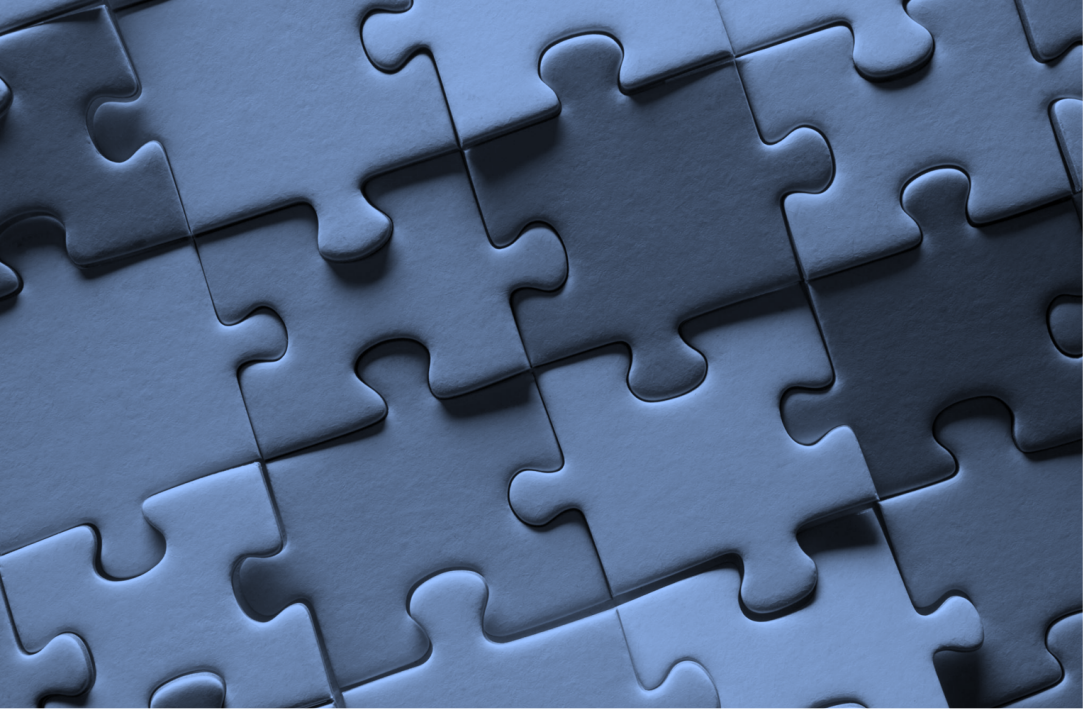


Air Quality:

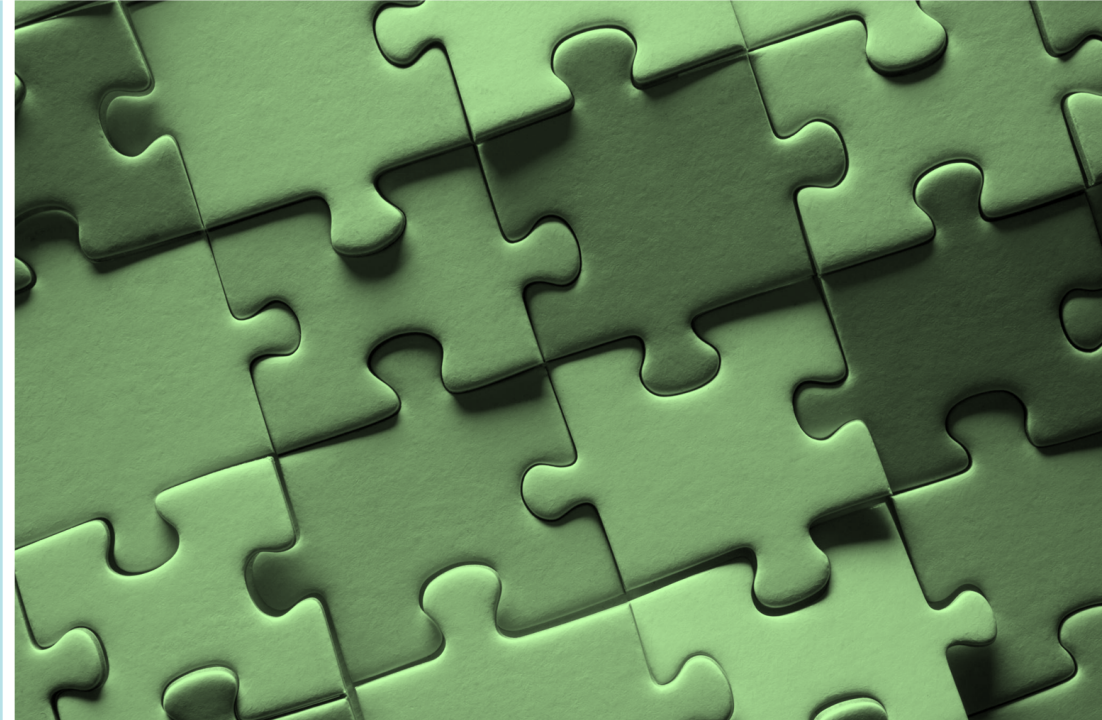
Establishing and
maintaining local
authority and
university
collaborations



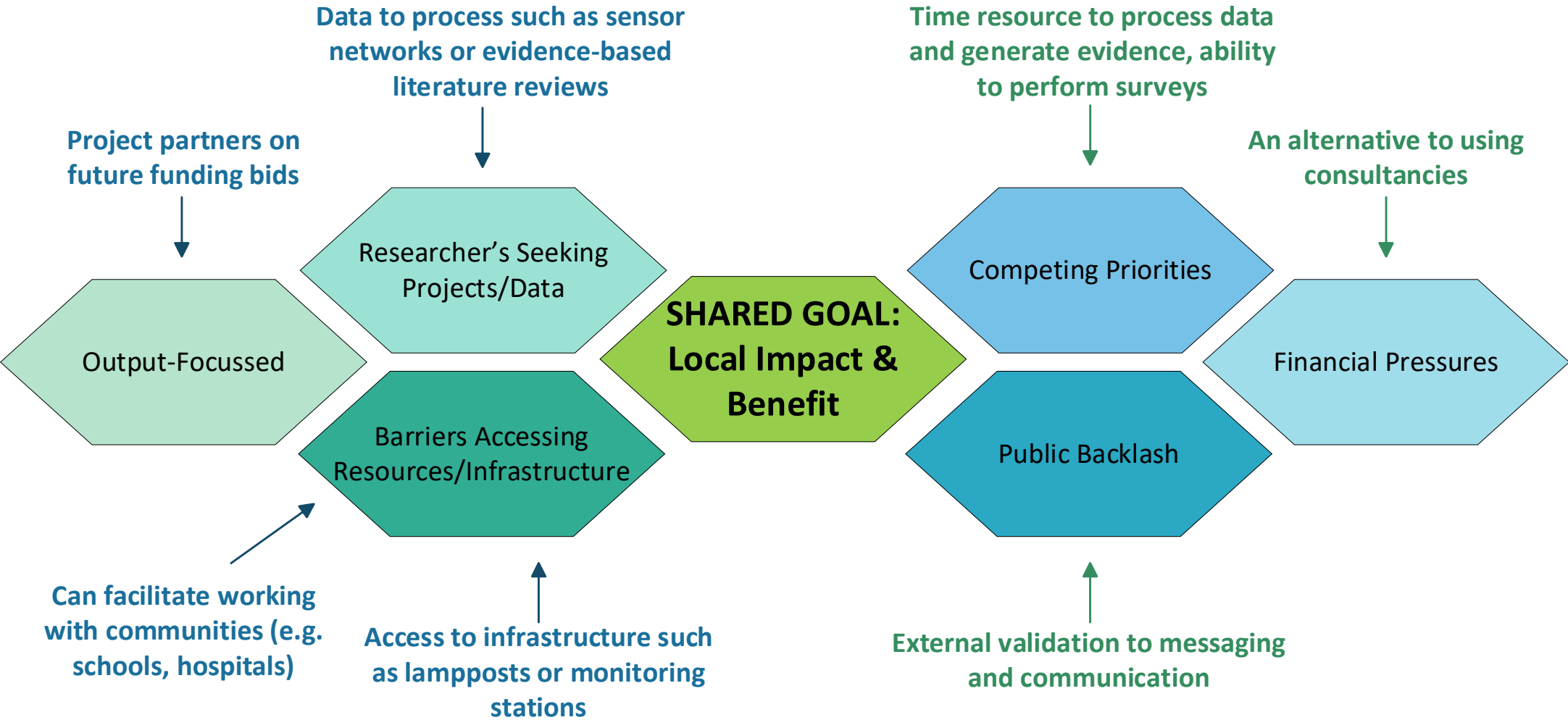
A close-up photograph of dark blue puzzle pieces, showing their interlocking edges and a slightly textured surface.

**Mutually beneficial partnerships
between local authorities and
universities are a useful but
underutilised mechanism to tackle
the clean air challenge**

**This guide is to demonstrate the
breadth of opportunities possible
through collaboration, and give
practical advice to support existing
relationships and promote new
relationships**



Examples of Reciprocal Support



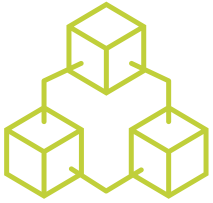
University Issues

and how Local Authorities can help

Local Authority Issues

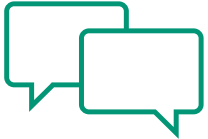
and how Universities can help

Study Examples



Sensors

- Data analysis and report generation
- Designing Network and Placement



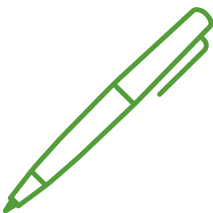
Communication

- Evidence and University backing to public-centred messaging
- Opportunities to increase impact and reach of research



Joint Investigations

- e.g. Measurements, research into perception of air quality, intervention monitoring, identification of key issues and behaviour change assessments



Education

- Resources for schools
- Material to educate the public on key issues such as wood burning

Not present at every organisation
but important contacts if present



Local authority

Air Quality Officer

Environmental health

Public health

Planning

Transport

Housing

Key Contacts

University

Key Search term:

“Air Quality Research [University Name]”

One connection in an institution can help
you find more!

If you are struggling to find a contact,
University-wide teams may be able to
help – look for Civic University Team,
Press Office or Policy Engagement

Relationship Facilitators

Multiple points of contact to mitigate persons leaving organisations

Motivated parties on both sides to ensure relationships are sustained and
priorities are aligned

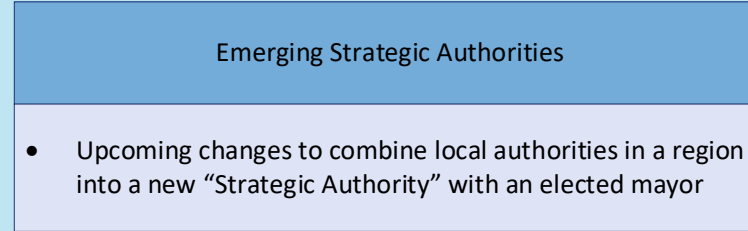
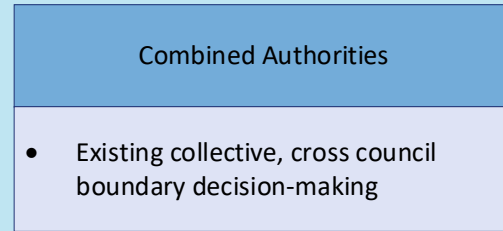
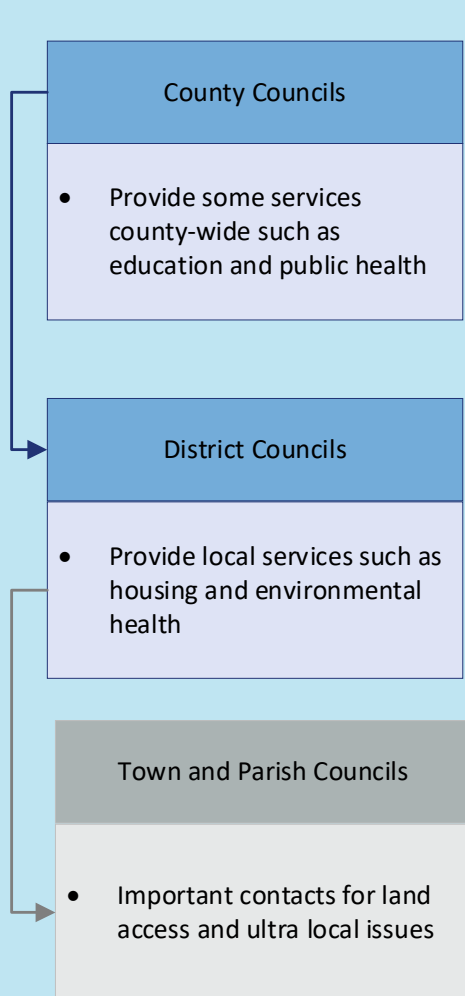
Funding is key to joint working being sustained and support local air quality
initiatives

Civic University Agreements: Universities proactively looking to partner with
local organisations to address local issues

Organisational Structure – Local Authority

2 tier

Combined Authorities

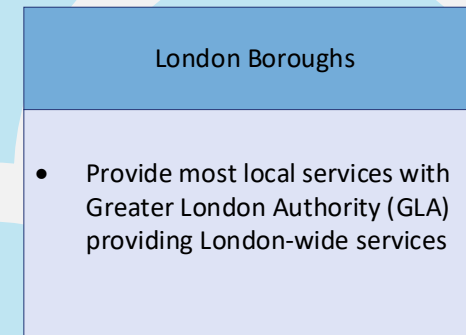
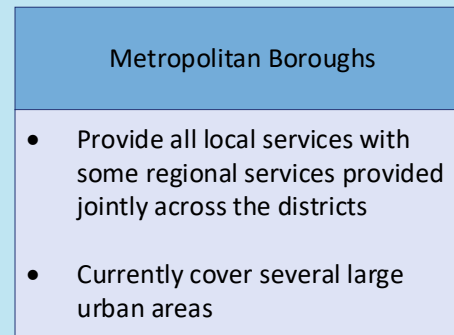


See [English Devolution White Paper](#) for more information

Single tier



(In Wales, Scotland and NI all councils are unitary)



NOTE: All councils in two-tier areas and neighbouring unitary authorities have been invited to bring together lower and upper tier local government services in new unitary councils

Organisational Structure – University

Career Stage & Possible Titles

Academic

Clinical Academic

Professor

Clinical Professor

Principal/Senior Fellow/Associate Professor

Clinical Associate Professor/
Clinician Scientist

Research Fellow/Postdoctoral Research Associate (commonly called Post Docs)

Clinical Research Fellow/
Academic Clinical Fellow

Postgraduate Students (PhD and Master's students)

NOTE:
Clinical Academics are medically trained professional who also have a research career

Undergraduate Students

Has expertise but less likely to be hands-on. Primarily responsible for securing funding and leading a project

More hands-on, doing the research and likely to know the technical aspects of a project best

Often doing the research – but directed and supervised by more senior academics

Likely to have access to students to support projects

NOTE: As Air Quality is not a specific academic subject itself there may be suitable contacts across multiple schools and faculties.

If struggling to identify a contact it may be helpful to contact a department at your local university who liaises with researchers across the institute such as the **Press Office, Policy Engagement or Civic University Team** (if present)

There is a steady stream of students who are always looking for projects

Starting Relationships

Key Ways to Start Working Together

Recommendations

Joint organisation networking-focussed meetings

Universities: consider offering free places to facilitate LA attendance

LA consider inviting academics to LA forums

Hosting regular meetings allow continued alignment of priorities

Utilising existing relationships

Make most of existing contacts, be it professional, alumni or personal, e.g. CIEH

LinkedIn can be a useful tool in finding contacts

One project often leads to continued working

Reaching out directly and forming new relationships

This could be one-on-one contact or reaching out to regional contacts

This can be an opportunity to run a regional LA-Uni meeting

It is often easiest to work locally, but this isn't fully geographically restricted

Finding Contacts

Identifying the right person may depend upon the specific project → In LA the job titles are more consistent across the UK which makes it easier to locate the right contact

In universities it is much more varied and can be difficult to locate a contact

In some cases you may not necessarily need an explicit air quality contact - those with data science expertise may be more suited to processing sensor data than an air pollution expert in a different specialty such as toxicology.

Examples of where different expertise may reside:

University Dept	Expertise
Medicine/Health	Epidemiology, Toxicology, Public Health
Geography/Engineering	Modelling, Building Design, Planning, Transport
Physical and Natural Science	Measurement, Characterisation, Modelling
Social Sciences	Behaviour Change, Community Engagement

Local authority
Air Quality Officer
Environmental health
Public health
Planning
Transport
Housing

NOTE: within LA that whilst Air Quality falls within the remit of environmental health, so does noise, odour and nuisance complaints. Depending on tier of authority – there may be an explicit Air Quality Officer

Other Key University Contacts

Civic University

In recent years “Civic University Agreements” have become more common whereby universities actively devise a strategy in collaboration with local partners to have local benefit.

It is worth investigating if your local university has such a strategy, and if so, there will be a contact address to aid forming partnerships and collaborations.

Policy Engagement

Universities commonly have a team dedicated to increasing policy impact, the exact name differs by institute. Searching “[university name] policy engagement” should identify the correct department for the specific university.

This may be a route to help identify researchers who work on air quality, but also is a route to the creation of policy briefs, literature reviews and student placements on topics of interest to local government

How Projects Run

Set clear expectations of what each party are bringing!

Every contributor from both LA and academia described the relationships as **collaborative** and wouldn't be possible without both parties but the balance was very project dependent

Universities have strengths in research and data analysis, with ongoing students available for project-based work

Local Authorities have direct interface with schools, hospitals and housing and access to data

In some cases LA have applied for funding with universities as partners and vice versa with universities including LA as partners on bids

Main time commitments from LA was stated as occasional steering meetings and reviewing of outputs; for Universities, research-focussed projects are more weighted toward university time, but co-production of outputs is more balanced.

Sustaining Relationships

Challenge	Recommendation
Staff turnover in each organisation is a key challenge. Many of these relationships formed organically and the loss of key contacts can make continuing work challenging	Aim to have multiple points of contact in both organisations
Universities and LAs work at different paces – typically a tighter time resource on LAs and a slower system within universities	Overestimate time for logistics, make clear time frames and expectations
Increasingly politicised nature of air quality – can mean a change in LA leadership affects interest in air quality projects, can also increase sensitivity and risk of backlash	Additional avenues for outputs can demonstrate benefit of air quality research and collaboration; Involvement of universities adds an independent, trustworthy name to messaging which can aid against backlash
Funding squeeze may restrict what is possible and further reduce time resource	Joint funding bids, preferably those which accommodate LA officer time and researcher time; in some cases, working with a university reduces the reliance on consultancies which can reduce costs

Funding Opportunities

Funding was identified as a key limiter in starting relationships and continuing working together. Two of the main ways to secure funding are:



Small funding opportunities (<£25k) that are specific to supporting collaborations or local authority targeted from UK funding bodies



Acting as a project partner on larger grant calls.



If permitted by the specific call it is recommended to cost the local authority staff time in order to minimise resource conflict



Often it is thought that the bulk of the finances come through the university, but in some cases funding for collaboration can come from grants applied for by the LA

Smaller Collaboration/LA Specific Funding

NIHR (National Institute for Health and Care Research)	
LA SPARC (link to most recent round as of 2025) NIHR Local Authority Short Placement Award for Research Collaboration	<p>Funding to support placements for EITHER Local authority individuals who want to undertake a placement within NIHR Infrastructure OR NIHR academy members who wish to undertake a placement within a Local Authority setting.</p> <p>Local Authority members can also be added to the list publicising that they are interested in receiving academic members to their authority.</p>
PHIRST – scheme overview Most recent funding round as of 2025 Public Health Intervention Responsive Studies Teams	<p>Funding for Local authorities of any tier to evaluate public health interventions commissioned by local government</p>
Research England	
HEIF - Higher Education Innovation Funding	<p>Specific funding allocated by Research England to Universities to engage in Knowledge Exchange. An academic partner can apply for HEIF funding within their institution with a local authority partner.</p>
Internal Institution Funding	
Seed Funding/Pump-Priming	<p>Small pots of funding (commonly within University funds) to get preliminary data or build connections to enable a larger bid.</p>

Health Determinants Research Collaborations (HDRCs)

HDRCs are another facilitator for university – local authority relationships.

These are NIHR funded with the aim “*to boost research capacity and capability within local government*”.

Currently there are 30 HDRCs across the UK, which are **usually hosted by a single local authority, working with universities for evidence-driven decision making**. These units can also support researchers with Public and Patient Engagement and Involvement (PPIE)

There is a key interest in the wider determinants of health which includes air pollution

The majority of the contributors to this document had links through local HDRCs and found this to be valuable for sustaining relationships.

Funding for HDRCs was competitive and experience of collaboration can strengthen the case for future award

Applied Research Collaborations (ARCs)

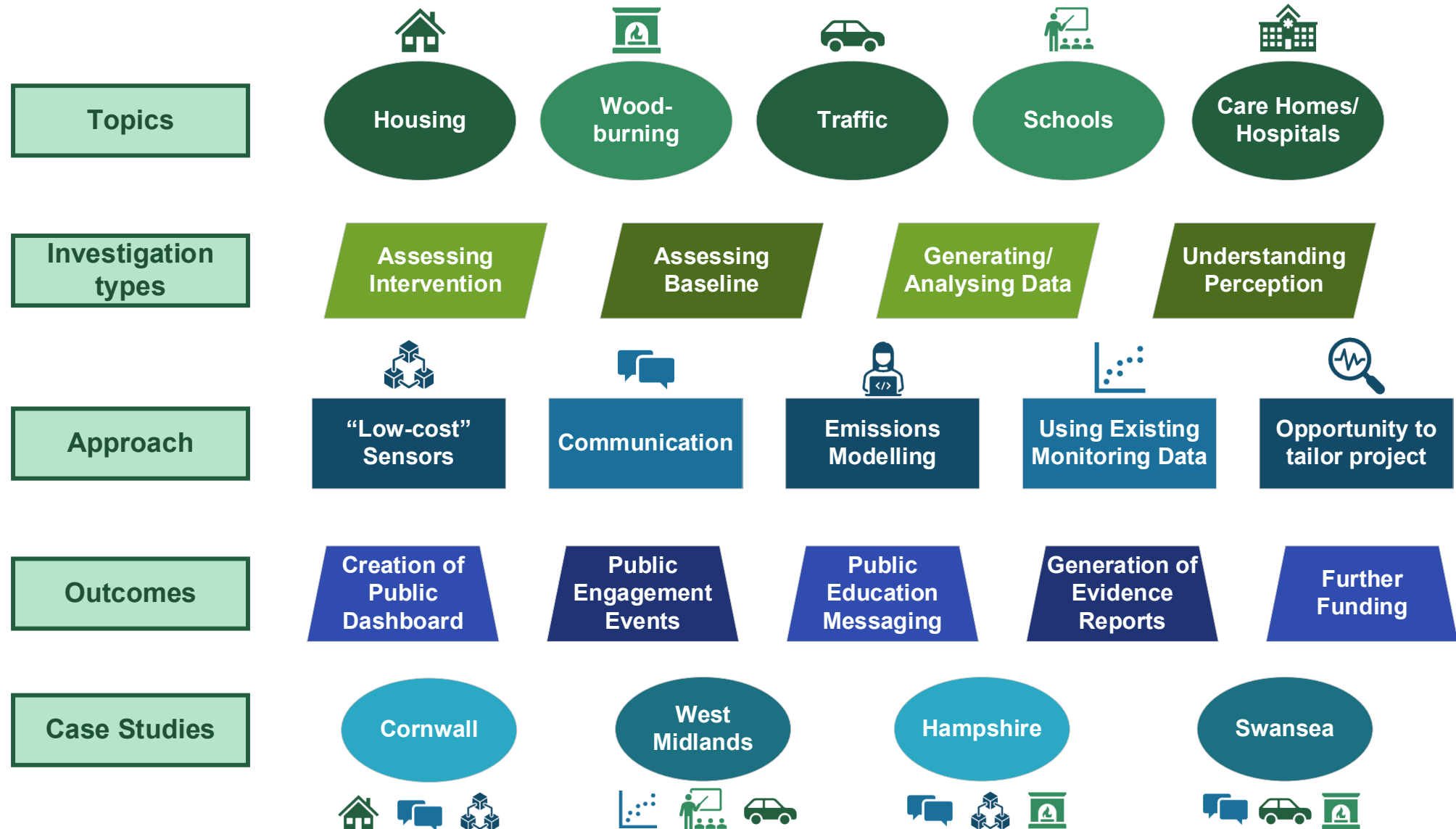
ARCs are another part of NIHR infrastructure linking NHS providers, universities, charities and local authorities.

These are to support applied health and care research to meet “*the needs of local populations and local health and care systems*”.

Currently there are 15 ARCs across the UK, with 7 national priority areas:

- Adult social care and social work
- Healthy ageing, including dementia and frailty
- Child health and maternity
- Health and care inequalities
- Mental health, including children and young people’s mental health
- Multiple long-term conditions
- Prevention, including behavioural risk factors

Common Topics for Collaboration



Case Studies

What has work involved?

Multiple projects – several around **healthy homes with air quality** measurements using sensors

How is work split?

Project-dependent, research-focussed tends to be university-led

Co-production is more balanced

How did the relationship form?

There was an existing partnership between the University and a local housing association supported in a European Regional Development Fund application with the LA as partner

The academic working on initial project at the University joined the LA helping to embed the findings and continue the collaboration

Any challenges?

It would be hard to make this relationship from scratch

Time pressures and short-term nature of funding

Recommendations?

Provide greater opportunities for LA staff to upskill in research



University of Exeter



How is the relationship sustained?

Small team of people involved rather than single contacts

HDRC funding enables more people to be involved and strengthen relationships

There is also a Civic University Agreement

Outputs and benefits

Much **greater awareness** of the **value of sensors** for local communities

University research **benefits from a strong local authority focus** on air quality

Creation of a dashboard to display/describe data

Information on the **impacts of damp and mould** passed to residents

Community engagement events and **co-design**

More impactful research publications

What has work involved?

Multiple projects – including **unintended consequences of net zero**, traffic and analysing existing data

How is work split?

Often university-led due to familiarity with bids

LA often provide time as needed

How did the relationship form?

LA were invited to events and networking opportunities which allowed the relationship to form

Senior colleague used to undertake work with the University

Any challenges?

Hard to argue with senior figures if they decide LA time shouldn't be spent on a project

LA unfamiliarity with ethics process

Recommendations?

Costing LA time, make it easy for conversations to happen!

How is the relationship sustained?

Multiple people are involved, but there tends to be a “go-to” contact

HDRC funding enables work to continue

Public Health qualification training on campus supports easy conversations

Outputs and benefits

Communication with schools – including **storybook with local author**

Behaviour change work with faith centres providing **data and learning**

Support with using the **right language** to reach diverse **communities**

Having the **university badge** on work helps – especially internally

What has work involved?

Primarily analysing **sensor data** from a project looking at **wood-burning**

How is work split?

Data analysis university-led

LA steer policy-relevant investigation, read reports, work together on messaging

How did the relationship form?

Some pre-existing relationships

University held an air quality specific workshop using HEIF funding to bring together researchers and local authorities across the county

Any challenges?

Sensor data doesn't provide the ability to give as strong messaging as might have been wanted

It would be difficult if key LA contacts left

Recommendations?

Regular alignment meetings
Data scientists can be good contacts



How is the relationship sustained?

Formation of a University-led air quality network across the region connecting researchers, LAs and businesses

HDRC funding and Civic University Agreement in place

Both academic and LA are very engaged

Outputs and benefits

Largely **communication-focussed** – knowing **what to tell people** burning or buying wood

More engagement around smoke-control areas – hard to enforce

Greater connectivity across the region

Making use of **University skills saved a lot of time** and allowed analysis that may not have been possible

Formation of a **regional air quality dashboard**

What has work involved?

Multiple projects – including **wood-burning** and health; **traffic-idling** and **behaviour change**

How is work split?

Very project dependent and on where the funding has come through – bids are often led by the LA

How did the relationship form?

LA officer and an academic already had strong ties

Funding was available for collaboration and general University-led networking events helped conversations

Any challenges?

Very different ways of working, especially in terms of pacing (academia is slower)	Time resource is a key pressure
--	---------------------------------

Recommendations?

Psychology can be a good department to approach for behaviour investigations

Look at the online research pages to find contacts



How is the relationship sustained?

Multiple projects in progress, continually looking at the next idea

Welsh government is a key funder

Having more than one person per organisation is key

LA values collaboration

Outputs and benefits

Health impact assessment on PM_{2.5} and wood-burning

Found **certain messaging worked well** for reducing engine idling

Now working beyond Swansea

Local air quality literacy campaign

University badge seen to add weight to messaging and **reduce public cynicism**

Acknowledgements

Slide Deck Prepared by Clean Air Champions Knowledge Exchange Team:

Dr Nat Easton (University of Southampton)

Christopher Johnes (University of Southampton and Portsmouth City Council)

Dr Sarah Moller (University of York)

Comments and experiences from our contributors are much appreciated, and we would like to thank:

Matthew Clark (Hertfordshire County Council)

Sophie Morris (Sandwell Council)

Amber Titchener (Southampton City Council)

Dr Richard Sharpe (Cornwall Council)

Tom Price (Swansea Council)

Dr Thomas Bannan (University of Manchester)

Dr Suzanne Bartington (University of Birmingham)

Prof Christina Vanderwel (University of Southampton)

Prof Emma Bland (University of Exeter)

Prof Ian Walker (Swansea University)

Dr Menna Price (Swansea University)

<https://www.ukcleanair.org/>

