

**Funding for Innovation:**

**Opening Local Authority Transport Data**

**Application Form**

Please ensure that you have read and understood the criteria and advice in the “Funding for Innovation: Opening Local Authority Transport Data” guidance note. **Bidders should at least ensure that they address all the guidance highlighted in bold in this guidance**.

A separate application form should be completed for each scheme.

**Applicant Information**

**Local authority name(s)\*:** City of York Council

*\*If the bid is a joint proposal, please enter the names of all participating local authorities and specify the lead authority*

**Bid Manager Name and position:** Ian Cunningham, Head of Business Intelligence

*Name and position of officer with day to day responsibility for delivering the proposed scheme.*

**Contact telephone number: 01904 555749 Email address: ian.cunningham@york.gov.uk**

**Postal address: City of York Council**

**West Offices**

**Station Rise**

**York**

**YO1 6GA**

When authorities submit a bid for funding to the Department for Transport, as part of the Government’s commitment to greater openness in the public sector under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004, they must also publish a version excluding any commercially sensitive information on their own website within two working days of submitting the final bid to the Department for Transport. The Department for Transport reserves the right to deem the business case as non-compliant if this is not adhered to.

**Please specify the web link where this bid will be published:** www.yorkopendata.org

**SECTION A - Scheme description and funding profile**

**A1. Scheme name:** Opening Local Authority Transport Data

**A2. Headline description:**

Please enter a brief description of the proposed scheme (in no more than 250 words)

*York has already invested in a data platform* [*www.yorkopendata.org*](http://www.yorkopendata.org) *to publish over 1000 data sets, including transport data. CYC already publishes datasets as part of “business as usual” and political and managerial psyche of the Council, but as we highlighted to North Highland, there is great untapped value in including dynamic datasets in this established service.*

*The DfT funded STEP (Smart transport Evolution Programme)and Eboracum projects have helped us to access untapped real time data. So, this bid looks to widen the published data by adding;*

* *Automatic traffic counters – This will exploit real time flow data we are now processing on a wider footprint internally.*
* *UTC data – We will publish information on traffic signal status plus potentially Signal, Phase and Timing (SPAT) and ‘Map’ information.*
* *Journey time – Sourced from Eboracum’s existing sensors.*
* *Parking information – We will publish permit and CPN information using our new parking system. We also look to work alongside the “digitised TRO” project to their external publication scope*

*We see the real challenge of opening data has not been the political, information governance, technical or “ownership” barriers, but the internal costs of publishing data repetitively. To achieve better quality and efficiency providing transport related data, this bid focuses on the experience that CYC has in delivering an open data platform (www.yorkopendata.org), as well as projects with the academic sector to release environmental data (YCEO project with University of York).*

*This means we can add value to STEP by publishing much of the new CAV ready datasets in a controlled sustainable way.*

**A3. Geographical area:**

Please provide a short description of area covered by the bid (in no more than 50 words)

**The area covered by the bid includes various locations within the boundaries of the City of York.**

OS Grid Reference: **SE54SE, SE54NE, SE55SE, SE55NE, SE64SW, SE64NW, SE65SW**

Postcode: **YO16GA**

Please append a map showing the location (and route) of the proposed scheme, existing transport infrastructure and other points of particular interest to the bid e.g. development sites, areas of existing employment, constraints etc.

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**A5. Equality Analysis**

Has any Equality Analysis been undertaken in line with the Equality Duty?  Yes  No

**SECTION B – The Business Case**

**B1. The Scheme – Summary/History** (Maximum 200 words)

Please outline what the scheme is trying to achieve – indicate what data you expect to collect and your approach, what applications you will deliver from the connected data etc.

This should also provide a clear statement on data privacy and security.

*In line with the opportunity in the North Highland report, we aim for full automated publishing of currently siloed traffic data. We need funding as formatting and depersonalization of data to be compatible for open publishing is needed during the transition from these siloes to open datasets. We will focus resources on datasets hard to publish (UTC data, traffic counters and parking).*

*The scheme will take advantage of the existing internal data extraction skills and well developed information architecture, complimented by a purpose-built data warehouse being used by the Council’s STEP programme in 2019. Our endpoint will be an external portal providing public access to these untapped data ( www.yorkopendata.org).*

*We are aiming to adopt existing industry-standard data schemas including Datex 2, Etsi SPAT MAP, and JSON to allow users to combine similar data across areas for interoperability, eg to provide GLOSA information that works in more places than York.*

*The current platform is fit for purpose for publication but will require adjustments for real time information. These changes to existing architecture will allow splitting of large-scale datasets, interrogation of the data where required, secured live access, and consumption of the data within users’ defined applications.*

*The procedures we develop will ensure published data will not include any personal data. It will be available through a secured read-only API, therefore preventing external manipulation.*

**B2. The Strategic Case** (Maximum 500 words)

This section should set out the rationale and strategic context for making the investment. This section is the most important and bidders should ensure that they address the guidance (particularly the text **in bold).**

Supporting evidence may be provided in annexes – if clearly referenced in the strategic case. This may be used to assist in judging the strength of your strategic case arguments but is unlikely to be reviewed in detail or assessed in its own right. So, you should not rely on material included only in annexes being assessed.

Some of the questions you may wish to consider are:

How can opening data improve your transport service and what is the strategic context and value?

*CYC is rich in transport data and has the physical infrastructure to collect the data, use the existing hardware, and provide the architecture for publishing this data.*

*As proved by existing efficiency improvements achieved through publishing CYC’s data it is only when data is appropriately processed and published accessibly that its true value can be realised through innovation and use of data by the private sector technology providers.*

*Strategically, the STEP business case suggested a PVB of £40m from congestion savings just at York’s signal junctions. Even a 5% increase through published data could be worth over £2m to York. Levering the maximum value from STEP investment is the core strategy here*

*This project builds on the ongoing STEP project by further expanding the sources of data that will be published via the open data platform.*

What options have been considered and why are the dataset(s) you have prioritised offer the best solution and value for money?

*Options are:*

*a) do nothing - keep data in siloes,*

*b) include a separate data publishing layer in STEP,*

*c) combine STEP data with the existing York open data site (preferred).*

*Datasets prioritised within this proposal have been identified as those representing real-time feeds, therefore providing highest potential for better traffic services delivered by external users (eg SPAT, traffic status for CAVs, smart parking operators, wider journey planning). They can be easily integrated with datasets across different local authorities for seamless services. GLOSA adoption using SPAT could reduce emissions but can only occur if the data is made available to end users – CYC alone cannot deliver this new service.*

*Datex 2 and JSON are already widely used, so publishing data assists end users in integrating the data in to their products/platform.*

What are the expected benefits / outcomes of your strategy?

*The main identified benefits and outcomes include development of automated and efficient data formatting and publishing processes, enabling sustainable and continual data availability through lower cost to CYC, as well as increased access and use of the data.*

*Publication of data will help new services in making journey times more reliable, improving road safety and air pollution. The STEP business case identified above shows a 10:1 BCR for the use of data in traffic management internally and we expect similar returns from external users.*

*We expect developers and academics to mine the data within their projects to uncover novel applications and insights. Additionally, private enterprise will explore the potential to commercially exploit the data in co-operation with the Authority and wider transport industry.*

What is the predicted impact of opening the data and how will you measure the benefits?

*The predicted impact is measured against CYC policy objectives in the same was as derived for Eboracum and STEP, eg through measuring changes in journey times through floating vehicles data, better parking occupancy spread, reduced emissions etc . Sensors and data feeds for this are in place.*

*A qualitative assessment of impact of data availability will also be undertaken with the existing open data community in York and with stakeholders of the STEP programme including the advisory board (which features a large OEM). Feedback will be used to design further work in data release and availability activities.*

How will you transform the data into intelligence and how will this help your value for money assessment?

*Raw data will be subject in STEP to quality tests and logical consistency before publication, where work will be done on anonymising, processing and translating the data suitable for open use. This approach protects CYC’s reputation by stopping bad data being sent to customers through quality and governance, the focus for this project. Data will be published for use by the market as a live secure stream, meaning additional low cost benefit delivery (smartphones showing live parking availability are zero cost to CYC compared to a fixed sign).*

*The data processed within the CYC’s dedicated data warehouse will also be made available for use within the Decision Making Support Tools used within transport planning processes. This should allow improved decision making.*

**B3. The Financial Case – Project Costs**

Before preparing a proposal for submission, bid promoters should ensure they understand the financial implications of opening the data (including any implications for future resource spend and ongoing costs relating to maintaining and updating the data), and the need to secure and underwrite any necessary funding outside the Department for Transport’s maximum contribution.

Please complete the following tables. **Figures should be entered in £000s** (i.e. £10,000 = 10).

**Table A: Funding profile (Nominal terms)**

Bidders should provide a cost breakdown, and justification, of the different stages of opening data that the Department will provide funding for.

|  |  |  |
| --- | --- | --- |
| ***£000s*** | ***2018-19*** | ***Total*** |
| ***DfT Funding Sought***  (Further details in project plan)   |  | | --- | | *T1 Data Exploring* | | *T2 Data Connection* | | *T3 Data Warehouse* | | *T4 Data Processing* | | *T5 Data Publishing* | | *T6 Data Maintenance* | | *T7 Stakeholders Engagement* | | *T8 Control Meetings and Project Management*  *Contingency* | | ***£100***   |  | | --- | | *£20* | | *£20* | | *£5* | | *£15* | | *£10* | | *£10* | | *£7,5* | | *£7,5* |   *£5* | ***£100***   |  | | --- | | *£20* | | *£20* | | *£5* | | *£15* | | *£10* | | *£10* | | *£7,5* | | *£7,5* |   *£5* |
| *LA Contribution from monies provided by core open data monies* | *£5* | *£5* |
| *Other Third Party Funding* | *£0* | *£0* |

Notes:

(1) Department for Transport funding must not go beyond 2019-20 financial year.

(2) A local contribution of 5% (local authority and/or third party) of the project costs is required.

**B4. The Financial Case - Local Contribution / Third Party Funding**

Please provide information on the following points (where applicable):

1. The non-DfT contribution may include funding from organisations other than the scheme promoter. Please provide details of all non-DfT funding contributions to the scheme costs. This should include evidence to show how any third party contributions are being secured, the level of commitment and when they will become available.

*No external contributions involved. The LA contribution will be provided in full by CYC.*

1. Where the contribution is from external sources, please provide a letter confirming the body’s commitment to contribute to the cost of the scheme. The Department for Transport is unlikely to fund any scheme where significant financial contributions from other sources have not been secured or appear to be at risk.

Have you appended a letter(s) to support this case?  Yes  No  N/A

**B5. The Financial Case – Affordability** (maximum 200 words)

This section should provide a narrative setting out how you will mitigate any financial risks associated with the scheme.

Please provide evidence on the following points (where applicable):

1. What risk allowance has been applied to the project cost?

*This is an interesting question in that there is inherent risk in the deliverables, as the project is looking to complete activities (transport live data release) which have not been overcome by most Local Authorities. Project costs are to cover CYC staffing time, rather than buying sensors or technology. CYC already has a strong platform and publishing procedures, therefore costs are unlikely to run over. Nevertheless a 5% contingency has been applied.*

1. How will cost overruns be dealt with?

*Cost overruns in terms of supplier availability or product deliverability will be dealt with in line with CYC procurement regulations. The Business Intelligence Hub has a strong track record with dealing with large IT system developments, migrations, project management and data publishing, and this experience will be used to mitigate any material impact on deliverables.*

1. What are the main risks to project delivery timescales and what impact this will have on cost?

*The two key risks identified are, firstly, staffing continuity, a constant challenge to Local Authorities, mitigated by the structure and size of the Business Intelligence Hub (40 data professionals) and then technical abstraction and connection to several data systems. This is mitigated by using a team with a strong track record in extracting information from data systems in both traffic (through Eboracum and STEP) and other fields.*

*There is a further challenge in this becoming too “data” led rather than “transport-need” led, mitigated against by having project governance tied into other STEP structures.*

*A final risk is no appetite for use of the data, mitigated against by early liaison with the established York data community.*

**B6. The Economic Case – Value for Money** (maximum 200 words)

Bidders are requested to provide at least a qualitative description of the benefits that will be delivered from the data opened and how these could provide potential benefits going forward.

This should also capture any examples which generate revenue from the data collected and an indication on the number of users that benefits.

*Further to the transport policy benefits detailed earlier, qualitative benefits include increased computer readable data availability and accessibility; improvement to existing data quality and security and better external and internal ability to exchange and reuse data.*

*By providing a single point of access and maintenance, we will create increased efficiency in data processing, providing the transport team with an established process used within other areas of the Council, and provide a technical architecture and documented pathway for any future further publication of transport datasets.*

*Opening York’s transport data will also provide the private sector with the ability to fully explore technological development opportunities provided by the data. This in return should provide further development and potential private sector investment in the field of regional and national transportation and road traffic management.*

*Planning for one of the largest redevelopment projects of brown-field sites in the country is taking place in York. This development, York Central, will hopefully be able to use solutions provided by the evidence base we make available in opening up the data, to create a desirable destination for businesses and public usage, aiding productivity.*

**B7. The Commercial Case** (maximum 200 words)

This section should set out the procurement strategy that will be used to select a contractor and, importantly for this fund, set out the timescales involved in the procurement process to show that delivery can proceed quickly.

What is the preferred procurement route for the scheme? For example, if it is proposed to use existing framework agreements or contracts, the contract must be appropriate in terms of scale and scope.

*CYC will deliver the majority of work using internal resources and skills. The Business Intelligence Hub has a wide range of data extraction, manipulation and integration skills alongside a proven track record of publishing information and a wide user community in York and further afield. This will be supported by the traffic team with their knowledge of the data sources and applications, including work already funded under STEP. Not having to procure a contractor will enable the work to start quickly within a few weeks of contract award date, using existing governance already started for the STEP programme.*

*Where necessary, CYC will use external contractors in line with the regulations required for public procurement contracts or from existing frameworks for specialist experts.*

\*It is the promoting authority’s responsibility to decide whether or not their scheme proposal is lawful; and the extent of any new legal powers that need to be sought. Scheme promoters should ensure that any project complies with the Public Contracts Regulations as well as European Union State Aid rules, and should be prepared to provide the Department for Transport with confirmation of this, if required.

An assurance that a strategy is in place that is legally compliant is likely to achieve the best value for money outcomes is required from your Section 151 Officer below.

**B8. Management Case - Delivery** (maximum 200 words)

Deliverability is one of the essential criteria for this Competition and as such any bid should set out if any statutory procedure are needed before it can be delivered.

1. An outline project plan (typically in Gantt chart form) with milestones should be included as an annex, covering the period from submission of the bid to scheme completion. The definition of the key milestones should be clear and explained. The critical path should be identifiable and any contingency periods, key dependencies (internal or external) should be explained.

Has a project plan been appended to your bid?  Yes  No

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1. A statement of intent to deliver the scheme within this programme from a senior political representative and/or senior local authority official.

*“The Council is the custodian of York’s Transport data. With new emerging technologies, business models and commercial opportunities, the release of this data in a structured, compliant, and repetitive method is important to maximise future product creation and economic activity. This bid, if successful, will compliment York’s other Smart Transport activity, and hopefully be an exemplar for other cities to follow.”*

*James Gilchrist, Assistant Director of Transport, Highways and Environment.*

**B9. Management Case – Governance (maximum 300 words)**

Please name who is responsible for delivering the scheme, the roles (Project Manager, SRO etc.) and set out the responsibilities of those involved and how key decisions are/will be made. An organogram may be useful here. This may be attached as an Annex.

*City of York Council’s Business Intelligence Hub will lead on delivery of items within the bid. The Head of Business Intelligence, Ian Cunningham, will oversee activity and provide updates and progress to the Council’s STEP board), the Open Data board, and main ICT Board. All of these boards meet on a six weekly cycle and include the most senior levels of Council’s management (S151 officer, Director of Place, Assistant Director of Transport, Highways and Environment, Head of ICT etc.).*

*Progress on the bid will be reported, alongside other Smart Transport projects, to CMT (Corporate Management Team) and scrutiny on a quarterly basis.*

*The Business Intelligence Hub is structured so there are several individuals available at a Senior Business Intelligence Officer role that can take forward medium ICT/Data projects. One of these will be allocated full-time to the bid over its lifecycle.*

**B10. Management Case - Risk Management**

Risk management is an important control for all projects but this should be commensurate with cost. A risk register covering the top 5 (maximum) specific risks to this scheme should be attached as an annex.

Has a risk register been appended to your bid?  Yes  No



**SECTION C – Monitoring, Evaluation and Benefits Realisation**

**C1. Benefits Realisation (maximum 250 words)**

The competition is seeking to build up the business case for the relevant dataset(s) opened and use cases. Please provide details on the profile of benefits, and of baseline benefits and benefit ownership and **explain how your will lead to the outputs/ outcomes. This should be achieved by logic maps, text descriptions, etc.**

We also request that your bid clearly articulates how you are expecting to use the data collected and the expected benefits for both users and road op. Please also outline how you could measure the expected benefits from the application of the harvested data.

*We have covered benefits throughout other sections of this bid. Additional expected benefits owned by York expected are:*

* *We expect that we will receive feedback from other Smart Transport and advisory boards on the usefulness of the information in creating new technologies, city planning and within evidence-based decision making.*
* *We expect that we will be contacted by various 3rd parties after data has been opened up and publicised, to enter in to discussions about additional fields and datasets that could be released to improve economic activity.*
* *We expect that a number of new technologies will automatically process our information and this will lead to future discussions about data quality and “up-time” availability. This will allow us to help design future processes, in conjunction with commercial partners, alongside improving the quality of our existing evidence base for transport decision making in both real time and longer term.*
* *We expect to gain a greater understanding of the data protection-information governance stance and landscape around transport data.*
* *We plan to measure the data connection usage, as well as sector scanning where new growth may occur.*

***The project hopes to show that taking raw data, improving its quality and provenance, fusing it with parking data and then publishing it can deliver additional benefits owned by data users and road users through:***

* *Making a critical mass of different data types and coverage. For example, an app offering smart parking and an app offering GLOSA will not be as strong a consumer offer as one combining both services.*
* *Being able to become ready for CAV pilots, by having a high-quality small city data set for real customer facing services.*
* *By levering off the interest Eboracum gained in the national press to encourage further users of the data, including via our STEP programme board members such as a major OEM, and through our existing known data users (approximately 7000 hits per month and over 1000 unique users).*

*We will also be able to make better operational decisions about traffic management by adding new tools for informing road users, beyond the VMS we already have and sat navs that do not include CYC data. Getting information into vehicles could reduce parking circulation.*

**C2. Monitoring and Evaluation (maximum 150 words)**

The Department expects bidders to set out a clear strategy and commitment to monitor and evaluate the impact of opening the data and share practical experience and knowledge.

***Sharing our experience always represents an integral part of CYC open data projects. We often deliver this through stakeholder thematic events, as well as publications of metadata, and would look to run alongside existing events. This will allow us to measure usage of the data and for what applications.***

***We will also fully support the DfT C-ITS user groups and conferences to share knowledge and benchmark our performance against other similar projects.***

***Monitoring of progress will use established project management processes, as well as governance by the STEP project board; learning will be provided back to the STEP advisory board. This board is made up of stakeholders heavily connected to York, from large companies providing end products to statutory bodies such as the ICO and Ordnance Survey.***

***Using the STEP business case gives us a profile of benefits largely based on journey time savings, so we will use the processes and technology proven in the Eboracum project to capture and measure this, and give it a value in line with WEBTAG guidance. STEP will collect York wide journey time and flow data to enable before and after analysis.***

*Post-implementation impact will be provided to the public via a dedicated set of key performance indicators published and publically available within CYC’s open data platform.*

**SECTION D: Declarations**

|  |  |
| --- | --- |
| **D1. Senior Responsible Owner Declaration** | |
| As Senior Responsible Owner for Opening Local Authority Transport Data I hereby submit this request for approval to DfT on behalf of City of York Council and confirm that I have the necessary authority to do so.  I confirm that City of York Council will have all the necessary powers in place to ensure the planned timescales in the application can be realised. | |
| Name: Ian Cunningham | Signed: |
| Position: Head of Business Intelligence |

|  |  |
| --- | --- |
| **D2. Section 151 Officer Declaration** | |
| As Section 151 Officer for City of York Council I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that City of York Council.   * has allocated sufficient budget to deliver this scheme on the basis of its proposed funding contribution * will allocate sufficient staff and other necessary resources to deliver this scheme on time and on budget * accepts responsibility for meeting any costs over and above the DfT contribution requested, including potential cost overruns and the underwriting of any funding contributions expected from third parties * accepts responsibility for meeting any ongoing revenue requirements in relation to the scheme * accepts that no further increase in DfT funding will be considered beyond the maximum contribution requested * has the necessary governance / assurance arrangements in place * has identified a procurement strategy that is legally compliant and is likely to achieve the best value for money outcome * will ensure that a robust and effective stakeholder and communications plan is put in place. | |
| Name: Ian Floyd, Deputy Chief Executive and Corporate Director of Customer and Corporate Services | Signed:  IF Signature.png |

**Submission of bids:**

The deadline for bid submission is **23.59 on 8 February 2019**.

An electronic copy only of the bid including any supporting material should be submitted to:

traffic.comp@dft.gov.uk