

# KOOTENAI COUNTY METROPOLITAN TRANSPORTATION PLAN



## 2007 - 2030

Adopted October 4, 2007



Prepared by:



**Kootenai Metropolitan Planning Organization**  
**221 W. First Avenue, Suite 310**  
**Spokane, Washington 99201**

## Table of Contents

<b>Executive Summary</b> .....	v
<b>Section 1 Evolution of a Transportation Plan</b>	
Development of the Kootenai County MTP .....	1-1
Countywide Transportation Policies .....	1-1
<b>Section 2 Existing Conditions Analysis</b>	
Introduction .....	1-2
Existing Conditions .....	5-2
Functional Classifications .....	6-2
Traffic Volumes .....	13-2
Traffic Safety .....	23-2
Truck Routes .....	28-2
Non-Motorized and Rail Corridors .....	32-2
Land Use Analysis .....	37-2
Transportation Analysis Zones .....	37-2
Levels of Service .....	45-2
Urban Roadways .....	46-2
Rural Roadways .....	46-2
Signalized Intersections .....	47-2
Unsignalized Intersections .....	48-2
<b>Section 3 Future Conditions Analysis</b>	
Future Conditions Analysis .....	1-3
Future Land Use .....	15-3
Transportation Network Analysis .....	19-3
Future Transportation Impacts .....	20-3
<b>Section 4 Financial Plan</b>	
Regional Funding Opportunities .....	1-4
Financial Capacity Analysis .....	5-4
Financial Options Available .....	10-4
Conclusion .....	11-4
<b>Section 5 Programmed Project List</b>	
The Master Plan .....	1-5
Public Involvement .....	1-5
Project Prioritization .....	2-5
Conclusion .....	21-5

## List of Figures

### Section 1

Figure 1.1 Environmental Mitigation Kootenai County.....	6-1
Figure 1.1a Urban Environmental Mitigation Coeur d'Alene.....	7-1
Figure 1.1b Urban Environmental Mitigation Post Falls.....	8-1
Figure 1.1c Urban Environmental Mitigation Rathdrum .....	9-1

### Section 2

Figure 2.1 Rural County Functional Classification.....	9-2
Figure 2.1a Coeur d'Alene Urban Functional Classification .....	10-2
Figure 2.1b Post Falls Urban Functional Classification .....	11-2
Figure 2.1c Rathdrum Urban Functional Classification .....	12-2
Figure 2.2 Average Weekday Daily AM Traffic Volumes Kootenai County 2005 ....	15-2
Figure 2.2a Average Weekday Daily AM Traffic Volumes Coeur d'Alene 2005 .....	16-2
Figure 2.2b Average Weekday Daily AM Traffic Volumes Post Falls 2005 .....	17-2
Figure 2.2c Average Weekday Daily AM Traffic Volumes Rathdrum 2005 .....	18-2
Figure 2.3 Average Weekday Daily PM Traffic Volumes Kootenai County 2005 ....	19-2
Figure 2.3a Average Weekday Daily PM Traffic Volumes Coeur d'Alene 2005 .....	20-2
Figure 2.3b Average Weekday Daily PM Traffic Volumes Post Falls 2005 .....	21-2
Figure 2.3c Average Weekday Daily PM Traffic Volumes Rathdrum 2005 .....	22-2
Figure 2.4 Kootenai County Accident Data .....	24-2
Figure 2.4a Coeur d'Alene Urban Area Accident Data.....	25-2
Figure 2.4b Post Falls Urban Area Accident Data.....	26-2
Figure 2.4c Rathdrum Urban Area Accident Data .....	27-2
Figure 2.5 Kootenai County Truck Routes .....	29-2
Figure 2.5a Coeur d'Alene Truck Routes .....	30-2
Figure 2.5b Post Falls Truck Routes .....	31-2
Figure 2.6 Kootenai County Non-Motorized and Rail .....	33-2
Figure 2.6a Coeur d'Alene Urban Non-Motorized and Rail .....	34-2
Figure 2.6b Post Falls Urban Non-Motorized and Rail .....	35-2
Figure 2.6c Rathdrum Urban Non-Motorized and Rail .....	36-2
Figure 2.7 Kootenai County Transportation Analysis Zones .....	41-2
Figure 2.7a Coeur d'Alene Urban Transportation Analysis Zones .....	42-2
Figure 2.7b Post Falls Urban Transportation Analysis Zones .....	43-2
Figure 2.7c Rathdrum Urban Transportation Analysis Zones.....	44-2
Figure 2.8 Kootenai County Existing Conditions .....	50-2
Figure 2.8a Coeur d'Alene Area Existing Conditions .....	51-2
Figure 2.8b Post Falls Area Existing Conditions .....	52-2
Figure 2.8c Rathdrum Area Existing Conditions.....	53-2

### Section 3

Figure 3.1 Average Weekday Daily AM Traffic Volumes Kootenai County 2030	2-3
Figure 3.1a Average Weekday Daily AM Traffic Volumes Coeur d'Alene 2030	3-3
Figure 3.1b Average Weekday Daily AM Traffic Volumes Post Falls 2030	4-3
Figure 3.1c Average Weekday Daily AM Traffic Volumes Rathdrum 2030	5-3
Figure 3.2 Average Weekday Daily PM Traffic Volumes Kootenai County 2030	6-3
Figure 3.2a Average Weekday Daily PM Traffic Volumes Coeur d'Alene 2030	7-3
Figure 3.2b Average Weekday Daily PM Traffic Volumes Post Falls 2030	8-3
Figure 3.2c Average Weekday Daily PM Traffic Volumes Rathdrum 2030	9-3
Figure 3.3 Kootenai County Existing and Projected Housing Density by TAZ	17-3
Figure 3.4 Kootenai County Existing & Projected Commercial & Industrial Density by TAZ	18-3
Figure 3.5 Kootenai County Future Conditions 2015 No Build	22-3
Figure 3.5a Coeur d'Alene Future Conditions 2015 No Build	23-3
Figure 3.5b Post Falls Future Conditions 2015 No Build	24-3
Figure 3.5c Rathdrum Future Conditions 2015 No Build	25-3
Figure 3.6 Kootenai County Future Conditions 2030 No Build	26-3
Figure 3.6a Coeur d'Alene Future Conditions 2030 No Build	27-3
Figure 3.6b Post Falls Future Conditions 2030 No Build	28-3
Figure 3.6c Rathdrum Future Conditions 2030 No Build	29-3

### Section 5

Figure 5.1 Countywide Master Plan, Long-Term, Year 2030	4-5
Figure 5.1a Coeur d'Alene Urban Area Master Plan, Long Term, Year 2030	5-5
Figure 5.1b Post Falls Urban Area Master Plan, Long Term, Year 2030	6-5
Figure 5.1c Rathdrum Urban Area Master Plan, Long Term, Year 2030	7-5
Figure 5.2 Countywide Master Plan, Short-Term, Year 2015	8-5
Figure 5.2a Coeur d'Alene Urban Area Master Plan, Short-Term, Year 2015	9-5
Figure 5.2b Post Falls Urban Area Master Plan, Short-Term, Year 2015	10-5
Figure 5.2c Rathdrum Urban Area Master Plan, Short-Term, Year 2015	11-5

### List of Tables

Table 1. Level of Service Criteria for Urban Roadways	11-1
Table 2. Level of Service Criteria for Rural Roadways	11-1
Table 3. High Collision Locations, Intersections in Kootenai County	23-2
Table 4. Land Use Categories	39-2
Table 5. Kootenai County Current Conditions Road Sections =>75% Capacity	46-2
Table 6. Kootenai County Current Conditions Intersections =>75% Capacity	49-2
Table 7. Kootenai County 2015 No Build Intersections =>75% Capacity	10-3
Table 8. Kootenai County 2030 No Build Intersections =>75% Capacity	11-3
Table 9. Kootenai County 2015 No Build Roads =>75% Capacity	13-3
Table 10. Kootenai County 2030 No Build Roads =>75% Capacity	14-3
Table 11. Population Projections	16-3
Table 12. City/County/Highway District Funding	2-4
Table 13. Funding Categories For Federal-Aid Work	4-4
Table 14. Percentage of Local Revenue by Category Through 2030	6-4
Table 15. Anticipated Revenue For Cities As A Group 2005-2030	7-4

Table 16. Historical Breakdown of Revenue and Expenditures For Highway District Account.....	8-4
Table 17. Anticipated Highway District Revenue 2005-2030 .....	8-4
Table 18. Anticipated Financial Resources For Public Transportation 2007-2030..	9-4
Table 19. Priority Array Scoring Criteria .....	2-5
Table 20. Long-Term Road Improvement Projects through 2030 .....	12-5
Table 21. Short-Term Road Improvement Projects Through 2015.....	14-5
Table 22. Intersection Improvement Projects Through 2030.....	18-5

**Visualizations**

Visualization 1. Prairie Avenue.....	22-5
Visualization 2. Elder Road .....	23-5
Visualization 3. Burma Road .....	24-5
Visualization 4. State Highway 97 .....	25-5
Visualization 4a. State Highway 97 .....	26-5
Visualization 4b. State Highway 97 .....	27-5
Visualization 5. Lancaster Road Interchange .....	28-5
Visualization 5a. Lancaster Road Interchange .....	29-5

**Appendices**

**Appendix 1**

Kootenai County Truck Traffic Survey

**Appendix 2**

Kootenai County Public Transit/Human Services Transportation Plan

**Appendix 3**

Kootenai County Public Involvement Policy

**Appendix 4**

KMPO Expenditures Table 2007-2030

# EXECUTIVE SUMMARY

## Executive Summary

The purpose of the Metropolitan Transportation Plan is to provide a long term blueprint for the region in addressing transportation needs brought about by continued growth and development. Addressing the region's transportation needs will require existing and future investments in streets, roads, highways, public transportation, and bike/pedestrian facilities. Providing transportation choices reduces dependency on the single occupant vehicle, which accounts for over 88% of all trips taken in Kootenai County.

The identification of those transportation projects that are needed to address growth and development have been developed by evaluating the current growth patterns and forecasting the growth and development across the metropolitan area. Population in Kootenai County is forecast to increase from 137,937 in 2005 to 158,628 in 2015 and 231,891 in 2030. This means more travel into and through the region and greater demands being placed on the existing transportation system whether its roads or public transportation.

Some areas that are fully built out, such as in the core of Coeur d'Alene, can still expect to see increased traffic volumes as new employment opportunities are created in retail and commercial centers and land previously in industrial development are converted to a range of uses from medium density residential to high rise residential and the introduction of mixed use developments such as Riverstone. This continued redevelopment activity will necessitate reconstruction and rehabilitation of existing streets to ensure there is an adequate provision for traffic and public transportation opportunities.

Similarly, areas in Post Falls and Hayden are also experiencing rapidly expanding residential and commercial areas that will attract new trips to areas that have been previously rural agricultural environments. This will bring about transportation and other infrastructure needs that will necessitate the reconstruction and/or expansion of many single lane roads into 3-lane and 5-lane facilities. Existing roads such as Pleasant View, Prairie, Hayden, Pole Line, Lancaster etc. will experience traffic volumes that exceed their current capacity within the next 20 years, requiring the need to plan for their reconstruction concurrent with growth.

In rural areas to the north and south of the urbanized area, growth is also anticipated. With continued widening of U.S. 95 towards Worley, Idaho and programmed improvements north to Sandpoint, Idaho, safety and travel time improvements will increase development pressure that has been historically tempered. Additionally, it is apparent that Coeur d'Alene Lake has been discovered by national development companies, as evidenced by the growing number of high-end developments being processed by local jurisdictions. The result will be increased traffic on secondary rural roads that provide access to State Highways, and growing demands to make improvements on traditionally low volume roads.

KMPO and ITD are currently assessing the long-term transportation needs of the SH-97 corridor on the east side of Coeur d'Alene Lake. When the recommendations and financial plans for the series of recommended projects are approved by the KMPO and ITD, they will be incorporated into the MTP.

## **Funding the MTP**

The planned projects contained in the MTP do not address all of the transportation needs in the metropolitan area. This is due to the fact that by federal law, the MTP must be financially constrained. By that the MTP must forecast future revenues and expenditures that can reasonably be anticipated over the life of the plan. This has two affects:

1. Future revenues can be anticipated so long as they are legally available and/or there has been some historical trend developed for existing revenue sources. Gas taxes, weight fees, registration fees, developer fees, and State or Federal grant programs have a long history of utilization in both the State and Kootenai County. For the purpose of the MTP, KMPO used a used a rolling 18 year average of historical funding using traditional sources to forecast potential through 2030. This approach takes into account past increases as well as actual historical changes in the county's economy to predict the future. The net affect is a reasonable forecast of future revenues, not a hard forecast of future revenues.

To address revenue sources that do not have a history of utilization in Kootenai County, an estimate has been developed using a mid-range value tied to an historical growth projection. The revenue source with the most predictability where this would apply would be the local option vehicle registration fee. A registration fee level is set per vehicle and then tied to the historical rate of growth for vehicles registered in Kootenai County. Once again the net affect is a reasonable forecast of future revenues, should the local option be exercised in the future.

The current revenue estimates indicate approximately a 3.5% annualized growth rate for transportation funding sources between now and 2030.

2. Expenditures can be reasonably anticipated as well using historical inflation rates. KMPO again used a rolling average over the past 18 years to predict future costs of transportation investments to accommodate the cyclical nature of the economy rather than today's hyper-inflation rates for construction materials that are impacting current construction projects.

Transportation expenditures by major cost category were independently forecast using the historical figures. Operations, maintenance, reconstruction, and new construction all have differing factors influencing the inflation of expenditures in their category. As an example, operations are influenced by personnel cost of living, medical benefits coverage, fuel, and equipment replacement costs. New

construction can be impacted by new design and engineering standards, escalating right of way costs, the cost of obtaining financing, material costs and availability of contractors to do the work.

In each of those conditions, the MTP must estimate the potential revenues and expenditures and indicate the cost of projects in Year of Expenditure dollars. So an estimated project cost today, must be inflated to take into account the year in which it is expected to be constructed. For the long term projects in the 2030 time frame, inflation can be as high as 230% of today's estimated cost.

Accomplishing this formidable task will necessitate the need for accessing multiple funding sources rather than the historical practice of single source funding. This could include location option transportation funding sources, state source, developer impact fees, STAR financing or local improvement districts. The MTP will be amended over time as various options are implemented or discarded through the public decision making process.

## **Public Transportation**

Clearly one of the least developed and least utilized transportation choices currently in Kootenai County is public transportation. During the past three years local jurisdictions in Kootenai County have teamed up with the Coeur d'Alene Tribe to implement the Citylink bus service to provide public transportation access beyond the traditionally served paratransit community. Ridership has seen a steady increase from 5,000 boardings per month to 18,000 boardings per month in the past two years. The latent demand for public transportation was identified in the adopted Public Transportation Plan, as is only now being tapped by improved routes, schedules, and coordination with paratransit service providers.

The challenge facing public transportation in the metropolitan area, however, is the availability of local matching funds. Currently, the Coeur d'Alene Tribe provides a vast majority of the local match (approximately 85%) to sustain the Citylink bus service. While this has been a successful partnership, continued expansion of the service and schedules beyond areas deemed mutually beneficial to the communities and the Coeur d'Alene tribe will result in a significant shortfall in the ability to provide local revenue.

Consequently it is incumbent on the metropolitan area to seek ways to develop a sustainable funding program to support public transportation. This may require State legislation to provide local taxing authority to public transit systems, a local option for the region that provides additional funds to jurisdictions to support public transportation, or State funding of public transportation beyond the federal grant programs currently managed by ITD.

**Conclusion:**

It was once said that there are simple solutions to complex problems, however, they are generally the wrong solutions. In the case of providing a safe and efficient transportation system for the Kootenai Metropolitan Area, there are no simple solutions, nor are there any cheap solutions. Given the limited funding resources available to address the regional and local transportation needs, our transportation system investments will need to be strategic, long lasting, and operationally sustainable.

Through a continuing, coordinated, and comprehensive transportation planning process, ideas will be developed, the public's views will be sought, and the elected officials in the region will set the course for the future. It is ultimately the residents of Kootenai County through their participation in meetings or through their ability to vote, that decides what is best for Kootenai County.