

In a city, a street is not a road.

Trolley-Motion, Lucerne 30.11.2010

Michael Güller







Limmatalstrasse 119

119

DIROK Lebensmittel-Markt und Geschenkartikel

DIROK Lebensmittel-Markt und Geschenkartikel

Coca-Cola

DIROK

Coca-Cola

DONA

DIROK

Zurich

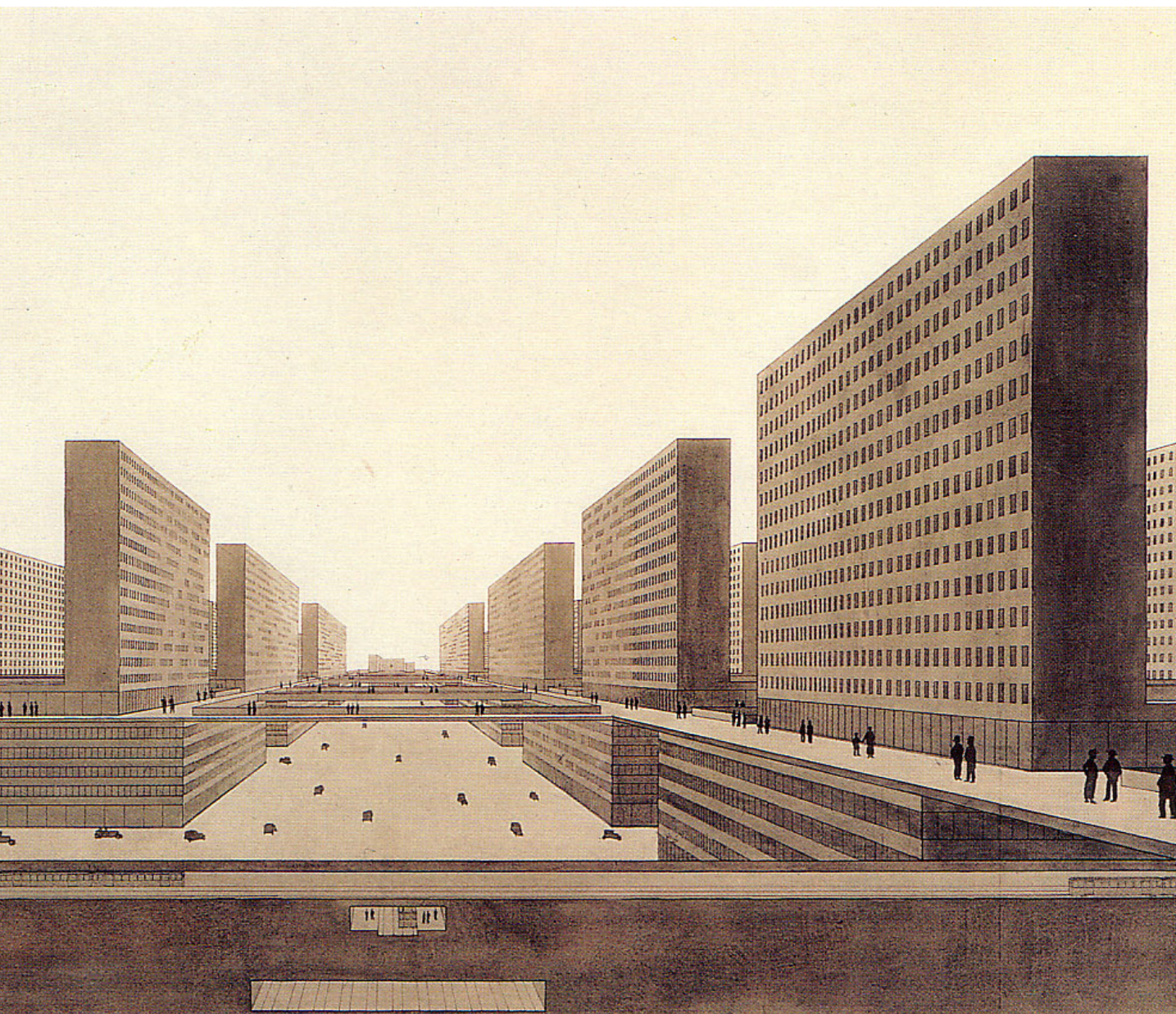


Hess-Swisstrolley BGGT-N2C Nr.66

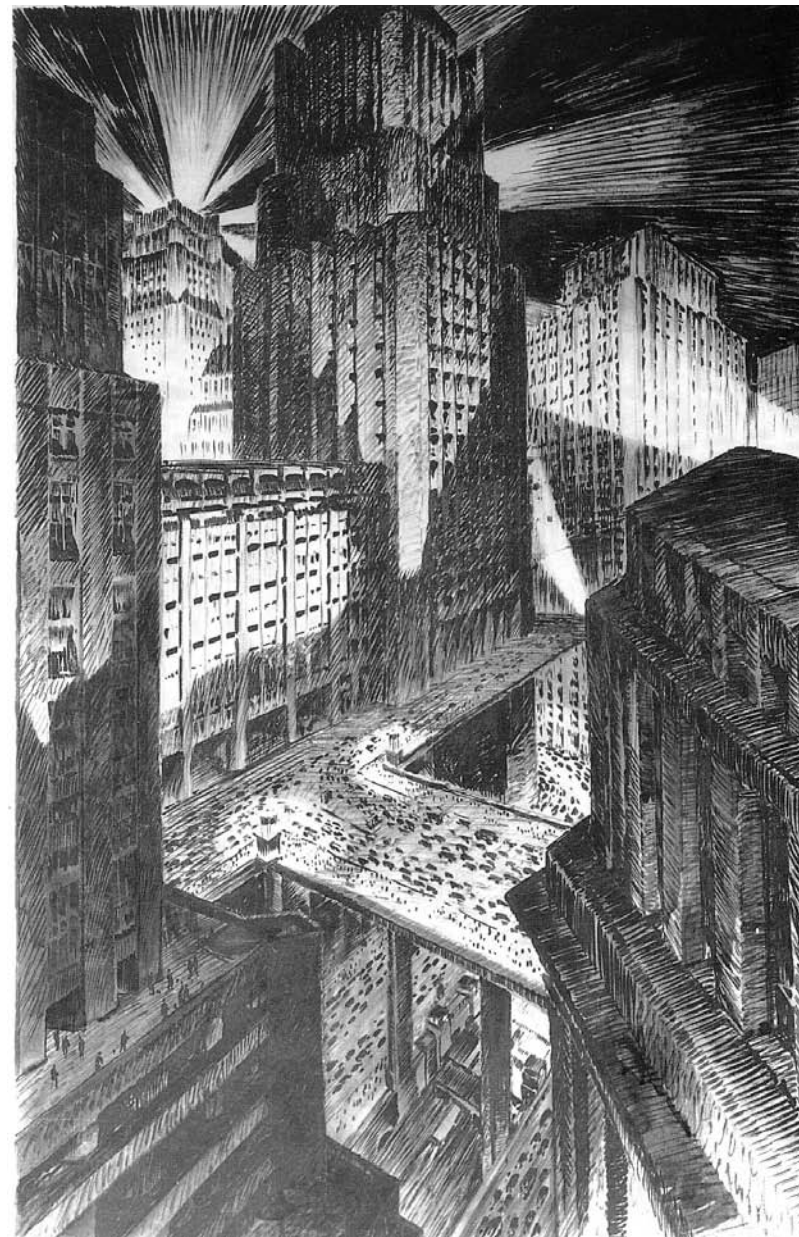




... but ...



Ludwig Hilberseimer, Ville verticale, 1922



Otto Hüntel / Fritz Lang, Metropolis, 1929



pedestrian - bike - bus - car - car - bus / bike - ? - tramway - tramway - bus - bus - pedestrian

v 2434 Zürich. Bahnhofstrasse
Alfred Escher-Denkmal



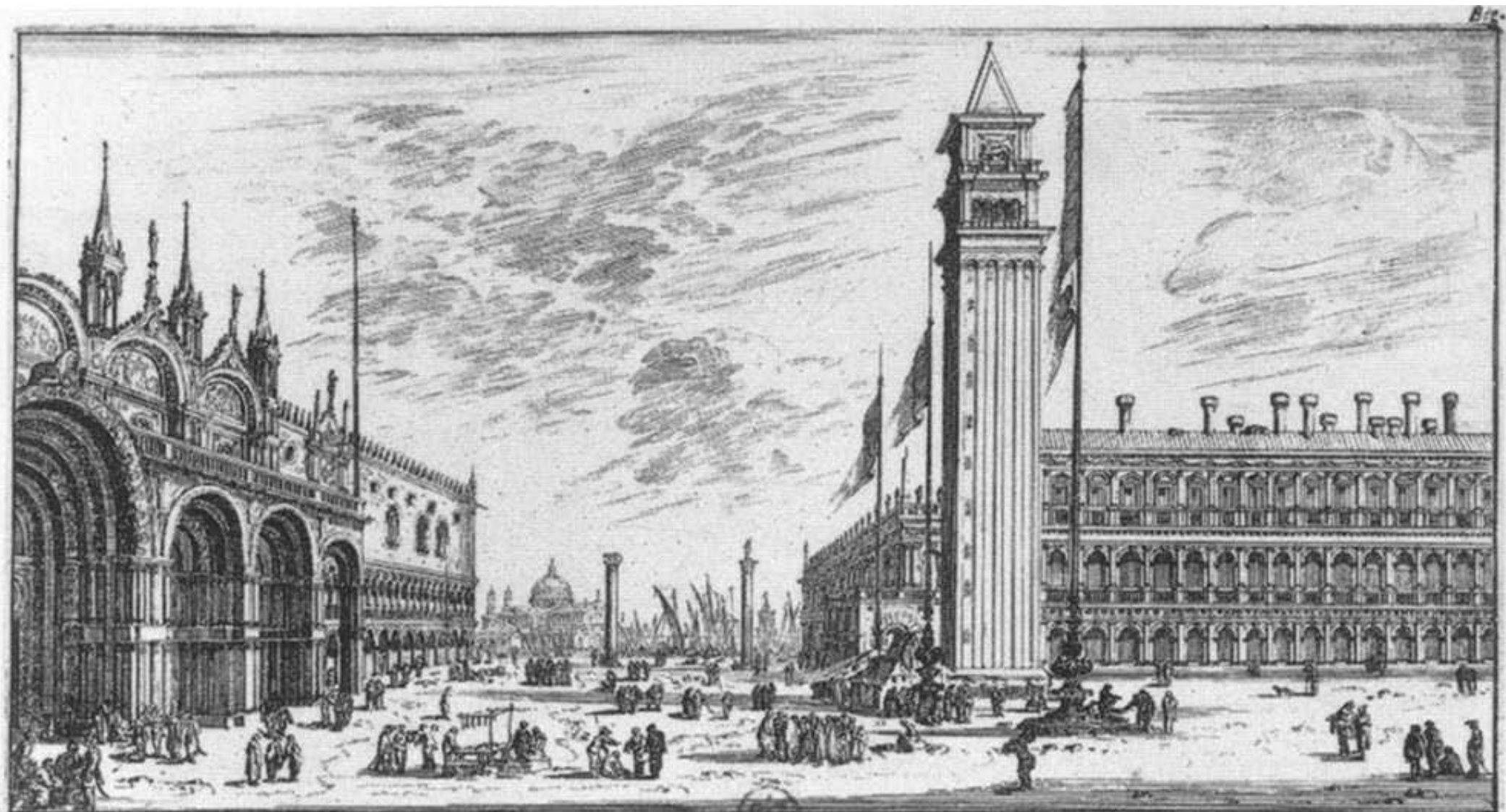
Bahnhofplatz Zürich, approx. 1900



Bahnhofplatz Zürich, 2010

... which city do we want?

(why to facilitate which mobility, and how?)



Veduta del. Piazza di S.^t Marco di Venezia vista verso il porto

Gravé par Israel Sylvestre

P. Mariotte sc.

Avec privilège du Roy

... network logic for the city of the future

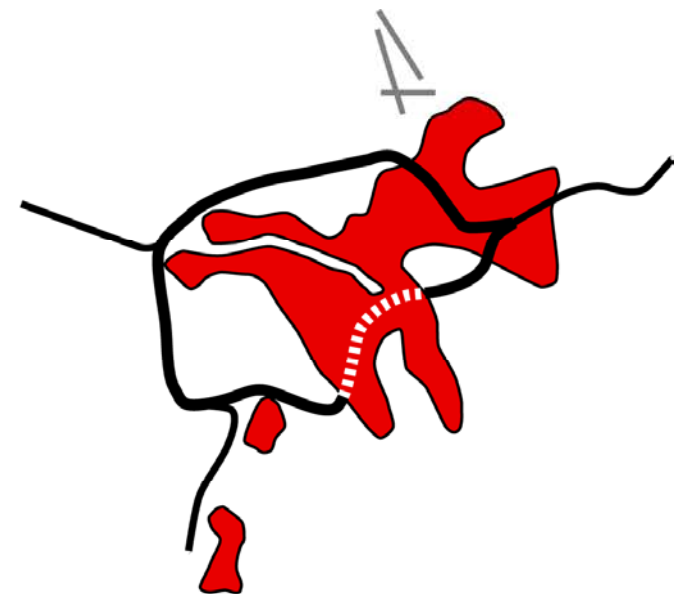
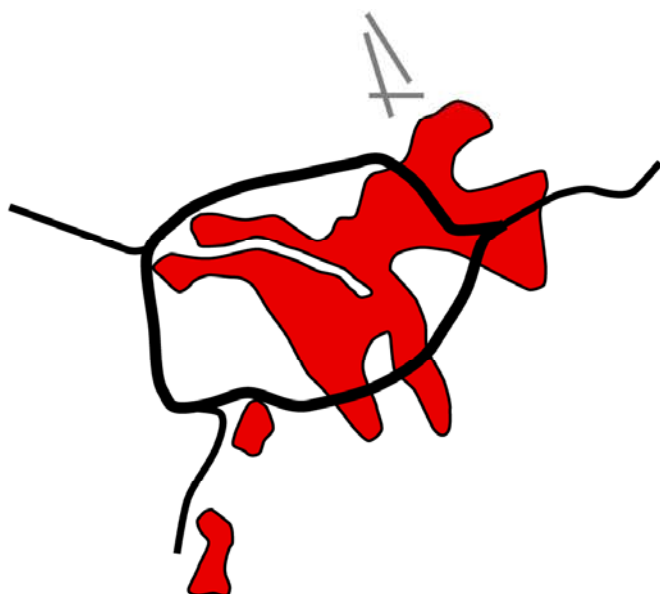
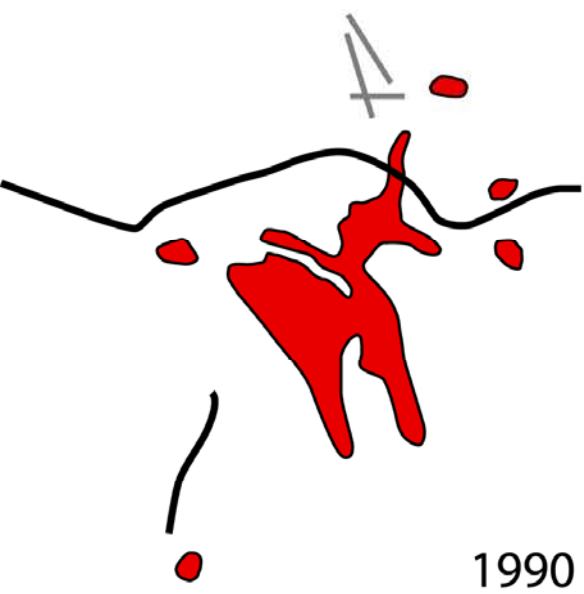
... the right accessibility for the right piece of city

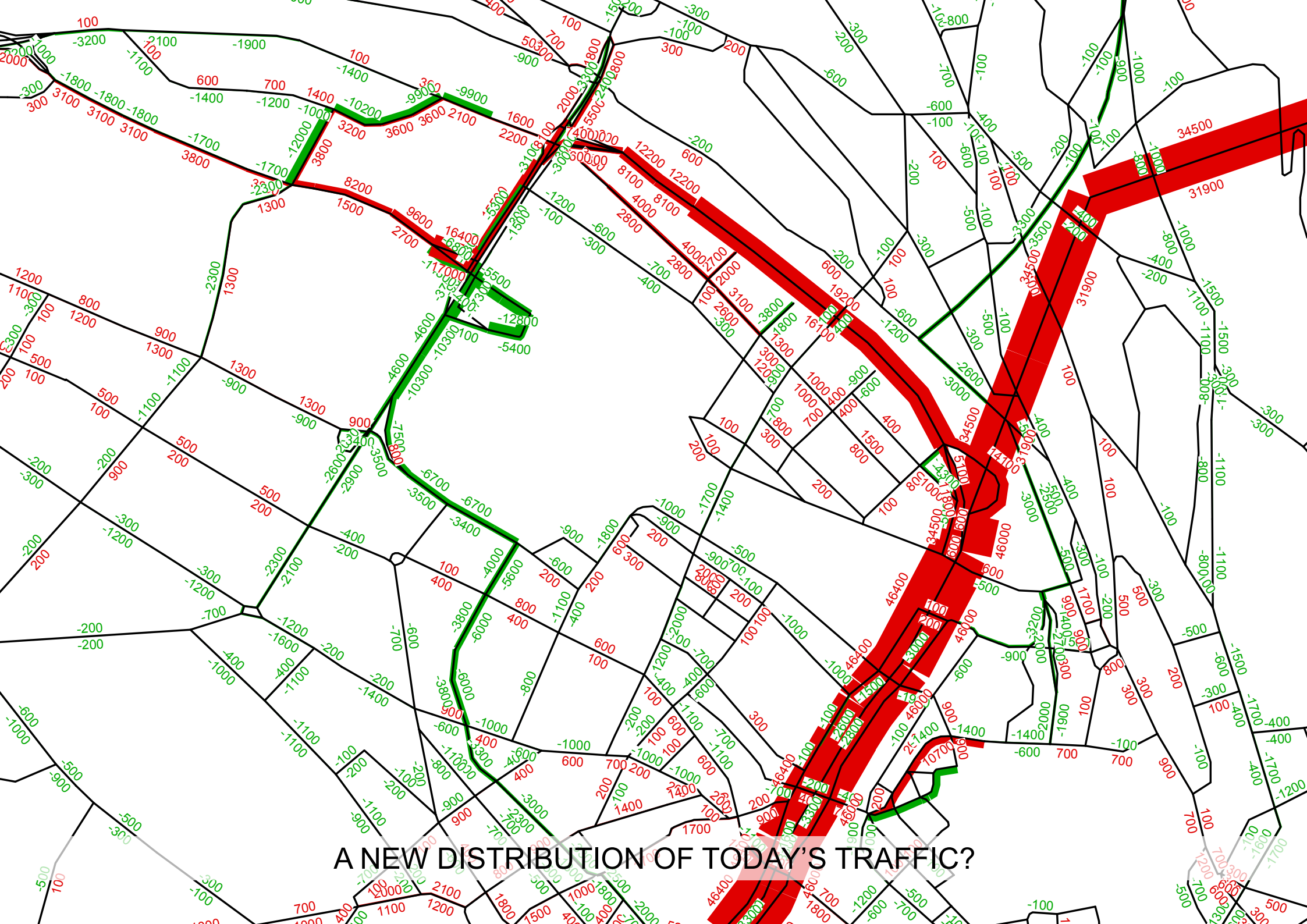
... impulsion for the development of strategic areas

... differentiated approaches to public space

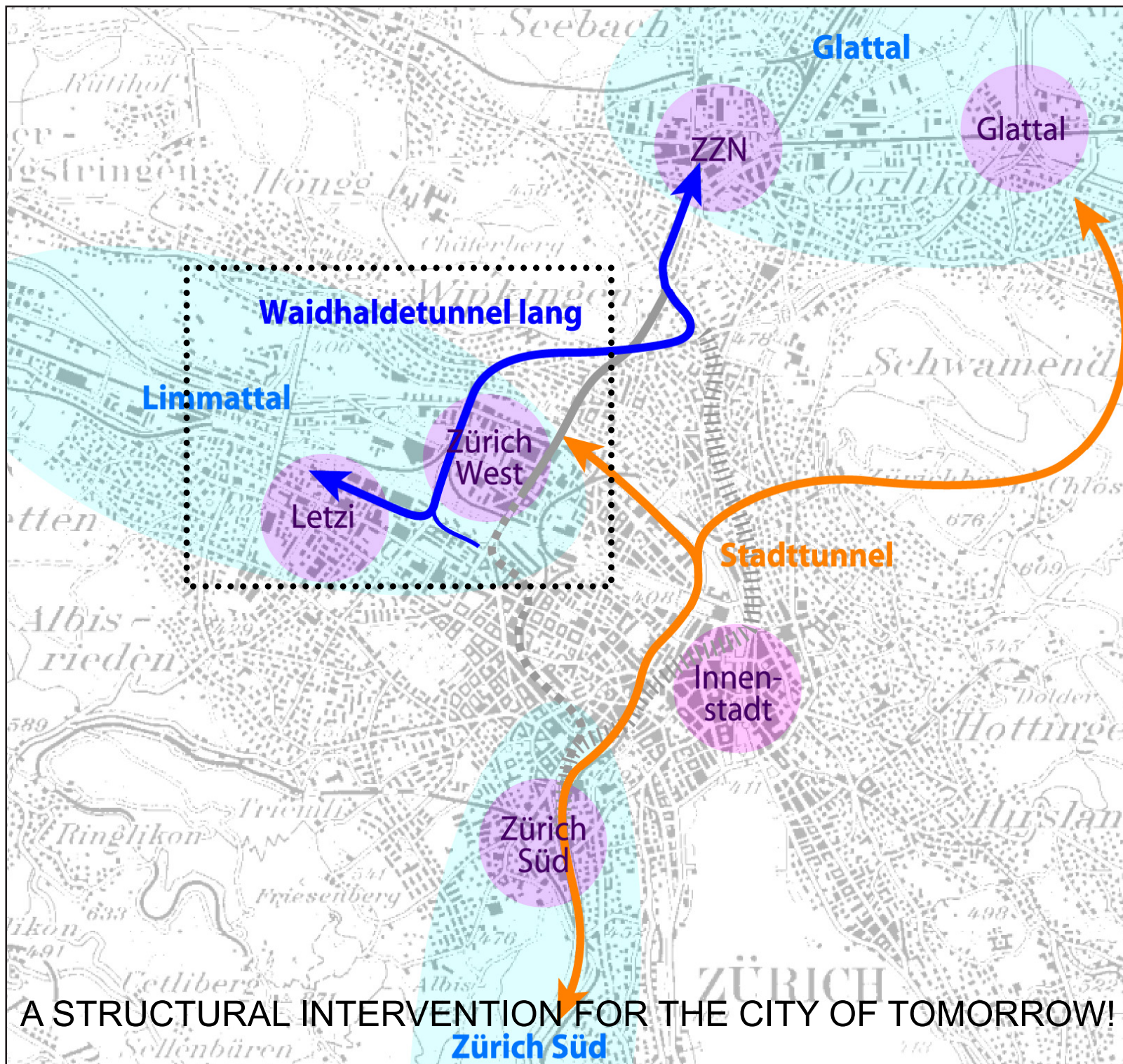
... image

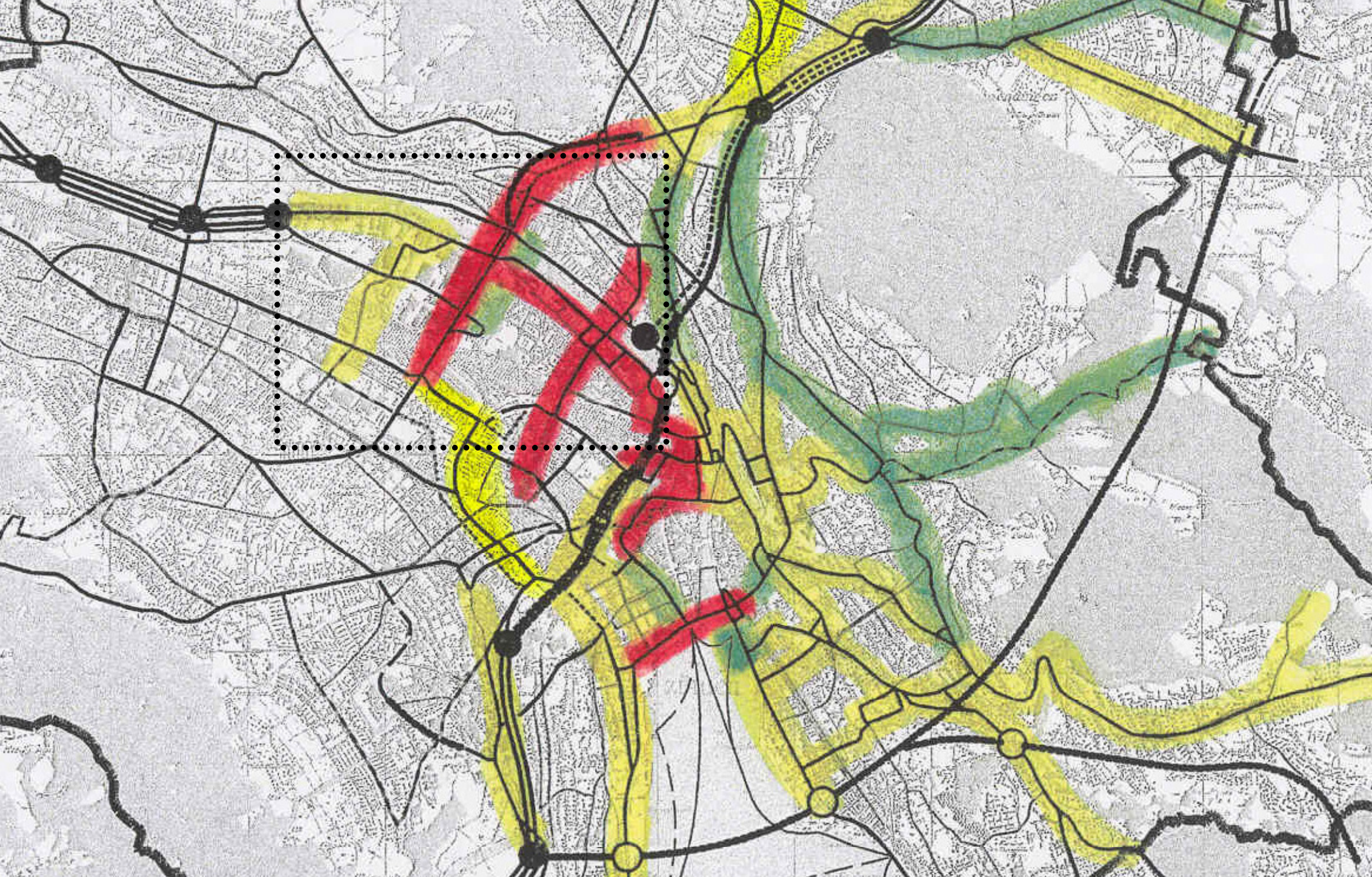
... the future of mobility





A NEW DISTRIBUTION OF TODAY'S TRAFFIC?

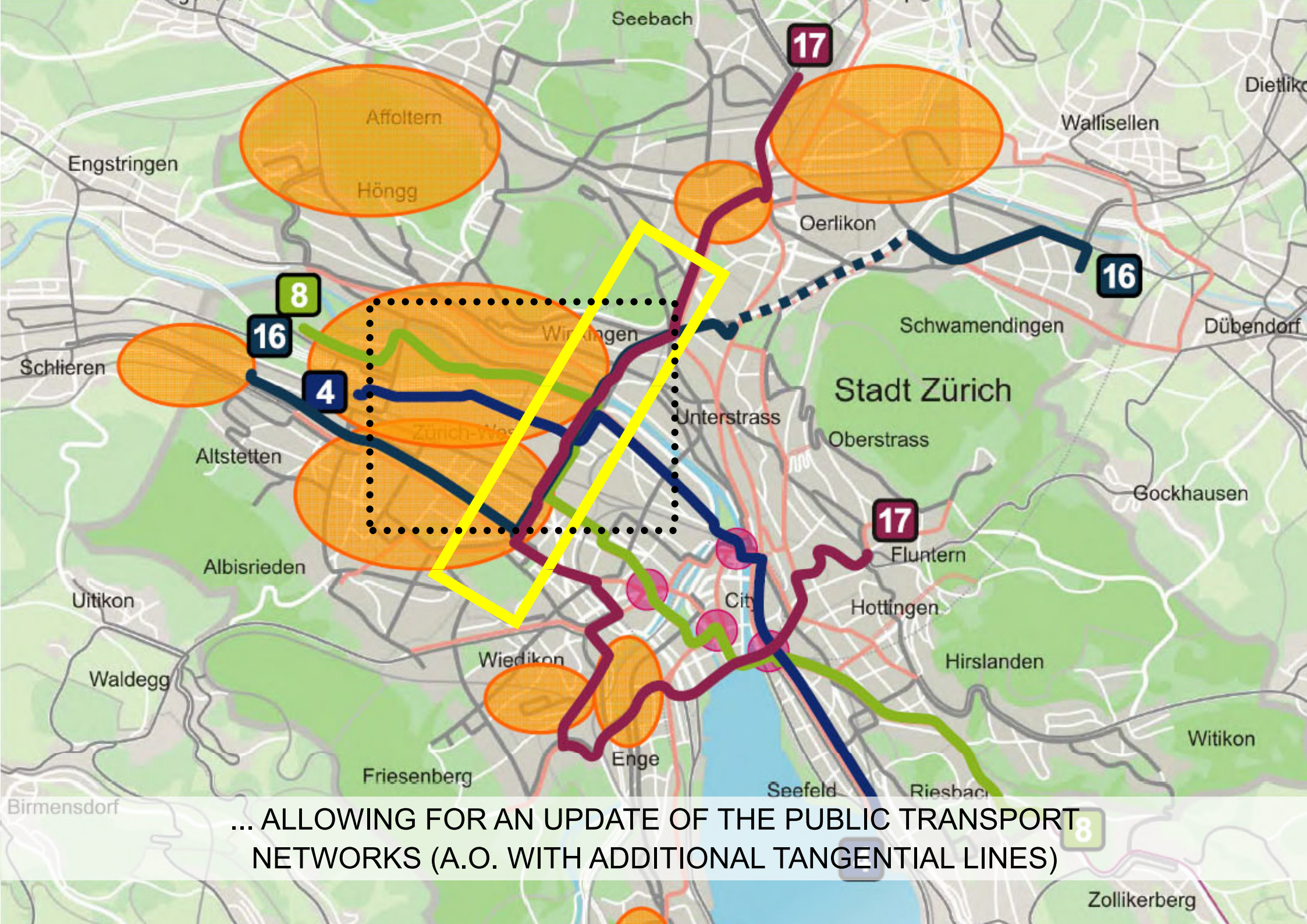




IMPROVEMENT OF THE QUALITY OF LIFE IN CITY DISTRICTS

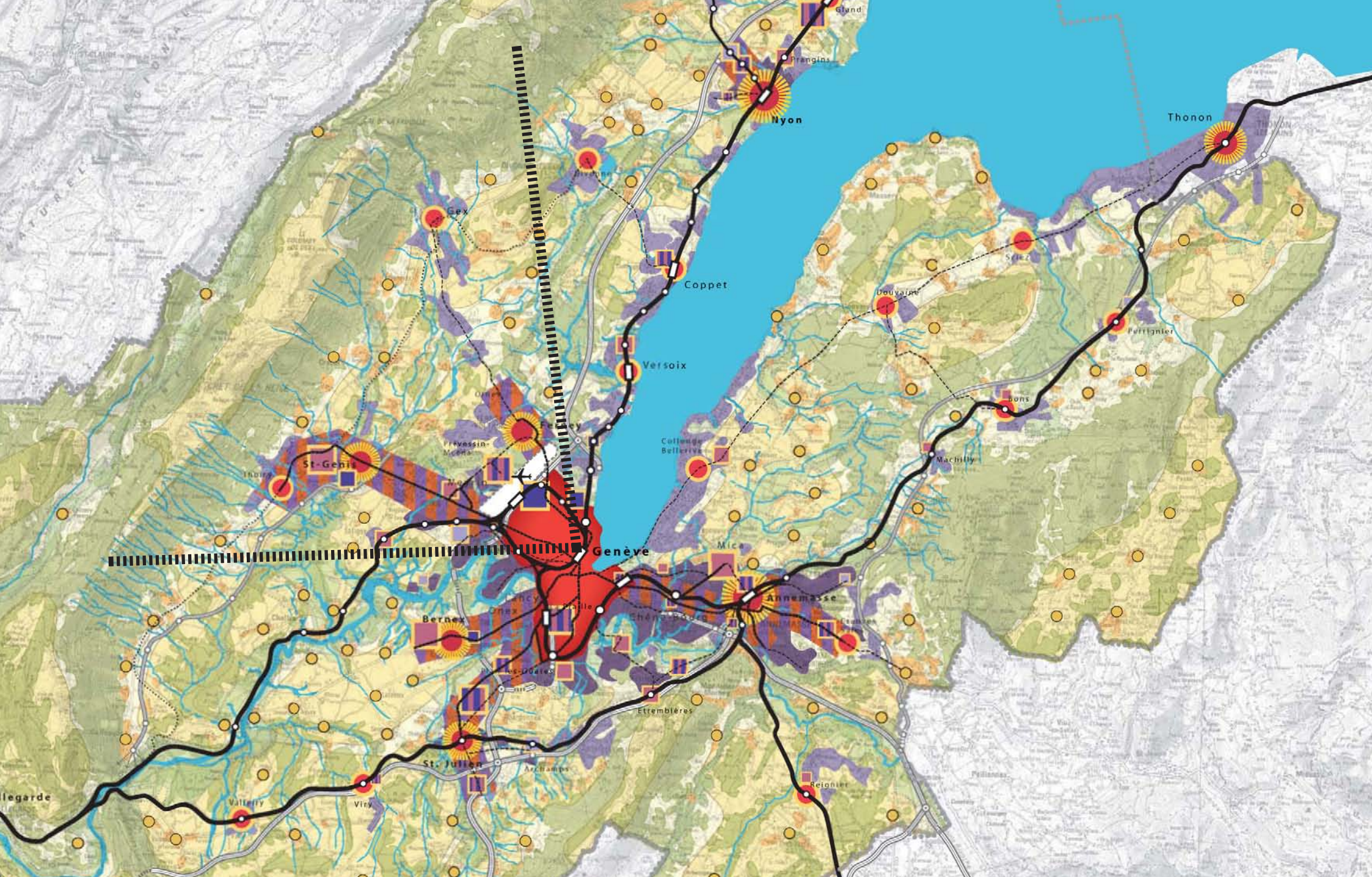


... AND LIBERATES SPACE FOR PUBLIC TRANSPORT IN A CRUCIAL CORRIDOR ...

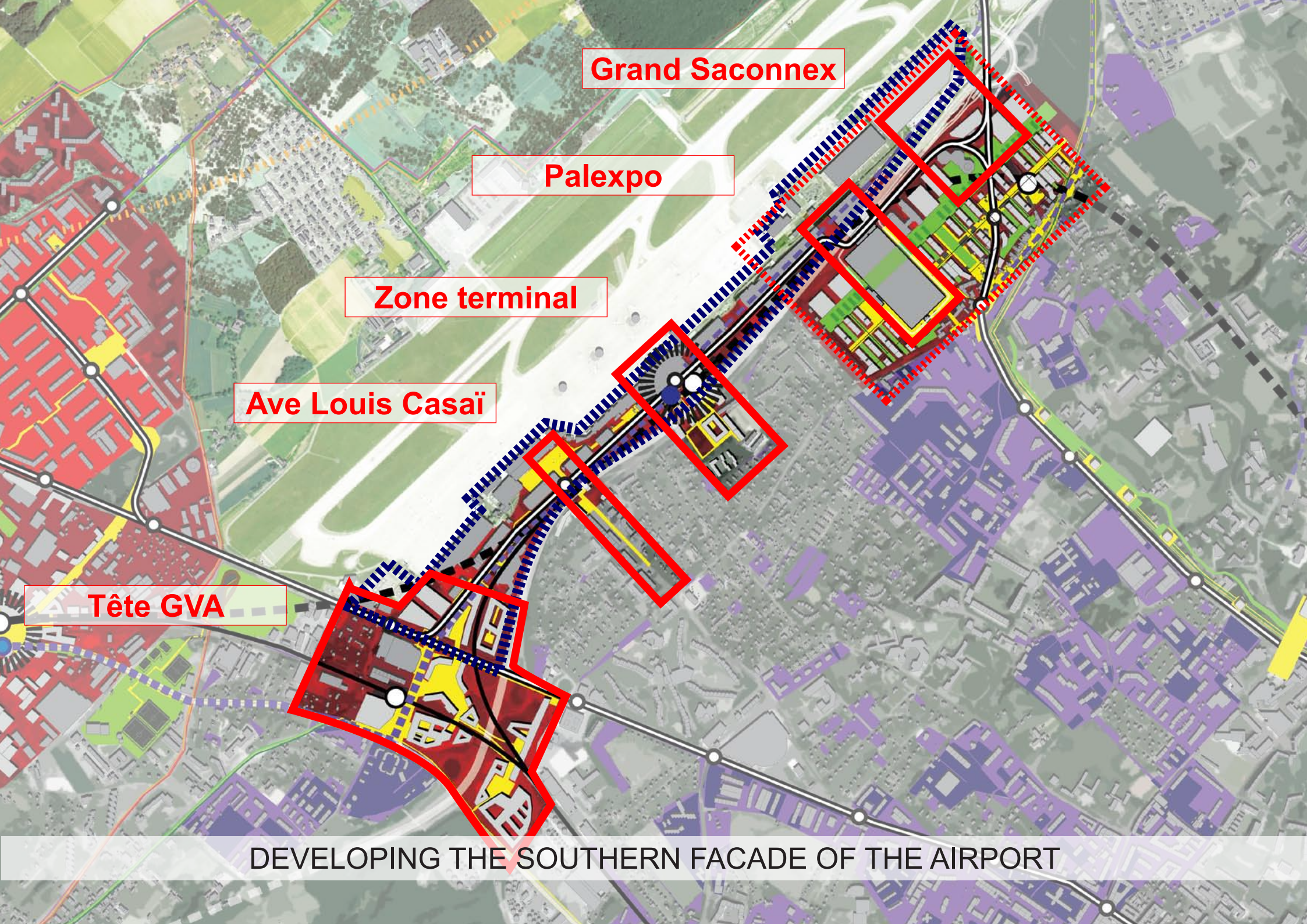


... ALLOWING FOR AN UPDATE OF THE PUBLIC TRANSPORT NETWORKS (A.O. WITH ADDITIONAL TANGENTIAL LINES)

... network logic for the city of the future
... the right accessibility for the right piece of city
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THE GENEVA AGGLOMERATION REGIONAL DEVELOPMENT SCHEME



Grand Saconnex

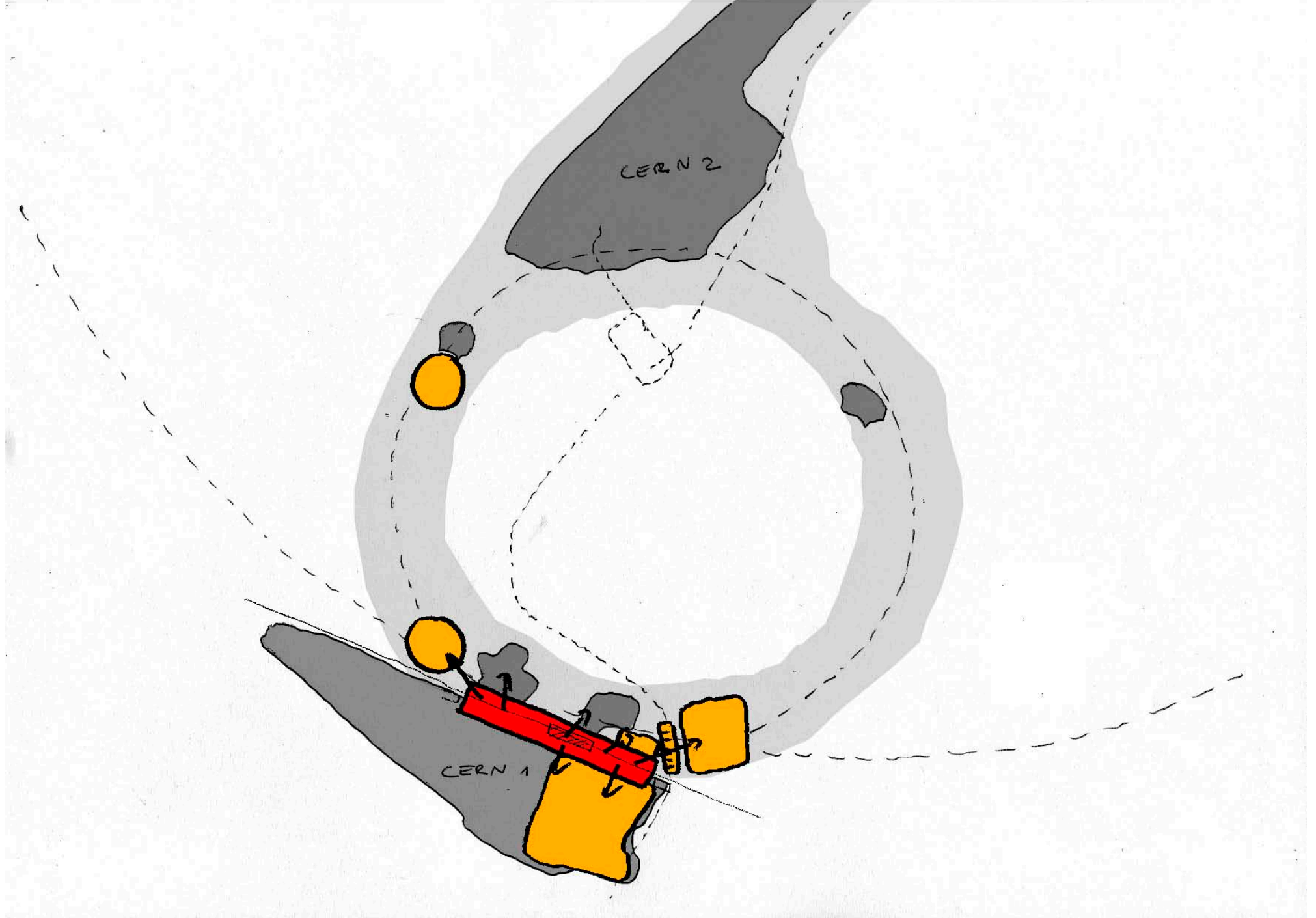
Palexpo

Zone terminal

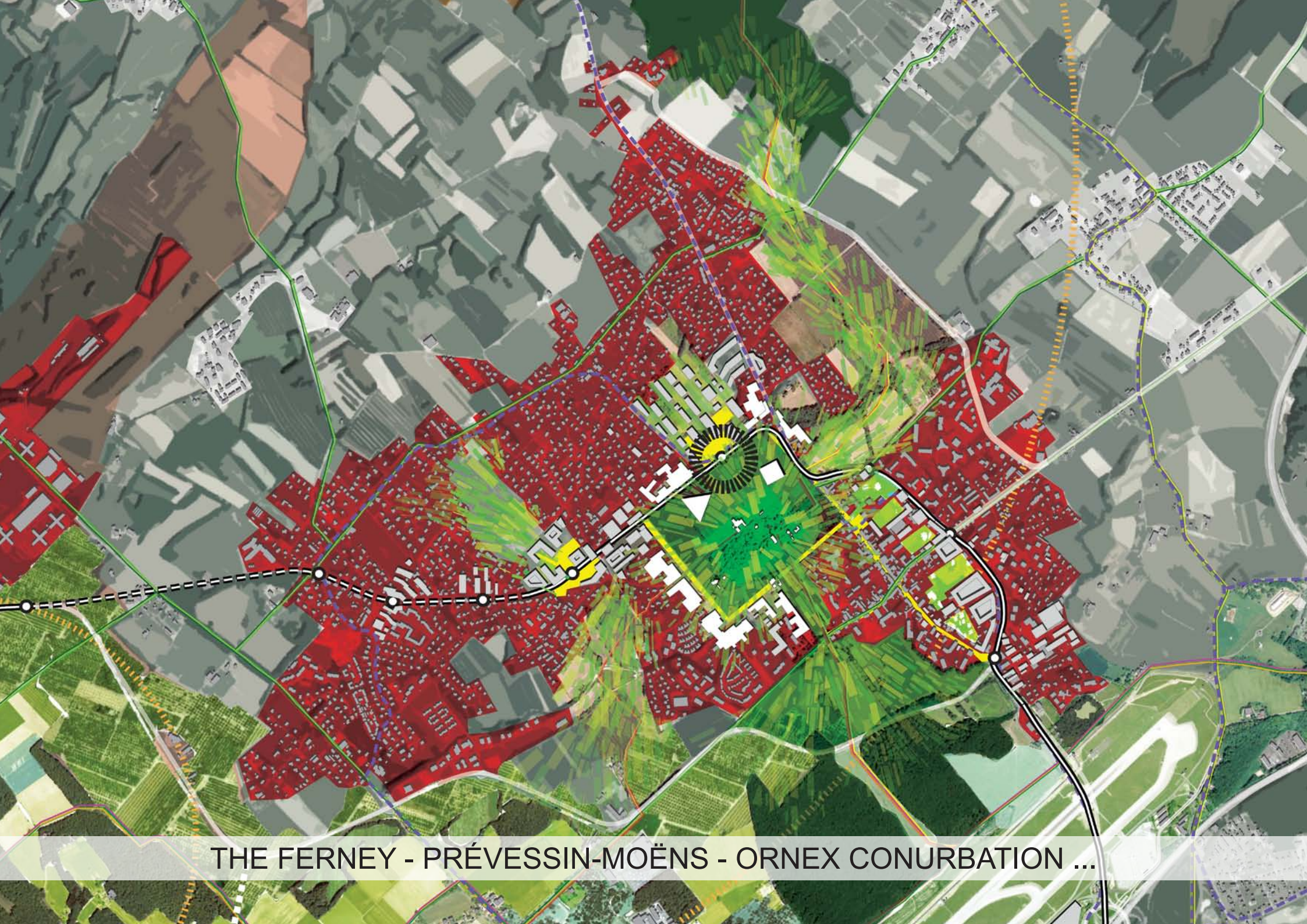
Ave Louis Casai

Tête GVA

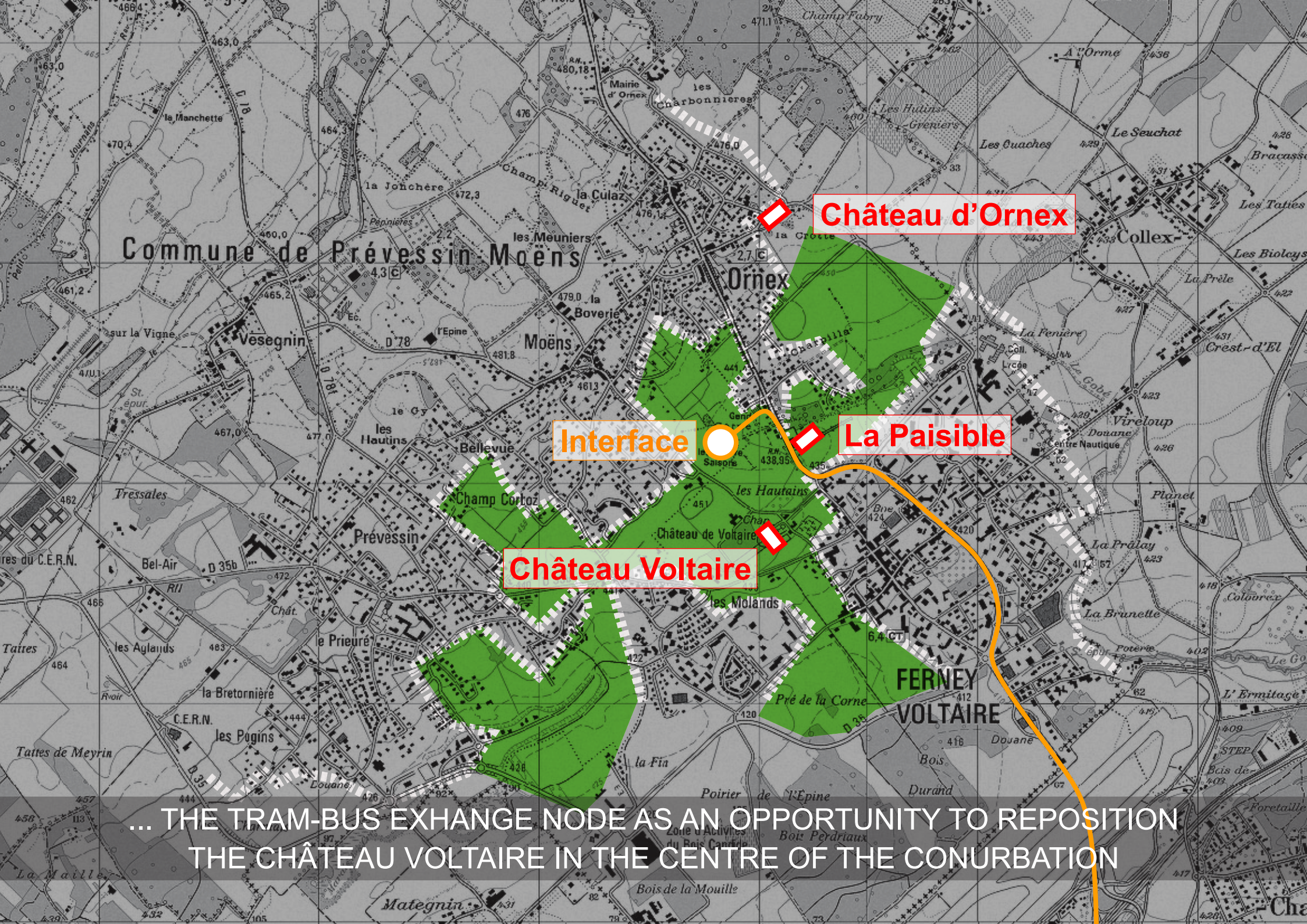
DEVELOPING THE SOUTHERN FACADE OF THE AIRPORT



CERN: KEY ELEMENT FOR THE INTERNATIONAL VISIBILITY OF THE SECTOR



THE FERNEY - PRÉVESSIN-MOËNS - ORNEX CONURBATION ...



Château d'Ornex

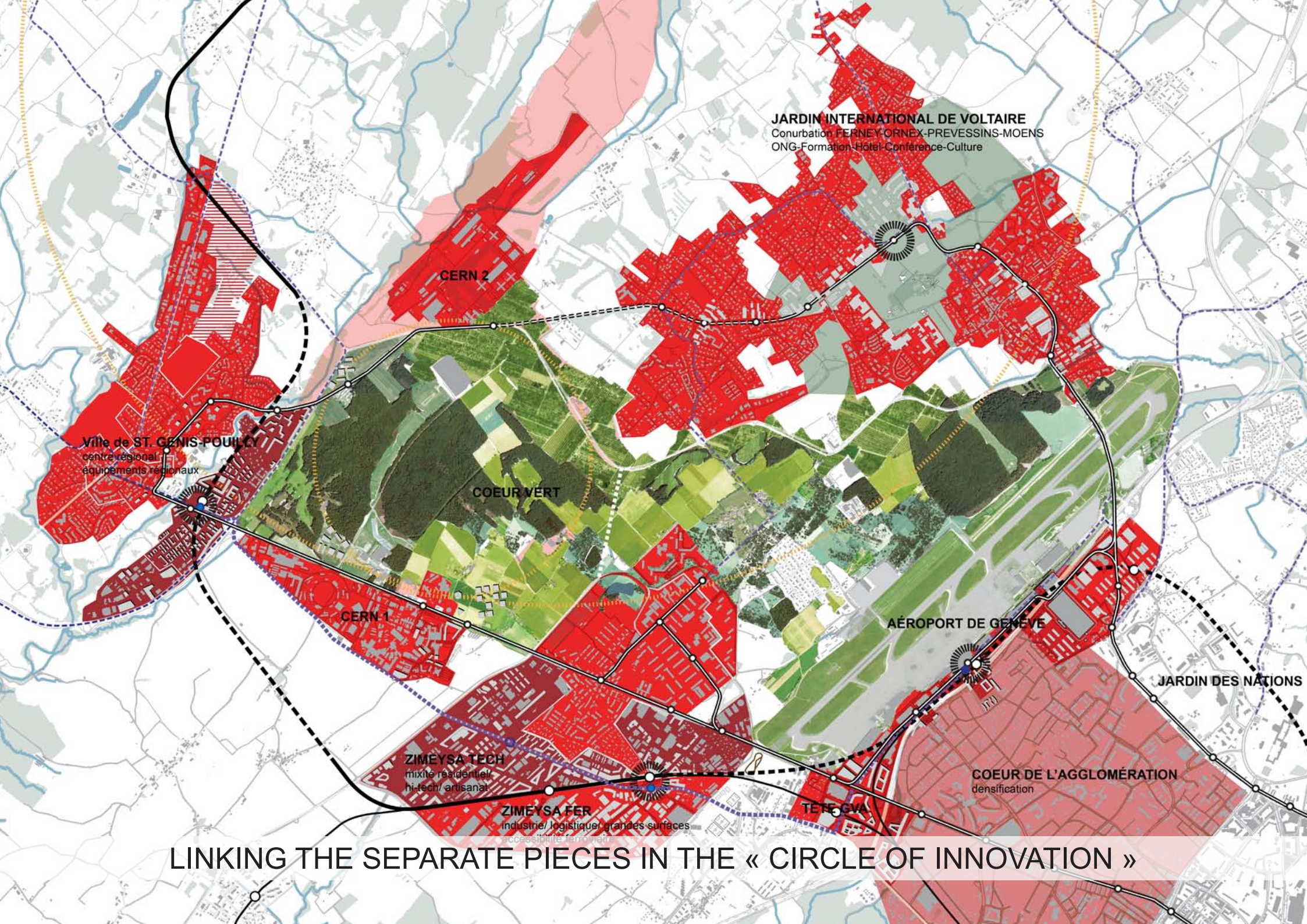
Interface

La Paisible

Château Voltaire

FERNEY
VOLTAIRE

... THE TRAM-BUS EXCHANGE NODE AS AN OPPORTUNITY TO REPOSITION
THE CHÂTEAU VOLTAIRE IN THE CENTRE OF THE CONURBATION



JARDIN INTERNATIONAL DE VOLTAIRE
Conurbation FERNEY-ORNEX-PREVESSINS-MOENS
ONG-Formation-Hôtel-Conference-Culture

CERN 2

Ville de ST. GENIS-POUILLEY
centre régional
équipements régionaux

COEUR VERT

CERN 1

AÉROPORT DE GENEVE

JARDIN DES NATIONS

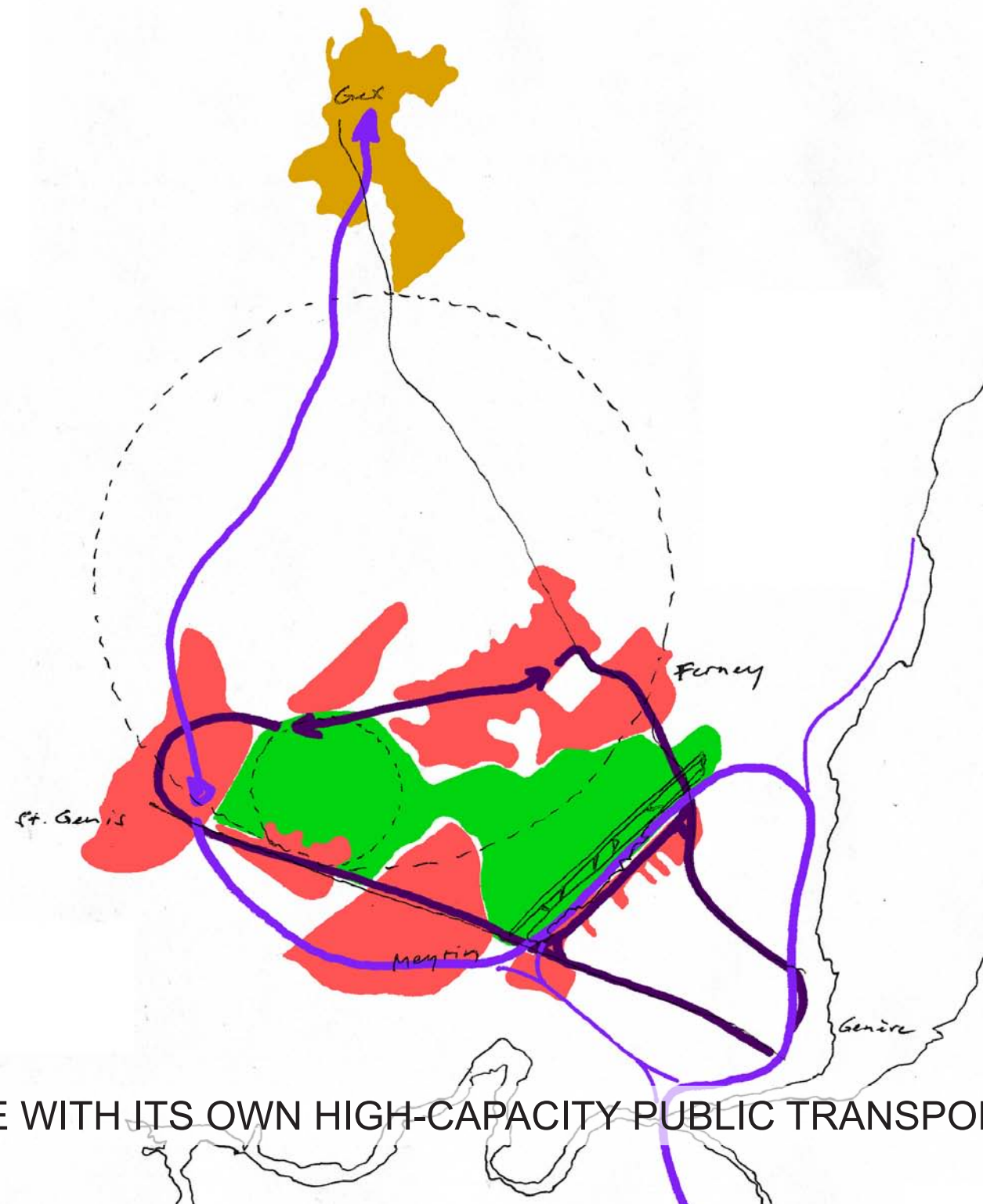
ZIMEYSA TECH
mixité résidentiel
hi-tech/ artisanat

ZIMEYSA FER
industrie/ logistique/ grandes surfaces

TETE GVA

COEUR DE L'AGGLOMÉRATION
densification

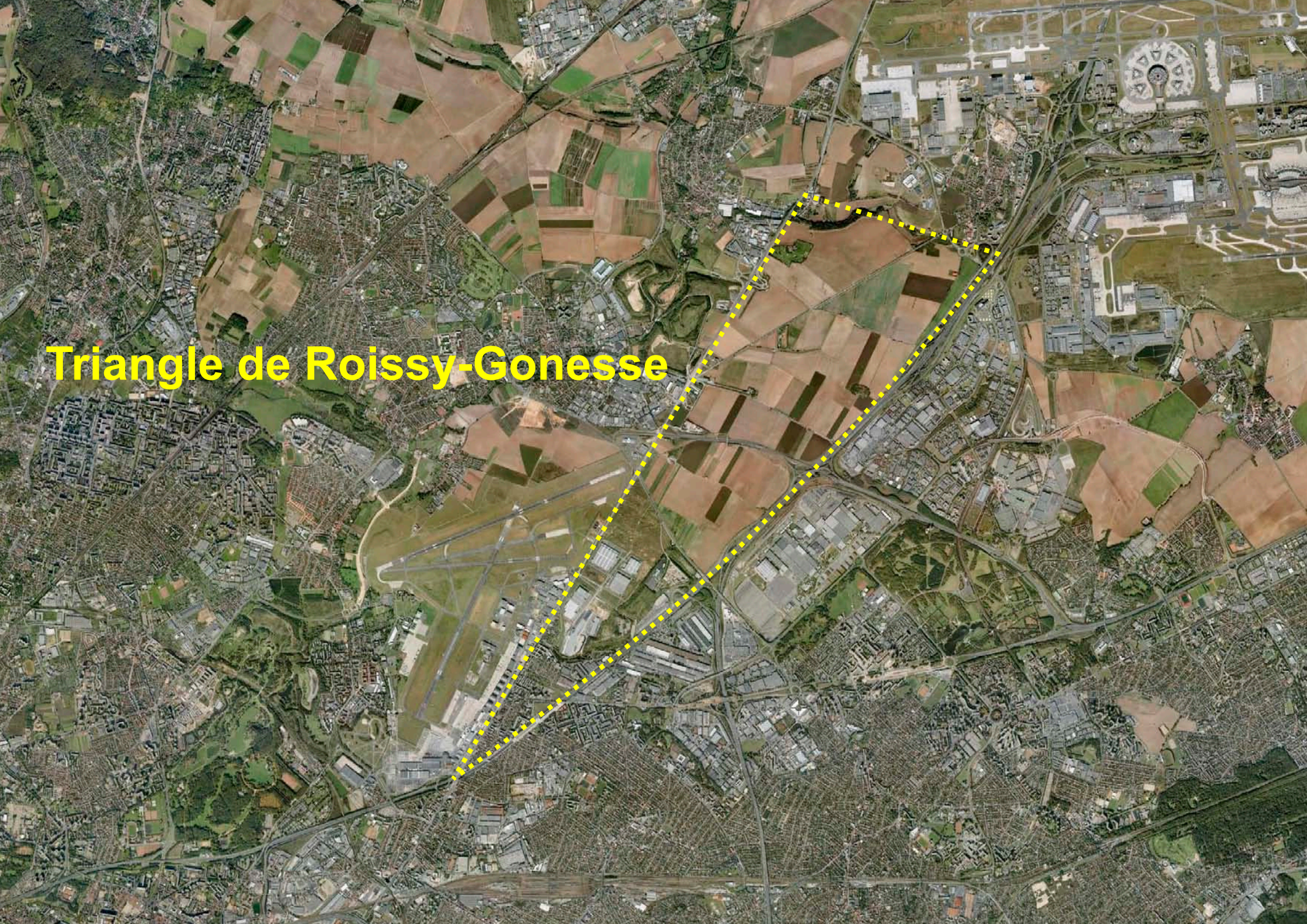
LINKING THE SEPARATE PIECES IN THE « CIRCLE OF INNOVATION »

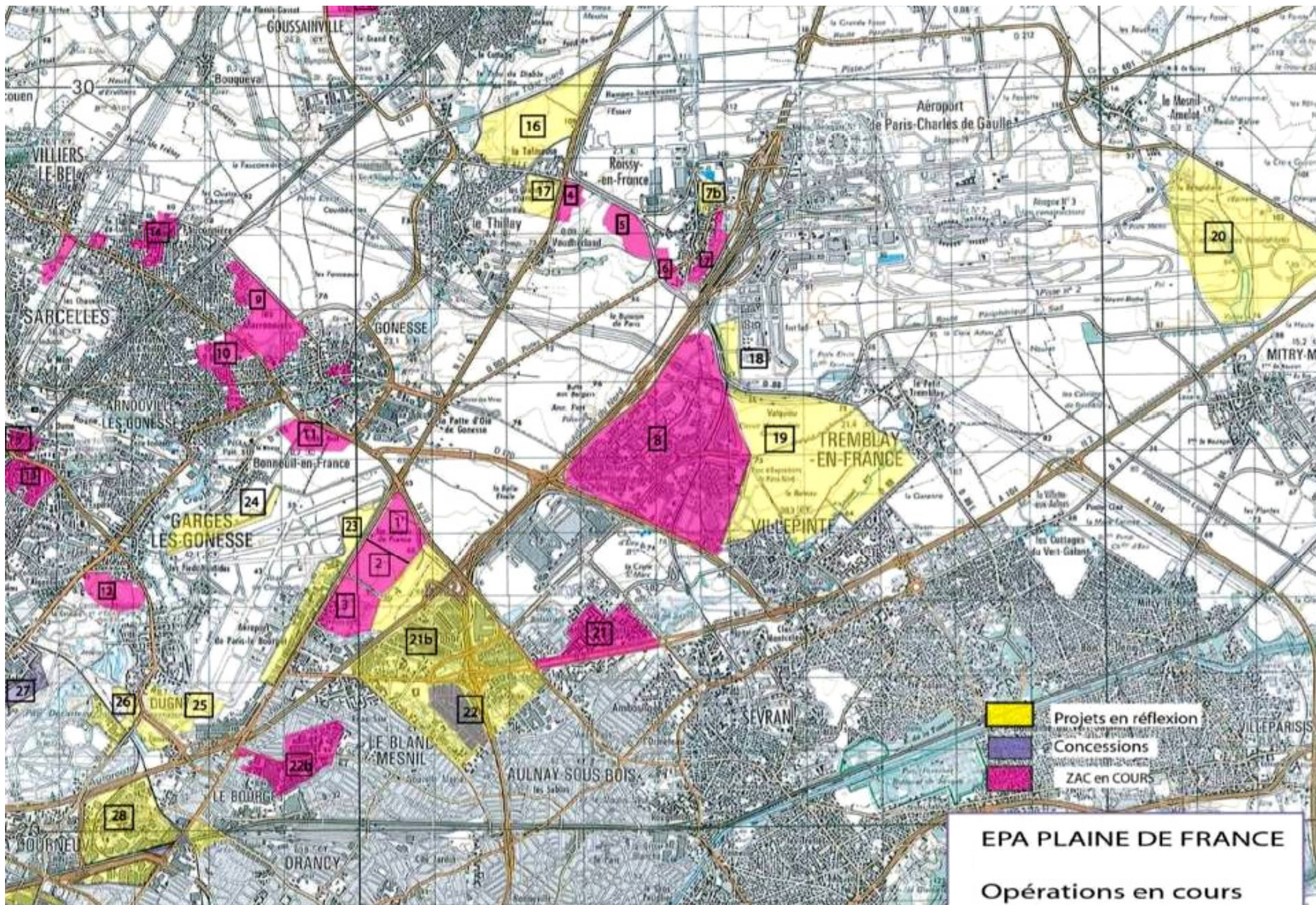


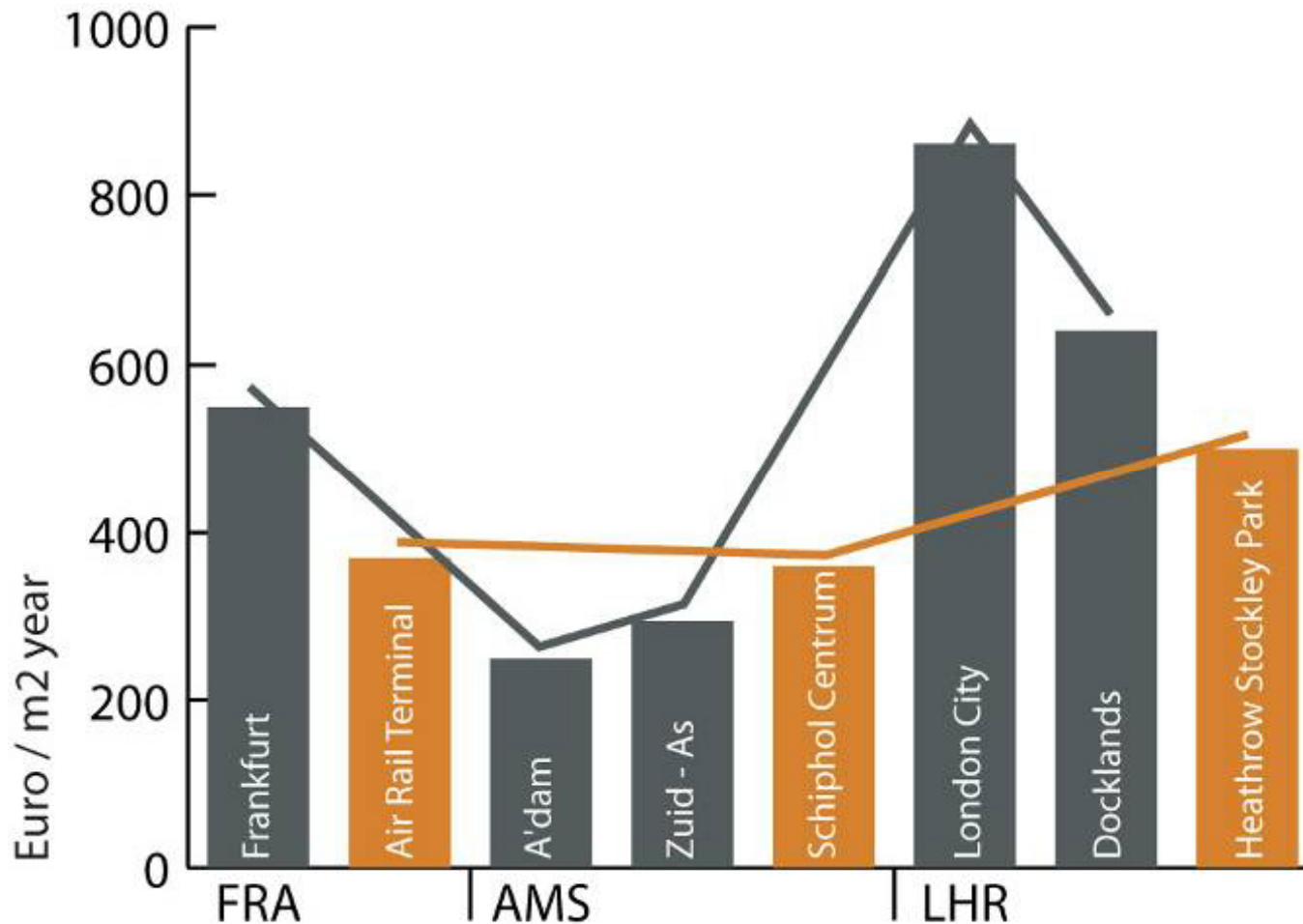
DOTING THE CIRCLE WITH ITS OWN HIGH-CAPACITY PUBLIC TRANSPORT LOGIC

... network logic for the city of the future
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Triangle de Roissy-Gonesse







Attractivité croissante de la région aéroportuaire pour les fonctions stratégiques d'entreprises (sièges sociaux, centres de formation, etc.)

INTERNATIONAL TENDENCY: PRIORITY SITES FOR INTERNATIONAL ACTIVITIES IN WORLDWIDE NETWORKS



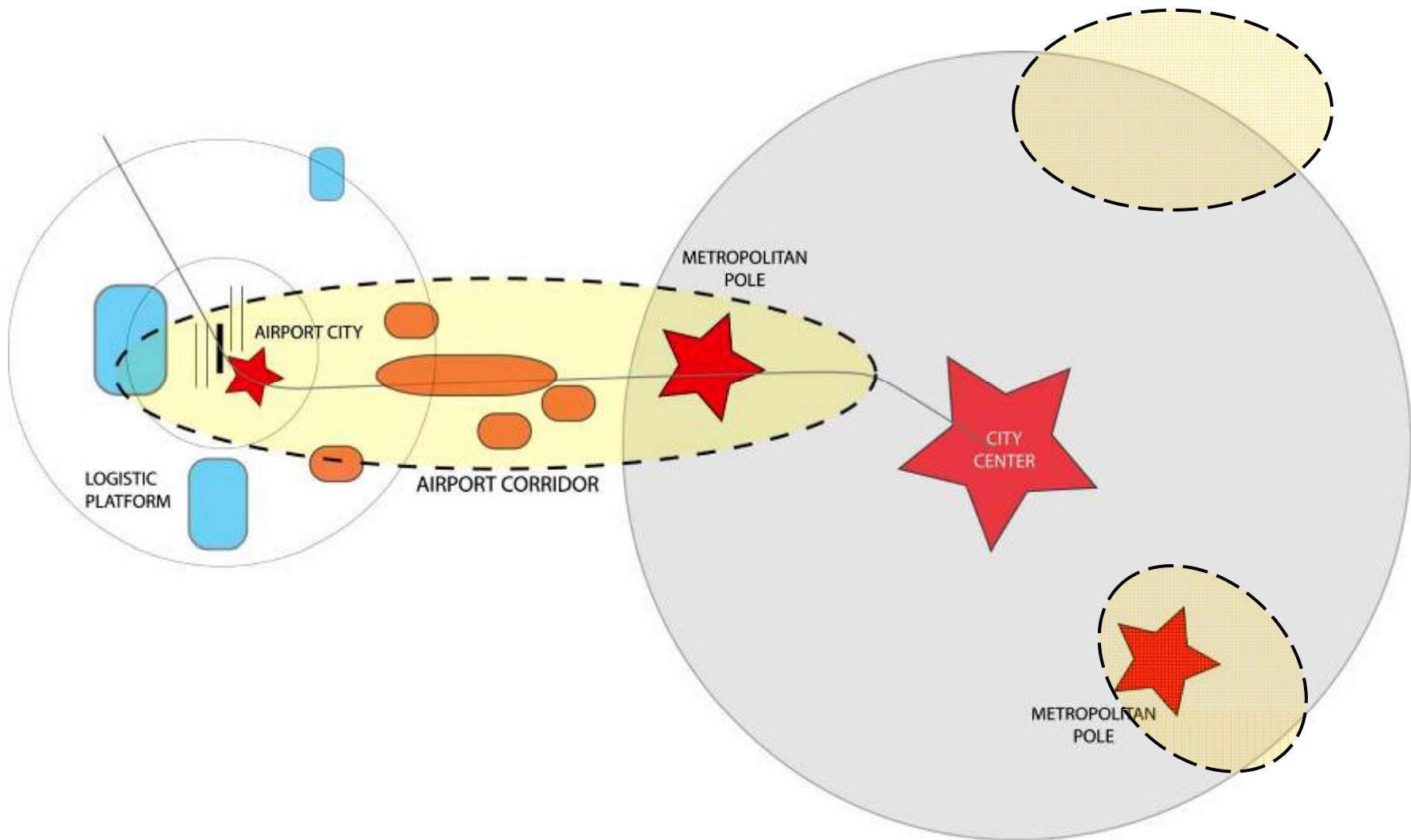
Voiture → décentralisation



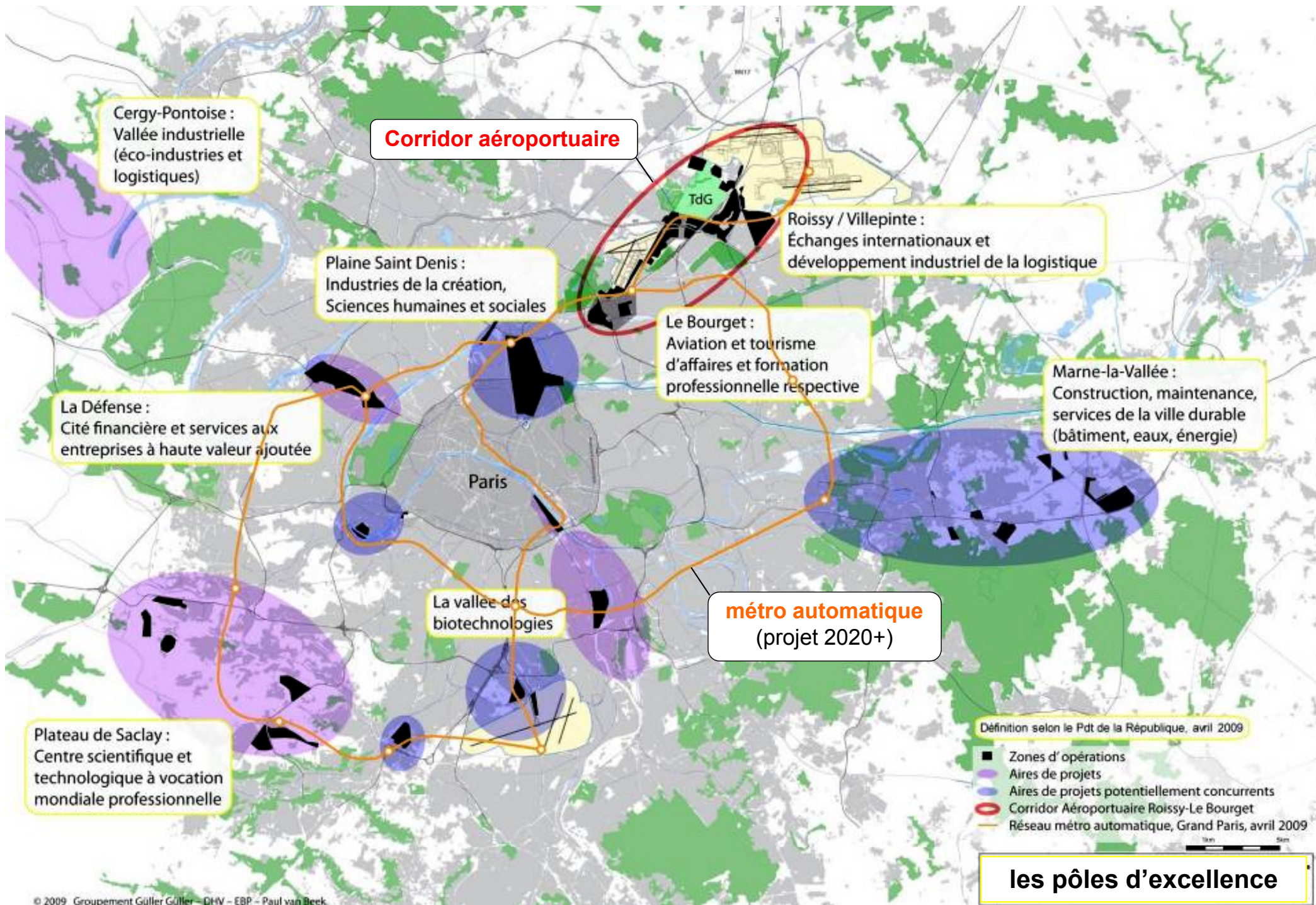
Train → re-concentration

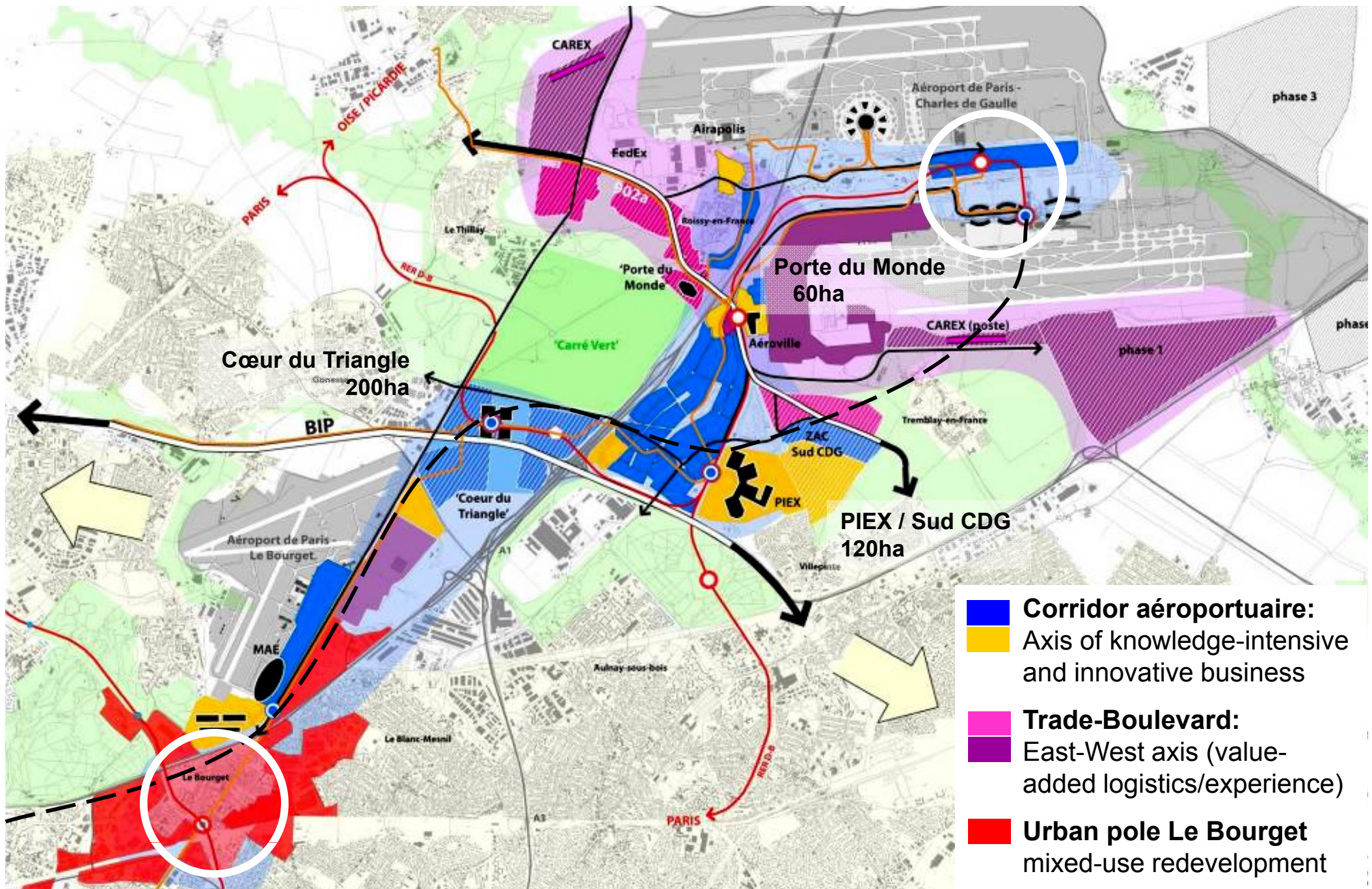


Aéroport → poly-centralisation



AIRPORT CORRIDORS: THE NEW VECTORS OF THE
ECONOMIC DEVELOPMENT OF OUR METROPOLISES

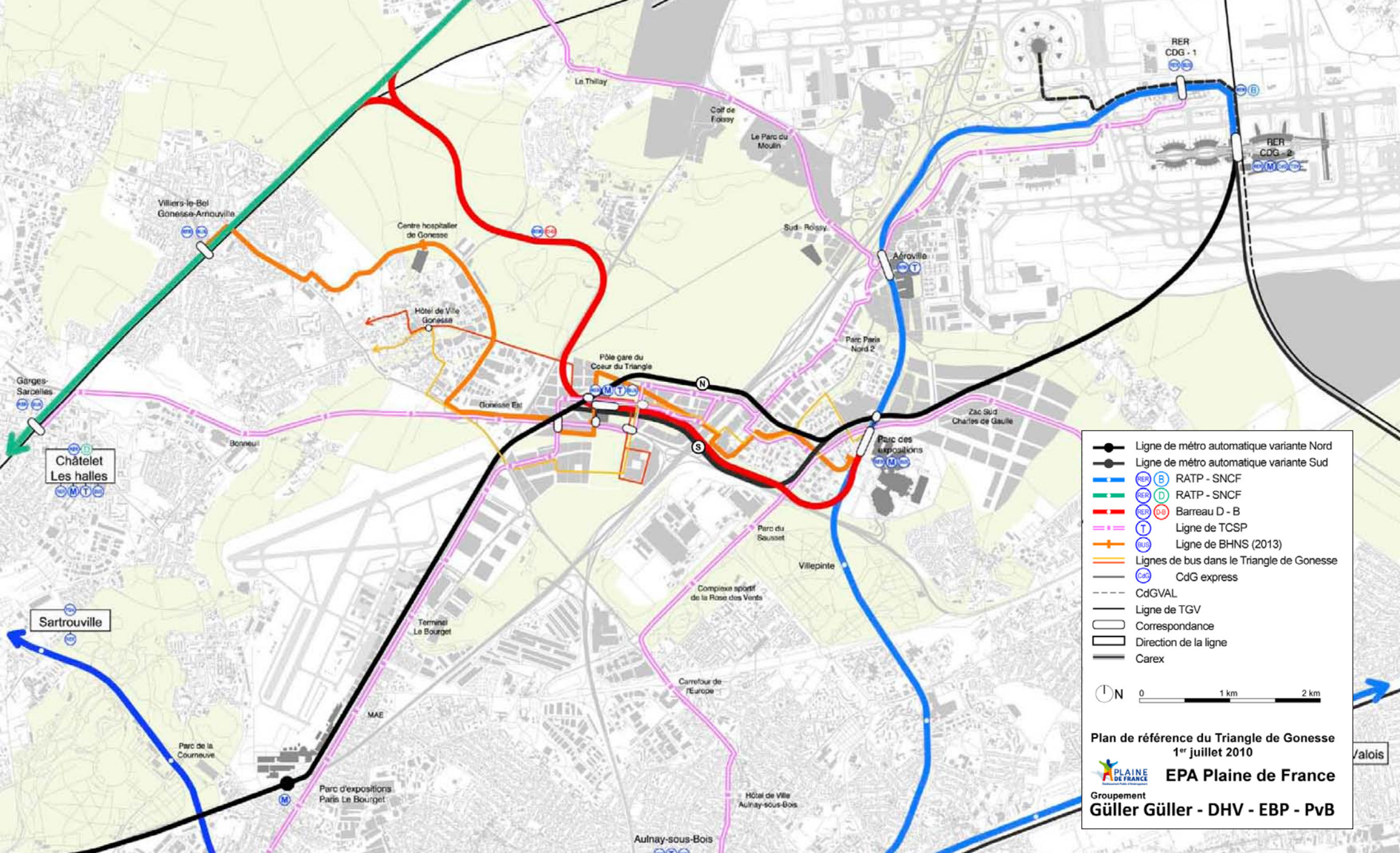




ORGANISING COMPLEMENTARITY OF THE DIVERSE DEVELOPMENTS



HEART OF THE TRIANGLE: A KEY AREA ...

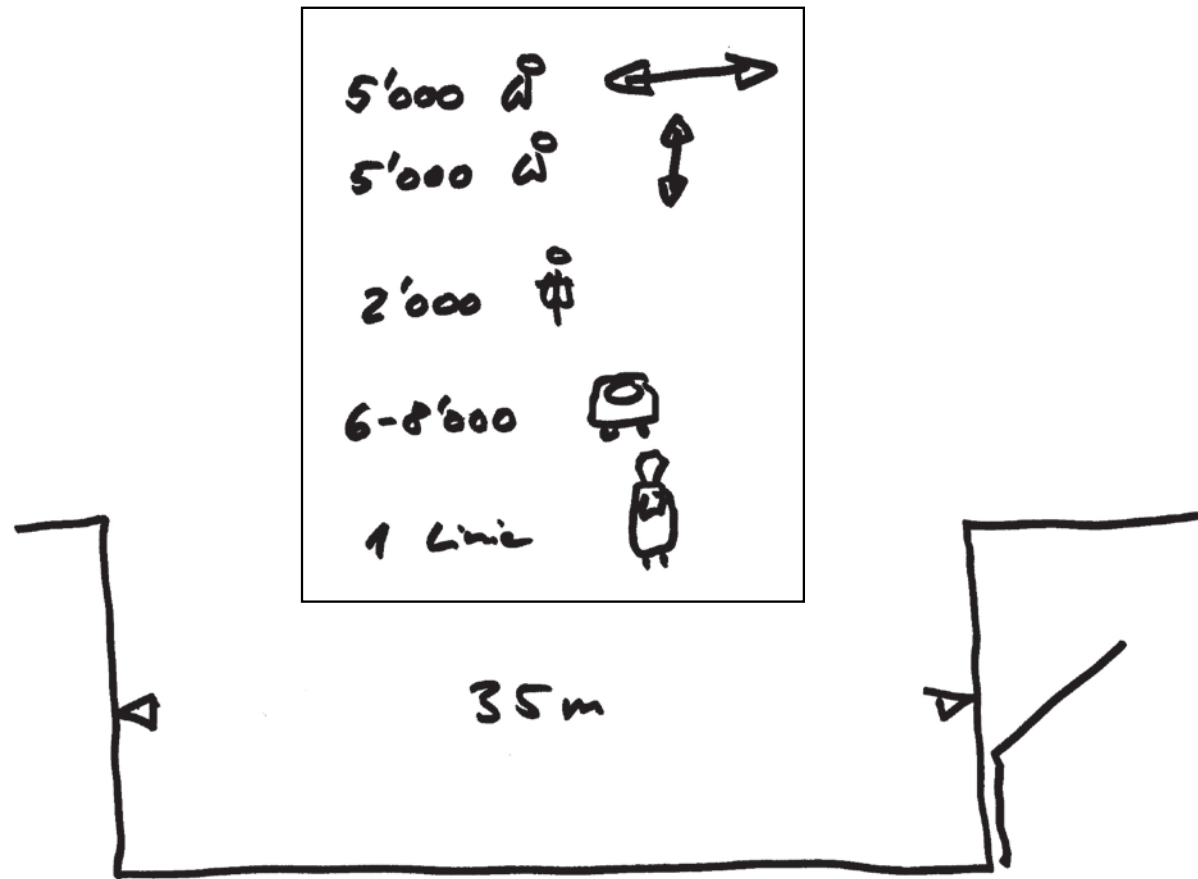


... TRIGGERING AN ECONOMIC DYNAMIC IN THE AIRPORT CORRIDOR
ALLOWING FOR ACCESSIBILITY IMPROVEMENTS AT ALL TERRITORIAL SCALES

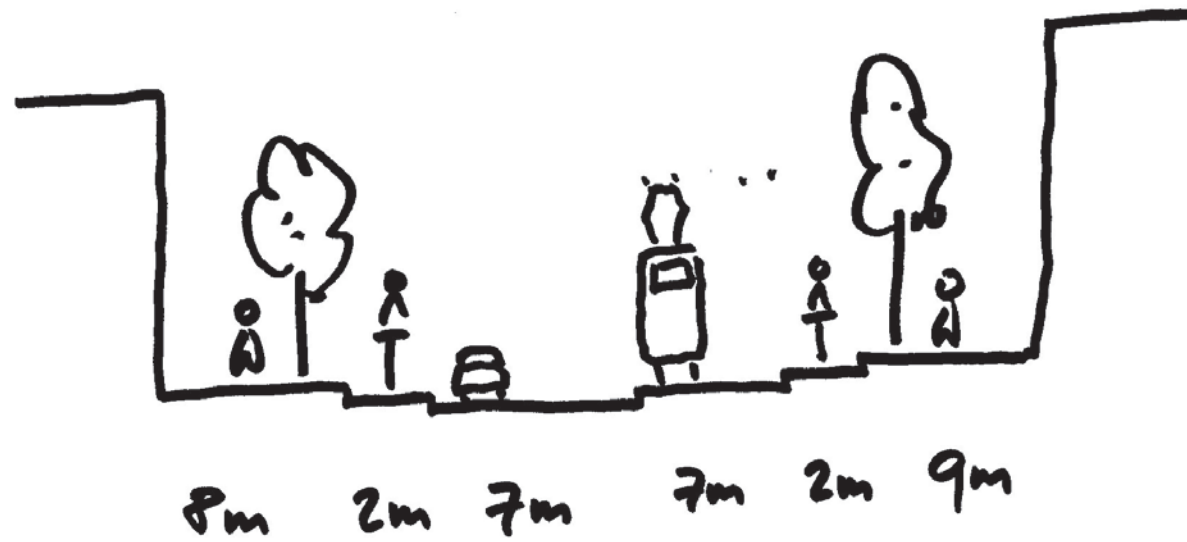
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HOW TO TRANSFORM A HIGHWAY ACCESS ROAD INTO A DISTRICT STREET?



HOW MUCH SPACE IS NEEDED FOR THE REDUCED TRAFFIC LOAD?

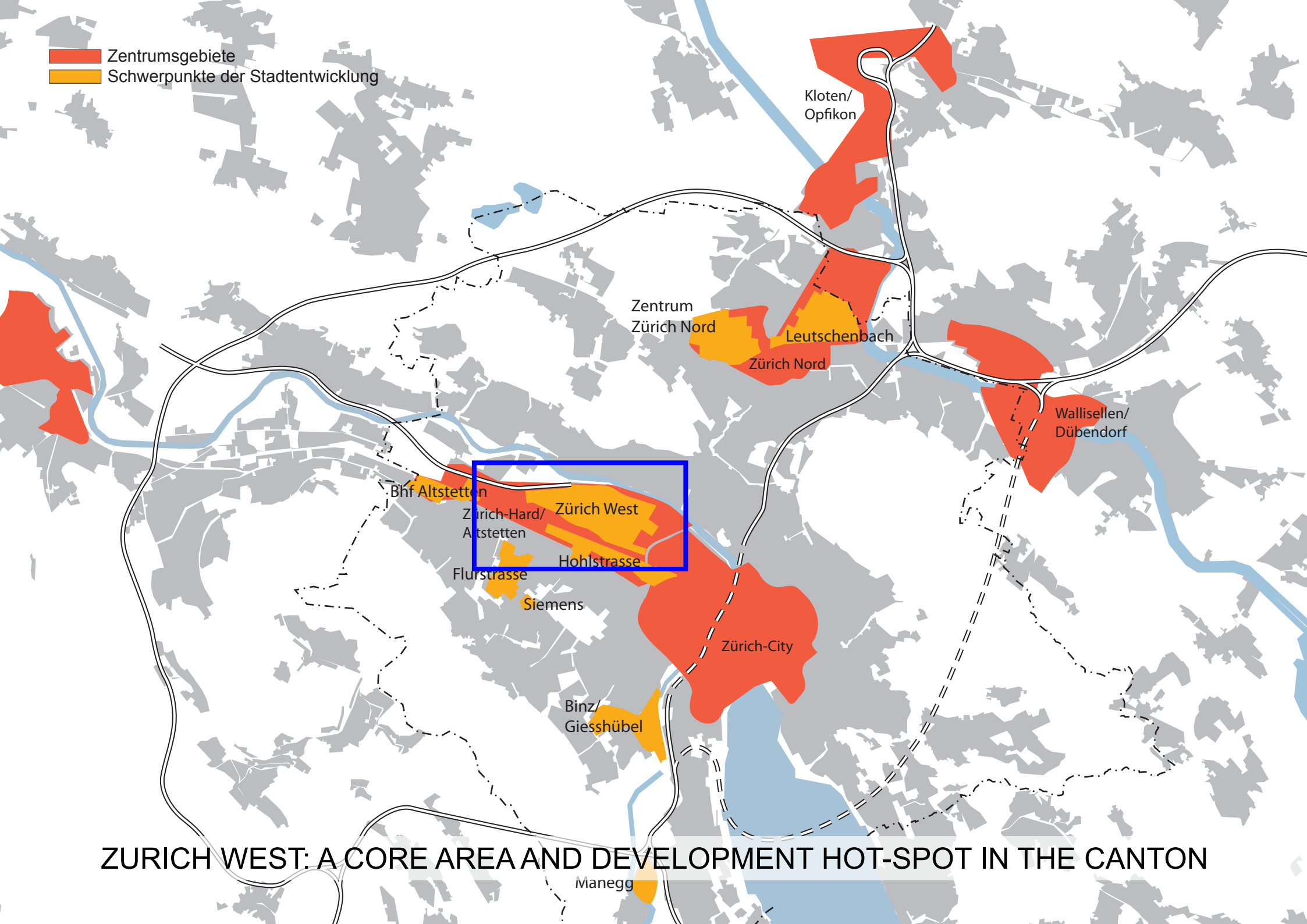


THE SPACE THEY WANT (TOP)? OR THE SPACE THEY NEED (BOTTOM)?

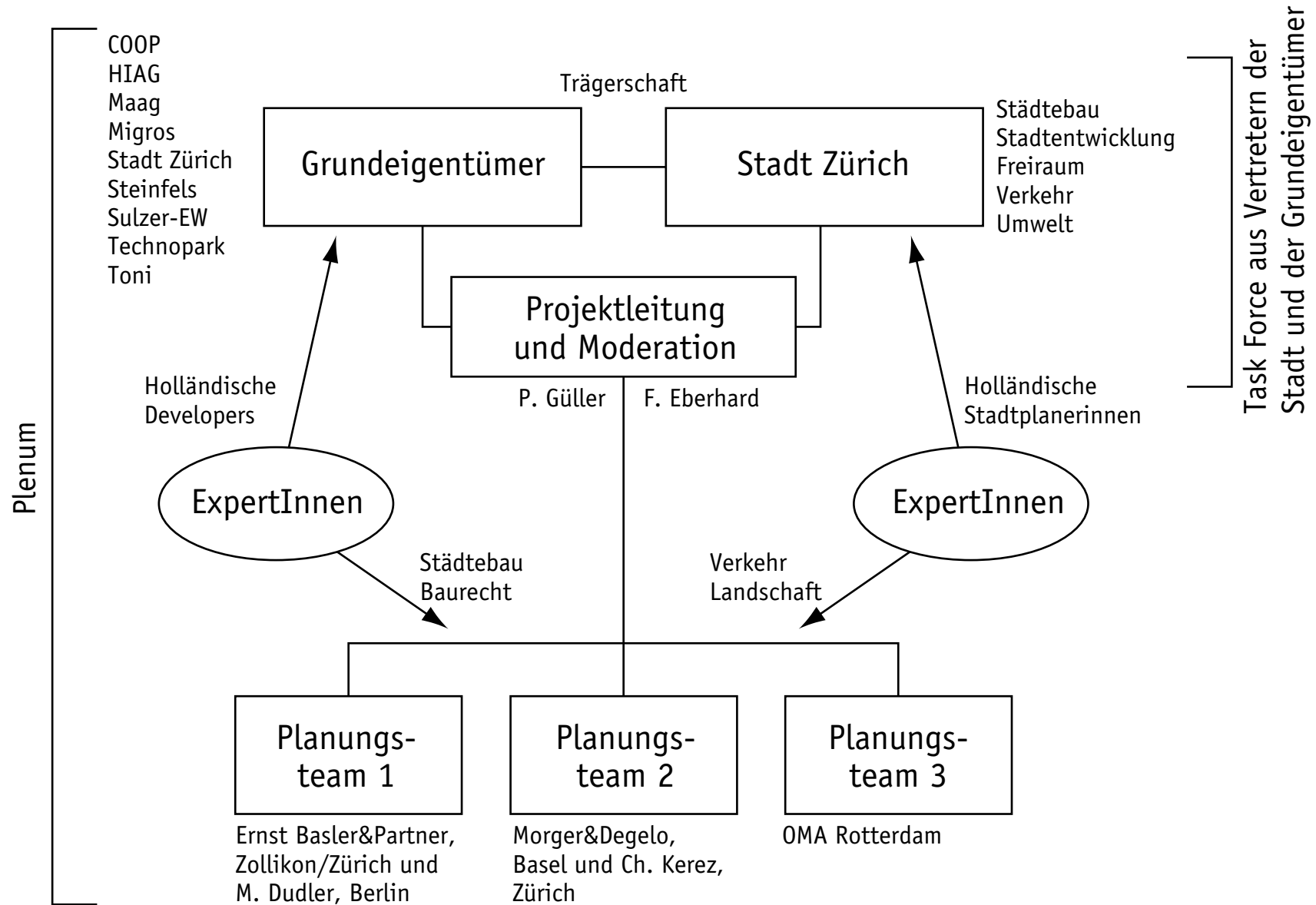


NOT JUST A LOCAL QUESTION ...

- Zentrumsgebiete
- Schwerpunkte der Stadtentwicklung



ZURICH WEST: A CORE AREA AND DEVELOPMENT HOT-SPOT IN THE CANTON



1990IES: A MAJOR PPP FOR THE REVALUATION OF ZURICH WEST



1



... ONGOING TRANSFORMATION ...



... EMBLEMATIC BUILDINGS, DIVERSITY AND MIXITY ...

1. *nodes in a polycentric network of public transport*
2. *superposition of several development layers over time*
3. *Job-sharing: complementarity in functional terms as well as in terms of image and identity with the other core areas*
4. *key area of the international competitiveness of the metropolitan system*
5. *big transport axes as urban boulevards with « address character »*
6. *role of a centrality at different scales*
7. *mixed use area: different types of activities, and residential*
8. *contribution to the requalification of the congested downtown*
9. *vitality in public space*

CORE AREAS: NOT JUST HOT-SPOTS IN TERMS OF QUANTITY,
BUT PARTICULARLY IN TERMS OF EXCEPTIONAL URBAN QUALITY



... MINIMISATION OF TRAFFIC SPACE, MAXIMISATION OF SPACE FOR PUBLIC LIFE

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BORDEAUX - IMAGE-FACTOR PUBLIC SPACE QUALITY



BORDEAUX - IMAGE-FACTOR OF A HIGH QUALITY PUBLIC TRANSPORT



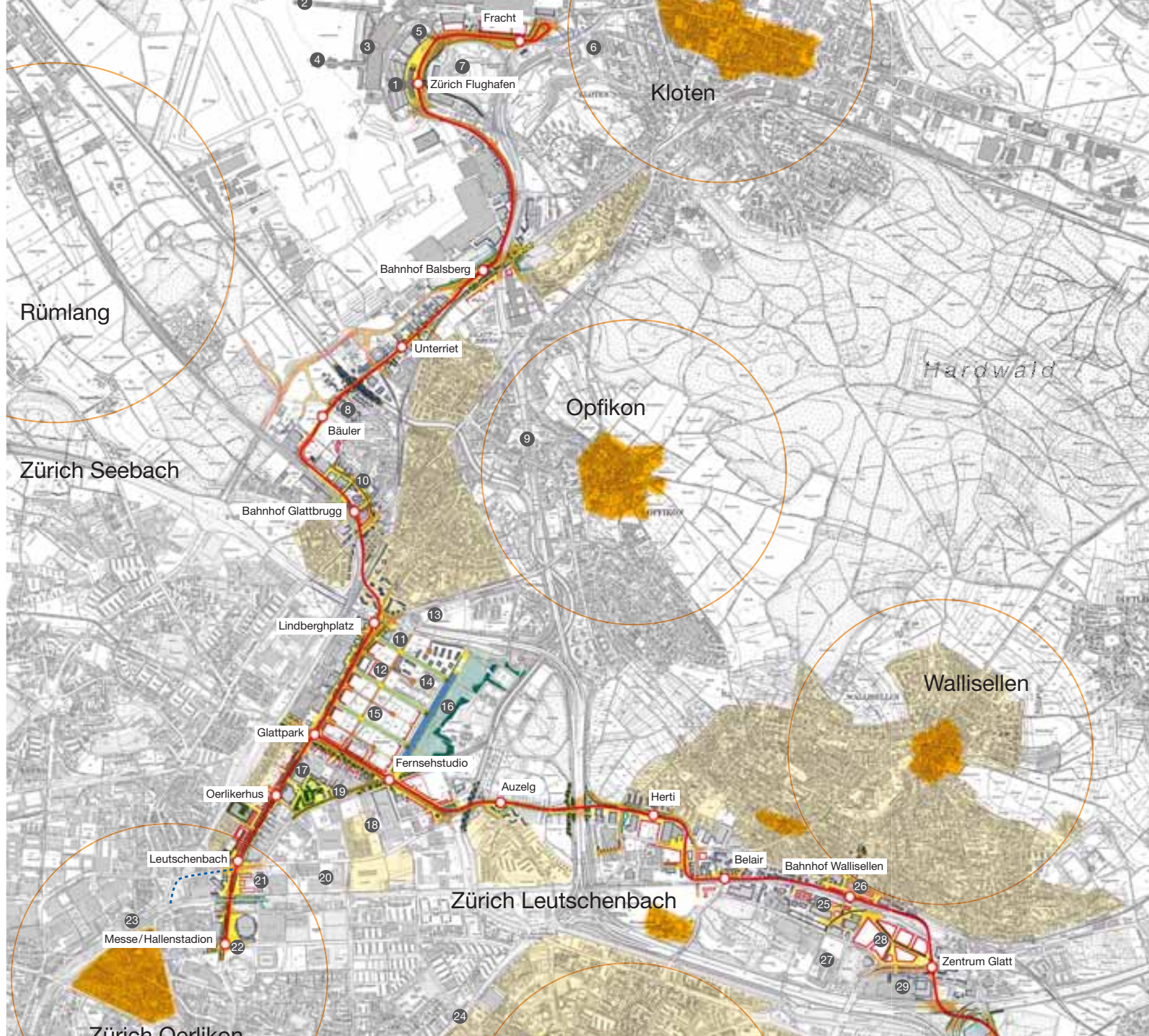
THE «FOSTERITOS» OF BILBAO'S METRO - MARKING THE CITY'S PUBLIC SPACE



THE GLATTALBAHN: IDENTITY FACTOR FOR THE ZURICH AIRPORT SECTOR ...



... FROM THE STATION ...

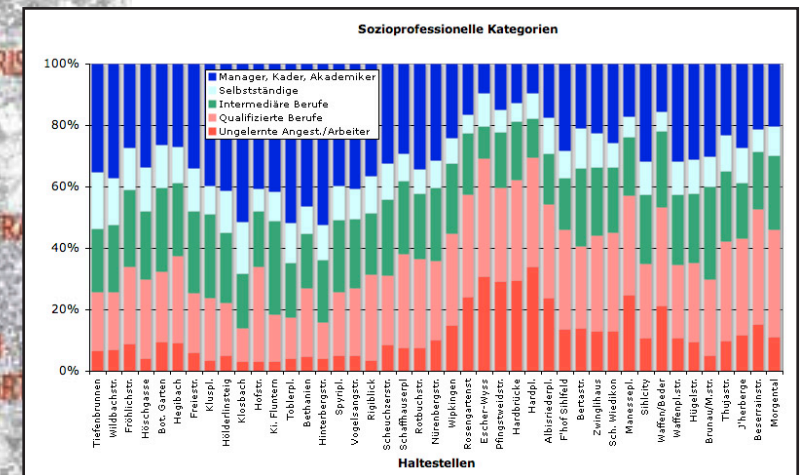


... TO AN OVERALL CHANGE OF PERCEPTION OF THE REGION



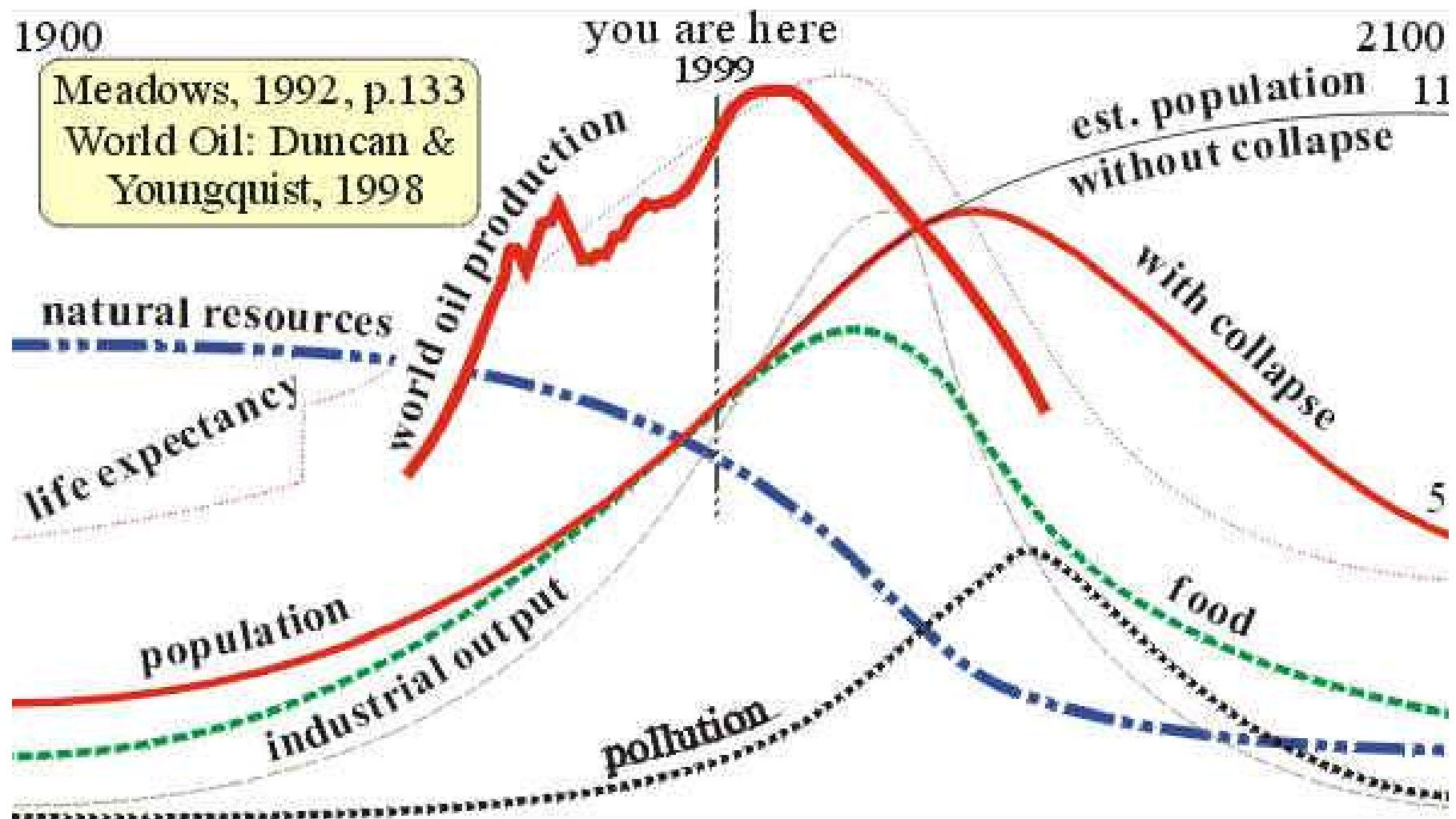


S5-STADT (a project of ETH Wohnforum / ETH CASE)



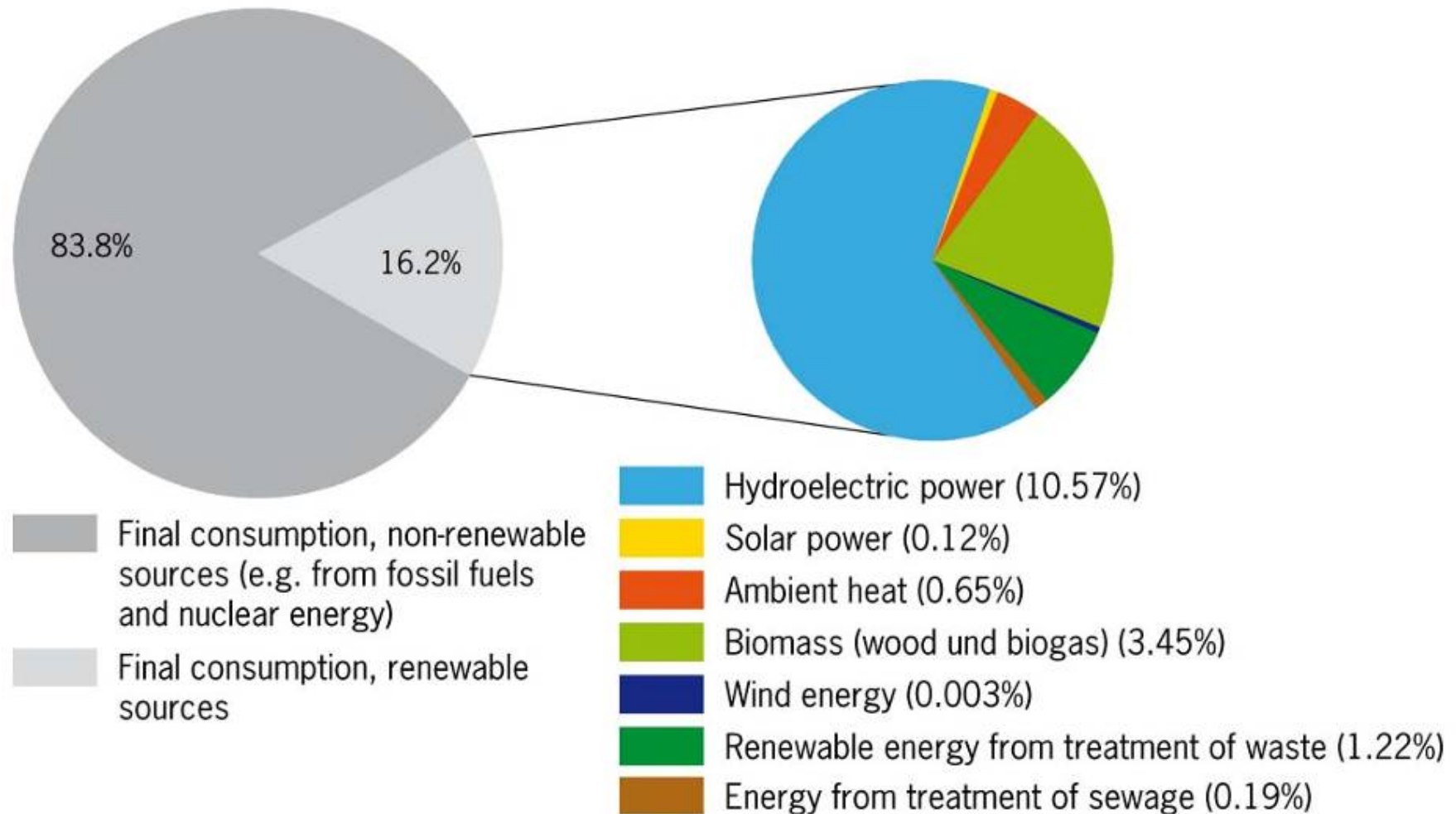
TROLLEY-LINE NR 33, ZURICH: SUBJECT OF A THESIS-PAPER *(Sanna Herzog, 2008)*

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... MOVING TOWARDS PEAK OIL (AND “PEAK ANY RESOURCE”) ...

Share of renewable energy in final energy consumption, 2005



Zürich 2008 ...



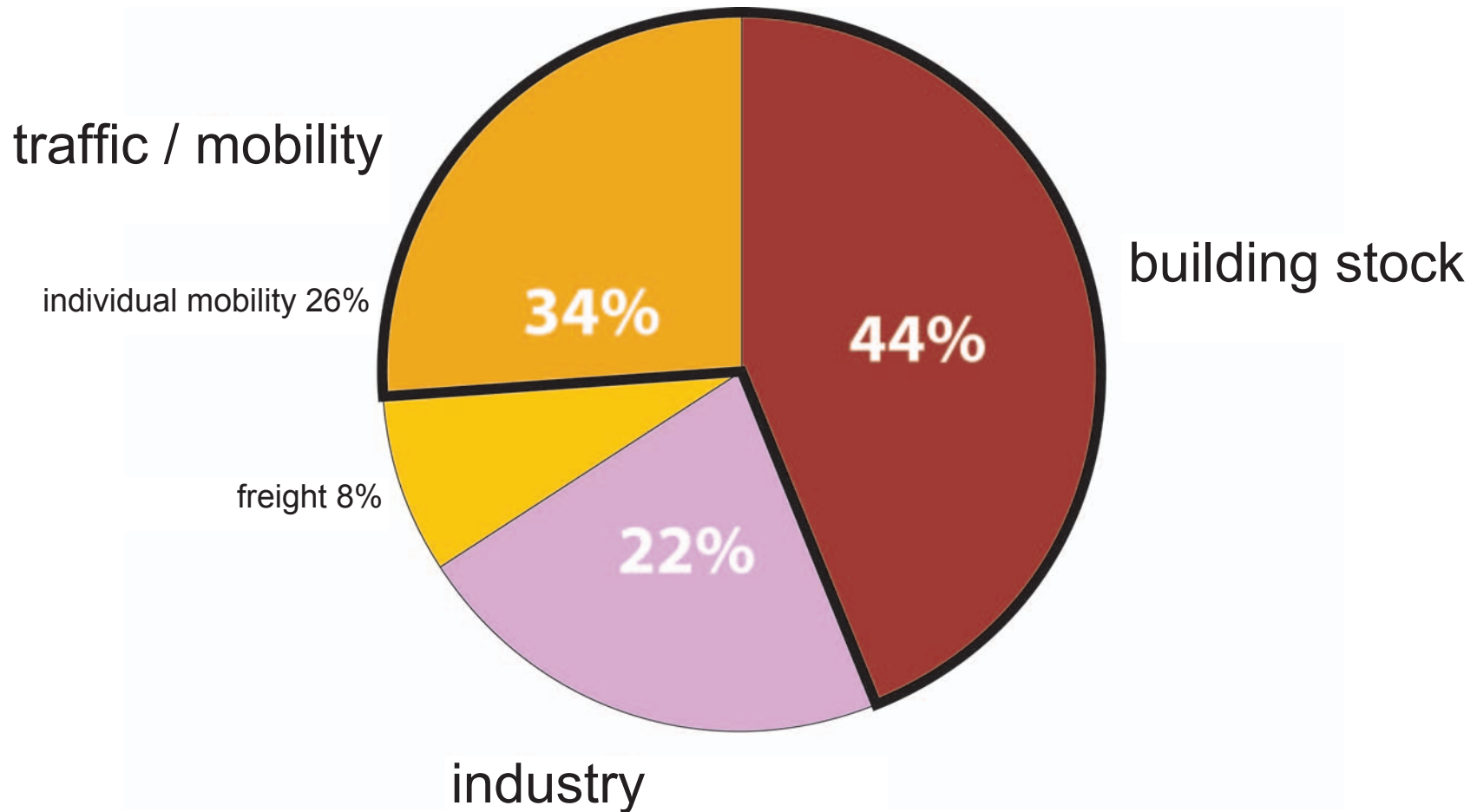
scarcity of resources

... 2050?

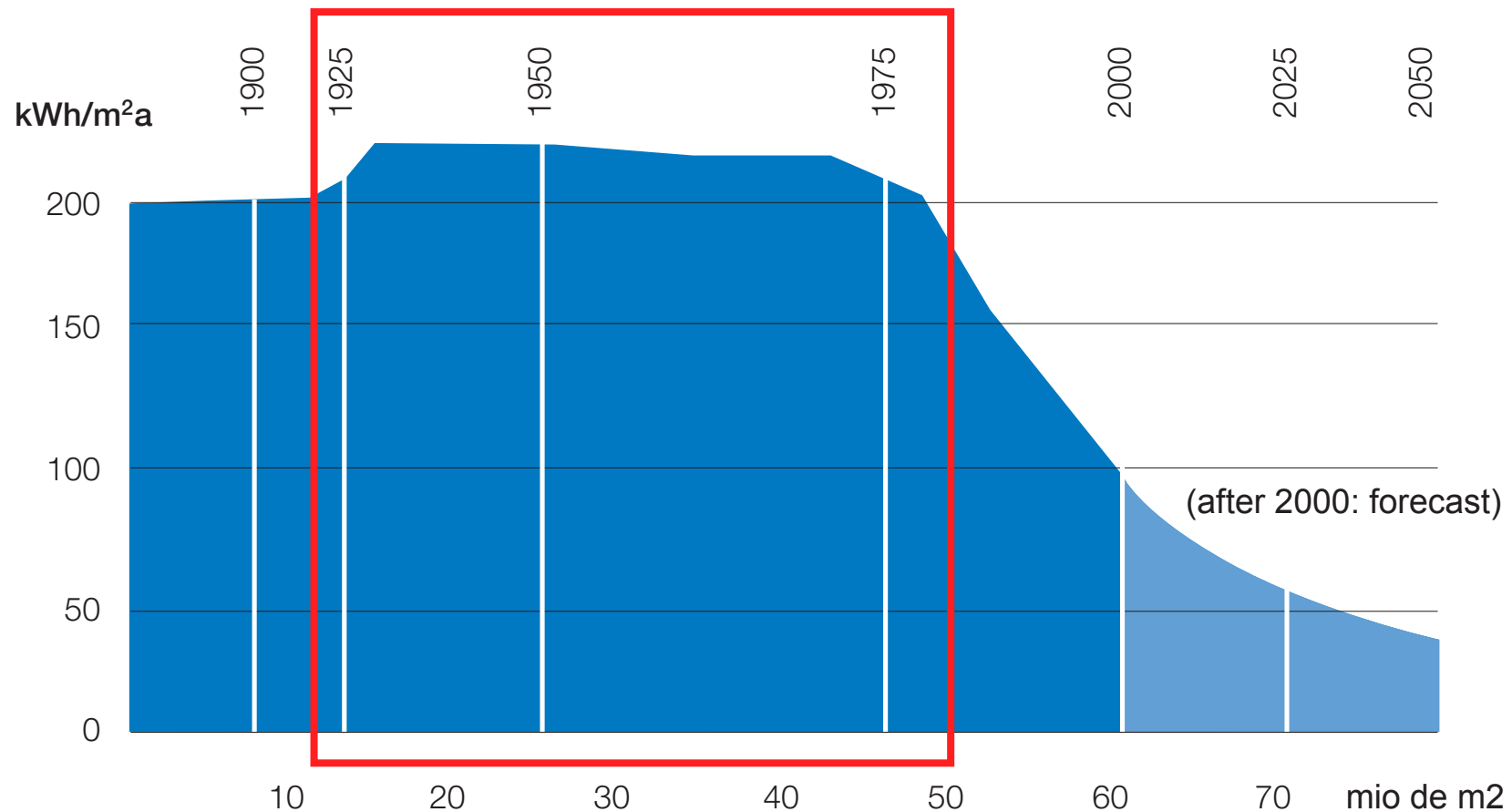




8 ELEMENTS DESCRIBING AN ENERGY-EFFICIENT CITY OF ZURICH IN 2050

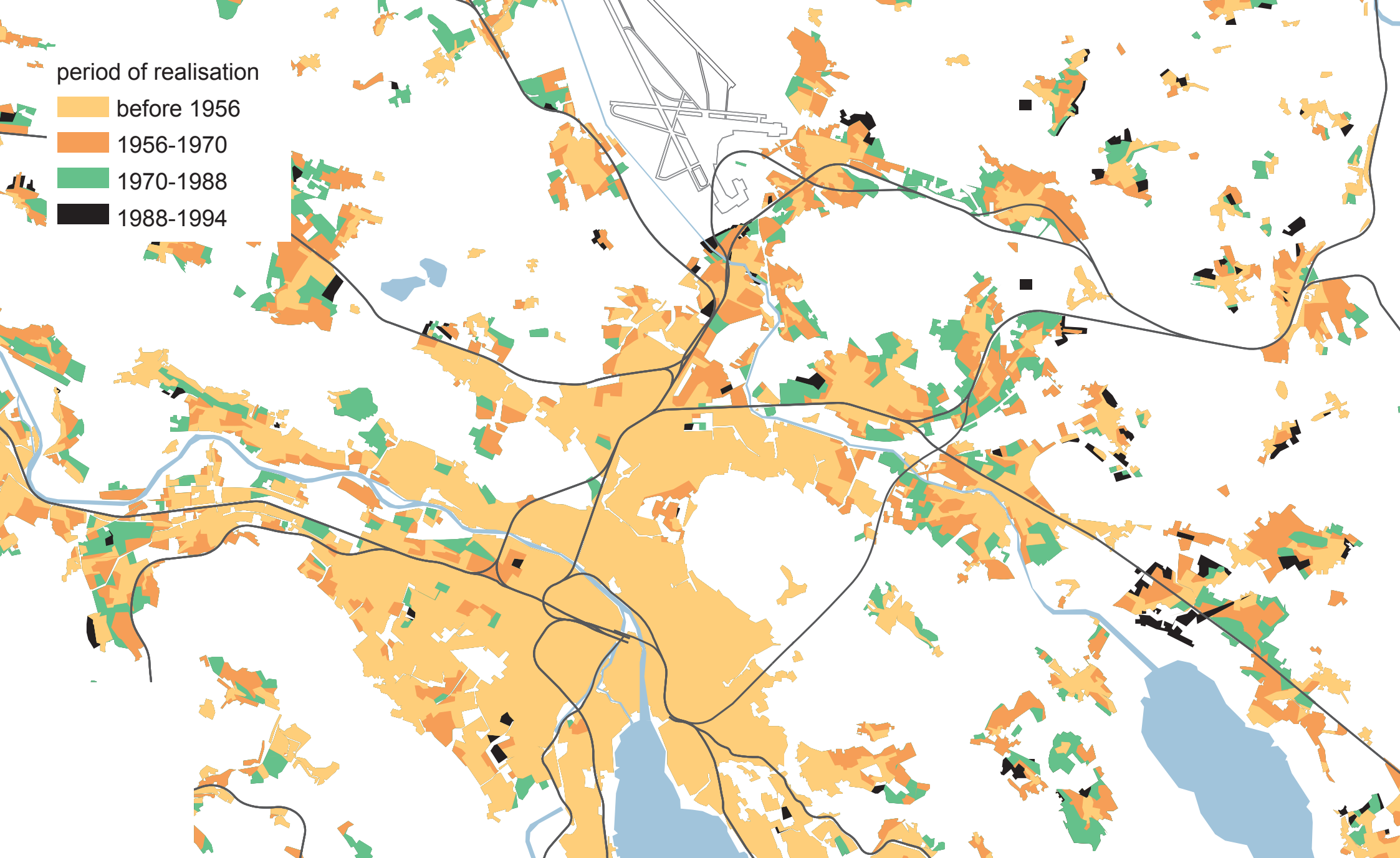


70% OF THE ENERGY CONSUMPTION IN WESTERN EUROPE IS HIGHLY DEPENDENT
ON THE STRUCTURES OF OUR CITIES AND REGIONS

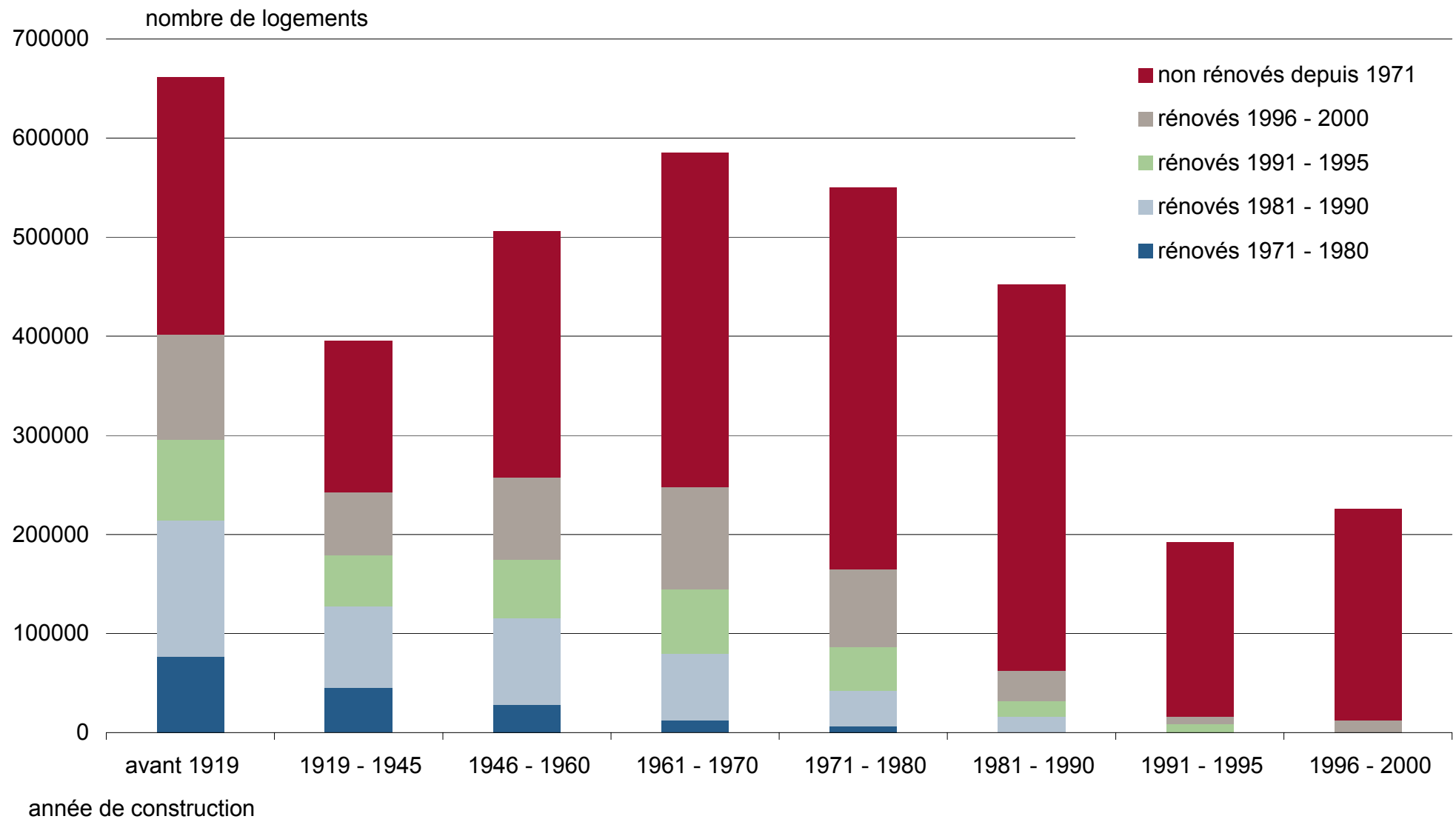


Consumption of energy of the entire stock of housing in Zurich, for heating and hot water

THE BUILDINGS FROM THE 20TH CENTURY REPRESENT NOT ONLY THE BIGGEST SHARE OF THE BUILDING STOCK, BUT ARE ALSO THE MOST ENERGY-INEFFICIENT



THAT SAME BUILDING STOCK OF THE 20TH CENTURY IS ALSO THE ONE WHICH IS MOST ENERGY-INEFFICIENT IN TERMS OF ACCESSIBILITY (CAR-BASED PERIPHERY)



Necessity of renovation of housing in all of Switzerland : **40%** (Geneva : **80%**)

**EXTRAORDINARY NECESSITY OF RENOVATION OF THE BUILDING STOCK -
AN OPPORTUNITY?**

May 18 2010: The European Union announces the binding objective that by 2020 « every newly built building - for housing as well as for workplaces - has to be zero-energy ».

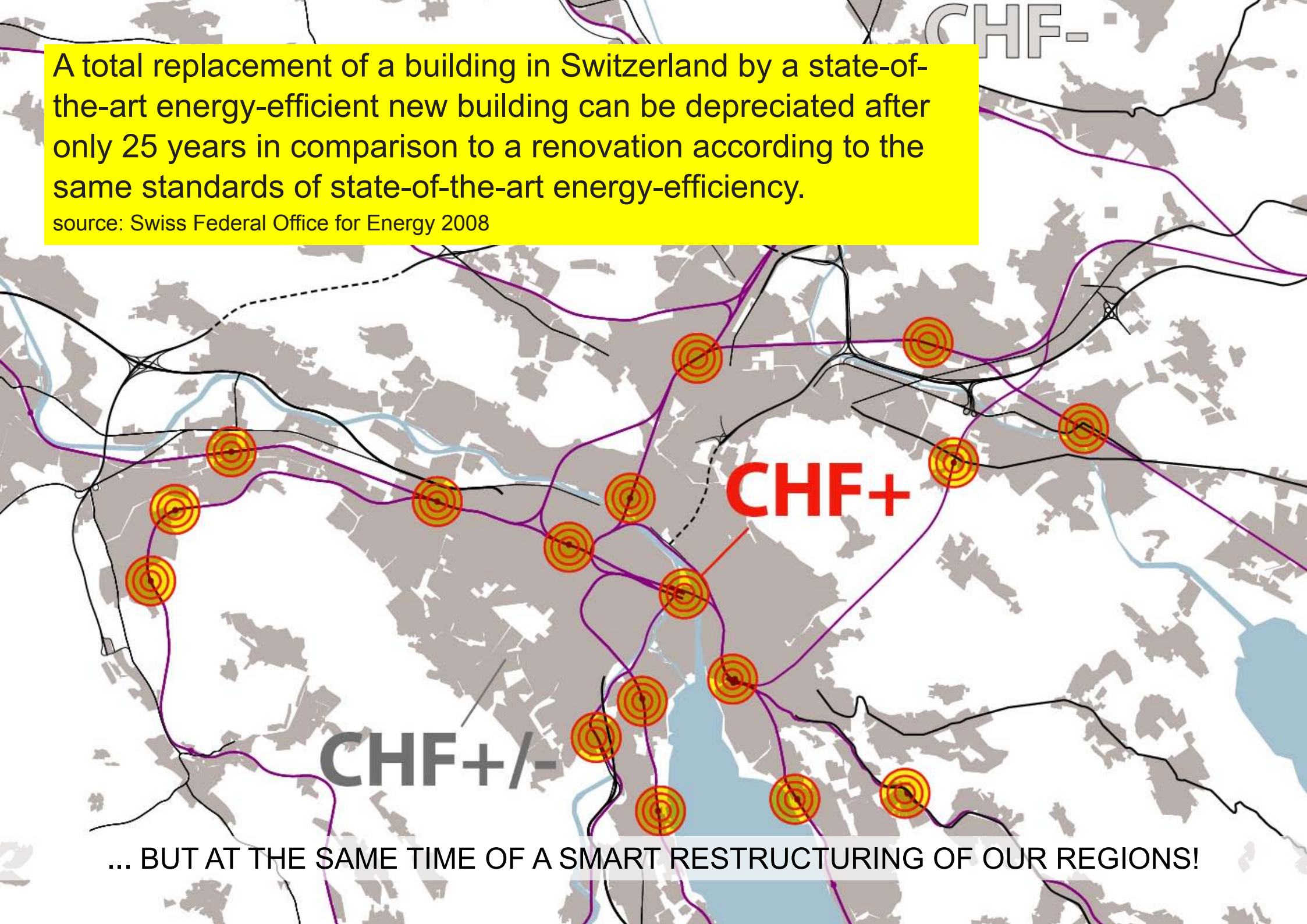
source: Swiss radio DRS, news



ENERGY-EFFICIENCY: NOT ONLY A QUESTION OF BETTER BUILDINGS ...

A total replacement of a building in Switzerland by a state-of-the-art energy-efficient new building can be depreciated after only 25 years in comparison to a renovation according to the same standards of state-of-the-art energy-efficiency.

source: Swiss Federal Office for Energy 2008

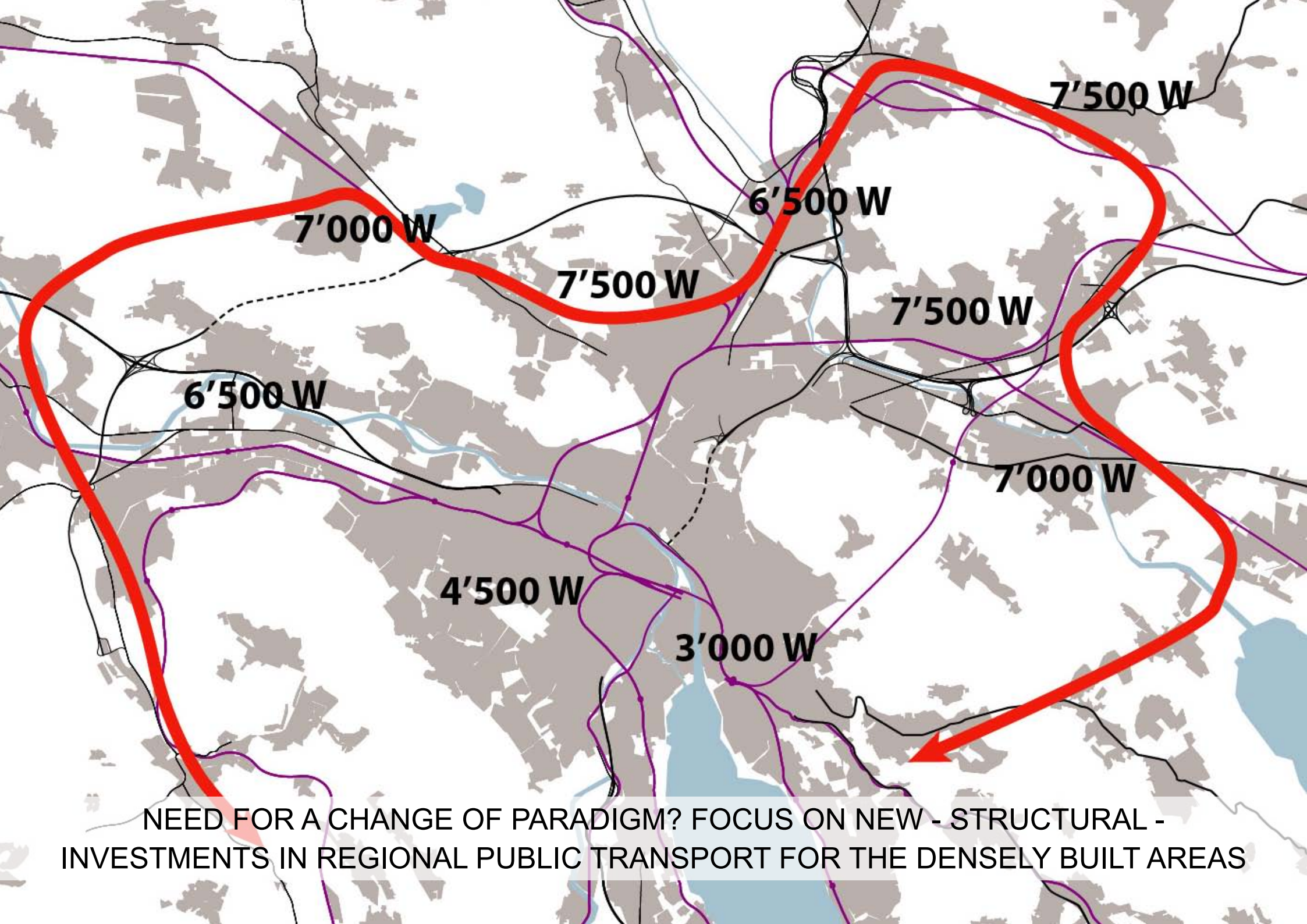
A map of Switzerland showing a network of energy infrastructure. Purple lines represent high-voltage power transmission lines, and black lines represent lower-voltage distribution networks. Numerous orange concentric circles are placed across the map, indicating specific energy production or distribution points. The text 'CHF+' is written in large red letters in the center-right of the map. In the bottom left, the text 'CHF+/-' is written in large grey letters. At the top right, 'CHF-' is partially visible in large grey letters. At the bottom, a grey banner contains the text '... BUT AT THE SAME TIME OF A SMART RESTRUCTURING OF OUR REGIONS!'.

CHF+

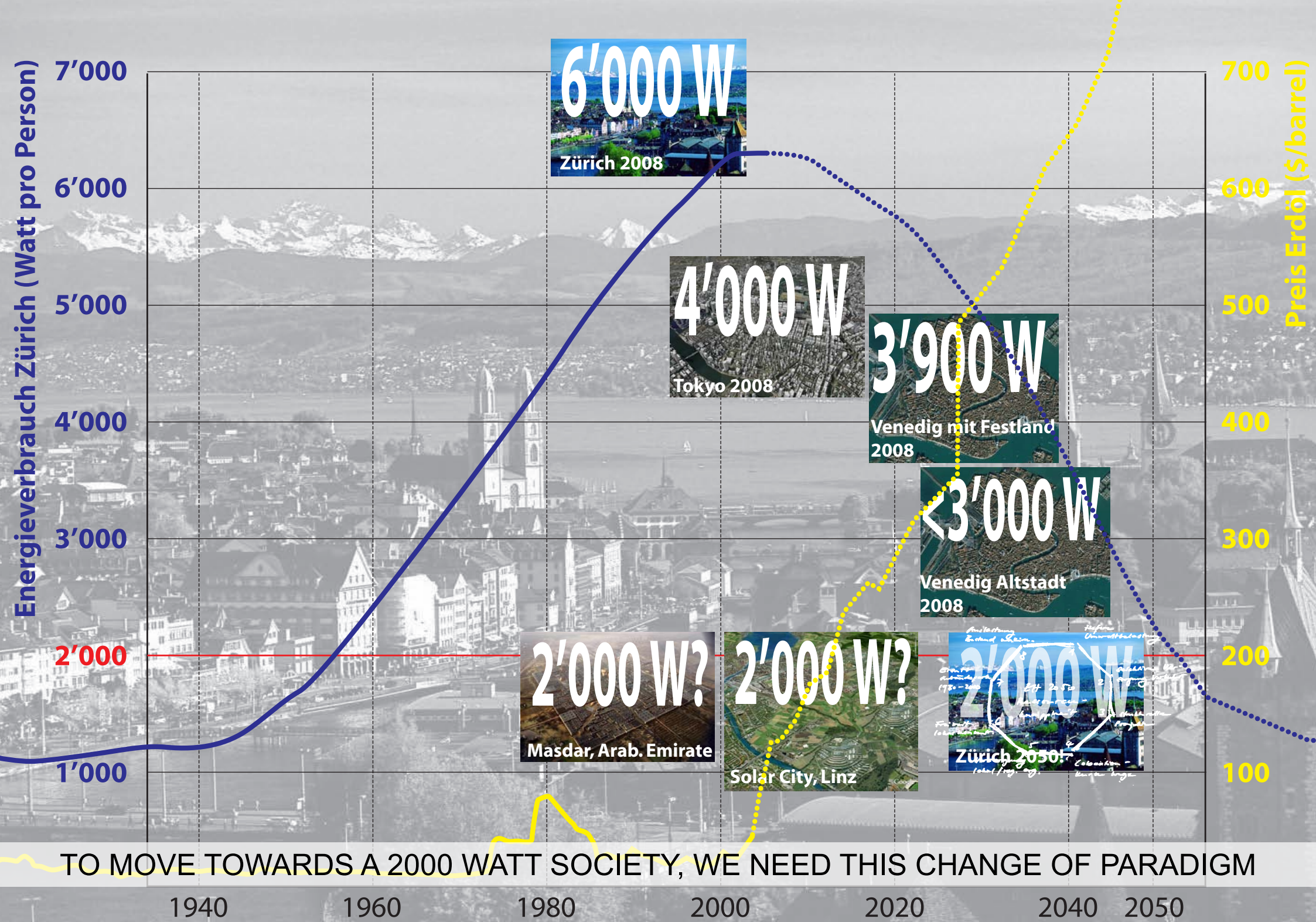
CHF+/-

... BUT AT THE SAME TIME OF A SMART RESTRUCTURING OF OUR REGIONS!





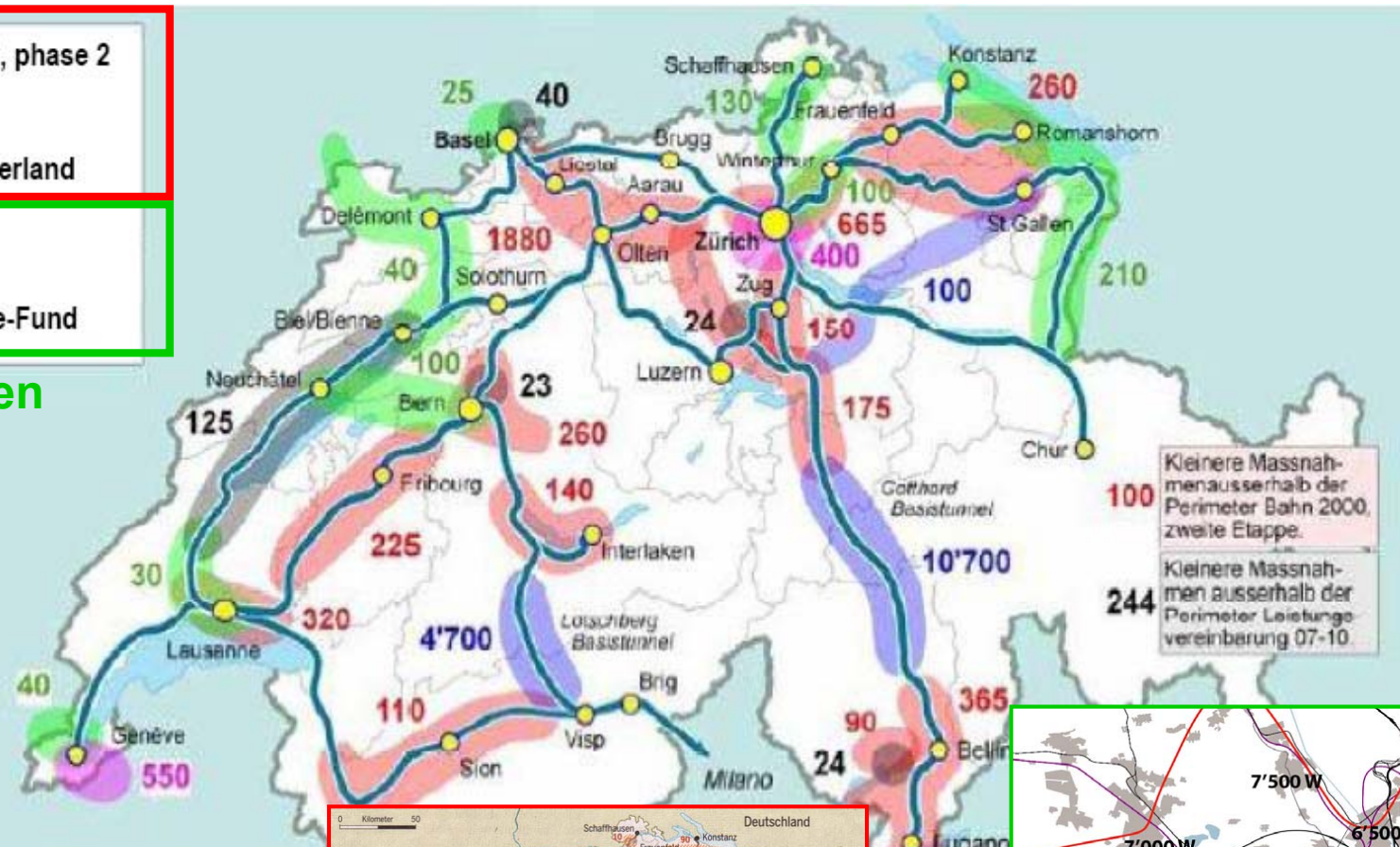
NEED FOR A CHANGE OF PARADIGM? FOCUS ON NEW - STRUCTURAL - INVESTMENTS IN REGIONAL PUBLIC TRANSPORT FOR THE DENSELY BUILT AREAS



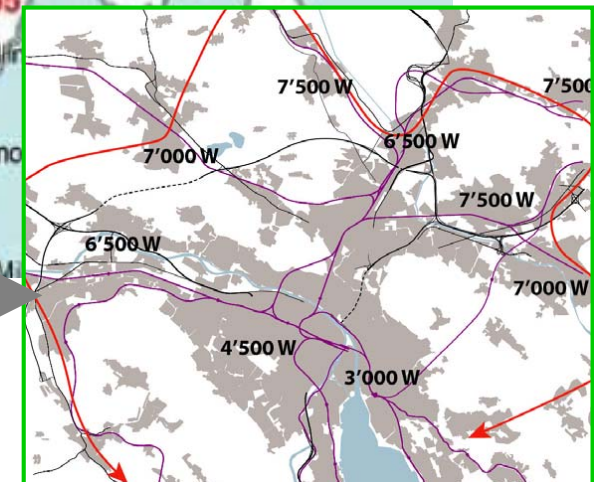
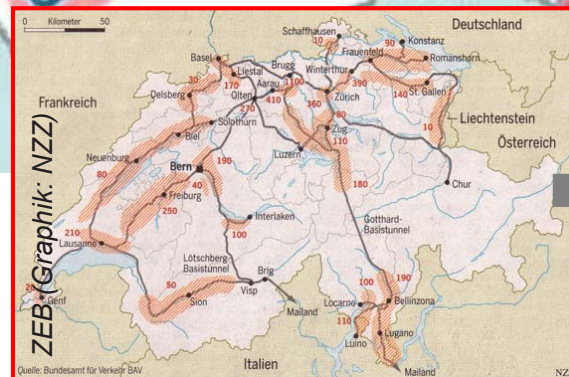
21 Milliarden

4'740	Railway 2000, phase 2
15'500	NEAT
675	HGV in Switzerland
480	Performance Agreement
1'017	Infrastructure-Fund

1.5 Milliarden



Quelle: Maria Seelhofer, Amt für ÖV Kanton SG



REPLACING COSTLY INVESTMENTS INTO LONG-DISTANCE AND HIGH-SPEED CONNECTIONS BY INVESTMENTS INTO THE MUCH-USED REGIONAL NETWORKS

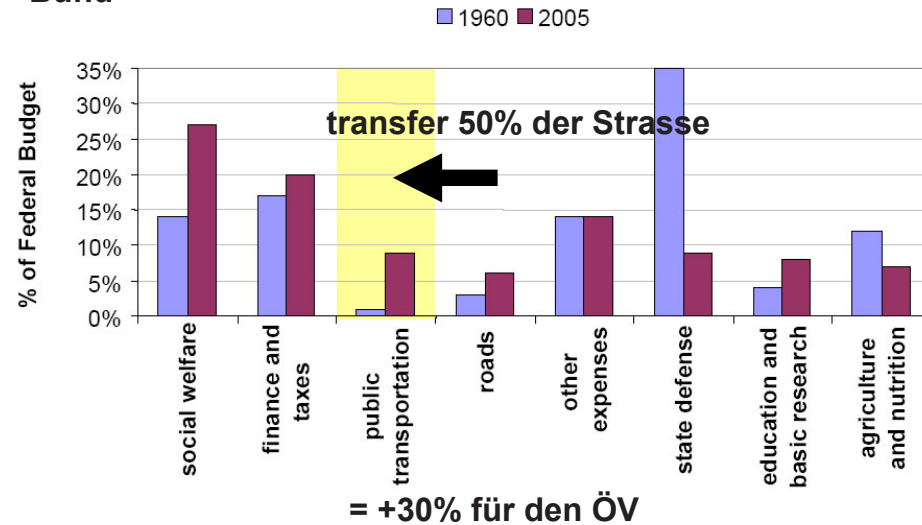
Infrastructure Fund

- To finish national roads: 5,4 billion EUR
- To dissolve chronic bottlenecks on national roads: 3,5 billion EUR
- To improve the transport infrastructure in cities and suburban areas: 3,8 billion EUR

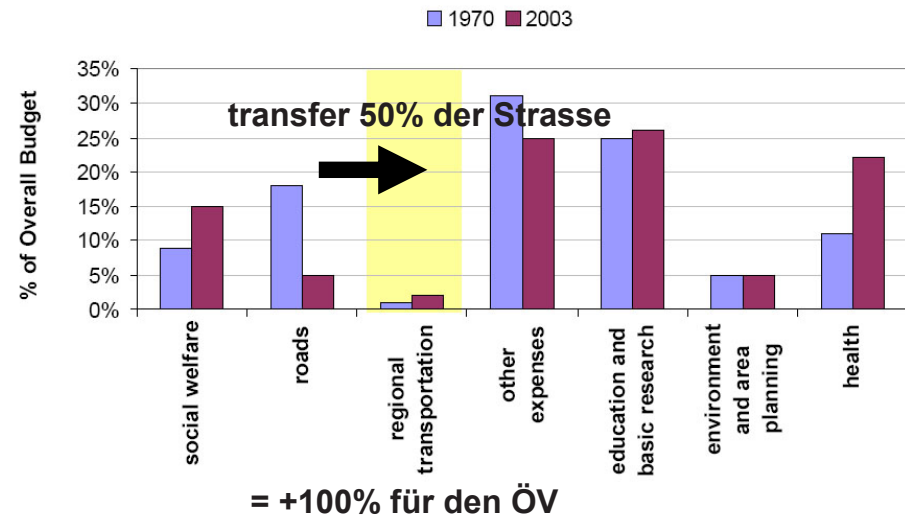
Why invest 9 billion Euro into national highways, and only 3.8 billion Euro into agglomeration traffic?

Hintergrundgraphiken: Maria Seelhofer, Amt für ÖV Kanton SG

Bund

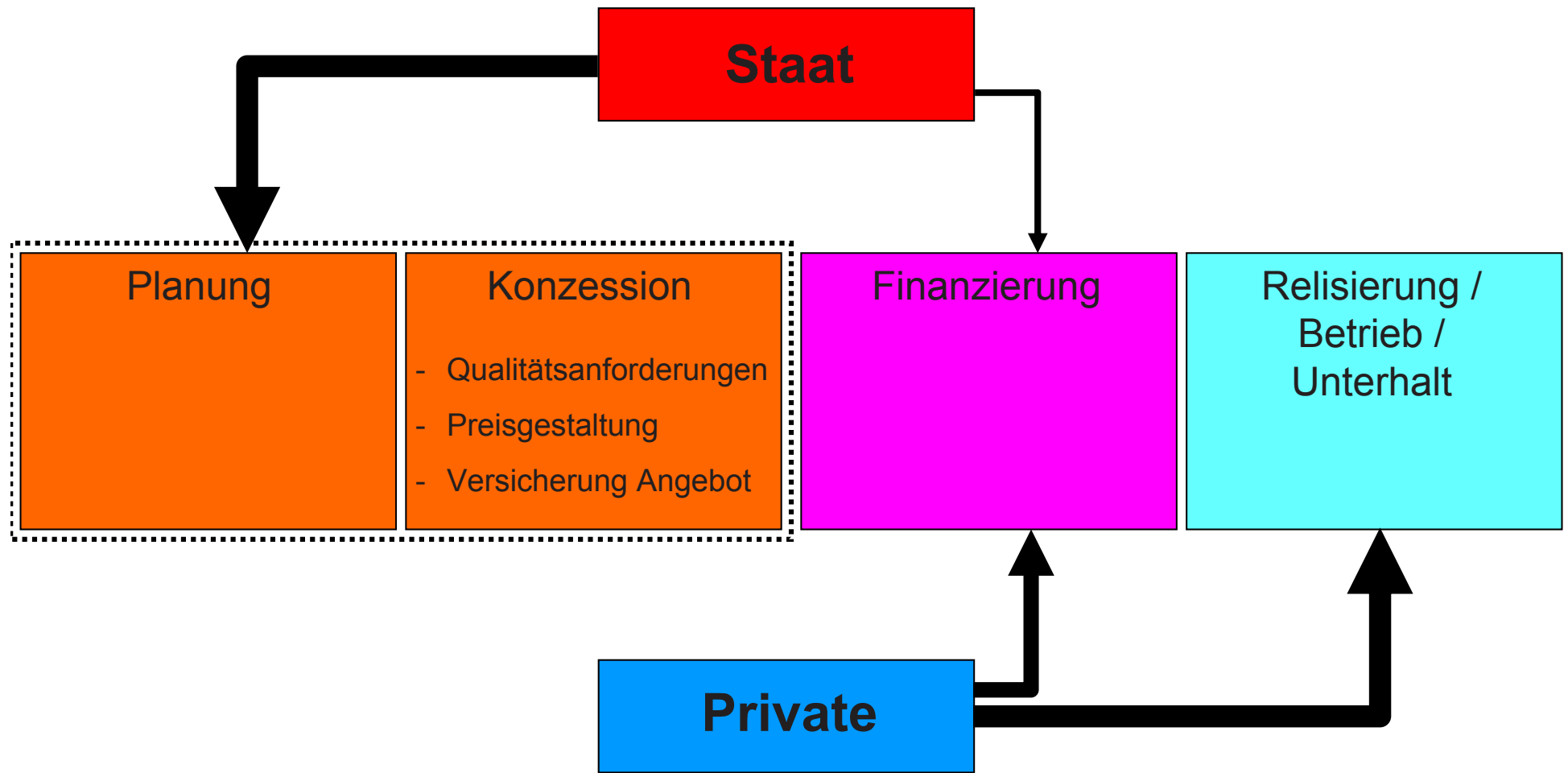


Kantone / Gemeinden



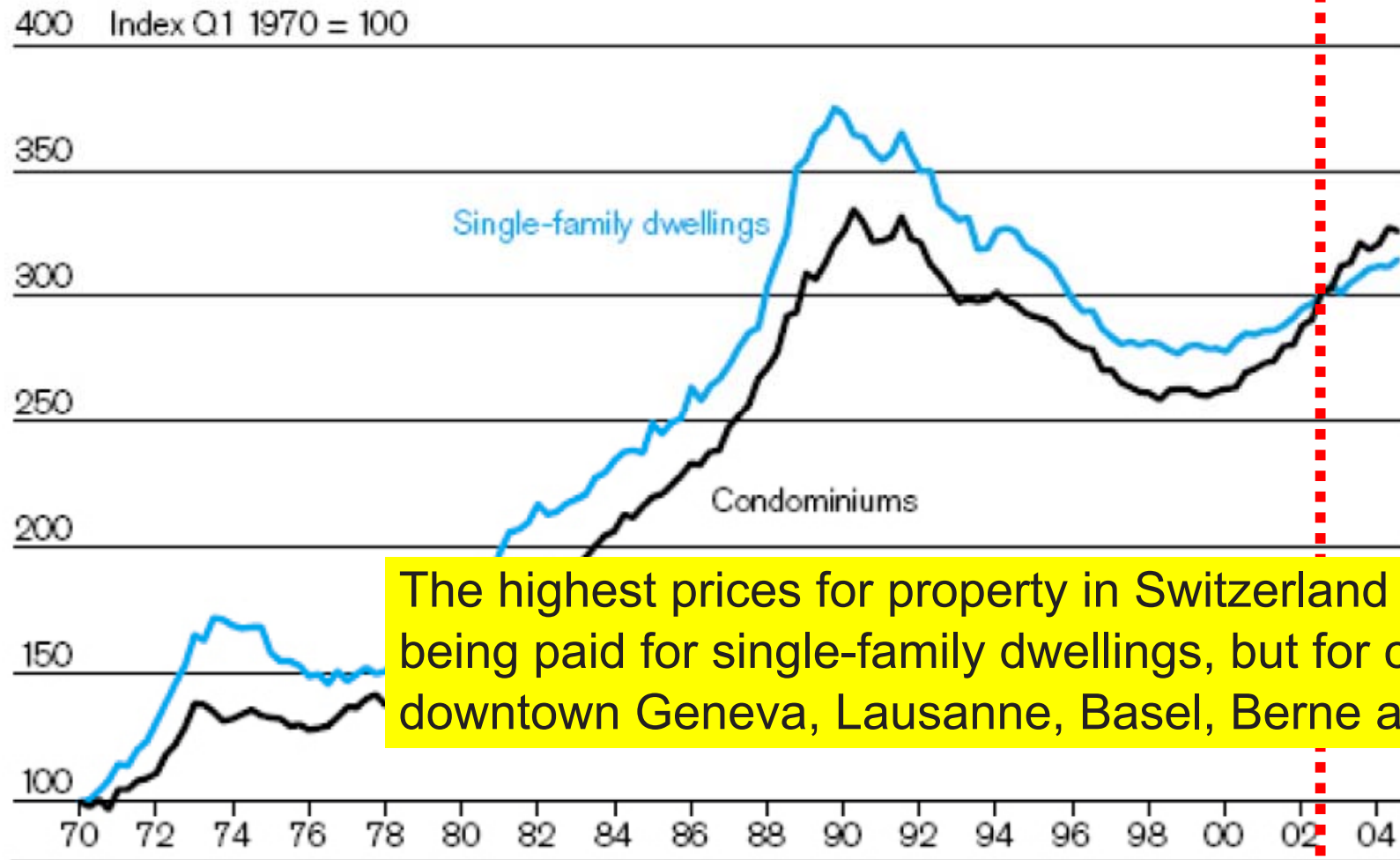
e.g. reducing investments of the Swiss Federation, the Cantons and the municipalities into the road network by 50%, in favour of public transport

SHIFTING MONEY FROM FUNDS FOR NATIONAL HIGHWAYS
INTO FUNDS FOR AGGLOMERATION NETWORKS



TAPPING THE ADDED VALUE OF INVESTMENTS TO ALLOW FOR A SHIFT IN RESPONSIBILITIES IN CONJUNCTION WITH NEW TYPES OF CONCESSIONS

Chart 17: Asking price index 1970–2004



The highest prices for property in Switzerland are no longer being paid for single-family dwellings, but for condominiums in downtown Geneva, Lausanne, Basel, Berne and Zurich.

Source: Schweizerische Nationalbank (SNB), Credit Suisse Economic Research

INVESTORS HAVE STARTED TO REALISE THE ADDED VALUE
OF THE ACCESSIBILITY IN DENSELY BUILT AREAS

An aerial photograph of a futuristic city grid. The city is laid out in a precise, rectangular pattern with narrow streets and small, uniform buildings. The buildings are dark in color, and the streets are light. There are patches of greenery interspersed within the grid. The overall impression is of a highly organized, planned urban environment.

Masdar, UAE (Foster and Partners):

- Zero Carbon city
- 200 inhabitants / ha
- carfree - high-tec mobility
- traditional construction styles (city and buildings)

THE CHALLENGE IS NOT THE CREATION OF NEW CARBON-FREE CITIES...



... BUT THE TRANSFORMATION AND UPGRADE OF OUR BUILT ENVIRONMENT!

the mobility we offer: a question of ...

... network logic for the city of the future

... the right accessibility for the right piece of city

... impulsion for the development of strategic areas

... differentiated approaches to public space

... image

... the future of mobility