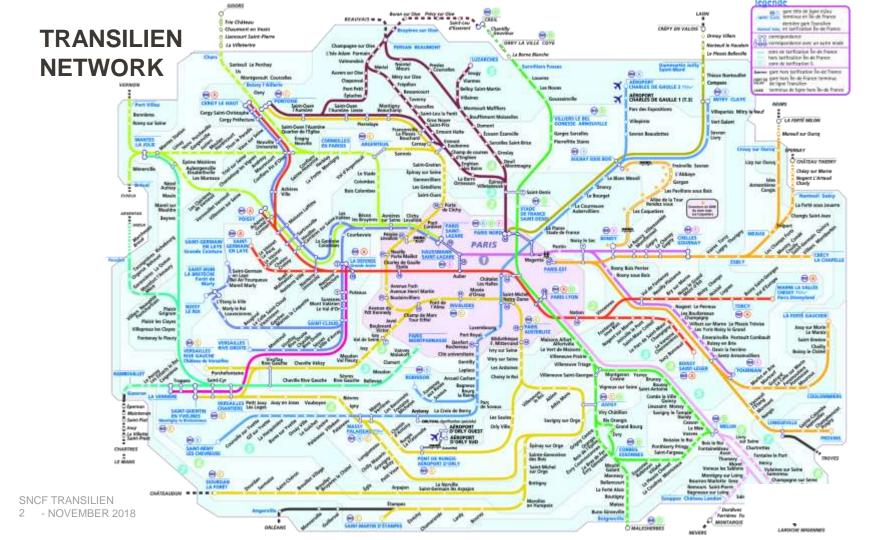
## **TRANSILIEN**

**NOVEMBER 2018** 





### THE TRANSILIEN MASS TRANSIT NETWORK

LAND AREA

Paris
105 km²
Paris Region
12,000 km²

**POPULATION** 

Paris

2 million

Paris Region

12 million



3.2 million

passengers carried safely daily

— 1.5 times the population of Paris

+3%

passengers annually



of the French rail network



15 lines

including 5 RER lines & 2 tram-train lines



Every second, 1 train enters or leaves a station

6,200 trains/day

650+ trains run simultaneously at rush hour

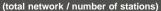


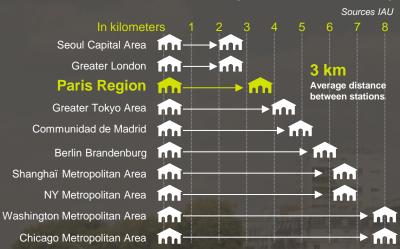
**13,000** employees & 3,000 drivers

#### WE ARE THE WORLD'S 2ND-BUSIEST MASS TRANSIT NETWORK

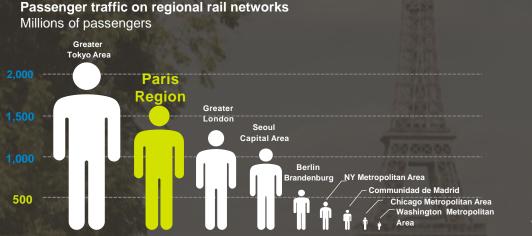
#### A TIGHTLY WOVEN NETWORK— EXTREMELY HIGH COVERAGE AND SERVICE

Average distance between stations in major regional rail networks





RER regional lines and Transilien play an outsized role in the Paris Region's mass-transit network, as compared with other cities where metro is often the dominant mode of transport.



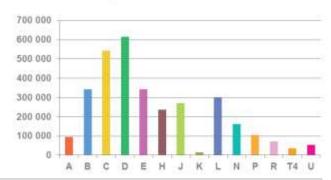


#### TRANSILIEN - CORE **INFRASTRUCTURE**

#### **VOLUMES VARY WIDELY BETWEEN RER** AND SUBURBAN LINES IN THE PARIS REGION

Lines serving densely populated areas (RER and Saint-Lazare station) carry much more traffic than lines serving outlying communities (Transilien lines N, P, R and K).

Nombre de montants par ligne SNCF, hors montants des tronçons RATP des RER A et B



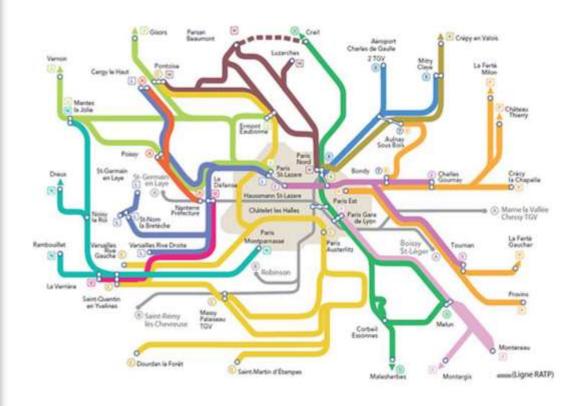
Includes RER A & B and RATP: 1.2m and 0.9m passengers daily











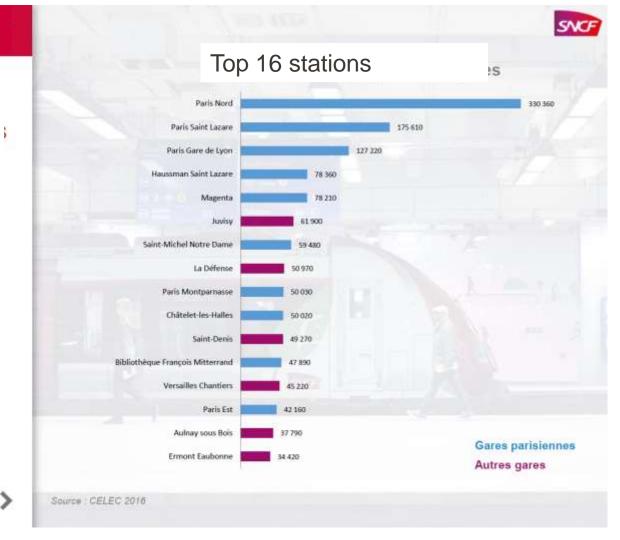
Source : CELEC

### TRANSILIEN – CORE INFRASTRUCTURE

### LARGE STATIONS IN INNER AND OUTER SUBURBS

The railway network has some 400 stations, with the top 25 accounting for 50% of traffic.

see number of stations by numbers





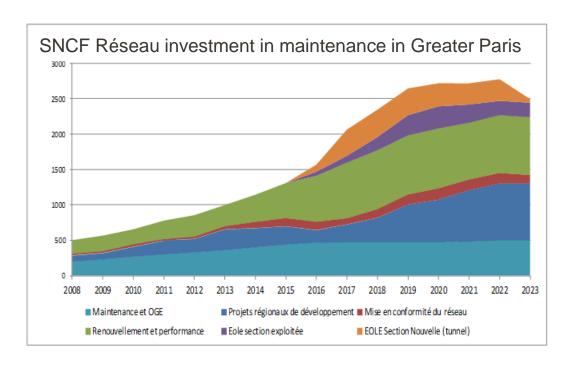


### FIVE KEY FIGURES

- + Growth in traffic: +18% since 2013
- + Growth in projects: 2.5x between 2015 and 2020
- + New trains (entirely new or renovated): 235 delivered to date
- + Stable on-time performance: 88.6% in 2018 vs 88.4% in 2017 (excluding RER A & B)
- + Customer satisfaction with passenger information: **75% of passengers were** satisfied with passenger information during the **2018 strikes**



### WORKS IN THE PARIS REGION: MASSIVE, GROWING AND SUSTAINABLE



- Works continue
- Brown- and green-field projects
- In addition to routine maintenance



### NEW OPERATIONS, NEW TRAINS



### 2018-2021: RESTRUCTURE 5 TRANSPORT OFFERS

#### + GOALS

Adapt transport supply to meet demand and changing lifestyles Mitigate impact of massive works programme, today and tomorrow

#### + APPROACH

Work with all stakeholders—organizing authorities, customers & customer associations, officials and more



| SA 2018  | SA 2019 | SA 2020 | SA 2021 | 2021 |
|----------|---------|---------|---------|------|
| L REPA J | D R E   | CRER    | R       | P    |



# ROLLING STOCK INVESTMENT PLAN (SDMR): UNPRECEDENTED SCALE AND SPEED



Add or renovate **714** trains



Revisit **24** garages and/or maintenance sites



Upgrade track and platforms in **25** corridors



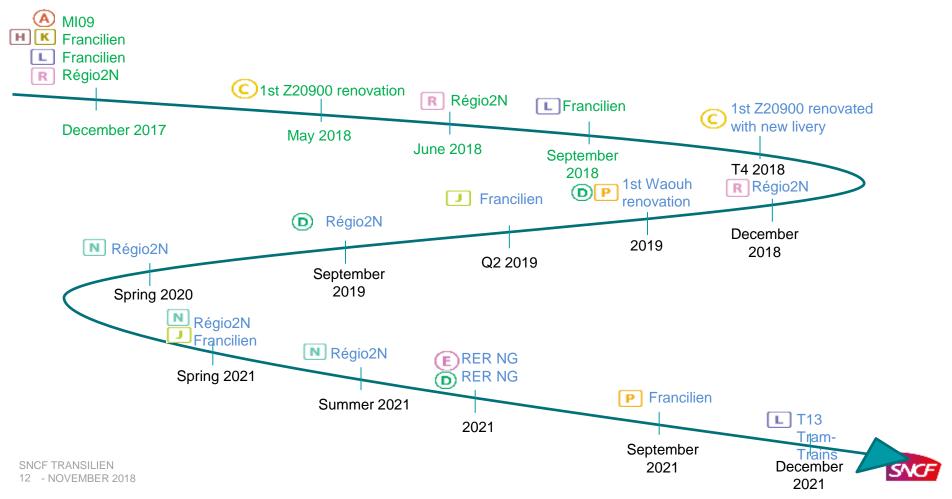
**140** workers—Transilien and SNCF Réseau



Over **€10bn** invested



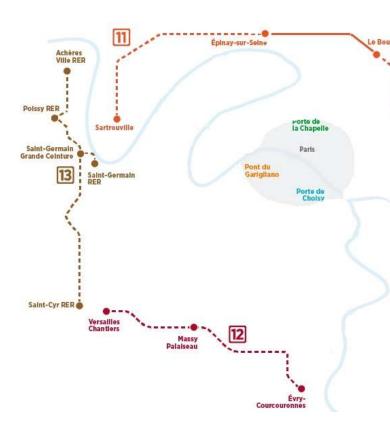
### **COMMISSIONING DATES THROUGH 2021**



# LINKING NETWORKS AND OPERATIONS: A NEW ERA FOR TRANSILIEN



#### LINKING NETWORKS: A RING ROAD OF TRAM-TRAINS



Now being extended from Clichy to Montfermeil: commissioning set for late 2019



2018: first full year of operations





Works resumed



First milestone: 5 October 2018







### LINKING NETWORKS: CONNECTING TO THE GRAND PARIS EXPRESS

#### 29 LINKS BETWEEN THE TWO NETWORKS...



#### ... AND 29 WORKSITES TO CREATE THEM



Changes at Ardoines station: May 2018



# EOLE WITH NEXTEO: THE FUTURE OF MASS TRANSIT





SINGLE COMMAND CENTRE (SCC)

+ First SCC set for deployment in Pantin by December 2021 as part of Eole project



# EOLE WITH NEXTEO: THE FUTURE OF MASS TRANSIT



### TUNNEL BORING MACHINE (TBM) LAUNCHED ON 28 NOVEMBER 2018

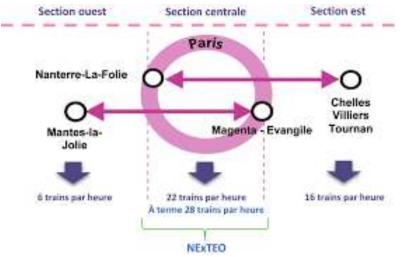


CNIT Station works



+ Communication-based train control: 108 seconds between trains in the centre section of Eole vs 180 seconds today

+ Up to 28 trains per hour



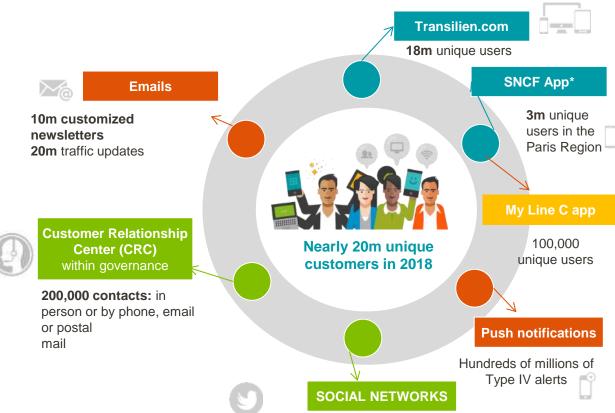


### PASSENGER INFORMATION



#### KEEPING CUSTOMERS INFORMED—NO MATTER WHERE THEY ARE





Hundreds of thousands of visits every month

on 11 Twitter feeds and online blogs

### PEACE OF MIND & SECURITY



### PEACE OF MIND: A CONSTANT EFFORT



#### **CCTV (CLOSED CIRCUIT TV)**

- + 100% of train stations and 683 trains equipped with surveillance cameras as of 30 September 2018
- + 75% of trains equipped by 2019
- + 1,691 requisitions handled by 31 August 2018 (4,200 in 2017).



#### 3117 ALERT SERVICE

- + Available: via phone (3117), SMS (31177) and a phone app (3117)
- + Average response time: 9 seconds (around 200 calls daily)
- + Sharp rise in use: calls increased 100% from 2016-2017, with 47,000 contacts/customers served in the first 9 months of the year



#### **EXPERIMENT: DROP-OFF ON DEMAND**

Drop-off between stops for women using the Noctilien night bus network



### CUSTOMER CARE, SECURITY & FRAUD PREVENTION



### Successful launch and retention of frequently used road line reinforcements during works

- + Scaled up in 2017
- + Construction sites for Grand Paris works in Clamart train station



#### **Geolocalization of replacement buses**

- + Equipment expanded to include all carriers
- + Next step: deploy digital information panels showing waiting time at bus stops



#### Free carpooling during works

+ From issuing refunds to handling expenses: Since October 2016, Transilien has offered carpooling with IDVROOM



#### Security and anti-fraud efforts to keep travel safe

- + SNCF security personnel positioned throughout the network and with deployment of plainclothes teams
- + Facilitators deployed in most relevant corridors or areas
- More ticket checks: on board by conductors and in stations by certified conductors or station employees



SNCF TRANSILIEN 22 - NOVEMBER 2018

### SERVING OUR CUSTOMERS



#### MORE AND MORE NEW SERVICES







Accessibility
118 train stations
by Y-E 2018

Remote
operations
156 train stations
in 2018

Work & Station
Co-working sites:
7 open, 15 underway
Micro-working sites:
128 by Y-E 2018

Car parks 23 facilities with 8351 spots Bicycles 43 secure shelters



### REMOTE OPERATIONS: IMPROVING SERVICE FROM THE FIRST TRAIN TO THE LAST

OVER 156 TRAIN STATIONS IN 2018 (200 BY 2024): €46m

#### **REMOTE OPERATIONS:**

- Facilitate access to platforms from first train to last (remote elevated operations)
- Help increase validations (access to CAB lines starting from first train)
- Save energy by controlling station lighting



#### MANAGING TRANSILIEN: RELIABLE CUSTOMER SERVICE FROM THE FIRST TRAIN TO THE LAST

- Monitor station equipment remotely
- Process station-based customer support requests remotely; add fourth- and fifthlevel stations by Y-E 2020
- Manage security calls (3117 alert line and more)



### **CLEANER TRAINS**

Continuous cleaning



#### QR code alerts







### CONSTANT EFFORT TO IMPROVE ACCESSIBILITY

PEOPLE WITH DISABILITIES ACCOUNT FOR OVER 4 IN 10 PUBLIC TRANSPORT USERS IN THE PARIS REGION—EVERY DAY

### €1.5bn

Financing: 50% IDFM, 25% RIF and 25% SNCF

### 118 train stations

accessible by Y-E 2018

# over 200 train stations

accessible by 2024, serving 90% of Transilien users





### SNCF: A KEY PLAYER IN SUSTAINABLE MOBILITY

#### TRAINS EMIT 31x LESS CO2



1%

of the carbon footprint of Paris Region residents comes from trains

VS

43% from cars

-1.7 T

CO2 annually for every user who chooses to travel by train

+18%

Rise in traffic since 2013

