

## Appendix 2

### Prioritisation Methodology

- 8.3 Green infrastructure opportunities were identified through baseline analysis, stakeholder consultation and site visits. Key projects were then prioritised against a range of criteria. The top scoring opportunities within each town were developed into key projects.
- 8.4 This section presents the methodology used for the prioritisation process. The criteria relate to specific themes (the potential benefits), based on the findings of the baseline analysis (see **Section 4**), and the deliverability of potential opportunities. The results of this prioritisation process are presented in **Appendix 4**.
- 8.5 It is acknowledged that the calculations for this prioritisation process are based on point data that defines the location of the opportunity sites, as opposed to polygon data that defines the boundary of the opportunity sites. However, the boundary of opportunity sites cannot be defined accurately for many opportunities and therefore it is considered that this prioritisation approach using the point data provides a good indication of the most beneficial and deliverable opportunities to prioritise.

### Themes

- 8.6 The opportunities were first scored in terms of the potential benefits they could deliver against each green infrastructure theme:
- Active transport and connectivity
  - Biodiversity
  - Cultural heritage
  - Health and well-being
  - Landscape
  - Recreation and play
  - Social and Economic Regeneration
  - Flooding

### Themes: Baseline

- 8.7 Criteria were used to assess whether identified opportunities were located in places where there is a 'need' for particular theme improvements. For example, if an opportunity was located in close proximity to recreational facilities it was assumed it would be less likely there is a need for recreational enhancements in this location.
- 8.8 Where multiple criteria were used to determine the baseline of 'need', the average of these scores was taken to represent the baseline for that opportunity.

#### Active transport and connectivity

- 8.9 The 'need' for active transport and connectivity improvements at an opportunity site was assessed using one criterion.

#### *How far is the nearest access route?*

- 8.10 The existing routes considered were:
- Bus stops
  - Train stations
  - Cycle paths
  - Active travel routes (as defined within active travel plans)
  - Public Rights of Ways
  - National trails
- 8.11 Opportunities that were closest to existing routes (see **Appendix 3 Figure 8.36**) scored 1, as it was judged that there is less need for active transport and connectivity improvements in these locations.
- 8.12 Opportunities that were furthest from existing routes scored 10, as it was judged that there is greater need for active transport and connectivity improvements in these locations.

#### Biodiversity

- 8.13 The 'need' for biodiversity improvements at an opportunity site was assessed using one criterion.

### *What is the biodiversity value of the site?*

- 8.14 The 'biodiversity value' layer on the Pembrokeshire Biodiversity Partnership Planning Tool (see **Appendix 3 Figure 8.37**) was used to represent the 'biodiversity value' of an opportunity location.
- 8.15 It is acknowledged that the 'biodiversity value' layer is based on desk-based calculations, based on designated sites and species data, and that this should be used with caution as actual 'biodiversity value' would require on-site verification. However, it was judged that this data would provide a reasonable indication of which opportunities are located in areas of generally higher or lower 'biodiversity value', which would help prioritise opportunities.
- 8.16 Opportunities that were located within 'high biodiversity value' areas scored 1, as it was judged that there is less need for biodiversity improvements in these locations.
- 8.17 Opportunities that were located within 'low biodiversity value' areas scored 10, as it was judged that there is greater need for biodiversity improvements in these locations.

### **Cultural heritage**

- 8.18 The 'need' for cultural heritage improvements at an opportunity site was assessed using one criterion.

### *How far is the nearest heritage asset?*

- 8.19 Where opportunity locations are closer to cultural heritage assets, it was judged there may be greater need for heritage interpretation and setting enhancements. It is acknowledged that different assets will likely have different sizes of areas that contribute to their setting, however it was judged that this data would provide an adequate indication of which opportunities are located in areas of generally more or less likely to contribute to heritage setting, which would help prioritise opportunities.
- 8.20 The cultural heritage assets considered were:
- Listed buildings (Grade I, II\* and II)
  - Scheduled Ancient Monuments
- 8.21 Opportunities that were furthest from cultural heritage assets (**Appendix 3 Figure 8.38**) scored 1, as it was judged that there is

less need for active cultural heritage improvements in these locations.

- 8.22 Opportunities that were closest to cultural heritage assets scored 10, as it was judged that there is more need for active cultural heritage improvements in these locations.

### **Health and well-being**

- 8.23 The 'need' for health and well-being improvements at an opportunity site was assessed using four criteria. The scores for each criterion were averaged to provide an overall baseline score for this theme.

### *Within an area of health deprivation?*

- 8.24 The Welsh Index of Multiple Deprivation (WIMD) is currently made up of eight separate domains of deprivation. The domains are as follows:

- Income
- Employment
- Health
- Education
- Access to Services
- Community Safety
- Physical Environment
- Housing

- 8.25 Opportunities that were located within the 10% least deprived areas in terms of health (see **Appendix 3 Figure 8.39**) scored 1, as it was judged that there is less need for health and well-being improvements in these locations.

- 8.26 Opportunities that were located within 10% most deprived areas in terms of health scored 10, as it was judged that there is greater need for health and well-being improvements in these locations.

### *Within an area of physical environment deprivation?*

- 8.27 Opportunities that were located within the 10% least deprived areas in terms of physical environment (see **Appendix 3 Figure 8.40**) scored 1, as it was judged that there is less need for health and well-being improvements in these locations.

8.28 Opportunities that were located within 10% most deprived areas in terms of physical environment scored 10, as it was judged that there is greater need for health and well-being improvements in these locations.

#### *Within an AQMA?*

8.29 Air Quality Management Areas (AQMAs) are designated in places where levels of pollution are not meeting national air quality objectives and therefore are areas more likely to contribute to poor health.

8.30 Opportunities that were not located within AQMAs (see **Appendix 3 Figure 8.41**) scored 1, as it was judged that there is less need for health and well-being improvements in these locations.

8.31 Opportunities that were located within AQMAs scored 10, as it was judged that there is greater need for health and well-being improvements in these locations.

#### *How far are the nearest active travel routes or open spaces?*

8.32 The active travel routes and open spaces considered were:

- Cycle paths
- Active travel route (as defined within active travel plans)
- Public Rights of Way
- National trails
- Designated open spaces
- Village greens
- Common land

8.33 Opportunities that were closest to existing routes and open spaces (see **Appendix 3 Figure 8.42**) scored 1, as it was judged that there is less need for health and well-being improvements in these locations.

8.34 Opportunities that were furthest from existing routes and open spaces scored 10, as it was judged that there is greater need for health and well-being improvements in these locations.

### **Landscape**

8.35 Although it is noted that there are various landscape character areas across Pembrokeshire (see Appendix 3 Figure 8.43 - Figure 8.44), it

was determined that the 'need' of an opportunity location for landscape improvements could not be assessed by specific criteria due to subjectivity and lack of a relevant data source. Therefore all opportunities scored 5 for this theme.

### **Recreation and play**

8.36 The 'need' for recreation and play improvements at an opportunity site was assessed using one criterion.

#### *How far is the nearest recreation or play facility?*

8.37 The recreation and play facilities considered were:

- Play areas
- Public rights of way
- Cycle paths
- Active travel routes (as defined within active travel plans)
- National trails
- Designated open spaces
- Village greens
- Common land
- Leisure centres
- Sports pitches

8.38 Opportunities that were closest to recreation and play facilities (see **Appendix 3 Figure 8.45**) scored 1, as it was judged that there is less need for recreation and play improvements in these locations.

8.39 Opportunities that were furthest from recreation and play facilities scored 10, as it was judged that there is greater need for recreation and play improvements in these locations.

### **Social and Economic Regeneration**

8.40 The 'need' for social and economic regeneration at an opportunity site was assessed using three criteria. The scores for each criterion were averaged to provide an overall baseline score for this theme.

#### *Within an area of regeneration?*

8.41 The published regeneration plan for Haverfordwest and the draft regeneration masterplans for the following towns were used to

determine whether opportunities were located within areas of regeneration (see **Appendix 3 - Figure 8.51**):

- Fishguard and Goodwick
- Milford Haven
- Pembroke
- Pembroke Dock
- Tenby

8.42 Is it noted that since this prioritisation was undertaken, final masterplans for Pembroke, Pembroke Dock and Tenby have been reported to Council<sup>3</sup>.

8.43 Opportunities that were not located within regeneration proposals scored 1, as it was judged that there is less need for social and economic regeneration in these locations.

8.44 Opportunities that were located within regeneration proposals scored 10, as it was judged that there is greater need for social and economic regeneration in these locations.

*Within an area of deprivation?*

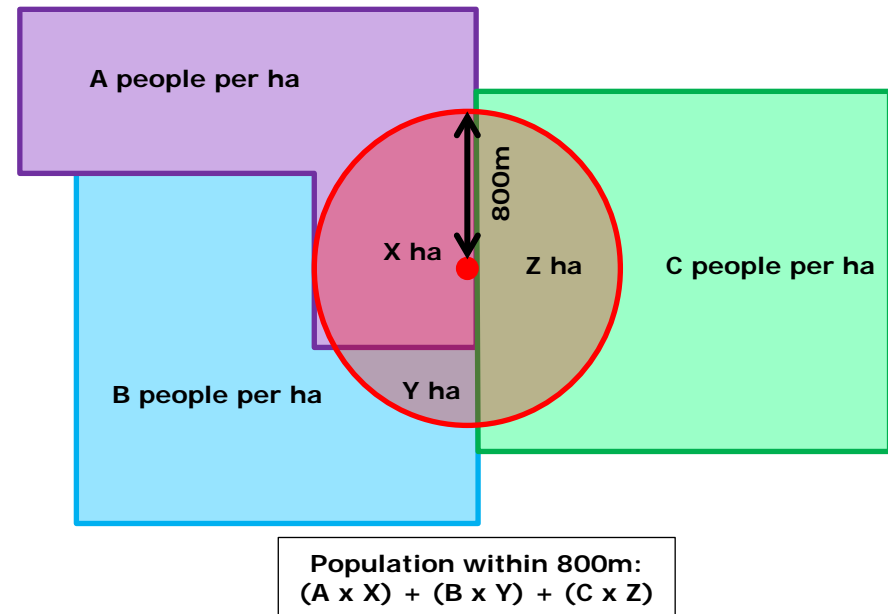
8.45 Opportunities that were located within the 10% least deprived areas in terms of overall deprivation (see **Appendix 3 Figure 8.52**) scored 1, as it was judged that there is less need for social and economic regeneration in these locations.

8.46 Opportunities that were located within 10% most deprived areas in terms of overall deprivation scored 10, as it was judged that there is greater need for social and economic regeneration in these locations.

*How many people could this opportunity benefit?*

8.47 The estimated population in proximity to an opportunity was used to represent the 'need' of an opportunity location for social and economic regeneration, i.e. locations with higher populations have greater need for social and economic regeneration.

8.48 The population within walking distance (800m) of opportunities was estimated using census data for the Lower Super Output Areas (LSOA) within Pembrokeshire. An 800m buffer was defined around opportunities and the area of this buffer within each surrounding LSOA calculated. The area within each LSOA was multiplied by the population density of each LSOA and summed to estimate the total population within 800m of opportunities (see **Figure 8.34**).



**Figure 8.34: Calculation the population within 800m of opportunities**

8.49 It is acknowledged that the population present within towns will likely vary with the seasons due to tourism and second home owners. Detailed data for seasonal populations within each town was not available and it was judged that the use of 2011 census population data was suitable to provide comparison between opportunity sites.

<sup>3</sup> Pembrokeshire County Council (2018) Notice of Meeting and Agenda - Cabinet Members, 13<sup>th</sup> March 2018. Agenda item 17. Available at: <http://mgenglish.pembrokeshire.gov.uk/documents/g4065/Public%20reports%20pack%2019th-Mar-2018%2010.00%20Cabinet.pdf?T=10&LLL=0>.

- 8.50 Opportunities that were located in proximity to the lowest population (see **Appendix 3 Figure 8.53**) scored 1, as it was judged that there is less need for social and economic regeneration in these locations.
- 8.51 Opportunities that were located in proximity to the greatest population scored 10, as it was judged that there is greater need for social and economic regeneration in these locations.

### Flooding

- 8.52 The 'need' for social and economic regeneration at an opportunity site was assessed using two criteria. The scores for each criterion were averaged to provide an overall baseline score for this theme.

#### *Within a flood zone?*

- 8.53 Opportunities that were not located within flood zones (see **Appendix 3 Figure 8.54**) scored 1, as it was judged that there is less need for flooding improvements in these locations.
- 8.54 Opportunities that were located within Flood Zone 2 scored 5, as it was judged that there is greater need for flooding improvements in these locations.
- 8.55 Opportunities that were located within Flood Zone 3 scored 10, as it was judged that there is the greatest need for flooding improvements in these locations.

#### *Within an area identified for natural flood prevention measures?*

- 8.56 As part of the Natural Resource Management Approach to Flood Risk in Pembrokeshire project, Environment Systems Ltd used the SENCE (Spatial Evidence for Natural Capital Evaluation) tool to model the existing ability of the land across Pembrokeshire to prevent flooding. From this they identified natural flood prevention measure opportunities at a county-wide strategic scale. These opportunities include:
- Re-wetting opportunities
  - Field margins opportunities
  - Wetlands floodplain opportunities
  - Tree planting opportunities
  - Shelterbelts opportunities

- 8.57 It is acknowledged that that the natural flood prevention measure opportunities were calculated based on an algorithm and on-site evaluations would be required to determine if such opportunities would be appropriate in each locations. However, it was judged that this data would provide an adequate indication of which opportunities are located in potential areas that could offer natural flood prevention measure opportunities, which would help prioritise opportunities.
- 8.58 Opportunities that were not located within natural flood prevention measure opportunities (see **Appendix 3 Figure 8.55**) scored 1, as it was judged that there is less need for flooding improvements in these locations.
- 8.59 Opportunities that were located within natural flood prevention measure opportunities scored 10, as it was judged that there is greater need for flooding improvements in these locations.

### Themes: Potential Improvements

- 8.60 Following assessment of the baseline conditions, the potential of opportunities to deliver improvements under each green infrastructure theme was assessed. This was assessed using professional judgement.
- 8.61 Opportunities that had the least potential to deliver improvements under each theme scored 1.
- 8.62 Opportunities that had the most potential to deliver improvements under each theme scored 10.
- 8.63 The average Theme: Baseline score for each theme was multiplied by the Theme: Potential Improvement score to create the Theme: Benefit Score. This was to represent the overall benefit that opportunities could provide under each theme.
- 8.64 For example, an opportunity that is within a location with high flood risk (scoring higher for Theme: Baseline) but does not propose flooding improvements (scoring lower for Theme: Potential Improvements) will score lower overall, as although the opportunity

may be in a location with greater need for flooding improvements the opportunity will not provide these improvements.

- 8.65 The Theme: Benefit Scores for each theme were multiplied together to provide an overall Theme: Overall Score for each opportunity.

## Deliverability

- 8.66 The deliverability of opportunities was also considered as part of the prioritisation process, as projects more likely to be delivered should be prioritised. This deliverability of projects was assessed based on 3 criteria.

## Deliverability: Cost

- 8.67 The cost of opportunities was considered to influence the potential deliverability. The costs of each project was estimate to be either high (£££), medium (££) or low (£).
- 8.68 Opportunities that were estimated to be high cost (£££) scored 1, as it was judged that higher cost opportunities would be less likely to be delivered.
- 8.69 Opportunities that were estimated to be medium cost (££) scored 5, as it was judged that medium cost opportunities would be more likely to be delivered.
- 8.70 Opportunities that were estimated to be low cost (£) scored 10, as it was judged that low cost opportunities would be most likely to be delivered.

## Deliverability: Project Status

- 8.71 The existing project status of opportunities was considered to represent the potential deliverability of opportunities. The project status of opportunities were classified into the following categories:

- Active: opportunities that would be part of or extend existing projects (but have not themselves commenced).
- Advanced proposals: opportunities that are part of or support emerging or adopted plans, such as the town masterplans and Active Travel Plans.
- Initial proposals: opportunities that have been identified by or in conjunction with stakeholders
- Concept stage: opportunities that have been identified in the field but have yet to be consulted on with stakeholders.

- 8.72 Opportunities that were identified to be at concept stage scored 1, as it was judged that these would require the greatest amount of input to deliver, due to lack of existing interest, and therefore would be the least feasible to be delivered.
- 8.73 Opportunities that were identified to be an initial proposal scored 4, as it was judged that these would require the second greatest amount of input to deliver, due to some existing interest, and therefore would be less feasible to be delivered.
- 8.74 Opportunities that were identified to be an advanced proposal scored 7, as it was judged that these would require some amount of input to deliver, due to existing interest and progress, and therefore would be more feasible to be delivered.
- 8.75 Opportunities that were identified to be active scored 10, as it was judged that these would require the least amount of input to deliver, due to existing projects, and therefore would be most feasible to be delivered.

## Deliverability: Identified Limitations

- 8.76 Several of the identified opportunities have known limitations based on their location and previous work undertaken. These could limit the deliverability of opportunities. Therefore, these limitations were identified through consultation with council officers and opportunities with limitations were judged to be less deliverable.
- 8.77 Opportunities with the least identified limitations scored -1, as it was judged that these opportunities are more likely to be delivered.

8.78 Opportunities with the most identified limitations scored -10, as it was judged that these opportunities are less likely to be delivered.

## Overall Score

8.79 The overall score for each opportunity was calculated by summing the following:

- Themes: Overall Score
- Deliverability: Cost Score
- Deliverability: Project Status Score
- Deliverability: Allocated Sites Score
- Deliverability: Deliverable Within 3 Years Score
- Deliverability: Identified Limitations Score

8.80 The highest scoring opportunities for each town were developed into key projects.