



# SUSTAINABLE TOURISM AT THE RAILWAY

## FIELDWORK INVESTIGATIONS

### LEVEL

Year 11

Geography Unit 2 Tourism: Issues and Challenges

### ACTIVITY DESCRIPTION

According to National Geographic “*Field work is the process of observing and collecting data about people, cultures, and natural environments. Field work is conducted in the wild of our everyday surroundings rather than in the semi-controlled environments of a lab or classroom. This allows researchers to collect data about the dynamic places, people, and species around them. Field work enables students and researchers to examine the way scientific theories interact with real life.*”

Field work is important at Puffing Billy Railway to inform our commercial, marketing, environment, and train operations teams. Not only do we focus on the natural sciences and environment, but we are constantly auditing our man-made assets, whilst also focusing on peoples experience throughout their visit. At Puffing Billy Railway, we are always collecting feedback via surveys, interviews and training and we use this data to implement change to create a better experience for staff, volunteers, and visitors in the future.

Students will develop a research question at school and will collect data on their visit to the railway to support and answer this question. Students will use this data to create a field work report of approximately 1500-2000 words. This report can include both the primary data collected on the day and secondary data investigated back at school. The report must also include detailed analysis of this data.

### THEME

Area of Study 1 – Characteristics of Tourism

Area of Study 2 – Impact or tourism: issues and challenges

### MATERIALS REQUIRED

- “Fieldwork Investigations” data sheet
- Access to a computer and the internet

### INSTRUCTIONS

#### PRE-VISIT

1. Students to collect data from secondary sources about the natural and human characteristics and tourism patterns of Puffing Billy Railway. Sources used could include government and non-government websites, topographic maps, Puffing Billy website, Google Earth, etc. This activity could be used to introduce the field work investigation and report or as a post visit activity.
2. Students to develop a research question for their visit to Puffing Billy Railway. This question could be about land use change, product sustainability, visitation numbers, etc. **Teachers’ choice** as to whether students develop individual research questions or students investigate a class research question, with individual students writing their own hypotheses. This would allow for collaboration between students when collecting and collating data in the field. Teacher is to lead a class discussion to determine questions (ideally this question is developed pre-visit but can also potentially be developed post-visit).

Example questions (see Fieldwork Investigations worksheet):

- a. Determining the economic effect of different spaces and experiences at Puffing Billy Railway
  - b. Assessing the effectiveness of Sustainable strategies at Puffing Billy Railway
3. If the question requires data collection while conducting field works students could complete the following before their visit to Puffing Billy Railway:
- a. Practice using a GNSS software application such as ArcGIS collector App, ArcGIS Survey 123 app or google maps to locate data collection points on a map (teachers to create 'data collection' questions and give students instructions to download and practice using designated app)
  - b. Construct social surveys
  - c. Write interview questions

### **POST-VISIT**

If students haven't completed pre-visit instructions above, they can complete these before completing the below.

1. On return from Puffing Billy Railway any data collected needs to be uploaded and collated in the appropriate way. If doing a whole class question, then this can be organised appropriately for everyone's use.
2. Students to be assigned an appropriate amount of time to work on the field work report. Teacher is to outline this timeline and expectations. If students have not yet designed a question, then a whole class discussion can be led to develop appropriate questions for the report.
3. Teacher to hand students the 'Fieldwork Investigations' data sheet. This will be a detailed account of expectations of student's fieldwork report.
4. Students to work on Fieldwork report and hand it in via the assigned application by the due date.

### **✓ SUGGESTIONS FOR ASSESSMENT**

This is an individual task where students will present the information and data they have collected from their field-based investigations as a written report. Students will show their level of understanding through their written task which will include the purpose of the writing, the audience, maps, photographs, charts, data analysis, diagrams, or graphs.

### **🔍 BACKGROUND INFORMATION**

**Puffing Billy Railways' Vision:** To excel in presentation of a heritage rail experience, which captures both the natural beauty and rich social history of Victoria's Dandenong Ranges.

**Puffing Billy Railways' Mission:** To restore and operate the Puffing Billy Railway as Australia's premier heritage steam railway, in a safe, efficient, and economically sustainable manner for the ongoing education, benefit and satisfaction of the community, customers and railway stakeholders, including staff and volunteers.

Tourism is defined as the movement of people travelling away from and staying outside of their usual environment for more than 24 hours but not more than one consecutive year (United Nations World Tourism Organisation definition). Tourism has changed and grown a lot since the 1950s and is predicted to grow even more so in this post covid era. The scale of tourism has a significant impact on local, regional and national environments, economies and cultures. The travel and tourism industry is directly responsible for a significant number of jobs globally and generates a considerable portion of global GDP.

The study of tourism at local, regional, and global scales emphasises the interconnection within and between places as well as the impacts, issues and challenges that arise from various forms of tourism. For example, the interconnections of climate, landforms, culture and climate change help determine the characteristics of a place that can prove attractive to tourists.

There is an interconnection between places tourists originate from and their destinations through the development of communication and transport infrastructure, employment, and cultural preservation and acculturation. The growth of tourism at all scales requires appropriate management to ensure it is environmentally, socially, culturally and economically sustainable (VCAA, 2022).

## **CURRICULUM LINKS**

### **Geography Skills – Fieldwork report**

(See Guidelines <https://www.vcaa.vic.edu.au/curriculum/vce/vce-study-designs/geography/Pages/Index.aspx>)

## **WORKSHEET – FIELDWORK INVESTIGATIONS**

Your task is to undertake fieldwork research on your visit to Puffing Billy Railway to create a report. You are to produce a report of approximately 1500-2000 words. You may wish to use the workbook supplied with the Education program to collect data on the day.

The fieldwork report typically begins with identifying the investigation issue and/or hypothesis. You will need to develop your question before or after your visit to the railway. E.g. What impact did COVID-19 have on Puffing Billy Railway?

In producing a report, you are normally addressing the following questions:

1. What did you do?
2. Why did you do it?
3. How did you do it?
4. What did you find out?
5. What do the findings mean?

Report writing is different to essay writing since:

1. Reports usually utilise primary rather than secondary data
2. They are more formally structured
3. You may not be required to develop an argument through the report. Despite the distinction that an argument is not formally required, the best reports flow from one section to the other where the sections may be seen as a series of linked sections.

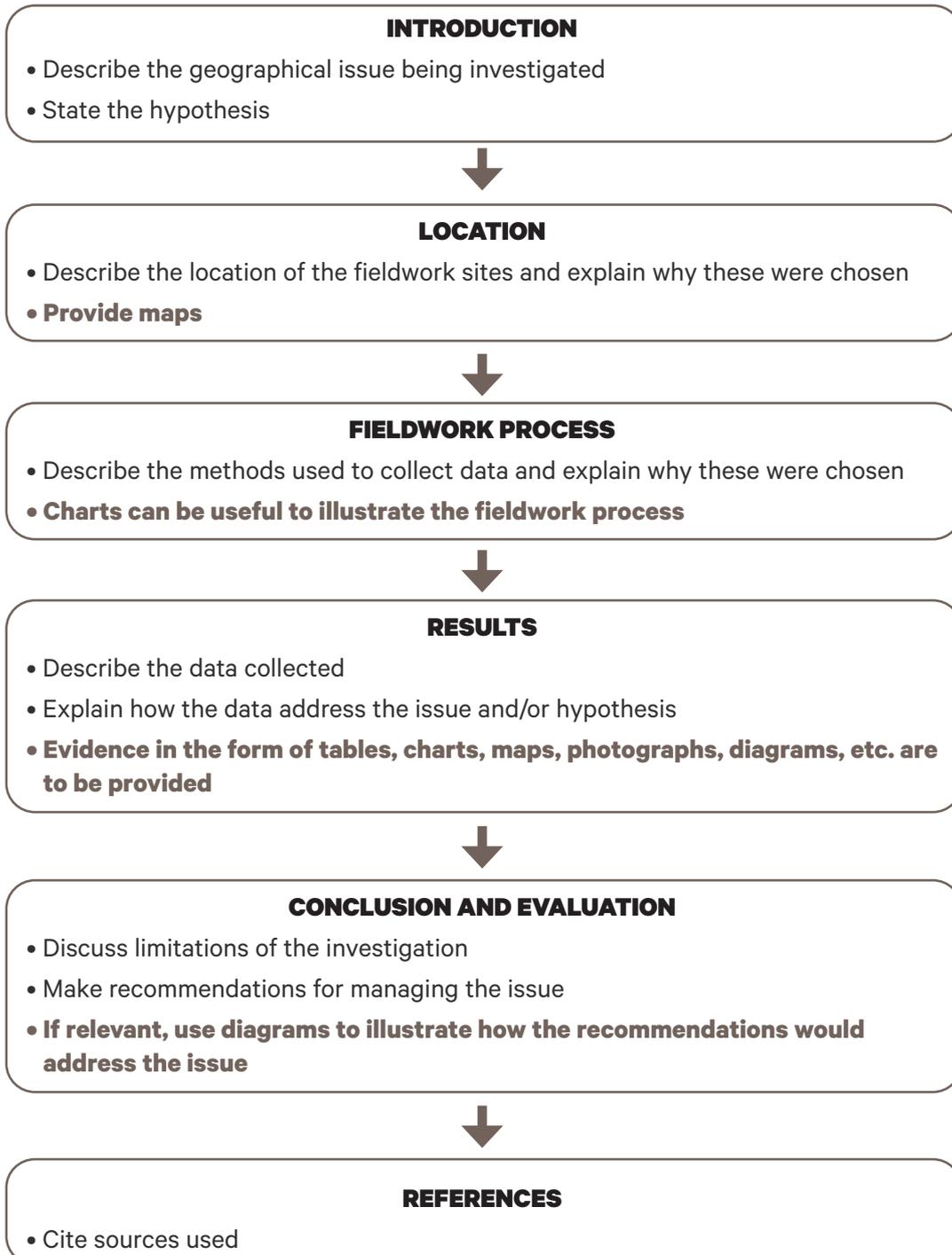


### **REMEMBER WHO YOUR AUDIENCE IS!**

This is one of the most difficult aspects of report writing. Write your report from the perspective of someone who is qualified in the academic field. In this context, you don't need to define key terms (such as climate change) unless they form an important part of your report.

## REPORT STRUCTURE

Reports written in Geography may have the following sections: Introduction, Methods, Results, Discussion, Conclusion. Follow the report structure below.



**EXAMPLE A: DETERMINING THE ECONOMIC EFFECT OF DIFFERENT SPACES AND EXPERIENCES AT PUFFING BILLY RAILWAY**

Besides the train ride, what activity/space contributes most to Puffing Billy Railway’s economic sustainability?

**PRIMARY SOURCE DATA**

Take photos of as many economic activities (those businesses that are selling stuff!) as possible. Record the time of your photo and estimate the number of people present. Give the activity a rating.

**PRESENTATION OF DATA**

**Back at school**

- Complete a table like this. Compare your table with other students to see if you can get an understanding of numbers at your businesses at different times of the day.

Photo of business/space	Times	People involved	Rating. In your opinion, is this activity economically important to Puffing Billy Railway? Low, medium, high

- Create an annotated map of Puffing Billy Railway, Belgrave Station to Lakeside Station, highlighting areas of high, medium and low economic activity according to your data.

**CONCLUSIONS (REPORT 1500-2000 WORDS)**

- *Besides the train ride, what activity contributes most to Puffing Billy Railway’s economic sustainability?*
- *What sorts of new economic activity might enhance Puffing Billy Railway’s economic sustainability?*

**EVALUATION**

- *How reliable do you think this data is?*
- *What should Puffing Billy Railway do to get better data?*

**Teachers Note:** Due to students all being on the same train journey perhaps on arrival to Lakeside Visitors Centre you could break the group into two so one half does this analysis earlier in the day as the train arrives and the other half does it later in the day. This will provide a deeper understanding of the volume of custom throughout the day. The time and people data might also be presented as a graph for each venue.

## **EXAMPLE B: ASSESSING THE EFFECTIVENESS OF SUSTAINABLE STRATEGIES AT PUFFING BILLY RAILWAY**

How is Puffing Billy Railway trying to be more sustainable in the future?

### **PRIMARY SOURCE DATA**

#### **Photographic Evidence**

Throughout your journey on Puffing Billy you will notice many environmental management practices in place. During the Education workshop at Puffing Billy Railway, you will be taken on a walk around the Lakeside Visitor Centre (weather permitting) to discuss the building sustainability, environmental controls and management. Take photos and/or notes of as many different controls and procedures and strategies as possible.

### **PRESENTATION OF DATA**

#### **Back at school**

Create an annotated Google map using your photos and text called "Sustainability at Puffing Billy Railway". See an example here from Sovereign Hill: <https://www.google.com/maps/d/edit?mid=1gJwUqCdxfvJplsHopRdDpHzyup8&ll=-37.57899513908591%2C143.8648832&z=16>

#### **OR**

Prepare an annotated report using photos and text to explain how Puffing Billy Railway manages its environment and carbon footprint (1500-2000 words). You should consider each of the following areas.

1. Building Sustainability
2. Protecting the Railway Corridor
3. Energy Use
4. Habitat and species protection

For each area (Belgrave station, lakeside Visitor Centre or along the Railway Corridor) you consider the possibility of creating a map and you should briefly discuss

1. The impacts of tourism
2. Puffing Billy Railways sustainability – including photos
3. The effectiveness of each sustainable activity
4. Suggestions for improvement.

The report should be presented in a professional manner: For more info:

<https://puffingbilly.com.au/about/environment/>

1. Protecting the Railway Corridor
  - 1.1 Effects of tourism on the railway corridor
  - 1.2 Puffing Billy Railway's management
  - 1.3 The effectiveness of these activities
  - 1.4 Possible improvement.

### **CONCLUSION**

- How can Puffing Billy Railway improve their sustainable practices?

### **EVALUATION**

- Given that this information was provided by an employee of Puffing Billy Railway, how trustworthy is the data? What should Puffing Billy Railway do to get better data.