Children and Young People's Travel In London Cycling and Walking Potential Policy Analysis Research Report

August 2011

Contents

Executive Summary	3
Introduction	5
Chapter 1 Travel in London by Children and Young People	8
Introduction	
Children and Young People	
Measuring travel of Children and Young People	
Trip rates of Children and Young People	
Journey purpose	
Mode shares	
Distances Children and Young People travel	
Times and days when Children and Young People travel	
Chapter 2 Children and Young People Cycling Trips	18
Introduction	
Cycling trips by Children	
Cycling trips by Young People	
Cycling trips by journey purpose	
Cycling trips by distance	
Cycling trips by time of day	
Frequency of cycling	
Profile of current cyclists	
Chapter 3 Children and Young People Potentially Cyclable Trips	27
Identifying potentially cyclable trips	
Potentially cyclable trips by Children	
Potentially cyclable trips by Young People	
Potentially cyclable trips by current mode	
Potentially cyclable trips by journey purpose	
Potentially cyclable trips by distance	
Potentially cyclable trips by day and time	
Chapter 4 Children and Young People Walking Trips	35
Introduction	
Walking trips by Children	
Walking trips by Young People	

Chapter 5 Children and Young People Potentially Walkable Trips	43
Introduction	
Identifying potentially walkable trips	
PWT by current mode	
PWT by journey purpose	
PWT by day and time	
PWT by distance taken	

Executive Summary

The Mayor has declared his aim of delivering a 'cycling revolution' in London by 2026; delivering a 400 per cent increase (from 2001) in the number of cycling trips and a 5 per cent mode share for cycling.

This report presents the results of analysis carried out by TfL Group Planning to understand the potential for growth in cycle travel and the nature of this potential, in terms of the type of trips, people and places offering the best opportunity for growth.

The analysis draws on two new tools developed by TfL which, separately and in combination, provide a fascinating and unique insight into where the potential to increase cycling can be found, and help the Mayor, TfL, and London's boroughs plan effective and good value for money policy interventions.

The travel of Children and Young People makes up around a quarter of all travel in London by residents. Within this analysis, Londoners aged 5 to 15 are included as Children, and Young People are those aged 16 to 25.

Across all age groups, the largest share of travel by Children and Young People is undertaken for leisure. Further large shares are trips to reach their school or place of work, although this varies more by age group. Currently walking has the largest mode share, making up around a third of all trips. Car is next most used accounting for a further 30%. Cycling is currently used for less than 2% of trips.

The types of trips made by Children and Young People have the potential to be shifted to walk or cycle, due to the length of the trips amongst other factors. Overall, around 1.2 million trips being made by Children and Young People could be cycled, while just under 500,000 trips could be walked.

Amongst trips made by Children, the largest single types of trips which could potentially be cycled are short (0.5-2km) car trips amongst Younger Children (5-10 year olds). Over 50,000 trips of this type to education, and a similar volume for leisure purposes have the potential to be switched.

Younger Children have a need for accompaniment on the majority of their journeys, therefore it is parents and guardians who have the greatest influence over the travel by this group.

The largest potentially cyclable trip types for Young People are all trips made by bus and between 2 and 5 km in length. The issue of travelling independently is less relevant for this group, so intervention can be more directly with this group. An example may be encouraging cycling for the commute to education, which may then translate into an increase for cycling for leisure, and continued behaviour when they leave education. One issue for Young People is the availability of free bus travel, which makes it favourable compared to other modes.

The definition of potentially walkable trips calculates that around one in five trips currently made by Children and Young People by mechanised modes could be walked.

¹ These volumes are not mutually exclusive, trips may be counted within both of these figures

Trips by Younger Children are particularly likely to be walkable, with trips from this age group making up two fifths of the total volume of walkable trips.

All the potentially walkable trips are short, due to the nature of walk trips and the definition used in the analysis (trips up to 2km). It is however interesting to note that the largest share of potentially walkable trips are at the longer end of the scale (1.5–2km), while a minority are the shortest trips (up to 500m).

The key trip types to target for walking for Younger Children are car trips for education purposes. For all distances up to 2km, switchable trips were seen in relatively large volumes. Amongst Older Children, bus becomes more important as a mode, due to free bus travel and increased independence.

Leisure trips dominate the largest volumes of potentially walkable trips for Young People. Amongst those Mainly in Education (16-20 year olds) larger volumes of these are by bus, while the oldest group are more likely to use a car.

As well as general attitudes to modes, a number of other factors are of importance in the choice of modes used by Children and Young People. These include the amount of parental influence in travel decision making, free bus travel, and, amongst Young People, the stage at which they learn to drive and/ or buy a car.

The motivations of using different modes by Children and Young People will need to be explored to assess the best tactics for encouraging the switching of potentially walkable and cyclable trips from their current mechanised mode.

Further information

For enquiries about the content of this publication, please contact:

TILenquiries@tfl.gov.uk

Tel: 020 7126 3678

Strategic Analysis, Group Planning Transport for London 9th floor, Windsor House 42-50 Victoria Street London SWIH 0TL

Introduction

Children and Young People in London today are the commuters of the near future. Their attitudes to travel will partially be formed during their development and transformation into young adults. Their current travel behaviour for their everyday activities is likely to inform their travel behaviour when they are older. Therefore, it is important to establish sustainable travel behaviour with this group.

This document presents the results of analysis conducted to understand the potential for growth in sustainable modes of travel for Children and Young People in London. The analysis aims to make the best use of available data to inform policy development, and therefore has all been carried out at TfL using existing data sources. The data analysed provides a unique insight into the current travel behaviour of Children and Young People, and has also allowed the potential for cycling and walking to be assessed. This can help the Mayor, TfL and London's boroughs to plan policy interventions that provide good value for money whilst meeting the needs of London young residents.

The goal of this analysis is to better understand the nature of Children and Young People travel in London, and the characteristics of trips that offer the best opportunity for shift.

This analysis is based on data collected through London Travel Demand Survey (LTDS), TfL's annual rolling survey of a sample of Greater London households. The data analysed had been collected using travel diaries as well as face-to-face interviews with members of selected households.

Travel can be measured in different ways, but the most appropriate for assessing travel behaviour is a travel diary or the interview technique as they both record purpose of the trip, besides time of the day and mode which can otherwise be recorded using counts or travel card data.

For the purpose of this analysis, a trip is defined as a one-way movement from one location to another to achieve a specific purpose. During one trip, several modes of transport can be used, and each segment of the trip is then referred to as a 'stage'. Each of the stages is distinguished by a single mode used to accomplish that stage.

Policy Context

In the latest Mayor's Transport Strategy published in May 2010, there are number of proposals aimed to encourage cycling and walking.

In 'Cycling Revolution London', the Mayor sets out his vision for London to become a cyclised city: one where people can ride their bikes safely, enjoyably and easily in an environment that embraces cycling. Making this a reality requires that physical and cultural changes are made in the city, demanding further investment, strong partnership working across the Capital and continued political leadership. The Mayor has declared his aim of delivering a 'cycling revolution' in London by 2026; delivering a 400 per cent increase (from 2001) in the number of cycling trips and a 5 per cent mode share for cycling.

2010 was the Year of Cycling and saw the launch of the first two Barclays Cycle Superhighways linking Central London to Barking and Merton, as well as the launch of the Barclays Cycle Hire

scheme in Central London. As well as numerous events and initiatives relating to cycling, thirteen Outer London boroughs were chosen to become Biking Boroughs, developing strategic plans to deliver increases in cycling in these localities.

A further 10 Barclays Cycle Superhighways are intended over the next few years, as well as expansions to the Barclays Cycle Hire scheme. Additionally, significant investment is planned for cycle parking, smarter travel and Greenways in the medium term. Longer term plans must include policy development by TfL to deliver the remaining mode shift. This will include overcoming current barriers, in terms of infrastructure, information and attitudes, required to achieve the target mode share.

Encouraging more Children and Young People to cycle is hugely important to the Mayor's vision of a cycling revolution, since any change in culture will only be sustained by encouraging young people to cycle and by ensuring they carry their enthusiasm through to adulthood.

TfL is working closely with schools to promote cycling, with London leading the way in targeting a change in school travel. By the end of 2009, 90 per cent of London's schools had an approved travel plan, providing a reported 6.2 percentage point reduction in the proportion of car use since the start of the School Travel Plan programme.

The Sustrans Bike It programme is an example of what schools can do to encourage cycling. During 2009, it achieved a doubling in the number of children cycling daily to the 45 participating schools, and a reduction in the number of children saying they never cycle to school fell from 78 per cent to 63 per cent. In addition, 40,000 school children in London received cycle training in 2009.

These high levels of engagement in cycling are one step in trying to encourage an increase in cycling amongst Children and Young People. Walking will also require some interventions to encourage mode shift and change in attitudes.

Introducing the analysis

TfL have developed tools to assess the development of cycling policy, as demonstrated in the Analysis of Cycle Potential report². Similar tools have also been developed to assess walking potential by Londoners.

The first tool is an **Analysis of Potential**, which is derived from TfL's London Travel Demand Survey (LTDS, 2005/06 to 2007/08). This seeks to identify current trips which could reasonably be cycled or walked all the way but which are currently made by mechanised modes.

The Survey provides an insight into how Londoners travel and includes 19,000 households and 42,000 residents. The analysis of potential seeks to quantify the nature and extent of the potential for cycling and walking in London, by identifying trips made at present by other modes, and assessing whether they could potentially be cycled or walked, based on a set of criteria about the person and trip.

² Analysis of Cycle Potential, December 2010, Transport for London

This analysis is carried out independently for cycling and walking, so it is possible for trips to potentially be cyclable and walkable.

Secondly, bespoke Market Segmentations have been developed, providing analysis derived from a range of data sources, which evaluates the key influences of travel behaviour in order to identify people who are most amenable to cycling or walking. The segmentation is a geo-demographic classification based upon full postcodes, so that each postcode is classified into one of seven segments according to the average characteristics of its residents. Because postcodes cover a relatively small number of households, resident populations tend to be highly homogeneous and therefore such classifications can be used with a reasonable degree of accuracy to predict the likelihood of an individual or household to exhibit a particular behaviour, characteristic or attitude. The market segmentation utilises behavioural and attitudinal data and can be used to identify the types of people who currently walk or cycle, could do more in the future and also the types of areas where these people live, ensuring that interventions are suitable for the needs of local people.

Both of these tools have already been used to assess the potential for the population as a whole to walk or cycle, while this report focuses on just Children and Young People.

Structure of the report

This report describes the findings of Children and Young People travel in London analysis. It deals with three main themes, namely Children and Young People Travel in London, Potential for growth of Children and Young People cycling trips, and Potential for growth of Children and Young People walking trips.

Chapter I looks mainly at the current travel patterns of Children and Young People. The main characteristics of trips, such as why are they travelling, where do they go, how far, and when are presented in this part of the report. This chapter sets out the background for the further analysis of potential.

Chapters 2 and 3 look at current and potential cycling trips undertaken by Children and Young People. These chapters set down both the characteristics of current trips undertaken using a bicycle and those additional trips that could potentially be cycled.

Finally, Chapters 4 and 5 set down current and potential walking trips undertaken by Children and Young People. These chapters set down both the characteristics of current walked trips, and then look at the other trips being made by Children and Young People that could potentially be walked.

Chapter 1 Travel in London by Children and Young People

Key findings

- Children and Young People in London account for one quarter of all travel in London by residents.
- Around half of trips by Children and Young People are for leisure purposes, while a further 30% are for education.
- When Children and Young People travel, they are most likely to walk (a third of trips).
- Around 1.9 per cent of their trips are currently undertaken using a bicycle.
- The remaining trips are relatively evenly split between car and public transport.
- Children and Young People travel more on a working day than on a weekend day, but the highest number of trips per time period is observed during the weekend interpeak period.

Introduction

The purpose of this chapter is to present observations of Children and Young People's existing travel patterns and trends, in order to provide the basis for the research later in this report into the potential for shifts in their travel to more sustainable modes.

The number of trips per person, modes used, main purposes for journeys, times and days of travel are all set out in this chapter.

Children and Young People

For the purpose of this analysis, Children and Young People are defined as those individuals who are between 5 and 25 years of age. There are around 1.96 million Children and Young People in London today, and on an average day, they account for 4.4 million trips in the capital.

Different ages within this group are engaged in different education or employment activities, which in turn influence their travel. Data about the activity of children under the age of 16 was not collected during the survey, so for the purposes of this analysis it was assumed that they were all in compulsory education.

Based on their main activity it was possible to divide the population of Children and Young People into four age groups. These are Younger Children (5 to 10 years old), Older Children (11 to 15 years old), Young People Mainly in Education (16 to 20 years old), and Young People Mainly in Employment (21 to 25 years old).

Most young people who were 16 or 17 years old at the time of survey were still in education (97 per cent of them). According to the survey findings, the share of young people in education then steadily decreases with an increase in age, down to 19 per cent of those London residents who were 25 years old at the time of the survey being in full-time education.

The comparison of the number of Children and Young People in London who are in education or employment is presented in Table 1 below.

Table 1 Number of persons per age group and activity

		In	Total	Percentage in	Percentage in
Age group	In education	employment	population	education	employment
Younger Children (5 to 10 yr olds)	530,487	-	530,487	100%	0%
Older Children (11 to 15 yr olds)	445,268	-	445,268	100%	0%
Young People Mainly in Education (16 to 20 yr olds)	346,455	73,264	419,719	83%	17%
Young People Mainly in Employment (21 to 25 yr olds)	123,989	299,547	423,536	29%	71%
All Children and Young People (5 to 25)	1,446,199	372,811	1,819,010	80%	20%

Source: London Travel Demand Survey 2007/08 to 2009/10

Measuring travel of Children and Young People

Trips undertaken by Children and Young People were identified using two main criteria. Besides the age of a person as the main selection criteria, observed trips were limited by origin and destination. Any trips that were completely outside Greater London were excluded from the analysis.

Based on these filters, the total number of trips undertaken by residents within Greater London, aged 5 to 25 years old, on an average day was 4.4 million trips. This accounts for a quarter of all travel by London residents, as seen in Table 2.

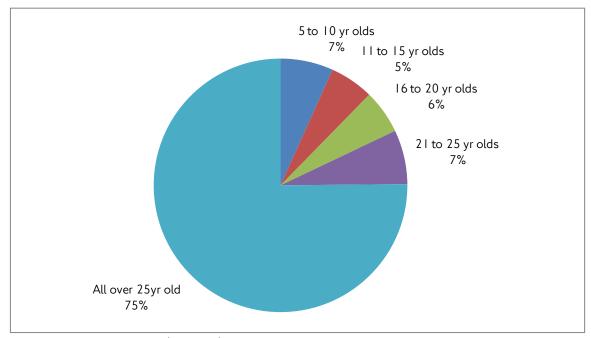
Table 2 Children and Young Persons Travel – Number of trips per age group

Age group	Trips (millions)	% Share
Younger Children (5 to 10 yr olds)	1.19	7%
Older Children (11 to 15 yr olds)	0.99	6%
Young People Mainly in Education (16 to 20 yr olds)	0.99	6%
Young People Mainly in Employment (21 to 25 yr olds)	1.23	7%
All Children and Young People (5 to 25)	4.40	25%
All population (over 5 years old)	17.2	100%

Source: London Travel Demand Survey 2007/08 to 2009/10

According to the survey, the trips are almost evenly distributed between the four age groups. Around half of the trips are undertaken by children (5 to 15 year olds) and another half is undertaken by young people (16 to 25 year olds). The share of trips of each of the age groups within the total population trips is presented in Figure 1.

Figure 1 Trips in Greater London - by age

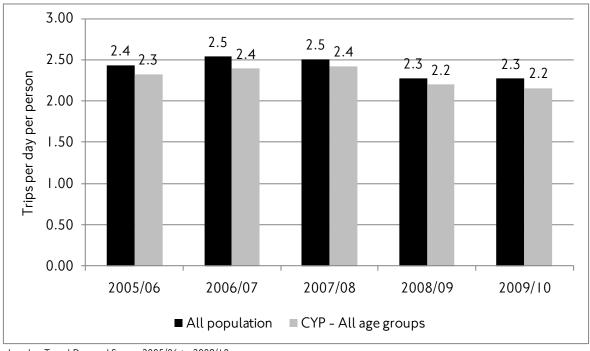


Source: London Travel Demand Survey 2007/08 to 2009/10

Trip rates of Children and Young People in London

Trip rates, or the number of trips per person per day based on a seven day week, are slightly lower for Children and Young People when compared with the trip rates for the whole population (Figure 2). However, the trend in trip rates for Children and Young People for the last 5 years follows the trend observed within the main population. There is a reduction in trip rates observed from 2008 onwards, most likely as a result of the economic recession.

Figure 2 Comparison of Children and Young People (CYP) trip rates with London population



When comparing across the four age groups, trip rates vary slightly, with the eldest group (Young People Mainly in Employment) making the most trips per person (Figure 3). The pattern of decreasing trip rates from 2008, seen above, is also observed for all age groups.

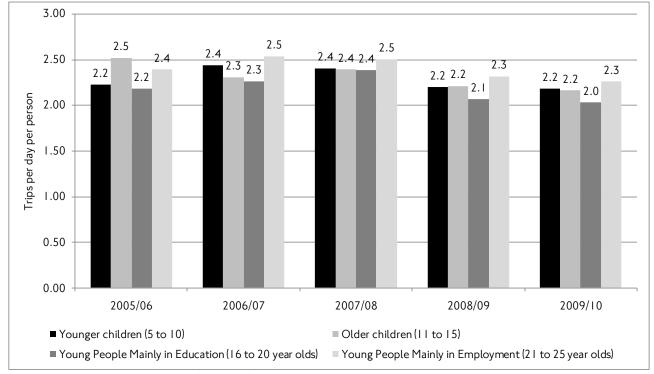


Figure 3 Comparison of trip rates – different age groups

Source: London Travel Demand Survey 2005/06 to 2009/10

Journey purpose

The LTDS defines 16 different journey purposes for each trip recorded in the travel diary. For this analysis they were aggregated into the following four main categories:

- Education all trips made as a pupil or a student at school/college/university or a trip accompanying someone (dropping-off/collecting) to school/college/university;
- Leisure any recreation/entertainment/shopping purpose;
- Work and services any work related trip (full or part-time work, delivery) or trip to use a service; and,
- Other any other purpose trips.

The analysis showed that on an average day, most of the trips undertaken by Children and Young People were for leisure purposes, making up around half of all trips. The second highest share of trips (3 I per cent) were undertaken for education purposes, while work and services trips made up most of the remainder. These shares and the split by age group are presented in Figure 4 below.

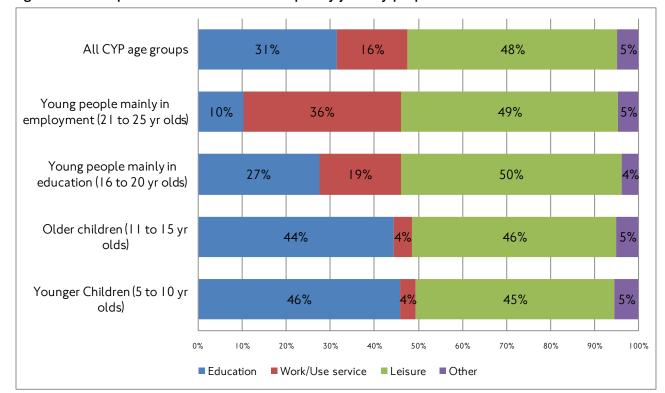


Figure 4 CYP Trips within Greater London split by journey purpose

Source: London Travel Demand Survey 2007/08 to 2009/10

Children travel by journey purpose

The split between educational and leisure purpose trips for children (5 to 15 years old) is fairly similar, and those trips make the overwhelming majority of trips within this group (over 90 per cent).

Young people journey purpose

Half of all of the trips undertaken by young people who are I 6 to 20 years old are for leisure purposes, while less than a third of all their trips are undertaken for education. This is despite the majority of these young people being in education (about 83 per cent of them). This may indicate that their trips for education purposes are not as frequent as those made by the younger age groups.

Out of the four age groups, the Young People Mainly in Employment group travels the most for work purpose. Seven in ten (71 per cent) of this group are in full or part-time employment. On an average day, over one third of trips made by this group are for work purpose.

However, leisure trips make up the largest share of trips by this group, making up 49 per cent of all of their trips.

Only 10 per cent of trips within this age group are undertaken for education purpose, even though 29 per cent of people in this age group are in education.

Mode shares

The analysis showed that, on an average day, Children and Young People were most likely to walk, as around 35 per cent of their trips were walked (Figure 5). Slightly smaller but similar shares of trips were made using car and public transport (bus or Underground/rail), with 31% using each.

Cycle trips accounted for 1.9 per cent of all of the trips undertaken by Children and Young People on an average day. When observing trips within individual age groups, this share changes slightly, and is the highest within the Older Children group, where the cycle trips make almost 3 per cent of all of the trips. For all the other age groups, cycling trips make up less than 2 per cent of trips.

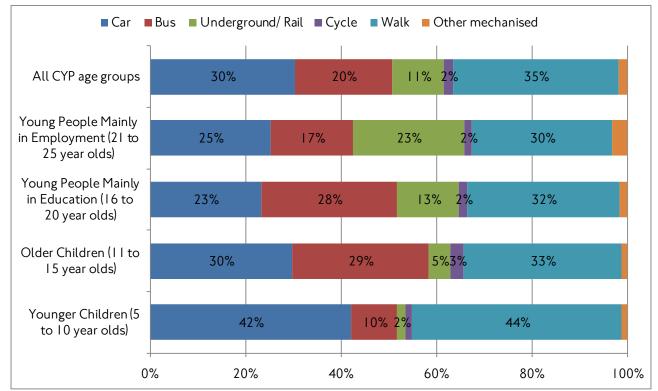


Figure 5 CYP Trips within Greater London split by mode

Source: London Travel Demand Survey 2007/08 to 2009/10

Mode shares for children travel

Younger Children (5 to 10 year olds) have the largest walk mode share compared to the other age groups (as presented in Figure 5 above).

However, a similar share of this group's trips, 42 per cent, are by car, while the public transport share is particularly low within this age group. This reflects the fact that they are mainly accompanied on their journey (car trips), or travelling relatively short distances (walking).

Older Children (11 to 15 year olds) are most likely to use public transport for their trips, compared to car or walking. Over a third of their trips use public transport, with the majority of these using bus rather than Underground or rail.

Within this group, walking trips make up about one third of all of the trips. Car is used substantially less than within the Younger Children group, with 30 per cent of trips made by car compared to

42% for Younger Children. These findings imply a change in the independence that this group have compared with the younger group.

Mode shares for young people

Young People Mainly in Education group (16 to 20 year olds) are very likely to use public transport, again reflecting the distances they travel. Around two thirds of public transport their trips are by bus, while the rest are by Underground or rail.

Around 32 per cent of their trips are walked, and the car has its lowest mode share for this group, at less than a quarter. This most likely reflects the fact that these young people are travelling further but still using the benefits of discounted travel and, possibly, not having access to a car.

As with the previous group, the Young People Mainly in Employment (21 to 25 years old) are most likely to use public transport to travel. This is the only group where bus is used less than Underground or rail. Car use is slightly higher than within the pervious group, making up 25 per cent of all of the trips by this group, although this share is still lower than amongst children.

Overall, the walking and car shares declines with age, at the same time the share of trips made by public transport, particularly Underground/ rail increases with age.

Distances Children and Young People travel

Over half (53 per cent) of trips by Children and Young People on an average day are to destinations up to 2 kilometres away, and 14 per cent of their trips are to destinations that are more than 8 kilometres away (Figure 6).

21% 32% 23% 10% 14% All CYP age groups Young people mainly in employment (2 I to 25 yr 17% 14% 23% 23% 23% olds) Young people mainly in education (16 to 20 yr 16% 29% 26% 13% 16% olds) Older children (11 to 15 yr olds) 18% 28% 36% Younger Children (5 to 10 yr olds) 31% 39% 18% 5% 6% 0% 20% 40% 60% 80% 100% ■ <500m ■ 500m to <2km ■ 2km to <5km ■ 5km to <8km ■ Over 8km

Figure 6 CYP Trips within Greater London split by journey length

Source: London Travel Demand Survey 2007/08 to 2009/10

Most of the Younger Children trips are to destinations up to 2 kilometres away – these trips make up 70 per cent of this group's trips. While the length of trips increases with age, trips up to 2 kilometres still make up two fifths of trips amongst the oldest group.

Times and days when Children and Young People travel

There is a slight difference in the numbers of trips Children and Young People undertake on an average weekday compared to an average weekend day. There are almost 12 per cent more trips undertaken on a working day than on either day during a weekend, as illustrated in Table 3Table 1.

Table 3 Number of CYP Trips within Greater London

Day of the week	am	Interpeak	pm	Off peak	Total trips per day
Weekday (any working day)	1,281,693	1,767,370	1,185,257	320,934	4,555,254
Weekend (Saturday or Sunday)	296,703	2,101,434	1,179,860	441,510	4,019,508
Weekday (any working day)	28%	39%	26%	7%	100%
Weekend (Saturday or Sunday)	7%	52%	29%	11%	100%

Source: London Travel Demand Survey 2007/08 to 2009/10

On weekdays the largest share of trips are made during the interpeak period, when 39 per cent of daily trips by Children and Young People are undertaken. During weekend days, the busiest time period is also inter peak, however, on these days more than a half of the daily trips are undertaken. The comparison between weekday and weekend day travel by time period is presented in Figure 7 below.

2,500,000
2,000,000
1,500,000
500,000
am interpeak pm off peak

Weekday (any working day)

Weekend (Saturday or Sunday)

Figure 7 CYP Trips within Greater London split by time and day of the week

Source: London Travel Demand Survey 2007/08 to 2009/10

Figure 8 below presents the share of each time period during both weekdays and a weekend days, for each of the age groups.

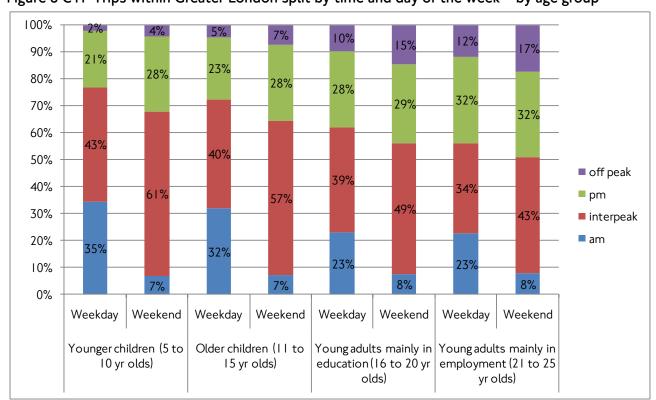


Figure 8 CYP Trips within Greater London split by time and day of the week – by age group

All of the age groups make the largest share of their trips during the interpeak period on both weekdays and weekend days. The shares made during weekend day interpeak periods were also larger than on weekdays.

The highest share of off-peak trips is observed within the oldest age group (21 to 25 years old) on a weekend day. For all ages, the share of trips made off-peak is higher at weekends than on weekdays. In addition, the shares increase with age.

The weekday am peak shares are higher amongst children than amongst young people. The reverse is true of the pm peak. The larger share of trips made in the pm/off peak amongst the older groups; this reflects the hours generally kept amongst young people compared to Younger Children in particular.

Table 4 shows the trip volumes behind the above chart. It reveals that all of the age groups make slightly more trips on a weekday than during a weekend day.

Table 4 Number of CYP Trips per time period

Age group	Day	am	interpeak	pm	off peak	Total
Younger Children (5 to	Weekday	428,458	527,949	258,040	27,288	1,241,735
10 yr olds)	Weekend	72,037	652,641	296,350	43,502	1,064,530
Older Children (11 to	Weekday	332,844	420,276	239,816	46,941	1,039,877
15 yr olds)	Weekend	62,312	497,809	245,225	64,417	869,763
Young People Mainly	Weekday	231,387	393,519	283,632	96,052	1,004,591
in Education (16 to 20						
yr olds)	Weekend	74,073	471,071	281,815	141,730	968,690
Young People Mainly	Weekday	289,004	425,626	403,769	150,653	1,269,051
in Employment (21 to						
25 yr olds)	Weekend	88,281	479,913	356,469	191,861	1,116,524
All Children and	Weekday	1,281,693	1,767,370	1,185,257	320,934	4,555,254
Young People	Weekend	296,703	2,101,434	1,179,860	441,510	4,019,508

Chapter 2 Cycling Trips by Children and Young People

Key findings

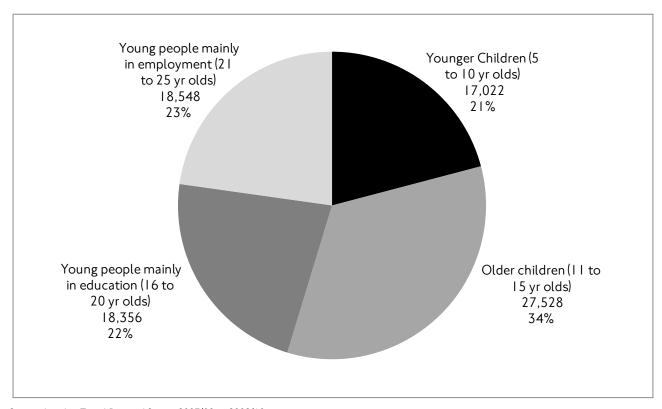
- Around 81,000 trips are currently cycled each day by Children and Young People
- The largest share (34%) of these cycling trips are done by Older Children (11 to 16 year olds)
- Leisure is the dominant purpose of current cycle trips, making up over half of the total
- Almost half are 0.5 to 2km in length
- Two thirds of Children and Young People cycle less than once a year or never

Introduction

The aim of this chapter is to present the characteristics of current cycling trips made by Children and Young People in London.

Around 1.9 per cent of trips undertaken by Children and Young People on an average day in London are by bicycle. In terms of volume, this is equivalent to over 81,000 cycling trips per day. Older Children make around one third of these cycling trips, while the rest is almost equally split between the three other age groups, as seen in the chart below.

Figure 9 Currently cycled trips by age group



The Younger Children group make the smallest volume of cycling trips of all four groups; 21 per cent of all Children and Young People's (CYP) cycling trips are made by this group. Around 22 per cent of cycling trips are undertaken by Younger People Mainly in Education, and about 23 per cent by Young People Mainly in Employment.

Cycling trips by Children (5 to 15 years old)

Cycling trips undertaken by Children account for around 55 per cent of CYP cycling trips, or over 44,000 cycling trips on an average day. Older Children cycle more frequently than Younger Children, and the majority of all cycling trips done by Children are undertaken for leisure purposes.

About 11,000 cycling trips undertaken by Children in London are for education purposes. This compares to almost 30,000 made by Children for leisure purposes.

While the numbers of trips for education are similar for Younger and Older Children (around 5,500 by each group), these similarities in volumes are less obvious when looking at the shares, as Younger Children make a larger share of their trips for education purposes.

This is due to the larger total volume of current cycle trips by Older Children. This also leads to the number of leisure cycling trips undertaken by Older Children being almost twice as high as that of Younger Children.

When trip distances are analysed, it appears that short distances account for most cycling trips, as over 60 per cent of trips undertaken by Children cover a distance of up to 1 kilometre. An additional 28 percent of all cycling trips by Children are between 1 and 2 kilometres in length. The number of trips then reduces drastically with further increases in distance.

Cycling trips by Young People (16 to 25 years old)

Almost 37,000 cycling trips are undertaken on an average day by Young People in London, which makes about 45 per cent of all cycling trips undertaken by Children and Young People. The cycle trips by Young People are almost equally split between the two age groups. However, there are differences in the profiles of the two Young people groups, as seen in Figure 10.

When Young People cycle, it is mainly for leisure purposes (almost 18,000 cycle trips on an average day), but two thirds of these are made by Young People Mainly in Education.

The eldest group are more likely to cycle to work or to use a service, making almost 4 times more work related cycling trips than the younger group (9,800 compared to 2,600).

The profiles of cycle trips by distance imply a much larger volume of trips over 2km in length amongst the oldest group (11,500 vs. 5,000 by Young People Mainly in Education), while they make very few of the shortest trips.

Cycling trips by purpose

Current cycling trips by Children and Young People were analysed according to the trip purpose, with the analysis showing that the majority of cycling trips are undertaken for leisure purposes (Figure 9). Trips for education account for slightly more than work/ use service trips.

Education ■ Work/use service Leisure Other All CYP age groups 21% 19% 58% Young people mainly in 9% 53% 37% employment (2 I to 25 yr olds) Young people mainly in 61% 25% 14% education (16 to 20 yr olds) Older children (11 to 15 yr olds) 19% 10% 70% Younger Children (5 to 10 yr 34% 62% olds) 20% 40% 60% 80% 0% 100%

Figure 10 Currently cycled CYP trips split by journey purpose

Source: London Travel Demand Survey 2007/08 to 2009/10

The LTDS survey indicated that the largest volume of cycling trips are made by Older Children for leisure trips (around 19,000), as seen in the table below. The next highest volume is also cycling for leisure, but amongst Young People Mainly in Education, at just over 11,000 trips per day.

Table 5 Volume of current CYP cycle trips split by purpose

Age group	Education	Work/use service	Leisure	Other	Total
All Children and Young People	17,345	15,365	47,631	1,112	81,453
Young People Mainly in Employment (21 to 25 yr olds)	1,754	9,871	6,774	148	18,548
Young People Mainly in Education (16 to 20 yr olds)	4,587	2,620	11,149	-	18,356
Older Children (11 to 15 yr olds)	5,250	2,712	19,150	416	27,528
Younger Children (5 to 10 yr olds)	5,754	162	10,558	548	17,022

Source: London Travel Demand Survey 2007/08 to 2009/10

Cycling trips by distance

As presented in Figure 11 below, the largest share of cycling trips cover distances between 0.5 and 2 kilometres (47 per cent). A smaller share of trips are shorter (27 per cent) while a similar proportion are more than 2km in length.

The length of trips made generally increases with age. Younger Children cycle mainly for short distances, with only 5 per cent of all cycling trips by this group covering distances of more than 2 kilometres. In addition, no cycle trips are recorded of more than 5km for people in this age group.

Older Children cycle slightly longer distances as 15 per cent of all cycling trips cover distances of more than 2 kilometres.

This is equivalent to around 800 longer trips by Younger Children, compared to around 11,500 amongst Young People Mainly in Employment.

The share of short (<500m) trips by Young People Mainly in Education is around half that seen for Children. As well as fewer short trips, this group make a larger share of longer trips, with a quarter over 2km.

The eldest group make very few short trips, while almost a fifth of trips are more than 5km. In total, six in ten trips by this age group are more than 2km in length, much more than any other age group.

27% 47% 20% 4%2% All CYP age groups Young people mainly in 36% 45% 10% 7% employment (21 to 25 yr olds) Young people mainly in education 20% 53% 24% 1 %% (16 to 20 yr olds) 43% Older Children (11 to 15 yr olds) 43% 10% 4%% Younger Children (5 to 10 yr olds) 37% 58% 5%% 0% 20% 40% 60% 80% 100% ■<500m ■ 500m to <2km ■ 2km to <5km ■ 5km to <8km ■ >=8km

Figure 11 Currently cycled CYP trips split by distance

Source: London Travel Demand Survey 2007/08 to 2009/10

In terms of volumes of trips, around 22,000 cycle trips in total by Children and Young People are less than 0.5km in length, with nearly half of these being made by Older Children.

Cycling trips by time of day

Three quarters of all cycling trips currently made by Children and Young People are on weekdays, as illustrated in the following Figure. Young People Mainly in Education make the largest share of their cycle trips on weekdays (80%), with the largest share of these in the interpeak period.

This group also make the smallest share of trips in the am peak on weekdays, compared to other age groups. Younger Children have the largest share in the weekday am peak. This reflects the purposes of trips, as shown earlier in the chapter, with a larger share of Younger Children's trips for education purposes compared to the other age groups.

Weekend cycle travel is mainly in the interpeak for all age groups, apart from Young People mainly in Employment, who travel more in the peaks. This is likely to be related to a higher share of this group being employed, which could include weekend work.

14% 21% 3% 28% 11% 14% All CYP age groups 6% 4% Young people mainly in employment 19% 20% 11% 7% 7% 4% 8% (21 to 25 yr olds) Young people mainly in education (16 34% 16% 19% 0% 11% 3% 6% to 20 yr olds) 26% 6% 3% Older Children (11 to 15 yr olds) 10% 23% 10% 4% 19% Younger Children (5 to 10 yr olds) 20% 15% 5% 2% 0% 10% 30% 40% 60% 100% 20% ■ Weekday am ■ Weekday interpeak ■ Weekday pm ■ Weekday off peak ■ Weekend am ■ Weekend interpeak ■ Weekend pm ■ Weekend off peak

Figure 12 Currently cycled CYP trips split by time of day

Source: London Travel Demand Survey 2007/08 to 2009/10

Figure 13 provides details of the volumes of trips which these shares represent. Older Children make the largest volume of cycle trips overall, as seen previously, and this is reflected in higher volumes on weekdays and weekends.

The weekday profiles of the other three age groups are relatively similar, with around 3000 trips from each group in each peak period, and around 5,000 trips in the interpeak.

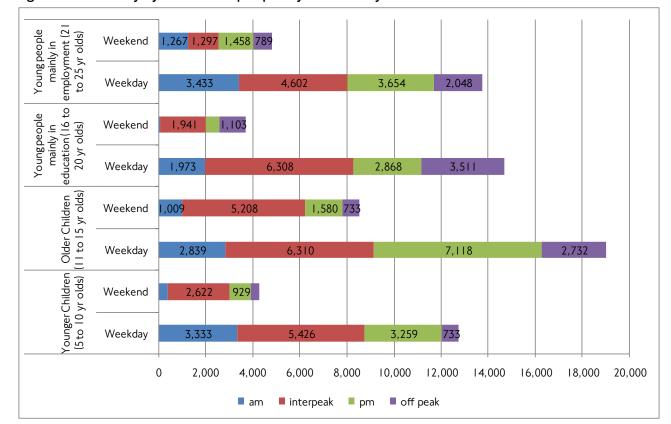


Figure 13 Currently cycled CYP trips split by time of day - volumes

Source: London Travel Demand Survey 2007/08 to 2009/10

Frequency of cycling

The volumes of trips shown so far in this chapter are based on those Children and Young People who cycle. It should, however, be noted that the majority of Children and Young People cycle very rarely. Two thirds of them cycle less than once a year or even never.

Despite this, about 7 per cent of Children and Young People (over 140,000) cycle frequently (more than 3 days per week), as shown in Table 6 and Figure 14 below.

Table 6 Number of Children and Young People by age and frequency of cycling

Age group	Frequent (3+ days a week)	Medium (1-2 days a week)	Low (less than once a week)	Less than once a year/ never	TOTAL	Missing/ don't know
Younger Children (5 to 10 yr olds)	40,704	80,974	96,132	307,798	525,607	4,879
Older Children (11 to 15 yr olds)	45,364	67,565	97,292	233,969	444,192	1,076
Young People Mainly in Education						
(16 to 20 yr olds)	26,706	30,624	61,452	343,639	462,420	721
Young People Mainly in						
Employment (21 to 25 yr olds)	27,703	20,126	46,045	428,179	522,053	987
All Children and Young People	140,478	199,289	300,921	1,313,585	1,954,27 2	7,664

10% 15% 67% All CYP age groups Young people mainly in employment 82% (21 to 25 yr olds) Young people mainly in education 13% 74% (16 to 20 yr olds) Older children (11 to 15 yr olds) 10% 15% 22% 53% 15% Younger Children (5 to 10 yr olds) 8% 18% 59% 40% 0% 20% 60% 80% 100% ■ Frequent (3+ days a week) ■ Medium (1-2 days a week) ■ Low (less than once a week) ■ Less than once a year/never

Figure 14 CYP Frequency of cycling

Source: London Travel Demand Survey 2007/08 to 2009/10

Profile of current cyclists

Using the cycling segmentation tool, it is possible to profile the Children and Young People in London based on the typical traits of the areas they live in.

As would be expected, there is little difference in profile comparing the different age groups, as the Children and Young People across London will fall in all the segments across the population. Young People Mainly in Employment are slightly more likely than average to fall in the Urban Living segment. This is due to the profile of the segment being younger, and the higher likelihood of these young people to live away from home and in those parts of London which are in the Urban Living segment.

The segments which cycle more than average are Urban living, Young couples & families and High earning professionals. Together these three groups account for 45% of London's population of Children and Young People, with Urban living making up the largest part of this share.

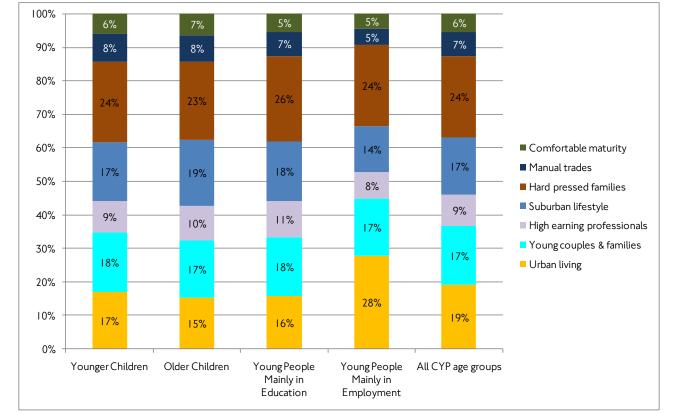


Figure 15 Cycling segmentation profile of CYP groups

Source: London Travel Demand Survey 2007/08 to 2009/10

The Children and Young People who cycle frequently (once a week or more) make up 17% of all Children and Young People in London. The profile of this subset is shown in the chart below.

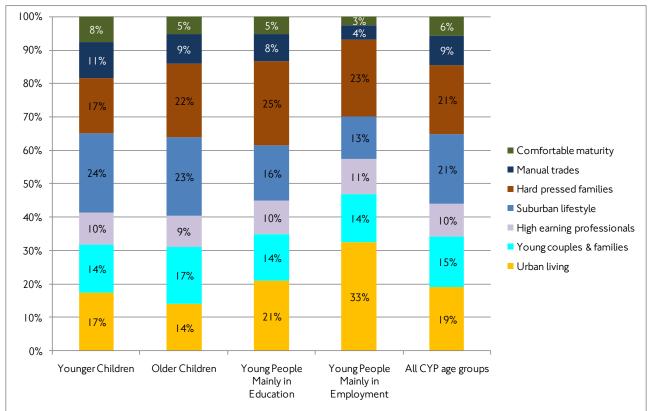
The profile is similar, although, at the overall level, a larger share of Children and Young People are in the Suburban lifestyle, Manual trades and High Earning Professionals groups

Smaller shares are seen in Hard Pressed Families and Young Couples & Families across all the age groups.

Amongst Children, the Suburban lifestyle segment is slightly larger amongst frequent cyclists than amongst everyone, while for Young People, the Urban living segment is larger than average.

The shares would be expected to reflect the expected cycling behaviour, with those segments with above average use making up larger shares compared to the equivalent population falling in the segment. This can be seen to be true of the Urban living and High earning professionals segments, and with the opposite effect on Hard pressed families.

Figure 16 Cycling segmentation profile of frequent cycling CYP



Chapter 3 Potentially Cyclable Trips by Children and Young People

Key findings

- Around 1.2 million or 44 per cent of 2.8 million mechanised trips undertaken by Children and Young People could potentially be cyclable.
- The largest volume of potentially cyclable trips are made by Younger Children (around 350,000)
- Of these, the greatest volume are car trips for education purposes, between 0.5 and 2km in length
- Longer bus trips for education are the largest volume of cyclable trips amongst Older Children
- The volumes of individual trip types for Young People are generally smaller than for children, however the largest is longer bus trips for work purposes amongst Young People Mainly in Employment

Identifying potentially cyclable trips

Out of 4.4 million trips that Children and Young People make every day, 2.8 million are done by mechanised modes. This means it is not walked or cycled currently. Mechanised modes have been grouped for this analysis into car, bus, Underground/rail and other (which includes, for example, motorbikes and taxis).

Some of the trips currently made by one of these modes could instead be cycled. Those mechanised trips that could be cycled are identified and profiled in this chapter.

To identify the potentially cyclable trips, a tool already developed for selection of potentially cyclable trips of the whole London population was applied to the trips made by the population of Children and Young People in London.

This analysis does not claim that these trips could are suitable to be cycled, or that all of the excluded trips cannot be cycled. The filters applied are intended to act only as a 'rule of thumb' to identify those trips that are most likely to be cyclable.

The filters applied to the trips to separate out those which were cyclable were the same as those previously applied to the trips made by the whole Greater London population.

Trips were not considered cyclable if:

- A heavy load was being carried;
- They were longer than 8 kilometre;
- They would take 20 per cent more time to cycle than by the current mode;
- They were started before 6am or after 8pm;
- The traveller had a disability affecting their travel, or;
- Trips were made by van, dial-a-ride, boat or plane.

With these selection filters applied, about 1.2 million current trips were identified as being potentially cyclable.

The volume of potentially cyclable trips by age group are set in Table 7 below.

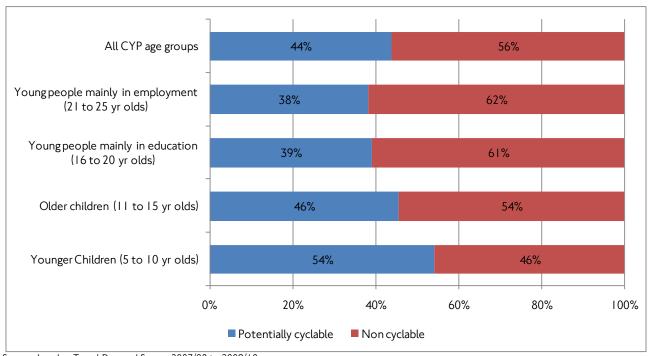
Table 7 Share of current mechanised trips which are potentially cyclable

Age group	No. of potentially cyclable mechanised trips	No. of non- cyclable mechanised trips	Share of mechanised trips which are potentially cyclable
Younger Children (5 to 10 yr olds)	352,792	297,171	54%
Older Children (11 to 15 yr olds)	289,764	347,052	46%
Young People Mainly in Education (16 to 20 yr olds)	258,564	401,910	39%
Young People Mainly in Employment (21 to 25 yr olds)	322,731	522,226	38%
All Children and Young People	1,223,850	1,568,359	44%

Source: London Travel Demand Survey 2007/08 to 2009/10

Around 44 per cent of all mechanised CYP trips are potentially cyclable (as shown above and in Figure 17). This illustrates that the younger the age group, the larger the share of trips which appear to be potentially cyclable.

Figure 17 Share of current mechanised trips which are potentially cyclable



Source: London Travel Demand Survey 2007/08 to 2009/10

Based on the analysis, the share of potentially cyclable trips is the highest for the Young Children age group (5 to 10 year olds). About 54 per cent of trips that they make on an average day could potentially be cycled.

The eldest group (Young People Mainly in Employment -21 to 25 year olds) makes the most mechanised trips that are excluded from being cyclable, just over three fifths.

Potentially Cyclable Trips by Children

The types of trips which are potentially cyclable amongst children, in terms of the current mode used, purpose and length have been analysed.

Table 8 shows the trip types which comprise the largest volumes of potentially cyclable trips amongst children. In total, these 10 types make up over half of all potentially cyclable trips for these age groups. All other trip types account for less than 20,000 trips each.

The trips shown are all between 0.5km and 5km in length, and are all switches from car or bus.

Table 8 Top 10 trip types for Children by volume of potentially cyclable trips

Age group	Mode	Purpose	Length	Volume of potentially cyclable trips
Younger Children (5 to 10 year olds)	Car	Education	500m to 2km	58,678
Younger Children (5 to 10 year olds)	Car	Leisure	500m to 2km	54,151
Younger Children (5 to 10 year olds)	Car	Leisure	2km to 5km	50,003
Older Children (11 to 15 year olds)	Bus	Education	2km to 5km	47,444
Older Children (11 to 15 year olds)	Car	Leisure	2km to 5km	30,766
Older Children (11 to 15 year olds)	Car	Leisure	500m to <2km	27,997
Younger Children (5 to 10 year olds)	Car	Education	2km to <5km	26,105
Older Children (11 to 15 year olds)	Bus	Leisure	2km to <5km	24,150
Older Children (11 to 15 year olds)	Bus	Education	500m to <2km	21,152
Older Children (11 to 15 year olds)	Car	Education	500m to <2km	20,112

Source: London Travel Demand Survey 2007/08 to 2009/10

The two largest volumes of potentially cyclable trips are similar and identified as trips by Younger Children using the car, for distances between 0.5 and 2km. The difference is the purpose, with a slightly larger number education trips being made compared to leisure.

However, the next largest volume, an additional 50,000 trips, is also car leisure trips by this age group. They are, however, slightly longer, at 2-5km.

Younger Children appear once more amongst in these top volumes, although the volume is much smaller than those already mentioned. These trips are longer car trips for education purposes.

With children of this age (5 to 10 year olds), the choice of mode is highly influenced by parents or guardians as these children are mainly accompanied on their journeys. Therefore, mode shift of these trips probably cannot be achieved only by educating the children or through providing infrastructure for cycling. The important influencing factor for these trips is educating the parents and guardians to change their mode choice behaviour.

The most recorded trip types amongst Older Children are bus trips for education purposes. These are trips of 2-5km in length. Two further bus trip types also appear in the table for this age group, once for shorter trips for education purpose and also for leisure trips of 2-5km. These volumes indicates that children aged between 11 and 15 years old make significant use of the free travel on buses in London for travel to school.

The remaining three volumes in the table are car trips by Older Children. Trips for leisure purpose (0.5-5km) by car make up around 60,000 potential cycle trips, while education trips (0.5-2km) by car

account for another 20,000, out of almost 290,000 trips which were identified as being potentially cyclable by Older Children.

These Older Children generally do not require to be accompanied on their journey. Raising awareness of cycling benefits, and improvements to cycling infrastructure in residential areas and particularly to/at schools could potentially affect the switch of the above trips to cycling. Raising awareness of the benefits of cycling through education could also be advantageous.

Potentially Cyclable Trips by Young People

The trip types with the largest volumes have also been extracted for Young People. The top ten trip types are shown in Table 9. In total, these types make up two fifths of all potentially cyclable trips currently made by Young People.

It is interesting to note that the largest volume for Young People is much smaller than the largest volume of Children's trips.

Table 9 Top 10 trip types for Young People by volume of potentially cyclable trips

Age group	Mode	Purpose	Length	Volume of potentially cyclable trips
Young People Mainly in Employment (21 to 25 year olds)	Bus	Work/use service	2km to <5km	28,724
Young People Mainly in Education (16 to 20 year olds)	Bus	Leisure	2km to <5km	28,592
Young People Mainly in Education (16 to 20 year olds)	Bus	Education	2km to <5km	27,283
Young People Mainly in Employment (21 to 25 year olds)	Underground/ rail	Work/use service	5km to <8km	26,038
Young People Mainly in Employment (21 to 25 year olds)	Car	Leisure	2km to <5km	23,054
Young People Mainly in Employment (21 to 25 year olds)	Bus	Leisure	2km to <5km	21,956
Young People Mainly in Employment (21 to 25 year olds)	Car	Work/use service	2km to <5km	19,611
Young People Mainly in Employment (21 to 25 year olds)	Car	Leisure	500m to <2km	19,427
Young People Mainly in Education (16 to 20 year olds)	Car	Leisure	2km to <5km	19,193
Young People Mainly in Education (16 to 20 year olds)	Bus	Leisure	500m to <2km	18,249

Source: London Travel Demand Survey 2007/08 to 2009/10

The largest three volumes of potentially cyclable trips undertaken by Young People are all by bus, and are all for trips of 2 to 5km. The largest volume is for Young People Mainly in Employment, for work purposes, while the next two largest groups are also very similar in size, but are trips by Young People Mainly in Education made for leisure and education purposes respectively.

The next five groups, totalling 110,000 trips, are all trips by Young People Mainly in Employment. They cover a range of combinations of trip types, including leisure trips by car between 0.5 and 5km in length. Notably, these trip types also include the only Underground/rail trips within these largest volumes.

The last two trip types are leisure trips made by Young People Mainly in Education. Shorter (0.5-2km) bus trips are listed, in addition to the longer ones seen nearer the top of the list, as well as the equivalent for car.

The majority of these trips are 2km+ in length, reflecting the profile of trips made by these age groups. Additionally, more of these trips are for leisure purposes than for work or education. This may suggest investment in encouragement to cycle for leisure purposes, in terms of infrastructure or other softer measures. Encouraging cycling for education purposes amongst the younger age group may also be beneficial in continuing cycling behaviour once they move on to employment.

Potentially cyclable trips by current mode

The largest share of those trips undertaken by Children and Young People and identified as cyclable are currently made by car (Figure 18). Car accounts for half of all potentially cyclable trips, while bus trips account for almost two fifths. The small remaining share of the potentially cyclable trips are currently undertaken by Underground or rail.

In terms of volumes, this is equivalent to 597,000 car trips, and 479,000 bus trips. The potentially cyclable car trips just by Younger Children total over 260,000 daily trips.

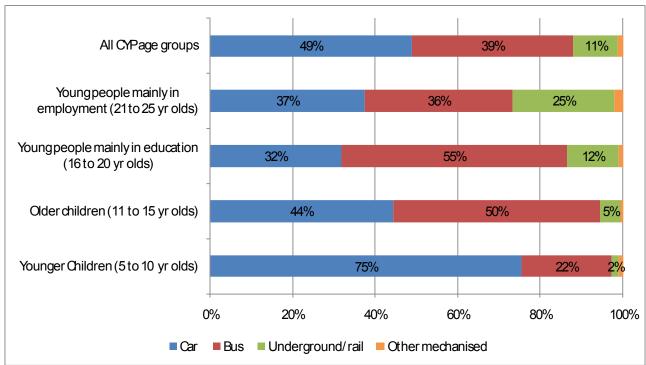


Figure 18 Potentially cyclable CYP trips split by current mode

Source: London Travel Demand Survey 2007/08 to 2009/10

About three quarters of potentially cyclable trips that are undertaken by Younger Children are currently made using a car. This is expected based on the profile of their trips, as shown in the previous chapters. Figure 5 provides the comparison of all trips made by Children and Young People, albeit also including trips by non-mechanised modes. This shows that car is the most used mechanised mode for this age group.

Of the potentially cyclable trips, shown in Figure 18, the car share generally declines with increasing age, while public transport becomes more dominant. In particular, the Underground/rail share increases with age.

For Older Children and Young People Mainly in Education, bus trips make up half of their potentially cyclable trips.

Current and potentially cyclable trips by journey purpose

As seen previously, more than half of current cycle trips by Children and Young People are for leisure purposes. Education trips are the next largest share for those aged up to 20, while work-related trips are more dominant for Young People Mainly in Employment (Figure 9).

Leisure trips also make up the largest share of potential cycle trips across all Children and Young People, as seen in the chart below (Figure 19). The share is slightly smaller compared to trips currently cycled, while the education share is slightly larger.

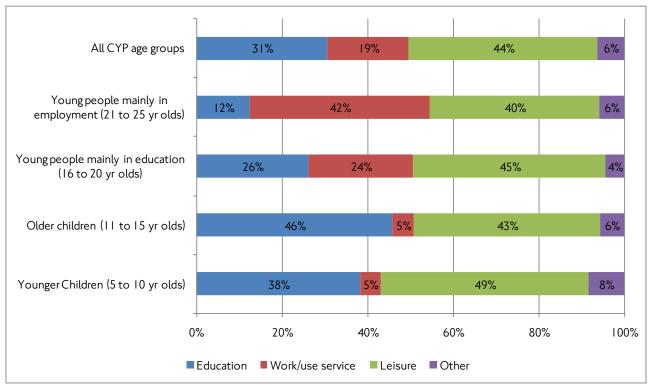


Figure 19 Potentially cyclable CYP trips split by journey purpose

Source: London Travel Demand Survey 2007/08 to 2009/10

Comparing the age groups reveals that the share of potential cyclable trips which are for leisure purposes is at least two fifths for all groups, although is largest amongst Younger Children. The education share declines with age and the work/use services share increases. This reflects the profile of the activities conducted by these groups overall, and the profile of all their trips, as seen in Figure 4.

Potential cycle trips by journey distance

Currently, most cycled trips are undertaken for distances under 2km; for the youngest age group, this is almost 95% of all cycled trips (Figure 11). Distance increases with age, so that more than half of cycle trips by the oldest group are more than 2km.

While all potentially cyclable trips are less than 8km in length, due to the filters used, a third are over 0.5km and up to 2km in length, and a further two fifths are 2-5km in length. The profile can be seen in Figure 20.

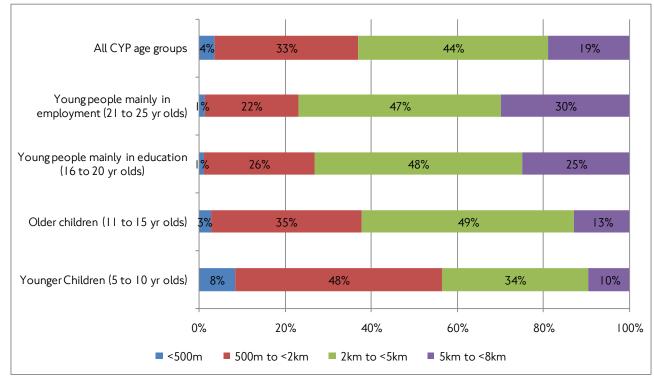


Figure 20 Potentially cyclable CYP trips by journey length

Source: London Travel Demand Survey 2007/08 to 2009/10

The potentially cyclable trips by Younger Children are generally shorter than those made by Older Children, and also shorter than those made by Young People. In total, over half of their potentially cyclable trips are less than 2km in length, including almost one in ten which are less than half a kilometre. An additional one in ten are longer than 5km, and while this share increases with age, the share of shorter trips declines.

The largest share of trips by the Younger Children (0.5-2km) is also the largest volume of trips of all the groups at around 169,000 trips.

Similar shares of mid-length trips (2km to 5km) are seen for Older Children and both Young People groups. The volume of trips made by Young People Mainly in Employment for distances of 2-5km is the second largest volume overall (152,000).

Potential cycle trips by day and time

Potential cycle trips follow a similar profile to all trips made by Children and Young People in terms of the time of day they are made.

Figure 22 shows that on both weekdays and weekend days the largest shares of trips are made in the interpeak period (10am - 4pm) for all age groups. This is particularly the case on weekend days, when nearly three fifths of potentially walkable trips are made in the interpeak.

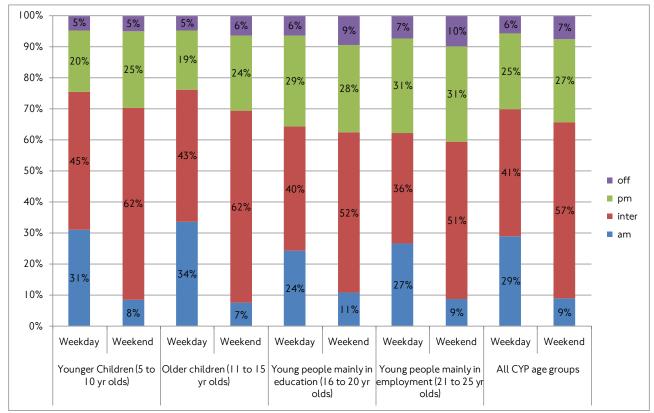


Figure 21 Potentially cyclable CYP trips by day and time

Source: London Travel Demand Survey 2007/08 to 2009/10

While the interpeak makes up the largest share, there is a downward trend in this share as age increases. The consequent increase with the older age groups is in pm peak and off peak trips which are potentially walkable.

Chapter 4 Walking Trips by Children and Young People

Key findings

- Currently 1.5 million walk trips are made every day by Children and Young People in London.
- Of these, 55% are by Children (5-15 year olds), with a larger share of these made by those in the youngest age group
- Over half of all the walk trips are less than half a kilometre in length, with the majority of the remainder between 0.5 and 2km long.
- Half of walk trips are for leisure purposes, although amongst the Younger Children, education makes up a particularly large share, contributing over 300,000 daily walk trips from just this age group.

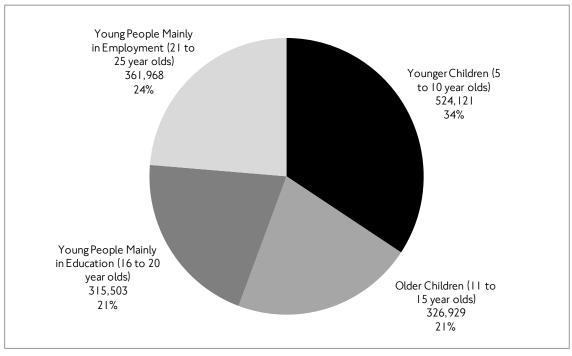
Introduction

This chapter outlines the profile of the trips currently walked by Children and Young People in London. The profiles are based on an average day, and assess the purpose, length and frequency of these trips.

On an average day, Children and Young People make over 1.5 million walk trips in London, which equates to around a third of all the trips made by people in these age groups.

The youngest age group make the largest share of these walk trips, accounting for a third of these. The eldest group accounts for a further quarter, and the remainder is split between the two middle age groups of Children and Young People. These shares are shown in the figure below.

Figure 22 Currently walked trips by age group



Walking trips by Children (5 to 15 years old)

Children make around 850,000 walk trips per day, with three fifths of these made by Younger Children. In total, Children make more daily walk trips compared to Young People.

Younger Children in particular are slightly more likely to make walk trips, with each Younger Child making 0.99 walk trips per day, compared to 0.73 walk trips per day amongst Older Children.

For all Children and Young People, leisure is the main purpose of walk trips. Amongst Children, just over half of walk trips are for education purposes, the equivalent of 442,000 trips per day. Leisure trips are still a major purpose, making up 42%, or over 350,000 trips.

There is some difference in purpose of walk trips between Older and Younger Children: Younger Children are more likely to walk for education than for leisure, while Older Children reverse this. As Younger Children make more walk trips in total, the volume of trips walked for education by this group is over 300,000, compared to less than half this volume by the Older Children. These volumes are illustrated in Figure 24.

Children are most likely to walk for a short distance, with more than half of trips less than 0.5km. A slightly larger share of trips are short amongst Younger Children than amongst Older Children (61% vs. 46%), however, the volume of trips of this length by Younger Children is more than double that of the older group, as shown in Table 10.

Walking trips by Young People (16 to 25 years old)

Around 675,000 walk trips are made per day by Young People aged 16-25. This is split almost equally between the two age groups, with Young People Mainly in Education making 315,000 of these trips (or 47% of the total for Young People).

Leisure is the dominant purpose for walk trips by Young People, being the purpose of almost 425,000 of the walk trips. Over half of these come from the older group of Young People.

The other main difference in purposes walked is in comparing walking for education and for work. As the group names suggest, Young People Mainly in Education are more likely to walk for this purpose, while Young People Mainly in Employment walk more for work purposes.

While for both groups the vast majority of walk trips are less than 2km in length, Young people in Education are slightly more likely to walk distances of 0.5-2km than shorter trips. These trips equate to 154,000 trips per day, as seen in Table 10.

Meanwhile, more than half of walk trips by Young people in Employment are less than 0.5km. Trips of this length make up 198,000 daily walks by this group.

Walking trips by journey purpose

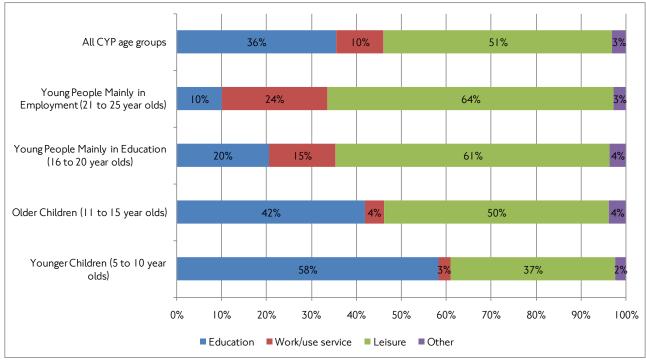
The purposes of walking trips currently made by Children and Young People are shown in Figure 23. Trips for leisure purposes account for half of daily trips, while education trips contribute a further third.

The largest share of trips by the Younger Children group are for Education purposes, making up a larger share for this group than leisure trips, which is the majority for all other age groups. This share is equivalent to 305,000 trips walked per day by this age group.

The share of walk trips made for education purposes declines with age, as shares for both work/use services and leisure trips increase.

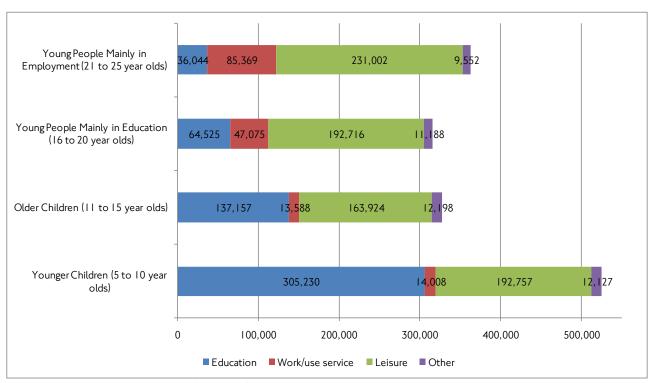
As seen in Figure 24, the volumes of trips for leisure are large, totalling at least 160,000 daily trips per age group. The largest volume for leisure is seen for Young People Mainly in Employment, who make 231,000 daily walk trips for this purpose.

Figure 23 Currently walked CYP trips split by journey purpose



Source: London Travel Demand Survey 2007/08 to 2009/10

Figure 24 Currently walked CYP trips split by journey purpose – volumes of daily trips



Walking trips by distance

As seen in the following chart (Figure 25), trips currently walked are predominantly short trips. Over half of trips walked by Children and Young People are less than half a kilometre in length, while the majority of the rest are between 0.5km and 2km.

The largest volume of walk trips are made by Young Children for distances of less than 0.5km (321,000 trips), followed by trips of the same distance by the oldest group (198,000 walk trips).

However, the profiles of trips lengths are similar across all the age bands. Young People appear to have slightly longer trips compared to Children, with a larger share of trips over 2km in length, although this remains the minority of trips.

Out of all the currently walked trips, only 57,000 trips are longer than 2km (4%). This provides good evidence for the distance filter for the potentially walkable trips, as seen in the next chapter.

43% 53% 3% All CYP age groups Young People Mainly in 55% 5% 39% Employment (21 to 25 year olds) Young People Mainly in Education 46% 49% 4% (16 to 20 year olds) Older Children (11 to 15 year olds) 46% 50% 3% Younger Children (5 to 10 year 61% 37% olds) 10% 20% 30% 40% 80% 90% 100% 0% 50% 60% 70% <500m ■ 500m to <2km ■ 2km to <5km ■ 5km to <8km ■ >=8km

Figure 25 Currently walked CYP trips split by journey length

Table 10 Currently walked CYP trips split by journey length - volumes

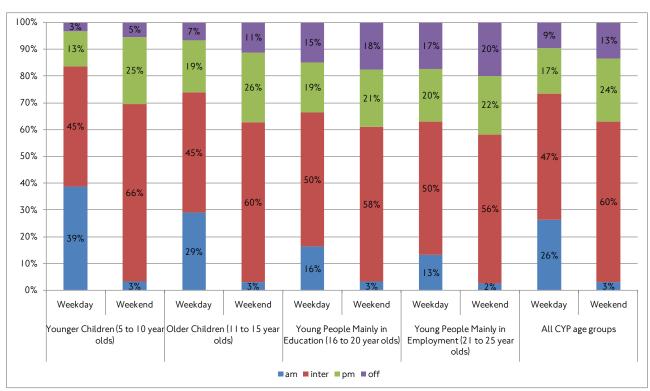
Age group	<500m	500m to <2km	2km to <5km	5km to <8km
Younger Children (5 to 10 yr olds)	320,650	196,100	7,230	-
Older Children (11 to 15 yr olds)	151,865	164,180	9,637	1,103
Young People Mainly in Education (16 to 20 yr olds)	145,159	154,526	13,108	1,946
Young People Mainly in Employment (21 to 25 yr olds)	198,196	141,096	19,797	1,457
All CYP age groups	815,869	655,902	49,772	4,506

Walking trips by time of day

On both weekdays and weekend days, walk trips are most likely to be during the interpeak period of the day. On weekend days, this time period accounts for three fifths of trips, with the majority of the rest occurring in the pm peak or off peak.

On weekdays, around a quarter of walk trips are made in the am peak. This share is higher amongst children, particularly Younger Children, and lower amongst Young People.

Figure 26 Currently walked CYP trips split by day and time



On all days, the share of trips made off peak (in the evening or night) is much larger amongst Young People than amongst Children, reflecting the differences in behaviour of the age groups, and the increased independence with age. The pm and off peak share is also higher for all age groups on weekend days compared to weekdays.

Frequency of walking

The following table and chart illustrate the frequency of walking by Children and Young People in London. Unlike cycling, the vast majority of Children and Young People walk frequently already.

Table 11 Number of Children and Young People by age and frequency of walking

Age group	Frequent (3+ days a week)	Medium (1 - 2 days a week)	Low (less than once a week)	Less than once a year/ never	Total	Missing/ don't know
Younger Children (5 to 10 yr olds)	473,284	39,199	8,453	6,509	527,446	3,041
Older Children (11 to 15 yr olds)	405,950	22,681	10,336	5,045	444,012	1,256
Young People Mainly in Education (16 to 20 yr olds)	417,667	29,690	11,200	3,019	461,577	1,564
Young People Mainly in Employment (21 to 25 yr olds)	455,156	43,967	15,512	7,268	521,903	1,137
All CYP age groups	1,752,057	135,537	45,501	21,841	1,954,937	6,999

Source: London Travel Demand Survey 2007/08 to 2009/10

Nine in ten Children and Young People walk frequently, which changes little across the age groups. The majority of the rest walk slightly less frequently, leaving a minimal volume who do not walk often. This is positive in trying to encourage more walking, as the majority already do it to some extent.

90% All CYP age groups Young People Mainly in 87% Employment (21 to 25 year olds) Young People Mainly in Education 90% (16 to 20 year olds) Older Children (11 to 15 year olds) 91% Younger Children (5 to 10 year 90% olds) 10% 0% 20% 30% 40% 50% 60% 70% 80% 90% 100% ■ Frequent (3+ days a week) ■ Medium (1-2 days a week) ■ Low (less than once a week) ■ Less than once a year/never

Figure 27 Children and Young People frequency of walking

Profile of current frequent walkers

Using the walking segmentation tool, it is possible to profile the Children and Young People in London based on the typical traits of the areas they live in.

As would be expected, there is little difference in profile comparing the different age groups, as the Children and Young People across London will fall in all the segments across the population.

The one notable difference in profiles is with the Young People Mainly in Employment group, who are more likely than average to fall in the Active urbanites segment. This is understandable as the profile of this group are students and young workers. This group are more likely than the others to have moved from a parental home, where the segment attributed to them will be affected by the behaviour of others, particularly adults, in the household.

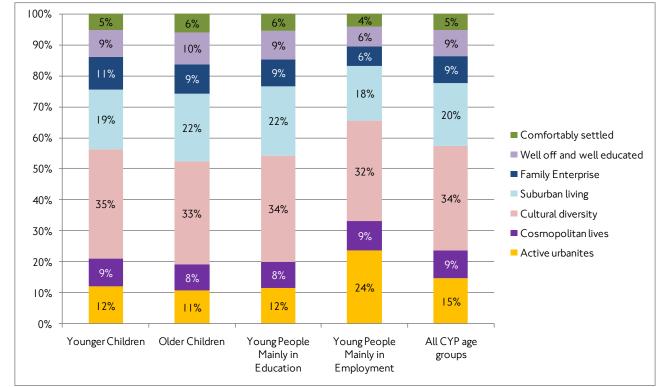


Figure 28 Walking segmentation profile of CYP groups

Source: London Travel Demand Survey 2007/08 to 2009/10

As almost all people walk frequently, the profile of frequent walkers reflects the profile above for all Children and Young People.

The key segments for walking, in terms of the amount walked compared to the average for London, are Active urbanites, Cosmopolitan lives and Cultural diversity. Together these segments make up 58% of the population of Children and Young People.

While the age groups have similar shares of Cosmopolitan lives and Cultural diversity population, the larger share of Active urbanites in the Young People Mainly in Employment age group may have implications on the willingness of this age group to walk more, but may reduce the volume of trips which are not currently walked.

Chapter 5 Potentially Walkable Trips by Children and Young People

Key findings

- Around 495,500 daily trips currently made are potentially walkable, based on the analysis conducted.
- This is equivalent to around a fifth of all current mechanised trips being made by these age groups.
- Younger Children have the largest volume of potentially walkable trips of all the Children and Young People.
- Car trips should be the focus for encouraging switching amongst this youngest group.

Identifying potentially walkable trips

Every day in London, 2.8 million trips are made by Children and Young People using mechanised modes. Some of these trips could potentially be walked, and based on knowledge of existing walking behaviour, a tool was developed to quantify these trips.

To identify which of these trips could potentially be walked, a number of filters were applied to the trip data for all mechanised trips made by Children and Young People in London.

Trips were not considered walkable if:

- Length of trip was more than 2km;
- The person making the trip was not aged 5-25 years;
- The person making the trip was carrying a heavy or bulky load;
- The trip is made between 8pm and 6am;
- The person making the trip has a disability which affects their travel; or,
- The trip is made by van, dial-a-ride, plane or boat.

With these filters applied, the volume of current mechanised trips which could potentially be walked is around 495,500.

The volume of potentially walkable trips made by each age group is set out in the table below.

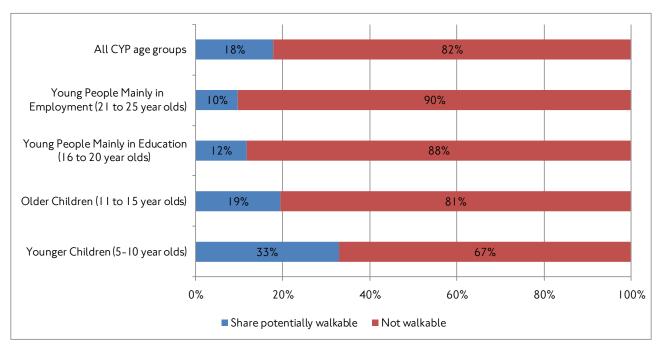
Table 12 Share of current mechanised trips which are potentially walkable

Age group	No. of potentially walkable mechanised trips	No. of non-walkable mechanised trips	Share of mechanised trips which are potentially walkable
Younger Children (5 to 10 yr olds)	213,381	436,581	33%
Older Children (11 to 15 yr olds)	123,327	513,489	19%
Young People Mainly in Education (16 to 20 yr olds)	76,841	583,633	12%
Young People Mainly in Employment (21 to 25 yr olds)	81,981	762,976	10%
All CYP age groups	495,530	2,296,679	18%

Overall, around one in five mechanised trips currently being made in London by Children and Young People using mechanised modes could be walked. This is a smaller share than the equivalent for potentially cyclable trips, mainly due to the distance filter allowing only shorter trips to be walked. It should be noted that trips could be counted as walkable and cyclable, so it is not possible to sum the two volumes.

The chart below illustrates the share of walkable trips for each age group. Younger Children are potentially able to walk a larger share of their trips, compared with the older groups. The share of walkable trips then declines with age. In terms of volumes, the smallest is amongst Young People Mainly in Education, as shown in the table above.

Figure 29 Share of mechanised trips which are potentially walkable CYP trips



This declining share is mainly due to the length of the existing trips which are travelled by the different age groups. The youngest age group make a larger share of shorter trips amongst all their trips.

It should be noted that the Younger Children age group already have the largest walk mode share of all the Children and Young People age groups. Switching these trips to walking would increase their walk mode share further.

The larger share of trips which are able to be walked leads to Younger Children making up a larger share of the total volume of potentially walkable trips, as shown in Figure 30. Overall, this age group account for two fifths of all potentially walkable trips. Older Children then contribute a quarter of the total, leaving 16-17% each for the Young People age groups.

Young People Mainly in Employment (21 to 25 year olds), 17%

Young People Mainly in Education (16 to 20 year olds), 16%

Older Children (11 to 15 year olds), 25%

Figure 30 Share of potentially walkable trips by age group

Source: London Travel Demand Survey 2007/08 to 2009/10

Potentially walkable trips by Children

Overall, Children make around 330,000 trips a day which could potentially be walked, based on the analysis. Around three fifths of these are by Younger Children.

This greater share of potential walking trips by Younger Children is reflected in the trip types which make up the largest volumes, as shown in Table 13. Younger Children make seven of the ten trip types in the list. Together these total over 135,000, out of the 175,000 within these top trip types.

Table 13 Top 10 trip types for Children by volume of potentially walkable trips

Age group	Mode	Purpose	Length	Volume of potentially walkable trips
Younger Children (5-10 years old)	Car	Education	500m-1km	27,039
Younger Children (5-10 years old)	Car	Leisure	1-1.5km	21,184
Younger Children (5-10 years old)	Car	Leisure	1.5-2km	20,307
Younger Children (5-10 years old)	Car	Leisure	500m-1km	19,775
Younger Children (5-10 years old)	Car	Education	1-1.5km	18,326
Younger Children (5-10 years old)	Car	Education	1.5-2km	17,319
Older Children (11-15 years old)	Car	Leisure	1.5-2km	14,008
Younger Children (5-10 years old)	Car	Education	<500m	13,798
Older Children (11-15 years old)	Bus	Education	1.5-2km	13,303
Older Children (11-15 years old)	Bus	Leisure	1.5-2km	10,292

All the trips by Younger Children appearing in the table are car trips, although they cover both leisure and education, and a range of trip lengths. This implies that it is car trips in particular that can be the focus of any interventions with this group, or more likely, with their parents and guardians.

The largest volume of trips made by Younger Children are car trips for education, between 0.5 and 1km in distance. Around 27,000 of these trips are made each day, which are potentially walkable. All trip lengths for car trips for education by this age group appear in the list, totalling 76,000 trips per day which are walkable.

The key trip types amongst Older Children are longer (1.5-2km) car trips, and also bus trips of this length. The car trips and half the bus trips are for leisure purposes, while the remainder are for education.

Amongst all the potentially walkable trips by Older Children, two fifths are currently bus trips. This is a much larger share compared to Younger Children (16%).

Potentially walkable trips by Young People

The total volume of potentially walkable trips for Young People is 159,000. This is around half as many as amongst Children.

The potentially walkable trips are split relatively evenly in volume between the two Young People age groups.

The table below shows the trip types which appear in the largest volumes as potentially walkable. The total volume of trips appearing in the table is around 71,000.

The largest volume is for leisure car trips of 0.5-1km by Young People Mainly in Employment. The volume is less than 10,000 trips per day, a volume which is smaller than any appearing in the equivalent table for Children's trips.

Table 14 Top 10 trip types for Young People by volume of potentially walkable trips

Age group	Mode	Purpose	Length	Volume of potentially walkable trips
Young People mainly in employment (21-25 years old)	Car	Leisure	500m-1km	9,542
Young People mainly in education (16-20 years old)	Bus	Leisure	1.5-2km	9,200
Young People mainly in education (16-20 years old)	Car	Leisure	1.5-2km	8,057
Young People mainly in education (16-20 years old)	Bus	Leisure	1-1.5km	7,866
Young People mainly in employment (21-25 years old)	Car	Leisure	1.5-2km	7,317
Young People mainly in employment (21-25 years old)	Car	Leisure	1-1.5km	6,244
Young People mainly in employment (21-25 years old)	Car	Work/use service	1-1.5km	6,170
Young People mainly in employment (21-25 years old)	Bus	Leisure	1.5-2km	5,793
Young People mainly in education (16-20 years old)	Car	Leisure	1-1.5km	5,776
Young People mainly in education (16-20 years old)	Bus	Education	1.5-2km	5,358

As with all the potentially walkable trips, those appearing in the top 10 types are split evenly between the two Young People age groups.

Leisure is the dominant trip type across both age groups, accounting for half of all potentially walkable trips, and over 80% of these top trip types.

All the trip types are car or bus, and the trips are mainly longer than 1km, except the largest volume trip type. This largest volume of just under 10,000 trips per day, are car trips for leisure by Young People Mainly in Employment.

A similar volume of trips are made by the younger group, again for leisure but using bus. These trips are also longer (1.5-2km).

A larger share of all the potentially walkable trips by Young People Mainly in Education are currently made by bus. The Young People age groups have different profiles in terms of mode use overall, as seen earlier, due to the availability of free bus travel for the younger groups, and the ages at which young people start to drive and subsequently buy a car. The owning of a car, particularly amongst those on more limited incomes, will be an important factor in mode choice, which has implications on the susceptibility of this group to messages encouraging walking.

Potentially walkable trips by current mode

Figure 31 shows the current modes used for all the potentially walkable trips by Children and Young People.

68% 29% All CYP age groups Young People Mainly in 66% 27% 5% Employment (21 to 25 year olds) Young People Mainly in Education 49% 47% 3% (16 to 20 year olds) Older Children (11 to 15 year olds) 58% 41% Younger Children (5-10 year olds) 82% 16% 0% 20% 60% 80% 100% 40% ■ Car ■ Bus ■ Underground/rail ■ Other mechanised

Figure 31 Potentially walkable CYP trips split by current mode

Source: London Travel Demand Survey 2007/08 to 2009/10

The largest share (68%) of all the walkable trips are currently made by car, with the majority of the remaining volume by bus.

The car share is particularly high for Younger Children, with over eight in ten walkable trips currently made by car. The car share then decreases generally with age, although increasing again for the eldest group, due to increased personal car ownership within this age group.

In total, this is equivalent to 364,000 walkable trips made by car; with half (around 175,000) of these made by Younger Children.

Only around 12,000 trips are currently made by Underground/ rail or other mechanised modes, indicating that the focus for switchable trips should be on car trips for the youngest age group, and bus trips amongst those with free bus travel.

Potentially walkable trips by journey purpose

The purpose profile of potentially walkable trips generally reflects the profile of all trips being made by Children and Young People. Figure 32 shows that leisure trips make up between two fifths and half of potentially walkable trips. Education and work/ use services combined make up a similar share for each age group, although the split between the two purposes changes with age.

The leisure trips make up around 225,000 potentially walkable trips.

45% All CYP age groups 32% 13% 9% Young People Mainly in 33% 48% 11% 7% Employment (21 to 25 year olds) Young People Mainly in Education 25% 19% 6% 51% (16 to 20 year olds) Older Children (11 to 15 year olds) 38% 6% 47% 9% Younger Children (5-10 year olds) 44% 6% 41% 9% 0% 20% 40% 60% 80% 100% ■ Education ■ Work/use service ■ Leisure ■ Other

Figure 32 Potentially walkable CYP trips split by journey purpose

Potentially walkable trips by distance

Due to the analysis methodology, all potentially walkable trips are short (less than 2km). The profile of these potentially walkable trips is shown in Figure 33.

9% 26% 30% 36% All CYP age groups Young People Mainly in Employment (21 to 25 year olds) 27% 32% 36% Young People Mainly in Education (16 to 20 year olds) 16% 37% 42% Older Children (11 to 15 year olds) 7% 27% 25% 41% Younger Children (5-10 year olds) 14% 29% 27% 30% 20% 30% 50% 60% 70% 80% 90% 100% ■ Up to 500m ■ 500m-1km ■ 1-1.5km ■ 1.5-2km

Figure 33 Potentially walkable CYP trips split by journey length

Source: London Travel Demand Survey 2007/08 to 2009/10

The largest share of trips overall are 1.5-2km, while the smallest share is the very shortest trips (less than half a kilometre). This is true for all the age groups.

Older Children and Young People Mainly in Education have the largest share of longest trips, with over two fifths of walkable trips over 1.5km in length for these age groups.

Younger Children make a larger share of short (<0.5km) trips compared to the other age groups. For the youngest age group these make up 14% of their potentially walkable trips, while for the older age groups, these short trips make up less than 10% of all their potentially walkable trips.

As Younger Children also have a larger volume of walkable trips, these shortest trips total 29,000 trips per day, compared to 8,000, 3,000 and 4,000 trips respectively for the older age groups.

Potentially walkable trips by day and time

As seen in Figure 8, weekend days have a larger share of all trips in the interpeak compared with the am or pm peaks. This is also true of potentially walkable trips, as shown in Figure 34.

100% 5% 8% 7% 8% 9% 10% 10% 11% 10% 16% 90% 18% 21% 24% 80% 25% 22% 22% 27% 28% 31% 70% 29% 60% 42% 50% 38% 42% 51% 41% 40% 61% 59% 56% 47% 52% 30% 20% 35% 31% 29% 21% 10% 17% 9% 8% 8% 8% 0% Weekend Weekend Weekend Weekend Weekday Weekday Weekend Weekday Weekday Weekday Younger Children (5-10 Older Children (11 to 15 Young People Mainly in Young People Mainly in All CYP age groups Education (16 to 20 year | Employment (21 to 25 year olds) year olds) olds) year olds) ■am ■inter ■pm ■off

Figure 34 Potentially walkable CYP trips split by day and time

Source: London Travel Demand Survey 2007/08 to 2009/10

Overall, on both weekdays and weekend days, the largest share of trips are made in the interpeak period. On weekdays, however, the am peak share is relatively large at almost 30% of trips.

The share of trips which are made in the pm peak and off peak increases with age, while the share of am peak trips decreases generally with age, when compared with Younger Children.

© Transport for London 2011

All rights reserved. Reproduction permitted for research, private study and internal circulation within an organisation. Extracts may be reproduced provided the source is acknowledged.

Disclaimer

This publication is intended to provide accurate information. However, TfL and the authors accept no liability or responsibility for any errors or omissions or for any damage or loss arising from use of the information provided.