Moving Goods & Freight, then & now [including wagons]

Brian Webber

This is a huge subject so this article can only attempt a summary of those aspects of the subject that might prove interesting and worthy of recording in this handbook.

The words "Goods" and "Freight"

The title of this presentation suggests that Goods and Freight are not one and the same. I understand that, from a loading point of view, the word Goods covers a huge range of "things" whereas the word Freight only covers those things being moved or intending to be moved. In the context of QR services, Goods was the word used for non-Passenger services from 1865 until the 1970s ?? when QR started running non-passenger trains with two maximum speeds, eg 60 km/h and 80 km/h. They differentiated the latter in timetables as "Express Freight". In more recent times, some services are timetabled for a 100km/.h maximum speed.

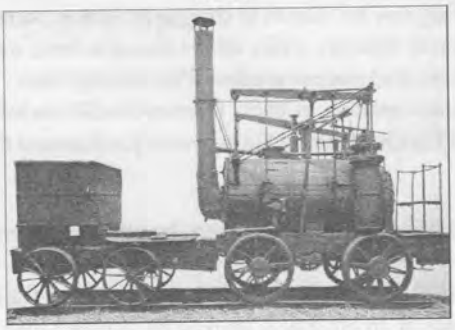
Moving Goods & Freight, then

The start of railways

It is generally accepted that "rail"ways were "invented" about the same time [in the 1700s] in Britain and Europe when production of coal for industrial fuel was increasing and there needed to be a better method of moving coal both within mines to get it to the surface and then from the mines to canals or waterways to be shipped to the areas of consumption. As new and larger machines were invented with the newly acquired knowledge of how to turn rock into iron, and later steel, there was an ever growing demand for coal to fuel the machines. At the start of the Industrial Revolution, industries were established beside a flowing stream so that a water wheel could be used to generate movement within the factory. Within the mines, firstly humans skidded tubs in the small low tunnels which was in line with the way "employees" were treated in other industries. Remember this was the era of migration from the country to the towns and cities and during and following the Irish Potato Famine people with no education and low skill levels had to accept any work they could get.

Later the tunnels were enlarged and horses were used to pull tubs on wheels – wagons, enabling heavier loads. Before long the wagons were equipped with flanged wheels and run on [wooden] "track" enabling both larger loads and more wagons to be hauled in a given time. Iron rails were available by the end of the 18th century.

"PUFFING BILLY" of 1813



About 1715 Thomas Newcomen "invented" a stationery steam engine which at first was used to drain mines of excess water. Later the design was refined to pull wagons along a track. The obvious next step was for the steam engine to move and pull the wagons, like a horse.

Richard Trevithick developed a high-pressure steam locomotive in 1804 which introduced the concept of a chimney and a draught over the fire. Improvements in iron enabled rails to be produced that could support the weight of the locomotives.

It soon became apparent that railways would be useful for hauling general goods as well as coal or minerals.

1963 - A10 Bingera Mill at Watawa - Fowgon w. hungry boards

Photo: Lumburra 1965, Owens Creek with cane derrick.

The first public steam railway, as we now know a railway to be, began on 27 September 1825 when the first public passenger train pulled by the engine 'Active' (later renamed 'Locomotion'), ran from Darlington to Stockton carrying 450 persons at 15 miles (24 km) per hour. Wrought iron rails were used.

Interested people in Liverpool and Manchester then called on George Stephenson to build a 64 kilometre railway to connect the two cities; one a port and the other a manufacturing city. When the line was nearing completion in 1829, a competition [the Rainhill trials] was held for locomotives. Stephenson's new engine, the 'Rocket', which he built with the assistance of his son, Robert, won with a speed of 36 miles (58 km) per hour. 'Rocket' introduced fire tubes in the boiler which was a major improvement and was used to the end of steam. By now the speed of a train exceeded that possible with a horse. Eight locomotives were used when the Liverpool-Manchester line opened on 15 September 1830, and all of them had been built in Stephenson's Newcastle works. It was a public carrier of both passengers and freight. From this time on, railway building spread rapidly throughout Britain, Europe, and North America, and indeed to most countries.

Rocket [replica], National Rail Museum, York, UK, 2007.
[Image: Brian Webber]

Passengers

Passengers were not considered at first until the Stockton & Darlington and then Manchester – Liverpool showed the public wanted to travel – and now further than a horse could take them at affordable cost to most working people.

Festiniog Railway - 1 ft 11½ in (597 mm) gauge. Founded by Act of Parliament in 1832; Steam from 1863 and from 1865 became the first narrow gauge railway in Britain to carry passengers.

Queensland became a separate colony [from New South Wales] in 1859. Previously NSW had shown some interest in providing a railway in Qld.

Why Government?

Railways in Victoria and New South Wales [Sydney and Newcastle] started as private lines but before long the Government took over. In Queensland, The Moreton Bay Tramway Company did surveys and offered shares but was unable to continue so the Government continued the project. This was contrary to the British and USA experience where private companies built and operated the railways; in Britain until nationalisation in 1948. So the major railway network in the colony became QUEENSLAND GOVERNMENT RAILWAYS.

Why 3ft 6in [1,067mm] gauge?

The initial railways in Britain were built to 4ft 8½in [1,435mm] gauge. This was sufficiently wide for horses to conveniently walk between the rails and seems to have corresponded with stage coach dimensions. Once selected for one railway, the manufacturers of locomotives and wagons and those responsible for track laying saw no reason to change for many years. Brunel, who always thought BIG decided to use 7ft gauge for "his" Great Western Railway while others thought there were economies to be had by constructing to a lesser gauge and having sharper curves and steeper grades. This concept was pioneered in **Norway** where a 3ft 6in gauge line was operating before QR's initial opening in 1865. It seems that knowledge of the line in Norway [certainly by the British Fox organisation which assisted the Queensland Government] influenced the Queensland decision.

Over many years, the QR [Annual] Commissioner's Report gave statistics comparing Queensland with the other states and New Zealand. These are interesting because they show the result of Queensland building their railways to 3ft 6in gauge. [Of course, all statistics should be read with caution]. This information is from the 1934/35 report, selected as it was after the end of most railway construction [until post-war]. It appears to show that the choice of 3ft 6in gauge proved far cheaper than one of the wider gauges.

	Queensland	New South Wales	Victoria	South Australia	Western Australia	New Zealand
Gauge/s	3ft 6in, 2ft	4ft 8½in	5ft 3in, 2ft 6in	5ft 3in, 3ft 6in	3ft 6in	3ft 6in
Population	967,947	2,621,894	1,839,363	585,000	443,295	1,559,624
Miles open	6,497	6,163	4,721	2,529	4,359	3,320
Capital	£64.7M	£140.9M	£75.8M	£27.9M	£25.8M	£54.1M
Cost per mile	£5,647	£22,874	£16,055	£11,030	£5,908	£16,292
Pass. journeys	24,249,641	142,520,429	139,689,042	16,660,213	12,876,378	19,654,467
Goods tonnage	4,418,041	10,643,139	5,401,974	2,228,689	2,803,316	5,444,977
Livestock tonnage	422,829	721,096	607,987	118,047	100,165	578,983
Train Mileage	12,869,974	25,173,199	15,536,111	5,080,319	6,024,887	10,628,400
Train Miles per average Miles open	1,981	4,084	3,291	2,009	1,382	3,201

Why buffers, hooks and screw couplings?

Elsewhere, centre "Norwegian" couplers were used including in the USA. However they were very dangerous as if they were not aligned anyone standing between wagons to "drop" the pin could be crushed. This happened at least once with QR Rail Motor trailers. It is likely that QR followed British practice with buffers, etc. A private railway at the Burrum Coalfield [Maryborough district] used "centre couplings" and for a time so did the isolated Maryborough railway. Automatic couplers were introduced to Queensland with the air-conditioned carriages in 1952.

Overview of 147 years

QR has been operating as a Government entity in various legal frameworks since 1863 [for 147 years]. For most of that time, until 1991, QR was a "common-carrier", required by its legislation to carry anything from anywhere to anywhere that it could reasonably handle. QR and the successive Governments took that role very seriously and when road trucks became practical, legislation restricted them to a feeder role. However following the Second World War, QR was a run-down business and many soldiers had seen what road transport could do. As well there was a "flood" of army surplus trucks available to enable the enterprising to establish businesses to compete with QR, particularly with the attraction for the public of door-to-door service.

It is the writer's view that following the closure of several branch lines in 1955 which did not seem to greatly inconvenience anyone, QR and the government began to question the role of railways in the state. The somewhat more controversial closure of the South Coast Line in 1964 and the Border-Hopping truck activities highlighted that times must change. The entry of overseas coal mining interests who negotiated special deals encouraged QR and the Government to introduce the concept of Commercial-in-confidence which meant the public "right to know" was weakened. [Secrecy during the War had been accepted].

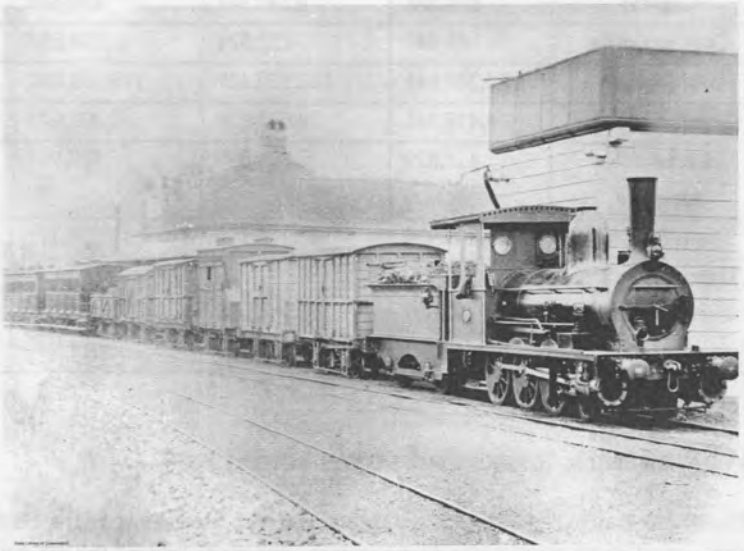
Whilst QR had Goodwill Officers who were responsible for gaining traffic, QR now became more selective as to what and where it wished to haul. By 1970, QR were actively discouraging traffic [eg moving North Eton Mill sugar haulage to road; ending livestock haulage on the Atherton Tableland by not supplying and scrapping the wooden framed K wagons, etc].

In more recent times, freight services have gradually but regularly been withdrawn and what can be called "closure by stealth" has become normal where consigners are discouraged, trains are then not timetabled and maintenance is withdrawn. These lines, classified as SERVICE SUSPENDED are effectively abandoned. The most recent train withdrawals have been the Biloela – Fisherman Islands meat train and the Dalby-Fisherman Islands cotton train.

Organisation of Queensland Government Railways, Queensland Railways, Queensland Rail, QR, QRNational etc

Track openings

B12 [2-6-0] 26 at Grandchester, [Kitson, 1874]–note outside bracing on the wagons. The loco was on the books until 1922.



The first line [Ipswich – Grandchester] opened on 31 July 1865, just 5 years after the first Colony Parliament met on 29 May 1860. *[Compare this with the ten year gap between the Gold Coast line reaching Robina and Varsity Lakes.]* It was the time when the American Civil War was ending and the New South Wales "Lithgow" Zig Zag was being built, opening in October 1869.

Important subsequent dates included:-

Tracks reached Toowoomba in May 1867, Dalby in April 1868, Warwick in Jan 1871, Brisbane in 1875, Wooloongabba [wharves] in 1884, Wallangarra in 1887, Charleville in 1888. The "Northern Railway" from Rockhampton was built at much the same time as the initial Southern & Western sections.

Generally branch lines were built in the expectation that both goods and passenger services would be provided to cater for local demand. The first line built without provision for goods handling was probably Thorneside – Wellington Point in 1986. *[By then QR had been discouraging goods traffic for over a decade.]*

Network

Between 1933 and 1947, QR had 10,457km of track, the maximum ever. As at 30 June 2009, QR "owned" 9,674km of which 246.1 km was "Service Suspended" giving 9,427.9km "in use" of which 1,982km is electrified. 1,388km of "lines" has no regular services.

Locomotive/s

Like the first railway at Sydney, 10 years earlier, QR's first section opened with four 0-4-2 locomotives. In recent times, trains have had four locomotives in the lead or three in the lead and three mid-train!

Over the years QR operated :

Steam	1865/1958 – 1969 [and since, Heritage]	
Diesel Mechanical	1939 - ex Etheridge 1968 - ex shunting 1987; DL1- DL4 [all named]	
Diesel Electric	1952 – future	numbered 1200 +
Diesel Hydraulic	1966/1974 – 1995;	numbered DH1 – DH73 [last 3 auto couplers]
Electric	1986 – future	numbered 3100 +

[Com-Eng, Clyde, Walkers-ASEA, Siemens, Germany for coal. 3900 for NCL from Sept 1988 – 2001]

Operations

QR commenced services with some bogie carriages but initial wagons were four or six wheel. Early timetables [printed in the Government Gazette] do not specify the train type but it is assumed all trains hauled passengers and goods.

Services

Goods trains

Many trains were shown in the Public Timetable as "Goods train with passenger accommodation attached."

Mixed trains

Where there was little goods or passenger demand, QR sometimes ran combined goods and passenger trains.

Light Engine, Engine & Van

In the day to day operations of a railway it is unusual for loading in each direction to be equal. Many wagons run empty one way either to return loaded or to re-position them to somewhere where there is a prospect of loading. As what goes "Up" [eventually] has to come "Down", at times it was economic to provide two locomotives on trains in one direction rather than run two trains, thus saving a Guard. This then required a light engine movement in the other direction [which was often quicker – thus cheaper] than running a double-header that was not justified by the load. Sometimes, as with loading/unloading livestock one locomotive could arrive later/depart earlier. In the early days, trains divided at Grandchester or Murphy's Creek and either did a "double run" or, particularly on the Main Range a second train ran on that section.

A new 1250 class locomotive is delivered from English Electric at Rocklea. Note the CHB van and battered wooden louvre wagons.
[Image: Brian Webber]

Bank engine [ie an engine kept at a location to assist passing trains, usually in the rear for goods trains, in the lead for passenger trains]. The bracket indicates the depot of the bank engine.

Dutton Park – Cannon Hill [Wooloongabba], Grandchester-Laidley [Ipswich], Murphy's Creek – [Toowoomba] , Gowrie – [Toowoomba] , [Toowoomba] – Harlaxton, [Yandina] – Cooroy, Monkland – [Gympie] , Bogantungan - [Alpha] in lead, Gargett – The Gap [Mackay], Collinsville – Briaba [Bowen], Haughton Valley – Mingela and Warrigul – Pentland [Charters Towers].

Change engine In steam days locos changed every 100 miles or so [eg Brisbane, Toowoomba, Warwick, Roma, Gympie, Bundaberg, Gladstone, Rockhampton, Emerald, Alpha, Mackay, Bowen, Townsville, Hughenden, Cloncurry, Cairns, Mareeba.]

Water engine

Steam locomotives operate by evaporating water and so, require a regular supply of water. Generally the water was taken aboard from tanks alongside the track, usually, though not always at stations. Some tanks in mid-section included Pidna, Kings Creek, Duleen, etc. The most common type of water tank was the circular 40,000 gallon tanks. At some locations "stand-pipes" were situated at the normal stopping places. If water was unavailable then a water tank ["gin"] was hauled.

Train composition

Behind the locomotive, if required was a water tank wagon. Then followed [in station order] the loading, then certain wagons with perishables and/or loaded with parcels, etc ["roadside"] and then the passenger vehicle/s, often a CLV [passenger lavatory van].

GENERAL TRAFFIC

QR was required to carry anything anywhere [as long as it was practical]. They could have operated road transport as they did with the Renard Road train [and in recent times with Q link]. To meet this requirement, they had a large variety of wagons and most stations had a siding and platform, crane and/or loading ramp.

In the days before computers, there was a large clerical effort required keeping track of wagons, moving them when loaded and then again when empty. There were "protocols" as to where empty wagons were to be moved, simplistically normally towards the coast for many types but for livestock and coal wagons it was to the west. The major stations issued 4-8 page instructions each day to ensure that wagons were marshaled into the appropriate train. Each District Office [eg Brisbane, Toowoomba, Roma] had to negotiate with adjoining Offices to ensure that wagons ordered were provided and that empty running was minimised. Most stations were involved in collecting charges for transport, shunting and demurrage. On the next pages I show details of a branch line, Dalby – Glenmorgan, which might be typical.

Roma Street Goods yard – mainly steel wagons including QLX louvre wagons and CMIS iced wagons.

Roma St Parcels Office *[Image : Brian Webber]*

QR PB15 469 arrives at Pleystowe to cross C17 727 in 1965 sugar season. Pleystowe was opened as an unattended staff station for the season. 727 was hauling empty sugar box MTWs to Victoria to be loaded at North Eton Mill. The Mill's loco hauled the wagons to the Mill and back on dual gauge track. 469 has general loading [empties?] ahead of sugar boxes from Marian or Cattle Creek Mills going to Mackay Harbour over the Harbour Board branch.
[Image : Brian Webber]

Cream cans wait to be collected, perhaps by a Rail Motor. Here at Lanefield, the Guard won't have to lift from ground level.

A list of facilities at stations for the GLENMORGAN BRANCH. From the LIST OF STATIONS, SIDINGS, ETC of 1950

28 STATIONS, STOPPING PLACES, ISOLATED AND PRIVATE SIDINGS.

Name.	Station or Gate.	Siding Accommodation.	Telegraph Signal and Telephones.	Weighing Accommodation.	Crane Capacity.	Fork Line or Diameter of Turntable.	Cattle, Pig, or Sheep Yards.	Stock and Vehicles Loading Bank	Timber Slag Gantry.	Shed Accommodation.
SOUTHERN RAILWAYS—continued.										
Glenmorgan Branch.										
*Shell Co.'s Siding (38 ch.)	..	S	..	..	..	..	..	..	..	..
*Siding (46 ch.)	..	S	..	..	..	..	..	..	..	..
*Downs Co-operative Dairy Coy. (Natcha)	..	S	..	..	..	..	..	S	..	..
c*Natcha	..	S	..	..	..	..	..	S	..	..
*Napier Bros. Siding (Natcha)	..	S	..	..	..	..	..	..	..	..
*Show Grounds (Natcha)	..	†	..	..	..	..	..	S	..	..
*Nandi	..	S	*tg*	*b*16 ton c	..	..	..	..	..	S
*Kupunn	..	L 4 ch.	..	20 cwt.	..	..	..	S	..	SGC
*Duleen	..	L 4 ch.	..	..	..	..	CPS	..	..	S
*Ducklo	..	L 4 ch.	*tg*	..	..	..	..	S	..	SG
*Gulera	..	L 5 ch.	..	..	..	..	..	..	..	S
**Ballast Siding (23 m.)	..	S	..	..	..	F	..	..	..	..
*Kumbarilla	..	L 12 ch.	..	10 cwt.	..	..	C	S	..	SG
*Weranga	..	L 7 ch.	..	..	..	..	..	..	..	S
*Bungybah	..	†	..	..	..	..	..	..	..	..
*Goranba	..	L 6 ch.	..	..	..	..	CS	..	..	S
*Perthton	..	S	..	..	..	..	..	..	..	..
dTara	S	S	*t tg*	20 cwt.	1 ton	F	CPS	SE	..	SGC
d*Sawmill Siding (Tara)	..	S	*tg*	..	..	..	..	..	..	..
*Tullagrie	..	L 6¼ ch.	..	..	..	..	..	..	..	S
*South Glen	..	L 9 ch.	..	..	..	..	CPS	S	..	S
*Cabawin	..	S	*tg*	..	..	..	..	S	..	SC
**Ballast Siding (69 m. 55 ch.)	..	S	..	..	..	..	..	..	..	..
*The Gums	..	L 9 ch.	..	..	..	..	CPS	S	..	SGC
*Hannaford	..	L 6 ch.	..	..	..	..	CPS	S	..	S
*Meandarra	G	S	*t tg*	30 cwt.	..	F	CS *a*	S	..	SG
Glenmorgan	S	S	*t tg*	20 cwt.	..	F	CS	S	..	SG

a Sheep yards for "end-loading" vans.
b State Wheat Board cart weighbridge.
d See Clause 378, *re* Shunting Sawmill Siding, Tara.
c Working of Natcha (Dalby Show Grounds). Live stock only is to be unloaded at this loading bank; other exhibits will be dealt with at Dalby Station.
tg Telephones connected with Dalby.

Instructions were provided for every traffic! From the General Appendix of 1935

474. Conveyance of Sewing Machines.—Frequently sewing machines (uncrated) sustain damage, mostly to the cast frames, as the result of oscillation in transit. Drop-head machines, protected with hessian, &c., should be loaded with the legs up, as far as possible, in a corner of the truck. The old style of sewing machines with fixed tops should not be loaded in this way, but placed fore and aft in the truck, with suitable loading packed around them.

475. Conveyance of Poultry.—During the summer months a large number of poultry die during transit by rail, and a great proportion of the loss is due to want of consideration on the part of senders.

Poultry should not be accepted if crated in a manner that involves cruelty. The birds should not be contained in a crate of less height than themselves, nor in a crate with open spaces between the bottom boards.

If the transportation desired will necessitate poultry being in the custody of the Department overnight, a drinking vessel must be placed in the crate by sender so that water can be provided at transhipping stations or destinations. Employees handling such consignments en route must see that fresh water is provided.

Poultry (and live stock) must be invoiced separately to ensure speedy transhipment (vide Clause 412).

Fowls must not be accepted for conveyance to the Southern States unless accompanied by a certificate from the Agricultural and Stock Department indicating they are free from fowl ticks.

From the 1950 Western Line Working Timetable:- [note the two trains following on Monday and Thursdays.]

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DALBY-GLENMORGAN BRANCH.

UP TRAINS.

Miles from Dalby.	Stations.		164 Motor Pass. Tuesday only.	82 Goods. Monday and Thurs.	84 Mixed. Monday and Thurs.	168 Motor Pass. Friday only.	254 Motor Pass. Wednes. only.	—	—
m. ch.			a.m.	p.m.	p.m.	p.m.	p.m.		
..	Dalby (W)—OS	depart	10 30	12 30	2 45	3 50 (85)	6 15	..	..
1 14	Natcha—OS §§	..	D	..	D	D	D	..	..
7 4	Nandi	..	D	..	D	D	D	..	..
10 41	Kupunn	..	D	..	D	D	D	..	..
14 38	Duleen (W)	arr	..	L 1 20	L 3 32	..	..	..	..
	Ditto	dep	D	1 25	D 3 37	D	D	..	..
17 20	Ducklo	arr	11 13 (83)	..	..	..	..	..	..
	Ditto—OS §§	dep	11 15	1 45	D 3 45	4 30	D	..	..
22 35	Gulera	..	D	..	D	D	D	..	..
23 0	Ballast Siding	..	..	..	..	..	..	..	..
26 59	Kumbarilla	..	D11 45	..	D	D	D 7 28	..	..
35 64	Weranga	..	D	3 10	D 4 35	D	D	..	..
39 76	Bungybah	..	..	..	..	..	..	..	..
44 11	Goranba	..	D	m	D	D	D	..	..
46 23	Perthton	..	D	..	D	D	D	..	..
52 65	Tara (W)	arr	1 0	4 30	m 5 21	6 10	8 40	..	..
	Ditto—OS	dep	1 25		6 0	6 35		..	..
57 30	Tullagrie	..	D	..	D	D	..	..	..
62 0	South Glen	..	D	..	D	D	..	..	..
66 42	Cabawin	..	D	..	D	D	..	..	..
69 55	Ballast Siding	..	..	..	..	..	..	..	..
70 40	The Gums	..	D	..	D 7 20	D	..	..	..
77 74	Hannaford	..	D	..	D	D	..	..	..
88 72	Meandarra (W)	arr	..	..	..	..	..	..	..
	Ditto	dep	3 5	..	A 8 45	A 8 5	..	..	..
102 59	Glenmorgan	arr	3 50	..	9 30	8 50	..	..	..

For Rail Motor stops see page 8.

Guards of trains and drivers of rail motors will exchange Train Staff or Ticket at Natcha and Ducklo.

The speed of trains and rail motors must not exceed 25 miles per hour on this branch.

The Fireman will assist the Guard to shunt if required.

No. 82 Up will do all shunting required between Dalby and Tara and will also convey loading for Tara and beyond to be attached to **84 Up** at Tara.

No. 84 Up will not shunt between Dalby and Tara but will stop as required for passengers. This train will shunt as required between Tara and Glenmorgan.

No. 84 Up will pick up school children at Kumbarilla.

Ducklo is an unattended Staff Station and trains will work through and cross at this station in accordance with Rules 229 and 442. The controlling stations are Dalby and Tara.

Nos. 164 and **83** will cross at Ducklo and guard of **83 Down** will attend to the signalling and crossing of these trains. The driver of **164 Up** must approach Ducklo with caution in case of late running of **83 Down.**

Forms 487 and 488 (Rule 444) will be issued when necessary by the Station-master Dalby for Up Trains between Dalby and Tara.

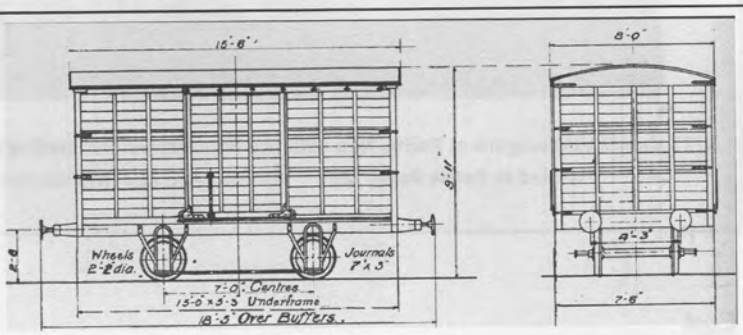
For other instructions see page 127.

In 1916/17 QR "split" the revenue into these headings:-

Passenger	£ 1,076T
Parcels and Miscellaneous	£ 321T
==========	
General Merchandise	£ **791T**
Flour	£ 29T
Sugar-cane [sic]	£ 21T
Other Agricultural produce	£ 223T
Timber	£ 182T
Firewood	£ 35T
Wool	£ 236T
Coal and Coke	£ 198T
Other Minerals	£ 143T
Live Stock	£ **575T**
TOTAL GOODS	£ 2,434T

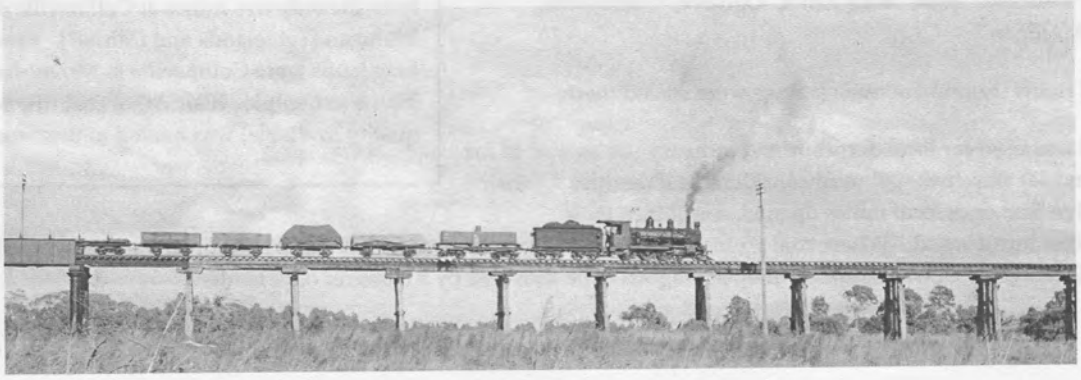
The above was carried in 11,103 goods wagons and 2,735 coal wagons. There were 180 [goods] brake vans [to trail 652 locomotives] ?

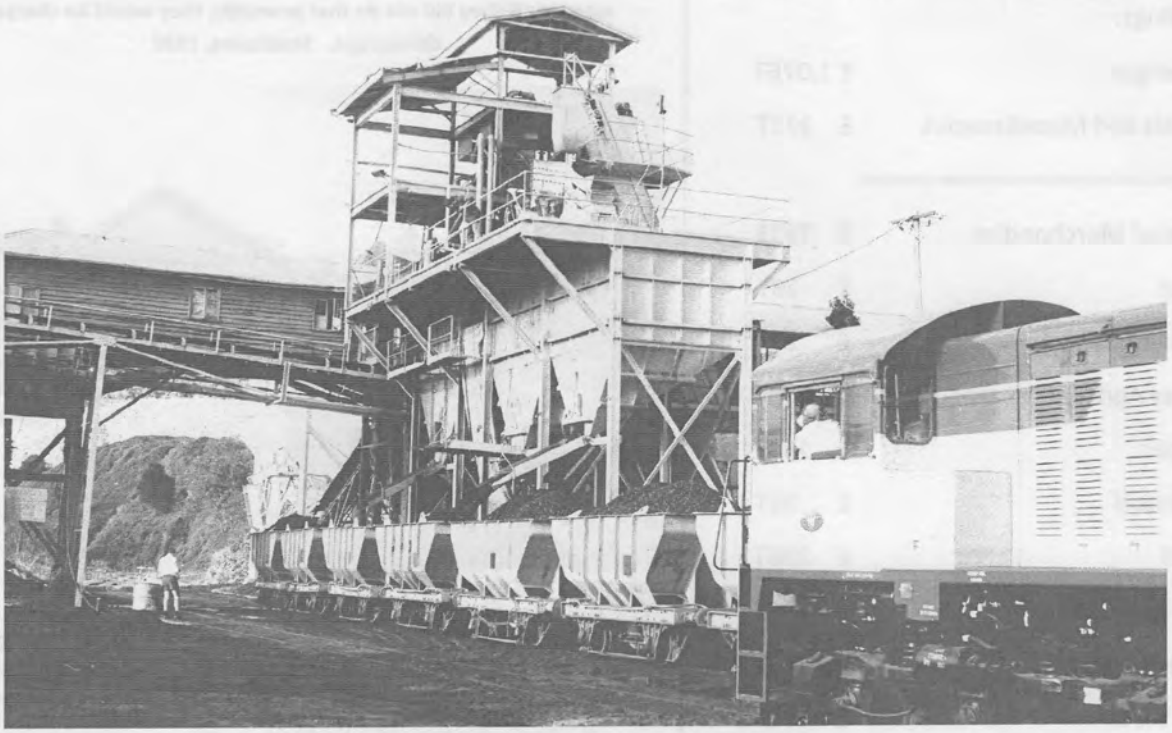
It was the responsibility of consignor and consignee to load and unload wagons. If they did not do that promptly, they would be charged demurrage. Strathpine, 1920



A class wagon

A PB15 drifts across the Burnett River bridge from Bundaberg with a goods to Wallaville in 1964 with loading being carried in small four wheel wagons behind a UW water truck. The photographer was on his way to work on his bicycle. ***[Image : Brian Webber]***





1727 shunts VJM wagons at Perrys Nob with the impressive mine loading structure alongside. The Perrys Nob coal was at this time hauled to Petrie Paper Mill. Selene Mine near Monto was somewhat similar. ***[Image : Brian Webber]***

Coal

Coal was hauled from very early days, initially from Bundamba.

From Mines:-

Redbank, Dinmore, Bundamba, Tivoli, south of Ipswich, Rosewood district, Marburg branch, Acland area, Injune, Tannymorel, [Burrum field] Torbanlea/Howard, Selene [near Monto], Baralaba, Bluff, Blair Athol, Ogmore, Collinsville, Mount Mulligan.

Locos of trains shunting at mine sidings were coaled there.

The coal was used for local domestic and industry use as well as for export and for ship fuel. QR used considerable quantities for their locomotive fleet once local mines opened. Until then their locomotives burnt wood. Where coal stages existed, coal was ordered to be delivered in hoppers but elsewhere [at many smaller locations] coal was supplied in open wagons to be shoveled by a labourer onto tenders.

LOCOMOTIVE COAL.

It will be seen from the list of mines, that nature did not provide a mine near every locomotive depot. As a result there were some long hauls, particularly in the Northern Division where all coal came by ship from Brisbane or Newcastle or from the only two mines at Collinsville or Mount Mulligan [Tablelands and Cairns?]. Among the long hauls were Collinsville to Mount Isa and Injune to Quilpie. Blair Athol coal [the best quality available] was hauled to Brisbane.

The transport of coal in the "steam era" was very complicated. As an example, in the Ipswich area, the Station Masters at Bundamba [for mines east of Ipswich] and Ipswich [for mines "beyond" Ipswich] arranged the wagon supply. Whilst volumes were fairly constant; in the short term there could be considerable changes in priorities due to the variances of shipping or other factors. Various coal purchasers required delivery in open wagons while only those who could unload the wagon through bottom doors could accept "V" type wagons. The latter included the wharves, QR loco depots with coal stages and Cavanagh Brothers at Roma Street. Most purchasers including QR out-depots required open wagons to enable unloading by shovel. [Pity a fettler at St Lawrence shoveling coal into the "tender" of a Garratt].

Mines required their daily allotment of wagons to be in their siding by a certain time to avoid double-handling. It was also necessary to clear wagons soon after loading was completed to make space for more empty wagons.

Wagons received from the several mines in an area, had to be sorted to make up trains for Wooloongabba, Roma Street, Newstead and elsewhere. Among the recipients were Princess Alexandra Hospital and the Petrie Paper Mill.

Export coal

Coal has been exported from the Ipswich area since 1882 That traffic had been carried in four-wheel wagons which suited the small scale of operations which at many mines involved horses [until the 2nd World War] hauling small bins. The wagons needed to be able to be moved [often by gravity] in the mine sidings while at the wharves the bodies were often lifted above a ship to discharge.

The Dakenba – Callide Coalfields branch was opened on 9 November 1953 specifically for coal haulage. Although it was the first branch line opened since 1932 it did not introduce any different train operations.

However the coal industry changed dramatically from about 1960 with the involvement of overseas companies who introduced open-cut mining, initially at Kianga/Moura. The maximum QR coal train until then had been 55 VJM [or similar] wagons = 570 tons hauled by steam locomotives. This was clearly inadequate for the volumes now to be handled [which had to pay for the mine infrastructure]. Accordingly QR negotiated contracts requiring the miner to lodge deposits "up front" for funds to pay for large wagons [and soon large numbers of them] and for diesel locomotives. The latter were initially English Electric locomotives built at Rocklea and equipped with their system of multiple unit control. The first larger wagons were VO class wagons made in Japan [and which carried the 50mph symbol which some believed was the Japanese flag, a sore point with those who fought in the Pacific War under twenty years earlier]. As this was happening, trains hauled by Garratt locomotives were clogging the Moura – Mount Morgan – Gladstone route. A C17 was on hand at Mount Morgan to bank trains to Moongan while the original low axleload Calliope River bridge required special working and limited wagon weights. [The rack line near Mount Morgan had been deviated in 1952]. Grade control devices were fitted to wagons to improve train handling. The writer saw a 1600 class hauling a coal train at Byelee about 1963 and listened to the Rockhampton South Train Control 'phone with stations advising the Controller of late running of the order of 800 minutes!! Double heading 1270/1300 class were used before March 1968 when the Moura Short Line was built for coal traffic although other services were timetabled.

In 1967, Utah Development Company commenced mining near Blackwater and built their line from Rangal to Utah Mine [now Kinrola] which opened in May 1968. [Steam locomotives ceased operating on QR in December 1969.] This operation introduced the VAO wagons and replaced the Moura coal trains on the Rockhampton – Gladstone section of the North Coast line. The 1270/1300 class locomotives were later joined by the [original] 2350 class locomotives and when locotrol was introduced, it saw 2450 class Clyde locomotives leading with the EE locomotives mid train.

At the same time, the Hay Point – Goonyella railway [201km] was built and 2100 class locomotives commenced hauling coal in mid 1971. This railway could have been standard gauge but did involve new standards. It was to a higher axleload standard with initially three 2100 class hauling the G wagons which required a tippler at the port. These trains had no Guards Van as the Commissioner started some industrial reform by requiring the Guard to ride on the second locomotive, to be involved in the Train Order working which was introduced. Later Guards were removed and locotrol working with a second consist of three locomotives was added with all worked from the lead locomotives via radio messages.

In the intervening 40 years, QR has become a major coal hauler [certainly among 1,067mm gauge railways]. The coal network is extensive with four "systems" [from the north], Newlands, Goonyella, Blackwater, Moura. Electric locomotives operate on the Goonyella and Blackwater systems, including those owned by a non-government operator.

Livestock

LIVESTOCK – A PB15 drifts slowly across Splitters Creek [Tirroan branch] 1963. This was a Saturday morning special. The photographer rode his bike to a nearby level crossing and then walked along the line. *[Image : Brian Webber]*

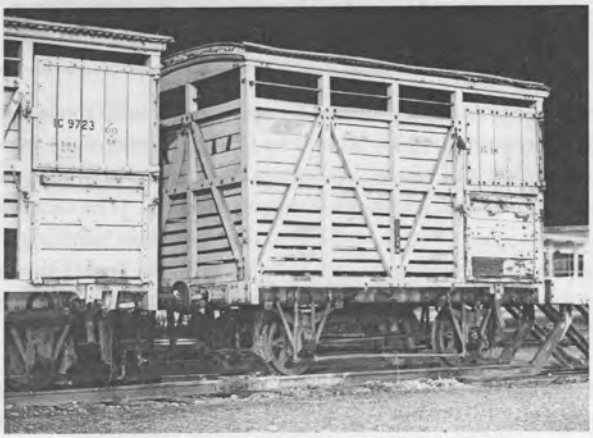
Livestock covers not just cattle but sheep, pigs and calves. The traffic includes stock from Sales to Abattoirs [probably the majority] but also stock from one grazier to another.

Cattle were hauled in wooden K wagons [8 wheels] and variations including KA with 80km/h bogies from 1965, and later KL wagons with steel bodies. A variant, KKB had a Guard's compartment at one end and a Drover's compartment at the other. Today's PCYK and KLEX classes were introduced in 1993 and 1996.

Sheep were hauled in two storey wooden [8 wheel] N wagons including NA with 80km/h bogies from 1973. There were a few wagons built on W wagon frames, including some Guards vans. In the 1880s there were some 40ft sheep wagons with couplers on the bogies.

Pigs and calves were usually conveyed in two storey wooden [4 wheel] L wagons and variations.

Cattle were hauled in very large numbers and often in special trains of the one type of wagon. If possible trains were timed to load at breakfast, if possible. This was after the cattle had an opportunity to have a drink and recover from the excitement of a saleyard or truck delivery. Cattle were inspected at regular opportunities and in earlier times the drover accompanying them would climb on top of the wagons if necessary to get any fallen stock to rise to their feet. Cattle were spelled on longer hauls. Spelling yards included Bororen.



IC wagons including IC14 at Mackay ca 1979
[Image : Brian Webber]

Principal unloading stations [meatworks] were : Cannon Hill, Murarrie, Holmview, Beaudesert, Dinmore, Gracemere Saleyards, Lakes Creek, Oonoonba, Oolbun, Cape River, Queerah. But there were also numerous individual consignments.

At Helidon, cattle had to be quarantined because of ticks.

Some attempt was made at times to use returning empty stock wagons to convey loads but this required the wagons to be cleaned and the loading, perhaps fuel drums, had to be consigned to an appropriate destination.

In a drought in the mid 1960s, sheep were hauled in H open wagons as they were the only wagons available.

Cane

Sugar cane is grown along much of the eastern seaboard with mills clustered around Bundaberg, Mackay, the Burdekin, Ingham and Tully – Mossman. Some of these Mills were not connected to QR but many were/are.

The harvesting season generally lasts from June to December and it is important that the cane, once cut be crushed before long.

Interesting QR cane hauls included :- [listed south to north]

To Gundiah [for Bauple Mill via their private line where hauled by their locomotive]; To Maryborough for Maryborough Mill [end of Wharf branch] from the Urangan branch; To Cordalba for Isis Mill [via a long Mill siding with their loco]; to Millaquin Mill; from Rosedale area; to Bingera Mill [long Mill siding with their locos] from Watawa [their siding with A10 locomotive] and beyond + Rosedale area; to Invicta Mill via Invicta Tramway which junctioned with QR at Avondale; to Plane Creek Mill from Carmila area [later chopped cane in cages on FJS wagons.]; to Racecourse Mill, from Mount Ossa area; to Pleystowe Mill from Owens Creek and Kungurri branches; to Marian Mill; to Cattle Creek Mill, Finch Hatton; to Farleigh Mill from Calen area; to Proserpine Mill from Wagoora area; to Inkerman Mill, Home Hill across the Burdekin bridge.

Sugar

To Urangan Bagged Trains ran onto Jetty

To Mackay Harbour Bagged, later bulk MTW/PCYM Plane Creek Mill, Sarina; Proserpine Mill; North Eton Mill [line closed 1971]; Cattle Creek Mill [line closed 1990]; Marian Mill [ended after 2008 season].

To Townsville Jetty Bagged, later bulk now VASO from Burdekin Mills

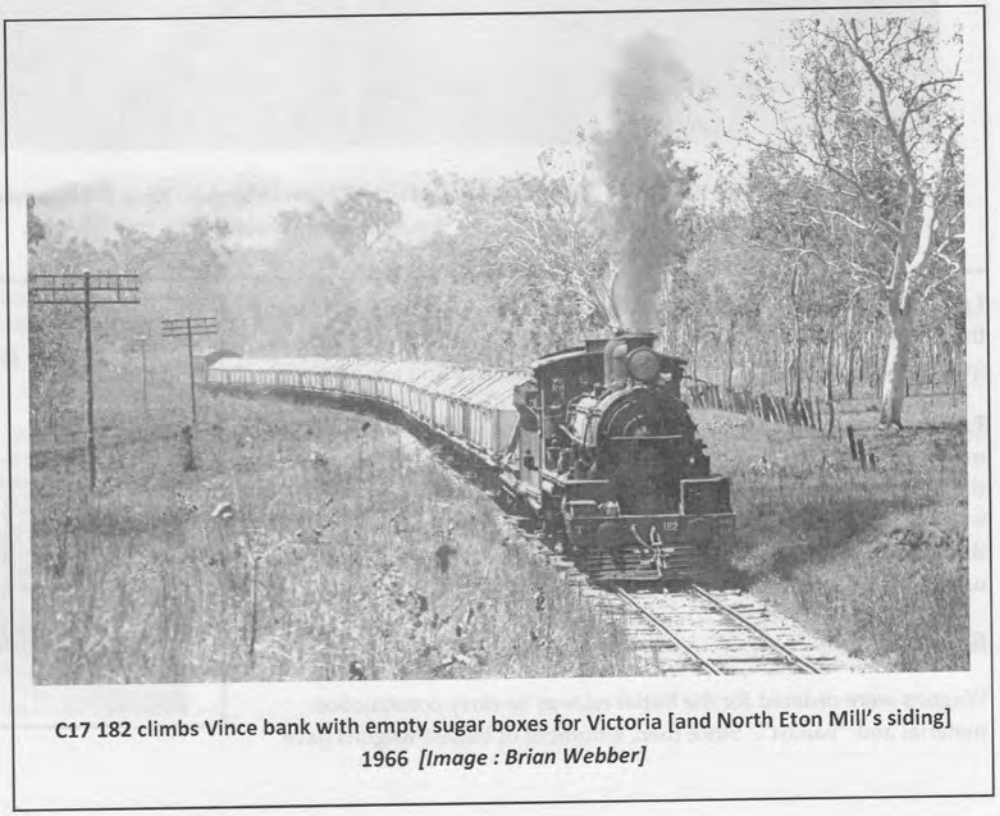
To Bangalow, Cairns [required road haul from QR to port] Bagged, later bulk MTW wagons from Mulgrave Mill, Gordonvale and Hambledon Mill, Edmonton

To Mourilyan Harbour [610mm gauge]

Sugar Juice

Sugar juice was hauled from Bundaberg and Childers area Mills until the 1950s.

The opening of a Crushing Mill at Arriga on the Atherton Tablelands for the 1998 season saw converted VO [now VMO] wagons used to haul the juice to Babinda for processing to sugar.



C17 182 climbs Vince bank with empty sugar boxes for Victoria [and North Eton Mill's siding] 1966 ***[Image : Brian Webber]***

Grain

Bagged grain was originally carried on MTW or in open wagons, then later in bulk in WH wagons, WHE wagons, QGX wagons, VGH wagons.

To Pinkenba [later Fisherman Islands], to Gladstone, to Mackay Harbour.

[now] from Darling Downs to Fisherman Islands, and Mount McLaren [Goonyella line] to Mackay Harbour.

1617 + 1615 shunting WHE grain wagons at Brookstead : Millmerran branch. Note the large silos, presumably on QR land.
[Image : Brian Webber]

Logs, **Sawn timber**, **Firewood** From the early years, timber in these three forms was a significant traffic. Firewood was hauled in large quantities to the several smelters around Cloncurry and to Chillagoe.

Fuel tanks These were introduced in line with the increase in motor vehicles over the years until the Oil Companies started using their own [or contracted] trucks. They were among the first steel wagons and also among the first privately owned wagons to run over the system. It may be that this was to "ensure" that the wagons were used only for the product of one company.

Ballast

Wagons were ordered for the initial railway to carry construction material and "ballast". Since then, a number of ballast wagons have

Wagon S 31106 at Workshops Museum, Ipswich
[Image : Brian Webber]

been in traffic to drop ballast and a plough wagon has usually been marshaled with them. Doubtless at times, Departmental wagons, probably were used for the conveyance of sleepers, locomotive ash and other material.

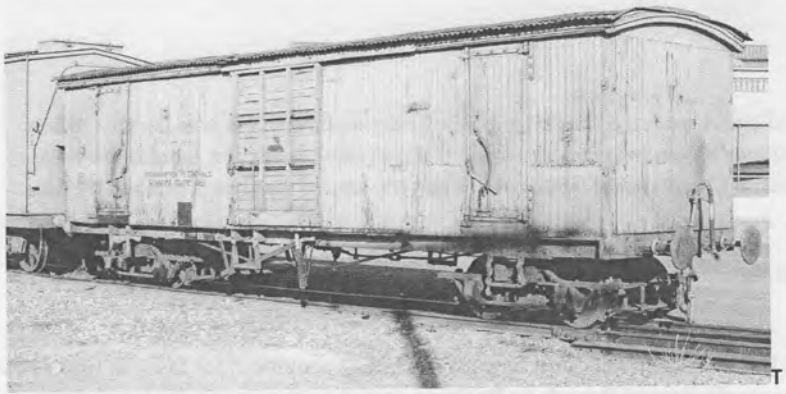
Containers

Shipping containers were introduced in various parts of the world in the mid 1950s but standardization of sizes did not happen until 1968. This saw ships especially equipped to carry them and they started reaching Queensland. Before long they were in use on domestic traffics and nowadays are seen on almost all general freight traffics. As well as providing a convenient way to tranship loading between modes, they have also reduced pilfering which was rife before their introduction. A disadvantage is that a railway has to take someone's word for what is in them although unless it is dangerous, that usually does not matter. The height of containers has increased from 8 feet to 10 feet necessitating the alteration of some bridges.

Cool Car, Refrigerated traffic

For decades QR delivered food stuffs and the whole array of retail products to towns all over the state. A fleet of insulated, and later, refrigerated vehicles were in use, some being hauled on passenger trains.

CMIS-T 30920 stenciled for ROCKHAMPTON – BLACKALL PERISHABLE TRAFFIC and a CMR in the north dock at Rockhampton, a convenient location for them to loaded from a road vehicle. Ca 1970. ***[Image : Brian Webber]***



his wooden CR wagon was a relic and poorly maintained by ca 1970 when photographed at Rockhampton. Note the two insulated compartments. It was stenciled ROCKHAMPTON TO EMERALD ROADSIDE TRAFFIC ONLY.

[Image : Brian Webber]

Other Aspects:

Shunting

Shunting was synonymous with goods traffic as long as QR was a common carrier. Potentially wagons could be loaded at every station and siding and be destined for every other station or siding. Loaded wagons were "accompanied" by waybills carried between Station Masters by Guards. The individual wagons carried labels to indicate origin station, destination station and weight or "to be weighed". Ideally trains arrived at significant stations with wagons marshaled in the correct [as indicated within timetables and books of instruction] order and similarly were dispatched in station order. At destination stations, wagons had to be "placed" to a suitable location for unloading. This may be a siding alongside a loading bank or road access or within a Goods Shed.

Weighing

QR charged for freight haulage by a series of "rates" which were "multiplied" by weight [mass] and distance. This required the weight of all loading to be determined by one of several methods.

1. The loading was one for which standard weights had been determined and advised to stations.

2. The originating station, being unable to establish the weight would apply a TO WEIGH label to the wagon. It was then up to Guards or subsequent stations to ensure that the wagon was passed over a weighbridge en-route to its destination.

Tarpaulins

Many loads in open wagons required to be covered by tarpaulins [including WH/WHE grain wagons].

There was always a problem with tarpaulins being stolen and not being returned to originating stations for subsequent loads. It may be that the weight of a tarped open wagon was significantly lighter than a covered wagon.

Cranes

Many stations had cranes to enable loads to be placed on or off wagons or road trucks.

Locomotives

Obviously trains could only run if locomotives and crews were available. At times and in certain depots, this was a recurring problem. This was particularly so about August each year when the livestock and sugar seasons coincided with the Brisbane Exhibition. Locomotives needed to be able to carry sufficient water for the anticipated journey and if water tanks were not available at appropriate distances along the way then a water truck was hauled, thus reducing the paying load that could be hauled. Sometimes a water truck was hauled to provide water for gang camps or stations and this wagon would usually be marshaled near the van so the Guard could empty water into a lineside tank.

Crane at Muckadilla

[Image : Brian Webber, 2000]

Depots/Engine shed

Steam locomotives were allocated to a particular depot and generally returned there after each round-trip. They required a washout about weekly. Diesel locomotives also were allocated to a Depot, with the majority to Mayne but, for instance, the 1150 class were allocated to Townsville and recently the 2600 class to Pring [near Bowen] and generally did not leave the Division.

Turning locomotives

Most QR steam locomotives hauled a tender and crews preferred to run with the boiler leading. This was because when running "tender first" [as QR called it] coal dust was blown into the cab, while if it was raining or cold, conditions were uncomfortable. Certain classes of locomotive had a 12 mph speed restriction when the tender was being pushed by the locomotive.

Locomotives were usually turned by running around a Fork line [or triangle, as some would say] though QR did have a number of turntables.

If necessary, locomotives could run tender first but it was allowed [and timetables usually provided] for them to turn at the first opportunity. Tank locomotives were not normally turned though on Brisbane northside they normally faced south.

The first Diesel locomotive classes [other than 1200 class] were not timetabled to be turned, but eventually this changed.

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This is a huge subject as there have been over 56,000 wagons. So the information below is only a brief summary of what there is and has been.

WAGON TYPES/CODES

Most information provided by Keith McDonald.

Until 1889/90 each of the isolated railways numbered each class of wagon from 1. With the imminent joining of the Southern & Western Railway and Maryborough Railway, there had to be one number series.

Initially wagons were known as "small" --- type; medium --- type or large --- type. The Great Northern Railway introduced a letter code system in the 1880s which ultimately became the state-wide system.

Initially and for much of the steam era, wagons were built to 5 ton or 8 ton [J types] Axle Load standard.

Classes: [not all variations shown]

	4 wheels	6 wheels	8 wheels	Subsequent
Covered	A	B	C	C, CB, CJ, CO
Louvre	AL		CLF	ALG, ALJ, CJF, BLC, CLC, CLO
Insulated	AB, ABG		CM	CMI [ice], CMIS [steel, ice], CMR [steel, refrigerated]
High sided open	D	E		DF
Open	F	G	H	FC, FG, FJ, FM, HC, HJ, HH, HO
Gondola				G – see below
Cattle/horses	I	J	K	IC, KKB, KA, KS, KSA, KL, KWA, KLEH, KOJX
Sheep/Pigs	L	M	N	LH, LJ, MN, N, NA, NWB
Tanks			O	Numerous codes reflecting ownership
Flats		O	P	PH, PJ
Logs	Q	R	S	QG, S [1], SJ, SR
Ballast	T		U	UR, VBO
Ballast ploughs				TE, TS [now – IBJXR bogie with remote control]
Hopper	V		V	4 wheel - V, VR, VJ, VJM Ballast : VTS, VTE 8 wheel – VH, VO, VAO [see below]
Water	WT		W	FGW, UW, WW, GWW [Garratts], WO
Rail wagons	W	X	Y	Departmental
Horsebox	Z		ZZ	In a separate number series until 1911.

[1] S wagons could be any of 19ft, 20ft, 26ft, 30ft or 32ft.

Codes: As the last letter, the usual meaning was:-

G	4 wheel Grovers [steering] bogie	
J	16/32 ton gross	8 Ton Axle load – by 1903 had 8" x 4" journals.
E	24/48 ton gross	12 TAL
O	63 ton gross	15.75 TAL

Speeds:

Wagons were originally built to a standard suitable for the line speeds and the speed locomotives could attain. However by the 1950s this standard was no longer appropriate as train speeds rose to 40mph, later by 1951 to 50 mph/80 km/h and by 1990 to the current freight maximum of 100km/h. Wagons allowed to run at 50mph had a red circle painted on each side while those allowed to run in passenger trains had a red diamond.

DF wagon 4680 at Mackay 1960s
[Image : Brian Webber]

Traffics:

Molasses H wagons were adapted to carry Tanks [probably supplied by the companies]. These operated for Millaquin, Beenleigh, Strathpine Distilleries and probably others. There were HM and LTM [conversions from redundant coupled locomotive tenders] while today there are MO and VMO wagons.

Grain Initially bagged and flat or open wagons [covered with tarps] were used. By 1955 WH [40 ton gross], then from 1959 WHE [48 ton gross] open wagons, then VGY prototype hopper in 1965, followed in July 1967 by the QGE aluminum wagons. They deteriorated over time and from 2001 they were replaced by VGH or VGK [ex coal wagons with Eco Fab covers].

Containers Initially QR added spigots [Twist Loks] to existing flat wagons. The first class built specifically for containers were the PYC class introduced in March 1974 [now seen mainly in Mackay Sugar traffic as PYCM, and on services west of Rosewood. Later there have been "skeletal" types with various codes depending on their design capacity of containers. There were 5 B class built at Ipswich and then BRM and BEZY and BCZY. Two FCZY four wheel wagons were also built and trialed but apparently the wheel flanges wore very quickly.

Coal/Nickel With the introduction of open-cut mining, initially at Kianga and Moura in 1964 it was necessary to move from 4 wheel [16 ton gross] hoppers to eight wheel [62 ton gross] wagons. The first class was the VO steel class [wagon VO 32902] imported from Japan which were used on services on the Moura Short Line opened in March 1968. For coal from near Blackwater [Utah Mine], the VAO [aluminum] class was introduced. Compared with the VO class, the VAOs had lower tare and greater carrying capacity within the gross limit. The VAO style of wagon has been replicated with many codes indicating the many improvements and increases in gross weight desired over the subsequent 40+ years. The latest and largest type today is the VCA class grossing 106 tonne, made with Stainless Steel.

When the Goonyella system opened in 1971, it introduced several new concepts, including removal of Guards Vans, Train Order working, 18 ton axle-load and, relevant here, wagons that required tippling [and not having bottom doors]. These were classed as G [for GONDOLA]. Subsequently there was a GH variant. When the Greenvale [nickel] line opened in December 1974 a different style of tippler wagon was introduced with external bracing and coded GN. There are also GO wagons of August 1975 originally obtained for Phosphate traffic on the GNR and recently GSZY wagons.

Minerals Mount Isa mine was among the first mining operation that required QR to carry large quantities of supplies and/or production in both directions over a long distance. Initially there were HVS wagons which had a central hopper but space at each end for the carrying on the return of ingots. Later after the "Rehabilitation", WHO open wagons [the first 62 ton gross type] were introduced carrying coal in 1962 from Collinsville west and ingots east. There was a PCC class which carried cement west and ingots on the return. Today there is a PCZYL type which carries coal in containers west and Lead Ingots on the return to Townsville.

Cane Until the end of the 1994 season, a number of sugar mills received some of their supply via QR. In the Bundaberg and Mackay districts, open wagons of F and H types were used while in the Northern Division, "skeletal" wagons with end chains and ratchets [coded FC and HC] were invariably used. The FC wagons were usually 18ft compared with the standard F wagon length of 14ft. The last sugar haul was between Carmila and Sarina for Plane Creek Mill which towards the end involved FJS wagons [with a "cage" which could be tipped at the mill] to hold the chopped cane.

Sugar QR had hauled bagged sugar to Mackay Harbour and Urangan Harbour, perhaps Townsville and Cairns?] for decades. When the industry changed to bulk handling, QR had to adapt and so Sugar Boxes [containers?] were placed on MTW wagons. From 1982 Burdekin sugar trains comprised VASO wagons and nowadays Mackay Harbour trains have larger Boxes on PYCM wagons. QR attempted after the 2008 season to discontinue Mackay area hauls but were only successful in ending traffic from Marian Mill depriving that branch of its only remaining trains. [When QR owned, the 2ft gauge Innisfail Tramway hauled both Cane to the Mill/s and sugar to Mourilyan Harbour].

[We should not forget the sugar mill tramways which haul amazing tonnages during the season. The two Ingham district mills haul sugar [boxes] to Lucinda].

Large/heavy loads In earlier times there were FWT four-wheel wagons to carry Army Tanks and HWT wagons rebuilt from redundant locomotive tenders for similar loads. There were a small number of drop centre wagons ; PJ, PJM [12 wheel], two PWZ [16 wheel]

Motorail Road vehicles have been carried since early times [eg buggies]. There were FM and FGM classes that had ends that could be lowered to cover the buffers so vehicles could be driven from/to end loading banks.[2] In the 1960s/70s there were a number of SM and SML wagons fitted with movable "chocks" to fit against car tyres but eventually QR realized that having 10 ton wagons carrying 1 ton cars was not very productive. When the "up-market" QUEENSLANDER was planned several DDM [double-deck motor] wagons were built in 1983 and DM wagons the following year. It seems the introduction of that service saw the attaching of these wagons to passenger services allowed to run at 100km/h maximum [from April 1986]. Whilst cairns and Roma Street had ramps, Townsville North Yard didn't so a DRPY with ramp was provided there. Recently there has been introduced two DSOP wagons which offer enclosed transit for motor cars, usually behind the SUNLANDER.

Notable classes:-

HV [recoded VH] wagons [8 wheel coal wagons] 20 of the steel version were obtained from American Car and Foundry in 1903 [Western Australia got 50]; 50 of a wooden version were built at Townsville shops between 1915 and 1923.

FJS/HJS wagons These steel open wagons were introduced in large numbers, many from the United Kingdom after the end of the 2nd World War. There were 4,500 FJS built and 1,000 HJS entering service from September 1950. Metro Cammell of the UK delivered wagons 26397 – 29396 between April 1953 and August the following year!

BLC wagons These were the first steel louvre wagons with 200 [Nos. 30942 – 31141] ordered from A.E.Goodwin, NSW. They were placed into service 3/56 – 3/58. These were the first class on QR painted Dark Admiralty Grey. They were withdrawn from 1979 but 120 have been re-used as other types.

ALY and ALY/T wagons These were 4 wheel steel louvre wagons built [ALY from 1964] at a time when road wagons on goods trains were becoming a thing of the past. It was astounding that the second group with automatic couplers were built in 191971. Many of these ended in Maintenance Depots as storage facilities [some complete with wheels, couplers and buffers].

VCA/VSA coal hoppers These are the most numerous hoppers currently with 1394 VCA pairs and 1233 VSA pairs. Each type comprises two "wagons" coupled by a bar sharing only one set of brake equipment applying on both "wagons". One vehicle is the "L" leading wagon and the other the "S" slave wagon.

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[2] Perhaps at some time in the past, this requirement saw the provision of end loading banks at many stations with the short dead-end siding extension to them?

Interesting classes:

CMI type A number of CMI insulated wagons had shelving/meat hooks installed to cater for various products. One was modified to carry Rabbit carcasses between 1933 and 1938 and re-classified CMR. That code was re-used later when Refrigeration was introduced.

EIC IC wagons with a "frame roof" for carrying elephants but restraining them and their trunks.

VSO wagon – 47553 Close coupled, multi hopper coal wagon built at Redbank and completed March 1999. It is a trial to see if the concept would allow more coal to be hauled in the current train length. Theoretical trains :

Was 39 VA?Q wagons	46.3 tonne per wagon	2,457 tonne per train
19 VSO wagons	143 tonne per set	3,591 tonne per train

TT, HD, SD wagons These were/are side dump wagons. The TT class was wooden and used during the standard gauge construction in the late 1920s. The SD wagons tend to operate as a train and often are used to widen cuttings and then dump the soil at a nearby embankment.

VMO wagons When a need arose [1994] for more Molasses wagons to replace the many HM wooden wagons, it was decided to rebuild some of the VO coal wagons by sealing the hopper area. They are currently used on Arriga [Tableland] sugar juice trains and on services between Ayr/Proserpine and the Darling Downs.

Special wagons QR used adapted wagons to haul some of their workshop or locomotive supplies. There were wagons for hauling locomotive sand [specially stenciled FJS, PS], wheels sets [FJW], locomotive water [FGW], welded rails [WR], Portable sawmills, Poison train vehicles, Coal hoppers converted for lime traffic. ??. There were also wagons modified to carry Explosives, Kerosene, Butter, pineapple crates, magnetite, etc. A profile wagon existed in the early 1910s probably to check clearances before the introduction of the "American" style Clerestory carriages.

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When the Great Northern Line was being extended from 1900 until the First World War period, some Cattle wagons had doors in the ends to enable rails to be carried.

QR has, it seems, always had a policy of "Waste not, Want not" so nothing that could be used to perform another task was ever scrapped [at least until the 1980s]. Many wagons surplus because a traffic was lost or because they were replaced by larger wagons found their way to other duties. Among them were many VJM [coal hoppers] which became VJMG [grain wagons] or VSE [Mineral Sands wagons]. With electrification, many wooden carriage frames were re-used for car carrying or for the Overhead Wiring train. Many coal wagons have moved down to lighter duties hauling grain to replace the aluminum VGE wagons which were deteriorating and could not be repaired.

The initial wagons were built by private enterprise in the United Kingdom and assembled in the state while many steel wagons were imported due to shortage of steel here. In the days of the isolated railways some were built locally [eg G & E Negus and Tooth and Coy at Maryborough]. Ipswich has always been the hub of QR workshops activity so it is not surprising that in earlier times businesses such as Hancocks, FG Springall, Fraser & Coy, GF Hack, E Harlow, all of Ipswich built wagons while today Bradken at Karrabin and QR's Redbank Workshops are supplying wagons to QR and interstate. Elsewhere in the state, B Babbage of South Brisbane in 1881, Griffiths [later Toowoomba Foundry] 1882, Perit & Filshie of Toowoomba, George Agnew of Nundah, J Patterson of Rockhampton and G Thomson & Co Townsville were among those who built wagons for QR. Some wagons were purchased second-hand from construction contractors or when private tramways were purchased [eg Cairns – Mulgrave Tramway].

Each railway had its own wagon repair facility with places like Emerald, Mackay, Maryborough, Hughenden and Roma doing minor repairs. It can be speculated that, in part, this was to provide gainful work for employees who, when required, attended derailments, breakdowns and operated cranes.

Ipswich Workshops, always the system's major workshop and the location of the senior workshop administrators, built 11,801 wagons but repaired and made parts for thousands more.

Important Wooden Wagons ::

C	eight wheel enclosed wagon :	weigh 8t 19c	carry 11t1c
F	four wheel open wagon :	weigh 3t 14c	carry 6t 6c
H	eight wheel open wagon :	weigh 7t 12c	carry 12t 8c
K	eight wheel cattle wagon :	weigh 9t 10c	carry 16 head
KKB	eight wheel cattle/guards wagon :	weigh 11t 10c	carry 10 head

Firsts:-

Four wheel wagons	all the initial wagons of 1865	
Six wheel wagons	from 1866	
Bogie wagons [3]	the MC class of 1881	
Hopper wagons	V wagons of 1882	
Vacuum brakes were provided on some wagons in the 1880s		
Steel frame wagons	iron frames from 1865	
Roller bearing class [4]	1959	WHE [grain] 31108
Aluminum wagons	1967	QGE [grain] 33780

1920s - Wirth's circus

Jetties/Wharves

Trains ran onto Jetties or wharves at all the major ports.

Buildings etc

Warwick with QGE wagons
[Image : Brian Webber]

Mitchell station and Goods Shed – 2000 *[Image : Brian Webber]*

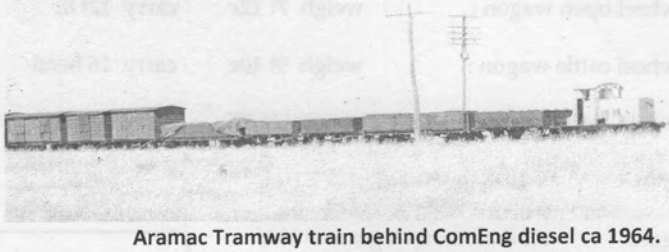
[3] Bogie Carriages were in use from the start of services in 1865
[4] Carriages had roller bearings from 1935

Tramways

1067mm/3ft 6in gauge

QR wagons ran on numerous tramways. These included mining lines and sugar mill lines but also the significant public lines [in the past] including Aramac, Beaudesert and the Cairns-Mulgrave Tramways.

The 2008 Convention handbook includes an article by David Mewes on the several tramways.



Aramac Tramway train behind ComEng diesel ca 1964.
[Image : Brian Webber]

Today QR freight services only run on private track at Burdekin area Sugar Mills.

762mm/2ft 6in gauge

Palmwoods - Buderim

610mm/2ft gauge

QR's Innisfail Tramway – sold 1975

Nambour - Mapleton

Douglas Shire Council: Mossman – Port Douglas

Uniform Gauge

1,435mm/ 4ft 8½ in gauge

QR has owned the line between Brisbane and the Border since it was opened in 1930. Until the purchase of Interail in 2002, QR did not own any standard gauge rolling stock. Since then using the name QRNational they have acquired and grown their business with operations between Brisbane and Perth.

Moving Goods & Freight, then & now

There are now two operators hauling freight; QR Freight and Pacific National Queensland. [The Corporate details of these identities isn't totally clear and may change if the "sale "of Government Assets proceeds].

QR FREIGHT

As far back as 1991, QR moved to segregate their coal/mineral, passenger and general freight into business units. But probably a decade before then they decided to allow their freight business to wither away unless the Government gave them specific contracts. It is difficult to remember any traffic gained by QR in recent times. One that comes to mind was the Owanyilla-Gladstone woodchip traffic but even it was hauled in [ex-]coal wagons.

Today, the only QR goods services, now called QR Freight, are two or three daily container trains along the North Coast Line, a weekly general freight to Longreach, haulage of a few wagons behind the WESTLANDER to Charleville [and perhaps, beyond], a molasses consist between the Burdekin and the Darling Downs, three grain consists and a similar number of livestock consists. There is a seasonal haul of Sugar Juice from Arriga to Babinda and of sugar from Proserpine and Sarina to Mackay Harbour and from several Burdekin Mills to Townsville. Pacific National Queensland also run two or three container trains between Moolabin and Mackay, Townsville or Cairns most days.

Since 1991, QR has been regularly re-organised with senior management people coming and going, a Board appointed and regularly changed with unclear responsibilities and a focus on the expansion of QR onto the standard gauge. The railway that probably does not provide general freight services between Brisbane and such towns as Mt Isa now operates container trains between Melbourne and Perth.

Within its home state, QR seems solely interested in hauling coal and on the Great Northern Line, minerals. In the year to 30 June 2009, QR Group Freight hauled 188.6 million tones of Bulk coal, 59.1 million of Freight and Minerals for a total of 247.7 million tonnes. They owned 8,529 coal wagons and 7,076 mineral and freight wagons at 30 June 2009. This doubtless includes activity interstate.

Merinda/Bowen yard shunt – containers loaded with coke from the Bowen Coke Works on their way to Townsville. One of QR's last "private siding" shunts. ***[Image : Brian Webber]***

PACIFIC NATIONAL QUEENSLAND

General Freight [Intermodal?]

Pacific National Queensland was formed to operate container trains between Brisbane and Cairns, taking over haulage from QR. They obtained 3 MKA locomotives to use until the arrival of 13 PN class locomotives, built new at Maryborough. The first operation of this organisation was the running of two of their MKA diesels from the Maryborough works of EDI [once Walkers] to Maryborough West on 22 June 2004. MKA1 towed MKA2 Maryborough West to Brisbane Sat 24 July 2004.

On 28/29 October 2004 they ran Karrabin [Bradken siding] to [old] Gympie with the first batch of their wagons for storage there until operations started. [The writer is unaware if QR were approached to sell their wagons which were soon to be surplus or for the use of a QR siding in Brisbane to store the new wagons].

Their wagons differed from any QR wagons in that they were articulated over 3 bodies [only 4 bogies]. There are 178 wagons in their fleet, intended to be used in eleven 15 wagon sets with 13 wagons spare. They can run at a maximum speed of 90 km/h. All wagons are three platform articulated vehicles, built by Bradken Rail at Karrabin. There are 3 classes:-

Class	Nos.	Length	Gross	Tare	[The wagons are maintained by Bradken Rail.]
RNAY	0001 - 0037	46.28m	160.0t	35.15t	carry 3 x 48ft containers
RNBY	0038 - 0074	43.85m	160.0t	33.55t	carry 48ft, 40ft, 48ft containers
RNCY	0075 - 0178	39.05m	160.0t	30.83t	carry 3 x 40ft containers

The maximum through load of PNQ trains on the North Coast Line is 1,600 tonnes and the maximum length is 644 metres. The colorful [and clean] PNQ locomotives would probably haul heavier and longer trains if crossing loops were extended.

Pacific National Queensland arrived in the north on 22 January 2005 when locomotive PN001 arrived at Partington depot light engine from the south. The first revenue "trial" train ran from Moolabin on 23 February 2005 to Woree [Cairns] behind PN003.

Coal traffic

Since then PN [perhaps a separate legal entity?] started coal train operations using both electric [7100 class] and diesel locomotives [8300 class] from ca May 2009.

PN have obtained about 500 [two-pack] NHAH wagons from Bradken at both Karrabin west of Ipswich and Braemar in New South Wales. They also imported two NHCH wagons from the USA for comparison.

It expects to have hauled 14 million tonnes at the end of its first year of operation.

PN train climbs Dakabin bank, north of Petrie, May 2010
[Image : Brian Webber]

Trivia

The Norwegian word for Goods is "Gods" so one sees "Gods Shed" on buildings along the track.

I watched a Fireman and Guard unload a refrigerator from a road wagon at Bymount on the Injune branch in 1966.

Acknowledgements:

I thank the Modeling the Railways of Queensland Convention 2010 Committee for giving me this opportunity to share information with others. I had not considered publishing an article on goods services until this invitation so I have had to give the subject much thought and have done considerable research which has increased my knowledge of a very important aspect of Railways, indeed their reason for being.

All my published material owes much to the research of the three Johns: John Armstrong, John Kerr, John Knowles. I also acknowledge the considerable volume of information published in many magazines by Rod Milne.

Keith McDonald has greatly assisted me as Rolling Stock is his particular interest.

Bibliography

The Day of the Goods train Ron Preston Eveleigh Press [An authoritative book on New South Wales Government Railways freight operations]

Various issues of SUNSHINE EXPRESS, RAILWAY DIGEST and MOTIVEpower.

Wikipedia.

I have not downloaded from these websites but they may be useful :-

http://www.4shared.com/file/51628771/eb49afe3/Rollingstock_Book_1982.html

http://www.4shared.com/file/51628062/6e14d99d/Rollingstock_Book_1991_A.html

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APPENDIX

Isolated railways:-

Ipswich	Grandchester	31 Jul 1865	33.5km
Rockhampton	Westwood	17 Sept 1867[5]	48.4km; [to Winton 29 Sept 1928]
Roma Street	Indooroopilly	14 Jun 1875	7.2km; [Double track] bridge opened 5 Jul 1876
Townsville	Reid River	20 Dec 1880	56.6.km; [to Winton 5 Jul 1899; Mt Isa 27 May 1929]
North Bundaberg	Moolboolaman	19 Jul 1881	65.2km; [to Mount Perry 20 May 1884]
Maryborough	Gympie	6 Aug 1881	98.7km
Mackay	Eton and Mirani	10 Aug 1885	48.0km; [to Netherdale 31 Jul 1911]
Cooktown	Palmer Road	30 Nov 1885	49.9km; [to Laura 8 Oct 1888]
Cairns	Redlynch	8 Oct 1887	11.9km; [to Ravenshoe 11 Dec 1916]
			[16 tunnels, while isolated]
North Rockhampton	Emu Park	22 Dec 1888	46.8km; [to Rockhampton 6 Nov 1899]
Normanton	Haydon	7 May 1889	61.7km; [to Croydon 20 Jul 1891] [steel sleepers]
Bowen	Guthalungra	1 May 1890	46.7km; [Bobawaba]
Indooroopilly and Antigua bridge washaways			1893 – temporary isolation
Innisfail	El Arish	18 Dec 1922	32.6km;
			Connected at Daradgee and Lilypond 10 Dec 1924

[5] Just 4 months after the S&W Railway opened to Toowoomba !!

Connection between isolated Railways

North Coast Line - join sections

Yandina	Cooroy	17 Jul 1891	S&W RLY to Maryborough Railway
	[to Kilkivan and Biggenden - enabled through transport between Charleville and Mount Perry]		
Bundaberg	North Bundaberg	15 Jun 1891	Maryborough Railway and Mt Perry Railway
Rosedale	Iveragh	1 Oct 1897	S&W Railway to Gladstone
Rockhampton	North Rockhampton	6 Nov 1899	Central Railway to Emu Park Railway
	Double track - included Fitzroy River bridge		
Gladstone	Rockhampton	18 Dec 1903	S&W RLY to Central Railway
St Lawrence	Carmila	24 Sept 1921	Central Line [and west to Quilpie] to Mackay Railway
Farleigh	Proserpine	1 Dec 1923	Central Railway to Great Northern Railway
Daradgee	Lilypond	10 Dec 1924	Great Northern Railway – Cairns Railway
			[completed the North Coast Line]

Alternate routes

QR has had 9? duplicated routes which allow/ed trains to run via alternate routes. These routes are:-

Original Line	Alternate Line
via Exhibition [opened 1882] [4.9 km] or	Central [opened 1890] [abt 4km]
Indooroopilly [11.2 km] [opened 1875] or	Yeerongpilly [11.9 km] [South Brisbane - Roma St was opened 18 November 1978]
Westbrook [closed 1 December 1959] or	Drayton [opened 1915] saved 15 km
Bundaberg or	Monto [completed 6 July 1931] [275.6 km]
St Lawrence or	Dysart [opened 22 November 1983]
St Lawrence or	Clermont [completed 29 July 1986]
Mackay or	Winton [completed 27 September 1928] Coast 436m/West 905m
NCL	Parana - Callemondah via bypass + [opened March 1968]
Via Mt Morgan [closed 1 August 1987]	Callemondah - Earlsfield/Moura [Short Line opened March 1968]

For a time there were four routes available between Rockhampton and Townsville!

Pre 1991 QR hauled anything. A 1720 class ascends the Dawes Range with a Gladstone – Monto goods. *[Image : Brian Webber]*

QR 1745 at Texas with the Guard discussing his strategy with the loco crew. *[Image : Brian Webber 3 November 1982]*

QR LTM wagons – converted from steam locomotive tenders *[Image : Brian Webber – "waste not, want not"]*

QR fuel train descends Little Liverpool Range on its way to Toowoomba and beyond. *[Image : Brian Webber]*