN GROUPS AND ORGANIZATIONS

The authors would like to extend a special thank you to all of the citizens who shared their opinions and concerns with the planning team in an effort to produce the best transportation plan possible for their community.



LIST OF PREPARERS

This Plan was prepared by the consulting firms of HKM Engineering Inc. and Community Development Services of Montana. The following members of our firms were contributors to this Plan or helped prepare the document.

HKM STAFF

Gary Simonich	P.E., Principal
Chris Laity	P.E., Project Manager
Darryl James	A.I.C.P., Quality Assurance
Todd Cormier	P.E., Technical Assistance
Sarah Joyce	E.I., Engineering Designer
Jeremy Salle	E.I., Engineering Designer
Jennifer Peterson	E.I., Public Involvement
Dave Stratton	Graphics Production
Sarah Nicolai	Graphics & Report Production

SUBCONSULTANTS

Janet Cornish	Community Development Services of Montana
Margie Seccomb	MS Grant Writing Services



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TRANSPORTATION ACRONYMS

ADA	Americans with Disabilities Act
CAA	Clean Air Act
CAAA	Clean Air Act Amendments (1990)
CBD	Central Business District
CFR	Code of Federal Regulations
CIP	Capital Improvement Program
CMAQ	Congestion Mitigation and Air Quality Program
CO	Carbon Monoxide
CTEP	Community Transportation Enhancement Program (a Montana Program)
CTPP	Census Transportation Planning Package
DOT	Department of Transportation
EIS	Environmental Impact Statement
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
GIS	Geographic Information System
HBNW	Home-based Non-work Trips
HBW	Home-based Work Trips
HCM	Highway Capital Manual
ISTEA	Intermodal Surface Transportation Efficiency Act
ITS	Intelligent Transportation Systems
MACI	Montana Air and Congestion Initiative
MDT	Montana Department of Transportation
MEPA	Montana Environmental Policy Act
MOE	Measure of Effectiveness
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
MTA	Montana Transportation Association
NAAQNA	National Ambient Air Quality Non-attainment Area
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act (1969)
NHB	Non-home Based Trips
Nox	Nitrogen Oxides
PM	Particulate Matter
PM-2.5	Particulate Matter of Less Than 2.5 Microns
PM-10	Particulate Matter of Less Than 10 Microns
TAZ	Traffic Analysis Zone
TDM	Transportation Demand Management
TEA-21	Transportation Efficiency Act for the 21 st Century
TIP	Transportation Improvement Plan
VHT	Vehicle Hours of Travel
VMT	Vehicle Miles of Travel
VPD	Vehicles Per Day

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TRANSPORTATION GLOSSARY

Average Daily Traffic (ADT) - The total amount of traffic observed, counted or estimated on a roadway segment during a single non-holiday 24-hour period.

Annual Average Daily Traffic (AADT) - The average daily traffic averaged over a full year.

Bike Lane - A lane devoted to non-motorized bicycles.

Capacity - The maximum sustainable vehicle flow rate that can be expected to traverse a roadway segment/intersection during a specific time period given roadway, geometric, traffic, environmental, and control conditions. Capacity is usually expressed in vehicles per day (vpd) or vehicles per hour (vph).

Context Sensitive Design (CSD) - Process of incorporating an increased sensitivity to the adjacent environment while completing roadway engineering.

Delay - The amount of time spent not moving due to a red traffic signal, or the inability to pass through an unsignalized intersection.

Gap - The amount of time between vehicles or the time that the lanes are available for merging traffic.

Institute of Transportation Engineers (ITE) - Organization for professional transportation engineers. ITE publishes the Trip Generation Manual, which provides information on trip generation for land uses and building types. For instance, if an individual needs to know the number of trip ends (see definition below) produced by an industrial park, the report provides a trip rate based upon the size of the building. The report also divides the trip rate into peak hour rates, weekday rates, etc.

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) - This Congressional Act requires states to develop a Statewide Transportation Plan and a Statewide Transportation Improvements Program (STIP) that identifies short-term project needs and priorities. It has also been a major source of funding for transportation planning and encourages the linking of transportation and community planning. (See also TEA-21 below).

Level of Service (LOS) - A qualitative measure of intersection or road segment operating condition. A grading scale of A through F is used to characterize traffic operating conditions. The scale is based on the ability of an intersection or street segment to accommodate the amount of traffic using it, and can be used for both existing and projected conditions. The scale ranges from "A" which indicates insignificant vehicle delay, to "F" which indicates significant vehicle delay and traffic congestion.

Link - A segment of highway ending at a major intersection on an urban street or at a ramp merge or diverge point on a freeway. Links have a node at each end.



Link Volumes – The number of vehicles using a specific street segment. It is typically expressed as average daily traffic (ADT) or vehicle per peak hour (VPH).

Linked Trip/Trip Chain – The sequence of grouping stops between the origin and ultimate destination. The intermediate stops made while enroute to the ultimate destination are referred to as passby trips. The term is used in the evaluation of the operation of the accesses or driveways serving the uses at the intermediate stops.

Median – A physical divider separating lanes of traffic that typically are traveling in opposite directions. A median is often installed to prohibit unsafe turning movements. It can also be used to beautify a streetscape.

Metropolitan Planning Organization (MPO) – The agency that administers the federally required transportation planning processes in a metropolitan area. An MPO must be in place in every urbanized area with a population over 50,000, and is responsible for the 20-year long-range plan and the Transportation Improvement Program (TIP). The MPO is the coordinating agency for grants, billings and policy-making for transportation.

Multimodal – The concept of incorporating private passenger vehicles, transit, and non-motorized (bicycles and pedestrians) transportation features into the planning process.

Node – The end-point of a link; also used interchangeably with “point.”

Peak Hour – The one-hour period during which an intersection or road segment carries the greatest number of vehicles. Traffic impacts are typically evaluated during the morning and afternoon peak hours when the greatest number of motorists are traveling to and from work.

Pedestrian LOS – Level of service for pedestrians can be studied as part of a transportation or traffic analysis, but is less common. It is typically only an issue in larger urban areas.

Platoon – A grouping of vehicles traveling in the same direction at the same approximate speed.

Stacking – The process of vehicles forming a line or queue. If the stacking extends into the through-lanes, delays and unsafe conditions become prevalent.

Traffic Calming – The process of designing streets or adding design elements to reduce traffic speeds and address unsafe traffic conditions. Design elements include, for example, speed bumps, narrowed streets, added traffic circle, etc.

Traffic Impact Study (TIS) – A study conducted by a transportation professional using transportation modeling and analysis software to predict the volumes and associated impacts from traffic generated by a proposed land use or development project. The study analyzes the impacts to roads and intersections and includes recommendations for roadway improvements that may be needed to mitigate unsafe situations and comply with the regulations of the reviewing jurisdiction.



TransCAD Model –Computer software from Caliper Corporation that combines Geographic Information System (GIS) and transportation modeling capabilities. Function uses include: GIS engine, mapping, visualization, and analysis tools. Application modules include: routing, travel model forecasting, public transit, logistics, site location, and territorial management

Transportation Analysis Zone (TAZ) – Geographic areas that identify land use characteristics, natural physical features, and associated trips for use in the traffic model and land use projections developed for the project.

Transportation Equity Act of the 21st Century (TEA21) – TEA 21 was enacted June 9, 1998 as Public Law 105-178. TEA-21 authorizes and funds the Federal surface transportation programs for highways, highway safety, and transit for the 6-year period 1998-2003. The TEA 21 Restoration Act, enacted July 22, 1998, provided technical corrections to the original law. (See also ISTEA above).

Transportation Demand Management (TDM) – Programs designed to maximize the people-moving capability of the transportation system by increasing the number of persons in a vehicle, or by influencing the time of, or need to, travel.

Travel Speed – The speed at which a vehicle travels between two points including all intersection delays.

Trip End – The term used to describe trips in terms of their common origins or destination.

Vehicle Miles Traveled (VMT) – Increases in VMT from existing residents are occurring every year, contributing to added congestion on roadways.

Volume to Capacity (V/C) Ratio – The result of dividing the counted or estimated traffic volume in a corridor by the estimated corridor/intersection capacity for a similar increment of time.

Vehicle Per Peak Hour (VPH) – This relates to Link Volumes (see above).

Weaving – The process of exiting a site and merging across multiple lanes "with traffic" to reach an intersection and go in a different direction.