INQUIRY QUESTION
Why are active transport levels declining?
Contemporary issues and sport: active transport

The increasing rate of sedentary behaviour in Australians is a major health concern. Not only are we becoming more sedentary, our physical activity levels are also declining.

One way to decrease sedentary behaviour and increase physical activity levels at the same time is through active transportation.

**KEY KNOWLEDGE**
- The role of the social-ecological model and/or the Youth Physical Activity Promotion Model in evaluating physical activity promotion and sedentary behaviour reduction initiatives and strategies
- The key concepts associated with the selected contemporary issue associated with participation in physical activity and/or sport in society
- Individual, social, policy and environmental influences on participation in physical activity and/or sport in reference to the selected issue
- Local, national and/or global perspectives of the selected issue
- Historical, current and future implications of the selected issue
- Government, community and/or personal strategies or programs designed to promote participation in physical activity and/or sport.

**KEY SKILLS**
- Identify contemporary issues associated with participation in physical activity and sport
- Participate in and reflect on physical activities that illustrate the participatory perspective of the selected issue
- Collect information on a selected issue related to physical activity and/or sport in society from a range of sources such as primary data, print and electronic material
- Analyse the historical, current and future implications on the issue identified
- Apply the social-ecological or Youth Physical Activity Promotion Model to analyse and evaluate strategies and programs associated with the selected issue
- Draw informed conclusions and report in a suitable format on the socio-cultural and environmental influences that impact on participation in physical activity and/or sport based on research findings

**CHAPTER PREVIEW**

- **Active transport**
  - **Influences**
    - Individual
    - Social
    - Policy
    - Environmental
  - **Implications**
    - Historical
    - Current
  - **Perspectives**
    - Local
    - National
    - Global
  - **Future implications**
    - Predisposing factors
    - Enabling factors
    - Reinforcing factors
    - Personal demographics
  - **Applying the Youth Physical Activity Promotion Model**
KEY CONCEPT  Active transport refers to the way we travel using our bodies, rather than using passive forms of transport, such as being a passenger in a car or bus. The more we participate in active, not passive, transport, the greater our likelihood of good health.

The issue

Active transport is defined as physical activity undertaken as a means of transport and not purely as a form of recreation. Common examples include walking, cycling and, for younger people, skateboarding or using a scooter. High levels of active transportation are linked to positive physical, economic and social outcomes. Active transport has also been found to be one of the most effective means of increasing levels of physical activity within a community.

According to the National Heart Foundation of Australia, the number of children walking to school has halved over the past 40 years. There has also been a significant rise in the rate of childhood overweight and obesity, and a decline in the average fitness level of children.

FIGURE 15.1 Walking or cycling to work or school has many health benefits.

FIGURE 15.2 National percentage of people walking to work, 1976–2011

Source: cyclehelmets.org

Old, WA, ACT (helmet law enforced after 1991)
Vic, NSW, SA, Tas (helmet law enforced in 1991)
Among adults, walking is the most commonly reported form of recreational activity in Australia, and this is also the case worldwide. Although the physical and psychological benefits of walking are well known, many surveys indicate a decline in the frequency and amount of walking done by both children and adults in many countries, including Australia.

**FIGURE 15.3** Urban sprawl in Australia’s major cities has contributed to people having to catch public transport to work and school, rather than walk or cycle, due to long distances being travelled.

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**TEST your understanding**

Use figure 15.2 to answer the following questions.

1. Outline a trend from the graph.
2. Justify the trend.
3. Suggest the most popular mode of transport to work and how it may have changed over time, based on the trend above.
4. Outline the impact helmet laws had on the percentage of people walking to work and suggest a reason for this.
5. In what year(s) were there more Victorians walking to work than Western Australians?

**APPLY your understanding**

6. Would you expect a similar trend in the percentage of people riding to work? Explain why or why not.
7. Research what percentage of people walk to work in London, Beijing or New York. Compare this data to the graph above. Suggest reasons for any similarities or differences.
KEY CONCEPT Individual, social, policy and physical environmental factors can enable active transport or can act as a barrier to it. It is important that all factors are understood and considered if we are to increase the number of people regularly using active transport.

15.2 Factors influencing active transport

Individual factors

**Cost**
Money is often a barrier for participation in physical activity; however, ‘cost’ can help encourage people to use active transport to and from school and work, acting as an enabler. Walking and cycling come at a very low cost and can have financial benefits due to the money saved on fuel, parking and public transport.

**Knowledge and skills**
If there is a lack of knowledge about the benefits of cycling and/or a lack of cycling skills, it can act as a barrier for active transportation.

Social factors

**Role models**
Many schools and local communities use role models to strongly encourage walking to school. Most walk-to-school programs, such as the Walking School Bus, include a supervisor, usually a parent or teacher, to accompany the children on their journey.

**Cultural norms and family dynamics**
Over the past 50 to 50 years, our family and home dynamics have changed significantly. There are fewer children in families, which means fewer people with whom to walk or cycle to school. Most families now also rely heavily on car travel, as it is perceived to be more convenient. Many parents incorporate school drop-offs with their commute to and from work.

Policy factors

**Funding**
Increased funding from the government for safe bike paths and bike storage, or for public bike-share initiatives, assists in making active transportation more accessible and therefore easier. On a smaller scale, employers can provide incentives for employees who use active transport; for example, more flexible hours to ensure safe travel in daylight.

Physical environmental factors

**Safety**
Safety is one of the most influential factors on active transportation. Safe routes for walking and cycling can strongly encourage people to use active transportation. This includes the provision of bike lanes, well-lit walking paths and signage to indicate reduced speed limits. A perception of increased stranger danger has also become a barrier for many people who consider active transport.
Access to equipment
While cycling to work does not require much equipment, Australian law requires that a helmet is worn when riding a bike. Australia was the first country to make this mandatory between 1990 and 1993, and this coincided with a significant drop in the number of people using cycling as their primary mode of transport. While the laws increased safety, it was seen by some as a barrier to cycling. More recently, Australians are still riding to work less than pre-helmet days but rates have plateaued.

Built environment
The built environment has a significant influence on perceived safety. As mentioned above, safety is vital in encouraging active transportation. In addition to separate cycling and walking paths, other examples of built environment that can enable active transportation include:
- lockers and showers, to allow people to store belongings and shower before and during work
- bike racks, to allow people to safely store bikes
- aesthetically pleasing walkways and stairwells, that are well-lit and clean, can encourage people to use these as opposed to the lifts.

Geographic location
‘Back in my day, we used to ride for kilometres to get to school and work…’ Many people would have heard this from their parents or grandparents. Research does show that the distance kids are willing or allowed to travel on their own has dramatically declined compared to past generations. Many children now attend a school of choice rather than the closest school. Many smaller schools have amalgamated to become bigger schools increasing the distances required for travel. Urban sprawl has also led to increased distances between the home and important amenities and facilities, including schools. This increased distance can result in active transport being less appealing and practical.

**FIGURE 15.5** Environmental influences on children walking to school

The factors shown in figure 15.5 can act as enablers or barriers to active transport. For example:

- access to attractive, public open space is associated with higher levels of walking
- creating supportive environments, particularly footpaths and walking paths in attractive neighbourhoods, has the potential to increase walking and vigorous physical activity
- where there is a lack of safe and well-lit paths, cycling and/or walking can be perceived as dangerous, limiting opportunities for active transport.

Canberra primary school makes bike riding part of the curriculum

*BY HANNAH WALMSLEY*

Learning to ride a bike will be part of the curriculum for year five and six students at Curtin Primary School, with the introduction of a new program to give kids confidence on a bike.

The initiative, Ride or Walk to School, is designed to get kids moving for at least 60 minutes each day.

More than 50 Canberra schools are already part of the three-year program run by the ACT Government-funded Physical Activity Foundation.

Students learn road and pedestrian safety, and bike maintenance skills.

Coordinator for the program at Curtin Primary School, Hugh Peoples, said the students would learn the skills to confidently ride to and from school.

‘Bikes are going to be a very important part of our PE program for the rest of the year for the whole of year five and six,’ he said.

‘Anyone can ride a bike fast, but it’s really tricky to learn how to control a bike and learn how to multi-task and be aware of the surroundings when riding.’

Curtin Primary School and schools registered with the program were given 15 new bikes and bike helmets to ensure all students had the opportunity to learn to ride a bike.

As well as encouraging students who live near the school to walk or ride, teachers at Curtin Primary School plan to establish a riding club where parents can be involved in group rides.

“We’ll also be trying to engage those kids who aren’t [easily engaged] in the classroom, to use their hands to help maintain and fix the bikes,” Mr Peoples said.

Year six student at Curtin Primary School, Elenor Parkinson, said riding to school was a relaxing way to start the day.

“It calms you before you go to school and refreshes you,” she said.

*FIGURE 15.6* Year 5 and 6 students at Curtin Primary School will learn bike skills to allow them to safely ride to and from school.

“When you ride, it’s sort of like being in your own little bubble, distant from the rest of the world.

“It’s a really good thing to do before coming to school where you have children rushing around everywhere and going into class.”

Curtin Primary School had already successfully encouraged students and families to use the commute to school as an exercise opportunity.

‘Originally we had about 15 to 25 per cent riding to school last year and it’s up to around 40 per cent if not more riding to school on a daily basis,’ Mr Peoples said.

*Source: abc.net.au, 8 April 2015.*

**TEST your understanding**

1. Describe the new program to be introduced at Curtin Primary School. Outline the purpose of this new program.
2. Explain how this program will impact on the physical activity levels of the students at this school.
3. List all the factors that may influence a student riding to school and categorise them as either enablers or barriers.

**APPLY your understanding**

4. Using your knowledge of the social-ecological model, explain how this policy would impact on the other levels of influence.
15.3 Implications of the decline in active transportation

KEY CONCEPT In order to improve active transport, it is important that we understand how participation in active transport has changed over time and more importantly why.

Historical
Research suggests that in the last 40 years, the number of children using active transport to travel to school has declined by 42 per cent. Active transportation to work has also decreased significantly as cities become more congested with traffic and are affected by urban sprawl. Many people now live further from work, making distance an increasing barrier to walking or cycling.

Current
Typically, only half of Australia’s children and young people use active transport at least once per week to travel to and/or from school. On census day in 2006, 80 per cent of employed people in Victoria travelled to work by car, with only 4 per cent walking and 1 per cent cycling.

In 2011 a minority of Australians used active transport as their primary mode of travel.

FIGURE 15.7 Urban sprawl is contributing to a decline in people engaging in active transport.

FIGURE 15.8 Methods of travel to work across Australia, 2011

There are many initiatives aimed at encouraging active transport. *Vic Health’s Walk to School month* is aimed at encouraging Victorian primary students to walk, ride or scoot to and from school. Primary schools and students can sign up to track their achievements throughout October. Participation is also encouraged by being eligible to win prizes.

The Bicycle Network has a national *Ride2Work* day held each year also in October. The aim of the annual event is to normalise the idea of riding to work. In doing so, it is hoped that more Australians will ride to work on a regular basis. It targets those who have never ridden to work before and encourages them to try it. It also allows frequent riders to stay motivated and encourage their workmates to get involved.

There are similar walk/ride to work days/weeks around the world, all aiming to increase the number of people using active transport.

**TEST your understanding**

1. Using figure 15.8, identify which state/territory had the greatest amount of active transport and suggest a reason for this.
2. Discuss how using public transport can lead to increased active transport.
3. In figure 15.8, all states/territories had a higher percentage of people walking than cycling to work. Suggest why this is may be the case.

**APPLY your understanding**

4. Discuss how a cycle share program could have an impact on the data in figure 15.8.
5. Compare the factors influencing walking and riding to work. Use these to justify Victoria’s data.
### Local perspectives

As the Victorian population grows, so does the number of people using active transportation. Walking is the most popular form of physical activity in Victoria, but cycling is growing in popularity (9.5 per cent increase between 2013 and 2014). In 2014, Melbourne had more bicycle commuters than any other city in Australia (25,594), and 41 per cent of all women who rode to work in Australia lived in Melbourne.

Factors that have influenced this include:
- increased safe bicycle lanes and paths
- bike-share program
- increased cost of car travel (tolls).

![Figure 15.9: Journeys to work by cycling (only), by home location](source: Chris Loader, Charting Transport)

### National perspectives

Despite being a ‘sporting nation’, Australia has often been behind in terms of participation in active transport. Historically it was argued that geographic location was a barrier to this but now as our cities become more densely populated and we are experiencing urban sprawl, geographic location continues to be a barrier in a slightly different way. We are well behind other developed countries. Many argue our strict bicycle helmet laws act as a barrier but we are also well behind on walking to work and school.

Recent research shows that 90 per cent of Australian households have at least one child’s bike in working order but only 11 per cent of children currently ride a bike to/from school on a regular basis. So what is it that is stopping kids from riding to school?
For 42 to 51 per cent of parents, the main reasons they did not allow their child to ride to or from school was that they were concerned about ‘stranger danger’ and the dangers posed by traffic and other road users.

The key findings in an active travel report card in 2015 suggested that, while almost 50 per cent of children aged 5 to 6 and 9 to 10 and just over 50 per cent of children aged 12 to 17 reported using active travel to and/or from school at least once a week, only 25 to 32 per cent claim active travel as being their usual mode of transport to and/or from school.

Parents of children aged 5-6 years and 9-10 years reported that 45% and 47% respectively used active travel to and/or from school at least once per week.

59% of secondary school students aged 12-17 years reported using active travel to and/or from school at least once per week.

State-based data collected from 2009 to 2014 show that the proportion of children using active transport at least once per week to travel to and/or from school lies somewhere between 30% to 85% for primary school students and 58% to 60% for secondary students.

These variations, particularly for younger children, could be due to disparities in the questions asked of both parents and children rather than to true demographic differences.
Using walking and cycling as a means of active transport is more cost effective than structured exercise programs in achieving population health outcomes. In addition, using public transport is also a cost-effective way to achieve environmental and economic benefits.

**Global perspectives**

Australia’s decline in active transportation over time is reflected in global trends. A significant influence on this global decline is our increased use of technology. So much of our time is now spent on social media, gaming and other technology, yet

![Image of children and mean number of trips](image-url)

Parents report that **25%** and **29%** of children aged 5-6 and 9-10 years respectively travel to and/or from school using active transport for five or more trips per week. **35%** of secondary school students, aged 12-17 years use active transport every day to travel to and/or from school.

The mean number of trips (one trip is defined as a one-way trip) travelling to and/or from school using active transport is: **2.5** trips for 5-6 year olds; **2.8** trips for 9-10 year olds; **4.1** trips for 12-17 year olds.

On average children aged 5-17 years spend 18 minutes per day (30% of recommended daily MVPA) using active transport to various destinations.

**Source:** Active Healthy Kids Australia, 2015, University of South Australia.
many argue they ‘do not have time’ to engage in active transport, as active transport often takes longer than passive transport.

However, countries which have higher rates of active transportation (such as the Netherlands, Denmark, Germany, Sweden, Finland and Norway), also have lower rates of obesity and type 2 diabetes than Australia, so targeting this may be vital to tackling our obesity epidemic.

**FIGURE 15.11** The percentage of children who use active transport to and/or from school from 1970

*Source: Active Healthy Kids Australia, 2014.*

**FIGURE 15.12** The Netherlands has the highest rate of active transport. This is because there is excellent cycling infrastructure there, including a continuous network of cycling paths and tracks, protected intersections and bike-parking facilities, as well as bike-friendly policies.
Australian parents more reluctant than English to allow kids to walk to school, study shows

Australian parents of 10 to 12 year olds are more reluctant to allow their children to walk home from school alone than their English counterparts, according to a study.

Just over half of Australian primary school children (51 per cent) are ferried to school by car, compared with less than a third (32 per cent) of primary school children in England, despite generally walkable distances in Australia, the study by Deakin University and VicHealth found.

The research compared the journeys of 784 primary school children and 455 secondary school children in rural and metropolitan areas of England and Victoria.

The Australian schools were all public and located in Fitzroy, Collingwood, Clifton Hill, Moonth Albert North, Surrey Hills, Knoxfield, Ferntree Gully, Gisborne, Korumburra and Kyneton.

Four in five (78 per cent) 11-year-old English children were allowed to walk home from school alone, compared with less than half of Australian children of the same age (43 per cent).

And most English children of that age were allowed to cross the road alone, compared with only two-thirds of Australian kids.

The researchers looked at parents granting ‘licenses’ — or permission — for several activities, including crossing roads alone, travelling to places other to school alone, going home from school, going out after dark alone, travelling on buses, and cycling solo.

While greater access to a second vehicle played a role in the Australian parents’ decision-making, lead researcher Dr Alison Carver says, it was far outweighed by factors such as fear of their child being abducted by a stranger and traffic issues.

These concerns existed despite statistics showing a low risk of abduction and increased traffic due to more parents driving their children to school.

‘[Australian] parents are concerned about stranger danger and traffic issues, although ultimately more cars contributes to traffic,’ she said.

‘Abduction rates is a funny issue: most children are abducted by someone they know. Random attacks, strangely, are very rare.’

Freedom of choice means Australian children live further from school

Dr Carver said more freedom of choice in public schooling also contributed to Australian kids on average travelling further to school.

‘Over half of kids are attending a school further from them than the closest [public] school,’ she said.

She compared the Australian experience with that of Switzerland, where public school zoning was far stricter.

‘In Switzerland, most kids live within a kilometre of their school,’ she said adding that ‘95 per cent of them walk to school’.

Dr Carver said children’s independence often increases when they reach secondary school, however: ‘Most Australian 11 and 12 year olds are still at primary school and face greater parental restrictions than those in England, who start school at an earlier age and are already attending secondary school.’

‘Park and Walk facilities located 500 to 800 metres from schools may encourage children to walk at least part of the way and help ease congestion around school gates.’

Findings come as childhood obesity rates soar

VicHealth CEO Jerril Rechter says the research confirms the number of children walking to school is declining, at a time when childhood obesity has reached record levels.

‘There seems to be a symbolic granting of freedom when a child transitions to high school, regardless of the child’s age,’ she said.

‘So while many kids are capable of independence when they are 10 to 12 years old, they’re generally not given permission to travel alone until they’re in secondary school.’

Despite parents’ concerns about time constraints, traffic, road safety and stranger danger, she said, ‘Once parents make the decision to let their kids walk, they tend to realise that these fears are unwarranted and walking can be a wonderful activity for children’s confidence and their health.’

The paper will be published in the hard copy edition of Children’s Geographies this month, coinciding with VicHealth’s Walk to School campaign.

Source: abc.net.au, 7 November 2013.
TEST your understanding

1 Use figure 15.9 to answer the following questions.
   (a) Suggest a reason for the trend in most parts of Australia from 1991–96.
   (b) Discuss two social environmental and two physical environmental influences that may explain the difference in the data for Canberra and Melbourne.
   (c) Explain how the Melbourne bike-share program may increase the number of people using active transport.

2 Using figure 15.11, describe the global trend from 1970–2010 in walking and cycling to school.

3 Data shows that more Australians walk than cycle as a form of active transport. Suggest two reasons why this may be the case.

4 Explain why Australia has lower rates of active transport compared to many other countries.

5 Outline three social environmental and three physical environmental factors that may act as barriers to active transport in Australia.

6 Suggest two reasons why other countries have higher rates of active transport.

APPLY your understanding

7 Devise a program that will encourage more active transport in your local area.
KEY CONCEPT

Active transport is an important life-long physical activity habit. It is vital, for the good health of individuals but also of the community, that we stop the decline of active transport.

One of the implications of our ever-increasing population is that the safety of people using active transportation may be sacrificed; for example, more cars on the roads make it harder for us to cycle safely.

The Australian Local Government Association has made nine recommendations to support greater use of active transport and public transport in the report *An Australian vision for active transport in 2010*.

1. Develop an integrated national active transport strategy and establish a national active transport authority.
2. Develop clear and realistic targets for active transport and physical activity outcomes.
3. Provide local government authorities with targeted funding for active transport.
4. Support the development of ‘Healthy Spaces and Places’ planning principles.
5. Encourage regional and local projects such as cycle routes and hiking tracks.
6. Promote safer environments for people who choose to walk and cycle, or use public transport.
7. Fund social marketing programs to promote the benefits of walking and cycling for people of all ages.
8. Support cycling training and pedestrian education in schools.
9. Provide incentives for persons to walk, cycle or take public transport to work.

The 2015 *Active Healthy Kids report card* has suggested the following for local communities and governments.

- Ensure high street connectivity and optimal density levels to reduce the distance needed to travel by students.
- Advocate for changes being made to the physical environment that make it easier for children to negotiate traffic.
- Ensure appealing landscapes within close proximities to homes that children can easily access and that encourage physical activity (e.g. playgrounds, sporting fields and courts, natural environments, skate parks etc.).

Developing healthy active transportation habits in kids is essential in changing the habits of Australia’s future.

The 2015 *Active Healthy Kids report card* has also suggested the following for schools.

- Consider the size of their ‘zones’. The closer children live to their school, the more likely they are to use active transport.
- Have active transport policies to promote and encourage the use of active travel to/from school including:
  - facilities within the school grounds to encourage walking and cycling (e.g. secure bike shelters and access to change rooms so can travel in all weather)
  - engaging with the wider school community to initiate walking/riding school groups (that could be adult supervised)
  - traffic-calming initiatives (e.g. crossing guards)
  - practices adopted by teachers and school leaders to encourage active transport use to and from school.

**FIGURE 15.13** In order to encourage more children to walk to school it is paramount that there are safety measures in place in congested areas.
TEST your understanding
1. List four common types of active transport for children.
2. Outline how active transport can lead to healthy habits for life.
3. List common barriers to active transport for children and briefly discuss how these have changed over time.

APPLY your understanding
4. Practical activity: the amazing race
   (a) Using key locations in the school/local community, create clues for students to walk/run around the campus. This may even be a map with numbers to follow.
   (b) Track steps using a pedometer. Teams are rewarded for the time it takes them to complete the race (the fastest team receives the highest amount of points) and for the number of steps.
      i. Outline when walking can be used as the primary mode of transport.
      ii. Identify three barriers and enablers to youth walking more.
      iii. Reflect on your own transport, and outline two situations in which you could use walking as your mode of transport.

5. Practical activity: bike safety
   Complete a safe bicycle-riding practical or cycle class. Before you do your practical, research key bicycle safety.

6. Practical activity: Complete a spin class. Record the kilometres ridden.
   (a) Convert the kilometres ridden to destinations you could have travelled to.
   (b) Based on your data in the practical, how long would it take you to ride to school? (Tip: work out average time per km, then work out how far you live from school.)
   (c) Calculate how much physical activity time you could accumulate in a week if you rode to school.

7. Using the Be active weblink in your eBookPLUS and your own research, answer the following questions.
   (a) Describe a strategy aimed at increasing active transportation:
      - in the community
      - in the workplace
      - in schools.
   (b) Outline four ways in which governments can help encourage active transportation.
   (c) Consider two of the walking case studies. Discuss how they are different and why.
Active transportation and the Youth Physical Activity Promotion Model

**KEY CONCEPT** The YPAP Model can be used to create programs to increase physical activity in children and young people with the goal of long-term behaviour change.

The Youth Physical Activity Promotion Model (see chapter 12) can be used to help create, evaluate and modify programs. If each aspect is addressed in detail specific to the target population, it is more likely to be successful and therefore result in long-term behaviour change. The model is organised around three broad factors that together influence how active children and adolescents are: predisposing, enabling and reinforcing factors.

#### Predisposing factors

When considering participation in active transport, the predisposing factors could be:

- improve perceptions of competence (Am I able?)
  - do the participants have the skills (walking, bike riding, scooting) to safely participate in the activity? Does the program provide guidance and/or teaching of basic skills to enable participants to be successful?
- improve attraction to physical activity (Is it worth it?)
  - is the program fun and exciting, and do the participants see the purpose and benefits of participating in the program? Does the program educate participants about the benefits of the program?

Programs should aim for all participants to answer yes to the above questions.

#### Enabling factors

Enablers provide the opportunity to be active. Possible enablers that active transportation programs may address include:

<table>
<thead>
<tr>
<th>Biological enablers</th>
<th>Environmental enablers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill level</td>
<td>Walking tracks</td>
</tr>
<tr>
<td>Physical fitness</td>
<td>Presence of safe footpaths/bike paths</td>
</tr>
<tr>
<td></td>
<td>Access to equipment (bikes, helmets)</td>
</tr>
<tr>
<td></td>
<td>Safe storage of equipment (lockers, bike racks)</td>
</tr>
<tr>
<td></td>
<td>Good weather (alternative options in poor weather)</td>
</tr>
</tbody>
</table>

**FIGURE 15.14** With physical activity levels in decline in Australia, we need to look at other ways to get people moving. Active transportation has been proven to increase physical activity levels.
Reinforcing factors

In addition to strengthening enabling factors, a program is more likely to be successful if it also strengthens reinforcing factors. Reinforcing factors include the support and encouragement of family, peers, teachers and role models to be active. In active transport, an example may be a parent volunteering to lead a ‘walking bus’ to school, or servicing a bike so it is ready for ‘Ride to School’ day. Other examples are parents engaging in active transportation with their children or creating groups where peers can engage in active transportation together. Reinforcing factors can be exhibited through either indirect or direct influence. For example, direct influence is the facilitation of participation such as a parent volunteering and taking their child along. Indirect influence includes a parent’s encouragement of the child to participate.

Personal demographics

Personal demographics such as age, gender, ethnic/cultural background and socioeconomic status lay the foundation for how the various influences combine to impact on physical activity behaviour. An active transportation program may cater for the personal demographics within a population by:

- having activities specific to the interests of the age group; for example, primary school children are more likely to scoot to and from school than secondary school students
- ensuring that all can access equipment, regardless of socioeconomic status; for example, a school having a bike loan program
- having role models of both genders; for example, using male and female leaders in walking groups.

Evaluating a program using the Youth Physical Activity Promotion Model

The HandsUp! Program

Aim: Supports thousands of schools across Australia to create and maintain an active travel culture. Suggestions to help make encouraging walking and riding to school quick and easy.

What they do:

- Monthly HandsUp! count system, so you can keep track of how you are going as a school. HandsUp! counts provide each school with the opportunity to measure their progress in supporting more students to become physically active and is a great way to reward their success. HandsUp! counts are simple. Schools simply count how students arrived at schools on any given day during the school week and enter the data they collect through their Ride2School account.
- Star Rewards and Barrier Buster Initiative — offering awards such as bike parking, bike education, a class set of bikes
- National Ride2School Day
- Local and state government support to create active travel environments (e.g. school crossings, reduced speed limits, paths etc.)

How to be involved:

- Schools can sign up for free using the online system.
- Schools must submit data once a week.

An evaluation of a program breaks down each of the factors and determines if they have been accounted for and, if so, how, using specific examples from the stem of...
the question. For factors that have not been addressed, an evaluation requires you to make appropriate suggestions to increase the likelihood of a program being successful. The table below provides an example of this.

**What aspects of the framework are addressed/not addressed?**

<table>
<thead>
<tr>
<th>Predisposing factors</th>
<th>Am I able?</th>
<th>Options given to suit skill set; for example, if someone can’t ride a bike they can walk.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Is it worth it?</td>
<td>While one of the prizes is bike education lessons, the program could be improved if these lessons were part of signing up to the program to help educate students about the benefits of active transport.</td>
</tr>
</tbody>
</table>

**Strengthen enabling factors**

<table>
<thead>
<tr>
<th>Biological</th>
<th>The program caters for a variety of skills (walking or riding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>Tools to help local and state government to create positive active transport environment (e.g. school crossings, reduced speed limits, paths etc.) Prizes include bike parking and a class set of bikes. This helps provide equipment.</td>
</tr>
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**Strengthens reinforcement factors**

| Participating as a school community can be a very strong reinforcement factor as students can actively travel to school with peers and teachers. |

| Personal demographics | The program is free, quick and easy. |

**Evaluation**

In order for a program to be effective, it needs to recognise that there are many factors that influence behaviour. There is no single factor that determines physical activity participation. The HandsUp! Program is free. It allows everyone, no matter their personal demographics or socioeconomic status, to be involved. By allowing students to contribute if they walk or ride, it allows a greater number of students to answer yes to the predisposing question of ‘am I able?’. These choices may also strengthen the biological enabler of skill.

The HandsUp! Program also aims to strengthen the environmental enablers by providing support tools to help local and state government to create positive active transport environment (e.g. school crossings, reduced speed limits, paths etc.) and prizes which include bike parking and a class set of bikes. This may help provide equipment. To strengthen reinforcement factors, the HandsUp! Program encourages participating as a school community. This can be a very strong reinforcement factor as students can actively travel to school with peers and teachers.

While it addresses most aspects of the Youth Physical Activity Promotion Model, the predisposing factor of ‘is it worth it?’ could be addressed better in order to ensure long-term effectiveness. While one of the prizes is bike education lessons, the program could be improved if these lessons were included in signing up to the program to help educate students about the benefits of active transport.
STRATEGIES TO DECODE THE QUESTION
- Identify the action words:
  List — enter in a list with others
  Outline — general description but not in detail
- Key terminology: Youth Physical Activity Promotion Model — predisposing factors, strengthening factors, reinforcement factors, personal demographics
- Key concept: Walking School Bus Program — use examples from the stimulus
- Marking scheme: 5 marks — always check marking scheme for depth of response required, linking to key information highlighted in the question

HOW THE MARKS ARE AWARDED
- 1 mark — mention that physical activity behaviour and the factors influencing it are complex. There is no single factor that determines physical activity participation.
- 4 marks — list each component of the Youth Physical Activity Promotion Model and outline if it has been considered in in the Walking School Bus Program.

KEY SKILLS
- Identify contemporary issues associated with participation in physical activity and sport
- Participate in and reflect on physical activities that illustrate the participatory perspective of the selected issue
- Collect information on a selected issue related to physical activity and/or sport in society from a range of sources such as primary data, print and electronic material
- Analyse the historical, current and future implications on the issue identified
- Apply the social-ecological model or Youth Physical Activity Promotion Model to analyse and evaluate strategies and programs associated with the selected issue
- Draw informed conclusions and report in a suitable format on the socio-cultural and environmental influences that impact on participation in physical activity and/or sport, based on research findings

UNDERSTANDING THE KEY SKILLS
To address these key skills, it is important to remember the following:
- apply the Youth Physical Activity Promotion Model to analyse and evaluate strategies and programs associated with the selected issue.

PRACTICE QUESTION
1 List each component of the Youth Physical Activity Promotion Model and outline if it has been considered in the Walking School Bus Program. (5 marks)

Sample response
Outline whether this program will be effective in increasing physical activity based on whether or not it addresses all aspects of the Youth Physical Activity Promotion Model.

Participation in active transportation is influenced by a number of different factors. The Walking School Bus Program addresses these by addressing the predisposing factors. Most students are able to participate as it involves walking. They can ‘walk’ the bus with friends which can help give it worth. Some education about the benefits of using the walking school bus would increases its effectiveness. The program seeks to strengthen enabling factors by allowing all students to join, no matter the age, gender or skill level, and they ensure safe routes to increase the safety. By using parents as conductors and encouraging groups of students to be involved, it strengthens reinforcement factors. The program is also free which can help overcome personal demographics barriers. While it addresses most aspects of the Youth Physical Activity Promotion Model, it could provide more incentives, like education on the life-long benefits of active transportation, to help better address predisposing factors.

PRACTISE THE KEY SKILLS
1 Outline two social environmental and two physical environmental barriers to active transport for youth and two sociocultural and two environmental barriers to active transport for adults.
2 Identify three strategies that could be used by a local government to increase the percentage of people using active transport.
3 Consider a local workplace and outline five specific barriers that would need to be overcome for the employees to engage in active transport. Identify these barriers as being social, cultural or physical environmental.

CHAPTER REVIEW
CHAPTER SUMMARY
- Use of active transport can increase physical activity levels and decrease sedentary behaviour.
- Active transportation can result in health, environmental and economic benefits for individuals and communities.
- Active transportation levels, across all age groups, are decreasing.
- There are many factors that influence active transport, many of which can act as enablers or barriers.
Australia’s levels of active transport are declining and are well below the levels of many other developed countries around the world.
In the last decade, Australia has begun to implement strategies that are aimed at increasing the participation in active transportation.
Programs that are most effective in encouraging active transportation are those that are tailored to the specific needs of a target group.
In order to critique programs that are aimed at increasing active transportation using the Youth Physical Activity Promotion Model, it is important to understand how active transportation is influenced by predisposing factors to be active, enabling factors to be active and reinforcing factors to be active.