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HIGH-RISE PARKING FACILITIES: A SOLUTION FOR URBAN REGENERATION?

FORO INFRAESTRUCTURAS Y SERVICIOS

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1. APPROACH

SEVILLE

1. APPROACH

- High levels of potential demand on the part of residents and "renters". Likewise, the same is true for park-and-ride services or integrated parking facilities.

- With the exception of the stabilisation seen during this period of economic downturn, problems continue to grow as a result of two main factors:

  - Growing motorisation
  - Importance of the recovery of urban space.

- The crux of the issue is, therefore, **how to juggle potential demand with realistic and viable bids.**

- One could contemplate the possibility of constructing **high-rise parking facilities.**

Parking in the Autostadt of Wolfsburgo

2. ANALYSIS OF THE GENERAL FRAMEWORK FOR PARKING FACILITIES IN SPAIN

SEVILLE

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- In the **case of residents,** the main problem is the price of concession or that they are subsidised or do not offset costs with regards to pass holders, and finally, do not create wealth/patrimony, an important aspect in Spain.

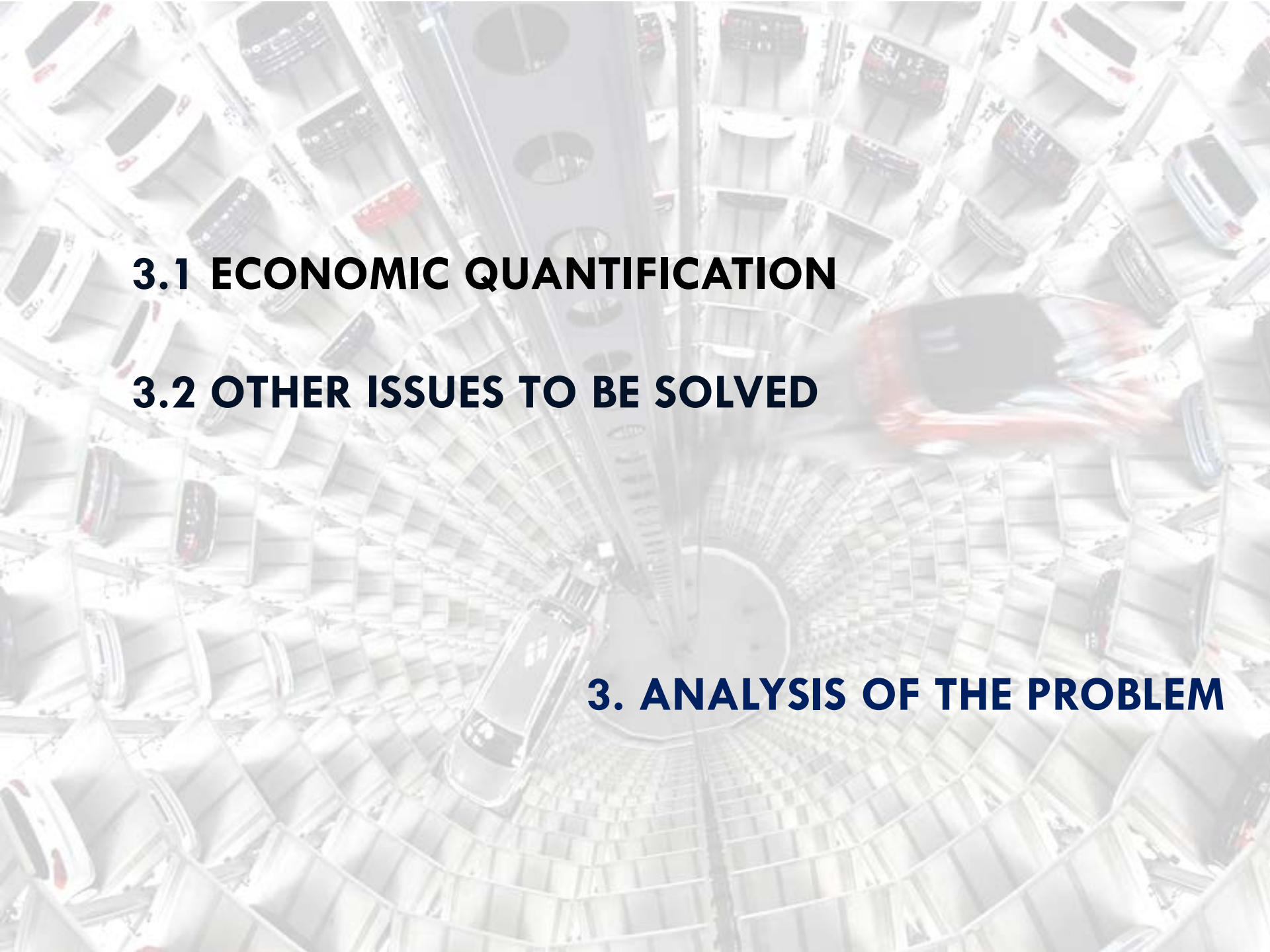
- And, if they **need subsidies** they do not cover construction costs and therefore, are:
  - either unviable or
  - require cross-financing methods or contributions from the Public Sector Administration.

- Unfeasible, in a word, and **even more so in these delicate times.**

2. ANALYSIS OF THE GENERAL FRAMEWORK FOR PARKING FACILITIES IN SPAIN

- In Spain, thousands of parking facilities are required to provide a total of two and a half millions spaces.
  - This represents less than 20% of the current vehicle fleet though would free up a large amount of urban lands for policies of sustainable mobility,
  - Allowing thus for the recuperation and regeneration of centres and urban areas.

Towers of Bertrand Goldberg in Marina City,
near Chicago.



3.1 ECONOMIC QUANTIFICATION

3.2 OTHER ISSUES TO BE SOLVED

3. ANALYSIS OF THE PROBLEM

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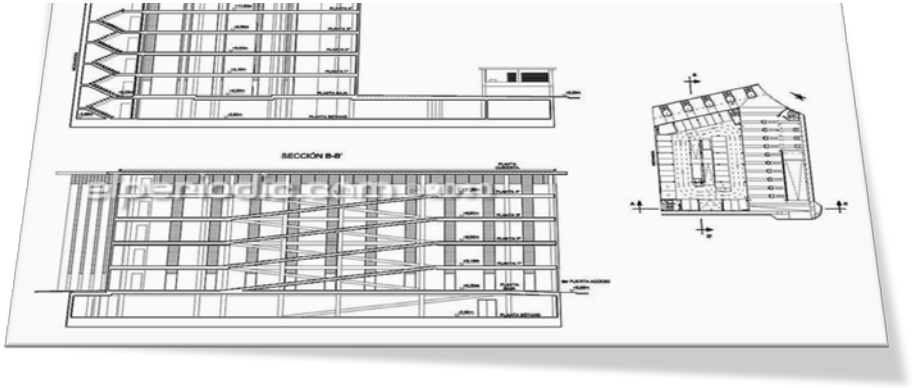
With this in mind, the possibility of constructing **high-rise parking facilities** could offer a serious consideration.

- Firstly, because at the present time, **residential promotions have been halted and cannot be financed**, this has led to a situation of real estate assets which are not generating income.

- Secondly, because their construction brings with them less problematic aspects than their underground counterpart, and so, **are cheaper**.



Parking in Burjassot

3. ANALYSIS OF THE PROBLEM

- This type of parking facility is commonplace in many countries.
  - Aside from the USA, closer to home in Germany many of this style of parking facility were built at the end of the last century.
  - In Spain (with the exception of some park and ride facilities linked to stations) the experiences in this field have been few.
  - We also have the so-called “robotic parking facilities” which have yet to find their niche in the market, except in unusual areas and circumstances.

3. ANALYSIS OF THE PROBLEM

Image of Marina City Parking Levels Detail
Chicago high-rise parking

- We must also take into account their weaknesses:
  - They are **not looked on kindly** from a town-planning perspective (mainly because in the past, the few experiences we had of these were vastly deficient from an aesthetic viewpoint),
  - They take into consideration **buildability** (which detracts from profitability)
  - If they are opened to all demand types, in popular areas they **can create extra traffic** issues (although this is also the case with underground parking facilities)

3. ANALYSIS OF THE PROBLEM
3.1 ECONOMIC QUANTIFICATION

Sales price per m^2 residential:	**3.000 m^2**
	1.500 €/ m^2 Corresponding to land costs
	1.000 €/ m^2 Construccion costs
	500 €/ m^2 Profit and miscellaneous
Sales price per m^2 high-rise parking facility:	
	1.500 €/ m^2 Corresponding to land costs
	500 €/ m^2 Construccion costs per space,
	400 €/ m^2 Profit and miscellaneous

Therefore, it can be seen that viability rests on selling, for the same direct profit margin at 2.400€/ m^2 meaning 25 € m^2/place implies 60.000 €/place, a price which would seem difficult to achieve.

3. ANALYSIS OF THE PROBLEM
3.1 ECONOMIC QUANTIFICATION

Bowling green high-rise **parking**

Trinity Square Car Park, Gateshead Get Carter Car Park

3. ANALYSIS OF THE PROBLEM
3.1 ECONOMIC QUANTIFICATION

- With 40,000€ per space for the 2,5million spaces to be built we would be talking about an investment of 100.000 MM€, which breaks down to, for a plan lasting ten years of 10.000 MM€ per year which would allow for the recovery of the investment levels in concessions seen in recent times.
- A more prudent scenario could generate in 5 years 250,000 new parking spaces at 40,000 €/per space which would imply an investment of 2.000 MM€ within a five year period.

Trinity Square Car Park,
Gateshead Get Carter Car Park

3. ANALYSIS OF THE PROBLEM
3.2 OTHER ISSUES TO BE SOLVED

- Basically, giving service usage generated by the building aside from that of residents in the area, and also, **not being taken into consideration in terms of buildability** as these are considered as public services services or public networks.

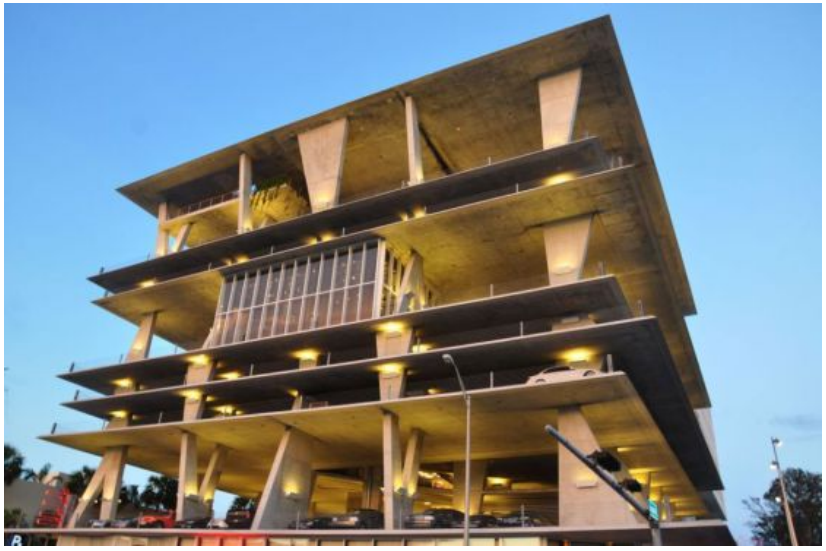
- From the interviews undertaken, we can also observe that there is a future viability for general parking facilities based on a **change in the business model**. This must not be based on selling time, but also rather on the selling of complementary services.

New Parking Deck

1111 Lincoln Road, Miami

Trinity Square, Gateshead

1111 Lincoln Rd



4. LINES OF ACTION AND FINAL RECOMMENDATIONS

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When this is proposed in a fully clear sense to the Public Administration, actions undertaken, up to that moment, are based on public actions. Amongst the most important we can quote:

- Plots belonging to the Public Sector Administration, local councils or regional governments, which are transferred for a specific purpose.
- Plots which from the beginning are intended for a specific purpose, for example, private installations, as part of executable units, and their ratio is weighted with the remainder of usages. Through this procedure the proprietor of the lands does not lose economic yield in comparison with owners of other units.
- Consideration of determined uses which have the aim of improving living standards for all citizens such as installations providing Services of Public and Social Value.

4. LINES OF ACTION AND FINAL RECOMMENDATIONS

Finally, it is worth pointing out the idea that a modification of the legal framework which **facilitates the sales** of underground parking spaces on public land could also generate greater viability for this type of project, and create important construction activities at the same time.

Car towers at the company's Autostadt

In the John Hancock Tower, the parking garage itself is disguised with black glass -- but the necessary ramp leading cars up to the upper floor entrance becomes a carnival-ride spiral.

Parking in Luarca with 220 plazas slots

c/ Tejón y Rodríguez (Málaga)

C/ de los Califas, near bus station in HUELVA (SPAIN)

Avenida de Italia S/N. 1ª Parking **Mercado del Carmen**

C/ Pablo Rada
HUELVA

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