Bike share guidance for local authorities

November 2022







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CoMoUK is the national organisation for shared transport, a charity for promoting its social, economic and environmental benefits. We work collaboratively with national, regional, transport and local authorities as well as the private sector to further these public benefits.



Introduction

Bike share is now a significant part of the transport mix in towns and cities across the UK. The evidence for the contribution of bike share to policy goals on activity levels, air quality and climate change is clear. CoMoUK's six years of user research has demonstrated a strong case for the social and environmental benefits of offering people convenient, low-cost access to bikes through bike share schemes.

Bike share (electric and conventional) complements rather than competes with bike ownership. The CoMoUK annual bike share user report shows that schemes act as a catalyst for lapsed or new cyclists (49% of respondents in 2021) and attract a wider demographic than traditional cycling. Shared bikes support last mile travel from public transport and Park and Ride sites. 24% of users in the latest CoMoUK user research had used bike share to replace at least 5 miles of car trips per week. Over recent years the number of schemes offering e-bikes has risen considerably, making cycling attractive to many and inclusive to those with health conditions and more challenging journeys.

As of June 2022, there are over 40 schemes live or in the pipeline in the UK, most enjoying strong use rates. Bike share is increasingly being seen as a valuable component of a wider sustainable transport network. However, there are still misunderstandings about the economics and unrealistic expectations of operators. The saying - "you get what you pay for" is very pertinent for cities looking to capitalise on the many policy benefits of bike share. The greater capital investment

the more the scheme can provide the optimal coverage. We work collaboratively with national, regional, transport and local authorities as well as the private sector to further these public benefits. In addition, revenue funding will allow cities to demand the highest service, keep prices competitive and support initiatives to improve social inclusion.

This updated guidance outlines all the influencing factors, financial and non-financial, behind the strongest schemes and assesses the minimum and priority areas of support required. The review also makes recommendations about the resources and approaches required to minimise criminal damage. The work draws upon extensive interviews with UK operators including looking at advice on enhancing the procurement process itself.

The report is written with a focus on hub/bay or docked bike share schemes, the assessment of the relative merits of different systems is not part of the remit of this work. It provides a framework for creating strong schemes which can provide a key component to creating liveable, sustainable environments.

BIKE SHARE REDUCES CAR USE



27%

of bike share commuters had previously travelled by car (driver or passenger) or taxi

BIKE SHARE IS A TOOL FOR RE-ENGAGING CYCLISTS



46%

of bike share users said the bike share scheme was a trigger to cycling again

SOURCE: CoMoUK Annual Bike Share Report 2021

Summary recommendations

- **Consultation:** Structured preprocurement consultation engagement supports efficient collection of the latest industry expertise.
- **Design:** Be clear about the objectives of the scheme, different aims will require different approaches e.g. a focus on reducing congestion might require greater coverage and public transport integration whereas a focus on inclusive and affordable travel might require greater funding and partnership working.
- Procurement: The route to selecting a supplier should be tailored to any funding available with recognition that the less public funding available, the more the operators will wish to have control and work flexibly to manage operating costs and the risk they are absorbing.
- **Specification:** This should be flexible and outcome focused except for the core non-negotiable factors to allow operators to develop the strategy they believe can be successful. Definitions of terms must be spelt out with description to avoid ambiguity.
- Funding: Some form of revenue support may be required and can take many forms; this can sometimes be achieved through flexible allocation of capital funding. The amount required can be partly offset by practical support from an authority.
- **Density:** The density of bike parking bays or hubs is a key factor to the success of a scheme, while also being a driver of cost. Users of the scheme need to feel bike share is quick and easy to use, with a choice of places to pick up and drop off bikes easily conveniently placed in all the directions around their trip origins and destinations. As far as possible, using car parking spaces to provide space for the bikes rather than pavement will minimise obstructions for pedestrians.
- Single versus multiple operators:
 Multiple operators can add value
 through density and choice as well as
 driving competition in larger areas.
 In smaller cities and towns, a single

- operator approach is likely to be viable. This may also apply to the expanding range of micromobility products which could compete with bike share.
- Service Level Agreements: Contractual SLAs can make a critical difference to operational costs, for example through increased redistribution costs and hence the success of a scheme. Assessment of performance should be linked to objectives and outcomes rather than focusing on outputs.
- Council staff support: It is vital for the scheme to be embedded into all council work with a senior "sponsor" to ensure it is automatically included in transport strategy, funding proposals, built environment development and cycle infrastructure plans, outreach and communications work.
- Long term funding: A very important factor to be considered in the development of the scheme is the replacement of bikes as they come to the end of their lifespan. The contract length should where possible be linked to the lifespan of the bikes at which point it may be necessary to seek further funding to replace the fleet.
- Deployment of schemes: The mobilisation period from signing the contract to launch needs to be at least six months and possibly up to nine months. Speed will be affected by support in the planning process.
- Criminal damage: A multi-pronged partnership approach is needed addressing vandalism through planning considerations, physical and digital technological interventions, community engagement and legal and policing measures.



Defining success

The following list has been compiled to define the characteristics of a successful scheme. These are points to bear in mind when designing the specification, choosing a supplier and setting up performance measures.

- Clearly articulated goals: What do you want to achieve from the scheme? Reduced congestion, modal shift, links with mass transport? Set clear goals and targets and set the scheme up accordingly.
- Utilisation by target groups: High awareness of and utilisation by identified target groups.
- Customer satisfaction: High rating of the service and repeat use by users plus lack of complaints from users and non-users.
- Longevity and quality of service:
 Ability of operators to fulfil contract agreements and provide a high quality service for the full length of the contract.
- Financial sustainability: A long term plan for balancing operational costs with reliable income streams without relying on price rises (which could reduce utilisation).

- Satisfactory density and coverage:
 Bikes available where they are needed and hubs to return them to in convenient locations or strategy to move towards this in phases.
- Minimal damage: Recognising eliminating all criminal damage may be impossible but keeping the level as low as possible so that it does not cause financial difficulties.
- Positive publicity: Supportive media coverage for the scheme locally and nationally from public and private sectors.
- Added value: Activities which involve working with charities, or local groups on issues such as road safety, cycle training, inclusion.



West Midlands Cycle Hire

Factors influencing success

The key factors which have had the most influence on the development of bike share are explored below. In consultation with operators and authorities, each has been examined in terms of the minimum and ideal circumstances required to create a success scheme as defined above.

a Setting scheme objectives, design and funding

Each authority needs to decide upon the policy objectives it wishes to address with the introduction of a bike share scheme. The key objectives of the scheme and the wider funding environment for delivery will set the parameters for the scheme design.

Bike share schemes fall into different categories from fully funded to non-funded with associated impacts on the management of the specification and sharing of risks. The table below illustrates how different funding scenarios affect how a scheme is managed.

Generally, where the local authority procures bike share as a service, it sets out exactly what is required, and a price is set for delivery of that specification. Alternatively, the council may invite a supplier to provide a scheme in the area without funding, in which case the business would not expect to be restricted in making key business and operational decisions which are important to financial sustainability. It is important for the contract to match the type of agreement, one for a concession agreement will be considerably less onerous that one for a service contract.

Where there is partial funding the issue of where the control and risks lies becomes more complicated. The operator will be taking the financial liability risks of the scheme and will need freedom to optimise operations for the best financial sustainability, while keeping within all standards outlined in the contract and CoMoUK accreditation. In the rare case where excess profit is generated, this could be shared between the operator and the local authority particularly if it is ring-fenced for further investment in the scheme and cycling infrastructure. Revenue share is very unlikely to be viable.

Given some authorities have limited access to funding, the report is written to examine the scenario where revenue funding to support a scheme is either not available or very minimal. The less public support available the more the operators will wish to have control and work flexibly to manage operating costs and the risk they are absorbing.

The amount of funding available will also affect the ability of the scheme to meet other policy objectives. For example a desire for wider area coverage will increase capital costs to pay for more bikes as well as higher revenue costs to cover scheme management. Where there is a strong interest in the potential for bike share to provide affordable low cost transport in low income areas, there will be a need to invest in partnership working as seen in the successful **CoMoUK** Bikes for All programme. Bikes for All set up partnerships with local charities to encourage take up by under represented groups through activities, incentives and removing barriers to riding.

Some central and inner London areas have such demand for bike share that operators have historically been willing to pay fees to operate to boroughs. It is important that these should be proportionate, reinvested into measures to support bike share and cycling generally and kept under review. The worsened economic climate has put the finances of all organisations including bike share operators, under greater strain.



Figure 1: Criteria required to meet different policy objectives for bike share schemes

| Policy objectives and priorities | Notes on the criteria required to ensure success |
|--|---|
| To keep funding costs low | If there is a lack of funding to develop the bike share scheme, it may be necessary to ensure that: the operator has a greater say over coverage and operational management of the scheme contractual requirements and service level agreements are not onerous the operator has control over pricing there is an active partnership approach to addressing criminal damage |
| To keep user pricing low | In order to keep user pricing for the user low, it may be necessary to ensure that: there is revenue support to cover operational costs, possibly only in the early days there is an active partnership approach to addressing criminal damage |
| To ensure the largest coverage area | In order to maximise the coverage area, it may be necessary to ensure that: there is additional capital funding for bikes, stations and deployment possibly also revenue funding to support management of stations in lower use areas there is a higher number of e-bikes to support longer trips |
| To include e-scooters | For e-scooter and bike share to successfully work alongside each other, it may be necessary to: • select a single operator to avoid diluting the market except in largest cities or • provide revenue funding to support management costs possibly only in the early days |
| To ensure inclusive scheme for those on low incomes | For bike share schemes to successfully support low income and marginalised groups, it may be necessary to: take an active partnership approach to work with specialist groups to support outreach and engagement work provide additional revenue funding to support subsidised hires, engagement work and manage an increase operational area |
| To ensure inclusive scheme for those with disabilities | For bike share schemes to successfully support people with a wider range of abilities, it may be necessary to: take an active partnership approach to work with groups with specialist knowledge provide additional capital funding for a wider range of bikes provide revenue funding to support cycle training, engagement work and managing additional operational tasks such as face to face hires |

b

Scale and density of bikes

The density of bike provision is a key factor in the success of a scheme. Users of the scheme need to feel bike share is quick and easy to use, with a choice of places to pick up and drop off bikes easily, placed in convenient locations in all the directions around their trip origins and destinations.

The city should set minimum expectations and identify priority areas to serve but then request proposals which fit the funding available. Taking a phased approach may be important as the long-term potential for bike numbers may be very different from that which may be sensible as a first launch.

Assessment of optimum density is often calculated as a percentage of population. Typical figures quoted by UK operators are around 1 bike per 700 people to 1 bike per 300 if the scheme presumably has high demand. Examples are illustrated in the table below. This approach may cause difficulties if there are different interpretations of the area being served or if a phased growth plan is chosen. In these circumstances, it may be useful to work bottom up and ensure parking bays /docks with an average of 10 bikes are placed every 300m to 400m with additional capacity at areas of high demand.

Parking bay development is a continuous process using available data. Bay expansions should be scoped in partnership with operators.

It is important to gain political and local community support to use on-street car parking spaces for bays to support growth and density. This has the added advantage of reducing conflicts over pavement space for non-users. These spaces can also be used by other existing or potential modes such as shared e-scooter, cargo bikes and moped schemes which are becoming increasingly common. With integration with public transport the sites have the scope to become mobility hubs, see the range of **CoMoUK hub guidance**.



Santander Cycles (nextbike), Milton Keynes

Figure 2: Fleet size ranges for different population levels

| | A population of around 250,000 | A population of around 300,000 | A population of around 750,000 |
|------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Fleet size - lower range | 350 | 500 | 1000 |
| Fleet size - higher range | 800 | 1000 | 2500 |

c Strategy

It is useful if the city can carry out specific research on areas which may be successful for bikes share. Alternatively local authorities can share generic data with operators on areas such as trip analysis, population centres, tourism and employment sites to build a picture of potential hotspots.

Where there is a good understanding of how the bike share scheme can best support local objectives, then it is useful to state these with as much detail as possible. Where there is more uncertainty over likely trip behaviour it is advisable to take views from operators on the local factors and opportunities.

It is important not to list all possible strategies which bike share might be able to support without a plan of how to match the scheme to objectives and which of these have priority.

However, it is useful to ensure bike share is referenced in relevant council and regional strategies where there are overlapping policy objectives and potential for unlocking financial support.

Exclusivity is also a key factor to consider; it is unlikely that more than one operator is likely to be able to be profitable in small to medium sized towns or cities. This also applies to deployment of an e-scooter share scheme which may impact the sustainability of each scheme if run by a competing operator. So by having one operator for both schemes there will be economies of scale whilst also avoiding competition between the modes. This can be mitigated with revenue support.



Ride On e-bikes, Dundee

d Specification

As when looking at the scale of operation, the specification should be outcome focused to allow operators to develop the strategy they believe can be successful.

The procurement specification should provide an overall vision for the scheme and what it seeks to achieve. Non negotiable minimum requirement should be kept to a minimum and be clearly defined and informed through market engagement. Definitions of terms must be spelt out with descriptions to avoid ambiguity especially with terms which refer to operating models such as docks, tethered, "lock-to." Suggested definitions are provided as an appendix. The latest innovations, and differences in style and quality of the bikes, should be compared in the assessment phase of procurement.

Any minimum expectations need to be very specific so that they can be costed. An example of this is a clear specification for integration of the bike scheme with local ticketing systems so all the implications and costs can be understood.

One key area which may require specific mention is the security and theft proof aspects of the bike and back office systems. Given criminal damage has been a difficulty it may be necessary to ask for extra protection for the lock and two factor authentication to avoid fraudulent activity.

Prescribing the percentage of electric bikes to be deployed is another area which needs careful thought. Including e-bikes can increase the number of users and trips but can also involve additional capital and operational costs. It may be hard to judge where the e-bikes will best be deployed before launch and so it may be useful to put aside an allocation of funding for e-bikes to test their use. Some suppliers only provide electric bikes, so requiring a mix fleet could reduce the number of responses to a tender.

е

Opportunities to secure revenue funding via sponsorship and other sources

There are a range of strategies used by operators to ensure the financial sustainability of schemes.

Rider income alone is seldom enough to cover costs, at least not in the first year or two while the scheme develops and beds in. It is therefore recommended that one or more of the following strategies must be in place to make bike share viable in the long term in UK cities.

In some cases, capital funding has been converted into revenue either to be used flexibly as required or to create a specific fund for spare parts.

As well as maximising the opportunities from capital funding, there are a range of other options to raise further income or reduce costs. An important strategy is to ensure bike share is a central part of guidance for new developments to generate \$106 funding for expansion of services and membership / rider credits for residents or businesses.

Where there are policies in place to generate revenue from curtailing car use such as a Workplace Parking Levy or a Clean Air Zone, this may be explored as an option to support the bike share scheme.

Securing sponsorship has been less successful recently than it has been in the past. Caution should be exercised about relying on this option to make up income and ensuring the size of the contribution was worth the significant additional effort and costs of supporting the agreement, e.g. additional specific marketing, although sometimes sponsorship agreements can include in-house marketing support.

Measures to increase income:

- Build in support to capital funding
- S106 developer contributions
- Clean Air Zone/workplace parking levy
- Sponsorship
- · Corporate memberships
- Advertising
- Grant funding

However, it can be a useful option to support bike share. The city is often best placed to make contact with potential leads rather than all bidders making contact separately but they should take expert advice on how to negotiate a good agreement.

Corporate memberships are another way to provide a predictable income if the servicing conditions are not too demanding. The council can play a valuable role in making links through existing networks. Some cities promote corporate membership of the bike share scheme as an option in campaigns around sustainability or health.

Advertising has been an option to raise income in some schemes, particularly on hub /dock signage although it also raises other difficulties as there will then be a need to secure planning permission. Selling naming rights for a parking area can be popular with some companies and can cover the capital and installation costs.

There may be opportunities for local authorities to apply for restricted grants funding which the operator isn't eligible for directly. Examples of funds which have supported bike share in recent years include:

- Transforming Cities Fund
- Future Transport Zones
- Levelling Up Fund
- Towns Fund
- · Community Renewal Fund
- Future High Streets Fund

Operators are open to profit sharing rather than revenue sharing, i.e. an approach which ensures costs are covered first. This would be set as a percentage of revenue once all costs are covered including the management of risks and shortfalls in earlier non profitable years.



Hi-Bike (Bewegen), Inverness

f

Reducing costs and partnership support

Turning the problem on its head, there may be ways to reduce costs which will ensure the financial viability of a scheme in the long term.

As well as helping to maximise income, the scale and density of a scheme will also heavily influence costs. Allowing operators to take a lead on designing the scheme will help ensure there is a dense core with manageable operating cost. Expansion out to less dense areas can only happen when demand is there to ensure that there isn't a burden from high redistribution costs and potentially lower utilisation. The ability to be flexible and move docks/ hubs in response to local conditions was also key.

It should be stressed that Service Level Agreements (SLAs) can make a critical difference to operational costs and hence the success of a scheme. It may be sensible to negotiate some measures of performance in terms of safety and streets tidiness but to avoid nominal targets on things like availability. It is more important to focus on meeting overall objectives rather than than specific outputs.

It will be helpful to allocate a council officer to maintain a dialogue about the scheme performance. There may be underlying issues to work on collectively, such as expanding provision, station position and vandalism.



As outlined above, the deployment of e-bikes will have an impact on operational costs as well as capital costs which can in most cases be recouped by higher fees and an increase in demand. However careful thought is needed to get the right percentage of e-bikes to satisfy demand in area but not to overload a scheme with high capital, rebalancing or battery swap costs. For a mixed fleet it may be useful to begin with a lower percentage and a set aside extra funding to either increase the e-bike or pedal fleet once the needs are better understood.

Another influential factor is the time of the council officers. In the mobilisation phase there should be the equivalent of a full-time staff member who can link the operators through to key people e.g. planning officers, business networks, marketing and PR. After launch it is vital for the scheme to be embedded into all council work with a senior "sponsor" to ensure it is automatically included in transport strategy, funding proposals, new development and cycle infrastructure plans, outreach and communications work.

If a sponsor is brought on board, there may also be the option of reducing marketing cost by working in partnership with them to utilise their expertise in this area as well as maximising links to council activity.

There may be a range of other measures which councils could be put in place to provide practical support to a scheme which can be identified through discussion, e.g. the use of council space for a workshop or support of a fleet contract for operation vehicles.

Reducing cost through tackling criminal damage is addressed later in this report.

Santander Cycles (Ride-On), Leicester

Figure 3: Measures to reduce costs

Measures to reduce capital costs

process for operators to follow

- Council lead on planning process and to have one standardised permissions
- · Minimising the % of e-bikes
- Council contractors for groundwork electrical supplies and integrating the set up of parking bays into existing on street works



Measures to reduce operational costs

- Scale and density operator led
- Correct setting of Service Level Agreements
- Council officer time
- Being strategic about % of e-bikes, comparing increased revenue and trips with operational costs
- The operator and local authority should work in a sustained and imaginative way, using all channels and partners available to promote the scheme
- The council may be able to help by providing a bike depot space but only if it is in the right location with enough space / parking
- Access to fleet contract for support vehicles

g

Implementation and bike management

There are many factors in contract set up and implementation which can have a critical impact in success.

Most operators are flexible about who owns the bikes. They can be owned by the council and leased back to the operator with clauses within the contract to cover scenarios where the service is forced to end early. The key issue is where the responsibility sits for replacement of bikes due to either wear and tear or criminal damage. Routine replacement of bikes best belongs with the operator and needs to be factored into expenditure plans. For criminal damage, some factors which influence the volume of criminal damage are managed by the operator such as protection of vulnerable bike parts, but others are beyond their remit alone and need a partnership approach. It is recommended that an agreement is put in place to share the financial impacts whilst working jointly on a strategy with the police and community groups. Further detail in the section below on measures to minimise criminal damage.

A very important factor to be considered in the development of the scheme is the replacement of bikes as they come to the end of their lifespan. The contract length should where possible to be linked to the likely expected duration the bikes can be used for. Operators report this is between 5 to 8 years. Funding for a refresh of bikes can then be linked to the next contract cycle. This may be from sponsorship or grant funding but needs to be planned for during the first contact period.

The mobilisation period from signing the contract to launch needs to be at least six months and possibly up to 9 months. Speed will be affected by support in the planning process.

The ideal time to launch is April or May to provide a longer period of better weather for the scheme to build ridership.

Capital funding ranges

In order to aid the planning process for authorities developing bike share the report now examines potential costs in terms of capital and revenue requirements. These latest figures were obtained from operators as the cost of their whole system, (bike, dock and back office systems) including installation and mobilisation, although the price is quoted per bike.

The tables below illustrate the range of options for:

- · Lower and higher scales of settlement
- Lower and higher prices quoted by operators
- Different percentages of electric bikes

Figure 4: Captial funding requirements

| | | A population of around 250,000 | A population of around 300,000 | A population of around 750,000 |
|--|--|--------------------------------|--------------------------------|--------------------------------|
| | Bike numbers | 350-800 | 500-1000 | 1000-2500 |
| of pedal pedal bike fleet of pedal pedal | Lower range of prices for pedal bikes ~£1500 | £0.5 - 1.2m | £0.75 - 1.5m | £1.5 - 3.7m |
| | Higher range of prices for pedal bikes ~£2500 | £0.85 - 2m | £1.5 - 2.5m | £2m - 6.25m |
| 100% e-bike fleet | Lower range of prices for e-bikes ~£3000 | £1 - 2.4m | £1.5 - 3m | £3 - 7.5m |
| | Higher range of prices for e-bikes ~£4500 | £1.5 - 3.6m | £2.25 - 4.5m | £4.5 - 11.25m |
| Mixed fleet: 70% pedal bikes 30% e-bikes | Lower range of prices for mixed fleet | £0.7 - 1.5m | £1 - 1.7m | £2 - 4.8m |
| | Higher range of prices for mixed fleet | £1 - 2.5m | £1.5 - 3m | £3.1 - 7.75m |

NB: Costs cover the whole mobilisation and may increase with inflation.

Operational funding ranges

It is difficult to be accurate when estimating revenue income shortfalls as there are so many factors which will affect costs as well as ridership income.

Schemes in high density areas with supportive partnership may not require revenue support at all, or only for the first year. Where revenue is required the figure will be impacted by the cost of expansions, new initiatives, depreciation, and inflation.

Based on our engagement with operators the average annual funding gap ranges between £200-300 per bike per annum (2022 prices). Depending on the number of bikes in the scheme this leads to an annual funding gap of between £70,000 and £300,000. Illustrations are outlined in the table below.

Figure 5: Typical range of income shortfall after ride income considered

| Shortfall per bike annually | 350 bikes | 500 bikes | 1000 bikes |
|--------------------------------|-----------|-----------|------------|
| £200 | £70,000 | £100,000 | £200,000 |
| £300 | £105,000 | £150,000 | £300,000 |



Beryl Bikes

Procurement routes

It is generally agreed that local authorities should carry out some form of market engagement with operators before the procurement process starts. This helps operators feed in their expertise to the design of strategy and for them to be used to draw out city specific advice.

Engagement should include a day to meet with CoMoUK accredited suppliers to test aspirations, gauge interest and try out apps and bikes. To make the most of the opportunity it is useful to hold detailed, structured market testing interviews where everyone is invited to answer set questions in advance. However, it is important to avoid cherry picking all the best ideas assuming that it is feasible to deliver them in combination.

A formal Competitive Dialogue process has many benefits, although it can take many months. Planning ahead to consider the launch date is critical given this should ideally be in Spring to maximise the chance of building a substantial user base during better weather. If this route was taken, a shorter two stage process may be preferable which allows for feedback on a draft tender specification through initial submissions and /or meetings. This would reduce the chance of final procurement documents including issues which cause problems for those tendering and thereby make it a more cost-effective process.

Where there is an investment in the scheme from the local authority a full tender process is required, advertised on a range of online tender portals. Some authorities are also taking this route even where there is no grant support as they deem the opportunity to use the public space as having a significant value and wish to run a competitive process. Other authorities are choosing to use Requests for Proposals to structure selection in an open and transparent way.

Where schemes are launched without financial support from the city a Memorandum of Understanding can be used but many authorities prefer the reassurance of a contract. As a contract has to be for a consideration this may involve a £1 nominal exchange. The contract can be for the award of a Concession which differs from a standard contract as it refers to the rights to exploit the service for commercial gain.

As the price of systems can vary considerably it may be useful to create an initial qualification round looking at matching specification and quality followed by a second to compare prices.

As far as possible items included in **CoMoUK accreditation** should not be repeated in the tender form.



HumanForest, London

Figure 6: Different routes for bike share procurement

| | Strengths | Weaknesses |
|---|---|--|
| Competitive dialogue | Hones the final service and contract. The multiple rounds enable stronger understanding of the authorities' needs, operators' services and increases likelihood of aligning objectives. | Time consuming |
| Requests for Proposals | Similar to competitive dialogue with less formal structure so simpler and faster to implement | This initial round typically leads to tender or MOU |
| Traditional tender process | Route most authorities are used to and provides strong contractual framework | Can be too rigid and slow which can mean delays and lost opportunities |
| Memorandum of Understanding | Fast to implement and allows maximum flexibility | Lacks teeth to enforce any KPIs No binding contract durations of service so operator can leave any time |
| Concession contract (possible outcome of a concession contract via a competitive dialogue) | Provides a contractual agreement for contracts without funding | Limited scenarios |

It is recommended that the contract should be open to some degree of negotiation post tender in order to fine tune details which could be of significance.

E-scooter schemes

In summer 2020 Government approved trials for shared e-scooter schemes. These are now cleared to run until 2024, subject to any further extensions. At the time of writing it is anticipated that the Government will legislate to create a new powered light vehicle class. This would be how e-scooters would be legalised.

In any bike share procurement exercise it is worth considering the option to expand to include e-scooters at a later date.

Offering up such opportunities explicitly to the whole market is preferable to allowing new modes to be added without an open transparent and competitive process. This works both ways when considering bikes to an e-scooter scheme.

There may be advantages to different modes being run by the same company or consortium in terms of the economics (unless a scheme is revenue funded), marketing, reduced number of apps for the user to download and fewer operational staff needed on the streets.

Although there will be financial benefits to multi modal operations, e-scooters can only provide cross-subsidy to bike and e-bike share in certain favourable contexts. The need for funding will depend on the local context and scheme requirements.

Consideration could also be given to addition of other modes such as shared e-cargo bikes or shared electric mopeds.

Measures to minimise criminal damage

Vandalism of bike share schemes is unfortunately not a new phenomenon. From the initial launch of bike share schemes back in 2010, various issues have been recorded and most schemes have suffered at least some damage.

Vandalism has been linked to both docked and dockless schemes. Outright theft of the bike or stripping it for parts does not seem to be as motivating as damage for the sake of "fun / kudos", with some incidents being filmed for social media. In any case, shared bikes typically have zero resale value, and most of their parts cannot be re-used.

In some cities vandalism has been limited to the first few months, in other areas it

has been sustained. In some areas it is a serious issue which is hampering the ability for schemes to ensure there are sufficient bikes to meet demand and thereby provide the many benefits which bike share can offer. In some cases vandalism can even be fatal to a bike share scheme, although there are more examples emerging of cities successfully addressing the issues: see the Cardiff case study on page 16.

a Planning considerations

- When choosing sites, it is important to consider the immediate environment in terms of how well it is overlooked, whether it has a reasonable footfall, good lighting or CCTV (and ensuring there is access to the footage).
- Could the site be integrated with other services to support its management and surveillance? Mobility Hubs are a new tool being used to house transport and related services; the co-location can help to improve natural surveillance.
- Has the operator engaged with the local police Designing Out Crime Team(s)?
 Building relations with local police and other public authorities more broadly on the specific issue of vandalism: see section c below.

 It is likely that a city will have hotspots and known high risk areas. These will feed into the planning / design considerations. Operators should also consider proactively checking and moving bikes out of these areas. There is sometimes a conflict between the desire to ensure the scheme is inclusive and covering all neighbourhoods with the practicalities of managing stations or bikes in areas of multiple indices of deprivation. This can be helped with greater community engagement



Lime, London

b Physical and digital technological interventions

Good quality, robust technology will also help to deter or delay activity:

- Some operators have added a GPS system with on-board computer to cry for "help" if bike believes it is being tampered with or stolen.
- E-bikes are in some ways safer from theft as the power can be disabled and the bike rendered useless although damage to an e-bike could be more expensive.
- Others have added extra "armour" to bikes in vandalism hotspots (such as metal casing around wiring).
- Some operators have also introduced airless tyres.

- The use of camera technology has been considered on docking stations or bikes in some locations as general CCTV does not always deter vandals, there may be GDPR considerations.
- Incidents of bikes being taken for misuse after registration using a fake accounts and non-payment, have been reduced by introducing extra steps of verification such as an in-app credit checks and payment gateways.
- In addition, it has helped in some cases to increase fines for improper use and shut down accounts after a certain threshold of poor behaviour has been reached.



Case study

Cardiff Cycle Crime Reduction Partnership

The Cardiff scheme is run by nextbike and sponsored by OVO Energy. The Cycle Crime Reduction Partnership was formed in Cardiff, after a significant increase in theft and vandalism. The partnership includes the police, the council and local charities. It uses various strategies to tackle vandalism including:

- Wide-reaching community communications campaign
- Weekly patrols with nextbike staff & police
- Training for police officers to recognise when bikes are not on hire
- Increased staff numbers who were also provided with body cams to record anti-social behaviour.

- Emphasis on reporting all types incidents to the police
- Removal of a few stations in areas of higher rates of vandalism and lower use while others were added in popular areas to increase number of drop off locations.
- Increased charges for leaving bikes outside stations where they are more vulnerable.
- Improvements were made to in app reporting of incidents.

The partnership with the police continues to grow and is producing successes especially in the number of convictions. A similar campaign in Newport resulted in a reduction of bike theft of 30%

Scheme launch: May 2018

Fleet size: 1029

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Community engagement interventions

Reports suggest that a significant proportion of the vandalism is carried out by younger people in the summer months which possibly points to a link to a lack of support in communities for these groups.

Various approaches have been tried by operators such as getting community groups involved in bike maintenance or creating artwork for stations. Such activities can, however, require a great deal of resources and may only have an effect for a limited period.

Wider community engagement has been used to encourage a greater sense of ownership of the scheme which then provides local support and surveillance.

The Bikes for All Scheme that CoMoUK has developed in Glasgow encourages use of the bikes by low income groups through engagement activities and mechanisms to take away payment barriers. By working in a sustained way through existing neighbourhood groups a network of champions for the scheme can be created. This approach can ensure there are not sections of the community who feel disenfranchised from the scheme as well as encouraging the community to report suspicious activity.









Bikes for All, Glasgow

d Legal and policing interventions

Police intervention has had a positive effect on vandalism. There appears to be a deterrent where the authorities are able to identify the culprits and a prosecution takes place. Operators have reported that incidents have reduced as the word seems to get around.

Inevitably it is difficult for the police to follow up on reports, but it is recommended that:

- A dialogue is established between the operator, authority and police early on as the scheme is being developed and as an ongoing process to improve understanding.
- Way of reporting crimes should be agreed, ideally individual crime reports should be submitted for each incident as this will affect police bike crime figures to triggers action.
- In some instances, the operators have been able to help the police by tracing bikes and linking a person to stolen property, thus also helping police crime statistics.
- Some operators have given the police free passes for the bikes, so they have a better understanding of how it works and when activity looks unusual.

- Operators wish to work with the police, for example to provide information on which bikes are stolen and avoid approaching legitimate users who might be on a bike which has been vandalised previously.
- In many cases bikes are kept within private property by users, particularly with dockless bikes. This makes the legal retrieval from private land difficult, even with GPS coverage. This is a complex issue for a private company to resolve and is worthy of discussion as these are often readily solvable crimes.

Collaborative working has been found to be beneficial for all sides as often capturing those responsible for bike share damage can uncover more serious organised crimes.

e Responsibility

Currently the responsibility for the bikes and other assets normally rests with the bike share operators.

City councils should be actively involved from the start along with other key stakeholders. There is a precedent in Oxford, where a multi-agency cycle crime working group including British Transport Police, Thames Valley Police, bike hire schemes and local retailers was set up.



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Conclusions and summary recommendations

Bike share can help to address many difficulties cities face, from congestion and air quality to inactivity and transport poverty. As far as possible bike share should be seen as a key part of the public transport system and be integrated into strategy and funding plans.

- Consultation: Structured preprocurement consultation engagement supports efficient collection of the latest industry expertise.
- **Design:** Be clear about the objectives of the scheme, different aims will require different approaches e.g. a focus on reducing congestion might require greater coverage and public transport integration whereas a focus on inclusive and affordable travel might require greater funding and partnership working.
- Procurement: The route to selecting a supplier should be tailored to any funding available with recognition that the less public funding available, the more the operators will wish to have control and work flexibly to manage operating costs and the risk they are absorbing.

- Specification: This should be flexible and outcome focused except for the core non-negotiable factors to allow operators to develop the strategy they believe can be successful. Definitions of terms must be spelt out with description to avoid ambiguity.
- Funding: Some form of revenue support may be required and can take many forms; this can sometimes be achieved through flexible allocation of capital funding. The amount required can be partly offset by practical support from an authority.



Lime, London

- **Density:** The density of bike parking bays or hubs is a key factor to the success of a scheme, while also being a driver of cost. Users of the scheme need to feel bike share is quick and easy to use, with a choice of places to pick up and drop off bikes easily conveniently placed in all the directions around their trip origins and destinations. As far as possible, using car parking spaces to provide space for the bikes rather than pavement will minimise obstructions for pedestrians.
- Single versus multiple operators:

 Multiple operators can add value
 through density and choice as well as
 driving competition in larger areas.
 In smaller cities and towns, a single
 operator approach is likely to be viable.
 This may also apply to the expanding
 range of micromobility products which
 could compete with bike share.
- Service Level Agreements: Contractual SLAs can make a critical difference to operational costs, for example through increased redistribution costs and hence the success of a scheme. Assessment of performance should be linked to objectives and outcomes rather than focusing on outputs.

- Council staff support: It is vital for the scheme to be embedded into all council work with a senior "sponsor" to ensure it is automatically included in transport strategy, funding proposals, built environment development and cycle infrastructure plans, outreach and communications work.
- Long term funding: A very important factor to be considered in the development of the scheme is the replacement of bikes as they come to the end of their lifespan. The contract length should where possible be linked to the lifespan of the bikes at which point it may be necessary to seek further funding to replace the fleet.
- Deployment of schemes: The mobilisation period from signing the contract to launch needs to be at least six months and possibly up to nine months. Speed will be affected by support in the planning process.
- Criminal damage: A multi-pronged partnership approach is needed addressing vandalism through planning considerations, physical and digital technological interventions, community engagement and legal and policing measures.



Co Bikes, Exeter

Definition of terms

As terms have been used with different interpretations and there is a blurring between models, it is recommended that the specification includes detail to explain exactly which systems will be consider or are preferred. For example, the term station based could be used for any of the first three operating models described below.

• Docked hub or station:

Each dock forms a part of a station with an automated locking mechanism that physically locks the bike to the dock. Systems sometimes offer a combination of fully docked and hybrid tethered operations to create flexible bays or overflow options.

• Non docked bike hub or station:

All technology is housed on the bike and locking is on the bike itself only. The parking area is defined on the ground with a marked-out area and signage and in the app using a geo fencing technology. Ending a hire outside of the area can result in higher charges / or a fine depending on how the system is configured.

Free-floating dockless:

Bike hire can be ended anywhere in an operational zone, there are no hubs. The bikes again are locked to themselves via their back wheel. A set of guidelines are provided on how to safely park a bike without causing obstructions.



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