



The **Agenda** of the **Mission Traffic and Transit Committee** meeting to be held in the **Conference Room** at the Municipal Hall at 8645 Stave Lake Street, Mission, BC on Thursday, February 4, 2016 at 1:30 pm.

**1. CALL TO ORDER**

**2. ADOPTION OF AGENDA**

**3. MINUTES FOR APPROVAL**

- (a) Minutes of the Mission Traffic and Transit Committee meeting held on December 3, 2015.

**4. DELEGATIONS**

- (a) BC Transit and First Canada – Issues from the Transit Sub-Committee (*attachment*)

**5. OLD BUSINESS**

- (a) Transportation Master Plan
- (b) Fraser Health's Plan for Parking at Mission Memorial Hospital
- (c) Cedarbrooke Chateau
- (d) Feasibility of 3-way Stop at 7<sup>th</sup> Avenue and Murray Street (*attachment*)
- (e) Lougheed Highway and Dewdney Trunk Road Request for Traffic Control Signal
- (f) Speed Reader Boards

**6. NEW BUSINESS**

- (a) Bus Shelters
- (b) ICBC Safety Review (*attachment*)
- (c) Signage in Mission
- (d) Bus Exchange at the Library – Development Proposal
- (e) Crosswalk Timing at Park Street and Lougheed Highway

**7. NEXT MEETING**

Thursday, April 7 at 1:30 pm in the Municipal Hall Conference Room

**8. ADJOURNMENT**

The **Minutes** of the **Mission Traffic and Transit Committee meeting** held in the Conference Room at the Mission Municipal Hall (8645 Stave Lake Street), on December 3, 2015 from 1:00 p.m. to 3:00 p.m.

Members Present: Councillor Danny Plecas, Chair  
Councillor Pam Alexis, Co-Chair  
Tracy Kyle, Director of Engineering and Public Works  
Bob Ingram, Mission Seniors Centre Association  
Ken Collier – Member at large, resident District of Mission  
Dan Sommer, Director of Development Services  
Jodi Marshall, School District #75  
Sanjay Gulati, Mission Community Services Society  
Wayne Green, United Way Fraser Valley

Others Present: Erika Duplissie, Administrative Clerk - Planning

## 1) **ADOPTION OF AGENDA**

Moved by Bob Ingram, and seconded by Councillor Alexis

RECOMMENDED: That the agenda of the Mission Traffic and Transit Committee meeting held on December 3, 2015 be approved with two additions by Tracy Kyle; 1) Dewdney Trunk Road at Lougheed Highway traffic signal, and 2) Speed readers/ICBC safety review.

CARRIED

## 2) **MINUTES**

Moved by Councillor Alexis, and seconded by Bob Ingram

RECOMMENDED: That the minutes of the Mission Traffic and Transit Committee meeting held on October 1, 2015 be approved.

CARRIED

## 3) **OLD BUSINESS**

Late agenda items were provided to the Committee in the form of memos corresponding to some of the Old Business items.

### **(a) Traffic Safety Issues (follow up items)**

Tracy Kyle, Director of Engineering and Public Works deferred to Ibrahim Ghafoor, Traffic Technologist – Traffic, to provide updates on the follow up items.

- Crosswalk Safety at Cedarbrooke Chateau (32419 7<sup>th</sup> Avenue) – Nothing further to report other than that the RCMP will need to monitor driver's speed in the area
- Crosswalk on Hurd Street - nothing further to report
- Traffic Safety concerns near 32296 Bobcat Drive West – Councillor Alexis asked if concerns received are put on a list and passed on to the RCMP. Ibrahim Ghafoor responded that a list can be forwarded to the Community Policing office.
- Parking on Rai Avenue. Nothing further to report.

- Parking at Intersections – Ibrahim Ghafoor shared that the issue has been discussed with the bylaw officers and this is an enforcement issue and the bylaw department should be contacted if there are any specific complaints.
- Mission Secondary and Leisure Centre Issues – Staff observed that the streets in the surrounding area have a speed limit of 30 km/h on school days. The RCMP has confirmed that speed enforcement in this area is on their patrol list. There are three crosswalks within the school area on 7<sup>th</sup> Avenue and one crosswalk on Grand Street in front of the Leisure Centre. It was agreed to have a crosswalk sign installed on Grand Street as well as for Ibrahim to look into moving the speed signs further north on Grand Street so that cars are slowing down before the hill. Staff also observed the availability of parking in front of the school and found it to be adequate. Councillor Plecas stated that the left turn signal northbound on Grand Street at 7<sup>th</sup> Avenue is not long enough. Tracy Kyle will have Ibrahim review the sequence.
- Parking at Mission Memorial Hospital – Councillor Plecas spoke with the hospital's 'parking police' and they acknowledge the issue and are looking at expanding the parking lot but there are seismic issues to be dealt with first. Councillor Plecas feels that Fraser Health is trying to come up with a long-term parking solution and he will follow up on that issue. He hopes to have received Fraser Health's plan by the February meeting of this Committee. Sanjay Gulati shared that Mission Community Services has just purchased a van for providing rides to events, hospital appointments, the Cancer Society, etc. They are currently working out logistics. Councillor Alexis suggested that Sanjay touch base with Mayor Hawes about this service.

#### **4) NEW BUSINESS**

Late agenda items were provided to the Committee in the form of memos corresponding to some of the New Business items.

- Crosswalk request at Griner Park – Discussion about the possibility of moving the current sidewalk, the challenges and additional costs of closing in the ditch on the south side of Cherry Avenue to all for a sidewalk. Tracy Kyle will look into various options and associated costs.
- Complaint of speeding on Shook Road – review of letter from the Mayor stating that Community Policing has conducted speed checks at the location and that vehicles were found to be conforming to the speed limit. Nothing more is required from the Engineering Department on this matter.
- Review request for a 4-way stop on 7<sup>th</sup> Avenue at the entrance to Mission Secondary School. Letter from traffic technologist stating that a 4 way stop controlled intersection cannot be accommodated as the current school driveway is not part of an intersection was reviewed.
- Review request for traffic signal at the intersection of 7<sup>th</sup> Avenue and Murray Street. Tracy Kyle reported that this intersection was reviewed in 2013 and at time it was determined that installation of a traffic signal was not warranted and it was moved forward to 2018. Also in 2013, a 3 way stop was not warranted. Ibrahim Ghafoor will investigate the feasibility of this now and will report back at the February 2016 meeting.
- Tracy Kyle provided an overview of the Cedar Street and 7<sup>th</sup> Avenue intersection upgrades. Two concepts have been presented to council at this time and requests for federal funding are being looked at. Councillor Plecas stated that he will meet with Jati Sidhu, Member of Parliament, to discuss federal

grants. Tracy shared that another report will be going to Council on December 7, 2015. Questions were raised about the future operation of the traffic signal on the Cedar Valley Connector at Briskham Street. Tracy asked Ibrahim to report back on the plans for that signal.

- Tracy Kyle shared that there have been concerns from residents about the lack of a traffic signal on the Lougheed Highway at Dewdney Trunk Road. Residents feel that the need will increase with the new development in the area. This request has been forwarded to the Ministry of Transportation and Infrastructure (MOTI) and the Member of the Legislative Assembly (MLA) for their consideration. MOTI will respond to the Mayor. Ibrahim to follow up to ensure that the Mayor does in fact receive a response. Councillor Plecas has an upcoming meeting with MLA Simon Gibson and he will bring this issue to the table at that meeting as well.

- Tracy Kyle shared that the District of Mission is in the process of purchasing two speed reader signs, with cost sharing from ICBC. Committee members suggested various locations for the readers and Tracy let them know that a connection to street lights for power is required, and that there are additional costs associated with taking them down and re-installing at new locations. Tracy asked Ibrahim to find out and confirm how many portable speed readers Community Policing currently has.

**(b) Transportation Master Plan Update – Tracy Kyle**

There is an open house being held today (December 3<sup>rd</sup>) at the Leisure Centre from 2:30-7:00pm. Tracy provided paper copies of the boards for the open house as well as the questionnaire for the Committee's convenience.

**(c) Transit – Dan Sommer**

Dan shared that the Planning department has received a development inquiry for several properties on 2<sup>nd</sup> Avenue that could impact the location of the bus exchange. Discussion about possible relocation of the bus exchange and the balance between public and private space. Dan clarified that he is not making any recommendations at this time, just sharing comments with the Committee.

Subcommittee Update – meet every two months. Trying to also sit down with management from the City of Abbotsford. Getting good feedback and want the opportunity to meet with Transit officials. Councillor Plecas asked if there is any new information about West Coast Express costs and Dan replied that it will come up at the JSSC soon. There are not any changes to service at this time. Councillor Alexis stated that it should be discussed at the February 2016 meeting as some changes may have to be made.

**(d) Next Meeting**

February 4, 2016 at 1:30 p.m. in the Conference Room at the Municipal Hall.

**5) ADJOURNMENT**

Moved by Bob Ingram, and

RECOMMENDED: That the meeting be adjourned.

CARRIED

The meeting adjourned at 3:20 p.m.

# Issues for BC Transit

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- Re-establish opportunity for Transit Subcommittee communication with BC Transit and Operator.
- Have bus heading downtown (33) come down 1<sup>st</sup> Avenue and turn right on Grand Street and turn right on 2<sup>nd</sup> Avenue, to allow for a stop on 1<sup>st</sup> Avenue.
- Could the schedules please reflect where the bus stops are located?
- There was a strong smell of diesel on certain buses and visible black streak in bus. Nova Bus. (Bus #9306) (#9301, initially resolved, but back again). Has the problem been fixed?
- Could the buses running in the evening run Monday through Saturday at consistent times? (40)
- Why don't the shopper shuttle seats go down? They are usually in the up position.
- Can the drivers please wait for passengers to be seated before pulling out of the bus stop?
- Can the drivers please ensure that wheelchairs are strapped in?
- Can you look at the route for the shopper shuttle to ensure connections are possible?
  - e.g. Can you use James Street instead of Welton Avenue? Can you get closer to the other buses on 2<sup>nd</sup> Avenue?
- Can the signage on buses be improved to clearly mark courtesy seats for the disabled and seniors? What is the role of bus drivers in enforcing courteous behavior of its riders?
- Bus break downs - has the situation improved?
- Reports of some great service by both drivers and by those giving information over the phone.

File: 0540-20-11

**DATE:** February 4, 2016  
**TO:** Tracy Kyle, Director of Engineering and Public Works  
**FROM:** Ibrahim Ghafoor, Engineering Technologist – Traffic  
**SUBJECT:** **Street Intersection Review at 7<sup>th</sup> Avenue and Murray Street**

**RECOMMENDATION:**

Convert existing non-controlled intersection of 7<sup>th</sup> Avenue and Murray Street to a 3-way stop controlled intersection.

**BACKGROUND:**

The District received a concern regarding the safety of the operation at the intersection of 7<sup>th</sup> Avenue and Murray Street. It was proposed that a traffic signal or a 3-way stop control be installed. An internal study at this intersection was completed in 2013. In 2013, the District Roads Development Cost Charge (DCC) capital budget included \$188,000 to install a traffic signal at the intersection of Murray Street and 7<sup>th</sup> Avenue. The study concluded that a traffic signal was not warranted at that time and that the allocation of funds would be transferred to have the work completed in 2018.

**DISCUSSION:**

Installation of a traffic signal is considered only after all other traffic control measures have been reviewed. Other traffic control measures include geometric improvements or 3-way/4-way stop control options. Traffic control measures are required to manage the operation of high traffic volumes or decrease the number of motor vehicle accidents. Based on the 2013 study, the District plans to install a traffic signal at the intersection of 7<sup>th</sup> Avenue and Murray Street in 2018.

Staff analyzed the feasibility of installing a 3-way stop control at this intersection. A 3-way stop control requires less traffic volume as compared to a traffic signal. A 3-way stop control is suitable for a traffic volume that is split 70/30 between a major roadway (7<sup>th</sup> Avenue) and a minor roadway (Murray Street). A 70/30 split means that less than 70% of traffic volume comes from 7<sup>th</sup> Avenue and more than 30% of traffic volume comes from Murray Street.

Staff collected traffic statistics at the intersection during peak hours on January 7, 2016. It was determined that the traffic volume split is 78/22. Therefore, a 3-way stop is not warranted at this time. However, staff recommend installing a 3-way stop control measure to increase the safety at this intersection in the interim, prior to the installation of a traffic signal in 2018.

Staff discussed installing a 3-way stop at this intersection with the RCMP to get their opinion. The RCMP support the recommendation, as the District will install a traffic signal in 2018. Design work to install a traffic signal is planned to start this year.

**COST ESTIMATE:**

Estimated cost to install a 3-way stop control is \$1,500. Cost of the project will be funded through the current operating budget of the Engineering and Public Works Department.

**COMMUNICATION:**

The District website will provide up-to-date information pertaining to the 3-way stop control for the public to reference.

**CONCLUSION:**

To increase safety at the intersection of 7<sup>th</sup> Avenue and Murray Street, it is recommended that a 3-way stop control measure be installed.

File: 0540-20-12

**DATE:** February 4, 2016  
**TO:** Tracy Kyle, Director of Engineering and Public Works  
**FROM:** Hirod Gill, Manager of Engineering Planning and Design  
**SUBJECT:** **Traffic Safety Improvements at four Intersections along Cedar Street**

**RECOMMENDATION:** The District consider and resolve:

1. That per Table A.1 of this report, staff prepare short, medium, and long-term project plans to investigate ICBC's proposed traffic treatments to improve traffic safety at four intersections along Cedar Street corridor.
2. That staff draft a report to Council to request the required funding to move forward with the proposed short term projects.

**BACKGROUND:**

In discussion with the District of Mission on road safety concerns, ICBC initiated a safety review at the following four intersections:

- Cedar Street and Cherry Avenue;
- Cedar Street and Best Avenue;
- Cedar Street and 14<sup>th</sup> Avenue; and
- Cedar Street and McRae Avenue.

The study was completed in October 2015 at a conceptual level, whereby suggestions to improve traffic safety were offered for District's consideration and follow up.

This report summarizes the findings and proposes a set of short, medium and long term action plans to improve road safety at these intersections.

**DISCUSSION AND ANALYSIS:**

A safety review of each of the four signalized intersections along Cedar Street identified a number of safety issues and possible treatments along Cedar Street.

The proposed treatments are based on a conceptual level investigation and as a result, further studies may be warranted to determine if they are viable and applicable for the local conditions.

ICBC's proposed treatments in these intersections include:

- Undertaking traffic volume and turning movement counts at each intersection to provide insight regarding the relationship between traffic movement and crash history;
- Reviewing the timing plans for each traffic signal to determine if coordination and traffic flow between the traffic signals can be improved along Cedar Street;

- Undertaking travel speed surveys along Cedar Street to determine the extent of travel speeds as being a safety issue; and
- Considering the application of anti-skid pavement treatment on the downhill approaches to reduce stopping distances for the southbound traffic along Cedar Street at the three intersections of McRae Avenue, 14<sup>th</sup> Avenue and Best Avenue.

Table A.1 (Appendix A) summarizes the safety concerns at these four intersections and recommends their possible treatments with a set of proposed studies and implementation timings.

Table A.1 proposes three time-related action plans, namely short, medium, and long term plans to improve traffic safety at these four intersections. These action plans are identified based on their complexity, obvious cause and effect relations to the problem, and cost.

Short term action plans in Table A.1 include lower cost safety measures that are intuitively effective and relatively easier to implement. The medium and long range action plans are those that are respectively more expensive and complex remedies, and need to be explored in further detail to determine if they are viable and applicable for the local conditions.

Staff recommend that the District start with the proposed short term action plans and then monitor the traffic to assess their effectiveness. Depending on the findings, staff may need to issue Request for Proposals (RFPs) in the subsequent years to hire consulting services to evaluate the proposed medium and long term traffic treatments and recommend the required set of actions to further improve the safety at these intersections.

#### **FINANCIAL IMPLICATIONS:**

Staff will estimate the costs associated with implementing the proposed short term action plans and will prepare a set of projects that need to be implemented in 2016 and 2017. Then, the financial plan will be prepared accordingly.

ICBC is willing to cost share on safety improvements, if the District decides to implement the proposed treatments. Staff will contact ICBC for grant, once each short term project cost has been identified.

#### **COMMUNICATION:**

The implementation of the proposed traffic treatments will be in close cooperation and coordination with RCMP. Staff will inform RCMP of the timing of each project implementation, and will seek their assistance for traffic enforcement.

Hirod Gill

## Appendix A

**Table A.1:** Proposes Action Plans to Improve Traffic Safety at four Intersections along Cedar Street

Location	Safety Concern	Possible Cause	Proposed Treatment	Short Term Plan	Medium Term Plan	Long Term Plan
<b>Cedar Street &amp; McRae Avenue</b>	16 crash incidents were recorded between the years 2010 and 2013.	1- Christine Morrison Elementary School is located at McRae, west of the Cedar Street. Increase traffic volume at pick up and drop off times may cause congestion and conflict with the turning movements at the signalized intersection	1- One of these two treatments would improve the safety: a. Road widening is required at the intersection to provide a separated northbound left turn lane. b. Restriction of left turns between peak morning commute hours (7:30 to 9:00 am) 2- A road vertical curve refinement may be required	N.A.	N.A.	A detailed study will be initiated to assess the required land acquisition for road widening and the loss of parking lane on the west side of the road in the vicinity of the intersection.  The road profile will be redesigned to address the vertical curve along Cedar Street at this intersection.
		2- Northbound left turn traffic along Cedar St. shares the through travel lane.				
		3- Sightlines along Cedar Street may be obscured by the existing vertical curve and hence, drivers may not see the traffic congestion and stop the vehicle in time.				
		Sightlines for southbound right turn traffic along Cedar St. may be obscured by the vehicles parked in the parking lane north of the intersection	Extend the southbound right turn lane by eliminating some of the southbound parking lane on the north side of the intersection	The District will complete this project in 2016	N.A.	N.A.
	High percentage of the crashes (i.e., about 81%) were related to rear-end type incidents.	Rear end type collision may be due to: 1- Unsynchronized traffic signal timing between the intersections along Cedar St. 2- Not having an advisory overhead flashing beacons, similar to the ones at 14 <sup>th</sup> & Best Ave. intersections, to advise drives to stop when signal is about to turn red.	Timing plans for each traffic signal should be reviewed for better coordination among intersections. to alleviate drivers' stop-start operations	N.A.	A detailed traffic study will be initiated to investigate: 1- The effect of traffic signal timing synchronization on the flow of traffic along the Cedar Street and its effect on alleviating vehicular start-stop operations. 2- Whether an advisory overhead flashing beacon will benefit the safety.	N.A.
		Cedar St has considerable downgrades on the southbound approach for traffic at this intersection. It could be difficult for drivers to react and brake in time, especially during inclement weather	The proportion of injuries and frequency of rear end, side swipe and off road collisions is relatively high for this intersection. The application of anti-skid pavement treatment on the downhill approaches could help to reduce stopping distances for the southbound traffic.	N.A.	A detailed traffic study will be initiated to investigate the effectiveness of this option.	N.A.

N.A.: Not applicable

**Table A.1: Continued**

Location	Safety Concern	Possible Cause	Proposed Treatment	Short Term Plan	Medium Term Plan	Long Term Plan
<b>Cedar Street &amp; 14<sup>th</sup> Avenue</b>	1- 41 crash incidents were recorded between the years 2010 and 2013.	The proportion of injuries related to rear end, left turn opposing and angle type crashes suggests that higher travel speeds may be a factor.	District would need to undertake speed survey and if it turned out that speed is a safety issue, additional police enforcement will be needed.	District staff will monitor the travel speed at this intersection and will work with RCMP accordingly to address the speeding issues.	N.A.	N.A.
	2- Higher number of crashes, compared to other intersections along Cedar Street.					
	3- Crash types are mainly rear end, angle T-bone, left turn opposing Cedar St. and 14 <sup>th</sup> Ave, and side swipe.	No left turn traffic signal causes conflicts between opposing traffic with left turn movements.	District will examine if left turn phasing is a viable option.	A detailed traffic study will be initiated to investigate whether a left turn light needs to be added in this intersection.	N.A.	N.A.
		The eastbound and westbound 14th Ave approaches are wide at this intersection and encourage higher entry travel speed right turn onto Cedar St and increase collision possibility with Cedar Street traffic.	Installation of Post Mounted Delineation (PMD) on both east and west bound 14th Avenue could be undertaken to effectively reduce the available turning radii for right turning vehicles	District will implement the proposed suggestion and monitor its safety improvement.	N.A.	N.A.
	The proportion of injuries and frequency of rear end, side swipe and off road collisions, especially during inclement weather, is relatively high for this intersection.	Cedar Street has considerable downgrades on the southbound approach for traffic at this intersection. It could be difficult for drivers to react and brake in time during adverse weather conditions.	The application of anti-skid pavement treatment on the downhill approaches could help to reduce stopping distances for the southbound traffic.	N.A.	A detailed traffic study will be initiated to investigate the effectiveness of this option.	N.A.

N.A.: Not applicable

**Table A.1: Continued**

Location	Safety Concern	Possible Cause	Proposed Treatment	Short Term Plan	Medium Term Plan	Long Term Plan
Cedar Street & Best Avenue	<p>1- 16 crash incidents were recorded between the years 2010 and 2013.</p> <p>2- There appear to be a high proportion of injury related collisions.</p>	<p>1- Higher travel speeds for traffic along the Cedar Street approaches.</p> <p>2- The eastbound and westbound approaches for the through/right turn lanes at this intersection is excessively wide that encourage:</p> <ul style="list-style-type: none"> <li>• Higher entry travel speed right turn onto Cedar Street; and</li> <li>• Unsafe parking.</li> </ul>	<p>Right turn movement could be marked as separate lanes.</p>	<p>District will implemented the proposed suggestion and monitor it for the safety improvement.</p>	N.A.	N.A.
		<p>1- Current lane designation encourages higher speed travel for southbound traffic along Cedar Street by allowing drivers to merge south of the intersection.</p> <p>2- The existing of the right turn lane into Adams Ave. right after the merge lane is a potential conflict between the movements.</p>	<p>Pavement markings and signage could re-designate the merge area to the north of the intersection to reduce conflict. This would alleviate/eliminate passing cars maneuvering through the intersection to merge.</p>	<p>District will implement the proposed suggestion and monitor its safety improvement.</p>	N.A.	N.A.
		<p>Cedar Street has considerable downgrades on the southbound approach for traffic at this intersection. It could be difficult for drivers to react and brake in time, especially during inclement weather.</p>	<p>The application of anti-skid pavement treatment on the downhill approaches could help to reduce stopping distances for the southbound traffic.</p>	N.A.	<p>A detailed traffic study will be initiated to investigate the effectiveness of this option.</p>	N.A.

N.A.: Not applicable

Location	Safety Concern	Possible Cause	Proposed Treatment	Short Term Plan	Medium Term Plan	Long Term Plan
Cedar Street & Cherry Avenue	1- 24 crash incidents were recorded between the years 2010 and 2013, of which 16 were related to property damage incidents.  2- The proportion of injury related crashes is less compared to the previously discussed	Low injury related crash history is probably due to (a) lower traffic at this location, and (b) being on a relatively flat terrain.	N.A.	N.A.	N.A.	N.A.
	The local store access and parking area located on the south-west corner may cause confusion/conflict with traffic movements along Cedar St. at this intersection.	The local store access and parking area is not well defined.	The District should work with the store owner to explore the possibility of relocating parking elsewhere on the property away from Cedar St or alternatively redesign the parking lot to narrow and define the driveways and allow for one way movement and restrict left turn entry and exit movements.	The District will contact the store owner to discuss possible remedial actions.	N.A.	N.A.
	School exit and the angled parking at the Albert McMahon school may have the potential to conflict with traffic movements along Cherry Avenue.	Proximity of the school to the Intersection.	The District should review road safety at this school to explore the possibility of replacing the angled parking area with parallel parking along Cherry Ave and restrict left turn exit movements from the school during peak arrival and dismissal times.	N.A.	The District will conduct a study to assess implementation of the proposed changes to the safety improvement at this intersection.	N.A.
	Despite being a multi-lane intersection, the Cedar Street approaches to the intersection have single primary overhead signal heads in each direction	Sub-optimal traffic signal visibility for the drivers	An additional primary signal head should be added to each direction on the Cedar Street to improve visibility.	N.A.	Given the low crash history at this intersection, the District will first concentrate on improving traffic safety at other intersection and then will look into the implementation of the proposed improvement at this intersection.	N.A.
	Higher travel speeds for traffic along the Cedar Street approaches	Ground levels out	Additional police enforcement is required.	District would need to undertake speed survey and if it turned out that speed is a factor, additional police enforcement will be needed.		

N.A.: Not applicable