Blue Mile, Blue Sound and Stepping Stones to Nature: An Exploration of their Impact

Final Report

October 2010

SERIO
A University of Plymouth Centre of Expertise
Executive Summary

Introduction

- Three projects with the aim of increasing public engagement with the environment were launched in Plymouth in 2010: Blue Mile, Blue Sound and Stepping Stones to Nature. The Blue Mile – Race for Environment is a new UK mass participation open water event and the inaugural event took place in Plymouth on the 3rd and 4th of July 2010. The Blue Sound and Stepping Stones to Nature are funded by the Big Lottery to work with local communities to improve their opportunities to access the blue and green environment.

- In 2010 SERIO, based at the University of Plymouth, was commissioned to develop a monitoring system for assessing the impact and achievements of these projects. As part this assignment, SERIO carried out a socio-economic and environmental impact assessment of the Blue Mile event.

Research Aims and Approach

- A bespoke toolkit was developed, to enable each project to monitor its impacts and achievements throughout its lifetime. The research included the following elements:

  - **Street Survey**
    A semi-structured face to face street survey was carried out during the Blue Mile to assess the socio-economic and environmental impact of the event. A total of 206 interviews were completed over the two days.

  - **Open Spaces Survey**
    This incorporated a pre and post event survey to collect views on and uses of outdoor open spaces to be completed by participants of each project before and after their participation in a project specific event. A total of 44 pre-event surveys were completed via an online survey amongst registered participants in the Blue Mile, while a subsection of key questions were administered to 123 Blue Mile visitors during the two day event through the street survey.

Key Findings from the Blue Mile Event

- Of the 206 respondents, 53.4% were male and 46.6% were female. The majority were at the Blue Mile event in an adult pair (42.2%). Reflecting the different activities provided during the two days, Saturday saw a larger proportion of groups without children (25.2%) and single adults (15.9%), while a higher proportion of groups with children were present on Sunday (32.3%).

- Consistent with other studies undertaken for Plymouth events, the Blue Mile catered to a relatively local audience, with the largest proportion of the sample (72.3%) living within the Plymouth Travel to Work Area (PTTWA). Of those living outside the PTTWA, 7.8% lived in the rest of Devon and Cornwall and the...
remaining 19.9% came from beyond Devon and Cornwall, with the majority having visited the city before. Travelling by car was the most common way to arrive at the event (57.8%), while 29.1% indicated they travelled by foot and 11.7% by bus. Three quarters of respondents had travelled six miles or less to arrive at the event.

- Three-fifths (58.7%) of respondents stated they had visited Plymouth specifically for the Blue Mile, with a quarter (25.2%) indicating that they were repeat visitors to the Blue Mile, planning to visit, or having visited on both days.

- Awareness of the event was good, with 70.4% of respondents having heard of the Blue Mile before attending. Word of mouth was the most common means for finding out about the event (cited by 34.5%). In addition, information on the event was gained from a range of news and advertising media, such as newspapers, radio and posters. A media coverage evaluation undertaken by the event organisers indicated that there was a good spread of regional coverage about the Blue Mile between February and July 2010. The Blue Mile official website was accessed by 16,216 visitors over that period. Despite this, a quarter of respondents highlighted the need to improve communication and marketing strategies, making suggestions for better timing and more widespread publicity both at a local level and throughout the region.

- The research shows that levels of involvement in the event were high, especially amongst male respondents and groups with children. Overall, 63.1% of respondents indicated they visited the Event Village or took part in one or more activities provided by the event over the two days. Nearly one fifth of respondents (18.0%) also indicated that they had registered to complete a Blue Mile. Positively, the large majority had not experienced any barriers when accessing activities.

- It is also evident that the majority of those attending the Blue Mile had a positive experience. Almost all rated the event as either ‘extremely good’ or ‘quite good’ (92.2%) and considered it to be child and family friendly to some extent. Further to this, the large majority of respondents (70.9%) indicated that they would be likely to complete a Blue Mile if the event was repeated in the future.

- Findings suggest that the Blue Mile had a positive impact on participants and visitors views and awareness of the environment and environmental issues. Over three-fifths of respondents indicated that attending the event had had a positive impact on their awareness of the blue environment and made them more aware of threats facing the marine environment. In addition, over half of respondents indicated that attending the event would have a positive impact on how they look after the planet and lead to an increase in their engagement with the natural environment. Positively, young people (aged 16-25) emerged as the age group who generally felt more strongly that their attendance at the Blue Mile would impact positively on their future behaviour.

- Respondents were also overwhelmingly positive about the impact of the event on the community and local area, with the large majority agreeing to some extent
that attracting events like the Blue Mile was good for the image of Plymouth (98.5%) and helped to bring the local community together (83.5%).

- These positive views and perceptions of the event were supported by feedback from exhibitors and competitors, as collected and analysed by the event organisers. Results from a short questionnaire administered to 11 exhibitors showed that exhibitors had a positive overall impression of the event and rated the general organisation of the event positively. Overall, consistent with visitors' perceptions, the majority of exhibitors felt that the event was successful to some extent in raising awareness and action for the environment. Positively, nine of the 11 respondents indicated they would be interested in exhibiting again next year.

- Similarly, of 30 competitors that completed a questionnaire administered by the event organisers after their participation in the Blue Mile, the majority reported to be 'very satisfied' with their experience of the event and rated the event as ‘extremely good’. These views were reflected in positive ratings for the registration process, the event location and its impact on the surroundings. For example, all respondents agreed to some extent that ‘Plymouth was a perfect place to host the Blue Mile 2010’ and the majority of respondents did not feel that the event had a negative impact on city pollution and traffic issues. Almost all respondents would take part in the Blue Mile again, with a number feeling they would participate in additional event activities and races.

**Economic Impact: Visitors Expenditure at the Blue Mile in Plymouth**

- Given the sporting nature of the Blue Mile, the UK Sport approach was proposed as a useful model for assessing the economic impact of the event. However, the nature of the visitors to the Blue Mile, in that they were mostly local, and the variety of activities provided by the event raised methodological difficulties in applying the UK Sport methodology and called for an adaptation of it to be applied. While no distinction between types of visitor (spectators, participants, media) was made, filters were applied to ensure that expenditure estimations were based upon respondents who were present at the venue because of the Blue Mile.

- Using this approach, the total average spend per head for travel, food and drink, accommodation, shopping and tickets for events and tourist attractions was calculated and multiplied by the total number of visitors, as recorded by the event organisers. Two potential scenarios for total visitor numbers were identified, with 5,645 people representing the lower limit and 6,636 people representing the upper limit. As a result, it was estimated that Blue Mile visitors generated between £115,111 and £135,300 in expenditure in Plymouth. This equated to a visitor economic impact of between £57,555 and £67,650 per day.

- In interpreting the economic impact of the Blue Mile, the following aspects are worthy of consideration. Firstly, accommodation expenditure, which tends to be one of the most significant components of an economic impact, was very low, due to the low number of respondents visiting from outside the local area, and
this had repercussions on the total expenditure. Secondly, aspects such as the
provision of different activities between the two days, with races held on one day
only, potential limitations in advertising the event beyond the local area, and poor
weather conditions on the Sunday, might have limited the number of visitors
taking part in the event to some extent, limiting in turn the extent of the economic
impact. Finally, the robustness of the overall estimate depends upon the
accuracy of the estimated number of visitors and the methodology applied for its
assessment. Although visitor numbers were monitored by the event organisers,
the event was not ticketed, which rendered it difficult to estimate overall
attendance. In addition, including the actual spend incurred by local people in the
calculations made, it is difficult to distinguish between the expenditure directly
attributable to the event and that which would have occurred regardless of this.

Environmental Impact: Visitors Carbon Footprint at The Blue Mile in Plymouth

- Assessing the environmental impact of an event or a project is becoming
  increasingly relevant, in light of issues associated with climate change and its
  potential policy and economic implications in the future. An initial assessment
  of the Blue Mile environmental impact was therefore carried out, based upon an
  estimate of the greenhouse gases emissions (carbon footprint) as a result of
  visitors travelling to the event.

- By applying Defra’s transport conversion factors to the number of miles
  respondents to the street survey had travelled by car, bus, train, taxi or ferry to
  attend the event, it was estimated that Blue Mile visitors generated between
  14,866.49 kg CO₂ and 17,476.59 kg CO₂ in total, equating to 2.63 Kg Co₂ per
  head.

- These findings must be interpreted with a number of caveats. Firstly, they rely on
  the accuracy of the estimated number of miles visitors stated they travelled to the
  event, as well as the estimated number of people attending the event. In
  addition, they only provide a partial understanding of the overall environmental
  impact. A full life cycle analysis incorporating all potential sources of greenhouse
gases, such as waste management and energy use, would be required to provide
  a comprehensive environmental impact assessment; however this was beyond
  the scope of the evaluation.

Key Findings from the Open Spaces Survey

- Key findings from the Open Spaces pre-event survey showed that green and blue
  spaces in the city of Plymouth and in the surrounding area were frequented
  regularly and positively appreciated. More than 60% of respondents strongly
  believed that local open spaces were important to them and the same proportion
did not feel that ‘Plymouth could make more of its natural environment’.

- Overall, the coast and water emerged as the most frequented open spaces.
  When it came to name specific open spaces respondents visited most frequently,
  the Hoe and the waterfront area, along with Central park and the Barbican were
the most popular within Plymouth, while Dartmoor was the most cited destination in the surrounding area. When asked about the reasons for visiting these open spaces, respondents reported they went there to enjoy the surroundings, get some fresh air and relax.

- A lack of time was perceived as the main barrier to visiting green or blue open spaces more frequently both in the city (41.0%) and in the surrounding area (74.4%). In addition, a few respondents mentioned accessibility issues as major factors preventing them from visiting open spaces in Plymouth (6.0%) or in the surrounding area (14.0%).

- Respondents reported they would be encouraged to visit open spaces more often if there were more organised activities in the city of Plymouth and better parking facilities and transport. Improvements in information and better public transport were considered relevant encouraging factors for visiting open spaces in the surrounding area of Plymouth. Interestingly, these aspects appear to be consistent with the projects' main purposes and therefore suggest key elements towards which all projects could work effectively.

- In terms of attitudes and engagement with the environment, key findings from the survey suggest that respondents were aware and committed to actions that would help to reduce their environmental impact, such as energy saving, controlled water use, recycling. In interpreting this, it is worth highlighting that cultural and sports events, as well as projects engaging with the community, tend to induce an upstream selection of participants, based upon their prior interest and involvement in the event contents.

**Conclusions and Recommendations**

- Findings from the street survey suggest that the Blue Mile event was successful in engaging visitors with the blue environment and had a positive impact on visitors’ views and awareness of the environment and environmental issues. Reflecting this in relation to future Blue Mile events, the following points should be considered:
  
  - The event is advertised further afield and in a more thorough way, continuing to use mainstream media and the internet to target people from beyond the local area and young age groups more effectively.
  
  - Consideration should be given to the opportunity of broadening the Event Village, providing more varied entertainment and planning a wider range of races on both days to attract a wider public and more paying participants.
  
  - Thought should be given to adopting more robust methods for counting visitors in the future, using for instance a ‘free ticket’ at the entrance of the Event Village, to ensure a more accurate estimate of visitor numbers and thus a more robust economic impact assessment.
Consideration should be given to adopting a more comprehensive monitoring system for assessing the environmental impact, based on the concept of a full life cycle analysis, to ensure the events sustainability. This could be used as part of the marketing strategy in promoting a ‘zero carbon’ Blue Mile.

Findings from the Open Spaces pre-event survey provided useful insights on respondents' attitudes towards local open spaces and highlighted practical aspects that would encourage people to visit open spaces more frequently, towards which all projects could work effectively.
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1. Introduction

1.1 Background to the Study

Three projects with the aim of increasing public engagement with the environment were launched in Plymouth in 2010: Blue Mile, Blue Sound and Stepping Stones to Nature.

The Blue Mile – Race for the Environment is a new UK mass-participation open water event, designed to encourage and facilitate engagement with the blue environment. The inaugural Blue Mile took place in front of Plymouth’s waterfront on the 3rd and 4th July 2010. Participants and visitors were offered the opportunity to take part in a variety of watersport events and activities, as well as visiting exhibits at the Event Village. Saturday provided the opportunity to participate in the Race for the Environment, which included swimming, kayaking and stand up paddle races, while Sunday was more family focused offering watersport taster sessions. Both days incorporated the National Marine Aquarium Blue Mile Walk and the Event Village. A selection of photographs showing key moments from the event, as provided by the event organisers to SERIO, are included in the Appendix One of this report.

The other two projects, Blue Sound and Stepping Stones to Nature are both funded by the Big Lottery Fund. Blue Sound, led by the Marine Biological Association, works with local community and youth groups to address the physical and perceptual barriers to accessing the blue environment. Similarly, Stepping Stones to Nature seeks to improve opportunities to access green space in and around Plymouth. Engaging and working with local communities is important in the delivery of all three projects.

In 2010 SERIO, based at the University of Plymouth, was commissioned to develop a monitoring system for assessing the impact and achievements of these projects. In consideration of the similarities of the projects’ aims a co-ordinated and collaborative research project was designed to do this.

As part this assignment, SERIO carried out a socio-economic impact assessment of the Blue Mile event. This was based upon previous impact assessments of the Plymouth Summer Festival undertaken by SERIO in 2007 and 2008 and in particular upon the economic impact assessment of the Artemis Transat at Sutton Harbour carried out in 2008.
1.2 Research Aims and Approach

The overall aim of this study was to develop a monitoring system based upon a bespoke toolkit for enabling each project to monitor its impacts and achievements throughout its lifetime.

The research consisted of two main elements:

- A semi-structured face-to-face street survey carried out during the Blue Mile two day event to assess the socio-economic and environmental impact of the event; and
- An Open Spaces Survey, designed as a pre and post event survey to collect views and uses of outdoor open spaces to be completed by participants of each project before and after their participation in a project specific event¹.

1.2.1 Street Survey

The street survey was designed to collect information on participants and visitors attending the Blue Mile. A semi-structured interview schedule using both open and close questions was developed in consultation with the client and was administered face to face by trained interviewers².

It investigated the following aspects:

- Participant and visitor profile, including the nature and purpose of their visit to the city;
- Participant and visitor expenditure during the day;
- Distance travelled and means of transport to the event;
- Awareness of the event (prior to visit);
- Event satisfaction; and,
- Perceptions and interpretations of the event’s key messages.

The fieldwork was undertaken across the two days of the event (3rd and 4th July 2010), throughout the Barbican and West Hoe areas, between 10am and 4pm each day. A total of 206 interviews were completed, 107 on Saturday and 99 on Sunday. (Please see Appendix Two for a copy of the questionnaire).

¹ At the time of writing, no projects had utilised the post-event survey from the toolkit.
² Four interviewers were engaged each day of the Blue Mile to carry out the fieldwork.
Responses from the completed surveys were entered into SNAP software and analysed using the Statistical Package for the Social Sciences (SPSS). In order to assess the economic impact of the Blue Mile, an adapted application of the UK sport methodology, as used in the previous economic impact study of the Artemis Transat at Sutton Harbour, Plymouth, was adopted.

1.2.2 Open Spaces Survey

A self completion questionnaire was designed to be administered to project participants before their engagement in an event, in order to understand their views on, and uses of green and blue spaces both within the city of Plymouth and its surrounding area.

The pre-event questionnaire explored the following aspects:

- Respondent profile;
- Awareness, perceptions and use of green and blue space in Plymouth and its surrounding area;
- Promoters and barriers to use of green and blue spaces in Plymouth and its surrounding area; and
- Environmental attitudes.

The pre-event questionnaire was provided to project co-ordinators in electronic form, to enable copies to be distributed to participants as required (a copy of the questionnaire is shown in Appendix Three). Due to time constraints, the Blue Sound and Stepping Stones to Nature projects were unable to successfully distribute pre-event surveys to participants before the Blue Mile event.

As participants for the Blue Mile had to pre-register online, this presented an opportunity to administer an online pre-event survey amongst registered participants. This was developed utilising SNAP survey software and went live on July 1st. A total of 44 pre-event surveys were completed out of 242 registered participants. Additional opportunities for capturing pre-event data were offered by the Blue Mile event itself. To this end, the street survey included a subsection using key questions from the Outdoor Open Spaces survey which was administered to respondents residing within the Plymouth area³ who had not previously completed the pre-survey. A total of 123 respondents completed this subsection during the Blue Mile two day event.

³ This included all areas identified by a PL postcode to reflect the local scope of the survey.
1.3 Structure of the Report

This report is organised under the following headings:

- Key Findings from the Blue Mile Event;
- Economic Impact: Average Spend at the Blue Mile Event;
- Environmental Impact: Visitors’ Carbon Footprint;
- Key Findings from the Open Spaces Survey; and
- Conclusion and Recommendations.
2. **Key Findings from the Blue Mile Event**

This section of the report presents the findings from the street survey undertaken at the Blue Mile.

2.1 **Respondent Profile**

Data collected from the street survey shows that 53.4% of respondents were male and 46.6% were female, with a slightly larger proportion of male respondents being recorded on Sunday. The age profile is shown in Chart One. The profile reveals a reasonable spread across all the age groups, with Sunday seeing a larger proportion of those aged 35-54 years (52.5%) and a lower proportion of younger respondents aged 16-34 years (20.2%), reflecting the family focused activities provided on Sunday.

**Chart One: Age of Respondents**

![Bar Chart](image)

* Percentages may not total 100, due to rounding
Base: All respondents (n=206): attendances on Saturday 3rd July (n=107), attendances on Sunday 4th July (n=99)
Source: SERIO, Blue Mile Survey 2010

As can be seen from Table One, the largest proportion of respondents attending the Blue Mile formed an adult pair (42.2%), while groups without children were the least represented (18.9%). Reflecting the family focused activities provided on Sunday a higher proportion of groups with children present on this day (32.3%), while Saturday saw a larger proportion of groups without children (25.2%) and single adults (15.9%), again possibly reflecting the activities of the day.
Table One: Attendance Grouping

<table>
<thead>
<tr>
<th>Grouping</th>
<th>Saturday 3rd July</th>
<th>Sunday 4th July</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Single Adult</td>
<td>21</td>
<td>19.6</td>
<td>10</td>
</tr>
<tr>
<td>Adult Pair</td>
<td>42</td>
<td>39.3</td>
<td>45</td>
</tr>
<tr>
<td>Group or Single adult with children</td>
<td>17</td>
<td>15.9</td>
<td>32</td>
</tr>
<tr>
<td>Group without children</td>
<td>27</td>
<td>25.2</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>100.0</td>
<td>99</td>
</tr>
</tbody>
</table>

* Percentages may not total 100, due to rounding

Base: All respondents (n=206), attendances on Saturday 3rd July (n=107), attendances on Sunday 4th July (n=99)

Source: SERIO, Blue Mile Survey 2010

As shown in Chart Two, the majority of respondents (72.3%) lived within the Plymouth Travel to Work Area (PTTWA)\(^4\), 7.8% lived in the rest of Devon and Cornwall (excluding the PTTWA) and the remaining 19.9% came from beyond Devon and Cornwall.

Chart Two: Domicile of Respondents

* Percentages may not total 100, due to rounding

Base: All respondents (n=206), attendances on Saturday 3rd July (n=107), attendances on Sunday 4th July (n=99)

Source: SERIO, Blue Mile Survey 2010

\(^4\) The PTTWA covers the postcode areas PL1-14 and PL17-21.
People living outside of the immediate Plymouth area (54 respondents) were then asked further questions to gather more details on their visit to the city. The majority (45) indicated they had visited the city previously, and less than half (24) stated that they were on holiday, with 27 having stayed or planning to stay in or near the city as part of their visit.

The number of nights that visitors stayed in or near the city ranged from one to 27. Two nights was the most frequently occurring length of stay. Of those staying overnight, the majority were accommodated within the city (21) and were more likely to stay at hotels (8) or with friends and relatives (8).

These results indicate that the Blue Mile event catered to a relatively local audience and repeat visitors to the city, consistent with other studies undertaken on Plymouth events. The proportion of respondents coming from outside the sub-region was also in line with other events hosted by the city.

### 2.2 Purpose and Method of Visit to the City

When asked about the main reason for their visit to the city, close to three-fifths (58.7%) of respondents stated they had visited Plymouth specifically for the Blue Mile. Sightseeing and visiting friends were other common reasons (17.5% and 10.2% respectively). 77% of those residing in the Plymouth area were visiting Plymouth because of the Blue Mile event, compared with 50% of those from Devon and Cornwall and 29% of those from further afield.

Of those who had not indicated that the Blue Mile was the primary reason for visiting Plymouth, 15 had came to the Barbican because they had heard of the event. This means a total of 66.0% of respondents were at the Barbican as a direct result of the Blue Mile.

A quarter of respondents (25.2%) indicated that they were repeat visitors to the Blue Mile, planning to visit, or having visited on both days. Specifically, while 27.1% of Saturday respondents indicated they would come again the next day, 23.2% of Sunday visitors stated they came to the Blue Mile the previous day.

Respondents were then asked to indicate how they travelled to the city and to provide an estimate of the number of miles travelled. As shown in Chart Three, the majority of respondents (57.8%) had travelled to the city by car (including taxi or motorbike), with 29.1% indicating they had travelled by foot and 11.7% by bus. Bicycle, train and park and ride were the least common means of transport.

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Please note that respondents could indicate more than one means of transport.
In terms of miles travelled for getting to the event, these ranged from under a mile to 200 miles, with a median value of four miles. Three quarters of respondents had travelled six or less miles to arrive at the event.

Further details about carbon emissions arising from visitors’ and participants’ travel is discussed in Section Five with the aim of providing an initial assessment of the environmental impact of the Blue Mile.

2.3 Awareness of and Involvement in the Blue Mile

In terms of awareness of the Blue Mile, 70.4% of respondents indicated that they had heard of the Blue Mile prior to being interviewed. Local respondents were much more likely to have heard of the event before their visit compared with those from further afield in Devon and Cornwall or beyond. A higher level of awareness was also detected amongst visitors aged 35-44 and groups with children.

As shown in Table Two word of mouth was the most common means for finding out about the event, with over a third of respondents (34.5%) citing this as the way they had heard about the event. In addition, information on the event was gathered from a range of news and advertising media, such as newspapers, radio and posters. One in ten respondents (9.7%) cited the Blue Mile website and a further 8.3% cited other websites. In addition 15.9% of respondents indicated they found out through other means which included tourist information, other local events and through the University. A summary evaluation of the actual media coverage of the event, as undertaken by the event organisers, is discussed in Section 2.8.
Table Two: Means of Awareness of the Blue Mile

<table>
<thead>
<tr>
<th>Channel of Communication</th>
<th>No.</th>
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<tbody>
<tr>
<td>Word of mouth</td>
<td>50</td>
<td>34.5</td>
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<tr>
<td>Newspaper</td>
<td>24</td>
<td>16.6</td>
</tr>
<tr>
<td>Radio</td>
<td>21</td>
<td>14.5</td>
</tr>
<tr>
<td>Poster</td>
<td>18</td>
<td>12.4</td>
</tr>
<tr>
<td>Blue Mile Website</td>
<td>14</td>
<td>9.7</td>
</tr>
<tr>
<td>Flyers</td>
<td>13</td>
<td>9.0</td>
</tr>
<tr>
<td>Other Website</td>
<td>12</td>
<td>8.3</td>
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<td>Television</td>
<td>11</td>
<td>7.6</td>
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<tr>
<td>Work</td>
<td>7</td>
<td>4.8</td>
</tr>
<tr>
<td>School</td>
<td>4</td>
<td>2.8</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
<td>15.9</td>
</tr>
<tr>
<td>Don’t know</td>
<td>3</td>
<td>2.1</td>
</tr>
</tbody>
</table>

*Percentages do not total 100% as respondents could give more than one response.
Base: All respondents that had heard about the Blue Mile (n=145)
Source: SERIO, Blue Mile Survey 2010

Data from the street survey also shows that locally based marketing methods, such as posters and fliers, emerged as effective means of raising awareness for young people (16-34), while newspaper and radio proved to be more effective for older people. Television, as well as radio, also appeared to be effective in informing people from across Devon and Cornwall.

Despite a high proportion of people being aware of the Blue Mile prior to their visit more than one quarter of respondents highlighted the need for improvements in the advertising of the event (26.7%). Specific suggestions were made for better timing and more widespread publicity both at a local level and throughout the region. See Section 2.4 below for further details on suggested improvements.

Respondents’ involvement in the Blue Mile was also explored. The Blue Mile event included the opportunity to register for completing one or more Blue Mile races, as well as to participate in a variety of entertainment and activities which did not require pre-registration. Overall, data shows that 63.1% of respondents took part in one or more activities provided by the event over the two days.

Almost one-fifth of respondents (18.0%) indicated that they had registered to complete a Blue Mile, with 7.2% indicating they had, or planned to, participate in the swim, 6.3% in the kayak and 1% in the stand up paddle. Only one respondent stated they participated in the triple challenge, taking part in all three races. Walks organised both on Saturday and Sunday attracted about
one in ten respondents (11.2%), while watersport sessions were attended by four respondents. In addition, around half of respondents (49.0%) indicated that they had, or planned to, visit the Event Village and 6.8% had watched the “End of the line” film screened at the Aquarium.

A higher proportion of male respondents and groups with children indicated they had taken part in one or more activities, compared to other groups of participants. Groups with children were also more likely to visit the Event Village, possibly reflecting the activities there. In addition, age emerged as a determinant in registering for completing a Blue Mile, with the large majority of registered respondents being aged between 17 and 54⁶.

Respondents were also asked an open question about any barriers they experienced in accessing activities. While the large majority did not mention any barriers (87.9%), five respondents highlighted the lack of sufficient information on the overall event and four specified registration requirements, in addition three indicated they found the registration closed. Barriers related to facilities and organisation (e.g. narrow walkways, lack of facilities for disabled or for childcare) were also reported by four respondents.

2.4 Views on the Blue Mile

Views were sought on the Blue Mile event overall. As Chart Four highlights, the majority of respondents stated that the event was either ‘extremely good’ or ‘quite good’ (92.2%). Over half of respondents (52.4%) gave an ‘extremely good’ rating and only three people (1.5%) rated the event ‘quite poor’, while none considered it as ‘extremely poor’.

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⁶ Participation to the Blue Mile races was open to people aged 17 or over.
Since the Blue Mile included a variety of activities especially organised for families and children, respondents were also asked their views on this aspect. As shown in Chart Five, nine in every ten respondents (90.1%) considered the event to be child and family friendly to some extent, with 65.5% rating it as ‘very child and family friendly’. Positively, groups with children were particularly keen to express a high rating for this aspect: 75.5% rated it as ‘very child and family friendly’, compared to 62.2% of adults visiting without children.
Respondents were then invited to suggest what would make the Blue Mile better in the future. As can be seen from Table Three, more than half of respondents made suggestions with the most common suggestion being that more advertising should be available both locally and regionally (26.5%). Linked to this, 7.3% of respondents indicated the need for improving communication and on-site information on the programme of events, such as directions, available facilities and on-going activities.

Offering more entertainment was mentioned by 12.1% of respondents. A wide range of additional entertainment and activities were suggested, including activities for children, live music, merchandise stalls and food outlets. Additionally, nine respondents (4.4%) suggested providing a greater variety of races, such as triathlon and a relay mile, as well as more walks.

One in twenty respondents (5.3%) also suggested improving facilities for accessing the event, for example by offering more or free parking and public transport and by making more toilet facilities available.

It is worth noting that similar suggestions were recorded during previous festival or sports events organised in Plymouth.
Table Three: Suggested Improvements to the Blue Mile

<table>
<thead>
<tr>
<th>Suggested Improvements</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising</td>
<td>55</td>
<td>26.7%</td>
</tr>
<tr>
<td>More events/entertainment and stalls</td>
<td>25</td>
<td>12.1%</td>
</tr>
<tr>
<td>Improve communication and on-site information on programme of events/activities</td>
<td>15</td>
<td>7.3%</td>
</tr>
<tr>
<td>Improve facilities (toilets, parking, etc)</td>
<td>11</td>
<td>5.3%</td>
</tr>
<tr>
<td>More and varied swims/walks (e.g. relay mile)</td>
<td>9</td>
<td>4.4%</td>
</tr>
<tr>
<td>Lower entry fee</td>
<td>2</td>
<td>1.0%</td>
</tr>
<tr>
<td>Other (e.g. later registration, more participants)</td>
<td>18</td>
<td>8.7%</td>
</tr>
<tr>
<td>Don't know</td>
<td>54</td>
<td>26.2%</td>
</tr>
<tr>
<td>No improvements suggested</td>
<td>43</td>
<td>20.9%</td>
</tr>
</tbody>
</table>

*Percentages do not total 100% as respondents could give more than one response
Base: All respondents (n=206)
Source: SERIO, Blue Mile Survey 2010

2.5 Impact of the Blue Mile

The survey explored the impact of the Blue Mile in a number of areas including respondents’ behaviour, environmental awareness, and views of the local area.

Respondents were asked what they thought was the event’s main purpose. A synthesis of their responses is provided in Chart Six below. 55.3% thought the Blue Mile aimed to raise awareness of the environment (with a minority explicitly referring to the marine environment), and 14.1% perceived it as an event for charity and fundraising.

Promoting watersport activities and/or health and fitness were also viewed as a main purpose of the event by 12.6% and 6.3% of respondents respectively, while a few suggested that the event was meant to support the city of Plymouth and especially its waterfront. Finally, around 14.1% of respondents indicated they were unsure about the purpose of the event.
When invited to think if they would do anything differently as a result of attending the Blue Mile, over a half of respondents (56.3%) did not mention any potential change in behaviour, with thirteen people reporting they were already aware or engaged with environmental issues and activities (Chart Seven).

Of those who stated they would do something differently, the most common action cited was taking part or encouraging family and friends to participate in more watersport or outdoor activities (13.1%). Eight people indicated they would take part in the Blue Mile next year.

Fourteen respondents (6.8%) said they would become more environmentally friendly as a result of attending the Blue Mile, while 3.4% said that they would look for more information on environmental issues and events like this.
Chart Seven: Perceived Potential Changes in Behaviour as a Result of Attending the Blue Mile

Respondents were then presented with a number of statements and asked to indicate the extent to which they agreed or disagreed with each. This stimulated respondents to directly reflect on any potential impact of the event. As shown in Chart Eight, a higher proportion of positive responses were collected, compared to the previous question.

Overall the majority of respondents felt attending the Blue Mile would have a positive impact on their behaviour, with 56.3% agreeing to some extent that they were more likely “to do more to look after our planet”, 54.4% agreeing they were more likely “to enjoy the natural environment with family and friends”, and 43.7% agreeing that they were likely “to take part in more water activities” as a result of attending the Blue Mile.

Positively, young people (aged 16-25) emerged as the age group who generally felt more strongly that their attendance at the Blue Mile would impact positively on their future behaviour.
To further measure the impact of the Blue Mile on respondents’ behaviour all respondents were asked how likely they would be to complete a Blue Mile if the event took place again in the future. As can be seen from Chart Nine, the large majority of respondents (70.9%) indicated that they would be likely to complete a Blue Mile, if the event returned in the future, with 44.7% indicating that they would be ‘very likely’ to do so.
The impact of the Blue Mile on respondents’ environmental awareness was also measured. As shown in Chart Ten, a large proportion of respondents felt attending the Blue Mile had had a positive impact on their awareness of a number of environmental issues. Two-thirds of respondents (65.5%) agreed to some extent that the Blue Mile had raised their awareness of the blue environment, 60.2% agreed that the Blue Mile had made them more aware of threats facing the marine environment and 53.4% agreed that the Blue Mile had opened their mind to environmental issues.
Finally the impact of the Blue Mile on the community and local area was measured. Respondents were overwhelmingly positive about the impact of the event in this regard, as shown in Chart Eleven. Almost all respondents (98.5%) agreed to some extent that attracting events like the Blue Mile was good for the image of Plymouth, with nearly nine in every ten agreeing that the Blue Mile and events like it help to bring the local community together (89.8%) and that their experience during the Blue Mile had enhanced their image of Plymouth as a tourist destination (83.5%).
2.6 The Blue Mile Event Village: Exhibitors’ Feedback

During the Blue Mile event, the Event Village hosted a variety of exhibits on the environment and related issues. At the end of the event a very short structured questionnaire was administered to exhibitors by the event organisers to collect views and feedback on their experience. Eleven questionnaires were completed and a summary of responses was provided to SERIO. Specifically exhibitors were asked to rate several aspects of the event on a numeric scale from one to five (where one corresponds to poor and five to excellent).

Key findings suggest that exhibitors were positive about the event (Chart Twelve). The average rating for the overall impression of the event was 3.9, with six respondents rating this as a four and two respondents as five out of five. None provided a score lower than three.

The general organisation of the Event Village was considered positively, with a mean score of 4.1. Ten respondents rated this aspect as four or five out of five. However one respondent was not completely satisfied with this, providing a rating of two. Views were more varied in relation to the location of the event village. While the mean score was 3.9, one respondent rated this as a two, and three exhibitors rated this as three out of five. Other aspects
related to information, customer care and support received far more positive responses. All respondents felt the information and pre-event instructions supplied in the Event Village Exhibitor Pack were clear, with the mean rating for this being 4.5, with six respondents rating this aspect as five out of five. Everyone also reported that they found the pre-event customer care leading up to the event as a four or five out of five, which resulted in a mean score of 4.5. In addition, although three respondents considered staff support as three out of five, five respondents were particularly pleased with the help the Blue Mile staff provided during the event, again rating this as five out of five. The mean score for this was 4.2.

Overall, the majority of exhibitors felt that the event was successful to some extent in raising awareness and action of the environment, as this received a mean rating of 3.5.

Positively nine of the eleven respondents indicated they would be interested in exhibiting again next year. In supporting these positive views and experiences an exhibitor commented as follows:

‘We have had a fantastic time, and have made so many contacts with other exhibitors and people attending the event. It's been so chilled and so organised, we all feel lovely and relaxed and I just want to carry on for another few days!!’

Chart Twelve: Exhibitors’ Feedback on the Blue Mile’s Event Village

Base: Exhibitors at the Blue Mile Event (n=11)
Source: Sport Environment 2010
2.7 The Blue Mile Event: Competitors’ Feedback

Following their participation in the Blue Mile, competitors were invited by the event organisers to complete a short questionnaire on their experiences and perceptions of the event. This covered aspects related to the registration process, participation in the day, levels of satisfaction, and intention to take part in the event again. Social and environmental impacts of the event, and competitors’ commitment to raise money for charity were also explored. A total of 30 questionnaires were completed and a summary of the quantitative responses were provided to SERIO.

Respondents included 14 female (49%), 12 males (41%) and three that preferred not to provide their gender. They were mainly aged between 16 and 44 years (22, 73%) and attended the event accompanied by their partner, family or friends (22, 73%). The majority took part in the Blue Mile Swim (20, 67%). Eight respondents (27%) also reported they used the event to raise money for charity, with three (10%) raising funds specifically for the official charity partner WWF-UK.

Supporting the findings from the street survey conducted by SERIO (see Section 2.4), results indicated that respondents were satisfied with their experience of the Blue Mile, with 22 (73%) reporting to be ‘very satisfied’ and rating the event as ‘extremely good’.

In terms of the registration process, both the on-line event entry/booking systems and the pre-event customer support received were rated positively: 21 (69%) and 22 (73%) respondents respectively considered these as ‘quite’ or ‘extremely good’.

In considering more general aspects of the event, such as its location and its impact on the surroundings, almost all respondents agreed to some extent that ‘Plymouth was a perfect place to host the Blue Mile 2010’ (29, 96%), and that ‘the event promoted a positive image of Plymouth’ (29, 96%), which confirmed the views expressed by visitors more generally (see Section 2.5). All respondents but one also felt that ‘the Blue Mile increased opportunity for people to participate in water sports’ (29, 96%). In addition, the majority of respondents did not feel that the event had a negative impact on city pollution and traffic issues.

Reflecting the positive experience, all respondents but one stated that not only would they recommend the event to others, but they would also take part in the Blue Mile again. A number felt they would participate in additional event activities, including the Two Mile Open Water Swim (13, 43%) or the 0.5 Mile Open Water Swim (7, 23%).

Comments from competitors, event volunteers and other staff involved in the organisation of the event that were collected by the event organisers supported these positive views and experiences.
‘[The Blue Mile Event] was brilliant and I had an absolutely wonderful time. I swam in the slow wave, it has been 30 plus years since I last competed and had set this event as a personal challenge and I did it…I wear my Blue Mile t-shirt with great pride, I earned it.’ (Blue Mile competitor)

‘Best event in Plymouth.’ (Blue Mile competitor)

‘Excellent day!!! Very well organised and enjoyed it very much.’ (Blue Mile competitor)

‘I enjoyed the day and thought it was a great event to showcase the water sports that Plymouth has to offer, as well as raising money for a worthwhile cause.’ (Blue Mile volunteer)

‘I think the event was well undertaken. It now needs to build upon the very good start.’ (Blue Mile Supplier)

‘I attended the first Blue Mile and felt it was a great success! The Blue Mile 'crew' did a fantastic job of organising the event and taking care of participants. Ocean enthusiasts and the public at large enjoyed the Event Village and activities in the water... My hope is that this event spreads to cities around the world to educate people about our marine environment, and enable them to take steps daily to protect it.’ (Olympic Gold Medallist in Synchronised Swimming & Panel Member for Beyond Sport Awards)

2.8 The Blue Mile Event: Summary of Media Coverage

An evaluation of the media coverage of the event was undertaken by the event organisers and a summary of results provided to SERIO. Key findings indicated that the event was covered in the UK only, with peak coverage being achieved during the Launch Event (July 2009), Live Registration (February 2010) and during the event weekend (July 2010). Regular press releases were issued throughout the period from the launch in July 2009 to the actual event in July 2010. In terms of volume of coverage (by circulation), television and online accounted for 77% of the total volume (42% and 35% respectively), followed by print (13%) and radio (10%). Articles were published, for instance, in the Western Morning News and the Herald, and the event was covered by BBC Spotlight and the BBC News website. The Blue Mile official website was accessed by 16,216 visitors between February and July 2010.

The media evaluation concluded that overall “a good spread of regional coverage” was achieved between February and July 2010 “which resulted in a reported high awareness level of the Event”. In addition, the evaluation suggested that the “message and tone of the coverage was accurate and very positive of the Event” (Sport Environment, 2010).
3. Economic Impact: Visitors Expenditure at the Blue Mile in Plymouth

3.1 Introduction

The Blue Mile impact assessment was primarily aimed to gain a better understanding of the event effectiveness in engaging visitors with the blue environment and in raising their awareness of environmental issues. Along with this, an economic evaluation was undertaken to provide an initial recording of the expenditure generated by the event in the host city. In being the first event of its kind, the event was not expected to achieve an impact comparable to other well established sports events hosted in Plymouth or elsewhere in the UK. However, the findings will be particularly useful as a point of reference for future events.

A variety of methodological approaches have been developed for assessing the economic impact of festivals, sport and cultural events. In 2007 and 2008 SERIO undertook a literature review to determine the most appropriate approaches to be applied to the overall Plymouth Summer Festival and to the Artemis Transat at Sutton Harbour, Plymouth. Given the different nature and purpose of these events, two different methodologies were adopted: while an ‘input-output model’, based upon the British Arts Festival association’s recommendations, was applied to the Plymouth Summer Festival, an adaptation of the UK sport approach was utilised for the Artemis Transat (SERIO, 2007; 2008a; 2008b).

Since the Blue Mile – Race for Environment was presented as a UK mass-participation open water event, focused around a range of watersport races and activities, the UK Sport approach was deemed appropriate for its assessment.

According to this approach, impact assessments aim to determine:

“...the total amount of additional expenditure generated within a defined area, as a direct consequence of staging an event”
(EventIMPACTS, 2009, p19).

The UK Sport approach to impact assessments and the ‘input-output model’ differ from each other in the way they calculate expenditure directly generated by an event. The ‘input-output model’ involves calculating the average visitor spend per capita and the multiplier effect within the local economy, less any capital expenditure that can be explicitly identified as incurred by the tourism event. According to the UK Sport approach, though, multipliers are specific to a given economy and therefore a multiplier recommended for tourism events would be inappropriate for a sporting event. Instead, the average spend is calculated and then multiplied by the number of bed-nights and day visits generated to provide a gross spend for the event. Additionally, the UK Sport model (1999, p15) recommends analysis of the data by three key filters:
By whether the respondents are local residents or visitors;

By respondent group type (e.g. spectators, participants, media); and,

By day and overnight visitors for each respondent group.

Excluding local residents from this assessment would remove the majority of the visitors (72.3%) from the analysis. Given that the majority of the respondents were at the venue specifically to attend the event, using this filter would appear to be inappropriate and it has therefore not been applied to the data. Instead, the calculation is based upon respondents who reported the Blue Mile was the main purpose of their visit to the city or they came to the venue because of this event (66.0%). This is still in line with the UK sport approach, which aims to exclude casual visitors from the eligible visitor group, as their expenditure would have been made regardless of the event (EventIMPACTS, 2009, p42).

The Blue Mile event consisted of a variety of sports activities and entertainment, with only a few requiring a registration for competing. Since all visitors were given the opportunity to engage in the event activities, any distinction between competitors and spectators is difficult. The majority of visitors interviewed (63.1%) indicated they took part in one or more activities, with 18.0% of respondents stating they registered to participate in a race. In addition official or media groups were not directly surveyed. Therefore, this second filter has not been applied to the calculations.

UK Sport also suggests separating day and overnight visitors. Only two respondents who came to the venue because of the Blue Mile reported spending any money on accommodation in Plymouth, therefore this filter was not applied to the data.

Finally, budgeted spend was not collected. Instead respondents were asked to provide a total indication of what they spent or planned to spend in the city on the day of the visit, including the evening. The economic impact assessment presented in this report, then, is based upon an adaptation of the UK Sport model, which resembles the one applied to the Artemis Transat at Sutton Harbour, Plymouth (SERIO, 2008b).

### 3.2 Calculations

#### 3.2.1 Average Expenditure Per Head

As the analysis is based upon the average spend per head, the total spend for travel, food and drink, accommodation, shopping, and tickets for events and

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7 Local residents are excluded from the economic impact calculations. According to the UK sport approach, their expenditure is considered ‘deadweight’ based upon the argument that it would have been made regardless of the event (Sport UK, 2004, p10).
tourist attractions was calculated as a first step\textsuperscript{8}. Where the spend data was collected as a total for a family group, it was divided by the number of adults in the group.

Separate averages were calculated for actual spend for:

- All respondents. That is, all respondents at the venue, including those present for reasons other than the Blue Mile.
- All respondents at the venue because of Blue Mile, including registered participants.

The full economic assessment is based upon the expenditure of respondents present at the venue because of the Blue Mile, although analyses for both groups are presented in Table Four below as there are some variations in the averages between the two\textsuperscript{9}. Specifically Table Four shows that the average spend of respondents present at the venue because of the Blue Mile were generally lower than the average spend for all respondents, with the exception of train and tickets expenditure.

### Table Four: Average Spend Per Head at the Blue Mile

<table>
<thead>
<tr>
<th>Item</th>
<th>All respondents</th>
<th>Respondents at the venue because of the Blue Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus</td>
<td>£0.08</td>
<td>£0.07</td>
</tr>
<tr>
<td>Car</td>
<td>£2.09</td>
<td>£1.90</td>
</tr>
<tr>
<td>Train</td>
<td>£0.24</td>
<td>£0.37</td>
</tr>
<tr>
<td>Other travel expenses (ferry, taxi)</td>
<td>£0.34</td>
<td>£0.18</td>
</tr>
<tr>
<td>Food/drinks</td>
<td>£9.49</td>
<td>£8.38</td>
</tr>
<tr>
<td>Tickets for events (included Blue Mile registration fee and related events)</td>
<td>£5.16</td>
<td>£7.22</td>
</tr>
<tr>
<td>Shopping/souvenirs</td>
<td>£2.74</td>
<td>£2.26</td>
</tr>
<tr>
<td>Accommodation in Plymouth</td>
<td>£1.60</td>
<td>£0.96</td>
</tr>
</tbody>
</table>

Base: All respondents (n=206); Respondents at the venue because of the Blue Mile (n= 136)

Source: SERIO, Blue Mile Survey 2010

\textsuperscript{8} The latest edition of the UK Sport approach suggests that ‘direct leakages’ are deducted from the total spending, that is any expenditure incurred by visitors with concessions or traders not resident in the host economy (e.g. petrol stations), based on the argument that this would not directly impact on the host economy. For the scope of the study, this filter has not been applied. However, when interpreting findings, consideration must be given to the possibility that some expenditure, especially related to travel, may not have occurred in the Plymouth area.

\textsuperscript{9} In considering the average spend, please note that where car expenditure was not given, the distance travelled was used to calculate expenditure by applying an average fuel cost of 13.7p per mile (based on motoring costs provided by the Automobile Association Limited for 2010 (AA, 2010)); bus and train expenditures do not take into account seasonal passes.
The second stage of the calculation involves totalling the average expenditure based upon respondents who stated they were present at the venue because of the Blue Mile. The total average spend per head per day was £21.35.

### 3.2.2 The Total Average Expenditure

To calculate the total impact of the Blue Mile average spend has been multiplied by the total number of visitors, including registered participants, using estimates provided by the event organiser, Sport Environment. Sport Environment monitored visitor numbers, as a result of which they estimated that 7,947 people passed through the Event Village over the two days and approximately 1,500 watched the water activities from the roadside that runs from the Barbican up to the Hoe; additionally, organisers reported that a total of 242 individuals registered to complete a race, 212 attended the water taster session and 187 took part in the walk. It is recognised though that it is difficult to provide a robust estimate of visitors numbers and that these figures might overlap to some extent, due to the counting methods used\(^\text{10}\). In addition, the event was organised over two days, offering people the opportunity to return to the event the next day and therefore be counted twice. The street survey shows that a quarter of respondents (25.2%) were repeat visitors to the Blue Mile, planning to, or having visited on both days.

Eligible visitor numbers to the event were estimated using these figures and findings from the street survey. Specifically, assuming 25.2% of repeat visitors, the total number of visitors, spectators and registered participants was downsized to 7,768. Further to this, casual visitors were discounted: since the street survey shows that around a third of respondents were at the venue for other reasons than the event itself, 930 people were exempt from economic impact evaluation\(^\text{11}\). The overall number of visitors was thus reduced to 6,636 people.

Finally, in considering any potential overlapping between figures, a second figure for actual visitors was estimated, which excluded the group of people (1500) who watched from the roadside, based upon the scenario that all those visited the event village at some point, thus being counted twice. This reduced the total number of eligible visitors to 5,645 people.

As a results, two final estimates were established for the Blue Mile visitors, 5,645 people representing the lowest limit and 6,636 people representing the upper limit.

Taking these high and low estimates, the total direct expenditure generated by the event was between £115,111 and £135,300, which equated to an economic impact per day of between £57,555 and £67,650.

\(^{10}\) Visitors to the Event Village were counted in and out with a clicker by event volunteers. Individuals could register for more than one activity and thus be counted more than once.

\(^{11}\) Registered participants (242) were excluded from this calculation, since it is assumed that they had to decide in advance to register and take part in the event and could not be at the venue casually.
It is recognised that this figure was lower than the impact generated by spectators of other major sports events held in Plymouth, such as the Artemis Transat at Sutton Harbour\textsuperscript{12} in 2008, which ranged between £151,200 and £192,720 per day (SERIO, 2008b). However, it is worth considering that the Blue Mile was a maiden event and had a budget significantly lower than that of other well established events. In fact, it emerged that the average spend per head per day at the Blue Mile (£21.35)\textsuperscript{13} was higher than both the average spend per spectator per day at the Artemis Transat (£12.60) and the average spend per day per respondent visiting the city specifically because of the Artemis Transat event (£19.23).

Overall, although caution must be exercised when drawing comparison with the spend data collected using a full application of the UK Sport approach, to provide some context the Blue Mile visitors economic impact appears to fall within the lowest range of visitors daily economic impacts – £46,678 to £355,009 – generated across six major events assessed by UK Sport in 2005-2006 (UK Sport, 2006).

3.3 Discussion

In interpreting the economic impact of the Blue Mile, three main considerations can be made with reference to the estimated number of visitors and their provenance.

Firstly, learning can be taken from the fact that, in comparison with other sports events, the expenditure at the Blue Mile appeared to fall within the lowest range of visitors daily economic impacts. In interpreting this, the low numbers of visitors from outside the local area is particularly relevant. Visitors and participants coming from beyond the host area are more likely to spend money on accommodation, which tends to be one of the most significant components of economic impact. Findings from the street surveys showed that only two respondents visiting the city because of the Blue Mile reported accommodation spend and this has had significant repercussions on the total expenditure.

Secondly, the overall estimate provided by this assessment should be interpreted with a number of caveats. On the one hand, its robustness is dependent upon the accuracy of the estimated number of visitors. Although the event organisers monitored the number of visitors passing through the Event Village with a clicker and some of the activities required a registration, access to the Blue Mile event was not ticketed which rendered it difficult to provide accurate estimations of overall attendance. On the other hand, the nature of the visitors at the Blue Mile prevented a full application of the UK Sport approach to economic impact assessments and, in so doing, incorporated an element of uncertainty in the overall estimate. In fact the local provenance of the majority of visitors to an event renders it difficult to

\textsuperscript{12} The Artemis Transat is the oldest solo ocean race in history and is held every four years since 1960.

\textsuperscript{13} Please note that this figure incorporates participants’ registration fee.
clearly distinguish between the expenditure directly attributable to the event and that which would have occurred regardless of this. In this respect, the success of the event in attracting visitors from beyond the local area is again crucial.

Finally, results show that although the total expenditure generated per day was lower than that of the Artemis Transat, the total average spend per head per day compares favourably with it. This means that an increase in levels of attendance would be likely to ensure an increase of the events economic impact in the future. For this reason, consideration should be given to those elements that might have limited to some extent the number of visitors taking part into the event.

- Although levels of awareness of the event prior their visit were high, respondents from the street survey highlighted the need to provide more advertisement. This might suggest that marketing and publicity strategies had a limited impact in reaching all potential target audiences especially those beyond the local area who needed to plan their visit in advance.

- The event activities organised on Saturday differed from those on Sunday as, consequently, did their target audiences. Key sport activities like the races were arranged on Saturday only, while Sunday was more family focused. This might have had an impact on attendance, since races and competitions are more likely to attract a greater number of spectators and participants. In addition, this may be seen as creating significantly different spending patterns during the two day event (e.g. registration fees were required for taking part in Saturday races only) and a significantly lower total expenditure on Sunday.

- Generally, attendance to outdoor events is more likely to be dependent on the weather conditions than indoor events. On Sunday the weather conditions worsened, compared to the previous day and attendance decreased substantially, as figures on visitors proved. Organisers estimated that the event attracted more than six thousand visitors on Saturday and less than three thousand on Sunday14.

A number of recommendations with regard to the issues discussed so far, are presented in the conclusions of this report.

14 These figures refer to the organiser’ original estimate prior to any adjustment.
4. Environmental Impact: Visitors Carbon Footprint at The Blue Mile in Plymouth

4.1 Introduction

There are many reasons for assessing and monitoring the environmental impact of an event or a project. Firstly, setting up an event or an activity and travelling to it typically requires using motorised transport and consequently, generates greenhouse gases associated with climate change. Secondly, sport and cultural events and projects, like the Blue Sound and Stepping Stones to Nature, are increasingly engaged with promoting environmental awareness and sustainable behaviours. As such, they are required to endorse a direct commitment to monitor their own impact on the environment. Thirdly, travel and supply costs might rise in the future, as a consequence of changes in policies and regulations for coping with climate change. Assessing the environmental impact would thus be essential in order to understand how exposed an event is in terms of changes in these areas and to ensure cost effectiveness and financial viability (EventIMPACTS, 2009).

This section presents an exploratory assessment of the environmental impact of the Blue Mile. This is based upon an estimate of climate change emissions (carbon footprint) as a result of visitors travel to the event, that is the amount of greenhouse gas emissions emitted by travelling to and from the event. Other aspects related to setting up and running the event, including energy consumption and waste, were not captured and as such are not included in this assessment.

4.2 Visitors Carbon Footprint Calculations

4.2.1 Total Greenhouse Gas Emissions

According to Defra, Greenhouse Gases can be measured:

“By recording emissions at source by continuous emissions monitoring or by estimating the amount emitted using activity data (such as the amount of fuel used) and applying relevant conversion factors (e.g. calorific values, emission factors, oxidation factors)” (Defra, 2009).

These conversion factors are used to convert activity data, such as number of miles driven, KWh of electricity used, tonnes of waste recycled, into kilograms of carbon dioxide equivalent (kg CO₂eq), which is:

“a universal unit of measurement used to indicate the global warming potential of one unit of carbon dioxide” (DEFRA, 2009).
This in turn allows for comparison with different greenhouse gases and different activities.

The activity data available for the Blue Mile included the travel information respondents provided through the street survey, in terms of means of travel used and estimated number of miles travelled to the event (see Section 2.2).

As the analysis is based upon the environmental impact of the overall visit, the total number of miles for a return journey was calculated as the first step. Where public transport (e.g. bus, train, taxi and ferry) was reported to be used, miles were converted into kilometres to allow the application of Defra conversion factors for those means of transport.

The second stage of the calculation involved applying the Defra transport conversion factors to the total distance travelled by each mode of transport. The specific emission factors used in this analysis are reported in Table Five below.

**Table Five: Defra Transport Conversion Factors**

<table>
<thead>
<tr>
<th>Means of Transport</th>
<th>Kg CO₂ per unit*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car (unknown fuel)</td>
<td>0.32641</td>
</tr>
<tr>
<td>Local bus</td>
<td>0.11037</td>
</tr>
<tr>
<td>Train</td>
<td>0.05774</td>
</tr>
<tr>
<td>Regular taxi</td>
<td>0.22169</td>
</tr>
<tr>
<td>Foot passenger ferry</td>
<td>0.01912</td>
</tr>
</tbody>
</table>

*Transport conversion factor for car refers to miles travelled per vehicle, whereas conversion factors for all public transport are provided by km per passenger

Source: DEFRA, 2009

The Defra conversion factor for car is based upon the vehicle emission, regardless of the number of passengers. Therefore, where the means of transport was reported to be a car, the total emissions were divided by the total number of adults and children who were with the respondent at the event.

Table Six shows the total greenhouse gases emitted by all respondents and by those who visited the city because of the Blue Mile. Although the full assessment is based upon emissions generated by respondents present at the venue because of the Blue Mile only, analysis for both groups are presented here, as there are some variations in the totals.

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15 This is based upon the assumption that all visitors would travel back to the same place they started the journey from, using the same means of transport.

16 This is based upon the assumption that all the people reported to be at the event with the respondent travelled together, although it is accepted that in some cases this might not have been the case.
Table Six: Respondents’ Greenhouses Gases Emissions, by Means of Transport

<table>
<thead>
<tr>
<th>Means of Transport</th>
<th>Greenhouse Gases emissions (kg CO₂)</th>
<th>All respondents</th>
<th>Respondents at the venue because of the Blue Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car</td>
<td>494.49</td>
<td>325.19</td>
<td></td>
</tr>
<tr>
<td>Bus</td>
<td>54.54</td>
<td>26.83</td>
<td></td>
</tr>
<tr>
<td>Train</td>
<td>2.97</td>
<td>2.97</td>
<td></td>
</tr>
<tr>
<td>Taxi</td>
<td>3.57</td>
<td>2.04</td>
<td></td>
</tr>
<tr>
<td>Ferry</td>
<td>1.28</td>
<td>1.14</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>556.85</td>
<td>358.17</td>
<td></td>
</tr>
</tbody>
</table>

'Car' also includes motorcycles and minivan, 'Ferry' also includes watertaxi and boat.
Base: All respondents travelling by a motorised vehicle (n=150); Respondents at the venue because of the Blue Mile travelling by a motorised vehicle (n=102)
Source: SERIO, Blue Mile Survey 2010

As can be seen, a total of 358.17 kg CO₂ were generated by respondents present at the venue because of the Blue Mile.

In being the most common means of transport used to get to the Blue Mile (57.8% of respondents used it), car emissions accounted for the highest amount of greenhouse gases generated for taking part in the event. These totalled to 325.19 kg CO₂. In addition, respondents who travelled by bus (11.7%) emitted a total of 26.83 kg CO₂.

4.3 The Total Average Visitor Greenhouse Gas Emissions

The total CO₂ emissions per respondent to the street survey were then calculated. These are as follows:

All respondents: 2.70 kg CO₂ per head

Respondents at the venue because of the Blue Mile: 2.63 kg CO₂ per head

The total average transport emissions for respondents have also been multiplied by the number of visitors, using the estimates provided in Section 3.2.2. It is calculated, thus, that the event visitors generated between 14,866.49 kg CO₂ and 17,476.59 kg CO₂. It must be emphasised however, that the robustness of this assessment is dependent upon the accuracy of the estimated number of visitors, as was the case for the economic assessment.
4.4 Discussion

This initial assessment of the Blue Mile environmental impact estimates that visitors travelling to the event generated between 14,866.49 kg CO2 and 17,476.59 kg CO2 in total, and 2.63 kg CO2 per head. These findings must be interpreted with a number of caveats. Firstly their robustness is dependent on the accuracy of the estimated number of miles visitors stated they travelled to the event, as well as the estimated number of people attending the event. Secondly, in being based on visitors' transport emissions only, this provides a partial understanding of the overall environmental impact. A comprehensive measurement of the event’s carbon footprint is not possible at this stage, due to the lack of information on other aspects involved in the setting up and running of the event that might have generated greenhouse gases (e.g. energy consumption, waste produced). Establishing accurate estimates for these aspects was beyond the scope of the present study. In order to accurately model the events environmental impact in the future a full life cycle analysis, incorporating waste management, energy use, etc. related to all aspects of the event (including planning and administration) would be required. However, this would be unable to capture the longer term benefits of behaviour change that the event seeks to achieve.
5. **Key Findings from the Open Spaces Survey**

This study aimed at developing a monitoring system based upon a bespoke toolkit to enable the Blue Mile, Blue Sound and Stepping Stones to Nature to monitor their impacts and achievements throughout the projects' lifetimes. As reported in Section 1.3, a key element of this toolkit was a pre-event survey exploring respondent’s awareness and use of outdoor open spaces in the Plymouth area. Findings from this are discussed in this section.

Specifically, this analysis incorporates the pre-event survey data collected during the Blue Mile event and through the on-line survey administered to registered participants. A total of 44 on-line surveys and 123 street surveys were completed. An overview of the respondent profile is provided in Section 5.1 and key findings emerging from the survey are presented in Sections 5.2 and 5.3.

### 5.1 Respondent Profile

The survey was completed by 52.1% of females and 47.9% of males. As shown in Chart Thirteen below there was a broad spread of ages within the sample, although a higher proportion of those in the 35-44 age group took part (24.6%).

**Chart Thirteen: Age of Respondents**

![Chart Thirteen: Age of Respondents]

In terms of domicile, amongst on-line respondents who provided their postcode, the majority indicated they were living in areas identified by a PL postcode (37), two were living in Devon and Cornwall and three beyond Devon and Cornwall. Since relevant questions included in the street survey were related only to open spaces in Plymouth, a filter was applied to ensure
only respondents living in areas identified by a PL postcode were included, this resulted in people from the PTTWA alone being interviewed.

Additional demographic data on working status, ethnicity and disability were also collected from the on-line survey. Results show that 63.6% of respondents were working full time, 11.4% part time, 11.4% were self employed and 11.4% were students and one was retired. The overwhelming majority were white British (95.5%). Only one respondent indicated they considered themselves to have a disability.

5.2 Outside Open Spaces in Plymouth and the Surrounding Area

The first set of questions included in the pre-survey focused on the use and views of open spaces in the city of Plymouth, with the majority of these administered to all participants, including Blue Mile visitors. Later questions covered similar issues with regard to open spaces outside of Plymouth and were not included in the street survey.

Registered participants were initially asked to indicate how often they visited a range of places in the city of Plymouth and in the surrounding area (within a 30 minute journey time from the city), such as the coast, water, park, woodlands, nature reserve and national park17. Results are presented in Table Seven and Eight below.

The most frequently visited places in the city of Plymouth as well as in its surrounding area were the coast and water. Plymouth’s coast and water were visited at least once a week by half of respondents, while this decreased to around four in every ten if these places were outside of Plymouth.

Four in ten respondents also visited parks in the city of Plymouth at least once a week and almost three in ten regularly went to Dartmoor or other national parks. Woodlands were visited less often while nature reserves emerged as the least visited open space.

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17 ‘National park’ was included in the question on places outside of Plymouth only.
### Table Seven: Frequency of Visits to Open Spaces in the City of Plymouth

<table>
<thead>
<tr>
<th>Open Space</th>
<th>Every day</th>
<th>3-4 times a week</th>
<th>Once a week</th>
<th>2-3 times a month</th>
<th>Once a month</th>
<th>A couple of times a year</th>
<th>Less frequently</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>The coast</td>
<td>3</td>
<td>6.8%</td>
<td>8</td>
<td>18.2%</td>
<td>10</td>
<td>22.7%</td>
<td>3</td>
<td>6.8%</td>
</tr>
<tr>
<td>Water</td>
<td>3</td>
<td>7.0%</td>
<td>6</td>
<td>14.0%</td>
<td>13</td>
<td>30.2%</td>
<td>2</td>
<td>4.7%</td>
</tr>
<tr>
<td>Park</td>
<td>2</td>
<td>4.8%</td>
<td>5</td>
<td>11.9%</td>
<td>11</td>
<td>26.2%</td>
<td>3</td>
<td>7.1%</td>
</tr>
<tr>
<td>Woodland</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>2.3%</td>
<td>7</td>
<td>15.9%</td>
<td>12</td>
<td>27.3%</td>
</tr>
<tr>
<td>Nature reserve</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>2.4%</td>
<td>7</td>
<td>16.7%</td>
</tr>
</tbody>
</table>

Base: Online pre-survey respondents (42-44)
Source: SERIO, Open Spaces Pre-Survey, 2010

### Table Eight: Frequency of Visits to Open Spaces Outside of Plymouth

<table>
<thead>
<tr>
<th>Open Space</th>
<th>Every day</th>
<th>3-4 times a week</th>
<th>Once a week</th>
<th>2-3 times a month</th>
<th>Once a month</th>
<th>A couple of times a year</th>
<th>Less frequently</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>The coast</td>
<td>1</td>
<td>2.3%</td>
<td>3</td>
<td>6.8%</td>
<td>15</td>
<td>34.1%</td>
<td>5</td>
<td>11.4%</td>
</tr>
<tr>
<td>Water</td>
<td>0</td>
<td>0.0%</td>
<td>5</td>
<td>12.2%</td>
<td>11</td>
<td>26.8%</td>
<td>5</td>
<td>12.2%</td>
</tr>
<tr>
<td>Park</td>
<td>0</td>
<td>0.0%</td>
<td>3</td>
<td>7.5%</td>
<td>6</td>
<td>15.0%</td>
<td>4</td>
<td>10.0%</td>
</tr>
<tr>
<td>Woodland</td>
<td>1</td>
<td>2.3%</td>
<td>1</td>
<td>2.3%</td>
<td>8</td>
<td>18.6%</td>
<td>6</td>
<td>14.0%</td>
</tr>
<tr>
<td>Nature reserve</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>4</td>
<td>10.0%</td>
<td>3</td>
<td>7.5%</td>
</tr>
<tr>
<td>National park</td>
<td>1</td>
<td>2.4%</td>
<td>2</td>
<td>4.8%</td>
<td>9</td>
<td>21.4%</td>
<td>8</td>
<td>19.0%</td>
</tr>
<tr>
<td>(e.g. Dartmoor)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Base: Online pre-survey respondents (40-43)
Source: SERIO, Open Spaces Pre-Survey, 2010

---

18 Please note that some respondents chose not to answer one or more items in this question.
19 Please note that some respondents chose not to answer one or more items in this question.
5.2.1 Most Frequented Open Spaces

All respondents were asked to indicate which open space in Plymouth, if any, they visited most frequently. While 12.8% of respondents indicated they did not visit any open spaces in Plymouth, for those who did, the most popular place was the Hoe and waterfront area, with 50.7% indicating this was the place they went most often in Plymouth. This was followed by Central Park (21.6%) and the Barbican (19.6%). Freedom Fields and other local parks were also indicated by 12.2% of respondents.

Table Nine: Most Frequented Open Spaces in the City of Plymouth

<table>
<thead>
<tr>
<th>Open Space</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Hoe and Waterfront area</td>
<td>75</td>
<td>50.7%</td>
</tr>
<tr>
<td>Central Park</td>
<td>32</td>
<td>21.6%</td>
</tr>
<tr>
<td>Barbican</td>
<td>29</td>
<td>19.6%</td>
</tr>
<tr>
<td>Mount Batten</td>
<td>10</td>
<td>6.8%</td>
</tr>
<tr>
<td>Cann Woods</td>
<td>10</td>
<td>6.8%</td>
</tr>
<tr>
<td>Saltram</td>
<td>7</td>
<td>4.7%</td>
</tr>
<tr>
<td>Freedom Fields</td>
<td>6</td>
<td>4.1%</td>
</tr>
<tr>
<td>Jennycliff</td>
<td>6</td>
<td>4.1%</td>
</tr>
<tr>
<td>Coast/beaches</td>
<td>9</td>
<td>6.1%</td>
</tr>
<tr>
<td>Devils Point</td>
<td>4</td>
<td>2.7%</td>
</tr>
<tr>
<td>Plymbridge</td>
<td>4</td>
<td>2.7%</td>
</tr>
<tr>
<td>Other local parks (e.g. Victoria Park, Devonport Park, etc)</td>
<td>12</td>
<td>8.1%</td>
</tr>
<tr>
<td>Mount Wise</td>
<td>2</td>
<td>1.4%</td>
</tr>
<tr>
<td>Other places (City Centre, Plym Valley, Bircham Valley, Estover)</td>
<td>9</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

*Percentages do not total 100% as respondents could name more than one place
Base: All respondents visiting open spaces in Plymouth (n=148)
Source: SERIO, Open Spaces Pre-Survey, 2010

The popularity of the Hoe and waterfront areas is also confirmed by responses provided to a direct question about the frequency of visit here, with 52.4% indicating they visited at least once a week.

A similar question was asked to registered participants of the Blue Mile with regards to places in the surrounding area of Plymouth (within a 30 minute journey time)\(^{20}\). Responses are provided in the Table Ten below. Dartmoor emerged as the open space where more respondent go most frequently (33.3%), followed by beaches, such as Whitsand Bay (16.7%) and Wembury Beach (14.3%).

\(^{20}\) Note that a few respondents indicated open spaces located in areas farther away from Plymouth.
Respondents were then asked to indicate the reason for going to the place/s they visited most frequently in the city of Plymouth and outside of it. As shown in Table Eleven, whether visiting an open space in the city or in the surrounding area, respondents reported enjoying the surroundings and getting some fresh air as the main reason for their visits. In addition, a high proportion of respondents indicated they visited open spaces in Plymouth or outside of it to relax (44.9% and 61.9%).

Other common reasons were proximity to home and spending time with family and friends, with more than one third of respondents indicating these as reasons for visiting places in the city, and more than half as reasons for visiting places outside of the city.

Taking part in recreational activities appears to be a more relevant reason for visiting places in Plymouth’s surrounding area, than in the city, while only a few people went to their favourite open space, regardless of its location, for an educational visit or to learn about the natural environment.

**Table Ten: Most Frequent Open Spaces in the Surrounding Area of Plymouth**

<table>
<thead>
<tr>
<th>Open Space</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dartmoor</td>
<td>14</td>
<td>33.3%</td>
</tr>
<tr>
<td>Whitsand Bay</td>
<td>7</td>
<td>16.7%</td>
</tr>
<tr>
<td>Wembury Beach</td>
<td>6</td>
<td>14.3%</td>
</tr>
<tr>
<td>Bantham</td>
<td>5</td>
<td>11.9%</td>
</tr>
<tr>
<td>Bodmin Moor</td>
<td>2</td>
<td>4.8%</td>
</tr>
<tr>
<td>Cawsand</td>
<td>2</td>
<td>4.8%</td>
</tr>
<tr>
<td>Mothecombe</td>
<td>2</td>
<td>4.8%</td>
</tr>
<tr>
<td>Other open spaces (E.G. Bigbury, The Coastal Path, Yealm Estuary, etc)</td>
<td>11</td>
<td>26.2%</td>
</tr>
</tbody>
</table>

*Percentages do not total 100% as respondents could name more than one place
Base: Registered participants visiting open spaces outside of Plymouth (n=42)
Source: SERIO, Open Spaces Pre-Survey, 2010*
### Table Eleven: Reasons for Going to the Most Frequently Visited Open Spaces in Plymouth and the Surrounding Area

<table>
<thead>
<tr>
<th>Reason for visiting</th>
<th>Open spaces in the city of Plymouth</th>
<th>Open spaces in the surrounding area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>To enjoy the surroundings</td>
<td>83</td>
<td>56.5%</td>
</tr>
<tr>
<td>To get some fresh air</td>
<td>76</td>
<td>51.7%</td>
</tr>
<tr>
<td>To relax</td>
<td>66</td>
<td>44.9%</td>
</tr>
<tr>
<td>It is close to home</td>
<td>54</td>
<td>36.7%</td>
</tr>
<tr>
<td>To participate in recreational activities (walking/surfing/sailing)</td>
<td>54</td>
<td>36.7%</td>
</tr>
<tr>
<td>To spend time with family/friends</td>
<td>51</td>
<td>34.7%</td>
</tr>
<tr>
<td>To take my children to play</td>
<td>25</td>
<td>17.0%</td>
</tr>
<tr>
<td>To walk the dog</td>
<td>18</td>
<td>12.2%</td>
</tr>
<tr>
<td>To learn about the natural environment</td>
<td>5</td>
<td>3.4%</td>
</tr>
<tr>
<td>For an educational visit</td>
<td>6</td>
<td>4.1%</td>
</tr>
<tr>
<td>No particular reason</td>
<td>3</td>
<td>2.0%</td>
</tr>
<tr>
<td>Other</td>
<td>16</td>
<td>10.9%</td>
</tr>
</tbody>
</table>

*Percentages do not total 100% as respondents could provide more than one response

Base: All respondents visiting open spaces in the city of Plymouth (n=147); Registered participants visiting open spaces in the surrounding area (n=42)

Source: SERIO, Open Spaces Pre-Survey, 2010

In addition to this, registered participants were asked to indicate how they usually travel to get to those places and who they usually go with.

In terms of means of transport, a large proportion of respondents reported they usually went by car. Predictably this proportion was higher when it came to travelling to places in the surrounding area of Plymouth (81.0% compared to 50.0% of people visiting open spaces in the city). Conversely, travelling by foot was more common for going to open spaces in the city (29.4%) than in the surrounding area (11.9%). Public transport appears to be the least popular, with no one using it for going to places outside of the city.
As shown in Chart Fifteen, whether visiting places in Plymouth or in the surrounding area respondents were more likely to do so with their partner (52.9% and 61.9%). Additionally, a large proportion visited open spaces in the city alone, while friends and family were preferred when it came to visiting places in the surrounding area.
5.2.2 Barriers and Encouraging Factors to visit Open Spaces

Further to investigating preferred open spaces, the survey explored any potential barriers as well as aspects that would encourage residents to go to open spaces.

As can be seen from Table Twelve, a quarter of respondents did not perceive any barriers to their visits to open spaces in Plymouth, while another 10.2% did not mention any particular reasons. Similar results were recorded with regards to visiting places outside of the city, albeit with lower proportions.

Of those who did feel there were barriers, the majority reported the lack of time and being too busy as factors that prevented them going to open spaces more frequently. In addition a few indicated that places were too hard to get to, especially if they were not in the city, and four people reported they could not afford to travel to the surrounding area.

Finally, one-fifth of respondents visiting open spaces in the city indicated ‘other’ barriers, including security issues (5), poor facilities and unkemptness (5) and parking costs (2). Living far away from the city (9) and adverse weather conditions (8) were also mentioned.
Table Twelve: Perceived Barriers to Visiting Open Spaces in the City of Plymouth and in the Surrounding Area more frequently

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Open spaces in the city of Plymouth</th>
<th>Open spaces in the surrounding area of Plymouth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>I don't have enough time/I am too busy</td>
<td>68</td>
<td>41.0</td>
</tr>
<tr>
<td>They are too hard to get to</td>
<td>10</td>
<td>6.0</td>
</tr>
<tr>
<td>I can't afford to travel there</td>
<td>3</td>
<td>1.8</td>
</tr>
<tr>
<td>I don't know how to get to them</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>I don't have anyone to go with</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>I can't afford to do things when I get there</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>I do not enjoy being outdoors</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>They are not suitable for my family</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>No particular reason</td>
<td>17</td>
<td>10.2</td>
</tr>
<tr>
<td>Nothing</td>
<td>41</td>
<td>24.7</td>
</tr>
<tr>
<td>Other</td>
<td>38</td>
<td>22.8</td>
</tr>
</tbody>
</table>

*Percentages do not total 100% as respondents could provide more than one response
Base: All respondents (166); Registered participants (43)
Source: SERIO, Open Spaces Pre-Survey, 2010

When asked about aspects that would encourage respondents to go to open spaces, different views emerged with regards to visiting places in the city or in the surrounding area, as shown in Table Thirteen.

For open spaces in the city, respondents indicated the availability of more organised activities (14.5%) improvements in parking facilities and costs and public transport (13.3%) as the main things that would encourage them to visit more frequently. Around one in ten respondents also mentioned improvements in information available and access, while 7.9% indicated that they would be encouraged to go more frequently if more children's play features were provided. In addition, 30 'other' responses were reported which ranged from cleanliness of facilities (8) to more time available (7) and security issues (3).

When it came to open spaces in the surrounding area of Plymouth, respondents prioritised the need for more information (22.5%) and better public transport (22.5%). Better parking facilities and better access were also indicated by respondents (20.0% and 17.5% respectively).

21 Please note that one respondent chose not to answer this question.
Finally, it is worth noting that almost a third of respondents felt they would not be encouraged by anything to visit open spaces in Plymouth more frequently and more than one third indicated the same with regard to places in the surrounding area.

Table Thirteen: Aspects that would Encourage Respondents to Visit Open Spaces in the City of Plymouth and in the Surrounding Area more frequently

<table>
<thead>
<tr>
<th>Aspects that would encourage respondents</th>
<th>Open spaces in the city of Plymouth</th>
<th>Open spaces in the surrounding area of Plymouth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Better parking facilities</td>
<td>22</td>
<td>13.3</td>
</tr>
<tr>
<td>Better public transport available</td>
<td>22</td>
<td>13.3</td>
</tr>
<tr>
<td>More children’s play features</td>
<td>13</td>
<td>7.9</td>
</tr>
<tr>
<td>More organised activities</td>
<td>24</td>
<td>14.5</td>
</tr>
<tr>
<td>More seating</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Better access (e.g. paths, signs etc)</td>
<td>16</td>
<td>9.7</td>
</tr>
<tr>
<td>More information about them</td>
<td>19</td>
<td>11.5</td>
</tr>
<tr>
<td>Nothing</td>
<td>49</td>
<td>29.7</td>
</tr>
<tr>
<td>Don’t know</td>
<td>10</td>
<td>6.1</td>
</tr>
<tr>
<td>Other</td>
<td>30</td>
<td>18.2</td>
</tr>
</tbody>
</table>

*Percentages do not total 100% as respondents could provide more than one response

Base: All respondents (165); Registered participants (40)

Source: SERIO, Open Spaces Pre-Survey, 2010

5.2.3 Perceptions of Open Spaces

Finally, the pre-survey administered to registered participants sought to understand respondents overall view of open spaces in the city and elsewhere. As can be seen from Table Fourteen, the large majority of respondents shared a positive view of open spaces. However, open spaces in the surrounding area of Plymouth tended to be seen more positively than those in the city, with 74.4% of respondents viewing them ‘very positively’ compared with 36.4%.

Source: SERIO, Open Spaces Pre-Survey, 2010

Please note that four respondents chose not to answer this question.
Table Fourteen: Respondents Views of Open Spaces in the City of Plymouth and in the Surrounding Area (within a 30 minute journey time).

<table>
<thead>
<tr>
<th>Rating</th>
<th>View of Open spaces in the city of Plymouth</th>
<th>View of Open Spaces in surrounding area of Plymouth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Very positively</td>
<td>16</td>
<td>36.4</td>
</tr>
<tr>
<td>Quite positively</td>
<td>21</td>
<td>47.7</td>
</tr>
<tr>
<td>Neither positively nor negatively</td>
<td>4</td>
<td>9.1</td>
</tr>
<tr>
<td>Quite negatively</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>Don't know</td>
<td>1</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Base: Registered participants (43-44)²³
Source: SERIO, Open Spaces Pre-Survey, 2010

5.3 Attitudes Towards the Environment

Given the aim of the Blue Mile, Blue Sound and Stepping Stones to Nature to raise awareness and promote engagement with the environment, a section of the pre-survey was designed to explore respondents’ attitudes toward this. Respondents were presented with a number of statements concerning their behaviour toward water use, energy saving and more general attitudes towards climate change and asked to indicate the extent to which they agreed or disagreed with each.

As shown in Chart Sixteen, the majority of respondents appeared to be thoughtful with regards to energy and water consumption, with 80.0% and 60.0% of respondents respectively strongly disagreeing with the assumption that they don’t give much thought to saving energy in their home and don’t pay much attention to the amount of water they use at home. In addition, nearly eight in ten respondents strongly disagreed with the idea that the effects of climate change were too far in the future to really worry them.

When considering potential barriers to sustainable behaviour, the lack of practical alternatives to travelling by car in Plymouth appears a factor preventing two thirds of respondents reducing their car use.

²³ Please note that one respondent chose not to answer the question on their views on open spaces outside of Plymouth.
To further explore respondents’ views of environmental issues, respondents were asked the extent to which they agreed or disagreed with a set of statement on their attitude towards local open spaces and their expectations on Plymouth’s commitment to protect their natural environment.

Results are shown in Chart Seventeen. As it can be seen, the large majority considered local open spaces important to them, with 61.9% of respondents strongly agreeing with this statement. In addition, 45.5% would like to do more to protect Plymouth’s marine environment, however, it should be noted that a quarter of respondents did not agree. However, this data should not be interpreted as an indication of disinterest, since many respondents indicated elsewhere that they were already engaged with the environment as much as they could and did not feel they could do more.

A strong level of agreement was also expressed with regards to the duty for Plymouth residents to recycle: 74.4% of respondents agreed with this. Conversely, when respondents were asked to indicate whether Plymouth could make more of its natural environment, a wider range of opinions emerged, with six in ten respondents disagreeing either ‘quite’ or ‘strongly’ and a quarter agreeing either ‘quite’ or ‘strongly’.

24 Please note that two to three respondents chose not to answer one or more items of this question.
In interpreting these findings, it must be emphasised that respondents were participants and visitors of an event clearly aimed to promote the environment and as such might not be representative of the general population of Plymouth and beyond. Attendance and engagement with projects like the Blue Mile, Blue Sound and Stepping Stones to Nature tend to be filtered by the public’s structural features and attitudes towards cultural and scientific contents and outdoor activities, resulting in an upstream selection of visitors. It is therefore more likely that people already interested in the environment and aware of issues around this, take part in these projects.

25 Please note that two to three respondents chose not to answer one or more items of this question.
6. Conclusions and Recommendations

6.1 Introduction

This study sought to develop a monitoring system based upon a bespoke toolkit for assessing the impact and achievements of the Blue Mile, Blue Sound and Stepping Stones to Nature projects. This toolkit included a street survey carried out during the Blue Mile two day event (3rd and 4th July) and an Open Spaces Survey to be completed by participants of each project. This report presented findings from the Blue Mile impact assessment and a summary of results emerging from the Open Spaces pre-event survey. Conclusions drawn from these findings, together with related recommendations are discussed in the following sections.

6.2 Blue Mile Impact Assessment

Findings from the street survey suggest that the event was successful in engaging visitors with the blue environment. Levels of participation in the activities were high, 92.2% of respondents rated the overall event ‘good’ or ‘extremely good’ and the majority felt that attending the Blue Mile had a positive impact on their views and perceptions of the environment and environmental issues.

Awareness of the event was good, with 70.4% of respondents having heard of the event before attending. Word of mouth was the most common means for finding out about the event. Six out of ten respondents visited the city or were at the venue specifically for the Blue Mile and a quarter of respondents indicated that they were repeat visitors to the Blue Mile, planning, or having visited on both days. Linked to this, it is of note that, consistent with other surveyed events staged in Plymouth over a short time scale, the event catered for a relatively local audience, mainly resident in the PTTWA.

Overall, in being a maiden event and with a lower budget than that of other well established sports events held in Plymouth, the Blue Mile was attended by a number of visitors ranging between 5,645 and 6,636 and generated an economic impact of between £57,555 and £67,650 per day.

The event also appeared to contribute to some extent in promoting sports development, as 13.1% of respondents stated they would take part or encourage family and friends to engage in more watersport or outdoor activities, as a result of their attendance. In addition, the Blue Mile appeared to be successful in developing a positive image of the city of Plymouth amongst its visitors. Such positive perceptions were reflected in the high proportion of respondents (70.9%) reporting that they would be likely to complete a Blue Mile, if the event was repeated in the future.

Reflecting these findings, the following points are worth considering in relation to future Blue Mile events.
Marketing
The media evaluation reported a good spread of regional media coverage and the use of a wide range of media. However, in taking into account visitors’ most common suggestion, the event could potentially be advertised further afield and in a more thorough way, particularly beyond the local area, as this would help to increase attendance and attract more people from outside of Plymouth, with potential beneficial economic returns.

Given the positive impact the Blue Mile had on young people and the low proportion of attendees from this age group, especially on Sunday, this audience could also be targeted more effectively.

Marketing methods could continue to include mainstreaming media (TV, newspapers, radio, fliers and banners), as they proved to be effective in generating overall awareness, but also strengthen the online coverage and the use of social networking that could help attract more young people.

Organisation and communication
Respondents to the street survey felt that more and varied activities and entertainment, including more watersport races, would improve the event. Consideration could be given to the feasibility of broadening the event offering, by adding food and merchandise stalls and more varied entertainment. The opportunity of organising a wider range of races (e.g. relay) and of planning them on both days should also be taken into consideration, as this would help to attract a wider public including a higher number of paying participants, and to retain visitors from beyond the local area in the city overnight.

It is also recommended that consideration should be given to improving on-site information on the programme of events, providing directions and making available facilities more easily accessible and providing clearer communication on registration requirements and details of the programme of events each day.

Monitoring total visitor numbers
The robustness of the economic impact assessment significantly relies on the accuracy of estimated numbers of visitors to the Blue Mile. Consideration should be given to adopting appropriate methods for counting visitors in the future, particularly if events will not be ticketed. It is suggested that the opportunity to monitor access to the Event Village, distributing a ‘free ticket’ doubling as a flier or a programme at the entrance is explored in the future.

Monitoring the environmental impact
The assessment of the environmental impact in this report is limited to the travel related impact of visitors. It is suggested that for future Blue Mile events a sound monitoring system for assessing environmental
impact should be developed, based on the concept of full life cycle analysis.

This will contribute to ensuring the events sustainability and, in being consistent with the Blue Mile’s main purpose, may be effectively used as part of the overall marketing strategy, in promoting a ‘zero carbon’ Blue Mile.

6.3 Open Spaces Survey

Findings from the Open Spaces pre-event survey provided useful insights on the characteristics and attitudes of those engaged in projects promoting engagement with the environment, like the Blue Mile, Blue Sound and Stepping Stones to Nature.

Cultural and sport events, as well as projects engaging with the community, tend to induce an upstream selection of participants, based upon their prior interest and involvement in the event contents. The Blue Mile, Blue Sound and Stepping Stones to Nature do not make an exception. The majority of respondents proved to be already aware and, to some extent, engaged with the environment and related issues, regularly visiting open spaces in Plymouth and in the surrounding area.

The lack of time was perceived as the main barrier to visiting green or blue open spaces more frequently. However respondents also indicated a range of aspects that would encourage them to go to open spaces, including more organised activities, information available and better public transport. These aspects appear to be consistent with the projects’ main purposes and in doing so, suggest key elements towards which all projects could work effectively.
References


Appendices

Appendix One: Images of the Blue Mile Event

Appendix Two: Blue Mile Questionnaire

Appendix Three: Open Spaces Pre-Event Survey
Appendix One

Images of the Blue Mile Event
Appendix Two

Blue Mile Questionnaire
Blue Mile Questionnaire

To be completed by interviewer:

Date of interview: ________________ Time of interview: ________________

Introduction:

Good morning / afternoon, I’m from the University of Plymouth. We’re conducting some research around the Blue Mile event. Would it be OK to ask you a few questions, it should take around 7 minutes of your time?

[Ensure respondent is aged 16 or over]

Just to assure you that any information you provide today will be treated in the strictest of confidence.

Main survey: Visitor Profile

1. So firstly, could you tell me where you live? ______________________ (write in, ask for country if overseas)

If UK:

2. And what is the first part of your postcode: (e.g. PL17): ______________

If Plymouth (PL postcode) at Q2 go to Q11

If not, then ask Q3

3. And is that where you have travelled from today? Yes □ No □ Go to Q5

4. Where have you travelled from today? _________________________________

5. Are you on holiday? Yes □ No □

6. Have you visited Plymouth before? Yes □ No □ Don’t know □

7. As part of your visit to Plymouth today have you, or are you, intending to stay in or near the City overnight?

   Yes □ Go to Q8
   No □ Go to Q11
   Don’t know □ Go to Q11
8. How many nights are you planning to stay in or near Plymouth in total? ________________

9. Is your accommodation within the city or outside of it?  
   - Plymouth □
   - Outside Plymouth □

10. What kind of accommodation are you staying in? [prompt with pre-codes]
    - Hotel □
    - B&B □
    - With friends/relatives □
    - Other (write in) ________________________

Ask all

11. What is the main purpose of your visit to the city today? [tick all that apply]
    - Shopping □
    - Business/work □
    - Visiting friends/family □
    - Study □
    - Sightseeing □
    - Blue Mile event □  Go to Q13
    - Other (write in) ________________________

If Blue Mile not mentioned at Q11

12. Did you come to the [insert: barbican / the hoe] today because of the Blue Mile event?  
    - Yes □  No □  Don’t know □

13. And how did you travel to the city today? [tick all that apply]
    - Park and Ride □
    - Bus □
    - Train □
    - Car □
    - Bicycle □
    - By foot □
    - Other (write in) ________________________
14. And how many miles did you travel by [INSERT EACH FORM OF TRANSPORT USED AT Q13]  
[INTERVIEWER: For Park and Ride separate out into Bus and Car]
- Bus __________ miles
- Train __________ miles
- Car __________ miles
- Bicycle __________ miles
- By foot __________ miles
- Other __________ miles

15. Including yourself, how many people are you with today?  
   Adults: ________  
   Children (under 16): ________

For those in a **group and if respondent is on holiday** at Q5 ask Q16, others skip to Q17. For **individuals** go to Q18

16. Are you all staying together?  
   Yes ☐  No ☐

17. Are you a family group?  
   Yes ☐  No ☐

**Ask all**

18. Can you tell me approximately how much you have spent or expect to spend in the city today, including this evening? So firstly, how much have you spent on.....  
   *[If respondent is in a family group at Q16 ask for total family expenditure, otherwise individual expenditure]*

   | Bus       | £________ | £________ |
   | Train     | £________ | £________ |
   | Taxi      | £________ | £________ |
   | Other travel (petrol, parking) | £________ | £________ |
   | Food/drink | £________ | £________ |
   | Tickets for events/Tourist attractions (include Blue Mile and related events) | £________ | £________ |
   | Shopping/souvenirs etc (non food and drink shopping) | £________ | £________ |
   | Accommodation | £________ | £________ |
Main survey: Awareness and Involvement in Blue Mile

READ OUT: The Blue Mile is a two day event.

Ask all

19. IF SATURDAY INTERVIEWING: Do you think you will come to the Blue Mile again tomorrow?
   IF SUNDAY INTERVIEWING: Did you come to the Blue Mile yesterday as well?
   Yes □ No □

20. Had you heard of the Blue Mile before today? Yes □ Go to Q21
    No □ Go to Q22

21. How did you hear about the Blue Mile? [tick all that apply]
   Poster □
   Flyers □
   Bus branding □
   Blue Mile Website □
   Social networking (i.e. facebook, twitter) □
   Other Website □
   Television □
   Radio □
   Newspaper □
   Word of mouth □
   Don’t know □
   Other (write in) ___________________

22. Have you registered to complete a Blue Mile? Yes □ No □
READ OUT: As well as the opportunity to complete a Blue Mile, the Blue Mile event includes a variety of entertainment and activities.

23. Which of the following have you participated in, or do you plan to participate in? READ OUT (tick all that apply)

Only ask if yes at Q22

- Blue Mile Walk □
- Blue Mile Swim □
- Blue Mile Kayak □
- Blue Mile Stand up Paddle □
- The End of the Line film (Aquarium) □
- Event Village □
- Watersport taster session □
- Other (write in) ___________________

24. What barriers, if any, have you experienced in accessing any of these activities?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Main survey: Event Satisfaction

25. How child and family friendly do you think the Blue Mile event is? Do you think it is…READ OUT

- Not at all child and family friendly □
- Not very child and family friendly □
- Neither/Nor □
- Quite child and family friendly □
- Very child and family friendly □
- (Don’t know) □
26. And overall, how would you rate the Blue Mile event today? Would you rate it as…READ OUT

- Extremely poor □
- Quite poor □
- Neither/Nor □
- Quite good □
- Extremely good □
- (Don’t know) □

27. What, if anything, could be improved about the Blue Mile to make it better in the future?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Main survey: Environmental and Social Impact

28. What do you think the main purpose of the Blue Mile is?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

29. And what, if anything, do you think you will do differently as a result of attending the Blue Mile?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

30. How much do you agree or disagree with the following statements. As a result of attending the Blue Mile I am…READ OUT (SHOWCARD A)

<table>
<thead>
<tr>
<th>ROTATE START</th>
<th>Strongly disagree</th>
<th>Slightly disagree</th>
<th>Neither nor</th>
<th>Slightly agree</th>
<th>Strongly agree</th>
<th>DK/NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likely to take part in more water activities</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>More likely to enjoy the natural environment with my family and friends</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Likely to do more to look after our planet</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
31. And how much do you agree or disagree with the following statements. READ OUT (SHOWCARD A)

<table>
<thead>
<tr>
<th>ROTATE START</th>
<th>Strongly disagree</th>
<th>Slightly disagree</th>
<th>Neither nor</th>
<th>Slightly agree</th>
<th>Strongly agree</th>
<th>DK/NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Blue Mile has raised my awareness of the Blue environment</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>The Blue Mile has opened my mind to environmental issues</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>The Blue Mile has made me more aware of the threats facing the marine environment</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>The Blue Mile and events like it help to bring the local community together</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Attracting events like the Blue Mile is good for the image of Plymouth</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>My experience during the Blue Mile has enhanced my image of Plymouth as a tourist destination</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

32. This is the first time the Blue Mile has taken place in Plymouth. If it were to take place again next year how likely would you be to complete a Blue Mile? Do you think you would be... READ OUT

- Very unlikely
- Quite unlikely
- Neither likely nor unlikely
- Quite likely
- Very likely
- (Don’t know)

Pre Survey Questions

Only ask if Plymouth postcode at Q2, others skip to Q42

Ask if registered to participate in Blue Mile at Q22

33. Have you recently completed an online survey about outside open spaces?
   - Yes  □ Go to Q42
   - No  □
   - Don’t know  □

34. Have you recently completed a paper survey about outside open spaces?
   - Yes  □ Go to Q42
   - No  □
   - Don’t know  □
READ OUT: I am now going to ask you a few questions about open spaces like the coast, water, parks and woodland.

35. Which open space in Plymouth, if any, do you go to most frequently? [INTERVIEWER: Write in the name e.g. Central Park, the Hoe, Cann Woods]

________________________________________________________________________

36. Why do you go to this particular open space? (prompt as per pre codes and tick all that apply)

- It is close to home □
- To relax □
- To get some fresh air □
- To participate in recreational activities (walking/surfing/sailing) □
- To walk the dog □
- To take my children to play □
- To spend time with family/friends □
- To enjoy the surroundings □
- For an educational visit □
- To learn about the natural environment □
- No particular reason □
- Other (write in) ___________________
37. Thinking more generally about the open spaces in Plymouth what, if anything, stops you going to them more often? (prompt as per pre-codes and tick all that apply)

- I don't have enough time/I am too busy
- They are hard to get to
- I can't afford to travel there
- I can't afford to do things when I get there
- I don't know how to get to them
- I don't have anyone to go with
- I do not enjoy being outdoors
- They are not suitable for my family
- No particular reason
- Nothing
- Other (write in) ___________________

38. And what, if anything, would encourage you to go to the open spaces in Plymouth more often? (Prompt as per pre-codes and tick all that apply)

- Better parking facilities
- Better public transport available
- More children's play features
- More organised activities
- More seating
- Better access (e.g. paths, signs etc)
- More information about them
- Nothing
- Don't know
- Other (write in) ___________________
39. Thinking more specifically about the Hoe and Waterfront area in Plymouth, how often do you go there?

   - Every day □
   - 3 - 4 times a week □
   - Once a week □
   - 2 - 3 times a month □
   - Once a month □
   - A couple of times a year □
   - Less frequently □
   - Don't know □

40. Overall, what do you think about the Hoe and Waterfront area? Please include both good and bad points.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

READ OUT: I am now going to ask you a few questions about your attitude towards the environment.

41. How much do you agree or disagree with the following statements. READ OUT (SHOWCARD A)

<table>
<thead>
<tr>
<th>ROTATE START</th>
<th>Strongly disagree</th>
<th>Slightly disagree</th>
<th>Neither nor</th>
<th>Slightly agree</th>
<th>Strongly agree</th>
<th>DK/NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don't give much thought to saving energy in my home</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>People in Plymouth have a duty to recycle</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I don't pay much attention to the amount of water I use at home</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>The effects of climate change are too far in the future to really worry me</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I would like to reduce my car use but there are no practical alternatives in Plymouth</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Local open spaces (e.g. the coast, water, parks, woodland) are important to me</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>I would like to do more to protect Plymouth's marine environment</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Plymouth could make more of its natural environment</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
Demographics

42. Just finally, what age bracket do you fall in? *(SHOWCARD B)*

- A 16 – 25
- B 26 - 34
- C 35 – 44
- D 45 – 54
- E 55 – 64
- F 65+
- G Prefer not to answer

Interviewer code:  Male  Female

That is the end of the survey – Thank you very much for your time and contribution to this survey.
Do you have any questions about this research?
Appendix Three

Open Spaces Pre-Event Survey
Open Spaces Survey

This survey is about outside open spaces in your local area, such as the coast, water, parks and woodland. We are interested in your views and attitudes towards them regardless of how often you go to outside open spaces.

The results from this survey will help us to develop an understanding of how different people access open spaces and their views and opinions about them. These findings will be shared with project partners to help them to increase how these spaces are used.

Data from this survey will be passed to a team of researchers at the University of Plymouth for analysis. Any information you provide will be treated in the strictest of confidence.

We look forward to receiving your survey and thank you for your participation.

Outside Open Spaces

Firstly, we would like to ask you a few questions about open spaces. The first few questions focus on open spaces in the city of Plymouth, while later questions ask about open spaces outside of Plymouth.

Q1
Firstly thinking about the city of Plymouth, how often do you go to each of the following open spaces in Plymouth?
Please tick one box for each

<table>
<thead>
<tr>
<th></th>
<th>Every day</th>
<th>3-4 times a week</th>
<th>Once a week</th>
<th>2-3 times a month</th>
<th>Once a month</th>
<th>A couple of times a year</th>
<th>Less frequently</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>The coast</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Water</td>
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<tr>
<td>Park</td>
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<tr>
<td>Woodland</td>
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<tr>
<td>Nature reserve</td>
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</tr>
</tbody>
</table>

Q2
Which open space in Plymouth, if any, do you go to most frequently?
Please write in the name e.g. Central Park, the Hoe, Cann Woods

☐ I do not visit open spaces in Plymouth ➔ Please go to Q6
Q3  Why do you go to this particular open space?  
Please tick all that apply

- It is close to home
- To relax
- To get some fresh air
- To participate in recreational activities (walking/surfing/sailing)
- To walk the dog
- To take my children to play
- To spend time with family/friends
- To enjoy the surroundings
- For an educational visit
- To learn about the natural environment
- No particular reason
- Other

If other please specify

Q4  How do you usually travel to this open space?  
Please tick one only

- Car/Motorbike
- Public transport (bus/train)
- Bicycle
- By foot
- Other

Q5  Who do you usually go to this open space with?  
Please tick all that apply

- By myself
- With my partner
- With my friend(s)
- With my family
- With my pet(s)
- Varies
- Other
Q6

Thinking more generally about the open spaces in Plymouth what, if anything, stops you going to them more often?
Please tick all that apply

- I don't have enough time/I am too busy .................................................................
- They are too hard to get to ....................................................................................
- I can't afford to travel there ...................................................................................
- I can't afford to do things when I get there ............................................................
- I don't know how to get to them ............................................................................
- I don't have anyone to go with ............................................................................... 
- I do not enjoy being outdoors ................................................................................
- They are not suitable for my family ......................................................................
- No particular reason ...............................................................................................
- Nothing ....................................................................................................................
- Other ....................................................................................................................... 
- If other please specify

Q7

And what, if anything, would encourage you to go to the open spaces in Plymouth more often?
Please tick all that apply

- Better parking facilities ............................................................................................
- Better public transport available ............................................................................
- More children's play features ................................................................................
- More organised activities ....................................................................................... 
- More seating ...........................................................................................................
- Better access (e.g. paths, signs etc) ........................................................................
- More information about them ............................................................................... 
- Nothing ....................................................................................................................
- Don't know .............................................................................................................
- Other ....................................................................................................................... 
- If other please specify

Q8

Thinking more specifically about the Hoe and Waterfront area in Plymouth, how often do you go there?

- Every day ...................................................................................................................
- 3 - 4 times a week .....................................................................................................
- Once a week ..............................................................................................................
- 2 - 3 times a month ...................................................................................................
- Once a month .......................................................................................................... 
- A couple of times a year ........................................................................................
- Less frequently ........................................................................................................
- Never ....................................................................................................................... 
- Don't know ...............................................................................................................
Outside Open Spaces (continued)

Q9 Overall, what do you think about the Hoe and Waterfront area? Please include both good and bad points.

_______________________________________________________________________________________
_______________________________________________________________________________________
_______________________________________________________________________________________
_______________________________________________________________________________________

Q10 When you think of open spaces in Plymouth, in general do you view them:

Very positively ........................................................................................................................................... ☐
Quite positively ............................................................................................................................... ☐
Neither positively nor negatively ......................................................................................................... ☐
Quite negatively ..................................................................................................................................... ☐
Very negatively ....................................................................................................................................... ☐
Don't know ............................................................................................................................................. ☐

Q11 Now thinking more broadly about your local area, how often do you go to each of the following open spaces outside of Plymouth (within a 30 minute journey time)? Please tick one box for each

<table>
<thead>
<tr>
<th>Open Space</th>
<th>Every day</th>
<th>3-4 times a week</th>
<th>Once a week</th>
<th>2-3 times a month</th>
<th>Once a month</th>
<th>A couple of times a year</th>
<th>Less frequently</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>The coast</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Park</td>
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<td></td>
</tr>
<tr>
<td>Woodland</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Nature reserve</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>National park (e.g. Dartmoor)</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Q12 Which open space outside of Plymouth (within a 30 minute journey time), if any, do you go to most frequently? Please write in the name e.g. Whitsand Bay, Tamar Valley, Dartmoor

☐ I do not visit open spaces outside of Plymouth  Please go to Q16
Outside Open Spaces (continued)

Q13 Why do you go to this particular open space?
Please tick all that apply

- It is close to home
- To relax
- To get some fresh air
- To participate in recreational activities (walking/surfing/sailing)
- To walk the dog
- To take my children to play
- To spend time with family/friends
- To enjoy the surroundings
- For an educational visit
- To learn about the natural environment
- No particular reason
- Other
If other please specify

Q14 How do you usually travel to this open space?
Please tick one only

- Car/Motorbike
- Public transport (bus/train)
- Bicycle
- By foot
- Other

Q15 Who do you usually go to this open space with?
Please tick all that apply

- By myself
- With my partner
- With my friend(s)
- With my family
- With my pet(s)
- Varies
- Other
Q16  Thinking more generally about the open spaces outside of Plymouth (within a 30 minute journey time), what, if anything, stops you going to them more often?  
Please tick all that apply

I don't have enough time/I am too busy .................................................................
They are too hard to get to ....................................................................................
I can't afford to travel there ..................................................................................
I can't afford to do things when I get there ..........................................................
I don't know how to get to them ...........................................................................
I don't have anyone to go with .............................................................................
I do not enjoy being outdoors .............................................................................
They are not suitable for my family ......................................................................
No particular reason .............................................................................................
Nothing ..................................................................................................................
Other .....................................................................................................................
If other please specify

Q17  And what, if anything, would encourage you to go to the open spaces outside of Plymouth (within a 30 minute journey time) more often?  
Please tick all that apply

Better parking facilities .......................................................................................  
Better public transport available .........................................................................
More children's play features .............................................................................
More organised activities .....................................................................................
More seating ........................................................................................................
Better access (e.g. paths, signs etc) .................................................................
More information about them ...........................................................................
Nothing ................................................................................................................
Don't know .........................................................................................................
Other ....................................................................................................................
If other please specify

Q18  When you think of open spaces outside of Plymouth (within a 30 minute journey time), in general do you view them:

Very positively ........................................................................................................
Quite positively .....................................................................................................
Neither positively nor negatively .........................................................................
Quite negatively ...................................................................................................
Very negatively ....................................................................................................
Don't know .........................................................................................................
### Attitudes Towards the Environment

This section of the survey explores your attitudes towards the environment.

#### Q19

Please indicate how much you agree or disagree with the following statements:

**Please tick one box for each statement**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Slightly agree</th>
<th>Neither agree (nor disagree)</th>
<th>Slightly disagree</th>
<th>Strongly disagree</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don't give much thought to saving energy in my home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People in Plymouth have a duty to recycle</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>I don't pay much attention to the amount of water I use at home</td>
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</tr>
<tr>
<td>The effects of climate change are too far in the future to really worry me</td>
<td></td>
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</tr>
<tr>
<td>I would like to reduce my car use but there are no practical alternatives in Plymouth</td>
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</tr>
<tr>
<td>Local open spaces (e.g. the coast, water, parks, woodland) are important to me</td>
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<tr>
<td>I would like to do more to protect Plymouth's marine environment</td>
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<tr>
<td>Plymouth could make more of its natural environment</td>
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</tr>
</tbody>
</table>

### About You

Finally we would like to ask you some questions about yourself. This will allow us to compare the views of different people completing the survey.

#### Q20

How old are you?

- 16 - 25.................................................................................................................. ☐
- 26 - 34 .................................................................................................................. ☐
- 35 - 44 .................................................................................................................. ☐
- 45 - 54 .................................................................................................................. ☐
- 55 - 64 .................................................................................................................. ☐
- 65+ ......................................................................................................................... ☐
- Prefer not to answer .............................................................................................. ☐
Q21  Are you male or female?

Male ............................................................................................................................................... □
Female ........................................................................................................................................□

Q22  Which of the following best describes your working status?

Working full time ........................................................................................................................ □
Working part time ...................................................................................................................... □
Self employed ............................................................................................................................ □
Unemployed .............................................................................................................................. □
Student ....................................................................................................................................... □
Homemaker ................................................................................................................................□
Retired ......................................................................................................................................... □
Other ........................................................................................................................................ □

Q23  How many children aged 16 or under live in your household?

None ........................................................................................................................................... □
1 .................................................................................................................................................. □
2 .................................................................................................................................................. □
3 .................................................................................................................................................. □
4 .................................................................................................................................................. □
More than 4 ................................................................................................................................. □

Q24  Do you consider yourself to have a disability?

Yes ............................................................................................................................................... □
No ................................................................................................................................................ □

Q25  Please indicate your religious background.

Prefer not to say ........................................................................................................................... □
Christian ....................................................................................................................................... □
Buddhist ...................................................................................................................................... □
Hindu ........................................................................................................................................... □
Jewish .......................................................................................................................................... □
Muslim ......................................................................................................................................... □
Sikh ............................................................................................................................................... □
Other ........................................................................................................................................... □
None .............................................................................................................................................. □
**Q26** To which of the groups shown below do you consider yourself to belong?

<table>
<thead>
<tr>
<th>Group</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>A White:</td>
<td>Prefer not to say, British, Irish, Any other white background</td>
</tr>
<tr>
<td>B Mixed:</td>
<td>White and Black Caribbean, White and Black African, White and Asian</td>
</tr>
<tr>
<td>C Asian or Asian Black:</td>
<td>Indian, Pakistani, Bangladeshi, Any other Asian background</td>
</tr>
<tr>
<td>D Black or Black British:</td>
<td>Caribbean, African, Any other Black background</td>
</tr>
<tr>
<td>E Chinese or other ethnic group:</td>
<td>Chinese, Any other</td>
</tr>
</tbody>
</table>

**Q27** Please write in your postcode:

________________________

**Q28** You may be asked to complete another survey in the future. This is so that we can understand your views and experiences of open spaces at different points in time. If you are happy to, please write your name below. This will help us to match your answers from different surveys.

Please write in your name in capital letters

________________________

Thank you very much for your help.

Please return your completed survey to the person who gave it to you.