



Building Young Hearts

Physical Activity, Young People
and the Physical Environment

April 2010

The National Heart Alliance

The National Heart Alliance (NHA) is an independent non-governmental organisation, established by the Irish Heart Foundation which aims to increase co-operation among organisations involved in the fight against heart disease and to recommend appropriate policies and approaches to improve heart health.

The Irish Heart Foundation

The Irish Heart Foundation (IHF) is the national charity fighting heart disease and stroke, the combined biggest cause of death in this country. The charity relies on donations for 90% of its funding. This funding supports their work in promoting healthy living across all ages to reduce the risk of cardiovascular disease; vital health and stroke research; patient support; resuscitation training and advocating better patient services and a healthier environment.

www.irishheart.ie

www.stroke.ie

Image

The NHA would like to acknowledge Green-Schools for the use of their cycling picture on the cover of this position paper and Claire Byrne the Photographer.

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Young People Consultation

The NHA would like to thank all the young people who participated in the consultation as well as:

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- Ann Marie Coen
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Executive Summary

Changes in the physical environment to promote and support increased levels of physical activity have the potential to reach a greater population and therefore achieve greater public health impact than individual measures. They are potentially less costly and more enduring than traditional educational physical activity interventions. Research has shown that the way communities are built either encourages or inhibits physical activity levels through influencing how people move around and within their communities.

The paper aims to show how the physical environment can improve young people's opportunities for physical activity and that it should be a key focus of policy for Government and local authorities.

Regular physical activity benefits young people in several ways – these include physical, social and emotional health benefits. *Get Ireland Active – Promoting Physical Activity in Ireland, the national guidelines on physical activity for Ireland*, recommend that young people should be physically active at a moderate to vigorous level, for at least 60 minutes every day and that they have the opportunity to be active every day during their normal family, school and community activities. Based on these recommendations a large portion of young people are not meeting these guidelines and/or are not physically active. Exercise participation decreases with age particularly among girls. Of major public health concern is that one in five 5-12 year olds is overweight or obese and one in five 13-17 year olds is overweight or obese.

The physical, built and social environments affect the health of both individuals and communities and include elements such as land use, transport and infrastructure planning. On a local scale, the design and availability of open public spaces, transport networks, the design of neighbourhoods and street networks, the perceived and actual safety of an area, as well as personal resources can all impact on health and wellbeing.

One of the first principles in creating high quality, sustainable, healthy neighbourhoods is prioritising walking, cycling and public transport and minimising the need to use cars. A neighbourhood that is walkable and/or cycleable is linked with higher levels of physical activity.

A key feature of sustainable neighbourhoods is the provision of a good range of amenities and services within easy and safe walking distance of homes. Streets can be designed to encourage their active use as opposed to simply being a thoroughfare.

Home zones and shared spaces are design concepts that emphasise the street as a place to use not just to pass through. Features such as shared surfaces (between pavement and road), seating, plants and traffic calming measures are all designed to slow down traffic and favour pedestrian use.

Children and young people should have safe places to play - designing streets and neighbourhoods to incorporate safe areas for active play; ensuring housing developments incorporate shared play areas in common spaces and the provision of interesting, safe, well-maintained playgrounds should be targeted at a national and local level.

The daily trip to school is the most universal opportunity for regular, sustained physical activity through walking or cycling and is a great way to get young people active. The school should be at the centre point of the community and ideally accessible by walking or cycling, particularly in urban areas.

Younger people have greater independence when they can take more trips walking or by bicycle; it gives them increased confidence as they can travel to and from school on their own or with friends; and it frees parents from the need to chauffeur their children.

Developing a pedestrian/cyclist priority zone one mile around each village or school, by reducing speed limits along these routes, could greatly increase active commuting to school. A low speed limit of 30kph should be introduced in the proximity of all schools and this speed limit should be strictly enforced. The drop off distance by a car should be restricted through a 'park and walk'/'park and stride' zone directly outside the school.

Where cycle training and parking have been provided there is evidence of increased bicycle usage, e.g. the Green-Schools Travel initiative showed a 6.6% increase in cycling in urban schools and 6.7% in rural schools when training was provided.

A school's design and environment may hinder or discourage physical activity. All schools should be encouraged as part of their development planning to develop school policies that address physical activity as part of the school day and not just in Physical Education (PE), or active travel.

Children and young people need opportunities for unstructured, imaginative and adventurous outdoor play in their neighbourhood, and not just through fixed equipment playgrounds. This should not be limited because of a lack of access, adult fears or stranger dangers.

Recent policy documents which emphasise sustainability in residential development and transport are welcome, e.g. *Sustainable Residential Development in Urban Areas and Smarter Travel*. Full implementation and monitoring of these policies are vital to ensure some of the changes needed to create a physical environment which supports young people becoming more active.

The National Heart Alliance sets out a total of **35 recommendations** for policy in the context of current evidence and best practice in relation to the physical environment.

Background

Introduction

The National Heart Alliance has been looking at the area of physical activity, young people and the physical environment since 2001. Following the publication of the *Summary of Evidence* report in 2006¹, a consultation with key stakeholders in public health, design, planning, transport, education, government and local authority was held to explore actions to address the area of young people, physical activity and the physical environment. This position paper has been prepared based on the outcomes of this consultation and taking into account the *Summary of Evidence* and existing policies and projects. The paper aims to show how the physical environment can improve young people's opportunities for physical activity and should be a key focus of policy. Policies that promote active lifestyles among the population, particularly young people, will enable them to attain the recommended 60 minutes of physical activity daily and maintain a healthy heart.

The Summary of Evidence provided examples of Irish and International research showing correlations between environmental factors and physical activity levels. Internationally, studies have demonstrated that changing the environment can change young people's physical activity behaviours¹. Environmental changes have the potential to reach a greater population and therefore achieve greater public health impact than individual measures. They are potentially less costly and more enduring than traditional educational physical activity interventions. Research has shown that the way communities are built either encourages or inhibits physical activity levels through influencing how people move around and within their communities. Thus, the promotion of walking and cycling as modes of active travel is singularly insufficient to bring about change in behaviour. Intervention is required through environmental, policy and legislative changes. However, these interventions are more effective when combined with education and promotion in order to get young people moving¹.

The National Heart Alliance intends that this position paper will be used as the basis for an ongoing programme of advocacy and campaigning to provide a more supportive environment for the promotion of physical activity among young people. While this paper focuses on recommendations to improve physical activity amongst young people aged 0-18 years, recommendations to improve physical environments can have a positive impact on people of all ages who inhabit those environments.

Physical Activity and Young People

National Recommendations

In 2009, the Department of Health and Children and the Health Service Executive launched the first National Physical Activity Guidelines for Ireland – *Get Ireland Active-Promoting Physical Activity in Ireland*. Based on these Guidelines, young people should be physically active at a

moderate to vigorous level, for at least 60 minutes every day. This activity should include muscle-strengthening, bone-strengthening and flexibility exercises three times a week².

The guidelines suggest that young people should have the opportunity to be active every day during their normal family, school and community activities. For example, play, games, sports, work, recreation, Physical Education (PE), planned exercise or active travel such as cycling². The physical environment through neighbourhood design, facilities and active travel can provide young people with the opportunity to incorporate physical activity into their daily routine to meet the 60 minute recommendation.

Levels of Physical Activity among Irish Young People

Based on the current recommendations (60 minutes per day) for physical activity, a large portion of young people are not meeting these guidelines and/or are not physically active. Findings from the Health Behaviour in School Aged Children (2006) reflect this³.

Percentage of children who meet recommended daily activity (60 minutes)

Age	Boys	Girls
11 years	51%	38%
13 years	39%	29%
15 years	27%	13%

Figures taken from HBSC 2006³

Exercise participation decreases with age - exercising four or more times a week decreases from 64% (10-11 year olds), to 59% (12-14 year olds), to 42% (15-17 year olds). Participation rates of girls show a significant drop as they get older 50.5% (12-14 years) to 28.1% (15-17 years)³.

The Take PART study looked at how young people aged 15-17 years travelled to school between 2003-2005 and found 29% of the participants (4013) travelled by car, 32% walked and 5% regularly cycled (9.4% of boys cycled in comparison to 1% of girls). Boys and girls who walked or cycled, lived within 1.5 or 2.5 miles of school respectively. As distance from school increased, so too did the likelihood of inactive travel to school and over 90% of those who lived further than 2.5 miles from school cited distance as a barrier to active travel⁴.

Findings from the 2006 Census echo the reduction in active travel modes to school. Between 1991 and 2006 walking and cycling decreased while travel by car increased⁵. 25% travel less than 1km, 36% travel between 2-4km and 60% of parents who drop off by car don't go to work⁵.

Year	Car (%)	Walk (%)	Bike (%)
1991	22	35	8
1996	29	31	5
2002	41	26	2
2006	46	24	2

Figures taken from CSO 2006⁵

Health Concerns

Cardiovascular disease (CVD) is Ireland's leading cause of death – approximately 10,000 people die each year from CVD, including coronary heart disease (CHD), stroke and other circulatory diseases⁶.

Physical activity is essential to maintain and improve health for people of all ages. Physical activity is central to the healthy development of children and young people. Regular physical activity benefits young people in several ways – these include physical, social and emotional health benefits.

The US Physical Activity Guidelines Advisory Committee (2008) identifies for children and young people that there is a strong evidence of⁷:

- Better cardio-respiratory and muscular fitness
- Better cardiovascular and metabolic health
- Some evidence of: Reduced symptoms of anxiety and depression
- Stronger bones
- Healthier body fat composition

Having fun and being with friends are the main reasons children and young people engage in physical activity and sport⁸.

In addition to dietary changes, declining physical activity participation has been a major contributor to the rising obesity levels in Europe in recent decades⁸. Overweight and obesity is now the most common childhood disorder in Europe⁹. Promoting physical activity has been identified as one of five key fields of action for addressing overweight and obesity¹⁰.

In Ireland low levels of physical activity among young people are of particular concern given the current health status of Irish children and young people¹¹. There has been a significant increase in teenage obesity since 1990 with an 8-fold increase in males (1% to 8%) and a 2-fold increase in females (3% to 6%)¹². 22% of 5-12 year olds (one in ten is overweight and one in ten is obese) are overweight or obese¹¹. One in five teenagers is overweight or obese (11% overweight, 8% obese)¹². The National Taskforce on Obesity estimated 300,000 children on the island of Ireland are overweight and obese and this is projected to increase annually by 10,000¹³.

The immediate and short-term problems that overweight and obese children and young people may experience include type 2 diabetes, respiratory, cardiovascular and orthopaedic problems, social isolation and psychological effects. The most important long-term consequence of childhood obesity is its persistence into adulthood, with its associated implications¹³.

The cost of treating obesity in Ireland (across the entire population) is estimated at €0.4 billion. The number of premature deaths annually attributable to obesity currently approximates to 2,000¹³.

Steps for change

Participation in physical activity is influenced by personal factors such as age, gender, ability and motivation, the social environment and the built and natural environment in which we live⁸. While 60 minutes of physical activity can be achieved in various ways throughout the day, given current activity levels and today's lifestyle and environment, increasing physical activity among young people is a challenge. Attitudes and perception are necessary for young people to change their behaviour, but the environment also needs to support and encourage such changes. Interventions are required through a range of environmental, policy and legislative changes.

Consultation with key stakeholders is the basis for this position paper – the points that were raised are reflected in the recommendations and set the foundations for discussion. Their contribution is acknowledged by the National Heart Alliance for guiding this work and moving it forward from this position paper.

The consultation day identified 7 key areas to improve the physical environment to encourage physical activity in young people:

- Neighbourhood Design
- School
- Facilities for Physical Activity, specifically for walking and cycling
- Facilities for Physical Activity – paid, public, private
- Transport
- Rural Environment.
- Facilities for Play

Accordingly these areas are expanded on and integrated into the paper.

A key issue arising out of the consultation process was that the challenges are different when looking at rural and urban environments and that these must be considered and addressed separately.

Moving and transporting people for access to education, employment, services, facilities and recreational activities in the rural environment is relatively more challenging to moving people in urban areas. Connectivity and access are facilitating factors to sustainable transport. Rural areas need to be supported to enable alternative or shared modes of travel.

The National Heart Alliance acknowledges that the Government has highlighted this difficulty in play (*Ready Steady Play!*¹⁴) and transport in rural areas (*Oireachtas Report*¹⁵ and *Smarter Travel*¹⁶) and that it requires separate attention.

There is a need to use policies already in place. The Government has emphasised that their targets and actions in *Smarter Travel* are relevant to both urban and rural living and they are committed to rural regeneration¹⁶.

Developments since 2006

Since looking at the evidence in relation to the physical environment and physical activity, the National Heart Alliance is encouraged to see significant developments in this area. The *Smarter Travel Policy – A Sustainable Transport Future – A New Transport Policy for Ireland 2009-2020* and *Ireland's First National Cycle Policy Framework* were launched in 2009 with a Walking Strategy to follow. The Government is demonstrating at a policy level the importance of the physical environment on activity levels and active travel. The National Heart Alliance and the Irish Heart Foundation want to highlight that these policies and projects can increase physical activity in young people and thereby provide additional gain from a health and economic perspective.

In terms of physical activity, the development of national guidelines in 2009², the rolling out of the national campaign 'Little Steps' by the HSE and safefood, the development of the Green-Schools Project¹⁷ and the Active School Flag¹⁸, are all positive in addressing the importance of young people's physical activity needs.

With policy now on the Government's agenda to promote and deliver on sustainable travel, much needed change can be achieved. For the health of our young people, the policy recommendations from *Smarter Travel* and the *National Cycle Policy Framework* must be put in to practice and implementation needs to be transparent, documented and monitored by the Government.

The National Heart Alliance and Irish Heart Foundation set out to identify in particular what policy changes are required and which existing policies need support in order to create a more supportive physical environment to get young people more active. The paper is supported by research and evidence both from an Irish and international context.

Neighbourhood Design

Physical activity opportunities should be created close to where people live to create local environments that are cleaner, safer, greener and more activity-friendly⁸. Promoting physical activity in different settings (e.g. neighbourhoods, health care settings, workplaces, schools and transport systems) and making the active choice the easier choice should be the focus of partnership-based strategies⁸.

Current evidence suggests that the physical, built and social environments affect the health of both individuals and communities¹⁹. These include the impact of land use, transport and infrastructure planning. On a local scale, the design and availability of spaces and transport networks, the design of street networks, the perceived and actual safety of an area, as well as personal resources can impact on health and wellbeing²⁰.

Neighbourhood design typically considers four land uses: residential, industrial, green space and institutional (e.g. schools)²¹. Neighbourhoods offer many opportunities for being physically active in everyday life. People are more likely to be active in community environments that are functional, safe (and perceived to be so), aesthetically pleasing and offer a mixed use of services¹. Mixed use neighbourhoods should be promoted.

Recent policy documents which emphasise sustainability in residential development²² and transport¹⁶ are welcome. The challenge now is to ensure that such guidance is followed in ways that promote healthy, active choices. Local Area Plans shape development at the local level and thus have enormous potential to become more health focused. They can help create and maintain neighbourhoods

that promote and support active travel and active lifestyles. There is a perception that decision-making power lies predominantly with developers but an open forum with active engagement by all stakeholders could enhance design and help create healthier, more active communities.

Recommendation

- ***There should be greater collaboration between the community, public health professionals, planners and developers in designing new developments and regenerating existing areas.***
- ***Best practice examples for neighbourhood design should be examined to see how they could be adopted in other areas.***

Active Travel

One of the first principles in creating high quality, sustainable, healthy neighbourhoods is prioritising walking, cycling and public transport and minimising the need to use cars²². In order to get more people walking and cycling, personal safety (from crime and traffic), provision of shortcuts which allow only pedestrians and cyclists shorter trip distances and times, along with the integration of public transport with walking and cycling routes need priority in relation to policy. If individuals don't feel safe and particularly if parents fear for the safety of their children, walking and cycling will not be viable transport options, even for

short distances. Young people are less likely to walk or cycle if their school route is along a busy road or crosses a busy road²³. In addition, parents who perceive unsafe roads, limited lighting/crossings or the need to cross several roads are less likely to allow their children to walk or cycle to school²³ or local destinations²⁴.

Smarter Travel Action 15 sets out to create a strong cycling culture in Ireland and ensure that all cities, towns, villages and rural areas will be cycling-friendly¹⁶. Walking is central to Action 16 of the policy where it sets out to ensure that urban walking networks are strengthened by increasing opportunities for walking and removing constraints as part of planning for more attractive public realms.

Recommendation

- ***Full implementation of Smarter Travel Actions 15 and 16 to create a strong walking and cycling culture.***

Walkable Neighbourhoods

Walkability refers to the extent to which a neighbourhood is conducive to walking. The degree of 'walkability' of an urban area has an impact on how often people undertake walking and other forms of physical activity¹⁹. A neighbourhood that is walkable and/or cycleable is linked with higher levels of physical activity¹⁹.

Physical design features which impact on the walkability of an area include:

- Street layout (Grid and distorted grid systems where streets and avenues are all connected are easier to negotiate by

foot compared to cul-de-sacs and looping street designs which increase the distance between destinations)

- Availability of high quality, continuous pavements and cycle paths
- Provision of pedestrian crossings
- Quality, well maintained street furniture, trees, artwork
- Design which works with the natural topography
- Street lighting

While some of these features are relatively easy to address others, for example street layout, should be incorporated as best practice when new neighbourhoods are being planned. The *Smarter Travel* strategy includes a list of factors, similar to those above to be considered in order to increase urban walking trips. It is envisaged that the proposed walking strategy will expand on this list and also make recommendations for improving walkability of rural communities.

Recommendation

- ***Local communities should be encouraged to assess their neighbourhood walkability and to advocate for change to improve walkability. Policies supporting the prioritisation of pedestrians and cyclists should be adopted. Retrofitting may be necessary to achieve increased walkability.***

Retrofitting

At neighbourhood level, local authorities are to prepare plans to retrofit areas towards creating sustainable neighbourhoods so that walking and cycling can be the best options for local trips, for example to reach local facilities such as shops and schools¹⁶. Good pedestrian infrastructure, including paths and street lighting, is related to greater non-automobile travel, particularly for non-work related trips¹. Among young people, objective measures of the availability of paths and cycling tracks are associated with increased walking and cycling to school, e.g. a steep route is perceived to be a barrier¹.

Consideration should be given to areas identified in existing Road Safety Audits and local Crime Audits undertaken by developers, local authorities and An Garda Síochána. In urban areas this will involve looking at the development of attractive, aesthetically pleasing routes and increasing the permeability of developments by opening pedestrian links between cul-de-sacs and onto roads, which allow for short trips around neighbourhoods.

Recommendation

- ***Implementation of Smarter Travel Action 4 with the view to prioritise design and retrofitting for open, safe, well lit routes overlooked by used buildings with destination visibility and increased junction safety.***
- ***In urban areas develop attractive, aesthetically pleasing routes and increase the permeability of developments.***
- ***In rural areas create a network of paths that extend outwards from town areas to destinations such as homes, schools or sports clubs.***

Home Zones and Shared Spaces

Streets can be designed to encourage their active use as opposed to simply being a thoroughfare. Safety is a key feature of active neighbourhoods. Areas perceived to be unsafe tend to be avoided by pedestrians which in turn increases the vulnerability of those pedestrians who do use such areas. Dilapidated buildings, litter and graffiti make neighbourhoods look uncared for and can form a barrier to people actively using the area. Threats to safety come from two different sources, road traffic and anti-social or criminal behaviour. Design features need to address both – for example a pedestrian underpass may reduce the risk from road traffic but pedestrians may feel threatened by other users. Findings suggest that planners may need to redefine their vision of streets to include a place where children and adolescents perform physical activity¹. A design compromise could be achieved if walkways were in place between cul-de-sacs so that both on street play and neighbourhood walking are achievable¹.

Home zones are a neighbourhood design concept that emphasises the street as a place to use not just to pass through. Features such as shared surfaces (between pavement and road), seating, plants and traffic calming measures are all designed to slow down traffic and favour pedestrian use. Similar to Home zones, the Shared space concept encourages a similar ethos in urban streetscapes. Many examples of initiatives exist internationally and these should be reviewed, consulted and considered when designing and retrofitting an area. For examples see websites such as www.walkable.org, www.livingstreets.org.uk and www.cabe.org.uk²⁵. DIY Streets in the UK

is a good guide for neighbourhoods to actively get involved at a local level to do something to improve the safety, condition and general feel of their street²⁶. Children and young people should have safe places to play⁸. Designing streets and neighbourhoods to incorporate safe areas for active play; ensuring housing developments incorporate shared play areas in common spaces and the provision of interesting, safe, well-maintained playgrounds should be targeted at a national and local level.

Recommendation

- ***With reference to good practice internationally, architects, planners, engineers, urban designers, landscape architects and local communities should work together to design, develop and manage streets, paths, green spaces and paved areas in the public domain in ways that promote physical activity and play.***

School as a community resource

The school should be at the centre point of the community and ideally accessible by walking or cycling, particularly in urban areas. However, current moves towards large, centrally located schools make this difficult to achieve. As a central point in the community, the school and its facilities should be more open to use by the wider community outside of school hours.

Recommendation

- ***A key consideration for the location for new schools, should be whether the majority of pupils can walk, cycle or take public transport to the facility.***
- ***The school should be a resource accessible to community and sports groups outside traditional school hours.***

Education and Social Marketing

Education on the health, social, environmental and financial benefits of active living and active travel for young people and their parents may encourage more active travel, sports participation and recreational walking and cycling. *Smarter Travel* and the *National Cycling Policy Framework* set out to educate young people on cycle training.

Education campaigns should be considered for all road users on the rules of the road with special consideration given to the awareness of vulnerable road users, including pedestrians, cyclists and road users with disabilities. Increased consideration for these vulnerable road users should also be given in the design of local transport networks.

Further initiatives could include introducing school travel plan officers who consult with young people, local authorities and adult residents. Links should also be made with interest groups such as health/green/environment/climate change groups.

A review of studies concluded that children's, young people's and parent's views about what helps and hinders their walking and cycling involves the strong culture of car use, the fear and dislike of local environments, children as responsible transport users, and parental responsibility for their children. The key message from the review is that interventions will not work unless public views about the value, safety, benefits and cost of walking and cycling are taken into account²⁷.

Recommendation

- ***An educational and social marketing campaign should be promoted to encourage active travel.***

Improvement and Maintenance of Routes

On all public pathways, cycle lanes, roads and tracks the surfaces should be maintained to encourage users. It is important to ensure that no new infrastructure impinges or blocks walking routes or pathways. Transport plans should consider all factors that impact on vulnerable users such as volume of traffic, speed limits, junction design, aesthetics, quality of surfaces, lighting and destinations.

Recommendation

- ***Prioritise provision and maintenance of pedestrian and cycling infrastructure.***

Transport

Active travel to and from school

The daily trip to school is the most universal opportunity for regular, sustained physical activity through walking or cycling and is a great way to get young people active.

Current statistics highlight a trend in travel modes to school that need to be reversed. Between 1986 and 2006, the number of primary school children cycling to school decreased by 83% from 23,635 to 4,087. In 2006 around 55,000 students were driven or drove less than 2km to their place of education while a further 150,000 were driven or drove 2-4km to their place of education²⁸.

Prioritise Active Travel to and from School

A school's location may hinder or discourage physical activity due to the neighbourhood design, proximity to homes and available transport options. The National Taskforce on Obesity (2005) identifies that every child should receive a safe and active passage to school through the provision of safe walkways, cycleways and transport¹³. Next to walking it is intended that cycling will be the most popular means of getting to school for both primary and post primary pupils¹⁶. The National Heart Alliance recognises that urban and rural communities present different barriers to active travel. Policies should consider community variations and develop solutions in consultation with the community and all stakeholders that can be adapted to suit the context of all areas.

Recommendation

- ***Walking, cycling and public transport or school buses to and from school need to be prioritised and included in national, local and school policies so that they become the most popular means of getting to and from school.***
- ***Young people should be provided with the knowledge, skills and confidence to establish a habit of active travel early in life through education in school, youth groups and targeted information campaigns.***

Safe Cycling Routes

The *National Cycle Policy Framework* acknowledges the quality of life benefits for young people who cycle. Younger people have greater independence when they can take more trips by walking and bicycle; it gives them increased confidence as they can travel to and from school on their own or with friends; and it frees parents from the need to chauffeur their children. When these younger people begin to drive they have a strong understanding of how to drive safely on the public roads and how to interact with cyclists²⁸.

The Government actively seeks to provide safe cycling routes to all schools and third level colleges by 2020. Objective 4 aims to provide cycling-friendly routes to all schools, adequate cycling parking facilities within schools, and cycling training to all school pupils²⁸.

Recommendation

- ***The proposed audits on every school and routes leading to the school from residential areas to be implemented by Department of Transport and Local Authorities should be documented and monitored accordingly.***
- ***Best practice to be used for routes that need to be upgraded, maintained or completely overhauled.***
- ***Schools should provide secure cycle parking at school to encourage cycling to school.***

Recommendation

- ***A low speed limit of 30kph to be introduced in the proximity of all schools and this speed limit to be strictly enforced. The drop off distance by a car should be restricted through a 'park and walk'/'park and stride' zone directly outside the school.***

Cycle Training

Cycling is an active travel priority and the key to ensuring cycling as a safe and viable mode of transport is cycle training. The Green-Schools project showed that the overall modal of pupils travelling to school by cycling remained relatively constant at approximately 3% over the survey. However, where cycle training and parking were provided there was increased bicycle usage – 6.6% in urban schools and 6.7% in rural schools¹⁷.

In the UK, *Bike It* (delivered through Sustrans) aims to create a pro-cycling culture in the school by working with the school to make a case for cycling in their school travel plan; supporting cycling champions and demonstrating cycling as a popular preference among children, young people and their parents²⁹. *Bike It* statistics (2007-2008 before and after *Bike It*) on schools that have completed the training show an increase in children/young people cycling to school.

Low Speed School Environs

Developing a pedestrian/cyclist priority zone one mile around each village or school, by reducing speed limits along these routes, could greatly increase active commuting to school. The immediate vicinity of the school environment must ensure a safe passage for young people who are seeking to travel to school in an active manner. Objective 4.2 of the *National Cycle Policy Framework* states that they will ensure by 2020 the environment in the immediate vicinity of schools is a safe and attractive low speed (30kph) environment with speed limits strictly enforced, and drop-off by car within a given distance restricted²⁸.

Statistic	Pre Bike It	Post Bike It
Children/young people cycling to school every day	4%	8%
Children/young people cycling to school at least once a week	14%	26%
Children/young people who never cycle to school	75%	55%

Figures taken from *Bike It – 2009*²⁹

Recommendation

- ***Cycle training to be an immediate priority and a national cycling curriculum to be developed and delivered as stated in the National Cycling Policy Framework; Objective 11.1.***

Urban Public Transport

Where walking or cycling options are not viable, public transport offers a healthier alternative than travel by car as it usually involves some walking at either end of the journey. Campaigns such as the National Transport Authority's 'One Small Step' and the Department of Transport's 'Green Schools Initiative' offer advice and support for using car alternatives. However, in order for more young people to choose public transport, it needs to be accessible, attractive and convenient¹. Public transport is often out of reach in certain areas and this makes it difficult to leave the car at home. Good public transport should be a core part of neighbourhood planning. There is also a need for an integrated public transport system which supports bicycle use (i.e. cycle to and from and on public transport).

Urban density affects travel behaviour as it affects the distances between destinations and the proportion of destinations that can be reached by walking or cycling⁴. As density increases, the number of hours and kilometres of car travel tend to decline, while active travel through walking, cycling and public transport increase³⁰. Inefficient public transport, design preference for motorised transport modes and

the resulting perception of inconvenience for active transport modes, such as walking or cycling, has led to an increase in car ownership and a higher dependence on the car as the primary mode of transport.

In Ireland, between 1996 and 2006 there was an increase of 38% in the number of private cars per 1,000 adults, from 382 to 528, however this was still below the 2006 EU average of 558. Car ownership may have possibly increased to beyond EU average levels with the total number of private cars licensed increasing from 1,800,000 to 2,470,000¹⁶.

This has had a knock on effect on active transport, young people and how they commute to school and to recreational activities. The onus is on policy-makers and planners to shift the focus from auto-centric transport systems that favour motorised transport modes to transport systems that favour walking and cycling and to public transport trips all which include a short walk or cycle. There is a need for priority to be given to active and clean modes of travel.

Recommendation

- ***Public transport trips involve some element of physical activity. Sheltered bus stops and well lit pedestrian connections will increase the likelihood of people using public transport. Cycle parking provision at train stations and cycle transport on trains also need to be considered.***

Rural Public Transport

The car is the most used mode of transport in the rural environment to access all facilities from work to school to shops. Public transport for many is just not a viable option. Public transport to facilities should be affordable and in line with the Rural Transport Initiative (RTI).

Smarter Travel has key actions to target this issue particularly for young people and getting to school with a planned extension of Rural/School Transport type schemes in more rural areas. There is also the intention to examine the potential for the expanded use of school and other publicly funded buses as a “local transport bus” to bring people to a range of services, but with (in the case of the school buses) the primary emphasis continuing to be on transporting children to and from school at the necessary times. Also to examine, as part of the current review of the school transport service, the current distance eligibility criteria, where it is not feasible to provide safe walkways and/or cycle paths¹⁶.

Recommendation

- ***Expanded use of school and other publicly funded buses as a “local transport bus” to bring people to a range of services so that they can be used by communities outside school hours.***

Design Priorities

There is a contradictory cycle of demand and supply in relation to infrastructure provision

for pedestrians and cyclists. Cycle lanes and footpaths have not been prioritised up to now and few people are walking and cycling. However, user numbers will not increase as long as the public feel that walking or cycling are unattractive or unsafe transport modes. Policy needs to be more proactive with methods to encourage more walking and cycling; to be specific about what types of measures are required and must address issues of safety, user confidence and perceptions.

Urban planning and health behaviour studies consistently show how communities are built influences whether or not people use public transport, drive, walk or cycle to reach their destination³¹⁻³⁴.

How the development affects the permeability of an area should be looked at, especially in the context of local amenities. Plans need to ensure that it is possible to take the shortest route possible on foot to a shop, service or facility along a safe, overlooked, well-lit path and that it can be faster than sitting in the car.

Good urban development includes shaping and managing the built (physical) environment to support human, as well as environmental health¹⁹. This involves a built (physical) environment that is designed to provide various opportunities for physical activity as well as removing barriers to physical activity – including those posed by factors of the natural environment, including climate and topography¹⁹.

School Environment

During the school day, breaks and PE classes can contribute to the daily 60 minutes physical activity requirement of young people. However, physical activity is being engineered out of young people's lives - this is not just in the built (physical) environment but also through modern appliances (e.g. remote controls, escalators, computers) and in the social environment (e.g. limitations on insurance for facilities, time, family priorities). There is a need to reintroduce moderate activity as part of young people's daily lifestyle. The school setting is a place where young people are likely to learn and practice attitudes, values and skills related to active living that will last a lifetime⁷. Alongside active travel, the importance of physical activity during the school day, during classes and after school must be recognised.

A school's design and environment may hinder or discourage physical activity. The school environment includes the presence of PE classes; opportunities to be active during break, lunch and extra-curricular activities, and the provision of equipment for activities.

At primary level there should be opportunity for children to free play, i.e. a large playground and open space to facilitate running and play – allocation of play space and/or zoning for example, skipping, time out area, basketball, free play, natural space etc. Staggering of break times can help to create more space and age-appropriate activities.

Green Schools

Green Schools is known internationally as Eco-Schools. It acknowledges long-term, whole school action for the environment through moving from environmental awareness in

the curriculum to environmental action in the school and wider community. It deals with the following environmental issues:

- Litter & Waste
- Energy
- Water
- Travel

The Green-Schools programme in Ireland was introduced in 1997 and is run by An Taisce. Travel was introduced as a national theme to the Green-Schools in 2008 and is supported by the Department of Transport and the National Transport Authority. Participating schools set their own Travel targets as part of their Action Plan – ultimately with the aim of increasing active travel i.e. increasing the number of pupils walking, cycling and/or using public transport and decreasing travel by car¹⁷.

The Green-Schools progress report has shown the national roll-out of the Green-Schools Travel programme to be successful in positively affecting school travel. The national target on introduction of the Travel theme was a 12% reduction in car use among the participating school population (101,000 pupils was estimate at publication of report). Comparison results from baseline to completion showed a 22% reduction in those travelling to school by car and walking to school increased from 17.5% to 25%. Cycling remained relatively constant at 3%¹⁷.

Recommendation

- ***The National Heart Alliance recommends that the Green-Schools Programme should be expanded to all schools by 2020.***

Active School Flag

The Active School Flag, led by the Department of Education is a non-competitive initiative at both Primary and Post-Primary which highlights the importance of PE, physical activity and sport in schools and communities in which they are based. The Active School Flag aims to improve physical activity provision in the school not only through the curriculum but throughout the school day and outside of school¹⁸.

It aims to empower schools to commit to a process of internal self evaluation as part of a whole school process aimed at improving provision of physical activity in their school. It encourages a partnership approach and allows for schools to become more proactive in approaching groups such as the Health Service Executive, Local Sports Partnerships and Education Centres in assisting them in the promotion of physical activity in their schools¹⁸.

School Policies

All schools should be encouraged as part of their development planning to develop school policies that address physical activity and active travel. However, they need to be supported at a local level by their local authority/council and at a national level by the Government (Department of Transport, Department of Education, and Department of Environment).

Both the Active Flag and Green-School projects can help facilitate such plans.

Action 7 of *Smarter Travel* aims to ensure that every school and college in Ireland has a school travel plan to encourage pupils to take alternatives to the car, with the appropriate support by local authorities to identify and implement safe walking and cycling routes to and from schools and other educational institutions, as well as providing better access for people with disabilities. The plan is to establish an advisory group of the relevant stakeholders to achieve better cooperation in delivering these. Where safe routes cannot be provided, The Department of Transport will consider an extension of the existing school transport scheme¹⁶.

Recommendation

- ***All schools should implement an active travel to school plan and promote physical activity throughout the school day through PE classes, break time and before and after school.***

Facilities For Physical Activity/Play

Good land use mix includes the presence of facilities for physical activity (such as fitness centres, parks, play areas). The availability of good quality facilities are more likely to increase uptake and can have a positive impact on levels of physical activity¹. Having many³⁵ and good quality³⁶ facilities for physical activity near the home is associated with an increased likelihood of active travel to school.

Facilities whether structured or unstructured must be accessible and convenient to young people and designed to cater for their needs. Convenience is the presence of facilities for physical activity on a frequently travelled route or within a 10-15 minute walk or a 5-minute drive³⁷.

Facilities favoured by older people may not be appropriate for young people, thus amenities should follow universal design principles, incorporating the different needs of multiple users. Where spaces are shared, there should be information available about the rules of use for and by the various users.

Having to be accompanied by an adult, adult fears and perceptions of safety and adults views on what young people want versus what young people actually want are other barriers that can result in barriers to young people accessing facilities¹.

The concept of physical facilities is often structured and sports related. Perceptions of facilities, access to and preference for facilities varies in young people, most notably by gender. Boys are more inclined to identify soccer, GAA or rugby grounds, all-weather pitches and golf courses in their area while girls will identify gyms, swimming pools, aerobic dance studios

and community centres in their area¹. While these facilities may be available for girls, they are often not affordable. For boys, the facilities they prefer are less costly and so are more accessible. When looking at paid and public facilities, cost needs to be kept to a minimum to allow all the community to avail of them.

Structured facilities provide a base and usually an organisational structure to get young people involved, e.g. GAA clubs. However, sports facilities aren't of interest to all young people and there is a need to target facilities that will get young people more physically active, e.g. local community halls/amenity facilities, play parks, green spaces, playgrounds etc.

Recommendation

- ***Where the Government intends to invest facilities, there needs to be a guarantee that these facilities are accessible in terms of getting there through active travel (some or all of the way). These facilities must also be accessible and affordable to young people.***
- ***Consultation with young people will identify their specific needs to facilities for physical activity, particularly where public funds have been used to develop a facility.***
- ***Where applicable, consideration for the shared-use of facilities e.g. schools used after school hours for public purposes and schools using public facilities within school hours.***

Facilities for Play

Prior to 2004 play had been neglected at policy level in Ireland. There was a shortage of safe public play spaces, no ring-fenced Government funding for play, a poorly developed public awareness of the value of play and no national strategy for play¹⁴. *Ready, Steady, Play!* aims to address these deficiencies.

Internationally (e.g. UK, Sweden, Netherlands and Belgium), play and facilities for play have been given greater priority. These countries with well developed play policies and facilities represent an environment where there is national and local political commitment, a highly developed public play infrastructure, a play training framework and a child-friendly environment¹⁴.

Young people are more active when they have convenient, good quality, affordable facilities for physical activity and play¹. The potential health benefits are vast and getting children active at a young age increases the chances of them being physically active, as they get older. Young people and play, and thus facilities for play, go hand in hand. All potential play needs must be considered in terms of access, quantity and quality. Protecting what is already in place is crucial. Local assessments of needs should be undertaken to determine local standards for open space, covering accessibility, quality and the range of activities offered.

Lifestyle changes, society changes and environmental changes all influence how children play in society. Today's generation of young people must have the environment designed so that it is accessible and conducive to their needs for play and activity. The National

Heart Alliance acknowledges developments since the publication of *Teenspace (2007)* and *READY, STEADY, PLAY! (2004)*.

Recommendation

- ***Children and young people's needs should direct investment which should be continuous and not just once-off capital. Factors such as the environment, design and the different styles of playgrounds (Traditional, Contemporary, Adventure) should direct investment.***

Playgrounds and skateparks

READY, STEADY, PLAY! targeted to bring the number of playgrounds nationally up to the standard of 1:10,000 per head population. This policy was designed to span 2004-2008, and set out to create better play opportunities for children. Its overall objective was to plan for an increase in public play facilities and thereby improve the quality of life of children living in Ireland by providing them with more play opportunities¹⁴.

Since 2006, the target of 1:10,000 playgrounds has been met across a number of county and city councils. Delivery of more playgrounds is planned for nearly all county and city councils³⁸.

Recommendation

- ***Delivery of the targets for playgrounds met and the target of 1:10,000 for all city and county councils achieved.***

Recommendation

- ***Investment continued not only in playground and skateparks but across all facilities for play.***

Since 2007, €2 million has been allocated to provide 22 skateparks¹³ (*Teenspace* No. 33). Local Authorities will review the operation of the pilot skateboard park scheme, introduced by the Department of the Environment, Heritage and Local Government, with a view to identifying potential opportunities for the provision of more facilities based on the recreational needs of young people in their areas.

Play Environment

The benefits of play and current strategies must be communicated to key stakeholders and recommendations delivered. There is a need to adopt a more natural play environment and encourage play outside of static equipment. Play takes many forms including playgrounds, streets and green areas and young people must be provided with space for structured and natural play.

Recommendation

- ***A review of Ready, Steady, Play! now needs to be carried out to identify if the objectives have been achieved, if not why not, and what is the best way to move forward in relation to play facilities for children and young people.***
- ***The Teenspace National Recreation Policy for Young People (2007) identified a number of action areas which have relevance to how the physical environment impacts on physical activity levels. Its progress needs to be reviewed.***

Public Open Space

Public open space can include parks, gardens, shopping areas, sporting fields, streets, public squares and plazas, playgrounds, walking and biking trails and natural areas. This allows for various levels of formal and informal sport, recreation and leisure activities including walking, running, cycling, ball games, dog walking/training and climbing. Public space is generally considered to improve physical and psychological health, as well as contribute to the social connections that help make a community. When public spaces are inaccessible, unpleasant or unsafe, many people are discouraged from utilising them¹⁹.

Based on the evaluation of thousands of public spaces around the world, the Project for Public Spaces (2008) identified four key qualities of successful public spaces, as follows³⁹;

that:

- they are accessible
- people are engaged in activity there
- the space is comfortable and has a good image
- it is a sociable place – one where people meet each other.

The natural environment and access to it, is of particular importance in the healthy development of children and young people⁴⁰. It expresses concerns that ‘nature deficit disorder’ is having an adverse impact on children’s and young people’s physical and social development⁴¹. The checklist notes that public open spaces allow for the type of creative play and participation in “community

games, which in turn create a sense of belonging and attachment to local places¹⁹. Beyond natural areas, children and young people need opportunities for unstructured, imaginative and adventurous outdoor play in their neighbourhood, and not just through fixed equipment playgrounds¹⁹. This should not be limited because of a lack of access, adult fears or stranger dangers.

Recommendation

- *Greater engagement with the planning and parks authorities in the expansion and development of the role of public parks in facilitating and promoting physical activity and play to include development of incidental space which allows access for free non-designed play is needed.*
- *An open space strategy could provide a broad guidance on how space should be used to ensure that natural environments to allow for creative and free play are protected.*

and clubs and access for all on the routes and trails will increase their sustainability and encourage their upkeep.

Smarter Travel Action 17 aims to look at State properties that are used for recreation and leisure and ensure that, where feasible, areas of State-owned land such as canal towpaths, former rail lines, Coillte estates, etc. are made available for the development of walking and cycling trails¹⁶.

Recommendation

- *Information campaign and education on the benefits of outdoor activities and walking and the promotion of local walks.*
- *Where feasible, state owned land to be made available for recreational use. For example, nature walks or the outdoor and adventure strand of the PE curriculum.*

Recreational Walking and Cycling

In recent years the Government has recognised the huge national interest in recreational walking and cycling and the resulting benefit to the general public health. Initiatives such as the Irish Heart Foundation's Slí na Sláinte (Path to Health) programme and the Irish Sports Council's National Trails Office are testament to this. It is crucial that investment is sustained to further promote, develop and maintain new and existing routes. Local linkages to schools

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Glossary

Active Transport – relates to physical activity undertaken as a means of transport. This includes travel by foot, bicycle and other non-motorised vehicles. Use of public transport is also included in the definition as it often involves some walking or cycling to pick-up and from drop-off points. Active transport does not include walking, cycling or other physical activity that is undertaken for recreation.

Built Environment – the human-made physical structures and infrastructure of communities.

Grid and Distorted Grid Systems – A grid is a type of city or town plan in which streets run at right angles to each other, a distorted grid has variations on street angles.

IHF – Irish Heart Foundation

Land Use Mix – a measure of the diversity of the land uses, such as housing, recreational, facilities and amenities. For example, neighbourhood design typically considers four land uses: residential, industrial, green space and institutional (e.g. schools).

Neighbourhood Design - The relationships between buildings, streets and open spaces that helps to give a neighbourhood its physical identity. Neighbourhood design refers to the scale, form and function of buildings and open space (including streetscapes).

Moderate/vigorous physical activity – moderate to vigorous activity includes everything from sport, physical education (PE) and formal exercise to active play and other physically demanding activities such as dancing, swimming or skateboarding. It also includes everyday activities such as walking and cycling. With moderate activity, the heart is beating faster than normal, breathing is harder than normal. With vigorous activity, the heart is beating much faster than normal and breathing is much harder than normal.

NHA – National Heart Alliance.

Physical Environment – The physical environment or urban form is the combination of streets, paths, trees, buildings, parks, play areas and other elements which make up the environment in which we live.

Public Transport Nodes – train stations, taxi ranks and bus stops.

Retrofitting - is the process of implementing changes to existing areas to increase their potential for activity.

Topography - a measure of the relative height and distance of point on the surface of an area to another used to describe the variations in slope (i.e. hilliness).

Vulnerable Road Users – defined by the Road Safety Authority as pedestrians, cyclists and motorcyclists.

Walkability - refers to the extent to which a neighbourhood is conducive to walking.

Young People - young people are defined in this paper as children aged 0-18 years.

Appendix 1

National Heart Alliance. Physical Activity, Young People and the Physical Environment - Summary of Evidence – Executive Summary

- Regular participation in physical activity provides physical, social and mental benefits to young people’s health and well-being.
- Young people should participate in physical activity that is developmentally appropriate, enjoyable and of at least moderate intensity for one hour per day.
- Many Irish children and adolescents are not achieving sufficient physical activity for health. Rates of walking and cycling to school are steadily decreasing.
- One in every five young people is overweight or obese.
- Physical inactivity and obesity create a tangible economic burden on the health system.
- Provision of a supportive environment for physical activity and active living can have sustainable, population wide effects. Research has established the relationship between the physical environment and physical activity among youth:
 - The presence of paths, walking trails and bike lanes/tracks are associated with more walking and cycling among youth.
 - Well-connected, permeable communities increase travel by foot among adults, however youth use poorly connected streets for play and physical activity. Walkways between cul-de-sacs represent a design compromise so both on-street play and neighbourhood walking are achievable.
 - Parental concerns regarding traffic volume, traffic speed and limited lightings/crossings restrict children’s walking, cycling and play.
 - Girls are more likely to perceive poor levels of personal safety and be less active as a result.
 - Adolescents are more active in litter-free environments with trees and interesting features to look at, and less likely to walk/cycle to school in the presence of exhaust fumes and other bad smells.
 - Young people are more likely to walk or cycle and be physically active in densely populated areas with lots of destinations (such as shops) and public transport.
 - The location of schools in or near residential areas is paramount to active commuting. As distance from school increases, less children and adolescents walk or cycle to school.

- Young people are more active when they have convenient, good quality, affordable facilities for physical activity and play. Provision of facilities for the preferred activities of adolescent girls is important.
- Changes to the physical environment have resulted in increased physical activity:
 - Infrastructural changes to the environment have resulted in increased walking and cycling to school as part of Safe Routes to School programs.
 - Road safety initiatives such as the introduction of traffic-calming measures, better facilities for walking and cycling, urban design sensitive to the needs of non-motorists, restrictions on use of motor vehicles, traffic education and strict enforcement of traffic regulations increased the use of streets by pedestrians and cyclists. The introduction of home zones increased children's outdoor activity including walking, cycling and playing in the street.
- Intervention is required through environmental, policy and legislative changes. subgroup encourages the development of policy recommendations by the National Heart Alliance, in collaboration with key stakeholders in this area

Appendix 2

Young People Consultation – Summary of findings

Consultation (data collection) with young people took place in August 2009 at the National HSE Community Games, Athlone.

The Questionnaire covered the position paper overview through four main areas:

1. Where you live
2. Getting around where you live
3. At school
4. Outside school

In addition, information on the young people's background was also gathered (gender, age, county of origin).

The National Heart Alliance felt it was important to gather the views of young people. We would like to acknowledge that the population of young people from whom the information is gathered is biased in that it targets those who would be deemed to be physically active.

The public consultation sample consisted of 203 primary and post primary children aged between 6 and 18. 63.5% of the sample were female and the average age of participants was 12.9 years. 72% of the sample live in a rural area (countryside or village) and 28% live in an urban area.

Findings

- 67% of the sample feel safe to walk cycle or play in the area and/or on their street. Twenty two percent feel safe to do so only when they are with friends and the remaining 11% do not feel safe to do these activities in their area at all.
- The most common reason for not feeling safe to walk/cycle in one's area was that there is **too much traffic (47%)**. Other reasons included that there is no path (21%) and simply not feeling safe (37%). There was no significant relationship between urban and rural location of participants and feeling safe to walk cycle or play in their area.
- The most commonly used mode of transport to **travel to friends house was by car (70%)**, followed by walking (26%), cycling (17%) and the bus (3%). The majority of participants reported that they are allowed walk/cycle to friends' houses (68%) with 17% only being allowed to do so with friends and 15% not being allowed at all.
- The **most commonly used mode of transport to travel to school was by car (47%)**, followed by bus (42%), walking (10%) and cycling (7%). The most common mode of transport that participants reported their friends using to travel to school was the bus (56%) followed by car (50%), walking (12%) and cycling (8%).

- The most commonly reported **reason for not walking or cycling** to school among those inactively commute was living too far way (74%), followed by safety concerns (12%), parents don't allow it (10%), **nowhere to lock bike (5%)**, don't like cycling (3%) and don't like walking (3%).
- Forty-two percent said that there are **safe places to cross roads** when walking/cycling to school but **43% said there are not safe places**. Fifteen percent said that they did not know if there were safe places to cross. There was no significant difference for gender, primary vs post primary and urban vs rural location in relation to safe places to cross.
- The majority of participants do not take shortcuts when walking or cycling to school (67%), the remainder (33%) do take shortcuts. Among the 33% (N=60) that do take shortcuts, the most commonly reported shortcut is through housing estates (40%), followed by across fields (38%) and over walls (17%).
- Outdoor playing fields were the most commonly available facility in respondents' schools (59%), followed by a gym or indoor hall (52%), playground (38%), a swimming pool (6%), tennis/basketball courts (3%) and a track (2%)
- Eighty-four percent of respondents reported that their school uses local sports facilities, the remaining 16% said they do not. GAA facilities were the most commonly reported facility that respondents reported their school using (82%), followed by swimming pools (23%), basketball courts (19%) and hockey pitches (12%).
- Thirty-eight percent of participants go on **nature walks in the community**; the remaining **62% do not**. Of those that report going on nature walks (38%, n=71) the most common location to go on walks is in the park (35%), followed by local roads streets towns (24%), forest/woods (22%) and lake/canal/bog (13%)
- Ninety-three percent of participants reported that they go to **sports/activity clubs** on the weekend or after school. Of those who do attend clubs, **76% reported that they have to pay**, 24% do not pay.
- Sixty-eight percent of respondents report that they walk cycle or jog for fun after school or on weekends.
- The vast majority (**93%**) of participants own a bike. Ninety-four percent can cycle. **70% have never done a safe cycling course**. Among those that have done a safe cycling course the majority did it in school (74%).



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