
**Decision Session -
Executive Member for City Strategy**

20th October 2009

Report of the Director of City Strategy

**Cycling Infrastructure within York – Standards, Evaluation
Tool, and Cost/Benefit Matrix**

Summary

1. This report considers the design of future cycling infrastructure for the City of York and presents a set of standards to be adopted. In addition, it also considers a tool by which a direct comparison of cycling schemes and their relative benefits can be made.

Recommendations

2. The Executive Member for City Strategy is recommended:
 - i. To approve the Standards and Principles for designing cycling infrastructure within York.
 - ii. To approve a cycling scheme Evaluation Tool and note a Cost/Benefit Matrix for expenditure on cycling infrastructure schemes.

Reason: To provide a uniformed approach to designing new cycling infrastructure within York so that consistency can be achieved throughout the network of cycle routes and to provide a mechanism to assess, justify, and prioritise future cycle scheme work programmes.

Background

Designing Cycling Infrastructure

3. In previous years, cycling infrastructure schemes have been designed and implemented on a piecemeal basis and have not all been implemented to the same standards. Inconsistencies in many areas, including quality, widths, signage, user priorities, surfacing etc, have all been experienced when using different departments, external consultants or contractors to design or build facilities.
4. With Cycling City status, York has an extensive programme of planned infrastructure works and it was felt that a document would be advantageous which was aimed at Engineers/Planners, and which set out consistent standards, principles and guidance for designing cycling infrastructure for York. The intention is that every facility which is

designed and subsequently built will be of the same 'York Standard', providing consistency throughout the network. This document entitled 'Standards and Principles for Designing Cycling Infrastructure' is attached as Annex A.

5. Extensive guidance already exists, issued by the Department for Transport (DfT) [Local Transport Note 2/08 – 'Cycle Infrastructure Design' – Oct 2008], and by Cycling England (Design Checklist & Guidance), and many of their recommendations are mirrored in the York Standards. Where the York Standards differ is that they are more concise than the DfT guidance and will act as a quick condensed reference, with some specifications altered necessarily to fit the uniqueness of York.
6. It is widely acknowledged that shared-use paths are particular points of conflict between pedestrians and cyclists generally and in York. Officers have investigated ways of addressing this problem but have been unable to develop a solution other than that offered by the DfT, without causing potential hazards for pedestrians, and/or causing additional confusion. In trying to resolve the situation advice has been sought from DfT, Cycling England and CYC legal services. Cycling England advised that where the width of a shared use path is insufficient to provide full segregation and has therefore been provided as a shared use space it is preferable to leave the area undelineated to put the onus on users to take extra care and consideration, as there would be insufficient space for the users to interact safely within the delineated area. Advice is that DfT regulations/guidance should be followed to avoid any possible challenge in the future.
7. For example, DfT guidelines do not stipulate when and where segregation should be used over unsegregation. However it is stated that: "Almost all off-road routes for cyclists are used by pedestrians, and the potential for user conflict needs careful consideration. Where there is potential for conflict, separating user flows is an option but if room is limited, this may not be making best use of the width available." In addition, concerning such areas, where pedestrian and cyclist movements are likely to conflict (i.e. pedestrian crossings or bus stops), DfT guidance states the following: "If the footway and cycle track on the approach are segregated, segregation should stop short of the waiting area (which should be shared use)." For this situation, the advice received from DfT; Cycling England; and the council's Legal Services department were all in agreement.

Evaluating Cycle Schemes

8. There has been a desire to develop a 'cycling model' which would predict the anticipated increase in cyclists using a facility once built, based on cost of facility. On investigation, and after discussions with other local authorities and consultants, it has been concluded that there is no such model in existence (although there is wide recognition that one would be useful).
9. An extensive list of desired infrastructure works over a limited amount of time and with a limited budget means that some prioritisation and

justification of schemes must be undertaken. A simple tool has been designed by which to compare the relative benefits of one scheme against those of another, and give each a score. In this way it is intended that a database of indices for schemes past and present can be established, against which future schemes can be assessed. The Evaluation Tool is attached as Annex B.

10. With thorough before and after monitoring of new cycling facilities in York it may be possible, in the future, to build up an evidence base which would then give sufficient confidence to prioritise cycling in certain circumstances and give an estimate for the anticipated increase in cyclists (but not currently at this time).
11. A report commissioned by Cycling England and reported to them by SQW Consulting in December 2008, included a matrix which showed the number of additional cyclists which were needed in order to justify a given spend on a cycling infrastructure project. Several variables gave estimated annual monetary values for each additional cyclist (cycling regularly for one year) including: health benefits; value of loss of life; NHS savings; productivity gains; pollution; congestion; and ambience.
12. Calculation is possible of the economic benefit of each cyclist, therefore it is also possible to use these combined values to show the number of new cyclists required to ensure that an investment will at least break-even over the full life of the cycle facility (assumed to be 30 years). Because facilities are varied in type and location, the matrix also gave values for four different types: urban on-road; urban off-road, rural on-road; and rural off-road cycle facilities. These results can be read within Annex C.
13. Using the matrix, and with thorough before and after monitoring of new cycle facilities (to give actual numbers for increased cyclist usage), we can estimate whether a scheme has been “good value for money”. However it should be noted that this is difficult to quantify initially, as usage tends to build up steadily from an initial boost, and therefore year-on-year growth in cyclist numbers is not usually uniform.
14. We can also, in time, develop this element into a ‘value for money’ factor to be included within the evaluation tool.

Consultation

15. Extensive consultation has been undertaken to develop the Cycling Design Standards including the following meetings:-
 - 27th May 2009 Major Infrastructure Implementation Group, Cycling City York Programme.
 - 19th June 2009 Internal (City Strategy) Workshop – participation from *Transport Planning; Engineering Consultancy; Network Management; and Highways Maintenance.*
 - 29th June 2009 Internal (City Strategy) Workshop – participation from *Transport Planning; Engineering*

*Consultancy; Network Management; and
Highways Maintenance.*

- 28th July 2009 Officer in Consultation with Executive Member – Director of City Strategy
16. In addition, a wide range of internal and external stakeholders have been consulted and additional comments have been received (and incorporated into the document where possible) from the following:-
- John Grimshaw CBE, Special Adviser to Cycling England
 - 'Cycling Champion' Member
 - York Cycle Campaign
 - Halcrow Consultancy
 - Transport Initiatives Consultancy

Corporate Strategy

17. Adopting the Standards and Principles for designing cycling infrastructure, as well as approving the cycling scheme Evaluation Tool, will contribute to the delivery of the Corporate Strategy, specifically through the following themes and commitments:
- Sustainable City
"The Council is committed to improve the quality of the local environment and the condition of York's streets and public spaces."

"The Council is committed to transform York into a 'Cycle City' by investing our successful £3.7 million bid in cycling infrastructure, increasing cycling opportunities and improving cycle availability to all".
 - Safer City
By providing consistency throughout the highways network, this will improve safety for all users.
 - Healthy City
Investing in quality and consistent cycling infrastructure will encourage more people to choose this mode of transport and improve general health and wellbeing.
 - Effective Organisation
Through being able to justify and prioritise cycling infrastructure schemes, the Council will be able to make the most efficient use of Cycling City and Local Transport Plan funding.

Implications

18. This report has the following implications:
- Financial
There are no financial implications at present. However, if the Evaluation Tool were not approved, schemes may not consequently

achieve their maximum potential in terms of “value for money” for effectively increasing the number of people cycling.

- Human Resources
There are no HR implications at present.
- Equalities
Providing consistent and improved cycling infrastructure throughout the city removes some of the barriers to – and encourages a modal shift to – cycling, where people may have been discouraged from doing so in the past. In addition, many of the standards advocate the minimisation of street clutter which would improve the street environment for pedestrians and particularly for blind and partially sighted people, as well as those with luggage or wheelchairs.
- Legal
There are no legal implications at present, other than those prescribed by DfT’s Traffic Signs Regulations and General Directions.
- Crime and Disorder
There are no crime and disorder implications at present.
- Information Technology
There are no IT implications at present.
- Property
There are no property implications at present.
- Sustainability
Adoption of the Design Standards will encourage a modal shift to more sustainable means of transport.
- Other
As a ‘Cycling City’, York needs to be seen actively improving provision for cyclists and using government funding to improve cycling infrastructure where it is likely to have the biggest effect on increasing cycling numbers. Any hesitance on this matter could damage York’s reputation as a Cycling City.

Risk Management

19. In compliance with the Council’s Risk Management Strategy the main risk that has been identified in this report could lead to the inability to meet the council’s objectives (Strategic).
20. Measured in terms of impact and likelihood, the risk score for the recommendation is less than 16 and thus at this point the risks need only to be monitored as they do not provide a real threat to the achievement of the objectives of this report.

Non Ruling Group Spokespersons' comments

21. As City of York Council's *Cycling Champion*, Cllr A. D'Agorne, Green Party, has already contributed to the development of the Design Standards and had no further comments on these. Regarding the cost/benefit of schemes, he suspected that returns in terms of increased use for a given investment would be variable according to a great many things such as major trip generators; residential areas served; degree of promotion; and even age profile in the local population. High profile local promotion of new cycling facilities would be money well spent from the Cycling City Programme.
22. Cllr I. Gillies, on behalf of the Conservative Group, commented that there was a need for secure and covered parking for cyclists within the city centre, in addition to the proposed Lendal Hub Station, to reduce the number of bicycles being locked illegally against lamp posts and railings. He believed that current parking should be removed from pedestrian areas and relocated to other sites, in addition to using areas of car parks. The loss of revenue from these car parking spaces could be compensated out of the Cycling City budget.

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Specialist Implications Officer(s): None

Wards Affected:

All

For further information please contact the author of the report.

Background Papers

Report: "*Cycling within York – Infrastructure Standards; Benefits Index; Cost/Benefit Matrix*", to meeting of Officer in Consultation with Executive Member – Director of City Strategy (28 July 2009)

DfT Local Transport Note 2/08: "*Cycle Infrastructure Design*" (October 2008)

Report: "*Guidance on Sustainable Development*", to City of York Council Scrutiny Management Committee (October 2006)

Annexes

Annex A Standards & Principles for Designing Cycling Infrastructure
Annex B Cycling Scheme Evaluation Tool
Annex C Cost/Benefit Matrix for Cycling Infrastructure