GLOSSARY OF COMMON RAILWAY TERMS

Terminology varies by country, and also often by railroad. The following are general terms as usually understood in Canada.

agent – an employee of the railway appointed to be in charge of a station. The agent was responsible for conveying train orders to train crews, and for staffing and operating the station. This included ticket sales, freight way bills, dispatch and receipt of express parcels and LCL (less than a car load of) merchandise, the operation of the station telegraph, maintenance of the station area, provision for the well-being and direction of passengers, and the safety and accuracy of freight shipments. A person of standing in the local community along with the banker, priest, postmaster and head teacher.

air brake – a power braking system with compressed air as the operating medium.

bad order (track) – a track to hold cars requiring minor repairs, usually in a marshalling yard.

baggage – a passenger's luggage, carried with the passenger or conveyed in the baggage compartment and (where required) stored in the baggage room at the station.

ballast – crushed stone or slag put down to form a level bed for the track and to facilitate drainage of the roadbed.

bridge – a structure consisting of plate girder or truss spans, intermediately supported, if needed, by piers at longer intervals than those of a trestle.

brakeman/trainman – an employee of the railway. These terms are interchangeable. The word brakeman dates from the days before air brakes when the brakes had to be applied by hand to stop the train. When the engineer wanted to stop the train he blew one short blast of the engine whistle. This was the signal for the brakemen to climb on top of the cars and apply the hand brakes. To apply the brakes a long brake club was used. A brake club was the size and shape of a pick handle and this gave the leverage to apply the brake.

buffer stop or **bumper post** – the barrier installed at the end of a dead-end track to prevent rail vehicles from proceeding further.

B&B – Building and Bridge (Department).

caboose – see **conductor's van**.

car – any piece of rollingstock (qv) that can form part of a consist.

class – see under **engines** and **trains**.

clearance (clearance form) - In addition to a train order, train crews needed a **clearance** when leaving their initial station and at any station where they receive a train order. A clearance is a verification that the crew has received all the orders it is supposed to receive.

coal chute – a structure next to, or over a railway track, used to place coal into the locomotive tender.

conductor – an employee of the railway in charge of a train.

conductor's van – a car at the rear of a freight train that acted as the conductor's office and crew accommodation, and as a look-out to ensure that nothing untoward was occurring to the train, of which the head-end crew might be unaware.

consist – the rolling stock assigned to an engine at any particular time on any particular run.

controlling gradient – see **gradient**.

cornfield meet – slang for a head-on collision.

(to) couple up – to couple up cars or cuts of cars to each other; or onto a train.

crossing (diamond) – a track formation where two tracks cross at grade. Where this is between two different railways, usually protected by an interlocking tower. (See also **Tower, interlocking**.)

crossover – where a pair of switches allows a train to move over from one (parallel) track to another.

culvert – a constructed opening under a railway track, usually to allow water to flow from one side to the other, either for drainage or for unimpeded flow of a smaller water course. Larger culverts may also be to allow passage between two fields separated by the railway. It may be constructed of wood, brick, stone, or latterly of concrete.

cut of cars – a number of cars coupled together (in the UK, a rake)

cut off (to) – to separate any car or cut of cars from each other or from the train (note – not to uncouple).

cutting – the excavation of high ground to provide a level grade for the track.

diamond (crossing) – see **crossing (diamond)**.

dispatcher – an employee of the railway responsible for coordinating and controlling train movements and issuing train orders on designated Subdivisions.

district – a Grand Trunk Railway term for a subdivision. See also **Subdivision**.

diversion – a temporary or permanent track re-alignment. A temporary track by-pass or siding is usually laid during nearby construction or after an accident, in order to maintain railway service (also known informally as a “shoo-fly”).

division – a major operating segment of a railway’s network. Its size was often defined by geography and/or the railway’s preferred organization. Sometimes determined by the distance a steam locomotive was able to travel before requiring service and/or a change of crew. The central location of a division was referred to as a division point. A division point would provide offices for the various necessary supervisory positions to administer the division.

double-header – a train pulled by two engines.

(to) double a hill – take a train over a hill in two parts.

doubling track – a siding or spur at the top of a gradient where cars could be set off temporarily.

(a) drop – switching a car onto another track where the car is uncoupled while the engine and car are in motion. Also referred to as “switching on the fly” or as "a running switch." This is a very dangerous practice, and many men have been hurt performing the task. A running switch is now banned on most railways.

elevator – grain storage tower with ability to load grain direct into railway cars.

embankment – a raised mound of earth shaped to support a railway track, usually in preference to building a trestle or bridge; or sometimes created when a trestle or bridge is filled in.

engine – a unit propelled by any form of energy, or a combination of such units operated from a single control, used in train or yard service.

engine house – a rectangular building for stabling locomotives; consisting of one or more tracks, connected by switches outside the engine house. Most smaller engine houses can only be entered from one end. See also **roundhouse**.

engines, class of – a series of locomotives manufactured to the same specifications, not necessarily by the same builder. Sub-classes of a series of locomotives were created when changes or modifications were made to the original design, either when being built new or when being modified during a rebuild.

engineman – a railway employee in charge of and responsible for the operation of an engine. (In the 19th century, also “engine driver”.) Commonly referred to as an “engineer”, or less elegantly as a “hogger”, (derived from an early slang name for an engine as a “hog”).

engineer – a person employed or retained by the railway who is trained in engineering applications (e.g. civil, mechanical, signal engineering). See also **engineman**.

express – merchandise moved on passenger trains.

flag stop – a station building, small shelter or platform, where intending passengers may board a train upon waving a flag on its approach, or where they may request the conductor to drop them off.

flanger – used in territories where there is a lot of snow. In appearance like a caboose, but equipped with retractable blades that are lowered to clean out the snow between the rails. The blades have to be lifted on approaching a road crossing or a switch.

freight – all manner of merchandise carried by the railway in freight cars of various kinds, including box, stock, gondola, flat and tank cars. (Early pioneer railway freight rolling stock usually consisted of box and flat cars.)

freight shed – an attachment to a station or a separate building where freight is stored. Accessed by a team track, siding or spur.

gauge – the distance between the inside edges of two rails forming a track.
“Standard gauge” is a worldwide gauge of 4' 8 (and 1/2)".

> In 1851, the Province of Canada required the “Provincial” (or “broad”) gauge of 5' 6" for any railway eligible for and desirous of applying for government financial assistance under the 1849 Railway Guarantee Act. This requirement fell into disuse by the early 1870s, whereupon conversions to the “standard gauge” took place during that decade.
> “Narrow gauge” refers to any gauge of less than 4' 8 1/2".(It should however be noted that the Great Western Railway, in their Provincial gauge days, referred to the standard gauge as the “narrow gauge”.)

grade or **gradient** – slope, rate of ascent or descent. “At grade” – at the same level, i.e., a road crossing “at grade” would constitute a grade or level crossing.
A “ruling (or “controlling) gradient” is the severest gradient on any given route.

grade crossing – where a road crosses a track.

Grade separation – another term for a trestle or bridge crossing another railway line or highway. From the perspective of the owning railway, a railway bridge over another railway may be appropriately referred to as an “overpass”, whereas the other railway would view it as an “underpass”. In the case of a highway, one over the railway would be viewed as an “overpass”, and one under the railway as an “underpass”.

hand brake – used during switching operations to slow or stop cars. Also, used to hold cars that are spotted on a yard track, or a string of cars set off in a siding.

hoop – a device in outline like a carpet beater, but with a hollow oval or sometimes triangle, used by the agent or telegrapher "to hoop up" a new order to a train en route. The crew would catch the hoop by thrusting an arm through the open loop, detach the order and throw the hoop back on the ground.

hostler – a railway employee responsible for moving engines in and around the roundhouse, readying incoming engines for the next day by topping them up with coal and water and then dumping their fires.

"hot box" – slang for a wheel journal bearing that has lost its lubrication and is running dry. If the car concerned is not detached from the train, likely to cause a derailment when it seizes up.

jigger – a small, four-wheeled, platform car easily set on or taken off the track; used by a section gang to inspect their section of track. Usually hand-pumped, but sometimes motorized.

junction – a place where one line or more diverges to another place.

lead track – a track connecting a yard or facility with a main line or running track.

line switches (to) – to set one or a succession of switches to permit a train to travel over a designated route.

live load – the force exerted by a train on a structure such as a bridge or turntable.

loading – see **live load**.

loop – see **siding.**

mail – Royal mail, carried by the railways under contract with the Canadian Post Office. It was carried in sealed canvas bags, on passenger and mixed trains, all across Canada. "Closed" mail was mail ready-sorted by destination post offices on trains not having an RPO car, where the bags would be handled, but not opened, by the train baggage man. See also **RPO (Railway Post Office)**.

mail catcher – a vertical pole and hook-type device mounted at the edge of a platform, enabling a passing RPO car to pick up a mail bag without requiring the train to stop.

marker – large lamp, with three green and one red lens used to indicate the end of a train.

operator – an employee of the railway engaged full-time (usually at major stations and junctions) in the transmission of messages and train orders by the Morse telegraph or by telephone. (At smaller stations, the station agent received and sent messages himself.)

order board(s) – originally a variety of disk or semaphore designs to indicate whether a train needed to stop to obtain a train order (qv). Both the GTR and the CPR had rotatable oval disk designs, coloured red on one side and green on the other, visible above the roof overhang and operated by means of a lever and rod from the telegrapher's bay at an agency station. If the train was required to stop to pick up a train order, the red aspect would be displayed to the oncoming train. If not, the aspect would show green. The CPR later switched to lower-quadrant semaphores. These were in turn replaced generally by a pair of upper-quadrant semaphore arms (one for each direction) visible above the roof line, again worked by levers from the telegrapher's bay. If a train was required to stop for orders, the arm would be extended in the horizontal (red) position. An order board in the half-way (yellow light) position indicated a non-restricting order, i.e., one that could be picked up with a hoop.

pushpole – a long pole carried by a yard engine that would allow it to move a car on an adjacent track.

rail – a length of iron (earlier) or steel (latterly) designed and molded to support a railway wheel. Originally produced in standard lengths and to a defined weight as in lbs per yard. Latterly welded together to form long sections, known as “ribbon rail”.

rail stop – see **stop block**.

RPO (Railway Post Office) – Railway Post Office mail was carried in a special car or compartment. The outward appearance of an RPO car was very similar to that of a regular baggage car. It was specially equipped for sorting mail, and the mail clerks (employees of the Post Office) sorted the mail en route. Mail thus sorted would bear a distinctive RPO cancellation mark.

right-of-way – the track and its roadbed. Legally, the land occupied by a railway, shown in a land deed as having a centre line, with a defined amount of land on either side. The standard allowance for a single track was 66 ft, or one “chain”.

road – a term dependent on its context. It may refer to an entire railway company, or specifically to the track and the right-of-way.

roadbed – the earth and gravel that supports the track. After a track is removed, what is left is the roadbed.

rolling stock – any passenger, mail, baggage or freight car or caboose. The term does not include engines or auxiliary (wrecking crew) equipment. (It should however be noted that in the late 19th century, it was usual for references to “rolling stock” to include engines.)

roundhouse – a building for servicing and repairing locomotives, strictly speaking of a semi-circular design; with a turntable at its mouth, for the purpose of assigning a locomotive to a particular roundhouse track. Often used interchangeably, although not accurately, with the term **engine house** (qv).

ruling gradient – see **gradient**.

section – technically, formerly a stretch of track about seven miles long, that was inspected daily by a section gang (consisting of one or two section men or hands, in charge of a section foreman. They would use a jigger (qv) to ride up and down their assigned section. They would store their tools and jigger in a section hut. The foreman was at one time provided with accommodation by the railway, known as a section man’s house or dwelling. Also used as a general term to describe a stretch of line.

section gang, duties – daily track inspection, gauging (checking the correct distance between the rails), weeding, tie replacing (25-50 per day as required), repairing bridges and fences, straightening posts after frosts, painting signboards, putting in new cattle guards, putting in snow fences, loading water barrels for bridges, snow shoveling, unloading iron and pilings for track and bridge repair.

set off (to) – see **cut off (to)**.

shoo-fly – see **diversion**.

shove (to) – to switch cars into a siding or spur track.

siding – a track adjacent to the main track, for passing trains, usually with a switch at either end, sometimes referred to as a loop (qv). Also in (marshalling) yards to accommodate freight trains. See also **team track**.

signal cabin – a building placed at a complex track layout, usually at a large city, for the purpose of controlling the trackwork and signals, originally by means of rodding, but latterly electrically.

specialwork – an unusual or non-standard track formation that has to be specially made.

spur – a track for “spotting” (setting off) cars at a plant, etc. Also a remainder of a portion of a main line after partial abandonment, e.g., the (name) Spur.

station – a place designated in the timetable by name. A station is usually a building with an agent (qv) in charge, that handles passenger and freight traffic, but it could also be just a sign board by the side of the track, that may coincide with the former location of a station building or flag stop shelter or platform.

stop block – a pile of ties, a “half moon”-shaped metal block clamped to a rail, or a large metal frame bolted to both rails with a transverse wooden or metal bar at the same height as the coupler. (In the UK, a bufferstop). A track with a stop block is a spur, a doubling track or a yard track.

string of cars – see **cut of cars**.

subdivision – a lesser operating section within a **division** (qv). Typically, a division would consist of numerous subdivisions, in the GTR known as districts.

sun kink - a track knocked out of alignment by heat beyond the rail’s allowance to expand.

switch – also known as a turn-out; a track configuration that allows a train to pass from one track to another. The earlier design was a stub switch whereby a bending pair of rails were lined up with the “stubs” of the diverging tracks. (to throw a switch is still sometimes referred to as “bending the rail”.) These stub switches were replaced in the 1890s by blade switches, where one of two blades would line up with the desired track. A “facing” switch is where one approaches the diverging tracks, a “trailing” switch where one approaches from one of the diverging tracks. As a verb, to move cars around (in the UK, “shunting”).

team track – often used interchangeably with “siding”, but strictly speaking the track parallel to the main line at a station, usually nearest to the station with a combination freight shed, at which freight is delivered or picked up by the teams (of horses) or, latterly, by trucks.

telegraph – communication by wire of train orders and other railway business between a dispatcher and agent or telegraph operator, by means of a telegraph key/sounder and Morse railway code.

throw a switch (to) – to set a switch to allow a train to pass from one track to another (slang – to bend the rail).

tie – a wooden or concrete length designed to hold two rails to the assigned gauge. (In the UK, a “sleeper”.)

timetable – the authority for the movement of regular trains (i.e., those shown in the timetable, as opposed to “extra” trains, which are not), according to the rules. The timetable contains classified schedules with special instructions related to the movement of trains and includes other important information. The “schedule” is that part of the timetable which prescribes class, direction, number and movement of a regular train (see also **trains, class of**). Frequently referred to as an “employee timetable”, to distinguish it from a “public timetable” that is displayed or given to the public.

tower, interlocking – a building equipped with levers to operate signals at a crossing (qv) between separate lines of the same railway, or by different railways.

track – two rails fastened to wooden or concrete ties to from a track.

train – any engine with or without a consist, authorized by timetable or dispatcher, to move from point A to point B.

trainman – see **brakeman**

train order – a written instruction or permission from a dispatcher to a train crew. For many years, there were two kinds of orders, the "31" order that had to be signed for, and the "19" order that could be delivered without taking a signature. The conductor could usually sign for a "31" order and deliver it to his engineman, so that he would not have to leave his engine and go to the office, which was inconvenient and time-consuming. The “non-restricting” "19" order was handed up to the train without a stop. A train order, as it was written on tissue paper, was often referred to as a “flimsy”.

trains, class of – in the pioneer period (1850 to 1880), trains were usually “express”, “mail”, “accommodation” or “freight”. During the later period and subsequently, trains came to be numbered as “first class” through to “fourth class”. Normally main line passenger trains would be “first class”. Some branch line passenger trains were “second class”. Mixed trains (i.e., trains composed of both freight and passenger cars and doing both freight and passenger work) would normally be second or third class. Freight trains were normally third or fourth class, or designated as “extra”.

trains, superiority of – a train is superior to another by right, class or direction. Right is conferred by a train order. Class or direction is defined by timetable. Right is superior to class or direction. On single track, direction is superior as between trains of the same class. Trains of the first class are superior to those of the second class, and so on. On single track, east- or southbound trains are superior to west- or northbound trains of the same class. (The timetable specifies the direction for the purpose of the determination of superiority.) Extra trains are inferior to regular trains.

transfer table – a track mounted on a moveable platform supported by rails in a transverse pit, that can transfer an engine to any one of a number of parallel tracks leading into a wide engine house with a large number of tracks. The transfer table can be fed by a single lead track.

trestle – a structure consisting of short, more or less equi-distant spans, built with local timber to carry a railway across a valley. Because of decay, fire, or instability for heavier trains, these were eventually filled in with earth (as an embankment) or replaced by bridges.

triple-header – a train pulled by three engines.

turntable – a track mounted on a deck with a centre pivot in a circular pit; for turning or assigning a locomotive to a “stall” at the end of its run. The earlier ones were hand-operated (frequently referred to as “armstrong” tables). Others at smaller locations were equipped with a small compressed air engine at one end and powered by air from the locomotive.

type – steam locomotives in particular are defined as to “type” by their wheel arrangement, which is also usually described by a name.
Common locomotive types are:
0-6-0 – six-wheel switcher (often referred to as a “yard” or “pony” engine).
4-4-0 – American
2-6-0 – Mogul
2-6-2 – Prairie
2-6-4 – Adriatic
4-6-0 – Ten-wheeler
4-6-2 – Pacific
4-6-4 – Hudson
4-6-4T – Baltic
0-8-0 – eight-wheel-switcher
2-8-0 – Consolidation
2-8-2 – Mikado
4-8-2 – Mountain
2-8-4 – Berkshire
4-8-4 – Northern
0-10-0 – ten-wheel switcher

2-10-0 – Decapod
2-10-2 – Santa Fe
2-10-4 – Selkirk or Texas

The combination of numbers is known as the “Whyte” classification system.
The first (0, 2 or 4) refers to the number of wheels on the pilot (leading) truck.
The second (4, 6 or 8) refers to the number of driving wheels (drivers).
The third (0, 2 or 4) refers to the number of wheels on the truck under the cab.

velocipede- an early hand-operated three-wheel inspection vehicle used by a section gang.

viaduct – a longer bridge structure supported by stone piers or steel towers.

water station – a Grand Trunk Railway generic term for any place where a steam locomotive could take on water. This could be direct from a **water tank** or **water tower**, or from any kind of stand (usually located at the end of a station platform). Later, better known as a “water plug” or “stand pipe”.
water tank or tower – a tall circular or square frame or stone foundation that supports a (usually) round tank beside a track, from which the tender of an engine can be refilled with water. On the CPR some water tanks were totally encased in a wooden frame to prevent freezing.

way freight – merchandise handled at a freight shed and by way freight crews. Also, trains designated to handle and move way (freight) cars and do switching en route.

weight load – see **live load**.

wye – a triangular track formation used instead of a turntable for turning a locomotive or cars. A wye requires more land but less maintenance, and has the added advantage of not having the same limitations of weight load or length as a turntable. Depending on the distance between the three switches, a wye could be used for turning a whole train. Preferred to a turntable also because it does not require to be dug out after snow storms.

yard – a system of tracks for the making up of trains, storing of cars and other purposes. A larger yard would be under the jurisdiction of an assistant superintendent, a trainmaster or a yard master. A yard at a smaller station, would likely be under the jurisdiction of the (station) agent (qv).

yard limits – that portion of main line trackage within limits defined by yard limit signs. Yard limits need not be near a yard, although they may be included. The signs exist to restrict the speed of trains entering any congested area, such as a busy junction. Yard limits do not restrict first and second class trains.