## Round 6 Fund application - Alpha project : Entry # 8065

## 2. Project contact details

**2.1 Lead authority name**

Cumbria County Council

**2.2 Details of the person leading this application**

Craig Barker

**Role**

Senior Digital Service Design Officer

**Email address**

[craig.barker@cumbria.gov.uk](mailto:craig.barker@cumbria.gov.uk)

**Phone number**

**2.3 Details of a senior stakeholder from lead authority**

**Role**

**Email address**

**2.4 Details of a Section 151 Officer from lead authority**

**Role**

**Email address**

**2.5 List your project partners and provide a single point of contact for each organisation:**

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| Project partner organisation | Name of single point of contact | Role of single point of contact | Email address of single point of contact | Phone number of single point of contact |
|---|---|---|---|---|
| Hartlepool Borough Council | | | | |
| Northumberland County Council | | | | |
| North Tyneside Council | | | | |
| Newcastle City Council | | | | |
| Gateshead Council | | | | |
| South Tyneside Council | | | | |
| Sunderland City Council | | | | |
| Westmor and Furness Shadow Authority | | | | |

## 3. Your project proposal

### 3.1 Project title

Exploring the scaling up of a digital data sharing solution for the rapid identification of vulnerable households in an emergency or crisis, which is currently a very manual, inefficient, costly paper-driven process.

### 3.2 Project description

Many Local Resilience Forums (LRFs) have requested their involvement with a tool designed and developed by Cumbria's digital team, in collaboration with Cumbria LRF. Cumbria's tool provides a search of multi-partner data sources, and the project will investigate appropriate methods to scale the tool and publish design patterns. The tool will enable rapid identification of vulnerable households by emergency teams during a crisis and provide confidence, safety and security to communities.

### 3.3 How much funding are you applying for?

139000

## 4. Project assessment

### 4.1 Describe the problem and hypotheses that your alpha project seeks to test.

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VIPER will be used by council staff and other representatives in the Local Resilience Forum (https://cumbria.gov.uk/emergencyplanning/crf.asp). These users will be able to identify vulnerable persons located within a particular area, using a wide range of data provided by LRF organisations and prioritise within geographical areas. For larger, county-wide incidents we can identify suitable locations for rest centres or at a smaller scale, identify individual streets needing support.

The key requirement was to access it across a wide range of agencies, at an input (data processing) and output (welfare check) level as we may have multiple agencies working across the incident.

The property profile basis of VIPER ensures that there are very limited GDPR concerns.

The ability to map properties on any geographic scale provides quick and concise situational awareness amongst all agencies in a crisis. This reduces the risk of lives being lost, or casualties being created, during a major incident for our most vulnerable.

***Major Incidents in Cumbria where need to improve Identification of Vulnerable People was a Lesson Identified:***

*Storm Arwen 2021 - Major Power Outage.*

*Eden Valley Water Outage 2020 – Water Outage for more than 3 days.*

*Beast from the East 2018 – isolated a number of rural communities in Cumbria for 5 days.*

*Also identified by another LRF from a Multi-Agency Debrief for a Wild Fire: "Appropriate technology to map vulnerable people and the ability to share this".*

An extract from a letter of support from Hartlepool Council, part of Cleveland Local Resilience Forum:

Cleveland Emergency Planning Unit is interested in being a partner in the development of the VIPER system having seen the system demonstrated by colleagues in the Cumbria Area. This would be of particular benefit not just to the councils but also other partners including emergency services, health bodies, and others.

From demonstrations / discussions with Cumbia and the NHS, VIPER addresses a number of longstanding issues and needs. As it stands local procedures rely on agencies sharing a range of "vulnerable persons" data and undertaking long-hand, manual processing. The time taken to turn this into actionable intelligence can be significant and draws resources and experienced staff away from other response roles.

VIPER appears to provide an opportunity to significantly reduce the demand on resources, and reduce the lag time between asking for a partner's data and being able to use the information.

### 4.2 Describe outcomes and outputs you aim to achieve by the end of the project.

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We will be focusing on:

- ○ **User Research:** We plan to undertake further user research to understand the needs of a range of different LRF partners.

- **Incident and Response:** So far, we have focused on the solution in an incident phase but we want to look at it in a recovery phase.

- **Service Patterns:** We will be updating and publishing service patterns.

- **Feasibility Assessment:** We are interested in exploring how VIPER can scale in terms of:

- ○ *Technical architecture* - how could it be deployed across multiple localities with different organisational types?
- ○ *Data architecture* - what is the data architecture that will be required to deliver a scaled version of VIPER?

- **Information Governance and Data Assurance:** Whilst the GDPR impact of the current solution is minimised, we will explore the implication for scaling across many LRF areas.

The following products will be produced as a result of this project phase:

- *Project website* - All of the final versions of the products list will be published on the project website.
- *User research*
- *Service patterns*
- *Feasibility assessment*
- *Technical and Data Architecture models*
- *Data standards*
- *Information governance guidance*
- *Communication and events*
- *Updated prototype* - The key output at the end of this project phase will be an updated prototype which will be tested across all of the partners listed for this project.

During the project, all participating organisations will have shared access via a number of digital tools.

All outputs will be shared on an Open Government Licence.

### 4.3 Tell us how your project will make local government services safer, more resilient and/or cheaper to run in the context of the problem area.

This project sets out to bring together data from a range of LRF partners and enable its use in an emergency response.

By using VIPER, the impact of human error is minimised, as previously it has been a manual processing task. This solution retains all records and brings them into a single property record. These individuals are the most vulnerable in our society and we are dealing with incidents with a range of serious consequences. This will allow the identification of vulnerable people to be safer and less resource-intensive.

The 2008 Cabinet Office Guidance 'Identifying People Who Are Vulnerable in a Crisis' (link) states – 'Identifying, planning for and providing for the needs of vulnerable group will involve a large number of partners and pulling together a large amount of complicated, and changing information'. Yet the guidance contains no method statement on how this should be collated. This has remained an issue for incidents over the years in Cumbria and elsewhere.

### 4.4 Tell us about who your project stakeholders are and how you plan to engage them.

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We will be working with a range of stakeholders from the wider public sector and the private sector to make this project a success. The public sector stakeholders are listed in 4.5 and 2.5. We've been overwhelmed by the interest in this project and the number of agencies wanting to participate. At an individual level, the key stakeholders are the digital team at Cumbria County Council and the LRF leads in each of the partner agencies who will be contributing to the project.

In addition, we will be working with Netcall, who provides the low-code platform that VIPER is built on and will be providing developmental support for the project. And we will also be working with Methods, a public sector transformation consultancy that will be supporting our user research work.

As stated in 4.2 we will be building a project website to host and disseminate all project outputs and we will use the website and other engagement tools (e.g. Slack, Trello) to work with partners on the project.

### 4.5 Tell us about any local government sector organisations you engaged with about your project.

Partners engaged as part of the Cumbria Local Resilience Forum Executive Board. They are aware of the need for improved identification of Vulnerable People and are involved with Multi-Agency Debriefs and Task and Finish Group planning for supporting vulnerable people in an emergency.

**Public Sector Partners in Cumbria Local Resilience Forum**

- Cumbria Constabulary
- Cumbria Fire and Rescue Service
- Environment Agency
- British Transport Police
- Civil Nuclear Constabulary
- Maritime and Coastguard Agency
- NHS England and Improvement
- Integrated Care Boards (South Cumbria and Lancashire, and North Cumbria)
- UK Health Security Agency
- National Highways
- Network Rail
- Nuclear Decommissioning Authority
- Met Office
- Coal Authority

### 4.6 How will project budget be used?

| Item (e.g backfill staff time, buy in user researcher, software, hardware and others) | Time/quantity | Total cost/value £ | Where will the funding come from? (e.g Local Digital funding or a particular project partner) |
|---|---|---|---|
| Delivery Management | Duration of Alpha | £ 54,000 | LDF |
| Professional services (Netcall, development & consultancy) | 30 days | £ 30,000 | LDF |
| Methods (user research) | 30 days | £30,000 | LDF |
| Software Development and Test Environments | Duration of Alpha | £0 | Provided by Cumbria County Council |
| Project Support | Duration of Alpha | £0 | Local Resilience Forum partners |
| Comms, collaboration tooling and event funding | Duration of Alpha | £25,000 | LDF |

### 4.7 Tell us about your delivery plan.

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We have worked closely with the Cumbria LRF to deliver an MVP solution.

We have conducted some high-level research, prototyped, and then produced an MVP version of our solution.

We use Agile for the delivery of our projects. This delivers tangible development/application builds much faster than a traditional approach. We have worked on the project so far in two-weekly sprints. For ongoing work, we schedule daily stand-ups to discuss progress, and planning meetings with the CLRF to discuss the scope of the next sprint.

We will explore expanding features (vertically) and scaling to other services / Resilience Forums (horizontally) to extend the capabilities of the solution. For solution feature expansion we aim to conduct workshops with appropriate stakeholders and produce User Stories for any additional features.

For expansion to other organisations, there are a number of milestones to deliver including training, mentoring, and project support.  Each organisation would need to make available a number of roles, including;

- Key Stakeholder / Single Point of Contact
- Programme Board / Subject Matter Experts
- IT / Integration Specialists
- End Users

The nature of the platform used to deliver this solution also equips both the County Council / CLRF and others to further develop the solution without high IT overheads.

We have outlined an example project plan below, covering the typical start-up services required to onboard other Councils / Resilience Forums, who would wish to use the solution, with the ability to onboard some of these in parallel too.

[Image of High Level Project Plan](#)

The solution is built using Netcall's cloud-based Liberty Create, a "Low Code" rapid application development platform. Platform delivery time is accounted for in our High-Level Project Plan and subject to the procurement of licensing (where applicable) can be initiated in a matter of weeks.

Netcall has confirmed they have sufficient resources and professional services to help support scaling and onboarding organisations.

**4.8 Describe how your project team will have the skills and time available to deliver the project in an iterative, agile and user-centred way.**

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Cumbria has recent experience in hosting the Local Digital funded LocalGov Drupal project.

Cumbria's digital team is agile trained and embraces user-centred design and an iterative approach to their projects and BAU programmes of work.

We have experience working with partners and suppliers including, delivery managers, developers, user researchers, interaction designers, and content designers. And are comfortable recruiting and procuring professional services that work in this way and can lead or be led by agile project leads.

We will look to supplement the project team with Delivery Managers, Developers, User researchers, and Business analysts.

The core project team is sufficiently trained and will coach people from partner councils where necessary, but we would also benefit from GDS-style training for people from our partners.

Aside from Netcall professional services for supplementary development and platform feasibility studies, and Methods for user research, all other skills will be provided by our partner councils or agencies.

### 4.9 Define the governance structure of your project.

Cumbria has experience running remote and geographically dispersed projects, LocalGov Drupal (Alpha and Beta). The use of collaboration tools enables this workstyle. Trello will be used as a digital scrum board and will be open to all project collaborators. Planning, scoping and review sessions will co-manage the Trello board using MS Teams, Meet, or similar.

Project communication and document sharing will be provided by Slack.

The delivery manager is overall responsible for the collaboration of members and the progression of the project.

A programme board will be established with key members from each of the LRF partners. This will review the overall programme progress and help to manage and mitigate risks and issues as the programme develops.

The product lead will engage with partner councils.

An open and honest team culture will be instilled.

### 4.10 Outline the risks to project success.

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**A wide-scale emergency response event or series of events would impact on the Local Resilience Forums' capacity to engage.**

Steps to mitigate include:

- Live incident response user research and feedback into project tasks
- Sprint freeze/down tools (successful delivery is postponed)
- The above scenarios can catalyse the creation of data sources that are fit for purpose and foster data sharing agreements.

**Cumbria Local Government Reorganisation, Cumbria County Council will cease to exist beyond April 2023.**

The project could be put at risk if the Cumbria project team is not supported by the new unitary councils. The impact of this risk is high, although we feel the likelihood is low due to the Digital and the LRF being hosted beyond the duration of the Alpha by Westmorland and Furness council, current senior stakeholders and shadow authority elected members are supportive. The risk is also mitigated by the large number of collaborating partner councils signed up.

**Product Steering**

There is a risk that each partner council has their own drivers and requirements from the project that do not align and a final agreeable solution can not be delivered.

We feel that this risk has been mitigated against already to an extent by the frequent engagement of LRFs during the prototyping, researching and development of Cumbria's product.

Going forward the product lead will also manage partner councils' engagement and steer the product/project accordingly.

**4.11 Describe how project monitoring and evaluation will happen.**

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We have some information available regarding the time that it currently takes to mobilise the data from different agencies, process and collate that data and then identify vulnerable individuals although as part of the user research we will collect further data to enable us to baseline this position.

We will work with project partners to gather this baseline data for all LRF participants.

We do have a clear view of the failure demand within the current process based on the lessons learned from previous emergency incidents as outlined in Section 4.1. We will collate similar lessons learned from other LRF participants to establish the key failure demand 'metrics' and we will build that into the project to ensure that the scaled solution addresses them.

We will map out the as-is process to identify resource flows and will then use that to calculate the potential resource savings by using VIPER. We will aim to calculate the potential beneficial impact across regions by applying the potential savings figure and multiplying this across LRFs to give a potential cashable saving.

Clearly, the metrics on the impact on the well-being of vulnerable people are hard to identify and measure and to a large extent, will only over be able to be tested in a real emergency situation. So whilst this will be a large benefit of this project, it will only be realisable in a real-life emergency.

### 4.12 Describe the benefits and savings your project is likely to deliver.

The key outcome of this project will be the increased ability of multi-agency emergency responses to more rapidly identify and protect vulnerable people during an emergency incident. Clearly, it is difficult to quantify the cost of that but there will clearly be significant savings and benefits regarding resource deployment and earlier intervention.

Having said that, there are real cashable savings that will be delivered by the wider use of VIPER. This is primarily saving to resourcing during incidents. An example incident is from February 2020 in Eden Valley – which left 8,000 properties without water following Storm Ciara.

In the Eden Water Outage, Cumbria County Council Eden Area Team worked on identifying Vulnerable People from the lists provided by Local Resilience Forum Partners.

Over the 7-day incident - 350 staff hours (at £20 per hour which would be around £7,000) were spent simply identifying support for those who were vulnerable within the affected area, as these vulnerable customers were provided with bottled water. The Area Manager responsible has identified that approximately half this time would be saved in the ability of the system to identify those in the affected area by mapping and drawing the area affected.

A system that is easy to use on the ground also allows better resourcing for our Emergency Services, so they can be redeployed to other critical areas, or increase the speed of an evacuation.

Through the use of property profiling, we are able to fully engage Community Emergency Planning Groups and Voluntary Agencies in our Emergency Response. This can help identify vulnerable people who don't appear on any organisation's list but will be known by local communities. Being able to bring in wider partners outside of the CCA Category 1 and 2 responders, extends the possibilities of not only better support for people during an emergency but potentially saving lives.

## 5. Agreement with DLUHC

### 5.1 Please confirm that you commit to delivering the project outputs listed below. Please tick the box to agree.

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- I agree

## 5.2 Agreements with DLUHC

**Please tick the box to agree.**

- I agree