

UCL TRANSPORT
INSTITUTE

UCL

A decent start

Report on our first year

“For the first time I truly began to understand what a multi-disciplinary powerhouse UCL is when it comes to transport. The potential significance of the Transport Institute has fallen into place.”

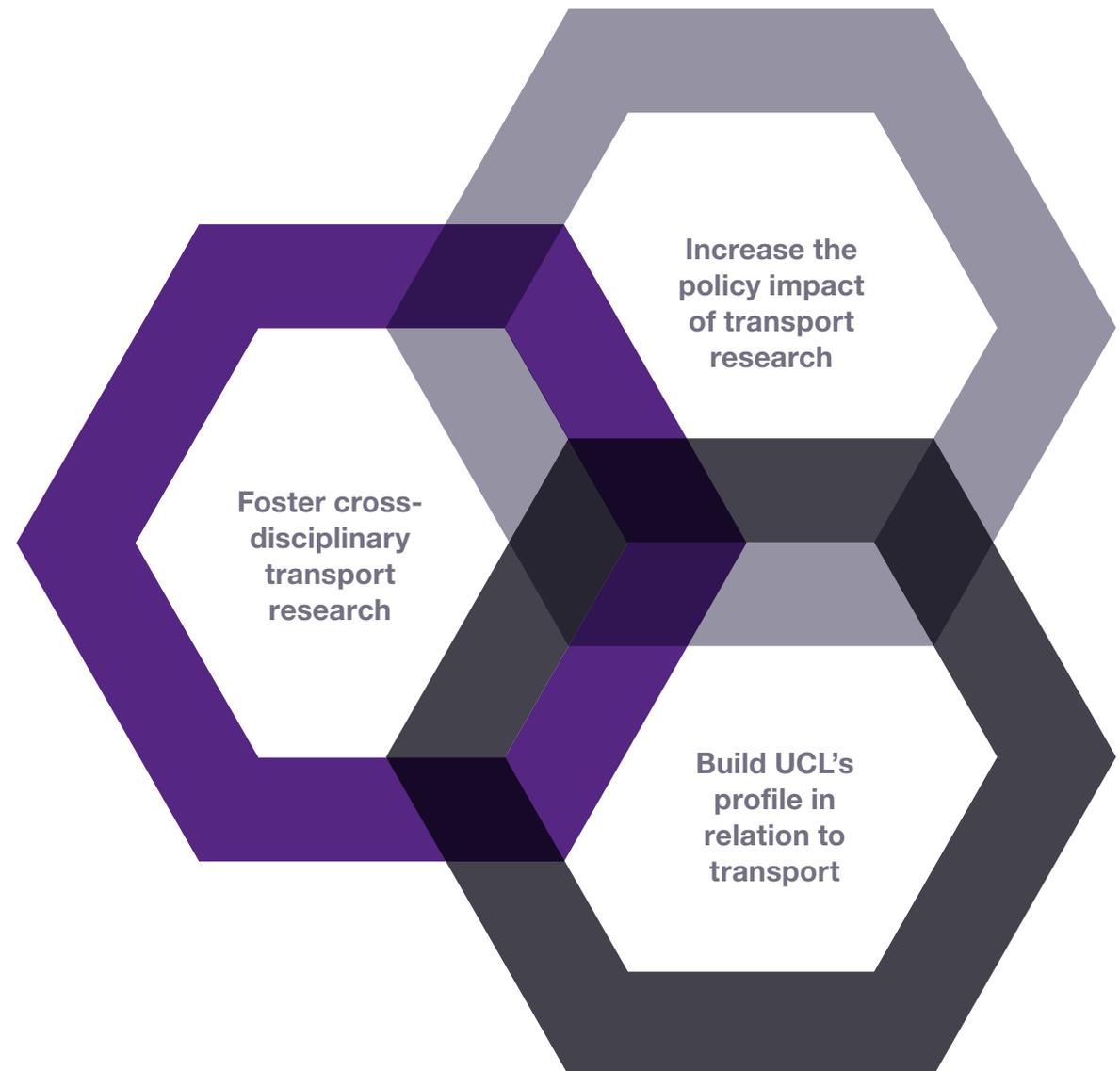
Rod Fletcher, Managing Director of Landor LINKS, publisher of Local Transport Today

Introduction

The UCL Transport Institute was founded with three principal goals:

- To foster cross-disciplinary transport research
- To increase the policy impact of transport research
- To build UCL's profile in relation to transport

This report provides a brief summary of the work done in our first year and some of our achievements. It begins with a survey of progress on our theme-based approach to activity before addressing each of the three above goals in turn.



Themes

The Transport Institute’s work in its first two years is being built around a theme-based approach to research (see Figure 1). The idea is that each theme will have a theme leader (a UCL academic doing relevant research) who will guide activity under that theme. At the heart of the theme-based approach lie (literally) our central concerns of quality of life and equity; also, as shown in the figure, the links from the research to policy and practice are a continual consideration.

We have appointed four theme leaders (see below) and are on our way to appointing a fifth, each of whom has developed her/his own way of working. We have supported them with seed-corn budgets for projects which will lead to significant grant applications and publications.

For each theme, we list the main activities to date.

Figure 1:
UCL Transport
Institute’s research
and policy priorities



Environment

Led by Dr Stephen Marshall,
Bartlett School of Planning

- Round-table meeting gathering a highly diverse range of researchers reflecting a deliberately broad interpretation of “environment”
- Project (ongoing), “Walk-in Cities”
(see *UCLTI live projects below*)

Figure 2: Metrocables, Medellín, Colombia



Safety & security

Led by Dr Aiden Sidebottom,
Security and Crime Science

- Creation of a UCL research network, **Crime & Transport**, meeting periodically to work on projects of mutual interest.
- The group’s facilitator, Réka Solymosi, convened a round-table meeting as part of 2014’s annual International Crime Science Conference, asking “what is the most important current problem in transport crime?”
- Aiden Sidebottom is planning to launch shortly a small grants competition under the safety and security theme.
- A bid was submitted to the Road Safety Trust to develop an app for cyclists to report near misses. If successful, the proposal will also be supported by UCLTI.

Figure 3



Culture

Led by Professor Iain Borden,
Bartlett School of Architecture

- Symposium on Cycling and Culture: half-day event at which papers were given on topics including UK attitudes to cycling safety, preventing bicycle theft, the rise of the e-bike in China, and cycling and identity.



Figure 4

Figure 5: The E-bicycle continuum

Bicycle style e-bike (BSEB)



Scooter style e-bike (SSEB)



There is a backlash against China's 120million electric bicycles



Figure 6

“Many thanks for inviting me to your fantastic event yesterday. I learned and thought far more than in all the recent conferences I have attended.”

Participant in the symposium on cycling and culture

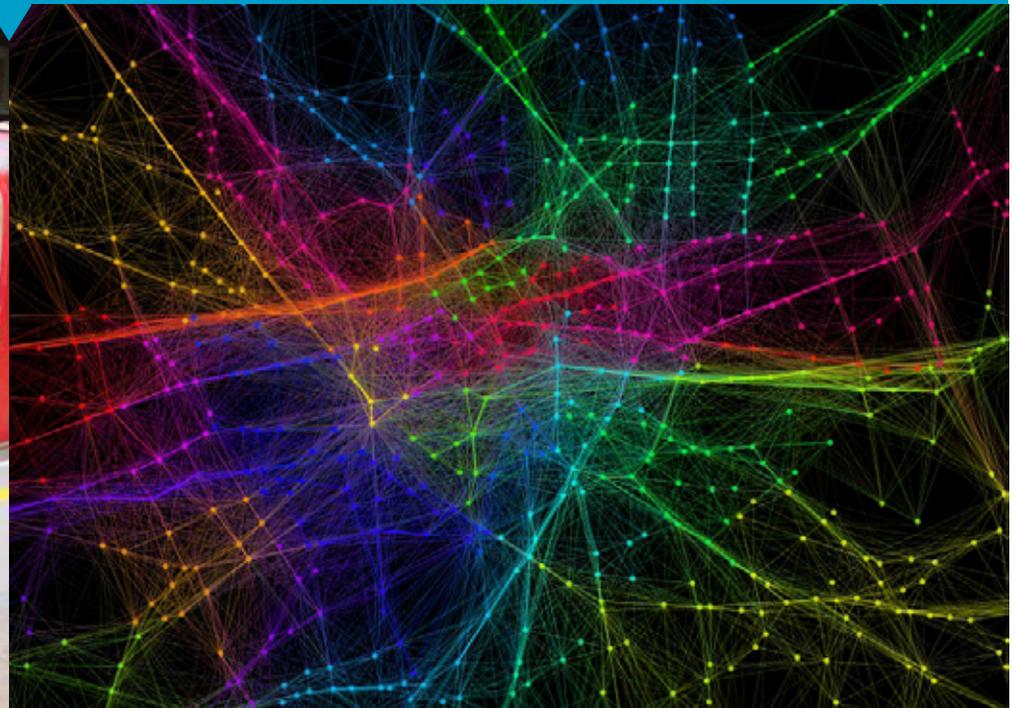
Accessibility

Led by Dr Catherine Holloway,
Civil, Environmental and
Geomatic Engineering

- Round-table meeting, gathering researchers working across fields of accessibility and mobility

Figure 7: Business Secretary Vince Cable MP visits a mock-up Underground carriage at PAMELA

Figure 8: Communities in activity formed during 700,000 minicab journeys across central London



Cross-disciplinary research relating to transport

UCLTI live projects

Policy commission on transport and ethics

A project taking place in partnership with UCL Public Policy. A group of research assistants led by Dr Dean Machin (Philosophy) and Dr Tom Cohen (Deputy Director of the Transport Institute) is investigating how an increased role for ethics in decision making could influence transport policy and the transport system.

“Walk-in Cities”

Conducted under the Environment theme, this project is being led jointly by Dr Stephen Marshall and Gustav Milne (Institute of Archaeology). It is asking what constitutes the optimal balance of measures to promote walking as part of the commuting journey in urban settings. It began with a cross-disciplinary seminar designed to help specify a wide-ranging literature review. A recent, second seminar addressed possible directions for seeking funding of a major follow-up project.

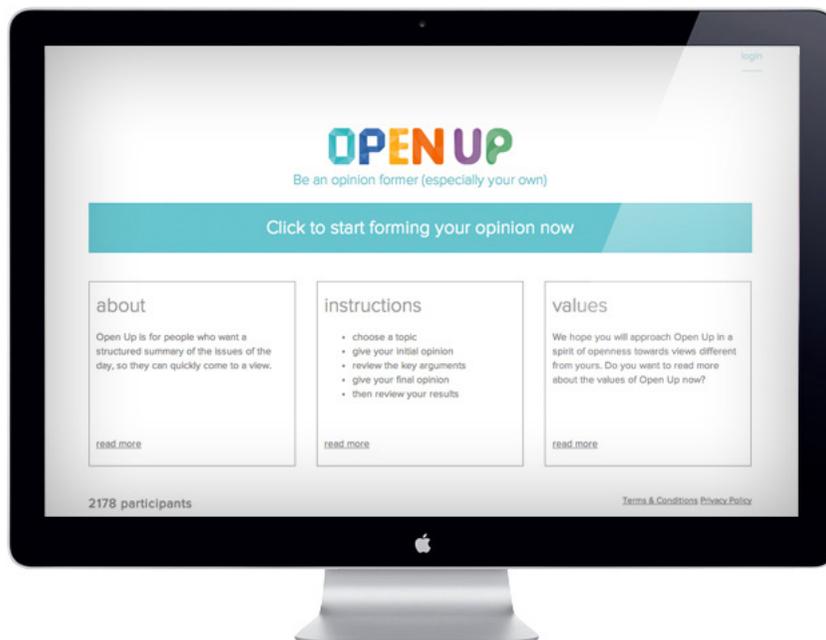
Citizens helping to define the transport research agenda

Funded by the UCL Public Engagement Unit’s Pathways grants (as part of the EPSRC Impact Acceleration Account), this project will ask citizens what the priorities should be for transport research. Tom Cohen is managing the project with Dr Sarah Bell (Civil, Environmental and Geomatic Engineering and Public Engagement Fellow) and Dr Jack Stilgoe (Science and Technology Studies). Major funders (eg DfT, EPSRC, ESRC, RAEng, TfL) are engaged in the process and will review its results.

Open Up on airport expansion

Open Up is an on-line deliberation tool. A topic on airport expansion has been developed by Tom Cohen, working with Nicole Badstuber (Civil, Environmental and Geomatic Engineering, and Science, Technology, Engineering and Public Policy) and Dr Antony Evans (Energy Institute). The project is in partnership with Perry Walker, originator of Open Up, and fellow of the New Economics Foundation.

Figure 9: Open Up website



Collaboration

A number of collaborative projects are at various stages of gestation:

- UCLTI staff have worked with colleagues at UCL's Centre for Behaviour Change (CBC) on a potential project for Transport for London, based on providing training on the development and evaluation of **transport behaviour change interventions**. There is also the prospect of collaborating with CBC on a major cycling project for an outer London borough.
- Visiting UCL Professor Luis Willumsen (Civil, Environmental and Geomatic Engineering) wishes to harness **mobile phone data to support transport forecasting**. This is being explored with colleagues at the Centre for Advanced Spatial Analysis and Electronic and Electrical Engineering as well as partners at Arup. There is also the possibility of involving Telefonica.
- Discussions are ongoing with representatives of **Sciencewise** concerning possible involvement of appropriate UCL experts in a transport-related dialogue.

Policy impact

Transport Select Committee

A good relationship has been established with the staff of the Select Committee. UCLTI arranged for Matt Ashby (Security and Crime Science) to advise staff on the terms of reference for an inquiry concerning **security on the railway**. And staff visited UCL to discuss a forthcoming inquiry on **strategic river crossings** where they met Professor Harry Dimitriou (OMEGA Centre), Visiting Professor Luis Willumsen and Dr Raul Fuentes (formerly Civil, Environmental and Geomatic Engineering).

UCLTI encouraged Professor Francesca Medda (Civil, Environmental and Geomatic Engineering) to submit evidence for an inquiry on **local transport expenditure** and she

was subsequently called to give oral evidence. UCLTI staff have also collaborated with Professor Dimitriou in developing evidence for the river crossings inquiry and have worked with Dr Jean-Paul Addie (Science, Technology, Engineering and Public Policy) on evidence for an inquiry into **smaller airports**.

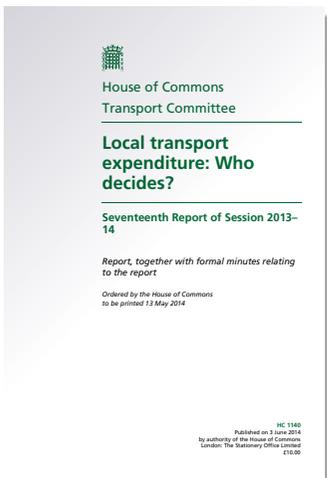
Figure 10: Professor Francesca Medda submitted evidence for an inquiry on local transport expenditure

“It was an extremely useful and productive session which will directly influence the terms of reference.”

Senior Assistant, Transport Select Committee, concerning a meeting to discuss the inquiry on strategic river crossings

London Assembly Transport Committee

As a result of liaison between UCLTI staff and the scrutiny manager for transport, Dr Stephen Marshall was invited to appear as a “guest” at a committee meeting where the Mayor’s **London Infrastructure Plan 2050** was examined.



Department for Transport (DfT)

There has been contact with DfT officials on several levels:

- When the DfT invited tenders from five higher education institutions to deliver an **introductory course in transport modelling** to officials, UCLTI's bid was successful. The resultant two-day course was co-ordinated by Tom Cohen and delivered by Professor Ben Heydecker, Dr Andy Chow, Dr Helena Titheridge, Professor Peter Jones, Visiting Professor Luis Willumsen (all of Civil, Environmental and Geomatic Engineering) and Dr Ed Manley (Centre for Advanced Spatial Analysis), with a contribution from Arup's transport consulting team.
- Professor Peter Jones collaborated with UCLTI and DfT officials in organising a round-table meeting to discuss **global drivers of decisions in UK investment**. The event drew high-level participants (chief executives, board members etc) from private-sector organisations in areas ranging from finance to telecommunications, and was attended by senior officials from many government departments other than the DfT itself (Foreign and Commonwealth Office; Energy and Climate Change; Business, Innovation and Skills; Government Office for Science). The meeting was followed by a dinner which was hosted by Professor David Price (Vice-Provost, Research) and attended by the Permanent Secretary of the Department for Transport, Philip Rutnam. A report of the meeting is being finalised.

- Following a meeting arranged by Joe Finlay of DfT, attended by Dr Miles Elsdon (Chief Scientist), Deirdre O'Reilly (Head of Social Research), Professor Peter John (UCL School of Public Policy) and others, active efforts are being made to set up an effective mechanism for arranging **secondments** (of UCL staff at the DfT and vice versa). This is being developed in conjunction with UCL Public Policy.
- DfT officials have expressed willingness to participate actively in the project **citizens helping to define the transport research agenda** (see *UCLTI live projects, above*).

“The event was highly interesting and useful.”

Participant in the round-table meeting on global drivers of decisions in UK investment



“The variety and volume of speakers made it far better than other comparable courses... Overall extremely good course; I would recommend.”

DfT official commenting on the introduction to transport modelling

*Figure 11:
Training DfT officials
in transport modelling*

Transport for London (TfL)

As with the Department for Transport, various initiatives involving this key transport stakeholder have been initiated:

- There is the prospect of delivering training on **travel behaviour change** (see *collaborations, above*) in association with UCL's Centre for Behaviour Change. This follows on from several liaison meetings with TfL staff working in its Behaviour Change, Travel Demand Management, Customer Research & Insight and Transport Policing teams, as well as officers from the Metropolitan Police Service's traffic division.
- A collaboration with the Consultation Institute involves preliminary work on the idea of **benchmarking consultation practice** across cities including London.
- Following liaison with Dr Kyle Jamieson (Computer Science), UCLTI staff have been in contact with suitable TfL staff concerning **innovative uses of Wi-Fi** on the public transport network.
- UCLTI staff have also been working to develop a **secondment** arrangement with TfL, through liaison with the Head of Strategic Analysis and others.
- Staff in TfL's Customer Research and Insight team have expressed willingness to participate in the project **citizens helping to define the transport research agenda** (see *UCLTI live projects, above*).

Major funders

The project **citizens helping to define the transport research agenda** (see *UCLTI live projects, above*) has involved contacts with several major funders of research – EPSRC, ESRC and RAEng, in addition to those mentioned above. The prospect of active collaboration with these key stakeholders is hoped to act as a basis for strong ongoing relationships.

Catapults: Transport Systems and Satellite Applications

UCLTI staff carried out a project for the Transport Systems Catapult on the concept of **Intelligent Mobility**. The work included an element of scenario planning, led by Peter Antonioni (Management Science and Innovation) and also involving David Ashmore (Civil, Environmental and Geomatic Engineering).

Following a successful day-long visit by staff of the Satellite Applications Catapult organised by Ian Raper (Mullard Space Science Laboratory), discussions are ongoing between Catapult staff and UCL academics concerning possible collaborations on projects such as developing the next generation of **automatic vehicle location**.

London councils

After a very positive meeting between **Camden's** portfolio holder for transport, Richard Jackson (Director, Sustainability – UCL Estates) and staff of UCLTI, work was done (in association with Bartlett School of Planning's Dr Robin Hickman and Dr Stephen Marshall) with officers on a proposal for innovative road closures to be put to TfL's Incubator Fund. This now is likely to be submitted in early 2015. Camden is also keen to collaborate with UCL, **Leeds University** Institute for Transport Studies and **Newcastle University's** Transport Operations Research Group on a project called Crowdwise on Transport, in which researchers will work with transport officers on developing innovative citizen participation techniques designed to involve a more diverse audience than usual, more meaningfully than usual, in local transport decision making.

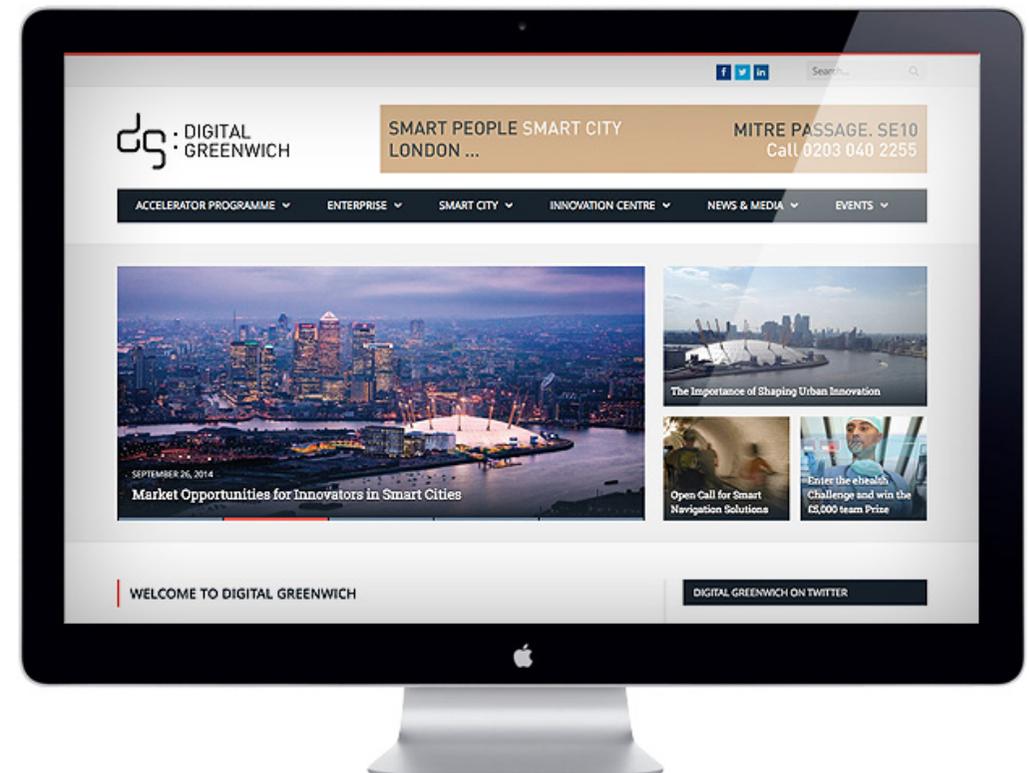
The TfL Transport Incubator fund is also the catalyst for contact with officers at **Greenwich** council, who submitted UCLTI ideas in a bid for funding innovative ways of dealing with conflicting demands and interests amongst users of the foot tunnels.

As mentioned under collaborations (*above*), UCLTI staff are likely to become involved in a project with an outer London borough in relation to major cycling interventions.



Figure 12: London Borough of Camden

Figure 13: Digital Greenwich website



UCL's profile in relation to transport

Events

Cycling@Lunchtime is a collaboration between UCLTI and CILT UK, CIHT, ICE and IHE. Monthly meetings are taking place at UCL at which researchers and practitioners in the cycling policy world debate developments and policy issues.

UCLTI assisted Professor Peter Jones and Clemence Cavoli (Civil, Environmental and Geomatic Engineering) in organising a conference entitled **Transforming transport research into policy and practice**. The event, which marked the end of a series of policy seminars on topics ranging from transport crime to shipping, involved a panel discussion with Louise Ellman MP, chair of the Transport Select Committee, Professor Rod Smith, former Chief Scientist at the DfT, Dr Nicola Christie, Director of UCLTI and Dave Bull, Director of Planning and Transportation at Thurrock Council.

The launch of **Peak Car – the future of travel**, by Visiting Professor David Metz (Civil, Environmental and Geomatic Engineering) was organised by UCLTI and included contributions from Emeritus Professor Phil Goodwin (Civil, Environmental and Geomatic Engineering).

Tom Cohen organised and chaired a session on the relationship between the media and transport policy as part of a symposium on **transport and the media** led by Dr Rachel Aldred of University of Westminster.

Two afternoon seminars have taken place at UCL in partnership with the Transport Statistics User's Group (TSUG), one on **HS2** and the other on the **presentation of statistics**.

Other events that have already been mentioned elsewhere in this report:

- Symposium on Cycling and Culture
- Round-table meeting on transport and our environment
- Round-table meeting on accessibility and mobility
- Round-table meeting on global drivers affecting future UK investment decisions
- Round-table meeting on transport and crime

UCLTI staff have also contributed to numerous events organised within UCL and externally.

Building links

A major part of UCLTI's mission is to increase contact between UCL transport researchers and the wider world. An effort has therefore been made to build links within UCL and with external organisations. The following list is a sample of the external bodies with which new relationships have been/ are being established:

- Arup
- Atkins
- Behavioural Insights Team
- Bus Users UK
- Chartered Institute of Highways and Transportation
- Department for Transport
- Involve
- London Remade
- Metropolitan Police Service
- PTV
- Sciencewise
- Sense about Science
- Steer Davies Gleave
- The Times
- Transport for London
- Welsh Assembly Government
- Wilkinson Eyre Architects

Communications

Supporting the person-to-person activity that has been a core of UCLTI's work in its first year, new media are playing their part. The Transport Institute's **website** is acting as a document repository and event-listing service. It is planned to enhance its currently rudimentary listing of transport experts.

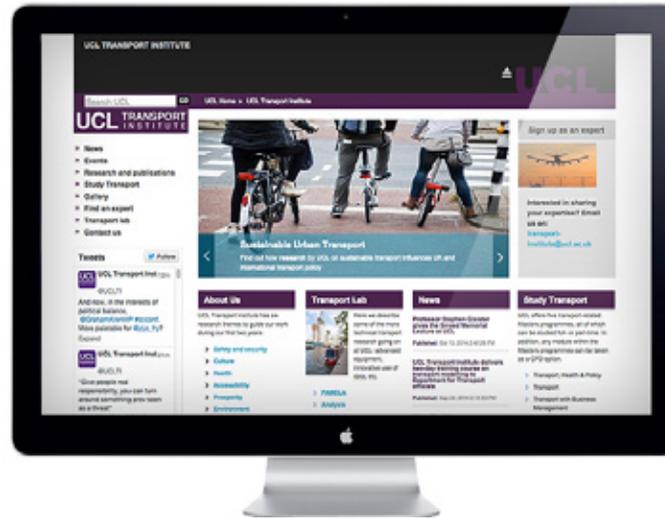


Figure 14: UCLTI website

This development will rely on the open-source **customer relationship management** tool Civi-CRM which has been installed and is being populated. This will enable users to search for transport experts using tags which will allow a much larger number of transport experts to appear on the website than at present.

The Transport Institute's activity on **Twitter** is gaining momentum. The @UCLTI feed

has steadily gained followers and at present has over 250, some of them prominent (Tom Edwards – BBC Transport Correspondent; Louise Butcher – Transport Policy Specialist at HoC; Transport Systems Catapult; PR Newswire Europe; RoSPA; Transport Planning Society; Transport Safety Commission; Clerk of Transport Select Cttee; RAC Fdn). Live tweeting of events has recently been trialled with some success.



Figure 15: UCLTI Twitter

“Thanks very much for this excellent summary.”

Recipient of the report on the symposium on cycling and culture

Image credits

Figure 1: UCL Transport Institute

Figure 2: UCL Development Planning Unit

Figure 3: Réka Solymosi

Figure 4: Aiden Sidebottom,
UCL Security and Crime Science

Figure 5: Helena Titheridge, UCL Civil,
Environmental and Geomatic Engineering

Figure 6: Peter Murray, New London Architecture

Figure 7: Accessibility Research Group, UCL

Figure 8: Ed Manley

Figure 9: Perry Walker

Figure 10: House of Commons
Transport Committee

Figure 11: UCL Transport Institute

Figure 12: London Borough of Camden

Figure 13: Royal Borough of Greenwich

Figure 14: UCL Transport Institute

Figure 15: UCL Transport Institute