This Urban Thinkers Campus (UTC) has focussed on the need to transition from the car-city to more liveable, post-car urban forms. Rather than eliminate cars altogether from the urban environment, post-car cities would simply cease to be
designed and built around the car, as has been the case in much of the developed and developing world since the Second World War.

There are sound environmental, public-health, social, economic and even political reasons for this transition, based around the need to avoid the basic problems associated with the car city: structural inequalities, congestion, the marginalisation of the pedestrian, the emission of greenhouse gases, and millions of deaths from noise and air pollution and accidents.

In order to arrive at post-car cities, a series of structural barriers - institutional, political, social and economic - must be overcome, before adequate planning and mobility strategies and measures can be put in place. Such barriers can potentially be overcome by initiatives and strategies such as: strong political leadership, institutional (re)design and the promotion of mechanisms for stakeholder and grassroots participation. With these innovations in place, it then becomes easier to implement that kinds of policy strategies and measures that are designed to reduce private motorised transport and promote the shift to more liveable cities.

Given the nature of the urban transformation that we have dealt with in this UTC, our recommendations are aimed, above all at public agencies, although stakeholder engagement is also addressed. Thus, we recommend that:

1). Public administrations at all spatial scales make an unequivocal commitment to drastically reducing private motorised transport in the urban environment.

2). Political leadership focusses on overcoming:

   a. Institutional fragmentation

   b. Car-city planning cultural inertias

   c. Opposition from minority groups

3). Health agencies play a greater role in planning and mobility policy-making.
4). Mechanisms be established for constructive engagement between public agencies and all relevant stakeholders. These should include:

a. Forums for stakeholder participation in all stages of the policy-making process (design, implementation and monitoring).

b. Data collected by transport operators should be made freely available, except where data-protection laws explicitly rule this out.

5). Spatial planning that promotes urban sprawl, suburbanisation, out-of-town shopping etc. should be avoided. Intermediate-size, compact, mixed-use urban forms should be promoted where possible.

6). Access to high-quality urban space and sustainable mobility services should be regarded as basic rights that local authorities have the obligation to make effective.

7). Public space used for cars (carriageways and parking) should be reduced and replaced by friendly, clean and healthy public spaces aimed at mixed uses by all members of the community, particularly the most vulnerable groups.

8). Effort should be made so that car-users absorb the negative externalities that society in general currently bears, through, for example, congestion charging and increases in on-street parking prices.

9). More budget resources should be devoted to public transport and active mobility infrastructure, particularly pedestrian ones, which have generally been absent from policy-making considerations.

By acting on these recommendations, the following goals are possible:

1). Socio-spatial inequalities – average income per capita differences between different neighbourhoods of the city. Goal: by 2030 GDP/per capita differences between the wealthiest and the poorest neighbourhoods should be reduced by 25%.
2). Built environment/land use – population density (1000s inhabitants per km2) and area of land subject to urbanisation (km2). Goal: by 2030, we expect to see a 20 per cent reduction in the ratio of land consumption rate to population growth rate.

3). Public space – proportion of public space given over to motorised transport (parking and carriageways) with regards public space for pedestrians and mixed uses (play areas etc.). Goal: by 2030, space for motor vehicles should not exceed 20 per cent of total urban public space.

4). Autonomy of vulnerable groups – proportion of children able to walk or cycle to school in safety on their own. Goal: by 2030, all children over 10 should be able to walk or cycle to school in safety on their own.

5). Public health – deaths from traffic accidents. Goal: by 2030, zero deaths and serious injuries from traffic accidents.

6). Air and noise pollution – goal: by 2030 all cities should comply with WHO guidelines on air and noise pollution.

7). Modal share – goal: by 2030, the modal share of private motorised transport should be no higher that 10 per cent in any urban context.

8). Cycling infrastructure – goal: by 2030 cycling lanes should represent at least 50 per cent of the total length of carriageways in urban environments.

Introduction to the Campus:

FIU organised the Urban Thinkers Campus (UTC) The Transition to Liveable Cities: the post-car city from 25th-27th October in Barcelona, building on the work that FIU has been developing over recent years on linking sustainable mobility and urban planning. We had the opportunity to present some of these
ideas during the Side Event Vision Zero Plus: The City for Citizens, that we organised at the Habitat 3 conference in Quito last year. In this UTC our aim was to go further and explore ways to achieve more LIVEABLE cities, as outlined in the New Urban Agenda and in the City We Need campaign of the WUC, from the perspective of mobility. Our point of departure was that shifting to more sustainable models of urban mobility can produce cities with more public spaces, with cleaner air, with fewer accidents, with greater access to mobility, and with higher levels of overall wellbeing. In this respect, we addressed Sustainable Development Goal 11: Sustainable Cities and Communities “Make cities and human settlements inclusive, safe, resilient and sustainable!”.

However, the construction of this LIVEABLE city depends on a fundamental change away from the current dominant model of urban mobility, that we call the ‘Car City’. This model, based on the dominance of private vehicles, is not a structural phenomenon that has always been in existence and that always will be; rather, the invasion of the car is relatively recent in the context of the long history of urban settlements. Cars now dominate cities and cities are organized around them, which has had disastrous consequences for cities and their inhabitants, in terms of urban sprawl, congestion, the marginalization of the pedestrian, global warming, and millions of deaths from air noise and air pollution and accidents.

Many cities have begun to identify and implement strategies and measures that seek to promote a shift towards sustainable mobility, namely: public transport, car-sharing and active forms of mobility, such as walking and cycling. Not only are such modes of mobility more environmentally sustainable, but they are also more efficient, more democratic, safer and healthier.

In this UTC, our overall objective was to articulate a new urban paradigm based on the principles of the New Urban Agenda that produces cities that are more just, equitable, democratic, efficient, healthy and safe. We call this new paradigm The Liveable, Post-Car City.
The UTC was organized around two days of discussion, before presenting the overall conclusions on the third morning. The first day dealt with strategies and scenarios for sustainable mobility in the short and medium term, while the second day was given over to an exploration of these themes in the long-term future. The Urban Thinkers Sessions had as their objective the drawing up of conclusions in the form of proposals for the implementation, monitoring and revision of the policy strategies and measures identified.

The eight UTC Core Themes were as follows:

Day One

1. Current Strategies to Promote Sustainable Urban Mobility
2. Reclaiming Public Spaces for the Community
3. Contesting the Cultural Hegemony of the Car

Day Two

5. Paradigm Shift: new mobility scenarios
6. New Urban Forms: overcoming the compact-sprawling city dichotomy?
7. The Governance of the Paradigm Shift.
8. Is the Post-Car City Desirable? Is it Achievable?

Each core theme was the subject of discussion in three Urban Thinkers Sessions:

1. Brainstorming session to examine the ‘state of the art’ of the theme under discussion;
2. Urban Lab based on innovative experiences and actions related to the theme;
3. Conclusions session given over to proposing solutions, action plans etc. based on the discussions in the previous sessions.

In order to facilitate discussion throughout the day’s sessions and the drawing up of conclusions, at the beginning of each of the core theme seminars a series of questions was be distributed among participants. The objective of each core theme seminar was to provide answers to these questions.

- At the end of each day, a Plenary Session brought together the conclusions of each core theme seminar and was presented to participants for discussion, amendment and approval.
- On the third day, a final Plenary Session was be held to ratify the overall conclusions.

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Summary of all session:

Day 1

UTC Core Theme 1: Current Strategies to Promote Sustainable Urban Mobility

The objective was to identify and analyse the most efficient strategies and measures to promote a modal shift from private vehicles to more sustainable modes of mobility.

The following questions were set to guide discussions and conclusions:

- What strategies and measures can be implemented to restrict the use of private vehicles and to promote the use of more sustainable modes?
- How can sustainable mobility be promoted beyond the policy areas of spatial and mobility planning?
- What social, political and institutional barriers exist to the implementation of these policies?
- How is implementation affected by the timing and sequencing of implementation?
• How can these barriers be overcome? How can stakeholders be engaged in the policy process?

Moderator: Pau Noy (Transports Metropolitans de Barcelona)
Rapporteur: Silvia Casorran (Àrea Metropolitana de Barcelona)

• Session 1: Brainstorming (90 mins.) Presentation: Alfonso Sanz (Mobility Consultant, Gea 21) “Sustainable Mobility Strategies”.
• Session 2: Case Study (90 mins.) Presentation: Philip Insall (Director, Insall and Coe) “How do we build the post-car city? By collaborating with public health”.
• Session 3: Defining Solutions (90 mins).

UTC Core Theme 2: Reclaiming Public Spaces for the Community
As space for private vehicles is reduced (parking spaces, carriageways etc.), how can we make best use of this newly-created space for the community. Here we explored the strategies, policies and measures that offer the greatest potential to improve the quality of life for urban inhabitants.

The following questions were set to guide discussions and conclusions:

• How do we define the characteristics that these reclaimed public spaces should have?
• What alternative uses could be given to these large car-orientated infrastructures such as urban motorways, flyovers and large car parks?
• How do we adapt current models of spatial management to new forms of public-community relations?
• How can we adapt these new spaces to different socio-economic contexts?

Moderator: Ricard Pie (Universitat Politècnica de Catalunya)
Rapporteur: Tonet Font (Ajuntament de Barcelona)

• Session 1: Brainstorming (90 mins.) Presentation: Francesc Muñoz (Universitat Autònoma de Barcelona).
• Session 2: Case Study (90 mins.) César Mosquera (Deputy Mayor, Pontevedra, Spain).
• Session 3: Defining Solutions (90 mins.).
UTC Core Theme 3: Contesting the Cultural Hegemony of the Car

Since WW2, the car has emerged as a powerful cultural symbol. Here we analysed this process, and explored the emergence of new values and social movements that have challenged this hegemony.

The following questions were set to guide discussions and conclusions:

- Which ideological practices have produced and reproduced the cultural hegemony of the car?
- Which have been the most significant political and cultural movements in the fight against the car and its infrastructure? Under what historical conditions did these movements emerge?
- What are the political, social and cultural values that underlie these movements?
- Is there a role for public administrations in promoting new cultural hegemonies favourable to sustainable mobility?

Moderator: Ricard Riol (President Promoción Transport Público)
Rapporteur: Alessandro Scarnato (Universitat Politècnica de Catalunya)

- Session 1: Brainstorming (90 mins.) Presentation: David Bravo (Architect)
- Session 2: Case Study (90 mins.) Mark Wagenbuur (Dutch Cycling Ambassador) “Contesting the Cultural Hegemony of the Car: the case of the Netherlands”.
- Session 3: Defining Solutions (90 mins.)

UTC Core Theme 4: Integrating New Technologies and Ownership Models into the Sustainable Urban Mobility Models.

New technologies and forms of ownership open up a range of possibilities for sustainable urban mobility models. This workshop analysed the most relevant of these developments, and sought to identify the social, political and economic conditions necessary to maximize the benefits for the city and its inhabitants.

The following questions were set to guide discussions and conclusions:
• Which are the most significant trends in terms of new technologies and ownership in the field of mobility?
• Which actors are driving these trends (businesses, public bodies etc)?
• How will different social groups be affected by these trends?
• How can these trends be harnessed in order to produce more liveable cities?

Moderator: Judith Batayé (OuiShare Mobility)
Rapporteur (Manel Ferri, Diputació de Barcelona)

• Session 1: Brainstorming (90 mins.) Presentation: Enric Cañas (Transports Metropolitans de Barcelona)
• Session 2: Case Study (90 mins.) Rikesh Sha (Transport for London) “Innovation through Open Data at Transport for London”.
• Session 3: Defining Solutions (90 mins.)

Day Two

UTC Core Theme 5: Paradigm Shift: new mobility scenarios

In the face of increasing uncertainty, maintaining a single ‘official’ urban model based on continued and infinite economic and demographic growth is unsustainable in both ecological and social terms. The bursting of the global debt bubble, new forms of collaborative economic activity – production, distribution and consumption – economic degrowth, energy and raw material crises etc. are all factors that will affect urbanisation and urban mobility in the future.

The following questions were set to guide discussions and conclusions:

• What mobility scenarios can we predict for the future?
• How will these changes affect the lives of different social groups?
• What policy measures can we adopt now to face up to the challenges of the future?

Moderator: Francesc Aragall (Design for All)
Rapporteur: Jon Aguirre (Paisaje Transversal)

- Session 1: Brainstorming (90 mins.) Presentation: Antonio Turiel (Researcher)
- Session 2: Case Study (90 mins.) Carlos Verdaguer (Mobility consultant, Gea 21) “New scenarios for mobility”.
- Session 3: Defining Solutions (90 mins.)

**UTC Core Theme 6. New Urban Forms: overcoming the compact-sprawling city dichotomy?**

Neither of these urban models are without problems, above all the ‘non-city’ of urban sprawl. This workshop analysed the alternatives to this spatial model within the context of paradigm shift, while following the principles laid down in the New Urban Agenda.

The following questions were set to guide discussions and conclusions:

- How to design new planning strategies, policies and measures based on the New Urban Agenda to adapt existing urban models to future mobility challenges.
- How will cities in the future relate to their surrounding areas in terms of mobility, infrastructure networks etc.?
- Which actors and stakeholders can play a key role in this transformation?

Moderator: Joris Scheers (ECTP-CEU)
Rapporteur: Ignacio Permán (ECTP-CEU)

- Session 1: Brainstorming (90 mins.) Presentation: Tadashi Matsumoto (OECD) “New Urban Forms”
- Session 2: Case Study (90 mins.) David Bravo (Architect) “Overcoming the Dichotomy between Compact City and Urban Sprawl”.
- Session 3: Defining Solutions (90 mins.)

**UTC Core Theme 7. The Governance of the Paradigm Shift.**

The configuration of our cities through the implementation of the New Urban Agenda will depend in many ways on how we share power and how that power
is used. Based on this premise, these sessions focussed on identifying the forms of governance that have the greatest potential to manage the paradigm shift implied by the New Urban Agenda with regards emerging models or urban mobility.

The following questions were set to guide discussions and conclusions:

- What are the possible scenarios for urban governance in the future?
- Which forms of urban governance will be best compatible with the paradigm shift to more Liveable Cities?
- What obstacles exist/will exist to pursuing these forms of governance.
- Which actors are likely to be central to the emerging democratic processes in general and to the design of new urban mobility strategies in particular?

Moderator: Florian Lorenz (Smarter than Car)
Rapporteur Jordi Rovira (Ajuntament de Barcelona)

- Session 1: Brainstorming (90 mins.) Presentation: John Etherington (FIU/Universitat Autònoma de Barcelona) “Beyond the Neoliberal City: governance in the post-car city”.
- Session 2: Case Study (90 mins.) Luisana Paganelli (RMIT, Australia) “The Urban Planning Process in Curitiba”.
- Session 3: Defining Solutions (90 mins.).

**UTC Core Theme 8: Is the Post-Car City Desirable? Is it Achievable?**

As we advance towards new urban models in which mobility will be more sustainable, democratic and just, private transport will be increasingly questioned. These sessions revolved around the idea of a city without cars, and specifically the following questions were set to guide discussions and conclusions:

- Will cities in the future be able to function without cars?
- What might be the benefits and costs from eliminating cars from our cities?
- What would have to be done to achieve this objective?
Key outcomes:

We began by identifying the barriers to more sustainable urban mobility models and forms, before outlining the structural and policy changes needed to overcome them.

1. Barriers to Change

a) Cultural hegemony

As a cultural icon, produced and reproduced through popular cultural practices, the car has been a key feature of late capitalist consumer society. It is associated with individual freedom and democratization, and thus fits easily into hegemonic political narratives such as neoliberalism.

It is not easy to overcome the paradox of, on the one hand, this idealised individual vision, and on the other the collective urban reality that is congested, unhealthy and dangerous.

b) Interest group opposition

There is a parallel between attempts to reduce the use of private motorized transportation and those to eliminate smoking in public places: a steady growth
of scientific evidence showing the negative health consequences of urban motorised vehicle use has led to some action being taken.

However, while eliminating smoking from public spaces was opposed by the tobacco industry and some sectors of the leisure industry, the struggle to reduce the use of private motorised vehicles comes up against a wider range of powerful interests, such as vehicle manufacturers and sellers, oil companies, infrastructure providers, real estate companies etc.

c) Institutional factors

Our discussions highlighted the recurring problem of institutional fragmentation in both vertical and horizontal terms:

- vertical: lack of connection between institutions at different spatial scales that impedes coherence in the design and implementation of sustainable mobility strategies and policies;
- horizontal: policy-making is often rigidly segmented between different policy areas, and even in those areas with obvious synergies (e.g. mobility, spatial planning and housing) institutional mechanisms to ensure cooperation of often missing.

In addition, we identified ‘car-city cultural inertias’ in planning departments, whereby transport planning is still focussed on increasing road capacity and motorised traffic flows.

d) Political factors

In the context of representative democracy:

- relatively short political cycles militate against the strategic, long-term planning necessary for fundamental change;
- intense mobilisation by those that are negatively affected by sustainable mobility measures tends to outweigh the perception by the majority of citizens of increased well-being.

Consequently, politicians often apply self-censorship and are too timid when addressing the problems of the car city.
2. Structural Change

a) Contesting cultural hegemonies

The post-car city must also develop a futuristic narrative that is attractive and capable of challenging the dominant car-based narratives. ‘Imagineering’ was the concept: first imagine and then search for the technical means to achieve that vision.

Improvements must be made to the comfort and efficiency of public transport if it is to be presented in a more attractive light, through advertising campaigns capable of engaging with increasingly individualistic and atomised societies.

Finally, the case of the Netherlands demonstrated that popular action against the car city is possible and can be successful: from the 1970s, grassroots movements have displayed the capacity to change conceptions of urban mobility is conceived towards more sustainable forms.

b) Vertical and horizontal governance integration

We emphasised the need overcome the vertical and horizontal fragmentation of urban governance systems. With regards the former, overall guidelines and policy objectives must be set at macro-level spatial scales (EU, UN), since only through coordinated action can macro-level challenges, be addressed. However, at the same time, decisions on the specific content of policy design and implementation should be taken as closely as possible to citizens for individual urban contexts to be taken into account.

In terms of overcoming horizontal fragmentation, our discussions centred on the concept of transformative co-operation, and on the capacity of policy entrepreneurs to successfully construct networks and mobilise resources to shift dominant institutional logics.

c) The role of health agencies

We suggested that public health policy-makers play a more active role in the design and implementation of spatial planning and mobility strategies. Public health bodies at spatial levels different levels (international, national, regional
and local) are well placed in this respect, since they are increasingly aware of the negative environmental and health effects of the car city.

Public health stakeholders are engaged in the relevant scientific debates and are uniquely placed to interpret these findings and, in conjunction with other agencies, to put the recommendations into practice.

In addition, public trust in health professionals is much higher than in other policy-making agencies and individuals.

d) Political Leadership

The deliberations of the UTC highlighted the importance of political leadership. Through political leadership:

- historical institutional pro-car cultures can be placed on new trajectories, directed towards better design and implementation of sustainable mobility and public space strategies;
- new decision-making frameworks can be established that bring in new actors public (health agencies, for example) and other stakeholders, such as citizen groups.

With regards the framing of policies, our sessions recommend that:

- strategies be presented in terms of easily-accepted objectives such as ‘clean air’ or ‘zero accidents’.
- public administrations should state clearly in quantifiable terms the expected economic and health benefits of successful implementation. Monitoring should also apply these criteria.
- public agencies should be proactive when designing and implementing sustainable mobility policies with regards potential opposition.

e) Democratic participation

The use of space impacts on the daily life of all, and consequently there is enormous scope for direct democratic participation in this area, and also a clear need for democratic legitimation. Consequently, we need:

- democratic participation at all spatial levels and throughout the whole policy-making process;
participation processes should be transparent, clear in their scope and coherent with the objectives that have been identified.

3. Policy responses

a) Spatial planning strategies

At a general level, our discussions highlighted the unsustainability of urban settlements based on extensive use of land (urban sprawl). This model:

- reduces the land available for other activities (food production, green spaces that promote biodiversity etc.),
- implies unsustainable levels of water consumption, materials necessary for the built environment (concrete, cement, steel etc.), and fossil fuels, since mobility in these models is premised on the use of private motorised transport.
- produces and reproduces social inequalities, since not all households have access to a car, and even in those that do, it is generally men that use them, to the obvious detriment of women, children and the aged.

Our workshops emphasised the need for urban planning strategies to promote the compact city, by promoting:

- medium-sized cities (including policies of zero urban growth)
- redensification and retrofitting of urban areas
- mixed uses of urban space (residential, commercial, leisure, educational etc.)
- networks of cities connected by high quality public transport

b) Public space

Interventions to increase the quality and quantity of available public space also have a positive effect, not only on reducing the use of private motorised vehicles, but also on constructing more liveable cities. More specifically, we stressed:

- The need to place right to public space at the centre of conceptualisations of the right to the city.
• The constructions of public space healthy, friendly, has a multitude of different uses and is accessible to all, particularly vulnerable groups, such as the elderly, children and women.

c) Sustainable mobility strategies and measures
We analysed urban planning and mobility strategies that can contribute to mitigating the effects of the car city, and promote long-term paradigm shift. We divided policy measures into ‘push’ (dissuasion of private motorised vehicle use), including:

• Traffic calming measures (e.g. reducing urban and suburban speed limits for motor vehicles)
• Road pricing/congestion charges
• Reduction of car-parking space and increase in price of parking in urban centres.

And also pull, (promotion of alternatives). As an overall approach, the emphasis was on considering mobility as a service, that is, integrated packages of mobility paying, for example, fixed monthly fee.
In addition, the following measures were proposed:

• Public transport should be interconnected between the different modes (intermodality).
• The capacity of public transport should be increased either through increasing current levels of supply and/or working with stakeholders to maximise current capacity.
• Revert current tendencies and give pedestrian infrastructure priority.
• The construction of quality cycling infrastructure (both pedal cycles and e-bikes) - safe (separated from motorised traffic), coherent (in network) and close to all (proximity).

d) New Technologies and Ownership Models
The selective, focussed use of ‘big data’ has many potentialities. Transport operators have access to an enormous amount of data points. The experience of Transport for London (TfL) suggests that making this data available to all in real time (with limited restrictions based on data protection laws) can have a transformative effect on urban mobility and beyond.
In order to promote the development of technological ecosystems, a stable, transparent regulatory framework must be put in place, which calls for a new culture of collaboration between the stakeholders.

The availability of ‘big data’ also enhances the possibilities for greater integration of mobility services, although to maximise such gains, that transport operators should be multimodal.

The electrification of private vehicles might avoid some of the problems related to the car city (local air and noise pollution), though not others: climate change; road accidents; air pollution from tyre and beak ware and from electricity generation; car-centred urban.

Conclusion & Way Forward:

The term ‘post-car city’ does not imply the total elimination of cars from the urban environment; it signifies urban models that are based around the needs and interests of the individuals and communities rather than around those of cars and car users. There are clearly sound social, economic, public health, environmental and political reasons that support the shift to post-car cities. In addition to being necessary and desirable, there is evidence that the post-car city is also possible: public transport and active forms of mobility, harnessing new technologies, are capable of absorbing the vast majority of journeys currently made in private motorised transport.

Having said this, there are clearly significant barriers to change (cultural, political, institutional etc.), although as we have shown, such barriers can potentially be overcome by initiatives and strategies such as: strong political leadership, institutional (re)design, and the promotion of stakeholder and
grassroots participation. With these innovations in place, it becomes easier to implement the policy strategies and measures highlighted here, measures that are aimed at reducing private motorised transport and at promoting the shift to more liveable cities.

With regards the way forward, this UTC has sought to identify ways in which stakeholders can engage with public authorities in order to hasten the transition towards more liveable, post-car cities, and thus advance the implementation of the New Urban Agenda. This UTC has sought to develop a relatively simple set of indicators with data that is widely available in many cities, and that stakeholders can use to a) measure the liveability of a given city, and from there, b) monitor any progress over time.

Indicators:

1) Socio-spatial inequalities. Socio-economic inequalities condition and are conditioned by the physical structure of the city; the greater the level of socio-economic inequalities, the greater the level of segregation and marginalisation of large sections of the population. This in turn cause environmental problems. Thus, we should measure average income per capita differences between different neighbourhoods of the city.

2) Built environment/land use – population density. As noted, urban and suburban sprawl must be avoided in favour of medium-sized, densely populated, mixed use cities. Thus, we should measure: population density (1000s inhabitants per km²) and area of land subject to urbanisation (km²).

3) Public space. In the car city, a minority (car users) consume a disproportionately large amount of public space. Thus, we should measure: the proportion of public space given over to motorised transport (parking and carriageways) with regards to public space for pedestrians and mixed uses (play areas etc.).

4) Autonomy of vulnerable groups. When healthy, safe and clean public spaces are created, one of the consequences is the increased autonomy of vulnerable
groups. One measure of this is the proportion of children able to walk or cycle to school in safety.

5) Deaths and injuries from traffic accidents. Millions of people are killed and maimed each year by traffic violence. This not only has a terrible cost in terms of human lives, but fear of accidents also conditions how we use the city. Thus, we must measure deaths and serious injuries in traffic accidents.

6) Air and noise pollution. Virtually all cities suffer from air and noise pollution levels that exceed WHO recommended levels. In urban contexts, road traffic is a key contributor to this. Thus, we propose to monitor the levels of the pollutants NO2, PM10 and Ozone, along with noise pollution levels.

7) Modal share. Clearly, the use of sustainable forms of mobility (walking, cycling and public transport) compared to car and motorbike use is a key indicator of the sustainability of a city. Thus, we should measure the modal share of all the main forms of mobility, including walking.

8) Cycling infrastructure. Virtually all studies point to the construction of safe, connected cycling infrastructure as key to promoting this mode of transport. Thus, we can measure: kilometres of separated cycle lanes versus total length of carriageways.

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**Recommendations:**

Given the nature of the urban transformation that we have dealt with in this UTC, public agencies clearly have a key role. Thus, we recommend that:

1) Public administrations at all spatial scales make an unequivocal commitment to drastically reducing private motorised transport in the urban environment.

2) Political leadership focusses on overcoming:
   a. Institutional fragmentation
b. Car-city planning cultural inertias

c. Opposition from minority groups

3) Health agencies play a greater role in planning and mobility policy-making.

4) Mechanisms be established for constructive engagement between public agencies and all relevant stakeholders. These should include:

   a. Forums for stakeholder participation in all stages of the policy-making process (design, implementation and monitoring).

   b. Data collected by transport operators should be made freely available, except where data-protection laws explicitly rule this out.

5) Spatial planning that promotes urban sprawl, suburbanisation, out-of-town shopping etc. should be avoided. Intermediate-size, compact, mixed use urban forms should be promoted where possible.

6) Access to high-quality urban space and sustainable mobility services should be regarded as basic rights that local authorities have the obligation to make effective.

7) Public space used for cars (carriageways and parking) should be reduced and replaced by friendly, clean and healthy public spaces aimed at mixed uses by all members of the community, particularly the most vulnerable groups.

8) Effort should be made so that car-users absorb the negative externalities that society in general currently bears, through, for example, congestion charging and increases in parking prices, especially on-street parking.

9) More budget resources should be devoted to public transport and active mobility infrastructure, particularly pedestrian ones, which have generally been absent from policy-making considerations.
Monitoring & Reporting:

By using the indicators identified in the Action Plan, it becomes relatively easy for stakeholder groups to monitor the extent to which progress is being made towards the liveable, post-car city of the New Urban Agenda. In terms of quantifiable objectives, we propose the following propose to use 2030 as our benchmark year, given that it coincides with the SDG timeframe. Some of the goals and indicators are shared with the SDGs, but others are not, and are more specific. In addition, we would like to insist on the importance of a global approach to this issue, which brings together a range of policy areas.

1) Socio-spatial inequalities – average income per capita differences between different neighbourhoods of the city. Goal: by 2030 GDP/per capita differences between the wealthiest and the poorest neighbourhoods should be reduced by 25%.

2) Built environment/land use – population density (1000s inhabitants per km2) and area of land subject to urbanisation (km2). Goal: by 2030, we expect to see a 20 per cent reduction in the ratio of land consumption rate to population growth rate.

3) Public space – proportion of public space given over to motorised transport (parking and carriageways) with regards public space for pedestrians and mixed uses (play areas etc.). Goal: by 2030, space for motor vehicles should not exceed 20 per cent of total urban public space.

4) Autonomy of vulnerable groups – proportion of children able to walk or cycle to school in safety on their own. Goal: by 2030, all children over 10 should be able to walk or cycle to school in safety on their own.

5) Public health – deaths from traffic accidents. Goal: by 2030, zero deaths and serious injuries from traffic accidents.

6) Air and noise pollution – goal: by 2030 all cities should comply with WHO guidelines on air and noise pollution.
7) Modal share – goal: by 2030, the modal share of private motorised transport should be no higher than 10 per cent in any urban context.

8) Cycling infrastructure – goal: by 2030 cycling lanes should represent at least 50 per cent of the total length of carriageways in urban environments.

Given that most stakeholders came from the Barcelona area, our objective is to engage with them in workshops over the coming year in order to exchange information on the degree to which the goals that we have set are being achieved in this city. When sufficient data is available, we will then bring this information in a report which we will then share with the WUC.

Our objective is to repeat the above procedure every five years until 2030.

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**UTC key speakers:**

Keynote Speakers:

- Day One: Jose María Ezquiaga (President of AETU) (Spain) “Current Strategies for the Challenges of the Car City”.
- Day Two: Florian Lorenz (General Manager Smarter than Car) (Austria) “Futurama Redux: Imagineering Urban Mobility after Cars and Oil”.

Workshop Speakers:

- Workshop 1: Alfonso Sanz, Philip Insall
- Workshop 2: Francesc Muñoz, César Mosquera
- Workshop 3: David Bravo, Mark Wagenbuur
- Workshop 4: Enric Cañas, Rikesh Shah
- Workshop 5: Carlos Verdaguer, Antonio Turiel
- Workshop 6: Tadeshi Matsumoto, David Bravo
- Workshop 7: John Etherington, Luisiana Paganelli
List of participants:

List of organisations represented:

1. Universitat Politècnica de Catalunya/BarcelonaTech.
2. Gea21: Grupo de Estudios y Alternativos
3. Pontevedra City Council
4. Mcrit, S.L.
5. Institute of Marine Science – CSIC, Barcelona
6. Autoritat de Transport Metropolità (Barcelona)
7. Universidad de Cantabria
8. Barcelona Regional
9. Freeel Electric Bikes
10. ISGLOBAL: Barcelona Institute for Global Health
11. Transports Metropolitans de Barcelona
12. University College London
13. ALEFRANCE
14. European Council of Spatial Planners (ECTP-CEU)
15. Àrea Metropolitana de Barcelona
16. Universitat Autònoma de Barcelona
17. Paisaje Transversal
18. Saba Aparcaments, S.A.
19. Barcelona City Council
20. Asociación Española de Técnicos Urbanistas (AETU)
21. Federación Iberoamericana de Urbanistas (FIU)
22. Diputació de Barcelona
23. Metropolis Mujeres
24. ACEFAT
25. A Coruña City Council
26. OECD
27. Transport for London
28. Insall and Coe
29. Design for All Foundation
30. Smarter than Car
31. Som Mobilitat Co-operative
32. PTP (Promoción Transporte Público)
33. OuiShare Mobility

List of partner groups represented:

1. Local and Subnational Authorities: 26
2. Research and Academia: 37
3. Civil Society Organizations: 35
4. Grass-root Organizations: 16
5. Women: 11
6. Parliamentarians: 0
7. Children and Youth: 3
8. Business and Industries: 5
9. Foundations and Philanthropies: 10
10. Professionals: 48
11. Trades Unions and Workers: 1
12. Farmers: 0
13. Indigenous People: 0
14. Media: 3
15. Older Persons: 1
16. Persons with Disabilities: 4

List of countries represented:
1. United Kingdom
2. Spain
3. Israel
4. Belgium
5. Brazil
6. Australia
7. Lithuania
8. Italy
9. Guatemala
10. Netherlands
11. Germany
12. Austria
13. France
14. Switzerland
15. Ecuador

Weblink to key Social Media posts:

- https://twitter.com/FIURB/status/923222680819683328
- https://twitter.com/paistransversal/status/922871044033138688
- https://twitter.com/FIURB/status/923086784006950912

Website:


UTC Photos