

**UCL** TRANSPORT  
INSTITUTE



**UCL**

# Annual Report 2016



## Personal Message from the Director

I founded the Transport Institute in 2013 in response to the dispersed and sometimes hidden nature of UCL's transport research activity. Although UCL has world-leading expertise in transport and mobility research, the depth and breadth of this capability is spread across 11 faculties. At the same time, transport challenges increasingly require interdisciplinary approaches, as we recognize issues such as health, ecology, safety, and culture are as central to transport and mobility as traffic management and other 'traditional' transport studies.

The Transport Institute aims (shown at right) are to stimulate researchers and bring them together from across UCL, connect research to policymaking and raise the profile of UCL's research. Our map of UCL research capability (following page) demonstrates the depth and breadth of UCL's expertise and world-leading status in transport.

Over the past three years I have worked with Deputy Director Tom Cohen to achieve our aims. Our central approach has been to set out six, cross-cutting themes, and to recruit and support a leader for each theme. Leaders have all generously given their time and ideas and run engagement events.

In addition to theme related activity, this year we provided research briefings for strategic stakeholders, convened a 'Radical Transport' conference and evidenced UCL's thought leadership by helping the Department for Transport scope out the social and behavioural issues around the future transition to automated vehicles.

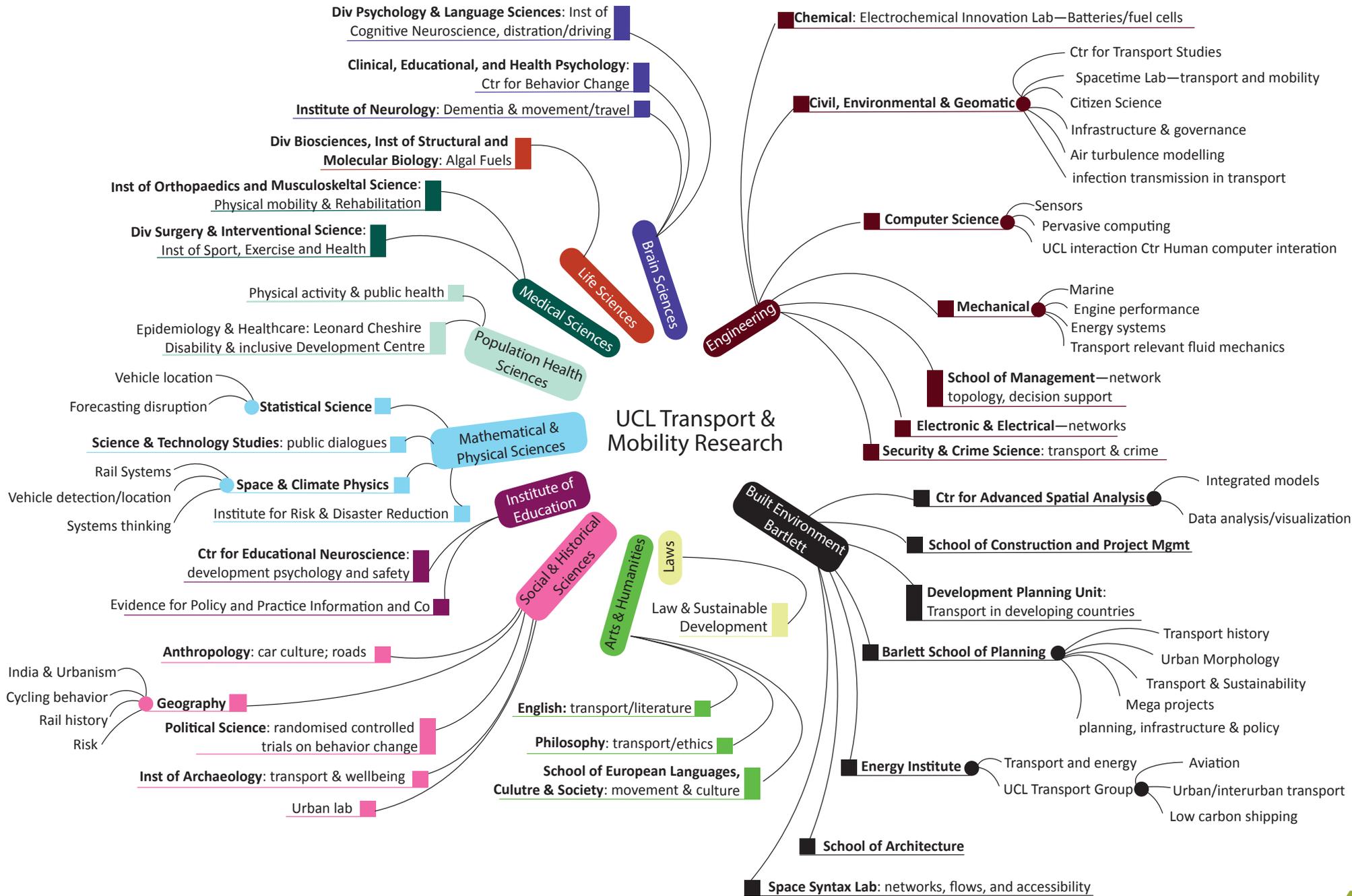
We have secured another three years' funding from the Engineering Faculty with support from the Bartlett. With our new Deputy Director, Dr Ann Thorpe, in place we are on a solid footing to continue to deliver on our aims and objectives, while also supporting UCL 2034 (see page 11).

We are assembling an advisory board and are pleased to announce that the chair of the board will be Sue Percy, CEO of the Chartered Institution of Highways and Transportation. In the near future we are planning to explore transport at night, to investigate the funding landscape for transport research and to link our seed funds to Grand Challenges – watch this space!

Finally, a big thank to Dr Tom Cohen the outgoing Deputy Director who has certainly helped put UCLTI on the map!



*Cover Image: Clare Morris, co-conceiver of Ride Side-by-Side service: read more about Side-by-Side page 7*



The UCL Transport Institute (TI) was established in 2013 with three main goals, and these continued to be the focus in 2016:

- Foster Cross-disciplinary transport research
- Increase the policy impact of transport research
- Build UCL's profile in transport and mobility

## THEMES

For 2016 The TI continued using its theme-based approach, looking at Policy and Practice through six theme lenses with a Theme Leader supporting each:

**Safety and security** Led by Dr Aiden Sidebottom, Security and Crime Science: Negotiating a balance between the scope to move and the many associated risks. Making transport safe and secure while at the same time preserving individual autonomy.

**Culture** Led by Professor Matthew Beaumont, English: Understanding how transport defines us by shaping our behaviour, beliefs and perceptions.

**Health** Led by Dr Jenny Mindell, Epidemiology & Public Health: Explaining how transport systems and our use of them influence our physical and mental wellbeing.

**Accessibility**, led by Dr Catherine Holloway Computer Science: Exploring both how transport systems provide access to opportunities and the barriers faced by so many users.

**Prosperity/Equity** Led by Professor Caren Levy, Bartlett Development Planning Unit: Understanding the relationship between transport and the economic circumstances of people, organisations and countries.

**Environment** Led by Professor Stephen Marshall, Bartlett School of Planning: Addressing the effects of transport systems on our natural resources and on our urban and rural areas.

## Transport Institute Themes





*Old Oak Park Royal development area (image Greater London Authority)*

The TI contributed to policy impact in two main ways—first by coordinating participation in policy processes such as evidentiary hearings or policy communication, and second by undertaking commissioned policy work

### **Participation in policy processes**

The TI coordinated evidence submission by Ben Heydecker to a parliamentary inquiry on hard-shoulder running. Deputy Director Cohen and Dr. Clemence Cavoli provided evidence to the House of Lords inquiry on automated vehicles. Cohen also presented the results of the citizens' jury on setting the transport research agenda to social researchers at the Department for Transport (DfT) (25<sup>th</sup> Feb).

TI advised on the Thames Cycleway scheme, in association with Thames Estuary Partnership. TI also participated in a community group session to help prepare responses to a policy consultation on the Old Oak Park Royal development. Cohen also spoke at the Socially Just Transport forum (6<sup>th</sup> Jun), presenting outline results from the work of the Policy Commission funded by UCL Public Policy on Transport and Ethics. As part of a project for the Campaign for Better Transport to investigate possible improvements to appraisal and business case development procedures TI conducted interviews with a set of senior transport professionals.

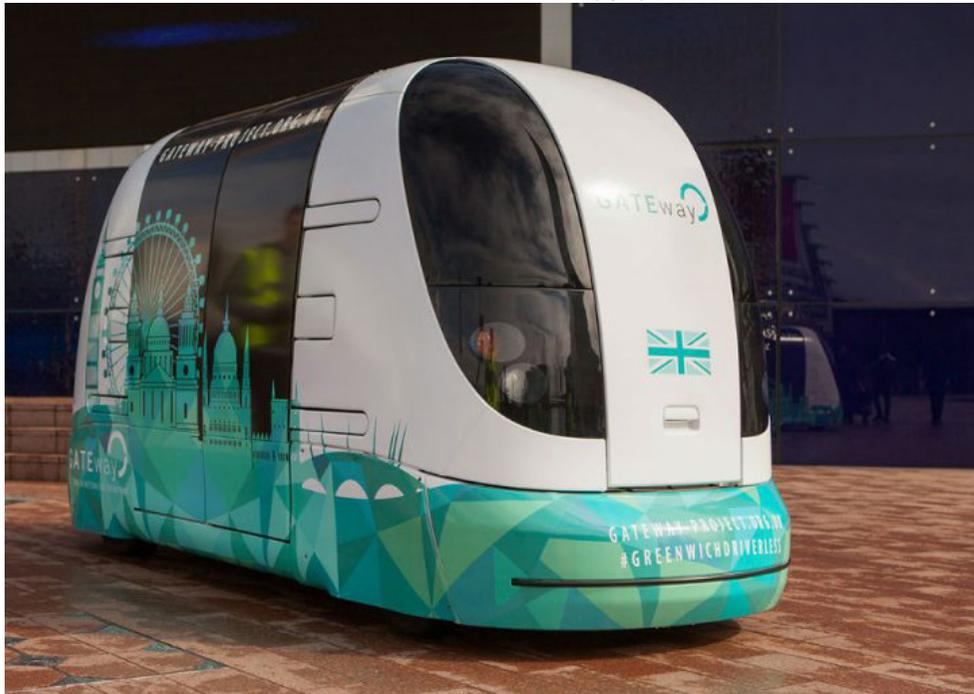
## Commissioned Policy/Research Projects

Bringing academically developed methods to policy makers, the TI through two Continuing Professional Development (CPD) courses:

- Introductory transport modelling for Department for Transport Officials and
- Participation and consultation in transport planning (in collaboration with Dialogue by Design).

TI also ran a DfT-funded project on the social/behavioural impacts of automated vehicles. The project was led by DfT's Social and Behavioural Research Unit, and funded by the International Vehicle Standards Division. The work included a literature review and extensive stakeholder engagement. The results are published (January 2017) on the UK government website under the title, 'Social and Behavioural Questions Associated with Automated Vehicles.'

*Driverless shuttle vehicle at the O2 in Greenwich (Photo, GATEway project)*



“Thanks again for such an interesting and highly participatory course!”

Mohamed Gaafar, Graduate Transport Engineer,  
BuroHappold Engineering

“Your course and the style of delivery has made the subject interesting!!”

Seth Twombly, Transport Project Officer, London Borough of Hounslow

# Research Facilitation



*Image courtesy of Ride Side-by-Side*

The Transport Institute continued to work on facilitating cross-disciplinary research through a number of events and activities. In particular TI ran and participated in events to facilitate research, submit research bids, and bring researchers together.

## Research Facilitation

The TI selected, supported and funded various research efforts. TI ran a grant competition for safety and security, which led to a day-long workshop on confidence hosted by Transport for London (8<sup>th</sup> Mar) and resulted in a report, "Confidence in Transport and Policing" (available online). Deputy Director Cohen sat on the Transport Practitioners Meeting (TPM) committee to select successful abstracts (26<sup>th</sup> Feb) for the July TPM meeting.

Finally, in association with transport consultancy Steer Davies Gleave, TI ran a Dragons' Den-style competition to solicit ideas for promoting more sustainable travel (27 Jun). The best ideas from the Dragons' Den won a package of support from the TI to help them get funded. There were two winning bids:

- "Ride Side-by-Side" led by David Dansky (Cycle Training UK) in collaboration with our own Director Nicola Christie. This project enables people to make short trips to appointments, the shops or social visits on a Side-By-Side cycle, accompanied by a trained rider (pilot). The idea has since been successful in getting funding from Transport for London and Nicola will be supporting the evaluation of the scheme.
- "Bicycle Ambassadors" - ambassadors are ordinary people who ride bikes promoting the benefits of everyday bicycle riding. Anybody who rides a bicycle can become a Bicycle Ambassador.

The 'dragons' included Stephen Joseph, OBE, Chief Executive at Campaign for Better Transport; Lucy Saunders, Public Health Specialist at Transport for London and Greater London Authority; and Dr Steve Watkins, Chair of the Transport and Health Study Group and Director of Public Health, Stockport Metropolitan Borough Council.

## Bringing Researchers Together

Activities to bring researchers together included a day-long event bringing transport researchers from CEGE together with their counterparts at the Bartlett (23<sup>rd</sup>

Feb). TI co-hosted a monthly Cycling@Tea-time meeting which brought researchers, practitioners and a policy makers to speak on different topics including bike sharing, cycle parking, local council bike give-aways, cycleways, quietways, cycle logistics and mini-Holland projects. Videos and slide decks are available for many of the presentations on the TI website under our event archive. TI also hosted and helped arrange a Landor day-long workshop on transport and ageing (19<sup>th</sup> Apr).

The Transport Institute held a conference on the topic of Radical Transport (20 Jun) with a range of presenters. Robin Lovelace talked about open source software in transport modelling and the context in which models can be 'leverage points' for change. David Metz suggested that we need to consider 'doing the minimum' rather than 'doing something' such as blindly building new infrastructure capacity, especially in cases where the projects are socially, politically, financially and environmentally difficult (third runway, East London bridge crossings). The presentations are available on the TI website under our Event Archive.

TI worked with Living Streets to organize an event on older people and walking (14<sup>th</sup> Oct) to inform the living streets research agenda. Tom Cohen worked with UCL colleagues during the early stages of the development of a bid to create a new Knowledge and Innovation Community (KIC) with a focus on urban mobility.

### Submitting Research Bids and Bid Development

TI submitted research bids, which went to:

- Ingenious grants scheme (a scheme of the Royal Academy of Engineering) with partners Open Up UK, CoVi and colleagues from UCL School of Management, on automated vehicles (status: awaiting outcome)
- DfT's social and behavioural development unit on automated vehicles. (status: successful, result reported on page 6)
- TI is developing a bid for a major project to investigate the role of "small-wheeled modes" (such as skateboards and scooters) in urban transport.



Image Flickr CC: Dan Slee, Traffic Lights, Glasgow street



# Raising UCL'S Profile in Transport Research

There were several approaches to raising the UCL transport research profile, including hosting foreign visitors, contributing to professional community activities, and continuing to develop the TI web presence.

## Hosting Foreign Visitors

During 2016 TI was glad to welcome a number of international visitors. Catherine Holloway (TI's theme leader for Accessibility at the time) chaired an event with Dr Ibidun Adelekan, University of Ibadan, a Nigerian academic as part of UCL's African Voices. TI contributed to a session with a delegation of transport dignitaries from Malaysia (15<sup>th</sup> Apr) and met with an academic delegation from Havana, Cuba (22<sup>nd</sup> Sep). The TI also hosted Professor Amelia Regan (Donald Bren School of Information and Computer Sciences, University of California Irvine) on a research visit and talk, "Surprising opportunities for sustainability in transport."

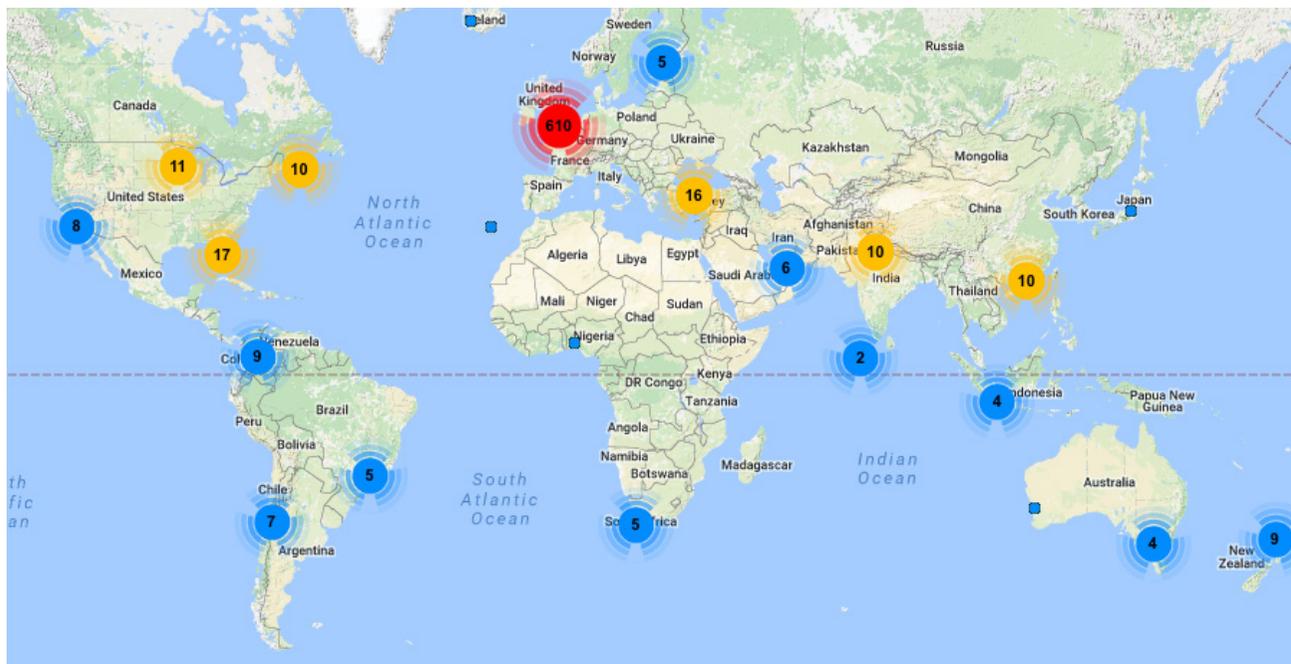
## Contributing to Professional Community Activities

TI Deputy Director Cohen and Director Christie were active in the professional community of transport and mobility researchers and practitioners.

Our Director Nicola Christie has been busy this year. She represented the UK at the Global Interactive Forum for Traffic Safety (GIFTS) in Japan talking about the UK's safety performance and capacity to deliver road safety education; she will be part of a strategic 'GIFTS' project involving 15 countries due to start in Spring 2017. At the Safety 2016 conference in Finland she talked about pedal cyclist fatalities in London and fitness to drive. In 2016 she also began a project helping Highways England explore the research landscape on driver behaviour.

As part of her role as a UK Safety Commissioner she is working on understanding how the management of occupational road risk can be improved in the UK. She is also a member of a Parliamentary Advisory Committee on Transport Safety. She is an external observer on the Metropolitan police's 'pursuit policy' working group. Christie also has an international role serving on the editorial board of five journals including "Injury Prevention," "International Association of Traffic and Safety Sciences Research IATSS," "BMC Public Health," "Transport Reviews" and "Transport and Health."

Deputy Director Cohen attended a session on Cities and the Future of Transport run by



Estimated Geographic locations of TI's Twitter followers, from Followerwork



**Twitter**  
**1061 followers**



**Mailchimp**  
**692 subscribers**

Transport Institute's Social Media Presence

the Guardian (17<sup>th</sup> Oct), which resulted in a write-up on Guardian Sustainable Business. Cohen also spoke at "Active Travel Communications Summit" organised by Landor (26<sup>th</sup> Jan), presented at ACT Travelwise conference (28<sup>th</sup> Jan): 'May We Please Now Start Talking About Walking (Instead of Cycling)?' and chaired the Hackney Cycling Conference (10<sup>th</sup> June). As part of a Landor summit on the future of transport planning, Cohen participated in a "question time" session (4<sup>th</sup> Nov).

Cohen also participated in a UCL-wide group of deputy directors and coordinators of cross disciplinary research centres at UCL, a group he founded in 2014. The group meets several times throughout the year and shares information about experiences in facilitating cross-disciplinary research and opportunities for these types of centres within UCL's research ecosystem.

## Web Presence

To communicate about transport and mobility expertise at UCL the TI continued developing its online presence. For example we developed and posted online a visual map of Transport Institute researchers across UCL that shows, at a glance, the wide range of transport and mobility related research across all 11 faculties. The TI has also continued to build its presence on social media, in particular using twitter to engage with the wider transportation-interested community; TI now has more than 1000 twitter followers. The Cycling@teatime events have also contributed significantly to the TI's mailchimp subscriber list, which is nearing 700. In the coming year we hope to engage with these audiences even more robustly to bring people together for transport research and highlight UCL's wide range of transport research.



Image Flickr CC: Thomas Hassel, Cross Walking

# Contributing to UCL 2034 Objectives

The Transport Institute's activity is aligned with *UCL 2034*, the 20-year strategy for UCL. Below we outline how the TI contributes under the strategy's six principal Themes.

## **Academic leadership grounded in intellectual excellence**

The Transport Institute cultivates academic leadership with the theme leader approach. Aiden Sidebottom, lead for 'safety and security,' commented, 'I consider it to be a useful and important form of university-wide enabling activity, and one which I cited in my successful promotion to senior lecturer.' Our events also enable academics to make contributions to the intellectual life of their disciplines, at all career stages.

## **A global leader in the integration of research and education, underpinning an inspirational student experience**

Events and activities run by the TI engage students and enrich the learning culture. For example students regularly participated in cycling@teatime. In addition the TI participated in the Socially Just Transport forum, which is run by doctoral students.

## **Addressing global challenges through our disciplinary excellence and distinctive cross-disciplinary approach**

TI encourages disruptive and creative thinking among UCL staff through events such as the Radical Transport conference and the dragon's den-style event. These nurture the development of new and innovative ideas to impact on real world problems. TI also works to build cross-disciplinary activity, by organizing activities that bring UCL researchers together in themes, such as 'well being' or 'culture' that cross different disciplines. By founding the Cross Disciplinary Centres (XDC) group, the TI enables sharing

across UCL of knowledge, best practices, and common challenges of interdisciplinary researchers and their research centres.

## **An accessible, publicly-engaged organisation that fosters a lifelong community**

The Transport Institute fosters productive relationships with local communities by participating in community group activities such as the Thames Cycleway scheme, helping develop community responses to Old Oak Park Royal development policy consultation, and helping to inform the Living Streets research agenda. In addition, the TI supported community groups through its Dragon's Den event where two community groups won support. In terms of fostering lifelong learning, the TI delivered several professional development courses on transport modelling and participation in transport planning.

## **London's Global University: in London, of London and for London**

The TI has a strong record of engaging with key agencies in London. For example, through the 'cycling@teatime' series, the TI brought many civil servants to UCL to share developments and best practices in cycling as a mode of transportation. The TI also conducted a workshop on transport and policing and participated in submission of evidence to parliament and the House of Lords

## **Delivering global impact through a network of innovative international activities, collaborations and partnerships**

Finally, the TI was active in an international network, with visitors from Nigeria, Cuba, Malaysia, and the US.



Director **Nicola Christie** is a psychologist whose research career began in 1985 at the Transport Research Laboratory, followed by a short time at MVA and then 10 years at the University of Surrey before joining UCL. Nicola's research interests have focused on transport safety and particularly the causes and consequences of unintentional injuries and the evaluation of interventions to reduce them. She also has an interest in the safe mobility of vulnerable populations. Nicola is an active member of Parliamentary Advisory Council for Transport Safety [www.pacts.org.uk](http://www.pacts.org.uk) and is part of their Road User Behaviour Working Party. She is also a UK Transport Safety Commissioner and represents the UK in the Global Interactive Forum on Traffic Safety in Japan. She publishes widely in a range of journals covering safety, the environment, mobility and health.



Former Deputy Director **Tom Cohen** joined UCL after a decade in transport consultancy. Tom completed a doctorate at UCL before taking up the post at the Transport Institute's launch in 2013 and serving until November 2016. His primary research interests are decision making in transport and transport justice. He is also very interested in citizen participation in transport planning and the functioning of the urban realm. Tom has lately become increasingly involved in transport futures – he led the work for the Department for Transport on automated vehicles and is currently leading a work package on “future developments” as part of the CREATE project.



Incoming Deputy Director **Ann Thorpe** brings to TI her background in sustainable design and development and experience in design thinking for policy. She was previously with UCL's Department of Science, Technology, Engineering and Public Policy where she ran the Masters in Public Administration. Prior to that she taught at the Bartlett School of Architecture on the topic of sustainable contexts for architecture. Ann also has experience of transport in business and the public sector. She helped to develop and market an online transportation-based startup and she has worked for a local authority. She is the author of two books (published by Routledge and Island Press) on sustainability and design.



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