

Highway 97: Intersection Improvements at Boucherie Road and Westlake Road

Community Engagement March 2 – 20, 2016

Engagement Summary Report

April 2016

Prepared by



About Kirk & Co. Consulting Ltd.

Kirk & Co. is a recognized industry leader in designing and implementing comprehensive public and stakeholder consultation and engagement programs. Utilizing best practices, consultation and engagement programs are designed to maximize opportunities for input. Kirk & Co. independently analyzes and reports on public and stakeholder input.

The views represented in this public engagement summary report reflect the priorities and concerns of engagement participants. They may not be representative of the views of the public and other stakeholders because participants self-selected into the Highway 97 Boucherie/Westlake Project community engagement, and therefore do not reflect a random sample.

Highway 97: Intersection Improvements at Boucherie Road and Westlake Road

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1. BACKGROUND

With the completion of the William R. Bennett Bridge and Westside Road Interchange projects, Boucherie Road to Westlake Road was identified as the next section of Highway 97 most in need of safety and mobility improvements. In 2014, the Ministry of Transportation and Infrastructure (MoTI) began planning for improvements to the Boucherie Road and Westlake Road intersections, to increase safety and mobility along the Highway 97 corridor.

These intersections create significant highway and cross street delays, and experience higher collision rates compared to other locations throughout the province.

The Boucherie Road and Westlake Road intersection improvements will help traffic continue to move safely and meet future traffic needs resulting from the projected population and economic growth in the area.

2. ENGAGEMENT WITH LOCAL GOVERNMENT AND FIRST NATIONS

MoTI has worked with the City of West Kelowna and Westbank First Nation to consider their goals for transportation infrastructure improvements, including:

- Planning and discussions with the City of West Kelowna and Westbank First Nation over the past year have resulted in conceptual layouts for intersection improvements at Westlake Road and Boucherie Road.
- Extensive technical consultation has been carried out with the City of West Kelowna and Westbank First Nation staff throughout the planning process.
- Local government has provided input related to land use impacts, future growth and traffic forecasts, and future local transportation infrastructure plans as well as improvement option evaluation.

HOW INPUT WILL BE CONSIDERED

Input will be considered, along with technical information, costs and benefits, and further input from local governments, as preliminary designs for the intersection improvements are developed. There will be additional opportunities to provide input regarding the Boucherie Road and Westlake Road intersection improvements as the project proceeds.

3. COMMUNITY ENGAGEMENT: MARCH 2 – MARCH 20, 2016

3.1 PURPOSE

The Ministry of Transportation and Infrastructure engaged with the community between March 2 and March 20, 2016 to provide information about the project and gather input from the public regarding conceptual layouts being considered for the intersection improvements at Boucherie Road and Westlake Road.

Engagement materials, including the discussion guide and feedback form, online feedback form and materials for the public open houses were posted online at www.gov.bc.ca/okanaganvalleycorridorprojects.

3.2 ENGAGEMENT PARTICIPATION

There were a total of **537** participant interactions during the Community Engagement period:

- **391** people attended two public open houses
 - March 2, 2016: 304 attendees
 - March 3, 2016: 87 attendees
- **145** completed feedback forms were received
- 1 written submission was received at an open house

3.3 ENGAGEMENT TOPICS

The discussion guide and feedback form provided information regarding planning work undertaken in the region, the needs and benefits of the project, and the two conceptual layouts being considered for the intersection improvements at Boucherie Road and Westlake Road:

- Boucherie Road Intersection: Conceptual Layout
- Westlake Road Intersection: Conceptual Layout

Participants were asked to provide their level of agreement with the conceptual layouts and reasons for their level of agreement. They were also asked to provide feedback on the importance of several considerations as the Ministry of Transportation and Infrastructure proceeds with the designs for the Boucherie Road and Westlake Road intersections.

3.4 NOTIFICATION

Notification of opportunities to participate in engagement included:

- **Newspaper Advertising**: Ads were placed in print newspapers notifying the public of the opportunities to participate in the community engagement.
 - Kelowna Capital News: Wednesday, February 24 and Wednesday, March 2
 - Westbank Westside Weekly: Thursday, February 25
 - Kelowna Daily Courier: Friday, February 26 and Tuesday, March 1
- **Social Media**: Two tweets were sent from @BCGovNews and @toddstonebc to notify of engagement opportunities and to remind readers to provide feedback.
- **Engagement Website**: All engagement materials were available on the project website on March 2, 2016 (*www.gov.bc.ca/okanaganvalleycorridorprojects*).
- **Changeable Message Boards**: Two changeable message boards were placed along Highway 97 to notify drivers of engagement opportunities and to remind drivers to attend the March 2 and 3 open houses.

A copy of the notification materials can be found in Appendix 1.

3.5 ENGAGEMENT METHODS

3.5.1 DISCUSSION GUIDE AND FEEDBACK FORM

The discussion guide and feedback form provided information regarding transportation planning work undertaken in the region, the needs and benefits of the project, and the two conceptual layouts being considered for the intersection improvements at Boucherie Road and Westlake Road. The discussion guide included a project rendering and 3-D model for each conceptual layout, which were also posted online. A feedback form to gather input was also provided at the public open house and online.

A copy of the discussion guide and feedback form can be found in Appendix 2.

3.5.2 ONLINE ENGAGEMENT

All community engagement materials were available on the website www.gov.bc.ca/okanaganvalleycorridorprojects, including electronic copies of the discussion guide and feedback form, open house display boards, detailed information related to Highway 97: Intersection Improvements at Boucherie Road and Westlake Road, and an online feedback form that could be submitted electronically. There were 145 feedback forms received, 103 of which were received through the online feedback form.

3.5.3 OPEN HOUSES

391 people attended the two public open houses held on March 2 and March 3, 2016. Discussion guides and feedback forms were provided to attendees at the open house and display boards summarizing the discussion guide were set up around the room. Participants were encouraged to complete their feedback forms in hardcopy or online. Project team members circulated and engaged with attendees in one-on-one and small group discussions.

Please note that engagement was open to all individuals, not just residents of West Kelowna.

4. ENGAGEMENT RESULTS

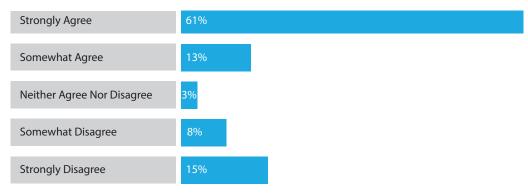
4.1 FEEDBACK FORMS

The following are results from the **145 feedback forms received** at the open houses, online, and by mail.

Note: Not all respondents answered every question.

Boucherie Road Intersection: Conceptual Layout

Q1A: Please rate your level of agreement with the Boucherie Road Intersection Conceptual Layout.



Total Responses: 136

Note: Totals may not add up to 100% due to rounding.

Q1B: Please provide any reasons you may have for your level of agreement regarding the Boucherie Road Intersection Conceptual Layout.

The following were the collected themes from 105 responses. Please note that participants may have mentioned multiple themes in their responses.

THEMES FROM REASONS FOR LEVELS OF AGREEMENT TO THE BOUCHERIE ROAD INTERSECTION CONCEPTUAL LAYOUT.	NUMBER OF MENTIONS
 Participants voiced general support regarding the conceptual layout. Comments included: The removal of traffic lights will improve safety and traffic flow (12 comments) The flow of traffic will improve (11 comments) The proposed layout is well designed (8 comments) This improvement has been long awaited and is needed (7 comments) Accidents will be prevented (5 comments) 	51
 2. Participants voiced concern regarding the use of traffic circles/roundabouts. Many drivers are unclear on how to navigate them (6 comments) No need for two roundabouts (5 comments) General concern and opposition to roundabouts (4 comments) Should be two lanes instead of three lanes (1 comment) Concern whether trucks could pass through (1 comment) 	17

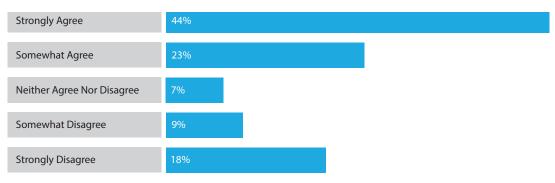
THEMES FROM REASONS FOR LEVELS OF AGREEMENT TO THE BOUCHERIE ROAD INTERSECTION CONCEPTUAL LAYOUT.	NUMBER OF MENTIONS
 3. Participants stated they did not support this conceptual layout. Comments included: The layout is not necessary and not required at this time (9 comments) Plan moves congestion from one area to another (3 comments) Boucherie Road intersection will negatively impact local businesses, property values and the local residential communities (2 comments) Makes more sense to have local traffic taken off the highway without having to stop the whole highway (1 comment) 	15
4. Participants commented on the project's use of land, including property that belongs to the Westbank First Nation, and payment for this land.	8
5. Participants voiced concern regarding the access in and out of Horizon Drive, stating that it is difficult to see traffic and that the proposed changes will worsen this issue.	6
6. Participants expressed support for the proposed roundabouts stating that they will improve the flow of traffic	3
 7. Additional comments included: Concern regarding access to Friends Pub (2 comments) Concern regarding access to bus stops (2 comments) Participants commented that a bypass would be a better idea (2 comments) Hayman Road needs to be the main road leading to the roundabout The Boucherie Road underpass should be a two lane underpass with room for a bicycle lane Need to redesign the entry to the intersection to accommodate the traffic Would like to see the entrance to the on-ramp moved further south Use the current Boucherie Road right of way for the traffic circle and connections on the east side of the highway Length of merge lane off of Boucherie Road onto Highway 97 is too short Design of both interchanges does not address future growth Too many entrances/exits in a short distance for efficient highway traffic flow, not to mention millions in infrastructure maintenance and replacement costs Highway 97 needs widening first Concern regarding the impact on the environment 	

Q2. How important are each of the following considerations to you as the Ministry of Transportation and Infrastructure designs the Boucherie Road Intersection?



Westlake Road Intersection: Conceptual Layout

Q3A. Please rate your level of agreement with the Westlake Road intersection Conceptual Layout.



Total Responses: 137

Note: Totals may not add up to 100% due to rounding.

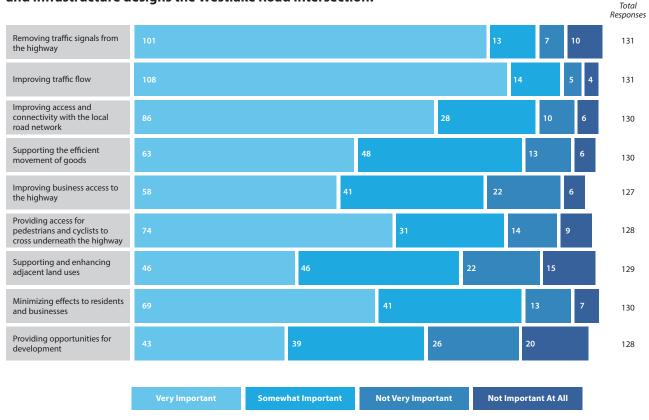
Q3B. Please provide any reasons you may have for your level of agreement regarding the Westlake Road Intersection Conceptual Layout.

The following were the collected themes from 109 responses. Please note that participants may have mentioned multiple themes in their responses.

THEMES FROM REASONS FOR LEVELS OF AGREEMENT FOR THE WESTLAKE ROAD INTERSECTION CONCEPTUAL LAYOUT:	NUMBER OF MENTIONS
 Participants voiced general support for the proposed layout. Comments included: The design will improve traffic flow and reduce congestion (15 comments) The design will decrease accidents and improve safety (7 comments) The improvements are long overdue and must start soon (4 comments) Great use of existing roadways (3 comments) 	49
 2. Participants provided the following suggestions and statements regarding the proposed Westlake Road changes. Comments included: Bus stop locations should be easily and safely accessible for pedestrians (6 comments) Concern regarding Westlake Road flowing directly onto the highway (5 comments) Concern regarding disruption and impacts to surrounding neighbourhoods (4 comments) Request for longer merge lanes on Highway 97 (3 comments) Concern regarding the new road being built behind Colleen Road (3 comments) Request for improved lighting on the highway (2 comments) Concern regarding congestion on Industrial Road (2 comments) 	29
3. Participants voiced general concern regarding the proposed layout with approximately half commenting that the design will not improve traffic flow.	23
 4. Participants commented on the Hudson Road intersection, stating that: An underpass or overpass would be a better option (9 comments) There should be a roundabout instead (7 comments) There should be easier access on and off the highway from Hudson Road and other residential roads (7 comments) 	23

THEMES FROM REASONS FOR LEVELS OF AGREEMENT FOR THE WESTLAKE ROAD INTERSECTION CONCEPTUAL LAYOUT:	NUMBER OF MENTIONS	
5. Participants stated that the proposed changes are circuitous for those crossing Highway 97.	18	
6. Participants voiced concern regarding the use of roundabouts stating that residents should be educated on proper use as well as questioning whether they will be large enough for commercial trucks.	6	
7. Participants stated agreement with reducing the number of traffic lights on the highway.	5	
 8. Additional comments included: That implementing traffic signals or eliminating left turns would improve traffic flow If Westlake Option A was chosen, the overpass at Boucherie could be eliminated Boucherie improvements should take priority over Westlake Westlake improvements should take priority over Boucherie Concern that proposed changes benefit Westbank First Nation, not West Kelowna residents Eliminate the intersection at Ross Road 		

Q4. How important are each of the following considerations to you as the Ministry of Transportation and Infrastructure designs the Westlake Road Intersection?



Q5. Please provide any additional comments you may have regarding the proposed improvements to the Boucherie Road and Westlake Road intersections on Highway 97 in the Okanagan.

The following were the collected themes from 98 responses. Please note that participants may have mentioned multiple themes in their responses.

THEMES FROM ADDITIONAL COMMENTS:	NUMBER OF MENTIONS
 Participants voiced general support for both proposed layouts. Comments included: Improvements are long overdue, necessary, and should be implemented as soon as possible (14 comments) Proposed improvements will decrease accidents and improve safety (12 comments) Proposed improvements will improve traffic flow and reduce congestion (7 comments) 	41
 2. Participants provided comments and suggestions regarding the proposed layouts, including: Requesting more consideration for pedestrian routes and safety (6 comments) Concern regarding the Hudson Road intersection (5 comments) Request to increase the number of lanes on Highway 97 (4 comments) Request for longer merge lanes onto Highway 97 (2 comments) Request for an underpass or overpass at Highway 97 and Westlake Road (2 comments) Request for sound barrier walls in 70+ kilometre zones (2 comments) Concern regarding safety of cyclists (2 comments) Request for a route to bypass West Kelowna and Peachland (2 comments) 	25
3. Participants voiced general concern regarding both proposed layouts stating that they will not improve traffic flow or are not necessary.	19
Participants voiced concern regarding the Westlake Road improvements, stating that they are circuitous.	8
5. Participants requested improved street lighting and brighter lane markings.	8
6. Participants requested easier access on and off Highway 97 to residential streets and businesses.	7
7. Participants requested a bypass on Highway 97 instead of the proposed changes.	6
8. Participants voiced general support for the Boucherie Road Improvements.	6
9. Participants commented that the plans are particularly beneficial for the Westbank First Nation.	6
10. Participants voiced concern about roundabouts stating that community members must be educated on use.	5
11. Participants stated disagreement with waiting to build a bypass before implementing other improvements.	4
12. Participants voiced concern that proper engagement with the community was not undertaken	3

THEMES FROM ADDITIONAL COMMENTS:	NUMBER OF MENTIONS
 13. Additional comments included: Concern regarding impacts on neighbouring communities Request for implementing more roundabouts Request for a sign north of Boucherie Road that prohibits the use of air brakes Upgrade Bartley intersection to an interchange and remove Ross and Daimler intersections Request for a frontage road system in West Kelowna to take local traffic off Highway 97 	

4.2 WRITTEN SUBMISSION

One participant at the open house provided a written submission with detailed design recommendations and a drawing of the proposed layouts.





Highway 97: Intersection Improvements at Boucherie Road and Westlake Road

Community Engagement

Appendix 1: Notification Materials

April 2016

NEWSPAPER ADVERTISING

Public Notice of Open House

Highway 97 at Boucherie and Westlake Roads

The Ministry of Transportation and Infrastructure is planning for future improvements to increase safety and mobility on Highway 97 at Boucherie and Westlake Roads.

The public is invited to attend one of the following open houses to provide input on conceptual layouts that are being considered to improve these two intersections.

The drop-in open houses are scheduled for the following dates:

Wednesday, March 2, 2016 4:00 p.m. to 8:00 p.m. Super 8 West Kelowna 1655 Westgate Road, West Kelowna, B.C.

Thursday, March 3, 2016 4:00 p.m. to 8:00 p.m. Sensisyusten Multi-Purpose Facility 1920 Quail Lane, Westbank, B.C.

For more information, please contact the ministry by e-mail at: carmen.love@gov.bc.ca



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SOCIAL MEDIA





Have your say on improvements to the Highway 97 Boucherie and Westlake Road intersections, ow.ly/YNTyE @WestKelownaCity #BC





Attend an open house to discuss proposed improvements to the Highway 97 Boucherie and Westlake Road intersections news.gov.bc.ca/10381



Highway 97: Intersection Improvements at Boucherie Road and Westlake Road

Community Engagement

Appendix 2: Discussion Guide and Feedback Form

April 2016

Highway 97: Intersection Improvements at Boucherie Road and Westlake Road



Discussion Guide and Feedback Form

Community Engagement March 2–20, 2016



Welcome

You're invited to provide input on conceptual layouts being considered for the intersection improvements at Boucherie Road and Westlake Road.

Community Engagement

There are several ways to participate and provide your feedback:

- ✓ Visit our website at www.gov.bc.ca/okanaganvalleycorridorprojects
- ✓ Read the Discussion Guide and complete the Feedback Form
- ✓ Fill out our online Feedback Form www.gov.bc.ca/okanaganvalleycorridorprojects
- ✓ Email us at boucherie.westlake@gov.bc.ca
- ✓ Attend an open house

Please submit your comments by March 20, 2016.

Public Open House Schedule

Location	Date/Time	Venue
West Kelowna	Wednesday, March 2, 2016 4:00 p.m. – 8:00 p.m.	Super 8 West Kelowna 1655 Westgate Rd, West Kelowna
Westbank First Nation	Thursday, March 3, 2016 4:00 p.m. – 8:00 p.m.	Sensisyusten Multi-Purpose Facility 1920 Quail Lane, Westbank

How Input Will be Considered

Input will be considered, along with technical information, costs and benefits, and further input from local governments, as preliminary designs for the intersection improvements are developed. There will be additional opportunities to provide input regarding the Boucherie Road and Westlake Road intersection improvements as the project proceeds.



Highway 97: Intersection Improvements at Boucherie Road and Westlake Road

With the completion of the William R. Bennett Bridge and Westside Road Interchange projects, Boucherie Road to Westlake Road was identified as the next section of Highway 97 most in need of safety and mobility improvements. In addition to the Central Okanagan Planning Study launched in 2014, which looks at the transportation needs for the broader area, the Ministry of Transportation and Infrastructure (MoTI) initiated conceptual planning for these intersections as a result of the safety and mobility improvements needed in the near term.

In 2014, MoTI began planning for improvements to the Boucherie Road and Westlake Road intersections, to increase safety and mobility along the Highway 97 corridor. These intersections create significant highway and cross street delays, and experience higher collision rates compared to other locations throughout the province. The Boucherie Road and Westlake Road intersection improvements will help traffic continue to move safely and meet future traffic needs resulting from the projected population and economic growth in the area.

Planning and discussions with the local government and First Nations over the past year have resulted in conceptual layouts for intersection improvements at Westlake Road and Boucherie Road. The planning work for these intersections includes regular technical consultations with the City of West Kelowna and Westbank First Nation.

Highway 97: A Vital Transportation Corridor

Highway 97 is the primary north-south roadway through the Okanagan Valley, serving as the major connection between the communities of Osoyoos, Oliver, Penticton, the City of West Kelowna, Kelowna, Vernon and Kamloops, and connecting the U.S. in the south to the Trans-Canada Highway (Highway 1) in the north.

Stages of Planning and Engagement

- 1 Current Conditions Analysis
- 2 Future Needs Defined
- 3 Conceptual Planning Development and Evaluation of Options
- 4 Community Engagement (March 2–20, 2016)

WE ARE HERE

Public input regarding the conceptual layouts under consideration

- 5 Revise Conceptual Layouts Considering Public Input
- **6** Initiate Preliminary Design

Planning for the Future: B.C. on the Move

In March 2015, the government of B.C. released *B.C. on the Move: A 10-Year Transportation Plan.* As part of developing this plan, province-wide engagement was held to seek comments from British Columbians about transportation priorities over the next 10 years. Over 12,500 survey responses were received and over 100 meetings were held with representatives of local governments, First Nations, chambers of commerce, port and airport authorities and other stakeholders.

Expanding the capacity of our transportation network is critical to improving safety, attracting new investment and supporting economic growth. The Province will invest approximately \$1 billion over the next three years to ensure our network has the safety, capacity and reliability to meet transport and trade needs.

You can read the full plan at engage.gov.bc.ca/transportationplan.

B.C. on the Move: Okanagan

In recent years, the regional transportation network in the Okanagan has undergone significant improvements for all modes of travel. Since 2001, the Highway 97 corridor in the Central Okanagan has received over \$400 million in upgrades to improve safety and mobility. Some of the highway improvements for the Okanagan region in *B.C. on the Move: A 10-Year Transportation Plan* include:

- Continue planning for the second crossing of Okanagan Lake
- Construct new passing lanes and four-laning on highways throughout the Okanagan, including six-laning through Kelowna
- Intersection improvements, new interchanges, and safety improvements on highways and roads throughout the Okanagan Valley

Central Okanagan Planning Study

The Central Okanagan Planning Study (COPS) will determine transportation needs of the area, and will look at route options including potential locations for a future additional lake crossing and potential timing for future projects. Although not part of COPS, the Boucherie Road and Westlake Road intersection improvements will be considered together with the recommendations resulting from COPS.

The study area for COPS extends from Greata Ranch, south of Peachland, north to Clerke Road/College Way south of Vernon, and encompasses the communities of Peachland, West Kelowna, Lake Country, the Westbank First Nation and Okanagan Indian Band.



To learn more about the Central Okanagan Planning Study, visit **engage.gov.bc.ca/okanagansecondcrossing**.

Boucherie Road and Westlake Road Intersections: Current Conditions

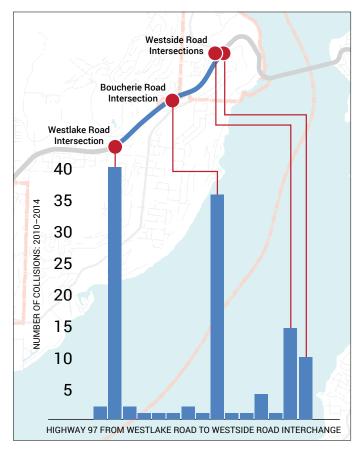
The population of the Okanagan is growing rapidly, and is predicted to continue to grow. From 1996 to 2011, the Central Okanagan population grew by 32%, a much higher rate than the provincial average of 18%. To meet this growing demand, capacity improvements are needed to address safety, queuing and delays and help improve travel times along Highway 97.

Traffic Collisions

An analysis of current operations and collisions, completed as part of the conceptual planning process, shows the Boucherie Road and Westlake Road intersections are considered collision prone locations experiencing higher than average collisions and accident severity, based on comparable locations in the province. On Highway 97, between Westlake Road and Westside Road, over 115 collisions have been reported in a five year period (2010–2014), with the majority occurring at the Boucherie Road and Westlake Road intersections.

Westlake Road and Boucherie Road are currently ranked the most collision prone locations along Highway 97 south of the William R. Bennett Bridge. The Ministry's planned improvements will increase safety at these two intersections.

Highway 97: Westlake Road to Westside Road 5-Year Collision History (2010-2014)



Since 2013, the average yearly number of crashes at the Westside Road interchange has decreased by 75%

Guiding Principles – Improvements to Highway 97 Intersections

Planning for improvements to the Boucherie Road and Westlake Road intersections include the following principles to guide the decision-making process:

- ✓ Improve safety and traffic flow on the highway.
- Improve access and connectivity with the local road network.
- Support and enhance adjacent land uses and consider local community character, aesthetics and image.
- ✓ Minimize impacts to residents and businesses and maximize development potential.
- √ Support active transportation.

In addition, MoTI has worked with the City of West Kelowna and Westbank First Nation to consider their goals for transportation infrastructure improvements.

Boucherie Road and Westlake Road Intersections: Current Conditions

Current Traffic Congestion

Highway 97 experiences significant delays and queuing, particularly northbound traffic during the morning peak hour, and southbound traffic during the afternoon peak hour. The following locations are particularly congested:

- The right turn from Boucherie Road onto Highway 97 (northbound) during the morning and afternoon peak hours
- The left turn from Highway 97 (southbound) onto Boucherie Road during the afternoon peak hour
- Eastbound Westlake Road/Hudson Road, including the left turn from Westlake Road/Hudson Road onto Highway 97 northbound during the morning and afternoon peak hours

Within the Boucherie Road and Westlake Road study area, traffic volumes on the highway during morning peak hours are around 3,500 vehicles-per-hour (VPH) and in the afternoon are around 4,200 VPH.

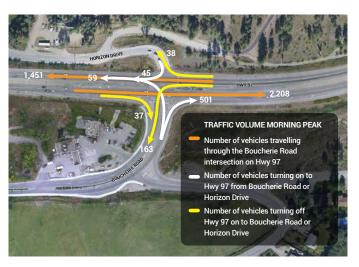
Traffic does not flow efficiently through the signalized intersections at Boucherie Road and Westlake Road as a result of existing traffic and land use patterns. For example, residential development is on the west side of Lake Okanagan and employment centres are on the east.

Congestion on Highway 97 has resulted in vehicles diverting to Sneena Road Extension, causing additional congestion on local roads.

Future Traffic Conditions

Anticipated development in the area (identified by the City of West Kelowna and Westbank First Nation) could contribute up to an additional 2,300 vehicles-per-hour (VPH) during the morning peak hour and 3,600 VPH during the afternoon peak hour over a 25-year time frame. This would increase daily traffic in the area by about 70%.

Traffic Volume During the Morning Peak Hour – Boucherie Road Intersection (Summer 2015)



Traffic Volume During the Morning Peak Hour – Westlake Road Intersection (Summer 2015)



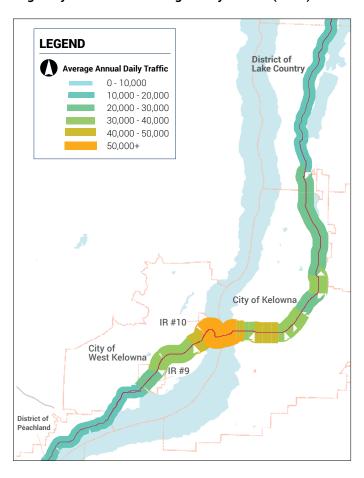
Current Traffic Congestion

There are many activity centres concentrated on the Highway 97 corridor, and few alternative routes. The greatest traffic congestion is around these activity destinations. Population and economic growth has resulted in congestion, particularly in the summer when the largest amount of tourist traffic is added to local and commercial traffic.

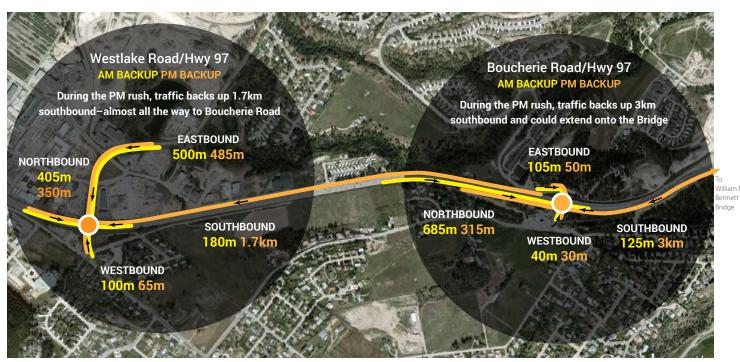
Traffic counts at the south end of William R. Bennett Bridge show that the average weekday daily traffic over the year 2014 is 56,000 vehicles per day, ranging from 47,000 in winter to 64,000 in summer.

Highway 97 and the side-streets at the Boucherie Road and Westlake Road intersections experience significant traffic congestion and traffic queues during the morning and afternoon peak hours, particularly in the summer months when traffic volumes increase by about 15%.

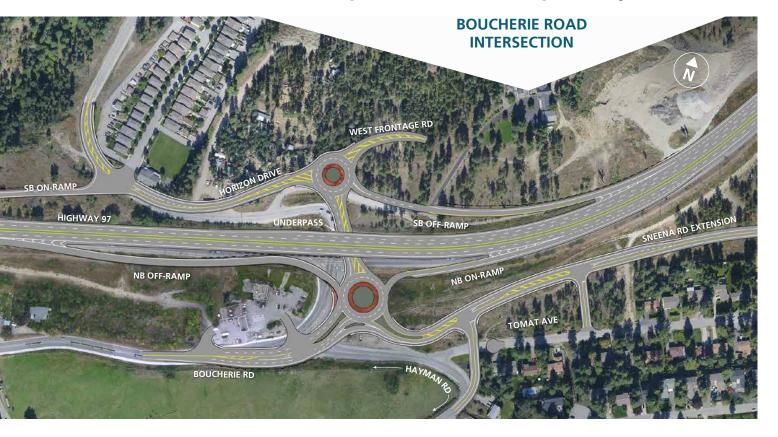
Highway 97 Annual Average Daily Traffic (2014)



Traffic Backups on Highway 97 During the Morning and Afternoon Peak Hours (Summer 2013)



Boucherie Road Intersection Improvements - Conceptual Layout



The Boucherie Road intersection conceptual layout will increase safety and capacity, and improve traffic flow.

Boucherie Road Intersection: Conceptual Layout

This conceptual layout provides on/off ramps to and from the highway. An underpass at the current intersection of Highway 97 and Boucherie Road would connect the two sides of the highway. The three-lane underpass would be a continuation of Boucherie Road to the west side of the highway using a new roundabout intersection with Horizon Drive.

On the east side, Boucherie Road would tie into a new roundabout with northbound on/off ramps. The Hayman Road intersection would be relocated to intersect with the extension of Sneena Road.

This conceptual layout reduces congestion and improves movement to and from the highway.

Planning and Conceptual Layout:

Project planning identifies the transportation issues for the project to solve, defines the scope of the project and recommends a solution to move forward into the design stage. A conceptual layout illustrates the recommended design during the planning phase of a project. The next step is preliminary design.

Boucherie Road Intersection Improvements - Conceptual Layout



Safety and Mobility Benefits Achieved with the Boucherie Road Conceptual Layout:

- Reduces potential for high speed collisions on highway
- Removes traffic signal from the highway
- Improves traffic flow
- Improves access and connectivity with the local road network
- Enables pedestrians and cyclists to cross underneath the highway
- Supports the efficient movement of goods

Other Benefits:

- Supports and enhances adjacent land uses
- Minimizes effects to residents and businesses and provides opportunities for development



Highway 97 approaching the existing Boucherie Road intersection

Multiple concepts were considered through the planning process to address safety and mobility concerns along the Highway 97 corridor between Westlake Road and the Westside Road interchange.

For a full list of the concepts assessed please see pages 11 and 12.

Westlake Road Intersection Improvements - Conceptual Layout



The Westlake Road intersection conceptual layout will increase safety and capacity, and improve traffic flow.

Westlake Road Intersection: Conceputal Layout

This conceptual layout provides "right in/right out" movements to and from the highway, with an underpass north of the current Highway 97/Westlake intersection. This underpass would connect Hudson Road with Stevens Road.

A section of Concord Road would be removed and a new road would extend from Hudson Road and connect back to Concord Road. The exact alignment would be confirmed in the next phase of preliminary design.

This conceptual layout provides better movements to and from the highway.

Roundabouts - Benefits:

- Roundabouts are growing in popularity across Canada and the U.S.
- Roundabouts reduce vehicle speeds through an intersection, improving safety for all users.
- Roundabouts reduce the potential for serious crashes, such as t-bone or head on-collisions.
- Roundabouts reduce GHG emissions by reducing delay and encouraging free flow of traffic.

Westlake Road Intersection Improvements - Conceptual Layout



Safety and Mobility Benefits Achieved with the Westlake Road Conceputal Layout:

- Reduces potential for high speed collisions on highway
- Removes traffic signal from the highway
- Improves traffic flow
- Improves access and connectivity with the local road network
- Supports the efficient movement of goods
- Maintains and improves business access
- Includes rapid bus facility
- Enables pedestrians and cyclists to cross underneath the highway



Highway 97 at the existing Westlake Road intersection

Other Benefits:

- Supports and enhances adjacent land uses
- Minimizes effects to residents and provides opportunities for development

Multiple concepts were considered through the planning process to address safety and mobility concerns along the Highway 97 corridor between Westlake Road and the Westside Road interchange.

For a full list of the concepts assessed please see pages 11 and 12.

Other Concepts Assessed

Multiple concepts were considered through the planning process to address safety and mobility concerns along the Highway 97 corridor between Westlake Road and the Westside Road interchange.

How does the Ministry Select a Conceptual Layout?

The Ministry's transportation planning analysis looks at many factors when examining conceptual layouts for solving a transportation related issue. Our teams consider technical information, along with environmental and land impacts, and community interests by using a multiple accounts evaluation (MAE). The content of the MAE is developed by our planning teams and includes input from local governments, First Nations and stakeholders. An MAE allows us to directly compare the benefits and impacts of each concept and assists our engineers in recommending a preferred layout.

Other Concepts Assessed: Boucherie Road Intersection



Signalized Diamond Interchange (Highway 97 Underpass)

Boucherie Road would pass over the highway, connecting the local roads on either side of the highway. Direct ramps would be provided to/from the highway northbound, while southbound a direct off-ramp and loop on-ramp from Horizon Drive (in the northwest quadrant of the interchange) would be provided.

Reasons why this concept was not selected:

- Property impacts to adjacent lands
- Short intersection spacing affects traffic operations
- High fill slope or retaining wall on west side
- Highest construction costs



Boucherie Road Flyover (Highway 97 Underpass)

Boucherie Road would pass over the highway, providing access to lands on either side of the highway. Access to/from the highway would be provided by "right-in/right-out" ramps.

Reasons why this concept was not selected:

- Increased circuitousness of local road network
- Property impacts to adjacent lands
- Reconstruction of Boucherie Road
- High fill slope or retaining wall on west side



Highway 97 Overpass (Horizon Drive Tube)

An underpass would be provided south of the existing highway intersection to access lands on either side of the highway. "Right-in/right-out" ramps would provide access to/from the highway.

Reasons why this concept was not selected:

- Increased circuitousness of local road network
- Pedestrian and cyclist connectivity between east and west sides less desirable
- · Rapid bus stop placement challenging
- New intersection on Boucherie Road at an 8% grade

Evaluation Process

The Boucherie Road and Westlake Road intersection concepts were evaluated by assessing the following criteria:

Economic Account

- Convenient access
- Highway exposure (to businesses)
- Land consumption

Socio-Community Account

- Cross-highway connectivity
- Impacts to residences
- Impacts to businesses
- Multi-modal (pedestrian, bicycle, transit)

Financial Account

- Maintenance cost
- Construction costs
- Property cost

Customer Service Account

- Safety
- Travel time savings
- Highway operations
- Ramp operations
- Network road operations
- Constructability

Local Government Input

- Westbank First Nation
- City of West Kelowna

Other Concepts Assessed: Westlake Road Intersection



Oval Roundabout (Stevens Road)

All movements to/from the highway would be provided by an oval roundabout connecting Stevens Road across the highway and connecting to Boucherie Road.

Reasons why this concept was not selected:

- Property and access impacts to adjacent lands (i.e. residences, ALR and Business Park)
- Grade differential between Boucherie Road east of highway and Stevens Road west of highway
- · Significantly higher construction costs
- Includes unfamiliar traffic manoeuvres for drivers



Westlake/Hudson Road Overpass (Oval Roundabout, NB; "Right-in/Right-out", SB)

Westlake/Hudson Road overpass would connect local roads on either side of the highway. Access to/from highway northbound would be provided by an oval roundabout, while "right-in/right-out" ramps would be provided southbound

Reasons why this concept was not selected:

- Property and access impacts to adjacent lands (i.e. residences, ALR and Business Park)
- Traffic management during construction would be challenging
- Includes unfamiliar traffic manoeuvres for drivers



Westlake Diamond Interchange

All movements to/from the highway would be provided by a diamond interchange just north of the current Westlake intersection. Westlake Road would pass over the highway, connecting the local roads on either side of the highway.

Reasons why this concept was not selected:

- Property and access impacts to adjacent lands (i.e. residences, ALR and Business Park)
- Grade differential between Boucherie Road east of highway and Stevens Road west of highway
- Potential environmental impact on west side of highway
- · Significantly higher construction costs

This feedback form seeks your input on the conceptual layouts for intersection improvements at Boucherie Road and Westlake Road.

Boucherie Road Intersection: Conceptual Layout

This conceptual layout provides on/off ramps to and from the highway. An underpass at the current intersection of Highway 97 and Boucherie Road would connect the two sides of the highway. The three-lane underpass would be a continuation of Boucherie Road to the west side of the highway using a new roundabout intersection with Horizon Drive. On the east side, Boucherie Road would tie into a new roundabout with northbound on/off ramps. The Hayman Road intersection would be relocated to intersect with the extension of Sneena Road. This conceptual layout reduces congestion and improves movement to and from the highway.



Strongly Agree	Somewhat Agree	Neither Agree Nor Disagree	Somewhat Disagree	Strongly Disagre

Boucherie Road Intersection: Conceptual Layout

2) How important are each of the following considerations to you as the Ministry of Transportation and Infrastructure designs the Boucherie Road Intersection?

	Very Important	Somewhat Important	Not Very Important	Not Important at All
Removing traffic signals from the highway				
Improving traffic flow				
Improving access and connectivity with the local road network				
Supporting the efficient movement of goods				
Improving business access to the highway				
Providing access for pedestrians and cyclists to cross underneath the highway				
Supporting and enhancing adjacent land uses				
Minimizing effects to residents and businesses				
Providing opportunities for development				

Westlake Road Intersection: Conceptual Layout

This conceptual layout provides "right in/right out" movements to and from the highway, with an underpass north of the current Highway 97/Westlake intersection. This underpass would connect Hudson Road with Stevens Road. A section of Concord Road would be removed and a new road would extend from Hudson Road and connect back to Concord Road. The exact alignment would be confirmed in the next phase of preliminary design. This conceptual layout provides better movements to and from the highway.



bett	er movements to a	nd from the highway	/.		
		evel of agreement w on pages 9 and 10.	rith the Westlake Road Inter	section Conceptual L	ayout, as described
	Strongly Agree	Somewhat Agree	Neither Agree Nor Disagree	Somewhat Disagree	Strongly Disagree
	Please provide any Intersection Conc		have for your level of agreer	ment regarding the W	estlake Road

Westlake Road Intersection: Conceptual Layout

4) How important are each of the following considerations to you as the Ministry of Transportation and Infrastructure designs the Westlake Road Intersection?

	Very Important	Somewhat Important	Not Very Important	Not Important at All
Removing traffic signals from the highway				
Improving traffic flow				
Improving access and connectivity with the local road network				
Supporting the efficient movement of goods				
Improving business access to the highway				
Providing access for pedestrians and cyclists to cross underneath the highway				
Supporting and enhancing adjacent land uses				
Minimizing effects to residents and businesses				
Providing opportunities for development				

5)	Boucherie Road and Westlake Road intersections on Highway 97 in the Okanagan.	

Information collected through this feedback form will inform the Ministry of Transportation and Infrastructure Highway 97 Boucherie/Westlake Project under the authority of s.26 of the *Freedom of Information and Protection of Privacy Act*. If you have any questions about the collection, use and disclosure of information, please contact: David Hume, Executive Director, Citizen Engagement, PO Box 9029, STN PROV GOV, Victoria BC V8V 9L9. Phone: 250 589-9043

Highway 97: Intersection Improvements at Boucherie Road and Westlake Road

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