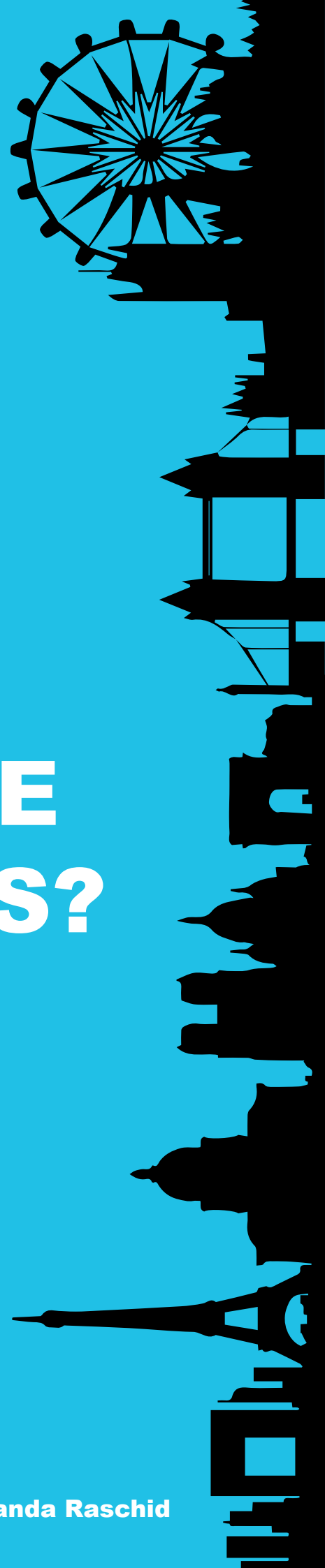


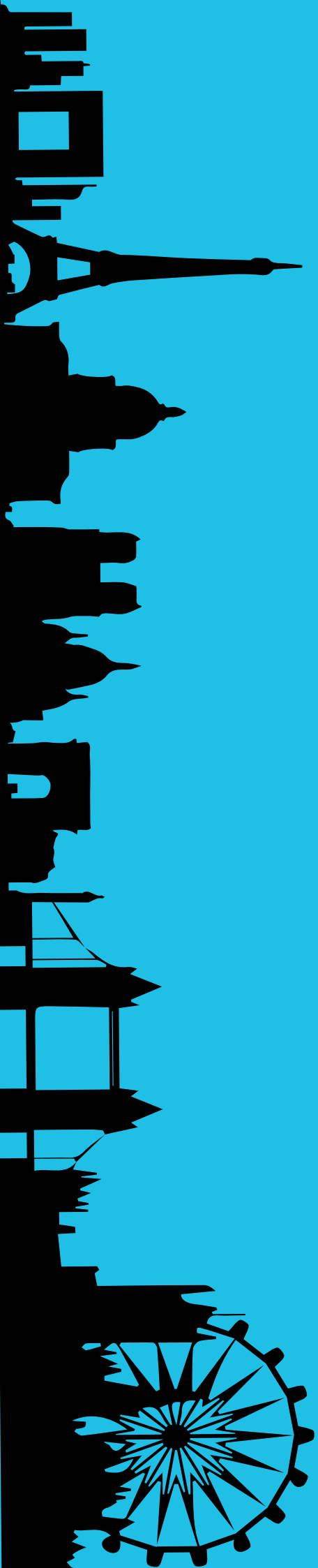
PARIS LONDON: ONE SINGLE METROPOLIS?

Capstone 2017

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Pietro Buffoni - Mélanie Eck - Roxane Lavollé - Miranda Raschid





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Emmanuel de Coral, Trade Development Advisor in Tech & Services, Business France, London

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Is there such a thing as a Paris-London metropolis?

Unity: a concept that has never been explored

Les "Meilleures ennemies du monde?"

Paris and London: together within Europe

Too different to compare

Disparate urban spaces

What is Paris? What is London?

Stronger through complementarity?

Introduction

In imagining a single metropolis between Paris and London, we found ourselves confronted with a space that has mostly been assessed in terms of competition (economic, financial, etc.) and that has never formally been studied through unity, apart from its inscription in inter-European organizations.

The two capitals are very different– almost too divergent to be compared– in terms of urbanization, functional economics, and scales. But could their dichotomy be the driving force of their collaboration? Could London's lacks be compensated for by Paris' strengths, and vice-versa?

IS THERE SUCH A THING AS A PARIS-LONDON METROPOLIS?

Unity : a concept that has never been explored

Given the historic Paris-London rivalry and the complex relationship between France and the United Kingdom, Paris and London have not been studied as a single urban space.

Les "Meilleures Ennemies du monde?"

In imagining a single metropolis between Paris and London, we found ourselves confronted with a space that has mostly been assessed in terms of competition (economic, financial, etc.). The cities are so divergent that Le Figaro gave them the nickname "Les Meilleures ennemies du monde" in a 2014 article. Although there is no literature mentioning both European capitals as part of the same space or the same megalopolis, by essence, the two metropolises fall into a vast existing literature on the organization of space in Europe and the European Union.

Paris and London: together within Europe

Europe is envisioned through several spatial structures that generate a comprehensive interaction between its major cities, especially in the western side of Europe. In economic geography, three spatial organizations are used to describe institutional functioning: the European megalopolis, the Ring, and the less popular but more wholistic European treillis ("Le Treillage de l'Europe").

The European megalopolis

De facto, one of the most recurring spatial entities defining Europe is the European megalopolis, or the so-called "Blue Banana," that takes the form of a transversal dorsal from Britain to Italy. The concept, developed by Roger Brunet, refers to the high density and urban space between London and Milan, over the Rhenan region.

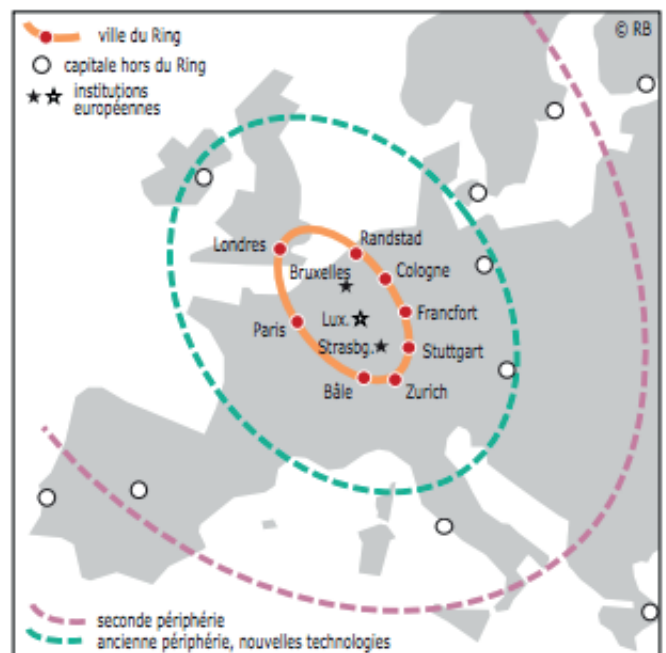
Historically speaking, the European dorsal was the result of the intense flux of economic activity and exchanges between the Northern Sea and the Mediterranean Sea, evident in its

spatial distribution in a dorsal shape across the Southeastern part of England, a large portion of the Rhur area, and through the Alps. The European megalopolis is assessed in terms of urbanization, or city-to-city density, which explains why Paris is slightly outside of the megalopolis, but is located in the buffer areas that benefit from and help shape the megalopolis.

The Ring

In an attempt to better assess the concentration of wealth, goods, flux, and large global cities in the northwest part of Europe, several authors (including Roger Brunet) have come up with a new way to synthesize the spatial organization of Europe. The Ring is a structuring axis of communication between all of the central capitals of Europe.

With the Rhenan center at its core (especially Luxembourg, Brussels, and Strasbourg as key cities in the governance of the EU), the Ring is fundamentally integrated in the European Union. The word "Ring" can be understood in both the German sense of the word (referring to the shape) or the English sense (referring to a space of competition); this dual terminology best reflects the double nature of the central space of Europe. Around the main ring is a constellation of peripheral rings with different purposes.



Source: Roger Brunet

IS THERE SUCH A THING AS A PARIS-LONDON METROPOLIS?

The European treillis

A final comprehensive model of European spatial organization, "Le Treillage de l'Europe," takes into consideration the dynamic duality between Paris and London and the aforementioned schemes of organization. A classic geographic understanding of "les lieux centraux" explains that cities of the same size tend to locate in equidistant locations, creating hexagons of cities. The European treillis makes obvious the flux and primary communication axis between these cities and around the European Dorsal. Around the megalopolis, complementary cities of the same size create two parallel axes, the PLM (Paris-Lyon-Marseille) and the continental European Hamburg-Berlin-Vienna across the dorsal. This model allows us to understand the metamorphism and symmetry around which Paris and London interact. The two cities alone are not one single space, but a larger scale of analysis allows us to place them in a wider context for further understanding.

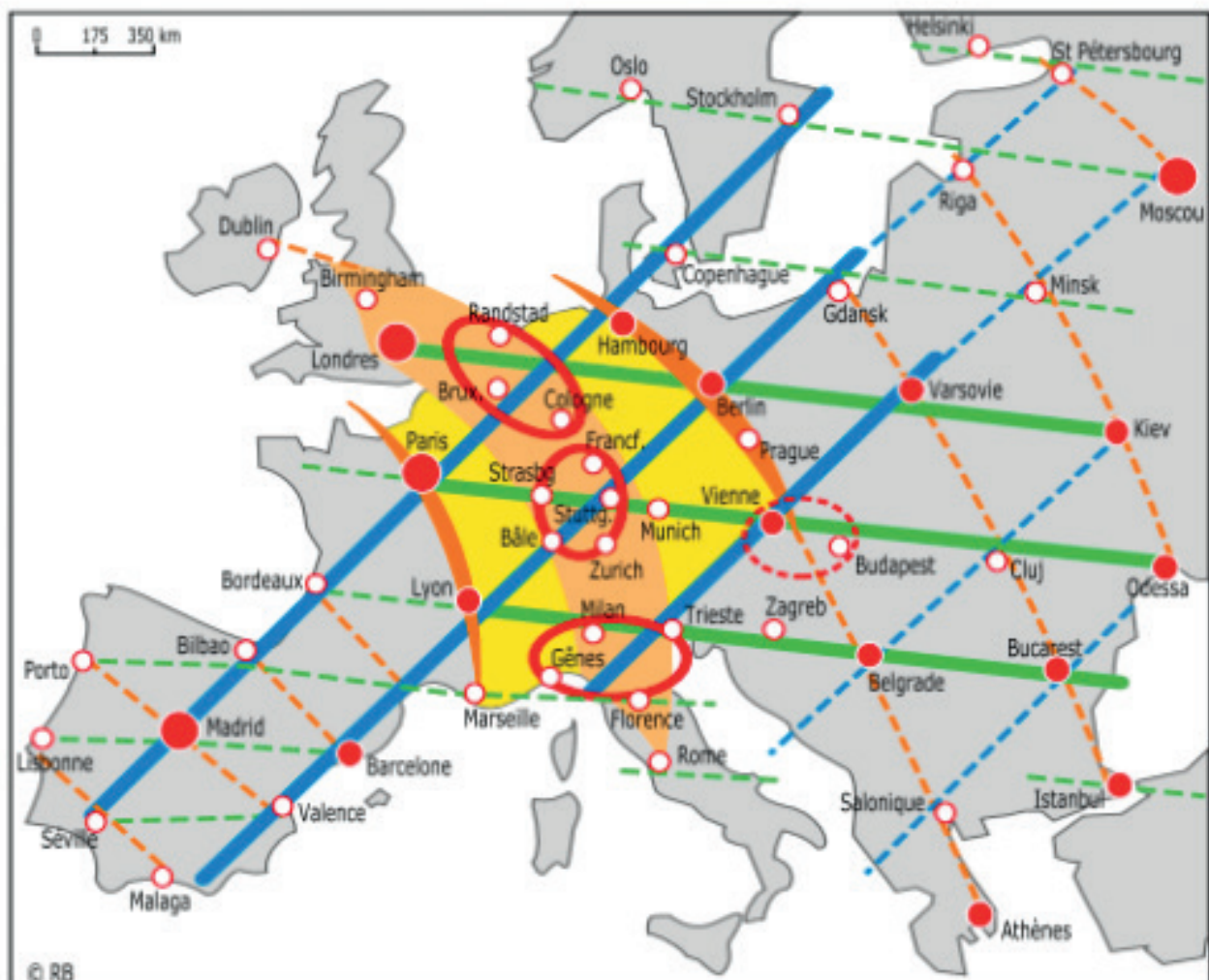
In the literature we can see a dominating trio leading Europe in terms of density, economic and demographic resources, or flux (railways, airports, etc.): Paris, London, and the Rhur area.



Source: LSE

In a similar approach to ours, the London School of Economics (LSE) recently published a report entitled the "Tale of two regions," comparing the Greater Southeast and the Dutch Randstad, assessing both polycentric spaces in terms of economic growth and sustainability.

Most of the existing work on this potential polycentricity has tried to assess the common grounds for a European politics of a dynamic economic and urban nature. However, those spatial organizations do not assess Paris and London as a single metropolis yet, and the quasi-totality of the literature only refers to the two large European capitals as competitors.

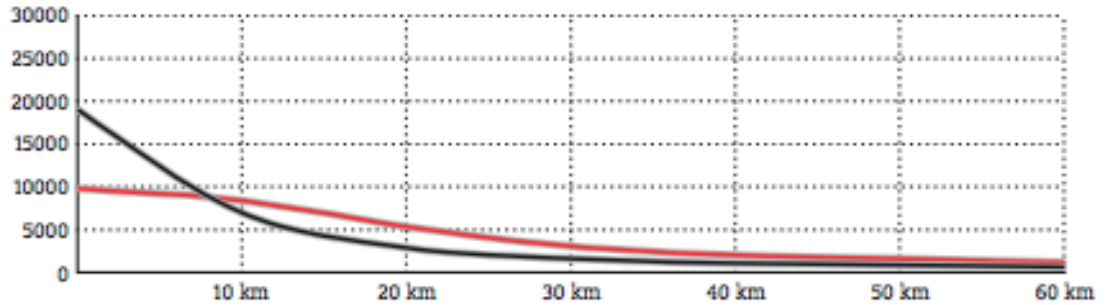


Source: Roger Brunet

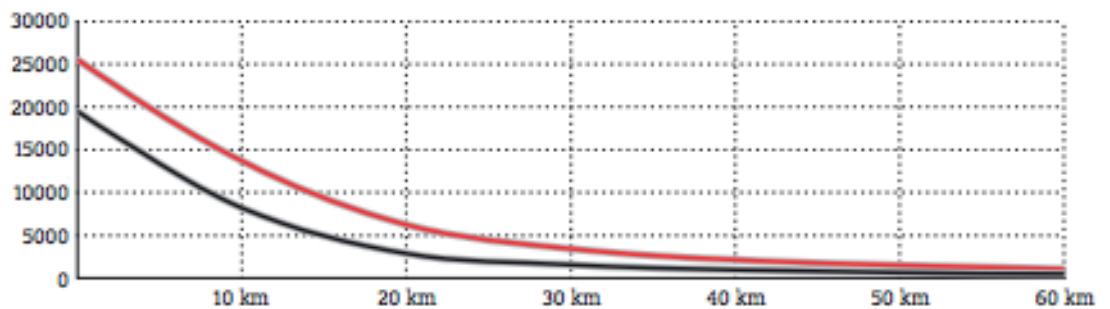
TOO DIFFERENT TO COMPARE

Densités
au km² en fonction
de l'éloignement
des centre des villes
— population
— emplois

Londres



Paris

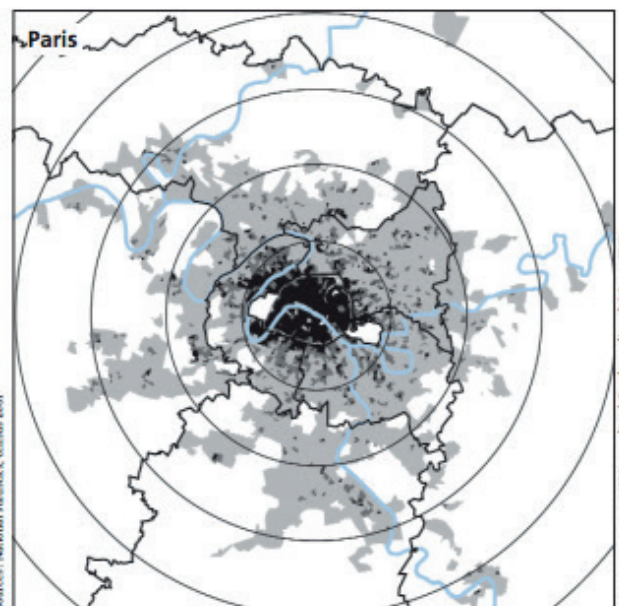
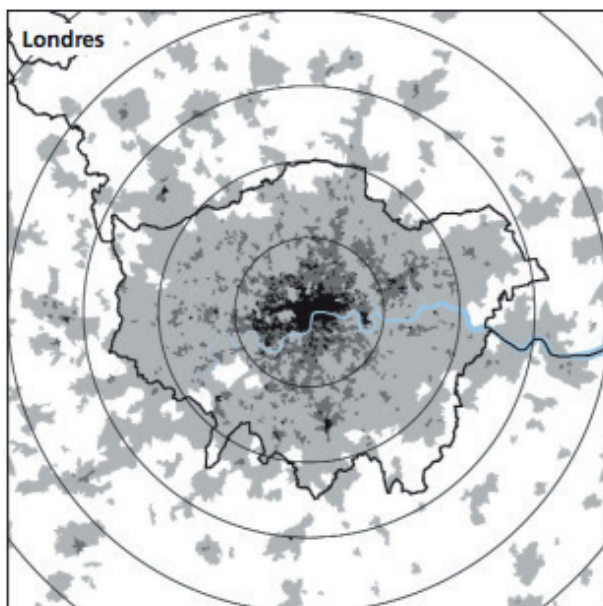


Source: APUR

When one thinks of Paris and London, every potential field of cooperation appears very complex. Are they even comparable? What is Paris? What is London? These are questions that emphasize the need for a better apprehension of the two capitals before placing them on common ground.

Disparate urban spaces

The great dichotomy between Paris and London begins with a difference of spatial structures, which can be explained through history, as well as different dynamics of metropolitan development.



Source: APUR

TOO DIFFERENT TO COMPARE

The first criteria to assess the divergent spatial organizations of Paris and London is density. The latter is significantly more diffuse than the French capital, while the former tends to be very dense in the center, with a density reaching more than 250 inhabitants/ha in certain "arrondissements" (15è, 18è, 19è, 20è, etc.). At the same time, the maximum density within London does not exceed 100-150 inhabitants/ha, the average for suburban areas of "La Petite Couronne" in Paris.

Paris falls into the typical continental European economic model of urbanization, which concentrates people as well as jobs in the center and expands proportionally towards the periphery. Its density at the very center is exceptionally high (with a population of 25,000 and 20,000 jobs) compared to the American model or Saxon model of urban economy that London adheres to.

In London, concentration is more moderate in the center, with more jobs than residents; both medium densities fall less steeply than the Parisian model, offering a better coverage and a better repartition of jobs and population across a larger space.

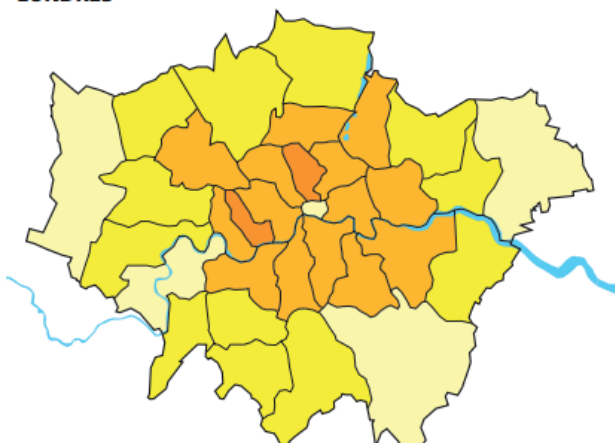
Most of the disparities between the two cities, notably regarding their economic models, in terms of activities and competition, result from their different spatial structures. In a broader sense, what are the Parisian and the Londoner areas? That is, how can we measure and assess Paris and London?

PARIS	Paris Urban Area	Paris Petite Couronne	Métropole du Grand Paris	Paris Grande Couronne	Ile de France	Paris commuter area
Area (km2)	105.40	657	814	11,250	12,012	17,175
Population	2,265,886	4,497,890	7,019,615	5,232,296	11,959,807	12,405,426

LONDON	Inner London	Outer London	Greater London Region	Greater London Urban area	London commuter area	London + South East
Area (km2)	319	1,253	1,572	1,737.9	-	20,833
Population	3,231,901	4,942,040	8,173,194	9,787,426	13,879,757	16,808,194

Source: insee (2014) / Office for National Statistics, 2011, Eurostat 2013

LONDRES

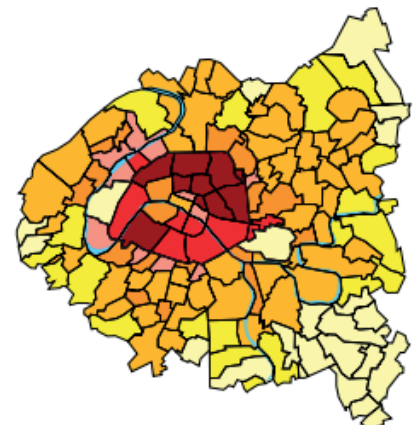


Densité de population



0 5 10 15 km

PARIS+COURONNE



Source: APUR

TOO DIFFERENT TO COMPARE

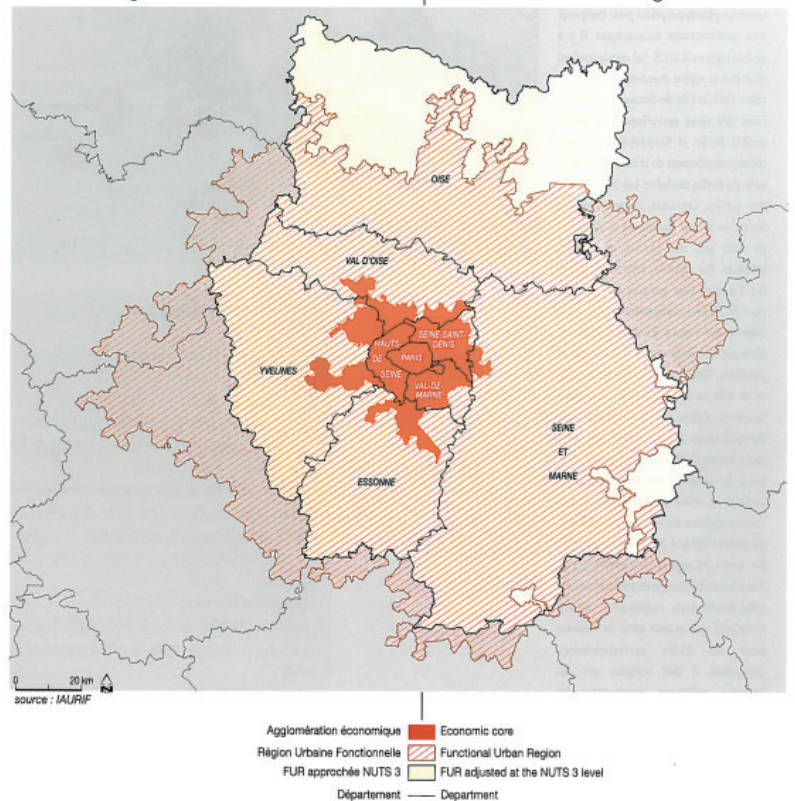
What is Paris? What is London?

Inspired by Saskia Sassen's work on global-city regions, and other existing literature on the idea of a metropolis, the key issue at hand is that Paris is not "Paris" and London is not "London."

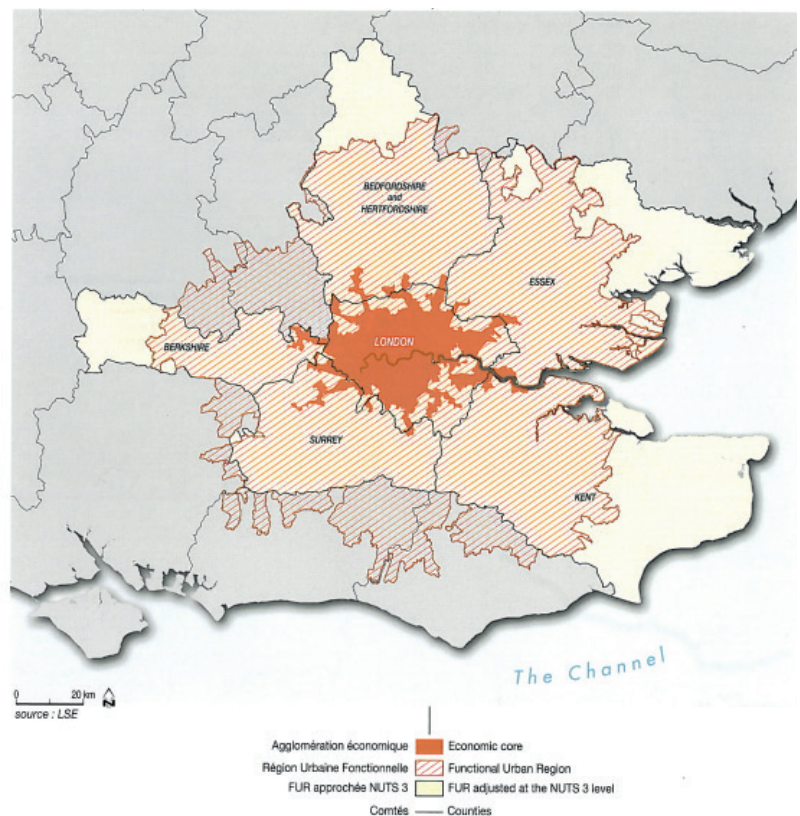
The terms Paris and London operate on multiple scales. Where the cities could collaborate, collide, or compete requires a full understanding of space in the individual entities. To what extent is London spatially diffuse, and how can Paris interact with that space, and vice-versa?

With the impact of polycentrism in the construction of modern cities, there are no "cities," but rather are metropolises in a more global and integrative sense. The social networks of cities encompass the capital and their surrounding suburbs, from Evry to Rouen for Paris, and from Cambridge to Southampton for London.

The first scale for understanding both Paris and London is the "City" (not the metropolitan area), which is both spatially and historically limited. The second scale requires considering the cities' economic core, a spatial figure that actually quite resembles the Grand Paris as we understand it; in the same way, the economic core of London surpasses the City itself. The third and final scale for Paris and London is the Global City Region, le Grand Paris and Greater London.



Source: GEMACA 2002



Source: GEMACA 2002



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Nicolas Lefebvre, General Director, Office du Tourisme et des Congrès, Paris

Flavien Menu, Director at Office for Cities, Paris

Capstone

Are Paris and London comparable?

Pierre, Eurostar

I do not think the two cities actually play in the same game. For instance, New York, for sure, is very international, but still remains an American city. For me, **London is not a British city; it is more a world-city.** Paris, on the other hand, is a big European capital, but certainly not a world-city. Contrary to in London, in Paris you do not have around 40% of the population that is from outside of country.

Nicolas, Office du Tourisme

The scale of the two cities is very different. London is almost an achieved metropolis with a governance system on the metropolitan level. Sadiq Khan is competent in almost the totality of crucial public affairs on the totality of the metropolitan area. On the other hand, when thinking about doing something **in Paris, you have to deal with the city, the metropolis, the region, the State**, and they are all very different and complex institutional bodies. Sadiq Khan can deal with Anne Hidalgo, but also has to deal with the region's President, the Metropole du Grand Paris president, the Chief of Police etc. It is **complicated**.

Martine, LATTS

In terms of **public administration**, when you compare Paris and London, Paris is "much smaller than the Greater London Authority." One could even argue that "in terms of political leadership, [...] **Anne Hidalgo has much more power than Sadiq Khan.**"

Considering the Mairie of Paris in terms of administration, there are around "35,000 people working there, and in London, the GLA administration is much smaller."

However, while the Mairie of Paris is "an institution with a lot of power and political leadership, and international visibility **at a larger scale**," the public authority "**is just too fragmented**" and the actions of all the local authorities are "not coordinated," as opposed to London, where the administration of the GLA includes all the territory of the metropolitan area.

Flavien, Office for Cities

Comparing Paris and London is an interesting question. "I think it's possible," but it all "depends at what kind of level you think. There is **policy transfer** between Paris and London, but as much as between **London and the rest of Europe**, with Copenhagen for instance."

Capstone

To what extent are London and Paris at the center of their respective national context?

Emmanuel, Business France

One should definitely **differentiate between London and the rest of England**.

Maxime, Business France

London is an island. It's not representative of the whole UK population. First it's **the only region in Britain that voted to remain**. Londoners are very open, but of course if you travel to Cardiff or Birmingham, I don't think the French living there had the same perception of Brexit.

Christian, French Embassy

London, to me, has this capacity to be the **driving force in the country**, way more than in France. And the **UK is definitely hyper-concentrated**. When you go to Birmingham, the 2nd biggest city in the country, prosperity is not really the first word that you would think of.

Philippe, French Embassy

Statistical surveys assess that the average salary per inhabitant per year is around £23,000 in London and the Greater South East, while it is around £15,500 in the rest of the country.

Simon, Crossrail

Projects on a large scale, such as big transportation development schemes, are happening in the UK only in London. This brings a political tension, as "there is [...] a feeling in the UK as a whole that **London gets all the investments**. And the reason why London gets all the investments is that **London produces all the money**.

Pierre, Eurostar

At the end of the Museum of London, there is a question that is something like "Do you think London should be independent?" It is even more true and even more clear now with the Brexit results, but what strikes me is how relevant this question is, because **London is so distinct from the rest of the country**. For instance, the UK economy suffered a lot from the 2008 crisis, while London's economy did not suffer as much.

Christian, French Embassy

Contrary to what many think, **London plays a way stronger role within the UK, than Paris does within France**. People always say that Paris is very centralized, but it is even more striking here in London.

Pierre, Eurostar

Against all the stereotypical views, I think **England is way more centralized than France**, in terms of transportation, for instance. In England, there is a larger differentiation between London and Manchester or Birmingham than between Paris and second-rank cities such as Bordeaux, Marseille, Strasbourg, etc. The latter actually have a European dimension that cities in England do not have. England is more of a macrocephaly with London at its core, than France is with Paris.

" " indicates a direct quotation.

Text outside of quotation marks is paraphrased, but maintains the integrity of the interviewees' thoughts.

[...] indicates an omission.



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Capstone

What is the added value of each city?

Pierre, Eurostar

London is definitely a city that has benefitted from globalization. I don't think that apart from London I would call any other city a global-city, and definitely not Paris. I think New York is a very open and international city, but it is still an American city. London is not like any other British city.

Christian, French Embassy

The UK has this huge **soft power instrument that is their language**. By definition, London is a global-city oriented towards the rest of the world, something that could become even more true now with Brexit. **London has this pretense of being this world-city that Paris does not have;** maybe Paris could be considered a world-city on specific topics such as culture, fashion, etc.

Nicolas, Office du Tourisme

There are remarkable differences between the two cities. They have similarities, but also **historic divergences**. We do not have the same history nor the same tourism characteristics as London. **The image of Paris as a romantic city** with big museums, the Seine, Montmartre, La Joconde, the Eiffel Tower makes the whole world dream about Paris. We know that it is one of the principal leverages of Paris' touristic attractiveness for Chinese, Korean etc. But we are also aware that it is a handicap because it **hides the modern side of Paris in terms of innovation**.

Maxime, Business France

There is a real promotional challenge to promote Paris outside of the **romance and the clichés**. Paris is way more than that; it is now crucial and is developing more and more, especially in the innovation sector.

Maxime, Business France

But I do think **the identity is way stronger in Paris than in London**, because it's very diverse; London is a bit of a catch-all city, less concentrated than in Paris.

Capstone

Could Paris and London be stronger through their complementarity?

Laurent, Welcome City Lab

"I see the two cities in **big competition**. For us, London is the biggest competitor of Paris. [...] Paris and London are, at the same time, political, economical, cultural cities that grew a lot in the 19th century [...] and in terms of politics and culture London and Paris have always been competitors. So I see them as **more competitors than complementary**."

Philippe, French Embassy

Economically, the two cities are following **convergent models**, both going toward large liberalization. However, if one offers **financial services**, he could be situated in London, Dublin, Paris, etc., and in this aspect, the issue of **competition** is way more important than complementarity.

Christian, French Embassy

Paris and London share **different heritages, different dynamics**, and, therefore, two distinct populations and **two distinct metropolis**. Both of them envision each other with different stereotypes, but those have changed, in my opinion, in the last decades.

Chris, London and Partners

"I love the fact that the cities have **different identities**." They have different languages, and that "suggests that they will never be a single metropolis," as "the natural extent of that will be that **there will be one language**." However, this is not a negative asset for the two, and it would be a shame for them to "become one sort of **bland single metropolis**." We need "the diversity of the world."

Lalage, London and Partners

What should be preserved is the **great differences between Paris and London**. "One of the values of Paris and London is that they are different, they have **different strengths**. This aspect must be protected in the **process of collaboration** between the two cities. "The risk and opportunity for Paris is to become the museum quarter of London."

Emmanuel, Business France

Clearly, Paris and London will **benefit from working together** instead of being in competition. In order to face in Asia, Singapore, Hong Kong, and Shanghai, **London and Paris have the choice between shooting at each other or working together on different skills**. They **really could be complementary** [...] Once again, Paris and London are like mutual peripheries, almost as if we could take the RER to reach the other.

Pierre, Eurostar

I think there is already **a part of Paris and a part of London that live in symbiosis**. Being provocative, we could envision London as a hub and Paris as a spoke regarding financial and cultural issues. There is a very integrated population between Paris and London, and it is very obvious because they all take the Eurostar. **But this integrated population is not representative of a typical Londoner and a typical Parisian**. As far as we've seen, 90% of people who use the Eurostar have a smartphone, and 80% of those have an iPhone. It says something about those to whom Paris and London are a single metropolis.

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[...] indicates an omission.



Paris Urban Area

- 105.40 km²
- 2,265,886 inhabitants

Métropole du Grand Paris

- 814 km²
- 7,019,615 inhabitants

Ile de France

- 12,012 km²
- 11,959,807 inhabitants

Inner London

- 319 km²
- 3,231,901 inhabitants

Outer London

- 1,253 km²
- 4,942,040 inhabitants

Greater London

- 1,572 km²
- 8,173,194 inhabitants

London + South East

- 20,833 km²
- 16,808,194 inhabitants

STRONGER THROUGH COMPLEMENTARITY?



Paris and London function as two very different systems in terms of perimeter and scale, which explains why the two capitals have mainly been studied in terms of competition, especially regarding each city's financial power. However, given the recent political context and the complexification of the French-British relationship since Brexit was announced, it appears strategic at this stage to envision a convergent relationship between the two metropolises. Could their divergences be turned into complementarities? Could Paris benefit from the strong exogenous system of London, and vice-versa?

Even in their position within the global context, the two cities are very specialized, and approaches to complementarity can be undertaken from their exogenous and endogenous functioning economic models. The power of London in attracting resources from all over the world (investments, qualified and unqualified labour, students, etc.) and using them to start and improve businesses may be diminished by the physical and symbolic barriers created by Brexit. It might be an opportunity for the French capital, whose "industrial" characteristics differentiate it from Anglo-Saxon metropolis such as London and New York, to seize, as long as the two cities start a dialogue.

Collaboration between the two cities would be highly symbolic. A first step in imagining a common future is crossing the main frontier between the two, the physical water barrier separating Paris and London: the English Channel. Creating a tunnel to make way for the Eurostar a couple of decades ago was a symbolic step in envisioning a common future. As Anne Hidalgo put it, "crossing the Channel as one crosses the périphérique."

Complementarity should be undertaken in different fields. Looking at the issues at stake in any globalized large metropolis, and especially in Western Europe, we identified five themes of possible cooperation between the two cities: Mobility, Sustainability, Innovation, Social Issues, and Culture & Tourism.

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Methodology

Stripping down to five themes
Q&A

Tales of inspiration

Hong Kong-Shenzhen-Macau:
A case of a multi-urban
complementary system
Seattle-Vancouver: Cross-
border innovative cities
Copenhagen-Malmö: an
effective case of cross-border
integration

How to read the document

Through this document, we aim to provide a holistic understanding of the state of collaboration between Paris and London. With the goal of providing a broad overview of the functional economics between the two rival cities, we take a thematic approach allowing us to disentangle the complex reality. We focus on five themes– Mobility, Sustainability, Innovation, Social Issues, and Culture & Tourism– that call into question different scales and appear to be crucial to the development of the modern city and a means to achieving polycentrism. Within these five themes, we consider different projects, whether concrete or projected, present or dreamt, to assess different levels of cooperation between the two cities.

To further our investigation on the opportunities of polycentrism, this document is punctuated by facts and data of three other couples of cities (Hong Kong-Macau-Shenzhen, Seattle-Vancouver, and Copenhagen-Malmö), that constitute a benchmark of analysis for the state of collaboration between Paris and London. At the end of each section, we include a Question and Answer (Q&A) session based on interviews we conducted in Paris and London in the form of a text message conversation.

STRIPPING DOWN TO FIVE THEMES

Mobility

The mobility sector is one of the most important when dealing with the integration of a metropolitan area. In order to conceive an integrated urban space, transportation within the geographical area is always a priority for policymakers. Paris and London have two of the most developed and widespread public transportation networks in the world, and they have inspired each other when developing their public transportation systems on many occasions.

While there has been a long-lasting comparison of the two cities throughout history, in order to envision a single urban space composed by Paris and London, efforts of integration necessitate the implementation of an integrated mobility scheme.

Sustainability

Sustainability is crucial to the development of a modern, resilient city. International concerns of hegemonization and of shared responsibility of climate change are key to understanding a metropolitan approach to sustainability, and cooperation is particularly important, hence our focus on sustainability.

As the host of the Cop 21 and the leader of the C40, Paris sets a high standard regarding the environment for London. Worldwide emphasis on environmental issues with different meanings (energy, green mobility, and gas emissions) increases the need for a sustainable city, which Paris and London both aim to achieve by looking in the same direction, but through different means.

Innovation

Historically, London has been seen as a more innovative city than Paris with its large number of enterprises, startups, and overall favorable business environment. It has the advantage that the city's language facilitates relations with the United States, rendering it the most obvious connection to Europe.

Q & A

To move beyond our theoretical knowledge of the two cities discovered through research, we decided to interview specific actors who would enrich our understanding of the collaboration of Paris and London by providing us with information about what is currently happening "on the ground" in various sectors. We selected a wide variety of interviewees from both the public and private sectors to give us a broad perspective on each of our five themes as well as the more general context of Paris and London.

We conducted seven interviews in London from Monday, May 29 to Friday, June 2, and six in Paris from Thursday, June 8 to Monday, June 12. Each interview had a duration of approximately one hour, during which we asked some common questions such as "What do you think of the concept of Paris and London as a single urban space?" as well as questions catered specifically to the sector in which the interviewee works.

At the end of each section, we include a Question and Answer (Q&A) session based on interviews we conducted in Paris and London in the form of a text message conversation. The questions have been adapted from those we asked during the interviews. Certain speech bubbles include direct quotations from interviewees; text outside of quotation marks is paraphrased, but maintains the integrity of the interviewees' thoughts.

Furthermore, the city's standing as a global financial center is a significant attraction to foreign investors. Recently, however, Paris has drawn attention in the innovation sphere with its rapidly growing number of incubators and startups, and notably due to its position in the European Union. With this development, competition between the two cities has intensified. Far from detrimental, their rivalry fuels innovation, as each city strives to create the best technology and attract the brightest engineers and scientists; their rivalry can, therefore, be viewed as "healthy competition." Each city looks at the other to see in which areas they must develop in order to stay relevant, as evident in the development of La French Tech in Paris after the start of Tech City UK in London. Many have argued, too, that because of the cities' differences, collaboration would be mutually beneficial, as Paris can profit from London's financial connections and London can use Paris' connection to Europe to its advantage; ultimately, the innovative success of one does not detract from that of the other.

Social Issues

Due to their strong presence in the media and impact on the population, social issues (education, borders, migration, and security) demonstrate what is at stake in a 2017 society facing globalization (migration and flux). Political and security challenges are inherent to the modern world. When the EU is no longer the supreme leader over these widespread issues, how do policymakers deal with them? Apprehending the globality of these phenomena is where there are possible strong ties of collaboration between the two cities.

Culture & Tourism

Both Paris and London are considered cultural world cities, whether for their country's literature, number of museums, music concerts, or cinema/theater events. The two cities are internationally regarded as prime locuses of culture and intend to continue to be seen as such. Because they both have prominent cultural scenes, Paris and London compete each year for the title of "First world touristic destination."

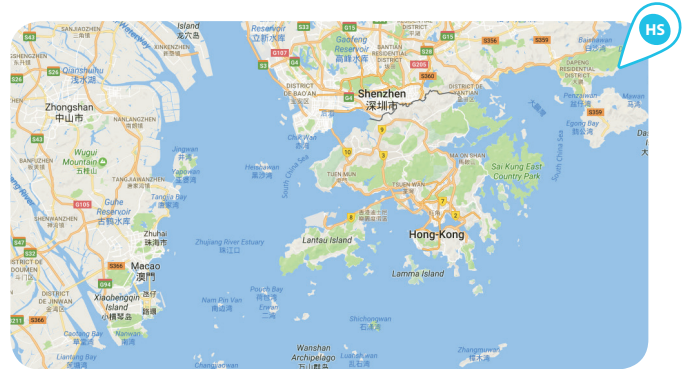
TALES OF INSPIRATION

A lesson in comparison

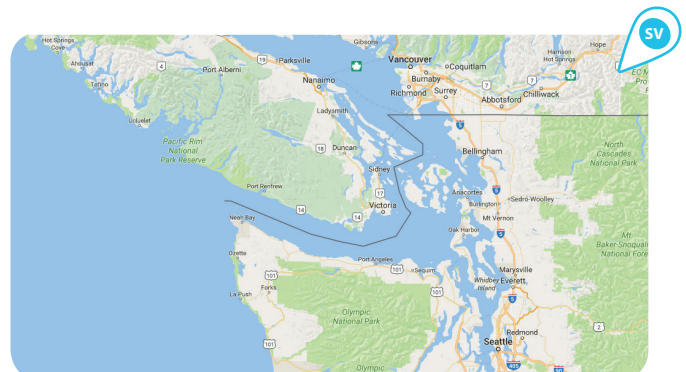
There are two different ways of assessing cooperation and polycentrism between cities. Either the two cities are similar and work together because of their proximity in location and in governance, or the cities are very different and find a common ground for cooperation in their diversity, using their divergences as an advantage (with one city being more efficient in one domain and the other compensating in another). These two systems are the extremes in a multi-city analysis. But where do London and Paris stand on this scale?

To better assess the grounds for cooperation between the two, we created a benchmark that would set the standard for imagining a common metropolis between Paris and London. We proceeded by choosing three different couples of cities, two of them sharing a referential in terms of size with the European capitals, and a third one, smaller, but already implemented and effective. All of these couples of cities share the common features of a boundary between them.

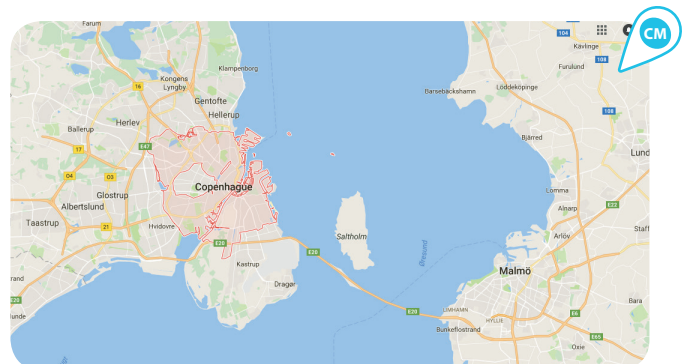
Hong Kong-Shenzhen-Macau: A case of a multi-urban complementary system



Seattle-Vancouver: Cross-border innovative cities



Copenhagen-Malmö: An effective case of cross-border integration



Source: Google maps

TALES OF INSPIRATION

Area (km2)

Honk Kong-Shenzhen- Macau	Seattle-Vancouver	Copenhagen-Malmö
Hong Kong: 2,755	Seattle City: 369 Seattle Metropolitan area: 15,209	Copenhagen City: 2,546 Total Danish region: 9,763
Shenzhen: 2,050	Vancouver City: 114 Greater Vancouver: 2,700	Malmö City: 158 Skane region: 11,035
Macau: 115.3		

Population

Honk Kong-Shenzhen- Macau	Seattle-Vancouver	Copenhagen-Malmö
Hong Kong (2016): 7,234,800	Seattle City (2015): 684,451 Seattle Metropolitan area (2016): 3,798,902	Copenhagen City (2016): 1,280,371 Total Danish region (2016): 2,016,285
Shenzhen (2016): 11,908,400	Vancouver City (2016): 631,486 Greater Vancouver (2016): 2,463,431	Malmö City (2014) : 318,107 Skane region (2011): 1,251,213
Macau (2016): 650,900		

GDP per capita

Honk Kong-Shenzhen- Macau	Seattle-Vancouver	Copenhagen-Malmö
Hong Kong (2015): \$56,947	Seattle Metropolitan area (2013): \$74,701	Copenhagen City (2009): \$46,552 Total Danish region (2009): \$27,983
Shenzhen (2016): \$23,848	Greater Vancouver (2014): \$44,337	Malmö City (2012): \$37,130 Skane region (2009) \$32,250
Macau (2013) : \$122,907		

Source: EMF / Hong Kong Government / Chinese Government /
Macau Government / OECD / BCstats / US Census

TALES OF INSPIRATION

Hong Kong-Shenzhen-Macau: A case of a multi-urban complementary system

The cross-boundary metropolis of Hong Kong-Shenzhen

The idea of a cross-boundary metropolis of Hong Kong-Shenzhen started circulating a few years before the handover of the British colony to the Chinese government in 1997.

The integration of Hong Kong into Mainland China was foreseen as an economic integration, given the "One Country Two System" institutional framework, that allowed the city to maintain a (quasi) independent political system.

Merging with Shenzhen would have offered Hong Kong new potential for growth by providing more access to Southern China and freer flow of resources and talent across the border, bringing about a win-win situation for both Mainland and the former British colony.

The integration started even before the formal proposal, when Hong Kong and Shenzhen began moving towards a unified management in shipping, thanks to the fact that the two ports were partially owned by the same company, and represented a complementary system; Hong Kong is a free port with no tariffs on general goods, but has higher transport costs than Shenzhen.

Economic integration based on economic complementarity

Hong Kong and Shenzhen's economies are complementary, and increasing cooperation and economic integration would bring advantages through the merging of their economies into an integrated market.

Hong Kong's economy is based on the service sector, representing over 90% of its GDP. It is an important international trade and financial center, and it is home to a large number of corporate headquarters. The Hong Kong Stock Exchange is the seventh largest in the world.

Much of Hong Kong's exports are products manufactured outside its territory (especially in Mainland China and, in particular, Shenzhen) and are distributed via Hong Kong.

In Shenzhen, even if the tertiary sector of the economy is growing rapidly, the secondary sector still has the largest share. Shenzhen is one of the biggest manufacturing centers in China, and it hosts some of the world's most successful high-tech companies.

Towards the integration

The plan of the Chinese government to merge the two cities is ongoing and includes a number of different strategies involving many different sectors, from transportation to customs, construction, finance, and the IT industry.

An express railway between the two city centers is currently under construction and will probably be completed in 2018.

Near the border zone, the construction of a high-technology valley has been announced to jointly attract foreign investments, and the stock exchanges of the two cities have been connected.

Different policies are promoted to allow students from the mainland to freely enter the education system in Hong Kong, and vice-versa.

According to some researchers, China's aim is to integrate Shenzhen and Hong Kong into one mega-city by 2020, creating the world's third largest city.

Macau

Macau represents a third end of the connection between Hong Kong and Shenzhen, serving as an attractive pole for tourists from around the world, and particularly from the two cities. Its tourism is based on the liberalized gaming industry, and it will soon be more integrated with Hong Kong and Shenzhen due to the construction of the Hong Kong-Zhuhai-Macau Bridge that will connect the two islands and the mainland.

Cross-border Control Points in January 2017

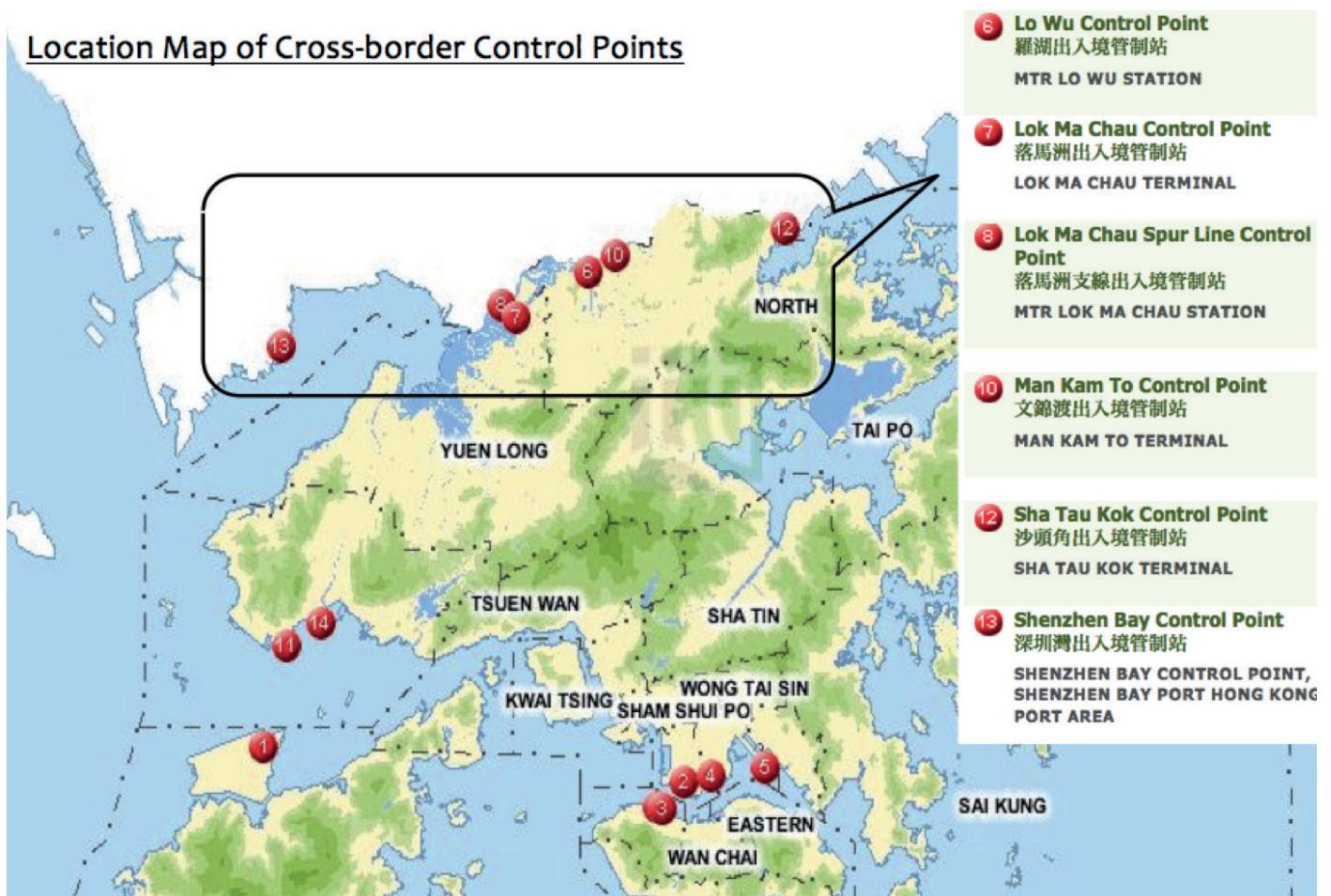
Control Point	Number of travellers per day	Type of crossing
Lo Wu	225,000	rail
Lok Ma Chau Spur Line Crossings	169,300	rail
Lok Ma Chau	76,400	road
Man Kam To	10,600	road
Sha Tau Kok	8,400	road
Shenzhen Bay	102,100	road

Source: Hong Kong government



Source: HZMB

Location Map of Cross-border Control Points



Source: HKU

TALES OF INSPIRATION

Seattle-Vancouver: Cross-border innovative cities

Cross-border cities

As coastal cities in the Pacific Northwest of North America, an area also known as Cascadia, Seattle and Vancouver have similarities that lend well to complementarity. Located on either sides of the United States-Canada border, a number of cross-border issues are implicated in their connection. There are 12 Customs land ports on the Canadian-U.S. Border between Washington and British Columbia.

There are three primary means of travelling the 230 km between Seattle and Vancouver: car, train, and bus. By car, the journey takes about three hours and is a straight route on Interstate 5 on the U.S. side and Highway 99 after the border. The primary crossing site is at the Peach Arch; other options include the Pacific Highway and Lynden borders. By the Amtrak Cascades train, travel time is around four hours. By bus (Greyhound or Bolt, for example), it takes between three and a half and four hours to get from one city to the other, but costs as little as \$15. Finally, one can travel by plane from the Seattle-Tacoma Airport to the Vancouver airport, but including time spent in check in, security, and customs, flying is not the quickest travel option.

Regarding immigration, Canada has more open policies that encourage workers to come and enter into the technology industry among others. According to estimates from the Boston Consulting Group, "foreign workers in the United States can wait about three times as long for a work visa as those in Canada do." Many citizens also wonder if the United States' immigration policies will become even more restrictive in the coming years.

"Emerging Cascadia Innovation Corridor"

In the technology and innovation sphere, leaders and executives have begun to refer to the shared space of Seattle and Vancouver as the Cascadia Innovation Corridor in the hopes that by defining them as one unit, both sides will be enhanced. The two cities are already sites of well-reputed academic institutions, "forward-thinking public policies," "world-class companies," and much more. Collaborative efforts between the cities are still in the development phase, but the Governor of Washington, Jay Inslee, and the premier of British Columbia, Christy Clark made strides towards the cities' collective future when they signed an agreement that would deepen their ties during the Cascadia Innovation Corridor Conference held in September of last year. The conference itself was already a common effort, arranged by the Business

Council of British Columbia, the Washington Roundtable, and Microsoft. The cities hope to improve in the areas of trade, education, research, and transportation. The agreement mentioned creating "more research collaboration between the University of British Columbia and the University of Washington." Additionally, "the leaders of B.C. Cancer Agency, the Seattle Cancer Care Alliance, and the Fred Hutchinson Cancer Research Center agreed to work together on detailed plans to expand patient access to care and clinical trials, advance immunotherapy, enable research collaboration, and provide better training opportunities for young scientists and researchers."

A future of transportation linkage

Another project that has come out of the conference is the potential development of a high-speed rail line connecting the two cities that would allow individuals to travel between them in less than an hour, a significant improvement from current travel times. With expected population increases in both cities, the rail line would be a preemptive way to combat inevitable congestion problems. Dow Constantine, Washington's King County Executive, also mentioned the prospect of having on-board customs to facilitate the cross-border travel process. As recently as February, Washington's Governor, Jay Inslee, allocated \$1 million of the state budget to "study the feasibility of the [high-speed rail] project." A second idea that has been proposed is the construction of a dedicated lane on the highway for autonomous, driverless travelling between Seattle and Vancouver.

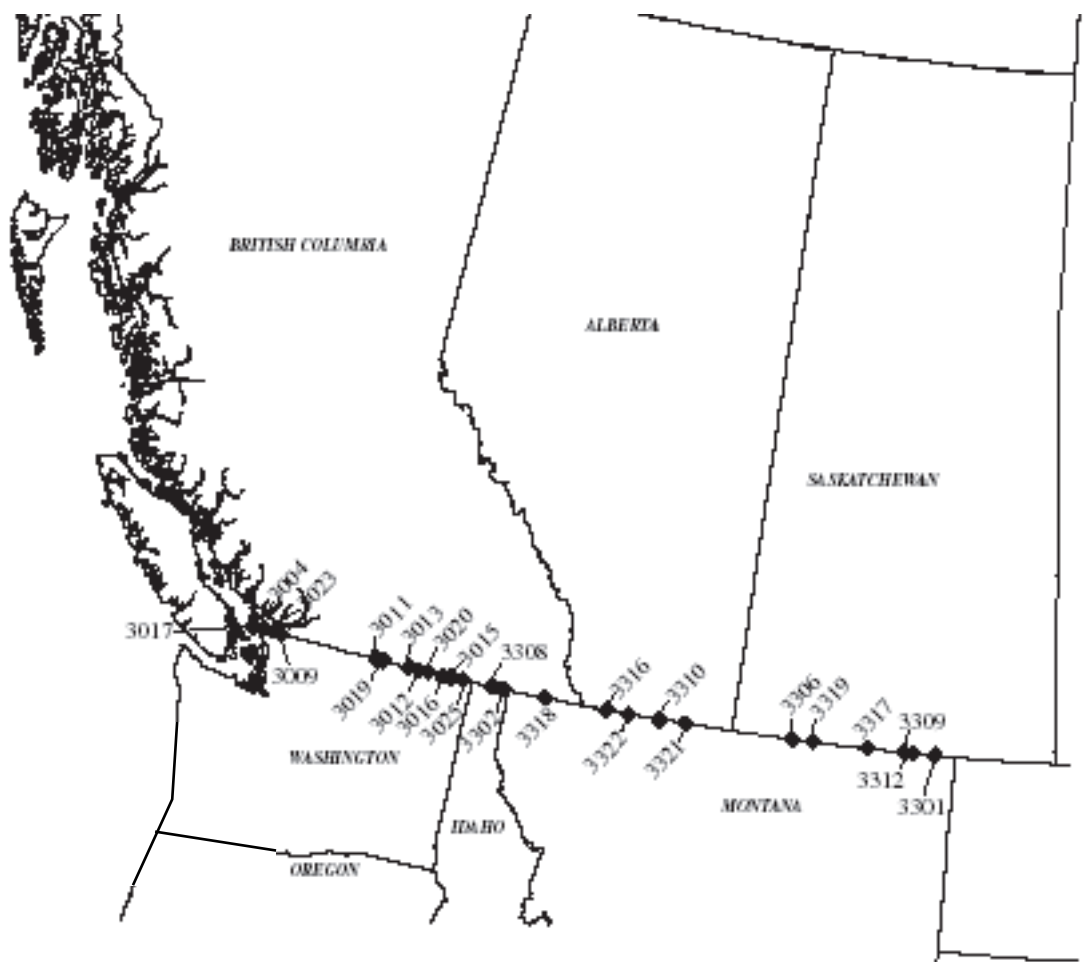
Non-resident travellers entering Canada in 2016

United States residents entering:	23,895.5
By automobile	16,264.5
By plane	5,309.3
By train	149.9
By bus	789.6
By boat	1,004.0
By other methods	378.2

Source: Statistics Canada



Source: anderhouse.com



Source: the U.S. Department of Transportation Bureau of Transportation Statistics

TALES OF INSPIRATION

Copenhagen-Malmö: An effective case of cross-border integration

A long history of cross-border cities

The third benchmark is different than the two above. First, Copenhagen and Malmö are European cities, which gives a stronger comparative approach vis-à-vis a Paris-London collaboration. Second, it also reflects a longer history of alliance between Copenhagen and Malmö. Between the two cities is the Oresund strait, linking Denmark's largest city with Sweden's third.

Prior to the opening of the Oresund Bridge (the longest road and rail bridge in Europe) in 2000, the two cities have often looked at each other in terms of economic functioning, but it is truly the Bridge that was the gateway for cross-border cooperation. Now, people can go from one city to the other by car in about 35 minutes, depending on the time of the day, improving the commute for workers, the trip for tourists, and access to Copenhagen's airport, one of Europe's busiest, for Swedes.

A year later, their ports converged into one single entity able to function 24/7 and operated by a single company, making the port the busiest in Northern Europe. Connecting the two cities also had impacts on residential markets (with a lot of Danes moving to Sweden where the housing market was more affordable), jobs, innovation, etc.

Between the cities, improvement in mobility was a significant symbolic step that impacted a lot of other aspects. For instance, 12 universities in both cities opened their classes and facilities to everyone in the city-region, regardless of their country of origin.

Towards a "Greater Copenhagen?"

The booming innovation and health sectors in the Oresund region also helped in boosting the region compared to the Nordics and to Europe in general.

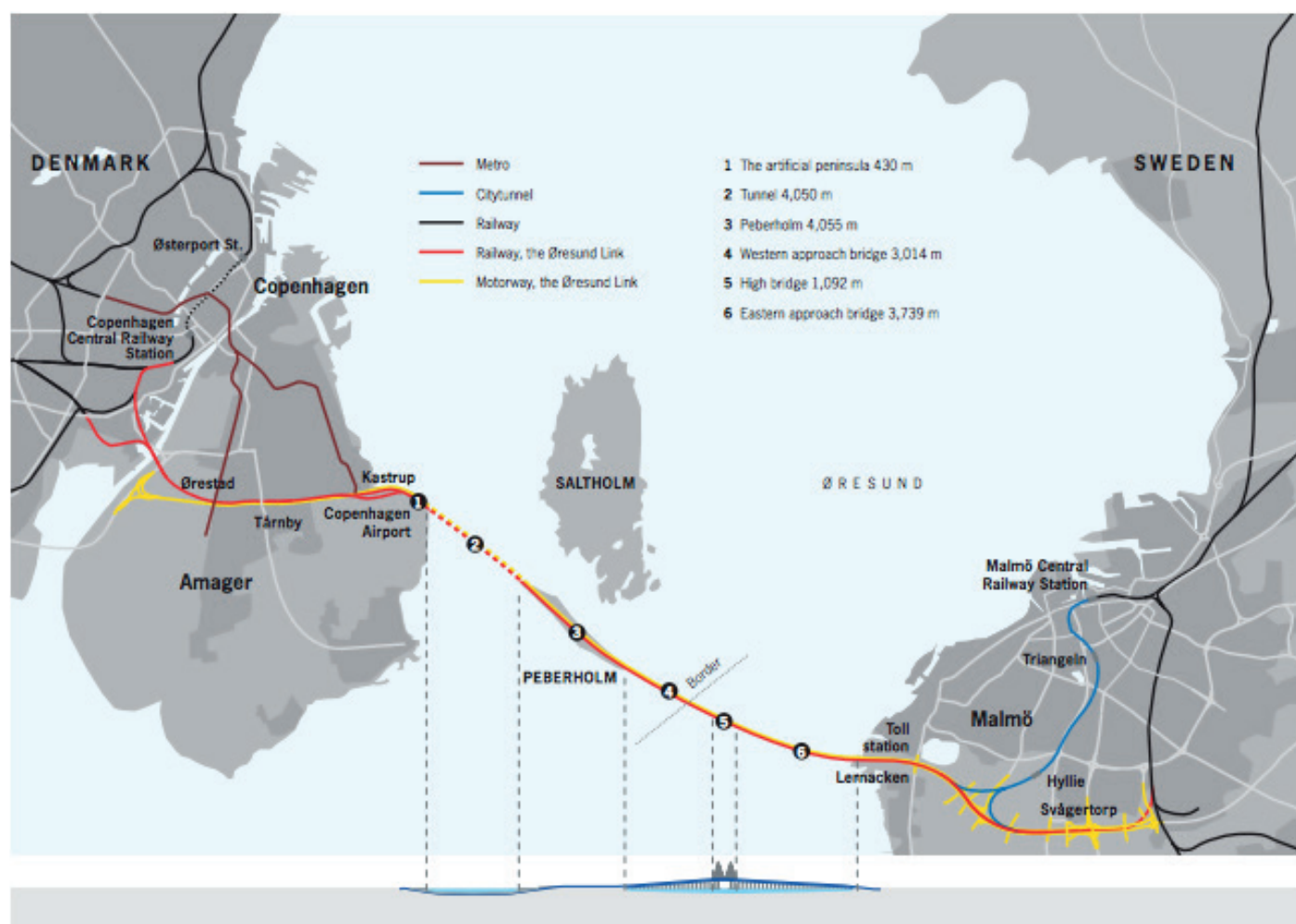
However, there is now, 17 years after the bridge opening, a high need for further integration around the two cities, that can be summed up by OECD's Visions for Oresund 2020, such as "being the front-runner in environmentally friendly transport and a laboratory for green technology" or being a "region that invests in cultural activities produced for, with and by children and young people" and a "hub of innovation, with entrepreneurs and synergies between educational institutions and trade and industry." The main idea is for the two cities to benefit at a maximum level from their complementarity, and be the "region whose residents are able both to make use of all that the region offers and to explore its potential."

All those visions tackle different levels of governance and themes of our study, and one could foresee a real city-region in the making. Even with the current political structures favoring the coordination, such as the Oresund Committee (a major policy-making group), one question remains: Oresund, or Greater Copenhagen? Major city-region experts, such as Greg Clark, tackle the need for pushing the integration towards a more common identity in the near future: "The investment in the Øresund bridge and tunnel was always supposed to create an integrated region between east Denmark and south Sweden— the difference now is that it has become clear the region needs a name that is not simply Øresund."

Variable	Capital Region of Denmark	Region Zealand (Denmark)	Total Danish part of the Oresund	Region Skåne (Sweden)	Oresund
Population (2011)	1.7 million	0.8 million	2.5 million	1.2 million	3.8 million (67% Denmark; 33% Sweden)
Surface (km²) (2011)	2 546	7 217	9 763	11 035	20 800 (47% Denmark; 53% Sweden)
Population density (inhabitants/km²) (2011)	660	113	256	110	178
Main cities	Copenhagen			Malmö, Helsingborg, Lund	
Unemployment rate (2012)	7.8% (2010)	6.7% (2010)	8%	9%	
GDP per capita (USD, PPP, 2009)	46 552	27 938	40 117	32 250	37 703
GDP growth (2000-09)	5.5%	-3.9%	3.4%	13.4%	6.1%

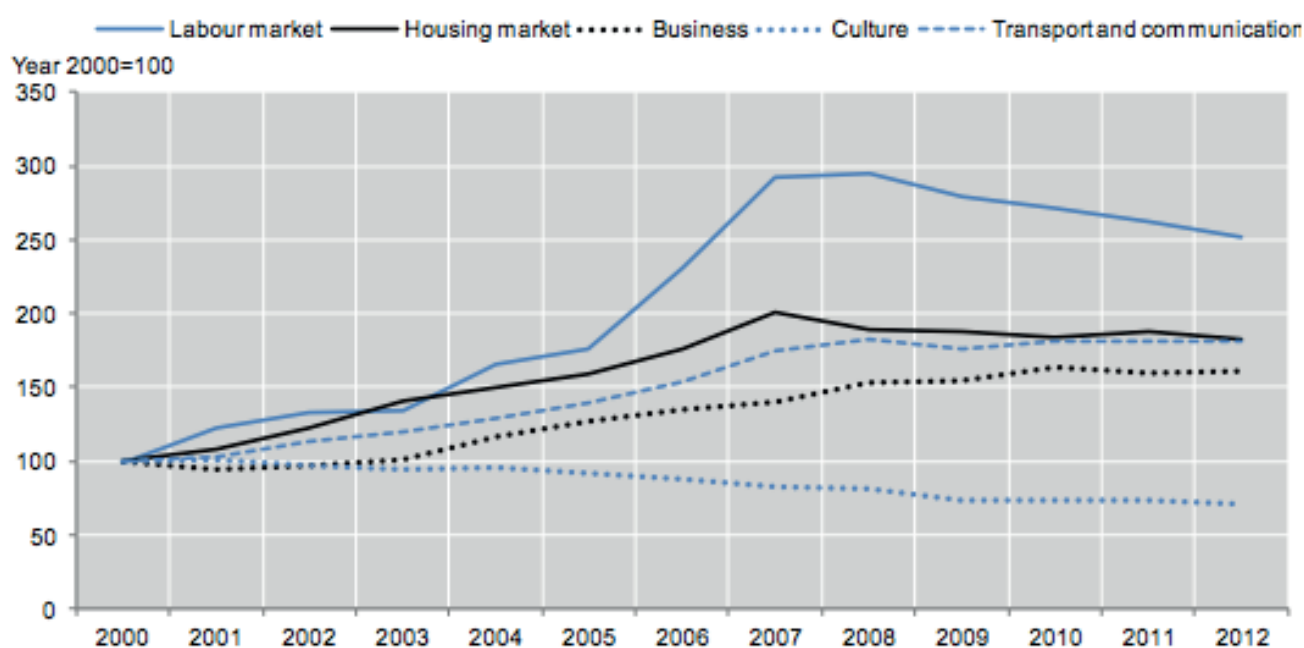
Source: OECD

The Øresund Fixed Link



Source: OECD

Figure 1.4. The Oresund Integration Index



Source: OECD

HOW TO READ THE DOCUMENT

GENERAL SUBTHEME

BENCHMARK BUBBLES

SUBTHEME

GREEN MOBILITY

Reducing pollution: Going hybrid or electric

London	Paris
2.3 billion passengers a year	nearly 1 billion journeys a year
- More than 8,600 buses - Over 2,000 hybrid Diesel buses (20% of the bus fleet)	- 4,490 buses - 12,876 drivers - 60% buses comply with the Euro VI standard or higher
More than 2,500 bus stops	More than 12,500 bus stops

Both in Paris and London, strong emphasis is put on the improvement of buses, a vast source of pollution, especially in the British capital where they have a significantly higher importance (60% increase in bus ridership between 2003 and 2013).

Health and environment issues are of a crucial importance for **Copenhagen and Malmö**, that created across the border a strong cluster, Medicin Valley Alliance (40,000 employees).

Initiatives in London

"Cleaner Air for London" campaign

- By 2020, new Low Emission Bus Zones (better, cleaner engines that meet the Euro VI standards, reducing the NOX emissions by 95%) are to be launched in 12 new zones.
- Similarly, 3,000 ultra low Emission Double Deck buses (by 2019) and 250 Single-Deck buses (by 2020) are to be launched in Central London
- Re-fit 5,000 existing buses so that they meet the Euro VI standards
- Project ZeEus on route 69 is testing wireless charging technology in order to find ways for buses to become 100% electric while charging on the road, at bus stations, etc.
- And in the meantime, they are testing bio-Diesels blends in order to fuel the network by 20%.

Initiatives in Paris

"Bus2025"

- Bus2025, which by then, will consist in a bus fleet that is 80% electric and 20% biogas, both renewable source of energies.
- As well as the UK, they first started to increase the share of hybrid buses (523 in circulation in the mid-2016), and started testing electric technologies and charging systems on the second phase of the project in 2015
- Ligne 341 is the first line 100% equipped with electric buses, and was part of a promotion program with the COP 21.
- By now, existing electric buses (and notably Bluebuses, built by Bolloré) have an autonomy between 180 and 250 km and cost around 500,000€, which is twice the price of a normal Diesel bus.

The demise of Diesel



In the UK
83,627 new Diesel cars in 2016
(178,022 total)
89,762 in 2015 (180,077 total)

The example of Diesel cars is further proof that the two metropolises look in the same direction. Recent studies (ICCT report) shows that Diesel cars pollute 10 times more than trucks and buses (the crucial difference being in the emission of Nitrogen oxides), and they are to be banned in Paris by 2020 - a decision made by Anne Hidalgo following the different reports on health issues caused by Diesel cars.

As their use is more mainstream in London and a ban on Diesel cars would imply a switch in energy supply and a change of habits for Londoners, Boris Johnson's strategy is to increase the congestion charge for Diesel cars entering Central London by 10£ - whereas the fees for «normal» cars is of 5£ - on top of the existing congestion charge.

Results

In January registrations of Diesel cars were 4.3% lower than the year before, while those of petrol cars grew 8.9% - unthinkable two or three years ago.

HOW TO READ THE DOCUMENT

A CLEAN LOOK OVER PUBLIC SPACE

Baby steps towards improvement of walkability

Pedestrians and their use of public space are of crucial importance in both cities, as evident by several initiatives. In Paris, for instance, "la piétonisation des voies sur berges" was intended as a way to fight against air and noise pollution that pedestrians are constantly exposed to, and to increase the share of green mobility, improving mixed-use areas between bikes and pedestrians.

According to The Economist, "London is a city made for walking", as the different boroughs are accessible by foot. Several municipal initiatives - as well as the Tube being overcrowded on office hours - such as replacing pavement curbs with granite bricks were made to enhance the pedestrian-friendly nature of the city. Thanks to them, the number of daily walking trips increased by 12% in 10 years after 2001.



Different strokes for different folks

Paris and London are characterized by a different approach to water within the city. Londoners swim in the lakes of their public parks. In Paris, initiatives are quite recent regarding citizen's access to water, and swimming in the Seine has been always tinted with disgust and a certain taboo. As part of the 2024 Olympics campaign in Paris, Anne Hidalgo envisions swimming in the Seine. Strong marketing campaigns around athletes are launched to overcome the symbols intrinsic to the Seine river, and the French Mayor plans to start her program by opening "Le Bassin de la Villette" for swimming starting this summer.

In London, the sentiment towards swimming in the Thames is relatively consistent with Parisian's attitudes, and the Port of London Authority is mentioning several risk factors such as cold water, tides, undertows and sewage remaining in the Thames (39 million cubic metres of raw sewage is found in the Thames per year), to discourage swimming in the River. An important part of Paris' rehabilitation of the Seine focuses on intense sanitation of the water.



Sustainable initiatives

By 2030: limit global warming by 2°C.

Green economy in the UK: an increase by 6% per year, a sector with 200,000 employees.

L'Avenue Verte Paris-London: 2 routes (408/474km) of marked bicycle paths.

Green mobility

2.3 billion bus passengers / year in London (over 2000 hybrid buses)

More than 1 billion passenger in France (523 hybrid buses).

Project ZeEus and "Cleaner Air for London" projects
Bus2025 project in Paris

Diesel cars to be banned in Paris by 2020.

Incentives in London: 4,3% decrease in Diesel cars registration.

STAR RANKING

Each theme is graded with a system of stars that represents an incremental scale according to these questions:

* = Is the issue there?

** = Is there a shared dialogue?

*** = Are there concrete common projects?

**** = Are there improvement plans for the future?

***** = What is the relative importance of the collaboration within context?

INDICATORS

01

Mobility

The mobility sector is one of the most important when dealing with the integration of a metropolitan area. In order to conceive an integrated urban space, transportation within the geographical area is always a priority for policymakers.

Paris and London have two of the most developed and widespread public transportation networks in the world, and they have inspired each other when developing their public transportation systems on many occasions.

While there has been a long-lasting comparison of the two cities throughout history, in order to envision a single urban space composed by Paris and London, efforts of integration necessitate the implementation of an integrated mobility scheme.

Moving the Parisian and Londoner ways
A long history of mutual competition
Who governs?
Commuter areas at a glance
How to commute? Buses in
London vs. trains in Paris
Where would you rather commute?

Branding the future of transportation
Paris
London

Around and across:
Discovering the plans
Grand Paris Express
Crossrail - Elizabeth Line
Crossrail 2
A glimpse into the different projects
Crossrail or the "British RER?"
3 projects, 2 approaches

There and back again
Two capitals at the core of the
European transport system
Train-ing instead of flying
Crossing the Channel
Public vs. Private: misaligned
management?
Bored at the border: risk of
intensification of passport control

MOVING THE PARISIAN AND LONDONER WAYS

A long history of mutual competition

The comparison of the transport systems between Paris and London has a long history; the two cities have been looking at each other for decades, with the aim of understanding the other's approach in influencing the development and performance management of an integrated transport system, and learning from its experience. This attitude in itself shows the competitive dimension of the relationship between the two municipalities, but at the same time signals the realistic dimension of comparison, and therefore the possibility of a shared framework of initiatives related to transportation network development within urban agglomerations. These initiatives could refer to many different issues: the design of new projects (Crossrail and Grand Paris Express, for example), capacity expansion, reduction of congestion, improvement of services for travellers, implementation of innovative policies for environment-friendly transportation (bike-sharing, car-sharing).

Who governs?

The public transportation network is managed by:

- the **Department of Transport** (for railways) and the **Greater London Authority** (for urban transportation), in London.
- the Syndicat des transports d'Île-de-France (**STIF**), in Paris.

The operations are managed by:

- **private businesses** for the railways, the Docklands line railway (DLR), and the buses, and the **public agency of Transport for London (TfL)**, under the **Greater London Authority**, for the Underground and the tramway in London.
- **private businesses (OPTILE)** for the suburban bus lines and **public businesses (SNCF, RATP)** for railways, metro, tramways, and urban busses, in Paris.

Commuter areas at a glance

Greater London	Parisian Territoire Aggloméré
8,674,000 inhabitants (39% in Inner London, 61% in Outer London)	8,580,610 inhabitants (51% in the "central core," comparable to Inner London, 49% in the "peripheral ring" comparable to Outer London)
4,374,000 workers (57% in Inner London, 43% in Outer London)	4,331,660 workers (67% in the "central core," 33% in the "peripheral ring")

Source for London: data.london.gov.uk, Employment, 2016
Source for Paris : IAU, 2009

This table shows a higher density in the Parisian central area and lower density in the Parisian peripheral area.

Les zones de Greater London : 1 579 km²



Le « territoire aggloméré » francilien : 1 579 km²



Source: IAU

MOVING THE PARISIAN AND LONDONER WAYS

How to commute? Buses in London vs. trains in Paris

Rail system and metro:

London has a more widespread rail system compared to Paris, but has a lower frequency of trains than Paris.

The Underground system in London is less concentrated in the central core of the urban space, while the Parisian metro system is almost non-existent in the peripheral ring, which remains served only by railways.

Nombre total de trains desservant les gares de chemins de fer et les stations de métro durant l'heure de pointe (un sens)

	Zone centrale		Zone périphérique		Ensemble	
	Inner London	Noyau central Paris	Outer London	Couronne périphérique Paris	Greater London	Territoire aggloméré Paris
Nombre de gares et stations	287	375	315	159	602	534
Nombre moyen de trains / gare et station	21	33	10	9	15	26
Nombre total de trains	6 130	12 558	3 050	1 352	9 180	13 910
Nombre de trains / 10 000 (P+E)	12,2	17,1	5	2,4	8,2	10,7

Source: IAU, 2007

Tramways:

Both cities have non-radial tramway lines, independently serving sectors of the peripheral areas. Differences are found in the location of the tramways: in Paris, they are concentrated in high-density zones in the Peripheral Ring, while in London, they implement transportation in specific urban sectors in Outer London.

Bus

The bus system in London has roughly twice the number of lines as that of Paris and almost three times the number of bus stops, demonstrating the higher density of the Londonian network.

In 2007 there were:

- 1.88 bn passengers in the Londonian bus system.
- 0.937 bn passengers in the Parisian bus system.

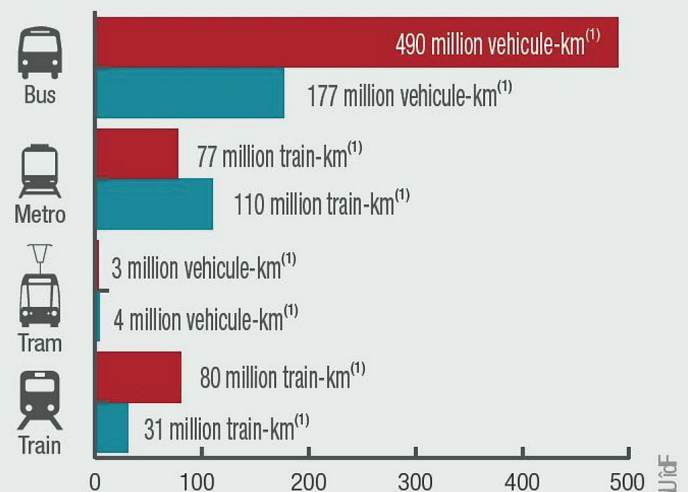
Source: IAU, 2007

Where would you rather commute?

The analysis highlights a big difference in transportation strategy in Paris and London. While in Paris the system is based on high-frequency and centrally dense rail and metro networks, London's public transportation is based on a lower frequency network in the center, complemented by a widespread, high-density network of buses in the suburban area.

The difference in service between the central area and the peripheral zone of London is, thus, much less evident in Paris. The service of the Parisian center is in no way comparable to that of the peripheral ring, which lacks the metro system and is not entirely covered by the suburban RATP bus network.

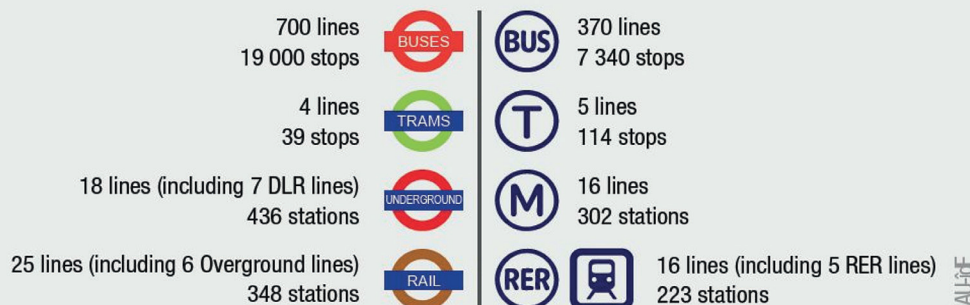
A bus network twice as dense in Greater London



Source: IAU calculations based on 2012 traffic data from operators

Source: IAU

A modal provision to the advantage of London in appearance



Source: IAU based on 2012 data from TfL and the STIF

Source: IAU

BRANDING THE FUTURE OF TRANSPORTATION

This section analyses the development strategies for public transportation, as presented by Parisian and Londonian governments. The objective is to show how policymakers want the public to perceive their vision for the city.



PARIS

Métro2030

The main development in the metro system is the **extension** of the lines 4, 11, 12, and 14, related to the construction of the Grand Paris Express network.

Moreover, **renovation** of stations projected by the Métro2030 plan will include:

- by 2017, the launch of works to automate line 4.
- by 2017, broadband mobile on all Paris metro stations.
- by 2018, 100% of metro stations to be lit by LED.
- by 2018, full renovation of 273 stations.
- by 2020, renovation of 55% of rolling stock.
- by 2030, modernization of 100% of lines and replacement or renewal of 85% of rolling stock by 2013.

The **numbers of Métro2030** as of now:

- 5.23 million passengers per day on the Paris metro in 2012 (+ 30% in ten years)
- 23 million ceramic tiles replaced on 272,000 m2 of renovated wall space
- 3,000 new multimodal information displays to replace the 1,300 old ones
- 30% energy saving thanks to next-generation rolling stock
- €3.6 billion invested since 2007, average investment of €500 million per year

Bus2025

The main development in the Bus2025 plan promoted by RATP is the so-called **energy transition**, through which the bus fleet will include hybrid, electric and natural gas (NGV) buses.

No specific plans are designed to significantly increase the number of buses or the spatial extension of the lines network.

Tramway

The tramway network operated by RATP in Île-de-France has become, in 2016, the largest network in France, and the third largest in Europe (in terms of passenger traffic).

RATP's existing extended network consists of:

- 7 lines
- 187 stations
- 105 km of tracks
- 830,000 journeys per day



LONDON

London Overground

Transport for London is continuously working on London Overground stations and service improvements to keep up with the growing demand on the network.

Some of the projects include:

- improving the reliability and capacity of the service
- controlling and staffing while services are operating

In order to expand the London Overground network there are plans for:

- brand new trains for West Anglia, Gospel Oak to Barking and other lines.
- installation of WiFi at 79 stations
- enhancing accessibility, reliability and service frequency
- increasing the capacity of trains by 25% by adding a fifth car to trains on most London Overground lines

TfL Rail

The renovation of the TfL Rail network will be mainly done in order to prepare for the final opening of the complete Cross-rail Line service in 2019.

It will include the provision of step-free access to all stations and the complete renewal of all ticket halls, with improved lighting, CCTV and customer information.

Buses

The vision of Transport for London for improving the bus system is twofold, and includes:

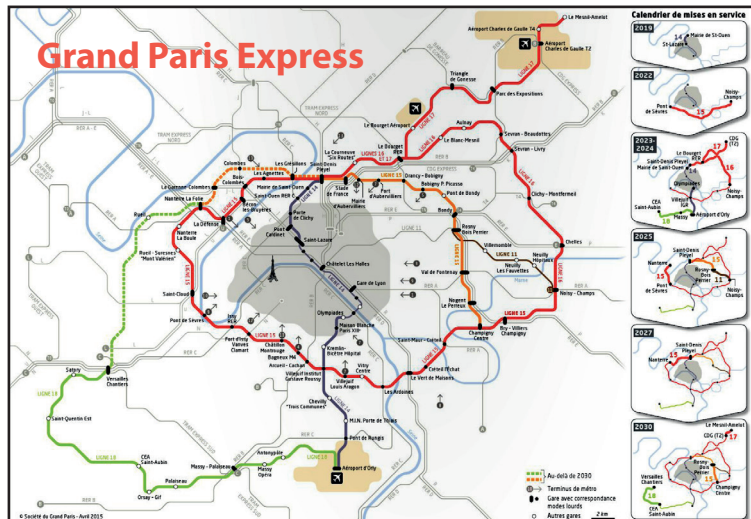
- the creation of a greener system, with the introduction of electric buses and Low Emission Bus Zones.
- improvement of bus routes, with plans for:
 - 2.3 billion passengers a year
 - more convenient routes to key amenities
 - improved circulation on selected routes by giving buses priority on the roads
 - more space on buses by introducing double-deck buses on certain routes
 - provision of extra buses during peak times

New river crossings

New river crossings are to be built between east and southeast London, in order to improve travel across the capital,

AROUND AND ACROSS: DISCOVERING THE PLANS

The commuting time between the surrounding metropolitan areas and the center city, that many workers have to endure every day, is still very high in both Paris and London (estimated to be about 67 and 74 minutes, respectively, for the trip to and from work); both the cities are, therefore, developing plans to tackle the pressing issue of traffic flows.



Grand Paris Express

The Grand Paris Express is a project of development of Parisian transportation at a metropolitan scale. With an overall cost estimated around €24.9 billion, it aims at constructing 4 new lines of railway (lines 15, 16, 17 and 18) and extending line 14, in order to create a network that passes through the peripheral zone of the metropolis surrounding the center of Paris, and connecting it to the city.

The Île-de-France railway infrastructure accounts for almost 40% of the national traffic on 10% of the total network. The GPE project represents an effort of modernization and development of the services, in order to cope with the significant increase in traffic (+ 21% in 10 years).

The work began in 2015, and from 2022 to 2030 all lines will be progressively put into service.

Crossrail - Elizabeth Line

The Crossrail project is a new railway that goes from Reading and Heathrow in the west through 42 km of new tunnels cutting through London to Shenfield and Abbey Wood in the east. During the project, 10 new stations are to be constructed, while 30 other stations will be renovated, with renewed integration of the existing infrastructures.

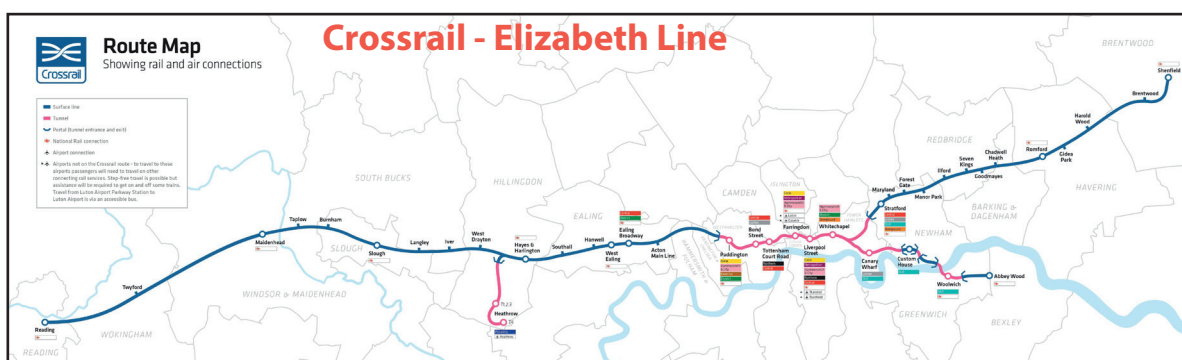
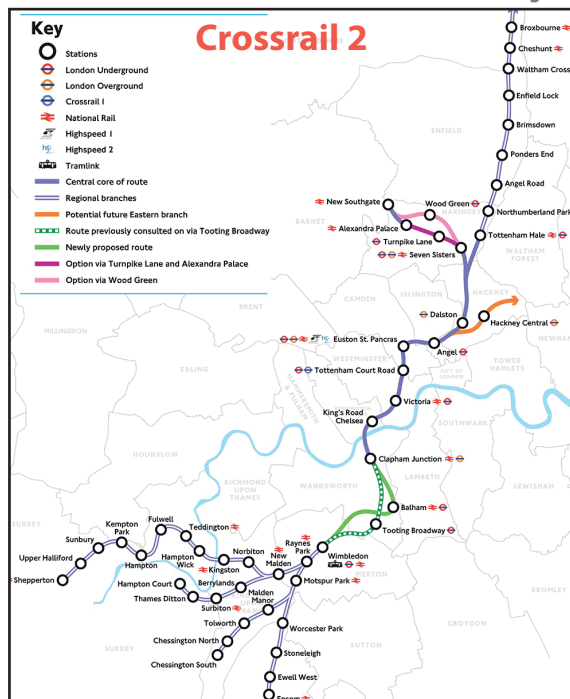
The project aims to reduce congestion in the City, offering quicker connections across the capital.

The overall estimated cost of the project is around £15 billion. Construction started in 2009, and it's now 80% completed. Full services are expected to begin in 2018; the Crossrail will allow an estimated 200 million passengers to travel across London and connect to the existing transport network.

Crossrail 2

Crossrail 2 is a projected new railway line that will connect the metropolitan area of London, and at a broader scale the South East, through a connection from north to south, cutting through the City.

It is expected to benefit destinations across the wider South East by releasing space on the rail lines into Waterloo and Liverpool Street. It would impact the connectivity of the whole nation's rail network by creating direct connection with more than 800 stations around the country. The target for the completion is the early 2030's, but the planning is at a very early stage and no decision has been made yet.



AROUND AND ACROSS: DISCOVERING THE PLANS

A glimpse into the different projects

Grand Paris Express	Crossrail	Crossrail 2
205 km of railway	100 km of railway	
72 new stations	40 stations (10 new)	50 stations (1 new)
17 interconnecting stations		800 station directly connected
4 extended metro lines (4, 11, 12 and 14)	10% increased rail capacity of central London	270,000 additional capacity for people travelling into London
700 million estimated annual passengers	200 million estimated annual passengers	
70,000 homes each year for 25 years (compared to 42,000 today)		200,000 new homes across London and the South East 60,000 new jobs
€22.6 bn estimated investment	€17.4 bn investment	€31.8–37.7 bn investment
Opening in 2030	Project 80% completed, final opening in 2019	Main work to start in the early 2020s (not yet approved)

Crossrail or "the British RER?"

Running east to west across London, the development scheme of Crossrail is similar to the concept of the Réseau Express Régional (RER) in Paris.

The main function of the new line is to bring passengers from



the suburbs to the heart of the city and across the city, then continuing out to the other side. In doing so, the railway line does not stop at terminals outside the city, but crosses it in underground tunnels, connecting to the metro system, therefore integrating suburban areas and inter-city services.

The similarities between the two railways can be noticed when comparing Crossrail to the RER A. Line A extends for 107 km, including 25 km of tunnel, while Crossrail runs for 103 km, with 27 km of tunnel. There are 7 inner city stations for both lines and a total of 46 stations on both systems.

3 projects, 2 approaches

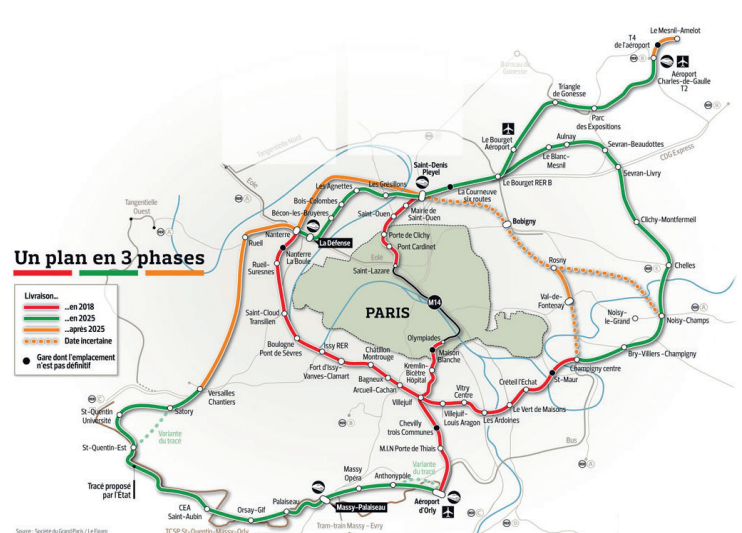
Looking at the main transportation projects that are being implemented in Paris and London, a fundamentally different approach to the integration of the metropolitan areas can be noticed.

While Greater London is designing a network of railways that would allow a faster and easier connection from the peripheries directly into the center of the city, crossing the center with the aim of relieving central metro lines from overcrowding, the same aims are pursued in Paris by creating a railway connection that runs through the peripheries.

As mentioned before, London's transport system in the peripheries is highly widespread and supported by a dense network of bus lines. However, commuting time from the region to the city are extremely long. The Crossrail system is, therefore, an answer to this specificity.

On the contrary, in Paris, direct connection to the center is already guaranteed by the 5 RER lines, but the peripheral network of public transportation is extremely sparse. The Grand Paris Express project especially aims at connecting strategic areas of the metropolitan region to deal with this problem.

The two maps clearly show this difference of approaches.



THERE AND BACK AGAIN

Two capitals at the core of the European transport system

The **European Union** is developing a series of policies and strategies that aim to coordinate an integrated transport system to build up the future of mobility at a continental scale. The framework is based on three main initiatives that have been introduced by the European Commission:

- 1) **White paper 2011:** a long term policy that adopts a roadmap of 40 concrete initiatives to achieve the Single European Transport Area, aiming to improve the transport system, increase mobility, and build a sustainable approach to mobility.
- 2) **Trans-European Transport Network (TEN-T):** a new transport infrastructure coordination policy launched in 2014. The aim is to build up a network of corridors to connect central nodes of European travellers.
- 3) **Transport 2050:** a development strategy that pushes municipalities to promote the reduction of pollutants in urban areas, through a drastic shift to cleaner cars and fuels.

Paris and London, as fundamental hubs of the European transport system, will play an important role in supporting and assisting the development of this strategy.

Train-ing instead of flying

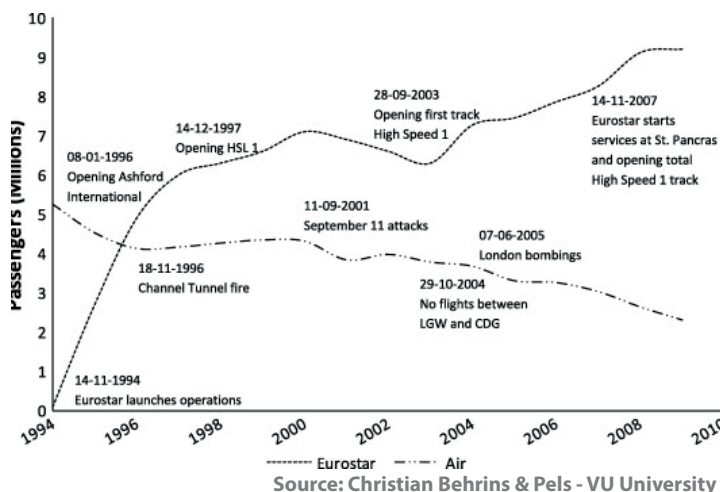


In 2010
9,000,000 train passengers



In 2010
3,000,000 air passengers

The passenger market between Paris and London is mainly composed of air transport and high-speed rail passing through the English Channel. Over the last few years, the train connection has increased the number of passengers, overcoming the number of people travelling by plane and becoming the largest means of transportation between Paris and London.



Crossing the Channel

One of the most significant outcomes of the realization and the operations of the Eurotunnel is that it overcomes a physical barrier that has always represented an insuperable obstacle between the two countries. The Eurotunnel had the effect of drastically reducing the perceived distance between Paris and London and it, therefore, encompasses a deeper meaning than just a railway connection between two cities.

Eurotunnel:

- 25% of the trade between the UK and continental Europe pass through it
- €1.023 billion of revenue and €200 million of net consolidated profit for the Group Eurotunnel in 2016

Source: Eurotunnel Group

Eurostar:

- 10 million passengers in 2016
- Approximately 6.5 million passengers between London and Paris (both ways) per year
- Over a third of clients are frequent travellers (5 or more trips per year)
- 40% travel for business, 16% are visiting friends and family, 44% leisure
- Average duration of the stay: 2-3 days

Source: Eurostar Limited

Guangzhou-Shenzhen-Hong Kong Express Rail Link:

- Opening of the rail link: 2018/19
- Hong Kong-Shenzhen travel time: 14 minutes (from 40 minutes)
- Cost: around \$8.5 billion
- Discounted economic benefits over 50 years: \$87 billion

Hong Kong-Zhuhai-Macau Bridge:

- 50 km link, longest bridge section of 29.6 km
- Travel time by road: 40 minutes (from 4.5 hours)
- Cost: \$10.6 billion

Seattle-Vancouver connection: a dedicated lane on the highway for autonomous vehicles between the two cities has been proposed.

Seattle-Vancouver High-speed Rail Line:

The feasibility of constructing a rail line that would reduce commute time to under an hour is being evaluated. Details of the project are not yet defined.

Copenhagen and Malmö Bridge:

In 2009, an average of 19,500 vehicles crossed the Oresund Bridge each day.

THERE AND BACK AGAIN



Source: projectmapping.co.uk

Shenzhen-Hong Kong Express Rail Link:

The project is divided into two sections:

- the Chinese section, owned by China Railway Corporation, paid for by the Guangdong Provincial Government and PRC's Ministry of Railways
- the Hong Kong section, operated by the MTR Corporation (HK), paid for by Hong Kong taxpayers

HS



Buses vs. Trains

Number of trains per 10,000 inhabitants

- **Central core / Inner London:** 17 trains / 12 trains
- **Peripheral ring / Outer London:** 2.4 trains / 5 trains

Grand Paris Express

- 205 km of railway
- 72 new stations
- 700 million estimated annual passengers
- €22.6 bn investment

Crossrail 1

- 100 km of railway
- 40 stations (10 new)
- 200 million estimated annual passengers
- €17.4 bn investment

Crossrail 2

- 50 stations (1 new)
- 98.5 million estimated annual passengers
- €31.8–37.7 bn investment

Eurostar

- 10 million passengers in 2016
- 6.5 million passengers between London and Paris (both ways) per year
- 40% business
- 16% friends and family
- 44% leisure

Public vs. Private: misaligned management?

Eurostar was initially owned by public authorities of France and Britain, mainly British Rail and SNCF, the two largest public transportation companies of the two countries. In the mid-1990s, however, British Rail was privatized, and the company changed ownership. It remains today half-owned by a French public company, and, for the other half, in the hands of a number of British private companies in the transport and financial sectors.

This mixed governance represents an interesting factor to analyse the behaviour and the future strategies of the company, especially when we look at the new challenges brought about by Brexit.

Bored at the border: risk of intensification of passport control

In the previous decade, Eurostar has faced some challenges in managing security controls on the route between France and the UK. Security concerns are now growing, and shutdown of frontiers that the UK has promised as a consequence of Brexit will make the issue even more complicated.

Eurostar plays an important role in finding an agreement between the governments of the two countries by, on one hand, promoting border security and, on the other, being careful not to scare away clients with too many added security measures.

Cooperation agreement between **Hong Kong International Airport (HKIA)** and **Shenzhen Bao'an International Airport (SZIA)**:

- coordinate the development by supporting long-term expansion plans
- immigration channel at Shenzhen Bay Bridge for passengers and vehicles travelling between the two airports
- "all-in-one tickets" that include accommodation and transportation options

HS



Simon Bennett, Head of Learning Legacy, Crossrail, London
Pierre Delalande, Director of Public Affairs, Eurostar Limited, London

Capstone

How did the RER inspire Crossrail?

Simon

The experience of the RER in Paris has been **highly influential** in designing Crossrail. Particularly during the 70s and 80s, when the project of Crossrail was initially conceived, Transport for London was looking at ways to build new transportation schemes **following other European examples**. So what we can say is that the two systems are **conceptually similar**.

Simon

The actual Elizabeth Line, to be completely opened in July 2017, has certainly taken inspiration from the RER, however, even if the "directors of London transport knew the directors of RATP, and [were] talking, [...] **there wasn't any exchange at an engineer level or at transport planner level.**"

Capstone

What's the transport strategy in London? Is it different from the one in Paris?

Simon

Crossrail and the RER have some significant differences. Frequency wise, Crossrail will have "24 trains per hour," it won't have double-decker rolling stock, and the doors of the train "will be open for [only] 40 seconds." To this regard, as opposed to the RER, Crossrail is **"just like an underground line"**. Moreover, the Elizabeth Line is only the first project, and it's not comparable to the RER system. The projected Crossrail 2 would "intersect with the Elizabeth Line at Tottenham Road," and "if you wanted to start thinking even further ahead, there are other places you can build several lines" in order to **create a RER-like system**, "but no one is thinking that far ahead in the UK."

Pierre

I think that the **Grand Paris Express is way more ambitious than the Overground**. In general, in terms of planification, France has a more long-term vision than the UK, and they are more able to finance their long-term vision. Grand Paris Express, for instance, is more efficient in collecting taxes than Crossrail 1 and 2.

Capstone

What initiatives could create cooperation?

Simon

"Without a doubt" an increased cooperation would benefit the development of projects in the UK, and that is why "I am working on [...] **the Crossrail learning legacy**." It is a website that would "prompt people to write up what they have learned in developing the project," with the aim of publishing a shared experience platform for people to learn from. "It is completely open, and anyone can look at it."

Simon

This initiative could become a **bridge between London and the rest of Europe; knowledge sharing** could be a product to be offered to different actors. The only issue is to make sure that people understand that lessons from other countries “can be applied in those [...] different structures.”

Pierre

In terms of **research and planning**, there is definitely something to do, and I think STIF and TFL already work together at this stage, although they have different networks and financing systems.

Capstone

How are the two cities making the Eurostar work?

Pierre

Eurostar used to be a **typical case of collaboration between national public monopolies**, resulting from an agreement between SNCF and British Railways that was signed in the 80s. There were many collaborations between, let's say, SNCF and Deutsche Bahn, to enforce the connection between Paris and Berlin, for instance.

Therefore, half of the way was covered by British legislation, and then by French legislation after the train passed through the tunnel. However, ever since 2010 and the new European directives promoting the recast of railway packages, Eurostar had to promote **a unified and unique structure** here in Britain: a single certificate of operation that is perfectly recognized and understandable anywhere. Now Eurostar has a structure established in one country, but is allowed to operate in different countries.

Pierre

Today, Eurostar is a British company, according to private British Law, and without any public funding. There are three main shareholders: massive Canadian and British pension funds, SNCF, and a little bit of SNCB. **Eurostar's center of gravity, therefore, is clearly British**, and the working language is primarily English, with 75% of its workforce here in England.

Capstone

What initiatives did Eurostar take to bring the two metropolis closer?

Pierre

The first thing to consider is the relative progress of Eurostar in the last 23 years. It went from around 2.5 or 3 million passengers per year, taking a 4-hour journey, to 10.5 million passengers taking the train for 2 hours and 17 minutes. But the main thing is that **we create more market share** than we take from the air travellers; Eurostar is increasing the market of passengers between Paris and London. What I mean is that a lot more people now are taking the train, and this was **truly a benefit for both cities**. We created **new uses for mobility between the two cities**. For instance people travelling back and forth in half a day, or within a day, for business, or leisure (exhibits, museums, etc.) purposes.

Pierre

A lot of these new uses are now stimulated by the Eurostar, and we participate in educating both cities' citizens about those new ways of travelling. Just look at the recent Eurostar commercials. Now, the idea is to create a common message, a common platform that can be used on both sides of the Channel. A lot of scenes in these commercials could happen anywhere in Paris or in London, indifferently, notably because the two cities have a lot in common; they share a young, dynamic, urban aspect. Now, we are trying to go beyond the stereotypes; we are trying to integrate the two cities.

“ ” indicates a direct quotation.

Text outside of quotation marks is paraphrased, but maintains the integrity of the interviewees' thoughts.

[...] indicates an omission.

02

Sustainability as a priority?

13 years to save the world
London's promises post-COP21

Green mobility

Working in Tandem:
L'Avenue Verte Paris-London
Reducing pollution: going
hybrid or electric
The demise of Diesel

A clean look over public spaces

Baby steps towards improvement
of walkability
Different strokes for different folks

Sustainability

Sustainability is crucial to the development of a modern, resilient city. International concerns of hegemonization and of shared responsibility of climate change are key to understanding a metropolitan approach to sustainability, and cooperation is particularly important, hence our focus on sustainability.

As the host of the Cop 21 and the leader of the C40, Paris sets a high standard regarding the environment for London. Worldwide emphasis on environmental issues with different meanings (energy, green mobility, and gas emissions) increases the need for a sustainable city, which Paris and London both aim to achieve by looking in the same direction, but through different means.

SUSTAINABILITY AS A PRIORITY?

13 years to save the world

The PC Agreement

- 143 countries having ratified the Agreement up to this date.
- They account for 82.91% of greenhouse gases.
- The UK is one of the last nations to ratify the Treaty on the 18th of last November (and it accounts for 1.55% of the greenhouse gases emissions).

Energy changes by 2030

- The goal is to limit global warming by 2°C vis-à-vis pre-industrial standards.
- The UK aims to decarbonize electricity, but is focusing less on solar and wind energy and more on nuclear.
- In France, there are similar objectives, but the country's strategy might change after the recent election.

The UK, ratifying the Paris Climate Agreement in a post-Brexit atmosphere tinted with climate skepticism, expressed two different initiatives. As expressed by Barry Gardiner, the UK is currently experiencing a 47% shortfall to reach its 2030 objectives in terms of energy, which only increased the necessity for the UK (and especially for London as an exemplary city) to lead the way towards a sustainable city. Furthermore, this aim for collaboration can also be retrieved in Nick Hurd's speech: "I hope this will send a very strong message of continued international commitment to implement Paris because it is obviously very important to send that signal out."

Vancouver, Seattle, Copenhagen, Hong Kong, and Shenzhen are part of the C40 network of cities.

London's promises post-COP21

Being the leader of COP 21 and the C40, Paris has been largely considered as a strong leader in the environmental cause, but an improbable effect is also that it challenges London to undertake initiatives to counteract its Parisian rival, initiatives that are made more difficult by the affluent protests against the COP 21 in the city. The City of London considers its green economy as booming, with a 6% increase per year, and employing more than 200,000 per year (a sector worth of £30 billion a year).

- London City Council has launched the Clean Bus Declaration via the C40 network, and negotiated a cut in price for hybrid buses.
- With 1,400 charge points, London has worked for a change in habit, and for an increase in the use of Ultra-Low Emission Vehicles (ULEVs).
- After visiting the Climespace branch of Engie, the Mayor of London aimed at reproducing the Parisian system of cooling off buildings using the Seine river, using the Thames.

GREEN MOBILITY

Working in Tandem: L'Avenue Verte Paris-London

L'Avenue Verte is an initiative undertaken by l'Association française pour le développement et la promotion de l'Avenue Verte London-Paris, in partnership with the English Association for l'Avenue Verte.



Their collaboration in terms of infrastructure (ensuring the continuity and practicality of the trail all along the two countries, as well as the ferry arrangements), marketing and events (as l'Avenue Verte was inaugurated for the Olympics in London in 2012), aims to promote sustainability, new, greener ways of travelling, and also tourism both in the capitals and the surrounding areas.

In fact, most of the promotion of the Avenue as well as the label "Accueil Velo" has been carried out by the different parks, regions and departments the Avenue crosses, to attract tourism from le Canal de la Villette to the city of London.



Source: L'avenue Verte Paris-London.fr

GREEN MOBILITY

Reducing pollution: Going hybrid or electric

London	Paris
2.3 billion passengers a year	nearly 1 billion journeys a year
- More than 8,600 buses - Over 2,000 hybrid Diesel buses (20% of the bus fleet)	- 4,490 buses - 12,876 drivers - 60% buses comply with the Euro VI standard or higher
More than 2,500 bus stops	More than 12,500 bus stops

Initiatives in London

"Cleaner Air for London" campaign

- By 2020, new Low Emission Bus Zones (better, cleaner engines that meet the Euro VI standards, reducing the NOX emissions by 95%) are to be launched in 12 new zones.
- Similarly, 3,000 ultra low Emission Double Deck buses (by 2019) and 250 Single-Deck buses (by 2020) are to be launched in Central London.
- 5,000 existing buses will be refitted so that they meet the Euro VI standards.
- Project ZeEus on Route 69 is testing wireless charging technology in order to find ways for buses to become 100% electric while charging on the road, at bus stations, etc.
- In the meantime, they are testing bio-Diesels blends in order to fuel the network by 20%.

Initiatives in Paris

"Bus2025"

- Bus2025, which by then, will consist of a bus fleet that is 80% electric and 20% biogas, both renewable source of energies.
- As in the UK, Paris first started to increase the share of hybrid buses (523 in circulation in mid-2016), and started testing electric technologies and charging systems during the second phase of the project in 2015.
- Ligne 341 is the first line 100% equipped with electric buses and was part of a promotion program with the COP 21.
- Currently, existing electric buses (and notably Bluebuses, built by Bolloré) have an autonomy between 180 and 250 km and cost around 500,000€, which is twice the price of a normal Diesel bus.

Both in Paris and London, strong emphasis is put on the improvement of buses, a vast source of pollution, especially in the British capital where they have a significantly higher importance (60% increase in bus ridership between 2003 and 2013).

Health and environment issues are of a crucial importance for **Copenhagen and Malmö**, who created across the border a strong cluster, Medicon Valley Alliance (40,000 employees).

CM

The demise of Diesel



In the UK

83,637 new Diesel cars in 2016
(178,022 total)
89,762 in 2015 (180,077 total)

The example of Diesel cars is further proof that the two metropolises have the same goal (reducing pollution), but different means of achieving it. Recent studies ICCT report shows that Diesel cars pollute 10 times more than trucks and buses (the crucial difference being the emission of Nitrogen oxides), and they are to be banned in Paris by 2020, a decision made by Anne Hidalgo following the different reports on health issues caused by Diesel cars.

As their use is more mainstream in London and a ban on Diesel cars would imply a switch in energy supply and a change of habits for Londoners, Boris Johnson's strategy is to increase the congestion charge for Diesel cars entering Central London by 10£ (whereas the fees for "normal" cars is of 5£) on top of the existing congestion charge.

Results

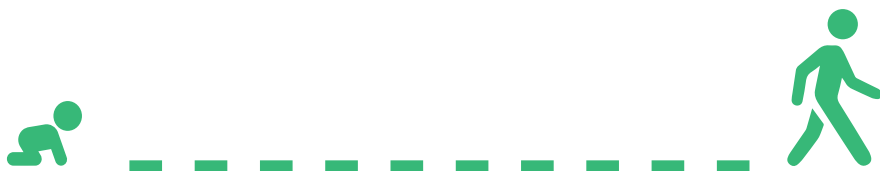
In January, registrations of Diesel cars were 4.3% lower than the year before, while those of petrol cars grew 8.9%— unthinkable two or three years ago.

A CLEAN LOOK OVER PUBLIC SPACE

Baby steps towards improvement of walkability

Pedestrians and their use of public space are of crucial importance in both cities, as evident by several initiatives. In Paris, for instance, "la piétonisation des voies sur berges" was intended as a way to fight against air and noise pollution that pedestrians are constantly exposed to, and to increase the share of green mobility, improving mixed-use areas between bikes and pedestrians.

According to The Economist, "London is a city made for walking," as the different boroughs are accessible by foot. Several municipal initiatives— as well as the Tube being overcrowded during office hours— such as replacing pavement curbs with granite bricks were made to enhance the pedestrian-friendly nature of the city. Thanks to them, the number of daily walking trips increased by 12% in 10 years after 2001.



Different strokes for different folks

Paris and London are characterized by a different approach to water within the city. Londoners swim in the lakes of their public parks. In Paris, initiatives are quite recent regarding citizen's access to water, and swimming in the Seine has been always tinted with disgust and a certain taboo. As part of the 2024 Olympics campaign in Paris, Anne Hidalgo envisions swimming in the Seine. Strong marketing campaigns around athletes are launched to overcome the symbols intrinsic to the Seine river, and the French Mayor plans to start her program by opening "Le Bassin de la Villette" for swimming starting this summer.

In London, the sentiment towards swimming in the Thames is relatively consistent with Parisian's attitudes, and the Port of London Authority is mentioning several risk factors such as cold water, tides, undertows and sewage remaining in the Thames (39 million cubic metres of raw sewage is found in the Thames per year), to discourage swimming in the River. An important part of Paris' rehabilitation of the Seine focuses on intense sanitation of the water.



Sustainable initiatives

By 2030: limit global warming by 2°C

Green economy in the UK:
an increase by 6% per year,
a sector with 200,000 employees

L'Avenue Verte Paris-London:
2 routes (408/474km) of marked bicycle paths

Green mobility

2.3 billion bus passengers / year in London (over 2,000 hybrid buses)

More than 1 billion passenger in France (523 hybrid buses)

**Project ZeEus and "Cleaner Air for London" projects
Bus2025 project in Paris**

Diesel cars to be banned in Paris by 2020

Incentives in London led to a 4.3% decrease in Diesel car registrations



Lalage Clay, Head of Education, London & Partners, London
Chris Gottlieb, Chief Marketing and Communications Officer, London & Partners, London
Amélie Cosse, Senior Consultant, Momentum Transport Planning, London
David Hart, Director at Momentum Transport Planning, London
Pierre Delalande, Director of Public Affairs, Eurostar Limited, London
Mike Raco, Professor of Urban Governance and Development at University College London, London
Nicolas Lefebvre, General Director, Office du Tourisme et des Congrès, Paris

Capstone

Are Paris and London on the same page regarding sustainability?

Claire

"In terms of whether or not the sustainability strategies are the same, [...] **everyone approaches this very differently**. So similarly to the Paris Agreement, in C40, **cities create their own sustainability strategies** that work for themselves, and we help them execute it, but all of them are very unique." [...] "Paris' priorities are going to be different than London's" even if "they are more similar than a lot of the cities that we work with." For example, "London and Paris are going to be far more similar than Paris and Cape Town." "They have shared priorities, but **they have different priorities as well**."

Pierre

Regarding the **Diesel Ban** and the different ways it is assessed in Paris and London, **I would say yes**; because in general, English culture is less keen on forbidding. And in Paris it's easier to implement those kinds of schemes. It's pretty visible when you're moving around in London; there are a lot of companies and different activities in the ultra-center of London, and it doesn't help with the traffic issues that are already there.

Mike

I saw in the British media recently that the Mayor of Paris said that "**it's in cities that you find some of the most progressive policies towards not just sustainability** but also maybe diversity policy [...]" It's in cities that you tend to find quite a progressive politics, so maybe it should be at the city level that climate change policy is organized." There may be something there that is different and that would be a fantastic thing to develop in the world."

Capstone

How do you brand Paris or London as sustainable cities?

Nicolas

We, in the Office du Tourisme de la Mairie de Paris, are not putting forward specific sustainability criteria (air quality, etc.) as boosting the attraction of different cities. However, we emphasize the **different touristic experiences** one can have within Paris, including "green ones." For the last two to three years, a lot of our publications have mentioned "la piétonisation des voies sur Berges." We do not emphasize the fact that they removed the cars to become more green, but we stress the idea that it created **incredible walking corridors** close to the Seine and **new ways of visiting the city**.

Nicolas

We also emphasize greener spaces. For some reason, Paris did not emphasize its numerous green spaces, which is both sad and paradoxical, because just as London, it is full of large green spaces all around the city. [...] The city of Paris has a very ambitious policy in terms of **pollution reduction and traffic restriction**, and I believe that will indirectly affect tourism in a positive way.

Chris

Potentially, we would brand London as a sustainable city; "we are looking at this **new strategy**." It is something "hugely important [...] in terms of the Mayor's priorities." However, we are still "at the beginning of our strategic process." The aim is to be able to promote a sustainable city "just as a great place to live, [...] that can be a **magnet for talents**." In the future, "who is going to want to live in a city that is not sustainable?" To this end, Sadiq Khan, talking about the future of London, coined the phrase "**good growth**."

Capstone

Who pushes for green strategies within Paris and London?

Amélie and David

"While there are organizations that set standards for [...] sustainable transportation," most of the improvements in green mobility go through a very high number of rules set by local authorities. **Green development is more politically driven**. Cycling, for example, is "about people changing their habits and policy helping people in changing their habits." Therefore, "the political will of **changing the mindset** around sustainability is essential".

Chris

"I think that one of the things that Hidalgo and Sadiq discussed was clean air and clean cities, and I think anything where we can **share ideas to make a better quality of life** for the people is absolutely right" and welcome.

Lalage

I am very interested in the idea of sustainability, especially seeing that "it has become **one of the Mayor's focuses**, and if London will [continue to] grow as it is growing now, we will have to take that very seriously. Equally if it ceases to grow, then we will have to be sure that the infrastructures built do not decay."

Chris

"I think that one of the things that Hidalgo and Sadiq discussed was clean air and clean cities, and I think anything where we can **share ideas to make a better quality of life** for the people is absolutely right" and welcome.

Capstone

Is it collaboration between the two or within a broader framework?

Mike

Given attitudes to climate change, pollution, environmental legislation, and the C40 (the group of 40 big cities in which Paris and London are big players), I think trying to come up with **common solutions** between some of the cities is really interesting.

Claire

"Collaboration is the model that C40 uses. Unlike businesses, cities aren't in competition with each other, so there's a lot of value that they find in talking to each other about the solutions that they've used and what they can borrow from each other to make their sustainability strategy success."

Claire

We find the **collaboration** between cities on sustainability to be **really helpful to them**, "because they're learning about things that they may not have considered in the past, and they're **learning [and replicating] best practices** from each other," as well as how to avoid mistakes. That's kind of a dream goal."

" " indicates a direct quotation.

Text outside of quotation marks is paraphrased, but maintains the integrity of the interviewees' thoughts.

[...] indicates an omission.

03

Innovation

Research on the rise

Sharing space and sharing
knowledge
A symbiosis of minds
Ile de France, queen of patents

Beneficial rivalry through startups

Chasing London: Paris seeks
investments
Boosting city appeal
Time to innovate
Fueling tech advancement
through competition

A win-win partnership

City-to-City Business
Welcome Programme

Historically, London has been seen as a more innovative city than Paris with its large number of enterprises, startups, and overall favorable business environment. It has the advantage that the city's language facilitates relations with the United States, rendering it the most obvious connection to Europe. Furthermore, the city's standing as a global financial center is a significant attraction to foreign investors. Recently, however, Paris has drawn attention in the innovation sphere with its rapidly growing number of incubators and startups, and notably due to its position in the European Union. With this development, competition between the two cities has intensified. Far from detrimental, their rivalry fuels innovation, as each city strives to create the best technology and attract the brightest engineers and scientists; their rivalry can, therefore, be viewed as "healthy competition." Each city looks at the other to see in which areas they must develop in order to stay relevant, as evident in the development of La French Tech in Paris after the start of Tech City UK in London. Many have argued, too, that because of the cities' differences, collaboration would be mutually beneficial, as Paris can profit from London's financial connections and London can use Paris' connection to Europe to its advantage; ultimately, the innovative success of one does not detract from that of the other.

RESEARCH ON THE RISE

Sharing space and sharing knowledge

Coworking spaces



In Paris

90 coworking spaces have appeared since 2008, and 40 more are in development. (APUR, 2016)

In both Paris and London, coworking spaces and fabrication labs (fab labs) are becoming increasingly prevalent as spaces that facilitate knowledge-sharing and collaboration.

Coworking is a concept related to the sharing economy, wherein the exchange of expertise through collective and collaborative work facilitates innovation. The first coworking space opened in London in 2005 and the first in Paris three years later. Nowadays, they are two places where this concept is growing tremendously. At coworking cafés, such as Hubsy in Paris, individuals pay an hourly fee in exchange for coffee, snacks, and a quiet place to work. There are private work rooms with whiteboards that can be rented out in order for groups to work together without disturbing others. Other coworking spaces, such as WeWork, an American coworking startup launched in 2010, are subscription-based and are designed more for groups of people from companies or startups that want to rent office space. WeWork has 174 office locations in 46 cities, including 17 in London, and just opened its first Paris location this April with a capacity of hosting 2,400 people.

Fabrication laboratories



In Paris

There are currently 45 fabrication laboratories and 9 more in development. (APUR, 2016)

Fab Labs provide tools and technology that can be used by entrepreneurs or individuals who want to create. One of Paris' biggest Fab Labs is located in the Cité des Sciences et de l'Industrie. It is a shared workshop where creators can make use of 3D and vinyl printers, a milling machine, laser cutting machine, thermal press, circular saw, and many other technologies. The use of the majority of the machines is free and available to anyone over the age of 15, unless accompanied by an adult. Individuals can bring their own materials to the Fab Lab, and extra materials can be left so that others can

"In 2010, 43% of private investment in research and development for the whole of Denmark and Sweden originated from the cross-border region (and the share increased from 25% in 1997). The region hosts 37% of the total number of researchers and 30% of patents of the two countries." (OECD, 2012a)

CM

use them for their own projects. The idea behind the space is to encourage people working side by side to ask each other questions and learn from their exchanges. The one condition that the Fab Lab has is that if someone uses the space, they must write about the methodology of their project on the Fab Lab Wiki page so that others have the ability to reproduce their work or learn from their process. Fab Lab London, opened in 2014, operates in a similar way to Paris' Fab Lab; it was also designed to facilitate digital fabrication and provides a workspace and machines to creators. The Lab provides "1. Shared workspace for schools, colleges & individuals to work and develop ideas, 2. Skills development and technology education through events & workshops, and 3. A business accelerator, translating innovative concepts into businesses."



A symbiosis of minds

The Ile-de-France region hosts 40% of French research, meaning it employs 126,500 people and hosts 46% of France's private research and 38% of France's public research. Each year, €18.4 billion are spent on research in the region. Public research in IDF accounts for 40%, whereas private research in the region accounts for 48% of total French expenditure. Public research is located within Paris, with half in the City of Paris and a quarter in Paris Sud. Ile de France is the first European region in terms of technological research, demonstrating the city's innovative capacity and legitimacy to international competitors. The city's research centers focus primarily on technological and medical fields such as electronics, fine chemistry, pharmaceuticals and instrumentation.

Co-publication UK and Ile de France, towards more collaboration

In addition to the biggest French research centers (INSERM, CEA, and CNRS), the main institutional partners of the United Kingdom are universities located in the Ile de France region. The amount of co-publications has tremendously increased in the last ten years. For instance, centers CEA and INSERM have doubled the number of co-publications with the United Kingdom in the last five years.

	2007	2009	2011	2012
Total number of copublications	5,582	6,551	7,532	8,202
with INSERM	657	872	1,115	1,280
with PRES Sorbonne Paris Cité	463	747	1,061	1,238
with Paris VI	455	691	880	944
with CEA	505	639	867	954
with CNRS	466	522	626	652

Source: Web of Science

RESEARCH ON THE RISE

As a global city, London also has many prominent research centers, the largest being the ones belonging to the prestigious universities of the "golden triangle." Among them, University College London and University of Oxford are the biggest with more than 5,500 researchers. However, University of Cambridge is the one spending the most, with more than £1.3 billion per year. The sector containing the most expenditure is the pharmaceutical one totalizing 22% R&D UK expenditure in 2013. The Francis Crick Institute, which opened in 2016, is the biggest biomedical research center in Europe. The Institute is directed by Nobel Prize recipient, Sir Paul Nurse, and is funded by Imperial College London, King's College London, University College London, the Medical Research Council, the Wellcome Trust, and Cancer Research UK. The aim of the institute, in addition to conducting medical research, is to facilitate relationships between researchers, entrepreneurs, and investors. Already considered the world capital of medical research, London is solidifying its global standing with the development of research centers like the Crick Institute.

"At the Cascadia conference, Ms. Clark and Jay Inslee, the governor of Washington, signed an agreement to deepen the ties between Vancouver and Seattle, including more research collaboration between the University of British Columbia and the University of Washington."

SV

Ile de France, queen of patents

With more than 7,000 patents registered in 2015 to the European Patent Office, the Ile de France region is the first European region before Bavaria. It represents 70% of total French registration. Greater London ranks 10th with barely 1,600 patents per year.

Leading European regions for patent applications at the EPO - 2015

Country	Region	2015
FR	Ile de France	7,421
DE	Bayern	6,961
DE	Baden Wurttemberg	5,054
DE	Nordrhein-Westfalen	4,961
NL	North Brabant	3,381
DE	Hessen	2,178
SE	Stockholm	2,068
FI	South Finland	1,684
DE	Rheinland-Pfalz	1,676
GB	Greater London	1,608

Source: European Patent Office

BENEFICIAL RIVALRY THROUGH STARTUPS

The European Digital City Index (EDCI), which was produced by Nesta as part of the European Digital Forum, indicates how well European cities support digital entrepreneurship and is designed to provide information about different locales where startups and scale-ups might choose to locate as well as which environments would benefit from the encouragement of digital entrepreneurship from policy makers. Currently, London is ranked in first place overall and Paris in fifth place. Looking at specific features, Paris outranks London in terms of digital infrastructure, knowledge spillovers, and lifestyle, while London remains ahead in access to capital, business environment, entrepreneurial culture, market, mentoring and managerial assistance, non-digital infrastructure, and skills.

Startups have been present in Paris for over two decades, with two notable success stories, BlaBlaCar, a popular ridesharing service, and Criteo, a real-time digital advertising software. Recently, there has been a startup boom in the city with an increase in venture capital investment and help from startup accelerators and incubators. In London, startups continue to thrive due to the city's substantial financial sector with financial services firms that help fintech and crowdfunding startups grow. Both Paris and London boast world-class universities and research centers as well as coworking spaces that facilitate innovation.

Chasing London: Paris seeking investments



Although the amount of venture capital investment in startups in Britain was still half a billion Euros more than that in France, the rate of increase in France over the last year was dramatic.

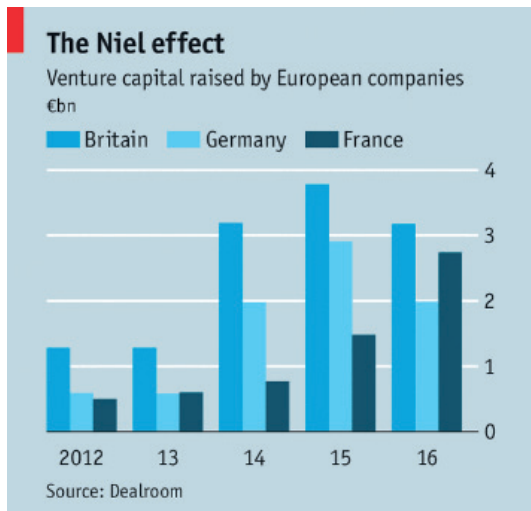
According to the Financial Times, "France has attracted record levels of deals and capital invested in 2016, making it the third most significant European tech hub by number of startups and by investment." Last year, the top French venture capital investments were in the fields of IoT ecosystem, music streaming, sound technology, semiconductor technology, and biotechnology. Dealroom, a company that "watches tech-industry trends" has said that last year, "France saw 590 rounds of capital raising, more than any country in Europe."

The Shenzhen-Hong Kong Stock Connect

is an investment channel connecting the Shenzhen Stock Exchange and the Hong Kong Stock Exchange. The cross-border trading link gives foreign investors greater access to mainland-listed shares and Chinese investors access to shares listed in Hong Kong.

HS

BENEFICIAL RIVALRY THROUGH STARTUPS



Source: The Economist

Boosting city appeal

London & Partners

London and Partners is the Mayor of London's official promotion agency. Its purpose is "to support the Mayor's priorities by promoting London internationally, as the best city in the world in which to invest, work, study and visit... by devising creative ways to promote London and to amplify the Mayor's messages, priorities and campaigns to international audiences."

Paris & Co.

Paris and Company is the economic development and innovation agency of Paris that was created through a merger of Paris Développement and Paris Region Lab. It "prospects and provides support for foreign direct investments, promotes the international attractiveness of Paris abroad, and fosters the Parisian innovation ecosystem through the incubation of startups, the experiment of new solutions, the organization of events and the cooperation between startups and global players."

Time to innovate



Startup accelerators and incubators are designed to help them grow and thrive; accelerators work with startups for a limited amount of time.

They involve an exchange of capital for guidance, while incubators work with them for longer periods of time to help them with sustained growth and do not require a company to pay them. Recently, many efforts have been made to create a European equivalent of the Silicon Valley. There are currently over three dozen startup incubators (both private and public) in Paris, according to Loic Dosseur, the co-director of Paris and Co.

Station F

Station F is an incubator located in the former train station Halles Freyssinet that is set to open in Summer 2017. It is soon to become the world's largest startup space at 34,000 square meters, with over 3,000 desks, more than 10 international startup programs, a makerspace, restaurant, cafe, bar, and eight event spaces. It will host Facebook's first startup incubator, the "Facebook Startup Garage," according to Chief Operating Officer, Sheryl Sandberg. Station F has been privately financed, but the city will spend an additional €70m to improve the area surrounding the incubator. Developers even plan to build a co-living space for entrepreneurs located just ten minutes away from Station F. Speaking about Station F, Paris' mayor, Anne Hidalgo, has said, "We hope it will create employment. I am convinced the metropolis has an important role in boosting the French economy. This will be a place to create enterprises *à la mode française*."

As recently as June 8, the Atelier parisien d'urbanisme (Apur) and the Institut d'aménagement et d'urbanisme de l'Île-de-France (IAU) announced that they have decided to join forces to explore the transformation and the specificities of the current dynamics.

The **Shenzhen-Hong Kong Innovation and Technology Park (HK/SZ I&T Park)** is a 87-hectare border area to host 1,000 companies with more than 20,000 workers, to encourage collaborative research and innovation between enterprises.

Fueling tech advancement through competition

Engrained in the concept of innovation is technology. With the shift towards a more innovative mindset, Paris and London have both become more tech-oriented as well. A key locus of this shift is in university populations, where graduates' career aspirations are changing and students are developing more entrepreneurial mindsets. In fact, a fifth of graduates from an engineering school near Paris are now trying to launch their own firms, and in 2015, many students from In-sead and HEC Paris went into jobs in the tech industry upon graduation. Today, many startups are developing in what is known as the "deep tech" sector, which includes artificial intelligence (AI), machine learning, and big data. French graduates are strong in these fields, and "after London, Paris is Europe's second talent hub for AI, virtual and augmented reality, and hardware technology." Paris also has the second-largest number of professional developers in Europe, and in 2014, France was the "best-represented and most acclaimed 'foreign' exhibitor" at the Consumer Electronics Show in Las Vegas, with 256 companies.

BENEFICIAL RIVALRY THROUGH STARTUPS

Innovation Clusters

Tech City UK is a technology district in East London that developed as such in 2010 after a cluster of technology startups began to grow there and following an announcement from UK Prime Minister David Cameron.



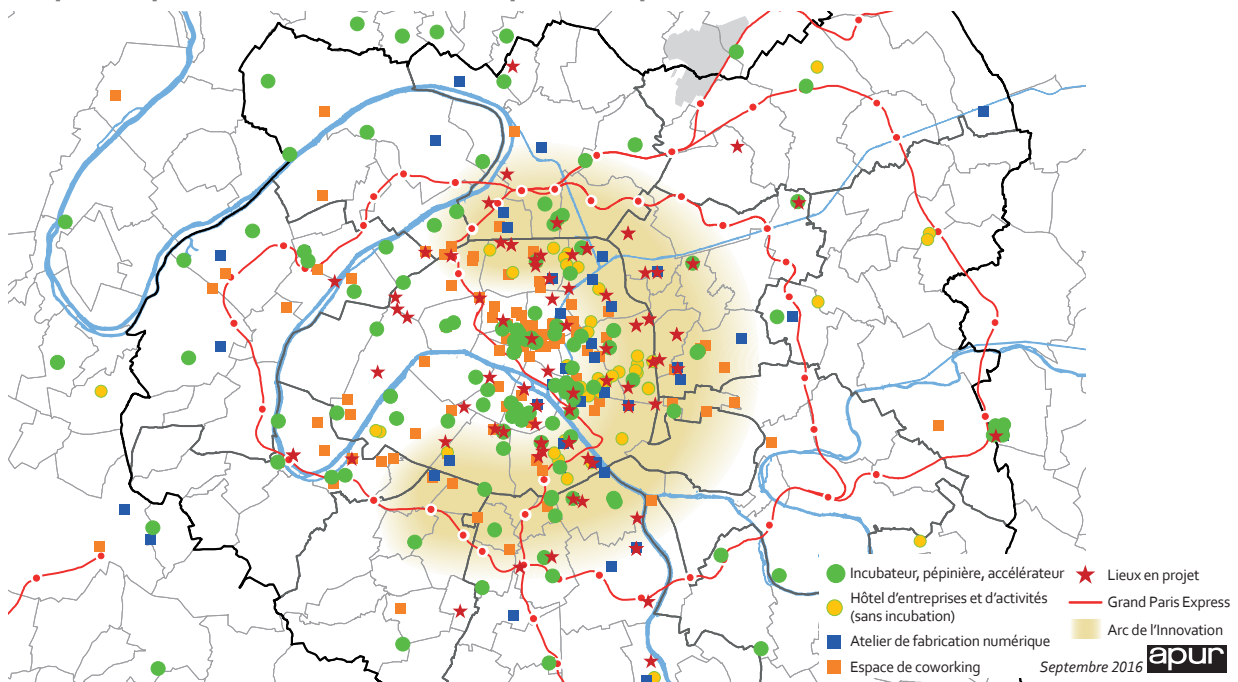
The area's growth was supported by the government at both a local and national level, as authorities saw its potential to develop into an innovative area similar to the Silicon Valley. Investors from companies around the world have put their money into Tech City. For instance, Google's Campus London, which includes a space for entrepreneurs to work, an event space where activities are held, a device lab, a smaller event space/classroom, and an accelerator space, is located in the area. Tech City also has partnerships with several universities such as University College London and London Metropolitan University. It has even developed the Tech Nation Visa Scheme, which allows Tech City UK to endorse applications for the Tier 1 Exceptional Talent Visa to give tech talent from around the world the opportunity to work in the UK's digital technology sector. Today, there are over 5,000 tech companies located in Tech City.

Paris-Saclay is a research and business cluster of six zones located 30 km southwest of Paris. The area first saw development around 1950 when French national institutions such as the French National Center for Scientific Research settled there. During that time and over the next twenty years, higher education institutions including the University of Paris, HEC,

École polytechnique and Supélec also established campuses on the Saclay plateau. With the goal of creating France's version of the Silicon Valley, in 2009, President Nicolas Sarkozy proposed a renovation to the campus. The Grand Paris Express project also includes plans to connect Saclay's zones, and investment is being made into academic real estate with the goal of "hous[ing] research institutions and higher education within a single super campus." The State's Investment Programme for the Future (PIA) allocates €1 billion to "Paris-Saclay laboratories, scientific facilities, and institutes" in an "unprecedented financial effort." As of 2013, Paris-Saclay played host to 657,000 inhabitants, 370,000 jobs, and 15% of France's research workers, and counting. It is estimated that within the next ten years, over 20,000 research faculty and 30,000 students will be working and studying in Saclay.

Today, the center of Paris is seeing tremendous development in terms of numbers of coworking spaces, fab labs, incubators, accelerators, and hubs. Three-fourths of these spaces were created between 2010 and 2016 and an additional twenty programs are in development. Since December 2015, the City of Paris and several communities (the territories of Est Ensemble, Plaine Commune, and Grand Orly Seine Bièvre) have also participated in a common initiative for economic development and job creation in an area referred to as the "Arc de l'Innovation." Thus far, nearly 600 public and private actors such as companies, institutions, investors, associations, and cooperatives are engaged in this project. The goals of this project are to create jobs, transform the urban area by softening the périphérique, and encourage innovative cooperation between the areas involved.

Important places in innovation and entrepreneurship in Le Grand Paris



Source: APUR

A WIN-WIN PARTNERSHIP

The key difference between clusters in London and clusters in Paris, therefore, is that those in the former developed spontaneously after startups sprung up in the same areas, while in the latter, centers were designed (by the government and other actors) with the goal of prompting innovative growth in these areas to create.

In fact, one recent conclusion of APUR and IAU, when looking at the dynamics in the sector of innovation in Paris, is that Paris, les Territoires, la Métropole du Grand Paris (MGP), and l'Île-de-France have a dynamism in terms of projects and actors thanks to the city's diverse innovation system. They have declared that the growth of 43% of French companies did not occur by chance, but rather, is results from ongoing transformations that have been accelerated by public actors in the Île-de-France region during the past decade. Paris is now striving to become a prominent actor on the world-scale.

Labels

La French Tech is a government initiative begun in 2013 by the French Ministry of Economy and Finance and can be seen as a response to the success of Tech City UK in London.

It is an accreditation given to metropolises around the world, nine of which are in France, to recognize their startup ecosystem and support the ambition of those in the tech industry in these cities. The initiative is directed by a small team, Mission French Tech, that creates a support system for startups by partnering with state actors in the economic sector. It also strives to promote public action that helps startups. Partners of La French Tech, including Caisse des Dépôts, Bpifrance, and Business France, invest in accelerators to help startups grow. Similar to the visa program started by Tech City UK, the French Tech Ticket program is a global competition between foreign startup teams wherein the winning team is given funding for their startup, a fast-track procedure for team members to obtain a visa to live in France, access to an acceleration program that involves masterclasses and networking events, a year in an incubator, as well as other forms of help in order to get their startup off the ground.

London itself does not have an accreditation system like Paris', but French Tech London, launched in April 2016, helps French startups navigate the UK technology and innovation sector and market by offering a network of French tech ambassadors and investors based in London. The network helps with market opportunity analysis and strategy, business networking, etc. through events and workshops. Public partners of French Tech London are Bpifrance, Business France, The French Chamber of Great Britain, the French Embassy to the United Kingdom in London. Private partners include investors and venture capital, consulting, and law firms Accel, Balderton Capital, OVH.co.uk, Leyton, and Lewis Silkin LLP. Funding is sponsored by Girls in Tech, La French Tech, Frog Valley (a network of London-based French entrepreneurs), French Digital (a community of French, Francophone, and Francophile professionals in Europe), FrenchConnect London (a private member club of French Digital Leaders in London), Startupbootcamp (a network of accelerators), and Techleaders Capital (a co-investment club for Tech CEOs and leaders). By creating a similar initiative for British startups in France, London may be able to benefit from the growing technological expertise located in Paris.

City-to-City Business Welcome Programme

On March 28 of this year, Mayors Sadiq Khan and Anne Hidalgo met and announced a joint effort in business collaboration through an initiative called the City-to-City Business Welcome Programme. This program, co-operated by Paris & Co. and London & Partners, will "include assistance with company set-up, access to co-working space, introduction to the local tech ecosystem and networking, and discounted accommodation. Eurostar will also provide entrepreneurs with preferential rates on their services."



Paris

#5 in ECDI Index

39 incubators,

15 accelerators

€2.7 bn of venture capital into startups

Amount of government funding into Paris-Saclay in 2013: \$3.25 bn

1 Wework office

London

#1 in ECDI Index

12 incubators,

24 accelerators

€3.2bn of venture capital into startups

Amount of venture capital into Tech City London in 2013: \$161 million

17 Wework offices



{ **Maxime Basquin**, Trade Development Advisor - Tech & Services, Business France, London
Emmanuel De Coral, Trade Development Advisor - Tech & Services, Business France, London
Christian Fatras, economic Counsellor, French Embassy, London
Alex Margot-Duclot, Senior Associate, Osborne and Partners, London (La French Tech)

Capstone

Why is London so attractive for business?

Maxime

When starting a business, London is **the place to be**. You can start a business online in two hours in the UK, while it would take two weeks in France. In general, startups have easier access to everything in the UK than in France. In terms of **investment**, most of the foreign investors are here. The **labor market** is more rotational in London than in France, and everyone switches jobs every 2-3 years, which is particularly interesting for people starting their career.

Maxime

The international community is way stronger in London than in Paris, with 40% of London's inhabitants being born outside of the country. In the tech industry, 40% of startup founders are foreigners, and it's about the same ratio for engineers. There are structures here in London that function without hiring any British citizens.

Emmanuel

The financial sector is a huge attracting force for French people here in London, as well, here in London. Most of the big American banks are in London rather than in Paris, which is a strong incentive in the financial sector.

Maxime

There are, indeed, a **lot of French expats working in finance**. Even our French banks are quite well implemented here in London. BNP and Société Générale are functioning here with around 3,000 people each, and in broader terms, many European banks are here in London. When one wants to start and boost his or her career in high-quality finance, **the obvious choice is here**.

Capstone

Will Brexit have an effect on business in the UK?

Maxime

For now, Brexit changes a lot the situation for the Investment Team of Business France, because they focus on finding British investors who are willing to develop in France or willing to buy strategic companies in France. This team has a lot of work because many companies want to **keep their access to the European market** and are thinking about moving their headquarters.

Maxime

Regarding the implementation of new businesses in the UK, **it does not really change much**. There was a decline in our activity for the first 3 months and it relates to something very sentimental. **People felt betrayed and unsure** about the upcoming years and were worried that the UK would drown. Luckily, thanks to the devaluation of the Pound there was a positive impact on foreign investments. Ever since last September, the demand for starting businesses in the UK was quite constant. Maybe Brexit will slow down the demand in the near future, but at this stage nobody knows the perimeter of the negotiation.

Alex

London has been seen as a big hub for innovation and a **“very trendy city for tech”** for a long time. However, “Brexit is having quite a big impact, I think, on the mentality.” The **spirit and the state of mind** in the city are changing. These are **“soft factors”** that highly affect the tech industry; people are worried that a reduction in skills migration to London could damage the access to talent.

Capstone

What about on startups?

Alex

Startups **should not be affected** by Brexit too much. In fact, there will be a 5-year window before it will become effective, and that is a very long time for startups. Bigger companies will have to prepare and plan a strategy to face it, but **for startups “that’s not a concern” right now.**

Emmanuel

Thanks to **Sadiq Khan and Anne Hidalgo getting closer together**, when you open a startup in Paris, Sadiq Khan is going to do everything he can to allow you to do the same thing in London without additional fees, and vice-versa. That is a crucial point in collaboration, I believe.

Capstone

Where does La French Tech stand between the French and the British?

Alex

La French Tech is an agency that aims to drive efforts to organize the **French community working in the technology industry** in France and in dozens of cities all around the world. Its purpose is “to promote the tech sector, and also to help the main actors, businesses, stakeholders, investors, entrepreneurs, to come together, help them know each other, and coalesce into a force of action.”

Alex

“The London French Tech hub [...] gets all the stakeholders of this French Tech ecosystem and French entrepreneurs [...] in the tech industry together to work, to network, to exchange opportunities.” The most important factor for our work to succeed is “to be **as open and international as possible, together**” in order to transform this “coalition into a useful club.”

Capstone

What do you think about Station F?

Alex

Station F is one example of a private initiative that received great support from the City Hall. These kind of initiatives are **“very good for the image of the city of Paris,”** and it’s important to “organize events to attract visibility” in order to allow the most people to be “aware of what’s going on in Paris or in London, helping them to promote it, to spread the word.”

Maxime

It is a good example showing that **France is going to come back.** But **there is a lot to be done.**

Christian

Station F is part of a movement where English people come to realize that there is stuff happening in the tech industry on the other side of the Channel and that there are incentives coming from a political side in Paris now. **Station F is, in that sense, a powerful message in itself.**

“ ” indicates a direct quotation.

Text outside of quotation marks is paraphrased, but maintains the integrity of the interviewees’ thoughts.

[...] indicates an omission.

04

Collaboration 101: Common grounds for education

Starting from a young age: secondary education
University Rivalry
Study Buddies
A lesson in prestige taught by London

Migration: a journey across the Channel

Working in London, retiring in France
#RefugeesWelcome?
Refugees: Re-negotiating French-British Agreement
Security as a common concern

Social issues

Due to their strong presence in the media and impact on the population, social issues (education, borders, migration, and security) demonstrate what is at stake in a 2017 society facing globalization (migration and flux). Political and security challenges are inherent to the modern world. When the EU is no longer the supreme leader over these widespread issues, how do policymakers deal with them? Apprehending the globality of those phenomena is where there are strong possible ties of collaboration between the two cities.

COLLABORATION 101: COMMON GROUNDS FOR EDUCATION?

London and Paris are two educational cores at the European but also world levels. A recent study published by the British Cabinet declared that Paris and London are the two best cities in which to be a student. Several characteristics enable us to consider them as such: the prestige of their universities, the number of foreign students they host every year, the dual-degree programs between renowned Parisian and Londonian universities, and the existence of programs in secondary education taught in English and French. In 2014, France spent 6.8% of its GDP (€146 billion) on education, while the UK spent 4.7% of its GDP (£84 billion).

Starting from a young age: secondary education

There are three Lycées Français in London, and three comprehensive schools and one high school in Paris that have a "section internationale." This Parisian high school gives students the opportunity to take the French Baccalauréat exam with the international option certifying that they have participated in a bilingual and bicultural curriculum. With this certification, it is easier for the students to be admitted to London's prestigious universities.

University Rivalry

London's prestigious universities

London has a very successful education system at both the secondary and higher education levels. Concerning higher education, London is considered to be a "global education powerhouse" with four of the world's top 10 universities. Universities such as Cambridge, Oxford, University College of London, and Imperial College attract students from all over the globe. In 2014, the UK attracted more international students than any other country except the United States, with 105,000 international students studying in London, accounting for a quarter of the total student population. In addition,

according to London and Partners, international students contributed £3 million to the UK economy in the 2013/2014 academic year. According to the UK Council for international student affairs, 13,000 students leave France every year to study in London.

Paris as the best city for international students

While London is seen as a top choice for education, Paris also benefits from a certain appeal at the world level. France is the world's third country for welcoming international students, hosting 60,000 foreign students every year. The French capital achieved this status thanks to the low cost of education fees, the quality of life, and the attractiveness of its curriculum. Even if the British do not comprise the majority of foreign student population, each year, 10,000 students from the UK choose to study in Paris.

QS Best City Rankings

Rank 2017	Rank 2016	City
1	7	Montreal
2	1	Paris
3	5	London
4	10	Seoul
5	2	Melbourne
6	9	Berlin
7	3	Tokyo
8	13	Boston
9	11	Munich
10	13	Vancouver

Source: New Strait Times

QS World University Ranking - 2016/2017 Results

2016 rank	2015 rank	Institution name	Country
1	1	Massachusetts Institute of Technology (MIT)	US
2	3	Stanford University	US
3	2	Harvard University	US
4	3	University of Cambridge	UK
5	5	California Institute of Technology (Caltech)	US
6	6	University of Oxford	UK
7	7	University College of London (UCL)	UK
8	9	ETH ZURICH (Swiss Federal Institute of Technology)	CH
9	8	Imperial College London	UK
10	10	University of Chicago	US

Source: World University Rankings

Mainland students in HK

In 2014, 20,871 cross-boundary students went from Shenzhen to Hong Kong every day.

HS

COLLABORATION 101: COMMON GROUNDS FOR EDUCATION?

Study buddies

Several prestigious Parisian universities have taken various initiatives so that their students can benefit from the reputation of London. For instance, the business school ESCP Europe, based in Oxford, moved its campus to London in 2005, establishing strong links with the City University. In the past few years, Sciences Po has created three dual diplomas with the universities of UCL, LSE, and King's College. Students from Dauphine University (400 every year) have the opportunity to spend their entire Bachelor's career in London, thanks to its establishment of a British campus in 2014. Classes are taught in English by Dauphine professors and British university faculty from King's College, UCL, LSE, and the University of Bath.

A lesson in prestige taught by London

London is also very attractive in terms of secondary education, hosting three Lycées Français. The largest French high school in London is the Lycée Charles de Gaulle, with 4,500 students, followed by the Lycée Winston Churchill, with 730 students. The Lycée Charles de Gaulle is the most prestigious Lycée Français outside of France and refuses 600 students' applications each year. Due to the increasing number of French expats in London, there is a high demand for another high school.

In 2001, among the 18,000 daily commuters over the Oresund region, 2,300 were students. The Oresund is highly educated (35% of the working age population with a higher education degree, versus an average of 32% in both countries).

CM

In 2012, the Chinese University of Hong Kong-Shenzhen was founded, as a cooperation effort between the Chinese University of Hong Kong (CUHK) and the Shenzhen University. CUHK is a public research university, located in Shenzhen, and approved by the Ministry of Education of the People's Republic of China (MoE). It represents a great research cooperation effort between Hong Kong and the Mainland.

HS

	London	Paris
Number of international students	107,000	60,000
UK-France exchanges	13,000 French students in London	10,000 British students study in Paris
GDP spent on education	£84 billion (4.7% of GDP)	€146 billion (6.8% of GDP)

MIGRATION: A JOURNEY ACROSS THE CHANNEL

Working in London, retiring in France



171,000 British are expats in France

21,000 British live in Paris.



70,000 British expats in France are retired.

Brexit risks for British expats in Europe

- Deportation (unlikely, though, because of a legal protection "acquired rights" under international law for expats even after Brexit)
- Risks for property.
- Visa issues.
- Necessity of a working permit



300,000 French are expats in Great Britain.

225,000 French live in the Greater London.



French expats settle in London for business.

Brexit risks for French expats in Britain

- Working permit
- Travelling visa for expats?
- Stigmatisation?

A common identity between Copenhagen and Malmö?

Because of the growing importance of the cooperation between the two cities and the aesthetic as well as structural symbolism of the Bridge, what defines the Oresund identity in a context of similarity between Danes and Swedes (in terms of language, culture, etc.)? The cultural similarities between them makes migration an easier topic and a strong basis for the apprehension of the collaboration between those two cities (with 80% on the Swedish side feeling part of the cross-border area).

The "expat situation" post-Brexit is a high concern and priority for the British as well as the rest of the EU governments, who fear their expats would bear the brunt of such a political decision. However, their issue can be considered "a well-known risk" that the British government has been mentioning even before Brexit, as it appears in their February 2016 publication, "The process for withdrawing from the European Union."

"Many UK citizens would want any negotiations to secure their continued right to work, reside and own property in other EU states, and to access public services such as medical treatment in those states."

"UK citizens resident abroad, among them those who have retired to Spain, would not be able to assume these rights will be guarantee."

In 2014-2015, they paid £674 million to other European countries for the treatment of UK nationals.

In 2010, 12,000 Danes lived in Malmö and 4,000 Swedes in Copenhagen.

#RefugeesWelcome?

Mediterranean figures

- Mediterranean sea arrivals in 2016: **355,361**
- Around 60% are men
- Around 20% women, 20% children
- 21.3 million refugees worldwide (2016)
- Total EU asylum claims (2015): **1,321,560**

Where do people applying for Asylum in the EU come from (2015)?

- Syria
- Afghanistan
- Iraq
- Kosovo
- Albania
- Pakistan
- Eritrea
- Iran
- Ukraine

MIGRATION: A JOURNEY ACROSS THE CHANNEL

Who are the asylum seekers in France and the UK (2015)?

In the UK	In France
Iran (4,780)	Albania (6,850)
Pakistan (3,700)	Afghanistan (6,065)
Iraq (3,645)	Sudan (6,055)
Afghanistan (3,100)	Haiti (5,145)
Bangladesh (2,225)	Syria (4,670)
Other (20,840)	Other (4205)

Refugees: Re-negotiating French-British Agreement

The border between Paris and London undertakes a triple symbolic dimension. It is first a physical obstacle, the Channel, then an institutional frontier, the Schengen space, and finally, a peculiar policy of externalisation of control over neighbouring States (France, but also Belgium, and the Netherlands). The policy was overruled by the Touquet treaty (2003) that decided to extend the British controls on French grounds (and to close the hosting center of Sangatte), and established a certain cooperation between the two countries, as witnessed by Philippe Wannesson:

"Pour la première fois, la situation à la frontière britannique fait l'objet d'une mobilisation des deux côtés de la Manche, avec un début de coordination."

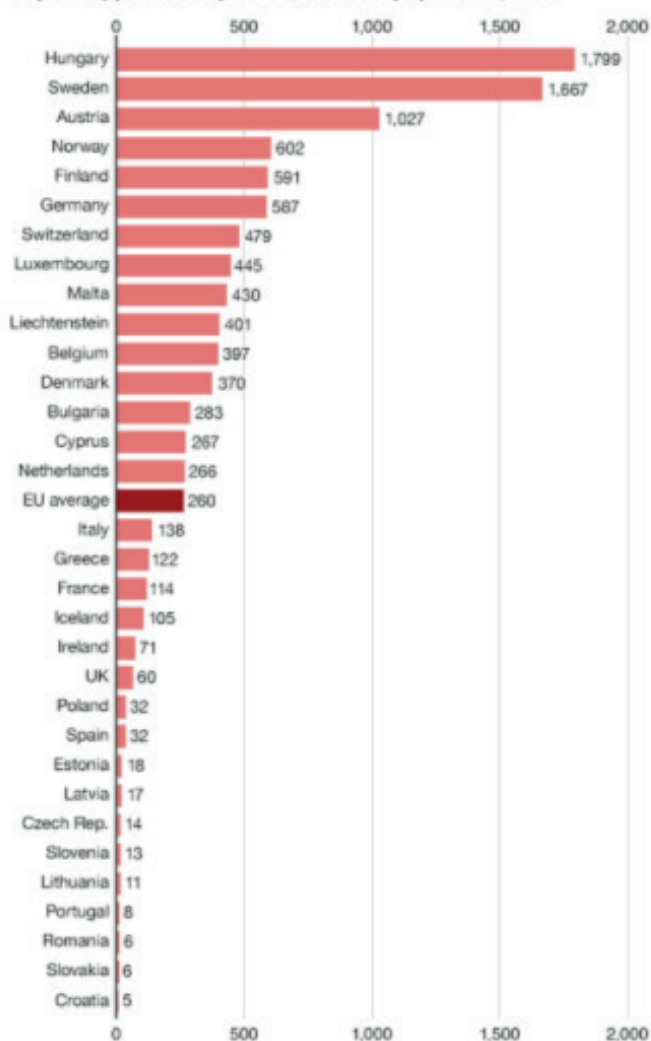
The existing cooperation presupposed a certain symmetry between the British and the French controls that have, in reality, proven to be more invested in France, and has put in emphasis new questions of identification and surveillance for dealing with this flux. The complexity of the French-British border reveals a growing interest for the question of frontier and of controls, that have been subject to a worldwide phenomenon.

Joint statement by the governments of France and the United Kingdom (30th August 2016)

"In the face of the challenges posed by ongoing migratory flows in Europe, and taking into account the migratory pressure in the Calais region and the particularly difficult humanitarian situation, we are committed to working together to strengthen the security of our shared border, to strongly diminish the migratory pressure in Calais and preserve the vital economic link supported by the juxtaposed controls in Calais."

Outside of the Schengen space, the pre-Brexit UK was not as much concerned with the migrant phenomena as the rest of the European countries (especially Germany and France), whose policies were more open to refugees. Protected by its strategic insular position as well as by the Dublin Convention (allowing the UK the right to refuse any refugee who reached Europe by any other country), they could displace their borders up to Calais. But the agreements are no longer valid now that the EU cannot shield the UK from the crisis; Brexit's first migratory consequence is the dismantlement of the "Calais Jungle" (around 7,000 migrants dispatched in 170 centers in France), and the UK will have to host more refugees than it ever has before.

Asylum applications per 100,000 local population, 2015



Source: Eurostat

Source: BBC

MIGRATION: A JOURNEY ACROSS THE CHANNEL

Security as a common concern



At the country level, France and the UK are strategic allies in the fields of defense and strategy, a collaboration that was defended in several bilateral agreements, notably the Lancaster House.

At the city level, the security issue is now challenged by a strong fear of terrorism, which has recently touched the sacred European area, frightening France and its close neighbours. In the joint statement by the governments of France and the United Kingdom on the 30th of August 2016, the idea is to reinforce the fight against terrorism: *"The terrorist attacks which hit France, as well as other countries on the continent over the last 18 months, make our commitment to work closely together even more important."* *"Effective UK/France cooperation remains crucial in addressing the shared threat we face from terrorism and extremism."*

Could London be seen as a safer place after the Paris attacks? The attacks renewed interest in security, and after November 13th, Theresa May called for the deployment of an extra 1,900 security and intelligence officers at MI5, MI6 and GCHQ, an increase of 15%.

After the recent London attack, however, Paris also reinforced its security system, oiling a reflexive mechanism of challenging each other's security; both cities strive to become stronger after an attack. The EU's policymakers also emphasized the importance of the fight against terrorism and the need for a local appeal for collaboration. In European Commission President Jean-Claude Juncker's speech after the attacks in Brussels a year ago, he said that the Commission "can only send that sympathy back twofold" and that the U.K. "will always remain a partner and a friend and one we will continue to work hand in hand with in the fight against against terror."

Passport controls between HK and Shenzhen

- 6 control points across the border
- 603,100 travellers crossing every day
- 41,400 vehicles crossing every day

The Hong Kong-Shenzhen boundary is secured through six different cross-border control points, two rail boundary crossings and four road crossings. The total number of travellers crossing every day is 603,100, among whom 331,400 travel by rail, 68,700 by coaches, 24,000 by shuttle buses, 29,400 by other cross-boundary vehicles, and 149,700 by local public transport services.



Education

107,000 international students in London.

13,000 students leave France every year to follow their study in London.

More than 6,000 students in Lycées français in London
60,000 foreign students every year in Paris

10,000 British students choose to study in Paris.

Migration and borders

There were around 7,000 migrants in the Calais Jungle.
1,321,560 asylum claims in Europe.

21,000 British expats in Paris (171,000 total in France).
225,000 French in the Greater London

1,900 extra security and intelligence officers deployed in London after the November 13th attack in Paris.



Maxime Basquin, Trade Development Advisor in Tech & Services, Business France, London

Lalage Clay, Head of Education, London & Partners, London

Pierre Delalande, Director of Public Affairs, Eurostar Limited, London

Christian Fatras, Economic Counsellor, French Embassy, London

{ **Philippe Guyonnet-Dupérat**, Financial Counsellor, French Embassy, London

Nicolas Lefebvre, General Director, Office du Tourisme et des Congrès, Paris

Capstone

Who are the typical French expats living in London?

Philippe

There are 300,000 French living in the UK. In general, the French in London are quite a young, diverse, and integrated population. Contrary to general clichés, the **typical profile** is quite far from the typical financial expat most people envision.

Pierre

There are two categories of expats in London. Of course, there is the classic model of expatriates: businessmen being moved to London by their multinational companies and their families following them, typically living with their families in South Ken. However, there is also another part of expats that have nothing to do with that model— a part more **diverse in a sociological, political understanding**, and more representative of the French population. This second category did not come to London for fiscal privileges, but because here they were given a chance and more opportunities.

Nicolas

The French community in London represents a very strong link between Paris and London, and even more because this community is not only French, but also strongly Parisian; they create **a story between Paris and London**. To me, this is a strong link between London and France, but more specifically between London and Paris.

Capstone

Why do French decide to settle in London?

Philippe

There are several factors: **a tax haven**, a general **mindset in business**, but also a **normative system** that is easier in England, and that is a powerful source of influence given the relative efficiency of justice vis-à-vis Civil Law. Moreover, in general, the **labor market** is way more attractive in London than in Paris.

Maxime

When you are an expat working here, it is so easy to be integrated within the labor market. You can **find a job easily**. Even with a mediocre level of English you can work at Caffè Nero right downstairs because you just need to know how to greet people and count change.

Capstone

Will Brexit affect the French community living in London?

Pierre

When thinking about Brexit and the question of expatriates, some sectors are obviously **more at risk**, such as **finance, investment, culture**.

Philippe

Taking very recent data, such as the 15% devaluation of the Pound value vis-à-vis the Euro, it is quite obvious that people would question their future here in London. Data on immigration shows that already **35% of European nationals in the UK are now gone**.

Christian

The expat situation is mostly a question of individuals, and although, of course, passenger mobility could be more difficult, it mostly questions **the right of citizens to stay here**. However, both countries and both cities could truly benefit from the issue, simply because the British economy is **highly dependent on expats**. In the tech industry, for instance, about 20-30% of the company leaders come from the EU.

Lalage

Brexit could also have an important impact on international students, as well. We know that one reason why students come study in London is because they can pop over to Europe. **If it stopped being so easy, it might be a big deal for us**.

Capstone

What do you think about Paris and London collaborating in the education sector?

Lalage

From the view of UK students, having international students coming in exchange **"is nothing but positive [...]"** how could it be anything else?" The collaboration in terms of student exchanges is led by the **crucial factor of language**; "Doing a degree [in the UK] is a way of consolidating their English skills, [...]" and it becomes a passport to jobs in the rest of the world."

Lalage

"Great Britain is an island off, rather than of Europe". Traditionally, "Britons have not been brought up to see themselves as part of the landmass of Europe", and "the idea that you could jump in your car and cross four borders in a day (...) **is not part of our upbringing**". However, "I think that there is a **changing perception**", and you can notice it "if you look at how young people voted in the referendum;" they "largely voted to stay in Europe, because they see that is part of their heritage".

Capstone

Could you see students living in Paris and studying in London, and vice-versa?

Lalage

There is already some collaboration in this terms. "I know personally French businesspeople whose families remain in Paris but they work in London", **"so it is feasible"**, even if certainly not cheap. A very interesting market in London that could be open for collaboration is the **"student's accommodation"** market. The system has privatized in the last 20 years, and there could be "fruitful exchanges between Paris and London; student accommodation providers could get together and find ways of making it possible to exchange accommodation", making it easier for students to "spend the month in Paris or vice-versa" for studying, while living in the other city.

" " indicates a direct quotation.

Text outside of quotation marks is paraphrased, but maintains the integrity of the interviewees' thoughts.

[...] indicates an omission.

05

Competing for the touristic spotlight?

French in Paris, foreigners in London

Top 3 Must-sees

A real cultural potential

2 for the price of 1 : a cultural package?

Common projects, to be continued...

Terrorist attacks: cooperation as a lifejacket

Prospects of tourism after Brexit

Culture & Tourism

Both Paris and London are considered cultural world cities, whether for their country's literature, number of museums, music concerts, or cinema/theater events. The two cities are internationally regarded as prime locuses of culture and intend to continue to be seen as such. Because they both have prominent cultural scenes, Paris and London compete every year for the title of "First world touristic destination."

COMPETING FOR THE TOURISTIC SPOTLIGHT

French in Paris, foreigners in London

In both cities, tourism represents a considerable part of their respective GDP (around 10%). This wealth is generated by the multiple millions of Euros spent by tourists every year, and also by job creation (1.2 million jobs).

Number of visitors in total :

Paris : 45 million
London : 31.5 million



International visitors

Paris : 18 million
London : 18.6 million

London largely benefitted from the 2012 Olympic Games, as every year since the mega-event there has been an increase in the number of visitors to the city. London is becoming more and more popular with increasing numbers of visitors coming to the City each year to attend the capital's world-class exhibitions, visit the city's famous landmarks, enjoy its diverse culture, and watch major sporting events. Forecaster Oxford Economics predicts that London will welcome 35.6 million tourists by 2020, an increase of 6%.

Both capitals have created a touristic passes (London Pass and Paris Pass) that include visits to many monuments and museums, bus tours, transport tickets, fast-track entries, guidebooks, etc. with the goal of saving people time, money, and stress. Tourists can choose to have it for 2, 3, 4, or 6 days with a progressive price. For those interested in discovering two of the world's most popular cities in a single trip, some agencies combine the visit in a seven-day trip, travelling from Paris to London by high-speed Eurostar train.

Top 3 Must-sees



London's 1st site:

British Museum
6.4 million visitors



Paris' 1st site:

Notre-Dame
14.3 million visitors

Among the 10 most visited monuments in the world, three are in Paris. The most visited French monument is Notre Dame de Paris with 14.3 million visitors, followed by the Sacré-Cœur Basilica with 10.5 million, and Le Louvre with 9.1 million.

In London, the most visited sites are museums. The British Museum is the first, with 6.4 million visitors followed closely by the National Gallery with 6.3 million visitors. The Tate Modern registers around 5.8 million visits per year.

Paris and London attract visitors from each other. In fact, the British are the top nationality to visit Paris, and vice-versa.

Government revenue from tourism in Canada

"In 2015, \$24.7 billion of government revenue was directly attributable to tourism. Domestic tourism spending accounted for 77.4% of this revenue, with the remainder coming from tourism exports.

Taxes on products sold to final consumers (\$14.2 billion) were the largest source of government revenue attributable to tourism."

SV



Source: European Cities Marketing

COMPETING FOR THE TOURISTIC SPOTLIGHT

A real cultural potential

The two capitals have been granted the UNESCO World Heritage label. London is one of the few cities worldwide which boasts four UNESCO World Heritage sites: Westminster Palace, the Royal Botanic Gardens at Kew, The Tower of London and Maritime Greenwich. In Paris and around, the banks of the Seine and the Palace of Versailles are both labeled as UNESCO World Heritage sites.

Art galleries also contribute to the cultural wealth of the cities, as there are around 850 in London and more than 1,150 in Paris.



Of the top 20 museums and galleries in the world:

6 Londonian

3 Parisian

2 FOR THE PRICE OF 1: A CULTURAL PACKAGE?

Common projects, to be continued...



Culture Connect (2010)

An initiative begun by Eurostar, it is the first cultural partnership between the most popular museums and galleries of London, Paris, and Brussels.

It gives travellers the opportunity to have two entrances for the price of one for exhibitions in any of the three cities.

The offer is valid 5 days from the arrival date in the city. In London, museums such as the National Gallery, the Tate Modern, Tate Britain and the British Museum were involved, while in Paris the museums involved were Le musée du quai Branly, le Musée d'Art moderne de la Ville de Paris, and les Galeries nationales du Grand Palais.

Another project was the **Tandem Paris-London** in 2015. After its success in Buenos Aires (2011), Berlin (2012), and Dakar (2013), the Institut Français decided to associate Paris and London for its fourth edition. With the support of the City of Paris, in partnership with the British Council, supported by the City of London, Paris and London had the opportunity to expose their populations to the other city's culture. Over the course of five months, 50 cultural events took place in both capitals.

	London	Paris	Berlin
Art galleries	857	1,151	421
Festivals and celebrations	271	360	63
National museums	13	27	18
Admissions to all theatres	22.0m	5.6m	2.4m
Live music venues	320	430	250
Michelin star restaurants	62	105	14
Théâtres	241	353	56
Museums	215	313	158
UNESCO World Heritage Sites	4	4	3

Source: GLA economics

Tourism sector in Canada

Among the provinces and territories, the tourism sector's share of jobs was highest in British Columbia at 12.2%.

SV

The Bridge

In **Copenhagen and Malmö**, the bilingual TV series "The Bridge" is an example that shows the importance of a joint culture between the two cities, improving their sense of belonging to the cross-border area.

CM

Tourism in Macau

- 38 casinos, more than HK\$200 million of revenue in 2016

- More than 30 million visitors (6.5 million from Hong Kong) in 2016

To boost tourism in Macau, talks are ongoing to allow travellers entering or leaving Hong Kong via bridge (to and from Macau), to avoid immigration and customs.

HS

2 FOR THE PRICE OF 1: A CULTURAL PACKAGE?

Terrorist attacks : cooperation as a lifejacket

In the year 2015, tourism in Paris was tarnished by the two terrorist attacks, creating a drop of 1.1% in the number of visitors compared to 2014. The aftermath of the attacks affected also the first semester of 2016, when there were 1 million fewer visitors than in the previous year. This drop was also caused by the repeated strikes and the floods. During the summer of 2016, despite the Euro football championship, Paris experienced a drop of 14% in the number of foreign tourists.

Prospects of tourism after Brexit

Although the tourism situation in London has improved in recent years, Brexit might dramatically reverse the situation. In March 2017, however, the Mayors of the two cities announced the signature of an ambitious agreement in favor of economic and touristic development. The websites VisitLondon.com and Parisinfo.com will be united, and from 2018, both cities will focus on culture and heritage.

By the citizens, for the citizens

PARIS

The Mairie de Paris created Le Budget Participatif, which gives Parisian citizens the opportunity to propose investment projects for their neighborhood or for the whole city each year. Currently, 5% of the city investment budget is dedicated to these projects. These initiatives are examined and are voted on by a council composed of members of the Mairie de Paris, district council representatives, and citizens. The wider public then votes on them either electronically or at polling centers. One recent project that has been funded by Le Budget Participatif is "L'arbre à livres," an initiative to install neighborhood book boxes to allow free circulation of books between people from the locality. "Les Grands voisins" is another community project that, between 2015 and 2017, changed the site of a former hospital into a mixed-use space. It favors the presence of craftspeople and creators as well as cultural activities such as concerts, movie projections, poetry sessions, and artistic activities such as photography and drawing, turning the site into an unprecedented urban laboratory. From the end of 2017, the Mairie de Paris will begin renewing the area to create 600 units of housing.

LONDON

London City Hall established a program called "Crowdfund London," which aims to improve local areas by promoting small projects with a big social impact, initiated by Londoners. By "backing" projects with particular potential, City Hall can "kick-start" projects and make local ideas and knowledge a reality. The Mayor supports the best ideas with a pledge of up to £20,000. The projects then have to find additional investments through crowdfunding to reach their funding goal before being realized. Currently, the total value of City Hall pledges is £825,000. Among the 191 community-led projects pitched thus far, 57 campaigns have been supported, benefitting target areas by stimulating economic activity and attracting more visitors. The project "Colour in Romford," for instance, a campaign to turn a grey High Street into a vibrant area of street art and community spirit, has been pledged £11,000.



Cultural attractiveness

3 museums in Paris and 6 museums in London among the top 20 museums and galleries in the world. more than 800 galleries in both cities

Tandem Paris - London : 50 cultural events in both capitals

Tourism sector

Tourism in each city accounts for 10% of the GDP

€35 million are annually spent in the two capitals by tourists

18 million foreign tourists in London in 2015

45 million visitors in Paris in 2015



Chris Gottlieb, Chief Marketing and Communications Officer, London & Partners, London
Nicolas Lefebvre, General Director, Office du Tourisme et des Congrès, Paris

Capstone

What are the specificities of each city in culture and tourism?

PARIS

Nicolas

Even if both cities attract Americans, there is a big disproportion regarding the **Chinese community**. The Chinese touristic community is very broad in Paris; it is the 3rd one in the world. It has experienced a tremendous increase recently. A reason for this is that Chinese people take a Schengen visa that enables them to visit France, Italy, Switzerland and so on, but not the United Kingdom.

Nicolas

Classic culture, architecture, and urbanism, are the most important characteristics of Paris. It has this image of being a great cultural, romantic, patrimonial destination with amazing culture. Concerning London, I would say that it is **live performances**. They have a considerable asset which is the language. For an American, it is significant because in Paris because he can only see a dance or concert show.

LONDON

Chris

The reason why we are so excited about our partnership with Paris is "because **they are different**. Paris is perceived as a city of romance, London is not, for reasons I can't explain! The food, for example is perceived as being better in Paris." However, the **language is constantly a barrier**. "When you live in Paris you have got to speak French."

Chris

The data shows that London and Paris are two of the greatest cities in Europe, and that's why we were so excited about partnering with Paris, because they are two great cities, and the data shows that **what the audience wants is to go to both London and Paris**.

Capstone

Are Paris and London collaborating or competing in tourism?

PARIS

Nicolas

London and Paris are **not in conflict, but in competition**. I would say that we are in competition in a lot of sectors, above all in **business trips**. Even if it's not always mentioned, business trips are very important in Paris, together with all the touristic activities linked to professionals events. **Paris is the first world city for congresses**. It represents around 45% of hotel nights in Paris.

LONDON

Chris

"The general philosophy in life is that collaboration is better than competition." Of course Paris and London are going to compete on certain things but where it makes sense. "**We should absolutely collaborate**" on sending "**a very positive message post-Brexit**."

Capstone

Do you have common plans to boost tourism?

PARIS

Nicolas

Yes, we have one **common project underway concerning the American market**. Indeed, we identified it as a market where collaboration is relevant because it is an essential market for both cities. We are working on a campaign project to promote both cities. **It should take place in 2018**. We want to build together a communication strategy toward the American market showing what is common to both cities; we might take **culture as common axis for communication**, showing that London and Paris are two big cities with things to offer culturally. At the same, we want to stress the specificities of each of them.

LONDON

Chris

"We have got potentially a **very exciting idea for next year**, hopefully, that will mean both cities are going to do something on a big scale" together. "We will do an initiative with London and Paris jointly promoting themselves to American tourists." In order to build a dialogue, "**we met Nicolas Lefebvre from the Paris Tourist Office**." We realized that "all the stars aligned, and politically, our two mayors are aligned; Hidalgo and Khan are getting along well."

Chris

"When we looked at the data, when Americans come to Europe, they just Google 'Europe' and they'll find that the two most appealing cities at the moment are London and Paris," so that's where they are naturally inclined to go. "The US is by far the biggest market for London," and "it is probably financially exponentially bigger."

Capstone

Who else could be involved in that collaboration?

PARIS

Nicolas

We need the transport component; that is very relevant for the collaboration. We will involve **Eurostar and flight companies**. We also wish to involve **cultural actors**, as culture is likely to be one of the priority sectors. We want to propose to Parisian and Londoner cultural sites to unite. We will look for institutions that are similar. For instance, Le Louvre and the British Museum or The Tate and the Pompidou.

LONDON

Chris

Natural partners would be "the **Eurostar**, the **airlines** and **hotels** in both cities."

" " indicates a direct quotation.

Text outside of quotation marks is paraphrased, but maintains the integrity of the interviewees' thoughts.

[...] indicates an omission.

Conclusion

Through the cases of Hong Kong-Shenzhen-Macao, Seattle-Vancouver, and Copenhagen-Malmö, a number of different initiatives and projects have been highlighted, in order to offer inspiring comparisons for actors to enhance the integration process of Paris and London.

As for the mobility sector, Eurostar provides a shared platform for Paris and London to improve the connectivity between them. However, the lack of extension plans or a shared integrated development plan shows that they could take inspiration from the cases of Hong Kong-Shenzhen and Copenhagen and Malmö, where city planners are designing strategies to bring the shared transportation system to a larger scale.

In the sustainability sector, even though the efforts made by Paris and London in tackling the issue do not involve a shared vision for the future, their participation in the international framework for sustainable develop seems to be the most relevant field for improvement.

While London is seen as the place to be for innovation, Paris has been catching up during the last few years. Coworking spaces, Fab Labs, and startups are flourishing in the French capital, boosted by the rivalry with its counterpart. Perhaps this rivalry could one day turn into complementarity, as is the case of Hong Kong and Shenzhen, making the two cities even more innovative. The recent collaborative action of the mayors seems to suggest that this is a possibility.

Regarding social issues, the two capitals have already shown a deep interest in working together, and whether it be in education, migration, or security, they know they will benefit from the other. Especially in terms of security and migration, Paris and London will need each other in the coming years.

Culture and tourism are sectors where Paris and London are seen more as competitors than as partners. They both have their own cultural assets and they compete for the title of best touristic city every year. A few cultural projects have been undertaken in the past, but in today's context, developing collaborative initiatives might have better success in boosting the cultural attractiveness of the cities.



MOBILITY



SUSTAINABILITY

**PARIS
LONDON**



**HONG KONG
SHENZHEN
MACAU**



**SEATTLE
VANCOUVER**



**COPENHAGEN
MALMÖ**





INNOVATION



SOCIAL ISSUES



CULTURE & TOURISM



Paris and London

Mobility: 3.5 stars

The Eurostar represents a shared effort in having a common project for reducing travel time between Paris and London. While the initiative is highly valued by the two cities, concrete plans for the future to develop shared mobility are still not defined.

Sustainability: 2.5 stars

In the area of sustainability and green development, Paris and London are both part of a broader framework of dialogue and cooperation that involves a number of cities all around the world. However, only minor projects, such as l'Avenue Verte, are implemented specifically between the two.

Innovation: 3.5 stars

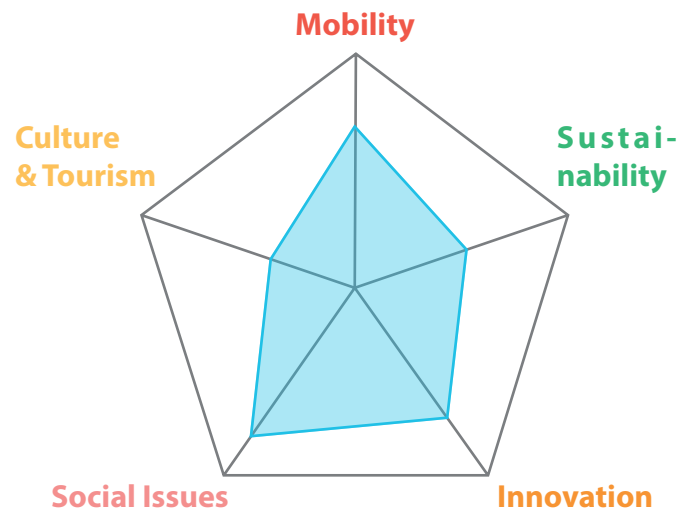
Paris and London are becoming increasingly prominent actors in the world's technology and innovation spheres, with growing numbers of research centers, incubators, accelerators, startups, and hubs. In March of this year, Mayors Sadiq Khan and Anne Hidalgo announced a joint effort in business collaboration through an initiative called the City-to-City Business Welcome Programme, which will help companies from each city establish a place in the other.

Social Issues: 4 stars

Paris and London are both education poles that attract students on a worldwide scale and they have a number of shared initiatives for exchange programmes between universities. Moreover Britain and France currently have a shared migration scheme that regulate the movement of people between the two countries. These issues are questioned by the imminent implementation of Brexit, that may drastically change the situation.

Culture & Tourism: 2 stars

There is a shared dialogue between the mayors of the two cities regarding culture and tourism, with Sadiq Khan and Anne Hidalgo announcing in March that they would like to join forces to attract visitors to both cities. The tourism agreement will be launched in 2018, but at the present moment, Eurostar's Culture Connect is the only shared program.



Seattle and Vancouver

Mobility: 2.5 stars

As cities that are both touristic destinations and those with growing technology and innovation sectors, it is necessary for them to have an easy link. The development of a high-speed rail line that would reduce the travel time to less than an hour as well as a dedicated lane on the highway for autonomous, driverless cars connecting Seattle and Vancouver have been proposed, but the governments of the cities are still evaluating the feasibility of these projects.

Sustainability: 0 stars

As with any large city in the modern world, both Seattle and Vancouver face environmental challenges, but there are currently no shared initiatives between the two.

Innovation: 3 stars

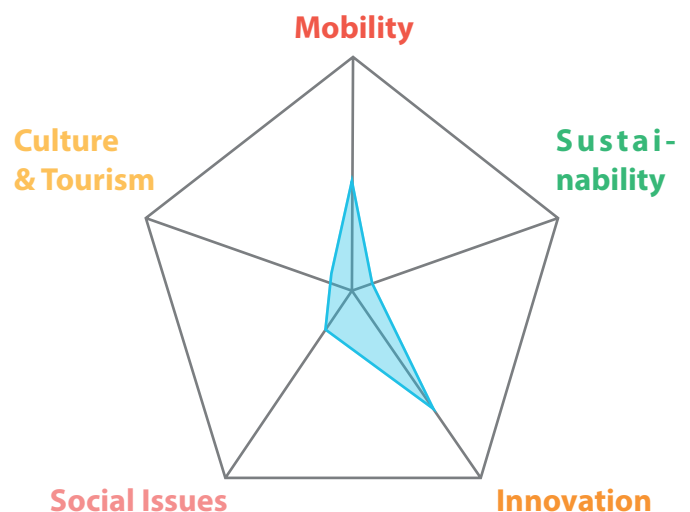
In the technology and innovation sphere, the space of Seattle and Vancouver is now being referred to as the Cascadia Innovation Corridor. Both cities are sites of well-reputed academic and research institutions, and last year, governmental leaders from each city signed an agreement to deepen their ties at the Cascadia Innovation Corridor Conference.

Social Issues: 1 star

The fact that Seattle and Vancouver are located in different countries means that there are border crossings where passports and visas are checked. This is the only common aspect of the cities with regards to security.

Culture & Tourism: 0 stars

Both cities are independently destinations for tourists, but they do not have any shared initiatives to facilitate travel or encourage joint-destination trips.



Hong Kong, Shenzhen, and Macao

Mobility: 5 stars

In terms of mobility, we can say that Hong Kong and Shenzhen are part of a common urban space. The six cross-border checkpoints allow the movement of hundreds of thousands of passengers per month, and the construction of the Hong Kong-Shenzhen Express Rail Link will make commuting between the two cities a 14-minute trip.

Sustainability: 1 star

In the dialogue between the two cities, issues of sustainability and reduction of pollution have often been raised. However, nowadays there is still a lack of shared initiatives to tackle those problems.

Innovation: 5 stars

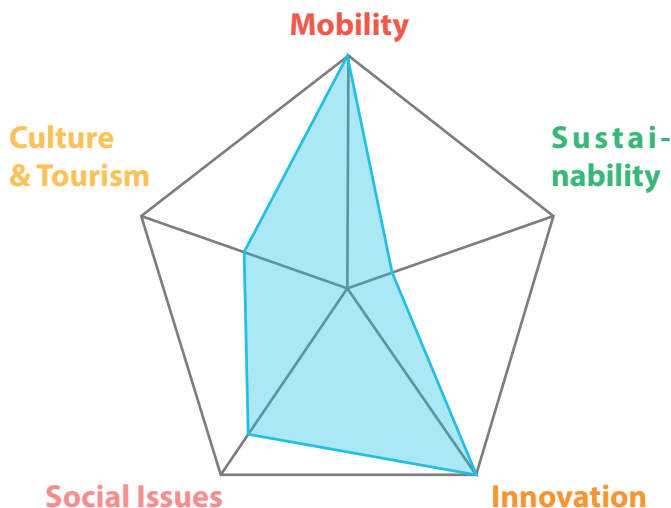
Shenzhen represents a hub for innovation for Mainland China, and throughout the last years it has been closely collaborating with Hong Kong to bring together financial and human resources in this sector. The imminent creation of a new shared cross-border innovation and technology hub will encourage collaborative research between enterprises.

Social Issues: 4 stars

In the education sector, Hong Kong and Shenzhen cooperate at different levels. Firstly, around 20,000 cross-boundary students travel every day from the Mainland to Hong Kong, thanks to a simplified visa control procedure. Moreover, universities in the two cities are starting partnerships to facilitate the arrival of more students from one to the other.

Culture & Tourism: 2.5 stars

Macau represents the touristic pole of the polycentric system with Shenzhen and Hong Kong. Though plans to facilitate the arrival of tourists in Macau have been discussed, concrete initiatives, such as a bridge connection to Hong Kong and a simplified border control procedure, are still at an early stage.



Copenhagen and Malmö

Mobility: 5 stars

The Oresund bridge connects Copenhagen and Malmö and allows people to quickly and easily go from one city to the other. This transport link has facilitated relations between citizens of each city and has allowed for the potential for a future common identity.

Sustainability: 2 stars

The cities are seen as frontrunners in environmentally friendly transport and green technology, but they do not have any common sustainability projects.

Innovation: 2.5 stars

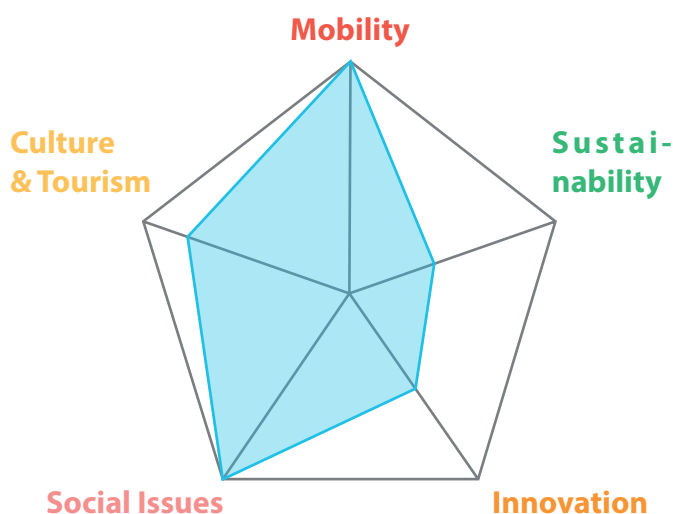
Nearly half of private investment in research for Denmark and Sweden originates from the cross-border region of Copenhagen and Malmö. These investments, however, are not part of an explicit cooperation between the two cities.

Social Issues: 5 stars

The connection between the two cities allows students to move between them. Twelve universities in both cities have opened their classes and facilities to everyone in the city-region, regardless of their country of origin, creating a strong educational collaboration and commonality.

Culture & Tourism: 3 stars

The interaction of Copenhagen and Malmö in terms of culture and tourism is facilitated by the fact that in some senses they share a cultural identity thanks to their similar languages and the connection offered by the Oresund Bridge. This collaboration and sense of belonging to the cross-border area is exemplified by the television series, "The Bridge."





Maxime Basquin, Trade Development Advisor in Tech & Services, Business France, London

Pierre Delalande, Director of Public Affairs, Eurostar, London

Christian Fatras, Economic Counsellor, French Embassy, London

Philippe Guyonnet-Dupérat, Financial Counsellor, French Embassy, London

Nicolas Lefebvre, General Director, Office du Tourisme et des Congrès, Paris

Alex Margot-Duclot, Senior Associate, Osborne & Partners, London (La French Tech)

Laurent Queige, General Manager of Welcome City Lab, Paris & Co., Paris

Mike Raco, Professor of Urban Governance and Development at University College London, London

Capstone

How will Brexit affect Paris and London?

Christian, French Embassy

"We might expect a '**dripping effect**,' meaning that it won't happen brutally, but gradually. Companies are going to withdraw their investments from the UK little by little. If an investor has to make a choice between Leeds or Zaventem, he will choose Zaventem in Belgium because it is **more relevant to be open in the European market**."

Laurent, Welcome City Lab

"The Brexit is a **major problem** in the world in terms of how people see Great Britain [...] and [it] has already brought **some effects in the tourism industry**. I can see, for instance, that some operators are very **worried about the future of the flow**, the easiness of going around from Paris to London [...] because, as you know, Great Britain is not part of the Schengen area. [...] People are very worried and are turning towards cities located in continental Europe and in the Eurozone because it's easier for them to organize a trip for a group or for individuals" to two continental European cities.

Laurent, Welcome City Lab

"It's a **question of competition**. We would not have [decided to open a fintech incubator in La Défense] if the Brexit did not exist, but as the Brexit was voted, now, Paris is in a **state of mind of attracting** the financial sector to continental Europe because many banks and many startups called us saying, 'we want to leave the UK because we are afraid of the future, what can you tell us about Paris and how Paris is attractive or not for us,' so we are trying to **strengthen our attractiveness and our competitiveness**."

Mike, University College London

One relevant issue with Brexit is the **breakdown of the "legal entity"** that Europe represents. "You can only have European funding if you have a European Court of Justice to oversee the agreements, [...] a bigger legal context that is really, really important." On the one hand, breaking this "would be problematic from the British perspective." On the other hand, however, "a lot of people in the financial sector are very happy about Brexit" because it could mean that London's market would be "**liberalized even more from European regulation**," and "become an even bigger tax haven."

Nicolas, Office du Tourisme

However, **London is still willing to cooperate with Europe, "especially with Paris,"** and that "is very linked to Brexit; it is a response to Brexit." "One of the fundamental reasons is to counteract the Brexit aftermath." We need to wait to see whether or not Brexit will affect people's choice of going to London.

Chrisitan, French Embassy

"However, I think that the city will remain an important financial place." I believe that naturally, London is "going to be more open to continental Europe, thank God, than toward the UK." **"Strengthening the European Union"** will remain a priority.

Alex, Osborne & Partners

As a consequence of Brexit, there is a possibility that many "investors who are based in London [...] will **look at France now**," as the "proximity between the two cities is an asset." There is a **"positive overall political climate"** brought about also by the election of **Emmanuel Macron**, which was a "very positive factor for investors." "It's having an effect on the perception of the country" during the political uncertainties of the post-Brexit era. The **attractiveness of Paris is growing** and this factor could be a starting point to create a **"strong connection"** between the two [cities]."

Christian, French Embassy

But right now, with the political situation on both sides of the Channel, we have a sort of **planets aligning** together right now. France tended to have a terrible image on the international scale, but it was not really justified.

Capstone

What should be the starting point for Paris and London to boost their cooperation?

Philippe, French Embassy

Thanks to transportation, there could be complementarity. In fact, there is a current **network** that makes London and Paris two very close cities since the building of the Chunnel.

Pierre, Eurostar

Another field of collaboration could be the **management of public transport through private agencies** just like Uber. London has a more dynamic approach to taxis, but in general, the **Gig Economy** refers to issues and challenges that all large metropolises face, especially those in Europe.

Philippe, French Embassy

Another field of collaboration is the **financial market**. Already, there is a collaboration between both cities through Europlace. And moreover, there is an **institutional dialogue** between the financial places of Paris and London because there are differences, but also many **similarities between the two**. This dialogue is stronger than the one between London and New York.

Philippe, French Embassy

AI believe that another issue on which Paris and London should work together is security. The two cities are facing similar **periods of crisis**. In France, the year 2016 was very violent, and for London it was the beginning of 2017. For this reason, **security represents a common challenge**.

Maxime, Business France

A dialogue was initiated mostly about **cyber security** issues, on which there is a huge potential.

Philippe, French Embassy

Paris 2024 could be a huge challenge, as well as a great opportunity, for Paris. The collaboration with London could be, to this regard, very useful, because London won the 2012 Olympics, and London succeeded in 2012, benefitting from the Olympics Games. The hope is that if Paris wins 2024, the two cities will try to **deepen their relationship** so that **Paris could take inspiration** from what worked and what did not in London.

" " indicates a direct quotation.

Text outside of quotation marks is paraphrased, but maintains the integrity of the interviewees' thoughts.

[...] indicates an omission.



Simon Bennett, Head of Learning Legacy, Crossrail Limited, London
Amélie Cosse, Senior Consultant, Momentum Transport Planning, London
Emmanuel de Coral, Trade Development Advisor in Tech & Services, Business France, London
Pierre Delalande, Director of Public Affairs, Eurostar, London
Martine Drozd, Researcher, Laboratoire Techniques Territoires et Sociétés (LATTS), Paris
Christian Fatras, Economic Counsellor, French Embassy, London
David Hart, Director at Momentum Transport Planning, London
Nicolas Lefebvre, General Director, Office du Tourisme et des Congrès, Paris
Alex Margot-Duclot, Senior Associate, Osborne & Partners, London (La French Tech)
Laurent Queige, General Manager of Welcome City Lab, Paris & Co., Paris

Capstone

Which actor should be driving this cooperation?

Pierre, Eurostar

Sadiq Khan is a core actor in the Paris-London collaboration. He is **pushing a lot towards more integration between Paris and London**, and with different European cities, in general. He needs to create those ties because his competences are very different from those of Anne Hidalgo. Although she rules over a smaller territory, she has more responsibilities and the financial and development means to do more. **Sharing their strategies and experiences** would have a huge impact on the Paris-London cooperation.

Martine, LATTS

In London "there's an organization [...] called London First," which is "a club of all of the companies based in the City of London" that allows them to "have a **coordinated action** and exercise huge influence on the political agenda, especially for transport." For example "they backed the Crossrail project and they partnered with Livingston ten years ago in order to advocate at the national level the need for London to receive national investment." This is an example "of coordinated action [...], of the **private sector**. So it already exists," especially in London. "In France it's [...] more fragmented and you can't really find an equivalent of London First in the Parisian context."

Martine, LATTS

"Because it exists in London, I see no reason why, within the private sector, [something like London First] couldn't be replicated." elsewhere. Moreover, "they could coordinate their action in order to have access to, or to **create networks**, [...] in transportation, energy, services," so "you can imagine, definitely, some sort of a **continuity between the two cities**," the creation of "some coordination mechanisms, possibly, around networks."

Amélie and David, Momentum Transport Planning

What matters the most in the collaboration between the two cities would be "the fact that the **mayors are collaborating**," **learning from each other**, and "giving the message that they want to change [...] so that people are more aware of the issue." In fact, the **political factor** is the one that can most effectively change the mindset of people.

Alex, Osborne & Partners

The thing that would mostly benefit the cooperation between Paris and London, especially in the tech sector, is "really a **mix of both**" the public and private sectors. The public sector has, in fact, the "the power and the capacity to pool people to lead the way" through many different incentives it can provide. However, you also "need to have strong private actors that are getting involved." It has to be "**a collective effort**," to encourage startups, for example, to go "on the other side of the Channel, from Paris to London or from London to Paris," to promote conferences, and to make sure actors working on both sides feel "supported and welcome."

Capstone

What do you think about Paris and London as "One Single Metropolis?"

Simon, Crossrail

"That sounds to me more like a **thought experiment than a real thing**, at the moment." "For me, it is only a common metropolis if people are commuting from one to the other," and two hours of travel time, no matter how sensational a goal it is, is still "not fast enough to make that work." However, cooperation is "a good thing to do anyway. **Collaboration and sharing of knowledge** is just a positive all around."

Christian, French Embassy

"Schizophrenia."

There are strong links, though; I would say a complementarity.

At the moment, the British are very interested in **bilateral cooperations**. They think that they need to compensate for what they are about to lose from communal relationships with bilateral relationships. Every member of the EU is claiming some sort of hard Brexit, but, at the same time, is pushing for a bilateral solution with London. This is why I mentioned schizophrenia. On one side, we try to work together, but at the same time, we try to take advantage of the situation.

Laurent, Welcome City Lab

"I think it's a **very theoretical idea**. Talking about what I know of the tourism area, it's a very **difficult thing to carry out in reality** because we are competitors, because the Brexit has **broken an evolution and a rhythm of cooperation**; it has broken that, so I think instead of trying to swim against the stream, it would be more relevant to strengthen our cooperations with other European cities because it's going to be easier. It's just a reality of the market." So, "why don't we **foster and strengthen our links with other European cities** located in continental Europe?"

Alex, Osborne & Partners

"I think it's **true already to some extent**." In fact, there are a lot of people "who already work both in London and in Paris, [...] in particular in the tech sector."

Moreover, "as soon as you look at it on a global scale," it appears "obvious." Investors in Asia, for example, think about "**London and Paris as pretty much the same thing**."

The two cities are also competing, and that's normal, but "that is something that can be overcome, and that has already happened to a big extent." Cooperation is something that needs to be pushed and encouraged.

Emmanuel, Business France

The relationship between Paris and London is famous all around the world, mostly due to the **short distance between the two**— two and a half hours by train thanks to the Eurostar. I do not think there are many European cities as well connected as they are, or even in the whole world. I lived in Singapore and there is no train connections with other big cities; we needed to take the plane to travel anywhere. Many consider Paris and London as **twins** because of their proximity.

Nicolas, Office du Tourisme

The first word that comes to me is **proximity**. Paris and London are big European cities that are very close to each other, and that proximity is created by the Eurostar.

Secondly, they are the only two metropolis in Europe that are comparable. They both have the status of being international metropolis, they are the only **world-class cities** in Europe, they have a similar size, and they are different from the other cities in Europe.

Finally, Paris is late in terms of governance compared to London. London made a step forward by creating the Greater London that tries to unify **governance at the metropolitan level**. At this level, between Paris and London, there is an undeniable gap.

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[...] indicates an omission.



GENERAL

Paris Urban Area

- 105.40 km²
- 2,265,886 inhabitants

Métropole du Grand Paris

- 814 km²
- 7,019,615 inhabitants

Ile de France

- 12,012 km²
- 11,959,807 inhabitants

Inner London

- 319 km²
- 3,231,901 inhabitants

Outer London

- 1,253 km²
- 4,942,040 inhabitants

Greater London

- 1,572 km²
- 8,173,194 inhabitants

London + South East

- 20,833 km²
- 16, 808,194 inhabitants



MOBILITY

Buses vs. Trains

Number of trains per 10,000 inhabitants

- Central core / Inner London: 17 trains / 12 trains
- Peripheral ring / Outer London: 2.4 trains / 5 trains

Grand Paris Express

- 205 km of railway
- 72 new stations
- 700 million estimated annual passengers
- €22.6 bn investment

Crossrail 1

- 100 km of railway
- 40 stations (10 new)
- 200 million estimated annual passengers
- €17.4 bn investment

Crossrail 2

- 50 stations (1 new)
- 98.5 million estimated annual passengers
- €31.8–37.7 bn investment

Eurostar

- 10 million passengers in 2016
- 6.5 million passengers between London and Paris (both ways) per year
- > 40% business
- > 16% friends and family
- > 44% leisure



SUSTAINABILITY

Sustainable initiatives

By 2030: limit global warming by 2°C

Green economy in the UK: an increase by 6% per year, a sector with 200,000 employees

L'Avenue Verte Paris-London: 2 routes (408/474km) of marked bicycle paths

Green mobility

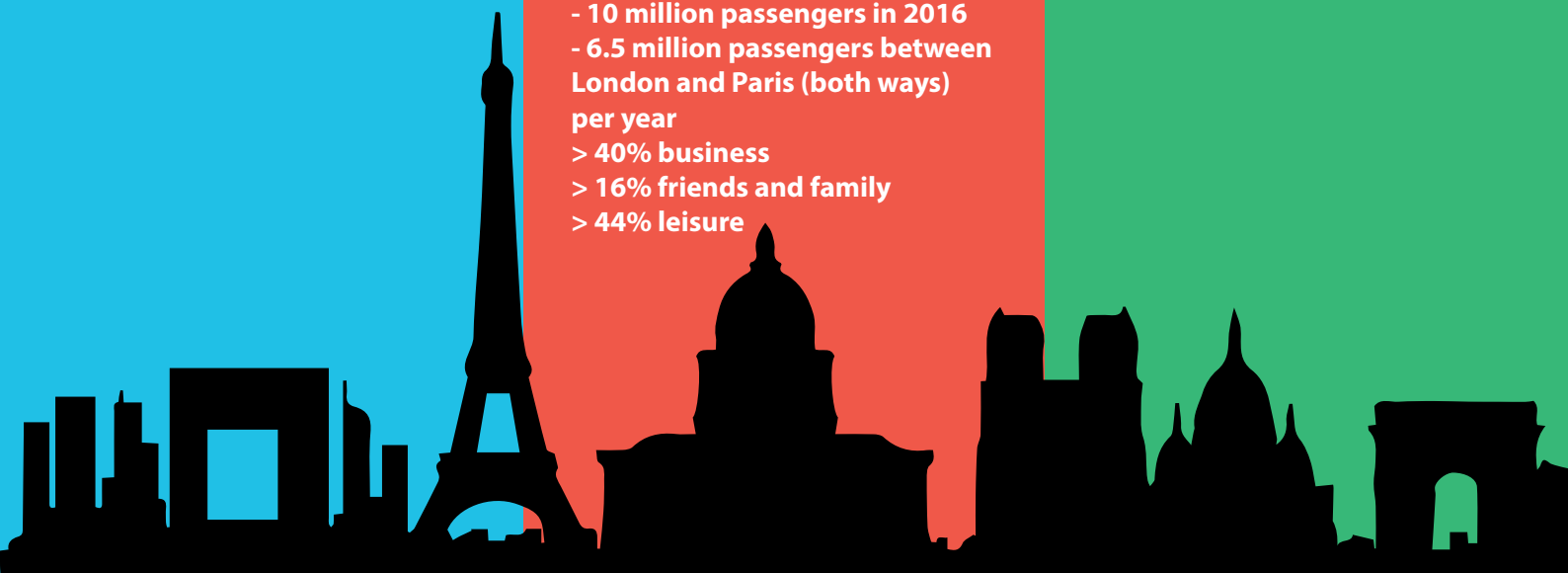
2.3 billion bus passengers / year in London (over 2,000 hybrid buses)

More than 1 billion passenger in France (523 hybrid buses)

Project ZeEus and "Cleaner Air for London" projects
Bus2025 project in Paris

Diesel cars to be banned in Paris by 2020

Incentives in London led to a 4.3% decrease in Diesel car registrations





INNOVATION

Paris

#5 in ECDI Index
39 incubators,
15 accelerators
€2.7 bn of venture capital
into startups
Amount of government
funding into Paris-Saclay in
2013: \$3.25 bn
1 Wework office

London

#1 in ECDI Index
12 incubators,
24 accelerators
€3.2bn of venture capital
into startups
Amount of venture capital
into Tech City London in
2013: \$161 million
17 Wework offices



SOCIAL ISSUES

Education

107,000 international stu-
dents in London.
13,000 students leave
France every year to follow
their study in London.
More than 6,000 students in
Lycées français in London
60,000 foreign students eve-
ry year in Paris
10,000 British students
choose to study in Paris.

Migration and borders

There were around 7,000 mi-
grants in the Calais Jungle.
1,321,560 asylum claims in
Europe.

21,000 British expats in Paris
(171,000 total in France).
225,000 French in the Grea-
ter London



CULTURE & TOURISM

Cultural attractive- ness

3 museums in Paris and 6
museums in London among
the top 20 museums and
galleries in the world.
More than 800 galleries in
both cities
Tandem Paris-London : 50
cultural events in both capi-
tals

Tourism sector

Tourism in each city accounts
for 10% of the GDP
€35 million are annually
spent in the two capitals by
tourists
18 million foreign tourists in
London in 2015
45 million visitors in Paris in
2015

