#### **AGENDA**

# ACTIVE TRANSPORTATION ADVISORY COMMITTEE Saanich Municipal Hall, Committee Room No. 2

Thursday, February 27, 2020 from 4:00 pm - 6:00 p.m.

- 1. CHAIR'S COMMENTS
- 2. ADOPTION OF MINUTES (minutes to be posted 02/24/2020)
  - January 23, 2020
- 3. BICYCLE PARKING GUIDELINES/STANDARDS (attachment)
  - Manager of Community Planning
  - University of Victoria, Campus Cycling Plan: Mgr., Sustainability, University of Victoria
    - University of Victoria Campus Cycling Plan
  - City of Portland Bureau of Transportation
    - Bike Parking Webpage
    - o Bicycle Parking Code Update Staff Report
    - Bicycle Parking Code Update Zoning Code 33.266.200
    - o Portland Maps Open Data, Bicycle Parking
- 4. HEALTH IMPACTS OF ACTIVE TRANSPORTATION
  - Manager of Community Planning
- 5. DEVELOPMENT OF ON-STREET MURAL GUIDELINES
  - Discussion lead by the Manager of Transportation and Development Services
- 6. MEMBER ITEMS
  - Student Bus Pass City of Victoria, Youth Transit Pass
  - Cycling Wayfinding Signage
- 7. ROUNDTABLE ON FUTURE TOPICS

\* ADJOURNMENT \* Next meeting: Thursday, March 26, 2020 at 4:00 p.m.

Please email jeff.keays@saanich.ca or call at 475-1775 ext. 3430 if you cannot attend.

GO GREEN!
MEMBERS ARE ENCOURAGED TO BRING THEIR OWN MUG TO THE MEETING

#### **MINUTES**

# ACTIVE TRANSPORTATION ADVISORY COMMITTEE Held at Saanich Municipal Hall, Committee Room No. 2 Thursday January 23, 2019, at 4:00 p.m.

Present: Councillor Judy Brownoff (Chair), Brian Collier, Pat Danforth, Eric Doherty, Norman

Gidney, Susan Kerr, Erin Prescott, Darrell Wick (4:20 p.m.), Jade Yehia (non-voting

liaison), Philippe Janicki

Staff: Troy McKay, Manager, Transportation & Development Services; David Williams,

Engineering Supervisor; Jeff Keays, Committee Clerk

Regrets: Robert McLeod

#### **MINUTES**

MOVED by N. Gidney and Seconded by D. Wick: "That the Minutes of the Active Transportation Advisory Committee meeting held November 28, 2019, be adopted as circulated."

**CARRIED** 

#### **CHAIR'S COMMENTS**

The Chair welcomed members to the first meeting of 2020, before providing an update on a number of Council related matters. The following comments were noted:

- The 2020 edition of the Saanich Cycling Festival will be held on April 19, 2020.
- The event will consider, integrate and promote provisions of the recently approved Climate Plan.
- A number on new events and initiatives are being considered including: guest lectures,
   e-bike demonstrations and eco-friendly information booths and displays.
- Community partners, such as VIHA, will have an opportunity to participate.

# Committee noted the following:

 Recognizing accessibility and ensuring inclusion and engagement with persons with disabilities, and in particular youth, is paramount to demonstrating the District's commitment to active transportation for all residents.

#### **HEALTH IMPACTS OF ACTIVE TRANSPORTAION**

- J. Yedha, Healthy Built Environment Consultant, Vancouver Island Health Authority, provided the committee with an overview of the health impacts of Active Transportation. The following was noted:
  - 1 in 3 people in BC are living with one or more diagnosed chronic disease, accounting for nearly 80% of the provincial healthcare budget.
  - 50% of adults and 91% of children are not getting enough daily exercise.
  - Canada's childhood obesity rates are amongst the highest in the world, almost doubling in the last 25 years to 26%.
  - Treatment of chronic disease costs the Canadian economy \$190 billion annually.
  - Many of these chronic diseases are preventable by eliminating four common risk factors.

- Tobacco use
- Unhealthy diet
- Physical inactivity
- o Harmful use of alcohol
- Health impacts of land use planning active transportation:
  - o The built environment can encourage or hinder healthy behavior.
  - How we get to work, school, grocery stores, parks are in part influenced by planning decisions from 5, 10, 20 years ago
  - Communities that are planned to make the healthy choice the easy choice shifts our individual behaviours from a sedentary one to an active one and ultimately improves our health.
- Land-use and transportation planning can reduce injuries to vulnerable road users.
   Cyclist and pedestrian fatalities are higher than motorists. Senior and school aged children are the most vulnerable.
- Built environments that provide safe reliable active transportation facilities will help limit negative impacts on children and youth, and mitigate the "conveyor belt" to adult obesity.
- Residents of pedestrian friendly neighbourhoods weigh on average 7lbs less than those living in sprawling neighbourhoods.
- Asthma rates are higher amongst children in high-traffic pollution areas.
- The risk of asthma symptoms are two times more likely in children (aged 5-7) who live within 250' of a major roadway.
- Active transportation helps to reduce isolation and improves social networks. As people who feel socially connected report mental wellbeing.
- Sense of community belonging decreases with increasing commute time those with a commute time of more than 50 mins are 56% less likely to experience a strong sense of community belonging than those with a commute time of less than 10 minutes.
- Health based evidence illustrates the connections between a planning principle impact
   (and) health related outcomes
- Health Evidence states that if you enable mobility for all ages and abilities by promoting safer streets and encouraging physical activity results in increased physical activity, walking, perception of safety. A corollary health related outcome is a decrease unintentional injury.
- Prioritizing safety by giving priority to walking and cycling = a further reduction in injuries, respiratory disease, increases in quality of life, mental health and social connectivity.

The Chair thanked the Healthy Built Environment Consultant, VIHA for their presentation. Committee discussion ensued, the following was noted:

- Pollution associated to volatile organic compounds are often hidden. Further investigation with regard to the any specific health impacts of pollution associated to brake pads, tire rubber and roadway asphalt.
- The committee could pass a resolution recommending that Council send a letter of Chief Medical Health Officer in support of the demonstrable health benefits of active transportation, including: injury and chronic disease prevention, mental health and inclusion, and community engagement and participation as part of the My Health My Community survey.
- Saanich staff and VIHA staff have both engaged with area schools to promote and support active transportation initiatives.
- The school boards efforts to rationalize and realign their catchment areas are helping to decrease travel distances, identify localized travel routes by serving the communities and neighbourhoods they are located in.
- Active Transportation is of great benefit to seniors.
- Efforts to increase safe routes, and infrastructure to recreation and activity centres is important.

- The age friendly planning guide, and the dementia resource guide both reference appropriate active transportation amenities, include width and design of sidewalks, their proximity to roads etc.
- The inclusion of health impacts in the annual ATP check-in would be beneficial. Demonstrating these benefits will resonate with community.

The Clerk will forward the presentation, along with the referenced documents and studies to committee after the meeting.

#### **MOTION**

MOVED by B. Collier and Seconded by P. Danforth, "That the Active Transportation Advisory Committee recommends that council write a letter to Chief Medical Health Officer to support My Health My Community survey for the South Island, which supports Saanich's Active Transportation Plan, Action 3B.2: Work with partners to develop and deliver materials outlining the health benefits of walking an cycling."

**CARRIED** 

#### BICYCLE PARKING GUIDELINES/STANDARDS

The Clerk circulated the Council Policy Bicycle Parking Guidelines on-table. The Manager of Transportation and Development provided a high level overview of the policy, and the various schedules of Zoning Bylaw 8200. The following was noted:

- Planning staff can provide more specific details on the provisions of the zoning bylaw.
   They will be in attendance at the February meeting.
- The zoning bylaw has two classifications of bicycle parking:
  - Class I
  - Class II
- Section 7, Table 7.4 identifies the number and type required per use.
- Saanich is seeing an increasing number of Development Applications coming in that have more spaces, better designs and accessibility than is required.
- These are often submitted in an effort to get relief from the number of motor vehicle parking stalls.
- Differences in perception with regard to size. Is bigger better?
- Class I stalls aren't secure enough; however, if they are cheaper compared to parking stalls for vehicles, then the design guidelines for Class I should be improved.
- All of the University of Victoria's dormitories have secure bike parking, and are limited to students only; however, bicycles theft still occurs.
- If a U-Lock is not used (outside) the bicycle will be stolen.
- The university has a number of bike lockers that can be rented for \$40 per month.
  - Rental rates are 100% indoors and 60% outdoors.
- Consideration should be given to the forecasted growth of e-bikes, and the necessity for charging stations.
- The shift to multi-residential developments should warrant a review and update to Class I bike stall designs.
- Convenient and accessible, safe and secure.
- Saanich's Bylaw and policy could be considered dated when considered in the context of trends in personal transportation and housing development.
- The University of Victoria has recently updated their Campus Cycling Plan including provisions for bike parking.

# **REVIEW: COMMITTEE PROCEDURES & DATES**

The Clerk provided the committee with a high-lever overview of the member orientation package. The package is in follow up to Council's direction of November 4, 2019, and arising from the recommendation of the Mayor's Standing Committee on Finance and Governance.

The Clerk noted that the division was in the final stages of planning for an advisory committee workshop. Details of the event will be circulated under separate cover shortly.

#### **ADJOURNMENT**

The meeting adjourned at 5:45 p.m.	
	Councillor Brownoff, Chai
	I hereby certify these Minutes are accurate
	Committee Secretary

# 7.1 Provision and Maintenance of Off-Street Parking Areas

- (a) Whenever a use of land, buildings or structures occurs in any zone pursuant to any provision in this bylaw and reference is specifically made to this section, offstreet parking spaces required by this section, shall be continuously provided and maintained.
- (b) All required parking areas shall be completed prior to the issuance of an occupancy permit.
- (c) The parking or storage of vehicles shall not be permitted on any required landscape area.

# 7.2 Buildings Non-Conforming as to Off-Street Parking

- (a) Any building or structure which conforms to the uses permitted in a zone but does not conform to parking regulations shall not be reconstructed, moved, or extended until the parking spaces are provided in accordance with this bylaw.
- (b) Any building or structure conforming as to use may not be occupied for any other conforming use requiring a greater number of parking spaces as calculated from Table 7.1 unless and until the required spaces are provided.

# 7.3 Number of Off-Street Parking Spaces

- (a) The minimum number of off-street parking spaces required for any use shall be calculated in accordance with Table 7.1.
- (b) If a use is not listed in Table 7.1, the number of spaces required shall be calculated on the basis of a use that is most similar to a use that is listed.
- (c) Unless otherwise provided in Table 7.1, if a development contains more than one use or involves collective parking for more than one building or use, the total number of spaces shall be the sum of the various classes of uses calculated separately and any space required for one use shall not be included in the calculations for any other use.
- (d) Where the calculation of the total required spaces results in a fractional number, rounding off to the larger whole number shall apply.



[	TABLE 7.1				
ŀ	USE OF BUILDING		REQUIRED PARKING SPACES		
ĺ	1.0	Residential			
	1.1	Single Family Dwellings	2 spaces per dwelling unit		
,	1.2	Secondary Suite	1 Space		
	1.3	Two Family Dwellings	2 spaces per dwelling unit		
>	1.4	Single Family Dwelling providing boarding or sleeping accommodation for guests in a bed and breakfast	2 spaces per dwelling unit plus 0.5 space per bedroom used for boarders or guests		
	1.5	Attached Housing	2 spaces per dwelling unit		
	1.6	Apartments	1.5 spaces per dwelling unit		
Buildings Containing three or more dwelling units for senior citizen housing and		1 space per 2 dwelling or sleeping units			
	Buildings Containing three or more dwelling units designed solely for families of low income and approved by the BC Housing Management Commission under the Nonprofit Housing Program		1.5 spaces per dwelling unit		
	1.9	Accessory residential uses in buildings also used for commercial users	1.5 spaces per dwelling unit		
	1.10	Buildings for Tourist Accommodation	1 space per dwelling unit or sleeping unit and 1 space per employees		
	1.11	Congregate Housing	0.5 space per dwelling or sleeping unit		
	2.0	Institutional Public and Semi-Public and He	alth		
Personal Care Homes, Extended Care Homes or Group Care Facilities with lodging 1 space per 3 beds		1 space per 3 beds			
	2.2	Medical, Dental and Real Estate office	1 space per 20 m <sup>2</sup> (215.0 ft <sup>2</sup> ) of gross floor area		
Ī	2.3	Hospital or similar use	1 space per 50 m <sup>2</sup> (538.2 ft <sup>2</sup> ) of gross floor area		
	2.4	Funeral Homes	1 space per 5.6 m <sup>2</sup> (60.0 ft <sup>2</sup> ) of gross floor area used for Assembly		
	2.5	Churches (areas of worship, halls, meeting rooms)	1 space per 8.0 m <sup>2</sup> (86.1 ft <sup>2</sup> ) of gross floor area used for Assembly		
	2.6	Sunday School	1 space per classroom		

USE OF BUILDING		REQUIRED PARKING SPACES	
2.7	Schools  (a) Kindergarten and Elementary (b) Junior Secondary/Middle (c) Senior Secondary (d) Colleges (e) Universities	1 space per employee plus 2 1 space per employee plus 2 1 space per employee and 1 space per 10 students 1 space per 30 m <sup>2</sup> (322 ft <sup>2</sup> ) of gross floor area 1 space per 50 m <sup>2</sup> (538 ft <sup>2</sup> ) of gross floor area	
2.8	Public Utilities	1 space per employee	
3.0	Cultural and Recreational		
3.1	Community Centres, Activity Centres	1 space per 20 m <sup>2</sup> (215 ft <sup>2</sup> ) of gross floor area used for Assembly	
3.2	Libraries, Galleries, Museums	1 space per 10 m <sup>2</sup> (107 ft <sup>2</sup> ) of gross floor area used for Assembly	
3.3	Theatres, Auditoriums, Dancehalls, Clubs, Halls or Lodges	1 space per 10 m <sup>2</sup> (107 ft <sup>2</sup> ) of gross floor area used for Assembly	
3.4	Stadiums, Arenas, Exhibition Halls, Pools or similar places with spectator facilities	1 space per 4 seats plus 1 space per 10 m <sup>2</sup> (107 ft <sup>2</sup> ) of ice area plus 1 space per player capacity of other sports	
3.5	Gymnasiums, Health Clubs, Spas	1 space per 10 m <sup>2</sup> (107 ft <sup>2</sup> ) of fitness or gymnasium surface area	
3.6	Bowling Alleys, Curling Rinks	4 spaces per alley or sheet of ice plus 1 space per employee	
3.7	Racquet and ball courts	2 spaces per court	
3.8	Ranges for golfing driving, archery or small arms firing	1 space per range tee or target corridor	
3.9	Golf Courses	8 spaces per golf hole provided	
3.10	Marinas, Sailing Schools and Associations	1 space per 2 mooring berths or storage spaces provided	
4.0	Commercial		
4.1	General Office	For buildings not exceeding 1000 m² (10764 ft²) of gross floor area: 1 space per 25 m² (269 ft²).  For buildings exceeding 1000 m² (10764 ft²): 1 space per 25 m² (269 ft²) for the first 1000 m² (10764 ft²), and 1 space per 30 m² (323 ft²) for any additional area.	
4.2	Retail sales of goods and services	1 space per 14 m <sup>2</sup> (150 ft <sup>2</sup> ) of gross floor area	

USE OF BUILDING		REQUIRED PARKING SPACES	
4.3	Freestanding Local Convenience Stores	5 spaces plus 1 employee parking space	
4.4	Retail Food Stores greater than 275 m <sup>2</sup> (2960 ft <sup>2</sup> ) of gross floor area	1 space per 14 m <sup>2</sup> (150 ft <sup>2</sup> ) of gross floor area	
4.5	Restaurants, Drive-in and Fast Food Restaurants	1 space per 10 m <sup>2</sup> (107 ft <sup>2</sup> ) of gross floor area	
4.6	Premises or portions thereof, licenced pursuant to Provincial Legislation for the regular sale of liquor except for neighbourhood public houses	1 space per 5.5 m <sup>2</sup> (59 ft <sup>2</sup> ) of gross floor area open to the public	
4.7	Neighbourhood Public Houses	1 space per 3 seats	
4.8	Service stations and facilities for the repair or servicing of motor vehicles	1 space per 2 employees (minimum of 2 spaces) plus 1 space for each service bay	
4.9	Financial Institutions	1 space per 16 m <sup>2</sup> (172 ft <sup>2</sup> ) of gross floor area	
4.10	Shopping centres less than 1000 m <sup>2</sup> (10764 ft <sup>2</sup> ) of gross leasable area	Shall be the sum of the various classes of uses calculated separately	
4.11	Shopping centres greater than 1000 m <sup>2</sup> (10764 ft <sup>2</sup> ) and less than 23225 m <sup>2</sup> (250000 ft <sup>2</sup> ) of gross leasable floor area	1 space per 19 m <sup>2</sup> (204 ft <sup>2</sup> ) of gross leasable floor area	
4.12	Shopping centres greater than 23225 m <sup>2</sup> (250000 ft <sup>2</sup> ) of gross leasable area	1 space per 17 m <sup>2</sup> (183 ft <sup>2</sup> ) of gross leasable floor area	
4.13	Cabaret or Dinner Theatres	1 space per 10 m <sup>2</sup> (107 ft <sup>2</sup> ) of gross floor area open to the public	
4.14	Studios for broadcasting and production for television, radio or recording purposes	1 space per 30 m² (322 ft²) of gross floor area	
4.15	Auction Rooms	1 space per 10 m <sup>2</sup> (107 ft <sup>2</sup> ) of auction floor area	
4.16	Home Furnishing Stores	1 space per 80 m <sup>2</sup> (861 ft <sup>2</sup> ) of gross floor area	
4.17	Rental and repair of household items, tools, appliances and small equipment	1 space per 100 m <sup>2</sup> (1076 ft <sup>2</sup> ) of gross floor area	

USE OF BUILDING		REQUIRED PARKING SPACES			
5.0	5.0 Industrial				
5.1 (a) Warehouse and Storage Area (b) Retail Sales Areas incidental to a Permitted use (c) Home Furnishing Store		1 space per 175 m² (1883 ft²) of gross floor area 1 space per 14 m² (150 ft²) of gross floor area Notwithstanding clause 5.1(a) or (b), 1 space per 80 m² (861 ft²) of gross floor area			
5.2	Industrial	1 space per 95 m <sup>2</sup> (1022 ft <sup>2</sup> ) of gross floor area			
5.3	Research Establishments, Laboratories	1 space per 30 m <sup>2</sup> (322 ft <sup>2</sup> ) of gross floor area			
5.4	Beverage Container Depots in Industrial Zones	1 space per 40 m <sup>2</sup> (431 ft <sup>2</sup> ) of gross floor area or 6 spaces, whichever is greater			

### 7.4 Exceptions and Additional Requirements for Off-Street Parking

# (a) Visitor Parking

In any RC, RT, RM, RA, RP, MFC-CH or MFI-CH zone, 0.3 spaces per dwelling unit of the required parking spaces shall be designated and clearly marked as "Visitor Parking" and shall be freely accessible at all times.

(i) In a mixed residential/commercial development required visitor parking spaces can be assigned to commercial use parking spaces but shall not account for more than 15% of the space required for the commercial use component.

#### (b) Disabled Persons Parking Spaces

- (i) In any development requiring 25 or more parking spaces, Disabled Person Parking Spaces shall be provided in the ratio of 1 for every 100 parking spaces required or part thereof.
- (ii) Each Disabled Persons Parking Space shall be a minimum of 3.7 m (12.1 ft) in width and shall occupy the nearest parking space to a building entrance that accommodates wheelchair access.
- (iii) Drop curbs shall be provided on any curb between a Disabled Persons Parking Space and the building entrance to accommodate wheelchair access.
- (iv) Each Disabled Persons Parking Space shall have a firm, slip-resistant and level surface.

#### (c) Neighbourhood Public House

A neighbourhood public house shall provide parking in accordance with the requirements of Section 4.7 of Table 7.1.

#### (d) A, RS and RD Zones

Parking provided in conjunction with an agricultural use, a single family dwelling use or a two family dwelling use shall provide the number of spaces required by table 7.1 but need not conform to the regulations of Sections 7.5, 7.6 and 7.7.

#### (e) Attached Dwelling Use

Parking shall be provided for an attached dwelling use in accordance with Table 7.1, however, the calculation may include a tandem parking arrangement to a maximum of 50% of the total spaces required and shall only be calculated where one of the tandem spaces is concealed within, attached to, and/or immediately adjacent to the dwelling unit for which the parking spaces are provided and need not conform to the regulations of Section 7.6(b).

### (f) Provision of Transit Facilities

Where a Regional Transit Stop is provided on any site, the total required parking for the uses located on the site may be reduced by 1% for every transit route utilizing the stop(s) provided.

# 7.5 Dimensions of Off-Street Parking Spaces

- (a) An off-street parking area provided in conjunction with any residential land use shall conform to Table 7.2 provided that:
  - (i) up to 35% of the total required off-street parking spaces may be designed for small cars by reducing the depth of stall for 90 degree parking from 5.5 m (18.0 ft) to 4.5 m (14.7 ft).
  - (ii) small car spaces are clearly designated for that use.
- (b) An off-street parking area provided for any non-residential land use shall conform to Table 7.3 provided that:
  - (i) up to 30% of the total required off-street parking spaced may be designed for small cars, by reducing the depth of stall for 90 degree parking from 5.5 m (18.0 ft) to 4.5 m (14.7 ft).
  - (ii) small car spaces are clearly designated for that use.
- (c) Notwithstanding the provisions of Tables 7.1 or 7.2 or Section 7.4 (b)(ii), where any parking space abuts any portion of a fence or structure the minimum stall width shall be increased by 30 cm (1 ft) for that stall only.

#### 7.6 Location and Siting of Off-Street Parking Areas

- (a) Required off-street parking spaces and manoeuvring aisles as required under Sections 7.5 (a) and 7.5 (b) shall be provided on the same lot as the use for which they are required.
- (b) Any area of a lot used for off-street parking shall be constructed so as to permit unobstructed access to and egress from each space at all times and shall be developed to ensure that adequate provision is made for access by vehicles to off-street parking spaces located in parking areas by means of unobstructed manoeuvring aisles as described in Tables 7.2 and 7.3.
- (c) Any area of a lot used for off-street parking shall not be located within 1 m (3.3 ft) of a lot line common to the lot and to a street.

(d) No parking space having direct access from a manoeuvring aisle that also serves as a means of access and egress to a lot zoned C-2, C-3, C-5, C-6, C-6DE or C-7 shall be located within 5.5 m (18.0 ft) of the lot line common to the lot and to a street as measured along the centre line of the access/egress driveway.

# 7.7 Design of Off-Street Parking Areas

- (a) All parking areas shall have vehicle stops or curbs not less than 90 cm (3.0 ft) from the end of each parking space except this requirement shall not apply to a parking space which shares a common front boundary with another parking space or has a parking angle of 0 degrees.
- (b) Each parking space and manoeuvring aisle in all parking areas shall be surfaced with asphalt, pavers, bricks, concrete, or other similar dust-free materials, but shall not be surfaced with sand, gravel, dirt, or any other unconsolidated substances.
- (c) Permeable paving shall be approved by a professional engineer in the form of a stormwater management plan and approved by the Municipal Engineer to adequately accommodate all surface runoff and subsurface water flows through infiltration into appropriate soils, landscaped areas, conventional storm drain systems, or a combination of the above.
  - (ii) Where an approved design of a permeable paving surface directs surface runoff onto landscaped areas, the requirement for continuous non-mountable concrete curb and gutter in Sections 6.4, 6.5 and 6.7 shall not apply.
- (d) Each parking area shall be designed and constructed in accordance with accepted engineering practices and designed to ensure that no drainage traverses a sidewalk.
- (e) The boundaries between each parking space shall be clearly delineated by means of painted lines on the parking surface or by means of vehicle stops.
- (f) The illumination of all outdoor parking areas shall comply with the provisions of the Municipal Outdoor Lighting Standards to Control Light Pollution annexed hereto as Schedule "B" and forming part of this bylaw.
- 7.8 Provision of Bicycle Parking Bicycle parking facilities for various uses shall be provided in accordance with the specifications of Table 7.4.

**TABLE 7.2 - Residential** 

Parking Angle In Degrees	Minimum Width Of Stall	Minimum Depth Perpendicular to Manoeuvring Aisle	Minimum Width of Stall Parallel to Manoeuvring Aisle	Minimum Width of Manoeuvring Aisle
0	2.4 m (7.9 ft)	2.4 m (7.9 ft)	6.7 m (22.0 ft)	3.7 m (12.1 ft)-one way
30	2.4 m (7.9 ft)	4.8 m (15.7 ft)	4.9 m (16.0 ft)	3.7 m (12.1 ft)-one way
45	2.4 m (7.9 ft)	5.6 m (18.4 ft)	3.4 m (11.1 ft)	3.7 m (12.1 ft)-one way
60	2.4 m (7.9 ft)	6.0 m (19.7 ft)	2.8 m (9.2 ft)	6.4 m (21.0 ft)-two way
90	2.4 m (7.9 ft)	5.5 m (18.0 ft)	2.4 m (7.9 ft)	7.9 m (25.9 ft)-two way*
90	2.6 m (8.5 ft)	5.5 m (18.0 ft)	2.6 m (8.5 ft)	7.6 m (24.9 ft)-two way*
90	2.75 m (9.0 ft)	5.5 m (18.0 ft)	2.75 m (9.0 ft)	7.3 m (24.0 ft)-two way*
* The minimum width for a manoeuvring aisle accessing only one bank of parking shall be 6.75 m (22.1 ft)				

**TABLE 7.3 - Non-Residential** 

Parking Angle In Degrees	Minimum Width Of Stall	Minimum Depth Perpendicular to Manoeuvring Aisle	Minimum Width of Stall Parallel to Manoeuvring Aisle	Minimum Width of Manoeuvring Aisle
0	2.6m (8.5 ft)	2.6m (8.5 ft)	7.0m (23.0)	3.7m (12.1 ft)-One Way
30	2.6m (8.5 ft)	5.0m (16.4 ft)	5.2m (17.0 ft)	3.7m (12.1 ft)-One Way
45	2.6m (8.5 ft)	5.7m (18.7 ft)	3.7m (12.1 ft)	3.7m (12.1 ft)-One Way
60	2.6m (8.5 ft)	6.0m (19.7 ft)	3.0m (9.8 ft)	6.1m (20.0 ft)-Two Way
90	2.6m (8.5 ft)	5.5m (18.0 ft)	2.6m (8.5 ft)	7.6m (24.9 ft)-Two Way*

<sup>\*</sup>The minimum width for a manoeuvring aisle accessing only one bank of parking shall be 6.75 m (22.1 ft)

	TABLE 7.4				
USE	BICYCLE SPACES REQUIRED (MINIMUM OF 6)	TYPE AND NO. OF BICYCLE PARKING			
RESIDENTIAL					
SINGLE FAMILY/TWO FAMILY	N/A	N/A			
Apartment/Townhouse	One per unit plus six space rack at each entrance of an apartment	Class I - 100% Class II - six space rack			
Buildings containing three or more dwelling units for senior citizen housing and approved by the BC Housing Management Commission under the non-profit housing program/congregate housing	One per 15 dwelling units	Class I - 70% Class II - 30%			
COMMERCIAL					
Hotel/Motel	One per 15 rooms     In addition, when hotel/motel is larger than 75 rooms, a six space visitor rack shall be provided	Class I - 60% Class II - 40%			
Office (all) retail sales of goods and services, restaurants research establishments, laboratories	One per 250 m² GFA for the first 5000 m² and one per 500 m² GFA for any additional area	Class I - 50% Class II - 50%			
Shopping Centre	One per 250 m² of gross leasable area for the first 5000 m² and one per 500 m² of gross leasable for any additional area	Class I - 30% Class II - 70%			
INDUSTRIAL (ALL)	• One per 950 m² GFA				
INSTITUTIONAL					
Hospitals	One per 500 m² GFA plus six space rack at each entrance	Class I - 75% Class II - 25%			
• Schools	All levels: One per 10 employees	Class I employees Class II students			
• Elementary	One per 10 students	Class II students			
Junior Secondary (Middle)	One per eight students				
Senior Secondary	One per eight students				
• College	One per five students				
University	One per five students (full-time, max attendance)				
Churches	One per 50 fixed seats	Class II - 100%			
Library/Museum/Art Gallery	One per 100 m² GFA	Class I - 20% Class II - 80%			

USE	BICYCLE SPACES REQUIRED (MINIMUM OF 6)	TYPE AND NO. OF BICYCLE PARKING		
Personal Care/Nursing Home/Group Home	One per 15 dwelling units	Class I - 75% Class II - 25%		
Correctional Institutions	One per 50 beds	Class I - 70% Class II - 30%		
CULTURAL & RECREATIONAL				
Community Care	One per 80 m <sup>2</sup> of GFA	Class I - 20% Class II - 80%		
Stadium, Arena, Pool, Exhibition Hall, similar places with spectator facilities	One per 100 m² of surface area	Class I - 20% Class II - 80%		
Gymnasium, Health Spa	One per 80 m <sup>2</sup> of surface area	Class I - 20% Class II - 80%		
Bowling Alley, Curling Rink	One per 2 alleys or sheets	Class I - 20% Class II - 80%		