



To: Public Works and Transportation Committee **Date:** January 5, 2005
From: Victor Wei, P. Eng.
Acting Director, Transportation **File:** 0100-20-TSAD1-01
Re: **TRAFFIC SAFETY ADVISORY COMMITTEE – 2004 ACHIEVEMENTS AND 2005 INITIATIVES**

Staff Recommendation

That the proposed 2005 initiatives for the Traffic Safety Advisory Committee, as outlined in the attached report, be endorsed.

Victor Wei, P. Eng.
Acting Director, Transportation
(4131)

Att. 1

FOR ORIGINATING DIVISION USE ONLY		
CONCURRENCE OF GENERAL MANAGER		
REVIEWED BY TAG	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
REVIEWED BY CAO	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>

Staff Report

Origin

Council endorsed the establishment of the Traffic Safety Advisory Committee (TSAC) in 1997 to create a co-operative partnership between staff, community groups and other agencies that seeks to enhance traffic and pedestrian safety in Richmond. The Committee provides input and feedback on a wide range of traffic safety issues such as school zone concerns, neighbourhood traffic calming requests and education initiatives. This report summarizes the Committee's activities in 2004 and identifies proposed initiatives for 2005.

Analysis

1. Committee Mandate and Membership

The overall mandate of TSAC is to enhance traffic and pedestrian safety in Richmond through the collective efforts of the City, community groups, external agencies, and other stakeholders. The Committee initiates or provides input on traffic management and engineering measures to address identified traffic safety concerns and promotes traffic safety through various joint education and enforcement programs. TSAC has representation from the following groups: Richmond District Parents Association (RDPA), ICBC, Richmond School District, Richmond RCMP, Richmond Fire-Rescue, and City Transportation and Community Bylaws Departments. The efforts of Committee members, both collectively through TSAC and individually through their own traffic safety initiatives, have been key factors in the significant annual reduction in reported traffic accidents in the city since the formation of TSAC and the start of the ICBC/City *Road Safety Improvement Program* partnership in 1997.

2. Activities and Accomplishments in 2004

The Committee's major activities and accomplishments in 2004 are summarized below. Highlights include the formation of a Sub-Committee to specifically focus on school zone traffic safety and the provision of input on traffic control and traffic calming proposals.

2.1 Sub-Committee on School Zone Traffic Safety

A Sub-Committee was formed to pursue greater involvement with school Parent Advisory Committees and school staff to educate parents and students on the importance of traffic safety and prompt their active participation in solving traffic safety issues around schools (e.g., walking rather than driving to/from school). While engineering and enforcement efforts have beneficial effects on increasing traffic safety around schools, their positive impacts can be diminished by chronic actions that counteract the measures, such as students being driven to/from school. Educational strategies that encourage schoolchildren to walk, ride or take the bus to school will complement engineering and enforcement measures.

Given competing priorities and limited resources, a key strategy of the project is to streamline and enhance the current process of analysing and resolving traffic safety concerns by actively involving external stakeholders (parents, teachers, students) in their identification, investigation and resolution. The process was initiated with a traffic survey of all elementary school students to determine their home-school transportation habits and help identify key issues and new methods to improve traffic safety around schools.

2.2 Elementary School Traffic Safety Audit

The City's traffic safety audit for school zones, initiated in 1997, was updated in light of recent changes in standards for school zone sign colours and wording, changes in legislation as to when school zones can be in effect, and openings and closures of schools. The audit examined the location and condition of school speed zones, parking prohibition signs, sidewalks fronting schools, the presence and location of marked crosswalks, drop off / pick up areas, and the traffic control characteristics and pavement markings of the roadway fronting each school. A review of all school zone signage was also conducted to ensure all elementary schools are properly signed. The traffic safety audit results indicate that all elementary schools have the required signage and parking/stopping prohibitions are in place where warranted. Attachment 1 provides further details on the traffic safety audit process and the results.

2.3 Traffic Safety Around Schools Web Pages

A new "Traffic Safety Around Schools" web page section was included as part of the updated City web site launched in December 2004. This section consolidates information on traffic safety around schools in one area, including access to the "Traffic Safety Around Schools and Playgrounds" brochure (in both English and Chinese), information on the *Way to Go! Program* and initiatives of TSAC. This site will also become a repository of resources for community stakeholders participating in the Sub-Committee's project to expedite the resolution of traffic safety concerns around schools.

2.4 School Zone Traffic Safety

The Committee contributed to enhancing traffic safety around schools through continued participation in the "Keep Our Future Safe" education and enforcement campaign during Traffic Safety Awareness Week (March 3-7, 2003), which involved the following activities:

- distribution and placement of bright yellow plastic lawn signs in school zones that had messages such as "Slow Down School Zone" and "30 km/h Monday-Friday 8 am – 5 pm";
- "Walking Yellow Wednesday," which is an inter-school challenge to achieve the highest participation rate of students walking to school;
- support of and distribution of material on the *Way to Go! Program* to Richmond elementary schools, which is a multi-agency program that seeks to increase the number of students who walk, bike, carpool or use transit to get to school, while still ensuring their safety; and
- distribution of material to secondary schools on the *Off Ramp Program*, which is a vehicle trip reduction program that seeks to reduce the number of vehicle trips to and from secondary schools.

The number of elementary schools participating in the "Walking Yellow Wednesday" event again increased over the previous year (30 in 2004 versus 26 in 2003) and two schools again achieved 100% participation (McKay and Maple Lane elementary schools). Additional activities to improve school zone traffic and pedestrian safety included:

- initial research to develop an anti-idling campaign, specifically around school zones;
- support of "International Walk to School Day (I-Walk)" in October 2004, for which the City sponsored a student art contest and Maple Lane Elementary School recorded a 100% participation rate;

- enforcement of school zone traffic regulations, particularly during back to school periods such as the beginning of September;
- improvement of parking and circulation layout at various schools; and
- installation of new walkways and crosswalks to improve pedestrian access to schools.

2.5 City-Wide Traffic Safety

The Committee contributed to improved traffic safety throughout the city via its participation in the following programs and initiatives:

- ICBC-sponsored Community Crash Reduction Challenge, a province-wide competition that challenged communities across BC to reduce vehicle crashes and road-related harm;
- continuation of a City-wide phased program to upgrade the minimum standard of arterial road crosswalks from shoulder-mounted or overhead signs to internally lit overhead signs with downward lighting and pedestrian-actuated amber flashers and beacons;
- review of proposed road improvement projects submitted for cost-sharing with external agencies;
- enhancement of traffic control signage and devices; and
- installation of new walkways and crosswalks to improve pedestrian access and safety.

2.6 Traffic Calming Measures

The Committee provided input on the following traffic calming measures:

- installation of two traffic circles and two raised medians on Barnard Drive;
- installation of one traffic circle and three raised medians on Saunders Road;
- replacement of temporary speed humps with permanent speed humps in the laneways parallel to and west of No. 1 Road and parallel to and east of Gilbert Road;
- installation and removal of temporary speed humps on Capstan Way and the review of alternative traffic calming measures;
- installation of permanent speed humps on No. 8 Road; and
- installation of permanent speed humps on Ferguson Road on Sea Island.

3. Proposed Initiatives for 2005

In addition to developing and providing input on corrective measures to address identified traffic safety concerns, the Committee has identified a number of proactive initiatives to enhance traffic safety and promote traffic safety education. The major initiatives proposed for 2005 seek to achieve these objectives through the co-ordinated implementation of education, enforcement and engineering measures in partnership with external agencies and stakeholders.

3.1 Sub-Committee on School Zone Traffic Safety

The Sub-Committee will pursue its initiative to improve the current process of identifying, analysing and resolving traffic safety issues around school zones by involving local stakeholders at each elementary school. Over the next few months, the student/parent travel survey data will be analyzed and a profile created for each school that summarizes student travel patterns and common traffic safety concerns. Parent volunteers at each school will be recruited to be trained as Traffic Safety Representatives for the RDPA. The Sub-Committee anticipates launching a

pilot application of the new process at selected schools in September 2005 with the eventual goal of establishing the process at all schools in Richmond.

3.2 School Zone Traffic Safety – On-Going Programs

The Committee will continue its involvement in the on-going review and improvement of traffic and pedestrian safety in school zones through:

- further development and implementation of an anti-idling campaign for school zones;
- continued participation in the Traffic Safety Awareness Week and I-Walk events and the “Yellow Ribbon” back to school promotion each September;
- increasing the participation rate of schools in the *Way to Go!* and *Off-Ramp Programs*;
- supporting the enforcement of school zone traffic violations;
- improving parking and circulation layout at schools; and
- introducing new walkways and crosswalks to improve pedestrian safety.

3.3 Other On-Going Programs and Initiatives

The Committee will continue to work on and/or provide input to the following on-going programs and initiatives:

- Richmond-Airport-Vancouver (RAV) Rapid Transit Project – the Committee will have opportunities to provide comment and input from a traffic safety perspective into the remaining public consultation phases of the RAV project. These phases include preliminary design (provide input on station design) and detailed design (provide comment on detailed station design given the chosen technology, alignment, station locations, and approach to station design).
- TravelSmart Pilot Project – TransLink and Transport Canada are funding the trial implementation of TravelSmart in a number of municipalities in the Lower Mainland, including Richmond’s City Centre. TravelSmart is a travel marketing program that directly targets households, rather than employers, with individualized marketing and promotional information to encourage and reinforce the use of alternative transportation modes. The Committee will work with staff and TransLink to develop and tailor a TravelSmart program for the City Centre.
- Transportation Strategies for Special Needs Users – the Committee will provide comment and input from a traffic safety perspective into the development of City transportation strategies to improve the mobility of seniors, youth and those with physical disabilities.
- Research of New Technology and Industry Best Practices – the Committee will continue its on-going research and review of new devices and technology to improve traffic and pedestrian safety as well as investigate industry best practices for potential local applications.
- Discouraging Speeding – the member agencies of the Committee will continue to jointly work on initiatives to curb speeding in the community. These efforts include supporting Richmond RCMP in its targeted enforcement program, investigating the installation of advisory signage (e.g., similar to the “Speed Kills” signage currently in place along selected arterial roads), adding educational material to the traffic safety section of the City’s web site, and continuing to implement traffic calming measures where warranted in local neighbourhoods.

3.4 Richmond Parking Advisory Committee

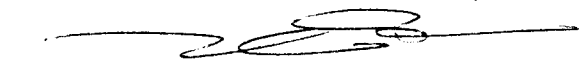
Council approved the establishment of and terms of reference for the Richmond Parking Advisory Committee in March 2004. This Committee is developing a 2005 Work Program that is anticipated to be presented for Council's approval in February 2005. If approved, TSAC will provide input on the work plan as required, as some items may have traffic safety implications (e.g., installation of crosswalks and changes to on-street parking regulations).

Financial Impact


There is no specific budget for this Committee. Costs associated with the installation of traffic control devices, walkway construction and other road and traffic safety improvements are normally accommodated in the City's annual capital budget and considered as part of the annual budget review process. Some of these projects are eligible for financial contribution from external agencies (e.g., ICBC and TransLink).

Conclusion

The Traffic Safety Advisory Committee is one of few multi-agency forums in the region dedicated to enhancing pedestrian and traffic safety within its home municipality. Since its inception in 1997, the Committee has provided valuable input on and support of various traffic safety improvements and programs and initiated a range of successful measures encompassing engineering, education and enforcement activities. The Committee's proposed initiatives for 2005 focus on continuing the Sub-Committee's project to collaborate with Parent Advisory Committees and school staff in resolving traffic safety issues around schools. Upon Council endorsement of these initiatives, staff will forward a copy of this report to the Council/School Board Liaison Committee for its information.



for Bob Gilchrist
Supervisor, Traffic Operations
(4131)
(on behalf of the Traffic Safety Advisory Committee)



Joan Caravan
Transportation Planner
(4035)

2004 Elementary School Traffic Safety Audit

1. Audit Process and Rationale

The City's traffic safety audit for school zones, initiated in 1997, is intended to maintain a high level of safety around Richmond elementary schools. The audit examines the location and condition of school speed zones, parking prohibition signs, sidewalks fronting schools, the presence and location of marked crosswalks, drop off / pick up areas, and the traffic control characteristics and pavement markings of the roadway fronting each school. A review of all school zone signage is also conducted to ensure all elementary schools are properly signed. Staff also review records of reported traffic incidents for the area and solicit feedback from the City's Traffic Safety Advisory Committee (TSAC), which has membership from the Richmond School District, the Richmond District Parents Association, Richmond RCMP, Richmond Fire-Rescue, and ICBC. In light of subsequent changes in standards for school zone sign colours and wording, changes in legislation as to when school zones can be in effect, and openings and closures of schools, staff updated the audit in Summer 2004.

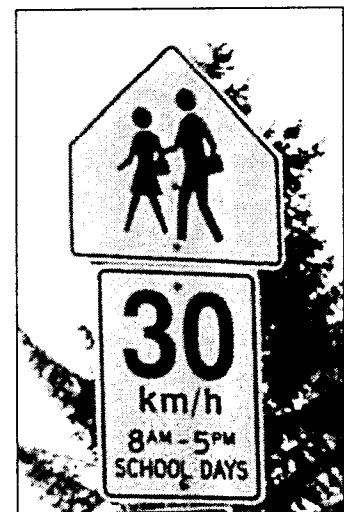
2. Traffic Control Measures for School Zones

In accordance with City policy regarding speed control measures in school zones, reduced speed signs (i.e., 30 km/h) are posted on locals streets adjacent to school frontages with the exception of major streets that have sidewalks along the school frontage and traffic signals to assist pedestrian crossings. In the latter situation, no reduced speed signs are posted but "No Passing" tabs are included on all school zone signs. In addition, parking and stopping restrictions have been implemented in school zones where warranted.

3. Legislation and Other Changes since 1997

Since 1997, the provincial government has passed the following legislative changes that affect school zone signage and school hours of operation:

- New Sign Graphics – establishment in Spring 2001 of a new standard of black graphics on a fluorescent yellow-green background for both advance warning and school speed zone signs;
- New Sign Tabs – revision in Spring 2003 of standard school speed zone "30 km/hr" tab signs to include the following text: "8:00 a.m. to 5:00 p.m. School Days"; and
- School Zone Hours – amendment in August 2003 to allow for school speed zone hours of operation to be extended on a case-by-case basis with no zone commencing after 8:00 a.m. or ending prior to 5:00 p.m. The amendment was initiated due to the more extensive use of school facilities by students and community groups outside of traditional school hours.



In addition, Spul'u'kwuks Elementary School opened in September 2000 and, in 2003, Garratt, Kilgour, Rideau and the Incentive Elementary Schools were closed.

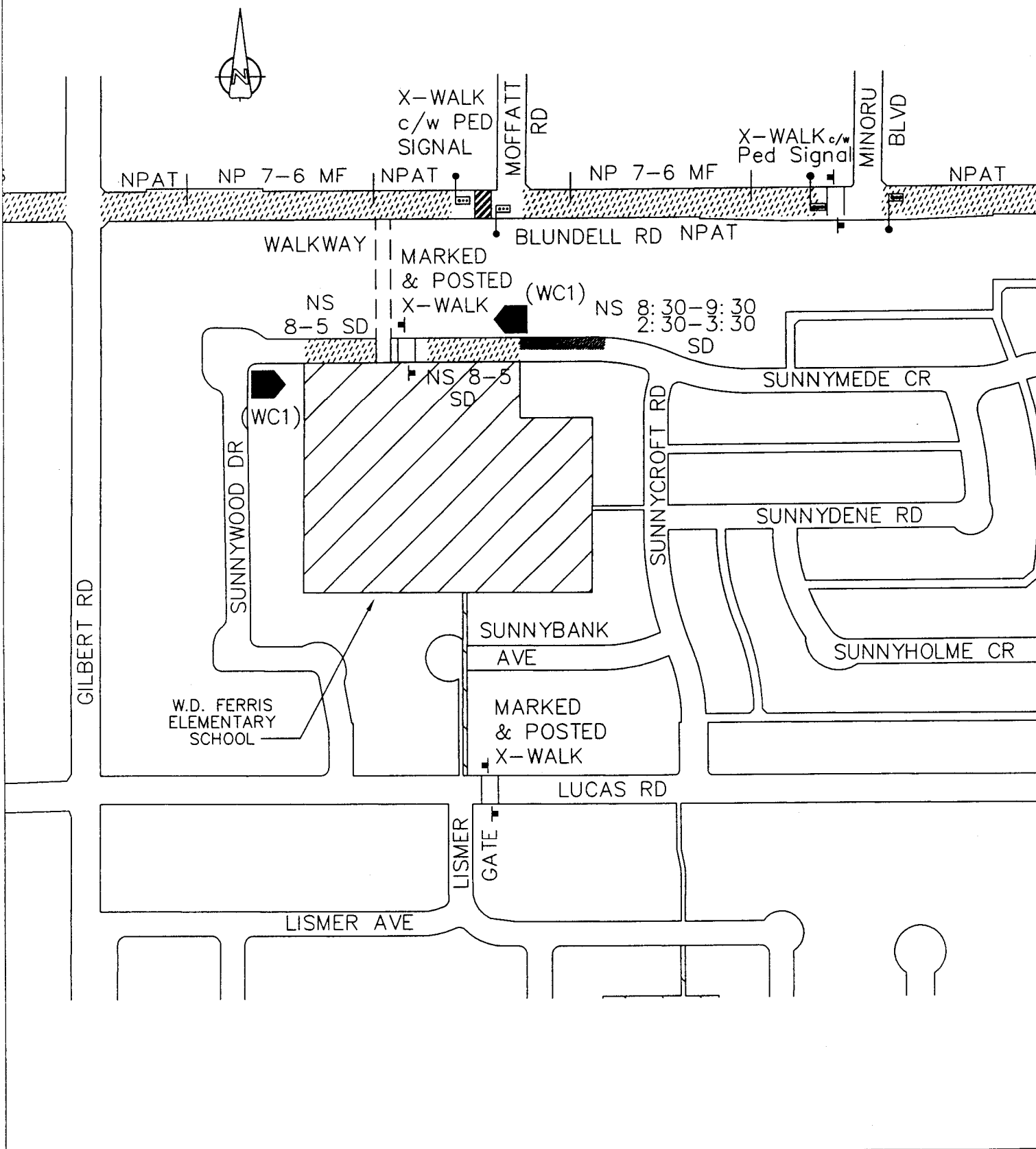
4. Traffic Safety Audit Results

Figure 1 contains a representative example of the traffic safety audit process for Ferris Elementary School. Following a survey of the area, a schematic drawing is produced that shows the surrounding road network and installed traffic control signage. Table 1 presents an inventory of all elementary schools and the traffic control and pedestrian facility characteristics present at each site.

The traffic safety audit results indicate that all elementary schools have the required signage and parking/stopping prohibitions are in place where warranted. Specifically:

- all school zone advance warning and speed signs in the city have been replaced with the new standard yellow-green sign;
- the “30 km/hr” tab signs on all existing school speed zone signs are currently in the process of being upgraded to include the additional text whenever the existing signs require maintenance;
- the school zone hours of operation can only be extended with consultation between the City and the Richmond School Board and to date the City has not received any requests to extend the hours of operation;
- all appropriate school zone signage has been installed or removed at new or closed schools respectively; and
- schools lacking sidewalks on both sides of the fronting roadway are typically located in older areas and subdivisions of the city (e.g., Errington, Kingswood). Sidewalks and/or pathways will be provided at these locations as redevelopment occurs in the area or, at high priority locations, as part of the City’s annual capital program.

Staff intend to regularly update the school zone traffic safety audit on a periodic basis to ensure that school zones traffic control measures reflect current legislative requirements and local conditions.



CITY OF RICHMOND

DES: S.G.	ENG:
DR: A.J.H./CJR	DATE: OCT/04
CHK:	SCALE: N.T.S.

RICHMOND SCHOOL ZONE
 TRAFFIC SIGNAGE & MARKINGS
 W.D. FERRIS ELEMENTARY SCHOOL

DR. No. FERRIS
SHEET No. 20

Ferris Elementary School Traffic Safety Audit



School Zone Signage along Frontage of Ferris Elementary School



Stopping Prohibition Signage along Frontage of Ferris Elementary School



Stopping Prohibition Signage and Crosswalk opposite Ferris Elementary School



Crosswalk and Crosswalk Signage in front of Ferris Elementary School

Table 1

Elementary School Traffic Safety Inventory

Elementary School	Speed Zone	Sidewalk		Parking or Stopping Prohibitions		Crosswalk	Drop Off Area	Road Fronting the School			
		Same Side	Opposite Side	Same Side	Opposite Side			Pavement Width (m)	# of Lanes	Painted Centreline	Curved
Anderson	●	●	●	●		●	●	10.3			
Blair	●	●	●	●		●	●	12.0			
Blundell		●	●	●	●	●	●	14.0	4	●	
Bridge	●		●	●		●	●	8.6			
Brighthouse	●		●	●	●	●	●	14.0	2	●	●
Byng	●	●		●		●	●	6.4			
Cook	●	●	●	●	●	●	●	14.0	2	●	
DeBeck	●	●		●			●	10.0			
Diefenbaker	●		●	●	●	●	●	8.8			
Dixon	●	●		●	●	●	●	6.8			
Errington	●			●	●		●	5.6			
Ferris	●	●		●	●	●	●	8.9			
Garden City		●	●	●	●	●	●	14.0	4	●	
General Currie	●	●	●	●	●	●	●		2	●	
Gilmore	●			●	●	●	●	7.7			
Grauer		●	●	●	●	●	●	14.0	4	●	
Hamilton	●		●	●	●	●	●	9.1			●
Homma	●	●		●	●	●	●	9			
Kidd	●	●		●	●	●	●		2	●	
Kingswood	●			●	●	●	●	8.15			
Maple Lane	●	●	●	●		●	●	8.7			
McKay	●		●			●	●	8.8			●
McKinney	●	●	●	●	●	●		8.2			
McNeely	●	●	●	●	●	●			2	●	
Mitchell		●	●	●	●	●	●	14.0	4	●	
Quilchena	●	●		●	●		●	10.8			●
Sea Island	●			●			●				●
Sidaway	●					●	●		2	●	
Spul'u'kwuks	●	●	●	●			●	11.8			●
Steves	●	●	●	●	●	●	●	8.9			
Tait	●	●		●			●	7.2			
Talmey	●		●	●	●	●	●	8.9			
Thompson	●			●	●	●	●	5.3			
Tomsett	●	●				●	●		2	●	
Walter Lee	●	●				●	●	5.7			
Westwind	●	●	●	●		●	●		2	●	
Whiteside		●	●	●	●	●	●		2	●	
Woodward	●			●			●		2	●	
Wowk	●	●	●	●	●	●	●	8.8			