

New Lynn Bike Hub Impact Evaluation

Lissy Fehnker

November 2018



Image 1 New Lynn bike hub

Table of Contents

Executive Summary	5
1 Introduction	6
1.1 Objectives of this Impact Evaluation.....	7
2 Methods	8
2.1 Core Research Elements.....	8
2.2 Research Design and Implementation	10
2.3 Participation.....	11
2.4 Data Analysis.....	12
2.5 Ethics and Data Management.....	12
2.6 Research Limitations.....	12
2.7 Evaluation Matrix.....	13
3 Results and Discussion	14
3.1 Relevance	14
3.2 Effectiveness	29
3.3 Impact.....	40
3.4 Efficiency	49
3.5 Sustainability	51
4 Conclusion	54
5 Recommendations	56
6 Acknowledgements	57
7 References	58
8 Appendix 1 – Misc. Data	59

Graphs

Graph 1 Community Needs and Reasons for Visiting New Lynn Bike Hub.....	16
Graph 2 Community Perspectives of New Lynn Bike Hub Importance in the Community	17
Graph 3 Community Narratives on Importance of New Lynn Bike Hub Importance in the Community	17
Graph 4 Project Partners Expectations of New Lynn Bike Hub	18
Graph 5 Project Partners Narratives on Expectations of New Lynn Bike Hub	18
Graph 6 Community Satisfaction with New Lynn Bike Hub.....	22
Graph 7 Narratives of Community Satisfaction with New Lynn Bike Hub	23
Graph 8 Internal Perceptions of New Lynn Bike Hub Success	24
Graph 9 Internal Narratives of New Lynn Bike Hub Success	25
Graph 10 Community Perspectives on Challenges/Improvements at New Lynn Bike Hub	26
Graph 11 Community Narratives on Improvements/Challenges at New Lynn Bike Hub	26
Graph 12 Internal Perspectives of Improvements/Challenges at New Lynn Bike Hub.....	27
Graph 13 Internal Narratives of Improvements/Challenges at New Lynn Bike Hub	28
Graph 14 Demographics of Research Participants/Bike Hub Users.....	36
Graph 15 New Lynn Bike Hub Traffic	37
Graph 16 Community Perspectives on Intended Aim of New Lynn Bike Hub	37
Graph 17 Community Narratives on Achieving Intended Aim of New Lynn Bike Hub.....	38
Graph 18 Internal Perspectives on Achieving Intended Aim of New Lynn Bike Hub	39
Graph 19 Impact of New Lynn Bike Hub on Community.....	44
Graph 20 Community Narratives on Impact of New Lynn Bike Hub	45
Graph 21 Community Narratives on Impact of New Lynn Bike Hub	45
Graph 22 Community Feelings at New Lynn Bike Hub.....	46
Graph 23 How Community Members Perceive the New Lynn Bike Hub	47
Graph 24 Internal Impacts of the New Lynn Bike Hub	48
Graph 25 Future Unpaid New Lynn Bike Hub Volunteer Commitment	52
Graph 26 Internal Perspectives of the Future of New Lynn Bike Hub	53
Graph 27 Community Likelihood of Recommending New Lynn Bike Hub	53

Tables

Table 1 Impact Evaluation Structure	8
Table 2 Breakdown of Participant Groups.....	11
Table 3 Linkage of Sustainable Development Goals to New Lynn Bike Hub	41
Table 4 Value Generation of New Lynn Bike Hub.....	49
Table 5 Proposed Value Generation of Bicycle Riding (CAD)	50

Executive Summary

This report is an impact evaluation of the EcoMatters' New Lynn bike hub. The report aims to better understand the extent of progress made in the one year of operation and ascertain how EcoMatters can continue to make progress on its goal of making cycling accessible to anyone, regardless of ethnicity, age, income, or social position. The evaluation produced numerous findings. Most importantly, it found that there is extremely high satisfaction with New Lynn bike hub. Satisfaction with the New Lynn bike hub has been attributed highly to the attitudes of the volunteers, the perception of it being a community resource, and the ability for visitors to learn new skills. From a project partner perspective, highly positive feedback was provided relating to the bike hub being a 'success story' which has enabled a sustainable way to promote safe cycling and providing cycling accessibility to a diverse range of groups. Based on the findings of the evaluation, much progress has been made toward meeting its aim.



Image 2 Kids enjoying the New Lynn bike hub (Source: Facebook)

1 Introduction

The New Lynn Bike hub located on Olympic Place, New Lynn, is facilitated by EcoMatters Trust and was opened in June 2017. Key project partners include Whau Local Board and Auckland Transport, along with a number of project collaborators including other community groups, and businesses.

Since the opening of the Bike hub, EcoMatters have had a very positive community response with growing numbers of people hearing about the service and choosing to donate bikes and drop in and make use of the resources and expertise.

The bike hub has volunteer mechanics who work alongside the community to teach skills that people need to continue the maintenance of their bikes and enjoy safe cycling. Where volunteer mechanics find people who cannot access a bike, or whose bike is too run down to be repairable, the volunteer will actively work with the person to help repair and restore another bicycle. At times, volunteers are also able to provide a person a newly repaired bike for free or at low cost/in exchange for volunteering.

On initiation of the New Lynn bike hub, expected benefits anticipated by EcoMatters were as follows:

Community Benefits

- **Education:** People can learn new mechanical skills and a “can do” attitude
- **Accessibility:** People can access a new mode of transport that can take them further and faster than they can travel by foot, and cheaper than they can travel by car or public transport. Also, that the service is available to everyone, and the price is no barrier to entry
- **Health:** People can get physically active through having a bicycle, and this can also assist with mental health
- **Safe cycling:** People have known safe places to cycle in the West through information gathered when visiting the Bike hub
- **Inclusiveness:** People feel they are part of a greater community when visiting the Bike hub, and can socialize with other people who have an interest in cycling
- **Sustainability:** Taking bikes out of the waste stream and giving them a new lease of life
- **Visibility:** Have more people engage with and visit the EcoMatters site at Olympic Park

Volunteer Benefits

- Volunteers are given opportunities to help to run the service can gain valuable people and bike mechanical skills

This research aims to understand the actual impacts, after one year of operation, that the bike hub is having on the broader community. This has been done through the use of an impact evaluation following standard OECD-DAC criteria.

1.1 Objectives of this Impact Evaluation

The key objectives of this impact evaluation are to do the following:

- **Deepen understanding:** This evaluation can be used as a tool to deepen knowledge and understanding of the limits, impact, and effect of the bike hub on the community
- **Informing future projects:** This evaluation can identify current successes and failures to assist with informing future projects
- **Transparency:** This evaluation will illustrate the responsible utilization of the resources and justify the results and their impacts, for both the wider community, project partners, and other project partners
- **Improve communication:** Linking into the previous point, this evaluation can assist in fostering the communication and understanding between the various interest groups

Reference will be made as to how the bike hub contributes to the global Sustainable Development Goals, as well noting how the bike hub acknowledges Te Ao Māori.

Impact evaluations are generally conducted by someone independent with relevant expertise to ensure that the evaluation is unbiased. Data collection and analysis has been conducted by an independent researcher with no prior involvement of the New Lynn Bike hub (or any bike hub facilitated by EcoMatters).

2 Methods

2.1 Core Research Elements

2.1.1 Impact Evaluation

Impact evaluation is a widely used method for understanding the impact of a project either during, or on conclusion of the project timeframe. Impact evaluation has been chosen for this research because it goes beyond assessing the size of the effects (i.e., the average impact) to identify for whom and in what ways the project has been a success. What constitutes 'success' and how the data will be analysed and synthesised to answer the specific key evaluation questions (KEQs) must be considered up front. Data collection is geared towards the mix of evidence needed to make appropriate judgments about the programme or policy. In an accurate mixed methods evaluation, this includes using appropriate numerical and textual analysis methods and triangulating multiple data sources and perspectives to maximize the credibility of the evaluation findings.

In addition to the above, this evaluation will respond to the following seven Key Evaluation Questions (KEQs) in alignment with standard OECD-DAC criteria. This will ensure robustness and transferability of the findings.

Table 1 Impact Evaluation Structure

OECD-DAC Criteria	Key Evaluation Questions
Relevance The extent to which the objectives of the bike hub are consistent with the user's needs	What were the enablers that have made the bike hub successful?
Effectiveness The extent to which the bike hub's objectives have been achieved	How valuable are the results of the bike hub to EcoMatters, community members, and project partners?
Impact Positive and negative primary and secondary long-term effects produced by the bike hub - directly/indirectly or intended/unintended	Has the bike hub produced the intended results in the short and medium term? If so - for whom, to what extent and circumstances?
Efficiency A measure of how economically resources/inputs (funds, expertise) are converted into results	What results - positive and negative, intended or unintended, has the bike hub delivered?
Sustainability The continuation of benefits from the bike hub	To what extent does this project represent the best possible use of available resources to achieve the results of the greatest potential value to participants and the community?
	Are the impacts from the bike hub likely to be sustainable?

2.1.2 *Kaupapa Māori*

Integrating kaupapa Māori perspectives was an important component of the research design. While initial research design envisaged collaboration and workshopping impact with Mana Whenua, due to time limitations as a result of circumstances outside the control of the research (particularly the imposition of the most significant Rahui ever introduced by an Iwi group - on the Waitākere Ranges to help reduce human impacts on the Ecosystem), workshops were unable to occur. Following initial engagement with Mana Whenua, integration of kaupapa Māori was focused on the inclusion of the following four threads within the impact evaluation research (Nelson, 2018):

- 1) Manaakitanga - are visitors feeling as though they are being treated like kings?
- 2) Whanaungatanga - relates to both whakapapa (lineage and history of the bike hub endeavour), and relationships (has a sense of family been generated?)
- 3) Tino Rangatiratanga – Does the bike hub facilitate self-actualisation, independence and autonomy? Is the relationship established between participants, volunteers and managers equitable/reciprocal (utu)?
- 4) Kaitiakitanga - Does the bike hub encourage and foster kaitiaki (a sense of belonging, purpose, care, and action)?

2.1.3 *United Nations Sustainable Development Goals*

The Sustainable Development Goals (SDGs), otherwise known as the Global Goals, are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. The SDGs consist of 17 Goals including poverty, climate change, economic inequality, innovation, sustainable consumption, peace and justice, among other priorities. The goals will be used as a primary reference point for exploring the “impact” component of the impact evaluation. Investigation of foreseen and unforeseen impacts will pay particular attention to the interconnected nature of the goals – often the key to success on one will involve tackling issues more commonly associated with another.



Image 3 United Nations Sustainable Development Goals

2.2 Research Design and Implementation

This research was conducted using a mixed methods approach (including unstructured interviews, media analysis, and questionnaires) to explore the Key Evaluation Questions. Mixed methods approaches are helpful for developing new lines of thinking, and also provide richer detail. The scope of research and specific requirements of impact evaluation make mixed methods the most appropriate design for this research.

Interviews, both face to face or over the phone, were also conducted with Bike hub volunteers and staff, other project partners, and members of the community. Use of interviews alongside questionnaires assists in eliciting narrative data that can reflect people’s feelings, experiences and opinions in greater depth (Kvale, 1996). This is due to interviewing allowing participants to speak in their voice and builds a holistic snapshot of the phenomenon being researched.

Surveys are considered a ‘strategy,’ instead of a method. The term ‘survey’ means ‘to view comprehensively and in detail’ (Denscombe, 1998, p. 7). Specifically, surveying assists a researcher to collect information from a sample of participants through their responses to certain questions. Through this approach, researchers can leap into the roles of the respondents, allowing them to get inside the respondents’ beliefs and ways of thought. This results in surveying being an extensive research technique, capable of gathering comparable information from people across a range of social groups.

The three main characteristics of surveying as a research strategy is that it implies broad and inclusive coverage, it brings ‘things up to date’ by researching a phenomenon at a specific point in time, and lastly that it brings the idea of empirical research. Consequently, surveying as a strategy for collecting data has many characteristics which has allowed it to emerge as one of the most popular approaches to social research.

Researchers who adopt a surveying strategy can use a number of methods within the strategy to undertake their research. Specifically, self-completion questionnaires and interviews were used in this research. Both questionnaires and interviews took a semi-structured approach, asking the same set of questions to each group

with a slight variance tailored towards different groups. The questionnaire contained 20 questions, and the interviews included ten questions. This is due to the questionnaire seeking demographic information as these were predominantly used for the community members.

The questionnaires were administered online and circulated to EcoMatters staff, and by invitation to members of the community via the EcoMatters Facebook page and other social media outlets. Questionnaires are a common form of data collection within the strategy of surveying and can be successfully used for both qualitative and quantitative research. Questionnaires consist of a number of questions with an expectation that participants can read and understand the questions, and either write or select, a response. Participants are expected to answer the questions on their own, without any aid from the researcher. Self-completion questionnaires have a balancing advantage over other forms of data collection (i.e., interviews) as it allows the respondent to select the time for their completion, an option that significantly reduces the ‘intrusiveness’ of some research approaches.

2.3 Participation

In total, 69 participants took part in this research. There was a diverse range of participation, and it is believed that this has been able to support a well-informed evaluation. The following tables contain breakdowns of participant type. The analysis of demographics is discussed in a later section.

Breakdown of participants is as follows:

Table 2 Breakdown of Participant Groups

Participant Group	Quantity	Methods Used
Community members	45*	Face to face interviews, questionnaire
New Lynn Bike hub volunteers and staff	9	Face to face interviews, phone interviews
EcoMatters staff	11	Face to face interviews, questionnaire
Other interested external stakeholders	4	Phone interviews
Total	69	

**only 43 of the 45 responses were used for this evaluation as two participants had completed the questionnaire without having visited the New Lynn Bike hub*

Information analysis also used to supplement data from the research. This included bike hub visitor tracking, bike donation and bike repair counts from the past calendar year. As well as formal research methods as discussed above, informal research methods were also included. These included unofficial/spontaneous conversations with volunteers, staff and community members, review of social media feedback on the bike hub pages and media stories, observation on site visits to conduct the research and personal experiences and feelings from the researcher. Conclusions were not based on these informal methods, however, they helped to assist in exploring the ‘essence’ of the bike hub and traits of the bike hub which are unable to be measured. This informal

method of data gathering is known as 'qualitative sensitive research', which is useful and necessary if we are to enhance our understanding of the many varying issues that affect people in today's society.

2.4 Data Analysis

Once a data set was collected, the analysis took place to describe, and make inferences to allow conclusions to be generated beyond what the data has presented (Cox, 2015). However, in this case, much of the data 'spoke for itself' as the same general themes became evident across all participants, with minimal outliers.

As the OECD-DAC criteria and subsequent KEQs that were developed required both qualitative and quantitative data to achieve their aims, the results from the interviews and questionnaires were analysed in a single research process known as integrated analysis (Srnlka & Koeszegi, 2007). This means that all data were analysed at the same time to generate a narrative around the KEQs. This was done through a process of coding data and conducting a simple content analysis.

2.5 Ethics and Data Management

All participants were anonymous when taking part in the research. Participants were therefore not asked for their names; however, e-mail addresses were sought as part of a financial incentive that was offered in response for taking part in the questionnaire. The financial incentive was a chance to win one of four \$50.00NZD supermarket vouchers. E-mail addresses were kept separate from participant responses at all times. This was explained to each participant prior to commencing the questionnaire or interview.

Participation in this research was voluntary. It was explained to all participants that the research was being conducted to explore the impact of the New Lynn Bike hub. Agreement to participate was therefore recorded as consent for the data to be used in the evaluation. Data was stored in electronically in password protected folders.

2.6 Research Limitations

In any impact evaluation there are limitations of the extent to which comprehensive data can be gathered and analysed. The primary limitation is related to the volume of participant input – ideally more people would have been interviewed and more surveys performed to allow the research to be a statistically significant sample of bike hub visitors. While as noted in section 2.3, we are reasonably confident that the participant input is sufficient to generate some general findings, there are community bike hub participants who have not been accessed as part of this research. In particular, we note that while the bike hub is only open with volunteers and staff for 16 hours per week, some services that the bike hub provides – namely a set of rudimentary tools and a pump is open all hours. We know from recent security footage that the bike hub is indeed used by people for bike maintenance throughout the day and night, however this participation has been unable to be comprehensively included in the research. Furthermore, also from security footage, we know that the bike hub is being used for purposes by which it was not intended, namely as a space for after-hours gatherings and enjoyment. This research does not include interviews or questionnaires with non-bike related users of the space, and future research may benefit from interviewing those users.

Limitations also relate to the type of data able to be collected and to the extent of analysis able to be undertaken. For example, we know that considerable health benefits may be derived from motivational components of the bike hub offering, as well as the removal of barriers (e.g. cost). This research has not analysed in detail the implications of derived impacts (e.g. health or environmental benefits), and it would be worthwhile for future research to explore.

2.7 Evaluation Matrix

Key Evaluation Question	Questionnaires	Interviews	Informal Methods	Information Analysis
What were the enablers that have made the bike hub successful?	✓	✓	✓	
How valuable are the results of the bike hub to EcoMatters, community members, and project partners?	✓	✓	✓	
Has the bike hub produced the intended results in the short and medium term? If so - for whom, to what extent and circumstances?	✓	✓	✓	
What results - positive and negative, intended or unintended, has the bike hub delivered?	✓	✓	✓	
To what extent does this project represent the best possible use of available resources to achieve the results of the greatest potential value to participants and the community?	✓	✓	✓	✓
Are the impacts from the bike hub likely to be sustainable?	✓	✓	✓	
Is the current bike hub model likely to be sustainable?	✓	✓		

3 Results and Discussion

The following section will present the findings from this research under the relevant OECD-DAC criteria and KEQ. As perspectives may differ based on whether the participant is external to the project (i.e., community members), or internal within the project (i.e., Bike hub staff, EcoMatters staff, project partners), questions asked through the surveying approach differed slightly. Therefore, the findings will be organized as coming from each perspective. Through this approach, it is also evident where there are consistencies or inconsistencies with the views and experiences across all of the people involved with the New Lynn bike hub.

Each sub-section presents the data relative to responding to the KEQ. At this stage, little critical analysis is done, as the data has been found to 'speak for itself.' Further time spent on analysis could result in deeper critical analysis.

3.1 Relevance

The extent to which the objectives of the Bike hub are consistent with the user's needs.

Assessing the relevance of a project requires an analysis of the extent to which the project responds to the needs of all the interested stakeholders involved in the project. Simply speaking, assessing relevance is also understood as asking "are we doing the right thing?". For this evaluation, relevance was explored through two KEQs — the first, relating to whether the New Lynn bike hub is relevant regarding whether it is perceived to be a success both internally and externally. From this, it was explored what the key enablers were that resulted in the success of the bike hub, and any potential barriers such as perceived challenges or areas requiring further improvement. Secondly, evaluating the results of the bike hub [and its services] and how valuable they are to the stakeholders involved in the project. This was done through seeking information on reasons why members of the community members visit the bike hub and comparing this to the services that are regularly on offer, and also seeking input from project partners to understand whether the bike hub has met their expectations. To understand the value of the results from a community perspective, the research explored whether the bike hub was considered an important part of the community.

3.1.1 *How valuable are the results of the Bike hub to EcoMatters, community members, and project partners?*

Addressing this KEQ began with a simple understanding of whether the services provided by the bike hub are aligned to the key reasons that community members are visiting, and therefore, how valuable the results of the project are to them. The two top reasons identified in this research are firstly, to get a bike repaired (30%), and secondly, to learn new skills (22%) (Graph 1). Through experiences at the bike hub and various interviews, the two reasons are closely interlinked as visitors not only want to have their bike repaired, but also want to learn how to repair their bike. Therefore, this general theme and reason of visiting the bike hub could be 'to learn how to repair my bike'. Contributing to over half of the responses, this is directly aligned to the services of the bike hub. Considering that, this indicates that the results show a success in the bike hubs ability to provide value to the local community.



Image 4 Bike hub visitor Jean, donating a bike she had used for 22 years (Source: Facebook)

Continuing on the theme of value in the community, members were asked directly whether they felt the bike hub was an important part of their community (Graph 2). Of all respondents, 84% responded yes, and most of the remainder (14%) responded 'somewhat'. However, a significant outcome from this question was that 0% of participants selected 'no'. When further expanding on their responses, the most common theme was that the bike hub was an important part of the community due to it being 'economical for the community'. Specifically, that it *"fulfils a need for financially short members of community and encourages them to access free cheap transport"*. This finding directly supports the original aim of the bike hub – which is discussed further in the following sections. A second theme from members of the community is that the bike hub is important as it is a 'space for learning'. This is aligned to the earlier finding that there is a desire for the bike hub to hold more workshops.

From a project partner perspective, it was asked whether the bike hub had met their expectations, to assess the value of the bike hub from their perspective. Of the four respondents, three out of four stated 'yes', and one stating 'somewhat' (Graph 2). Key themes from this were around the bike hub promoting sustainable transport in the region and assists with getting resources and information directly to the community *'on the ground'* (Graph 3). Specifically, narratives around this included that *"it's been great for Auckland Transport to reach members of the public so directly and in such a sustainable manner"*. This is well aligned with perceptions by members of the community that the bike hub is a 'place for learning' and that there is a desire for more workshops.

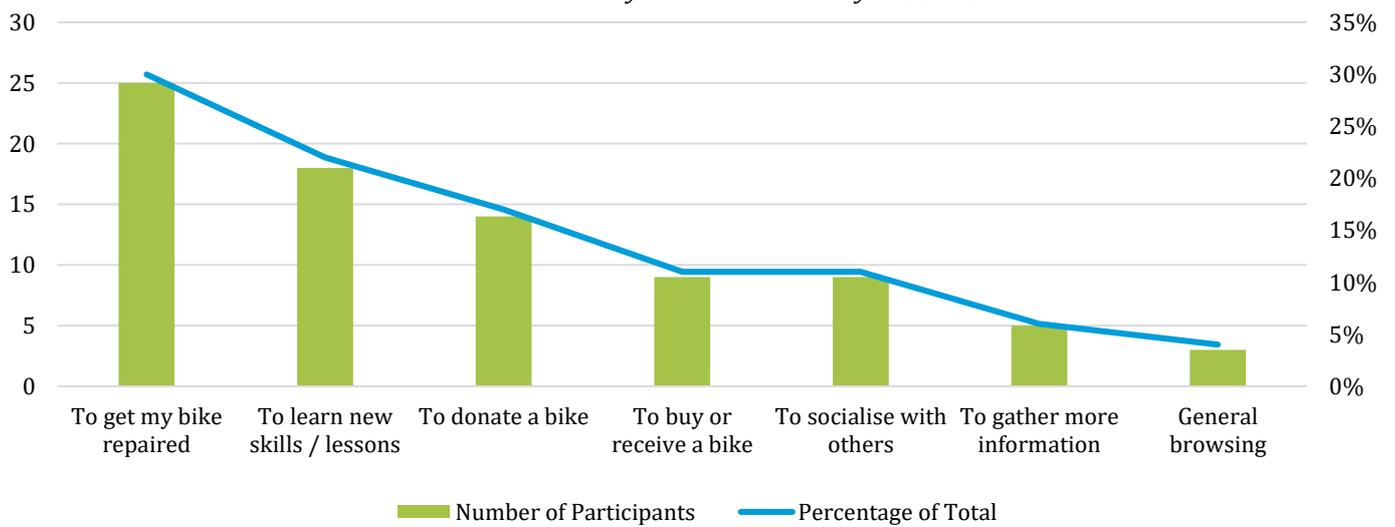
The key theme from the project partner that stated the bike hub has 'somewhat' met their expectations was due to unclear outcomes on the environmental benefits of the bike hub. Although it is acknowledged the difficulty in capturing this, there is *"more scope for capturing environmental outcomes such as emissions as transport is such a large contributor and the bike hub is promoting ways to reduce this..."*.



Image 5 Alex, a bike hub visitor (right) pictured with bike hub volunteer Chris (left) who visited the bike hub to borrow a bike for a few weeks so he could continue to transport himself around Auckland as cycling is his only method of transport (Source: Facebook)

Community Needs and Reason for Visiting New Lynn Bike Hub

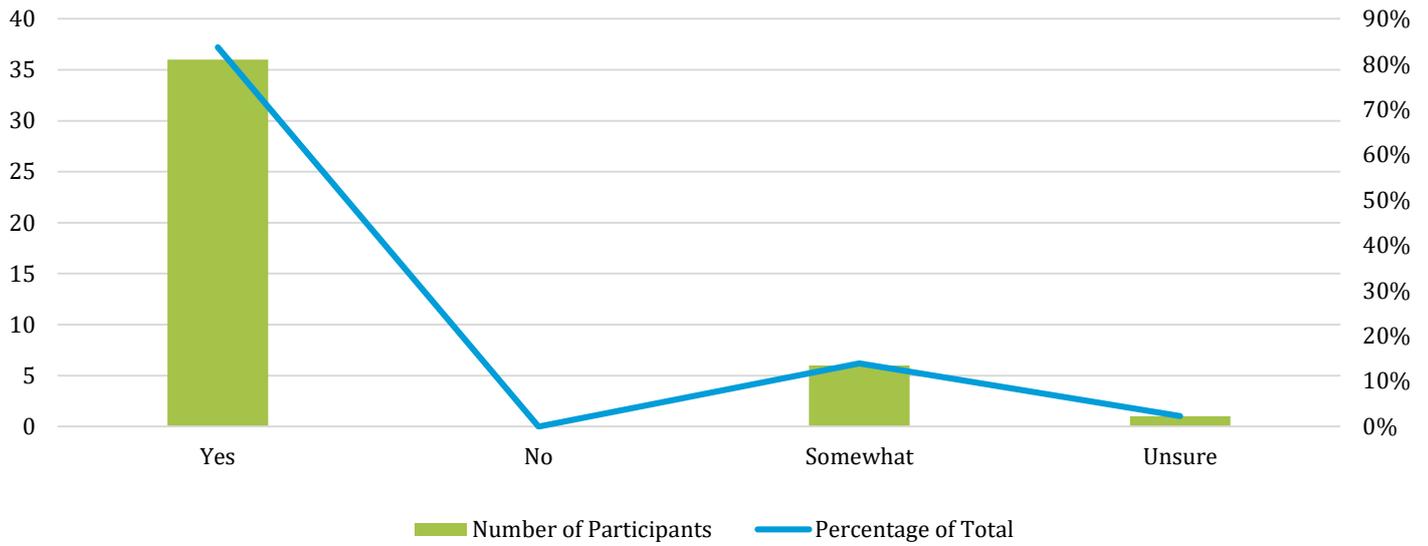
"What services do you use at the New Lynn Bike Hub?"



Graph 1 Community Needs and Reasons for Visiting New Lynn Bike Hub

Community Perspectives of New Lynn Bike Hub Importance in the Community

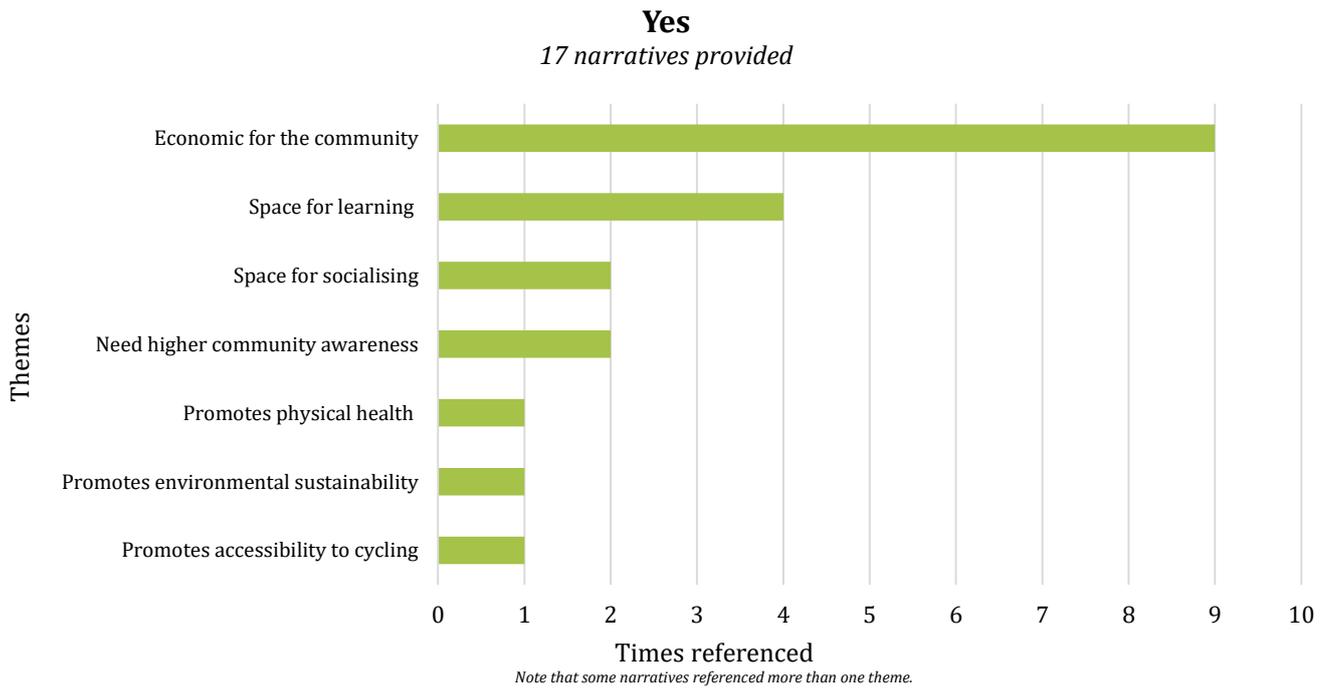
"In your opinion, do you feel that the New Lynn Bike Hub is an important part of your community?"



Graph 2 Community Perspectives of New Lynn Bike Hub Importance in the Community

Community Narratives on Importance of New Lynn Bike Hub Importance in the Community

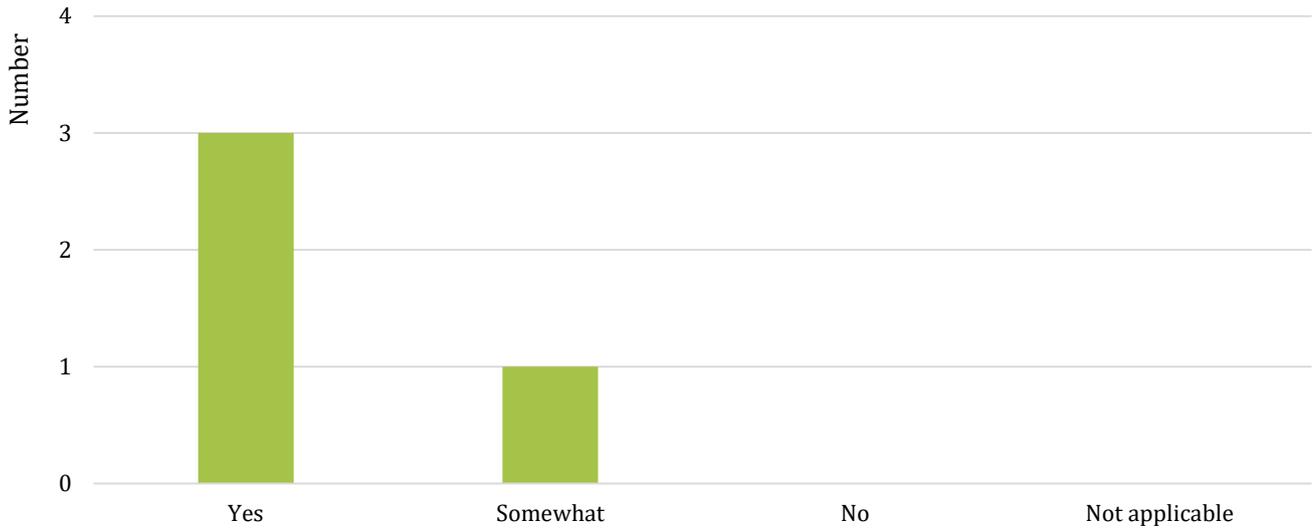
"Why is the New Lynn Bike Hub an important part of your community?"



Graph 3 Community Narratives on Importance of New Lynn Bike Hub Importance in the Community

Project Partners Expectations of New Lynn Bike Hub

"In your opinion, has the New Lynn bike hub met your expectations?"

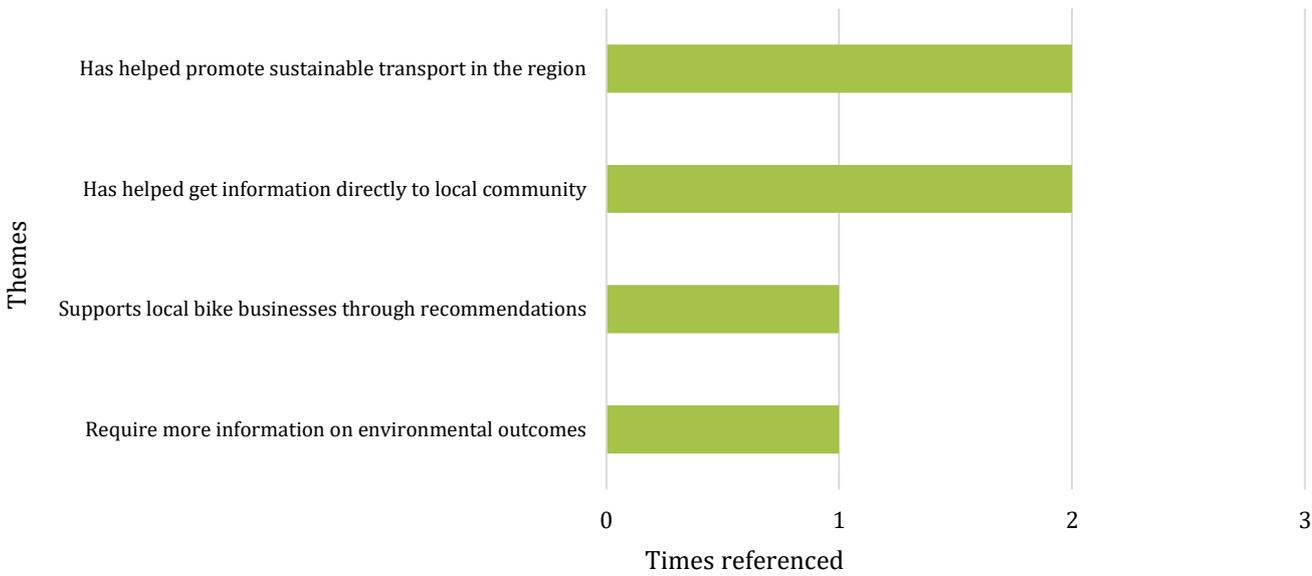


Graph 4 Project Partners Expectations of New Lynn Bike Hub

Project Partners Narratives on Expectations of New Lynn Bike Hub

"Why/why not has the New Lynn Bike Hub met your expectations?"

Yes / Somewhat
3 narratives provided



Graph 5 Project Partners Narratives on Expectations of New Lynn Bike Hub

3.1.2 What were the enablers that have made the Bike hub successful? [And barriers to this success?]

Is the New Lynn bike hub a 'success'?

To address this KEQ, it was first explored whether the bike hub was perceived to be 'successful' internally and externally. This was important to establish before understanding the enablers that contributed to its success. There is some overlap with this criterion and the following criteria – *Effectiveness* – which sought to understand whether the bike hub was successful in meeting the initial aim.

Determining whether the New Lynn bike hub is a 'success' was challenging, as there are a number of criteria that can be used to help with measuring whether a project such as this is 'successful' Al-Shaaby & Ahmed (2018) argued that project 'success' is most commonly measured by either cost (financial benefits), time, quality or stakeholder satisfaction. For the purpose of this research, stakeholder (community) satisfaction was used as the determinant to understand whether the New Lynn bike hub is a 'success'. Along with this, perspectives from internal groups (project partners, EcoMatters staff and bike hub staff) were sought to determine whether there was first, alignment with community perspectives and secondly, a feeling as to whether the bike hub was considered 'successful' from the internal perspective.

Results from the research showed that from a community perspective, 88% responded that they were satisfied with the bike hub (either moderately or extremely). Only 9% of participants (4) indicated they were 'neither satisfied nor dissatisfied' and 2% of participants (1) was 'extremely dissatisfied.' This high level of satisfaction across the community is aligned to the perspectives of bike hub staff and project partners, whom all indicated that they thought the bike hub was a success. Regarding EcoMatters staff, all but two participants said it was a success, with one stating they were 'unsure' and one participant providing no response to the question. (Graph 6 and Graph 8). Isolating these results from the other results in this research would indicate that this project has been a 'success' based on these perspectives.

Enablers of success

To explore the enablers of the perceived success of the bike hub, narratives were used from all groups. The narratives were coded and organized into key themes. The most apparent theme in response to "why the New Lynn bike hub is successful" was around the attitudes of the volunteers. Feedback from participants who did not rate the bike hub as a success centred around volunteer inaccessibility. These findings reflect the importance of firstly how volunteers are treating visitors, and whether or not visitors feel they are getting adequate interaction with the volunteers (Graph 7). Without further narratives as to how long the particular participants had to wait until they received (or did not) receive volunteer interaction, it is difficult to determine whether these comments can be considered representative of other visitors. This finding has also reflected the way in which volunteer attitudes can represent the bike hub as a whole – with participants associating the volunteer attitudes with the bike hub as an overall project, piece of infrastructure or service.

From an internal perspective, key enablers contributing to the success were identified as the bike hub being perceived as a 'community resource' and the 'dedication of volunteers and staff.' One principal aim of assessing the relevance of a project is to determine whether the original objectives of the project are still valid. In this case,

given that the original aim of the bike hub was that it would be a community resource, this response across internal bike hub staff, in particular, reflects the continued commitment to this aim (Graph 9). However, community participants who indicated they were satisfied with the bike hub make little to no reference to this being a key enabler of its success. Therefore, this may reflect that the push for the bike hub to be a community resource may not be as well received as intended by community members. Also, as discussed, this may reflect the notion that members of the community perceive the bike hub as being the volunteers whom they interact with – instead of it being a shared resource.

Barriers for future success

Lastly, this KEQ sought to understand whether improvements could be made to the New Lynn bike hub. All groups were asked the same question – *“In your opinion, are there any areas of the New Lynn bike hub that you could see improvement with?”*. Of the community members, 30% responded with ‘yes’ and 14% responded with ‘maybe’ (Graph 10). Of the 44% respondents who indicated there were areas requiring improvement, the most common themes were ‘volunteer accessibility,’ ‘more workshops’ and ‘longer opening times’ (Graph 11). Consequently, these findings support the earlier findings discussed in the previous section. As it is evident that volunteer attitude is considered of high importance to community, and volunteer inaccessibility being a theme that results in lower satisfaction levels, it is expected that the areas needing improvement would be along similar themes. These findings reflect the strong desire of visitors to the bike hub to interact with volunteers. The second theme, ‘more workshops’ can be viewed as directly linking to the low association by members of the community that the bike hub is a community resource. This reflects that there may be a desire to learn new skills, interact with other members of the community and to be able to come and spend time at the bike hub. Through spending longer time at the bike hub engaged with workshops, this may result in a stronger sense of ‘community’ when perceiving the bike hub. Lastly, the theme of ‘longer opening hours’ may represent two ideas. Firstly, that members of the community may be finding the bike hub inaccessible, and secondly, that longer opening hours may help with volunteer accessibility. As the bike hub is open for four hours a day/four days a week, foot traffic is condensed, meaning that volunteers are ‘spreading themselves thin’. Through the experiences conducting face to face interviews, it was commonly students that made this comment. For example, one 10-year-old participant stated that *“the bike hub is never open after school, which is when me and my friends always want to come. In the weekend, we have to spend time with our families”*. This is somewhat reflected in the occupation status of participants on Graph 14, highlighting that less than 10% of bike hub visitors are students.

From an internal perspective, EcoMatters staff and project partners indicated that there were aspects at the New Lynn Bike Hub that could be amended to improve relevance (Graph 12). From the bike hub staff perspectives, the key theme identified was increasing the advertising of the services that the bike hub offers. Through face to face interviews, common comments were made that *“people think they can drop their bikes off to be repaired and then pick them up later. When we explain that we don’t work that way and we want to teach them how to fix it themselves, they get frustrated”*. Through increased advertising and marketing of the bike hub, this was believed to help avoid these situations. Secondly, was an increase in physical space. On average it was stated that it takes approximately 30min – 60min to set up, and pack down the bike hub due to the lack of storage for bikes (one 20ft container). Common remarks on this theme through informal discussions included that *“without having to*

spend so much time setting up and packing down, we could spend more time talking to the visitors". Lastly, a shared theme between both bike hub staff and EcoMatters staff was around collaborating with other interested organizations or businesses. Through informal discussions, comments were made that it there are a number of businesses that would be interested in supporting the bike hub – either through financial resourcing or other resourcing. However, there is a current lack of time and persons available within the bike hub or EcoMatters to facilitate these relationships. One volunteer stated that they *"need another Brent or similar who is a mechanic and good at liaising"* to assist with developing further relationships (Graph 13).

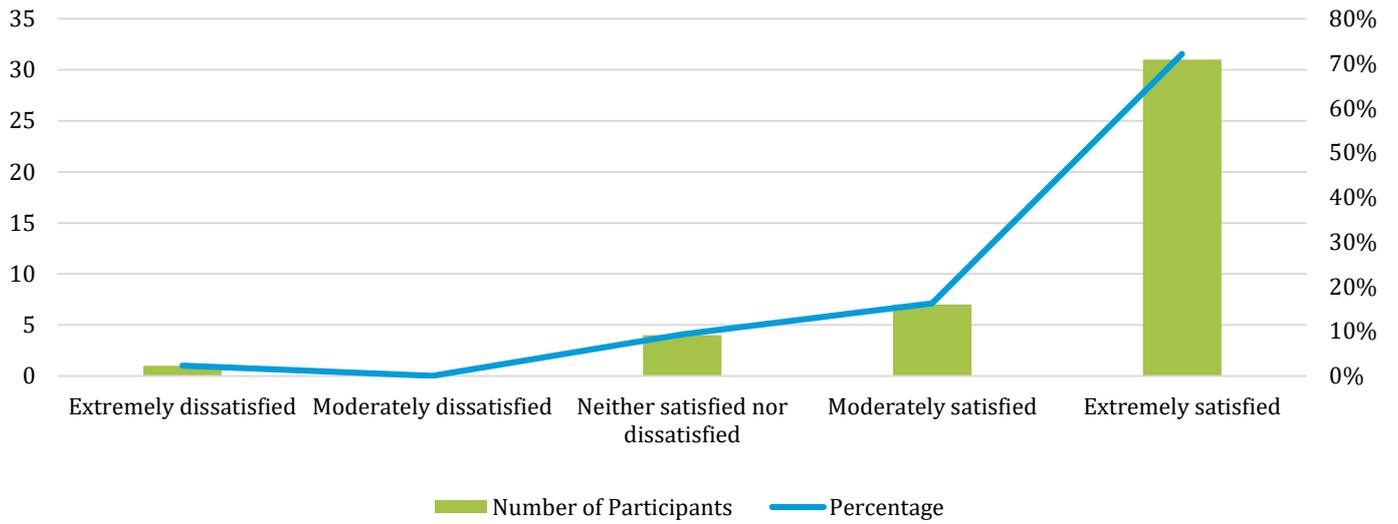
Aligned with the earlier themes picked up from the community members, longer opening hours was identified as a key theme across EcoMatters staff responses to improve relevance. Lastly, project partners identified that more monitoring is beneficial from their perspective to help with tracking results and outcomes. As funding or other means of resourcing comes from the project partners involved with the research, there was notable influence on this theme. However, as it was acknowledged through informal discussions that *"social results are very difficult to capture, how can we bundle up the great stories we hear and actually report them in a formal way?"*.



Image 6 First 2018 New Lynn bike hub visitors (Source: Facebook)

Community Satisfaction with New Lynn Bike hub

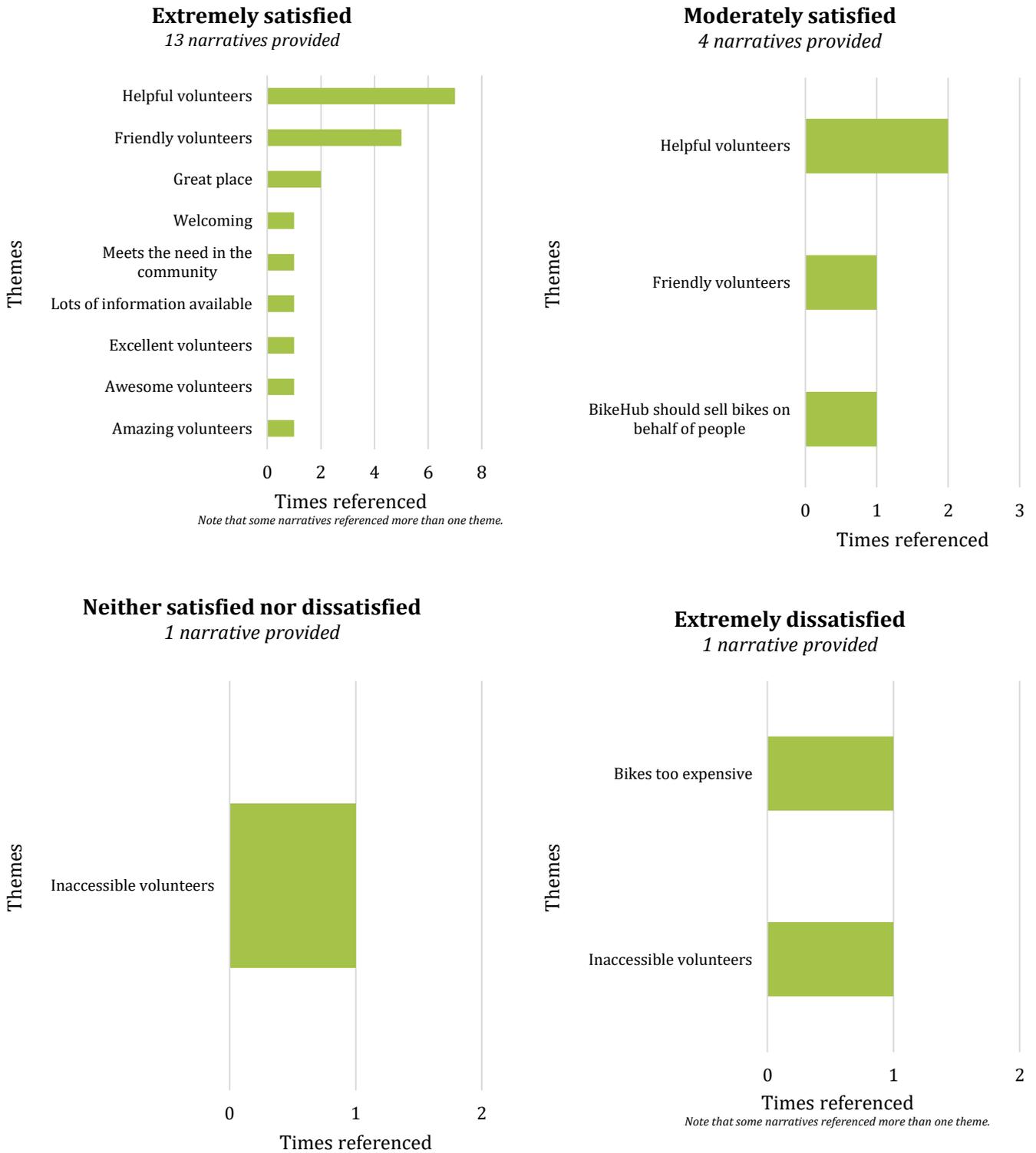
"How satisfied are you with the services of the New Lynn Bike Hub?"



Graph 6 Community Satisfaction with New Lynn Bike Hub

Narratives of Community Satisfaction with New Lynn Bike Hub

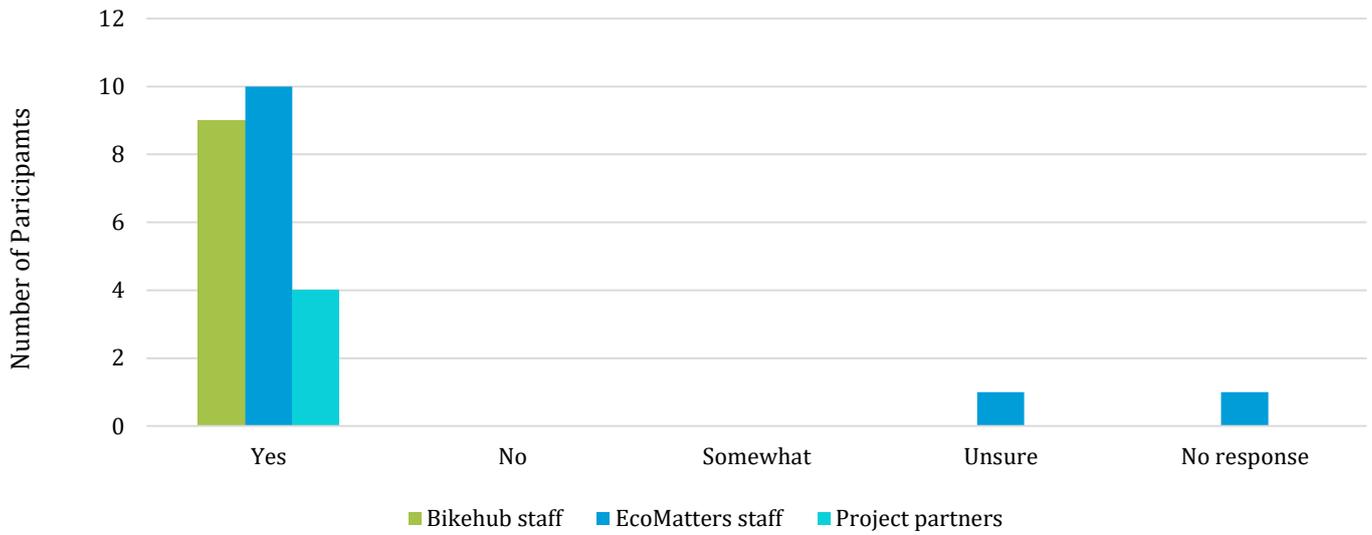
"Why/why not are you satisfied with New Lynn Bike Hub?"



Graph 7 Narratives of Community Satisfaction with New Lynn Bike Hub

Internal Perceptions of Bike Hub Success

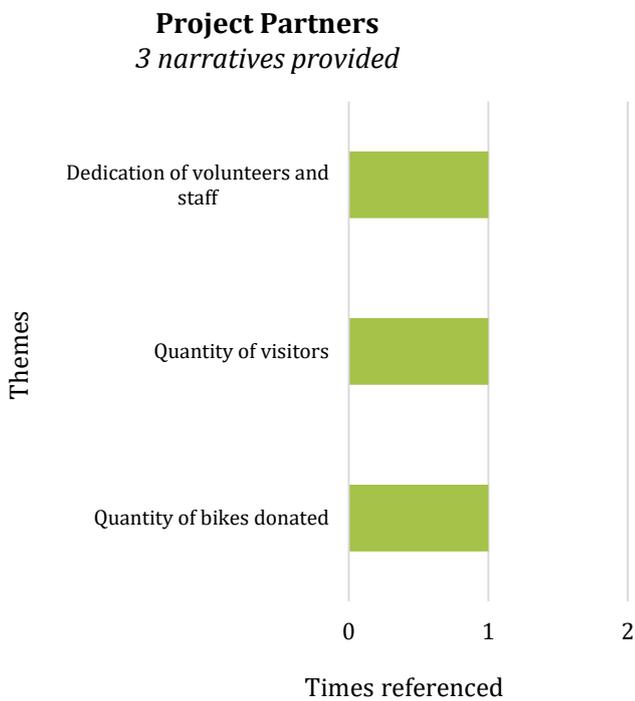
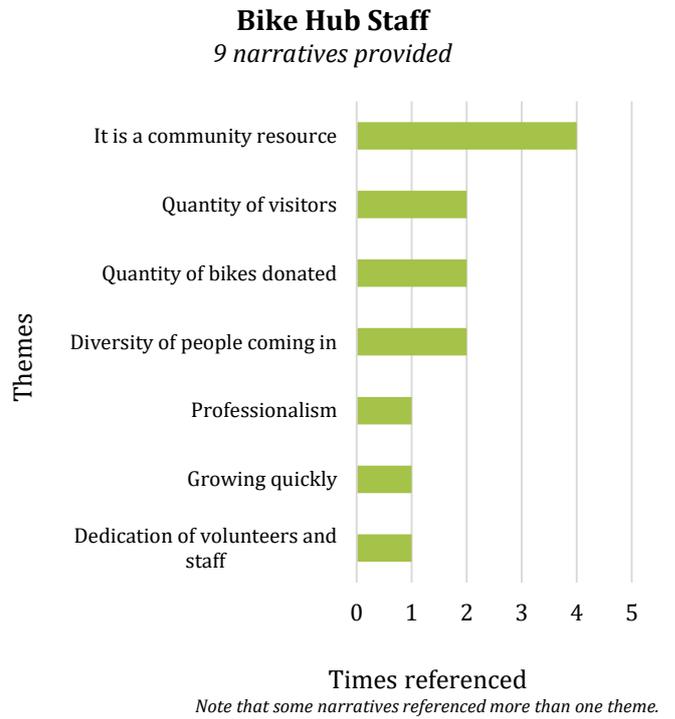
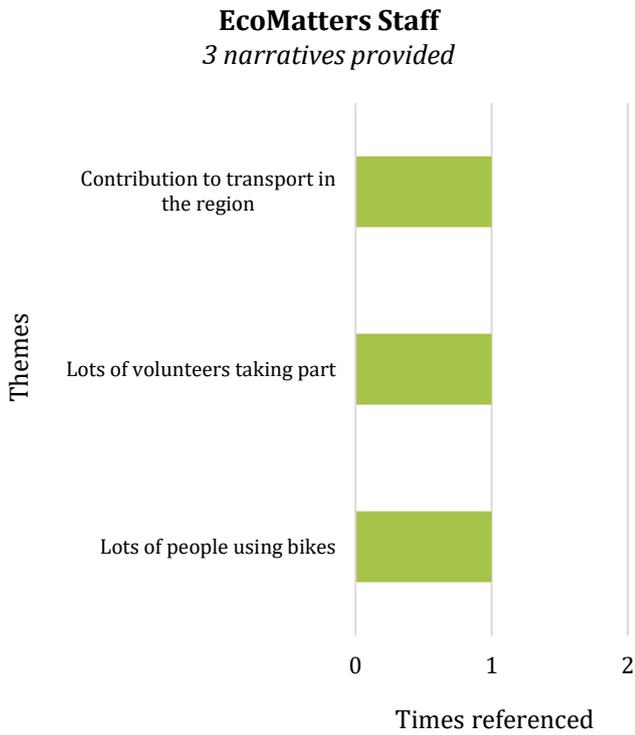
"In your opinion, do you feel that the New Lynn Bike Hub is a success?"



Graph 8 Internal Perceptions of New Lynn Bike Hub Success

Internal Narratives of New Lynn Bike Hub Success

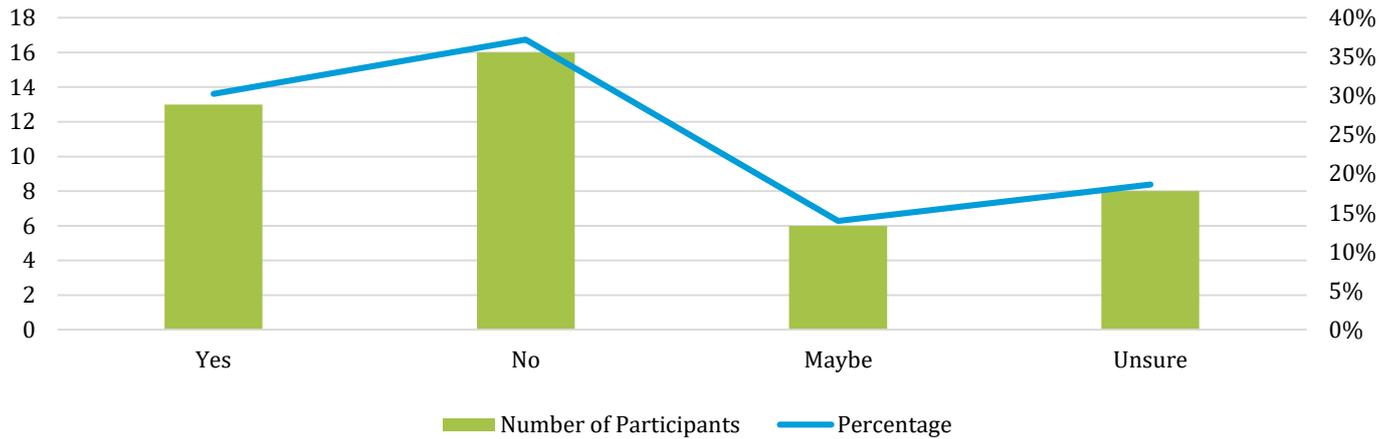
“Why do you think the New Lynn Bike Hub is successful?”



Graph 9 Internal Narratives of New Lynn Bike Hub Success

Community Perspectives of Improvements/Challenges at New Lynn Bike Hub

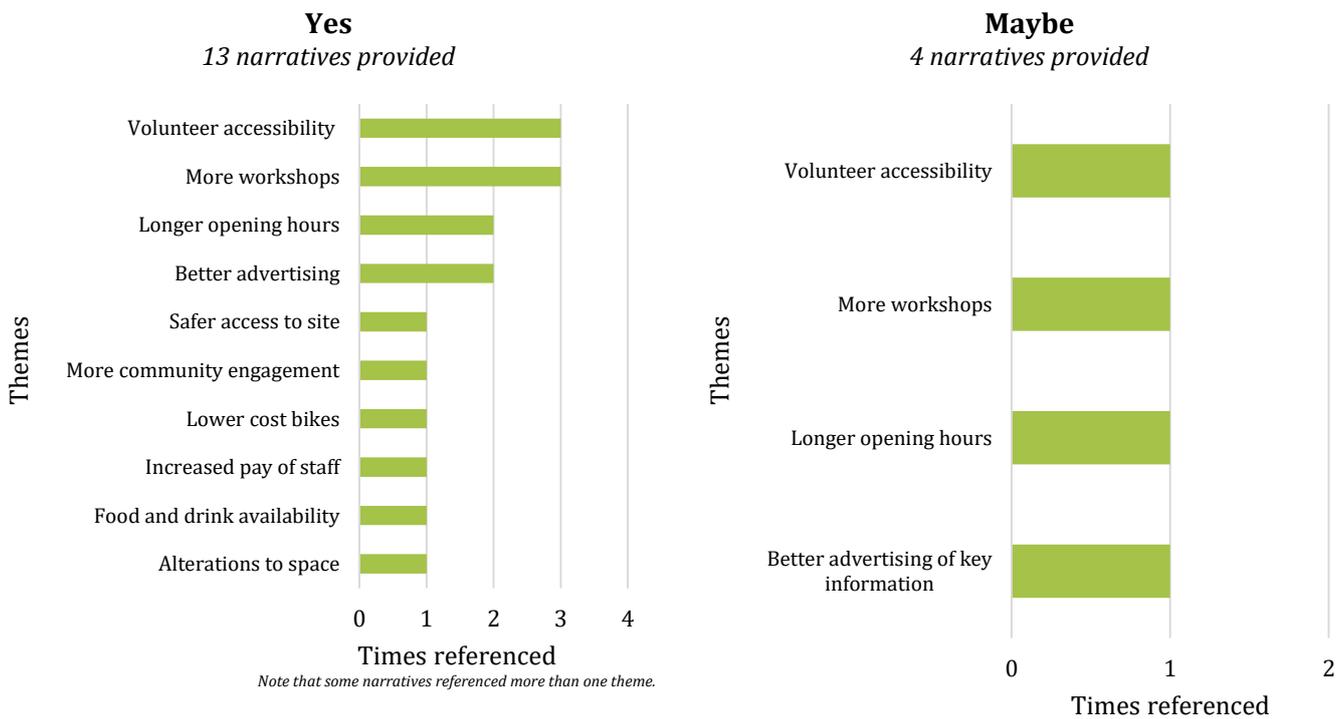
"In your opinion, is there anything at the New Lynn Bike Hub that you could see improvement with?"



Graph 10 Community Perspectives on Challenges/Improvements at New Lynn Bike Hub

Community Narratives on Improvements/Challenges at New Lynn Bike Hub

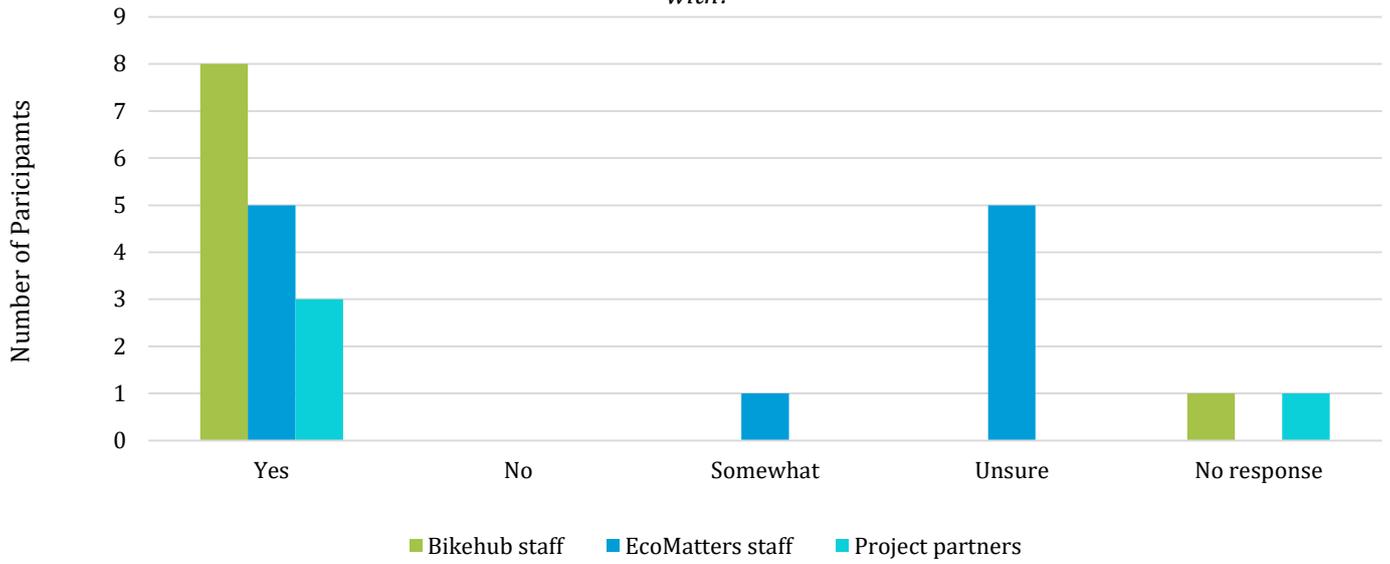
"What improvements could be made at New Lynn Bike Hub?"



Graph 11 Community Narratives on Improvements/Challenges at New Lynn Bike Hub

Internal Perspectives of Improvements/Challenges at New Lynn Bike Hub

"In your opinion, is there anything at the New Lynn Bike Hub that you could see improvement with?"



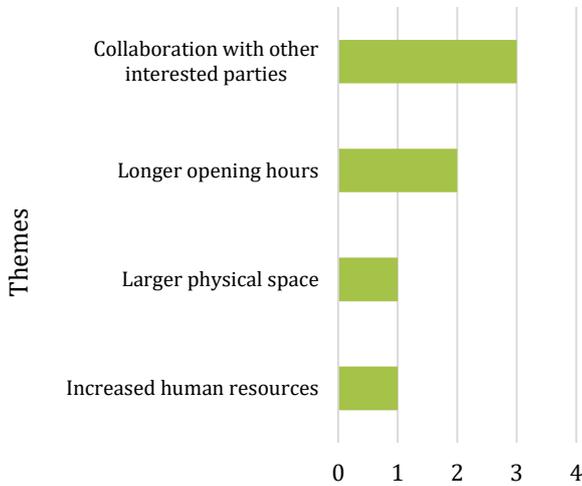
Graph 12 Internal Perspectives of Improvements/Challenges at New Lynn Bike Hub

Internal Narratives of Improvements/Challenges at New Lynn Bike Hub

“What could you see improvement with at the New Lynn Bike Hub?”

EcoMatters Staff

5 narratives provided

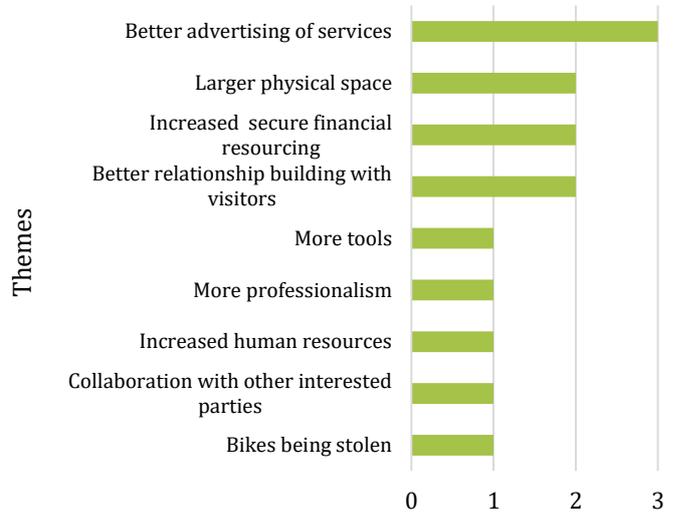


Times referenced

Note that some narratives referenced more than one theme.

Bike hub Staff

8 narratives provided

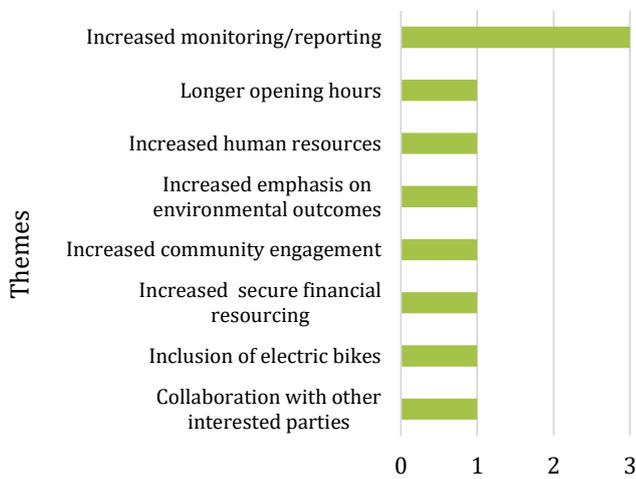


Times referenced

Note that some narratives referenced more than one

Project Partners

4 narratives provided



Times referenced

Note that some narratives referenced more than one theme.

Graph 13 Internal Narratives of Improvements/Challenges at New Lynn Bike Hub

3.1.3 Key Takeaway Messages

- The objective of the New Lynn bike hub is relevant to the needs of the community, particularly through the positive alignment of the services on offer and the community members reasons for visiting
- If using the 'stakeholder satisfaction' criterion to measure project success, it can be argued that the New Lynn bike hub is a 'success'
- Key enablers of the success of the New Lynn Bike Hub is volunteer attitude and accessibility
- Community members who are satisfied with the New Lynn Bike Hub make little to no acknowledgement that their satisfaction is due to the bike hub being a community resource
- From a community perspective, key areas needing improvement of the New Lynn Bike Hub is increasing volunteer numbers, so members of the community have the opportunity to interact with volunteers more easily
- Longer opening hours is a common piece of feedback from groups when considering areas requiring improvement
- There is a desire to collaborate with other businesses and organizations who share a common aim of the bike hub to ensure future success
- Issues such as physical space may be jeopardizing the day-to-day efficiency of the bike hub
- Project partners key area of improvement is the communication of results monitoring and tracking
- The community feel that the New Lynn bike hub is an important part of their community
- The New Lynn bike hub has met the expectations of project partners however tracking environmental outcomes would ensure the project meets expectations entirely

3.2 Effectiveness

The extent to which the Bike hub's objectives were achieved.

Assessing the effectiveness of a project focuses on exploring whether the intended objectives of the project were achieved. This can be difficult as there is often limited information available, however basic data collection in this instance can help with understand whether the initial objective of the aim is reflected in basic demographic responses to the research questionnaire. As well as this, tracking information on visitor numbers, bikes donated, volunteer hours and so on, can also provide an idea of the effectiveness of the bike hub in relation to its day to day service usage. Using more direct questions, to seek input from the various participant groups as to whether they feel that in their opinion the aim has been achieved and the bike hub has been effective at meeting this, provides important narratives to assist with future improvements. The term 'participants' will be used in the next section, to reflect that participation demographics in this research may not accurately reflect bike hub visitors but can still provide an indication of the potential diversity of bike hub visitors. However, it is intended that the use of the research participant demographics be used to reflect a moderately high level of assumption that this is reflective of the bike hub visitors.

3.2.1 *Has the Bike hub produced the intended results in the short and medium term? If so – for whom, to what extent and circumstances?*

The initial aim of the bike hub was to make cycling accessible to anyone, regardless of ethnicity, age, income or social position. Although not directly related to this aim, the data showed that there was a higher input from female participants. This may not be reflective of the general gender diversity of bike hub visitors, but may prompt further investigation. Age diversity is relatively low to medium, with a clear dominator of participants aged between 35 – 54 (Graph 14). This may be simply because people within this age group are more likely to engage with online questionnaires or research, but this finding still suggests that these are the individuals that hold an active interest in the bike hub (including an active interest in supporting the bike hub through partaking in research). The lowest age groups are 0 – 10, 65 – 74 and 75 +. Again, this may be due to the inability to access computers or low engagement with social media minimizing the chance that the online questionnaire was seen. Brent Bielby, manager of the bike hubs posted an image on the Facebook bike hub page of two teenagers stating that *“it’s great to be able to support an interest in cycling amongst teenagers. We need to be able to nurture a desire for individuality and freedom in this age group”*. Informal discussions with volunteers and staff indicated that younger people do frequently visit the bike hub, however, as indicated in an earlier section, opening hours may be an issue for accessibility for younger people that are still at school.



Image 7 Joshua (left) and John (right) spent a day at the New Lynn bike hub, building a personalised bike each from scratch (Source: Facebook)

Also, people under the age of 10 are unlikely to have any access to computers or are unable to participate in research such as this impact evaluation. Therefore, this research cannot encompass these bike hub users. Informal discussions indicate that children are frequent visitors to the New Lynn bike hub, for example three-year-old Aania (pictured below) whose father visited the bike hub to receive a balance bike for her to learn cycling.



Image 8 Father Kaushic (left) and daughter Aania (right) on a balance bike at the New Lynn bike hub (Source: Facebook)

Older visitors are also informally known to frequent the New Lynn bike hub. Conversations with volunteers reflect that there are positive numbers of retired visitors who visit the bike hub to learn how to ride a bike, as the last time that they had ridden was in their youth. For example, Ron (pictured below), aged 70, who visited the New Lynn bike hub to learn how to ride a bike. Ron had last cycled when he was 25 years old.



Image 9 Bike hub visitor Ron, aged 70 (left) and Johnny, aged 88 (right) with refurbished bikes (Source: Facebook)



Image 10 Bike hub visitors Caleb (left), Nick (middle) and Hanz (right)

The research indicated that there is little diversity in terms of ethnicity, with the majority of participants being NZ European. Again, this may not be a determinant of actual bike hub visitors. Therefore, it may be invalid to include this finding from the research as entirely reflective of the actual visitors. As it will be soon discussed, a key theme that arose when having informal conversations with internal groups whether the bike hub succeeded the original aim, was that it was evident it was successful due to the *'high number of ethnically diverse people visiting'*. As noted on two occasions recently on the bike hub Facebook page, a volunteer posted *"Zamani from Afghanistan visited this weekend, he is in process to gaining refugee status to stay here and needed a bike as relief from the tedium of the refugee facility."* Also, a volunteer posted a story explaining that *"Nora and Abdul from Saudi Arabia [came to the bike hub]. This was Nora's first ever bike ride. Women are not usually allowed to cycle in Saudi Arabia, so here she launched into it with great confidence and balanced well on her first go!"* It is understood through informal conversations with volunteers and staff, it is common for new refugees and migrants to visit the bike hub.



Image 11 Zamani from Afghanistan (left) and Nora and Abdul from Saudi Arabia (right) visiting the New Lynn bike hub (Source: Facebook)

Although the majority of participants chose not to disclose their personal, annual income, there is diversity across all income brackets. The most common (by a marginal difference) was \$20,000 – 29,999 and \$50,000 – 59,999. However, there was a noted diversity overall. This finding may indicate that the original aim of the bike hub being accessible regardless of income, may have been successfully achieved. Supplementing this finding, was a piece of feedback received by a member of the community who visits the bike hub with their family on the bike hub Facebook page stating that *“The bike hub is literally a life-saving service for us. We are a low-income family and we can’t afford to go to the bike shop for regular safety assessments. We have had several major safety issues identified and resolved that we would have never picked up if it wasn’t for the bike hub volunteers”*. However, it is difficult to assume this finding is representative of all visitors as lower income groups may have less accessibility to partake in the research due to the inaccessibility to computers. On visiting the New Lynn bike hub, I was told that *“a number of homeless people come to drop off bikes to be repaired that they find on the streets”*.

Lastly, social status was measured as seeking input from the participant on their occupation status. The most common response was full-time worker, with second being part-time worker. There is little diversity as the majority (77%) were in some form of employment. Whether this is reflective of actual bike hub users, this may indicate that social status (i.e. having paid employment) may be a significant trait of bike hub users, with no employment being the minority of users.

The data collected from the bike hub reflecting actual visitors is broken down into the service received when they arrived (Graph 15). The graph indicates that there has been an increase in visitors, and all services over the past year, considering that the 2017 year of operation was May-Dec and 2018 is Jan-Oct. The increase may indicate the bike hub is effective in the community.

Seeking responses from participants based on their opinions of the achievement of bike hubs initial aim provided little narrative. Although 79% of community members agreed that the bike hub had met its original aim, only four further narratives were provided, two coming from participants who indicated 'yes', one from the participants indicating 'maybe' and one from the only participant indicating 'no' (Graph 16 and Graph 17). The only theme across the members indicating 'yes' or 'maybe' was that the bike hub promotes cycling in the area, is accessible, but that there should be an increases of community engagement. For the participant who indicated 'no', the feedback was around inaccessibility of volunteers. This theme being one of the most common arising from critical feedback of the bike hub.

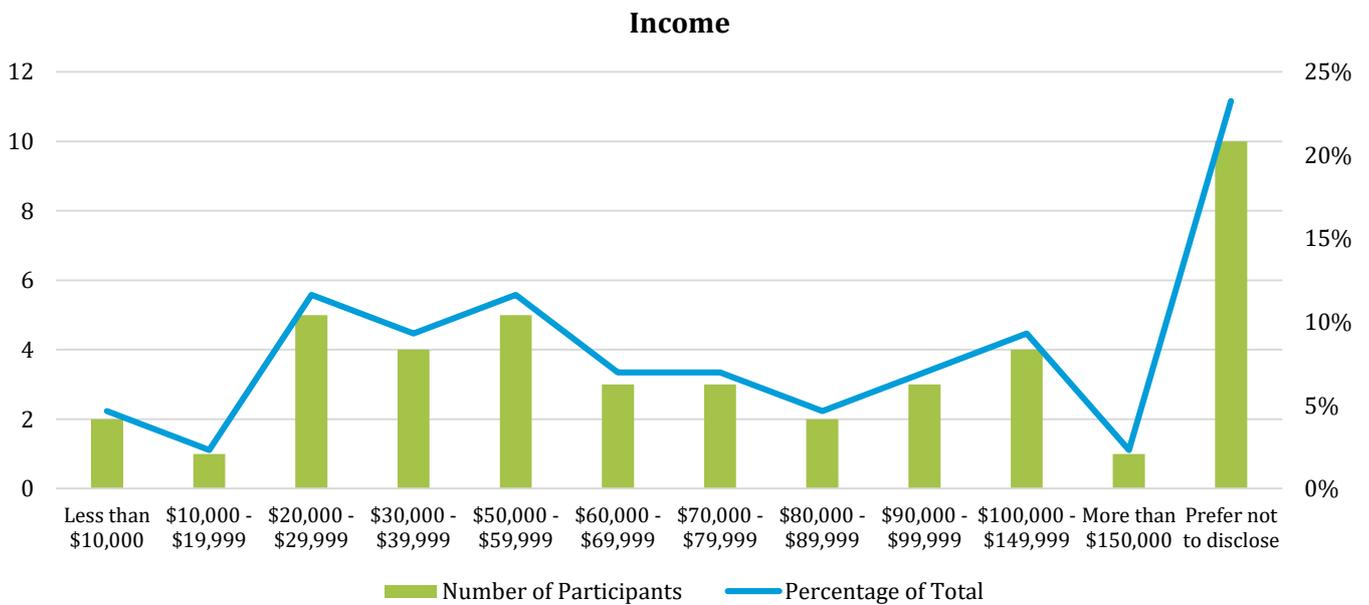
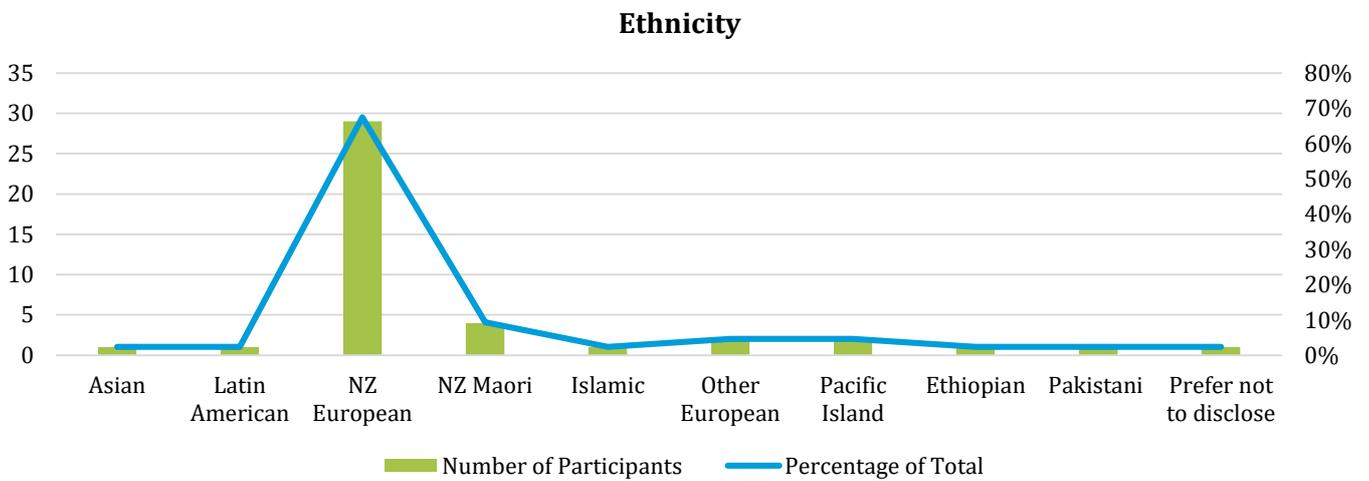
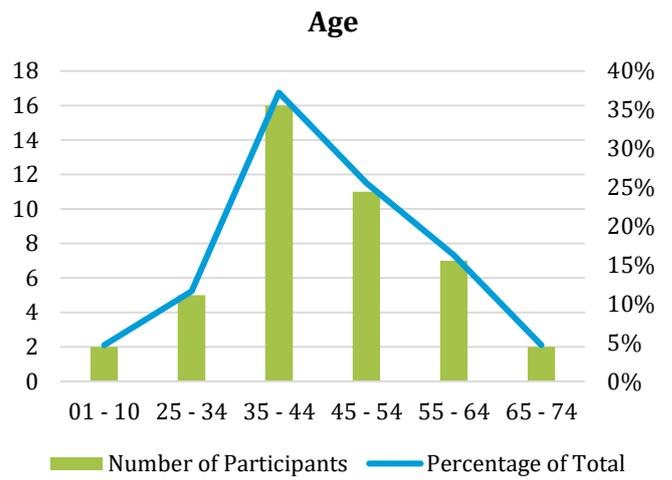
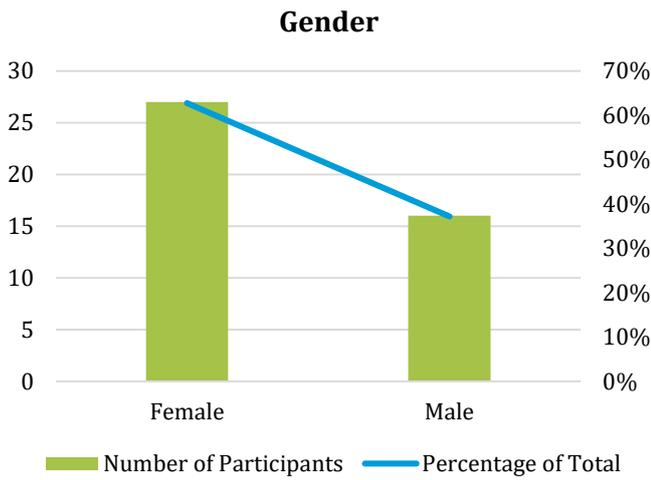
From an internal perspective, although 100% of EcoMatters staff indicated that they felt the bike hub was a success, there was little narrative provided. The themes discussed across the three narratives were that the *'bike hub achieved the aim more than I ever expected'* or that the bike hub is successful at promoting cycling, and the increased social media feedback is proof of the aim being achieved. From a project partner and bike hub staff perspective, all but one bike hub staff member indicated that the aim had been achieved. Common themes discussed were that it is evident that the aim has been achieved due to the diversity of visitors with varying ethnicities and incomes. A bike hub staff member who stated that the aim is 'somewhat' achieved, stated that more could be done to engage with the various diverse groups in the community. However, with little narratives provided, it is difficult to make any concluding statements and further research would be beneficial specifically focusing on this aim – particularly around monitoring and tracking actual visitors and their demographics to the bike hub.

Lastly, the New Lynn bike hub has had positive media attention on a national level. In August 2017, Radio New Zealand interviewed Brent Bielby (Manager, EcoMatters Trust Bike Hubs) and Damon Birchfield (CEO, EcoMatters Trust) on the success of the New Lynn bike hub. The discussion was based around how the aims of the bike hub positively aligned to the (then) current state of Government priorities around reducing congestion on the roads and the promotion of skill sharing, living sustainably and promotion of health and wellbeing through cycling. The news piece received positive feedback on social media channels.

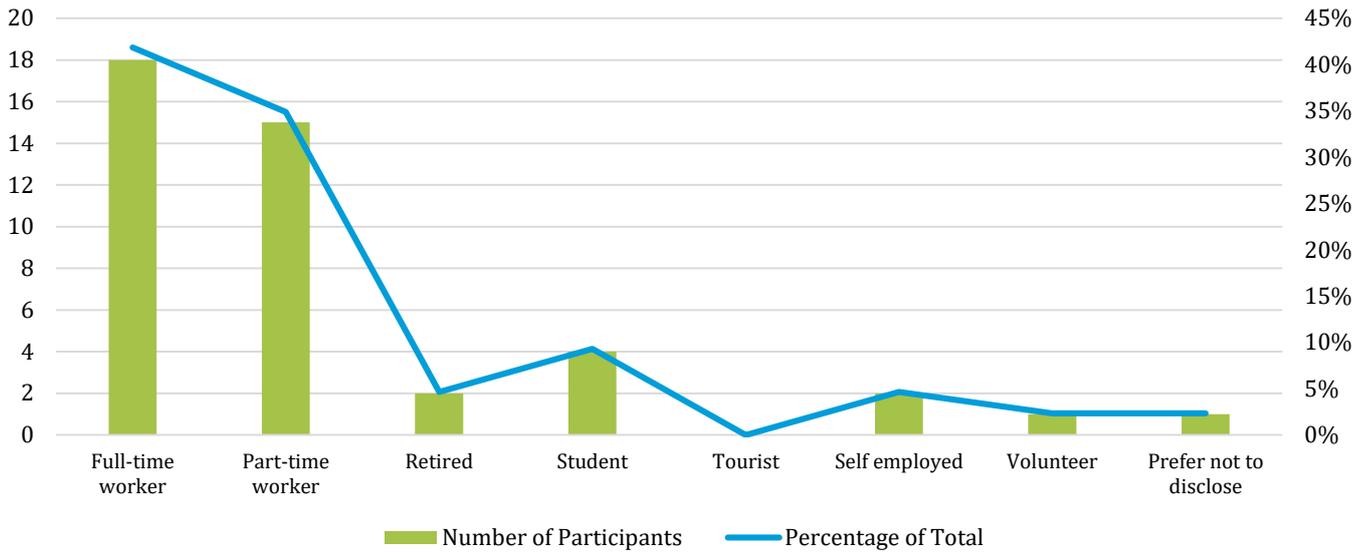
3.2.2 Key Takeaway Messages

- Although it may not accurate to perceive research participant demographics as entirely reflective of all bike hub visits, results indicate a low ethnic diversity and social status diversity engaging with the bike hub
- Although it may not accurate to perceive research participant demographics as entirely reflective of all bike hub visits, results indicate that there is a strong diversity in income and ages engaging with the bike hub
- Further research would need to be conducted specifically on diversity of bike hub visitors to successfully determine whether the original aim [*making cycling accessible regardless of ethnicity, age, income and social status*] has been achieved

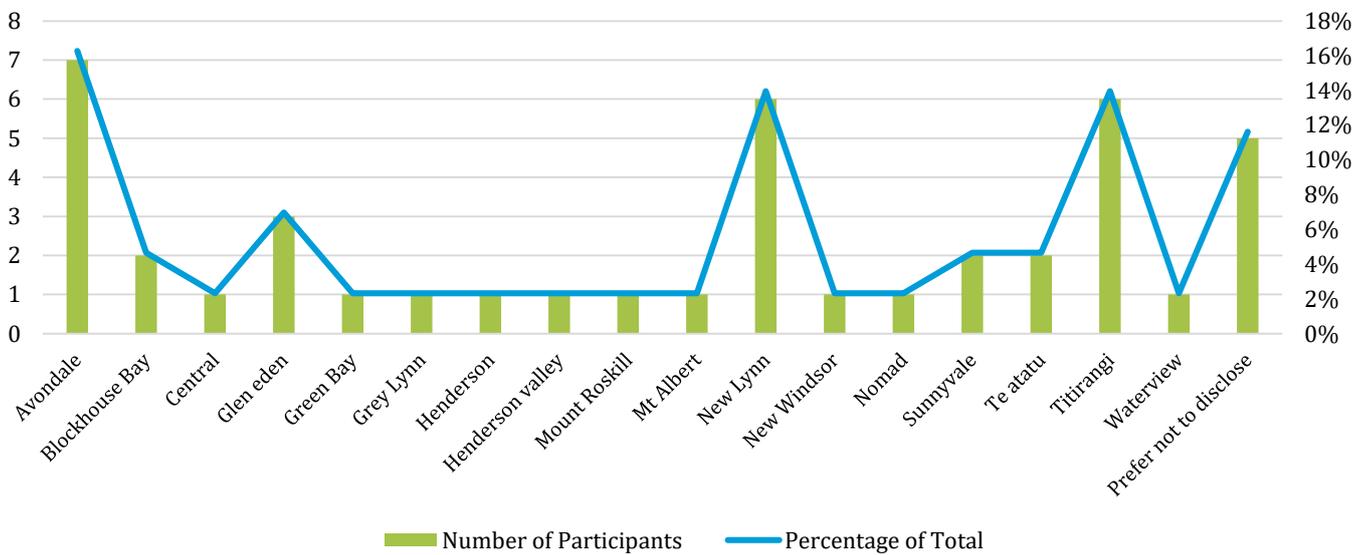
Research Participants/Bike Hub Users



Social Status/Occupation

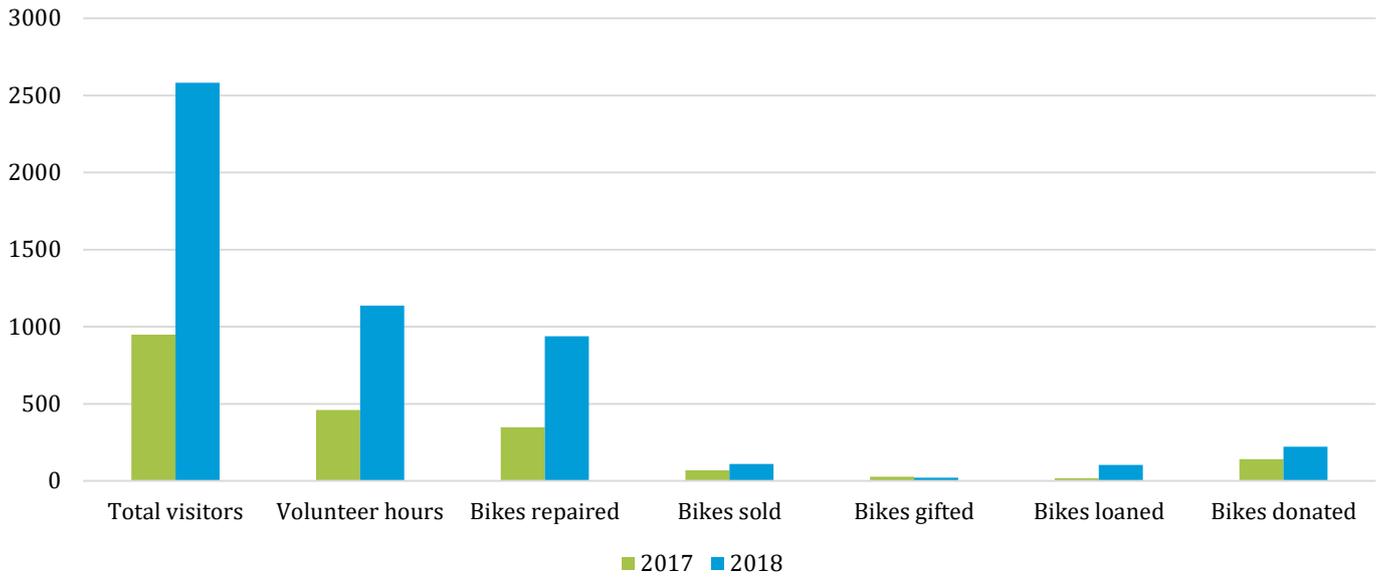


Place of Residence



Graph 14 Demographics of Research Participants/Bike Hub Users

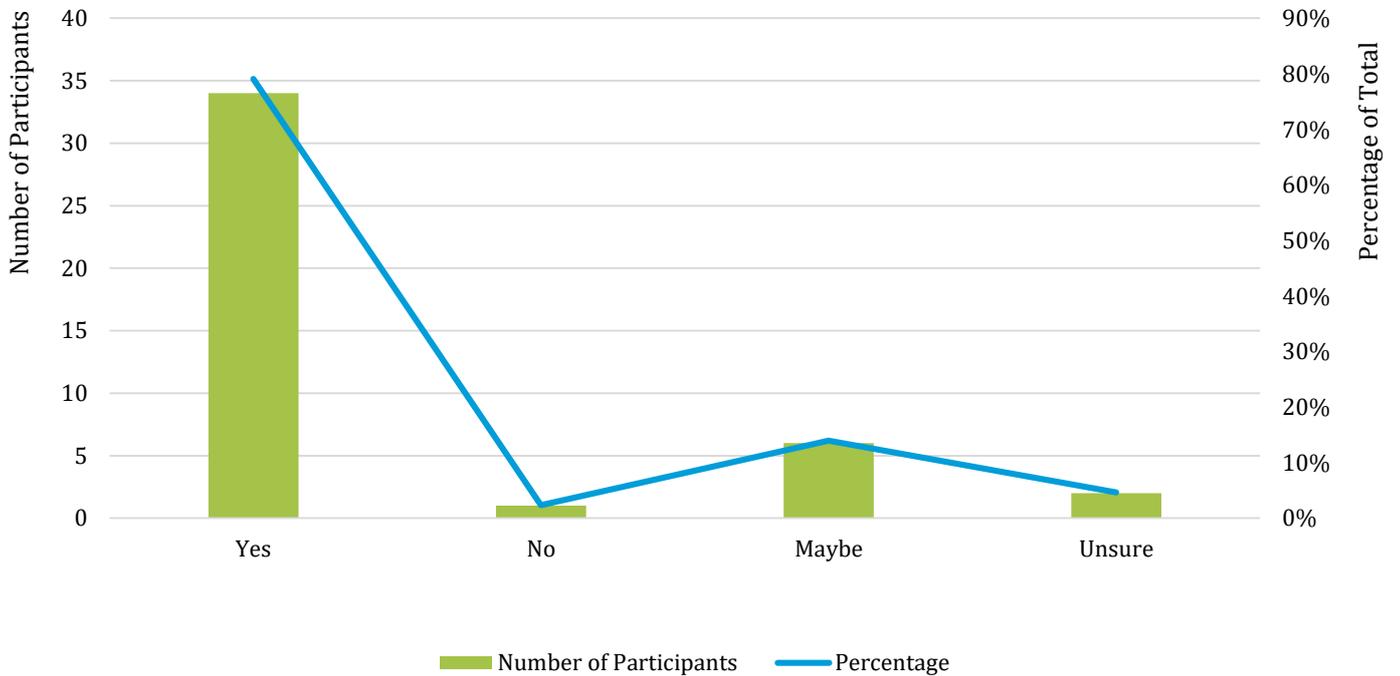
New Lynn Bike Hub Traffic



Graph 15 New Lynn Bike Hub Traffic

Community Perspectives on Intended Aim of New Lynn Bike Hub

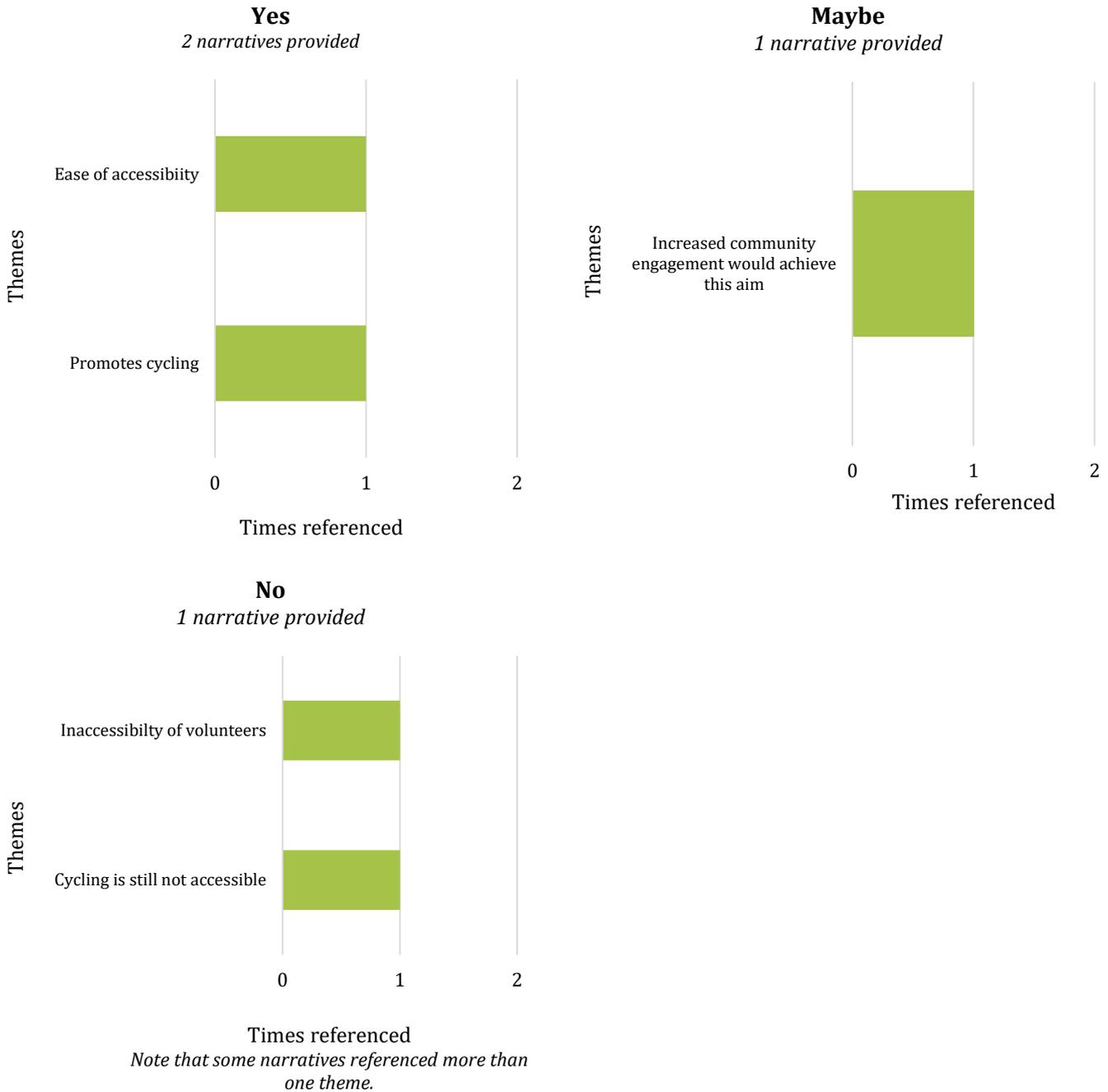
"The initial aim of the New Lynn bike hub is 'making cycling accessible to anyone, regardless of ethnicity, age, income or social position'. Do you feel this has been successful?"



Graph 16 Community Perspectives on Intended Aim of New Lynn Bike Hub

Community Narratives on Achieving Intended Aim of New Lynn Bike Hub

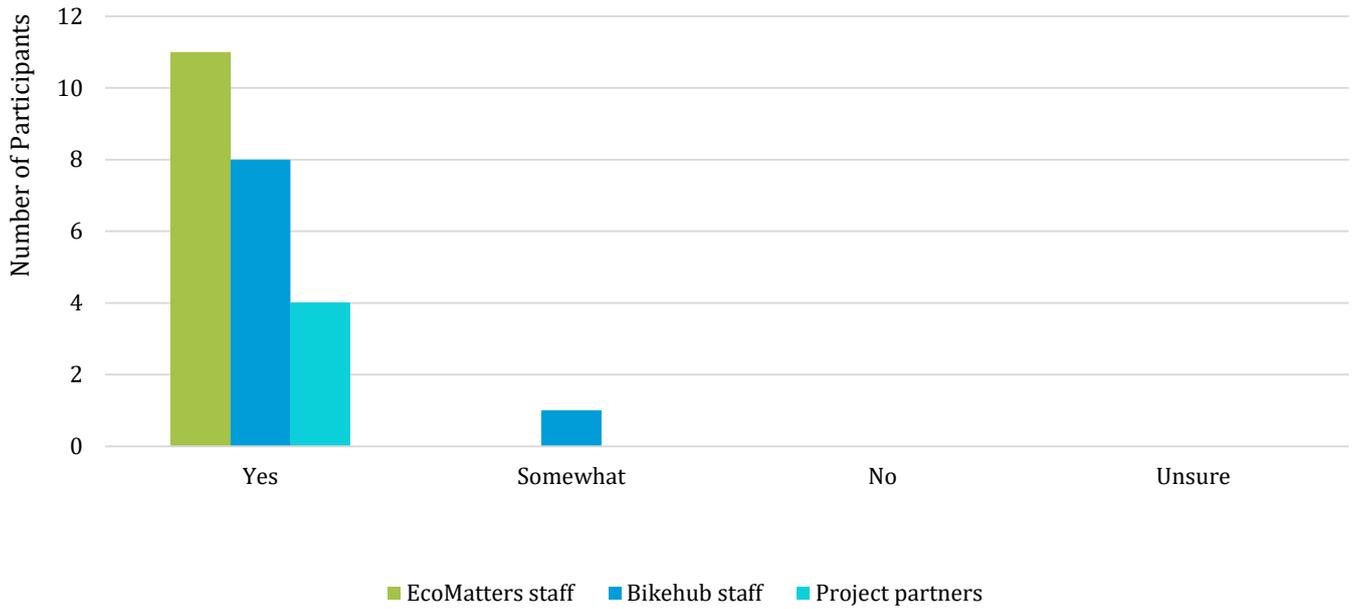
“Why/why not do you think the New Lynn Bike Hub has achieved this aim?”



Graph 17 Community Narratives on Achieving Intended Aim of New Lynn Bike Hub

Internal Perspectives on Intended Aim of New Lynn Bike Hub

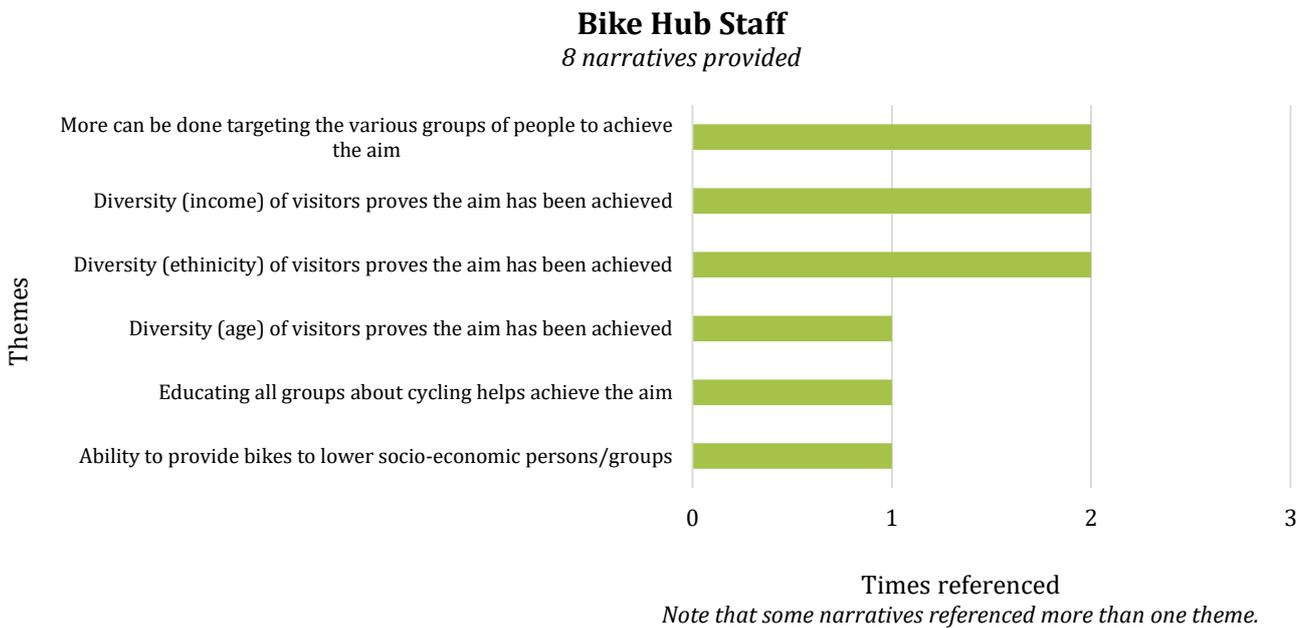
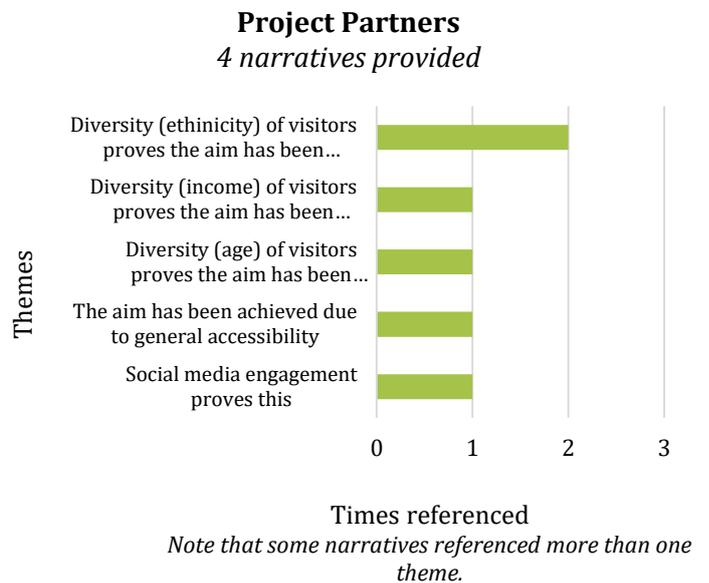
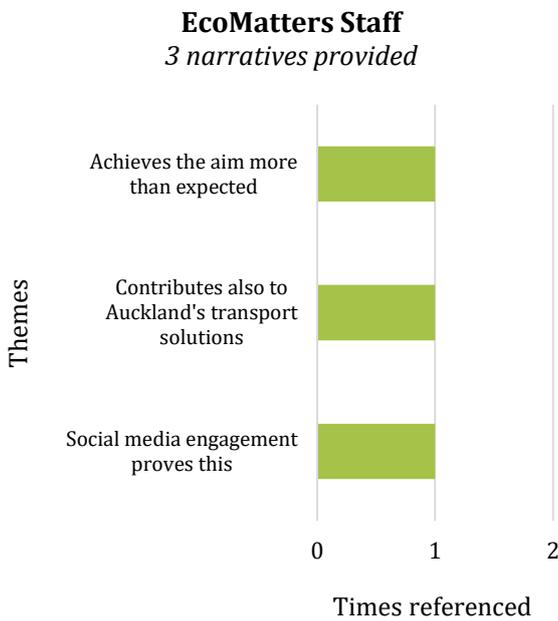
"The initial aim of the New Lynn bike hub is 'making cycling accessible to anyone, regardless of ethnicity, age, income or social position'. Do you feel this has been successful?"



Graph 18 Internal Perspectives on Achieving Intended Aim of New Lynn Bike Hub

Internal Narratives on Achieving Intended Aim of New Lynn Bike Hub

“Why/why not do you think the New Lynn Bike Hub has achieved this aim?”



3.3 Impact

Positive and negative primary and secondary long-term effects produced by the Bike hub - directly/indirectly or intended/unintended

Assessing the impact of a project involves measuring the totality of the effects brought on by the project. This includes intended and unintended impacts, as well as positive and negative impacts. This criterion is different from *Effectiveness* where the aim is to measure the intended results. As this research is the first project relating

to the New Lynn bike hub, the results from this criterion can assist with setting a baseline of impact. Investigating these deeper impacts of a project requires a deeper investigation and is commonly qualitative in nature. This helps with capturing the 'essence' of a project, and entails a more flexible method of research. For example, use of open ended questions and moving away from testing strict variables, allowing participants to determine the themes for analysis and working 'bottom up'. This KEQ also makes reference to how the bike hub contributes to the global Sustainable Development Goals.

3.3.1 Sustainable Development Goals

The bike hub project contributes to a number of the United Nations Sustainable Development Goals. The table below addresses each goal, and how the New Lynn bike hub contributes to each of the goals.

Table 3 Linkage of Sustainable Development Goals to New Lynn Bike Hub

Goal 1: No poverty End poverty in all its forms everywhere	The bike hub supports ending poverty by providing lower socio-economic groups to access cycling, through repairing and refurbishing bikes and selling them below market prices or gifting bikes for free. The bike hub provides free expertise that is accessible to all income brackets.
Goal 2: Zero hunger End hunger, achieve food security and improved nutrition and promote sustainable agriculture	Not applicable
Goal 3: Good health and well-being for people Ensure healthy lives and promote well-being for all at all ages	The bike hub supports positive physical health through the promotion of cycling as an alternative means of transport. The bike hub is accessible to all age groups.
Goal 4: Quality education Ensure inclusiveness and equitable quality education and promote lifelong learning opportunities for all	Education regarding safe cycling, and how to repair bikes is provided free for all members of the community by the bike hub.
Goal 5: Gender equality Achieve gender equality and empower all women and girls	Not applicable
Goal 6: Clean water and sanitation Ensure availability and sustainable management of water and sanitation for all	The bike hub reduces water pollution through
Goal 7: Affordable and clean energy Ensure access to affordable, reliable, sustainable and modern energy for all	Not applicable
Goal 8: Decent work and economic growth Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	The bike hub offers volunteer positions and they are open to any member of the community. A number of volunteers have gone on to paid positions in other organisations
Goal 9: Industry, innovation and infrastructure Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	The bike hub supports innovation through developing the bike hub model that can be duplicated and used nationwide.
Goal 10: Reducing inequalities Reduce income inequality within and among countries	Provides support for community members with low income. Bikes are provided free of charge or at very low cost.
Goal 11: Sustainable cities and communities Make cities and human settlements inclusive, safe, resilient and sustainable	The bike hub supports sustainable cities through the promotion of sustainable transport.
Goal 12: Responsible consumption and production Ensure sustainable consumption and production patterns	The bike hub supports sustainable consumption through upcycling waste bikes and re-selling them to avoid over consumption of virgin bikes
Goal 13: Climate action Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy	The bike hub supports reducing the causes of climate change through promoting cycling as an alternative means of transport. This naturally results in getting more cars off the road and reducing transport emissions
Goal 14: Life below water	Not applicable

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Goal 15: Life on land

Not applicable

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Goal 17: Partnership for the goals

The bike hub is demonstrative of a strong local government-NGO partnership

Strengthen the means of implementation and revitalize the global partnerships for sustainable development

3.3.2 *What results - positive and negative, intended or unintended, has the Bike hub produced?*

This KEQ was investigated in two ways. Firstly, through directly asking if the bike hub has had a positive impact on their lives, and secondly, asking community members how they felt when they were at the bike hub and the words they would use to describe it. The aim of this was to generate unexpected themes to particularly help with capturing the unintended results.

When asking community members if the bike hub has had a positive impact on their lives, 86% indicated 'yes' (Graph 19). The common themes from narratives provided is that the bike hub helped them to learn new skills, and that it has helped them gain confidence to cycle. This result can be considered a positive result, but whether or not it was intended may have been indirectly intended. Participants who were either unsure or maybe had only either visited the bike hub once or had not experienced an impact themselves but acknowledged the impact they could see on the community. The participant who indicated no, had discussed having felt 'awkward' when visiting due to inaccessibility to volunteers. Although only making up one response, this was likely an unintended impact.

Community members were also asked how they 'feel' when they are at the bike hub (Graph 20). The most common words used by participants were 'welcomed', 'happy' and 'positive'. Considering the aim of the bike hub is to make cycling accessible, positive emotional responses when visiting the bike hub were likely unintended but reflect that the bike hub is having a positive impact on visitors. When asked how participants would describe the bike hub, common words used were 'friendly', 'helpful' and that it a 'important part of the community'. Following on from earlier comments, these results highlight again that volunteer attitudes are strongly associated with the perception of the bike hub.

Interestingly, there was no narrative or comments on the bike hub helping to have positive physical health impacts on community members. This is likely unintended, as an underlying objective of the bike hub is to promote well-being through the use of getting active and cycling as a main form of transport.

Of most interest were responses regarding the impact on bike hub staff lives (Graph 23). Most likely unintended, were the positive impacts on mental health. Informal discussions and narratives that the bike hub had "really helped me emotionally" or "helps me when I feel depressed" were unexpected and indicates that the impacts of the bike hub reach far beyond the original aim of making cycling accessible. Bike hub volunteers who stated that they "feel really good when I help people" reflects that the bike hub has influenced individual's personal wellbeing and emotions through simply being involved with the daily management of the bike hub services. As a researcher, visiting the New Lynn bike hub had an extremely positive impact on me at an emotional level. It was evident

through hours of informal discussions that the bike hub was an important part of many visitors lives. The area generated a feeling of warmth and connectedness, with groups from diverse backgrounds interacting on a deeply, personal level. This was something I never experienced before at a shared community facility run by a social enterprise.

Although this impact evaluation was unable to undertake an extensive analysis of the environmental impacts of the New Lynn bike hub, over the past year, 209 bikes were donated. Given that the majority of these bikes needed repair and refurbishment, it can be assumed that a percentage of them may have been sent to landfill. Therefore, it is assumed that the bike hub plays a role in diverting waste away from landfill.



Image 12 Bike hub volunteer Mark (left) with recycled bike part art (Source: Facebook)

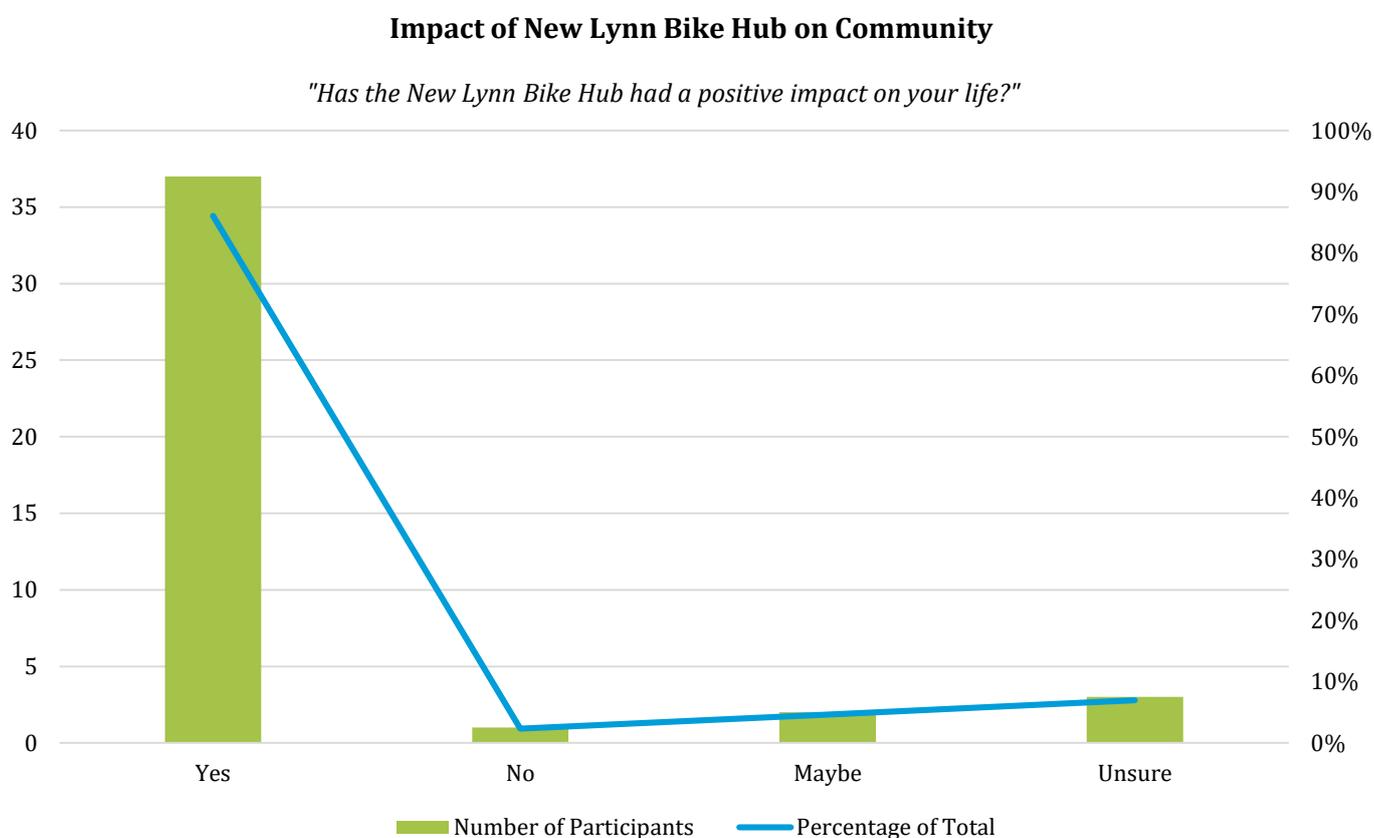


Image 13 Bikes and parts dropped off by a bike hub visitor to be recycled (Source: Facebook)

Lastly, from an EcoMatters staff perspective, positive impacts that were felt from the bike hub included the increased exposure for the entire EcoMatters organization, including ‘more people knowing that we exist, seeing our community gardens and realizing we have an office here’ (Graph 24). Although it is unsure what direct positive impact this may have had on the EcoMatters Trust, increased exposure can be assumed to come with greater visits to the EcoMatters website, greater understanding of the organisations key projects and potentially interest in volunteering, donating or other means of getting involved.

3.3.3 Key Takeaway Messages

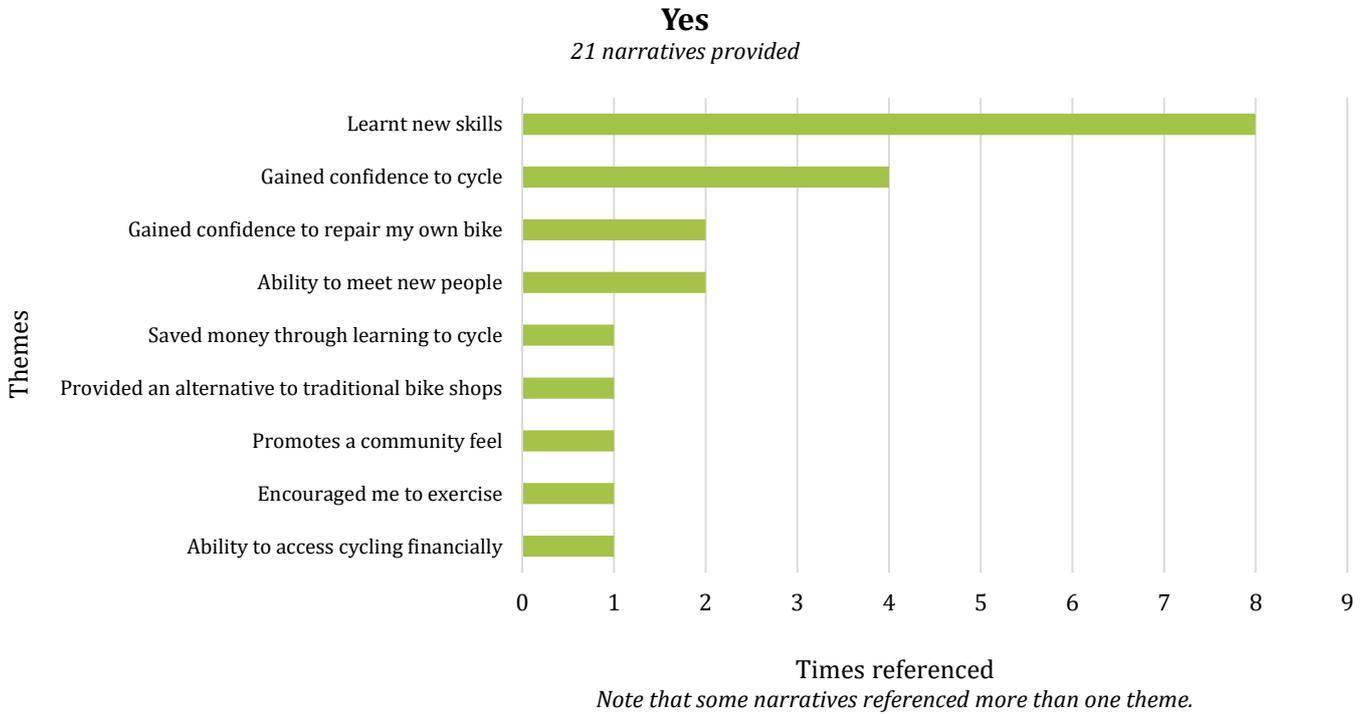
- The New Lynn bike hub is having a positive impact on the community and bike hub volunteers
- Community members feel welcomed when at the bike hub, including feeling happy and positive
- Positive impact on bike hub volunteer's mental health is a notable finding from this research, most likely an unintended positive impact
- There were no noted negative impacts of the bike hub on any participant group
- No community members reference the benefits of the bike hub to their personal physical health
- The New Lynn bike hub may be responsible for the diversion of broken bikes from landfill, helping to reduce waste in the region contributing to positive environmental outcomes. However, this area would require further research



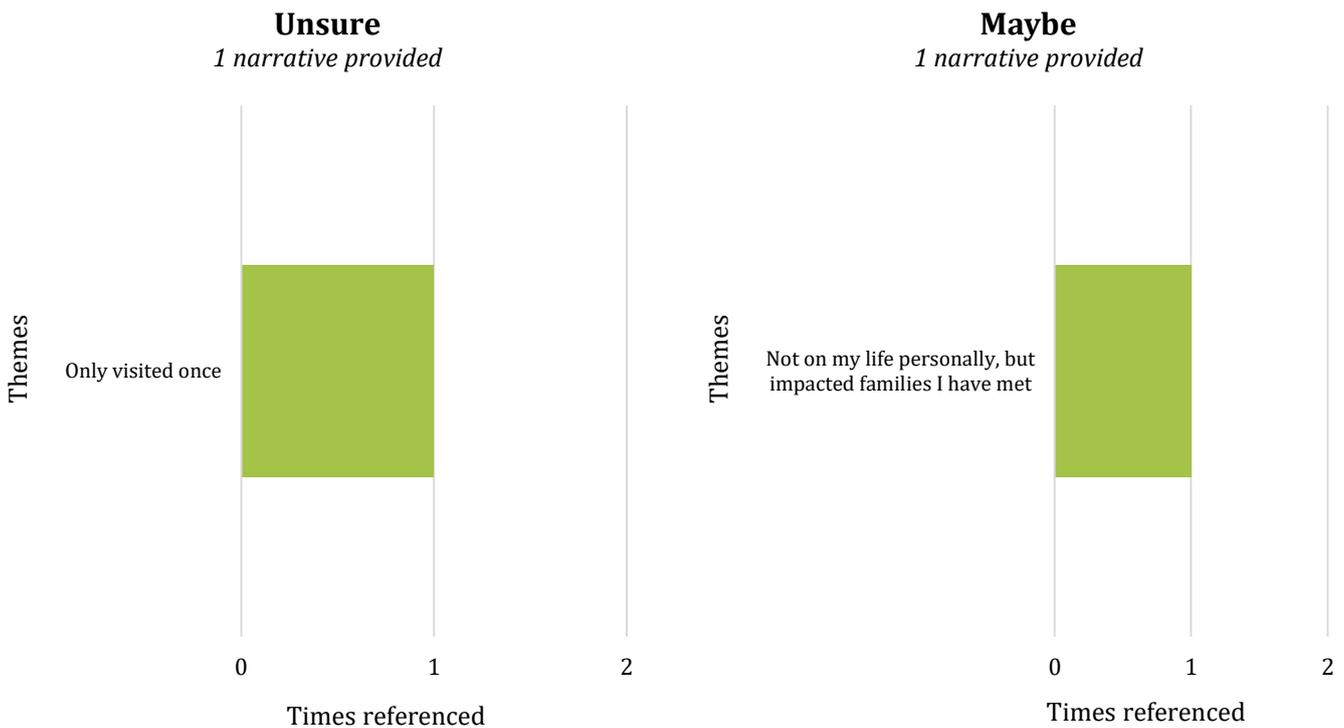
Graph 19 Impact of New Lynn Bike Hub on Community

Community Narratives on Impact of New Lynn Bike Hub

“Why/why not has the New Lynn Bike Hub had a positive impact on your life?”



Graph 20 Community Narratives on Impact of New Lynn Bike Hub

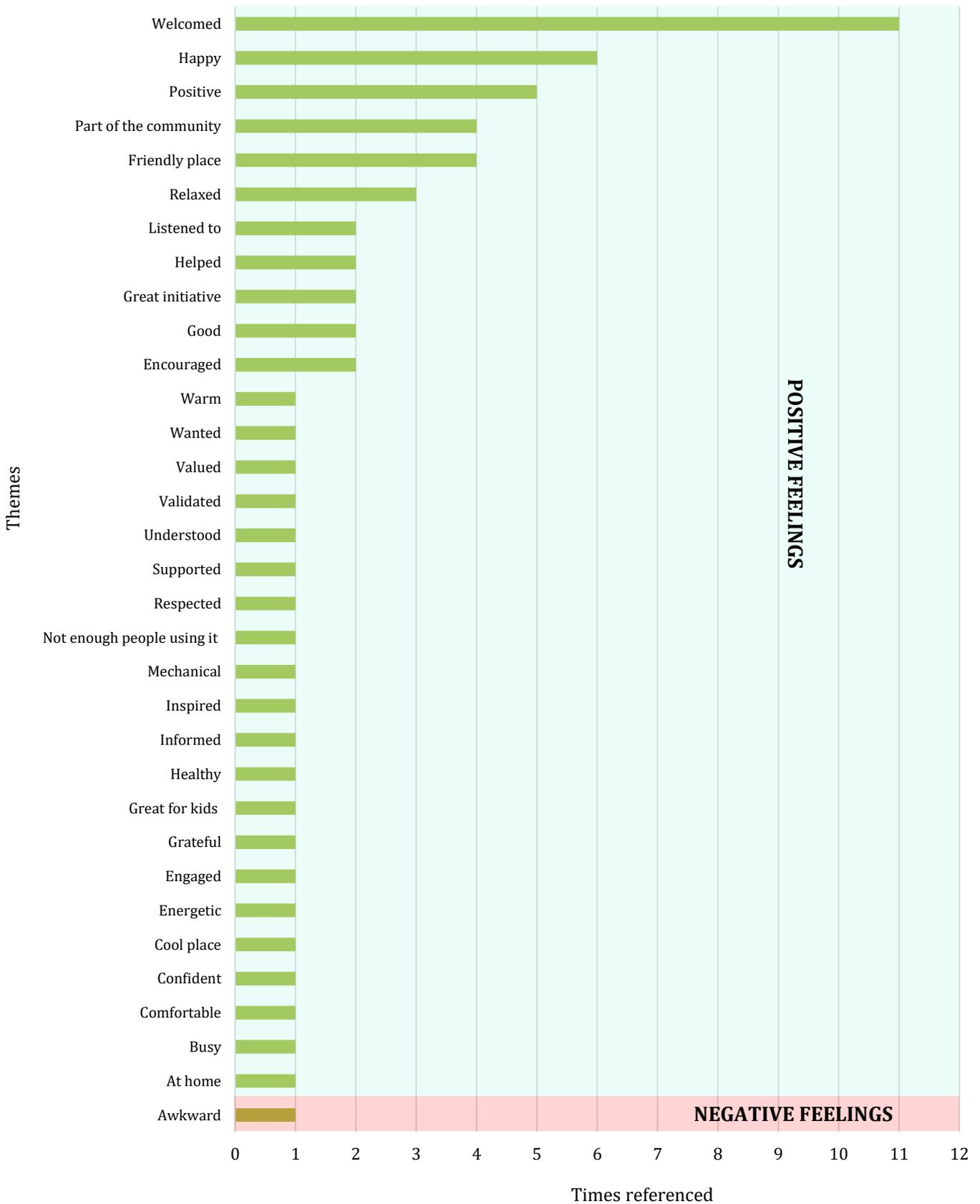


Graph 21 Community Narratives on Impact of New Lynn Bike Hub

Community Feelings at the New Lynn Bike Hub

"How do you feel when you are at the New Lynn Bike Hub?"

42 narratives provided



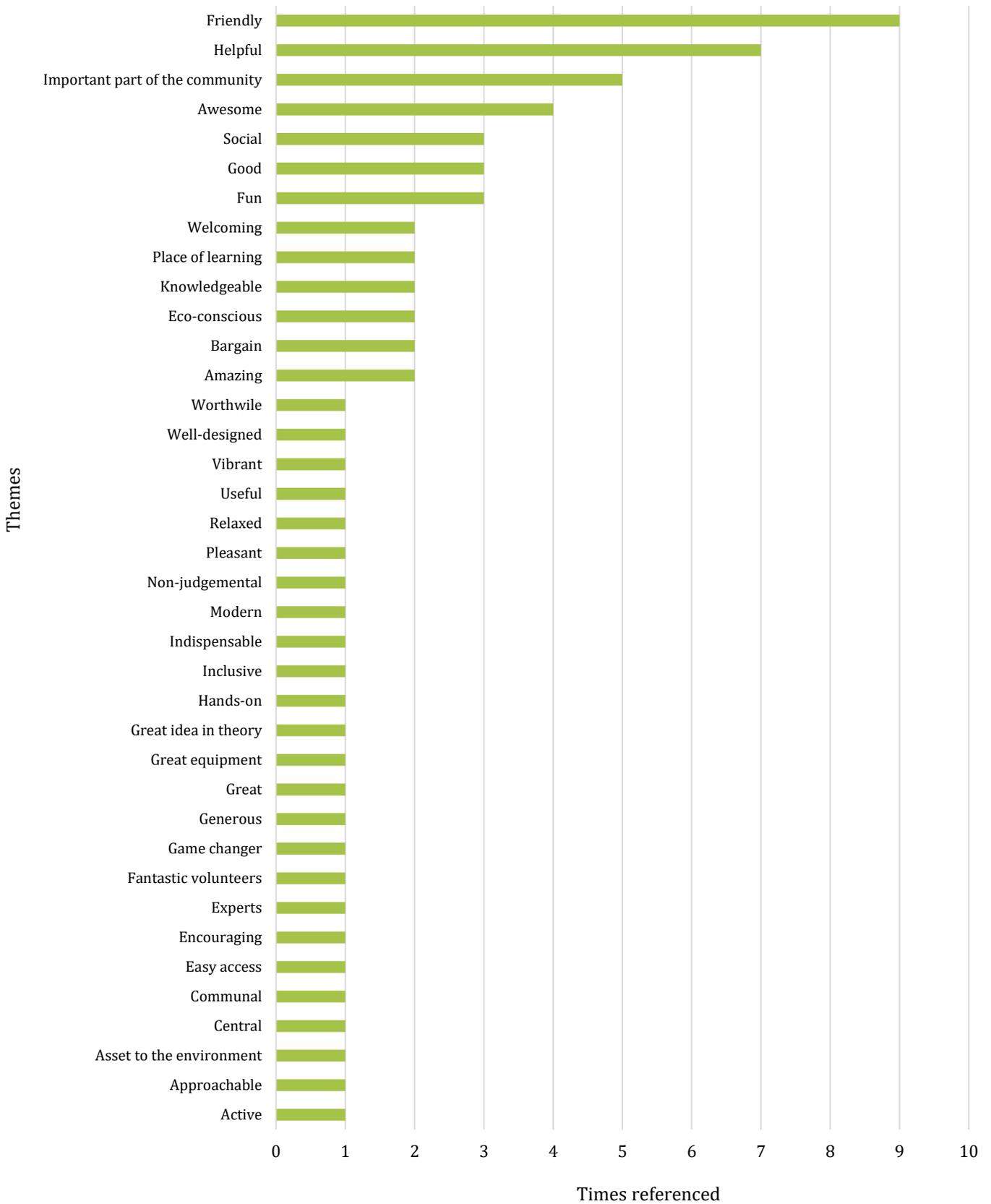
Note that some narratives referenced more than one theme.

Graph 22 Community Feelings at New Lynn Bike Hub

How Community Members Perceive The New Lynn Bike Hub

"What words would you use to describe the New Lynn Bike Hub?"

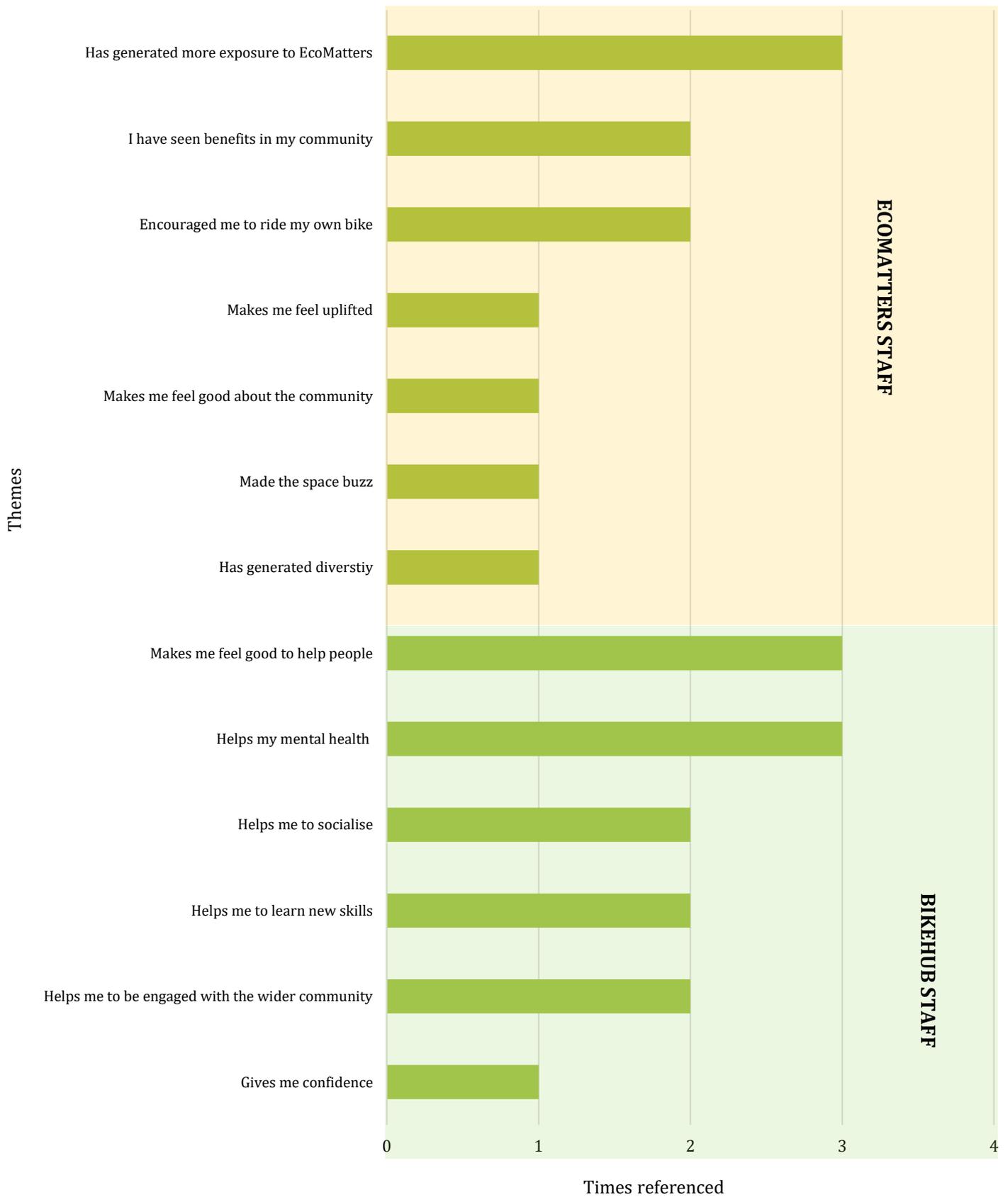
42 narratives provided



Graph 23 How Community Members Perceive the New Lynn Bike Hub

Internal Impacts of the New Lynn Bike Hub

"What impact has the New Lynn Bike Hub had on you personally / the work you do?"
42 narratives provided



Graph 24 Internal Impacts of the New Lynn Bike Hub

3.4 Efficiency

A measure of how economically resources/inputs (funds, expertise) are converted into results

Assessing efficiency is looking at the relationship between resources allocated to the project and the results achieved. As the results achieved from the project are discussed across all KEQs, this section should be read in conjunction with the impacts, and value creation in the community discussed in other sections.

3.4.1 To what extent does this project represent the best possible use of available resources to achieve results of greatest possible value to the community?

As the value of the bike hub for the community is through the services on offer by the bike hub (i.e. teaching repair skills, loaning bikes, etc.) the value of this can be measured through the positive impacts that are apparent through the findings of this research. Therefore, to calculate how the best possible use of available resources achieve this value in the community, value creation through bikes donated and repair skills will be calculated to present how the bike hub model can generate financial value to promote community value with a limited amount of resources.

Table 4 Value Generation of New Lynn Bike Hub

October 2017 - October 2018	
Volunteer hours	1,111
Value of total volunteer time (Ministry for the Environment, 2017)	\$30.00
Total value of volunteer time	\$33,330.00
Bikes repaired	909
Bikes received (donated)	245
Average cost of waste bike	(\$10.00)
Average cost of an un-refurbished bike	\$50.00
Average cost of a refurbished bike	\$100.00
Average value of bike repair	\$50.00
Value of total bikes repaired	\$45,450.00
[Refurbished] Value of total bikes received (donated)	\$24,500.00
Grand total of financial value generated	\$103,280.00

As well as direct financial value generation, the New Lynn bike hub generates notable value through skill sharing, empowerment, movement away from reliance on vehicles, health and wellbeing benefits from physical exercise. Riding a bicycle instead of driving a car has numerous indirect economic impacts often because the costs and benefits are borne and accrued by society in general rather than the individual user. Although little work has been done in New Zealand to attempt to quantify this, Canadian researcher Todd Litman of the Victoria Transport Policy Institute has attempted to quantify the benefits of switching from driving to bicycling. Litman estimated that replacing a car trip with a bike trip saves individuals and society \$1.43 CAD per mile travelled (Litman,

2018). Litman broke-down the indirect costs as follows (based on conditions in Canada, so only to be referenced as a general guide for New Zealand):

Table 5 Proposed Value Generation of Bicycle Riding (CAD)

Benefits of 1,000 miles (1,609km) shifted to Non-motorized transport		
Benefit	Per Mile (1.6km)	Total
Congestion reduction	\$0.02	\$200.00
Roadway cost savings	\$0.05	\$500.00
Vehicle cost savings	\$0.20	\$2,000.00
Parking costs (assuming 1 mile (1.6km) trip length)	\$1.00	\$10,000
Air pollution reduction	\$0.05	\$500.00
Noise pollution reduction	\$0.03	\$300.00
Energy conservation	\$0.04	\$400.00
Traffic safety benefits	\$0.04	\$40.00
Total	\$1.43 (\$1.56NZD)	\$14,300.00 (\$15,640 NZD)

This breakdown provides a general guide for the potential indirect, financial and societal benefits that the New Lynn bike hub generates. A total number of 2,583 people visited the New Lynn bike hub in the past calendar year (Graph 15). Making an informal assumption that 50% of visitors shift 1.6km of their motorized transport to cycling per month, this would generate over \$2,000NZD in indirect financial and societal monthly value. However, further research would be recommended to explore the indirect community value generated by the New Lynn bike hub.



Image 14 Te Kura Kaupapa Māori o Ngā Maungārongo visiting New Lynn bike hub (Source: Facebook)

3.4.2 Key Takeaway Messages

- Due to volunteer commitment, the bike hub is able to generate financial value which continues on to generate value to the community and to support it in being a self-sustaining model
- Based on overseas research, the indirect, societal financial benefits of promoting cycling exceed \$1.56 NZD per 1 mile, therefore it is assumed that the New Lynn bike hub is contributing to the wider societal benefits through cycling promotion

3.5 Sustainability

The continuation of benefits from the Bike hub

Sustainability assessments of a project focus on the longer-term impacts from the project, as well as the financial and institutional sustainability of the project. Assessing sustainability implies focusing on the likelihood that the effects of the project will be maintained over time, and whether the status quo relating to resourcing is likely to be maintained long term.

3.5.1 Are the impacts from the bike hub likely to be sustainable?

Based on previous results across the earlier KEQs, it is evident that a key impact from the bike hub is education and promoting positive experience through social interaction. Specifically, due to the approach of teaching visitors to maintain their own bikes instead of repairing bikes as a service, will likely generate impacts that will continue long-term. However, in terms of the service being regarded as a 'place or learning' and a 'community resource', the actual physical structure of the bike hub would need to remain to continue fostering these ongoing impacts. However, the New Lynn bike hub was intended to be a pilot model to test whether the bike hub concept would be effective. The results from this succinct evaluation have indicated that the model is proving successful having a wide range of positive feedback and noted impacts.

To understand how the impacts of the bike hub as a conceptual model may be sustainable, EcoMatters staff and project partners were asked to describe how they viewed the future of the bike hub (Graph 26). The most common theme referenced was that it could provide a model for national growth, and that there is 'lots of potential'. This may indicate that the results alone from the bike hub services may have indirect ongoing impacts through the initiation of more bike hubs, across Auckland and New Zealand.

3.5.2 Is the current bike hub model likely to be sustainable?

The bike hub relies heavily on volunteer commitment. Given that the model is predominantly self-sustaining, the future of the bike hub will most likely continue to rely on volunteer time to survive financially into the near future. To determine whether the current bike hub model is likely to be sustainable in the long term, establishing the future commitment of current volunteers is useful. The results have indicated that all volunteers currently at the bike hub are committed to providing volunteer time indefinitely (Graph 25). This commitment plays a huge role in the security of the bike hub. However, in order for the bike hub to continue to be a self-sustaining model financially, there is also a reliance on increased visitors and increased bike donations that can be on-sold. In attempt to measure whether the visitor numbers will continue, or grow, community members were asked how

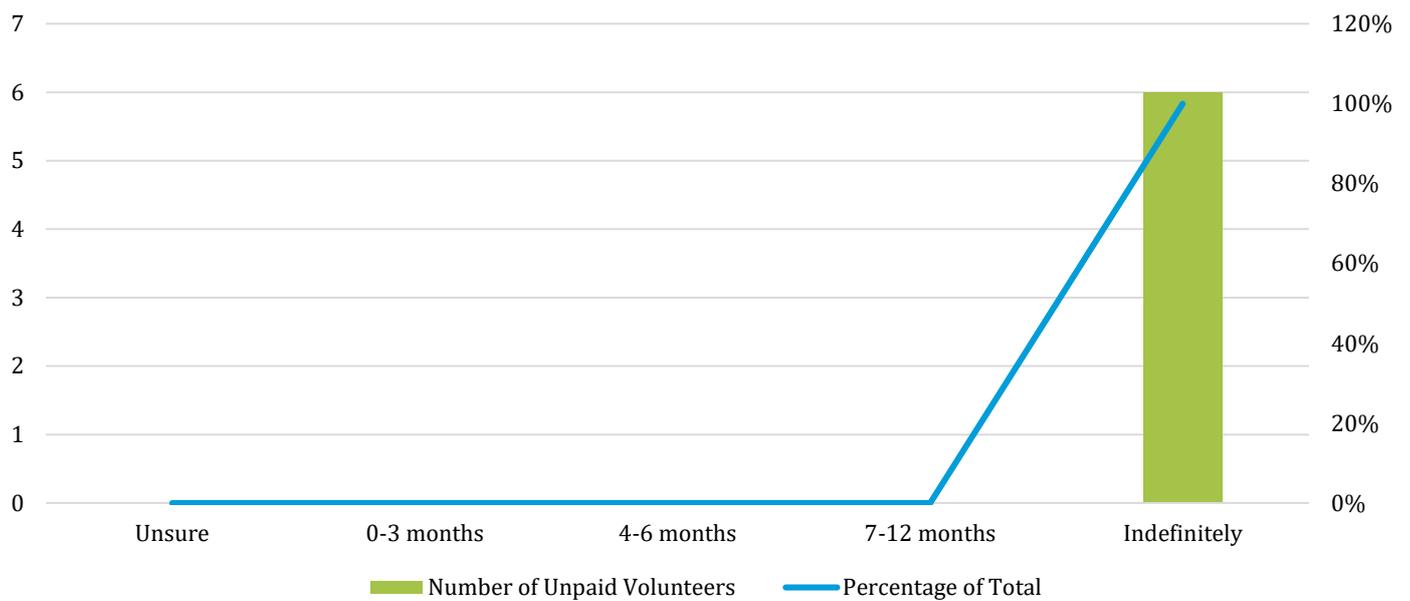
likely they would recommend the bike hub to friends and family (Graph 27). A large number (96%) stated that they were likely (either extremely or moderately). If these intentions follow through, then it can be assumed that visitor numbers should continue to grow.

3.5.3 Key Takeaway Messages

- The nature of the services the bike hub offers entails that impacts from the bike hub will be long term across the community
- Ongoing volunteer commitment is likely to ensure the financial security of the bike hub
- Increased word of mouth which is likely to occur will result in higher visitor numbers will support the future financial security of the bike hub as a self-sustaining model

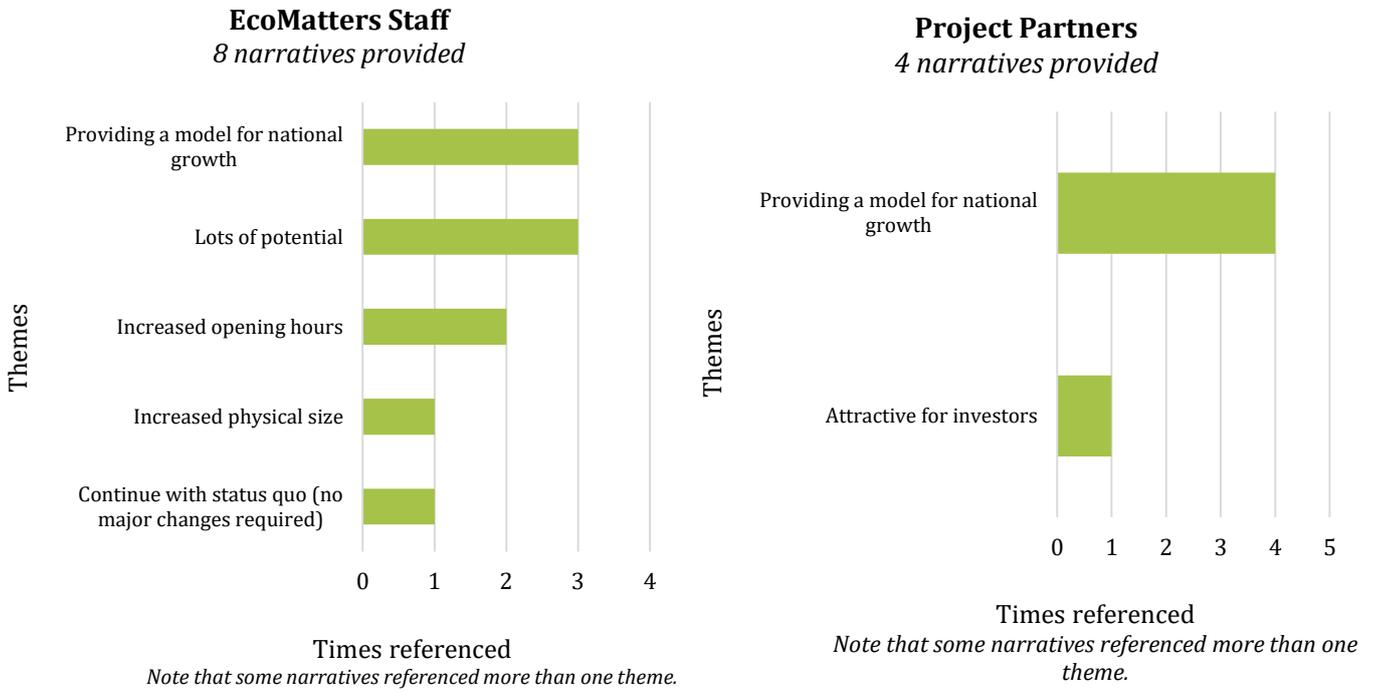
Future Unpaid New Lynn Bike Hub Volunteer Commitment

"How long will you continue to volunteer at the New Lynn Bike Hub?"



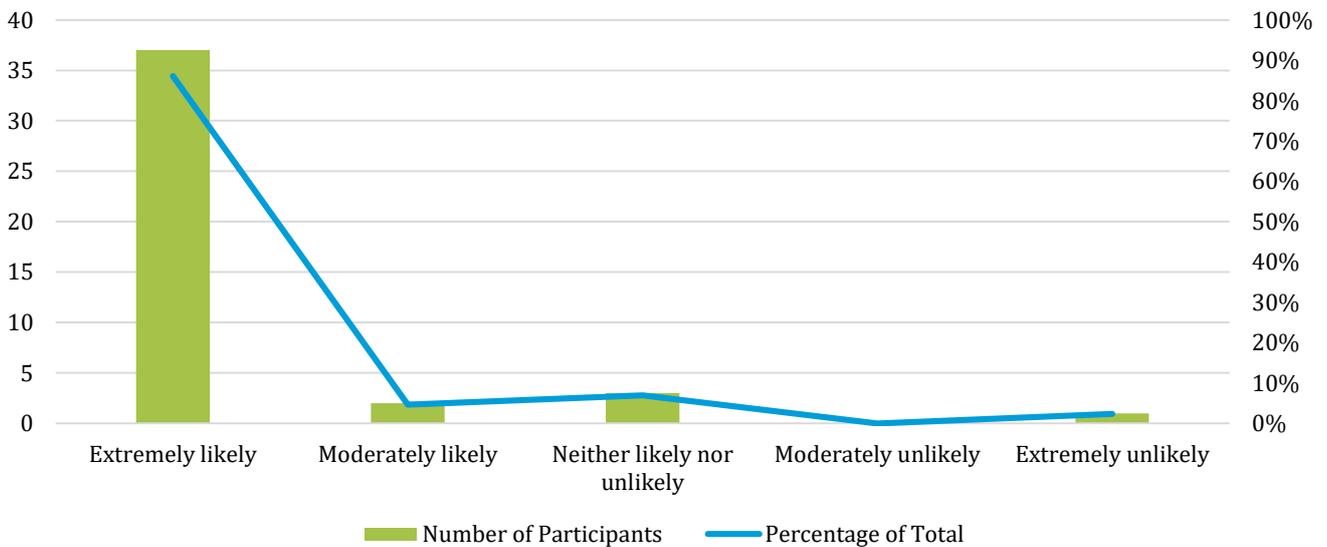
Graph 25 Future Unpaid New Lynn Bike Hub Volunteer Commitment

Perspectives on the future of New Lynn Bike Hub
"Describe the future of the New Lynn Bike Hub"



Graph 26 Internal Perspectives of the Future of New Lynn Bike Hub

Community Likelihood of Recommending New Lynn Bike Hub
"How likely are you to recommend the bike hub to friends and family?"



Graph 27 Community Likelihood of Recommending New Lynn Bike Hub

4 Conclusion

The evaluation produced numerous findings. Most importantly, it found that there is extremely high satisfaction with New Lynn bike hub. Satisfaction with the New Lynn bike hub has been attributed highly to the attitudes of the volunteers, the perception of it being a community resource, and the ability for visitors to learn new skills. From a project partner perspective, highly positive feedback was provided relating to the bike hub being a 'success story' which has enabled a sustainable way to promote safe cycling and providing cycling accessibility to a diverse range of groups. The initial aim of the bike hub was to '*make cycling accessible to anyone, regardless of ethnicity, age, income or social status.*' Based on the findings of the evaluation, much progress has been made toward meeting its aim.

The community inclusiveness of the bike hub has proven to be a considerable success, with large numbers of bike hub users indicating that the bike hub is an integral part of their community. Central themes of discussion include that the bike hub has been useful in providing economical services to the area, and has provided members of the community with a space for learning. Also, the evaluation confirmed that the main reason for visitors coming to the bike hub is to learn new bike repair skills. Therefore, the impacts from the bike hub will be long-lasting – through knowledge generation from visitors that is likely passed on to friends and family.

The unintended positive impacts from the bike hub include a range of personal, emotional benefits to people involved – mainly bike hub volunteers. Mental health benefits associated with connecting with the community, helping others and learning new skills have been observed to have a profound impact. Community members who regularly visit the bike hub have also strongly indicated the positive feelings that the bike hub has promoted, particularly around feeling 'welcomed' and 'happy.' On interviewing a 10-year old boy from Ethiopia, I was told that "*this bike hub is a huge part of my life... I came here having no idea of how to ride a bike. Now, not only do I know how to ride, but I also know how to fix my bike, and I can now teach others!*". These sincere and heartfelt statements were common throughout the evaluation that was conducted. This reflected a deep attachment that a diverse range of people in the community has with the New Lynn bike hub.

The New Lynn bike hub has a notable contribution to the global United Nations Sustainable Development Goals. It is crucial for small projects to acknowledge the goals and ensure that the project objectives are aligned as much as they feasibly can be. In particular, the New Lynn bike hub makes significant contribution to goals relating to poverty, good health and wellbeing, sustainable communities, responsible consumption and climate action.

Volunteer commitment is a crucial component of the future success of the New Lynn bike hub. Value creation for the New Lynn bike hub is generated by volunteers through expertise, particularly with bike repairs and the interaction they have with visitors. As this research has highlighted that current New Lynn bike hub volunteers have a long-term commitment to continue dedicating their time, the long-term sustainability tends to be positive. However, areas of improvement identified through the impact evaluation are directly linked to resourcing capability. For example, more extended opening hours and larger physical space were a common feedback theme across groups. Alongside this, is an increased desire for more workshops and social collaboration. With a large number of visitors indicating that they either have or are highly likely to recommend the bike hub to friends and

family, word of mouth will likely increase visitor numbers significantly over the next year. Therefore, the pressure on these current challenges is likely to increase.

With continued resourcing and support, future research and strategic focus can be on better monitoring and tracking of results, particularly on the environmental outcomes of the bike hub and the potential of applying the bike hub model further across Auckland and New Zealand.



Image 15 Regular New Lynn bike hub visitor Earnest (Source: Facebook)

5 Recommendations

- Collaboration with other interested organisations and businesses to help with future resourcing and promotion of bike hub services
- Further research into actual visitor demographics to determine whether the initial aim of the bike hub has been achieved
- Increase in volunteers to ensure volunteer accessibility for all visitors
- Increase in opening hours to increase accessibility for school children
- Increase in physical space for more storage of bicycles onsite
- Increase in workshops for the community to promote further skill sharing and social opportunities
- Focus on environmental impact tracking, particularly the diversion of waste to landfill and reduction in transport related emissions
- Focus on health and wellbeing tracking, particularly the health benefits associated with transitioning from motorized transport to cycling
- Research on the indirect societal benefits of promotion of cycling, New Zealand specific
- Higher communication with project partners to provide monitoring and tracking information
- Continue positive relationships with bike hub volunteers to ensure long-term commitment

6 Acknowledgements

EcoMatters and the researcher of this Impact Evaluation would like to acknowledge the contribution of all research participants, especially volunteers and collaborators. This research was funded through Lottery Community Sector Research Grant R-LCSR-2018-79354.

7 References

- Aldridge, A., & Levine, K. (2001). *Surveying the social world: Principles and practice in survey research*. Philadelphia: Open University Press.
- Al-Shaaby, A., & Ahmed, A. (2018). How do we measure project success? *Journal of Information Technology*, 8(2), 1-5.
- Ashley, P., & Boyd, B. (2006). Quantitative and qualitative approaches to research in Environmental Management. *Australasian Journal of Environmental Management*, 13(2), 70-78.
- Berg, B. (2007). *Qualitative research methods for the social sciences*. London: Pearson.
- Check, J., & Schutt, R. (2012). Survey research. In J. Check, & R. Schutt, *Research methods in education* (pp. 159-185). Thousand Oaks: Sage.
- Cox, M. (2015). A basic guide for empirical environmental social science. *Ecology and Society*, 20(1), 63.
- Denscombe, M. (1998). *The good research guide for small-scale social research projects*. New York: Open University Press.
- Kothari, C. (1990). *Research Methodology: Research and Techniques*. New Dehli: New Age International.
- Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing*. Thousand Oaks: Sage.
- Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, arts-based and community-based participatory research approaches*. New York: The Guildford Press.
- Miles, M., & Huberman, A. (1994). *Qualitative data analysis*. Thousand Oaks: Sage.
- Molina-Azorin, J., & Lopez-Gamero, M. (2016). Mixed methods studies in environmental management research: Prevalence, Purposes and Design. *Business Strategy and the Environment*, 25, 134-148.
- Ponto, J. (2015). Understanding and evaluating survey research. *Journal of the Advanced Practitioner in Oncology*, 2, 168-171.
- Singleton, R., & Straits, B. (2009). *Approaches to social research*. New York: Oxford University Press.
- Srnka, K., & Koeszegi, S. (2007). From words to numbers: How to transform qualitative data into meaningful quantitative results. *Schmalenbach Business Review*, 59(1), 29-57.
- Tashakkori, A., & Teddlie, C. (2003). *Handbook or Mixed Methods in Social and Behavioural Research*. California: Sage.

8 Appendix 1 – Misc. Data

Past Recommendations of New Lynn Bike Hub by Visitors
"Have you ever recommended the bike hub to friends and family?"

