MEMORANDUM

TO:  TECHNICAL ADVISORY COMMITTEE (TAC)  
FROM:  TOM JENTZ, CHAIRMAN  
RE:  THURSDAY, SEPTEMBER 26, 2019 TAC MEETING  
DATE:  SEPTEMBER 20, 2019

A meeting of the Kalispell Technical Advisory Committee (TAC) is scheduled for Thursday, September 26, 2019 at 1:30 p.m. in the MDT second floor conference room, 85 - 5th Avenue EN in Kalispell. The primary topic of discussion will be the kick off meeting of Kalispell Bypass (US 93 to Airport Road) project.

MDT has hired the engineering firm of KLJ to complete design work on the final segment of the US Highway 93 Bypass from US 93 South through the Airport Road Roundabout. MDT plans to widen this interim segment to a four-lane, grade-separated roadway replacing the two roundabouts. Actual construction is not scheduled and in practical terms is beyond the 5 year horizon. Initially, KLJ will present two Intersection Selection Studies to determine the configurations at Airport and Siderius Roads. KLJ will be seeking the TAC and public input as part of the Studies over the next 6-months with initial traffic data being presented in September. This TAC meeting will be the kick off meeting for this study.

Kalispell Bypass US 93 to Airport discussion outline:

1. Project Introduction (Bob Vosen, MDT or Kathy Harris, KLJ).
2. Fall Schedule:
   a. September TAC Meeting: Introduction, Existing Traffic and Growth Rates, Road Classifications
   b. November TAC Meeting: Traffic Forecasts, Simulations and Analysis
   c. November Public Meeting: Introduce the project and hear the public’s concerns and issues. Traffic data will be available but no intersection alternatives will be presented prior to listening to the public.
3. Today’s Meeting:
   a. Present Traffic data and 1st Traffic Memo showing traffic counts and forecasted growth rate. Confirm AGR with TAC.
b. Request clarification from City on Road Classification and Design of the north/south Base Camp or Siderius Road.

c. Request clarification from City and County on Airport Road:
   i. Urban route versus secondary highway transition
   ii. Road Classification (Local/Collector/Minor or Major Arterial)
   iii. Design Speed (recommend 35 mph)

A copy of the KBP Traffic Memo #1 is also attached for your review prior to this meeting. If you have any questions, do not hesitate to contact this office.
The Kalispell Technical Advisory Committee (TAC) will meet on Thursday September 26, 2019 starting at 1:30 p.m. in the MDT 2nd Floor Conference Room at 85 5th Avenue EN in Kalispell. A final agenda is provided below.

The agenda for the meeting will be:

A. Call to order and roll call

B. Approval of minutes of July 24, 2019 meeting

C. Comments from the Public

D. Kickoff meeting with KLJ to begin discussion of Kalispell Bypass (US 93 to Airport Road) Design project.

E. Old Business

   - Update of the 2006 Kalispell Area Transportation Plan

   - Update on the TAC recommendation to re-classify West Reserve Drive from the intersection of US Highway 93 to the Intersection of US Highway 2 by removing it from the State Urban System and adding it to the State Primary System

F. New Business

   - Update on status of area highway projects by MDT, Flathead County and Kalispell.

G. Setting next meeting date.

H. Adjournment
KBP: Traffic Memorandum #1

Date: 9/6/2019
To: Fred Bente, MDT Consultant Manager
From: Kathy Harris, PE, PTOE and Kevin Mackey PE, PTOE
RE: 2038021 KBP: US 93 to Airport Road, Traffic Data Summary

Introduction

This memorandum summarizes existing and historic traffic data for the Kalispell Bypass (KBP) study area, focusing on the segment between US 93 and Airport Road (Reference Post (RP) 0 to 1.7). Information in this memorandum will support traffic analysis, 2045 traffic projections, and subsequent development of intersection alternative for the KBP project area.

Traffic Data Summary

Average Annual Daily Traffic

Figure 1 presents the average annual daily traffic (AADT) for locations in the study area. This includes the following data:

- **2019 AADT**, collected by KLJ at two locations on the KBP. The first location is between US 93 and Airport Road, and the second location is north of Airport Road.
  - 2019 field-collected data was adjusted using MDT seasonal factors. Data was based on 48 hours of data collected on a Tuesday and a Wednesday in July.
  - Since the KBP is on the edge of the City of Kalispell, adjustment factors for both Rural and Urban Principal arterials were averaged, with a final adjustment factor of 0.85 applied to field-collected counts.
- **Average growth rates (AGR) in the project area.**

AM and PM Peak Hour Turning Movements

KLJ collected AM and PM peak hour turning movements at the following intersections. This data can also be seen in Figure 1.

- US 93 and Kalispell Bypass
- Kalispell Bypass and Airport Road
- Airport Road and Cemetery Road
Figure 1 - Traffic Data Summary

AADT Notes:
- Data highlighted in blue was omitted from AGR analysis since these are bypass counts that were done before the full completion of the KBP or were done before traffic patterns normalized with the full bypass in place.
- Data highlighted in orange was omitted from AGR analysis since these counts appear to be inconsistent with other data at those locations.

Legend:
- Daily Corridor Data Location
- Turning Movement Data Location
- Lane Configuration
- AM (PM) Peak Hour Turning Movements

85% Speeds:
- EB = 62.1 mph
- WB = 63.7 mph

*Avg. Annual Growth Rate From 2016-2019

85% Speeds:
- EB = 58.3 mph
- WB = 55.7 mph

*Avg. Annual Growth Rate From 2018-2019

*Avg. Annual Growth Rate From 2015-2018

Year | AADT
-----|-----
2014 | 1,730
2015 | 2,920
2016 | 2,920
2017 | 1,710
2018 | 1,830

% Growth* | 1.41%

Year | AADT
-----|-----
2014 | 3,990
2015 | 4,300
2016 | 5,050
2017 | 6,670
2018 | 9,090
2019 | 9,699

% Growth* | 6.7%

Year | AADT
-----|-----
2014 | 3,680
2015 | 4,930
2016 | 4,330
2017 | 5,090
2018 | 5,100

% Growth* | 1.14%

Year | AADT
-----|-----
2014 | 12,920
2015 | 15,380
2016 | 15,890
2017 | 12,000
2018 | 13,070

% Growth | -5.3%

Year | AADT
-----|-----
2014 | 3,900
2015 | 4,300
2016 | 5,050
2017 | 6,670
2018 | 9,090
2019 | 9,699

% Growth* | 6.7%

Year | AADT
-----|-----
2014 | 14,290
2015 | 14,890
2016 | 19,370
2017 | 16,110
2018 | 20,120

% Growth | 1.92%

*Avg. Annual Growth Rate From 2016-2019
Average Growth Rates (AGR)

Observed Study Area AGR
To help guide the traffic projections effort, average growth rates (AGR) were calculated based on historic data. In the absence of an up-to-date regional travel demand model, growth rates are a common method for projecting future traffic conditions. Figure 1 shows AGR at key locations in the project area.

Note that AGR analysis omits KBP data that was collected before or immediately after the completion of the north segment of the KBP and also omits data that appears inconsistent with overall trends at specific locations.

The following AGR were observed in the project area:

- US 93, south of KBP = 1.92 percent
- US 93, north of KBP = -5.3 percent
  - Traffic reduction north of the KBP is consistent with expectations that the KBP would divert US 93 traffic around Kalispell
- KBP, between US 93 and Airport Road = 6.7 percent
  - This is a high growth rate, however this only includes two years of data
- KBP, west of Airport Road = 2.0 percent
- Airport Road, north of KBP = 1.14 percent
- Airport Road, south of KBP = 1.41 percent

Regional AGR
MDT Automatic Traffic Recorder (ATR) data was evaluated for the time period between 2001 and 2017 to better understand AGR at locations with a more robust dataset. Figure 2 shows ATR data that was evaluated.

- ATR A-024: Located on US 2, 1.3 miles west of Kalispell
  - Average annual traffic growth rate from 2001 to 2017 = 1.37 percent
- ATR A-060: Located on US 2, 1.5 miles east of MT 206 near Columbia Falls
  - Average annual traffic growth rate from 2001 to 2017 = 1.18 percent

These growth rates are consistent with rates observed at most locations in the KBP project area, with the exception of US 93 north of the KBP and the segment of the KBP between US 93 and Airport Road.
Figure 2 – Regional Traffic Growth (2001-17)
Expected Demographic Changes in Study Area
The City of Kalispell Planning department currently assumes a two percent annual population growth rate.

For growth in area employment, the 2016 Kalispell Couplet Study assumed a 1.61 percent annual growth in the total number of jobs in Kalispell.

Kalispell Travel Demand Model
The current Kalispell Travel Demand model was developed for the 2006 Kalispell Transportation Plan update, and therefore is out of date.

A partial model update was completed for the 2016 Kalispell Courthouse Couplet Study; however, this was limited to updating population and employment data. Since core model components like trip generation rates and trip distribution/assignment methods were not updated, this travel demand model is not recommended for the KBP project.

Recommendations for Traffic Projections
Based on the information presented in this memorandum, KLJ recommends applying a two percent AGR to estimate 2045 traffic conditions for KBP traffic analysis. We recommend a two percent AGR since:

- Historic traffic data shows an AGR between one and two percent through most of the project area
- Current demographic projections assume a two percent annual growth in population and a 1.61 percent annual growth in employment
- Two Percent is within industry standards for traffic projections.