Part 2: Modelling

Part 1 of this paper discussed some of the areas where narrow gauge passenger equipment was used. The challenge then becomes how to represent these in model form.

Queenslanders most frequently use HO/n2.5/HOn30 and On16.5/On30 scale/gauge combinations for modelling Queensland's 2' gauge tram/railways. Commercial models are not widely available, but with some modification/conversion reasonable approximations can be made using commercial kits typically sourced from the UK. However, truly accurate representations will require scratch building.

The following notes offer some suggestions to consider when representing narrower gauge passenger equipment.

Shire and Company Tramways

The peak period for passenger services would be from around 1900 to the late 1930s and probably no later than the Second World War. Most of these services operated as mixed trains with one or two passenger carriages. In periods of peak demand such as excursions and picnics, the normal passenger carriages would be supplemented with covered goods wagons -- typically open wagons. For example, the canvas seats from the Mossman picture theatre are known to have been used on at least one occasion in open wagons of the Douglas Shire Tramway.

The normal passenger carriages appear to fit into two broad categories -- the fully enclosed coach often with longitudinal seating and the open "toast rack" carriages with transverse seating. Some operators had both types. Equipment from German and French manufacturers is represented and it could be assumed that their equipment used their "standard" construction techniques. Local manufacturers are also represented and their equipment would be strongly influenced by current British and QGR practices.

All the passenger-carrying ventures set out with an air of over-enthusiastic optimism and it would be expected that the passenger rolling stock would have been finished to a high standard and typically had the tramway name embellished on the side. The reality of falling passenger revenue suggests that minimal maintenance would have resulted in the passenger stock being in poor condition by the end of its life. There also appears to be examples of passenger stock being converted to a dual passenger/goods role.

Excursions

Typically excursions used available goods rolling stock fitted with temporary seating and occasionally temporary canvas roofing. From a modelling perspective the tramways' typical rolling stock could be used in a similar manner, the big challenge being to suitably populate the train with figures from the correct period. Early excursions would have been very special events requiring the finest Sunday dresses and suits and hats for the men. Later excursions were perhaps a little less formal. The motive power should match the period of the excursionists.

Tourist trains were a feature of North Queensland of the 1980s and 1990s. Passenger rolling stock was purpose built typically with cross bench seating and enclosed to the waistline but open above with roll-down blinds. Typically they used steam locomotives that were painted to match the passenger carriages. It could be expected that children would predominate the passengers and, being in tourist areas, casual dress would be in order. For the modern era cane modeller they offer a "prototype" excuse for a steam locomotive or two.

Navvies

For mills that operated passenger services, it is possible that the passenger rolling stock finished its days in navvy service. They would tend to be neglected and in poor condition with minimal maintenance. Another option would be to convert existing goods stock to navvy use. Flat or open wagons used for bagged sugar transport and cane trucks are known to have been converted to navvies transport by the addition of seats and roofs. There are many interesting one-off prototype wagons however these will remain the province of the scratch builder.

Conclusion

This has been a very brief overview of the history and operation of passenger services on the narrower gauge railways of Queensland. We hope that we have demonstrated that there is a lot more out there...
than would interest modellers of sugar cane railways than just locos hauling long loads of cane trucks. There are also opportunities to build models of mining railways that also provided passenger and goods services. The richness of the scenery changes from the southern coastal regions to the tropical north and then out to the rugged mountainous region around Stannary Hills.

Acknowledgements

Whilst preparing this paper it has become apparent that passenger rolling stock on narrow gauge railways has received a low priority from railway historians and researchers. Most equipment was operated by private companies and Shire Councils and archival information is not readily available in the public domain. Much of the information contained in this paper has been drawn from sources such as accounts in local newspapers, information contained in local histories and photographic evidence. The best documented of these tramways is covered in the book "The Innisfail Tramway" by John Armstrong and Gerard Verhoeven, republished by the LRRSA in 2000. Drawings of some of the Innisfail Tramway equipment from the QGR era are available in the State Archives. Although specific to the Fijian sugar industry, the book "Cane Train" by P Dyer and P Hodge gives a good account of the type of equipment used by CSR, some of which was common to their Fijian and Australian Mills.

With a few exceptions, the vehicles no longer exist and are not available for measuring to produce drawings for modelling purposes. Jim Fainges has produced drawings of some equipment based on photographs using photogrammetry techniques and these provide a useful guide to the general appearance and proportions of the equipment. Copies of some are available from internet sources.

Our thanks must go to those people who have allowed us to use their photographs and drawings to illustrate this talk.

References


Acknowledgements

Adapted, with permission, from the 2004 Modelling the Railways of Queensland Convention notes. The original notes have been edited slightly, broken into two sections to facilitate downloading and suppl-mented with images drawn from the on-line Rail Heritage Image Collection.
Editor’s Note
The photos and drawings which follow show the variety of passenger equipment used on Queensland’s narrow gauge shire and cane tram/railways.

Open sides with open ends, closed ends, enclosed with and without doors/windows, flat or rounded ends, end platforms, combined with guard's vans and/or cream vans, longitudinal or lateral seating, and even a motorised rail bus. Finally we have an example of a navvy van, used for carrying navvies and their tools to work sites. And if we wished we could add special purpose units such as the occasional ambulance or inspection van.

While scratchbuilding or kitbashing is required for all these vehicles, they are relatively easy to construct using a bogie chassis or flat car as the starting point. The earliest vehicles will likely require soldered wire frames, but the later vehicles can be built with standard styrene or timber shapes. Ensure that you add enough weight for good operation and keep any side footboards inside your railway's loading gauge.

Finally, the CaneSIG web site has Jim Fainges' full plans (www.zelmeroz.com/canesig). While some of have been prepared from photographs, rather than field measurements, multiple views will allow you to build a representative vehicle to fit whatever chassis you have available.
Buderim Tramway – 20' 6" long, 6' 2" wide coach, presumably longitudinal seating. Jim Fainges drawing from photographs.

Mapleton Tramway 22' 10" long, 5' 6" wide, passenger and guards van with one lateral seat and a cream compartment. Jim Fainges drawing from K McDonald dimensions.

Mapleton Tramway 24' 2" long, 7' wide (over guard's enclosures) passenger and guards van, likely with longitudinal seating. Jim Fainges drawing from K McDonald dimensions.

Douglas Shire Tramway 20' 8" long, 6' 11" wide, coach and van with three compartments of lateral seating. Jim Fainges drawing from 1997 EM Loveday drawings.

Irvinebank Tramway 27' 9" long, 6' 5" wide, passenger coach. Jim Fainges drawing from EM Loveday drawings.
Douglas Shire Tramway rail bus built by PDST engineers. Jim Fainges provisional drawing from photographs.

Mossman Mill bogie passenger van, likely used with the Mill's tourist train service, 1994. Greg Stephenson photographer.

CSR Meat Wagon: used to transport stores to the cane cutters who worked in the cane fields manually cutting the sugar cane as whole sticks and loading them on open cane wagons. All provisions, primarily meat, were loaded in the wagon and delivered to various barracks in the district during the cutting season.

This van was donated to the IILRMS by CRS Victoria Mill, Ingham in 1973. It's shown here partially restored and needing a new roof in 2009.

Modelling Cane Railways #18: 4 Wheel Box Wagon, one of the CaneSIG Basic Handbook series, describes the construction of an On30 model of a similar wagon used by CSR's SPSM mill at Lautoka, Fiji.

Navigate to the Handbook page from www.zelmeroz.com/canesig

Happy modelling!