





Barcelona Metropolitan Area: Planning Metropolitan Avenues

Metropolitan Land use



AMB Density

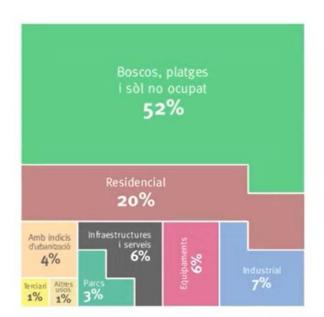
5.105hab/Km2

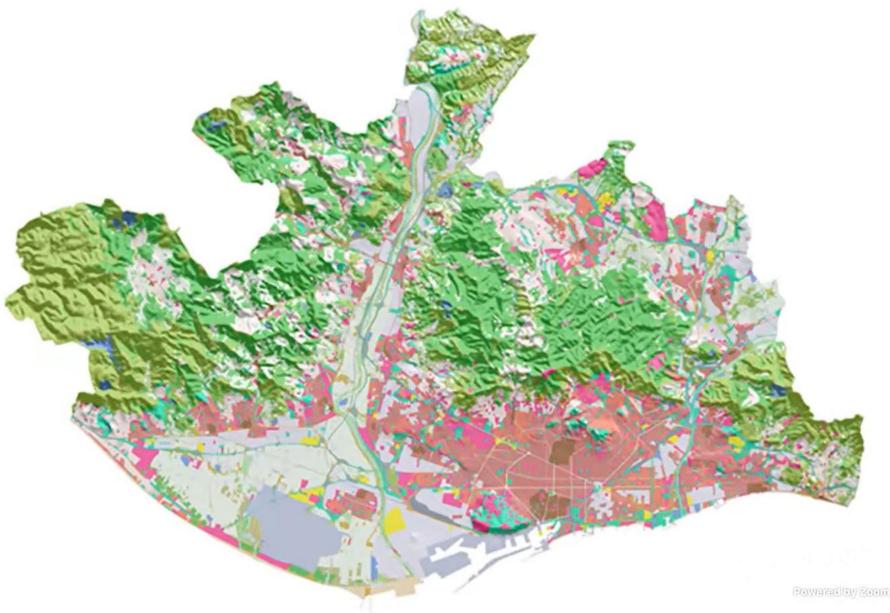
Barcelona city Density

15.992hab/Km2

Porto city Density

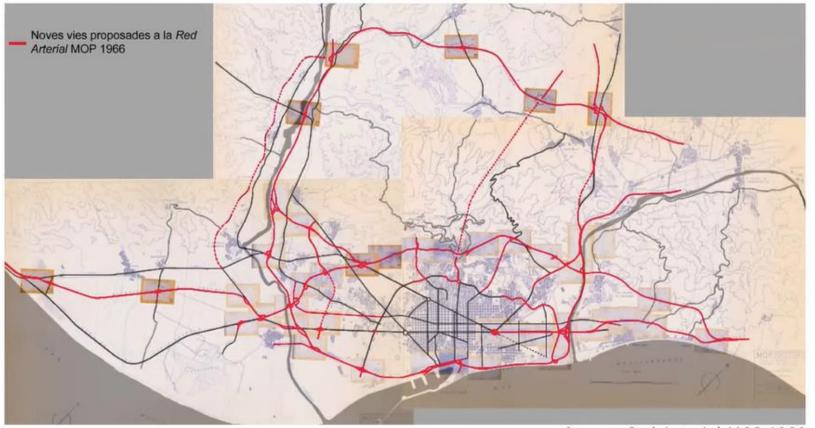
5,596hab/Km2







Context







Source: Red Arterial MOP 1966

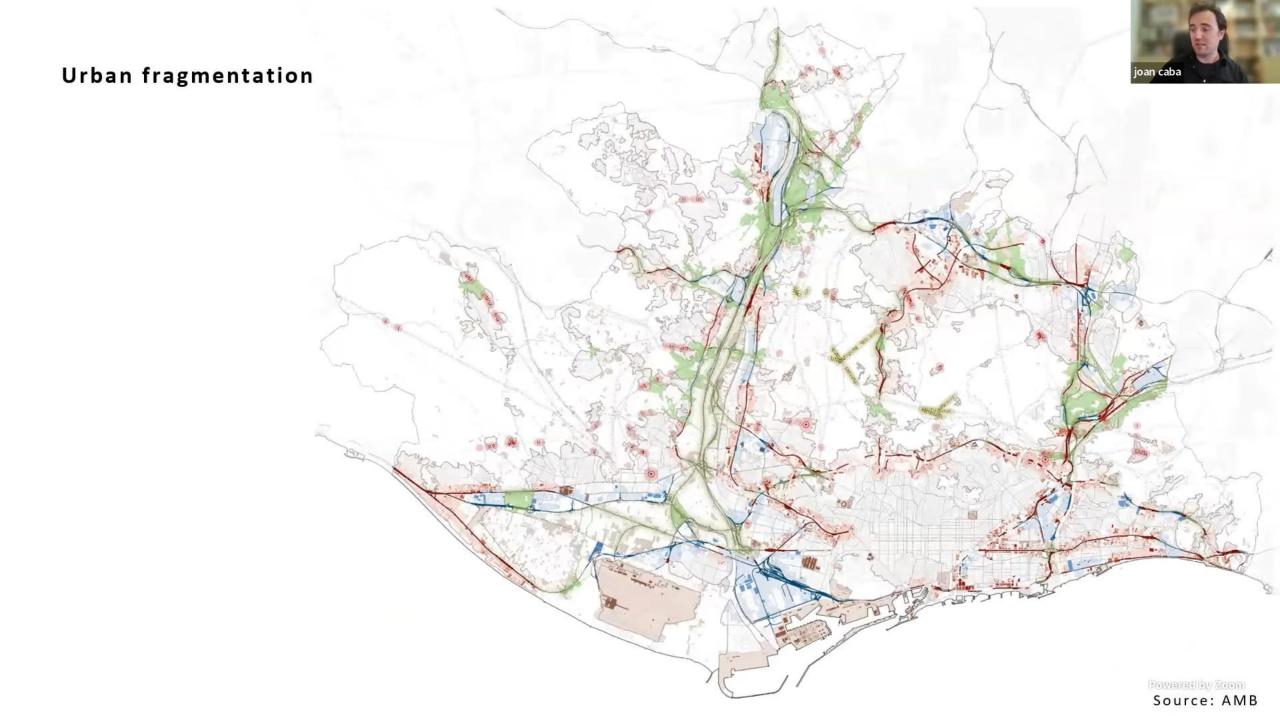
SOLVED GENERAL STATES

joan caba

Image today!

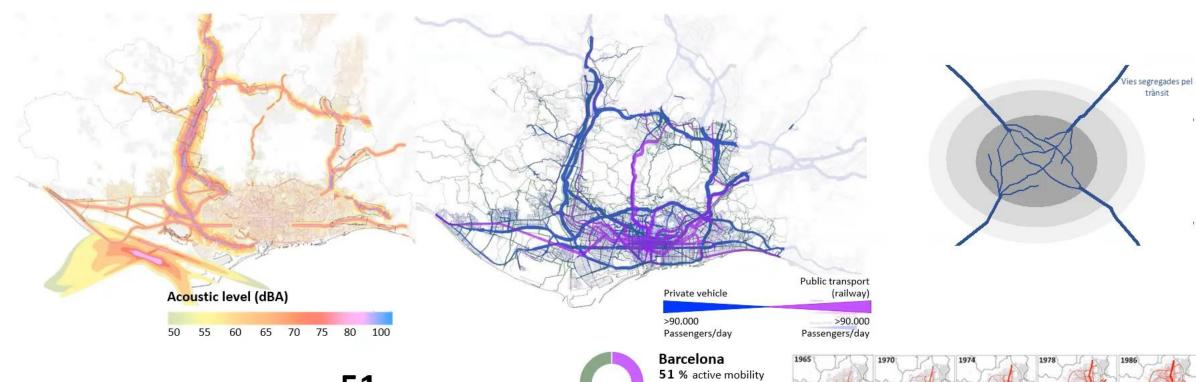






Other Externalities





21 % [~650.000 pers.] Population with acoustic levels over 70 dBA

58%

Population with night acoustic levels over 55 dBA

51% • Movements in the metropolitan area in active mobility (walking - cycling)

24%

Movements in public transport

25%

Movements in private transport

29 % public transport

20 % private transport

First ring

51 % active mobility

20 % public transport

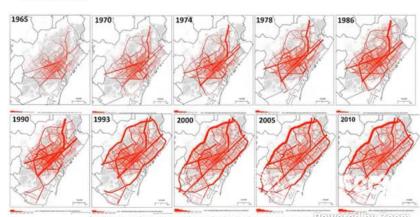
29 % private transport

Second ring

45 % active mobility

10 % public transport

45 % private transport



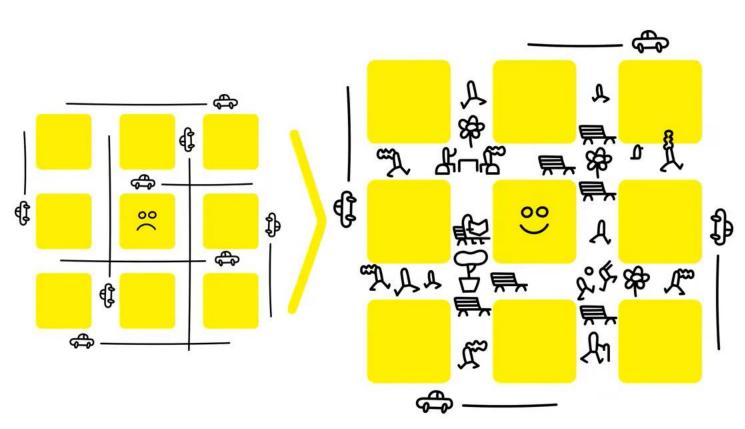
Infrastructure and mobility: more supply, more demand





Transformation of urban centres

Superbloks

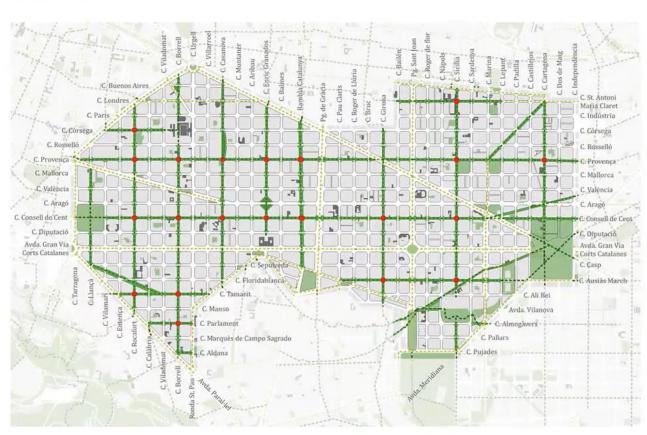






Transformation of urban centres

Green axis







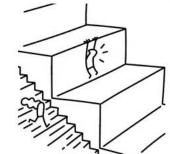
Source: ICC

At metropolitan scale?

XX century: automobile expansion, roads, highways, junctions, urban sprawl...







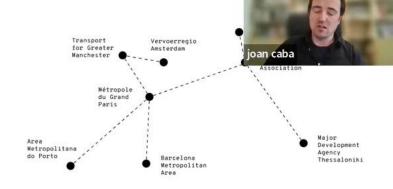
How can we achieve A HUMAN SCALE METROPOLIS FOR ALL?

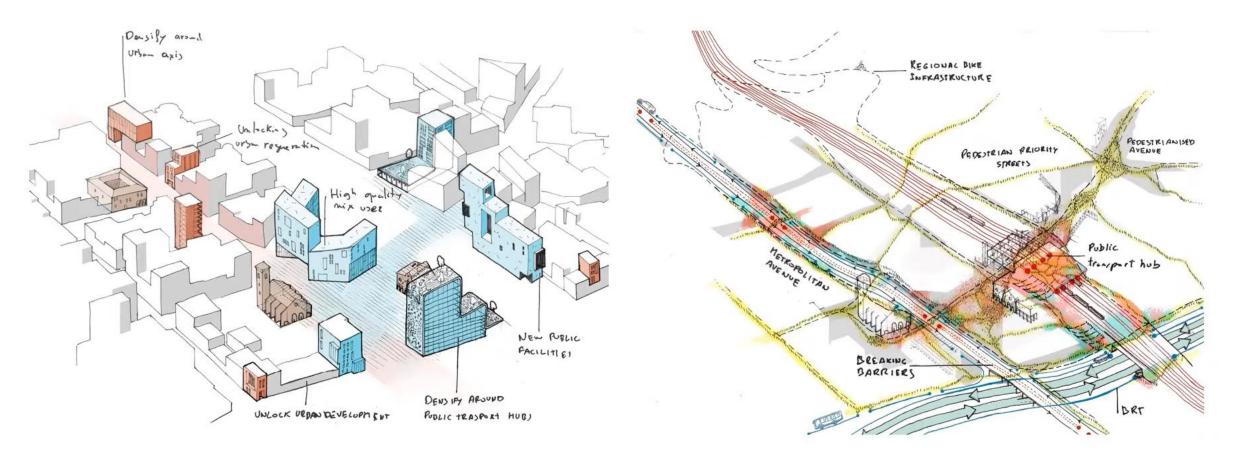
Source: RiConnect final document, illustration by i Bravo

Learning

Exchange International projects

URBACT RiConnect — 8 metropolises to Rethink, Transform and Integrate mobility infrastructure







Learning

Internal studies

Rethink how to transform and integrate the C-31 motorway to a metropolitan avenue



CDLL AND

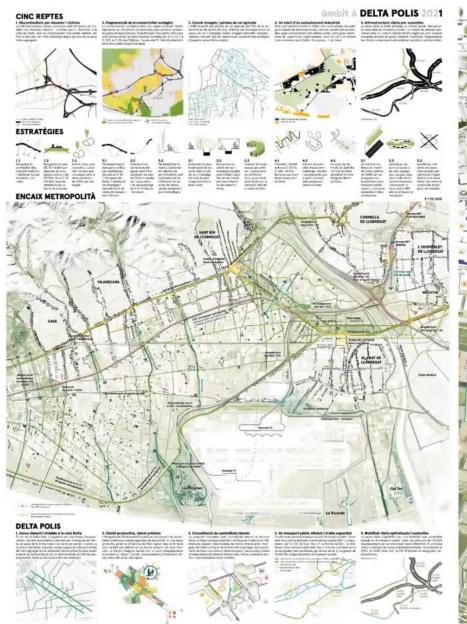
Source: CPU, AMB

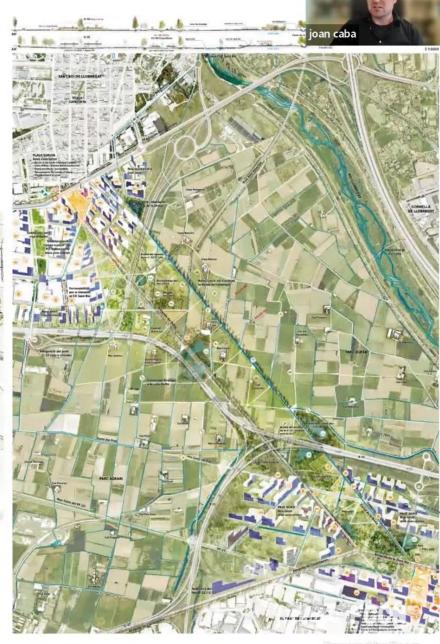
Learning

Competitions

Nusos i cruïlles: International competition to transform and integrate highway junctions







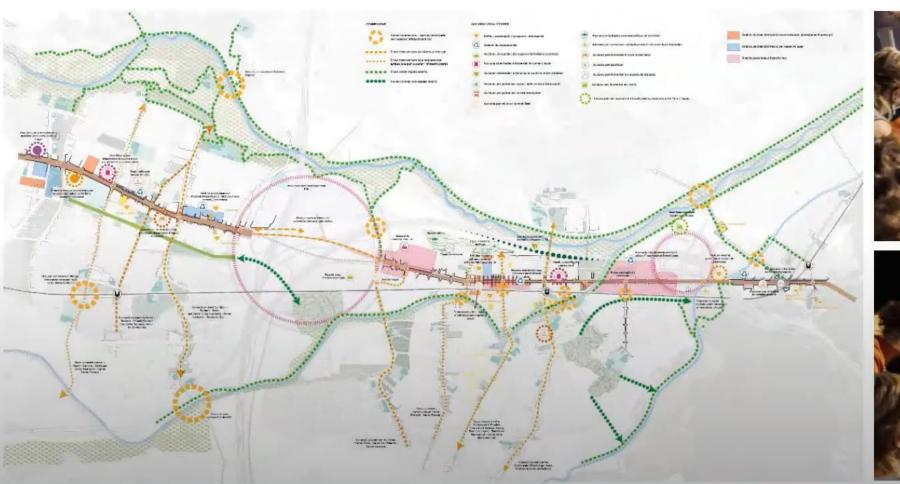
Source: https://urbanisme.amb.cat/divulgacio/concursos/nusos-cruilles



Testing

Processes

Avinguda del Vallès. A codesigned integrated action plan to transform a road to a metropolitan avenue







Testing

<u>Pilots</u>

C-245. A transformation of 12Km road to a metropolitan avenue that links 5 municipalities



Before

After





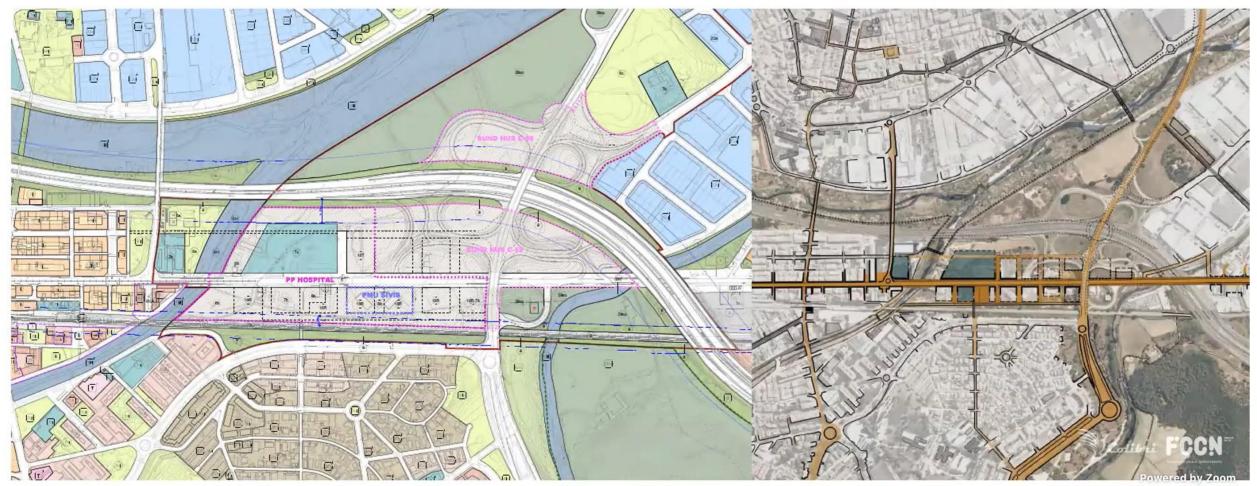
Source: Street View, AMB

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Planning

Local plans

Urban masterplan to transform and old road to a metropolitan avenue, connecting two municipalities and allocate a new neighbourhood and a regional hospital.



Source: CPU, AMB



Planning

Metropolitan urban master plan

Initially approved in March 2023.

Pla director urbanístic metropolità





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Planning

Metropolitan urban master plan

Basic Lines. Multiple scales

1

biophysical matrix and its ecosystem services

2

polycentric urban system
articulated by a
metropolitan network

3

balance, cohesion, liveability and competitiveness of urban settlements

4

Enhance urban metabolism and minimise environmental impacts



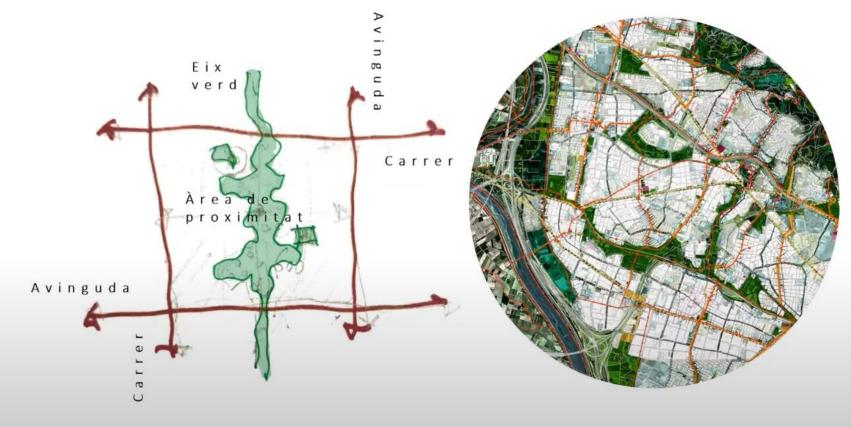






Streets and green axis. Proximity traces.





250 km

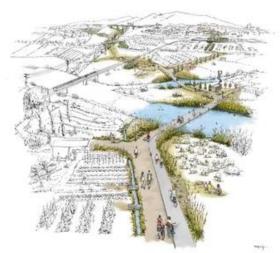


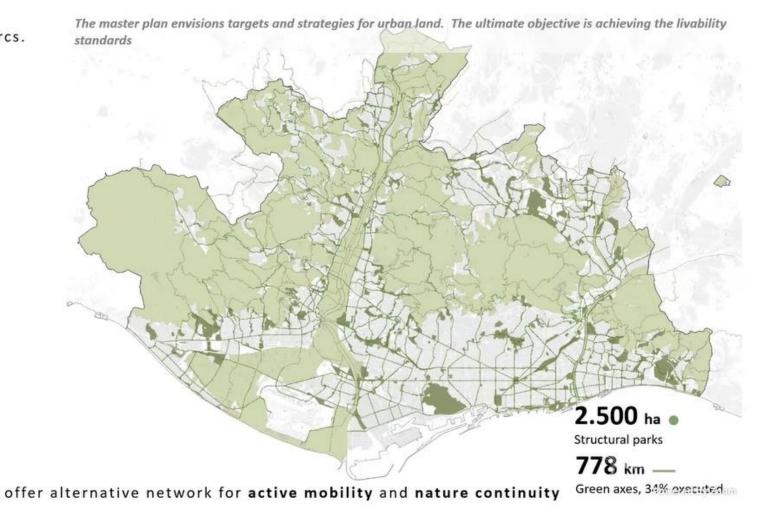
Planning

Metropolitan urban master plan

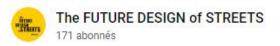
Green corredors, green axis and parcs.







Session 4 :: Big streets :: the Future Design of Streets













Planning

Metropolitan urban master plan How to transform OLD ROADS & HIGHWAYS into streets to be the main public transport, active mobility and city Metropolitan avenues. Common traces. life paths/ways Tramification: New construction 13 % 10 metropolitan avenues Transformation 54 % 250 km Remodelation 33 % Urban structure for sustenible mobility linking centers and municipalities

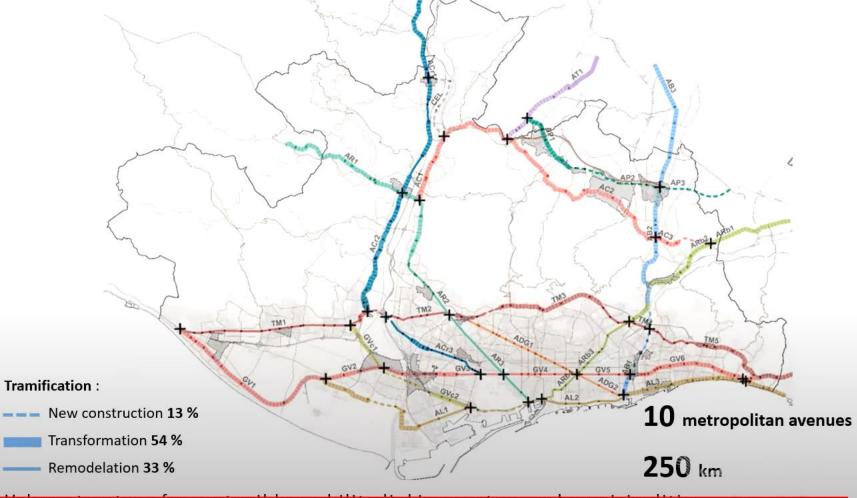
Session 4:: Big streets:: the Future Design of Streets

Metropolitan avenues. Common traces.





How to transform OLD ROADS & HIGHWAYS into streets to be the main public transport, active mobility and city life paths/ways



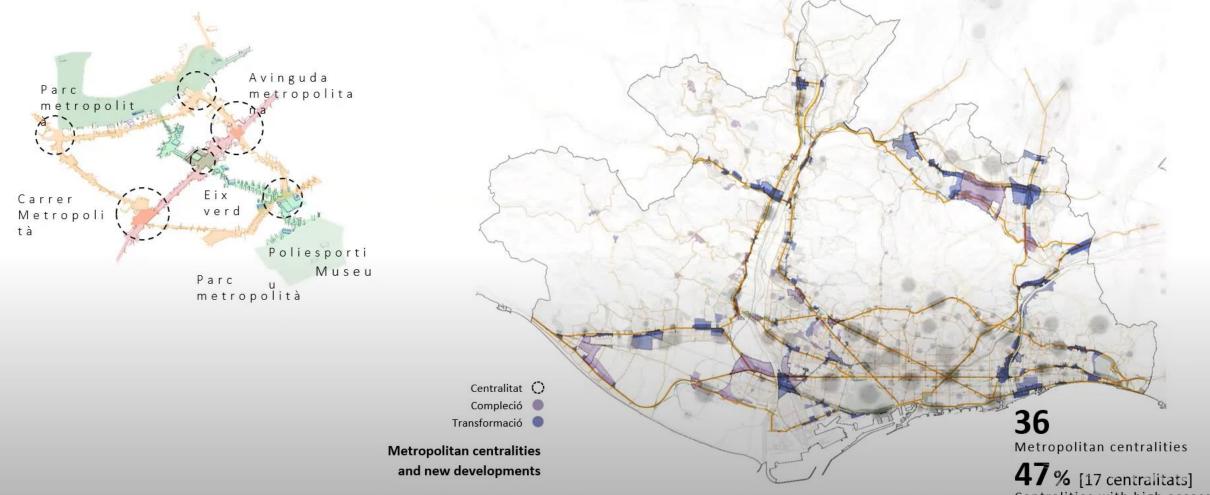
Urban structure for sustenible mobility linking centers and municipalities







Metropolitan centralities and new developments





TO A HUMAN-SCALE METROPOLIS FOR ALL







Helsinki City Boulevard Strategy

Niklas Aalto-Setälä

Strategic urban planner City of Helsinki

Future Design of Streets – 2023, presented from Helsinki April 19th 2023







Population of Helsinki

79,000

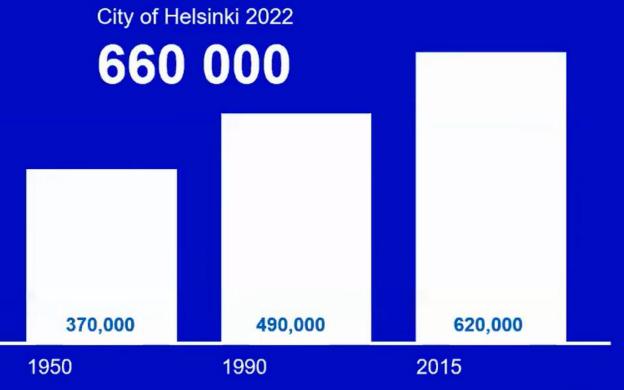
1900

Total of Helsinki region

1.5 million

Annual growth of Helsinki Region

+ 15 000-20 000 / year

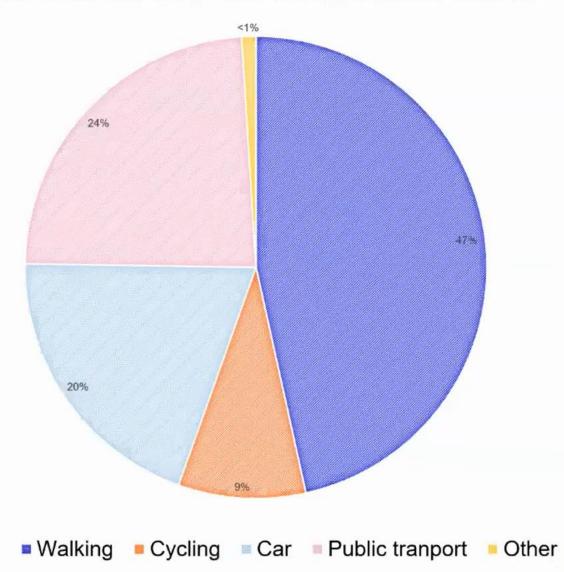








MODAL SPLIT IN HELSINKI 2022









Multi level decision making



City Strategy 2021-2025



Carbon neutrality program



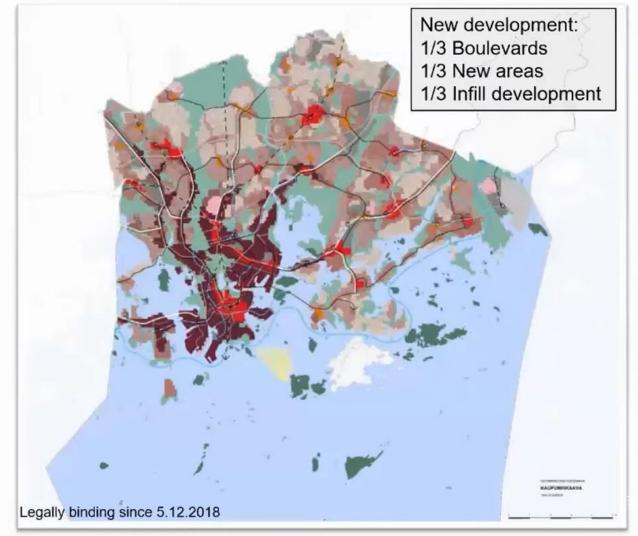
Master plan 2016





Master plan 2016 - "The Urban Plan"

- Expansion of the inner city
- Creating a Public Transport Network City
- Infill development of important nodes
- Improving the green network city
- 5. Carbon neutrality





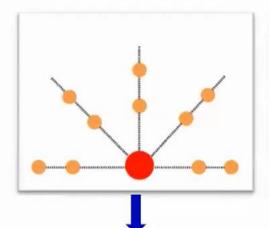


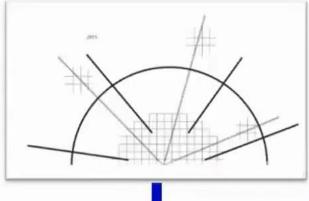


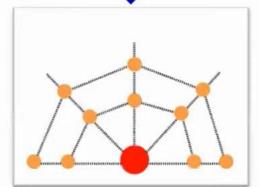
Transforming the urban structure

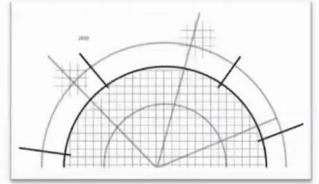
Public transportation

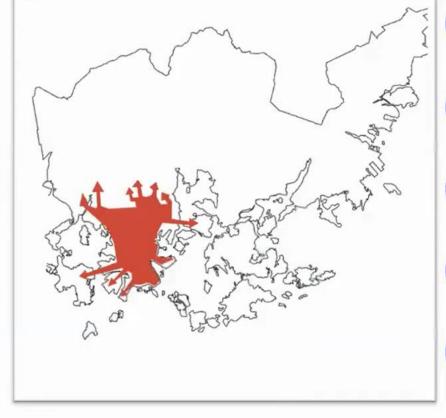
Land use









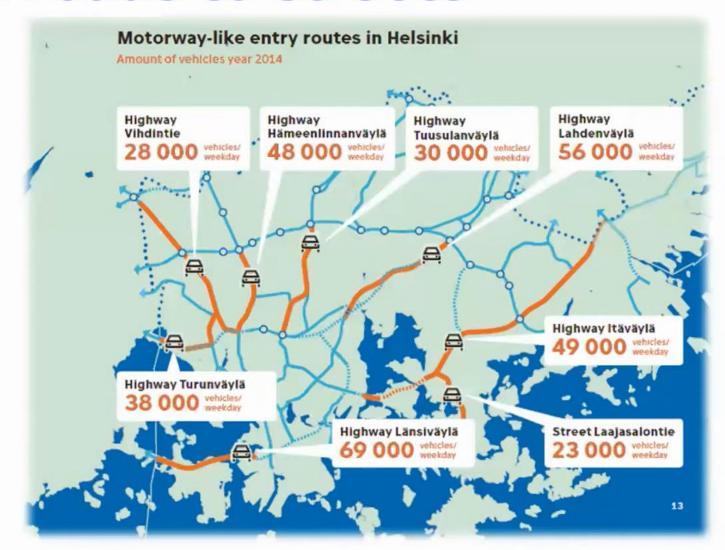








From roads to streets











Helsin





Cotibri FCCN



BULEVARDI / 2+2 / 41 m / VE1



City Boulevards on a regional scale

Helsinki

Map: Helsingin kaupunki Kmo, land use plan drafts: Kymp Yle







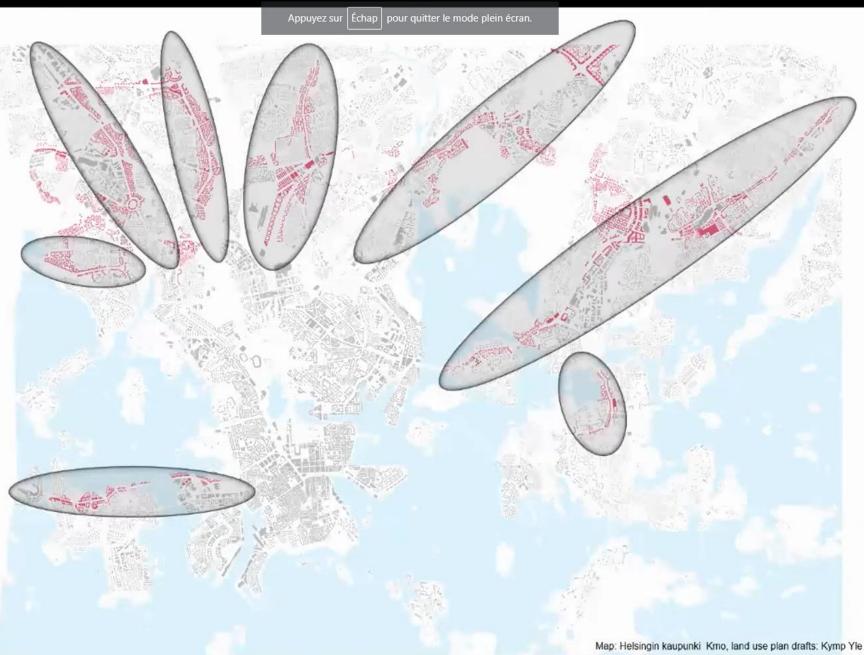






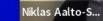


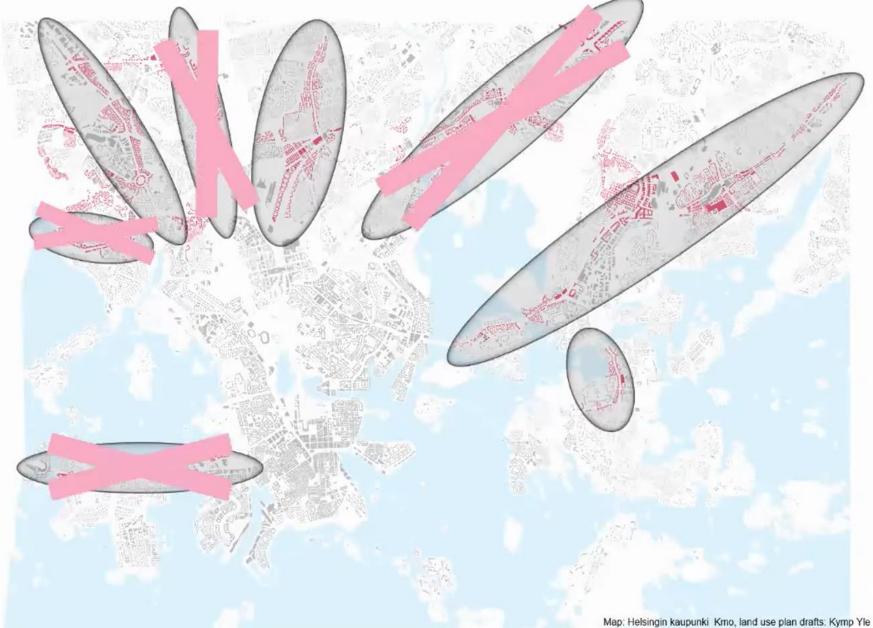






Colibri FCCN™



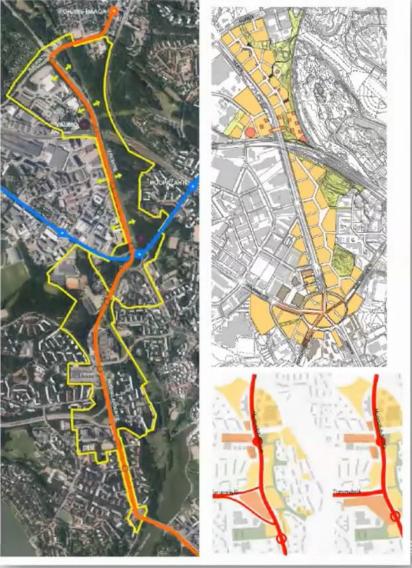


Helsinki

Niklas Aalto-S...

Western Boulevard City



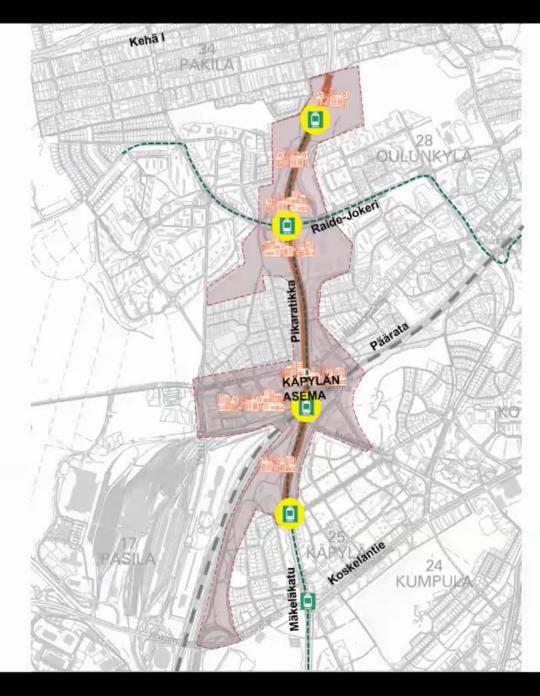


Mäkelänkatu Boulevard city



Kuva: HSL/IDIS Design Oy.











Laajasalontie











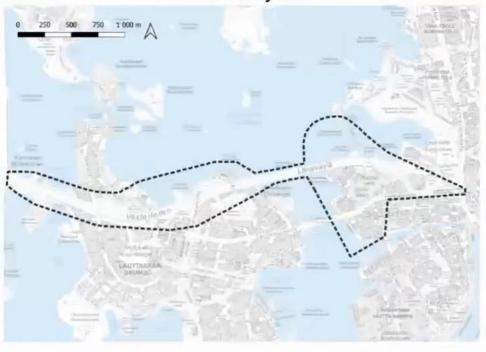


Lokal master plans

Viikinranta – Lahdenväylä



Länsiväylä









Niklas Aalto-S...



Map: Helsingin kaupunki Kmo, land use plan drafts: Kymp Yle

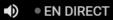


Colibri FCCN









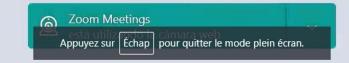
Helsinki



Thank you! Kiitos!

Helsinki







Urban Visions of City Street

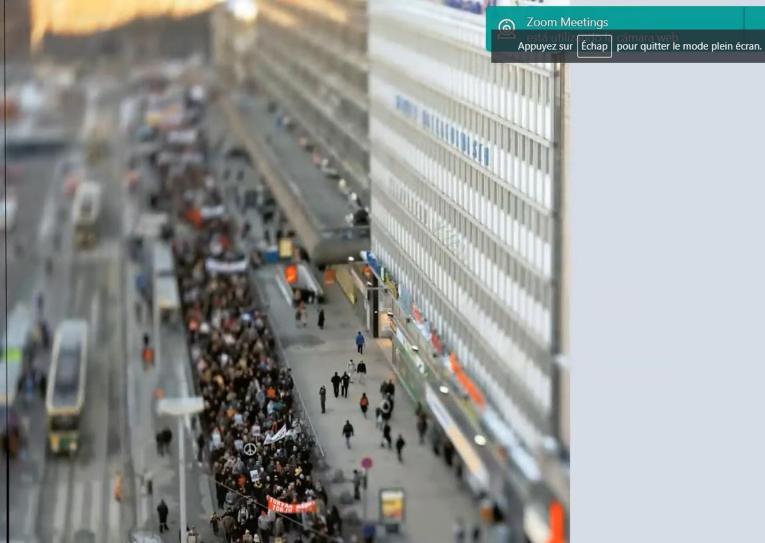
Juan L. Rivas Navarro – <u>juanluisrivas@ugr.es</u>

RB Arquitecturas Urbanas

Assoc. Prof. Urban & Regional Planning Departament Escuela Técnica Superior de Arquitectura etsag Univeristy of Granada (Spain) UGR







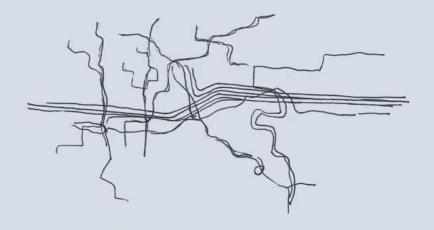
Urban Universe of City



Urban Times & Identity of City Street

Urban Roles of City Street

Urban Form and Architecture of City Street





Urban Universe of City Street





















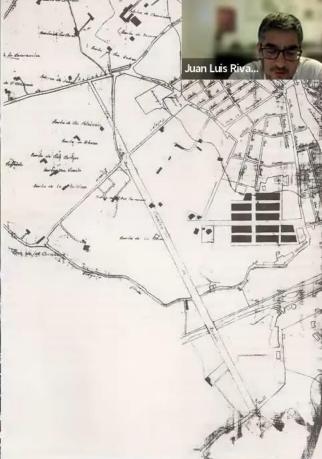




Urban Universe of a street in Malaga Urban Universe of City Street of Málaga Local framework (Andalucía Avenue) Immediate urban environment + Public spaces attached, courtyards and relevant sidewalks

EN DIRECT

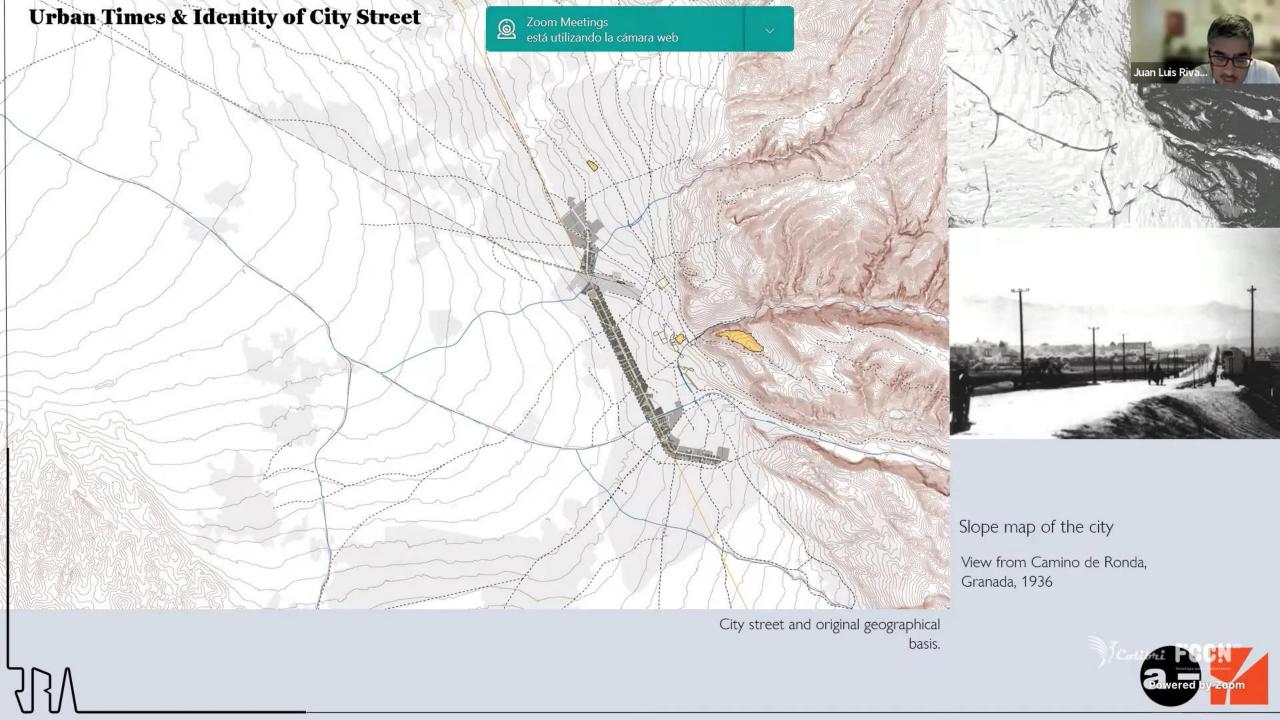




Layout of the Camino de Ronda. Plan of Granada, 1935.

Aerial view from the west to the city of Granada, 1956





Urban Roles of City Street



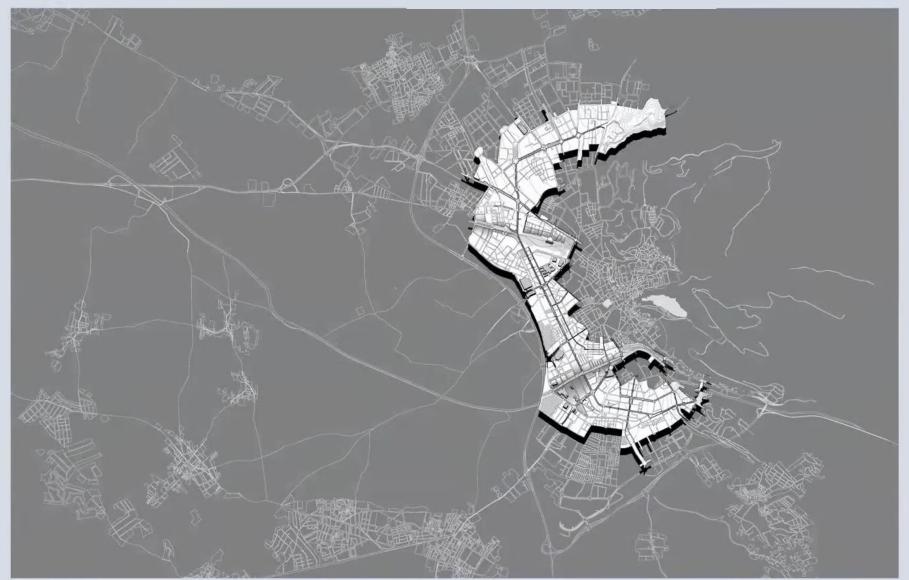






Urban Roles of City Street





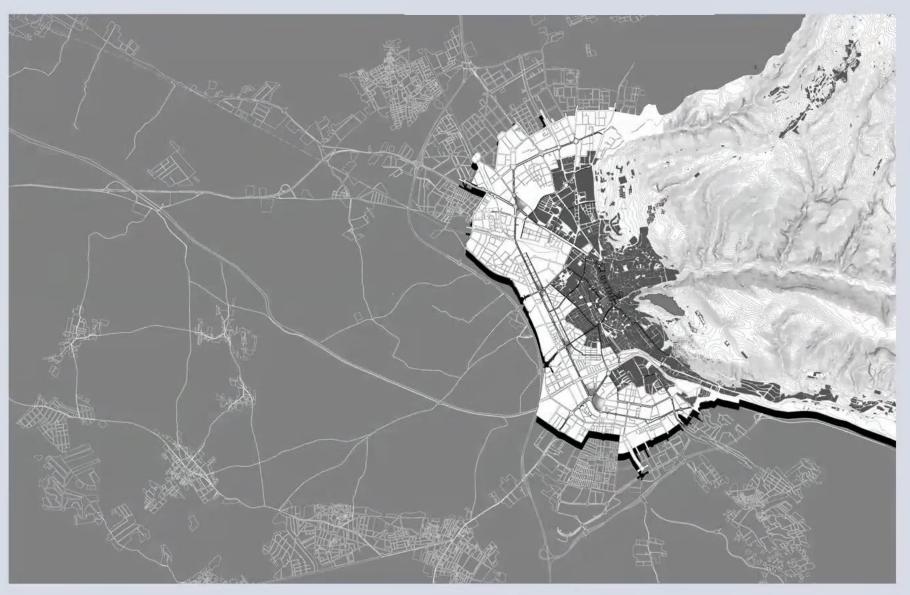
Peripheral scenario





Urban Roles of City Street



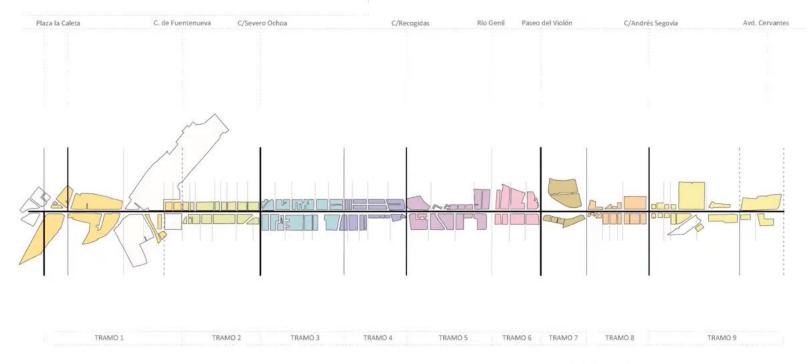


Central or growth scenario





Urban Form and Architecture of City Street



Urban form
An interior space as an opportunity



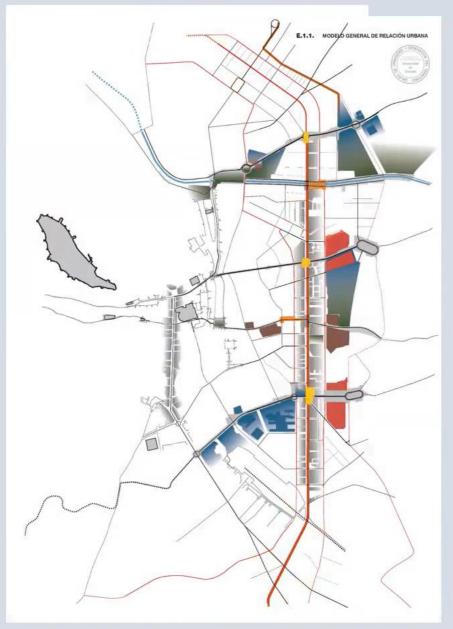












To conclude...

...not only a space for potential changes ...a key part of its structure, its meaning, its history

Streets are multidimensionalclosely related to the urban fabric

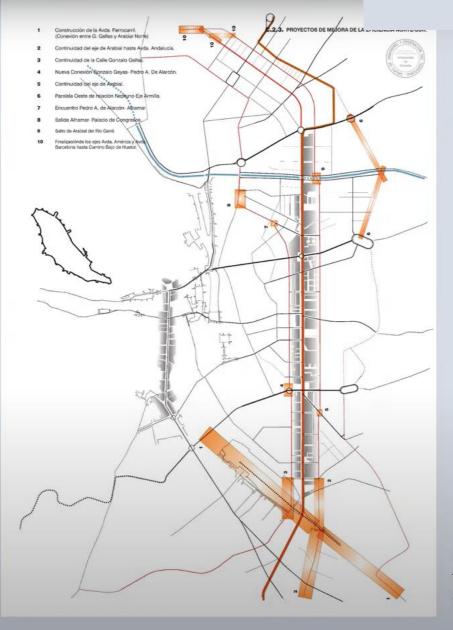
Report on the Granada light rail. The urban opportunities of the N-S metropolitan line on the burying of the central section. Laboratorio de Urbanismo, 2010. UGR.





Session 4:: Big streets:: the Future Design of Streets





...not only a space for potential changes ...a key part of its structure, its meaning, its history

Streets are multidimensionalclosely related to the urban fabric

...overlapping perspectives architecture of relationships, identity & landscape

Report on the Granada light rail. The urban opportunities of the N-S metropolitan line on the burying of the central section. Laboratorio de Urbanismo, 2010. UGR.











...not only a space for potential changes ...a key part of its structure, its meaning, its history

Streets are multidimensionalclosely related to the urban fabric

...overlapping perspectives architecture of relationships, identity & landscape

The Urban Project of the city street cannot be isolated nor moved away from this deep understanding of its urban form

Report on the Granada light rail. The urban opportunities of the N-S metropolitan line on the burying of the central section. Laboratorio de Urbanismo, 2010. UGR.



