


Traffic forecasting

Key Learning Area	Unit or lesson title and main focus questions	Most appropriate level and suggested number of lessons
 Geography	Traffic forecasting Why does the North West region need improved public transport?	Stage 4–5
		1–2 lessons

Teacher briefing

People living in Sydney’s North West region will be more familiar with travelling by car or bus rather than by train. Why does the North West region need better public transport?

The following activity is designed to help students discover answers to this question, and provide insights into how transport forecasters and planners work.

After reading Source 1 and analysing the information contained in Sources 2 and 3, students can discuss why adding more buses to North West region routes may be unsustainable, and why the region needs a rail link.

This is an introductory Stage 4 Geography learning activity, but can easily be incorporated into lesson sequences in transport or forecasting topics with Stage 5 students.

Requirements for these lessons

- Interactive whiteboard
- Sources 1, 2 and 3, either printed or projected on an interactive whiteboard.

Assessment

Assess students’ ability to interpret maps, and understanding of forecasting increased road congestion and longer journeys, as a result of population growth and other factors.

Key terms and vocabulary

Sustainable, extrapolation, trend, Sydney Metro Northwest, North West Growth Centre, Central Business District, Sydney’s Global Economic Corridor, travel speed and reliability, traffic volume, layover parking.

Background information

The NSW Department of Planning and Environment published the Sydney Metro Northwest *Corridor Strategy* on 15 May 2013. It is a guide for future development along the Sydney Metro Northwest. It includes planning around studies on each of the eight new train stations that will be built along the alignment at Cherrybrook, Castle Hill, Hills Showground, Norwest, Bella Vista, Kellyville, Rouse Hill and Tallawong. It is predicted that the area surrounding these new train stations will provide 27,400 new homes and 49,500 new jobs by 2036.

Section 2.4 of the Sydney Metro Northwest *Corridor Strategy* details reasons as to why increasing the number of buses operating in the North West region may be unsustainable, and why the region needs a rail link. These reasons include:

- By 2036, over 40 per cent of residents from the North West Growth Centre are expected to travel to Sydney's Central Business District by public transport in the morning peak period, while a further 15 per cent will travel to Macquarie Park, Chatswood, St Leonards and North Sydney
- Without improvements in public transport, it is predicted that by 2021 road congestion will increase travel times from the North West region by more than 50 per cent (in some cases more than 70 per cent)
- It is forecast that there will be an overall increase in buses entering the Central Business District of some 34 per cent by 2021; and growth in M2 express buses will account for almost 70 per cent of that growth.

Web links



Sydney Metro Northwest priority urban renewal corridor

<https://www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/Sydney-Metro-Northwest-Urban-Renewal-Corridor>

Further information on the challenges commuters currently experience when using public transport can be found in *Understanding the challenges*, Project Overview June 2012, page 15.

https://www.sydneymetro.info/sites/default/files/Project_overview.pdf%3Fext%3D.pdf

Syllabus links

Geography K-10

Geography Stage 4 – Place and Liveability

- the influence of accessibility to services and facilities on the liveability of places
- strategies used to enhance the liveability of places

(GE4-1) locates and describes the diverse features and characteristics of a range of places and environments

(GE4-3) explains how interactions and connections between people, places and environments result in change

(GE4-7) acquires and processes geographical information by selecting and using geographical tools for inquiry

(GE4-8) communicates geographical information using a variety of strategies.