Moving People on Queensland's Tramways

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An excursion train on the Mapleton Tramway, Shay locomotive and passenger-guards van to the left, with others sitting on benches on bogie flat wagons. John Henworth Collection.

Most people at this Convention would be aware of Queensland Rail's 3' 6" (1067mm) gauge freight and passenger operations, and Queensland's 2' (610mm) gauge sugar mill lines for hauling sugar cane during the harvest season. We're not so familiar, however, with how people were moved on Queensland's Shire and other tram lines.

Mapleton Tramway 24' passenger-guards van from the train above. Passengers sit facing each other on longitudinal benches along each side. Drawn © by Jim Fainges, dimensions by K McDonald.

In practical terms, anything running on rails today in Queensland is a 'railway', regardless of the particular legislation which governs its operation. In past eras there was a separation between railways, governed by individual Railway Acts and the Commissioner for Railways, and 'trams' owned and operated by local authorities or registered companies and subject to the Tramway Acts (1882-1890).

The Tramways Acts, 1882-1890: "authorise the construction, maintenance and working of tramways on public streets and roads in such a manner as to not impede ordinary traffic" [outside the municipality of Brisbane]. Sugar mills; mining, timber and construction companies, etc.: and various local authorities all operated light, narrow gauge, railways under these acts. [Ozcase Queensland]

This clinic note looks at how passengers and workers were carried on some of these light railways, whether or not they were 'common carriers'. While not included here, modelling information will also be included in the face-to-face presentation.
Rockhampton's Municipal Tram System (3' 6" gauge)

Larger local authorities worldwide built and operated rail-based passenger transport systems. French-built Purrey steam trams ran in Rockhampton’s streets from 1909 until they were replaced by busses in 1939. Brisbane and other Australian cities, it should be noted, had already switched to electric trams when Rockhampton's trams began operating but the city at that time still lacked an adequate electric power infrastructure.

Purrey tram #5 and trailer bound for Dawson Road. Archer Park Rail Museum Collection.

The 3' 6" gauge Purrey steam trams were unique in Australia, with the Queensland Government Railway also using Purrey trams for services to nearby Parkhurst and Lakes Creek. One Purrey tram (the only preserved example in the world) has been restored and operates weekly at the Archer Park Rail Museum.

Aramac Tramway (3' 6" gauge) and Douglas Shire Tramway (2' gauge)

Aramac, located 41 miles (66.7km) north of Barcaldine, was established as the Central Railway line was built from Rockhampton to Longreach. Other towns bypassed by the Central Railway were connected by branch lines, but the tiny Aramac Shire population decided to go ahead with its own tramway after the Commissioner for Railways decided to proceed with a Longreach to Winton connection rather than through Barcaldine. The Shire financed a narrow gauge railway - the Aramac Tramway - joining the town with Barcaldine. Although well patronised by passengers and freight, throughput was seldom enough to generate good revenues. State assistance was needed after 1930 until the railway's closure in 1975. [queenslandplaces.com.au/aramac]

Passenger operations began in 1913 with a daily service (except Sunday) from Aramac to Barcaldine and return. This was not sustainable and by 1917 there were only three services per week. Passengers were accommodated in what appear from photos to be ex-QR wooden carriages.
In the mid-1950s a Fairmont gang car, normally used for maintenance, supplemented the train service to convey mail and stray passengers. Following an accident it was replaced late in 1957 by a tramway-owned Landrover. Train services were increased to five per week, when traffic warranted, in 1967 with the introduction of an ex-QR rail motor and trailers.

When it closed it was the last Shire-owned railway operating in Queensland and one of the few 3’ 6” gauge lines that hadn't been taken over by QR.

Other shire tramways also used self-propelled passenger vehicles, with or without trailers for carrying passengers and/or freight. The Douglas Shire Tramway (2' gauge), for example, operated such a rail bus service using the vehicle below.

Buderim-Palmwoods Tramway (2' 6" gauge)

The Queensland Government Railways' North Coast rail line reached Palmwoods in the Sunshine Coast hinterlands during 1891, providing a connection to markets in Brisbane and beyond. However access to Palmwoods for the fruit and vegetable growers of the area was difficult due to the terrain and poor roads. Buderim and district in the early 1900s was thriving with its farms producing plenty of high quality fruit and timber. However…
• Roads were poor and transport to Woombye – the main centre of that time – relied on horses, wagons and bullocks.

• Shipping services through rivers and creeks to Maroochy River ports, with sandbar problems, was a variable which threatened perishable produce.

• There was a great need for effective and reliable transport to the main Queensland Rail (QGR) train line and thus access to the Brisbane markets.

The alternative tramway routes considered from 1903 onwards were Buderim/Palmwoods or Buderim/Woombye. Buderim/Palmwoods was settled on by 1911 and the line was open and began operating on the 1st of December 1914, with the official opening later in 1915. The line was closed in 1935.

[BPHTI web site]

Photos from the era often show the Krauss locomotive (now cosmetically restored and soon to be on display locally) pulling four wheel low sided open freight wagons containing goods in crates and sacks, followed by the bogie coach and then the bogie brake van. Other photos show the line's Shay locomotive, parts of which were used in a cosmetic Shay restoration at the Illawarra Light Rail Museum, NSW.

The line is significant in that it was 2’ 6" (762mm) gauge, rather than the 2’ (610mm) gauge of the sugar mill tramways or the 3’ 6" (1067mm) of the QGR.

The 11.5 kilometre line was funded through a government grant to the Shire and privately constructed. Unlike many shire-owned tramlines, it ran on its own well-constructed permanent way, rather than simply along shire roads or on easements through farmer's fields.

The tram often ran two trips per day from Palmwoods to Buderim or at times the shorter Palmwoods to Forest Glen run as the freight demanded. A significant social role was also performed taking passengers to Palmwoods to join the train to Brisbane, and transporting excursion passengers to Buderim to stay in the Buderim guest houses or to travel down to the coast. One or two loads per day of up to 150 passengers were carried in the one passenger carriage and on fruit-box and plank seats on the flat-top trucks. The Palmwoods to Buderim trip took about one hour. [BPHTI]
Innisfail and Mourilyan Tramway (2' gauge)

Innisfail Tramway 2' gauge passenger trains ran to QR's 3' 6" gauge line prior to the completion of the North Coast line. S Hanlon photographer from John Dennis, *Off the Beaten Track*, NGDU #27.

The Innisfail and Mourilyan Tramway was the only Government owned and operated 2' gauge railway in the State.

Indeed, it was one of the comparatively few Australian railways of this gauge that operated as a common carrier, for in its time it conveyed thousands of passengers including shoppers to and from town, wharf labourers to work, even racegoers to and from the course, and picnickers on pleasure trips.

It started as a Shire undertaking called the Geraldton Tramway, changed ownership and acquired part of separate tram system [Mourilyan Harbour Tramway]. It altered over the years into the role of purely a sugar line. Eventually the Queensland Government disposed of it. [Armstrong & Verhoeven p10]

Innisfail Tramway 20' enclosed coach. Note the longitudinal seating benches along both sides. Given their size the Buderim carriages likely had similar seating. Drawn © by Jim Fainges.
Construction of the Geraldton Tramway began in 1899, reaching Nerada (17.25 miles) in 1903. In 1914 ownership passed to the Queensland Government's Commissioner for Railways. The tramway was now 16 miles (27 km) long, plus a 3 mile (4.8km) branch to Basilisk (South Johnston) and a 1 1/2 mile (2.4km) branch to Kalbo.

The nearby Mourilyan Harbour line was taken over by the Geraldton Tramway in 1915, after completion of a connecting link from Innisfail (renamed from Geraldton), and renamed the Innisfail and Mourilyan Tramway.

By mid-1916 eleven passenger services were operating each week to the harbour to connect with passenger steamers both north and south, including one on Sundays. There was also an evening entertainment service to South Johnston every second Saturday. By 1920 special passenger services to the wharf were also provided for day labourers.

However the working timetable of 27 June 1920 shows there were three passenger trams a week to and from what was called South Bank for transfer to the newly completed 3' 6" gauge system to Cairns. [Armstrong and Verhoeven]

In December 1924 the North Coast line was completed with connections north and south, ending the need for the passenger steamer connections.

By 1930 the tramway had essentially converted to a sugar tramway and by1934 passenger and mixed trains only ran as needed. In June 1977 the tramway was sold to the nearby sugar mills.

Mapleton Tramway (2' gauge)

The 5.5 mile (9km) Mapleton Tramway climbed the Blackhall Range and connected Nambour to Mapleton. It was built 1897-1904 by the Moreton Central Sugar Milling Company (Nambour) and extended 1914-15 by the Maroochy Shire Council after the Shire purchased the mill's track. The line closed in 1944 but the Shire's debt was not paid off until 1966.

Knowles indicates a tri-weekly passenger coach ran from Mapleton to Nambour during 1896-97 and the a goods carrying service was started in 1909, with passengers sometimes carried as well.

The company tramlines had probably been used for passenger and freight transport by farmers. In was common in the pre-motor age for people in the sugar districts to own trolleys, powered by horse or by man (in the latter case by pole or foot), for use on mill company tramlines to travel to the nearest town, and to convey their own goods….

The mill company had passenger rolling stock, used on services on its lines to the east of Nambour, services which connected with river craft to beach resorts. Photographs of passengers travelling on the Dulong line in company days shows them seated on cane trucks, however, usually on central longitudinal seats, with five passengers facing outwards to each side….

On its passenger tickets, it issued a 'Special Notice to Passengers', stating that it was not a common carrier, that it carried as it saw fit, solely by way of obligement, that passengers travelled at their own risk, that the company was not liable for any injury or loss, and that it made charges not by way of profit, but merely to assist in upkeep. [Knowles]

The tramway's larger coach (see page 1) was 24' 2" long with a standard guards compartment. Passengers sat on inward facing seats for both the long and short carriages, but more than half of the length of the smaller coach was completely open and used for freight.

The passenger accommodation extended from the guard's compartment back to a point about 6 inches forward of the centre of the vehicle. A transverse wall was placed here, with an open doorway in its centre to allow passengers access to their seats. There were two window openings on each side of the passenger compartment, each with a canvas roll-up weather screen. [Henworth]
Shorter guard's van (left and below) with passenger accommodation and space for cream cans and other freight (left). The guard sorted mail into pigeon holes on the front bulkhead, and while there are foot steps on each side for the guard, there are none for the passengers. The van has a hand brake for the bogie under the guard's compartment. [Henworth]

As well as the two 'coaches', the tramway's rolling stock included flat, livestock and small fruit wagons.

Mapleton Tramway 22' 10" passenger, cream and guards van. Scale 1/4"-1' (1:48). Drawn © by Jim Fainges, dimensions by K McDonald.

Community Recreation, Mill Tours and Tourism (2’ gauge)

Health and Safety, and public liability, requirements were looser last century and some sugar mills had passenger transport, perhaps only for a picnic excursion or latterly as part of a mill tour. The head image (page 1) shows one such excursion.

Operations at Mossman Mill provide perhaps the best known contemporary example. During the steam era the mill supplemented
its single coach with open wagons (4 wheel with 3 board sides), likely containing temporary benches set longitudinally down the centre. Equipment and operators evolved over the years but as Cairns grew tourist were transported to their hotels on specially built bogie carriages. Tourist operations in recent years were pulled with a restored steam locomotive.


**Sugar Mill Transport (2′ gauge)**

Every mill had some form of transport for their navvy crews, often based on ex-cane bin underframes. Some vehicles were self-propelled with commercial or mill-built mechanisms.

Some vehicles only transported people, others also carried materials and tools; and many provided a place for crews to get out of the tropical sun for ‘smoko’, meal breaks, etc.

‘Tin and timber’ tended to be the norm on earlier vehicles, with more modern ones built using domestic ‘colorbond’ or other shed materials. The various self-propelled vehicles all likely went into service some decades ago.
Plane Creek Mill, nd. While presumably self-propelled, it's unclear whether this crew van could also pull the navy wagons following. Greg Stephenson, photographer.


Kalamia Mill's 'Navvie Lander' (a pun on the QR 'Lander' passenger trains), 7 October 1997. They appear to be built on an extended length 4w cane bin chassis. Greg Stephenson, photographer.
Moreton Mill, Nambour, likely during a railfan excursion as people were also traveling on temporary seating on the flat wagon to the right, nd but likely c1985. This vehicle is described as the "long work car" in Jim Fainges' drawings. Greg Stephenson, photographer.


Acknowledgements and References

Archer Park Rail Museum:  
http://QldRailHeritage.com/archerpark


Bell, Peter and Kerr, John (2002), *The Aramac Tramway*, Melbourne: LRRSA.


Fainges, Jim. Unless indicated otherwise, the plans contained in this paper have not been reproduced at a modeling scale. However they are all available on-line. Use Fainges or the desired tramway as a search term in the image collection at http://QldRailHeritage.com/mrqc

While many of Jim's drawings have been created from photos and minimal dimensions but they still provide an invaluable resource for the shire/cane modeler.


Henworth, John. *Mapleton Tramway* web site:  
http://www.starfieldobservatory.com/MapletonTramway/TitleMT.htm


Queensland Places web site:  
http://www.queenslandplaces.com.au

Queensland’s Rail Heritage Image Collection: 
to view images in this document and more follow the image library link at http://QldRailHeritage.com/mrqc/photos.html

Railways and Tramways, Preliminary Note. 
Ozcase Queensland Historical Legal Collection, http://ozcase.library.qut.edu.au


Fairymead Mill navy bogie flat wagon with canvas covered enclosure with benches, tool box and space for additional tools and supplies, 1981. Greg Stephenson photographer.
While all required textures are included here, the small size of the model may require trimming or other adjustment of some components.

Pivot beams, solebars and timbers (above for underframe, steps, etc.) fold and glue around card to create structural timbers. Headstock should be created as part of end to ensure structural integrity. Extra headstock print covers exposed end of card, trim to fit.

The floor must fit inside headstock/walls with side walls extending roughly 1/3rd of solebar width below bottom of floor. Roof texture is oversize, trim to fit and colour underneath to avoid exposed white card.

Interior bracing may be required to keep walls straight or to support roof. Trim heights as needed and sides of template evenly to fit inside walls.

Decide on method of coupling before starting construction and adapt kit as needed. Small HOn30/OOS bogies should work satisfactorily, adjust location of pivot beam (bolster) if necessary. Fine pins, set in pre-drilled holes make queenposts with fishing line or brass wire for truss rods.

**Buderim Coach - HO Scale (1:87)**

Kit contains textures © Clever Models plc; CG Textures

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