Since its launch in 2009, CSaP has developed into a world-leading pioneer of new ways to mobilise the expertise of a whole university to address public policy challenges. At the core of our work as a knowledge broker is the CSaP Policy Fellowship, with nearly 300 Fellows and over 1400 experts.

**Policy Fellowships** start with questions posed by policy professionals; through a carefully programmed schedule of one-to-one conversations, the Fellow then engages with experts from a wide range of disciplines, all of whom have some contribution to make. The hard work is done by the Fellow, who uses the meetings to challenge assumptions, refresh thinking, and test new ideas. Policy Fellows typically describe their exposure to what the University has to offer as providing a rare space to think deeply, and to be energised and invigorated by new thinking.

As the 2017 Annual Report makes clear, CSaP is now in a position to pull its network to work. We convene our Policy Fellows and experts in order to deliver:

- **Policy workshops**, which bring together policy professionals with a diverse group of experts in a safe space to discuss some of the most challenging policy questions.
- **Professional development**, which utilises the CSaP network to support early career-researchers and policy professionals develop the skills and know-how they need to work more effectively together.
- **Policy engagement** for academic research, which uses CSaP’s tried and tested programmes to design and deliver bespoke activities to help individual research projects and centres engage actively with relevant policy makers.

CSaP’s mission is to improve public policy through the more effective use of evidence and expertise. We do this by creating opportunities for public policy professionals and academics to learn from each other.
Since its launch in 2009, CSaP has developed into a world-leading pioneer of new ways to mobilise the expertise of a whole university to address public policy challenges.
We create opportunities for public policy professionals and academics to learn from each other.

We work with our partners to deliver bespoke workshops, public lectures, and other events for network members.

We help researchers at Cambridge to develop policy-related activities as part of their research planning.
Public Lectures and Seminars
CSaP works with its partners across the University to deliver public lectures and seminars on some of the key policy challenges affecting society.

This year we have partnered with Christ’s College; the Behaviour and Health Research Unit; the Biomedical Research Centre; and the Winton Centre for Risk and Evidence Communication to deliver talks on climate change; childhood obesity; the General Data Protection Regulation; and communicating uncertainty.

CSaP Annual Lecture
In February, Professor Chris Whitty, Chief Scientific Adviser in the Department of Health, delivered our annual lecture which looked ahead to profound changes in health and disease. In his lecture, he discussed how to predict and respond to the policy challenges that will follow over the next two decades.

Dr S T Lee Lectures
The Dr S T Lee public policy lectures consider aspects of scientific, medical or technological research and developments that are likely to have significant implications for public policy over the next decade.

The 2017 Dr S T Lee lecture was given by Geoff Mulgan, Chief Executive at Nesta. Dr Mulgan discussed how the world could make the most of new tools for intelligence, and how we might avoid a widening gap between the technical achievements of artificial machine intelligence, and the social intelligence of the systems on which our lives depend.

CSaP Annual Conference
Our annual conference, in June, brought together 150 members of our network to discuss some of the opportunities for policy makers at both local and national levels to draw on academic expertise in support of more effective public policy.

Researchers, and the network of Policy Fellows with whom they have interacted over the year, presented their work on a range of topics such as social cohesion, the future of the internet, ecosystems services, and industrial strategy. Recordings of the various talks can be found on our website†.

† http://www.csap.cam.ac.uk/News-features/2017-csap-annual-conference/
Services to Research
CSaP helps researchers at Cambridge to develop policy-related activities as part of their research planning. In 2017, CSaP worked with researchers to build policy engagement into research projects on British ecosystems services policy in the context of the UK leaving the European Union; multilingualism and languages policy; and the impacts of machine learning on climate change modelling, among others.

As part of the service we provide, we organise workshops and recruit Policy Fellows to help researchers engage with the policy dimensions of their research throughout their projects.

Policy Workshops
Our interdisciplinary workshops bring together policy professionals and academic experts to address questions posed by our network, share new insights, and offer fresh approaches to tackling policy challenges.

In 2017, we held 14 Policy Workshops on topics ranging from industrial strategy, privacy, and civil society to food policy, climate change and devolution.

Policy Research
CSaP has plans to develop a new policy research initiative in 2018. This will support the Policy Fellowships by helping to develop promising ideas that emerge from the programme, and add evidence mapping and evidence synthesis to our current role of knowledge brokering.

CSaP supports researchers by drawing on a thriving network of Policy Fellows, and established ways of bringing together policy professionals and academicians, to increase the policy impact of research.

“Increasingly, as academics, we are required to think out of our silos and work together in an interdisciplinary way to break down barriers and solve big problems. Meeting with CSaP Policy Fellows has helped me to appreciate the big challenges faced by policy makers. This in turn has informed my own research as well as helped me learn about what my colleagues in other parts of the university are doing to address these challenges from the perspective of their disciplines.”

Jaideep Prabhu
Jawaharlal Nehru Professor of Indian Business and Enterprise
University of Cambridge

With devolution agreements giving Greater Manchester Combined Authority more powers and responsibilities, I am open to any opportunity that can help make a success of this exciting new approach to local government.

I started my CSaP Fellowship with no preconceptions other than the view that meeting world-class authorities on subjects relevant to my role had the potential to be enormously beneficial.

The briefing from CSaP was superb, and really gave me a good sense of what to expect from my meetings with academics. In preparation, I honed some broad areas that I wanted to explore more rigorously. Although it was hard to see why I was scheduled to meet with certain academics, often it was these seemingly more peripheral experts that gave me the most value.

In the past, the relationship between Greater Manchester’s universities and local government has been fairly ad hoc. This meant that many opportunities for partnership and collaboration were lost. Inspired by CSaP’s setup, I have been working with Alan Harding, our Chief Economic Adviser, to formally structure these institutional relationships to better harvest the research potential of Greater Manchester. Professor Hilary Pilkington’s contribution to our Mayoral Commission on community cohesion and radicalisation is a perfect example of this.

The outcome of these more structured relationships has been the establishment of a combined authority and academic network. The aim of this network is to share best practice and insight amongst the Combined Authorities to maximise their potential for success.

The Fellowship also supported the development of GMCA’s health and social care policy and the health devolution agenda. During my meetings, I was made aware of some important recent research that might not have come to my attention otherwise. This work informed discussions around the organisation of public health functions in Greater Manchester.

If I was pitching the Fellowship to someone about to participate, I would say that it is a really intensive exposure to a wide range of relevant experts. It’s an investment that will potentially stand you in good stead for the next 20 years.

Andrew Lightfoot
Strategic Director Public Service Reform, Greater Manchester Combined Authority

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Local Government Policy Fellow

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Local Government Policy Fellow
Working with our partners, we are able to extend the value of our activities beyond the University of Cambridge to other universities and learned societies.

**CSaP Affiliate Network**
The CSaP Affiliate Network extends the benefits of the CSaP Policy Fellowship to other universities, and creates engagement between policy and leading researchers throughout the UK. Through the Affiliate Network, CSaP Policy Fellows have the opportunity to engage with researchers beyond Cambridge, with additional days spent visiting other UK universities.

In 2017, 14 CSaP Policy Fellows were hosted by our affiliate members at the Institute for Policy Research, University of Bath; the Policy Institute, King’s College London; the Faculty of Social Sciences, University of Sheffield; and Public Policy Southampton, University of Southampton.

**The Royal Society**
During 2017, CSaP and the Royal Society joined forces to extend the value of the Policy Leaders Fellowship. Following the termly roundtable discussion in Cambridge, the Royal Society now hosts a follow-up policy breakfast which provides an opportunity to dive into greater detail.

**The new Cambridge Institute for Public Policy**
CSaP welcomes the Institute for Public Policy which will be launched in April 2018. We expect to go on working closely with the Institute’s inaugural director, Professor Michael Kenny, with the Institute prioritising education and research, while CSaP continues to focus on knowledge brokering and engagement.

**Doctoral Training Partnerships at Cambridge**
CSaP has been collaborating with the Doctoral Training Partnerships (DTPs) to identify opportunities for their PhD students to work on policy-related activities.

In 2017, we hosted a PhD student from the AHRC DTP working on a project to help improve engagement between government and arts and humanities researchers. We also ran professional development workshops for NERC and ESRC PhD students to give them a better understanding of the role that scientific evidence plays in public policy.

**Policy Leaders Fellow**

Ed Humpherson
Director General for Regulation, UK Statistics Authority

"CSaP is nothing if not an advertisement for the power of connecting to new ideas. This has impressed me and rubbed off on me. When confronting a new problem or set of issues, I’m much more likely now to ask my teams “do we know the current or newest thinking about this issue?”

The most significant benefit to me of my Policy Fellowship has been a growth in my confidence – in working with big, new ideas; in participating on equal terms with global experts; and in trusting my curiosity. I’ve used this confidence in my day job, and as a development experience it’s been perfect.

In contrast to the leadership development programmes I’ve been on in recent years – which have tended to have a reflective, look-inside-yourself focus – the CSaP Fellowship has given me confidence in an outward orientation, towards the world and to new ideas.

I’ve gained a series of specific ideas that I’ve used to guide my thinking as I lead the new Office for Statistics Regulation. Some ideas have been of immediate and direct applicability; others resonated but could be placed in storage, ready to be drawn on at just the right time.

For example, on my first CSaP day, Dame Fiona Reynolds talked of her aim to turn the National Trust into an “open-armed” organisation when she became Chief Executive. The phrase “open-armed organisation” is a slow burner that has grown in prominence in my mind since I first heard it. And it serves as a leitmotif for the whole CSaP experience: this notion of opening up space for public participation has recurred throughout my CSaP experience. For example, it’s frequently part of Lord Richard Wilson’s summaries at the end of the Fellowship’s meetings, which can often focus on the diffusion of power away from Whitehall, and it crops up repeatedly elsewhere too.

Similarly, I found the discussions on social cohesion, the future of cities and the future of work completely fascinating, stimulating, and challenging.

To summarise the impact of CSaP in a sentence: When confronting a new problem or set of issues, I’m much more likely now to ask my teams “do we know the current or newest thinking about this issue?”"
Professional development

Workshops
In 2017, CSaP’s professional development workshops focused on bringing together early-career civil servants with doctoral students at Cambridge to learn how academic experts and decision makers in government can work together on public policy issues.

In March, speakers from the Foreign and Commonwealth Office and the British Antarctic Survey presented at a workshop for the Cambridge Earth System Science Doctoral Training Partnership, at which students grappled with a challenge on arctic ice management.

Also in March, we organised a series of talks in Whitehall and the Parliamentary Office for Science and Technology for the Churchill Scholars – American Masters students studying science, mathematics, and engineering at the University of Cambridge, based at Churchill College.

And in November, we organised a workshop for Science and Engineering Fast Streamers in the civil service, and students in the ESRC DTP, to give them an insight into research on artificial intelligence, high-impact low-probability events, and communicating science to non-experts.

We have also been working closely with the policy profession in the Department for Transport. In 2017 CSaP ran three programmes aimed at developing the policy professionals’ ability to reach out to and use relevant external expertise. Topics included policy challenges in health and transport, infrastructure, and mobile sensors.

Internships
This year we recruited policy interns from the Universities of Birmingham, Bristol, Cambridge and Nottingham through the RCUK scheme.

As well as developing their communication, writing and event-management skills, our interns have made a significant contribution to our work – from producing background papers and reports for our workshops to interviewing Policy Fellows and writing news articles and case studies.

Secondment opportunities
Over the past year, we have worked with the Department for Communities and Local Government, and GO Science, to identify PhD students to work in government on short-term secondments. We are also working with the ESRC DTP at Cambridge to help identify opportunities for their students to take up secondments.

How does academic research get incorporated into policy making? How can academics and policy officials communicate with each other more effectively to enhance this process? What is a career in policy making really like? Through my CSaP Policy Internship, I had the privilege to explore these questions from a range of perspectives.

During the first three weeks of my internship I organised a workshop to discuss implementing the Paris climate agreement; researched experts to shed light on pressing questions submitted by policy makers; and attended a roundtable discussion in the Cabinet Office on the role of digital services in government.

Some of my most memorable experiences were talking with CSaP Policy Fellows. Whether it was during candid conversations at a reception at the Royal Society, or interviews for case studies in Whitehall, every civil servant I met gave me an interesting take on the work they do.

Through my internship, I developed a range of invaluable skills, from writing news stories and reports to organising events and conducting interviews, and realised that policy was the career I wanted to follow.

This year, I was lucky enough to earn myself a place on the Civil Service Fast Stream, and so have officially taken my place in Whitehall. I’ve only been in the role for a few months so far - but I’m really enjoying my first post as a civil servant. I look forward to seeing where this new career takes me next.

Dr Isabel Webb
Senior Policy Adviser, EU Exit Strategy for Nuclear Fusion Research, Department for Business, Energy & Industrial Strategy

“By having first-hand experience of the challenges and opportunities awaiting policy makers and academics, I’ve become much more aware of the great potential that’s unlocked when the research-policy divide is bridged.”

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Our Policy Fellows, who include 37 Policy Leaders Fellows and 16 Junior Policy Fellows, have met with more than 1400 experts since the programme launched in 2011.

CSaP Policy Fellows spend an initial five days visiting the University for one-to-one meetings with researchers, organised to reflect their policy interests; and then pursue the objectives they set for the two-year period of their Fellowship, returning to Cambridge from time to time for further meetings and events.

The diversity of Policy Fellows’ roles and interests means that researchers have opportunities to interact with a wide range of policy makers who want to engage with academia. Themes that were covered over the past year from Fellows’ questions included aspects of national security, energy policy, climate change, artificial intelligence and machine learning.

Some of the most active and engaged Policy Fellows have joined the Continuing Fellowship, an annual membership scheme which provides opportunities for Policy Fellow alumni to continue to benefit from access to new and emerging research at Cambridge and beyond.

There were 17 Continuing Fellows in 2016-17, participating in discussions with (among others) the Winton Centre for Risk and Evidence Communication and the Leverhulme Centre for the Future of Intelligence.

Over the two years, our Policy Fellows gain access to new and emerging research and its relevance in tackling real-world challenges. A survey of our Fellows shows that since the programme launched:

- 100% would recommend the programme to others
- 89% gained fresh perspectives on their current work
- 89% improved their network of contacts
- 33% reported direct impacts on the policy-making process
Deborah Bronnert
Director General, Economic & Consular
Foreign & Commonwealth Office

“I have found it a huge privilege to be a CSaP Fellow for the past two years, meeting with a range of experts covering topics from neuroscience to the future of cities.”

Sometimes, I’ve had to think carefully about how I might apply these subjects to the work I do on diplomacy. But I’ve always found a link as well as enjoying stimulating discussions that have opened up new and diverse subjects.

Science and evidence are a central part of our diplomatic toolkit. We’ve had our own in-house academic team – our research analysts – for over 70 years; as well as FCO historians for almost a century. They’ve been invaluable to me personally in helping me understand the key drivers of different countries and issues, and linking me up with academics and think tanks.

We have 80 science officers in more than 30 countries engaged with fostering and promoting scientific collaboration. The UK is one of a handful of countries with a Chief Scientific Adviser in the Foreign Office using science diplomacy to build links with other countries.

As a country with a long history, it is important that we understand the way we are perceived by others, including their take on any shared history we may have – as well as an understanding of the culture, politics and economies of those countries. It’s also helpful to know what’s worked and what hasn’t.

Our in-house teams are a foundation of that but external discussions and links are essential too, and CSaP has been an excellent vehicle for extending my knowledge and contacts in the wider academic world, as well as opening up new subjects and improving my awareness of the strength of UK academic research.

I have found it a huge privilege to be a CSaP Fellow for the past two years, and I look forward to continuing to engage in the future.
We would like to thank Pembroke College for continuing to welcome our Policy Fellows to Cambridge. Affiliations shown are correct as at the time of election to the Fellowship.
Chaired by Dame Fiona Reynolds, Master of Emmanuel College Cambridge, discussion focused on questions posed by Julia Unwin, Chair of the inquiry into Civil Society Futures. How have recent governments understood and attempted to harness civil society? What future possibilities are there for more effective engagement between civil society and government?

Participants at the workshop reflected on their own experience of government engagement with civil society, citing examples where engagement had led to improved public policy, as well as where it had failed.

Discussion highlighted challenges to established ways of thinking about civil society, which have been brought about by pressure on identity and community resulting from changing patterns of work, housing and the effects of austerity.

The discussion focused on how governments could learn from successful examples of using knowledge from lived experience and activism in the policy processes. And also the new ways that civil society organisations are connecting with the changing communities they seek to represent.

Positive examples ranged from the Scottish Government’s 2015 Community Empowerment Act, to the ways that civic universities are providing a convening space for civil society, and civil society engagement on social media platforms.

The purpose of this workshop was to examine ideas to improve engagement of civil society in public policy. In particular, how to go beyond using civil society organisations as delivery partners to engaging with civil society as a core part of the policy making process.

**Spotlight on...**

**Civil society and social cohesion**

Social cohesion was the focus for discussion at our Policy Leaders Fellows roundtable in February, and a panel discussion at our annual conference in June, which was chaired by Julia Unwin.

In October, CSaP organised a roundtable discussion with Professor Michael Kenny, Director of the new Cambridge Institute for Public Policy, and Julia Unwin, Chair of the inquiry into Civil Society Futures.

"In the current context, disruption of the status quo and the impact the internet has had in politics, this conversation was timely and much needed. It’s so important, for the sake of community cohesion and to strengthen civil society, the different sectors represented in the room work together to solve the major challenges we discussed. Hopefully this was just the start of that conversation."

Kajal Odedra
Change.org

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Positive examples ranged from the Scottish Government’s 2015 Community Empowerment Act, to the ways that civic universities are providing a convening space for civil society, and civil society engagement on social media platforms.
Discussions with our Policy Leaders Fellows raised a number of questions on social cohesion which were discussed at a roundtable meeting of the Fellowship in February.

What do we mean by social cohesion? What measures might we have of cohesion that go beyond measures of GDP? What policy responses can help to build social cohesion, where can and should government have a role, and what outcomes should be worked towards?

The meeting, chaired by former Cabinet Secretary Lord Richard Wilson, brought together senior civil servants in Defence, Education, Health, Transport, Work & Pensions, the FCO, BEIS, Defra, Scottish Government and the UK Statistics Authority, with academic experts from the universities of Cambridge, Kent, London Birkbeck and Sheffield.

Social cohesion is associated with trust, a sense of belonging, inclusiveness and wellbeing – each of which is threatened in the absence of social cohesion.

Jobs, identity and a sense of meaning are all essential for cohesion. Lack of opportunities for young people to engage in meaningful work, for example, presents a significant threat to cohesion and increases the risk of conflict in society.

The discussion focused on the two-sided nature of social cohesion; rivalrous social cohesion in which a shared sense of group identity is defined in opposition to others, versus non-rivalrous social cohesion which supports individuals to hold multiple identities and to build bridges with different groups.

The meeting highlighted a number of opportunities for advancing non-rivalrous social cohesion and tackling loneliness and social isolation. There was also a discussion on opportunities for policy intervention at national as well as local level to promote positive social contact between members of different groups.

Social cohesion, commitment and trust

I greatly enjoyed my time as a Policy Leaders Fellow and taking part in the workshops that CSaP organised. Coming from an Arts and Humanities background, I found the science-based workshops on neuroscience, data analytics and epigenetics to be both challenging and interesting. The epigenetics session, in particular, made a big difference to how I thought about poverty and deprivation.

My work as Chair of Civil Society Futures looks into how civil society organisations can organise to make an impact and adapt for the future. As I was tasked with looking at where civil society might be in 10 years’ time, the CSaP policy workshop on this topic was very timely; firstly, to enable a more sophisticated view of civil society, and secondly to brief policy makers on the big challenges.

The social cohesion session for Policy Leaders in February, and the CSaP annual conference panel discussion in June, were also very interesting as they directly referred to my passions and background.

I very much liked the methodology of the workshops and the interdisciplinary make-up of the participants and contributions. Overall, they have been great experiences as they provided a cost-effective ‘deep-dive’ into evidence.”

Julia Unwin
Chair of the Independent Inquiry into the Future of Civil Society

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Policy Leaders Fellow

Julia Unwin
Chair of the Independent Inquiry into the Future of Civil Society
Evidence, uncertainty and trust

In September, CSaP partnered with the Global Food Security initiative at Cambridge to convene a roundtable discussion on the future of UK food regulation. And the question of how we communicate uncertainty without endangering trust and credibility, a research question that academics at the Winton Centre are investigating, was the topic of a panel discussion held in November.

Will improvements in the monitoring and surveillance of the global food system increase levels of consumer trust?

CSaP Policy Fellow, Julie Pierce – Head of Openness, Data and Digital at the Food Standards Agency – set the agenda for this workshop with a series of challenging research questions on monitoring and surveying the food system.

The FSA works on behalf of the consumer, ensuring that the food available for purchase is safe, and that it is what it says it is. Improved monitoring, surveillance and openness of the food system is driven by the latest data modelling and digital technology. Part of Julie’s role is to bring innovative approaches and technology into the practices of the FSA.

The purpose of the workshop was to understand how the monitoring of the global food system might help consumers, and indeed to what degree consumers themselves might play a direct role in driving greater visibility of and engagement with the food system. Finally, whether increasing consumer engagement could increase their understanding of the food system, resulting in net health benefits.

The relationship between expertise, risk and trust was explored explicitly in this discussion. Using expertise to improve risk monitoring, far from leading to a reduction in consumer trust, could provide an opportunity to increase it.

Government-driven citizen science projects to engage non-scientists in scientific and data-gathering projects are in keeping with the FSA’s goal of empowering the consumer. Discussants at the workshop agreed that consumers needed to be able to trust the regulatory bodies working on their behalf, and that more accurate monitoring and surveillance, as well as more consumer engagement, would help build this trust.

EVIDENCE, UNCERTAINTY AND TRUST | WORKSHOP

Monitoring the global food system: building trust and resilience for UK citizens and consumers

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How can we communicate uncertainty without endangering trust and credibility?

There is a gulf between the public’s trust of official statistics, and their lack of trust in the way government uses these statistics. How can we make it more difficult for politicians and the media to misuse statistics?

Academics at the University of Cambridge’s Winton Centre for Risk and Evidence Communication are investigating the difficult question of how we can communicate uncertainty without endangering trust and credibility.

In November, Chairman of the Centre, Professor Sir David Spiegelhalter, led a discussion on this topic with contributions from Emily Miles, Group Director of Strategy at the Department for Environment, Food and Rural Affairs; Amanda Farnsworth, Head of Visual and Data Journalism at BBC News; and Sir David Norgrove, Chair of the UK Statistics Authority.

The role of a policy maker is to understand which policies are best supported by the evidence, to communicate this, and to implement the policies decided upon by ministers.

Traditional news media has an important role to play in helping to separate fact from fiction. This means not only qualifying represented data as the “best estimate”, but also communicating clearly what is meant by terms such as “likely”.

We are at a stage where the level of distrust in experts is more perceptible than ever before. One factor contributing to this situation is the lack of a reliable methodology for communicating uncertainty about the conclusions we draw from our data.

Even our best scientific methods do not lead us to absolute certainty; yet so often in the public communication of research, uncertain conclusions are presented as certainties.

The answer to the research question – how do we communicate uncertainty without endangering trust and credibility – according to Professor Spiegelhalter, is likely to depend upon the context of the communication, its audience, and the format of presentation.

As someone who was new to Defra at the time, having this information provided me with a vivid sense of memory and understanding regarding the public debates which have shaped the department.

I also participated in a CSaP workshop on civil society, co-convened by Julia Unwin, Chair of the Independent Inquiry on the Future of Civil Society. Her view that we should refine the formality of language around volunteering to be more in line with the usage of ordinary citizens, influenced Defra think piece on environmental volunteering.

Above all, my Fellowship has given me access to a network of expert researchers, which I feel I can draw upon at any time. Innovation expert, Professor Jaideep Prabhu, recently joined us at Defra for an engaging talk as part of our Defra Greenhouse talk series. And rural economist, Professor Ian Hodge, presented to a panel of senior civil servants in Defra Group regarding the future of farming and ecosystem services.

CSaP’s network has made it much easier to get expert perspectives from outside the policy making sphere, and I hope to continue this collaborative work with CSaP in the future. I will also encourage others within my directorate to undertake CSaP Fellowships.

Emily Miles
Group Director, Strategy, Defra

“I approached my CSaP Policy Fellowship as an excellent opportunity not only to understand more about certain research areas key to my new position, but also to aid my personal development as a leader.”
The main purpose of the workshop was to share insights and develop an understanding of the social and demographic trends and drivers of change shaping the transport system of the future, and consider these in the context of emerging technologies.

Researchers from Imperial College London and the Universities of Cambridge, Leeds, Newcastle, Nottingham, and Oxford participated in discussions on factors that affect our travel choices; designing technology to help influence behaviour effectively and responsibly; and managing tension between tailored personalisation of data and the ethics of using that data.

Achievable targets for the Foresight Project were drawn out of the discussion, as well as long-term factors to be considered such as a move towards car-free cities and the introduction of autonomous vehicles.

These advances have the potential to raise new questions for public policy, e.g. will services driven by consumer demand – such as ride sharing – conflict with policy interventions, such as reducing traffic capacity in favour of cycle lanes?

And how will other areas of policy such as housing, employment, education, open data and health influence people’s attitudes and behaviours towards transport?

A report of the workshop is available on our website†.

† http://www.csap.cam.ac.uk/links/13/4834/
Over the past year, CSaP has worked with the Department for Transport on a new learning and development scheme developed by Pauline Reeves, a CSaP Policy Fellow and senior civil servant in the DfT.

Inspired by Pauline’s Fellowship experience, the purpose of the “Policy Propeller” was to spark a mutually beneficial dialogue between policy professionals in the DfT and researchers at Cambridge on a range of policy challenges.

The first policy challenge introduced policy professionals to researchers in the Cambridge Centre for Diet and Activity Research to discuss policy options for doubling the level of cycling activity by 2025, and for cycling to become the default for short journeys by the 2040s. Discussions at these workshops ultimately influenced the Government’s first statutory cycling and walking strategy†, published in May this year.

For the second policy challenge, the DfT cohort was keen to explore the use of smart monitoring technology to better understand the condition of existing infrastructure in the UK.

Dr Jennifer Schooling, and a team of researchers from the Cambridge Centre for Smart Infrastructure and Construction, set out the opportunity for the UK to be an early adopter of smart monitoring technologies, challenging the DfT participants to make an innovative value case for the implementation of such cutting-edge technologies.

The result of this collaboration was a proposal by the cohort to senior officials in the DfT to encourage the use of smart technologies to become the “new normal”.

Following on from the success of these workshops, the DfT plans to make this scheme part of the overall talent-management strategy for the department.

“Having senior buy-in from members of the DfT Executive Committee was and remains crucial to the scheme’s adoption and continuation. They act as the final panel to approve policy ideas, some of which may feed into current policy thinking around the issues in question.”

Pauline Reeves
DfT

Guy Cohen
Policy and Strategy Lead, Privitar Ltd

“I found CSaP’s Policy Fellowship to be exceedingly useful and interesting. There is an element of public service and ‘working for something greater than your salary’. I’m very thankful for the hard work CSaP does and I foresee continuing value from my Fellowship.”

I’m the Policy and Strategy Lead at Privitar, a privacy engineering technology company which designs solutions for data scientists, so they can mine large data sets in a privacy-preserving way.

As a nascent field there are a range of unsolved policy challenges in privacy engineering. These include understanding what is required by new regulations, such as the General Data Protection Regulation; looking beyond just regulation to see the ethical considerations which exist outside of legal requirements; and developing the standards and methods which can form the best practice required to enable wide adoption of these powerful new tools.

I greatly enjoyed my experience as a Policy Fellow, and felt the experience gave me both useful insight into my areas of interest, and a greater understanding of the role of academia in policy making. I found it motivating due to the relevance to my work, as well as from intellectual curiosity to understand the work of the fascinating people I met.

The conversations with those I met, both other Policy Fellows and those at workshops I attended, have been interesting and important. For instance, a conversation with a Cambridge researcher at a CSaP dinner in my first year changed the way I think about data ownership.

As well as being interesting and formative, many of my meetings also led to ongoing collaborations and relationships. I been invited to speak to students on the subject of data privacy and ethics. And I am having ongoing discussion with four other academics on pieces which we might collaborate on, all of which I think are fascinating and relevant to both my and their work.

Privacy is only growing as an issue and an area for research and as such I hope that the valuable connections made through the Fellowship will continue. Ideally, I’d like to see a working group emerge which myself and many of those I met could join to continue collaborating and sharing learning. I’m also keen to take part in further policy workshops on big data and data ownership as appropriate.
Clive Maxwell, Director General for Energy Transformation in BEIS, addressed some of the main challenges the government faces—including improving the UK’s building efficiency and the prospect of electrifying our heating systems to use heat networks, biogas or hydrogen fuel instead of fossil fuels.

Chris Rapley, Professor of Climate Science at UCL, introduced the concept of planetary vital signs—key indicators used by climate observers for measuring climate change. Having clear climate change signals to communicate to the public could help emphasise its importance and encourage behavioural changes to reduce carbon emissions.

In our fourth series of climate seminars, organised in collaboration with Christ’s College Cambridge, we covered a range of topics from planetary vital signs for measuring climate change, to using AI to develop more sophisticated future climate predictions.
The purpose of the workshop was to discuss which questions should be investigated by researchers to best help decision makers across government and industry adapt to the changing climate.

Contributing to the discussions were Cambridge researchers from computer science, engineering, sustainability and the environment, and the business school; policy professionals from Defra and the Environment Agency; and lawyers and business leaders including Client Earth, Marks and Spencer, and Mott MacDonald.

Advances in technology and data science have the potential to provide information about environmental risks across an increasingly broad spectrum of policy-relevant issues.

New data science tools, such as machine learning, offer the potential to augment more traditional climate modelling techniques and lead the way to multi-dimensional climate risk assessments.

Improved knowledge and accessibility to statistical techniques can dramatically change the way that society approaches climate change.

However, to enable widespread access to such information by decision makers, data management infrastructure needs to be overhauled and data curated in such a way as to ease its application. It will also be necessary to foster close dialogue between data providers and data users, to ensure the information is generated in a form that is fit for purpose.

In June, we organised a workshop with Dr Emily Shuckburgh from the British Antarctic Survey to explore the potential for longer-term research initiatives at Cambridge to develop data science methods for more useful climate risk assessments.

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Governance

CSaP’s Management Committee reports to the University of Cambridge’s Research Policy Committee. The Advisory Council advises on CSaP’s strategy and activities, paying particular attention to the views of stakeholders.

Management Committee
Professor Dame Ottoline Leyser (Chair)
Director, Sainsbury Laboratory
Dr Robert Doubleday (Secretary)
Executive Director, Centre for Science and Policy
Professor Christoph Loch
Director, Cambridge Judge Business School

Professor Richard Prager
Head of School, School of Technology
Professor David Runciman
Head of Department, Department of Politics and International Studies
Professor Dame Carol Black
Principal, Newnham College Cambridge
Dr Claire Craig
Director, Science Policy, Royal Society
Professor Dame Athene Donald
Master, Churchill College Cambridge
Dr Geoff Mulgan
Chief Executive, Nesta
Dame Fiona Reynolds
Master, Emmanuel College Cambridge
Dr Adrian Weller
Senior Research Fellow, Department of Engineering, University of Cambridge
Lord David Willetts
Executive Chair, Resolution Foundation
Lord Richard Wilson
Chair, Cabinet Secretary (1998-2002)
Sir Chris Wormald
Permanent Secretary, Department of Health and Social Care, and Head of the Civil Service Profession

Advisory Council
Dr David Cleevely (Chair)
Chairman, Raspberry Pi Foundation
Julia Unwin (Vice Chair)
Chair, Independent Inquiry on the Future of Civil Society
Professor Dame Carol Black
Principal, Newnham College Cambridge
Dr Claire Craig
Director, Science Policy, Royal Society
Professor Dame Athene Donald
Master, Churchill College Cambridge
Professor Dame Ann Dowling
President, Royal Academy of Engineering
Clare Moriarty
Permanent Secretary, Defra

Dr Geoffrey Mulgan
Chief Executive, Nesta
Dame Fiona Reynolds
Master, Emmanuel College Cambridge
Dr Geoff Mulgan
Chief Executive, Nesta

Financial Report – Year to 31 July 2017

The Centre for Science and Policy is grateful to the University of Cambridge for its HEIF contribution; Dr Charles F Kennel and Dr Ellen Lehman, and the Mikheev Charitable Trust for their philanthropic donations; and organisations that have sponsored or supported particular activities during 2017. The table below shows that CSaP finished the year with a surplus, the first time since the Centre launched in 2009.

<table>
<thead>
<tr>
<th>Income</th>
<th>FY 2015/2016 £</th>
<th>FY 2016/2017 £</th>
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</thead>
<tbody>
<tr>
<td>495k</td>
<td>515k</td>
<td></td>
</tr>
<tr>
<td>Expenditure</td>
<td>543k</td>
<td>495k</td>
</tr>
<tr>
<td>Net income</td>
<td>(48k)</td>
<td>20k</td>
</tr>
<tr>
<td>Total funds brought forward as at 1 August</td>
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<td>188k</td>
</tr>
<tr>
<td>Total funds carried forward as at 31 July</td>
<td>168k</td>
<td>168k</td>
</tr>
</tbody>
</table>

CSaP Team

Nicola Buckley
Associate Director
Policy Fellowships
Katie Cole
Comms & Admin Coordinator
Dr Robert Doubleday
Executive Director
Laura Hyde
Events Coordinator
Kaisa Jussila
Policy Fellowships Coordinator
Jackie Ouchikh
Head of Programmes
Dr Steven Wooding
Lead for Research & Analysis