Mobility for Valencia city centre
A case study

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València is a Mediterranean coastal city surrounded by orchards

Centre of a metropolitan area with about 1.8 million people
Tosca’s map
València, 1704

Historical city centre
In Spain, a lot of municipalities were developed their Sustainable Mobility Urban Plan (Vitoria, Barcelona, ...)

València City has also its mobility plan but this plan did not apply the theory of superblocks.
• If superblock is too large, there is a risk that visitor numbers will decrease and activity will decrease.

• And finally public spaces can become desert spaces without people.

• This paper shows a Final Master work about a proposal of superblock in València city centre.
OBJECTIVES: A SUPERBLOCK FOR VALENCIA CITY CENTRE

• To identify a district as a possible superblock
• To identify the zones in district that produce or attract traffic.
• To propose and evaluate possible alternatives for traffic management more sustainables that minimizes the use of private car vehicles.
• To generate new urban landscapes in public spaces.
METHODOLOGY

• Delimitation of the study area, according to the theory of superbloks.
• Description of mobility characteristics in the Valencia city center based in the analysis carried out in its Sustainable Urban Mobility Plan of Valencia.
• Identification of zones that generate or attract trips. Particularly residential uses, office buildings, commercial zones, parking, hotels, entertainment, health facilities, green zones or similar and public facilities. In Spain, the cadastre has a complete information of uses building to building for all buildings.
• Alternative study of transport networks for different modes from the supply point of view to allows activities access.
• Public spaces design.
Delimitation of the study area
### Basic characteristics of mobility in Valencia City

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total trips</td>
<td>1,575,973</td>
</tr>
<tr>
<td>Not-motorized trips (pedestrian and bicycle)</td>
<td>834,289</td>
</tr>
<tr>
<td>Motorized trips</td>
<td>741,684</td>
</tr>
<tr>
<td>Average mobility by person (trips by person)</td>
<td>1,98</td>
</tr>
<tr>
<td>Average mobility by person, not-motorized (trips by person)</td>
<td>1,04</td>
</tr>
<tr>
<td>Average mobility by person, motorized (trips by person)</td>
<td>0,94</td>
</tr>
</tbody>
</table>
Walking
Private bicycle
Public bicycle
Public bus
Tram–Underground
Car driver
Car passenger
Motorbike
Uses that generate or attract trips in Sant Francesc district

<table>
<thead>
<tr>
<th>Uses</th>
<th>Ceiling m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>416,011</td>
</tr>
<tr>
<td>Offices</td>
<td>176,042</td>
</tr>
<tr>
<td>Commercial</td>
<td>292,717</td>
</tr>
<tr>
<td>Parking</td>
<td>135,159</td>
</tr>
<tr>
<td>Hotels</td>
<td>54,258</td>
</tr>
<tr>
<td>Entertainment</td>
<td>28,211</td>
</tr>
<tr>
<td>Health facilities</td>
<td>4,362</td>
</tr>
<tr>
<td>Green zones or similar</td>
<td>7,693</td>
</tr>
<tr>
<td>Public facilities</td>
<td>12,273</td>
</tr>
</tbody>
</table>
Commercial uses map
Parking map
Activity concentration map
ALTERNATIVES:
SEQUENTIAL ANALYSIS

ITINERARY NETWORKS:
- CAR
- PUBLIC BUS
- BICYCLE
- PEDESTRIAN
Car itinerary
Alternative 1
Car itinerary
Alternative 2
Car itinerary
Alternative 3
Bus itinerary
Alternative 3
Overlap all itineraries
Alternative 3
Final image of public spaces functions
CONCLUSIONS
• This study shows an example of application of theory of superblocks and traffic design based in traffic network offer to apply in city centre zone to calming traffic. The final objective is to promote non-motorized trips but maintaining the necessary basic services that must be performed by motor vehicles.
• The Valencia city centre is very big to consider all it as a superblock. In consequence the study area is Sant Francesc district, a zone with more adequate dimensions. The study proves that is possible to significantly increase pedestrian public spaces while maintaining basic services through motorized transportation.
• The action allows redesign the urban landscapes in city centre. Particularly the street sections to allow the different traffic network and zones of meeting points for people.
• The applied methodology has proven to be useful for the reorganization of traffic in urban areas with the aim of promoting non-motorized traffic and generating new urban public spaces or low carbon urban landscapes.
THANKS FOR YOUR ATTENTION