Are we there yet?

The history of transport
in north-west Tasmania

Resource book for teachers

BURNIE
REGIONAL
MUSEUM

Contents

1.
Introduction

The resources included in this box comprise objects and images relating to the history of transport in north-west Tasmania. Modes and methods of transport featured include: walking, horses, bullocks, bicycles, cars, trains and ships.

The history of transport is intimately linked to the routines of daily life, work, and play. Trading routes, pack tracks, road and rail lines have spread over time to form a network across the region.

The 'Are we there yet?' theme provides a wealth of opportunities to explore and compare how changing modes of transport have influenced daily life. The evolution of technology, and the reasons for this can also be investigated.

These resource materials are designed for Kinder, Years 1 – 6 as well as Year 9. Specific links between these resources and the Australian Curriculum have been identified in Section 3. The strongest links are with the History curriculum and these are highlighted alongside other curriculum areas e.g. English, science, mathematics, and geography.

In Section 4, there is for each object or photograph in the resource box:

- Brief background information
- Several discussion starters/questions/ activity ideas

This information is designed for teachers to read and present as appropriate/interpret to their students.

Section 5 contains worksheets based on the objects and photographs in the Transport Resource box.

Section 6 is a class discussion exploring historical questions and research, the analysis and use of sources and perspectives and interpretations.

Objects and displays within the Burnie Regional Museum which relate to the Transport theme are highlighted in Section 7.

Section 8 includes links to online resources which may be useful.

2.
Now that you have your resource box please...

- Check the contents against the inventory when you receive the box and again before you return it. If any objects are damaged or missing, please notify the Burnie Regional Museum immediately so that they can be repaired or replaced.
- Handle objects with care.
- When removing objects from the box, place them on clean areas clear of pencils, pens, paint, water and anything else that may contaminate them.
- Do not leave the objects unattended unless you are sure anyone handling them understands how to treat the material.
- Display the photographs using book/music stands or 'Blue-Tac'. Please don't use drawing pins or any other material to pierce the photographs.
- Return your box on time, as the next borrowers are also keen to take delivery of their education box.
- Please note: This box is for use in your classroom only and should not be passed on to other staff at your school. As the teacher responsible for this box you will be held accountable for any damage or loss of objects.

3.
Curriculum Links Matrix

The following links have been identified between the objects, photos and stories in the 'Are we there yet? The History of Transport in north-west Tasmania' Resource Box and the Australian Curriculum from Foundation, Year 1 to 6 as well as Year 9.

Year Level	Resource Box Grouped Activities	Curriculum Link	Related Elaborations
Foundation	Entire Box Activities (History)	**ACHHK004:** How the stories of families and the past can be communicated, for example through photographs, artefacts, books, oral histories, digital media and museums.	**2:** Sharing the story of an object from home, describing its importance to the family (for example photographs, old toys, statues, medals, artwork, jewellery) and creating a class museum.
	Maps (Geography)	**ACHASSK014:** The representation of the location of places and their features on simple maps and models. **ACHASSI008:** Draw conclusions based on observations displayed in maps.	**1:** Creating story maps or models to represent the location of the places and features they pass on their way to school. **2:** Identifying ways ATSI peoples represent the location of Country/Place
Year 1	Entire Box Activities (History)	**ACHHK030:** Differences and similarities between students' daily lives and life during their parents' and grandparents' childhoods, including family traditions, leisure time and communications.	**1:** Examining and commenting on photographs and oral histories (for example talking to parents, grandparents and other elders) to find out how daily lives have changed.
Year 2	Entire Box Activities (History)	**ACHHK046:** The impact of changing technology on people's lives (at home and in the ways they worked, travelled, communicated, and played in the past).	**1:** Examining changes in technology over several generations by comparing past and present objects and photographs, and discussing how these changes have shaped people's lives (e.g. the introduction of television, transistors, FM radio and digital technologies).
	Photographs and information about Captain William Jones or the Burnie Wharves (History)	**ACHASSK044:** The history of a significant person, building or site in the local community and what it reveals in the past.	**3:** investigating the history of a chosen person, building, site or landmark in the local community using sources and relating a story which these reveal about the past.
	Entire Box Activities (Geography)	**ACHASSK051:** The influence of purpose, distance and accessibility on the frequency with which people visit places.	**3:** Investigating how people's connections with places are affected by transport and telecommunications technologies.

Year Level	Resource Box Grouped Activities	Curriculum Link	Related Elaborations
Year 3	Entire Box Activities (History)	**ACHASSK063:** How the community has changed and remained the same over time and the role that people of diverse backgrounds have played in the development and character of the local community.	**1:** Exploring photographs, newspapers, oral histories, diaries and letters to investigate how an aspect of life in the local community (for example, transport, entertainment, the natural and built environment, technology) has changed over time.
Year 4	Seasonal movements of Aboriginal people in north-west Tasmania map (History)	**ACHASSK083:** The diversity of Australia's first peoples and the long and continuous connection of Aboriginal and Torres Strait Islander Peoples to Country/Place (land, sea, waterways and skies).	**4:** Investigating pre-contact ways of life of the Aboriginal and/or Torres Strait Islander Peoples; their knowledge of their environment including land management practices; and their fundamental beliefs about the interconnectedness of Country/ Place, People, Culture and Identity.
Year 5	Entire Box Activities (History)	**ACHASSK107:** The nature of convict or colonial presence, including the factors that influenced patterns of development, aspects of the daily life of the inhabitants (including Aboriginal Peoples and Torres Strait Islander Peoples) and how the environment changed.	**2:** Mapping local, regional and state/ territory rural and urban settlement patterns in the 1800s, and noting factors such as geographical features, climate, water resources, the discovery of gold, transport and access to port facilities that shaped these patterns.
	Photographs and information about Captain William Jones (History)	**ACHASSK110**: The role that a significant individual or group played in shaping a colony.	**1:** investigating the contribution or significance of an individual or group to the shaping of a colony in the 1800s.
Year 6	Federation Street and Entire Box Activities (History)	**ACHASSK134:** Key figures, events and ideas that led to Australia's Federation and Constitution.	Context for events during Federation.
Year 9	Entire Box (History)	**ACDSEH090:** Living and working conditions in Australia around the turn of the twentieth century (that is 1900).	**1:** identifying the main features of housing, sanitation, transport, education and industry that influenced living and working conditions in Australia.

4.
What is in the box?

Laminated map showing seasonal movements of Aboriginal people in north-west Tasmania.

Prior to European settlement Aboriginal Tasmanians in the north-west of the state are thought to have belonged to one of eight bands. Members of these bands moved through the region along well defined 'roads' in the landscape according to the seasons, to seek food and other resources and for trade and ceremonial business.

On their seasonal journeys the north-west Tasmanians crossed many rivers and even travelled to islands in Bass Strait in paperbark canoes. More information about Tasmanian bark canoes can be found at:

shapingtasmania.tmag.tas.gov.au/object.aspx?ID=35

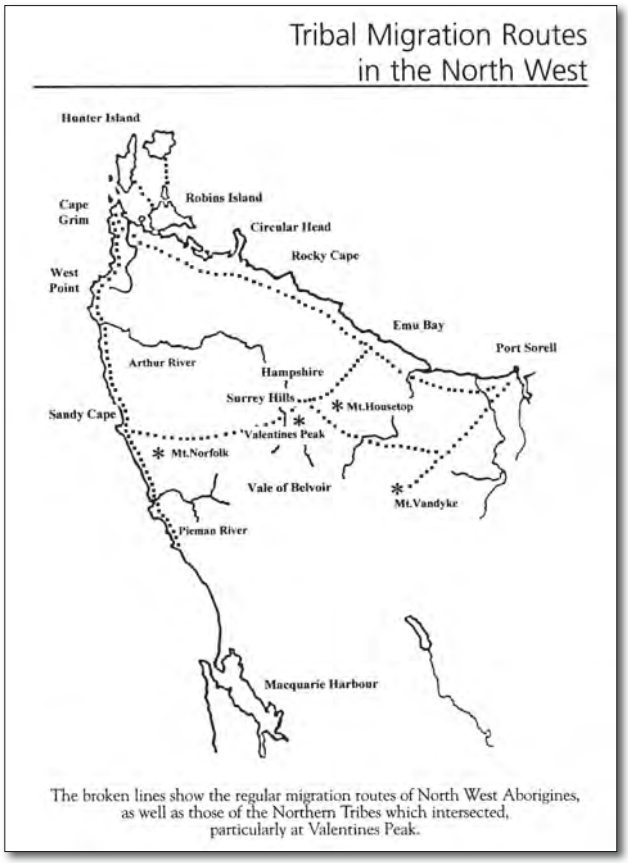


Image source – McFarlane, I. (2008) Beyond Awakening – The Aboriginal Tribes of North West Tasmania: A History. Fullers Bookshop, Launceston, p.226.

- Research some of the food resources that Aboriginal Tasmanians have used and still use in north-west Tasmania.
- Using the information in the web link above and watching www.youtube.com/watch?v=7Fd6-yhy05E try making a small-scale model of a bark canoe and determine how the design works.
- The Hunting Co-operative Game (for outside on school ovals): Divide students up into three groups; hunters (1/4 of group), kangaroos, and emus (the rest of group split in half). Designate safe places in the oval landscape where animals can retreat to safety.

  Hunters are given knowledge of the habitat, grazing patterns, and numbers of either kangaroos or emus. Only hunters with kangaroo knowledge can hunt kangaroos, and the same with emus.

  All hunters work as a team to hunt the animals by passing on knowledge to appropriate fellow hunters and co-operating in capture (by tagging them, either by touch or throwing soft balls).

  A stopwatch and a whistle are used to put time limits on how long each hunter can run in 20-30 second bursts (to represent an hour's work).

  The aim of the game is to successfully hunt enough kangaroo and emu to feed all the people back at camp within a four "day's" period.

  Kangaroos and emus can move freely but must freeze when the whistle blows.

AC Link
(Foundation Geography A CHASSK014 Elab 2);
(Year 4 History ACHASSK083 Elab 4);
(Year 5 History ACHASSK107 Elab 2)

Horse shoes x 3

Making horse shoes is not as simple as it might seem. Like human feet, each horse's hoof is an individual size and therefore has a different requirement.

If the horse is to perform well the shoes have to be made to fit comfortably and to compensate for any disabilities the horse may have. A horse's front hoof is a different shape to its back hoof and so there are front and back shoes.

- How many people in your class have ridden a horse? 100 years ago do you think there would have been more or less people in your class who would have ridden a horse? Why?
- Does anyone in your class own a horse? Have they watched a horse being shod? Can they describe what they saw?
- How are horse shoes attached to the horses hoof? Can you see where these shoes have been attached?

Horse shoes are nailed onto the bottom of the horse's hoof, which is similar to a much larger version of a human toenail. It doesn't hurt the horse; just as it doesn't hurt us to cut our toenails. Notice the holes in the horse shoe for the nails to be hammered through.

- Do you know what a person who makes horse shoes is called? Blacksmiths work mainly with hot metal, forging it into shape using tools to hammer, bend and cut it. Farriers were horse hoof specialists and blacksmiths who specifically made horse shoes.
- Write a short story about one of the horses who may have worn one of these shoes – where did the horse live? Was it a working horse or maybe a race horse? What sort of work did it do? Who was its owner? Were they kind or cruel? What was the horse doing when it lost this shoe?

Carbide bicycle lamp

Bicycles became very popular in the late 19th century. Along with the horse and carriage, bicycles were a principal means of personal transportation prior to the automobile.

Calcium carbide powder was placed in the bottom compartment of the lamp and water dripping from a tank at the top produced a flammable acetylene gas when coming into contact with the carbide.

The jet in the lamp was then lit and the brightness of the lamp was regulated by the flow of water. The same type of lamp was also used as lighthouse beacons, and as headlights on motor-cars.

Portable carbide lamps, worn on the hat or carried by hand, were used by miners in the early twentieth century.

- What are the differences between this light and a bicycle light from today? Why have they changed?
- How are bicycle lights powered today?

  Batteries, generators that used the motion of the wheel turning to power them

- Why do bikes need lights?
- Ask your parents/grandparents/older friends about how and when they used bicycles and what sort of lights they had for them.
- Draw the carbide lamp.

Car horn

This car horn is representative of the technologies used in the early 20th century to warn pedestrians about the presence of vehicles.

In 1865 England's 'Red Flag Act' attempted to protect pedestrians from self-propelled vehicles such as 'steam buses' by ensuring all motorised vehicles were preceded by a man on foot carrying a red flag and blowing a horn! Of course, it was quickly realised that a horn in the automobile itself, operated by the driver, was much more efficient!

By 1900 motorists had a choice of signalling devices which included bells, whistles and bulb horns. This one is an example of a hand squeezed bulb horn.

Pedestrians and owners of horse drawn vehicles complained that bells and whistles were too easily confused with trolley cars, bicycles or even bakery wagons. As a result the horn became the most popular signalling device for motorised vehicles.

- Can you spot the horn on the front motor coach in the photo titled 'Early motor coaches in Launceston, c. 1910'?
- Photocopy the photograph and using balloons above the heads the people write in what they are thinking/saying.
- Why does a horn make a noise when you squeeze the rubber bulb?

Explanation: The horn consists of a flaring metal trumpet called a 'bell' attached to a small air chamber.

There is a metal reed or diaphragm in the throat of the bell. Air is compressed by squeezing the rubber bulb and the air flows over the reed or diaphragm, causing it to vibrate.

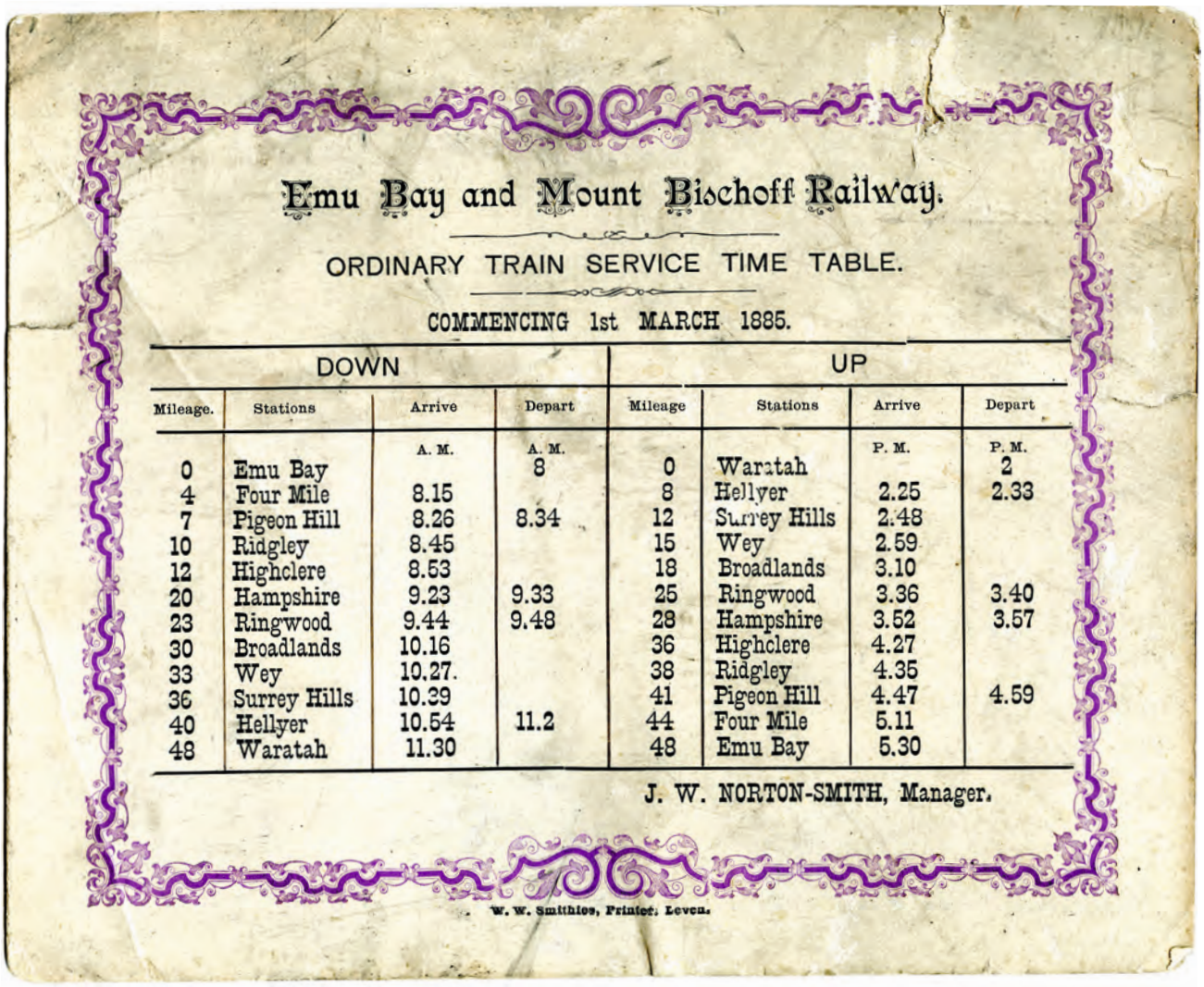
These vibrations create sound waves and the metal trumpet improves the transfer of sound energy from the diaphragm to the open air, making the sound louder.

Railway timetable (laminated)

This is a copy of the 1885 Emu Bay and Mount Bischoff Railway train timetable. Trains on the railway carried tin ore from the mines at Mount Bischoff near Waratah to the port at Emu Bay (now known as Burnie). Prior to the railway, packhorse teams and bullocks pulling wagons were used to carry the tin ore. The railway was completed in 1884 and the volume of ore being carried to Burnie's port soon doubled.

The photos titled 'Horse drawn wagons crossing the Wey River bridge (c. 1878)' and 'Emu Bay and sailing ships (1883)' and the associated information provide some history about this train line

- The locomotives also carried passengers. How long did a trip from Emu Bay to Ridgley take?
- Using a map, work out how many kilometres it is from Burnie to Ridgley. Estimate how long it would take you to drive this distance.
- On the trip from Emu Bay to Waratah at which station did the train stop the longest?
- Which two stations are separated by the greatest distance?
- Look at the photo of Waratah Station. What are the differences compared with the station in Burnie? What do you think the metal grate on the front of the train is for?



Emu Bay and Mount Bischoff Railway.

ORDINARY TRAIN SERVICE TIME TABLE.

COMMENCING 1st MARCH 1885.

DOWN				UP			
Mileage.	Stations	Arrive	Depart	Mileage	Stations	Arrive	Depart
		A. M.	A. M.			P. M.	P. M.
0	Emu Bay		8	0	Waratah		2
4	Four Mile	8.15		8	Hellyer	2.25	2.33
7	Pigeon Hill	8.26	8.34	12	Surrey Hills	2.48	
10	Ridgley	8.45		15	Wey	2.59	
12	Highclere	8.53		18	Broadlands	3.10	
20	Hampshire	9.23	9.33	25	Ringwood	3.36	3.40
23	Ringwood	9.44	9.48	28	Hampshire	3.52	3.57
30	Broadlands	10.16		36	Highclere	4.27	
33	Wey	10.27.		38	Ridgley	4.35	
36	Surrey Hills	10.39		41	Pigeon Hill	4.47	4.59
40	Hellyer	10.54	11.2	44	Four Mile	5.11	
48	Waratah	11.30		48	Emu Bay	5.30	

J. W. NORTON-SMITH, Manager.

W. W. Smithies, Printer, Leven.

Mystery object

This object is something to do with transport.

- What do you think this object is? Why do you think so?
- Imagine you work in a museum and you have found this object in the collection. It has no information with it, how would you find out what it is?

This is a horse collar

The horse collar is designed to distribute weight and protect the horse's neck when pulling heavy loads. The farm implement (or whatever load the horse was pulling) was attached to the metal hames (a pair of curved metal pieces lying on the horse collar) by a harness or chains.

The photo 'Working Horses c. 1955' shows two horses wearing collars like this one.

Horses used to be the main source of power for transporting people and materials and for pulling machinery. Leather was the best material for making harnesses, collars, saddles and bridles because it was strong and durable yet soft on the horse's skin.

Until about 1930 most communities had a saddler and harness maker in their midst. This trade can be likened to that of a mechanic today. To break a strap or a buckle on the harness of a horse was as much of an emergency as a vehicle breakdown today.

- Imagine you are a saddler and harness maker in the 1920s. Write about a typical day at work. What sorts of things did you have to fix? Were there any emergency repairs required? Were your customers grateful or grumpy?
- Pretend you are preparing a horse for a day of work. Act out how you would put a collar, bridle and saddle on the horse. Remember to reassure and talk to your horse. Perhaps you talk to the horse about what the day's work will entail?

Photographs

This collection of photographs relate to the history of transport in north-west Tasmania.

For each photo in the collection you can use the Visible Thinking approach (see link in Section 8. Useful links/resources) by asking: What is going on? What makes you say that?

This will help students describe what they see/know and encourage them to build explanations which in turn promotes evidence based reasoning.

First car in Burnie (1910)

The early years of the 1900s saw the slow change from horse-driven vehicles to motorised transport in Tasmania. The car in the photograph belonged to Cyril Davey.

- Compare this to a car of today eg lights, protection for the driver and passenger, types of wheels etc. Why have these changes occurred?
- Ask your grandparents if they have photographs/memories of travelling in old cars and what they were like.
- Ask students to choose either a horse driven vehicle or a car and explain in writing why they think one would be better than the other. Older students may write it in the form of a persuasive text. *eg. I strongly believe horses and carts are better than cars because...*

Captain Jones and family (1890s)

Captain William Jones came to Australia in 1861 and settled in Burnie.

He was very active in trade and established factories for making bricks, timber, cordials and butter. He later became Harbour Master of Burnie and Chairman of the Town Board.

The photograph shows Captain Jones and his family in front of their home 'Menai'. The cast ironwork on the house and decorative gateposts indicate that this house belongs to a well to do member of society.

- Look at a map of the streets of Burnie and see if you can work out where in the town this house was located. (Hint: Look for the street that has the same name as the house)
- Make up a story based on this photo and act it out.
- Working in pairs, each student draws a small element from within this photo eg a window, part of a gate post etc and then each student has to guess what the other person has drawn.

AC Link
(Year 2 History ACHASSK044 Elab 3);
(Year 5 History ACHASSK110 Elab 1)

Potato wagon at Burnie wharves (c. 1903)

Burnie exported more potatoes to the mainland than any other Tasmanian port.

Sacks of potatoes were taken to the wharves by horse and bullock teams where most of the loading of heavy bags (average weight approx. 76 kg) was done by hand.

More information about bullock teams can be found at:

www.powerhousemuseum.com/collection/database/?irn=213440

- 'Compare these three photos of Burnie's wharf: Emu Bay and sailing ships (1883), Potato wagon at Burnie wharves (c. 1903) and Burnie wharf area today (2015). What are some of the differences between the photos? Are there any things that are the same?
- How many people would it take from your class to weigh the same as a 76kg bag potatoes? Imagine trying to lift this weight!
- Using the information contained in the link above, write a list of three reasons why bullock teams are better than horses for heavy transport.

Burnie wharf area today

Fenton's log tractor, Circular Head (1920)

The fitting of railway type wheels to machines such as tractors made it possible to replace horse and bullock teams for the transport of logs from the bush to sawmill.

This made transporting the logs quicker but it was still hard and dangerous work. Logs could easily slip or roll and crush a person. The brakes on the modified tractors also needed to be very good – imagine trying to stop suddenly when towing a log like the one in this photo!

Building the tram tracks through steep county and over creeks and rivers required inventive engineering as did the modification of farm tractors to turn them into vehicles suitable to run on rails.

At the mill the logs were sawn into planks. The stacks of timber on the left of this photo have been arranged for seasoning (drying) before being sold for using to build houses and other structures.

- Imagine you are the person driving the tractor. Write a diary entry for a day e.g. write about what tasks you were required to do, what time you started and finished work, how you travelled between home and work or did you live on site, what you ate at your meal breaks etc
- Some of the timber stacked up would have been used to build houses. Do you live in a house built from timber, bricks or something else? When was your house built? Who in your class who lives in the oldest house? Conduct a survey and make a graph of the results showing what types of houses the people in your class live in. What other materials do people build houses from here and in other countries?

Burnie butchery (1907)

Two methods of meat delivery are depicted in the photograph. Meat was either placed in a box-like safe to protect it against dust and flies and delivered in a horse-drawn cart, or put in a canvas-covered basket and delivered by a man on horseback. Often a boy accompanied the man in the cart to help with the deliveries.

Location of the Burnie butchery as it looks today (2015)

- In the past meat, milk, bread and other items would be delivered to your home. What do you have delivered to your home today? Why has this changed?
- Ask your parents and grandparents what they used to have delivered to their homes and how were they delivered?
- Photocopy the photograph and using balloons above the heads of the people write in what they are thinking/saying.
- Compare the historic and the new photograph of this location. What differences can you see? Are any things the same? Which style of building do you prefer, old or new? Why do you prefer that style?

  Next time you are in one of the main streets of Burnie, look around and see if you can identify any parts of historic buildings or shopfronts. Do you think it is important to retain historic buildings in a town or city or should they all be replaced with new buildings? Why? Why not?

Bullocks dragging logs (c. 1933)

Teams of bullocks (this is a Cumming Brothers team) were used to move logs from where they were felled to the nearest railway, where they were then transported by train.

This photo shows a wooden tramway that has been built in the bush to help move the logs. Many of the logs were taken to nearby sawmills and cut into building materials for use locally or to be shipped interstate. Sometimes the cleared land was converted to farmland.

Pairs of bullocks in the team are joined by a bullock yoke. More information about the bullock yokes and bullock teams can be found at:

www.powerhousemuseum.com/collection/database/?irn=213440

- What is the tramway made of? How is this different to railway tracks today? Why have the construction materials changed?
- Using the information contained in the link to the left, write a list of three reasons why bullock teams are better than horses for heavy transport.
- Pretend you are a 'bullocky'. Using the information contained in the link above write a series of diary entries about your life & managing the bullock team. What are your bullocks' names and what are some of their character traits? Are any bullocks injured at the moment? What sort of work are you doing this week? Where do you live when you are working? e.g. in a tent? What do you eat?

Bullocks working cleared paddock (c. 1915)

The bullocks in this photo are pulling a scarifier. Scarifying was done after the land had been cleared of trees and ploughed. Scarifying breaks up the large clods of earth in preparation for planting crops.

The trees behind the bullock team have all been killed by ringbarking. This involves cutting a groove into the bark around the base of the tree. As a result the tree dies making it easier to cut down which in turn makes clearing land quicker.

More information about the bullock yokes and bullock teams can be found at:

www.powerhousemuseum.com/collection/database/?irn=213440

- A bullock could weigh up to 1200kg!
- Given that a bullock team could pull up to between 2.5 and 3 times their own weight, if trees were being cut down at a rate of 30 per day and each tree weighed up to nine tonnes, then how many trees could be moved each trip?

Emu Bay railway workers (c. 1915)

Railway workers gather to pose for a photograph, proudly holding their tools used to prepare sites to build the railway line. Without the help of machinery a large gang of men was needed to move soil and rocks to create a flat surface upon which the railway line could be constructed. Once the line was built these men would also be responsible for its maintenance.

Good workers were in short supply so 140 railway navvies were ordered from Victoria. Many absconded after only a few weeks to become miners. Mining shifts were only eight hours a day instead of ten on the tramway. Miners also had dry huts, while tramway workers slept in tents.

Did you know?...

Steam trains get their power by burning coal in a firebox. This heats up water in the boiler (which is like a giant kettle), making steam. The steam drives a piston to and fro and the piston turns the rods connected to the wheels of the train.

It takes the fireman about three hours of shovelling coal into the firebox to make enough steam before the locomotive starts to move.

- Why do you think one of the men is wearing a suit?
- How many different types of tools can you identify in this photo?
- Photocopy the photo and using balloons above the heads of five people write in what they are thinking/saying.
- Pretend you are one of the workers and write a letter home to your family about your life working on building the railway. What sorts of tasks did you do each day? Who did you like to work with? Why? Where did you sleep? What sorts of food did you eat? What did you do when you weren't working?
- In a small group, make up a story about a typical day working on the railway crew and act it out.

Emu Bay and sailing ships (1883)

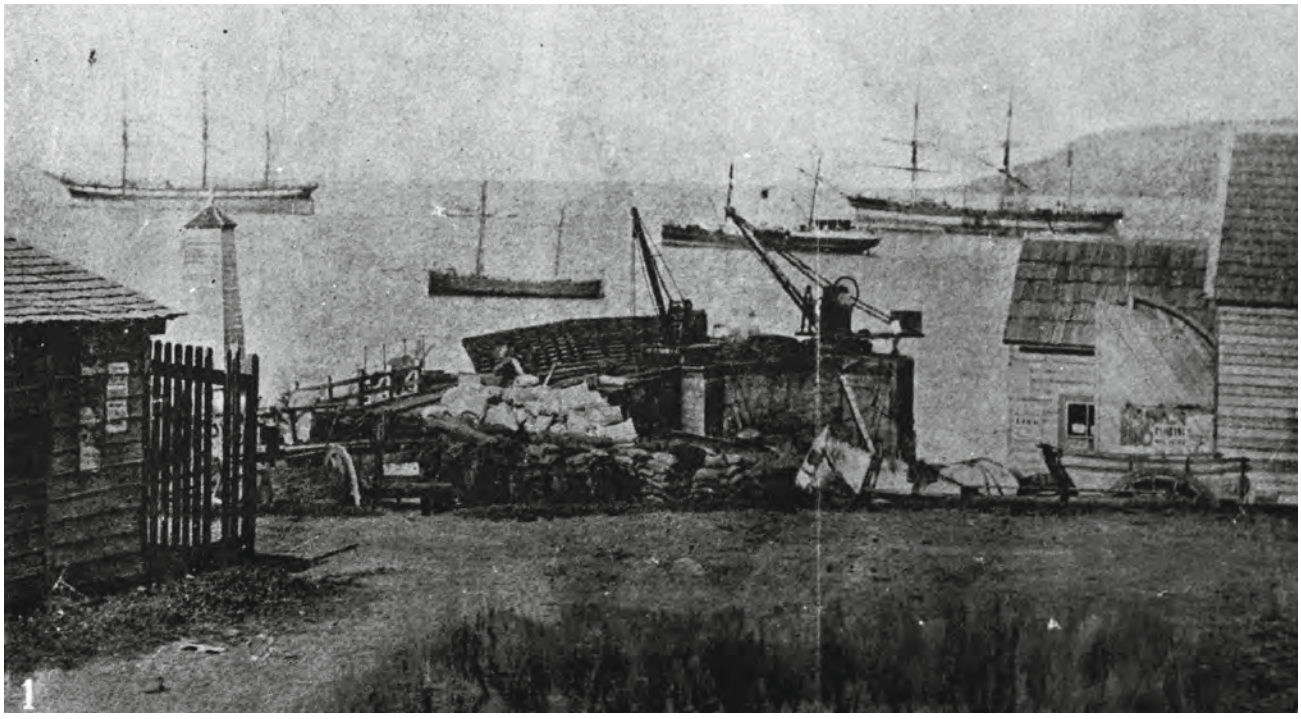
The photograph shows the barques 'Highmoor' and 'Remonstrant' moored in Emu Bay, Burnie. At the time this photograph was taken they were the biggest vessels ever to have anchored at Emu Bay. These ships had brought the iron rails and locomotives (dismantled into parts) from Britain that were used to construct the first rail link between Burnie and Waratah - the Emu Bay and Mount Bischoff Railway.

It took five months to unload the ships because all the cargo had to be loaded into smaller boats and rowed ashore.

- What equipment can you see in the photo that would have helped with the unloading and moving of the materials from the ships?
- What type of roofs are on the buildings at the wharf? How do these differ from roofs today? Why have they changed?
- It took the 'Remonstrant' 83 days to sail from Wales to Burnie. The ship carried passengers as well as cargo. Here is a description:

  *"She is a powerful ship, fitted with the most recent improvements, and altogether is a handsome specimen of modern shipbuilders' art. Her **saloon**, approached by a **companion way** from the **poop**, is sufficiently large to accommodate a few passengers, for whose comfort the provision in respect to room and the style in which the apartment is furnished is ample. The vessel possesses fine deck room and lofty 'tween decks, their height being 8ft 16in. She registers 1044 tons, and carries about 1650 tons of **dead weight cargo**. With her present cargo she is drawing 18ft 6in. Between her for and main **hatchways** the crew have their **quarters** in a good sized iron deck house, a very much better arrangement than the old style of **forecastle** quarters."*

  Can you find out what the words in bold mean?
- What items do you think people would have packed for the voyage? If you had to choose 3 things to take on a long sea voyage, what would they be and why would you choose them?
- Can you find out what the following nautical terms mean? Port, starboard, aft, bow, abandon ship etc.
- Play a game of Ships Captain (similar to Simon Says with a nautical twist). There are many versions of the game's commands. Google the game and then select the commands to suit your groups/space. Good for reinforcing above nautical terms.



Working horses (c. 1955)

Before tractors, horses were used for farm work and for clearing the bush. Although tractors were invented in the late 1800s, it took many years for some farmers to be able to afford one, so horses were still regularly used for farm work until the 1950s.

The collars on the horses are designed to distribute weight and protect the horse's neck when pulling heavy farm equipment. Implements were attached to the metal hames (the pair of curved metal pieces lying on the horse collar) using a harness or chains.

- Have a look at the collar (the mystery object) in the resource box. It is made from leather which is strong and durable yet soft on the horses' skin. What do you think the collar has been stuffed with?
- These horses have guards (called blinkers) around their eyes. What do you think these are for?
- Can you name any of the tack that the horses are wearing?

Joseph Northrop's horse team, Burnie (1903)

Horses used to be the main means of transporting produce to and from farms, stores and the port.

Local contractor Joseph Northrop owned a large livery stable where he housed his own horses and also took care of other people's horses when they came to town for the day.

Coach proprietors, tradesmen and even local country people visiting town could have their horses stabled and fed at livery stables.

- What are the equivalent of horse teams today? *(trucks)* What are the equivalent of livery stables today? *(car parks)*
- Using www.trove.nla.gov.au, can you find historical accounts of livery stables, coaches, and horse trading? Using these can you create a story out of a day in the life of a coach team along the north-west coast of Tasmania?

Horse teams ploughing a paddock (c. 1935)

This photograph shows two teams of horses ploughing a paddock. Farm horses like these were trained to have their own role – note that one is walking in the already ploughed furrow and the other on the grass.

Farmers took pride in being able to plough furrows (a long narrow trench for planting into) that were very straight. Two teams made the job much quicker as each only ploughed one furrow at a time.

A farmer would walk many kilometres a day guiding the plough. Two other men are following dropping seed potatoes into the furrow.

- Do you think this farmer would be proud of these furrows? Why/why not?
- Which job would you prefer, guiding the plough or planting the seed potatoes? Why?

Construction of the railway from Burnie to Wynyard (1913)

As Burnie's port became the primary port in the region, the railway was extended to link it with other towns and settlements.

In 1913 the railway was extended from Burnie to Wynyard so that more farmers could export their farm produce. Wynyard storekeepers could also use Burnie's port to import shop stock and equipment.

At this construction site the horses pulling the drays have cart saddles to help distribute the weight of the heavy loads. Unlike today, curious locals could access construction sites for a close inspection.

- In small groups ask one student to describe an object in this photo, without actually stating what it is, and then ask the other students to try and identify what the object is.
- Ask students to choose one of the two types of transport referenced in the picture (either horse and cart or train) and explain in writing why they think it would be better than the other. Older students may write it in the form of a persuasive text.

  e.g. I strongly believe horses and carts are better than trains because...

Railway station and port, Burnie (c. 1914)

This picture demonstrates almost every mode of transport popular at the time – horse and carriage, horse and cart, train and bicycle. The only mode of transport not seen in the picture is a ship.

Rail was an important means of travel 100 years ago and trains ran south, east and west from Burnie. Warm fires in the station would greet passengers as they arrived at the station or if they were waiting for their train to depart.

Notice how close to the station the sea was, prior to the land being reclaimed in the 1960s to accommodate the growing needs of the port.

- Can you find a current photo of the station at Burnie? If you can find a photo compare how close the shoreline is to the station now. Why has this changed?
- Ask your parents and grandparents if they ever travelled to or from Burnie by train and if so what they can remember about the station and their trip.
- One of the wagons being pulled by the horses waiting on the station is covered but the others are open. Why? What do you think each type of wagon would transport?

Horse drawn wagons crossing the Wey River bridge (c. 1878)

The photograph shows the original wooden tracks and bridge built to carry the horse drawn wagons from Mount Bischoff tin mine in Waratah to Burnie.

The line was converted to iron rail and steam engines in 1884. Minerals from the mine were transported to Burnie for export from the port and passengers were able to travel the line for work or pleasure.

- What does the effort required to construct bridges like this and the associated railway line tell you about the value of the tin that were being mined at Mt Bischoff?
- Why was tin so valuable at this time?
- Is tin still being mined today?

5.
Worksheets

The following worksheets can be used in conjunction with the objects and photographs in the resource box.

Wages day

Imagine you are one of the workers in the photo
Emu Bay railway workers c. 1915

You are employed for a 10-day shift and you will be paid in one of the following ways:

a) $6 per day

b) $3 on odd numbered days and $9 on even numbered days

c) Day 1: $1, Day 2: $2, Day 3: $3 and so on

d) Day 1: $1, Day 2: $1 and the sum of the previous 2 days for each day afterwards

e) Day 1: 10 cents and for each day afterwards double the amount of the day before

f) Day 1: $1, Day 2: $3 and $3 less than the total paid so far, for each day afterwards.

Choose a method of payment.

Which method do you think pays the most?

Which do you think pays the least?

Fill in the chart below and compare

Did you make the right choice?

Day	A	B	C	D	E	F
1	$6	$3	$1	$1	10c	$1
2	$6	$9	$2	$1	20c	$3
3	$6	$3	$3	$2	40c	$1
4						
5						
6						
7						
8						
9						
10						
Total						

Everyone needs a...

Make up a newspaper advertisement for either the bicycle light or the car horn

- What are its uses?
- What are its benefits?
- How would you promote it/encourage people to buy it?

Have a look at ads in current newspapers and catalogues to give you some ideas.

Dear diary...

Imagine you are the 'bullocky' in the photo 'Bullocks dragging logs c. 1933'.

Write some diary entries based on what you did each day.

23 June 1933

Dobbin injured his leg today, it caught in a hole & he twisted it and now he is limping badly. Will have to rest him tomorrow, maybe longer. Not sure who to move up into his spot. Bluey doesn't have the experience and Ned is too short.

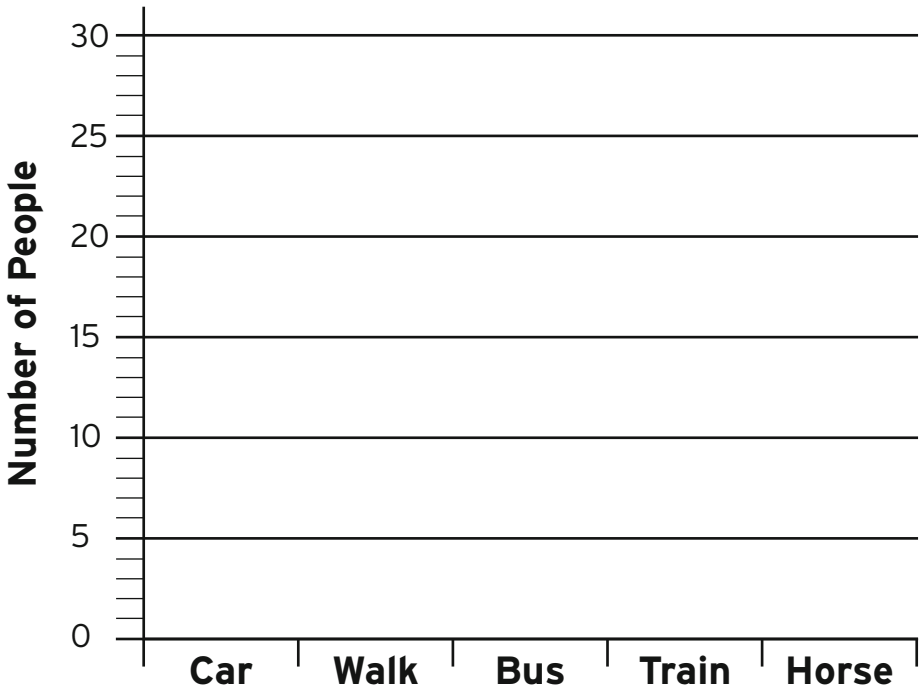
26 June 1933

30 June 1933

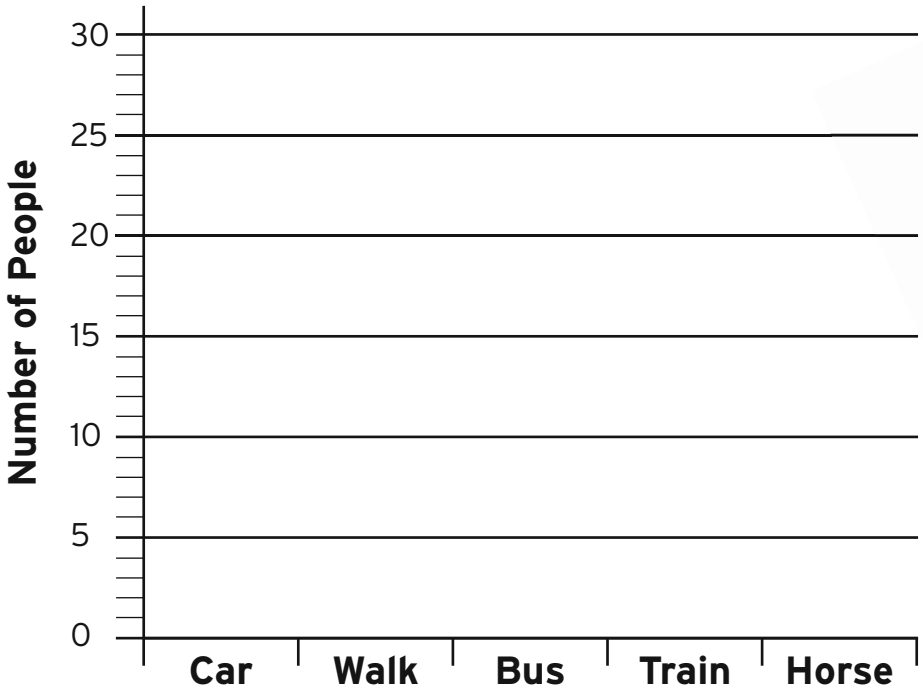
3 July 1933

Travelling to school

Survey each person in your class and ask how they most regularly travel to school.
Draw a bar graph of the results below.



Ask each person in the class to ask a grandparent or great-grandparent how they travelled to school when they were your age?
Draw a bar graph of the results below.



What's the difference?

Fill in the table below table showing the differences between travelling by foot, horse and car.

Ratings for some categories will vary between people eg. enjoyment.

- Add some more things to compare in the left hand column.
- Add a different method of transport and rate it in the right hand column.

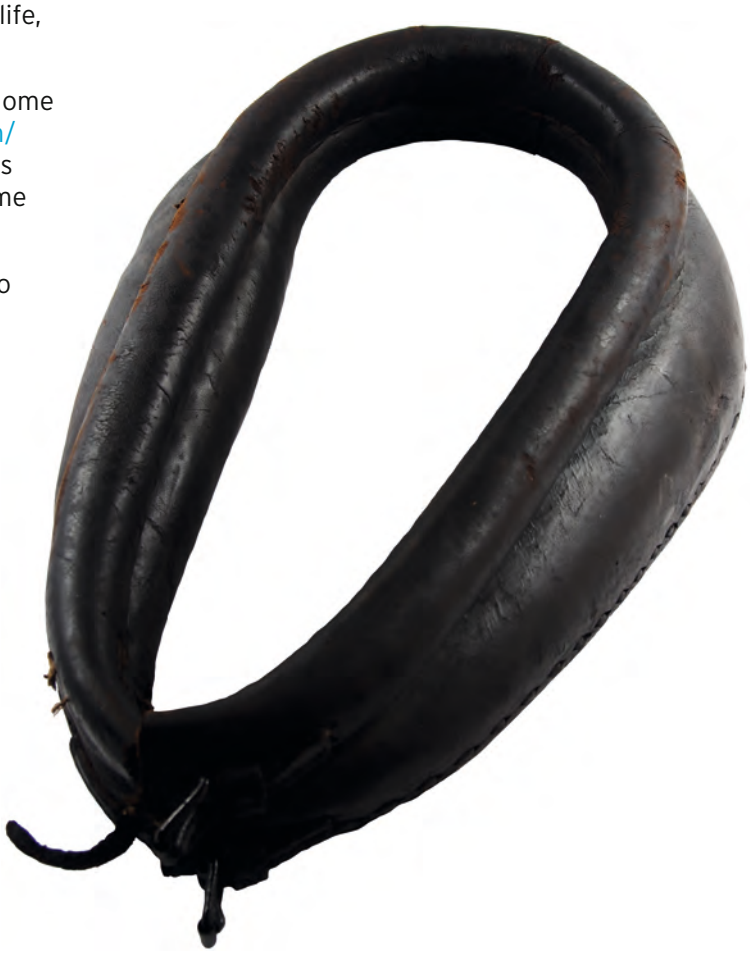
	Walking	Horse	Car	
Cost to buy	low	medium	high	
Speed				
Distance you can go				
Skill required				
Cost to maintain				
Enjoyment				

6.
Unearthing history – a class discussion

The following questions could be used to prompt a class discussion.

- What are some of the different ways we can find out about the past? Hint: what sorts of things are in the resource box eg objects/artefacts, documents, images...
- In terms of telling us about the past, is the information we obtain from paintings different to that from photos? Why?
- What sorts of things will we leave behind for people to find out about us?
- What about when technology changes (eg video, audio tapes, records etc) Will people in the future have the tools to unclock all parts of the past?
- If you could choose 5 objects/images/ documents to leave behind to give clues to someone in the future about you and your life, what would these 5 things be?
- Perhaps you could bury a time capsule at home or at school? See paleofuture.gizmodo.com/what-is-a-time-capsule-1531521900 for ideas and information about different kinds of time capsules around the world.

  The International Time Capsule Society also has good ideas, see crypt.oglethorpe.edu/international-time-capsule-society/



7.
Extending the learning – come and visit the Burnie Regional Museum

The understandings developed from this Transport resource box can be extended by a visit to the Burnie Regional Museum.

See www.burnieregionalmuseum.net/visit for details about bookings, logistics, costs and support for museum visits

Some of the objects within the Museum collection which relate to the Transport theme include:

Horse and carriage

This is a light, simple two-person carriage drawn by one horse. The horse and carriage was a primary mode of transportation in the 19th century, although it required roadways to be at least crudely graded.

Many roads in the area weren't graded until the late 19th century, so before that transport was limited to walking or riding on horseback. For long journeys, travel by sea was the only option.

Bicycle

Note the bicycle lamp, shape of handle bars and wooden wheel guard on this one. This one also has tyres filled with air, an innovation made in the late 1880s, which made bike riding much more comfortable. Previously bicycle tyres were made from solid rubber.

Blacksmith: Horseshoes and carriage parts

He was the repairer of equipment and the provider of essential spare parts for vehicles and farm and industrial machinery. He was arguably even more important as the local farrier, for the blacksmith was also the man who looked after the well-being of the hooves of all the horses in the district.

Without regular hoof trim and replacement of the shoes, the animals could not perform their tasks well and would cost their owners money in lost time.

Saddler: saddles, collars, bridles, harnesses etc

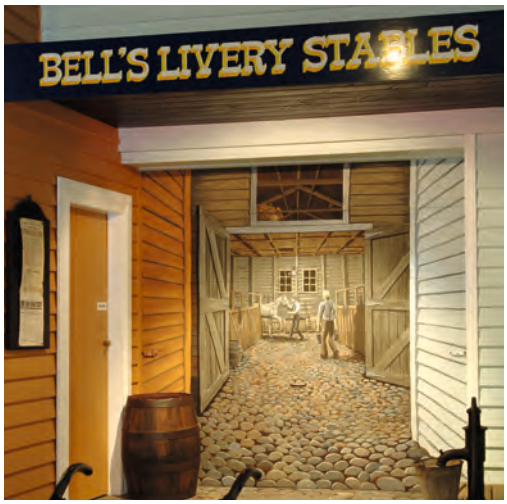
Horses overwhelmingly provided the power in transport, haulage and agriculture. Leather, being strong and durable yet soft on the horse's skin, was by far the best and indeed the only medium from which to make their harness.

Until about 1930, most communities had a saddler and harness-maker in their midst. Like that of a blacksmith, this trade provided a service that can be likened to that of a mechanic today.

The business had to carry a wide range of 'spare parts'. To break a strap or buckle on the harness of a horse was as much of an emergency as an engine breakdown in a motor vehicle, for the beast and its load became immobilised. The harness-maker would be called to replace it and to do this quickly he needed to have the required strap or part in stock.

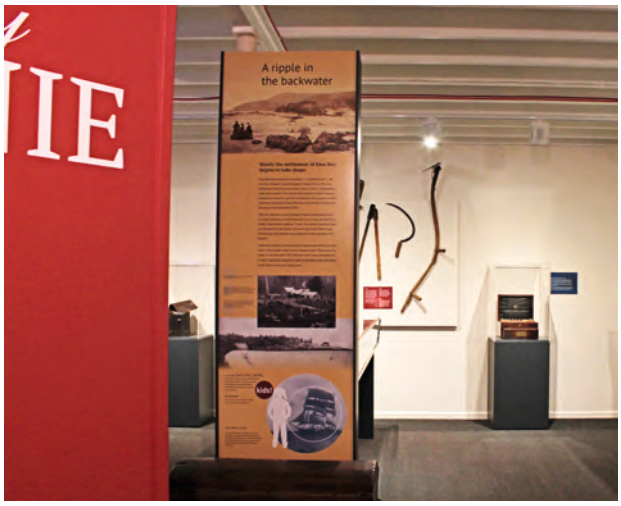
Saddlers and harness-makers therefore made a wide range of harness, including collars and also stocked the necessary metal components for a wide variety of horse drawn vehicles that were on the roads at that time. These ranged from heavy-duty wool-bale class wagons and timber jinkers to light two-wheeled sulkies. Saddlers also needed to keep the patterns of a variety of saddles and bridles that they could be required to make. These often had to be tailored to meet the needs and comfort of the rider and modified to suit the horse that they were made for.

Livery bait stables



One hundred years ago Burnie had no less than three livery and bait stables. Here coach proprietors, tradesmen and even local country people visiting town could have their horses stabled and fed. These facilities were used in much the same manner as people use car parks today.

Early Burnie Exhibition



Explore the history of the wooden tramway and its conversion to the Emu Bay Railway

Read about the development of Burnie's port and find out how sailing ships loaded and unloaded their cargo in Burnie.

For the first 50 years of European settlement in Burnie, sailing ships were the only way to access the town. It was not until 1875 that the rivers were spanned and a coach track built along the coast to provide a link with other north west towns and Launceston.

8.
Useful links/ resources

The resources below provide some useful links to online images related to the transport theme and

http://trove.nla.gov.au
National Library of Australia – online images, historic newspapers, books maps, music, archives and more.

http://museumvictoria.com.au/bfa
Museum Victoria, 'Biggest Family Album' contains over 9 000 photographs from rural and regional Victoria dating from the 1890s to the 1940s. These images provide insights into domestic and working life, education, recreation, travel, settlement and much more.

www.powerhousemuseum.com/pdf/OPAC/246256.pdf
New South Wales Pioneers – Photographs by George Bell 1890-1900

See page 9 Off to school – two children riding a horse to school

See page 13 Bullock team hauling a log

www.powerhousemuseum.com/collection/database/menu.php
Search 109,756 objects collected from 1880 to the present day. The interactive database contains thousands of zoomable images and research into the Museum's collection.

www.scootle.edu.au
Scootle provided digital resources for teachers and students mapped to the Australian curriculum.

www.myplace.edu.au
On this website you will find educational material to support teachers using the 'My Place' TV series in the classroom. Explore background information, aligned with the My Place stories, on events and people significant to Australia's history.

www.visiblethinkingpz.org/VisibleThinking_html_files/VisibleThinking1.html
'Visible thinking' is a flexible and systematic research-based approach to integrating the development of students' thinking with content learning across subject matters.

Visible thinking has a double goal: on the one hand, to cultivate students' thinking skills and dispositions, and, on the other, to deepen content learning. Thinking dispositions include: curiosity, concern for truth and understanding, a creative mindset, not just being skilled but being alert to thinking and learning opportunities and eager to engage with them.

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