



Zones 1 and 2: Timekeepers' Building and Grounds

The building through which you enter The Workshops Rail Museum was originally the Timekeepers' Building. As you pass through this space, students will be able to see a number of objects and images on display to provide an insight into the nature of the site. Once inside the Museum grounds in the forecourt area, you might like to look at and talk about:

The artwork titled *Marker* by the artist Brad Nunn:

- It is located on the right side of the plaza and is recognisable by the stainless steel that was used to create it
- Use the opportunity to elaborate upon what the artwork conveys, as well as the significance of the men in the photo
- Relate the workers' time discs to a roll call if the students have experienced this
- Ask students to share their opinions on its significance to the Museum

Pompey:

- Students are able to climb inside Pompey's cabin – please ensure they do not climb on any other part of the train
- Ask students what they think it would have been like driving this train and how it would be different from driving trains today, e.g. where the driver would sit, the cabin, controls, etc
- Direct students to read the interp panel and discuss how Pompey was used in the past
- Ask students why they think Pompey is now a main object in the Museum



Zone 3: Moving Goods



Enjoy a close up look at a mixed goods train. In this area you might like to look at and talk about:

- The video
- Items in the cabinet, e.g. what are they, what were they used for, are they still in use today, if not, what has replaced them
- The outside of the train – wheels, track, colours – encourage younger children to make steam whistle noises and wheel turning actions, etc
- Inside the locomotive – the firebox where the coal is burned
- The crane used to lift objects into and out of wagons
- The wagon used for sheep or pigs – encourage younger children to join in with animal noises and actions
- The wagon with timber – what might be made with this timber?

- **The passenger carriage:**
 - Go into the guard's compartment and have a look around
 - Ask students if they can see where the letters went
 - Lift up the seats and check out the storage areas
 - There is a stretcher attached to the ceiling – discuss what might it have been used for
 - Ask the children to discover the small compartment where dogs were carried (it looks a bit like a cage at the very end of the wagon)
 - Listen to the soundscape (recording) and ask students to locate some of the objects mentioned
- On the other side of the platform are a petrol tanker, a coal hopper (with real coal) and a covered wagon:
 - Discuss with students why these items were transported by trains
 - Discuss what other things are transported by trains today
- Encourage students to listen to the soundscapes and describe what they are hearing – how does this contribute to the experience when looking at this train?

The Boiler Shop



The Workshops Rail Museum is housed within what was the Boiler Shop of the Ipswich Railway Workshops. Built in 1903, its purpose was to build and repair boilers for steam locomotives. It was expanded four times to cater for the increasing demands for boiler making and repairs. During its busiest period in the 1950s, up to 24 boilers could be made or repaired at any one time, with at least 300 boilermakers, plus assistants and apprentices employed here. It was a very noisy, busy and filthy workplace with a dirt floor to help absorb the noise and so that the boilers would not get damaged when rolled onto the floor. Pounding forging hammers and pneumatic machines created the noise.

This space now contains most of the Museum zones. Before exploring the rest of the zones, ask students what it would have been like to work here 100+ years ago. Ask questions relating to what they think it felt like, sounded like, and smelled like (empathic responses). Encourage students to look up to take in the size of the space.

Zone 4: Diesel Revolution



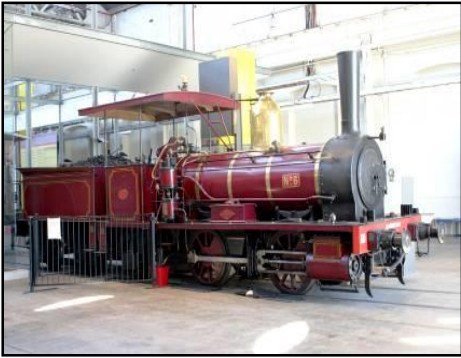
Large and powerful diesel electric locomotives have been the backbone of railways throughout the world. Look inside a diesel electric locomotive and discover how it works and how to drive it.

In this area you might like to:

- Look at and talk about the numbers on the locomotives – what are they for?
 - Change the destination of the train by turning the handle on the front right side of the blue diesel
 - Look at the parts inside the motor and the information on the interpretive panels
 - Go into the driver simulation area in the yellow diesel – let each child drive the train
- In the simulation area, look at the sink, hotplates, windscreen wipers, seats that rotate and the instruments: Ask students why these locos had sinks and hotplates in the cabins
 - Focus students' attention on the model train timeline display case in front of the diesel – discuss how trains have changed over times in appearance, purpose, means of locomotion, and also discuss what has stayed the same
 - Examine the pictures and slide show on the outside wall of the Roundhouse Shop – these are images of the old roundhouse at the Ipswich Railways Workshops: Discuss with students how the roundhouse worked; the types of jobs; and the different types of locos they can see

Zone 5: All Aboard

In this area you may like to look at and talk about:



- The red passenger carriage and guard's van – how are they different from modern trains
- Read the interp panel about the locomotive shown in the picture (currently it is being overhauled by Queensland Rail and can be seen on the Steam Shop tour) – discuss how old this loco is (constructed in 1865 and is still operational)
- Watch the video and describe how steam was used to power the locomotives
- Look at the model steam engine in the cabinet
- Look in through the back of the carriage



Boiler Shop Theatre:

Students are able to enter the theatre to watch a short film called *The Romance of Rail*. Before watching the film, teachers can direct students to listen for certain information that can be discussed later. Ideas for post-film discussion include:

- Why do they think the film is called *The Romance of Rail*?
- Discuss the different types of locomotives and rolling stock shown and their uses
- Outline the origins of rail from the early steam locomotives through to the high speed trains of the present day (e.g. Maglev trains)
- Listen to the narrative of a train journey and discuss what it was like, how long it took, what the carriages were like, and what students think it would have been like to experience a long steam train journey

Science Stations:

There are various science stations located in this area, as well as through other zones on the Museum. The hands-on nature of these stations allows students to hypothesise and experiment with various scientific concepts that are closely linked to the science of rail. Instructions on how to use the stations and explanations of the scientific phenomena being investigated are displayed with each station.

Zone 6: Model Railway

The Model Railway depicts scenes from Queensland's extensive rail network. It includes Brisbane suburban lines, inland routes to grain-growing districts and outback towns, the coastal route, lines to coal mines in central Queensland, and privately operated cane railways.



- Look for different things on the model, such as boats loading coal (to reinforce what they have seen in Moving Goods), tunnels, bridges, the soccer match and so on
- Ask students to find all the different types of animals they can see on the model, e.g. cattle, camels, horses, kangaroos, chickens, cats, dogs, pigs, crocodile, etc
- Point out that the images on the screens are cameras attached to the model trains to allow them a closer view of the models, and encourage them to push the different buttons gently to change the screens
- Ask the children about train rides they have been on in Queensland and their experiences
- Speak to the operator to find out more about the model

Zone 7: Ipswich Railway Workshops

This display focuses on the employees and their work at the Ipswich Railway Workshops.



- Assist the students to appreciate the large number of occupations at the Ipswich Railway Workshops
- Help them to locate other railway workshops in Queensland, as well as places where minor maintenance was carried out
- Observe the range of tradesmen's tools on display – What is still used today? What have the other tools been replaced with?
- Encourage students to listen to the soundscape at the kitchen table display and discuss what event the recording is about. What impact did this have on workers at the time?
- There are several builders' plates on display - What is a builder's plate? What information is on a builder's plate?
- Draw students' attention to the large images on the back wall of the different workshops of the past – discuss the trades represented; the clothing the workers are wearing; the tools and machinery. Compare and contrast between the past and the present
- Ask students to find out what a "foreigner" is and to find some examples of these
- There was a famous saying, "*If it could be made, it could be made at the Workshops*" – discuss with students what they think this means and why it was a sense of pride for the workers (i.e. how they identified with this as being a part of the Workshops social and cultural identity)

Zone 8: Rail in Queensland

Here visitors can see Queensland's railways in perspective – the history, how World Wars I and II affected operations, the way people used to travel, the story of Australia's different railway gauges, and railway safety systems. See how railway workers dressed and some of the equipment they used.



- Sit and view the video about rail gauges
- Examine and discuss the visual time line of the development of rail in Queensland in relation to other national and world events
- Talk about the different uniforms worn
- Point out and look inside the wooden suburban carriage – these were used on the Brisbane suburban system from 1912 into the 1980s
- Encourage students to imagine travelling in these carriages (no air conditioning, open windows, noisy, soot from the engine, etc) – how does this differ from travelling in modern passenger (electric) trains?

Zone 9: Platform 9



In this area you might like to look at and talk about:

- The items on the platform, such as the suitcase
- Who might have used this train?
- Information on the platform
- Inside ALF (the Refreshment Car) – talk about the leather seats, fans, food area, windows, shutters, etc
- Talk about the materials used – wood, metal, leather (no plastic or fibreglass – why?)
- Encourage students to listen to the soundscapes and describe what they are hearing – how does this contribute to the experience when looking at this exhibit?

Zone 10: Nippers Railway



The youngest person working in a railway track gang was often referred to as a 'Nipper'.

This zone is a dedicated children's play area. You may wish to allow younger children to explore and discover the zone for themselves, under your supervision.

Paper, coloured pens, costumes, books, etc are freely available for children who wish to be creative.

Zone 11: Might and Muscle

Railway construction is heavy work. On display are some of the tools and equipment used by track construction gangs in the past.



- Listen to the story told by Arthur Harris about his bondwood hut
- Talk to the children about the lifestyle of railway workers in times gone by
- Discuss the items inside the hut and ask children to talk about them – encourage emphatic responses about living and working on the railway lines
- Look at the track construction setup and the different types of tools
- Lead children to appreciate that track workers needed to be fit to use the heavy tools and lift rails and sleepers
- Compare the setup with the images on the wall showing modern railway construction
- Watch the video to compare and contrast track laying practices from the early 1900s to the mid-1900s to the present

Zone 12: One of a Kind

There are two items in this display – the vice-regal carriage (built 1903) and an old Panhard rail motor (built 1918).



- Discuss the age of each item and the condition each is in
- Where were they built?
- Look inside the vice-regal carriage – observe the furniture and fittings
- Compare the way people travelled in this carriage to the way ordinary passengers travelled
- Discuss what it would be like travelling in the rail motor in a variety of conditions – e.g. wet, windy, hot, cold, or a combination of these.
- Ask the children to describe a journey in the Panhard in the era that it was operating

Near this area is an exhibition, *Great Railway Journeys of Australia*. Encourage students to look at the different objects and images on display, such as maps, models, objects and images. Share ideas on what it would be like to have gone on such a journey.

There is an education kit available for *Great Railway Journeys of Australia* from the Museum's website at: <http://www.theworkshops.qm.qld.gov.au/Events+and+Exhibitions/Exhibitions/Permanent/Great+railway+journeys-of+Australia>

Zone 13: Rail Today

Although road and air transport have made severe inroads into rail transport, rail is making a comeback in a number of ways.



In this space, encourage students to:

- Look at the videos
- Discuss the advantages of rail transport in heavy haul – e.g. mining, containers
- Consider if the Maglev is a serious competitor for passenger traffic over air and road. Why or why not?
- Discuss the advantages and disadvantages of very high speed trains
- Drive the tilt train simulator
- Share their own experiences of high speed rail travel in other countries (if applicable)

Zone 14: Other Railways

Queensland's railways included not only the Queensland Rail network, but also a number of other systems. These included the huge sugar cane railway 610mm gauge system, timber tramways, underground mine systems, as well as railways carrying passengers and goods to small communities not served by the main network.



- Talk about the sugar cane locomotive, FLASH
- Discuss the manual cutting of sugar cane
- How was the cut sugar cane stacked on the wagons?
- How is cane cut today?
- How is sugar cane transported to sugar mills today?
- Describe the differences between the sugar cane trains used today and those used in the past

Gold Diesel:

- Ask students to find its name (on the small interp panel under the train) – Century
- Why was it called Century?

Zone 15: Boiler Shop Gallery



This zone features temporary exhibitions. You may wish to enter the gallery to discover what is currently on show.

Zone 16: Museum Collections and Storage and Heritage Rolling Stock

As you pass through this area, look through the windows to see the some of the Museum's objects and archival collection.



In this area you might like to look at and talk about:

- Many of these items have to be kept in controlled conditions – e.g. air conditioned storerooms with temperature and humidity set at varying levels according to the items stored – ask the children why they think this is done
- Why do Museums exist?
- Have they been to other Museums and seen different collections
- Read the interp banners and look at the images on *Tracking Queensland: Major Mileposts for Rail* – Discuss the different images and milestones for rail in Queensland over time.

8, 9, 10 Road: In this space you can see:

- The tracks in the ground
- How the Queensland Rail workers restore heritage locomotives, carriages and wagons
- How this very old section of the workshops has been modified for Museum use
- Look through the gates at the workmen – talk about the tools and machines they are using
- Look at the other carriages and rolling stock on the other side of the fence, which are currently being worked on by Queensland Rail – discuss how they are being restored, the materials used, and how working on these would differ from working on modern electric trains
- Read the information on the interp panels about the heritage rolling stock – compare and contrast the different locomotives in the in pictures



- Direct students to look inside the red camp wagon: Built in 1968, it was used by workmen as accommodation when the railway workers were working away from home. Inside students can see a fridge, cupboards, a stove – there would have been camp stretchers at each end. Two men would have lived in this particular wagon. Some camp wagons accommodated six men. Water was stored in large black tanks underneath the wagon.
- Inspect the DL1 diesel mechanical locomotive - what might it have been used for? How does it compare to the larger diesel electric locos near the front of the Museum, e.g. the blue, yellow and gold diesels?

Mephisto:

This World War I German tank, an A7V Sturmpanzerwagen, has been a part of the Queensland Museum's collection since 1919. Encourage students to read the interp banners and find our information about the following:

- Its military history
- How it has been moved over the years from France to its current place at The Workshops Rail Museum
- Discuss the measures that have been taken to help preserve this object
- Why is it in a carcoon (plastic bubble)?



Zone 17: Heritage Railway Workshops Tours



The assembly area for the Queensland Rail Workshops tours is adjacent to the brick building first used in January 1902. For over sixty years it was the foundry where a very large range of parts for locomotives, rolling stock and infrastructure was cast.

Casting was done in iron, brass and aluminium using wooden patterns made by highly skilled pattern makers.

In 1965, the foundry was moved to the Queensland Rail Redbank Workshops, and this building became the Bogie Shop until the late 1990s. It is now part of the Museum precinct, awaiting restoration prior to full time use.

There are two Heritage Railway Workshops Tours on offer, the Blacksmiths Shop tour and the Steam Shop tour, and they are fully guided by a Queensland Rail worker. Teachers need to book into one or both of these when booking an excursion.

Blacksmiths Shop Tour:

See the sparks fly, feel the heat of the furnaces and thud on massive one-tonne hammers in the Blacksmith Shop.

Steam Shop Tour:

Discover the ins and outs of real Steam Trains. Here you'll see real Queensland Rail workers busily maintaining and restoring the gems of the Queensland Rail heritage train fleet.

Other items to look at in this area include the Garret Steam Traction Engine and the Marshall Steam Roller. Students can look for information on how old these objects are and what their original uses were.



The Power House

Built in 1902, the Powerhouse provided electricity to the Workshops site and some parts of Ipswich. Ask students to find the whistle (above the large arched door on the left) and discuss how it was blown every day when the site was still operating to mark the start and finish of the workday.

Encourage students to read the interp panels outside the building and discuss:

- Why would the Workshops have needed its own source of electricity
- Who worked in the Powerhouse? Why were other workers not allowed in there?
- How it was used once it stopped being the main supplier of electricity to the site?



For more information about the exhibits at The Workshops Rail Museum, please go to the following web page:
<http://www.theworkshops.qm.qld.gov.au/Events+and+Exhibitions/Exhibition>