

Opening Address: Designing Transport is Designing Cities

Étienne Tricaud

- CEO & Co-Founder – AREP





Designing Transportation is Designing Cities

Étienne Tricaud
President & Co-founder

AREP

RAILNATION Chicago
November 2, 2017



Or : « The 200 Years
History of Hate & Love
Relationship between the
Transport & the City »

Étienne Tricaud
President & Co-founder

AREP

RAILNATION Chicago
November 2, 2017



Or : « the Station
is the Future
of the City »

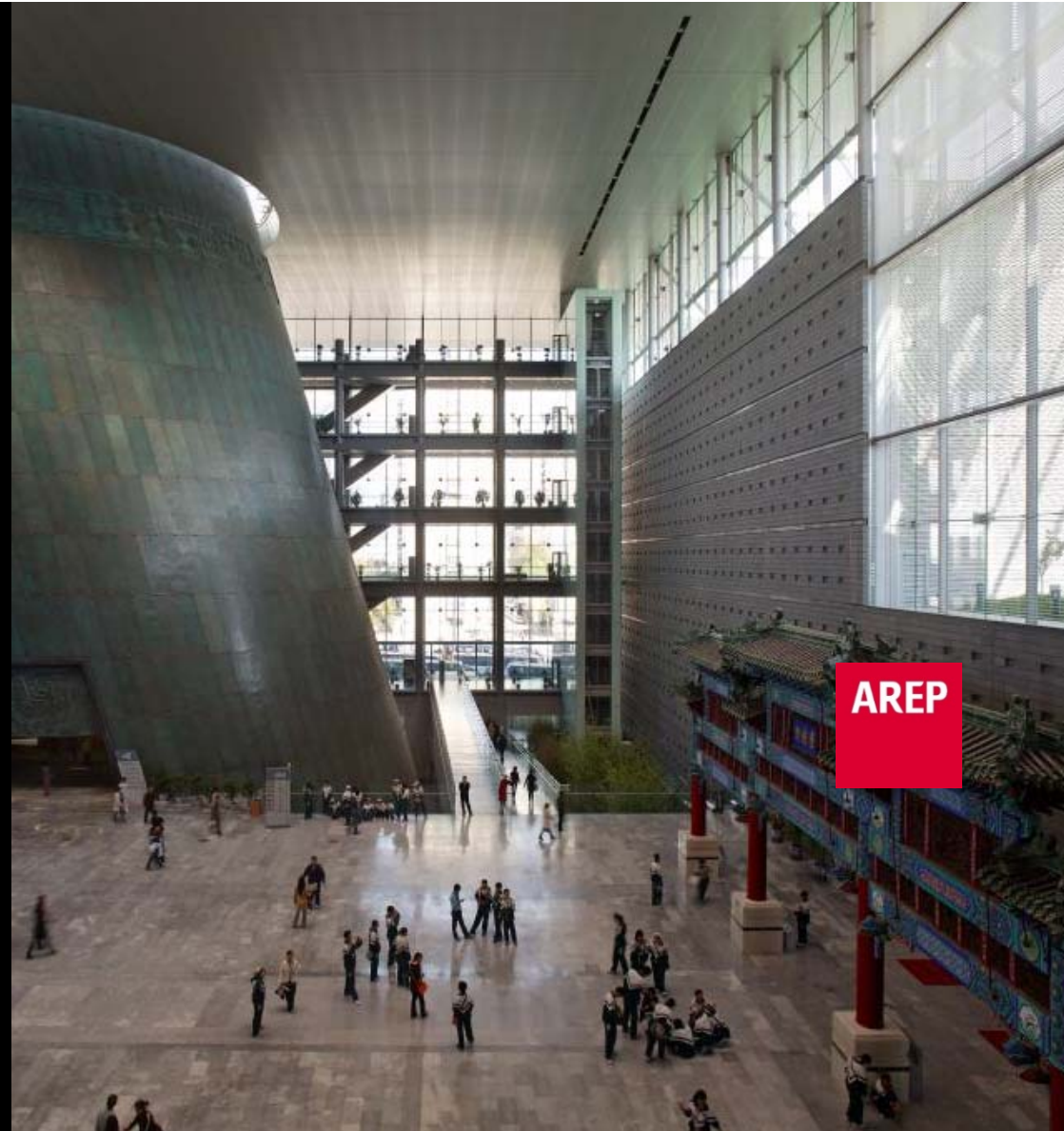
Étienne Tricaud
President & Co-founder

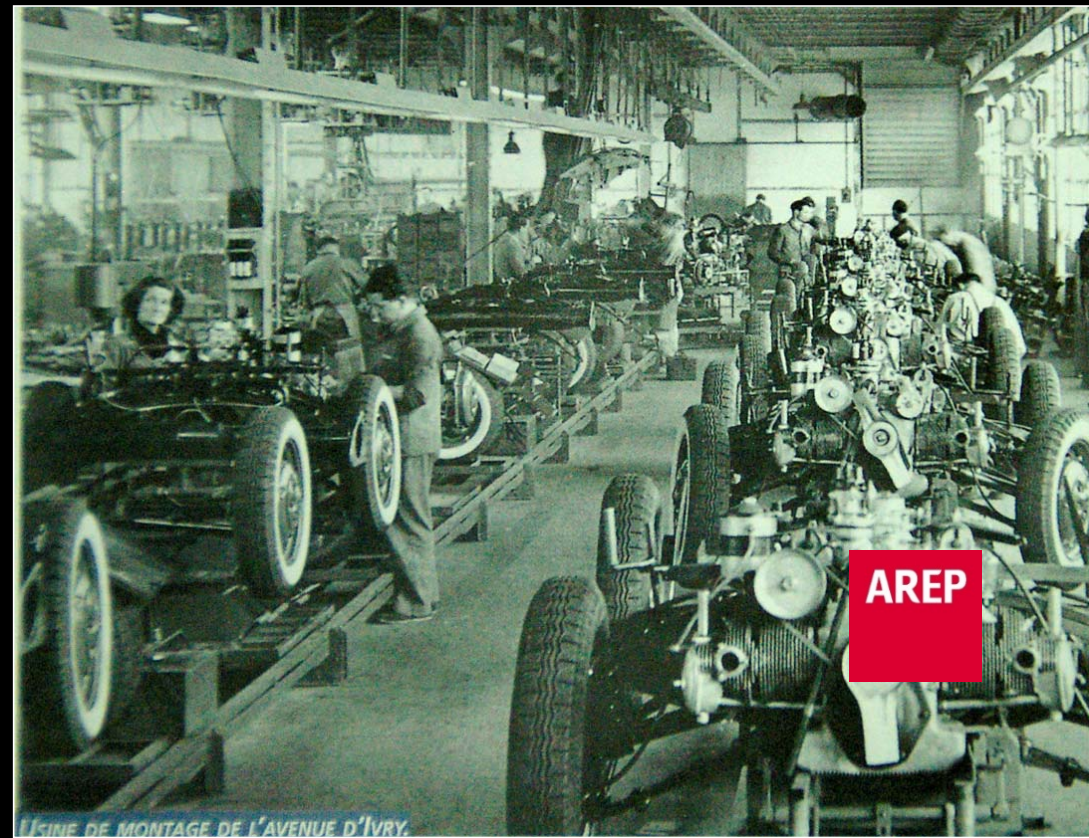


RAILNATION Chicago
November 2, 2017

A multidisciplinary design office

Architecture
Urban planning
Structural and MEP engineering
QS & Economy
Product and graphic design
Programming
Passenger flow engineering
Project management







France
Paris
Nantes
Bordeaux
Marseille
Lyon
Nancy
Lille

Marocco
Casablanca

Russia
Moscow

Qatar
Doha

U.A.E.
Abu Dhabi

India
Mumbai

China
Beijing
Shanghai

Vietnam
Hanoi





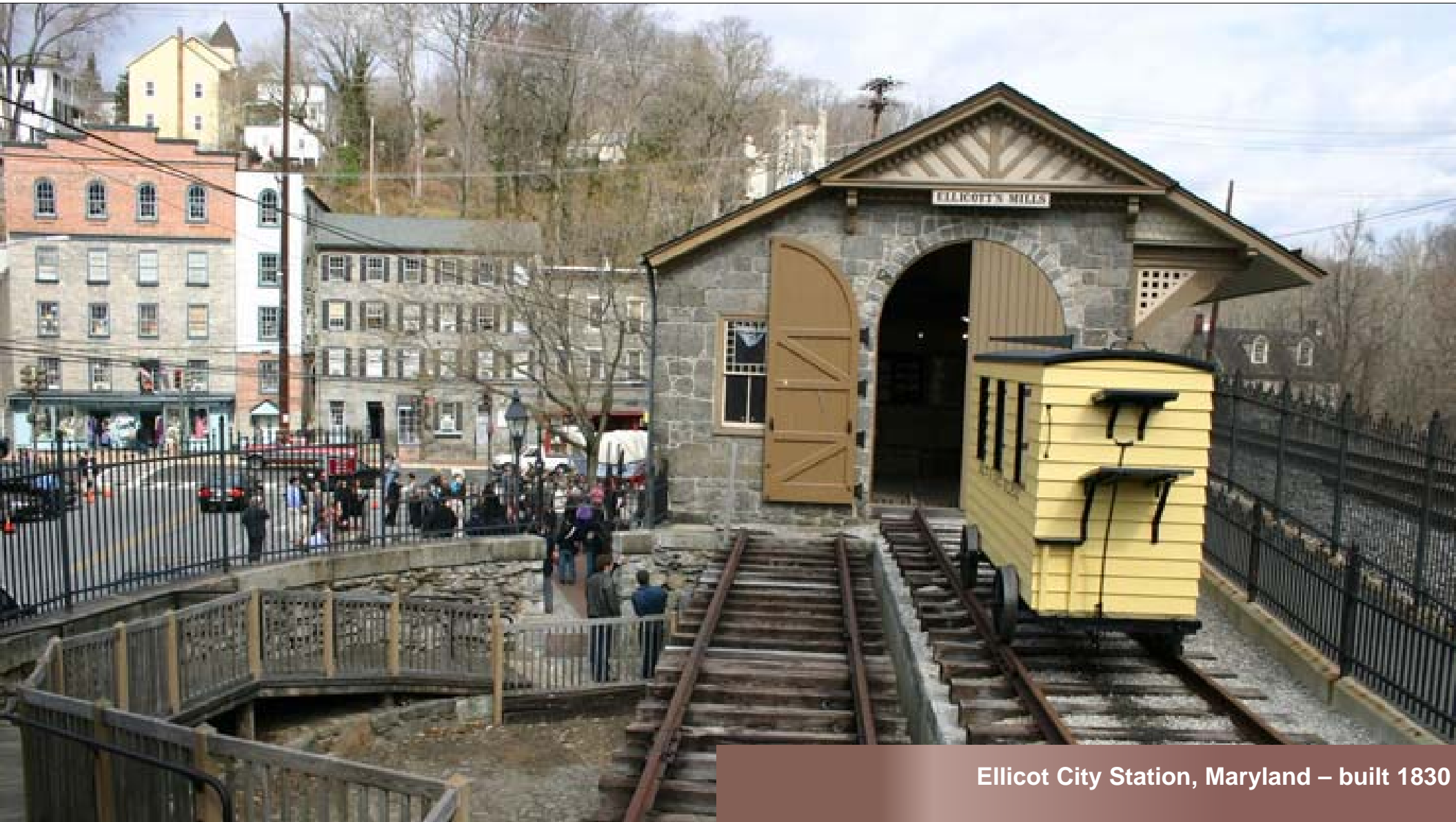
Designing spaces for
people on the move

AREP

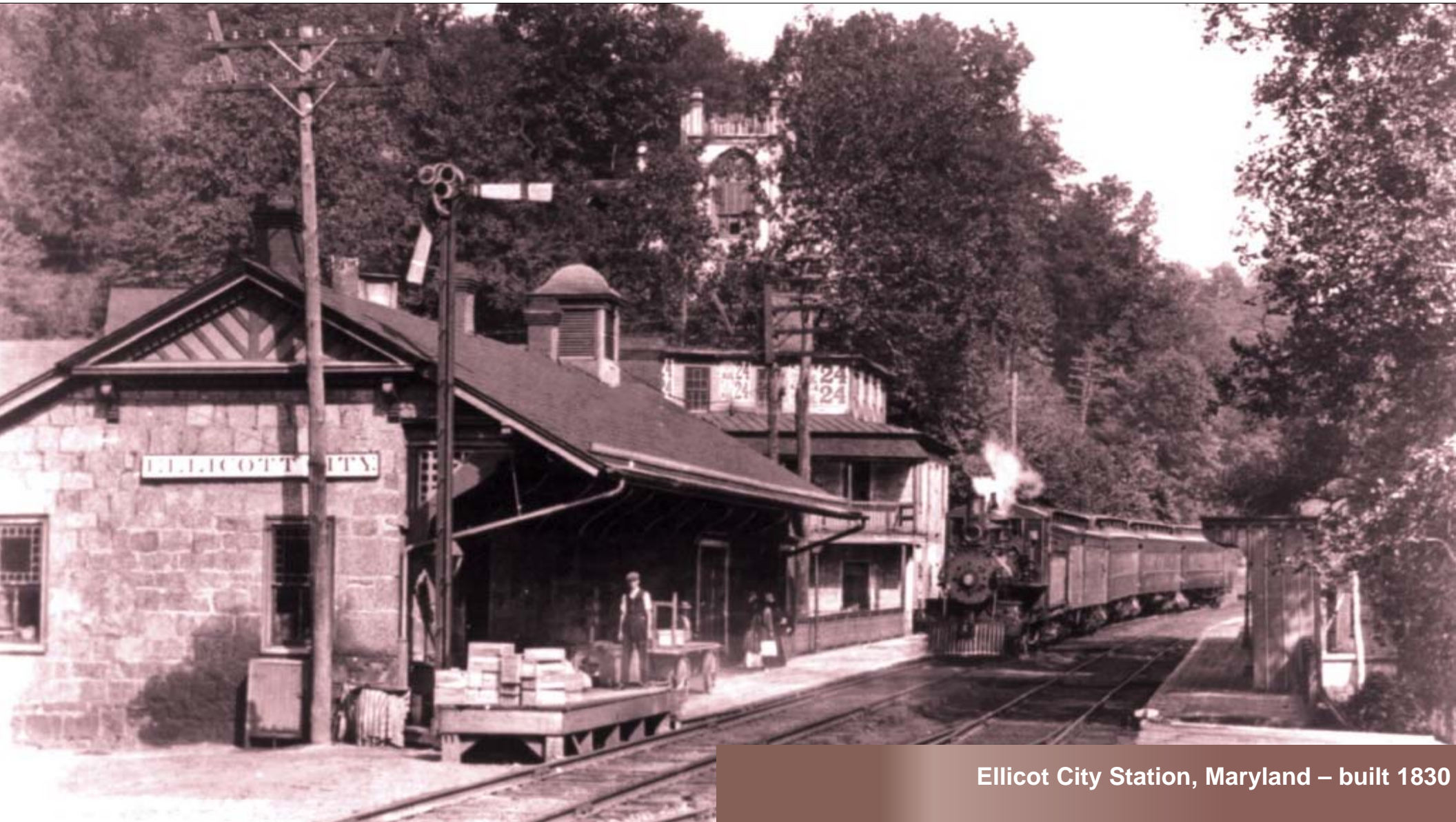
And shaping cities for the future of urban cultures



1. The Birth of the Railroad



Ellicott City Station, Maryland – built 1830

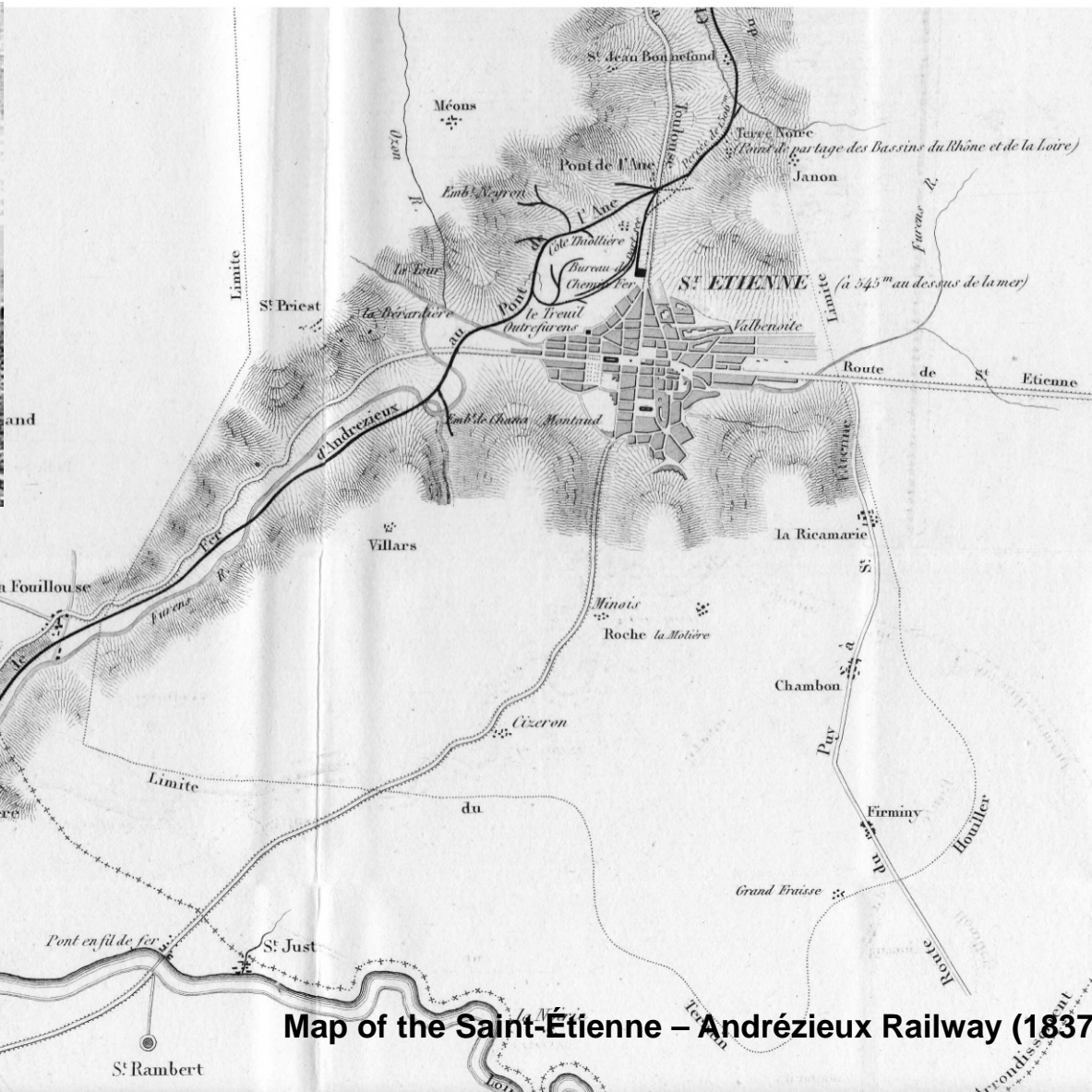
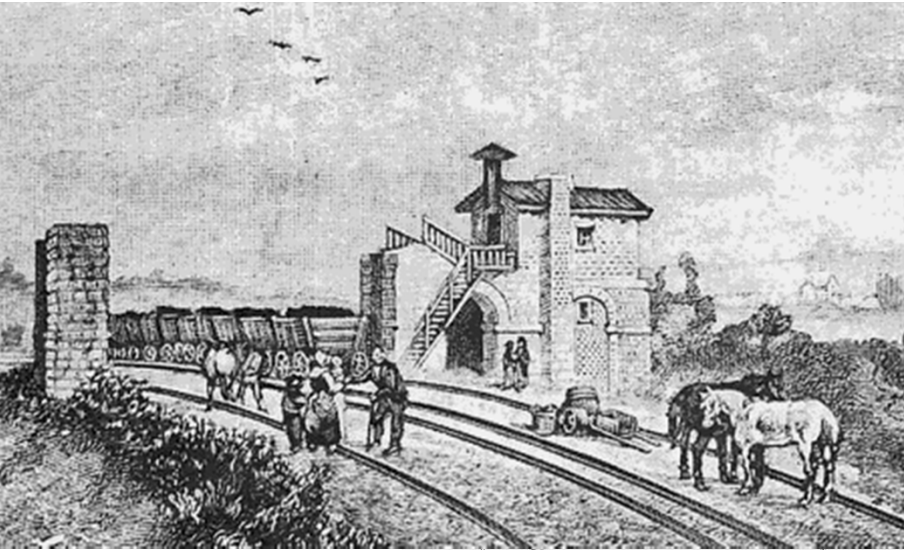


Ellicott City Station, Maryland – built 1830



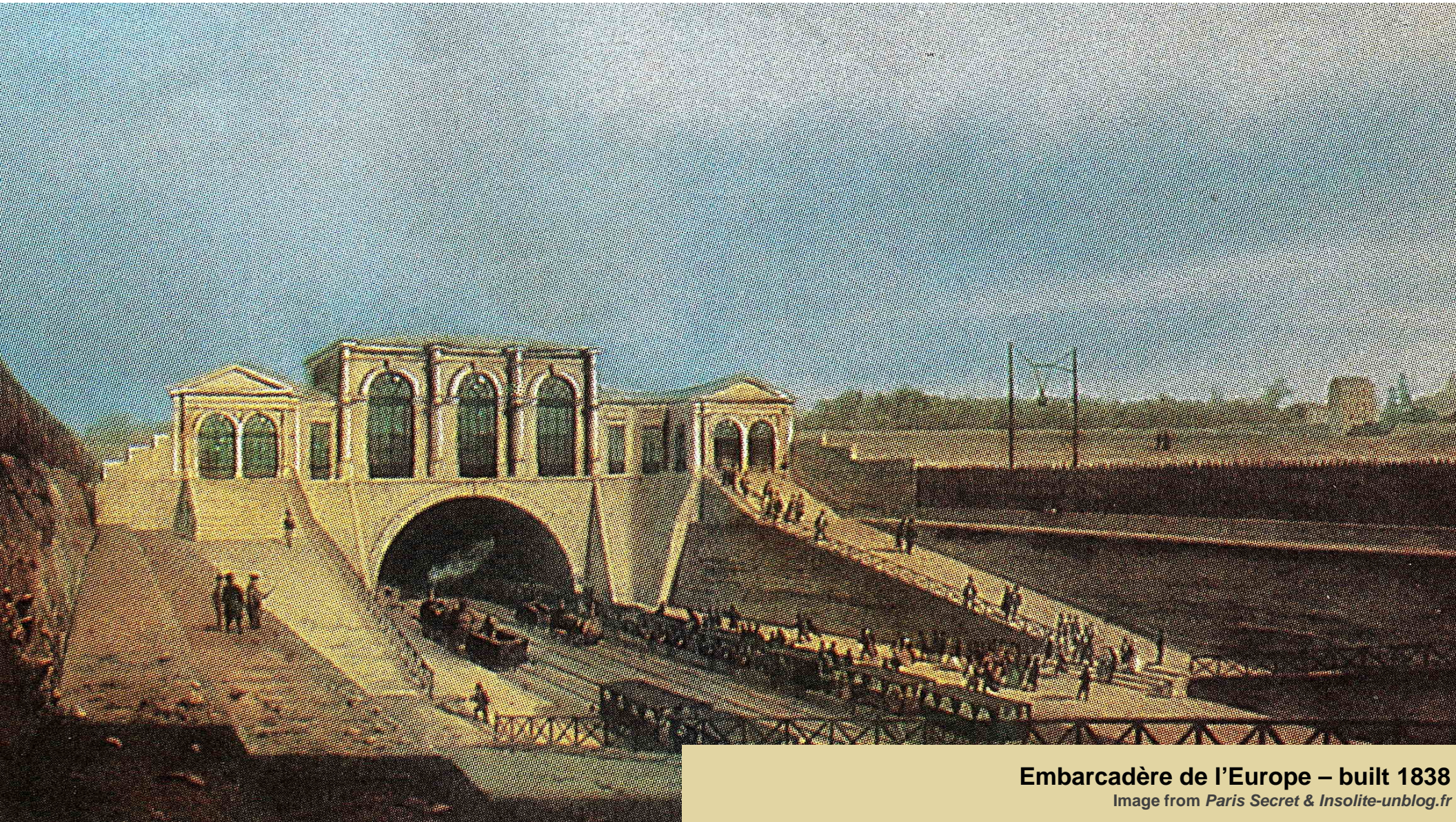
"Best Friend of Charleston" – built 1830

Photo from *American Rails*



... and in France

Map of the Saint-Étienne - Andrézieux Railway (1837)



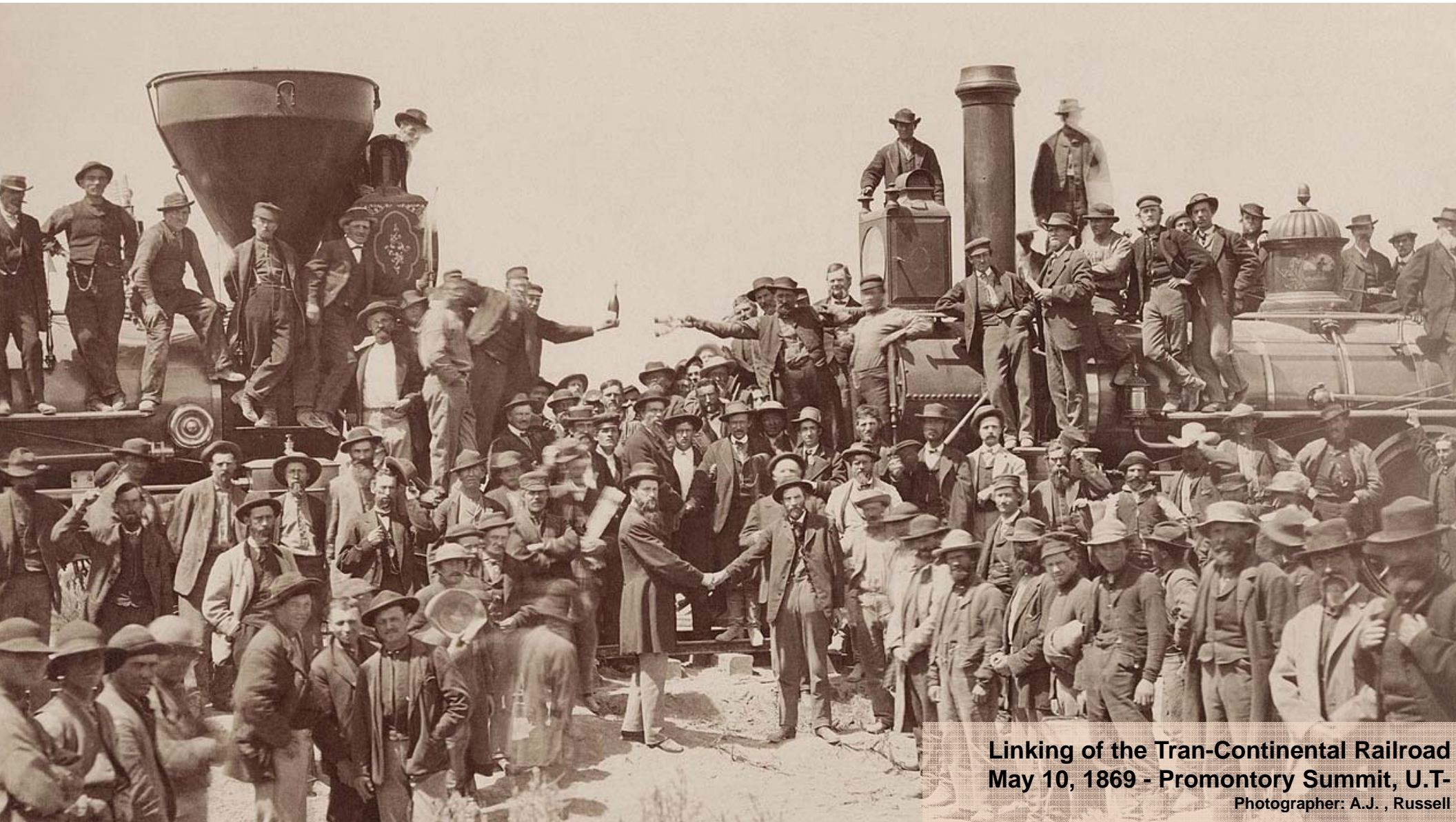
Embarcadère de l'Europe – built 1838

Image from *Paris Secret & Insolite-unblog.fr*

2. The First TOD (Transit Oriented Development)







**Linking of the Tran-Continental Railroad
May 10, 1869 - Promontory Summit, U.T.**

Photographer: A.J. , Russell



28A



28B

VIEW LOOKING SOUTHWARD FROM GOLDEN GATE.

The GREAT PLEASURE ROUTE of the PACIFIC COAST.

SOUTHERN PACIFIC R.R.

TICKET OFFICES:
 PASSENGER DEPOT,
 TOWNSEND ST.
 VALENCIA ST. STATION,
 BET. 3RD & 4TH
 AND N^O. 613
 MARKET ST.,
 GRAND HOTEL
 SAN FRANCISCO.

A. C. BASSETT, SUPERINTENDENT.
H. R. JUDAH, ASST. PASSENGER & TICKET AGENT.

Be carefree, be comfortable and enjoy a

New World Standard in Travel

The new Santa Fe

Super Chief

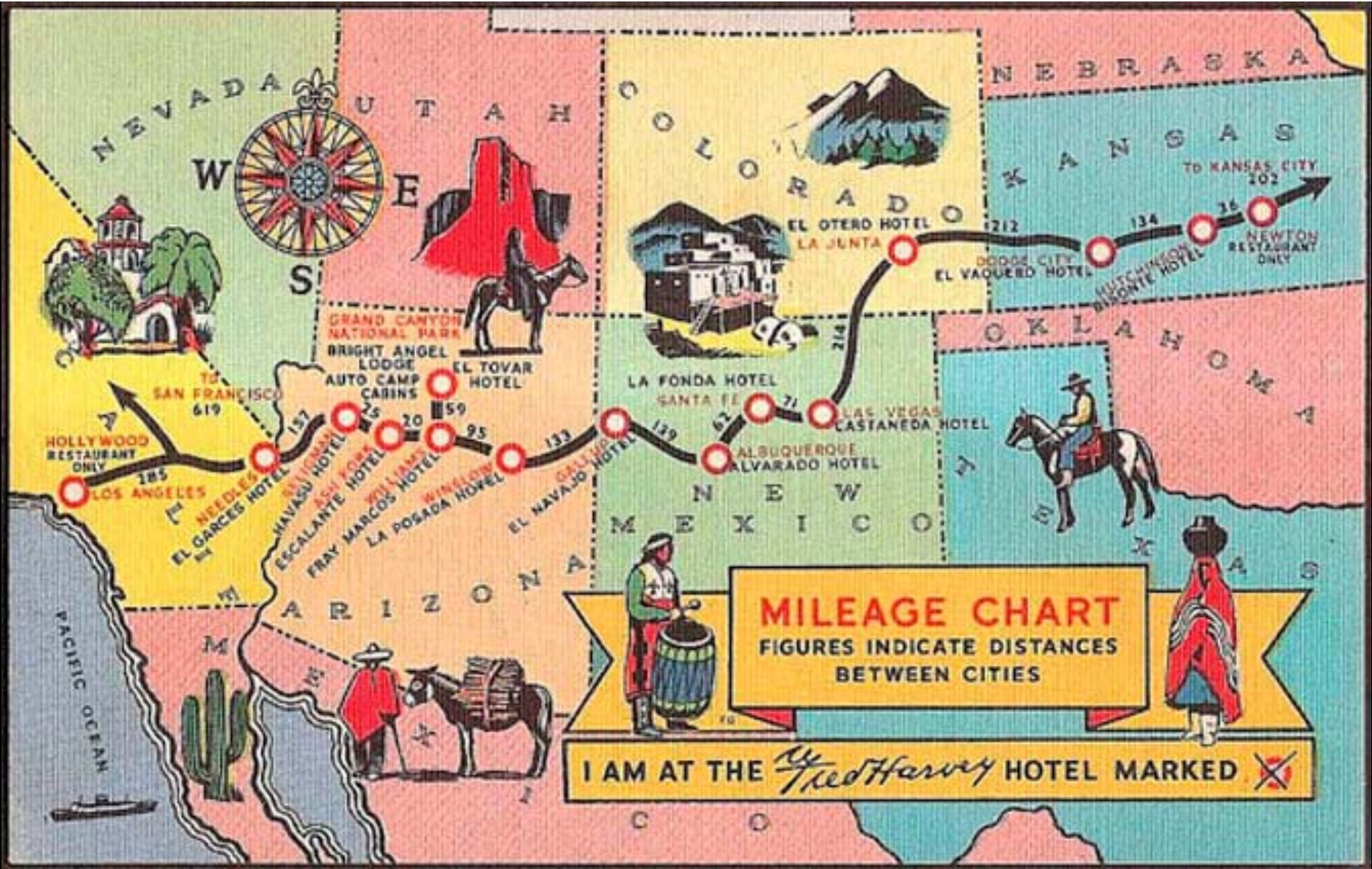
Advanced ideas for your travel luxury... new cradled smoothness
in the ride... daily between Chicago and Los Angeles

From the flanges on the wheels to the tip of the Pleasure Dome, the Super Chief is new—entirely new.
 To give you the smoothest ride of your life on rails, this new Super Chief glides on cushioned springs... removes any idea you ever had about any train.
 The keynote is comfort.
 You find it in the distinctive Turquoise Room in the lounge car—a delightful place to relax, enjoy a cocktail or entertain your friends at dinner—the first time such a room has been provided on any train.
 You find it in the Pleasure Dome—“top of the Super, next to the stars”—that brings you an unobstructed view of wonderful southwestern scenery.

You find it in the new dining cars where Fred Harvey chefs present new and exciting menus.
 Accommodations in this beautiful all-rounder train are designed to pamper you every mile of the way: “Push-button” radio or music in your room when you want it... beds you just can't help sleeping in... charming apartments by day.
 From the engineers who glide you across this great country to the porter who answers your bell, this is the train of thoughtful service.
 For your next trip between Chicago and Los Angeles say “Super Chief.” Now, more than ever, it is America's train of vision. Just consult your local ticket agent.

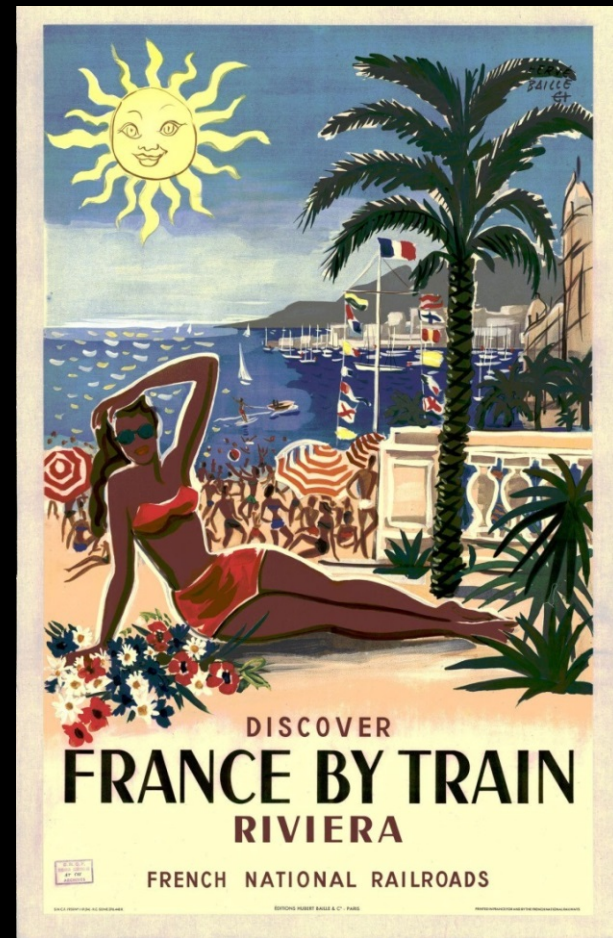
SANTA FE SYSTEM LINES
Serving the West and Southwest







H-1885 THE ESCALANTE, FRED HARVEY HOTEL, ASH FORK, ARIZONA



3. The Golden Age of Railway Stations



Claude Monet
" Saint-Lazare Station,
Exterior View "

1877- Musée d'Orsay



'Arrival of a Train at La Ciotat' – 1896, the Lumière brothers

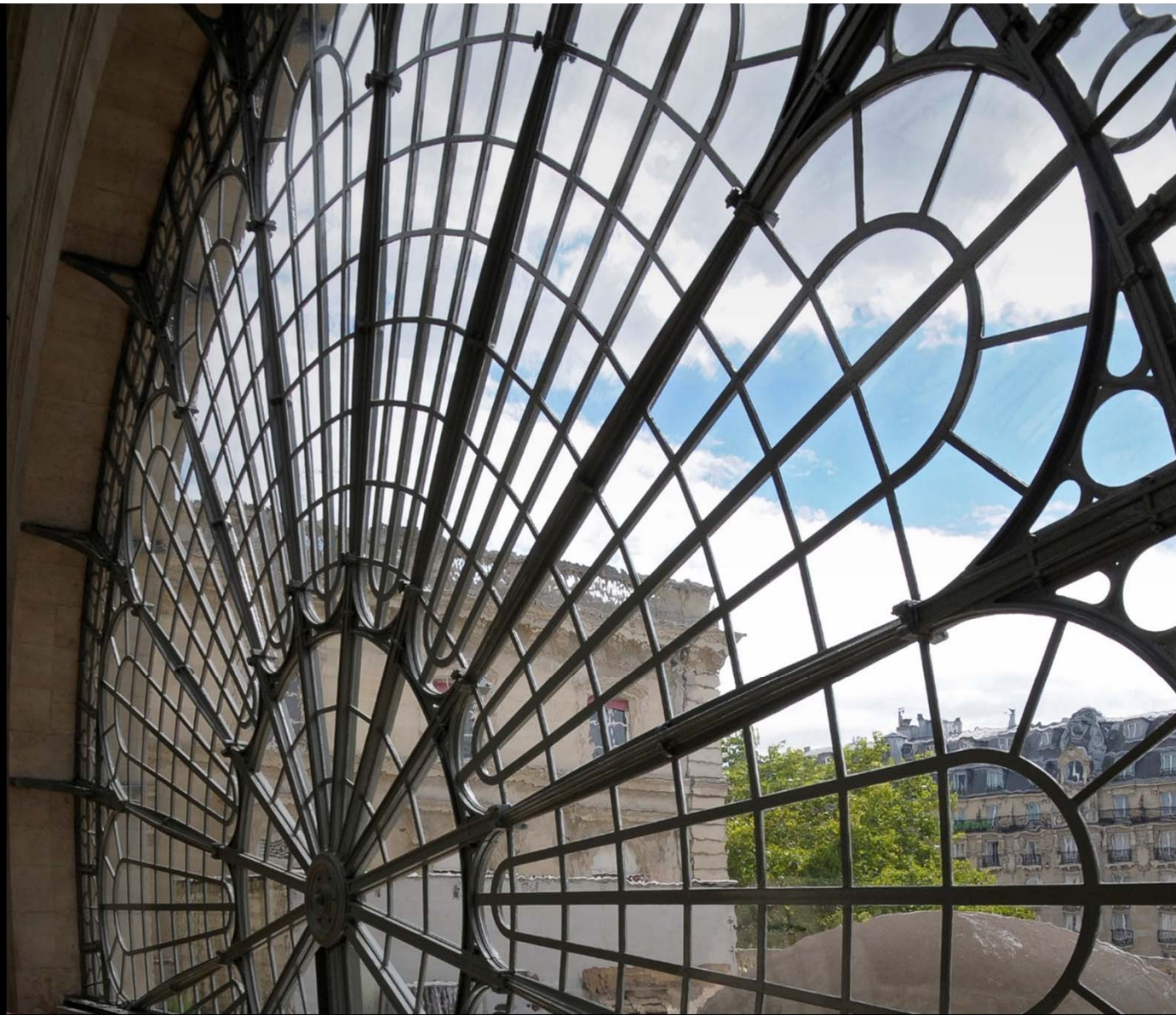


B. J. C.

PARIS — La Gare de l'Est



Paris – Gare de l'Est



Paris – Gare de l'Est



Paris – Gare de l'Est



Paris –Gare du Nord



Paris –Gare du Nord



London - Euston Station
Early 1890s



Richmond Main Street Station



Los Angeles Union Station

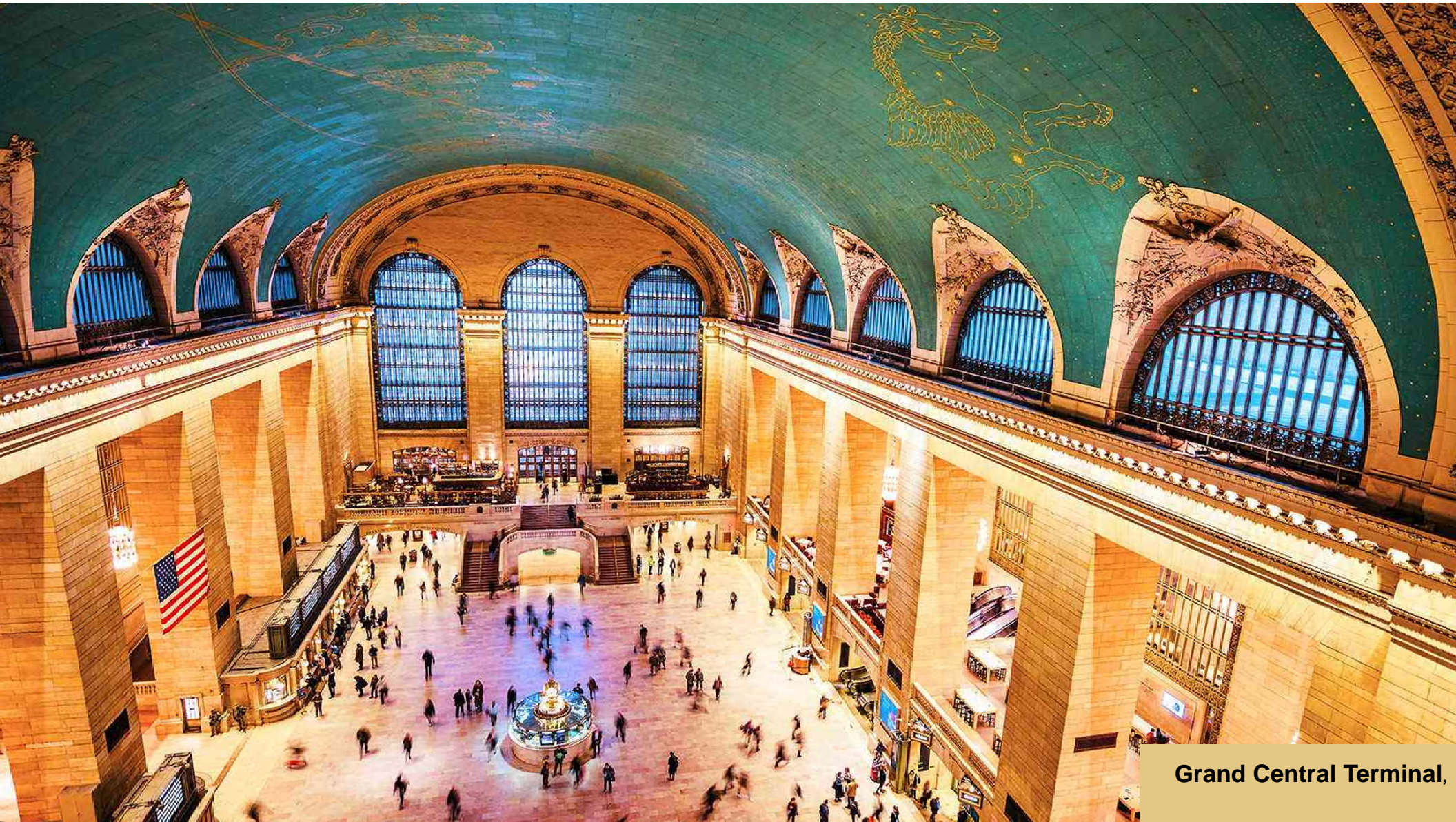


Los Angeles Union Station



Grand Central Terminal,

Late 1920s
by CORBIS



Grand Central Terminal,



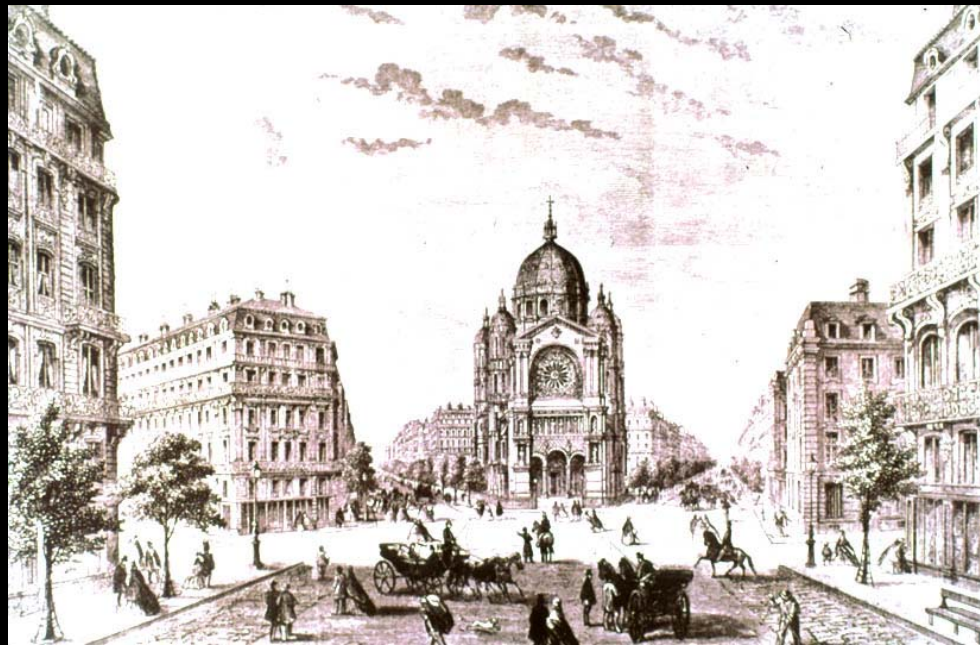
Chicago - Union Station



Chicago - Union Station

4. The Birth of Urban Transport
and the 20th Century
Urban Development









6. Avenue
an der 33. Straße

New York. Fünf übereinanderliegende Verkehrsweg



Yesterday



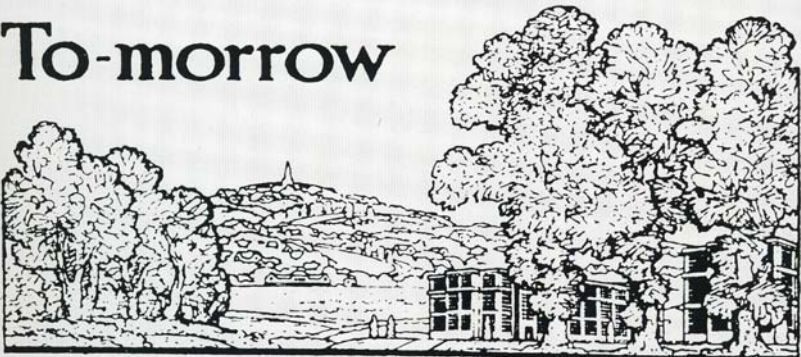
Living and Working in the Smoke

To-day

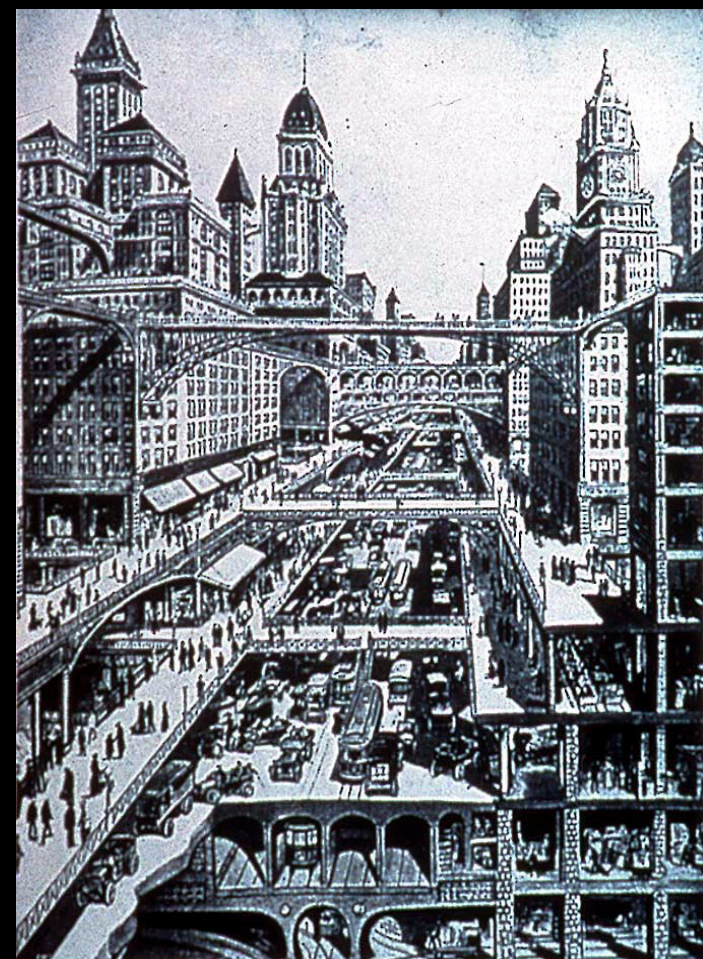


Living in the Suburbs - Working in the Smoke

To-morrow



Living & Working in the Sun at WELWYN GARDEN CITY



L'INTRODUCTION DES VITESSES MÉCANIQUES DANS LA VIE MODERNE OBLIGE À DIFFÉRENCIER ET CLASSER LES VOIES DE COMMUNICATIONS SELON LEUR FONCTION

Les voies actuelles de circulation urbaine répondent et souvent imparfaitement aux besoins millénaires des piétons et véhicules à traction animale.

Depuis 50 ans environ, la vitesse et le nombre sans cesse croissant des automobiles de toute nature ont créé progressivement la plus grande confusion du trafic circulaire des villes.

Des palliatifs provisoires, tels que l'ordre policier, les passages cloutés, les sens uniques, ne pourront éviter des solutions plus complètes.

IL CONVIENT :

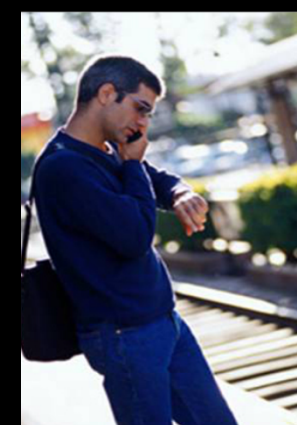
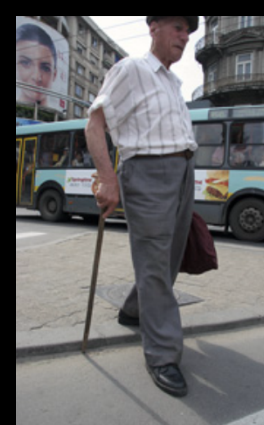
- de ménager aux piétons des allées et passages à l'abri des dangers du trafic intense des véhicules,
- d'organiser les voies suivant leur fonction,
- de réserver des zones de stationnement à l'écart de la circulation.











5. New Modes for Long Distance Transport







6. The Decline of the Train..
Of the Station..
and of the Station District



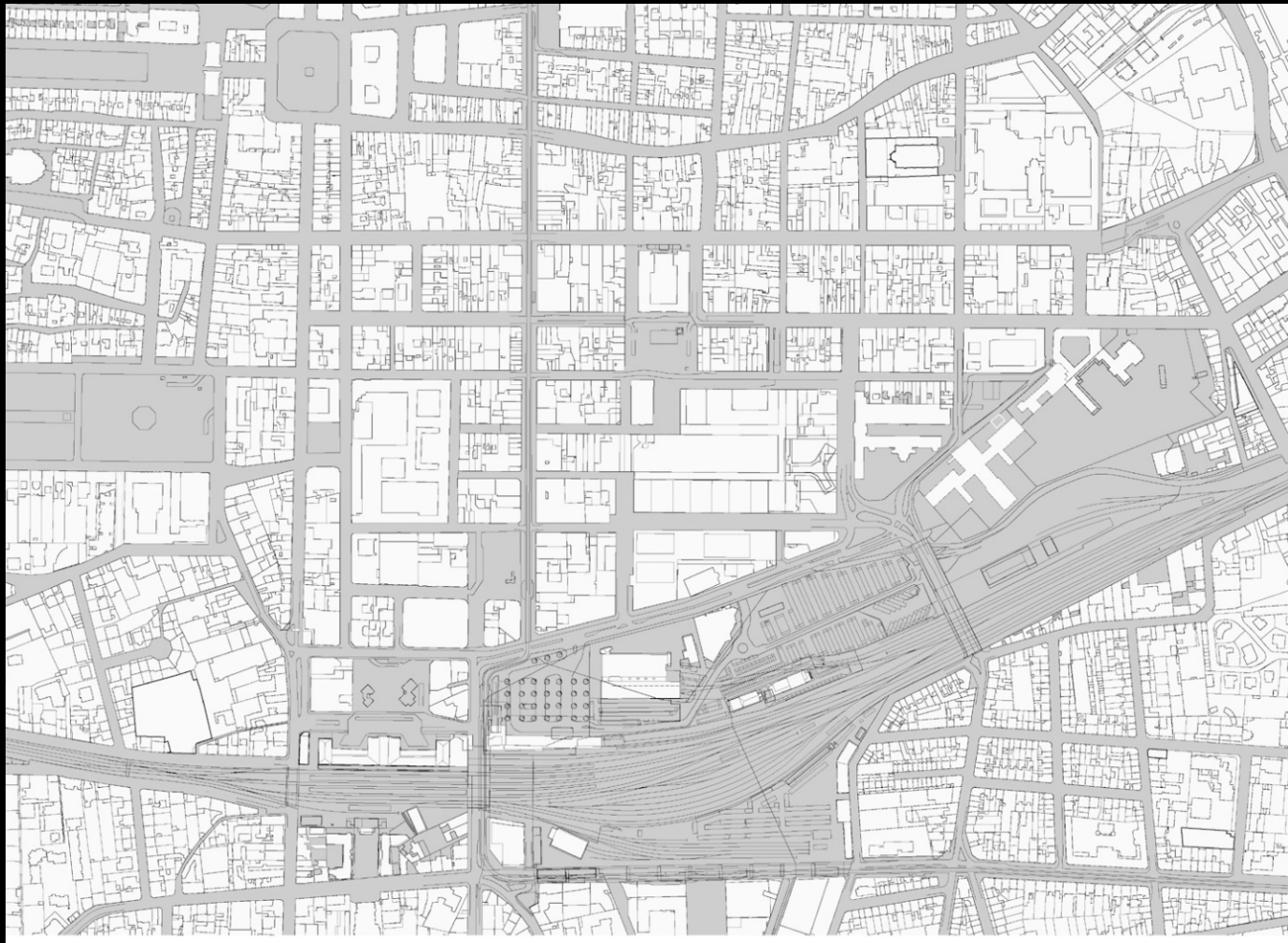
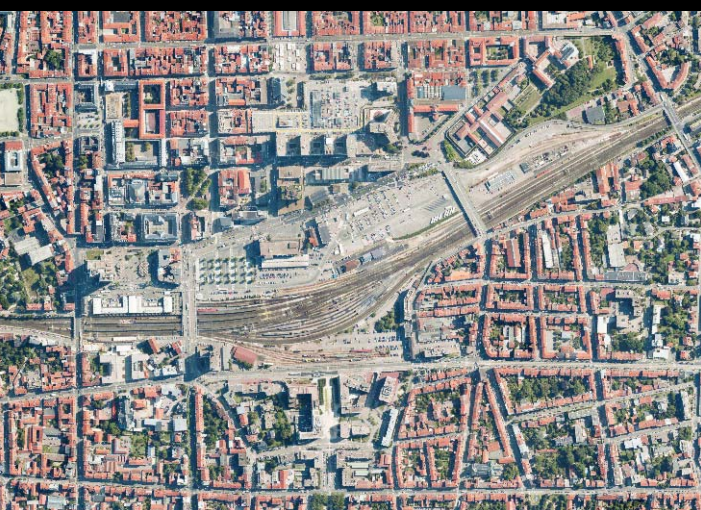
Grenoble station



**Paris - Gare
Montparnasse**

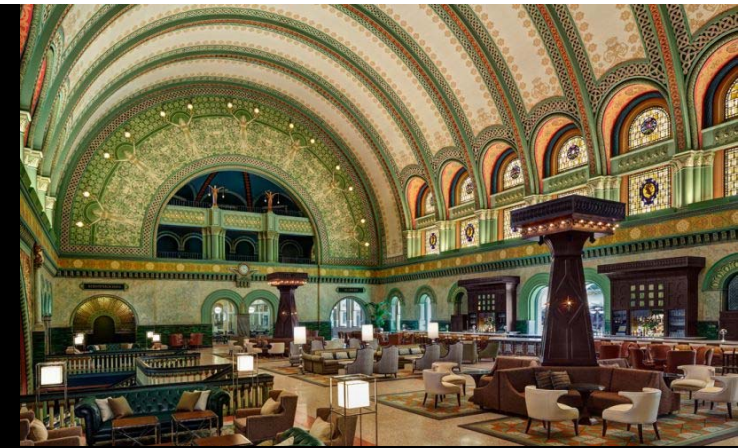


Paris - Gare
Montparnasse



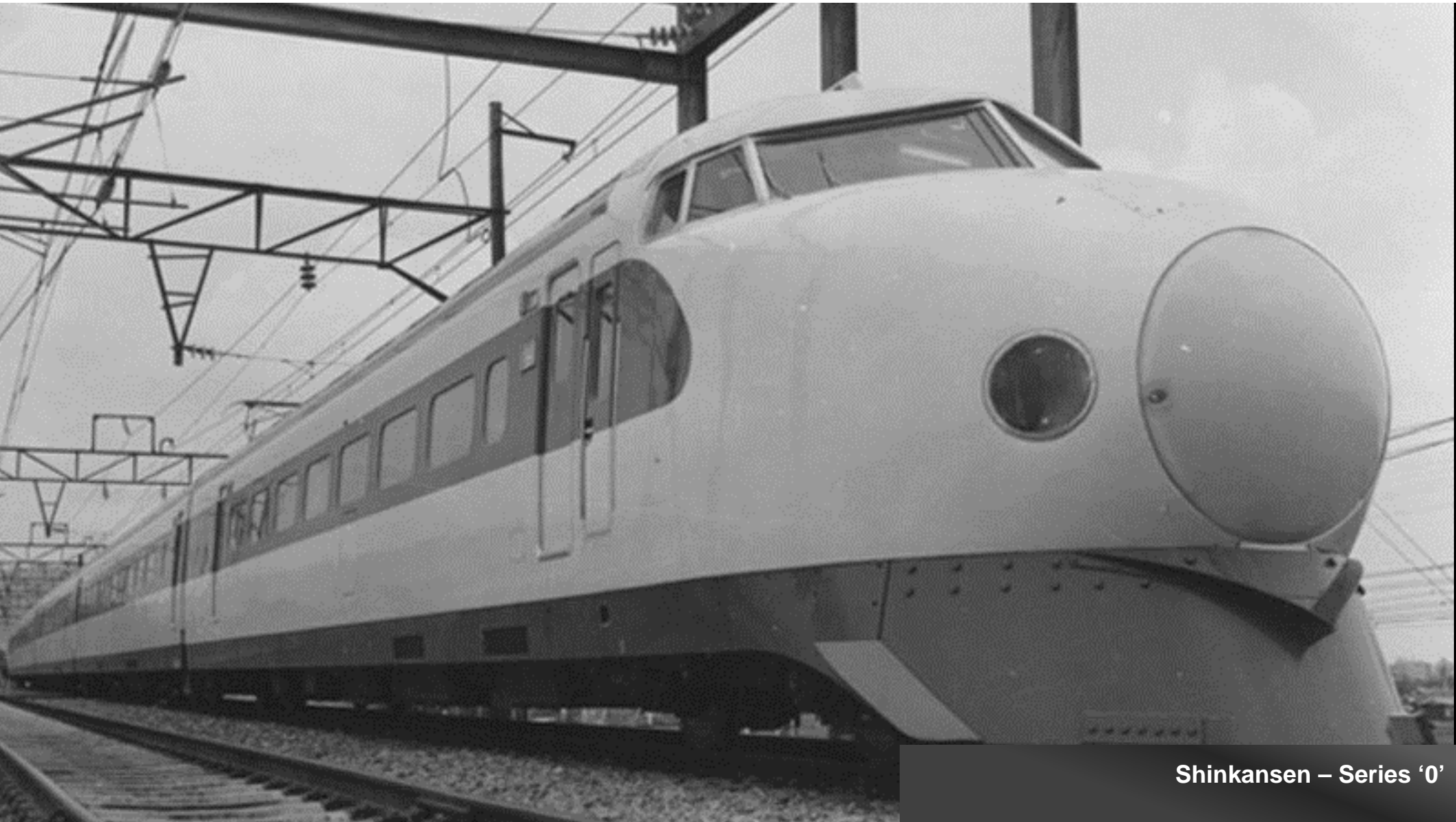


Tacoma Union Station
Now, the
U.S. District Court for the
Western District of Washington



Saint Louis Union Station
Now the **Saint Louis Union Station Hotel**

7. The High Speed Rail Effect



Shinkansen – Series '0'



General Motors' AeroTrain



United Aircraft UAC Turbo Train



TGV Sud-Est : 1981



TGV - V150

World land-speed record conventional-wheeled vehicles

357.2 mph – April 3, 2007

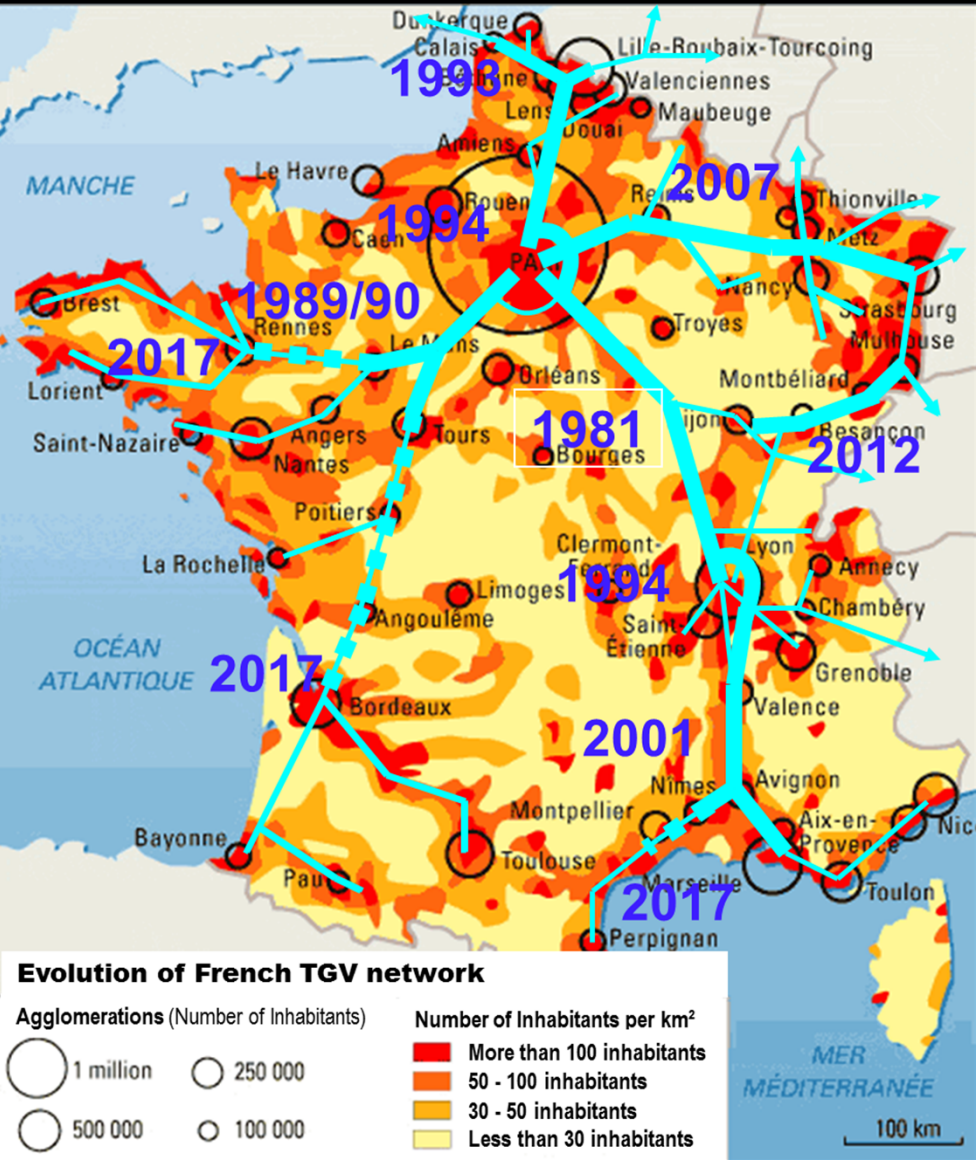




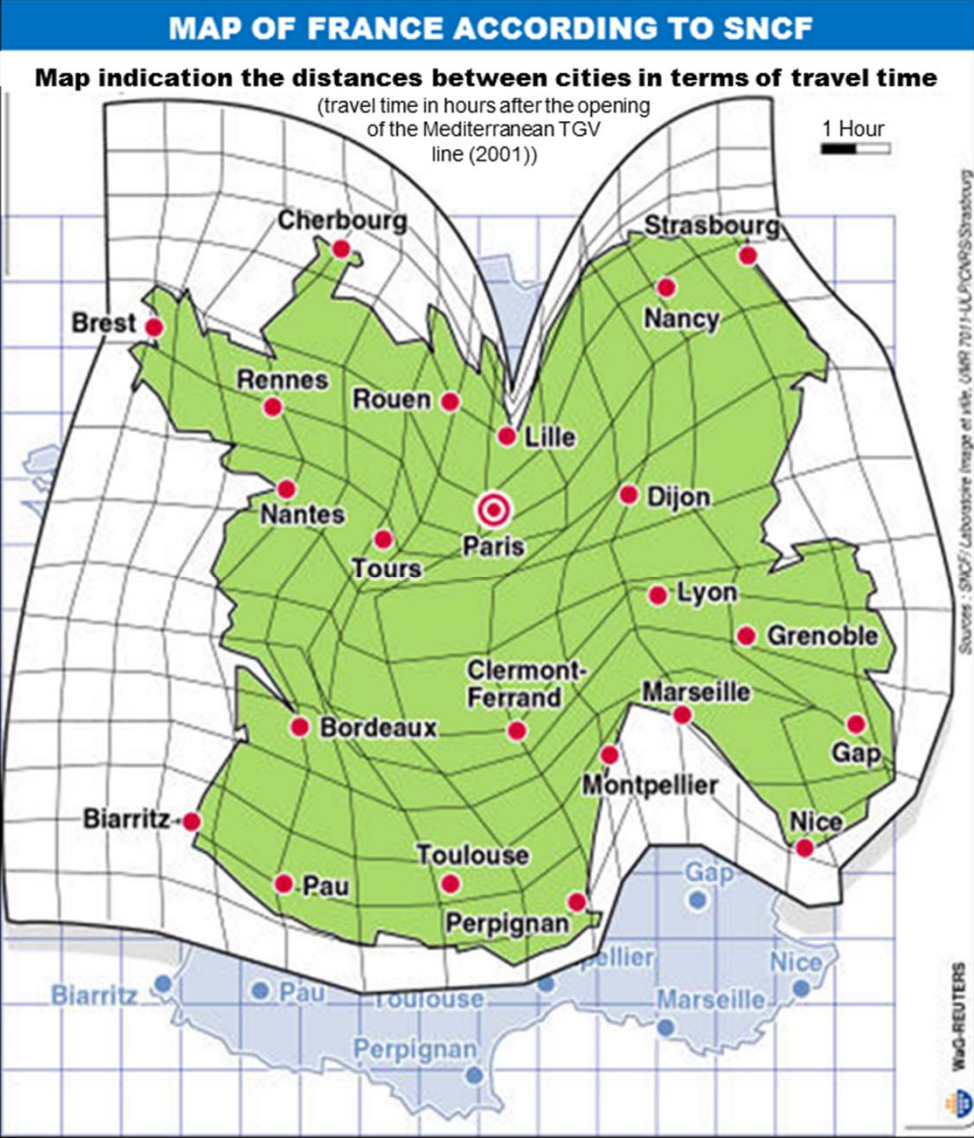
8. The Rebirth of the Railway
Station : Phase 1

The Development of the TGV Network

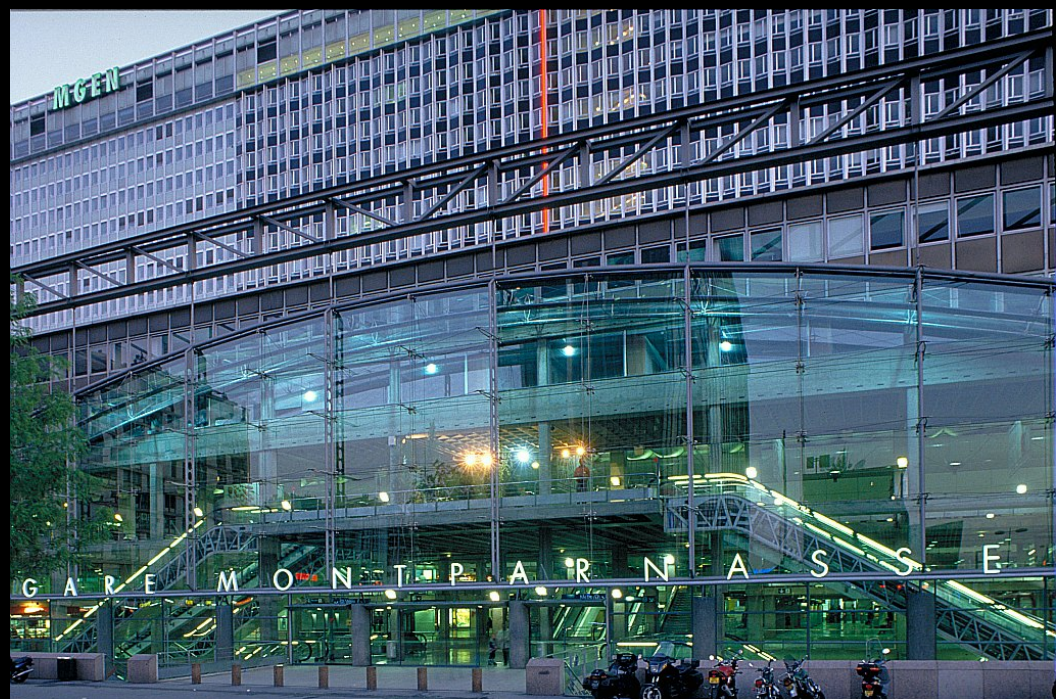
1981-2017



The TGV's Effect on France



Paris Gare Montparnasse 1990

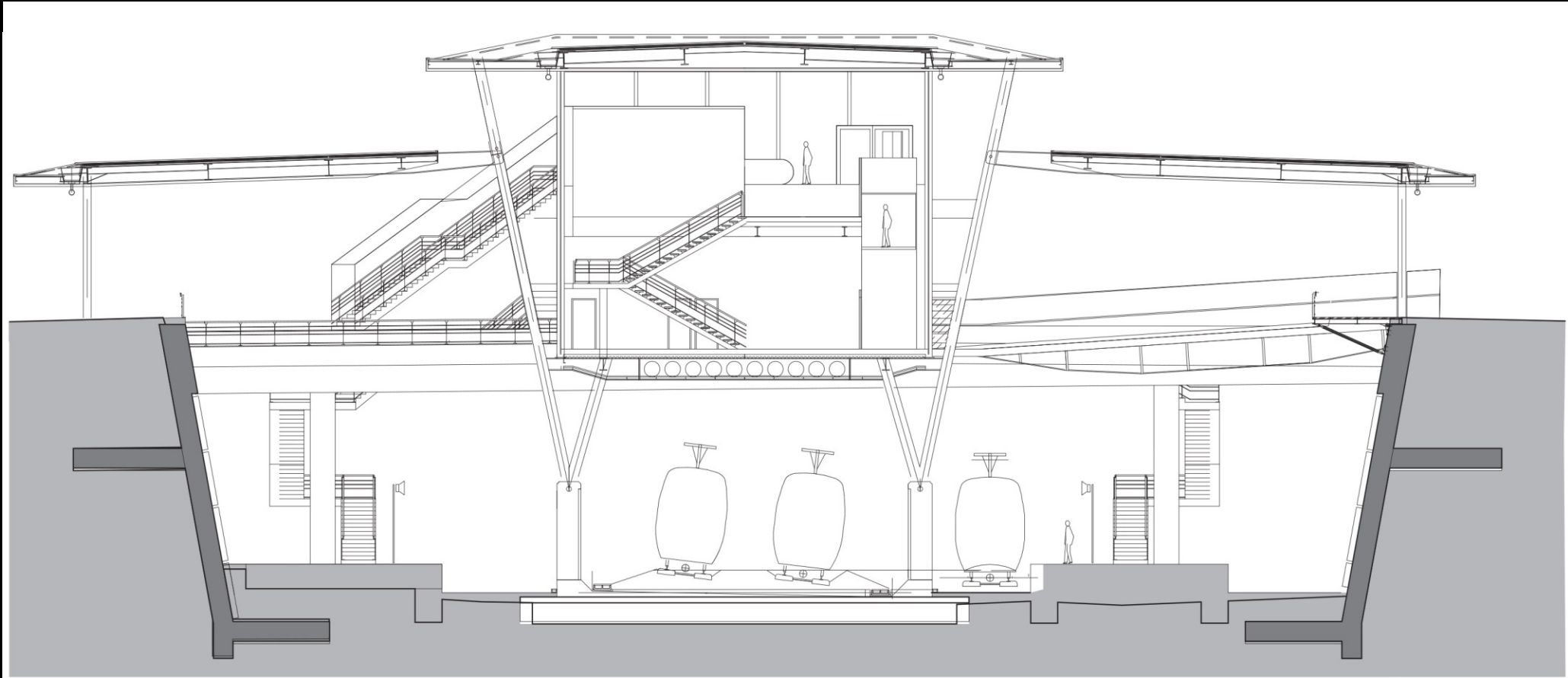


Valence TGV Station 2001



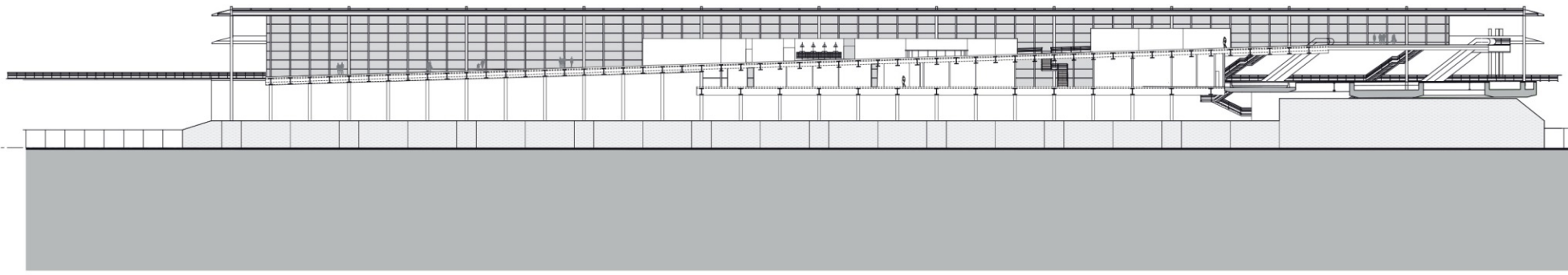






0 5 10 m

Valence TGV Station - Transverse Section



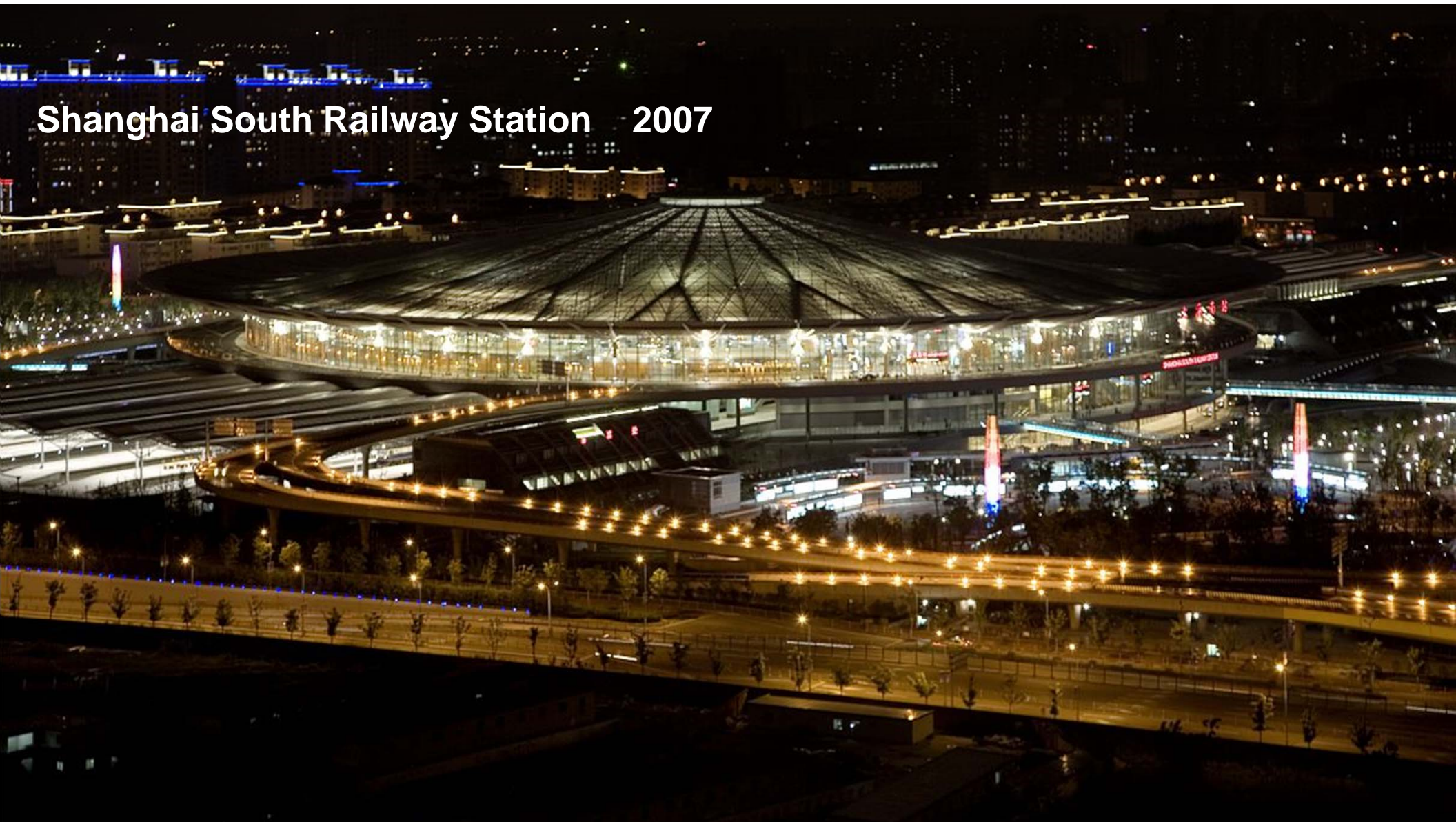
0 10 50 m Valence TGV Station - Longitudinal Section



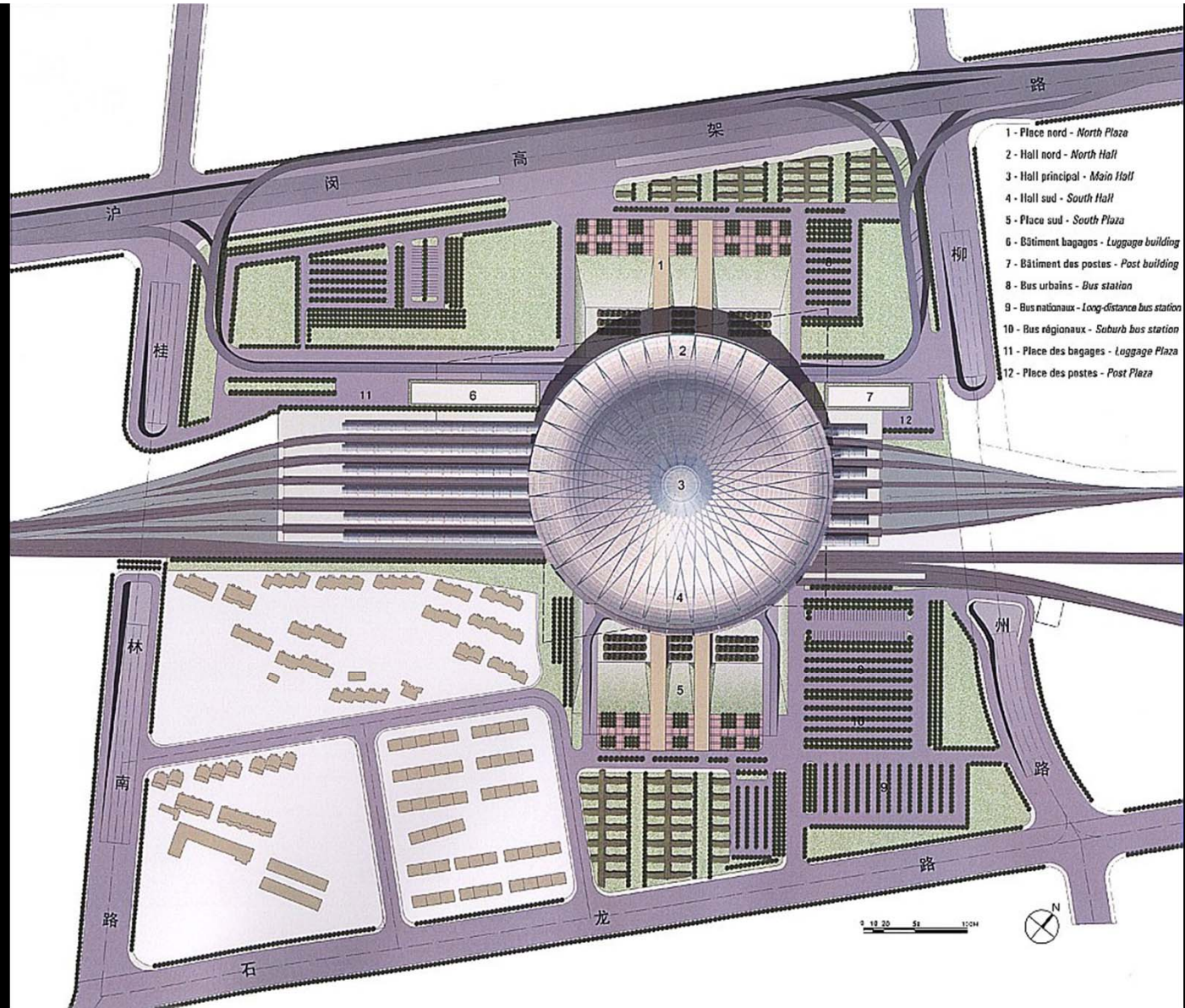




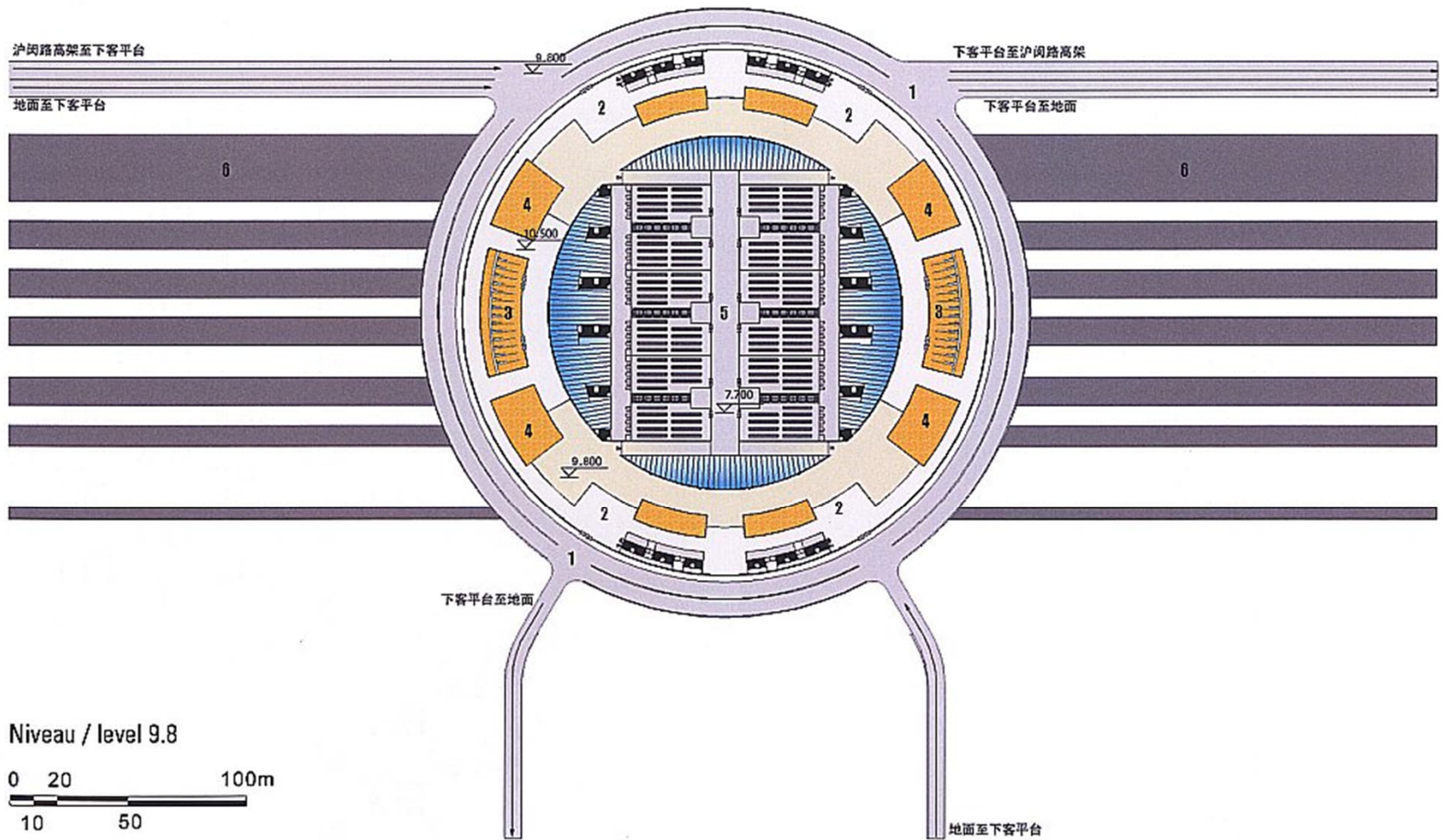
Shanghai South Railway Station 2007





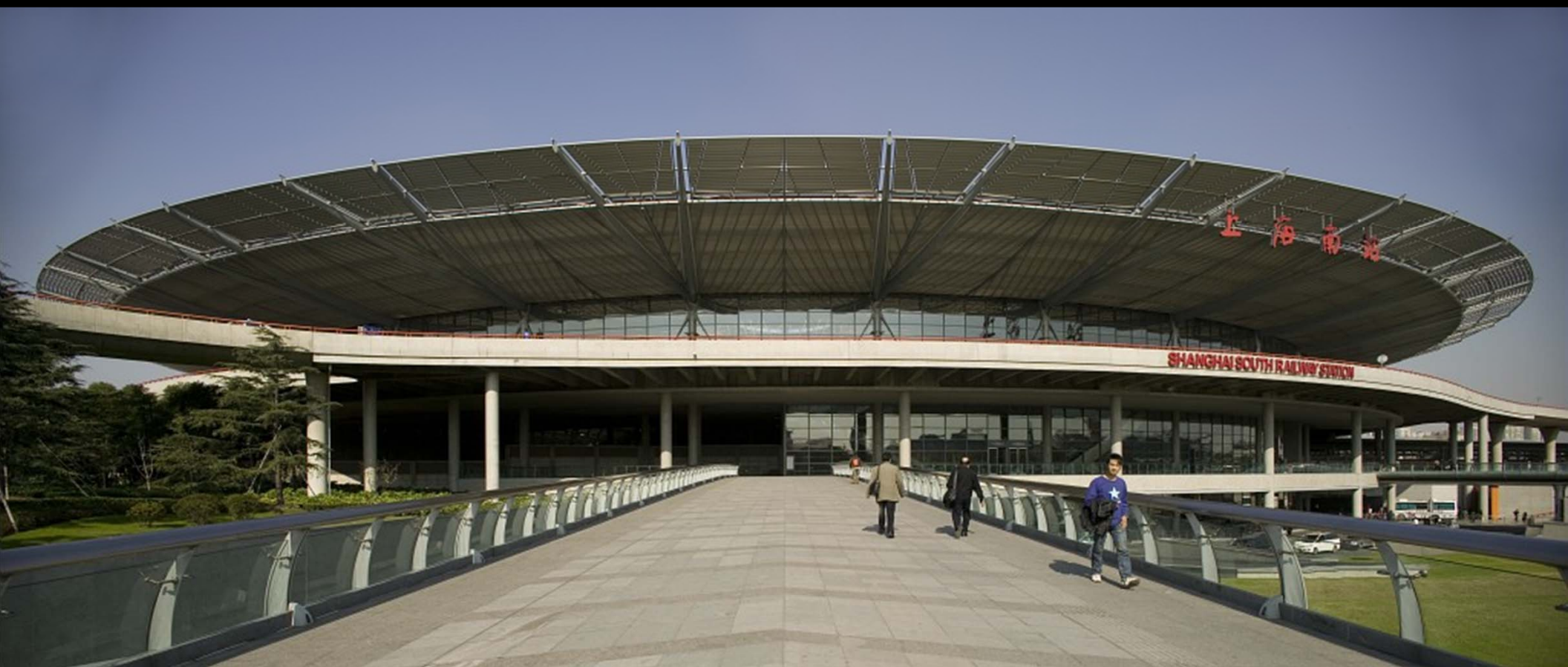


- 1 - anneau des déposes - *drop off ring*
- 2 - salle des départs - *departure room*
- 3 - espaces vente de billets - *ticket sales desks*
- 4 - espaces commerciaux - *shopping area*

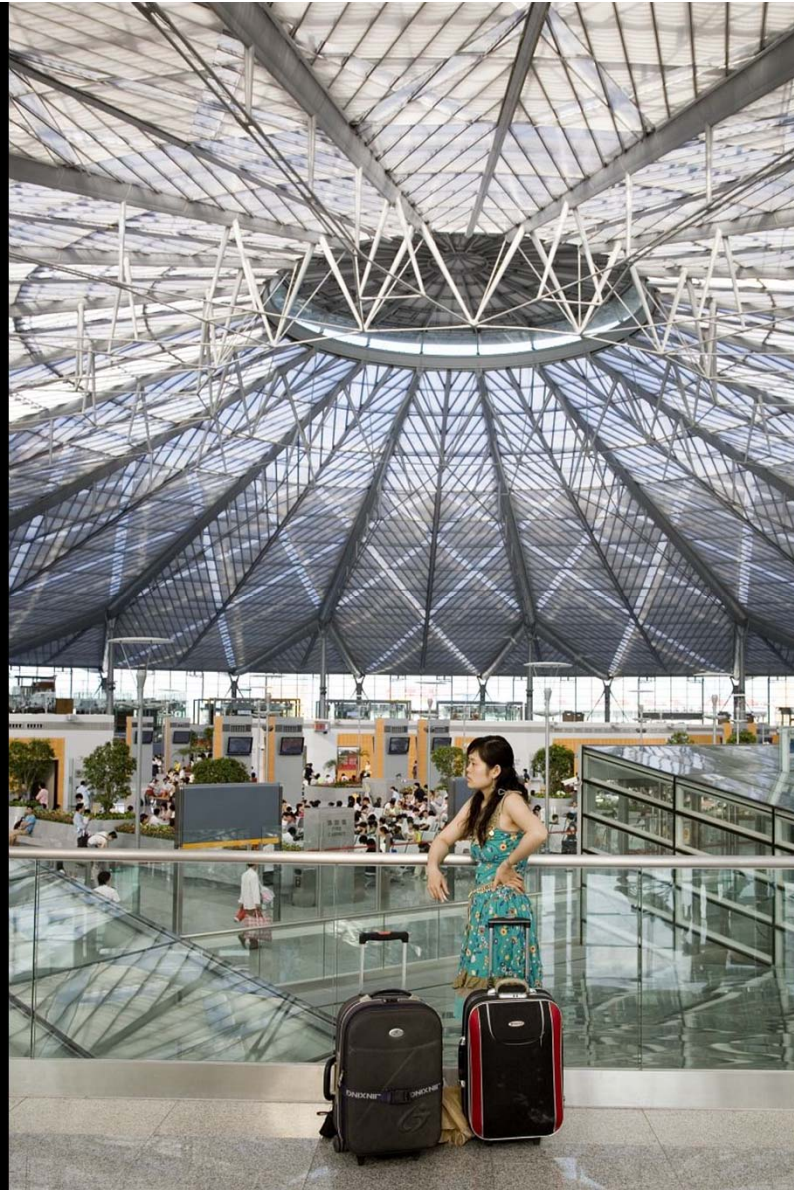


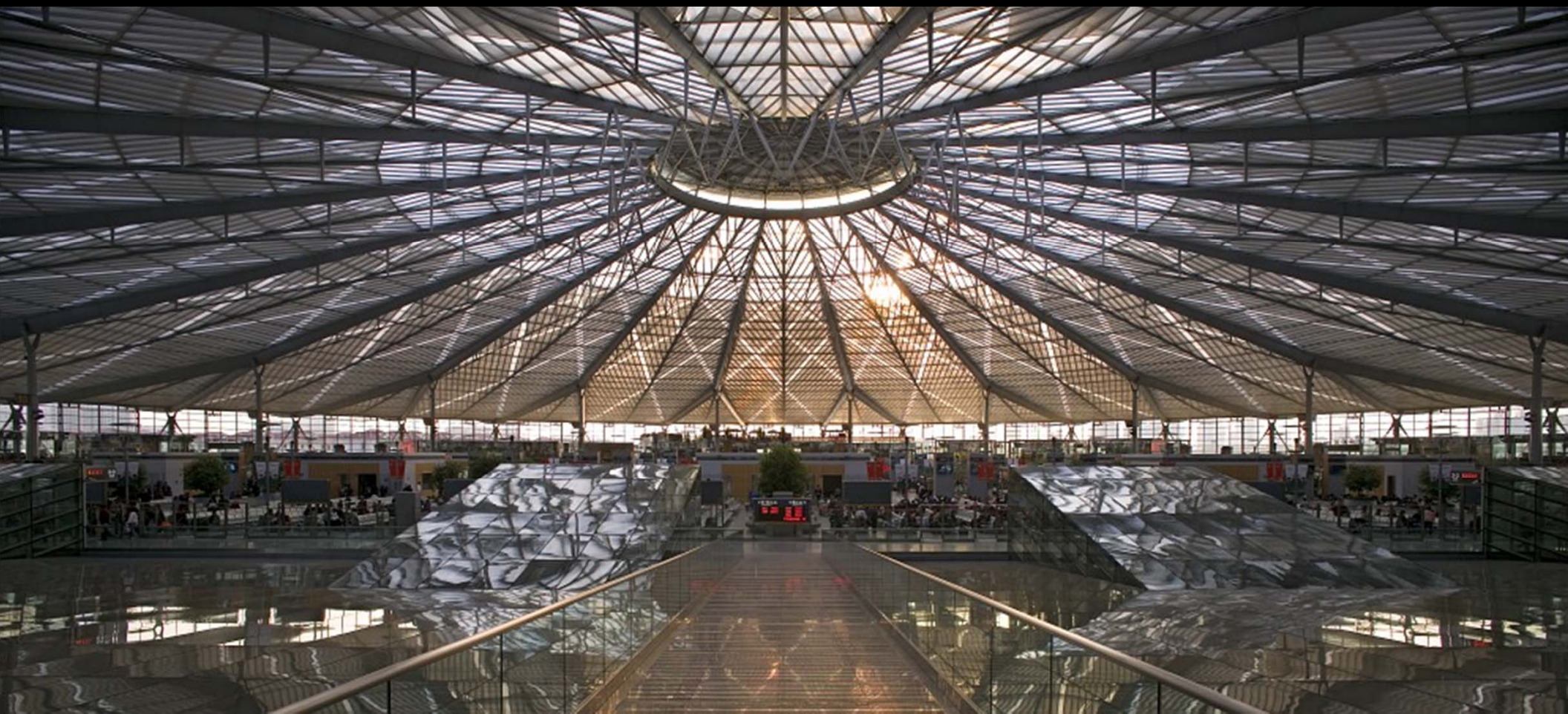
















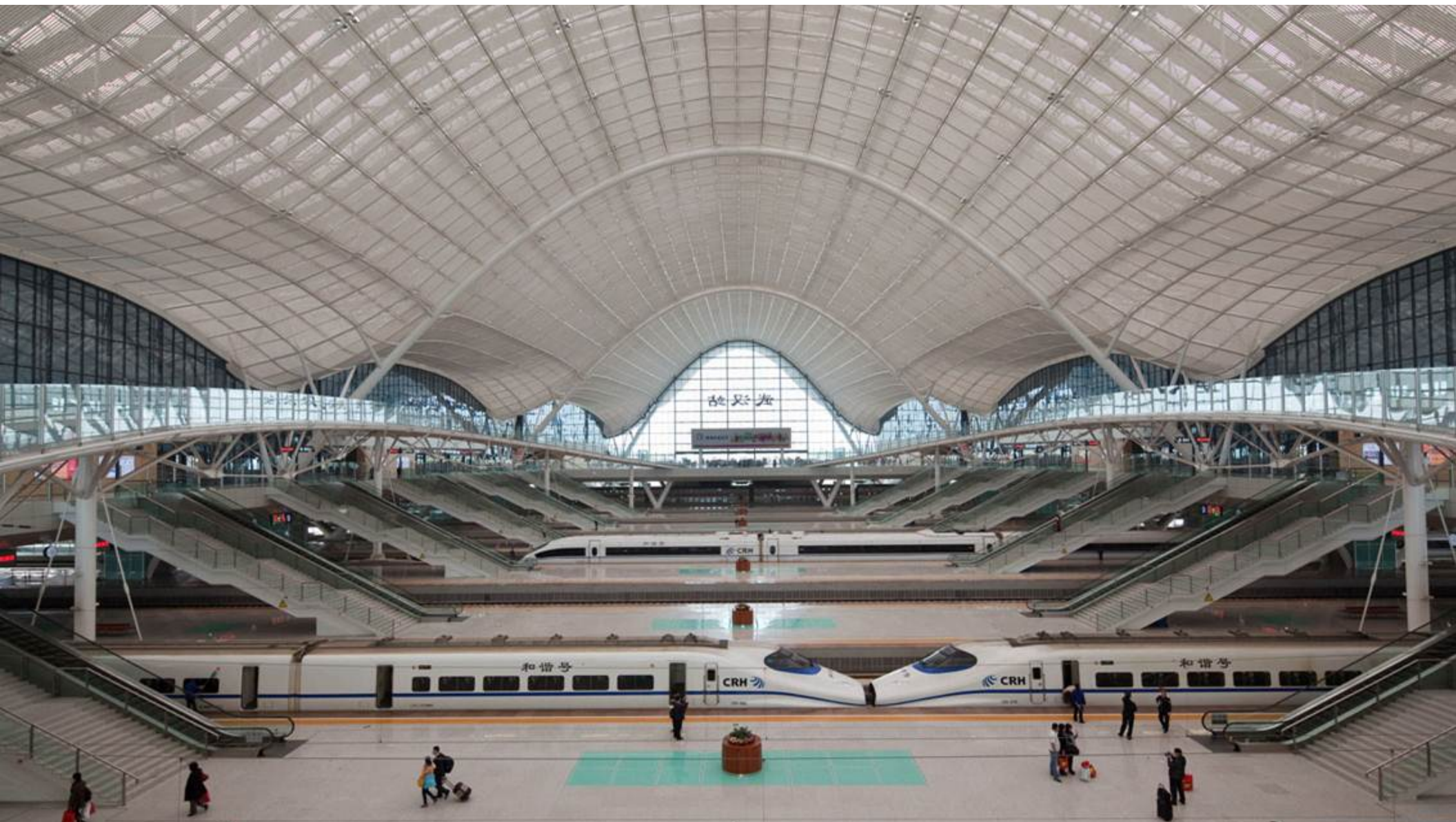
Wuhan Railway Station 2009

Wuhan, China









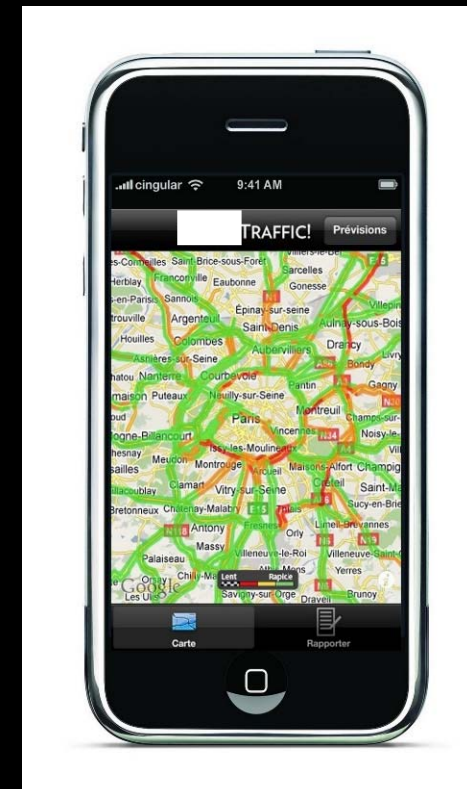
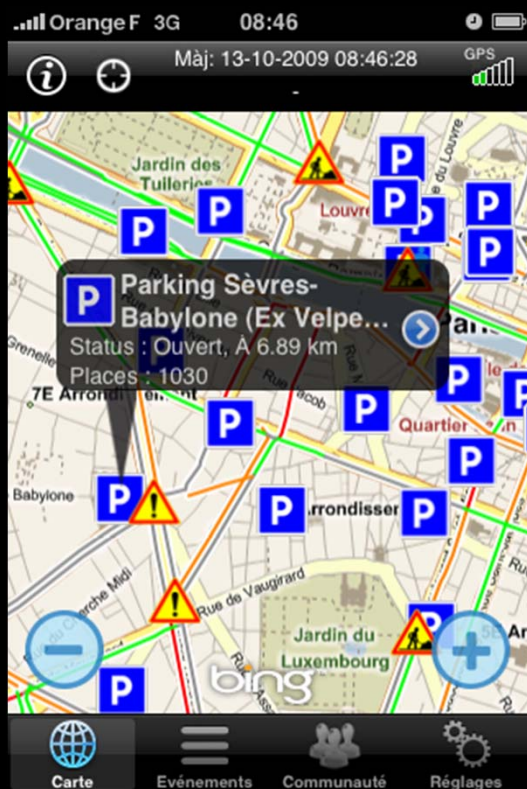
9. The Era of new Urban Transport















Millennials in Motion

Changing Travel Habits of Young Americans
and the Implications for Public Policy

U.S. PIRG
Education Fund

FRONTIER GROUP

Figure 1. Millennials' Day-to-Day Transportation Experience Differs from Other Generations⁷

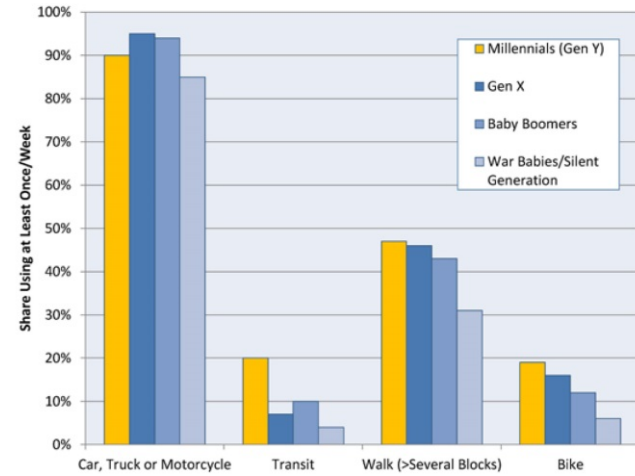
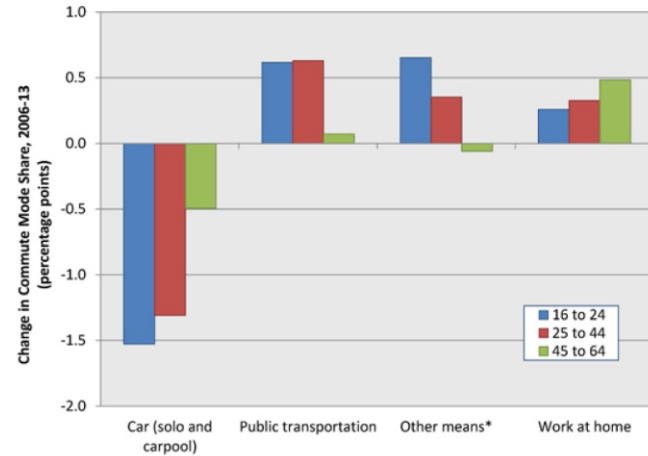


Figure 3. Change in Commute Mode Share, 2006 to 2013, by Age Group¹⁹



* "Other means" includes walking, taxicab, motorcycle, bicycle or other unspecified means.

10. Stations as All-
Encompassing Mobility Hubs
(The Rebirth of the Railway Station : Phase 2)

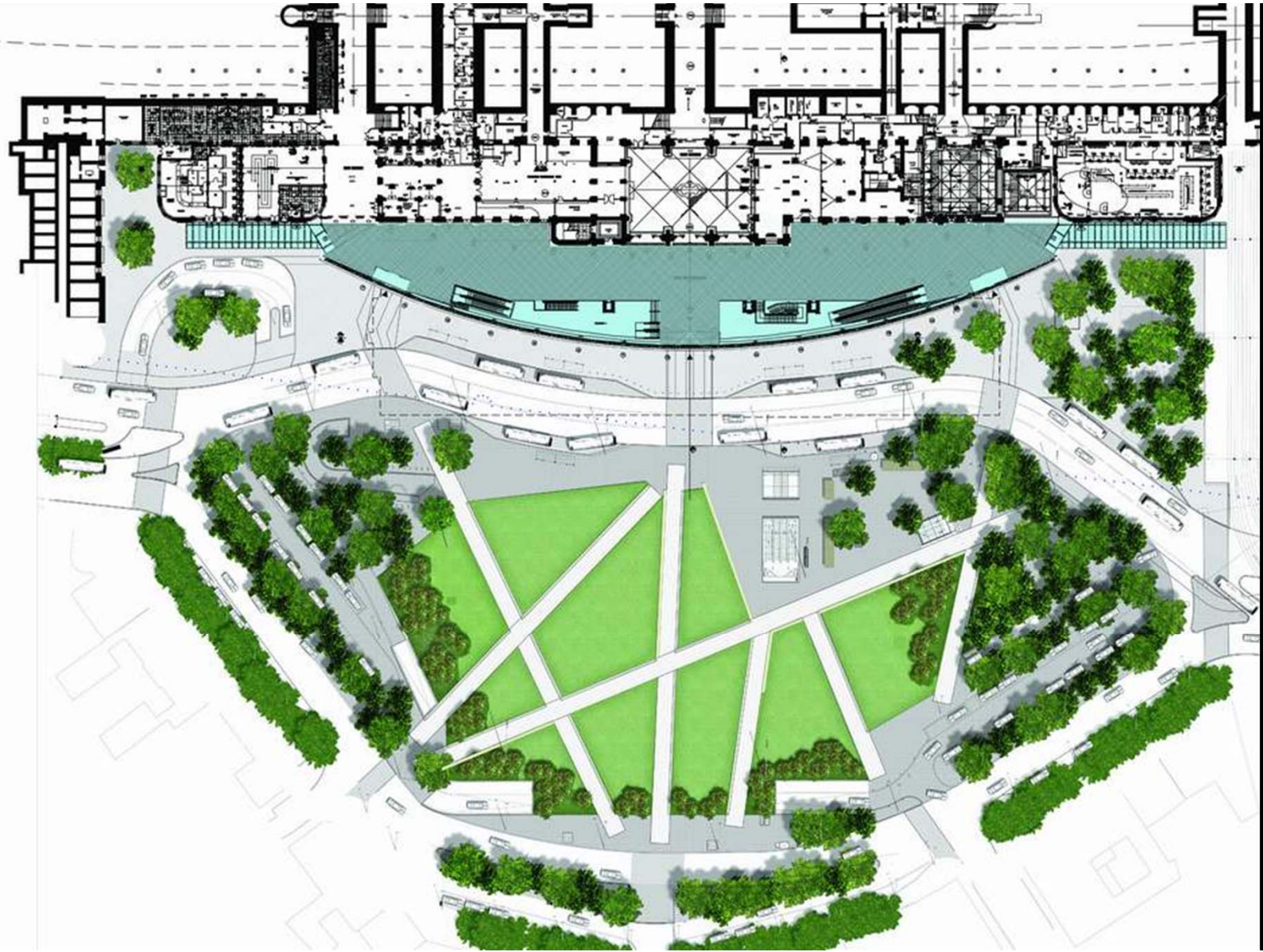
**Strasbourg Station and
Multimodal Hub 2007**



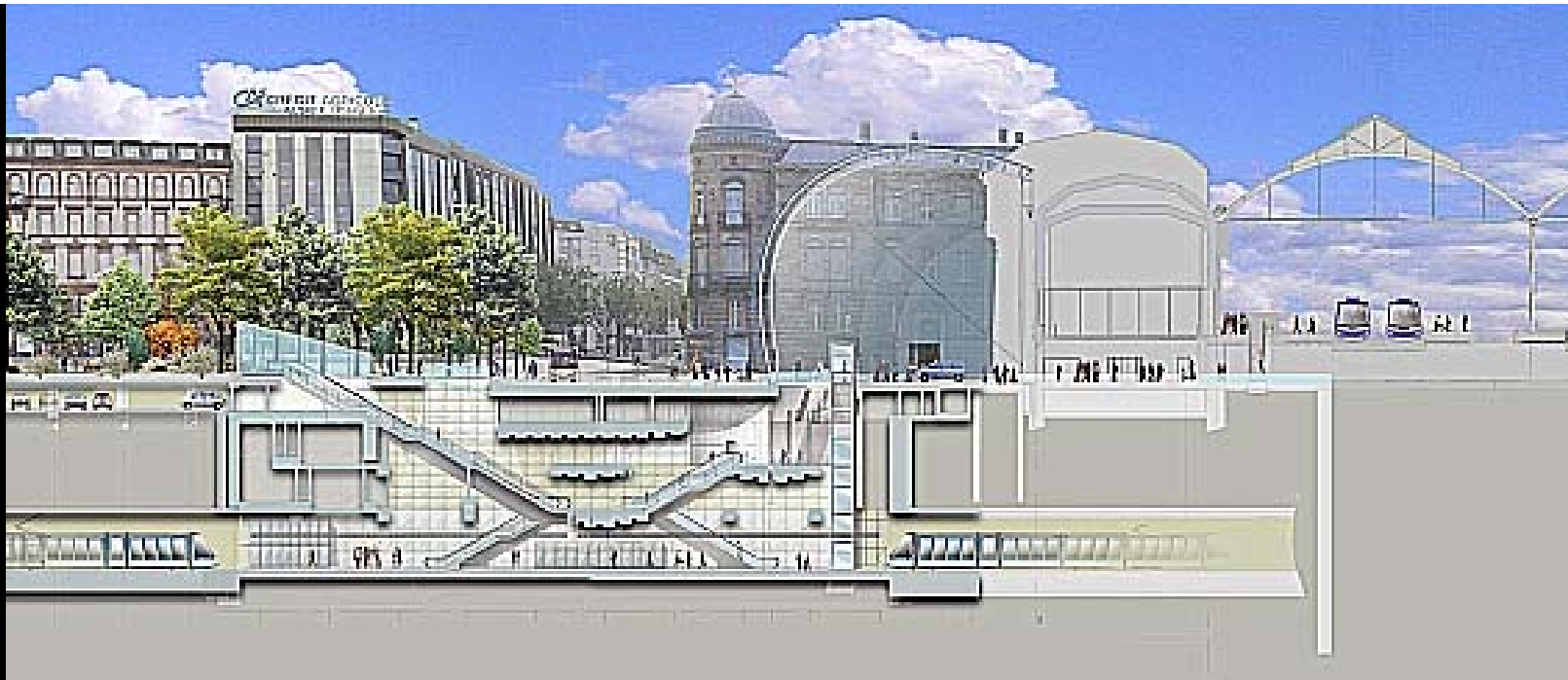












Strasbourg Railway Station
AREP photo





Le Mans Multimodal Hub 2006



