

Overview of B.C. Highway Functional Classification

Functional classification is the process by which streets and highways are grouped into classes according to the character of the service they are intended to provide. Higher function highways place more emphasis on mobility for through traffic, and lower function highways and roads place more emphasis on land access.

“Functional classes” (also known as “strategic classes”) differ from “service classes” and “design classes”. Service classes describe physical design and access features: “freeways” have no at-grade access, “expressways” have well-spaced signalized access at important cross streets and little or no private driveway access, “arterials” have signalized access of variable spacing as well as private access, as do “collectors” and “local roads”. Geometric standards and design speeds are much higher for freeways than for local roads.

“Design classes” are a more detailed description of service classes. For example, the arterial service class encompasses a variety of design classes indicating differences in geometric standards according to location (rural vs. urban), median treatment (divided vs. undivided), and design speed. E.g. RAU80 = rural arterial undivided 80 km/hr whereas UAD70 = urban arterial divided 70 km/hr.

B.C. highways are functionally classified into five groups. Only the upper three functional classes apply to the numbered highway system. The un-numbered side road system is largely composed of the lower three classes. The five classes are:

- **Primary Highways:** A continuous, integrated highway network for long distance international trips and inter/intra provincial trips between major population centres (population typically in excess of 50,000) and other major activity nodes. Carry substantial heavy truck volumes over long distances. Expected to provide for high overall travel speeds, with minimum interference to through movements. Typically are freeways, expressways, and/or arterials.
- **Secondary Highways:** A network which serves inter/intra provincial travel having a trip length of regional significance. They integrate with primary highways to provide a balanced highway network. Connect urban areas with population typically from 5,000 to 50,000, and significant activity centres not served by the primary system. May be freeways or expressways, but are usually arterials.
- **Major Roads:** Major roads serve intra provincial travel with trip lengths and traffic volumes of regional or sub-regional importance. Connect significant settlement areas and activity centres not already served by primary or secondary highways. May service resource areas. Typically are arterials; may be collectors.
- **Minor Roads:** Also serve intra provincial travel, with trip lengths and traffic volumes of sub-regional importance. Connect all remaining settlement areas and other areas of equal activity level not already served by higher function roads, where it is reasonable to do so. May service resource areas. Typically are collectors; may be arterials.
- **Local Roads:** Serve to provide direct access to individual land uses. They integrate with the higher classes to provide a balanced highway network. Note that the lowest functional class and the lowest service class have the same term: local road.

The “**National Highway System**” (NHS) is a subset of primary highways which have been deemed to be of national importance, and therefore which have higher expectations placed on them regarding mobility, reliability, geometric standards and condition.

British Columbia Numbered Highways - Functional Classification

Primary Highway System

Hwy #	From	To	Notes
Hwy 1	Jct Tolmie Ave (Victoria)	Ferry Terminal (Departure Bay)	Trans-Canada Highway (NHS)
Hwy 1	Ferry Terminal (Horseshoe Bay)	BC-Alberta Boundary	Trans-Canada Highway (NHS)
Hwy 2	Jct Hwy 97 (Dawson Creek)	BC-Alberta Boundary	Inter-provincial connection to Hwy 97 (NHS)
Hwy 3	Jct Hwy 1 (Hope)	BC-Alberta Boundary	Crowsnest Hwy (NHS)
Hwy 5	Jct Hwy 1 (Hope)	Jct Hwy 1/97 (Kamloops)	Coquihalla Hwy (NHS)
Hwy 5	Jct Hwy 5 N (Kamloops)	Jct Hwy 16 (Tete Jaune Cache)	Yellowhead Hwy (NHS)
Hwy 10	Jct Hwy 91 (Delta)	Jct Hwy 1 (Langley)	E-W goods movement: Lower Mainland Gateway
Hwy 11	Canada-USA Border (Huntingdon)	Jct Hwy 7	International goods movement (NHS)
Hwy 15	Canada-USA Border	Jct Hwy 1 (Surrey)	Major international goods movement (NHS)
Hwy 16	Ferry Terminal (Prince Rupert)	BC-Alberta Boundary (W of Jasper)	Yellowhead Hwy (NHS)
Hwy 16	Masset (Queen Charlotte Islands)	Ferry Terminal (Skidegate)	Yellowhead Hwy
Hwy 17	Jct Tolmie Ave (Victoria)	Ferry Terminal (Swartz Bay)	Pat Bay Hwy (NHS)
Hwy 17	Ferry Terminal (Tsawwassen)	Jct Hwy 99 (Delta)	Tsawwassen Hwy (NHS)
Hwy 19	Ferry Terminal (Duke Point)	Ferry Terminal (Bear Cove near Port Hardy)	Vancouver Is. Hwy (NHS from Nanaimo to Parksville)
Hwy 37	Jct Hwy 16 (Kitwanga)	BC-Yukon Boundary (near Watson Lake)	N-S link to Yukon
Hwy 91	Jct Hwy 99 (Delta)	Jct Hwy 91A (Richmond)	Major N-S connector, key goods movement route
Hwy 91	Jct Hwy 91A (E. Richmond)	Jct Hwy 99 (W. Richmond)	Major E-W connector, key goods movement route
Hwy 91A	Jct Hwy 91 (Richmond)	Jct Marine Way (New Westminster)	Major N-S connector, key goods movement route
Hwy 97	Canada-USA Border (S of Osoyoos)	Jct Hwy 97A (Swan Lake)	Okanagan Hwy (NHS from Jct 97/97C to Swan Lake)
Hwy 97	Jct Hwy 1 (Cache Creek)	BC-Yukon Boundary (near Lower Post)	Alaska Hwy (NHS)
Hwy 97A	Jct Hwy 97 (Swan Lake)	Jct Hwy 1 (Sicamous)	Okanagan Hwy (NHS)
Hwy 97B	Jct Hwy 97A (N of Enderby)	Jct Hwy 1 (Salmon Arm)	Okanagan Hwy (NHS)
Hwy 97C	Jct Hwy 97 (N of Peachland)	Jct Hwy 5 (Merritt)	Okanagan Connector (NHS)
Hwy 99	Canada-USA Border (Peace Park)	Oak St Bridge (Vancouver)	Vancouver-Blaine Hwy (NHS)
Hwy 99	Lions Gate Bridge (Vancouver)	Jct Hwy 1 (N Vancouver)	NHS
Hwy 99	Ferry Terminal (Horseshoe Bay)	Lorimer Road (Whistler)	Sea to Sky Hwy (NHS)

Notes: Some highways have dual number designations; only one is included in the list
 NHS indicates that the highway is part of the National Highway System

British Columbia Numbered Highways - Functional Classification Secondary Highway System

Hwy #	From	To	Comments
Hwy 3A	Jct Hwy 3 (Keremeos)	Jct Hwy 97 (Kaleden)	Connects 2 primary highways (3 and 97)
Hwy 3A	Jct Hwy 3 (SE of Castlegar)	Jct Hwy 3A/6 (Playmor Jct)	Part of E-W link from Castlegar (pop. 7,200) to Nelson (pop.10,000)
Hwy 3A	Jct Hwy 3A/6 (W of Nelson)	Jct Hwy 3 (Creston)	Alternate link from Nelson (pop. 10,000) to Creston (pop. 5,000)
Hwy 3B	Jct Hwy 3 (Nancy Green Lake)	Jct Hwy 22 (Trail)	N-S access to Rossland (pop. 3,700) & Trail (pop. 8,200) & USA border at Paterson
Hwy 3B	Jct Hwy 22 (Trail)	Jct Hwy 3 (Meadows Jct)	International goods movement
Hwy 4	Port Alberni	Jct Hwy 19 (Qualicum Beach)	Port Alberni pop. 27,000 (2004)
Hwy 4	Government Wharf (Tofino)	Port Alberni	Tofino&Ucluelet pop. only 3,000 but Pacific Rim has 3rd highest Cdn nat. park attendance
Hwy 4A	Jct Hwy 4 (Coombs)	Jct Hwy 19 (S of Parksville)	Most direct link to Hwy 4 approaching from the south on Hwy 19
Hwy 5A	Jct Hwy 3 (Princeton)	Jct Hwy 97C (N of Aspen Grove)	Princeton pop. is only 2,700 but Hwy 5A links 2 primary hws: 3 & 97C
Hwy 5A	Jct Hwy 5 (Merritt)	Jct Hwy 1 (Kamloops)	Alternate route Merritt (pop. 7,300) to Kamloops (pop. 80,400)
Hwy 6	Canada-USA Border (Nelway)	Jct Hwy 3 (12 km S of Salmo)	International goods movement
Hwy 6	Jct Hwy 3 (Salmo)	Jct Hwy 97 (Vernon)	International goods movement; Links Vernon (pop. 35,100) to Nelson (pop. 10,000)
Hwy 7	300m E of United Blvd (Coquitlam)	150m E of Coleman Rd (Coquitlam)	TransLink operates the other sections of Highway 7 west of the Pitt River
Hwy 7	95m E of Ottawa St (Port Coquitlam)	Jct Hwy 1 (N of Hope)	Connects North-East sector of Lower Mainland to Hope (pop. 6,400)
Hwy 7B	Jct Hwy 7 (United Boulevard)	Jct Hwy 7 (Lougheed Hwy)	Connects Hwy 1 to Hwy 7
Hwy 8	Jct Hwy 5A (Merritt)	Jct Hwy 1 (Spences Bridge)	Connects 2 primary highways (5 and 1)
Hwy 9	Jct Hwy 1 (E of Chilliwack)	Esplanade Rd (Harrison Hot Springs)	Crosses Fraser R. & provides access to Agassiz/Harrison area (pop.8,300)
Hwy 12	Jct Hwy 1 (Lytton)	Jct Hwy 99 (Lillooet)	Links 2 primary highways (1 & 99)
Hwy 13	Canada-USA Border	Jct Hwy 1 (264 St, Langley)	International goods movement
Hwy 14	Jct Hwy 1 (Millstream Interchange)	Grant Road (Sooke)	Access to Langford (pop. 20,300) & Sooke (pop. 9,300)
Hwy 19A	Jct Hwy 1 (Nanaimo)	Jct Hwy 19 (Lantzville)	Alternate route to Hwy 19 serving Nanaimo (pop. 77,000)
Hwy 19A	Jct Hwy 19 (Parksville)	Jct Hwy 19 (Mud Bay)	Alternate route to Hwy 19 serving Parksville (pop. 11,000)
Hwy 19A	Jct Hwy 19 (Mud Bay)	Jct Hwy 19 (Jubilee Parkway)	Alternate route to Hwy 19 serving Comox (pop. 12,000) and Campbell River (pop. 30,000)
Hwy 19A	Jct Hwy 19 (Jubilee Parkway)	Jct Hwy 19/28 (Campbellton)	Alternate route to Hwy 19 serving Campbell River (pop. 30,000)
Hwy 20	Jct Hwy 97 (Williams Lake)	Government Wharf (Bella Coola)	Access to Bella Coola (area pop. approx. 3,000) & other valley communities
Hwy 21	Canada-USA Border (Rykerts)	Jct Hwy 3 (Creston)	International goods movement
Hwy 22	Canada-USA Border (Paterson)	Jct Hwy 3 (Castlegar)	International goods movement
Hwy 22A	Canada-USA Border (Waneta)	Jct Hwy 3B (W of Montrose)	International goods movement
Hwy 23	Jct Hwy 6 (Nakusp)	Jct Hwy 1 (Revelstoke)	Galena Bay to Shelter Bay ferry links Hwy 23 across Upper Arrow Lake
Hwy 24	Jct Hwy 97 (93 Mile House)	Jct Hwy 5 (Little Fort)	Connects 2 primary highways (5 and 97)
Hwy 33	Jct Hwy 3 (Rock Creek)	Jct Hwy 97 (Kelowna)	Alternate route from Hwy 3 to Kelowna, longer distance trips
Hwy 37	Jct Nalabila Blvd (Kitimat)	Jct Hwy 16 (Terrace)	Access to Kitimat (pop. 10,400)
Hwy 37A	Canada-USA Border (Stewart)	Jct Hwy 37 (Meziadin Lake)	Stewart (pop. 700); significant heavy trucks; port connection
Hwy 39	Jct Hwy 97 (N of McLeod Lake)	Jct Alberta Dr (MacKenzie)	Access to Mackenzie (pop. 5,300)
Hwy 41	Canada-USA Border (Danville)	Jct Hwy 3 (near Grand Forks)	International goods movement
Hwy 49	Jct Hwy 2 (Dawson Creek)	BC-Alberta Border (Briar Ridge)	Interprovincial route serving Dawson Creek (pop. 11,000)
Hwy 77	Jct Hwy 97 (N of Fort Nelson)	BC-NWT Border (S of Fort Liard)	Access to BC-NWT border crossing
Hwy 93	Jct Hwy 3 (near Fort Steele)	BC-Alberta Border (Vermilion Pass)	Access to BC-Alberta border crossing
Hwy 93	Canada-USA Border (Roosville)	Jct Hwy 3 (Elko)	International goods movement
Hwy 95	Jct Hwy 93 (Radium)	Jct Hwy 1 (Golden)	Connects primary highway (1) to secondary highway (93)
Hwy 95	Canada-USA Border (Kingsgate)	Jct Hwy 3 (Curzon)	International goods movement
Hwy 95A	Jct Hwy 3/95 (near Cranbrook)	Jct Hwy 93/95 (Wasa Junction)	Access to Kimberley (pop. 6,700)
Hwy 97	Jct Hwy 97A (Swan Lake)	Jct Hwy 1 (Monte Creek)	Access to Okanagan Valley from the north-west
Hwy 99	Lorimer Road (Whistler)	Jct Hwy 97 (N of Cache Creek)	Downgraded from Primary in Oct 2009 due to traffic volumes and population served
Hwy 101	BC Ferry Terminal (Langdale)	Lund	Access to Gibsons, Sechelt, Powell River (pop. 13,400) & other communities
Hwy 395	Canada-USA Border (Laurier)	Jct Hwy 3 (Cascade)	International goods movement

Notes: Some hws have dual number designations. This list shows only 1. Overlaps with primary hwy segments (e.g. 5A/97C, 6/3) are not shown, as this is a secondary hwy list.

All population figures are based on 2003 BC Stats info
Highway Planning Section

19 October 2009

British Columbia Numbered Highways - Functional Classification

Major Road System

Hwy #	From	To	Comments
Hwy 1A	Jct. Hwy. 1/Mt Sicker Rd (N. Cowichan)	Jct Hwy 1 (Ladysmith)	Links Chemainus (pop. 3,100) to Ladysmith (pop. 7,000)
Hwy 14	Grant Road (Sooke)	Port Renfrew	Access to Port Renfrew (pop. 300)
Hwy 18	Jct Hwy 1 (N of Duncan)	Jct N Shore Rd/S Shore Rd (Lk Cowichan Village)	Access to Lake Cowichan (pop. 3,000)
Hwy 23	Jct Hwy 1 (Revelstoke)	Mica Creek Dam Site	Access to Mica Creek Dam
Hwy 26	Jct Hwy 97 (near Quesnel)	Barkerville Historic Park	Access to Barkerville, Wells (pop. 237) & smaller communities
Hwy 27	Jct Hwy 16 (W of Vanderhoof)	Jct Somme Rd/Municipal Boundary at Fort St James	Access to Fort St. James (pop. 2,000)
Hwy 28	Jct Hwy 19 (Campbell River)	Jct Muchalat Dr/Nimpkish Dr (Gold River)	Access to Gold River (pop. 1,300)
Hwy 29	Jct Hwy 97 (Fort St. John)	Jct Hwy 52 (Tumbler Ridge)	Access to Tumbler Ridge (pop. 2,500) via Chetwynd (pop. 2,500)
Hwy 30	Jct Hwy 19 (north of Port McNeill)	Port Alice Municipal Boundary	Access to Port Alice (pop. 1,100)
Hwy 31	Jct Hwy 3A (Balfour)	Jct Hwy 23 (Galena Bay)	Links Balfour (pop. 1,100) to Galena Bay ferry
Hwy 31A	Jct Hwy 31 (Kaslo)	Jct Hwy 6 (New Denver)	Links Kaslo (pop. 1,050) to New Denver (pop. 550)
Hwy 35	Jct Hwy 16 (Burns Lake)	Francois Lake Ferry Landing	Access to Francois Lake ferry
Hwy 43	Jct Hwy 3 (Sparwood)	N Boundary of Elkford	Access to Elkford (pop. 2,500)
Hwy 52	Jct Hwy 97 (Arras - W of Dawson Creek)	Jct Hwy 2 (Tupper) via Tumbler Ridge	Most direct route to Tumbler Ridge from Dawson Creek
Hwy 97C	Jct Hwy 8 (near Merritt)	Jct Hwy 1 (N Ashcroft Access Loop)	Alternate route to Hwys 8 & 1. Merritt (pop. 7,300) - Ashcroft (1,800)
Hwy 97D	Jct Hwy 5 (north of Merritt)	Jct Hwy 97C (West of Logan Lake)	Access to Logan Lake (pop. 2,300)
Hwy 113	Jct Hwy 16 (Terrace)	Gingol'x (previously "Kincolith")	Access to New Aiyansh (pop. 700) & Gingol'x (pop. 400)
Hwy 118	Jct Hwy 16 (Topley)	Village of Granisle	Access to Granisle (pop. 350) and Babine Lake
Un-Numbered Highways			
Athalmer Road	Jct Hwy 93/95 (S of Radium)	District of Invermere	Access to Invermere (pop. 4,000) and resort areas beyond

Note: All population figures are based on 2003 BC Stats info