

Mobility Networks: Big Scale to Meet Big Challenges

ULI Belgium's fifth workshop on "Stations and the City" focused on two case studies of railroad infrastructure constructions, one in London and the other in Paris. Held on June 14, 2018, the 29 workshop participants had the opportunity to reflect on the impacts of building networks of communication by creating a better urban environment, dynamic growth, and socioeconomic development.

That's the mindset that we need to find: build that collaboration between the business and the public communities."

—Alain Flausch
Honorary Secretary General, UITP



"The growth of major metropolises is possible only with the introduction of infrastructure such as 'Grand Paris' and 'Crossrail,' enabling the development of peripheral towns around the metropolis and in so doing preserving the human dimension of the 'town'".

—Gérard Philippson,
ULI Belgium board member

Distinct Paradigms for the Metropolis: Circular and Linear Integrated Networks

On January 1, 2016, Paris was officially made a *métropole*—the Métropole du Grand Paris (MGP)—and thus the development process of 200 kilometers of metro lines, started in 2007, has become even more relevant than it already was. In London, the first proposal for a cross-London rail route was introduced in 1880, and the official planning process began over 100 years later in 1989. The soon-to-be-achieved goal is to build 100 kilometers of tracks across London to increase its capacity and reduce journey times.

The structure of the Grand Paris Express is orbital. In London, the proposal is different: the Crossrail 1—the "Elizabeth Line"—is intended to create a linear underground line across central London from east to west. Both visions have as the main goal the integration of the new communication lines within the existing ones in order to reinforce mobility and connectivity.

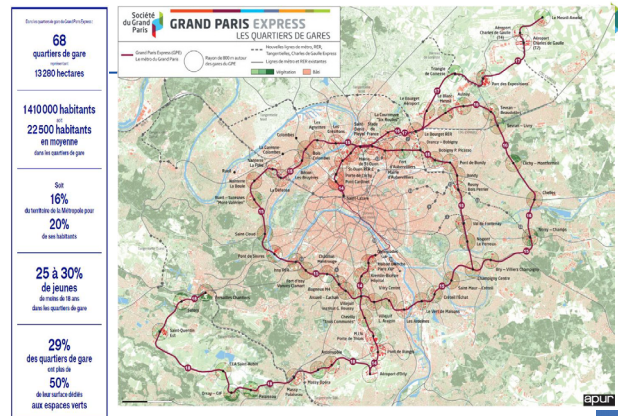
Alain Flausch, former CEO of the STIB Brussels public transport operator and Honorary Secretary General, UITP, asked in his opening speech to all attendees: "What about Brussels?" Although the Brussels region is of a different scale than Paris and London, that does not exclude it from consideration of the need for a bigger mobility infrastructure. According to Flausch, it is desperately needed. Such transport infrastructure affects economic growth and sustainability. The amount of time that people spend commuting and otherwise moving around is also a question of quality of life. As cities densify, working on finding better mobility solutions is essential. From two case studies introduced today, we should be learning lessons for the transport infrastructure in Belgium.

Paris: Scaling Up Area Development Holistically

The Société du Grand Paris is the state agency commissioned to design and implement by 2030 the Grand Paris Express. **Catherine Barbé**, director of strategic partnerships at Société du Grand Paris since 2010, developed the mind-set behind the project, which is planned to comprise 68 new stations and 200 kilometers of lines supplementing the 200 already existing, at an estimated total cost of €35 billion.

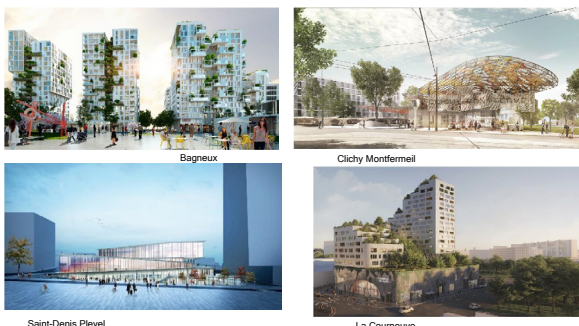
Since the use of public transport has increased over the past 20 years and because the inner Paris railroads are suffering from congestion, the decision was made to build a circle line around Paris. Two million people live in inner Paris and 5 million more in Greater Paris. Barbé explained that the inhabitants of Greater Paris are suffering from a lack of connectivity and therefore mobility. The existing rail roads based on a radial format force user who wish to move from one suburb to the other to go first to the center of Paris and then leave Paris to reach their suburban destination. This results in pressure on the inner Paris metro or rail systems and increases the time allocated to transport from suburbs to suburbs

higher education. Vitry Centre's situation is one example. A low-income city located outside Paris in the south, along the Seine River, Vitry Centre has no metro station at the moment. Studies show that for a 45-minute journey, access to job opportunities will increase by 131 percent and journey times will improve by 302 percent.



A station for each territory

Société du Grand Paris



The Grand Paris Express goes around the city with one main circular road and two smaller ones. It will create a direct connection between the three Paris-area airports while giving suburban areas a better chance to be integrated into the mobility network. The different lines both connect and are being connected with the existing networks. The Société du Grand Paris expects 2 million passengers a day with a driverless metro that can have one train every two minutes.

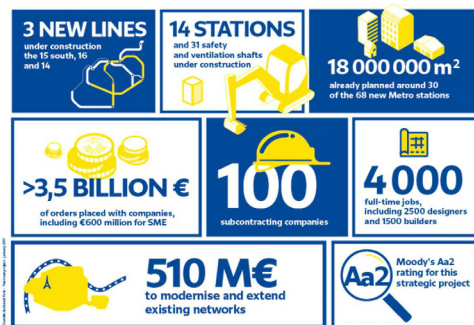
One aspect of a good métropole is its transportation infrastructure. If such infrastructure generates significant socioeconomic impacts, even better. In France, one must now demonstrate the socioeconomic benefit of a public project, which entails the complementary objective of preventing obstacles and delays later. Paris estimates the economic and social benefits generated by the Grand Paris project at €100 billion. This growth includes tax revenues produced by job opportunities at economic and research education hub developments due to increased connectivity. On one hand, Paris is showing that building infrastructure is a tool for territorial development. On the other, the Grand Paris Express is proving that a public structural project is about long-term economic and social-oriented benefits, and not just financial returns.

The Strong Case for the Elizabeth Line's Establishment

Ben Tate, head of property development at Transport for London, shared reflections about the construction process of London's Elizabeth Line. When one is undertaking such big infrastructure, the timeline is a primary consideration: ten years of lobbying and analyzing, 11 years of building a detailed planning process, and ten years of construction. Tate accepted that major infrastructure projects take significant periods of time to deliver, but encouraged authorities to spend less time talking in order to get building more quickly. The more time you take, the more costs increase.

The situation at the end of 2017

Société du Grand Paris



The Elizabeth Line is creating 100 kilometers of track and 42 kilometers of tunnels within central London with ten new stations and 31 upgraded ones, fully integrated within the existing networks. The project is expected to cost £14.8 billion and will deliver £42 billion to the UK economy.

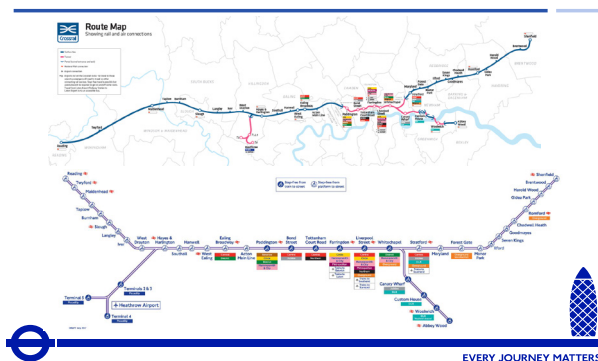
In December 2018, the line will enter into commercial service.

Barbé, an urban planner and a map lover, illustrated how this network will drastically improve people's lives in terms of shortened journey times, expanded territorial coverage, and increased access to employment and

With the line expected to handle 200 million annual passengers, the project's main goal is to deliver improved transport infrastructure, reducing congestion by expanding the central London rail capacity by 10 percent, increasing connectivity, reducing journey time, and really trying to support economic growth in London.

A second retrospective reflection brought by Tate is the necessity to build a strong business case early in the process, to understand the financial implications and to gain broad political and public support. For Tate, that was one of the Elizabeth Line's keys to success. Crossrail Limited—the company handling the design, financing, construction, and delivery of the project—designed an economic and financial architecture around the stations as they were being developed. A strategic, robust delivery is about being rational and gaining the trust of the various stakeholders and communities. Direct economic analysis has shown that the costs are huge, but Crossrail Limited calculated that £1.97 of direct benefits is generated for every £1 spent. And if one includes the wider economic and social benefits, it increases to £3 for every £1 spent.

Crossrail Project Overview



Thirdly, regarding the land assembly process and the compulsory purchase of land, Tate believed that the station sites turned out to be too small. There are 3.3 million square feet of urban projects called “over-station development.” Tate commented that there will always be a need to balance the scheme impacts on adjacent landowners and the potential to deliver improvements to the areas surrounding new stations. However, if the acquired land areas are too small, this can impact on build costs - due to increased constraints - and can limit wider regeneration benefits. The main challenge now for Crossrail is to achieve a smooth transition to the operation of the new system.

Crossrail Project Overview – OSD Schemes



• 3.3m sq ft of development

Planning Regeneration: Pushing In, or Pushing Out?

Besides site specificities, the London and Paris projects have similar goals—efficient mobility and connectivity—and both are looking at sustaining the metropolitan assets. In addition, the state's agencies are sharing the regeneration of the urban lands as a major goal.

In both cases, but even more for London, the conversation

on means to support regeneration came unfortunately later. The primary focus was improving the transport networks. In doing so, the question of the implementation of stations into the broader urban landscape arose. Opinions diverged, explained Barbé, between a perception of already overdeveloped areas and inputs on urban renewal: improving the developments and linking up the stations. Political governance and overall territorial analysis in terms of density levels, cost of living, and employment specializations are tools to decide upon how to regenerate areas and maximize benefits that flow to them.

Several goals underlie the development of stations. For Paris, bringing private developers to suburban areas where social housing prevails is one way to bring a diversity of uses and population while improving owner occupation. On the other hand, for London, Tate's first concern is that the potential of regeneration will be constrained by the operational aspects of stations in central London. Secondly, a comprehensive insight should guide urban planning in terms of pricing up risks—e.g., gentrification, pushing small businesses out—and the alteration of the urban fabric. Urban planning efforts can be badly perceived by citizens, warned Tate and Barbé. Perhaps that is the reason why involving local stakeholders is an absolute requirement for building consensus around the project and making the process as easy as possible.

Public Institution Framework: Top-Down Initiatives and Bottom-Up Compliance

When embracing such great projects, special legislation must be enacted, declared Flausch. To avoid pushback from numerous local authorities, France and the United Kingdom created state-level legislation to give guidance and powers to the public agencies because it is of national interest.

In 2008, The “Crossrail Act” enabled the Elizabeth Line's establishment. Likewise, the Grand Paris Express was made possible through a special act of Parliament that led later to a “Déclaration d'utilité publique.” Having one approach approved by the state is helpful: it wraps up all the approvals in one—land acquisitions, construction, heritage and planning approvals, and the governance of controls. Although London encompasses 32 boroughs, relations with stakeholders and local authorities were managed effectively because everybody was on the same page.

With 131 municipalities under the MGP canopy, the métropole is developing strategies to which the local authorities are submitting themselves. Public inquiries are the norm in a wide-reaching rail routes project. But how are these strategies being communicated?

Barbé explained to ULI the communications lines that are needed to build a communications network. First, it must be a continuous process because public and participatory debates are necessary to create compliance. With stations bordering three or four municipalities, the task is not easy. Relations with local authorities were strengthened because the mayors came to realize what stations are going to contribute to their local environment. One strategy is including local authorities in the decision process. Another is communication of the territorial studies to the mayors in order to effect a better understanding of the overall situation, giving mayors talking points when facing the public inquiries and creating possibilities of comparisons.

The Sensitive Question of Funding Infrastructure with Multiple Beneficiaries

One difference between Paris's and London's transport construction is the funding architecture. In Paris, the state is the only stakeholder and money provider. More precisely, Paris Region taxes and wealth are financing the Grand Paris Express. Besides that, the sale of properties above the stations through public competition to private developers, the issuance of bonds, loans, and commercial revenues are complementing the financial scheme.

The Elizabeth Line is in a more advanced state. Tate shared the insights they have gained regarding funding. Tate was clear about the challenges of having a 100 percent privately financed infrastructure project, simply because public transport infrastructure is a public matter and is not fully bankable. However, Tate does believe that the proportion of private money could increase, and for one simple reason: those who benefit the most in added value of assets should contribute more.

The Elizabeth Line was mostly publicly funded (65 percent), but Transport for London has the difficult task of looking for tools to increase private money funding for future infrastructure projects like Crossrail 2. Multiple potential solutions for the future were presented, including



value capture through a “commercial and residential transport property charge.” It is a levy on landowners in the influence zones of stations. The “business rate supplements on Crossrail 1” reached £4.1 billion, but was paid by rental occupiers who are not directly benefiting from the added value while the landlords are actually making the capital growth. Tate is aware that a levy on landowners will be controversial but believes that these issues should be fully debated in order to bring forward much needed infrastructure improvements. In addition to financial innovations, Tate and Barbé emphasized that innovations in construction to reduce costs in both projects are also intensively being investigated.

Conclusion: Shaping Cities' Futures through Rail Routes

Hosting two people from the public sector developing their giant projects with a mostly private sector audience was not an easy thing to do, but was necessary, according to Flausch. Discussions among the audience started on tax measures and the complexity of layers therein. Alongside densification, climate change, livable cities, one could say that the rail routes are also shaping cities' futures.

To liven up the discussion, Flausch brought up diversification of funding to the workshop's attendees. Relying exclusively on public subsidies is no longer the only option. The public and private communities need to find ways to collaborate in a trustworthy relationship. According to Barbé, urban dynamism comes from territorial development, but the public and private sectors are not mutually exclusive. Because real estate developments benefit from infrastructure, public projects are also built with the private sector's interest in mind.

Pictured left to right: Gérard Philippson, Founder and CEO, Sopedi Real Estate Financial Products; Ben Tate, Head of Property Development, Transport for London; Catherine Barbé, Director of Strategic Partnerships, Société du Grand Paris; Alain Flausch, Honorary Secretary General, UITP; Marnix Galle, Executive Chairman of the Board of Directors, IMMOBEL

About ULI

The Urban Land Institute is a global, member-driven organisation comprising more than 40,000 real estate and urban development professionals dedicated to advancing the Institute's mission of providing leadership in the responsible use of land and creating and sustaining thriving communities worldwide.

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ULI has been active in Europe since the early 1990s and today has over 3,000 members across 27 countries. The Institute has a particularly strong presence in the major Europe real estate markets of the UK, Germany, France, and the Netherlands, but is also active in emerging markets such as Turkey and Poland.

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