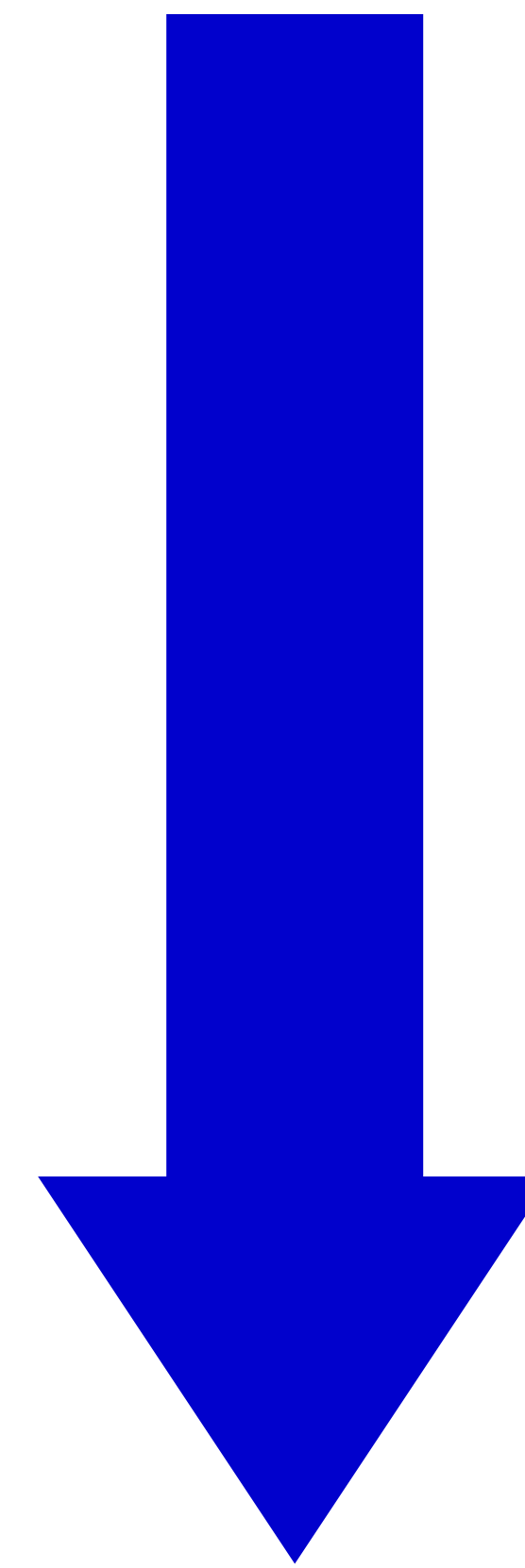




Welcome to the Highways 1 & 3 Existing Route Improvements Open House No. 3

Your participation in this project is important

Please take time to sign in and fill out a
comment form





Study Purpose

The Alberta government has retained Stantec Consulting Ltd. to develop an interim improvement strategy along Highway 1 & 3 within the City of Medicine Hat

Purpose of this Information Session

To present the recommended improvement strategy

Background

- In 2000, Alberta Transportation (AT) took over direction, control & management of Hwys 1 & 3 through Medicine Hat
- There is no room to provide additional travel lanes on Hwy 1
 - Eventually it will reach capacity
 - In the long term, Hwy 1 will be relocated outside the community
- Highway 1 through the City is experiencing operational & safety issues at certain locations
- Two main areas of concern:
 - Intersection of Highway 1 & Dunmore Road
 - Highway 1 between 1 Street & 16 Street
- In 2006, the City completed its Roadway Systems Master Plan (RSMP), which identified required roadway improvements at 65,000, 75,000 & 95,000 population horizons
- At 75,000, the City identified the following improvements along Highway 1:
 - Interchange at 1 Street
 - Closure of 6 Street intersection
 - Development of eastbound exit at 6 Street
 - Closure of 16 Street intersection
 - Interchange at Dunmore Road



Study Objectives

- To identify interim improvements along Highways 1 & 3 to prolong the life of the existing facility & defer construction of the Highway 1 realignment. Tasks include:
 - Develop interchange plan at the intersection of Highway 1 & Dunmore Road
 - Develop improvement options for Highway 1 between 1 Street & 16 Street
 - Develop access management strategy for Highway 3 within the City of Medicine Hat



Highways 1 & 3 Existing Route Improvements

Study Timelines

December 2005 – Open House No. 1

- Gathered input from public prior to developing improvement options

January 2006 – May 2007

- Working with AT & City, considered numerous improvement options
- Ultimately agreed upon two possible improvement strategies

June 2007 – Open House No. 2

- Discussed improvement options & gathered input
- Offered individual meetings with business stakeholders

July 2007 – September 2007

- Based on discussions and comments received, revisions were made to the improvement options
- City completed independent traffic modeling to assess impact on City's transportation network & identified a preference for Option 1

October 2007

- Presentation made to City Council, and the recommended improvement strategy (Option 1) was supported by the City



Study Timelines Cont'd

February 2008 – Council Presentation

- Following municipal elections, presentation was made to new City Council
- City Council requested further information before being prepared to support the recommendations

March 2008 – January 2009

- Ongoing discussions between AT and the City

January 2009

- City Council reaffirmed support of the recommended improvement strategy

April 23, 2009

- Present recommended improvements to the public

Summer 2009 – Report

- Submit report to AT for comment and approval



Highway 1 & Dunmore Road

Existing Condition

- At-grade signalized intersection
- 12,000 to 17,000 vehicles per day on Highway 1
- 13,000 to 21,000 vehicles per day on Dunmore Road
- Traffic volumes will increase as this area further develops
- Right-of-way for interchange has already been protected

Recommendation

- All-directional diamond interchange with signalized intersections on Dunmore Road
- Raise Dunmore Road over Highway 1
- No additional right-of-way required



Highway 3 Access Management

Existing Condition

- Currently 19 intersections/accesses along Hwy 3 from south city limits to Hwy 1
- Existing speed limit already dropped to between 50 & 70 km/h with City
- 4,000 to 12,000 vehicles per day on Hwy 3 through City
- No major operational issues along Hwy 3 through City

Recommendations

- Close 7 intersections/accesses along Hwy 3 & provide service road connections where necessary
- Construct southbound left-turn lane at 30 Street SW
- Construct southbound left-turn lane at South Boundary Road



Highways 1 & 3 Existing Route Improvements

Highway 1 – 1 Street to 16 Street Existing Condition

1 Street Intersection

- Unsignalized
- 24,000 to 28,000 vehicles per day (vpd) on Hwy 1
- Large southbound right-turn in AM Peak
- Large eastbound left-turn in PM Peak

6 Street & 16 Street Intersections

- Signalized
- Complicated signal patterns
- 6 Street - 20,000 to 24,000 vpd on Hwy 1
- 16 Street - 22,000 to 25,000 vpd on Hwy 1
- From traffic perspective, intersections are failing & will only get worse in the future
- Intersections too close to Hwys 1 & 3 (Gershaw Drive) to accommodate all-directional interchanges



Highways 1 & 3 Existing Route Improvements

Highway 1 – 1 Street to 16 Street Improvement Options

- Many options were considered & discussed with Technical Review Committee (TRC)
- Two options deemed viable by TRC for further investigation & presented to public in June 2007
- Following open house, revisions were made to options to reflect comments & issues raised

Option 1

- Full interchange at 1 Street
- Closure of 6 Street intersection

Option 2

- Partial interchange at 1 Street
- Partial access at 6 Street (eastbound exit & westbound entrance)

Common to Both Options

- Remove eastbound exit from Hwy 1 to Bomford Crescent
- Convert Bomford Crescent to one-way road in eastbound direction
- Close 16 Street intersection
- Remove westbound exit from Hwy 1 to Red Deer Drive
- Improvements to Hwys 1 & 3 interchange
- Improvements to 10 Avenue SW, 13 Street SW & 8 Avenue SW
- City of Medicine Hat completed independent traffic modeling comparing the two options
- Based on modeling, the City identified a preference for Option 1



Highways 1 & 3 Existing Route Improvements

Highway 1 – 1 Street to 16 Street Recommended Improvement Strategy

- All-directional interchange at Hwy 1 & 1 Street
 - Traffic signals on 1 Street
 - 1 Street will pass under existing Hwy 1
 - Provides access to powerplant
 - Red Deer Drive is reconfigured to continue to provide access to hospital
 - Requires buy-out of existing businesses in northeast quadrant
- Closure of 6 Street
- Closure of 16 Street
- Remove eastbound exit from Hwy 1 to Bomford Crescent
- Remove westbound exit from Hwy 1 to Red Deer Drive
- Reconfigure Red Deer Drive
- With closure of 6 & 16 Street intersections, improvements are required to accommodate increased traffic at Hwys 1 & 3 (Gershaw Drive) interchange
 - Traffic signals
 - Northbound & southbound left-turn bays
 - Additional lanes on westbound & eastbound ramps
 - Westbound entrance ramp connects directly to Hwy 1
- Improvements also required to some intersections on Hwy 3
 - 10 Avenue SW – Designated left-turn lanes on Hwy 3
 - 13 Street SW – Designated right-turn lane on Hwy 3 in southbound direction
 - 8 Avenue SW – Designated left-turn lane on Hwy 3 in southbound direction
- No construction timelines have been identified
 - Improvements will be prioritized with other work within the Province



Highways 1 & 3 Existing Route Improvements



Thank you

If you have any questions, please contact any of the Stantec staff here today.

The information and plans presented here today will form the basis of the recommendations to be made to the Alberta government