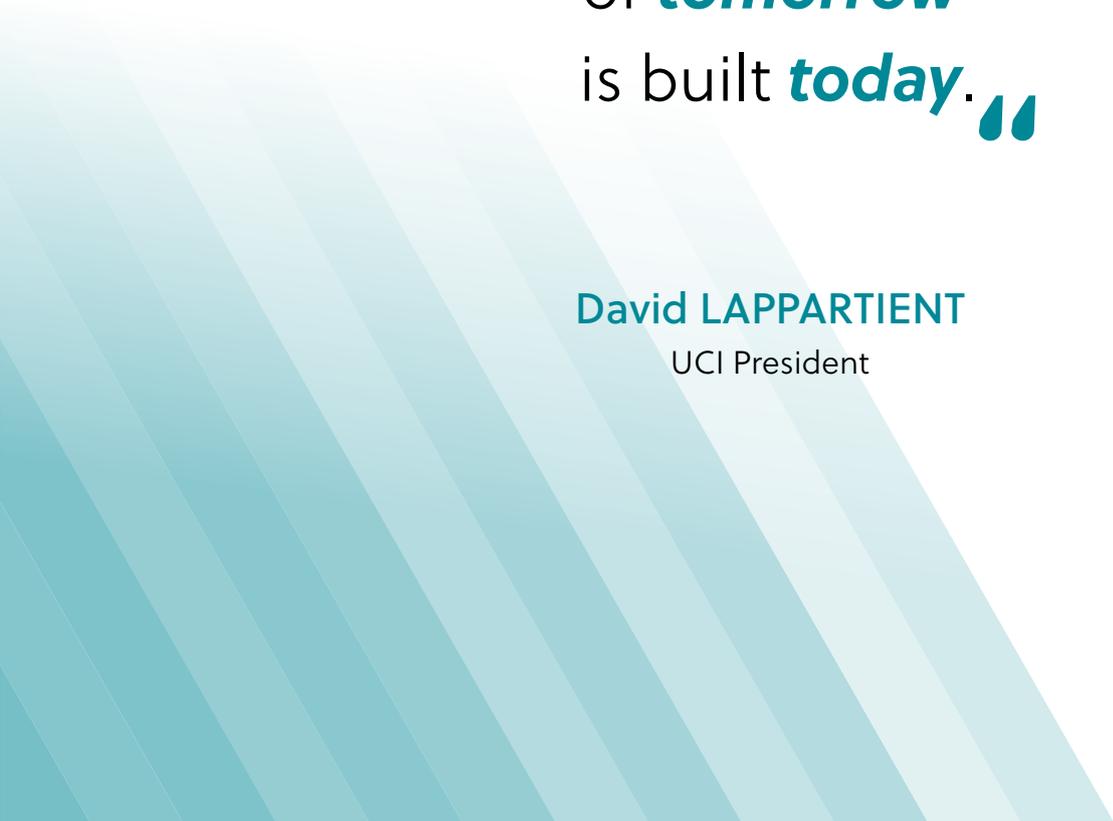


A photograph of a young girl wearing a white helmet and a white t-shirt with a colorful graphic, riding a bicycle. An adult's hands are visible, supporting the girl's arms from behind. The background is blurred, showing other people and bicycles. The entire image has a teal color overlay.

CHILDREN'S CYCLING EDUCATION PROGRAMMES

UCI TOOLKIT
FOR NATIONAL
FEDERATIONS



“ The cycling
of **tomorrow**
is built **today**. ”

David LAPPARTIENT

UCI President

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1. INTRODUCTION

Promoting and enhancing everyday cycling is a core pillar of the UCI's strategy, striving to ensure that elite cycling acts as a catalyst to inspire even greater mass participation, and get many more people using bikes as part of their everyday lives. Be it working with cycling advocacy partners, championing local, regional, national or international cycling initiatives or supporting National Federations with their cycling promotion programmes, the UCI's Cycling for All programme is meant to support the realisation of a more bike friendly world.

We recognise that giving children the skills to ride competently and safely is an essential priority. As such we have partnered with The Bikeability Trust in the UK to develop a child cycle education programme toolkit. Designed for National Federations, the toolkit contains practical guidance on creating a programme; alongside advice on creating a rationale and business case for a child cycle training programme. The toolkit is derived from the UK Bikeability model.

ABOUT BIKEABILITY AND THE NATIONAL STANDARD FOR CYCLE TRAINING

Bikeability is the public face of the National Standard for Cycle Training, published by the UK Department for Transport, which deals with the underlying competencies and technical administration of cycle training. There are three levels of Bikeability training:

- *Level 1* teaches trainees to learn to control and master a bike. The training takes place in an environment away from cars or traffic – usually in a playground or closed car park.
- *Level 2* is delivered on local roads giving trainees real cycling experience that equips them with skills to deal with traffic on short journeys such as cycling to school, work or the local shops.

- *Level 3* teaches the skills to tackle a wider variety of traffic conditions than Level 2. It is designed to equip trainees with skills that enable them to be able to deal with all types of road conditions and more challenging traffic situations.

To ensure the quality of training, Bikeability is delivered by qualified and registered national standard instructors working under Bikeability schemes.

DOCUMENT OBJECTIVES

This toolkit provides practical advice and knowledge for National Federations seeking to develop their own child cycle training programmes, and can be used in a number of ways:

- If a framework for cycling education already exists, but there is no national training programme in your country, a National Federation may wish to develop one
- If neither standard or training programme exists, the creation of a standard is highly beneficial but not essential, should a National Federation wish to establish a training programme
- If training programmes already exist - and if a National Federation is already managing these - this toolkit can help support and augment their continuing success.

Alongside a project plan containing a full breakdown of actions, there are documents, guides and examples of best practice attached to this manual.

This toolkit can thus be used to support multiple actions:

- Creation of a national standard for cycle training (or enhancing an existing one)
- Development of a national programme for child cycle education
- Providing support where a national child cycle education programme exists

If a national standard for cycle training does not yet exist in your country, it is not necessary to create one before creating a child cycle education programme. Guidance on the creation of the standard is presented as part of this toolkit, as the presence of such a standard can enhance an educational programme.

DOCUMENT OVERVIEW

- Sections 2 and 3 introduce the practical steps to *implementing a training scheme*
- Sections 4, 5 and 6 provide *background evidence and guidance* to build the case for a training scheme
- Section 7 provides an insight on *branding materials*
- Section 8 explains the *National Standard* concept - using the UK as an example
- Section 9 is the *New Zealand case study*



2. GETTING STARTED

The *Project plan* is the best place to start. This will guide you through the necessary steps.

During the Feasibility stage, you may find it helpful to refer to the *Economic case* and to the *Research* items, both of which are contained in the pack.

The cycling education rationale *Presentation* may be helpful when you approach potential funders to initiate discussion.

All of these documents are editable, allowing you to adapt them to your circumstances and to your audience.

The pack contains:

ITEM	DESCRIPTION	FORMAT
Project plan	A template project plan, covering the major tasks needed to set up a national cycling education programme (including central administration, quality assurance, funding, instructor training etc.)	1 x <i>Microsoft Project (.mpp)</i> 1 x <i>pdf</i>
Economic case	The case for government investment: costs (both fixed [set-up] and ongoing), supplied in the form of an Excel spreadsheet that can be adapted to suit local numbers. The Word document is an example of an economic case, based on research evidence	1 x <i>Excel</i> 1 x <i>Word</i>
Research	References to academic research and other evidence	2 x <i>Word</i> 1 x <i>pdf</i>
Presentation	A brief template presentation pack with key messages for potential funders (i.e. governments) to initiate a discussion	1 x <i>Powerpoint</i>
Branding guidance	Guidance on branding (although the Bikeability brand is not a necessary part and Federations/Governments are, of course, free to choose their own branding)	1 x <i>Word</i> 2 x <i>pdf</i>
National Standard	A template National Standard (the foundation for the cycling education programme) and advice on getting the appropriate buy-in to this	1 x <i>Word</i> 1 x <i>pdf</i>
Delivery guidance	Bikeability and Bikeability Plus Delivery Guides, Instructor Training manual and guidance on inclusive delivery of Bikeability. These documents may be useful at later stages of the project, but will certainly need adapting	3 x <i>pdf</i> 2 x <i>Word</i>
Case study	Detailed business case documents from New Zealand, which consulted with the Bikeability Trust in England, and are in the process of implementing a broader programme of cycling education	3 x <i>pdf</i>



3. PROJECT PLAN

Available as a PDF or Microsoft Project file, the project plan maps out the tasks and actions required to deliver the project.

The notes below explain the stages in the template project plan.

The tasks, timescales and dependencies are based on the experience of developing and implementing Bikeability in England and are meant as a guide only. The timescales are indicative only and are likely to be typical for a large national programme.

OVERVIEW

The project plan document is a handy tool for planning and constructing the development of the child cycle training programme.

Tasks are numbered in the plan, along with projections on time and resources required for achieving each task.

KEY PHASES AND TASK IDs

FEASIBILITY ID: 1-9	DEVELOPMENT (CORE) ID: 10-79	PROMOTION (CONTINUING) ID: 49-79	SET-UP ID: 80-189	FURTHER DEVELOPMENT ID: 190-194
<p>The first step is a feasibility assessment.</p> <p>This toolkit contains guidance and evidence to support this process.</p> <p>Research of local factors relevant to cycle training is an essential component.</p>	<p>Development concerns the design of: the child cycle training programme, a national standard (should one not exist), delivery model, and courses</p>	<p>These tasks focus on key steps required to ensure the success of the programme. They cover:</p> <ul style="list-style-type: none">• Promotion• Branding• Funding rules• Instructor training• Monitoring & evaluation	<p>Very practical steps concerning organisational or programme set up are detailed</p>	<p>Once the programme is up and running, these steps are suggested as future actions to consider.</p> <p>Such as:</p> <ul style="list-style-type: none">• Diversification of funding streams• Securing commercial partners

FEASIBILITY PHASE - RESEARCH AND BUILDING THE CASE

This initial stage focuses on gathering research and understanding the context and challenges in which the programme will be operating and confronting. It also focuses on modelling and securing funding, covering task IDs one to nine.

Some background research is provided in this pack, but an assessment of local cycle training and education practice will be necessary.

The spreadsheet in this pack can be edited to give indicative annual budget, based on the local context.

The economic assessment can be adapted with the local costs, as calculated above.

The plan is based on a funded model of cycling education: i.e. instructors are paid to deliver cycle training. In this model, feasibility depends on the ability to find suitable funding. There are several reasons for adopting this model (including quality, ability to have leverage, consistency, scalability and sustainability [i.e. do not rely on volunteers]), but it is not the only model.

DEVELOPMENT PHASE - DESIGNING A PROGRAMME & RESOURCES

Tasks 10 to 79 are concerned with designing and developing the cycling education programme.

Determine which organisation will lead development [ID 11-15]

An important step, particularly if there is already some cycling education activity happening. Do not compromise on this step, it will only defer problems.

Develop National Standard [ID 16-22]

A template is provided in this pack.

If a national standard for driving exists, that would be a good starting point for developing a cycling and cycle training standard, since the programme is about utility cycling, which entails sharing the same road space (at times, at least, depending on the extent of dedicated and separated cycling infrastructure). The template provided was based on the UK national standard for driving and riding a motorcycle.

The standard must be agreed by all relevant bodies.

Determine delivery model [ID 23-26]

Will the programme be market-oriented or centrally planned? At this point in the plan, this is an essential choice to make.

The main decision here is whether to adopt a market-based approach for providers, or to have a centrally-planned model, perhaps with a single national provider. This is much a matter of political philosophy as anything. In England, the Bikeability model operates as a market, with competition between providers of training, coordinated by a non-profit body that operates centralised quality assurance and ensures a level playing field.

If a centrally-controlled model is preferred, the following two stages will not be necessary.

(MARKET-ORIENTED ONLY) Design provider model [ID 27-31]

This stage involves setting the entry standards for providers. An example is available from Bikeability, but it will need to cover insurance and various policies.

(MARKET-ORIENTED ONLY) Design quality assurance regime [ID 32-37]

The entry requirements are the first stage of quality assurance. Other stages will be required, such as internal quality assurance (providers need to continually improve themselves) and external quality assurance (to check that standards are being maintained and that internal quality assurance is working).

Design structure of education programme awards [ID 38-43]

The cycling education programme will be based on the national standard developed earlier. This stage involves deciding how the programme should be structured (for example, Bikeability has three core levels and ten 'Plus' modules) and how that structure relates to the national standard. It may cover some or all of the standard.

Design courses [ID 44-48]

It is necessary to design the courses that trainers or partners will deliver under the programme. The delivery guidance materials and examples from Bikeability in this pack will prove useful during this step in the programme.

Taking the structure defined in the previous step, this stage involves writing exemplar courses that cover how the programme will be delivered. It is also important at this stage to set minimum standards for course durations and ratios of instructors to pupils.

Promotion [ID 49-61]

This stage involves creating a communication plan for the programme.

Branding & Online [ID 54-61]

A part of the promotion phase, these tasks cover the development of branding materials and key communication topics such as social media. Please refer to part 7. of this document for advice on branding.

Funding rules ID 62-67

As one of the key precepts is that this is a funded programme, it is important to set the rules under which the funding is spent (possibly as grant rules). These may go beyond the timing and ratio minima set at course level in the previous stage (as the courses may be delivered with other sources of funding, or possibly with none at all).

Instructor training ID 68-76

This stage concerns the training of instructors who will deliver the end-user training. You will also need to consider the training of those who train the instructors (in England they are called Instructor Trainers and have a separate qualification).

The key outputs are a defined qualification (registered with a national qualification body, if possible) and exemplar courses for training instructors and instructor trainers.

Monitoring and evaluation ID 77-79

The monitoring and evaluation plan needs to measure impacts, as well as outcomes, in order to assess the benefits of the programme so that they can be compared with the costs.

SET UP PHASE - PRACTICAL STEPS MAPPED

Covering topics such as administration, securing office space, IT and staffing, this phase is included as an example only and the steps should be self-explanatory. Tasks 80-176 are included in this phase.

OPERATIONS PHASE - DAY TO DAY REQUIREMENTS

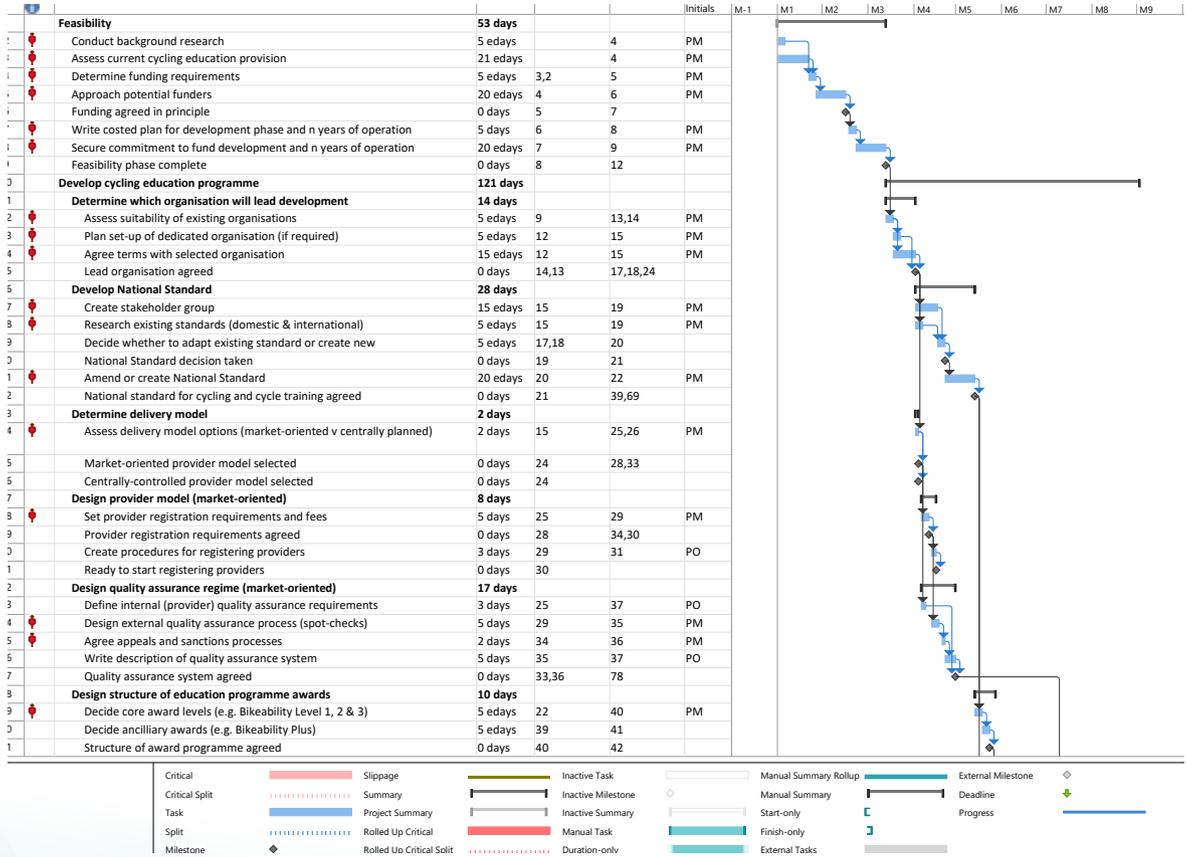
This phase is included to help you to plan and resource the day-to-day operations of the central administrator, under tasks 177-189.

FURTHER DEVELOPMENT PHASE - FUTURE STEPS

This phase is indicative of the sort of future developments you may consider to your programme. Tasks 190-194 are part of this phase.

EXAMPLE

To help visualise the Project Plan, please find below a one-page example of the tool:





4. ECONOMIC CASE STUDY

Providing a clearer understanding of the long-term economic benefits a child cycle training programme can deliver will assist with seeking wider support for the project.

Derived from data and research carried out in the UK where the Bikeability model this toolkit is based on was developed, a full economic evaluation document is available. Please find an adapted executive summary of this evaluation, alongside additional information on Bikeability below.

BIKEABILITY ECONOMIC EVALUATION

Bikeability is the UK government's national cycle training scheme designed to give people the skills and confidence to cycle safely and well in modern road conditions.

By March 2013, more than one million children had been trained. We have undertaken an economic evaluation of Bikeability based upon data such as the Ipsos MORI evaluation and research analysing school census and Bikeability delivery data. Our analysis adheres to the principles of Government guidance on economic appraisal as set out in the Treasury Green Book and the UK Department for Transport's (DfT) WebTAG guidance.

Appraisal Results

We have undertaken an appraisal based on three appraisal periods – short term (three years, to reflect the initial response to the programme) and then medium (up to 10 years) and longer term (up to 30) to assess the impact of behaviour change persisting through the remainder of childhood and into adulthood respectively.

The results show that the economic performance of the scheme, based on the assumptions employed, would deliver a benefit cost ratio (BCR) of just over 3:1, 5:1 and 7:1 over these time periods.

We have undertaken a range of sensitivity and scenario tests that show the economic performance of the scheme remains strong under a range of tests.

Bikeability Programme

Bikeability is particularly useful to schools as it includes both road and bike safety as part of the training which are topics that can be covered in lessons at various key stages. It also presents an opportunity for the school to alleviate the problem of congestion during the school run by providing children with the skills and confidence required to cycle to school safely. This has the added benefit of providing the children with more opportunities for exercise which in turn helps to improve mental and physical well-being.

The majority of training is delivered to Year 5 and 6 primary school pupils (children aged 9-11). There is currently a much lower volume of training delivered to children in Year 7, the first year of secondary school.

Bikeability training is delivered free of charge or at low cost by the Local Highway Authority or School Games Organiser host school. DfT has provided funding for Bikeability child training places since the introduction of the scheme. Funding is provided at the rate of £40 per child, which must be used to deliver training up to Level 2. The total amount of funding provided by DfT has increased year on year but always as a contribution of £40 per pupil up to Level 2. This excludes any additional costs that local authorities and/or parents contribute towards the training costs.

In addition, there is a central administration cost of about 5% to cover quality assurance, grant administration, etc.

There are three National Standard levels with a series of outcomes for each that a trainee must demonstrate. There are core Bikeability award materials (badge, certificate and booklet). The complete cycle training typically takes place over three years, although not all school children are expected to attend all levels of training.

Potential Benefits

In spring 2010 the DfT commissioned Ipsos MORI to carry out a research study into the impact and perceptions of cycle training, with a specific focus on Bikeability.

The results were encouraging, particularly in addressing the safety concerns of parents as children who have taken part in the Bikeability scheme feel safer and more confident when riding on the road (86%) and their parents feel more confident in allowing them to do so (87%).

Bikeability training itself is also rated very highly by both parents (97% say that they are very/quite satisfied with the training) and children (95% describe it as fairly/very good), and children who have taken part say that they would recommend it to friends (91%).

The economic benefits of Bikeability are based on changes in perception (increased confidence) and changes in behaviour (where this increased confidence encourages more cycle usage).

The key benefits are:

- Benefits to new cyclists from reduced journey times (compared to former mode);
- Improved physical fitness - benefits to the individual;
- Benefits to existing cycle users from improved safety - valued on the basis of a reduction in accident risk;
- Benefits to society from reduced congestion, accidents and emissions from modal shift from car;
- Health benefits - from reduced childhood obesity and, over the longer term, improved mental health and reduced risk of death from cardiovascular illness;
- Reduced travel for parents escorting children to school or other destinations;
- Absenteeism benefits - regular cyclists are shown to have fewer days off sick which is a direct productivity benefit to the employer / economy (as above).

Some of these benefits would only occur in the short-term during student life (e.g. reduced parent travel), and others during working life (e.g. absenteeism).

The full economic evaluation is available to download with this toolkit.



CALCULATING FUNDING

An excel sheet entitled Sample Funding Calculations is also provided. This spreadsheet can assist with modelling the costs of running different elements of a child cycle training programme. While providing an at a glance summary, costs such as staffing and the purchase of materials can be inserted into the

spreadsheet to provide a calculation of what budgets would be required to run an overall programme, or specific actions.



5. SUPPORTING RESEARCH

A growing body of research is providing an insight on best practice and the benefits of implementing child cycle training programmes.

Contained in the toolkit is a report which details evidence and research that may support the development of your child cycle training project. The executive summary is available below.

NARRATIVE REPORT - CYCLE TRAINING EVIDENCE

This report summarises current data and research relating to children and cycling with a particular emphasis on cycling to school and the role of cycle training in bringing about more cycling to school. This report is part of a wider Transport for London (TfL) research project seeking to understand what can be done to get more children cycling in London.

The main objectives for the wider TfL research are to:

- Establish the current baseline numbers of children cycling to school and receiving training in London split between primary and secondary age
- Understand how barriers to children cycling to school can be overcome split by primary and secondary age
- Understand how cycle training for parents links to children cycling to school split by primary and secondary age
- Understand how child cycle training can be improved to maximise children cycling to school for primary age and secondary age

There is mixed existing evidence for objectives 1, 2 and 4 and very limited evidence about the link between cycle training for parents and children cycling to school.

Why does child cycling matter?

Child cycling has the potential to deliver both health and transport outcomes. There is an extensive literature on the health benefits of cycling. Benefits include associations with general good health and less chronic illness among regular cyclists and inverse associations with body mass index, cholesterol, high blood pressure and diabetes.

Getting children cycling at a young age is likely to be key to continued cycling throughout childhood and into adulthood. Research has shown that cycling to school at age 10 strongly tracks cycling to school at age 16, suggesting that travel habits formed early in a child's school career determine how they travel throughout their time at school. While there is no specific research into a link between cycling as children and cycling as adults, the literature does suggest a correlation between levels of physical activity as children and physical activity as adults. Research among adults also found that adults with a strong cycling habit made less-conscious decisions to cycle for given journeys compared with those who had weaker cycling habits. This suggests the formation of cycling habits at an early age is an important factor in creating regular adult cyclists.

Past and present trends in children cycling

Since the 1990s the level of cycling for the journey to school has been low, accounting for around two per cent of journeys in the UK including London. This low level of cycling has remained fairly static since the mid-1990s, however, between the mid-1970s and the mid-1990s the average number of miles cycled by children fell by 41 per cent. In London, while child cycling levels have remained static since 2002/03, there have been changes in the use of other modes, for example, car use has declined by approximately five percentage points and bus use has increased by around seven percentage points.

This decline in the level of child cycling may in part be explained by falling levels of children's independent mobility. Since the 1970s there has been a decrease in the number of children allowed by their parents to undertake independent trips such as the journey to school. The literature concludes that independent mobility is an important factor in determining physical activity levels among children. Higher levels of independent mobility were also associated with higher levels of cycling to school.

Like adults, children cycle for leisure as well as utility trips (such as the journey to school). It is likely that many child leisure rides go unrecorded because of the absence of a means of recording these rides. For example, school travel surveys or the National Travel Survey may pick up journeys to school or key destinations but are unlikely to identify when children have

spent playtime riding a bike. Playtime cycling may be important because, like adults with leisure cycling, it enables children to engage positively with cycling and enables them to develop basic cycling skills.

Cycling safety among children

Department for Transport (DfT) statistics show that 324 children were killed or seriously injured (KSI) while cycling in 2012, the lowest number for 30 years and a continuation of a downward trend since 1979, even in the context of a decline in the level of child cycling over the same period. Of these KSIs, a very small proportion relates to the journey to school – in 2007, of 522 child cycling KSIs, three related to the journey to school. It should be recognised that a decline in KSI is only part of the cycle safety picture and does not necessarily mean that safety in the broadest sense has improved. The fall in KSI could be explained by an increase in perceptions of danger among parents and carers, and the deployment of measures to avoid danger, as much as by a reduction in actual danger.

Attitudes and motivators for child cycling

Attitudes to travel generally have been found to vary by age among children; for the youngest children the fun aspects of transport are most important. Young teenagers value the independence offered by non-car modes and older teenagers tend to aspire to car ownership and use.

Cycling has four main attractions for children – it is fun, expands their territory, is a social activity and allows for interaction with people and the environment. In comparison to adults, children have more positive views about cycling and are more open-minded about transport choices generally.

The key barriers to cycling identified in the literature are:

- Road danger – concerns about road danger, particularly among parents, carers and school staff
- Attitudes – car culture and aspirations towards car ownership and use, a concern among parents not to expose their children to activities that may be perceived as dangerous and self-image concerns among children
- Convenience – cycling as an inconvenient mode for parents particularly for accompanied journeys to school, where driving or walking with a child to school may be perceived by parents as easier than cycling
- Distance – the literature suggests distances of between 0.7km and 1.5km from school are most conducive to cycling

There is less evidence in the literature for how these barriers and motivators affect different 'types' of children, for example, how these factors vary by age, gender and socio-demographics.

Cycle training

Across London and the UK cycle training is a measure widely used by authorities to improve cycle safety and increase levels of cycling. In the literature, the term 'cycle training' has been used in reference to many types of training. However, when cycle training is referred to in contemporary London and UK policy it usually refers to the Department for Transport's National Standard for cycle training, Bikeability. The course content and delivery standards for Bikeability are clearly specified with discrete outcomes identified for each of its three cycling skill levels.

Levels of cycle training delivery

TfL figures for 2011/12 show a total of 28,569 children participated in Bikeability cycle training at Level 2 (basic on-road training), and 3,007 at Level 3 (advanced on-road training). Across the rest of England, DfT funding delivered 293,360 Level 2 Bikeability places. The current data does not enable us to distinguish between primary and secondary school training places, although Level 3 is most likely to be delivered to secondary school age children only and the bulk of Level 2 training takes place in primary schools.

While these figures tell us the baseline numbers trained, they do not help us to understand what proportion of eligible children receive training. Further analysis is required to compare these numbers against school year-group data held by the Department for Education.

Child cycle training and safer cycling

There is some evidence for a positive association between cycle training and safer cycling:

- Trained children are three times less likely to become a casualty than those who have not received cycle training
- Trained children were less inclined towards risky behaviour than untrained children
- Children and parents reported improvements in children's abilities to judge risk and greater confidence while cycling on the road
- Training increases cycling skill among participants – adults and children

Cycle training and more cycling

There is also evidence for an association between cycle training and more cycling, although research on this issue tends to have been undertaken by government agencies or businesses with an interest in delivery and therefore may be inclined towards evaluation bias. Key findings include:

- Evaluation of the national Travelling to School Initiative found that schools participating in cycle training had higher levels of cycling to school than those not participating
- In Hertfordshire (an English county), the level of cycling to secondary schools was found to have increased over time where all feeder primary schools had participated in Bikeability cycle training

- Parents of children in Merseyside who had received cycle training said their children's frequency of cycling had increased after the training, particularly for leisure purposes

Research among adults suggests that those who have received cycle training increase their frequency of cycling after training, although for adults it is more likely to have been a personal choice to undertake training perhaps in response to or preparation for starting to cycle. There is no evidence in the literature of a link between cycle training for parents leading to more cycling by their children.

The implications for cycle training

There is evidence that cycle training increases the skill and confidence of trainees and may result in increased frequency of cycling after training. Cycle training plays a positive role in influencing the perceptions of parents, helping to allay concerns about cycling safety.

However, consideration of the barriers to child cycling suggests that cycle training alone is unlikely to result in more cycling. While training has a positive effect on parental perceptions of their child's abilities, concern about the safety of the environment in which their children must cycle will remain.

Therefore, cycle training should be supported by complementary measures that both address the environment in which children cycle and parental perceptions of that environment.



6. CYCLING EDUCATION RATIONALE

To present the arguments in favour of developing a child cycle education programme, a PowerPoint Presentation has been created by the Bikeability Trust.

The slides of the presentation are below (full PPTX included in the pack). This PowerPoint file can be freely adapted to support your project.

Cycling Education: Rationale

January 2019



What is cycling education?

- Training for on-road utility cycling
- With progressive levels
- Which delivers:
 - More people cycling
 - More safely
 - More often



Who is cycling education for?

- Start with children
- Spread to parents, teachers
- Extend to professional drivers
- Extend to all adults



How to structure a cycling education programme?

- Under-pin with National Standard
 - Agreed by all relevant bodies
 - Endorsed by government
 - Gain buy-in
- Fund centrally (by government)
 - Not expensive
 - Contribution toward cost
 - Retain leverage to maintain quality
- Coordinate centrally
 - Either by a government agency
 - Or by a charity or NGO



What are the benefits of cycling education?



- Cycling itself has proven benefits:
 - Improves physical and mental health
 - Reduces obesity
 - Reduces air pollution
 - Reduces traffic congestion
 - Reduces CO2 emissions
- Benefits of cycling education:
 - Increases cycling rates (leading to the benefits above)
 - Improves hazard perception and therefore safety while cycling
- Benefits of centralised structure:
 - Quality (quality assured nationally)
 - Consistency
 - Value for money – benefit : cost ratio 3:1 – 7:1 depending on conservatism of assumptions



What is cycling education?



Level 1

At Level 1 new riders learn to control and manoeuvre their bikes in a space away from traffic such as a playground or closed car park. Trainers will usually be trained in a group of 5-12, though individual training may also be available in your area. At Level 1 you can:

- ➔ prepare yourself and your bike for cycling
- ➔ get on and off your bike without help
- ➔ start and pedal and stop with control
- ➔ pedal along, use gears and avoid obstacles
- ➔ look all around and behind, and control the bike
- ➔ share space with pedestrians and other cyclists

Level 2

Level 2 takes place on local streets, giving trainees a real cycling experience. Trainees learn how to deal with traffic on short journeys such as cycling to school or the local shops. Trainers are usually trained in small groups – up to 6 trainees per instructor – though individual training may also be available. At Level 2 you can:

- ➔ prepare for on-road cycling
- ➔ start and finish on on-road journey
- ➔ recognise typical hazards
- ➔ let others know what you are about to do
- ➔ know where to ride on the road
- ➔ peer pedal vehicles and side roads

Level 3

Level 3 equips trainees with skills for more challenging roads and urban situations – busier streets, queuing traffic, complex junctions and roundabouts. It also includes planning routes for solo cycling. Level 3 training is delivered one-to-one or in groups of up to 3 so can be tailored to a trainee's individual needs, such as a route to work or school. At Level 3 you can:

- ➔ prepare for a journey
- ➔ understand advanced road positioning
- ➔ pass queuing traffic
- ➔ negotiate and deal with hazards
- ➔ understand correct road signs
- ➔ react to hazardous road situations

What is cycling education?

Level 1



Off-road



Honing bike-handling skills



Guides remind trainee (and their parents) what they have learned and suggest next steps



Ready for Level 2



What is cycling education?

Level 2



First training session on road
– riding as a snake



Teaching methods ensure
understanding, not just remembering



On quiet roads to begin with,
observation is a key skill



Signalling intentions to
other road users



What is cycling education?

Level 3



Busier roads



Roundabouts



Traffic lights



Multi-lane roads



Cycle training impact: evidence

Safer cycling

- [Ipsos MORI parent/child attitudinal surveys 2010, 2015](#)
- [NFER 2015 hazard perception and risk mitigation study](#)

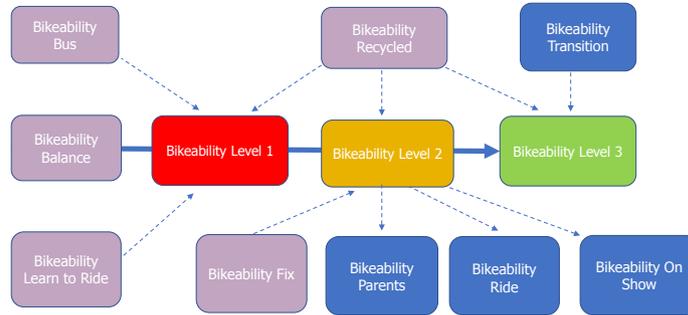
More cycling

- [Ipsos MORI parent/child attitudinal surveys 2010, 2015](#)
- [SDG 2012 school travel and Bikeability administrative data analysis](#)
- [TABS 2014 school travel survey](#)
- [SDG 2016 Bikeability Plus pilot report](#)

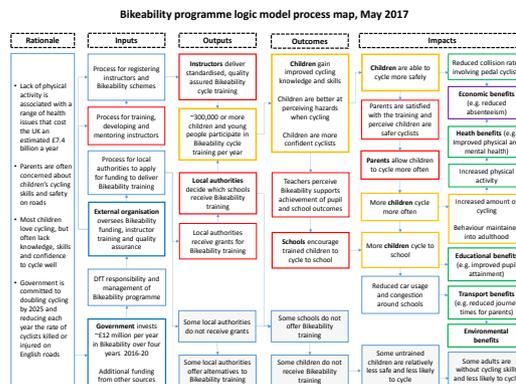


Bikeability Plus

Amplifying the benefits of Core Bikeability



Logic model underlying Bikeability



Monitoring and evaluation

Needs to be a combination of:

- 'Output monitoring' – children trained, schools participating etc.
- 'Outcome monitoring' of the effects of Bikeability and Bikeability Plus
 - More children cycling
 - More safely
 - More often



Lessons from England

- Define clearly what your cycling education programme is, right from the start (safety – cycling spectrum)
- Make sure your cycling education programme is integrated into a wider programme of cycling investment
- Create (or plan for) a custodian for the programme from the start
- Monitor outcomes, not outputs; and start on day 1
- Set a government funding contribution level that encourages local contributions (rather than sets a price)
- Design competition in from the start (market-based approach)
- Design an instructor training regime that ensures quality and consistency; and QA this as well
- Provide continuing development for instructors (and a career path)
- Collect a (modest) fee from instructors and registered providers from day 1
- Integrate Quality Assurance from the beginning





7. BRANDING GUIDANCE

Strong branding can ensure that students, parents, stakeholders and other collaborators easily identify the child cycle training programme.

Attached are branding guidelines developed by The Bikeability Trust. These materials and guidance on the use of the brand may prove

insightful when it comes to development of any branding materials for a child cycle training programme.

Included are: an information sheet, guidelines on the use of the brand and awards materials, and technical guidelines.

Clear logos ensure brand recognition. The Bikeability samples are displayed below:

Logo

Master logo

This is our master logo. Its primary use is print applications where it is important to display the core colours of the master brand.



Level specific logos

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget lacinia magna, eu imperdiet augue. In mattis ut nunc et posuere. Mauris varius nibh ac.

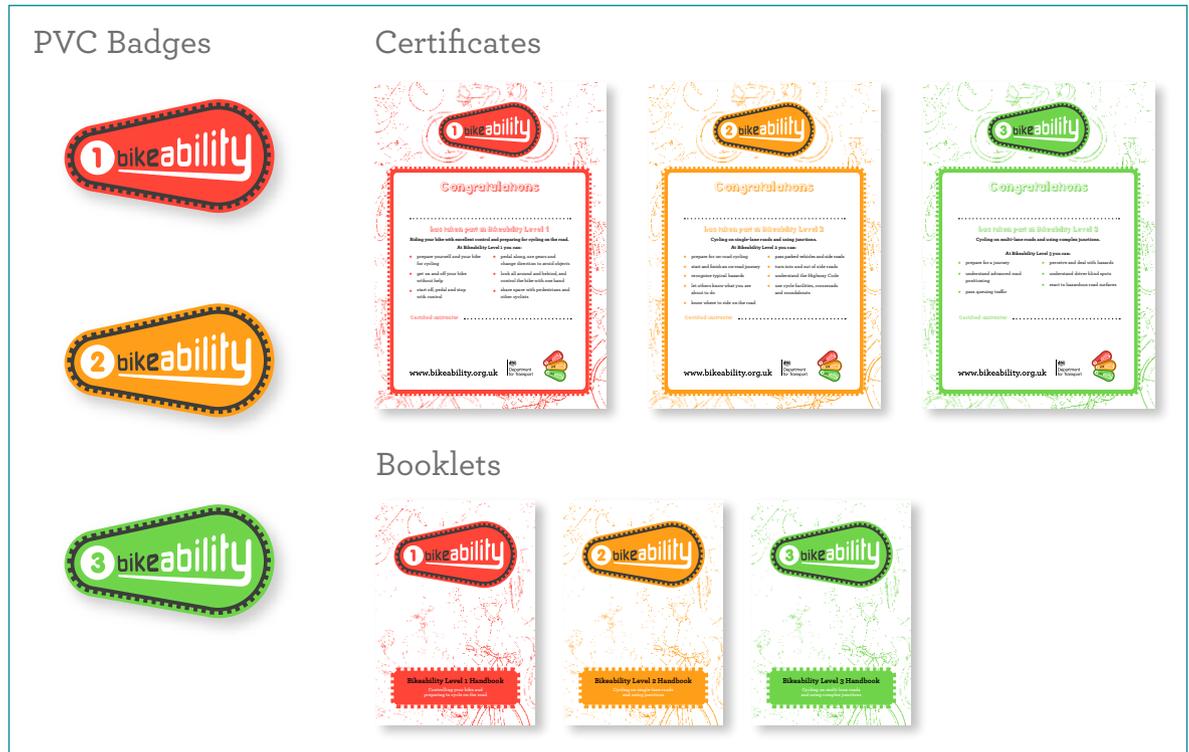


Usage on colour backgrounds

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam eget lacinia magna, eu imperdiet augue. In mattis ut nunc et posuere. Mauris varius nibh ac.



Upon completion of Bikeability training, children are awarded certificates, PVC badges and booklets recognising their accomplishment. Samples of which are displayed below:





8. CREATING A NATIONAL STANDARD

A national standard for cycle education should provide a strong underpinning of a wider educational programme; helping ensure quality and the easy replication of the programme across the country.

Information on the UK National Standard is contained in the toolkit, and is summarised below.

THE NATIONAL STANDARD - AN INTRODUCTION

The National Standard for Cycle Training (the 'National Standard') is a statement of competent cycling and cycling instruction. It describes the skills and understanding needed to cycle safely and responsibly, and to enable others to cycle.

The National Standard describes the different 'roles' involved in cycling and cycling instruction. Each role is made up of 'units', and each unit has one or more 'elements'. These elements describe competent cycling and cycling instruction in detail.

The National Standard aligns with established national standards, including the national standards for driving and riding mopeds and motorcycles that underpin driver and rider training. Alignment with these standards provides a platform for communicating the National Standard to other road users, and encouraging better shared road use.

The National Standard can be used by anyone, but is intended particularly for cycle riders, other road users, cycling instructors, driving instructors, cycle training providers, standard setting bodies, awarding organisations, education and training providers, and producers of learning resources.

The National Standard is a holistic statement of cycling competence for all people:

- embracing all abilities
- who ride any type of cycle
- everywhere cycling is permitted
- in all weather and traffic conditions
- at any time of the day or night.

The National Standard promotes the use of systematic routines. In all cases this involves independent decision making when performing the core functions that underpin safe and responsible cycling:

- making good and frequent observations
- communicating intentions clearly to other road users
- choosing and maintaining the most suitable riding positions
- prioritising road use particularly at junctions.

The National Standard promotes use of the primary and secondary riding positions. These are defined as follows:

The primary position is in the centre of the [left]most moving traffic lane for the direction in which you wish to travel.... The secondary position ... is about 1 metre (3 feet) to the [left] of the moving traffic lane if the road is wide, but not closer than 0.5 metre (1.5 feet) to the edge of any road.... The secondary riding position is always relative to the line of moving traffic, not the road edge.

Sample Unit from the UK National Standard

Below is a unit taken from the UK's National Standard. It is included as a practical example to illustrate how an element of the National Standard would look like in practice.

UNIT 3.1: NEGOTIATE ROADS SAFELY AND RESPONSIBLY

ELEMENT 3.1.1: MAINTAIN A SUITABLE RIDING POSITION

I CAN

- choose and maintain suitable riding positions
- apply a systematic routine when changing riding position
- pass stationary or slower moving vehicles
- make flowing and stopping U-turns
- decide whether or not cycling infrastructure can help a journey (if present).

I UNDERSTAND

- how riding position can improve visibility
- why primary position (centre of the lane) is suitable for negotiating junctions, where roads narrow, on bends, where there is not enough room for to be overtaken, and when I am riding at the speed of other traffic
- why secondary position (to the [left] of the stream of traffic) is suitable where there is time and space to be overtaken
- how to change position using a systematic routine
 - look behind for following vehicles
 - communicate intentions to other road users ahead or behind if necessary
 - change position when there is time and space to do so
- why I should cover my brakes
- the importance of riding at least a door's length away from stationary vehicles
- where and when flowing and stopping U-turns are suitable
- the strengths and weaknesses of cycling infrastructure (if present).



9. CASE STUDIES

In New Zealand, the National Cycling Education System has been designed to strengthen child cycle skills and promote riding to school, as part of a wider commitment to promoting cycling in all forms. The Bikeability Trust provided expert advice and support in the development of the New Zealand model, and is highlighted in this toolkit as an example of best practice.

Included is a leaflet on the Cycling Education System, a 'Detailed Business Case' and briefing paper.

The vision of the National Cycling Education System, as set out in the briefing paper document, is as on next pages.

VISION

A New Zealand where everyone can learn to ride a bike from a young age, meaning that learning to ride on the road, and getting around by bike is an option when they grow-up, and we have a generation of drivers who understand the needs of bike riders.

The National Cycling Education System aims to build on and strengthen current cycle skills training delivery.

- The Transport Agency will provide national oversight, administration, and guidance.
- A national brand, quality assurance mechanisms, and monitoring and evaluation systems will be developed.
- A suite of cycling education modules and tools will be developed, which can be shaped by regional partners for individuals and groups in their communities.

New Zealand Cycling Education System Leaflet:

Cycling Education System

A case to upskill for life

Our vision is for a New Zealand where everyone has the opportunity to learn to ride a bike starting from an early age. We want to help more kids experience the joy of exploring by bike and incorporate it into their everyday life. It's an important life skill, just like swimming, and often a child's first taste of real independence. It's also where they are likely to first become a road user. Learning to ride safely on-road as a child makes getting around by bike an option later in life. This means we'll have more diverse out there who can understand different perspectives on our roads.

Cycling supports a range of shared outcomes including transport, injury prevention, health, education and sport. We see on a ten-year journey to build a connected network for cycling, engage with our communities, promote cycling and encourage people to safely share the road and pathways.

As we improve our cycling environment, and as more people start to cycle, we also want to make sure they have the skills and experience needed to cycle safely.

The NZ Transport Agency and ACC have partnered in the development of a national cycling education system.

In collaboration with a range of cross-government stakeholders, to maximize impact and deliver multiple benefits, an initial \$2.7 million of funding has been approved to establish the system by June 2018. The total investment including delivery of cycling education is expected to be around \$24 million by June 2021.

Focusing on children and their families, this system will help build their confidence and knowledge - from learning to ride a bike through to transitioning to on-road riding when they are ready. It will also benefit adults who haven't ridden a bike for a while, with programmes designed to help them improve their skills on both standard and e-bikes.

We are building on the positive enthusiasm around the country for the Bikes in Schools programme. We are developing an agile, national programme using the very best practice, some of it some green right here in New Zealand, to develop a strong model from the start.

New Zealand currently has some great cycle skills training being delivered in pockets around the country. This is all about making it more effective and reaching more people.



The facts

- Kids love to ride bikes. 67% of kids want to cycle.
- Currently only 2% of children cycle to school down from 2% in 1996.
- Between 2012 and 2016 there has been a 24% increase in NCCV cycling injury claims.
- Between 1990 and 2014 the average time taken to get to school was 28 minutes (or less) to just be a student.
- Child obesity rate has increased from 8% in 2006/07 to 11% in 2014/15.
- Currently only about 10% of New Zealanders have ever ridden a bike to school. Only about 10% of adults have ever ridden a bike to work.
- 20% of urban New Zealanders, 18 years of age or more have ridden a bicycle to work or school in the last 12 months.
- Only around 1000 adults each year receive cycle skills training.

The benefits

- More New Zealanders develop safe road skills early in life.
- More New Zealanders cycling.
- More safety on our roads.
- Help our kids get more active and kickstart healthier lifestyles.
- One component in increasing active transport to school, reducing school gate congestion.

What we're doing

- A best practice, safe cycling system approach to education.
- An agile model aligned with the school curriculum.
- An approach that promotes cycling safety skills for all ages and abilities.
- A system focusing on all road users.
- A comprehensive monitoring and evaluation system.

The timeline

PHASE 1 - 2016-17		PHASE 2 - 2017-18 TRANSITION				PHASE 3 - 2018
November	June	July	September	October	December	June
Initial business review	Agreement in place	System implementation	System implementation	System implementation	System implementation	System implementation
		System implementation	System implementation	System implementation	System implementation	System implementation
		System implementation	System implementation	System implementation	System implementation	System implementation
		System implementation	System implementation	System implementation	System implementation	System implementation
		System implementation	System implementation	System implementation	System implementation	System implementation
		System implementation	System implementation	System implementation	System implementation	System implementation
		System implementation	System implementation	System implementation	System implementation	System implementation
		System implementation	System implementation	System implementation	System implementation	System implementation
		System implementation	System implementation	System implementation	System implementation	System implementation

National Land Transport Programme planning

The winning formula



Fun places for kids to learn to ride a bike with their families.



Flexible opportunities to develop new cycling skills and gain experience in safe road environments.



Aligning with the school curriculum to deliver the core skills of cycling as part of citizenship and healthy, responsible road users.



Learning road rules and how to respond to hazards through on-road training to real life environments, with assistance from external providers.



Opportunities for adults to build confidence getting around by bike for a better in our towns and cities.



Learning how to be safe on the road with a gear on a bike.



Ongoing improvements to our transport systems to the point where comfortable connected networks for cycling.





For further information please contact: kirsten.melrose@ta.govt.nz or whitney.sakemans@ta.govt.nz or visit www.nzta.govt.nz/national-cycling-education-system

ABOUT THE UCI

The Union Cycliste Internationale (UCI) is the worldwide governing body for cycling. It develops and oversees cycling in all its forms, for all people as a competitive sport, as a healthy recreational activity, as a means of transport, and also just for fun. It represents, for sporting and public institutions alike, the interests of 194 National Federations, five Continental Confederations, more than 1,500 professional riders, more than half a million licensed competitors, several million cycling enthusiasts and two billion bicycle users all over the world.

The UCI manages and promotes the nine cycling disciplines: road, track, mountain bike, BMX – Racing and Freestyle –, paracycling, cyclo-cross, trials and indoor cycling. Five of these are featured on the Olympic Games programme (road, track, mountain bike and

BMX – Supercross and Freestyle Park), two in the Paralympic Games (road and track) and four in the Youth Olympic Games (road, mountain bike and BMX – Supercross and Freestyle Park). The UCI manages the promotion of its own events, including UCI World Championships and UCI World Cups in the different disciplines.

To encourage the global and equitable development of cycling, the UCI built the UCI World Cycling Centre (WCC) which, as well as serving as the UCI headquarters, is a high-level training and education centre. Cycling is also more than just a sport – the use of the bicycle fulfils many functions outside the sporting sphere as a means of transport and leisure. This is why the UCI is committed to expanding its Cycling for All programmes, which are designed to improve conditions and accessibility for those practising cycling.

Photo credits

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MORE INFORMATION

www.uci.org/cycling-for-all

CONTACT

cyclingforall@uci.ch

