“SO, WHY DON’T YOU BUILD IT?”

SOCIAL, POLITICAL AND ADMINISTRATIVE BARRIERS TO CYCLING INFRASTRUCTURE IN A MEDIUM-SIZED, LOW-CYCLING CITY

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introduction

Context and motivation

- Cycling reduces urban environmental impacts, improves safety & health (Arsenio et al., 2016; Brand et al., 2021).
- Most studies on cycling tend to focus on large cities (Goel et al., 2022).
- Small & medium cities: generally low-cycling (<1-2%) and car-dependent, even though they characterized by shorter distances, lower road traffic densities, lower public transport service levels (Handy et al., 2012; Mattioli et al., 2020).
- Critical: infrastructure development is still incipient.

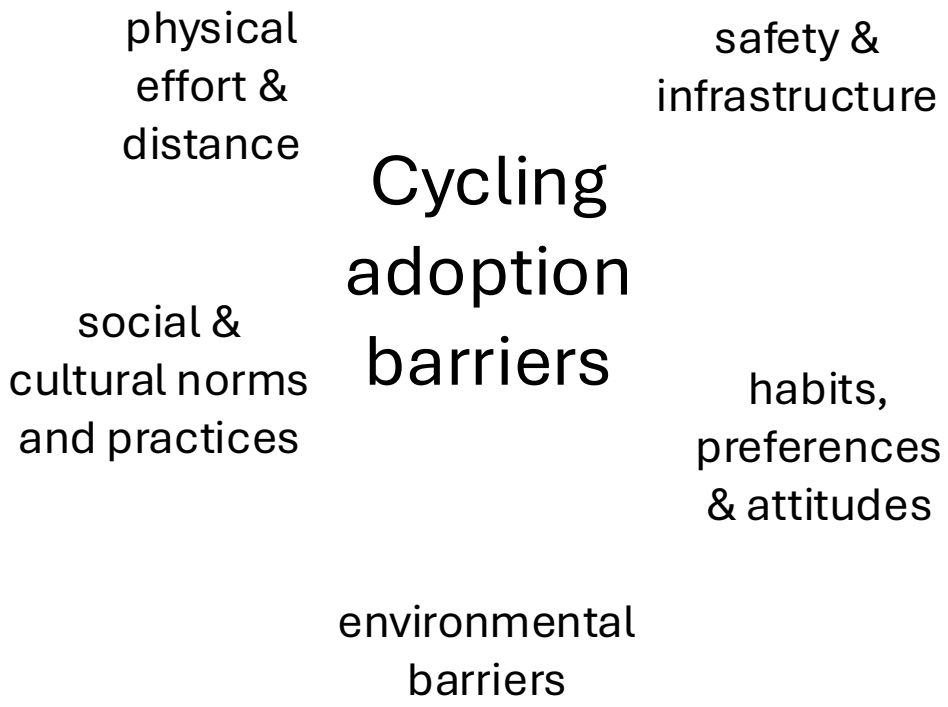
Guiding research questions

- What are the main barriers to cycling adoption in low-cycling cities?

- More specifically, what are the main barriers hindering the construction of safe and attractive infrastructure in such contexts?

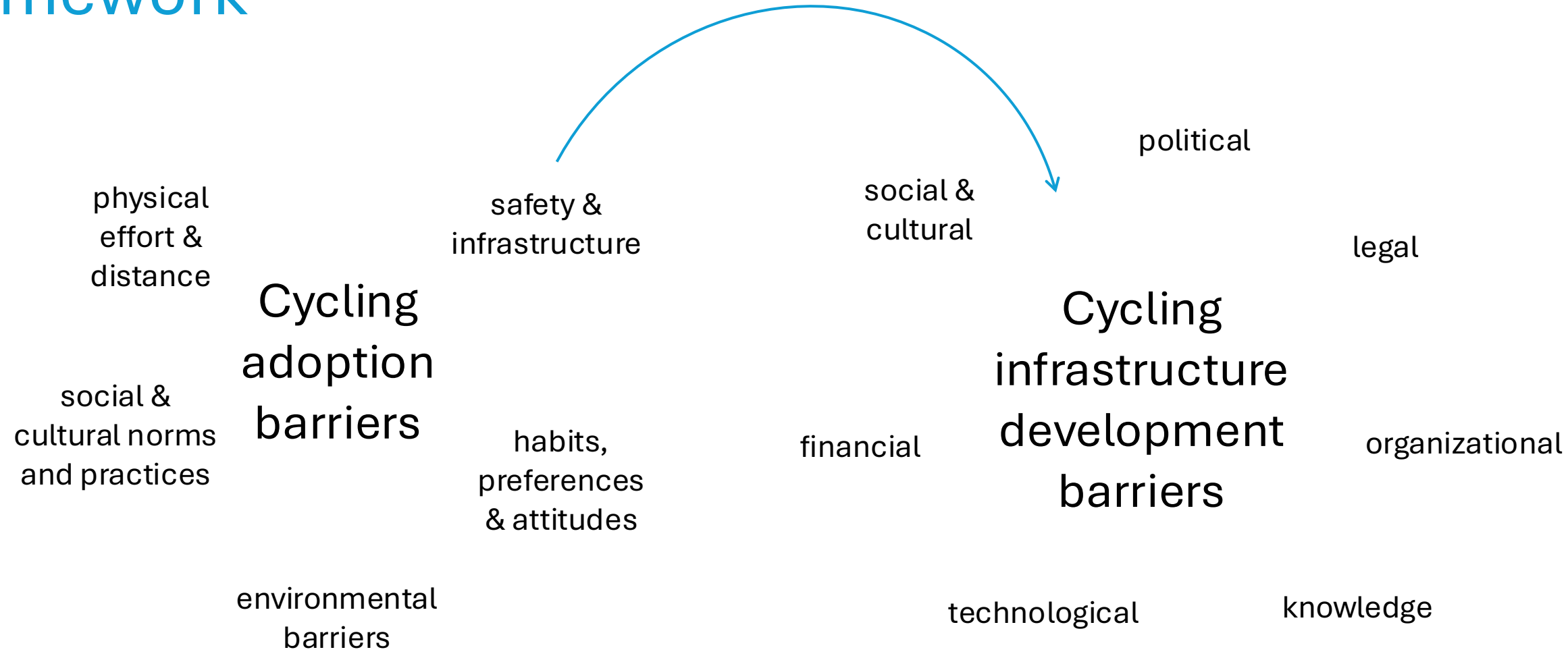


framework



Fraser & Lock (2010), Wuerzer & Mason (2015), Winters et al. (2011), Aldred & Jungnickel (2014), Parkin et al., (2007), Lizana et al. (2021), Félix et al., (2025)

framework



Fraser & Lock (2010), Wuerzer & Mason (2015), Winters et al. (2011), Aldred & Jungnickel (2014), Parkin et al., (2007), Lizana et al. (2021), Félix et al., (2025)

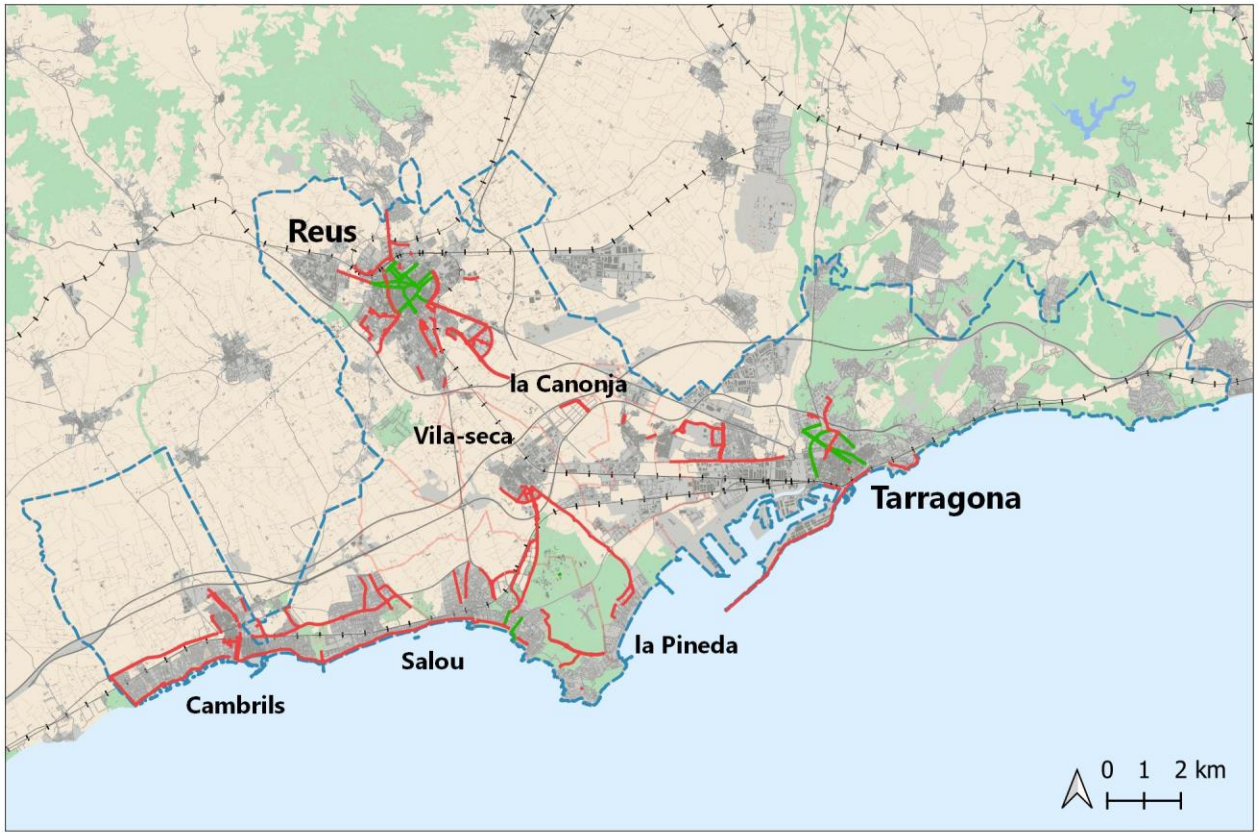
Bannister (2005), May et al. (2006), Vigar (2010), Akerman et al (2011), Bardal et al. (2020)

study area

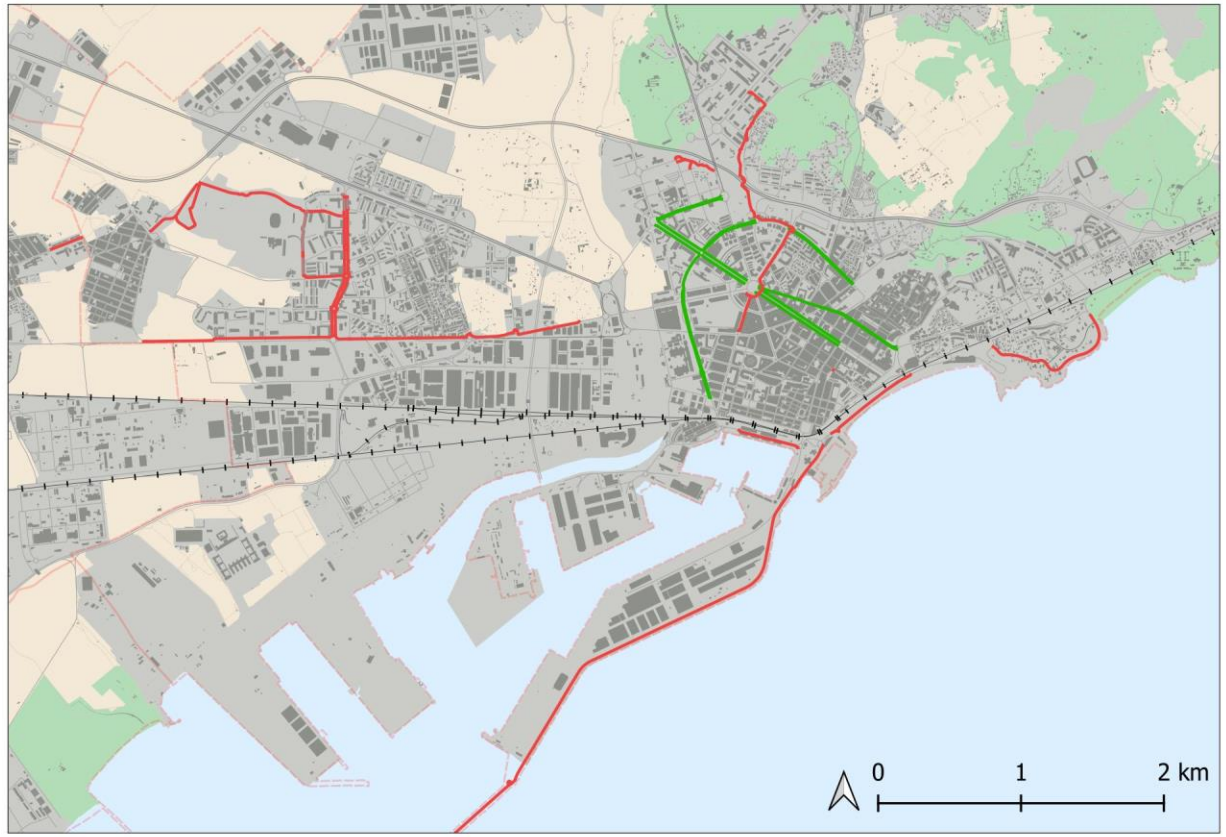
City of Tarragona ≈ 140,000 inh.
Urban area ≈ 300,000 inh.



Camp de Tarragona urban area



City of Tarragona



previous data

Survey among 1,038 **residents** on their perceptions of cycling & infrastructure (2022)

Camp de Tarragona urban area

Delclòs-Alió, X., & den Hoed, W. (2024). **Perceptions of potential cycling infrastructure in a low-cycling context: Evidence from a medium-sized urban area**. *International Journal of Sustainable Transportation*, *18*(12), 999-1011.



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Perceptions of potential cycling infrastructure in a low-cycling context: Evidence from a medium-sized urban area

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ABSTRACT

A key factor for the use of bicycles for transportation is the presence of safe and pleasant infrastructure. While research mostly focuses on large cities, cycling infrastructure and use are still incipient in many small and medium-sized cities. Because of their spatial context and very low and demographically uneven cycle use, it is key to understand how the potential of growing infrastructure is perceived among the general population, as well as how these perceptions differ based on personal characteristics. We focus on Camp de Tarragona (Catalonia, Spain), a polycentric urban area where bicycles are used for transportation for less than 1% of trips, and where local authorities have shown renewed interest in expanding and improving the current infrastructure to increase bicycle usage. We examine the perception of residents in the study area regarding various bicycle infrastructure scenarios through a visual preference analysis using photo evaluation. The representative survey was conducted with over 1,000 individuals in 2022, which demonstrates a widespread willingness to cycle as a means of transportation. However, this desire remains unmet due to inadequate infrastructure and an urban configuration that generally discourages cycling. The results show a need for recognizable, safe and segregated cycling infrastructure, though with differing perceptions between gender and age groups and between levels of urban density. The understanding of diverse sociodemographic nuances in the preferences of non-cyclists emerges as vital for promoting cycling as a feasible and socially inclusive transportation choice, highlighting the importance of tailored infrastructure to encourage cycling and enhance accessibility.

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KEYWORDS
Active mobility; cycling; perception; transport equity; visual preference survey

1. Introduction

Recent urban policies and academic research agree that increased cycling mobility offers a solution for urban environmental issues, safer traffic, and healthier lifestyles. However, the reality is that considerable segments of urban populations do not currently cycle because of individual or built environment-related barriers. Outside of select countries and cities, the modal share of cycling does not often reach more than 1–2%. Despite this situation, more and more cities are focusing on the creation and upgrading of cycling infrastructure to meet gradually growing demands. However, it is not always clear where this demand comes from: more cycling does not necessarily converge the uptake differences between demographic groups. For example, the characteristics of those cycling tend to be socially unequal in terms of gender (Aldred et al., 2016; Garrard et al., 2008), age (Cavill & Davis, 2021; Garrard et al., 2021), and ethnicity (Braun et al., 2021; Crossa et al., 2022). Typically, in places with a low use of cycling as form of everyday transport, between two-thirds and three-quarters of the cycling population consists of men (Goel et al., 2022).

While arguably, the *end goal* of mobility is the facilitation of people with access to all destinations, regardless the travel mode, there is ample scope to position cycling more centrally within transitions toward more sustainable travel and as part of more healthy and socially equitable mobility futures (Arsenio et al., 2016; Sagaris & Tiznado-Aitken, 2023). From an environmental point of view, in addition, it is especially important to attract current non-cyclists to cycling because of the significantly higher mobility-related emission levels they produce (Brand et al., 2021). Therefore, we develop the argument that cycling research would benefit from a stronger focus on non-cyclists, particularly in cities with low cycling use. We propose to do this along the concept of cycling equity and by focusing on the perceptions of the general population in a polycentric urban area of smaller cities.

In theory, smaller cities are fertile grounds for cycling as a mode of transportation. They are variously characterized by shorter distances, lower road traffic densities, lower public transport service levels, and lower municipal budgets (Handy et al., 2012). These features would point to the suitability of a human-scale, granular, and relatively cheap

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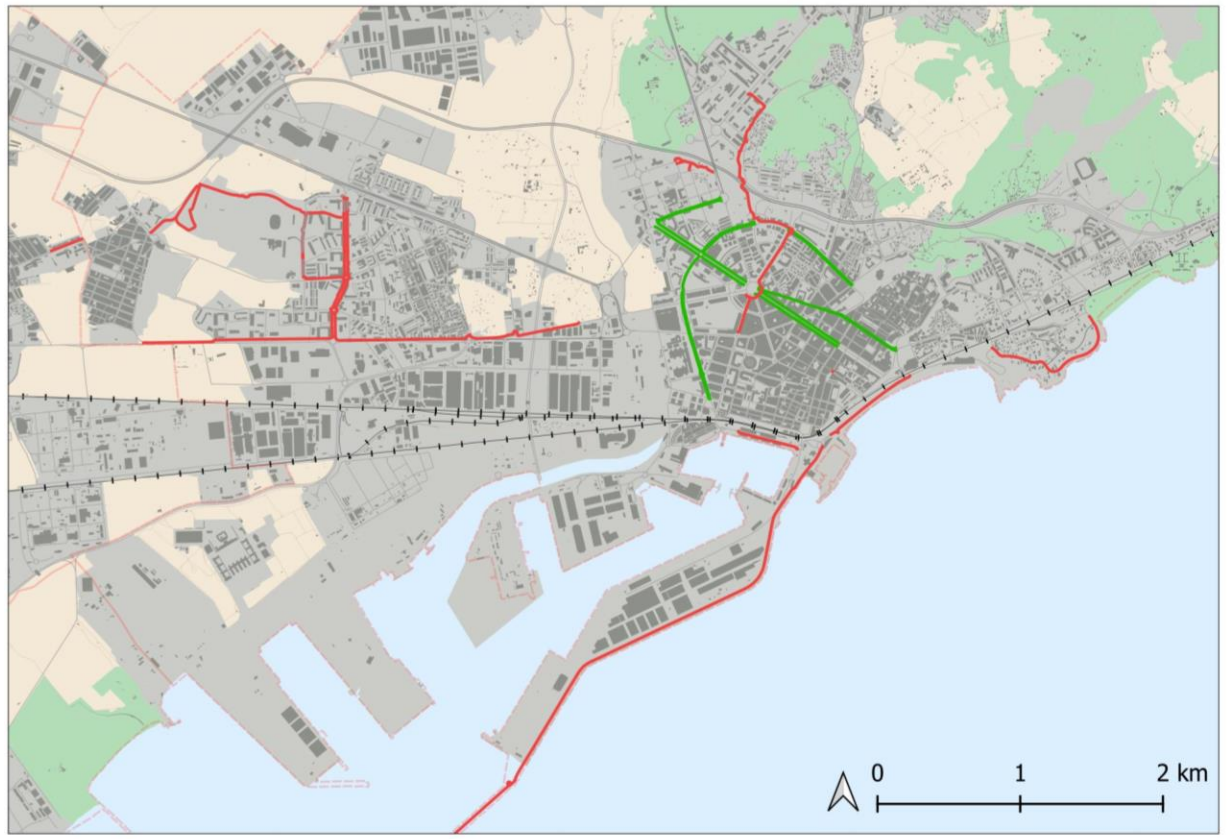
current work

Interviews with local key **stakeholders** on their perceptions and experiences

City of Tarragona



initial insights from the interviews

14 interviews conducted (February-July 2025)
21 participants involved (16 men, 5 women; most 40-50 y.o.)
~ **12h** of interviews recorded (40 min – 1h on average)

interview	participant	gender	age group	institution	position
1	1	Man	40-50	Ajuntament de Tarragona (Tarragona city council)	Politician (past office holder)
2	2	Man	30-40	Ajuntament de Tarragona (Tarragona city council)	Incumbent politician
2	3	Woman	40-50	Ajuntament de Tarragona (Tarragona city council)	Incumbent politician
3	4	Man	40-50	Ajuntament de Tarragona (Tarragona city council)	Municipal civil engineer
4	5	Woman	50-60	Autoritat Territorial de la Mobilitat (Regional Transport Authority)	Managing director
4	6	Woman	60-70	Treballem per Pere Martell' (neighborhood platform)	Spokesperson
4	7	Woman	70-80	Treballem per Pere Martell' (neighborhood platform)	Spokesperson
5	8	Man	70-80	Treballem per Pere Martell' (neighborhood platform)	Spokesperson
6	9	Man	40-50	Autoritat Territorial de la Mobilitat (Regional Transport Authority)	Head of mobility department
7	10	Man	40-50	Ajuntament de Tarragona (Tarragona city council)	Head of mobility department
8	11	Man	40-50	Ajuntament de Tarragona (Tarragona city council)	Urban Master Plan (POUM) Office member
8	12	Woman	40-50	Ajuntament de Tarragona (Tarragona city council)	Urban Master Plan (POUM) Office member
8	13	Man	40-50	Ajuntament de Tarragona (Tarragona city council)	Urban Master Plan (POUM) Office member
8	14	Man	40-50	Ajuntament de Tarragona (Tarragona city council)	Urban Master Plan (POUM) Office member
9	15	Man	40-50	Federation of Neighborhood Associations in Tarragona	Spokesperson
10	16	Man	30-40	BiciCamp (local cycling advocacy group)	Spokesperson
11	17	Man	30-40	BACC (regional cycling advocacy group)	Spokesperson
12	18	Man	30-40	Port of Tarragona	Head infrastructure department
13	19	Man	40-50	Servei Territorial de Carreteres - Generalitat de Catalunya	Area head
13	20	Woman	30-40	Servei Territorial de Carreteres - Generalitat de Catalunya	Technician
14	21	Man	40-50	Àrea d'infraestructures del territori - Diputació de Tarragona	Area head

initial insights from the interviews

1. **Political will**: Strongest driver or barrier - cycling as political tool - left: flagship project (even if unplanned) - centrist: only manage existing (and even rollback) - politics as societal goals vs. citizen preference management – mobility as politics or simply as a technical issue (e.g. PMUS).

2. **Organizational challenges**: No overarching strategy – low communication -fragmented, isolated decisions & projects (e.g. PMUS & POUM) - contrast with Reus: bicycle plan continues across governments due to technical alignment.

3. **Technical capacity**: Limited resources: time, know-how & initiative - no proactive cycling projects - leads to few & sometimes poorly executed projects - - limits use & social support .

4. **Two scales**: intra-city = political debates; intercity = politically simpler but funding constrained.

5. **Weak social activism**: shrinking advocacy, recent “funeral for the bike.”

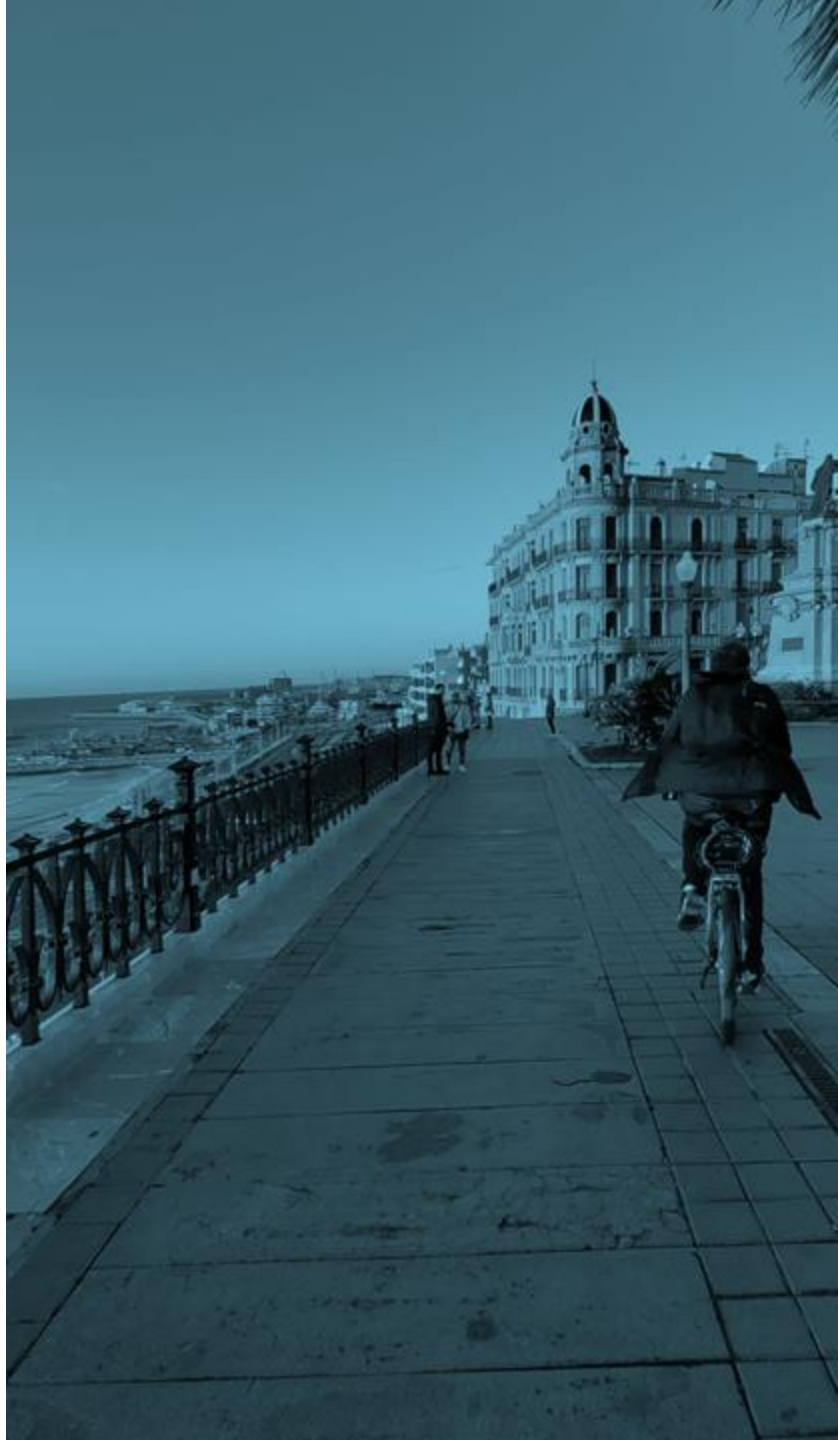


final remarks

1/ **Lack of (quality) infrastructure seems to be the main barrier** to **cycling adoption**, especially in a low-cycling contexts like Tarragona.

2/ Interviews highlight that **political will (or lack of it) is likely the main barrier to infrastructure development**. This trickles down to organizational and technical challenges, especially at the city level.

3/ **Specific to Tarragona or applicable to similar cities?** medium size, low density, governance challenges.



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Thank you!

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