

SECTION 1

EVOLUTION OF A TRANSPORTATION PLAN

Development of the Kootenai County MTP

As stated in section 1 of this Plan, this report has progressed through a series of evolutions to end up as the Metropolitan Transportation Plan that it is today. In 1997, Kootenai County Area Transportation Team contracted with J-U-B engineers to compile the Kootenai County Transportation Plan for the years 1997 to 2017.

Encompassing all of Kootenai County and including the cities of Coeur d'Alene, Post Falls, Hayden, and Rathdrum; the highway districts of East Side, Worley, Post Falls, and Lakes, and the Idaho Transportation Department, the Plan's purpose at the time was to complete a thorough analysis of existing and future land use and transportation systems. Existing and future data was capsulated into a computer traffic model for forecasting future traffic volumes and traffic impacts. Through a public facilitation process by KCATT and informational meetings, a complete 20-Year Transportation Plan was developed and recommended priority improvements assigned for 2003 and 2017, and is now being updated for the short term (2015) and long term (2030).

By definition, the Metropolitan Transportation Plan is a 'comprehensive, multimodal "blueprint" for transportation systems and services aimed at meeting the mobility needs of the Kootenai County Metropolitan Area through the next 23 years.' By comparison, the Kootenai County Area Transportation Plan (KCATP) calls itself a '20-year future plan from 1997 through 2017; a thorough analysis of existing and future land use and transportation systems.'

Because the two Plans have such similar aims and goals, it made sense to mold the KCATP into a Metropolitan Transportation Plan once it became mandated for Kootenai County to have one. In fact, sections of several reports and/or plans were incorporated into this MTP, as the information required was already contained in other documents. This saved both staff time and resources, as Planners, GIS professionals and Public Education/Information staff were only required to update the Plan and reformat it, instead of starting completely from scratch to construct an MTP.

One major update to the document to conform to MTP requirements was to add a list of projects programmed for construction between the present, 2007, and 2030. That list can be found in Section 4 of this report.

Countywide Transportation Policies

During the compilation of this Plan, new and additional countywide issues were identified. These issues are discussed below. It is important to remember this document is a planning tool and is not intended to set policy for any of the local agencies. These issues and the information presented herein should be considered by the local agencies in their policy process:

Noise Impact Guidelines

Each agency is encouraged to consider the impacts of noise from roadways as well as land use changes. Mitigation of noise to meet and exceed Federal Guidelines is

encouraged through landscaping and enhancements that are natural and blend with the site environment.

Environmental Mitigation

It is important to address environmental mitigation issues and resources in a long range plan in order to identify sensitive sites to avoided or take into consideration prior to project construction. Figures 1.1 (County), 1.1a (Coeur d'Alene), 1.1b (Post Falls), and 1.1c (Rathdrum) show the locations of some of the air, water and waste concern areas in Kootenai County, including air quality monitoring locations, waste remediation sites, impaired lakes and open mitigation sites. Jurisdictions interested in constructing transportation projects in these identified areas will be required to conduct mitigation activities before construction can begin. The urban areas of the county in particular are affected by environmental considerations.

The Idaho Department of Environmental Quality (IDEQ) plays a large part in protecting the environment by requiring air, water, and waste remediation monitoring on a regular basis. IDEQ routinely assesses outdoor (ambient) air quality to satisfy federal regulatory requirements and scientifically determine the quality of Idaho's airsheds. Breathing elevated levels of air pollutants can adversely affect health, especially among children, the elderly, and those with heart or lung diseases.

Water is another of Idaho's resources that could be threatened by potential transportation projects. Idaho's 92,000-plus miles of rivers and streams and over 100 lakes and reservoirs not only provide great natural beauty, they supply the water necessary for drinking, recreation, industry, agriculture, and aquatic life.

The water supply for the Kootenai Metropolitan Area is served predominantly from aquifers created by glacial till deposited on the Spokane River valley floor through the Ice Age. The Rathdrum Prairie-Spokane Aquifer has been designated by the U.S. Environmental Protection Agency (U.S. EPA) as a Sole Source Aquifer. Spokane County was required to develop and implement a 208 Water Quality Plan to protect the aquifer from contamination, after studies of the water source were completed in 1979. To date, Kootenai County has not been required to create one.

Transportation projects contained in the MTP must comply with provisions contained in the 208 Water Quality Plan. Those provisions typically require some form of treatment to surface water runoff from the transportation system. In many cases, 208 water quality swales or containment areas are required as a part of the projects' design. The requirements imposed on any particular project are identified during the project's design and environmental review process, through consultation with resource agencies. Based on these consultations, necessary mitigation measures are identified and agreed to as part of the project's final approval for construction. Surface water run-off from the transportation systems is now being treated prior to its entry into the ground. Wetlands and critical areas have been defined, and jointly developed mitigation areas have been established within watersheds, to cost-effectively address and offset losses caused by transportation related projects.

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In addition, Kootenai County property owners who have land above aquifer or in recharge areas now must pay \$8 a year to protect the water supply. The Kootenai County Commission set the fee in August of 2007.

As for other Kootenai County waterways, a wastewater discharge permit is required for disposal of waste material into "waters of the state," which include rivers, lakes, streams, and all underground waters and aquifers. A wastewater discharge permit is also required for certain industrial users that discharge industrial waste into sanitary sewer systems. A wastewater permit may be required for facilities that have storm water runoff to surface waters.

Every two years, IDEQ's Surface Water Program is required by the federal Clean Water Act to conduct a comprehensive analysis of state water bodies to determine whether they meet water quality standards or if additional pollution controls are needed.

Overseeing Management and Disposal of hazardous wastes is another concern of the IDEQ. The Waste Management and Remediation Division is responsible for monitoring and controlling the generation, treatment, storage, and disposal of wastes in Idaho. The waste management group focuses on ensuring that wastes generated in or entering Idaho are managed and disposed in a manner protective of human health and the environment. On the remediation side, program resources are directed to responding to existing releases of hazardous substances to surface waters, ground water, or soils.

KMPO has a Transportation/Air Quality Planner on staff to conduct air quality modeling, which is used to estimate concentrations of pollutants that new emissions sources may emit.

Another environmental issue to be taken into consideration when planning transportation projects is the presence of endangered and threatened species. According to the U.S. Fish and Wildlife Service, the existence of the following species have been documented in Kootenai County:

- Gray wolf- Listed threatened
- Canada wolf- Listed threatened
- Bull trout- Listed threatened
- Water howellia- Listed threatened
- Spalding's catchfly- Listed threatened

Agencies involved with environmental agencies, such as Idaho Fish and Game, U.S. Fish and Wildlife Service, U.S. Forest Service, Idaho State Lands, United States Corps of Engineers, State Historic Preservation Office, Idaho Department of Environmental Quality, and the Coeur d'Alene Tribe, have been contacted regarding this MTP and provided a copy of the Plan.

Transportation Demand Management

As the county population grows and traffic increases, Kootenai County needs to look to alternative forms of transportation to relieve the demand on the existing roadway network. Adding additional lanes, intersection improvements, and creating new routes makes a difference in the performance of a facility, but cannot be repeated perpetually. Transportation System Management (TSM) and Transportation Demand Management (TDM) are two strategies that attempt to manage the existing transportation system by improving efficiencies, thereby reducing travel demand.

TSM focuses on improving efficiency by implementing operational changes such as computerized traffic signal control systems, surveillance control and driver information systems (SC&DI), channelization or reconfiguration of intersections, freeway ramp metering, signal timing progression, incident response teams and transportation management centers. These techniques reduce overall delay on the system and minimize adverse affects associated with accidents.

TDM focuses primarily on the work commute trip where routine trips to the same origins and destinations have the highest probability of being affected. Activities such as carpooling, vanpooling, bicycling, walking, increasing transit service, teleworking, and flexible work schedules are all examples of TDM techniques that Kootenai County agencies and employers should consider, and are supported by this Metropolitan Transportation Plan.

There has been a noticeable increase in recent years of TDM in Kootenai County: the Coeur d'Alene Tribe's Citylink bus service is picking up in popularity and rider numbers, the developer of the Greenstone complex in Coeur d'Alene has purchased two shuttle buses to transport riders between Greenstone, downtown and the Kroc Center, a 40-space park-n-ride lot is proposed for Appleway and Ramsey in Coeur d'Alene, and there are several bicycle/pedestrian projects included in the long and short term project lists for Kootenai County included in this Plan. Even with all these advancements though, Kootenai County agencies and employers need to continue TSM and TDM efforts if they wish to avoid the congestion projected by the KMPO Model in section 1 of this Plan.

Access Control/Access Guidelines

Provisions for permitting access to the roadway system need to be in place for each agency. Permitting of access is a vital step in:

- Preserving the function of a roadway.
- Providing guidance of frequency, location and size of an access to a type of roadway.
- Preserving the capacity of a roadway and enhancing the safety of the roadway and the access.

Impact Analysis

The process of identifying and evaluating the traffic impacts of a proposed development on existing roadways helps to identify deficiencies to be corrected in access, safety and adjacent street capacity. The Idaho Transportation Department (ITD) has developed a standard for Transportation Impact Studies and several local agencies have entered into a Memorandum of Understanding with ITD on the Impact Study.

Land Use or Zoning Restrictions

Each of the local planning departments need to review existing and future land use regulations and the classification of adjacent or affected roadways for compatible access conditions. The main issue is providing appropriate access from the land use to the roadway so each is preserved or enhanced. The poor match for this situation would be a land use with high access needs along a roadway that can only offer low access.

Utilities Coordination

This Plan is also a major planning tool for utility corridors. The future right-of-way corridors will also be called upon to accommodate utilities. Each local agency has developed standard locations for accommodating utilities within the right-of-way. ITD and LHTAC have also published standards and guidelines for accommodating of utilities within the right-of-way and local agencies have developed a countywide policy on utility coordination within the right-of-way.

Location Studies

Before any major roadway improvements are undertaken, a comprehensive location study should be conducted of the proposed improvements. After selection of the preferred alignment of the proposed improvement, a program of conscious accumulation of right-of-way should begin. The route should be designated officially by the appropriate agency and defined by the County and city planners. Citizens should be given ample opportunity to plan for these proposed routes. The choices will be difficult and will not please all parties. Though controversial, postponing these decisions will only complicate the process as property begins to develop along proposed routes.

Urban Roadways

Urban roadways are more difficult to analyze and define their capacity and Level of Service. At lower speeds, below 50 mph, the intersections generally dictate the capacity of an urban roadway section. It is, however, always useful to evaluate an overall urban roadway in simplistic form. To generally define urban roadway Level of Service, Table 11 has been formulated. Determination of Level-of-Service for urban roadways is then defined by the average daily traffic volume (ADT) in both directions as depicted in Table 10 below.

Table 1. Level-of-Service Criteria for Urban Roadways

Facility Type	Both Ways	A	B	C	D	E
Principal (Major) Arterials	6 lanes + median	30,000	35,000	40,000	45,000	50,000
	5 lanes + median	27,000	31,500	36,000	40,500	45,000
	4 lanes + median	24,000	28,000	32,000	36,000	40,000
	2 lanes + median*	10,000	11,600	13,300	15,000	16,600
	2 lanes w/o median*	8,000	9,300	10,600	12,000	13,300
Minor Arterials	4 lanes + median	18,000	21,000	24,000	27,000	30,000
	4 lanes w/o median*	16,000	18,500	21,000	23,600	26,250
	2 lanes + median*	9,000	10,500	12,000	13,500	15,000
	2 lanes w/o median*	7,000	8,200	9,300	10,500	11,600
Collectors	2 lanes + parking	5,250	6,125	7,000	7,875	8,750
	2 lanes + median	9,000	10,500	12,000	13,500	15,000
Industrial		6,000	7,000	8,000	9,000	10,000
Local Street	2 lanes + parking	-	-	2,500	-	-
	2 lanes + parking	-	-	1,200	-	-

Source: ITD
 * Level of Service capacity numbers were calculated based on historical data for these categories.
 NOTE: Level of Service is measured in Average Daily Vehicle Trips.

Rural Roadways

Rural roadways usually operate at higher rates of speed than urban areas, do not have curb and gutter, and have minimal access points. Determination of rural roadways level-of-service is depicted in Table 11.

Table 2. Level-of-Service Criteria for Rural Roadways

Facility Type	# of Lanes	A	B	C	D	E
Principal (Major) Arterials	4 lanes	16,600	24,800	28,400	32,400	36,000
	2 lanes	8,300	12,400	14,200	16,200	18,000
Minor Arterials	4 lanes	16,800	19,600	22,400	25,200	28,000
	3 lanes	12,600	14,700	16,800	18,900	21,000
	2 lanes	8,400	9,800	11,200	12,600	14,000
Major Collectors	4 lanes	9,000	10,500	12,000	13,500	15,000
	3 lanes	6,750	7,875	9,000	10,125	11,250
	2 lanes	4,500	5,250	6,000	6,750	7,500
Minor Collector	4 lanes	6,000	7,000	8,000	9,000	10,000
	3 lanes	4,500	5,250	6,000	6,750	7,500
	2 lanes	3,000	3,500	4,000	4,500	5,000

* Level of Service capacity numbers were calculated based on historical data for these categories.
 NOTE: Level of Service is measured in Average Daily Vehicle Trips.

Safety

Metropolitan Transportation Plans are encouraged to be consistent with the State's Strategic Highway Safety Plan (SHSP) and other transit safety and security planning and review processes, plans and programs. For this Plan, KMPO Coordinated with Idaho Transportation Department (ITD) to develop steps to consider safety in the transportation arena.

A draft of ITD's SHSP is available through the State Highway Operations and Safety Department at ITD by calling (208) 334-8557. The SHSP addresses ten emphasis areas with the mission of reducing traffic-related deaths, life-altering injuries and the related economic losses on Idaho's roadways. The ten emphasis areas are:

- Aggressive Driving
- Commercial Vehicles
- Emergency Medical Services
- Highway-Railroad Grade Crossings
- Impaired Drivers
- Mature Drivers
- Occupant Protection
- Road Related Crashes
- Vulnerable Users
- Young Drivers

Action Plan Groups will be created for all ten emphasis areas. Members will be representative of engineering, enforcement, education, and emergency medical services. These committees will develop action plans, including priorities and detailed processes, to begin implementing strategies for the emphasis areas. All information, data, and ideas will be assembled to create a "Tool Box" for each emphasis area.

Each year, the Action Plan Group will measure the success of implemented strategies through evaluation and investigation in order to determine their effectiveness. In particular, they will analyze whether fatality and serious injury rates and numbers have increased or decreased and where they are being best influenced. The Group will recommend whether strategies should be further implemented in other areas. Following their recommendations, strategies will be added, removed, or modified to enhance the safety of Idaho roadways.

Many of the projects listed in Section 5 of this MTP consider the ten emphasis areas in their planning and/or construction phases. For instance, the series of projects called 'Bridging the Valley' stretch from the Idaho State Line all the way to Athol, Idaho and involve separating highway and railroad grade crossings.

Installing roundabouts, as planned by the Lakes Highway District in conjunction with the City of Hayden, is a way to cut down on traffic collisions, which falls under the 'Road Related Crashes' emphasis area of ITD's SHSP.

And improving intersections by realigning or increasing sight distance, as planned by several of the agencies involved, will help everyone from mature drivers, to emergency vehicles to commercial drivers, while ideally cutting down on aggressive drivers.

Transportation System Security

One consideration of the MTP that has become an issue in recent years is security of the transportation system. Many jurisdictions and agencies have developed emergency preparedness plans to address the possibility of emergencies on the roads.

The Idaho Transportation Department has a variety of security and emergency preparedness plans. Depending on the severity of the emergency, plans are available to deal with everything from catastrophic conditions requiring restricted travel to resuming business after an incident has been dealt with:

ITD's '*Emergency Highway Traffic Regulation Plan*' sets forth policies, responsibilities and procedures for the regulation and use of the highway network within the State of Idaho during an emergency. The '*Idaho Emergency Plan, Emergency Support Function #1*' Plan, assists state and local government agencies and voluntary organizations requiring transportation capacity to perform response missions following a major disaster or emergency. It also serves as a coordination point between response operations and restoration of the transportation infrastructure. The '*Idaho Hazardous Materials Incident Command and Response Support Plan*' provides effective, coordinated emergency support to local government by state, federal, and private agencies for incidents involving the release or potential release of hazardous materials in the State of Idaho. And the '*Transportation Incident Management Plan*' provides effective, coordinated emergency response support at transportation incidents on the State of Idaho highway system.

Some of the plans are not available for public distribution due to security reasons. For more information on security and emergency preparedness plans, ITD's Emergency Programs office can be contacted at (208) 334-8414.

Kootenai County also has a division dedicated specifically to safety and security. The County's Emergency Preparedness Plan also covers a number of possible emergencies and natural disasters, and has an entire section dedicated specifically to transportation and transportation facilities. It lays out a blueprint of steps to follow to mitigate, prepare for, respond to and recover from emergencies and disasters, including:

- Coordinating task forces responsible for implementing mitigation plans.
- Assisting with local funding sources for mitigation projects.
- Designing and conducting multi-agency training exercises that test emergency plans.
- Activating the Kootenai County Emergency Operations Center to provide interagency coordination for managing disaster response and recovery.

- Obtaining and allocating necessary manpower, equipment, and supplies needed for emergency response.
- Facilitating public meetings for local, state, and federal agencies to discuss recovery and post-disaster mitigation assistance for citizens and businesses.

For more information on Kootenai County's Emergency Preparedness Plan, contact the Kootenai County Office of Emergency Management at (208) 446-1775.

Another agency concerned with security on the roads is The Coeur d'Alene Tribe's Citylink bus service. Citylink addresses potential security threats through its 'Safety, Security and Emergency Preparedness Plan' (SSEPP) and its 'Threat and Vulnerability Assessment.'

While problems have been rare to date on Citylink buses, if a problem *does* develop, the agency's managers take a personal approach to solving the problem and will either ride that route themselves or follow it to gauge the problem and determine how to deal with it. While dropping off and picking up riders at the Coeur d'Alene Casino, drivers can contact casino security to deal with problems. While on the road, they are instructed to call in a code over the CB radio and the dispatch center will send law enforcement to the location to remove disruptive passengers or address other problems. The same applies for medical emergencies. Drivers are also instructed to watch for suspicious packages brought or left on-board.

Further information on Citylink's Safety, Security and Emergency Preparedness Plan can be obtained by calling the Citylink offices at 1-877-941-RIDE.

While security poses challenges to transportation providers that they didn't have to worry about nearly as much in the past, agencies providing transportation services in Kootenai County appear to have crafted plans and policies not only to be proactive and prevent emergencies, but also to direct them on how to deal with emergencies most effectively. Even the smaller, newest agencies such as Citylink have comprehensive guidelines to follow, in an effort to keep a minor incident from turning into a major one.