

Bikes in Schools

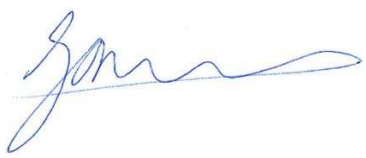


Programme assessment



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1. Introduction

The Palmerston North Bikes in Schools (BiS) programme started in 2015 and has been delivered by Palmerston North City Council (PNCC) to six schools since then. Additional schools have expressed interest in joining the programme. Feedback from the Bike On Charitable Trust, whose core function is to provide and assist BiS programmes, is that PNCC has achieved many positive outcomes in a very short period of time through its BiS programmes. Palmerston North has also been fortunate to have strong political support for the initiative.

However, there is a concern from Council that the NZ Transport Agency will not match PNCC's investment if the programme focusses solely on infrastructure and does not include a strategic approach or educational elements. It is also timely to assess the effectiveness of the existing programme delivered to date.

The PNCC Planning and Strategy Committee therefore requested an independent assessment of the BiS programme, and ViaStrada was commissioned to undertake this assessment. This report documents the key findings of that assessment.

2. Methodology

The following sources of information have been used to undertake the assessment:

- Key documents provided by PNCC were reviewed:
 - Draft Palmerston North Bikes in Schools Programme Assessment (Read, 2015) – 16 September 2015 (undertaken in 2015, when PNCC had committed to implement the programme but prior to its commencement)
 - Active Transport Gap Analysis (Read, 2016) – 2 August 2016
 - Bikes in Schools Progress Report for Planning and Strategy Committee (Lane, 2017b) – 3 April 2017)
 - Bikes in Schools Questionnaire to school principals and corresponding Bikes in Schools database
 - Financial tracking spreadsheets
 - Cost estimates and contract documents
 - Some project emails from Sandi Morris (former BiS coordinator while employed at PNCC)
 - Other material contained within physical project folder at PNCC (4505-05-20)
- Key stakeholders were interviewed, either face to face, by phone, or email using a series of questions prepared earlier (based on the original project proposal for PNCC) to structure the sessions. Stakeholders included (see Appendix A for a full list):
 - Palmerston North City Council staff
 - BiS programme leaders from other parts of the country
 - NZ Transport Agency cycling team staff
 - Representatives from local schools who have taken part in the BiS programme

- Other contacts involved in health promotion, cycle skills training, etc
- ViaStrada staff have also previously visited other Bikes in Schools programmes around New Zealand (e.g. Wellington, Christchurch) and talked to the staff there.

3. Strategic planning

3.1. Strategic vision and objectives

We began the review by assessing the documented vision and objectives of the BiS programme in Palmerston North, as these are critical planning aspects that should be the foundation for any programme.

NZTA Research Report 271 (Macbeth, et al., 2005) outlines best practice for walking and cycling strategies. While such strategies are broader than the development of a specific programme (e.g. BiS), we considered that the principles (including the importance of having a vision statement and outlining objectives or goals) presented by Macbeth, et al. (2005) are appropriate to the latter.

We have not identified, from the documents reviewed, any document that specifically identifies and defines the vision and objectives of the PNCC BiS programme. While the parties involved may have (had) a clear understanding of the intentions and expectations of the programme, we consider that having a written record of this information is a fundamental cornerstone to strategic planning; it helps to consolidate the parties involved and inform outside parties (including potential funding sources) about the programme. Failure to document such information is likely to result in development of conflicting visions, scope creep, and loss of momentum when there are changes in the people involved in the programme.

The material in the Draft¹ Palmerston North Bikes in Schools Programme Assessment (“Draft Programme Assessment”, Read, 2015), especially the section on programme focus, lends itself to establishing a vision and objectives. Communication with key staff who are / were involved in the programme confirmed that this document has effectively been used as a strategy, in lieu of anything formally adopted.

Recommendation:

- Develop the Draft Programme Assessment document into a formally adopted strategy document with an implementation guide.
 - This should include a specific vision statement and defined objectives, and progress to final status. It is likely that doing so would also go towards improving the programme’s eligibility for NZ Transport Agency funding.
 - The implementation guide should include guidance to schools about how to achieve the strategic vision and objectives (see also section 3.2).

3.2. Process development and documentation

We looked for documentation on the process to be followed, any identified guidelines, and how any such documentation has been adapted based on lessons learnt from the first schools to participate in the BiS programme. We did not, however, find much

¹ note that ViaStrada has not been provided with a final version of this report, and assumes that none exists

documentation regarding these aspects. As is often the case, it appears that personal knowledge has been relied on to improve past practices. While the implementation to date has been successful in many ways (over 1,600 students at six schools now riding more often, with increased skills training and the associated health benefits), with the main PNCC staff member responsible for BiS now no longer employed there, the challenge is how to record and/or transfer that knowledge.

The Draft Palmerston North Bikes in Schools Programme Assessment (“Draft Programme Assessment”, Read, 2015) documents the options for the four key aspects of the BiS implementation package – bikes and helmets, track construction, bike storage, and skills training. This information draws largely on that provided by Bike On (c2010-2017), while adding details specific to Palmerston North.

We consider that basing PNCC’s guidance on the Bike On material is a sound approach, as this is the most comprehensive source of experience with BiS programmes in New Zealand. However, it is necessary to be more specific in defining and adopting this guidance, so that Council has a solid point of reference for internal decisions and the basis of any memorandums of understanding made with schools and funding agents.

Recommendation:

- As recommended above, the Draft Programme Assessment should be updated and used as a guide for implementing BiS in Palmerston North. The updates should include feedback from Palmerston North Schools that have since participated in the programme (see also section 4.4).

The following sub-sections outline specific considerations with respect to the key aspects of the implementation package:

3.2.1. Bikes and helmets

Fifty bikes of varying sizes were typically provided for each BiS programme (Ross Intermediate had only 30). Most schools interviewed were pleased with the bikes provided through Avanti Palmerston North.

Ross Intermediate School is the first intermediate-only school in the country to have a BiS programme, and found that their pupils were causing more stress to their bikes (e.g. jumps); it stands to reason that the system used for younger children may not be appropriate for those approaching their teenage years. They suggested that it would be better to have different bikes that are more suited to this type of use (e.g. bikes with suspension and sturdier frames).

Typically, most schools provide a bike helmet to each individual child for them to use throughout their time at school (Ross Intermediate had a single set used for all classes). Helmets of leaving pupils were used to replenish the supply for new pupils where possible, or new ones were bought (one school noted the unexpected problem of an increasing roll, requiring additional helmets to be purchased).

The arrangement with Avanti provides economy of scale benefits to PNCC and participating schools, in terms of initial setup costs. However, it should be considered whether it would be advantageous to share the BiS business around multiple agents in the city. Including multiple parties in a tendering process would ensure the most competitive rates for schools and help support a wider range of local businesses.



Figure 3.1: Different size bikes available, Holy Cross School, Wellington

The two-year contract of supplying and maintaining bikes seems to be working well to date for the participating schools, but, as discussed further in section 6.2, it will be necessary for schools to consider on-going maintenance after this period.

Recommendation:

- Consider the demands of older children when purchasing bikes for intermediate school (Year 7-8) pupils.
- Give other businesses the opportunity to tender for subsequent schools, according to the current model of providing bikes, helmets, and servicing them for two years.

3.2.2. Track construction

The Bike On Trust provides guidance on limestone sand (“lime-sand”) riding track construction (Bike On, 2016). We have reviewed these guidelines with a specialist civil engineer, and suggest that the following additional information would be useful to ensure contractors deliver a suitable product:

- The guide should specify that the topsoil should be removed in the excavation process before laying the track.
- The ground condition should be assessed. Ground that is / gets too wet will become boggy and unable to support the track. In such cases, it may be necessary to consider drainage options, which increase the complication and expense.
- It would be preferable to use some form of barrier between the path and the adjacent ground, to prevent the path surface from spreading into the soil, and weeds from infiltrating the path surface. Timber battens would traditionally be used for this, but there are some engineered soil and mesh products available now.
- Where the path is not on level ground (i.e. the ground slopes across the path’s width, or longitudinally) the lime-sand will migrate down the slope over time, resulting in surface thinning at the higher part and thickening at the lower part.

While Bike On suggests a lime-sand surface for all three track types, some schools opted to have an asphalt surface for the perimeter track, so that it could also be used by other devices (e.g. scooters) and in a wider range of weather conditions. In the case of Palmerston North, all perimeter tracks have been constructed in asphalt, which cost schools roughly an extra \$30k up-front but should lead to lower maintenance costs (see section 6.2). The Bike On guidance also recommends that pump tracks be constructed by contractors who have experience in such tracks.



Figure 3.2: Pump track, Terrace End School, Palmerston North

The process of finding reliable contractors to construct the tracks was not straightforward; different contractors were often employed to construct different tracks within the same school, and one contractor was decommissioned after their work proved inadequate and untimely.

Recommendations:

- Schools should have the flexibility of deciding between an asphalt surface and a lime-sand surface for the perimeter track, with the merits of each option explained to the schools.
- The guidance for lime-sand construction should be expanded to include the points identified above.
- Guidance for asphalt track construction should be developed. This could be drawn from the *New Zealand Cycle Trail Design Guide* (ViaStrada, 2015).

3.2.3. Bike storage

Schools were provided with a secure storage container by SpaceWise, customised for the purpose of storing bikes, as per guidance from Bike On. None of the school representatives interviewed mentioned any notable concerns with this arrangement. Some schools installed bike racks within the container to better organise the bikes, while others simply relied on good placement when returning the bikes. All sites also had an

asphalt surface next to the container on which to set out the bikes at the start of a day or between cycling sessions.



Figure 3.3: Bike storage container, St Mary's School, Palmerston North

Recommendation:

- Continue supporting the supply of customised storage containers to schools (unless they have other means of storing bikes, e.g. a spare shed).

3.2.4. Skills Training

Further effort is required to establish a consistent school cycle skills training programme in Palmerston North, both for the pupils and supporting teachers. The Draft Programme Assessment discusses whether training (one of the four key implementation aspects) can be provided by Bike On, Massey University, Sport Manawatu, NZ Police or another provider. Sport Manawatu was recommended as the most feasible option and currently they (with some assistance from the Police) have been undertaking cycle skills training at the BiS schools.

This investigation, however, has revealed that Sport Manawatu does not have the capacity to provide cycle training as one of their core services, and would therefore be unable to provide the level of training required to service an increasing number of schools. At present, Sport Manawatu receive funding for cycle training from a number of sources, including we believe some PNCC sport and recreation funding, but no current land transport funding.

Cloverlea Primary School intends to have two staff members trained by Sport Manawatu, so they can then provide suitable skills training to their students 'in-house'. They suggest this would be a useful model for PNCC to consider; it would be easier to provide key training modules for selected school personnel than to all students on an on-going basis.

To provide an effective BiS programme, PNCC must shift its corporate mindset from being a "roading infrastructure provider" to being a "transport provider". This encompasses

not only providing the required facilities and equipment, but also educating key programme deliverers (e.g. teachers, trainers) and recipients (e.g. pupils, road users) in how best to use the opportunity entrusted to them. Cycle skills training and travel behaviour change are two key components of this.

To ensure that cycle skills training is delivered to Palmerston North schools in a coordinated manner, it is in PNCC's best interests to oversee cycle skills training directly, even if the actual training is outsourced to other parties like Sport Manawatu. Recent developments between NZ Transport Agency and ACC to develop a consistent nationwide cycle skills training programme with greater funding are likely to provide opportunities for PNCC to pursue this. This could be incorporated into the role of a BiS Coordinator position that oversees all activities related to cycling promotion and education.

Recommendation:

- PNCC to resource a role that coordinates cycle skills training within the city, in conjunction with other activities associated with BiS programmes and travel behaviour change.

3.3. Strategic alignment

We considered how well the BiS programme is aligned with PNCC's other related activities, especially in terms of cycling network provision and travel behaviour change.

Within Palmerston North City

The Active Transport Gap Analysis (Read, 2016) identified two significant gaps in the BiS programme; the first being that, while the programme provides tracks, bikes and helmets etc, it doesn't include associated activities to encourage and promote cycling as a travel alternative to schools.

Secondly, the Transport Agency has also indicated dissatisfaction with the degree of alignment between PNCC's BiS programme and cycle network planning². As detailed in the section on funding (5.2), the synergy between the two components will need to increase before schools can expect to benefit from Transport Agency funding. This includes creating a local cycle network suitable for school children and also ensuring that BiS encompasses skills training as well as infrastructure.

As an institution, PNCC has traditionally viewed itself as a provider of roading and parking. To illustrate this: 2009 was the first year when the LTCCP (the predecessor to the 10-Year Plan) included items aimed at encouraging more travel using active transport modes, but these measures focussed on providing infrastructure (notably shared pathways and bridge improvements for cyclists) and did not touch on any behavioural change programmes. The 2015-25 10-Year Plan, while diversifying in the types of provisions for cycling, still focuses on infrastructure rather than education and promotion. It is clear that a full BiS programme, which, according to the NZ Transport

² However, the Bike On Charitable Trust's strategic vision for Bikes in Schools is simply: *"to enable as many New Zealand children as possible to ride a bike on a regular and equal basis within school"* i.e. Bike On focuses on biking *within* school, and not in the surrounding cycle network.

Agency's objectives, should include skills training and be linked to behavioural change initiatives, does not lie within Council's current core services.

Recommendation:

- Council should include in relevant strategies some objectives and actions targeted at enhancing PNCC's BiS programme, the cycle network planning approach, and the links between the two. These strategies should include:
 - *Integrated Transport Strategy*
 - ViaStrada has sighted the existing version, but understand that this is about to be replaced.
 - *Sustainable City Strategy*
 - *Sustainable Practices Strategy*
 - *Active Recreation Strategy*
 - While this focusses on recreation, not transport, there should be synergy between the two trip purposes, especially in terms of target audience, and using active recreation as springboard to motivate people to make active transport choices.

Within the Manawatu Region

The interviews show that there has been some difficulty in 'finding a home' for the BiS programme between PNCC, Sport Manawatu and Horizons Regional Council, as it is not within the current core services of any of the three organisations. To this effect, the work already done within PNCC towards BiS should be commended. It is also acknowledged that this would not have been possible without the significant level of political support present in Palmerston North.

Recommendation:

- Palmerston North City should continue to be a leader within the Manawatu-Wanganui Region. While it would be preferable that some components of the BiS programme are eventually led at a regional level, it may be necessary for PNCC to develop a model that works at a city level and can be expanded later to a regional level.

4. Programming and implementation

4.1. School selection and prioritisation

We investigated the method used to select the schools to participate in the BiS programme. We wanted to know whether the process was clearly defined, repeatable, appropriate and effective.

We have reviewed the spreadsheet used in the prioritisation process. We are not aware of any supporting documentation that describes the underlying principles of the prioritisation spreadsheet, how it was used, or should be used in the future; however, there are some annotations within the spreadsheet itself:

- A description of four priorities (summarised below in order of stated highest importance first):

- Having a training / education programme that is sustainable long-term
- Support from school to obtain and maintain bikes, helmets, and storage facility
- Support from school for fund raising (to meet capital and operational expenses)
- Support from school for construction of tracks (pump, skills and circuit)
- A note saying *“The full detailed procedure is based on details in the NZTA Procurement Manual Appendix C Supplier Selection Methods (page C-4)”*

Based on the spreadsheet, we understand that the prioritisation method involves:

- A measure of each school’s motivation to participate in and potential to benefit from the programme, based on their responses to 11 questions from PNCC (see original questionnaire in Appendix B, distributed to all schools in the district).
 - Intended to represent 30% of the final score.
 - Base scores to each question range from 4 (“strongly support”) to 0 (“strongly against”) where each question is worded in a way that “strongly support” is seen as the response most aligned with the programme priorities.
 - It appears that each question relates to one of the four priorities and that it was intended that the response to each question would be weighted according to the importance of its corresponding priority.
- A score from a panel of five evaluators who each rated each school according to the four priorities, using the questionnaire responses for guidance.
 - Intended to represent 70% of the final score.
 - The evaluators were:
 - Aleisha Rutherford, Palmerston North City elected Councillor
 - Paul McArdle, Bike On Trust founder
 - Phil Stevens, active transport advisor, Sport Manawatu
 - Adrian Cornwall, NZ Police
 - Sandi Morris, PNCC transportation planner (at the time responsible for BiS)

We determined that there were some flaws in applying the prioritisation method:

- The “technical summary” tab, which summarises the school responses to the questionnaire, includes a score and a weighting factor for each question. It would be expected that each school’s total score is calculated from a sum-product of scores and weighting factors. However, the total score was calculated by summing the scores and weighting factors for all questions, thus making the weighting factors meaningless, and all questions assessed as equally important.
- It was intended that the same priorities were used to weight the school responses and evaluator responses, but the weighting factors used were slightly different in each case. This is arguably irrelevant, since the school responses are based on 11 questions which are not equally distributed among the four priorities, whereas the evaluators simply gave a score for each priority.
- The *intended* weightings of 30% and 70% for the school responses and evaluators’ scores respectively have not been correctly applied. Therefore, the final scores are not percentages (it was not possible to achieve a total score of 100), which is misleading as many other values are implied to be percentages.

We should note that, despite these calculation issues, we could not find any evidence that any schools had been unfairly advantaged or disadvantaged in the conversion of their raw marks to the final score.

However, we consider that there are some underlying issues with the establishment of the priorities and how they have been applied:

- The four priorities are described in a way that gives useful strategic direction for the programme as a whole, but it is not clear how evaluators were expected to translate these descriptions into scores for individual schools. In the absence of a detailed scoring rubric, we assume that there will have been a lack of consistency between individual evaluators as to how they interpreted these descriptions and applied them in the scoring process.
- The school response component would be biased towards certain schools who might give a seemingly enthusiastic response without it necessarily being grounded in reality (e.g. the difference between good intentions and what is actually undertaken later on).
- The school response component arguably unfairly penalised schools that already had some elements in place (e.g. those that already had a bike track could not say that they “strongly support” the statement “*we would like to build a cycle track as part of a programme at our school*” and would therefore miss out on the potential points from that question).
- The selection process seems to be based primarily on the responses from the initial questionnaire, rather than using this as a filter for subsequent follow-up interviews with the Principal and Board of Trustees to confirm interest and expectations.
- The priorities omit some key aspects such as:
 - Whether a school has enough physical space to accommodate the facilities
 - Whether a school has staff or parent volunteers able to assist with ongoing running of a BiS programme

As well as updating the priorities to best reflect the intended result within a school, it could also be considered whether the focus of future funding should be shifted to better maximise returns across the city; some possible strategies are outlined in Table 4.1:

Table 4.1: Possible strategies for prioritising funding

School prioritisation method description	Advantages	Disadvantages
Status quo: prioritise schools that have no existing infrastructure or programme, but lots of enthusiasm	Simplifies the evaluation process; allows a similar process to last time to be used again. Focuses on “working with the willing”.	Fails to take into account other factors that should be considered (see below).

School prioritisation method description	Advantages	Disadvantages
Shift focus to schools that already have a bike track and provide them with any additional tracks, bikes, helmets, storage facilities and training.	<p>The cost of constructing tracks comprises about 50% of the programme cost, according to the Bike On approximate costs.</p> <p>Could result in more schools having a full programme for the same level of investment from PNCC.</p> <p>Maximises benefits of tracks already installed by ensuring all students (not just those who have bikes and can bring them to school) have the opportunity to ride, and the skills to do so safely and confidently.</p>	Not the most equitable solution – some schools who already have some provision will end up with a full programme whereas other schools will have nothing.
Shift focus to schools that are close to existing or planned cycleways.	<p>Would align better with NZTA goals (and associated funding).</p> <p>May encourage greater take-up of biking to schools.</p>	May be less relevant at primary schools given the low rate of cycling by under-10s, unless facilities with high cycling levels of service are available.
Shift focus to schools where potential cycle commuting use is higher (i.e. high schools, intermediate schools)	May result in greater take-up of biking to schools.	<p>Greater difficulty getting older students (esp. high school) to engage in cycling.</p> <p>Advantages of getting young children biking more regularly are lost (e.g. health/fitness, development of motor skills, readiness for on-road cycle skills training).</p>
Shift focus to schools that are already enthusiastic in undertaking cycle skills training programmes.	Actual activity is a better gauge of enthusiasm than stated intent – it can be assumed that schools that are already actively pursuing some form of cycling activity will make the most of additional programme elements.	This alone would not be a suitable measure to distinguish between various schools, as their level of participation in cycling skills training is most influenced by national curriculum requirements and availability of skills trainers.

School prioritisation method description	Advantages	Disadvantages
Shift focus to largest schools first	Provides a greater number of children affected by the programme for a very similar investment (extra helmets may be the only additional cost)	Disadvantages smaller schools simply due to their size.

In practice, it is probably important that **all** of the above factors are given some consideration in any future evaluation process, but certainly none of them should be a key criterion on their own for acceptance or rejection of a school.

Recommendations:

- Develop more detailed documentation outlining the evaluation and prioritisation criteria used and the process to be followed for school selection.
 - This is important for transparency (e.g. to allow prospective schools to tailor their applications appropriately, and should the decisions ever be questioned by an external party or unsuccessful school)
 - It is also important for future-proofing of the programme (e.g. to minimise the disturbances created should a new staff member be required to run the programme).
- Ensure the list of evaluation priorities more accurately reflects the true key criteria to a successful BiS programme, incorporating the additional criteria listed above.
- Fix the calculations in the prioritisation spreadsheet so that it accurately performs its intended function and can be used to more accurately inform the decision-making process.

4.2. School engagement

We investigated the extent to which schools were successfully engaged in the process of implementing BiS, and whether they appreciated their responsibilities in receiving the PNCC funding support.

The schools (generally via the Board of Trustees) provided PNCC with either a letter or a signed Memorandum of Understanding (MOU) outlining their commitment to participating in the programme in terms of ongoing maintenance of track and resources (not all documents could be found though). However, the letters lacked any detail on the level of commitment anticipated and how this would be achieved, and the majority of principals interviewed indicated that they weren't aware of having made any formal arrangement with Council regarding the use of funding and continuing support of the programme.

Cloverlea School was a particular case as the cycle track is partially on the adjacent Cloverlea Park and hence a special MoU was created to record issues relating to ownership, access, maintenance, etc.

The only other MoUs found were between the Bike On Trust and PNCC for the three schools that received additional Trust funding for their BiS programmes (\$10-12.5k each)

due to their proximity to Government Urban Cycleway Programme projects. These MoUs recorded the expectations that PNCC would use the funding towards the BiS projects, and work with the schools to ensure that bikes and tracks were maintained in safe working conditions, and that all pupils received introductory cycle skills training.

It would seem prudent as a **minimum** that PNCC should expect some formally recorded agreement with each school (ideally with their Board of Trustees) as to their ongoing intentions with the BiS facilities provided at their sites. Ideally this should include:

- Agreement of the school to provide the proposed BiS facilities and to raise or underwrite the necessary funds to cover the balance of the costs
- Agreement to provide cycle skills training for all students (and ideally teachers)
- Commitment to provide regular opportunities for pupils to use the BiS facilities, either through regular classes or during school breaks
- Commitment to allocate sufficient annual funds and other resources for ongoing maintenance of the bike tracks, bikes and helmets
- Agreement to allow community use of the BiS tracks out of school hours

The fact that both PNCC and schools are having difficulty finding any record of such an agreement is concerning, and should be rectified as soon as possible.

It is notable that there doesn't appear to be a consistent approach to meeting with the principal (and ideally Board of Trustee members) during the school selection process (see section 4.1). Wellington City noted that this was an important part of their engagement and selection process, to glean more understanding than could be determined from just the initial Expression of Interest forms and to make clear the expectations for the school.

We also note that it is not clear whether PNCC have adequately continued to provide ongoing liaison and support to the BiS schools since implementation. This has not been helped by the resignation of the previous BiS coordinator at PNCC. But it is clearly a factor in ensuring the ongoing success of these programmes (especially if the initial enthusiasm wanes or some unforeseen problem arises). It also helps ensure that the terms of the agreed MoUs are continuing to be met.

Recommendations:

- Attempt to find all signed letters or MoUs from previously funded schools, or prepare new MoUs for their consideration and agreement.
- Ensure that there is a well-documented process for getting agreement from future BiS-funded schools regarding their expectations and obligations, including selection meetings and formal MoUs signed off by their Boards.
- Ensure that PNCC continues to provide some ongoing liaison and support to existing and new BiS schools to assist them with any issues they encounter and to ensure that aspects such as maintenance and skills training continue.

4.3. Contractor procurement and management

We investigated how the BiS procurement process performed and whether it could be improved. In particular, it is understood that the engagement and management of contractors for this programme has required significant PNCC staff time. Some discussion around the different models for funding and engaging schools is also discussed in section

5.3. Even if the existing process of PNCC project managing the implementation was devolved to the schools or a third party, it would be prudent to pass on to those organisations the lessons learned to date by PNCC.

As more schools have BiS programmes delivered in Palmerston North, council staff involved should get a better understanding of the typical costs involved, the quality of different contractors and suppliers, and the typical problems encountered (this report should also help to inform the programme in the future). There may also be benefits, in regards to consistency and repeatability of facilities delivered and economies of scale, if the same suppliers are used for multiple schools over time and ideally under multi-school contracts. While each school has some differences in the final designs used (e.g. track layouts), there are still a lot of commonalities in their form and construction materials.

The April 2017 progress report to the planning and strategy committee (Lane, 2017b) identified that *“having now delivered six school projects there is a better understanding of what is involved.”* ViaStrada considers this to be a reasonable assessment, given that experience improves efficiency, but cautions that the departure of the key PNCC BiS staff member (in conjunction with the aforementioned lack of documentation of the strategic and process elements of the programme) will likely compromise the efficiency gains. There was also a feeling that, while the contractual and infrastructure related aspects of the BiS programme may become more streamlined with experience, the amount of effort required to oversee ongoing liaison and support of BiS schools post-implementation probably should be greater than what has been provided to date.

Recommendations:

- To achieve savings and economies of scale, encourage the use of the same contractors and suppliers for multiple schools, ideally under multi-site contracts.

4.4. Feedback from schools and lessons learnt

We asked four of the six Palmerston North schools who had received BiS funding³ how they found the BiS process (from application to planning to delivery to on-going use). In general, the experience has been a positive one and they are very pleased with their resulting facilities. In particular, it was noted consistently that the efforts of PNCC’s BiS coordinator to oversee all project management and to be a “one stop shop” for any school enquiries was highly appreciated (although we suspect that effort may have been more than initially expected by PNCC). This highlights the need for an ongoing dedicated resource to coordinate the BiS programme.

Schools noted that pupils are developing good motor skills and fitness from regular exposure to the bikes. These health and fitness outcomes are currently being assessed via a Massey University research project (in conjunction with MidCentral Health) and there is a strong desire by the researchers to expand the programme to evaluate additional BiS schools and “control” schools. Another interesting feature noted by one school was the social aspect of being able to walk/bike/scoot around the perimeter track with friends, instead of sitting down somewhere.

Not every school was using the BiS facilities in the same manner. For example, the amount of regular class time given over to using the bikes and tracks varied in frequency from

³ All six schools were approached, as were others that had been unsuccessful in obtaining funding to-date, however not all schools were available to participate in interviews during the investigation period.

multiple times a week for every class to being at the discretion of the individual teachers. Likewise, while one school was allowing use of the facilities during their (longer) morning break, another allowed use during lunchtime, while another did not allow use outside of prescribed classroom hours (preferring to encourage children to undertake other activities instead at breaks). Some schools offer extra time on the tracks as a positive incentive and reward for good behaviour in classroom activities.

All BiS facilities allow community use after school hours, and the evidence to date is that this is working well. Cloverlea School also allows the adjacent kindergarten to use the facilities, and apparently some smaller bikes were provided to help enable this.

4.4.1. Lessons learned from elsewhere in New Zealand

We also contacted people with experience of BiS programmes elsewhere in the country to see if there were other lessons to be learned.

As alluded to earlier in the report, the chair of the Bike On Charitable Trust, whose core function is to provide and assist BiS programmes, emphasised that PNCC has achieved many positive outcomes in a very short period of time through its BiS programmes, and these should be acknowledged. He considered that having implemented BiS in six schools over a short period of time and with a relatively small amount of transport funding is a significant achievement, that will benefit the personal health of the children at these schools, as well as flow-on benefits for the city's transportation system.

Although the typical components of a BiS programme are very similar from place to place, it is evident that there are quite a wide variety of differences in terms of implementation and operation (e.g. see section 5.3 for the different forms of funding management). The relative independence of each school (in terms of management style and philosophy) is also important to remember, and trying to have all schools fit a single prescribed model of implementation and subsequent operation may result in "pushback" or reluctance to take part by some schools. Ultimately, even with the best intentions of a MoU between school and council (see section 4.2), the BiS facilities will just become additional assets within the school and it then becomes entirely up to them as to how they use and maintain them in the long term.

It is notable that Palmerston North and Wellington are the only BiS programmes currently with regular dedicated Council funding for schools to access; schools in other locations are typically funding BiS programmes in a more *ad hoc* manner, including often some support from their local council.

Wellington's programme started in 2014 (with the first schools completed in 2015) and they have committed \$600k over 3 years to fund approximately nine schools. Although they directly oversaw the first round of schools, they have since contracted out the project management of their programme to the Bike On Trust (their fee comes out of the overall programme funding). Typically, they are funding up to about \$60k per school (allowing some flexibility if a few unexpected costs come up), with the balance of costs sourced by school fundraising (Bike On also arrange a MoU between each school and themselves). Like Palmerston North, Wellington are also preferring to use asphalt perimeter tracks; the only school that created a limestone track had significant problems during construction. All of their BiS schools receive Grade 1 & 2 cycle skills training from local provider Pedal Ready (funded by council).

While the selection of the first schools for Wellington's BiS programme was somewhat *ad hoc*, their general approach now is to "work with the willing", as evidenced by their initial application form and subsequent interview with the principal. Ideally there is a discussion with the Board of Trustees to outline expectations and they encourage a commitment by Boards to underwrite the remaining costs that need to be raised. Interestingly, there is the suggestion that Wellington may soon be running out of potential candidate schools, in terms of who has expressed interest; they may have to consider changing their standard model of delivery to make further inroads (e.g. only partial school facilities, greater use of linking with adjacent council reserves).



Figure 4.1: BiS programme at Holy Cross School, Wellington

It is notable that Wellington have adopted the approach now of "contracting out" the implementation of BiS; their experience from the first few schools where they managed them directly (like Palmerston North) was that schools were rather "needy". Despite this, the presence of a dedicated council staff role for sustainable transport means that the Council is still able to maintain regular liaison and support with schools in the programme. A couple of recent BiS projects involve schools adjacent to parks, so the Council has been more involved in helping to develop joint cycling facilities there.

Recommendations:

- Allow for some flexibility in the requirements and expectations of the BiS programme for each individual school, while still adhering to the broad principles of the BiS philosophy.
- Consider a funding contribution by PNCC towards the Massey University research into health outcomes from BiS programmes (co-funding is generally looked favourably upon when applying for central funding agency research grants).

5. Financial considerations

5.1. Alignment with budget

We investigated whether the project been delivered to budget and, if not, what steps could be taken to improve future estimates and expenditure. Bike On (c2010-2017) states that a BiS programme (including purchase of equipment, and construction of a riding track, a pump track and a skills track), for a school of 300 pupils, will cost approximately \$50,000. However, Bike On note that the costs are “very approximate” and they “vary greatly by region.” This cost also appears to assume that a low-cost perimeter track (i.e. limestone) will be provided as opposed to a sealed track (discussion with BikeOn suggests that about 90% of school tracks from similar initiatives around the country are unsealed).

Regional variations may include factors such as the degree of marketplace competitiveness (this can also vary between different seasons / periods and over time), whether local contractors are experienced in providing such facilities, and whether suppliers are willing to discount the costs of materials, equipment and / or labour for school projects. Therefore, ViaStrada considers it is not surprising that the average cost per school (see Table 5.1) is higher than the \$50,000 per school budgeted by PNCC.

Table 5.1: costs for Bikes in Schools programmes (Lane, 2017b)⁴

School	Gross cost	Nett cost to Council
St Mary’s School	\$85,919	\$54,918
Longburn School	\$66,984	\$51,767
Terrace End School	\$87,461	\$58,461
Takaro School	\$87,225	\$56,725
Cloverlea School	\$89,803	\$58,623
Ross Intermediate	\$97,766	\$57,766
Average	\$85,526	\$56,317

Read (2015) also noted “it is unlikely \$50,000 will be enough to deliver the full programme developed by Bike On.” This shows that Council was made aware of the likely financial aspects before the costs were incurred. For comparison, Wellington City Council has been funding approximately \$60,000 for its recent BiS programmes, with the expectation that the full cost might be closer to \$100,000 per school. However, as discussed in section 5.2.3, it is considered important that schools are making some contribution to the initial programme costs and the previous figure of \$50,000 seems to have been sufficient to incentivise them.

The Bike On chair emphasised that the substantial input made by the PNCC transportation planner previously in charge of implementing BiS has ensured a very good return on investment for PNCC’s monetary investment.

⁴ Staff have indicated that the costs shown above may not be completely final, as some projects were completed recently and there may still be invoices to be processed.

Recommendations:

- Continue to allocate a maximum of \$50,000-\$60,000 of Council money per school.
 - This would be for a full programme (i.e. bikes and helmets, track construction, bike storage and training). Schools that already have one or more of these elements in place (e.g. those that already have a bike track) would receive less funding from Council.
- Consider budgeting a margin above what funding is indicated to schools, to cover unforeseen extra costs that cannot be reasonably passed on to schools. For example, indicating that \$50,000 is available from Council, but budgeting an extra margin of \$5,000-\$10,000 if needed.
- Expect that the additional costs will be organised by the schools themselves, either by NZ Transport Agency / Bike On Trust funding (see sections 5.2.1 and 5.2.2) and / or fundraising (section 5.2.3).

5.2. Additional funding sources

It will typically be necessary to obtain additional funding beyond the amount allocated per school by Council. It may be possible to receive some funding subsidy from the NZ Transport Agency, or via other fundraising sources targeted by schools or Council. The following sections discuss these options, and how the programme might be amended to receive NZ Transport Agency funding.

5.2.1. Transport Agency grant funding from Bike On

The Transport Agency is in the process of adapting a funding mechanism specifically for BiS programmes, in a way that should make funding more accessible. In response to learnings from the previous funding arrangements (see section 5.2.2), and the Detailed Business Case developed for a national cycling education system (Hawley, et al., 2017), the Transport Agency has decided to inject funding into the Bike On Trust, with the stated aim that Bikes in Schools becomes a “pillar” of the education system.

This process will be simpler than that of the current National Land Transport Fund (NLTF), and schools won't need to have a direct connection to an infrastructure project. The Transport Agency have indicated they will want to avoid double-dipping between the two funding sources (NLTF and Bike On), so it would be better for most schools to pursue Bike On Trust funding, unless there is a specific nearby cycling infrastructure project they can join with to obtain NLTF funding (see section 5.2.2).

The Transport Agency will specify several principles that will guide funding prioritisation. Based on discussions with Agency staff, these are likely to be along the lines of:

- Funding is leveraged and local council is planning to contribute financially (i.e. more than just stated political support)
- Demonstrated enthusiasm / motivation of the school, principal and Board trustees – especially in terms of how they will make the most of the provisions and how they plan for on-going maintenance
- On-road cycling education training available:
 - BiS should be a building block towards getting children cycling for transport later on. Ideally children who participate in Bikes in School will receive Grade 2 cycle training either at the end of their primary school time, or when they

move on to intermediate. This requires a Grade 2 training programme to be in place either at the BiS school, or at a higher school where many of the pupils are like to move on to.

- Investment is strategically aligned in conjunction with network planning:
 - For children to be able to cycle to school they need to have appropriate options on the surrounding transport network. Therefore, schools with existing or planned cycle routes that cater for the appropriate target audience are likely to be prioritised.
- Wider community benefit:
 - The school can demonstrate partnerships with other groups – e.g. a local early childhood centre, or a plan for tracks to be used and promoted during the weekend and school holidays.
- Size of school and location:
 - Larger schools have more pupils and therefore likely to warrant a higher level of investment.

Levels of investment will depend on how well each school fits the above prioritisation principles but may range from \$1k - \$25k.

The Agency has indicated BiS should ultimately be coordinated at the level of the Manawatu-Wanganui Region (i.e. the jurisdiction of Horizons Regional Council) not just limited to the boundaries of Palmerston North City. However, ideally PNCC should also have a staff member responsible for delivery of their BiS programme (although that role may also encompass other associated activities as well), and they would preferably work in conjunction with a coordinator at the regional level, whose role would include skills education. The Transport Agency has expressed willingness to support PNCC and HRC in discussing and pursuing such an arrangement.

Recommendations:

- Include indicative grant funding criteria outlined above in the BiS planning and school prioritisation processes.
- Appoint a new PNCC staff member (or re-designate an existing one) whose role would include managing the BiS programme in Palmerston North, and other associated cycling education and travel behaviour activities (and ultimately liaising with a regional coordinator if such a position is established).

5.2.2. Funding subsidy from work category 452

Historically, the only theoretical avenue for NZ Transport Agency subsidy of BiS programmes was via work category 432 (“Promotion, education and advertising”); however evidently no-one had ever tried that approach and it may not have been considered an eligible activity. Since late 2015, the NZ Transport Agency now offers funding subsidy (i.e. “matched” approximately 50:50) from work category 452 (“cycling facilities”) of the National Land Transport Fund (NLTF) to councils for cycling behaviour change programmes, which includes BiS programmes as an “in-scope activity” (presumably this falls under “*project costs... associated with attracting users to the cycling network*”). The Transport Agency have recognised that this can be a limited option for BiS, as it is essentially tied to nearby infrastructure funding.

PNCC were previously unsuccessful in obtaining this funding and, from our stakeholder discussions, there are some lessons to be learnt from this experience that will help improve chances of obtaining funding in the future:

- The Transport Agency considered that PNCC's previous application, contrary to the Agency's criteria, had not focussed BiS investment along urban cycleway plan (UCP) routes. The Agency will be looking to see that investment is still made strategically in conjunction with network planning. This will require PNCC to prove that it is continuing to improve its cycling network in a way that will be suitable for younger, less-experienced cyclists, and that parents will feel comfortable allowing their children to cycle there.
- The Agency also wants to see that Council is supportive of the programme, e.g. in terms of stated support and financial commitment by Council, and allocation of appropriate staff/contractor resources to implement and support the programme at future funded schools. While certain staff members at PNCC may have had a plan regarding what they wanted to achieve with the BiS programme and how they were going to get there, the actual documentation was limited (this is consistent with the appraisal in section 7).
- PNCC staff have indicated that the initial application for funding subsidy took some time in being processed internally within PNCC before being delivered to the Transport Agency. This may have influenced the Transport Agency's impression of PNCC's willingness and ability to approve the application.

In addition, it is acknowledged that there are certain factors that have made it difficult for PNCC to obtain funding for BiS programmes:

- The Horizons Regional Council (HRC) effectively controls access to regional land transport funds, so any new programme item such as BiS would require a change to the RLTP to be approved by HRC. We understand that a variation to include long-term funding of BiS and associated education activities was approved by HRC's Regional Transport Committee in March 2017.
- Funding allocated to work category 432 in the region was fully controlled by HRC, and they prioritise this on road safety, based on crash history, rather than behaviour change. This made it difficult for PNCC to obtain funding for BiS or associated cycling education and behaviour change programmes through the RLTP prior to the change in funding policy for work category 452.

Recommendations:

- Develop a strategic document that outlines why it is important to Palmerston North to have a BiS programme.
- Designate an existing staff resource (or employ or contract a new resource) dedicated to implementing and supporting the BiS programme in the future, together with other associated cycling education and travel behaviour programmes.

5.2.3. Other potential fund raising

All schools to date in Palmerston North have had to raise additional funding themselves to fully pay for their BiS programmes. This is not unusual in terms of other schools around New Zealand; indeed, in most places schools would be raising all of the funds themselves for a similar programme (although that might include an *ad hoc* contribution by the local council).

Requiring schools to have some “skin in the game” helps to demonstrate their commitment to the programme; schools that are willing to find the necessary extra funding are also likely to commit to ongoing support for schoolchild use, cycle skills training, and bike/track maintenance.

Many charitable trusts are available for schools to tap into for fundraising of this nature. For example, we understand that the Eastern & Central Community Trust has consistently funded schools in this region \$8k to go towards BiS programmes where applications have been made to them.

Council could support schools in exploring other avenues of funding; this may help motivate schools who would only be willing to participate in the programme if they’re aren’t required to make a large financial contribution. Council could prioritise those schools who are willing to fundraise, as this is a good indication of their motivation towards acquiring the facilities and making the most of them. However, as the programme is rolled out across more and more schools, it may be necessary to think of incentives to motivate less-enthusiastic schools to fundraise.

An example of novel fundraising is Cloverlea Primary School’s community “adopt a bike” scheme, whereby members of the community donated the cost of an individual bike. Terrace End School also made use of community volunteers to assist with some basic ground preparation and final landscaping work, thus reducing the overall cost of contractors.

Since 2013, schools are also able to use their Ministry of Education property capital funding to fund 50% of a cycle track⁵. However, in practice most school’s property budgets are already allocated for the next five years, so it may be more a long-term or opportunist option. For example, BikeOn cited the example of one school elsewhere in New Zealand that was able to contribute \$30,000 towards a bike track due to cost savings in a major capital project.

Recommendations:

- Council could prepare advice for schools on how to seek additional funding, and encourage that they do so.

5.3. Models of financial management

To date, the chosen schools have worked together with PNCC to determine exactly how the BiS funding is to be spent. This has given PNCC assurance that the money is invested in the manner intended, and given the schools guidance as how to make best use of it. During the interviews to date, three of the four schools interviewed indicated they prefer this model, but the principal of St Mary’s School would have preferred (in hindsight) to receive the allocated \$50,000 from Council and then manage its expenditure directly.

ViaStrada suggests that St Mary’s School is an exception beyond the norm, as they were previously intending on developing tracks and purchasing bikes regardless of financial support from Council. Even then, they were very appreciative of the support provided by the PNCC coordinator to implement the facilities. In most cases, schools will need to be directed through the process, and may need to be held accountable to their commitment

⁵ See: <https://www.beehive.govt.nz/release/government-supports-school-cycle-and-fitness-tracks>

at times when other activities pose a distraction from the process of successfully implementing the BiS programme.

Several alternative financial models can be considered for the funding and management of Bike in Schools; these are summarised in Table 5.2:

Table 5.2: Financial model alternatives

Financial model description	Advantages	Disadvantages
1. Status quo: Council works with chosen schools to determine design details, and arrange contractors and suppliers.	<p>Council has more control over each step of the process, to ensure it aligns with their objectives.</p> <p>Council brings the collective experience of all BiS programmes previously delivered, to ensure new schools not only do not make the same mistakes but can achieve an even more effective solution than previous schools.</p> <p>Engaging contractors and suppliers for multiple schools produces economies of scale.</p>	<p>Requires significant input from Council (in terms of labour time), at a level that is not currently possible in terms of staff resources.</p> <p>May create some difficulties for schools if original project budgets change later and further cost-sharing has to be negotiated.</p> <p>Schools may have access to other local suppliers that they would prefer to engage.</p>
2. Fund chosen school(s) a fixed amount and task them with running the track build and equipment provision directly. (approach currently used by Wellington City Council)	<p>No cost over-runs for PNCC; they only supply a fixed contribution.</p> <p>Schools will have more autonomy and flexibility in choosing their preferred service providers and making the most of opportunities available from school contacts (e.g. parents who work in construction or are happy to participate in working bees).</p> <p>This model is likely to best share the various tasks among a variety of local businesses, rather than simply sticking to a few key suppliers.</p> <p>The workload of the PNCC staff member responsible for BiS would be significantly reduced.</p>	<p>The direction taken by the schools might not achieve Council's aims, and it would be difficult to hold schools accountable to this once the infrastructure has been constructed / procured.</p> <p>Schools may have difficulty getting good contractor & supplier rates without economies of scale.</p> <p>Relies on the motivation and enthusiasm of champions within the school to see the project through (which can be difficult given all the other activities happening within a school at any given time).</p> <p>Most schools prefer a higher level of Council participation than is offered by this model.</p>

Financial model description	Advantages	Disadvantages
3. Council's financial contribution is given to the Bike On Trust and they are tasked with overseeing the track construction and equipment provision directly.	<p>Bike On is already experienced with providing these services, and thus there will be a repetition advantage and economies of scale to be gained by having them work directly with all schools in Palmerston North.</p> <p>The workload of the PNCC staff member responsible for BiS would be significantly reduced.</p>	<p>The direction taken by the schools and Bike On Trust might not achieve Council's aims.</p> <p>Not clear whether Bike On want to take on this role at a larger scale; they tend to just provide advice and contacts.</p> <p>Bike On will also be receiving funding from the NZ Transport Agency, to be distributed to schools; this may be viewed as a conflict of interest if they are also to be responsible for providing / procuring the services.</p>
4. Separate charitable trust is set up to administer BiS programmes in a district, and Council contributes to this (see example of Connex Trust in Gisborne ⁶)	<p>Trust can coordinate fundraising for schools from multiple sources.</p> <p>Advantages of repetition and economies of scale.</p> <p>Trust would be very focused on successful achievement of BiS goals.</p> <p>The workload of the PNCC staff member responsible for BiS would be significantly reduced.</p>	<p>The initial establishment time to create a new trust structure and obtain initial funding may cause considerable delay.</p> <p>The direction taken by the trust might not achieve Council's aims (unless Council are represented on the trust's board).</p>

It is important that Council have a direct influence on the aims and outcomes of the project, therefore Model 2 is not recommended.

Model 3 is a potential option, but Council would need to explore the possibility with Bike On, and develop a method of ensuring Council's objectives for the programme will be achieved in conjunction with the Transport Agency's principles for their funding contribution to Bike On.

Model 4 is a potential option if widespread rollout of BiS around Palmerston North is envisaged, and it would be worth investigating further the operations of the Connex Trust in Gisborne. However, establishing such a set-up in Palmerston North would take time, and so some alternative model would be needed in the interim.

Model 1 is currently used and still viable and should be seriously considered. This option will give Council the most control over the process, but will also necessitate the

⁶ See <https://www.sportgisborne.org.nz/15-gisborne-schools-will-have-cycle-tracks-by-2018/> and <https://www.facebook.com/connextnz/>

development of a new staff position to maintain the previous level of support to date by PNCC.

Recommendations:

- Model 1 (i.e. the current approach) should be continued for now, but it would be worth exploring further the feasibility of the Model 4 approach (setting up a specific local BiS trust).
- Designate an existing staff resource (or employ or contract a new resource) dedicated to implementing and supporting the BiS programme in the future, as was done for the previous six schools.

5.4. Potential funding requirements

The long-term funding goals should be considered. Council will need to know how many schools will want funding to join the BiS programme in the future. This will depend on whether the programme is limited to primary / intermediate schools, or whether it is extended to secondary schools. Table 5.3 shows the number of schools in Palmerston North of various types.

Table 5.3: Palmerston North school types

Type	Years	Number of schools in Palmerston North	Number of BiS programmes to date
Composite	1-13	1	-
Primary	1-6	20	4
Full Primary	1-8	9	1
Intermediate	7-8	3	1
Secondary	9-13	5	-
Full Secondary	7-13	1	-

There are currently 33 schools in Palmerston North (including Longburn School) with primary / intermediate-aged children. Of these, 6 have already have a BiS programme implemented, and a further 5 (Aokautere, Linton Camp, Linton Country, Turitea, and Whakarongo schools) are considered to be too isolated from the current potential cycling network (although they may still be interested in pursuing the BiS programme). Therefore, there remains 22 schools that could potentially participate in the BiS programme (plus a further 6 if secondary schools are included).

However, it remains to be seen whether all of these schools are interested in introducing BiS facilities on their sites in the near future (particularly some smaller specialist schools). Conversely, some schools may elect to fundraise to develop their own BiS programme ahead of being selected by PNCC. Also, some schools (e.g. Roslyn, Winchester, Riverdale, West End) already have a cycle track on their premises, so the necessary contribution for them to achieve a full BiS programme may be less than other schools.

6. Resources

We investigated whether sufficient resources have been allocated to the programme so far, and whether these have been used efficiently.

6.1. Personnel

The Active Transport Gap Analysis (Read, 2016) identified a resource gap for delivery of the BiS programme, as it was too intensive for the staff capacity at PNCC at the time. Staff members have suggested that the key PNCC transportation planner initially responsible for the programme spent more time working on it than was intended for the role, but this was necessary to achieve the programme's objectives. This key staff member has since left PNCC and we understand that this has exacerbated the situation.

Read (2016) recommended appointing a new full-time staff member (note this was prior to the departure of the aforementioned transportation planner) whose role would include the BiS programme.

Recommendation:

- Based on the findings from this review, ViaStrada agrees with Read (2016) that a new staff member should be appointed, and their role should include the BiS programme and the school travel management plan programme.
 - The demands on this staff member may be reduced if a different model of financial allocation (e.g. Model 2 presented in section 5.3) is adopted. However, it will always be necessary to have someone within PNCC responsible for the BiS programme.

6.2. On-going maintenance

A key part of ensuring the programme's success is that tracks and bikes are maintained and continued to be used in subsequent years. This aspect may, however, be overlooked by schools during the initial stages; none of the schools in Palmerston North have had their BiS facilities long enough yet to experience significant maintenance costs.

It is important that schools are aware of the on-going financial implications of owning tracks and equipment, which will not be covered by the initial funding injected by Council and the NZ Transport Agency / Bike On. BikeOn recommends that school Boards allocate at least \$2-3k per year for ongoing maintenance costs (although they may not require as much in the first couple of years).

Bike tracks will require periodic maintenance, e.g. to re-spread the surface evenly, replenish the surface material, remove weeds, repair any damaged elements, etc. Some of this could be undertaken by unskilled volunteers (e.g. parents, staff members) but it may be necessary to employ a skilled contractor on occasion. The most important aspect is that schools undertake regular inspections to verify the quality of the infrastructure and identify any defects that require attention.



Figure 6.1: Signs of slight track deterioration, Terrace End School, Palmerston North

Bikes require on-going maintenance. The current contract with Avanti includes a 2-year bike service agreement built into programme, but after this it will be necessary for schools to procure the services themselves. Parents or staff members with bicycle-repair skills could perform most tasks, and there is the option of upskilling willing volunteers. It will be necessary to purchase replacement bicycle components (tubes, tyres, brake pads, etc) from time to time, and, perhaps eventually, replace the bikes themselves.

It was observed that the older children at Ross Intermediate (especially boys) tended to “push” the bikes harder in terms of jumps on the pump track and skid braking on asphalt. For example, bald patches were already evident on some of their bikes in less than two months of operation. The school staff there were being pro-active in warning pupils against doing this, pointing out that unusually high damage would see the bikes out of circulation more often while maintenance and repairs were undertaken.

A useful model to look at can be found in Hutt Valley, where a local cycling advocate has set up a “BikeTec” service that provides an ongoing regular bike servicing arrangement to a couple of local schools for a small fixed price (as a charitable trust, Biketec can seek community grants to support their work).

It is in Council’s best interests to avoid the assets they invest in becoming “white elephants” that no longer get used. However, other than providing initial advice regarding maintenance expectations at the outset and general guidance on how best to maintain the bikes and tracks, there is little that Council can do to control school’s ongoing management of their assets. We do not consider it prudent for PNCC to help fund ongoing maintenance of these BiS facilities.

Recommendations:

- Provide schools with an indication of the on-going maintenance components and costs they will face once the BiS programme is operating.
- Provide schools with guidance as to how best to manage their assets, including:

- An asset register template
- A check-list of items to assess periodically
- Advice on how to identify, commission and train volunteers to help with on-going maintenance
- Advice on how to budget for on-going maintenance
- Advice on how to procure additional funding to support on-going maintenance

7. Conclusions

Palmerston North City's Bikes in Schools programme has been rolled out to six schools to date in fairly rapid manner since the initial idea inception. By all accounts, the programme has been very successful in meeting the needs of the participating schools to develop better skills and health/fitness in their pupils and to encourage a love of cycling. The programme has also provided a number of assets that are available for the community to use out of school hours. PNCC has been able to leverage an investment of about \$330,000 to produce about \$510,000 of facilities, plus ongoing maintenance commitments from schools.

The programme has not been without its difficulties and less than optimal processes. Some key recommended actions for PNCC, based on those made throughout this report, include:

1. Progress the Draft Programme Assessment document into a formally adopted strategy document (including vision and objectives), with an implementation guide.
2. Appoint a new PNCC staff member (or re-designate an existing one) whose role would include managing the BiS programme in Palmerston North, and other associated cycling education and travel behaviour activities.
3. Include in relevant PNCC strategies suitable objectives and actions targeted at enhancing PNCC's BiS programme, the cycle network planning approach, and the links between the two.
4. Amend the list of evaluation criteria for BiS prioritisation so they more accurately reflect PNCC's objectives and also the objectives of potential funders (e.g. the Transport Agency, via Bike On).
5. Develop more detailed and transparent documentation outlining the reasons behind the various evaluation and prioritisation criteria used and the process to be followed for school selection.
6. Ensure that there is a well-documented process for getting agreement from future BiS-funded schools regarding their expectations and obligations, including selection meetings and formal MoUs.

We would reiterate the glowing endorsement from Bike On Trust chair Paul McArdle, who felt that the Palmerston North programme was a good model for other parts of New Zealand. By implementing the recommended actions, the programme can continue to be a success for more schools in the city.

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Appendix A Stakeholders contacted

The following people were contacted during this project, either by face to face interview, telephone conversation, or email. The information and advice provided is greatly appreciated:

- Palmerston North City Council staff
 - Dave Lane, PNCC road planning team leader (in person)
 - Graeme Tong, PNCC roading manager (in person)
 - Sandi Morris, original PNCC staff member heading the Bikes in Schools programme, now at Opus International Consultants (in person)
- BiS programme leaders from other parts of the country
 - Paul McArdle, Bike On Trust, Hastings (by phone)
 - Hugh Wilson, Sustainable Transport Advisor, Wellington City Council (by phone)
- NZ Transport Agency cycling team staff
 - Claire Pascoe (by phone)
 - Elizabeth Claridge (by phone)
- Representatives from local schools who have taken part in the BiS programme:
 - Wayne Jenkins and Zayne Templeton, Ross Intermediate School (in person)
 - Suneal Singh, St Mary's School (in person)
 - Sue Allomes, Terrace End School (in person)
 - Leiana Lambert, Cloverlea School (by phone)
- Public health research staff
 - Dr Geoff Kira, School of Public Health, Massey University (in person)
 - Nigel Fitzpatrick, Health Promotion Advisor, MidCentral Health (in person)
 - Emma Williams, Health Promoting Schools Advisor, MidCentral Health (in person)
- Other personnel
 - Phil Stevens, Active Transport Advisor, Sport Manawatu (in person)



Appendix B Original PNCC questionnaire to schools

5 October 2015

Sandi Morris
Transportation Planner
Palmerston North City Council
Private Bag 11034
Manawatu Mail Centre
PALMERSTON NORTH

BIKES IN SCHOOLS – EXPRESSION OF INTEREST QUESTIONNAIRE

School: _____

Principal: _____

Email Address: _____

Phone Number: _____

This questionnaire is to gauge the interest of schools in the Bikes in Schools programme. It will also help develop the programme within Palmerston North.

Please indicate your schools view with regards to the statements. The responses will not preclude a school from being eligible for support from PNCC for implementation of a Bikes in Schools programme.

Statement	Strongly Against	Moderately Against	Neutral	Moderately Support	Strongly Support
Our children would benefit from a Bikes in Schools programme					
We would be supportive of greater cycle education in our school					
We would like to build a cycle track as part of a programme at our school					
We would be willing to store bikes at our school					
We would like a programme to focus on road and cycling safety					
We would like a programme to focus cycle handling skills					
We would like a programme to focus on getting our children active					
We would be willing to include regular cycling as part of our curriculum					

Statement	Strongly Against	Moderately Against	Neutral	Moderately Support	Strongly Support
We would train our teachers to be able to deliver a cycling programme in our school					
We would be willing to provide funding in support of development of the programme at our school					
We would be willing to find other external funding to support our programme					

Please make any further comments you have are in the space below, or included on a separate page.
