

# Paris Transportation Trip

## Learnings and Exchanges

Vice-Chair Melgar  
Executive Director Chang



San Francisco  
County Transportation  
Authority

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# Paris at a Glance

- 2 million pop
- 41 sq. miles area
- Part of Ile-de-France region (12 million), GDP E765
- Paris Metro serves 5.2 million passengers daily
- Mayor Anne Hidalgo
- 20 arrondissements, each with own Mayor and total of 120 deputy mayors
- City budget – E9.5B (2018)





# Agenda

1. Local Streets & Transit
2. Oliver Wyman Executive Mobility Forum
3. RATP (Paris Transit Operator)
4. Societe du Grand Paris Express





# Local Streets & Transit



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# Velib Bikeshare and Paris Streets

- Paris has 64% public transit mode share for work trips, 11% commute by private automobile, 11% walk or skate, 6% bike and 4% commute by motorbike
- Mayor Hidalgo's climate and transportation initiatives "[Paris Respire](#)" (literally "Paris Breathes"), :
  - o 50 kilometers (31 mi) of pop-up cycle lanes known as "coronapistes" to ease pressure on public transport
  - o Removal of over half of Paris' parking spaces (70,000 out of 140,000 spaces) and increasing parking fees
  - o Conversion of certain sections of a highway along the [River Seine](#) into a riverside park
  - o €250 million re-design the [Champs-Élysées](#) into a "fantastic garden" reducing vehicle space by half in favor of bikes/peds
  - o Creating "15-minute city" – access to schools, offices, shops, parks, health centers by a 15-minute walk or bike ride



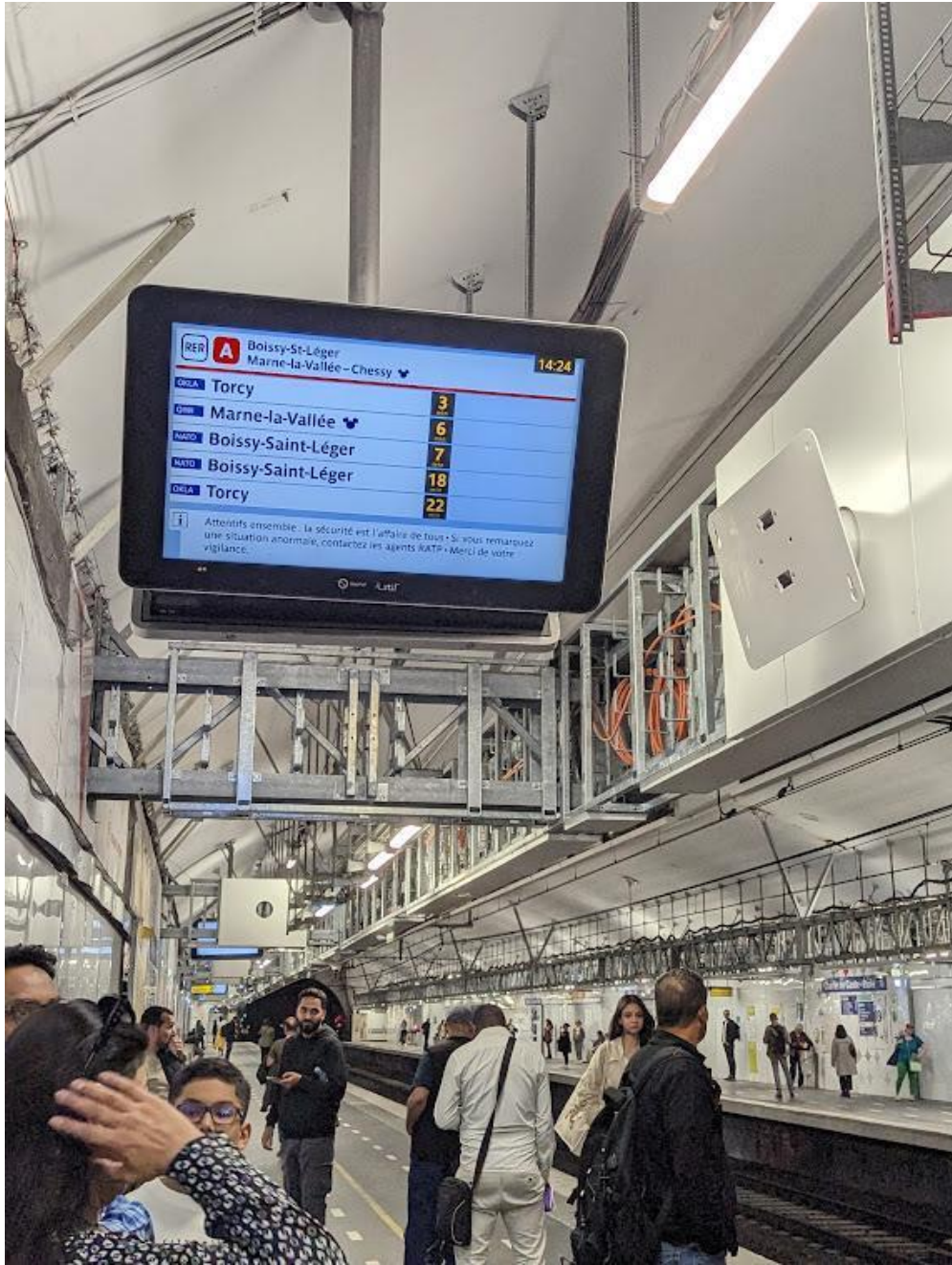














# Gare de Lyon









# Oliver Wyman Executive Mobility Forum



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# Oliver Wyman Forum

- SF Ranked #1 in Mobility Readiness
- VC Melgar featured speaker at CEO dinner
- Dir. Chang spoke on Sustainability panel
- Participated in workshops on decarbonization of parcel deliveries (Amazon) and EV insights





# Oliver Wyman Forum

- SF Ranked #1 in Mobility Readiness, lower on Sustainability and Transit Indexes
- Parcel Delivery workshop was interesting (OW + Amazon)

## STANDARD POSTAL SERVICE DELIVERY FOR A 1KG PARCEL EMITS 1,075 GCO2E

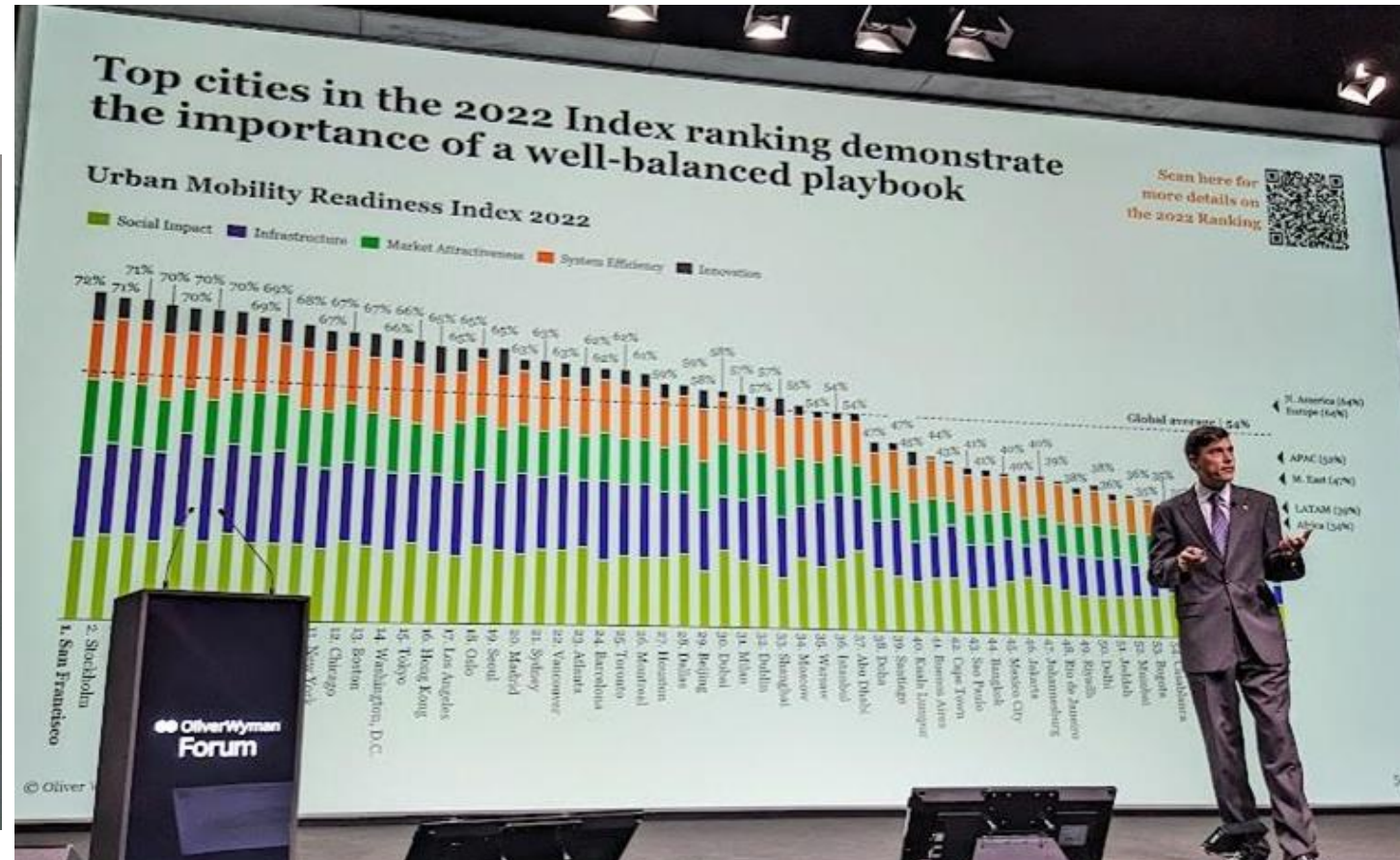
National Standard emissions for 1 kg parcel in large cities, by emission type  
gCO2e/parcel

**1KG PARCEL = 1KG CO<sub>2</sub>E**

TRANSPORT	BUILDING	PACKAGING	IT
30%	28%	31%	11%

Source: Oliver Wyman analysis  
© Oliver Wyman

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# UITP Secretary General

- Compared EU post-COVID situation to US/SF
- Climate efforts
- Transit funding and sustainability
- Ride-hail regulation





# RATP





# RATP Group

- Public transit services provider contracted by regional authority Ile-de-France Mobilites
- RATP operates 34 bus lines, 16 Metro rail lines, 8 tramway lines and sections of the RER regional rail and suburban rail systems
- RATP Dev is engaged transit operations across France and the world in transport, autonomy, energy, development and finance





# RATP Dev/Group

RATP operates in 16 countries, including US

- E1.5B in Revenues

Lines of Business include:

- Public Transport
- Real Estate
- EV and AV buses and cars
- Logistics
- Fiber Optics, Telecom
- Energy



## RATP GROUP: A LEADING PLAYER IN URBAN INNOVATION

All around the world, the Group innovates every day to improve passengers' daily lives and invent the city of tomorrow.

- Innovating every day for our passengers
- Inventing and building the cities of the future
- Accelerating our industrial leadership
- Decarbonising and saving energy in transport and cities

Over 230 innovation projects

Over 180 collaborations with start-ups since 2017

## OPTIMIZING ENERGIES AND USES OF MOBILITIES AND CITIES

Decarbonizing and preserving the energy of mobilities and cities

The RATP ambitious plan for a 100% ecologically friendly bus fleet in Paris Region : upgrading the 4700 buses to electric and bio-CNG technologies by 2025 and contributed to the bus transition in London

25 bus depots modernized in the Ile-de-France area

- 1100 hybrid buses
- 637 Electric buses
- 877 Bio CNG buses

Testing and deploying **HYDROGEN** to decarbonize urban mobility



# New Mobility: a major area of development for RATP Group

## ON DEMAND MOBILITY



Micro Transit  
Ride-hailing

## ACTIVE & SHARED MOBILITY



Bikesharing  
Carpooling

## AUTONOMOUS MOBILITY



Shuttles  
Automated Bus

## GREEN MOBILITY



Electric Bus  
CNG, Fuel Cell

MaaS

RATPDEV



# FOCUS: 2025 Bus Plan in Paris

RATP



bus2025

In the end (2025)

**4 700**  
Green buses

**25**  
bus depots converted

**2025 BUS PLAN, ONE OF THE MOST AMBITIOUS TRANSITION PROJECTS WORLDWIDE**  
In the Paris Region, the RATP is aiming for a 100% clean bus fleet by 2025.

## SOLUTION

- 2014-2018  
Trials phase  
to test power, recharge and constructors
- 2019-2025  
Deployment phase  
Phase de déploiement  
on a large scale to renew the entire fleet

## RESULTS

- At the end of 2021, operation of:
  - 550 electric buses
  - 600 bioNGV buses
- From 2021, reception of 600 green buses per year
- By 2025:
  - > 4700 green buses (50% electric, 50% bioNGV)
  - 12 electric bus depots
  - 13 bioNGV bus depots

RATP

## Comparison of existing alternatives to diesel

	FUEL ALTERNATIVES	HYBRIDS	BIONGV	ELECTRIC	H <sub>2</sub> HYDROGEN
ENVIRONMENTAL BENEFITS*	●○○○○○	●○○○○○	●●●○○○	●●●●●●	●●●●●●
MATURITY	●●●●●○	●●●●●●	●●●●●●	●●●●○○	●●○○○○
EXTRA COST**	●●○○○○	●●●○○○	●●○○○○	●●●○○○	●●●●●●
OPERATIONAL IMPACT	●●○○○○	●●○○○○	●●●○○○	●●●○○○	●●●○○○

\* VS DIESEL  
\*\* VS cost of Diesel in France



# RATP Dev

- MaaS
- Autonomous Services

**Bonjour: MAAS APPLICATION**  
 RATP

Digital solution including several modes of transportation for trips searching and booking in Ile-de-France area

mappy → RATP SMART SYSTEMS → RATP GROUP

100% French

**2.5M users/month in 2022**

- ✓ Passenger information in real time
- ✓ Crowd level indication (metro, regional trains, tramways and bus networks)
- ✓ Recharging and buying of transport tickets and subscriptions
- ✓ One account for mobility and favorite addresses and routes

**Services:**

- ✓ 150,000 interest points available: - restaurants, cinemas, supermarkets, schools, flower shops, museums, parcs, bakeries, hairdressers, etc.
- ✓ "Vélib" (shared bicycles service) > 20,000 bicycles - 36% electrically assisted
- ✓ "Marcel" (private car service) > 1/3 electric and hybrid vehicles
- ✓ "TIER" + "LIME" + "Dott" shared service

30 000 bicycles, 15 000 scooters

sustainable urban mobility modes

- The document is a RATP property and could not be used without authorization - Contact: Mrs Natacha Ferrier, Corporate International Relations

RATP GROUP

Designing and building the cities of the future

## SHARED URBAN AUTONOMOUS MOBILITY SERVICES

Provide new services that are complementary to existing transportation and are suitable for territories, improve quality of life in city centers, bring passengers to heavy modes and make our jobs evolve.

Testing the robotaxi

Experimenting with the autonomous bus

Mairie de Vincennes

Rising to the challenge of the dense zone

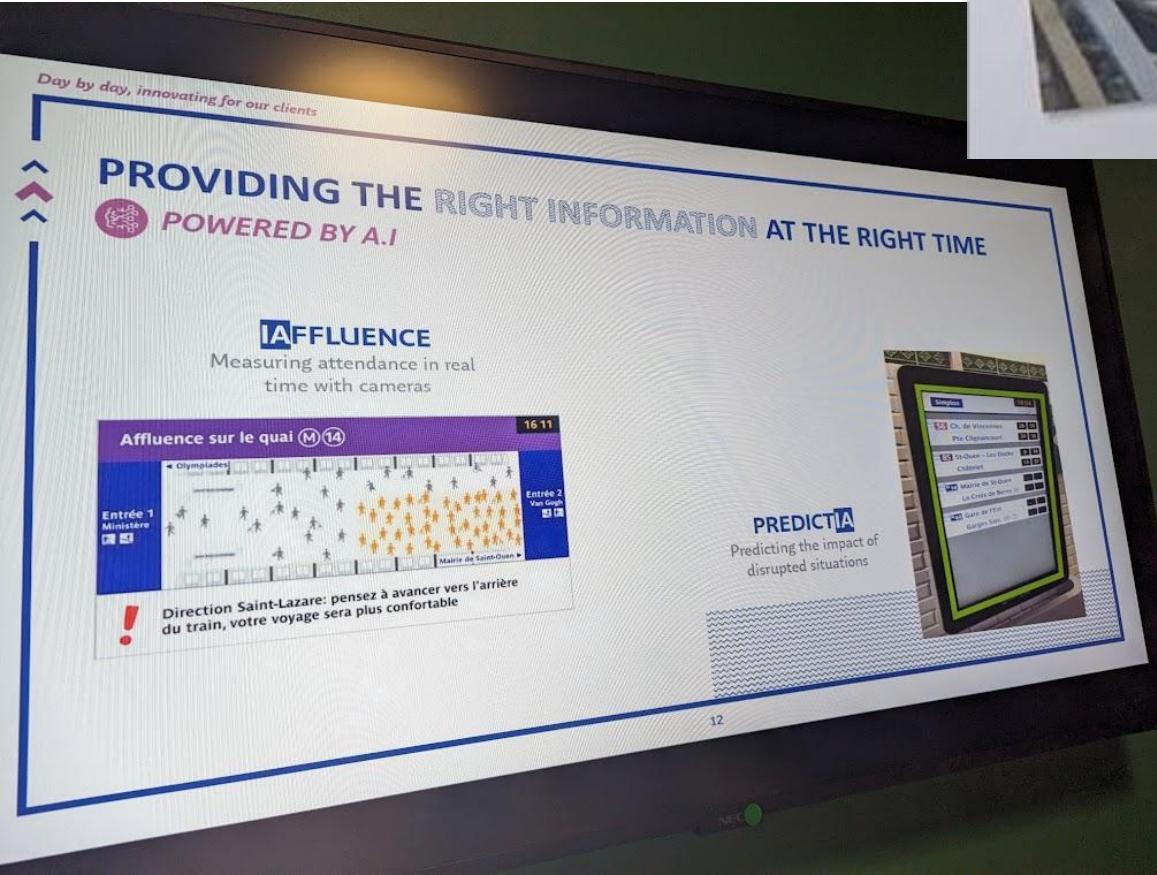
Developing driving assistance

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# RATP Dev

- AI
- Robotics





# Societe du Grand Paris



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# Paris Grand Express

- Largest infrastructure project in Europe E 56B
- Grand Paris Express set up by 2010 federal Law
- Delivering 4 lines, 200 km, 68 stations (10% aerial, 90% subway)
- Connecting poorer suburbs on east
- Circumferential with N/S axis connecting airport to support Summer Olympics in 2024





## Funding:

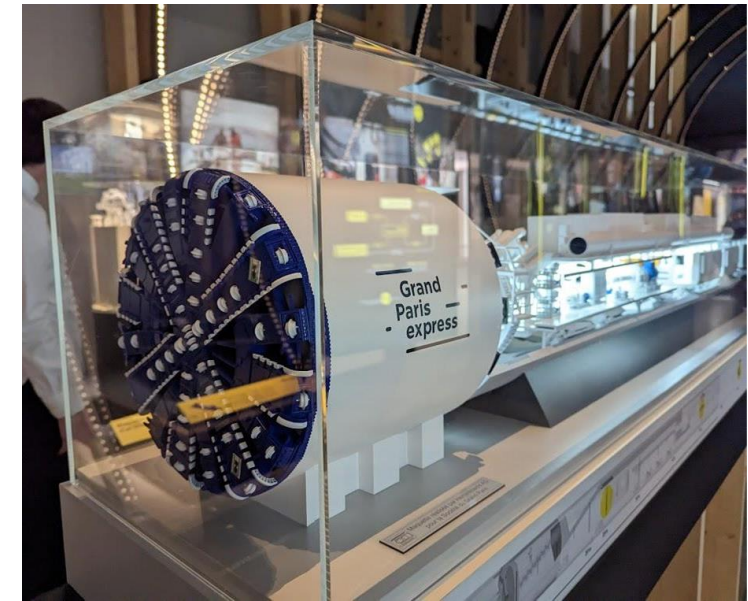
- Office space tax
- Special infra tax
- Property tax on restaurants and biz
- Flat rate tax on network biz
- Regional tourist tax
- Regional parking space tax





Notable:

- Attention to outreach
- Architecture of stations
- Green features/bonds







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[sfcta.org/stay-connected](https://sfcta.org/stay-connected)