

Cabinet

16 July 2013

Report of Cabinet Member for Transport, Planning & Sustainability

Feasibility Report – Cycle Hire Scheme for York

Summary

1. This report outlines a case for a full city-wide trial of a public cycle hire scheme within York, using examples of various schemes in other cities to evidence the type of scheme suitable to York.
2. A citywide scheme would also work towards providing a long-term legacy following the Yorkshire staging of Le Grand Départ of The Tour de France in July 2014, as well as reinforcing York's position as lead Cycling City in the region.

Background

3. Over the decades York has naturally grown and embraced its cycling culture and never more so than over the last few years with programmes such as Cycling City York and now i-Travel which have invested in dozens of infrastructure improvements and initiatives promoting cycling as a sustainable transport choice. The Council remains committed to reducing the growth in traffic congestion, promoting sustainable travel as an alternative within our city.
4. With the ongoing programme of completing the strategic cycle network, working with our businesses, schools, universities and colleges, and local residents we will continue to see increases in cycling that adds to the culture we have, which makes York the top city in the North for cycling and within the top 3 in the country. For example at the last census⁽²⁰¹¹⁾ over eleven thousand York residents (aged 16 to 74) chose cycling as their primary mode of travel to work.

5. Despite these high cycling levels, in addition to the initiatives in place to give people access to a cycle or affordable opportunities to own one, there still remains a gap in cycle provision for those living and working in York who require a quick and flexible service to meet a variety of needs.
6. For those residents who would like to cycle but currently do not do so, this appears to be due to a number of reasons. Two of these are affordability and storage of a cycle, especially for those living in flats with little or no cycle storage available to them. Also those residents who may consider *ad hoc* cycling for some occasional journeys but do not consider purchase of a bike a worthwhile investment. Easily available access to a bicycle would also appear to be attractive to students studying in York; commuters; and visitors wishing to undertake short one-way journeys.
7. A significant step towards making cycles readily available to everyone is through the introduction of a city-wide cycle hire scheme, which is the focus of this report.
8. Advocates of cycling generally acknowledge that the more costly (and arguably potentially more risky) projects can only be successfully implemented where higher cycling numbers are already established and there is a prevalent cycling culture, such as in many continental cities. It is judged that York now displays such numbers, with 11.5% of working-age residents cycling. Comparably, Munich – Germany’s “*Bicycle Capital*” – has their cycling-to-work figure at approximately 15%, which has grown considerably since the 1990’s when it was only 5%.
9. The possibility of a cycle hire scheme, aimed primarily at residents currently without access to a bicycle (but also the potential for some commuter and visitor use) had been proposed during the Cycling City York programme but had been dismissed as too costly and potentially a revenue burden if requiring a subsidy from the Council.
10. However with recent technological advancements which make operating costs significantly cheaper, in addition to recent expressions of interest regarding potential corporate sponsorship, it has since been considered that implementing a city wide cycle hire scheme in York may now be very much feasible, although consideration should be given to the size of the scheme required.
11. Discussions are being held with a range of potential stakeholders and if sponsorship is secured for a cycle hire scheme, the costs

associated with setting up and rolling out a full city-wide initiative will be significantly reduced, at least from a Council perspective. Further discussion will be required with interested sponsors following the tendering exercise (should Cabinet agree to proceed with this scheme).

12. The scale and density of any scheme is proven to be critical to its likely success. A small scale trial (with a particularly limited coverage of a city) must not be used to estimate the potential strategic demand of a full-scale scheme due to the network effect of increasing returns, and any such trial will almost certainly fail. Any trial in York needs to be on a comparable level with any future permanent scheme, i.e. a fully-rolled out large scale scheme.

Examples from other towns / cities

13. Such fully implemented schemes have proven to be a public success. The well known and vast TfL Barclays Bike Hire scheme has undoubtedly proved a success in London, although it's implementation and operation has been costly despite a heavy subsidy through their corporate sponsor, predominantly due to the expensive infrastructure required (i.e. for the many special *Bixi* docking stations). From usage data, it has been observed that the Londoners who use the scheme tend to be 9am to 6pm commuters; midday errand runners; and fair-weather cyclists who take the tube or the bus when it's a cold and/or wet. The greatest demand comes from 'after-rail commuters' who have travelled in by train then continue the final part of their journey by bike instead of what would normally have been by foot, tube, bus or taxi. This particular demand for after-rail facilities is also expected to be prevalent in York.
14. In recent years and in some cases within the last few months, other towns and cities within the British Isles have rolled out or announced their intention to introduce cycle hire schemes (of varying sizes) illustrating the nation's appetite for embracing the cycle hire culture. These include Manchester, Cardiff, Oxford, Northampton, Peterborough, Sunderland and Galway. Liverpool are due to introduce a large-scale scheme shortly, once a provider has been sourced.
15. Large non-UK citywide schemes have been an overwhelming success in Europe including the cities of Paris, Barcelona, Amsterdam, Stuttgart, Berlin and Copenhagen – although again it

should be noted that many of these receive corporate sponsorship or are subsidised by the respective city/transport authority, primarily through revenue raised from on-street car parking (Barcelona) or from the federal *Deutsche Bahn* (Munich, Stuttgart & Berlin etc).

16. Medium-scale schemes have had mixed fates. Newcastle operates Scratchbikes, which was a Newcastle University born venture for students but which proved so successful that 18 months ago it expanded the service and opened up the service to all residents. Currently with approximately 150 bikes located in 20 different locations, the scheme does not require specialised docking stations and is quicker and cheaper to install than the heavy infrastructure systems deployed in some of the towns and cities across the UK and the world. Bike locations can readily be altered once demand has been tested, so more popular sites can see an increase in bike numbers, with the lesser used locations seeing reductions.
17. *Hire-a-Bike with Cycle Blackpool* started off with nine separate locations (approximately 50 bikes) for several months before rolling out to over 30 locations with many more bicycles. However this came at a cost of £1 million over a three year period (2009-2012), mostly funded by their then Cycling England grant and the local PCT. Following the council's decision to withdraw financial support for its operation at the end of 2012 however, the scheme has been mothballed for the immediate future with new sources of funding being sought. A recent update has established that a tendering process is currently underway to find a new commercial operator which they hope will bring it back into operation during the summer.
18. Evidence however shows that wherever a small scale trial, to gauge potential use, has been implemented, it has always failed. This can be evidenced by such pilot schemes as *Hourbike Bristol* where only seven hubs and 18 bicycles were used which resulted in a very limited take-up and the scheme being subsequently withdrawn after 18 months. The consensus was that there had been far too few hubs / bicycles for such a scheme to be useful for residents, as the only realistic journeys a user could make was limited to between two of the seven hubs. Therefore appeal to the wider population failed.

Lessons learnt

19. For a trial scheme to be a proven success in York, we would need to take on board many of the lessons-learned from other towns and

cities with similar schemes, avoiding similar mistakes, and seizing on essentially what has worked.

20. The criticisms of certain cycle-hire projects usually revolve around the complexity of initially accessing the bikes. In some of the earlier schemes, tickets or pre-paid cards needed to be purchased from a vendor followed by a phone call to a customer service number, in order to gain access by then inputting a pin number into one of the bikes. In some examples, users then had to call customer services again when they had deposited the bike. Essentially, the more long-winded the process was to hire a bike, the less the scheme got used.
21. It is recognised that access to a scheme needs to be fast and easy for it to attract users, especially the potential for impulse, *spur of the moment* use. In order to maintain a certain level of security, any scheme would require website registration with a credit/debit card as deposit and payment for use. Newcastle's cycle hire scheme includes a smartphone app which then gives a pin to enter onto the solar-powered unit on the handlebar in order to unlock the security-tagged bike lock. All bikes communicate wirelessly with a cloud management system and on-board GPS is used to ensure that the bike is returned to a designated hire location and to measure how far the bikes are being ridden. Accelerometers will inform the operator when a bike moves without authorisation. Certainly this type of system is something which any similar scheme in York should strive to emulate.
22. The main criticism of London's scheme, at least in its initial year, was that with cycles having to be returned to special *Bixi* docking stations, if one was full the user would have to search around for another nearby one with spaces. The more popular destinations were regularly oversubscribed leading to user frustration when there was either no bike there to be hired out, or else no spaces left to deposit it back.
23. Another issue is that specialized docking station hubs require a power source, usually mains electricity as well as only accommodating one bicycle, whereas existing cycle parking ("sheffield stands") can accommodate 2 per hoop. Additionally, other infrastructure intensive *Bixi* schemes such as London's have experienced problems with defective docking stations. Any scheme in York would need to avoid these infrastructure-heavy, obtrusive and expensive docking stations, not least due to the sensitive public

realm. Ideally, existing cycle parking locations would be used with little alterations required other than perhaps a flagpole-type sign to highlight that it is a location for hire bikes. Ideally, the technological element of the bike hire would be incorporated onto individual bicycles as opposed to docking station (like it is in Newcastle).

24. Although Blackpool's scheme is currently on hold, it should be noted that this scheme had been primarily aimed at the town's millions of annual visitors as opposed to local residents (and any potential commuters). With Blackpool's tourist trade being extremely seasonal, with the perception that the town 'closes down' during winter, it may not be surprising that the scheme was subsequently closed over winter. A scheme in York, with full coverage of the city, attractions, universities, park & ride sites, residential areas and outlying retail parks, would be far less dependent on visitor usage – and even then – York's tourist trade is fairly constant all year round.
25. In terms of scale, Bristol had the issue that there were far too few bikes and a very limited number of docking station / hub locations to generate the type of casual *ad hoc* use which the likes of London succeeded to attract. In order for any cycle hire scheme in York to be effective, locations need to be plentiful and in key places. An initial quick appraisal of these locations can be seen in **Annex A**, although some of these 38 locations are potentially less important than others so could perhaps only feature a minimal number of bikes until demand has been fully understood. A live up-to-the-minute online map and mobile/tablet *app* would be required showing the specific locations of each docking station as well as the numbers of bikes currently available. This is common to all cycle hire schemes seen in other cities.
26. How respective cycle hire schemes are funded varies widely. London's scheme is predominantly funded by TfL, with a significant sponsorship contribution from Barclays. Oxford's scheme is funded from their LSTF grant. Sunderland and Galway's schemes are both funded by their respective Universities. Liverpool's planned scheme will be funded by its city council for an initial 3 years with sponsorship being sought during this time. Newcastle's scheme however is completely funded through a partnership arrangement (through a Business Improvement District). This was set up by the businesses of Newcastle city centre as a commercially-run, private, independent, not-for-profit company whose remit was to enhance the business environment and deliver improvements in the area.

Experience shows that cycle hire schemes are unlikely to make a profit, but with backing by a partnership of council and other organisations, and/or large sponsors, they are affordable.

Who, what, why, how & when

27. The target audience for a cycle hire scheme in York will be primarily those living and working in the city and not necessarily the tourist trade, and it is expected that rental periods will be short. Due consideration will need to be given so as not to negatively impact on local organisations that already offer bike rental, therefore York would aim to offer charges which are at a competitive rate for the first 30 minutes / one hour, but after this the hourly rate increases to well above other bike hire organisations' hire prices. This is similar to how public cycle hire works in Barcelona and also in London. This along with having to join as a member of the scheme will help to keep the focus on those living, working and studying within York and avoids any negative impacts and criticism from local businesses who currently rent bikes. Consideration could also be given to handing out free-use trials of a York cycle hire scheme to local residents who may be persuaded to start cycling as part of the LSTF personalised travel planning work.
28. Regarding numbers of bikes per location, this will be very much based on trial and error and close observation of demand. Any scheme needs to be flexible enough to easily allow redistribution of bikes to locations with higher use. An initial conservative estimate of overall numbers (with around 38 docking station locations) would indicate that 150 bikes would be an appropriate number to operate with in York. However, a bare minimum of 100 bikes could perhaps suffice initially until demand had been fully gauged, with scope to increase numbers incrementally where appropriate. It's certainly the case that there is a balancing act to be struck between enough bikes and locations being available for the scheme to prove attractive to users, without over-providing and thus increasing costs.
29. With York hosting the start of day two of the *Grand Départ* of The Tour de France in July 2014, there is a strong emphasis on ensuring a strong cycling legacy both within the city and also regionally throughout Yorkshire. It has been suggested that if successful in York, a cycle hire scheme could be rolled out into the wider Yorkshire region, with York leading the way. Working with partners a long-term vision is for every main town and city in the

region to have cycle-hire, thus enabling better linkages between urban areas and key trip attractors. This would be achieved through working with business and rail operators to take this forward with Legacy partners and Local Authority members.

How a scheme could be financed

30. The costs associated with setting up and providing a cycle hire scheme could be met through any combination of a number of potential revenues:

- Overall scheme sponsorship from a private company/companies taking a proactive approach to corporate, social responsibility;

[At least one major potential sponsor has expressed an interest in this project]

- Sale of advertising on a temporary basis to both small and large companies, as well as organisers of large events;

[Advertising space on the bicycle may of course be restricted, should we secure a single corporate sponsor who wishes the hire scheme to be complete with their own branding]

- External grant funding, as part of a Community Partnership;

[The universities & colleges partnership 'Higher York' has recently submitted a bid for the NUS Students Green Fund, to help York to establish / augment a local cycle hire scheme which would benefit their students]

- Direct revenue from the bike hire itself through the tariffs charged.

[It will be unclear exactly what level of revenue will be recouped through tariff charges until a scheme has been operating for a period of time, hence the requirement to trial a scheme initially]

Can we provide this through local sources?

31. With little spare resources available at this time, it would be recommended that the Council buy in the services of a cycle hire provider rather than try to provide and operate any resource-intensive in-house run scheme. Operating via a third-party means

that all aspects of the scheme from provision of the infrastructure to bookings, and from collection of fares to maintenance of the bicycles, would be fully delivered with minimal resources required from the Council. Most cycle hire providers in UK towns/cities also work in partnership with a local company or companies who can maintain the bicycles for them and operate the scheme locally, thus helping to add to the local economy. In York, there have already been a couple of expressions of interest from local businesses in doing this.

32. Consideration has been given to the possibility of working in partnership / a co-operative with local cycle retailers to establish a cycle hire scheme as a social enterprise. However, local businesses have been consulted (please see 'Consultation' section of this report) and the clear consensus is that some of the cycle retailers would like *some* involvement in the scheme, be it through a maintenance contract for the fleet of bicycles or as operating partners, but are not in a position to establish a citywide scheme themselves, principally due to the sheer scale of the scheme proposed and it's inferred cost.

Implementing a trial scheme

33. This proposal seeks a phased approach to establishing a city wide cycle hire scheme:-

- Stage 1:
- i) Market testing (through tendering) to establish the exact costs associated with introducing a scheme (see *paragraph below*);
 - ii) Securing private sponsorship to part/fully fund the costs of setting up and running the scheme, and/or any other local partnership funding contributions;
- Stage 2:
- i) Subject to Cabinet approval, award contract(s) for supply / delivery / operation / maintenance, etc.
 - ii) Full roll out of pilot scheme, learn lessons and establish user demand and needs.
- Phase 3: Scaling of the scheme – either scaling up or down, depending on the outcomes of Phase 2.

34. The leasing of a cycle hire scheme will require revenue funding. This could be mitigated against in part or in full by securing corporate sponsorship by a private business (or businesses) and/or through other external funding (such as grants). CYC has already received an expression of interest by a potential major sponsor. It is currently unclear what level of revenue will be recouped through tariff charges from users of the cycle hire until a scheme has been operating for a period of time.
35. The cost of establishing a scheme is currently not clear-cut and will only become apparent once the tender exercise has been undertaken (if approval is given). However, indicative costs have been sought using Newcastle as the closest example to what York should strive to emulate:-
- Using Scratchbikes (as they do in Newcastle), a system with 100 bikes in 38 locations would cost approximately £157K per annum / ~£13K per month if leased over 36 months. This would be for the entire package including delivery / operation / local maintenance etc.
 - Because much of the costs to the operating company come from the initial purchase of the equipment etc which is repaid throughout the lease period, if the timescale for lease is reduced, the costs subsequently increase. For example, a 24 month lease would cost approximately £187K per annum / ~£15½K per month.
 - For a short 12 month period this would be approximately £277K per annum / ~£23K per month.
36. It is Officers' view that a 24 month trial, using approximately 130 bicycles and 38 locations would establish the potential level of use for a permanent cycle hire facility in York in the future. Estimates are that this would cost in the region of £200K per annum.
37. The level of revenue funding required from the Council is of course dependant on how much corporate sponsorship the scheme attracts, any external grant funding, and future tariff income.

Consultation

38. No public consultation has been undertaken to date. Other cities with cycle hire schemes have reported little corroboration between

early public market testing (prior to a scheme being implemented), to the overall level of take-up once a scheme had been introduced.

39. Local cycle retailers and companies in York that already offer some cycle hire have been consulted in order to mitigate against any trade being potentially taken away from them. Responses are supportive and are detailed below:-

Cycle Heaven (who offer cycle hire for visitors)

"I fully support the initiative and appreciate the efforts to design the scheme so as not to undermine our existing [hire] business in York. It may help to boost the number of cyclists in York and that can only be a good thing. A word of caution however - Any efforts to achieve significant modal shift will continue to be hampered by the ban on cycling in the city centre. In many northern European cities, cycles and pedestrians mingle freely without any issues. York needs to address this problem at some point. The fact of the matter is that the city centre is a hub of cycling journeys, so it seems very strange to many of our cycle hiring visitors that cycling is banned in this so-called cycling city. Efforts need to be made to overcome the antediluvian attitudes of many businesses and residents on this matter."

Bike Rescue

"Sounds like it could work fine..."

In Barcelona it is clear that the system works because of the large number of bikes and docking stations being close together so that if one was full it was a short ride to another one that was still near your apartment to make it worth using a bike rather than other forms of transport.

Crucially people need to be able to make one way journeys.

To operate as a viable alternative to the car or bus, it must be suitable for our users – given that York is a cycling city i'm just not sure how many people will use it – obviously without trialling it how can we tell.

I can see a scheme working well at the University to/from the city centre; and from the P&R sites to the city centre.

Get Cycling

"We know the Scratchbikes scheme pretty well and have recommended it to some of our public sector clients. We know the people behind Grand Scheme (Scratchbikes) and believe strongly in the concept. It is not clear whether you are set on appointing GS for York, in which case, possibly, no tendering would be necessary since they are the only people with the technology you require."

Options

40. There are two options available to Cabinet:

- Option A – Give approval for Officers to undertake a tendering exercise with interested companies which would establish the

costs associated with undertaking a full city-wide trial for 24 months, delivered in its entirety by a third-party. Secondly, secure corporate sponsorship and/or any other potential external funding of the scheme to offset some of the revenue costs to the Council. Return to Cabinet at a future date to present the outcome of this exercise with a conditional view to awarding the tender and the full roll out of a scheme.

- Option B – To not have a cycle hire scheme for York due to the recognised limitations that have been experienced in other towns/cities.

Analysis

41. It is the view of Officers that Option A – Introducing a full city-wide cycle hire scheme to York on a trial basis – would be an effective way of promoting cycling, particularly in view of the desire to secure a legacy to the Tour de France visiting the city. However with the extent of potential (external) funding currently not determined, it would be prudent to finalise funding options prior to awarding a contract and rolling out a full scheme. Hence the recommendation to bring an update to a future meeting of Cabinet for a final decision to be made.

Council Plan

42. The outcome of this report will contribute to the following aspects of the Council Plan:
 - Create jobs and grow the economy – provision of ad hoc use cycles would make it easier for staff to access their workplace safely by cycle or journey between places of work. By encouraging more people to cycle to work or to access leisure / retail destinations, this should reduce congestion in the city which then makes the movement of other vehicles more efficient thus saving businesses money in lost time.
 - Get York moving – providing a cycle hire scheme and promoting cycling as a more attractive and efficient mode of travel should reduce residents' reliance on motorised transport thus reducing congestion and helping the remaining traffic to move better.

- Build strong communities – provision of a cycle hire scheme which residents would have access to should help connectivity between different communities and access to workplaces, education and retail.
- Protect vulnerable people – cyclist are one of the most vulnerable types of road user and any large-scale roll-out and use of a recognisable distinctive York cycle hire scheme will help raise awareness of cyclists by other road users.
- Protect the environment – cycling is one of the most sustainable forms of transport so the more people who can be encouraged to cycle the better it will be for the local environment both in terms of air quality and the visual impact of parked vehicles.

Implications

43. The outcome of this report will have the following implications:

- **Financial** – The leasing of a cycle hire scheme will require revenue funding for which there is currently none allocated. This could be mitigated against in part or in full by securing corporate sponsorship of a scheme by a private business (or businesses) and/or other external funding.

It is estimated that a 24 month trial of a full scheme would establish the potential level of use for a permanent cycle hire facility in York in the future.

Estimates are that this would cost approximately £200K per annum to lease and operate.

- **Human Resources (HR)** – there are no HR implications.
- **Equalities** – there are no equalities implications.
- **Legal** – the Council's powers under section 1 of the Localism Act 2011 are sufficient to provide for a cycle hire scheme. If the project progresses then there will be further legal implications – in particular relating to procurement and ensuring proper conditions of hire are prepared mitigating any risk to the Council.
- **Crime and Disorder** – there are no crime & disorder implications.

- **Information Technology (IT)** – there are no IT implications
- **Property** – There are no property implications.
- **Highways** – Nearly all proposed docking station locations are on adopted-highway and are already in use currently as cycle parking.

Risk Management

44. There is of course the risk that any cycle hire scheme rolled-out in York could not gain the level of usage which the council would like to see and therefore remain mostly unused, thus risking reputational damage to York.
45. Another potential risk is that should a cycle hire scheme be established in York and corporate sponsorship and/or other external funding subsequently be withdrawn at a later date, the Council would be burdened with finding the additional revenue in order to support the continuation of operating the scheme.

Recommendations

46. Cabinet is asked to:
 - 1) Agree to the general principle of introducing a public cycle hire scheme within York;
 - 2) Give approval for Officers to undertake further development of a business model for a scheme, including seeking external sources of funding and tendering for a potential provider;
 - 3) Receive a further report at a future meeting of Cabinet setting out the full financial implications and potential funding sources, and further consider at that point the introduction of a full city wide trial of a public cycle hire scheme for 24 months.

Reason: To continue to promote cycling within York as a sustainable transport option and offer a low-cost alternative to private transport for short journeys. This would be primarily aimed at residents of the city and its suburbs, but would also appeal to commuters as well as some visitors.

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Report Approved:

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Background Papers: None

Annexes: Annex A – Potential cycle hire locations in York

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