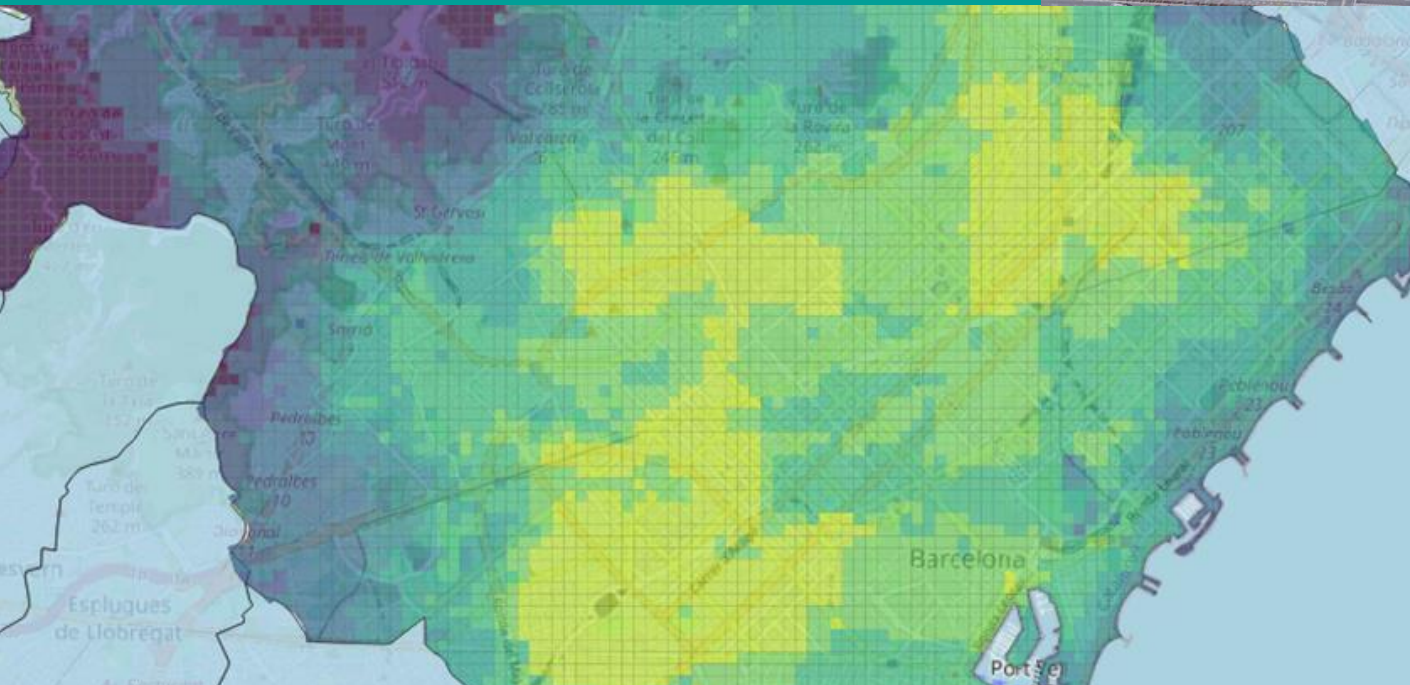


Políticas de ciudad de 15 minutos y sus impactos

Oriol Marquet -- UAB

Uso del automóvil



Valores inmobiliarios

Objetivos



Mapificar las condiciones de la ciudad de los 15 minutos en Barcelona

15-minutos andando

Número de servicios disponibles a menos de 15 minutos



Analizar asociaciones entre vivir en entornos de 15 minutos y uso del automóvil

Comportamiento vial

- Decisión de conducir
- Tiempo de uso (proxy de distancia)



Analizar asociaciones entre accesibilidad en entornos de 15 minutos y valores inmobiliarios

- Premium por más accesibilidad?
- Amenaza de gentrificación

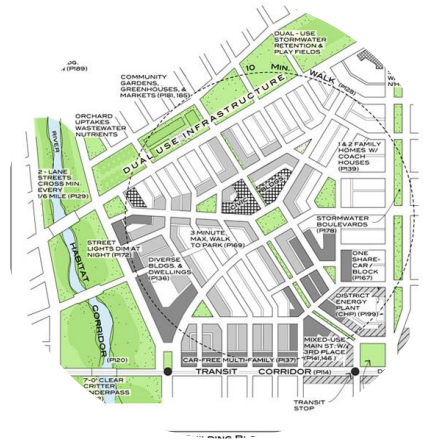
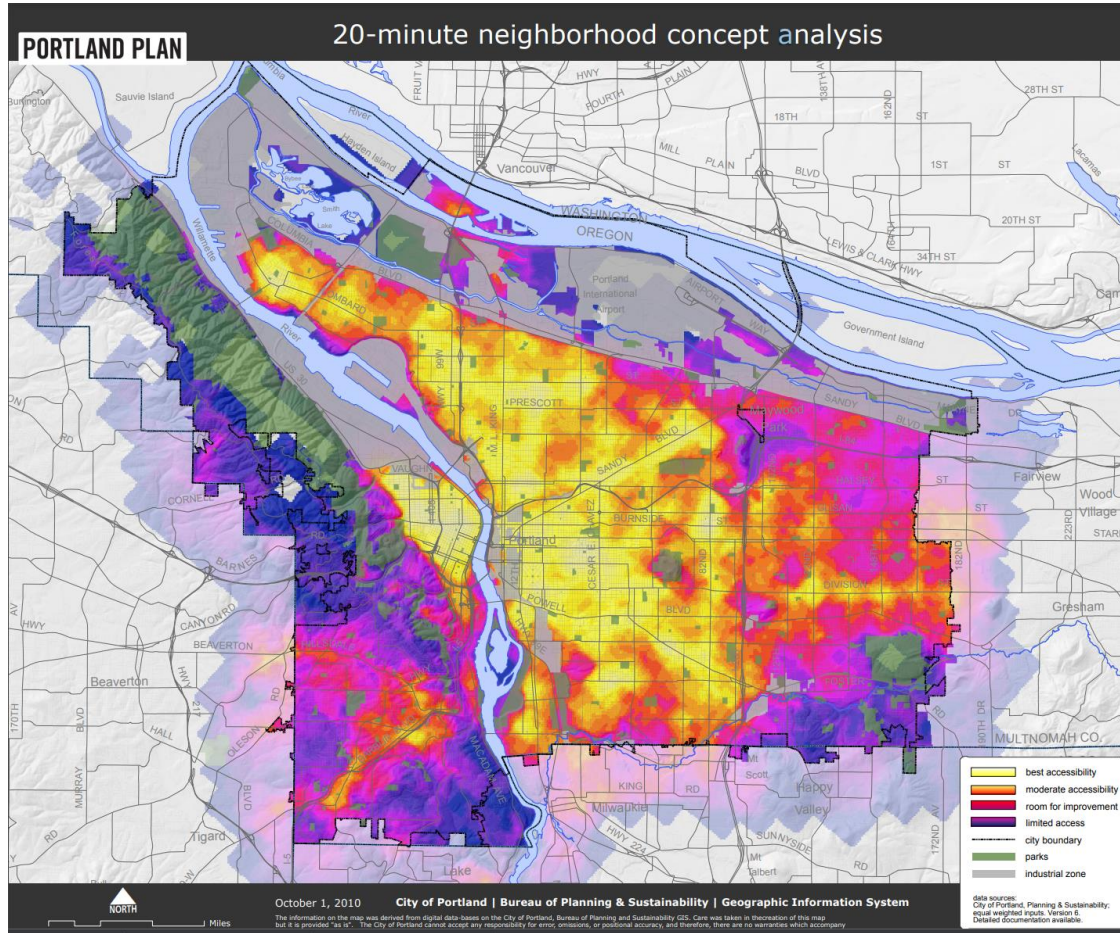


Table 1. Comparing neighborhood planning movements. Absence of the principles is indicated by × and presence is shown by ✓.

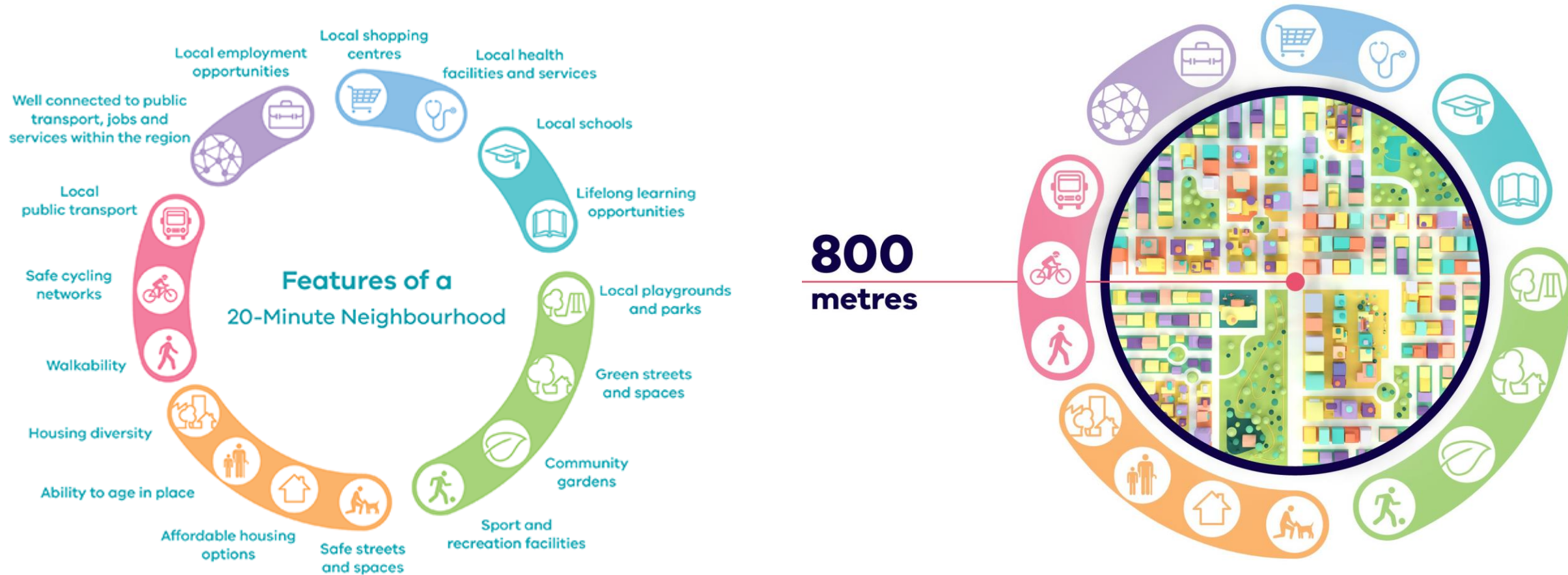
Neighborhood Planning Movements	Proximity	Density	Diversity	Mixed-Use	Modularity	Adaptability	Flexibility	Human-Scale Design	Connectivity	Digitalization
Garden city	×	×	✓	×	×	×	×	×	✓	×
Neighborhood unit	✓	×	×	×	×	×	×	×	×	×
Modernism	×	×	×	×	×	×	×	×	×	×
Post-modernism	✓	✓	✓	✓	×	×	×	✓	✓	×
Eco-urbanism	✓	✓	✓	✓	×	✓	×	✓	✓	✓
15-minute city	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Khavarian-Garmsir, A. R., Sharifi, A., Hajian Hossein Abadi, M., & Moradi, Z. (2023). From Garden City to 15-Minute City: A Historical Perspective and Critical Assessment. *Land*, 12(2), 512. <https://doi.org/10.3390/land12020512>

Portland, Oregon. 2010



Plan Melbourne, 2014-2016



20-minute city, based on walking, cycling or public transport

Beijing

larger minute threshold for commuting trips (45 to 60 min), and a shorter minute threshold for local personal trips (15-20 min)

Guangzhou

Basic life circles that span from 30 walking minutes in rural communities, to 15 walking minutes in urban communities

Shanghai

15-minute walk range circle at the community level



Todas estas iniciativas de planificación urbana buscan utilizar la proximidad y la hiperproximidad para reducir las externalidades derivadas del transporte y, al mismo tiempo, maximizar la accesibilidad local de forma socialmente equitativa.

Milan, Copenhagen, Rotterdam, Malmö, Vienna, Montreal, Valencia Barcelona... Más de 140 iniciativas de ciudades en todo el mundo que mencionan la idea de avanzar hacia la ciudad de 15 minutos

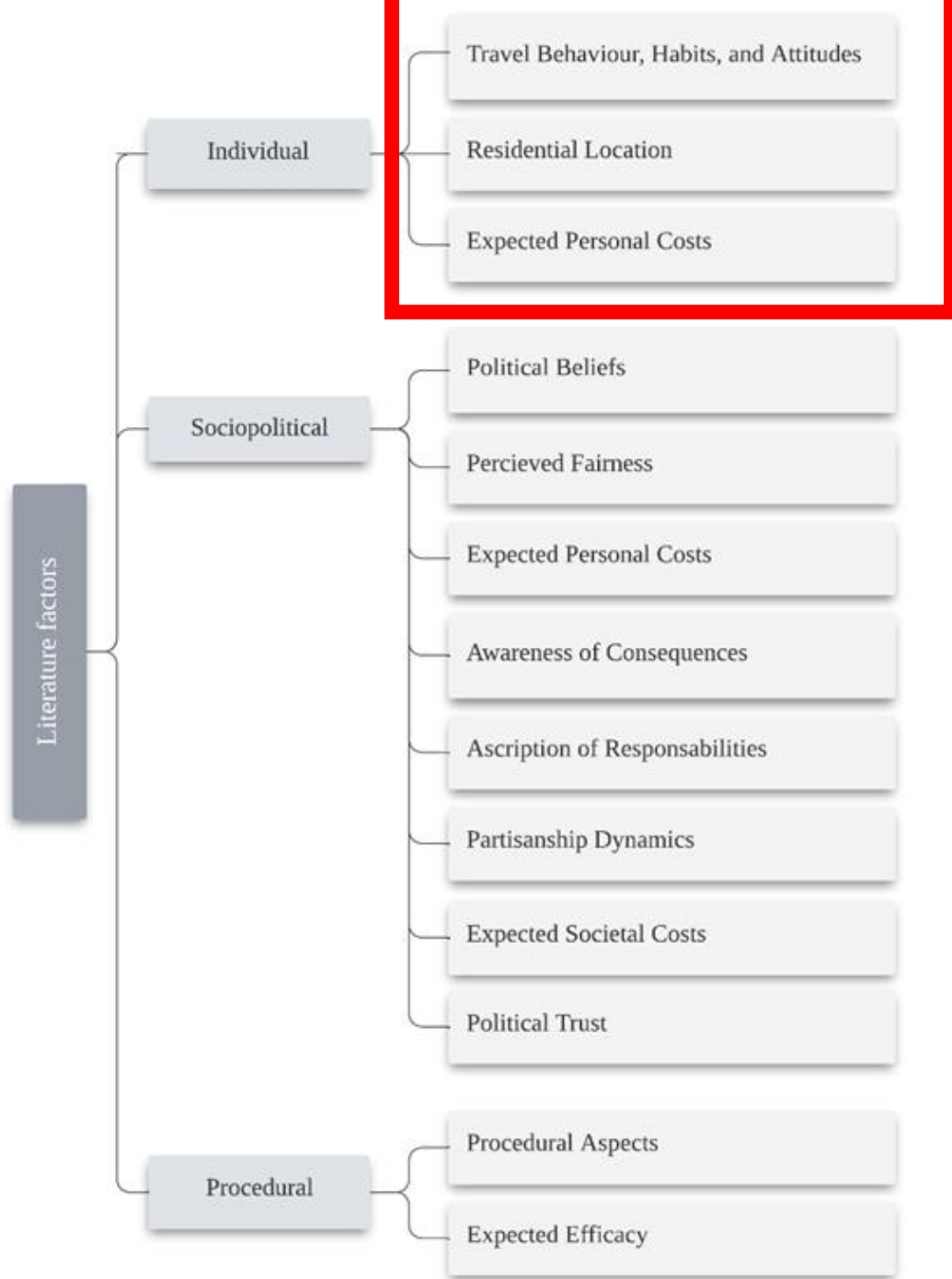


Section	Type of Criticism	Political Orientation	Main Concerns	Response Tactics	Evidence Basis
Globalism and Conspiracy Theories	Agenda 2030/Globalism Conspiracies	Varied, often right-wing	Worry over a loss of sovereignty to a global agenda, with fears of local autonomy being usurped by hidden control measures.	Public education, myth debunking	Low, speculative
	Fear of Overregulation and Surveillance	Libertarian, privacy advocates	Perceived overregulation and intrusive surveillance that may accompany 15 minute cities	Policy clarification, safeguards assurance	Moderate, concern-based
Urban Planning and Conservatism	Distrust in Centralized Planning	Conservative, libertarian	Centralized planning perceived as a governmental overstep into individual freedoms and local governance.	Community engagement, transparency	Moderate, ideological
	Loss of Automobile Freedom	Suburban, car-dependent	15-minute city will restrict car usage. seen as an attack on personal mobility and a lifestyle change.	Highlight alternative transport benefits	Mixed, projection-based
	Resistance to Urban Life	Anti-urban, rural	Resistance to urban values that are seen as threatening to local traditions and identities.	Addressing rural concerns, broader dialogue	Varies, cultural
	Technocratic Skepticism	Varied	Wariness of decisions made by experts without community input, fearing exclusion of non-technical perspectives.	Integrating lay knowledge, democratizing planning	Moderate, participatory concerns
	Populism and Anti-Elitism	Right-wing, populist	Resentment towards the elites and experts driving planning initiatives, viewed as out of touch with the 'common people'.	Direct engagement, addressing economic fears	Low to moderate, populist
Social Equity	Environmental Gentrification and Exclusion	Left-leaning, equity advocates	Fears that urban redesign could lead to displacement of low-income residents and worsen social inequalities.	Equity and gentrification assessments, inclusive planning	High, research-based
	Participation and Autonomy	Across spectrum	Rejection of top-down approaches that may ignore community needs.	Participatory methods, local adaptation	High, empirically grounded

Marquet, O; Honey-Roses, J; Nello-Deakin, S; Anguelovski, I; 2023 *Decoding the 15-Minute City Debate: Conspiracies, Backlash, and Dissent in Planning for Proximity*. Journal of American Planning Association, *Forthcoming*.

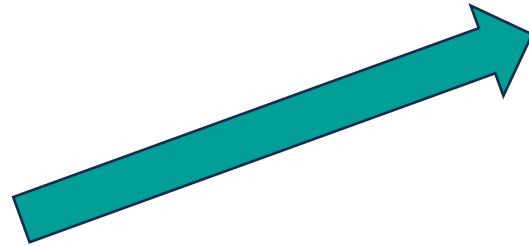
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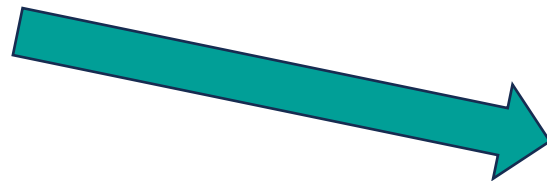


Marquet, O; Fernández-Núñez, M; Mojica, L; Maciejewska, M; 2023 *Pathways to 15-Minute City adoption: Cross-Examining Popular Criticisms with Empirical Acceptability Factors*. Cities. Forthcoming

Ciudades de 15 minutos

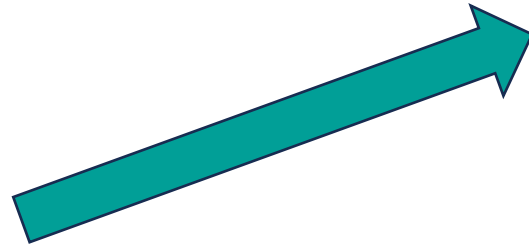


Alteran el uso del
automóvil?

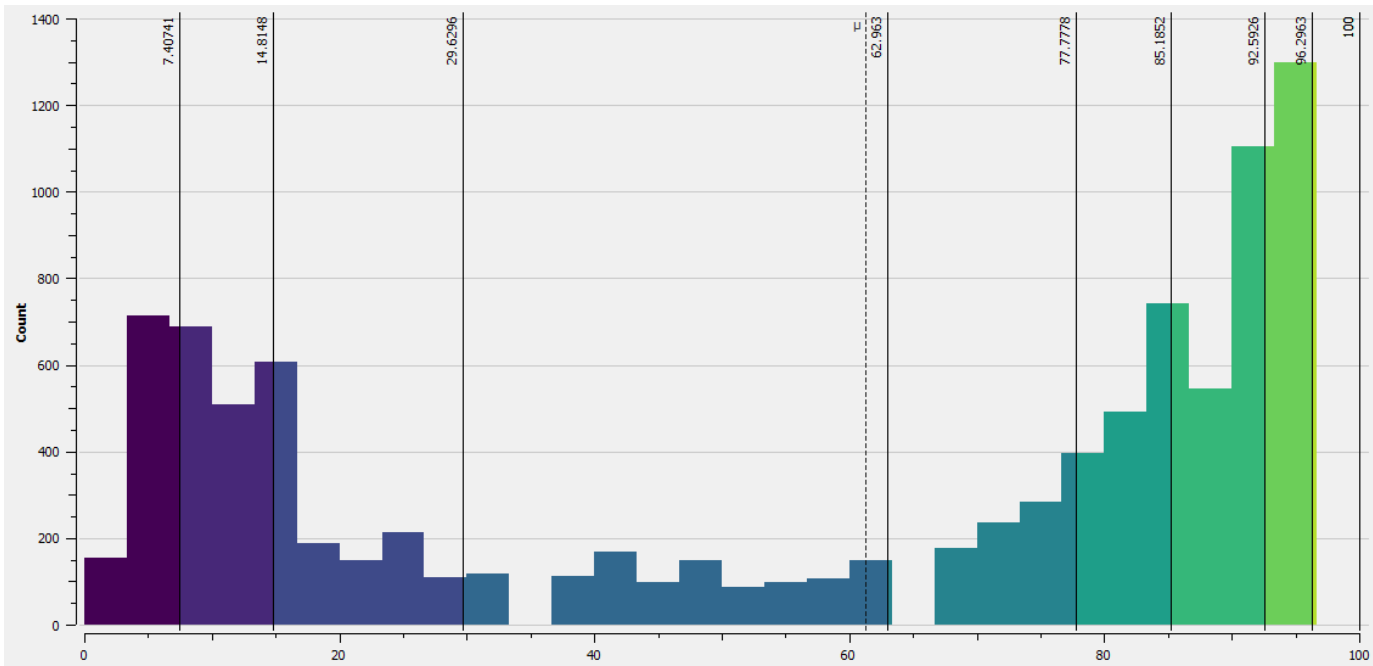


Afectan a los
valores
inmobiliarios?

Ciudades de 15 minutos



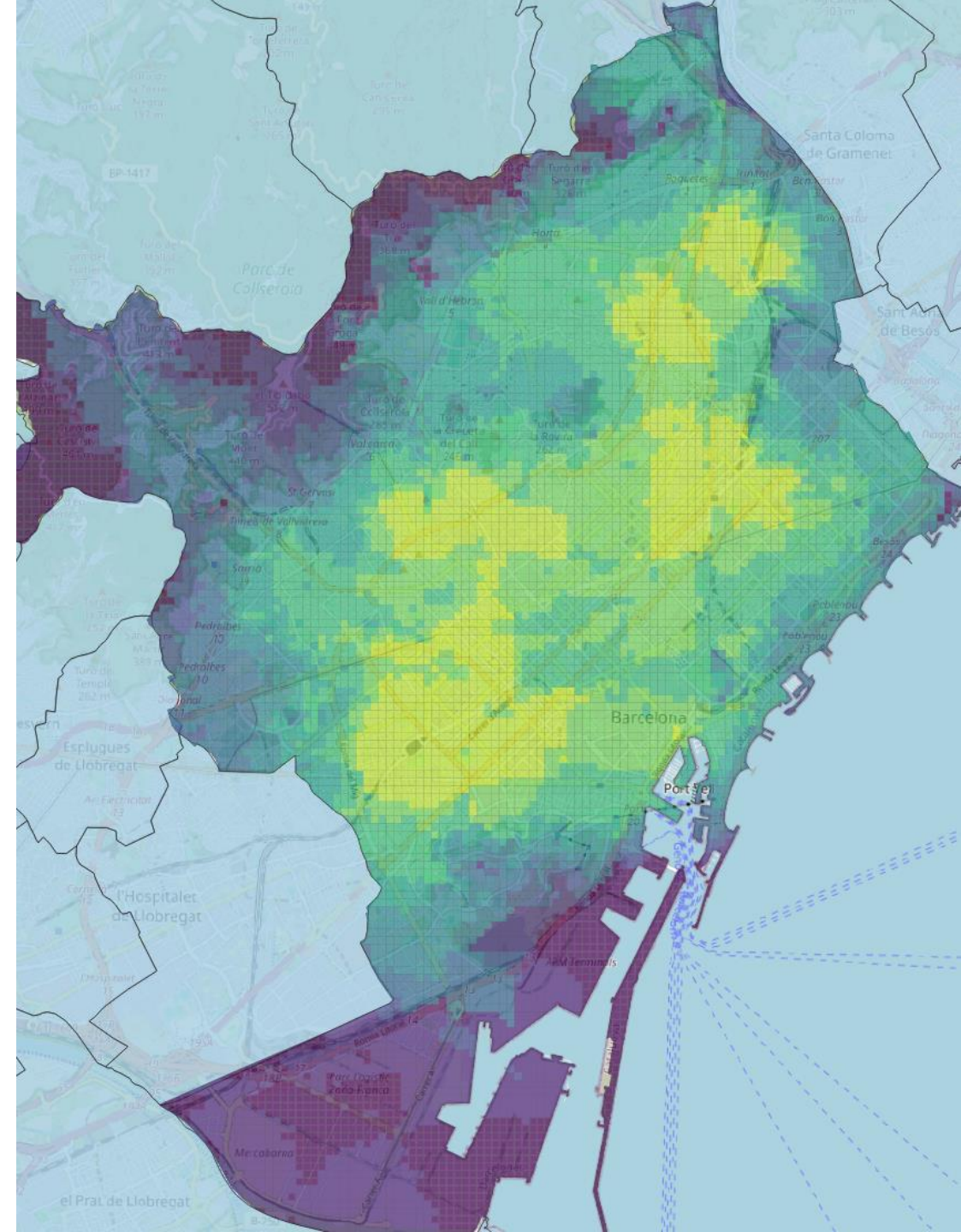
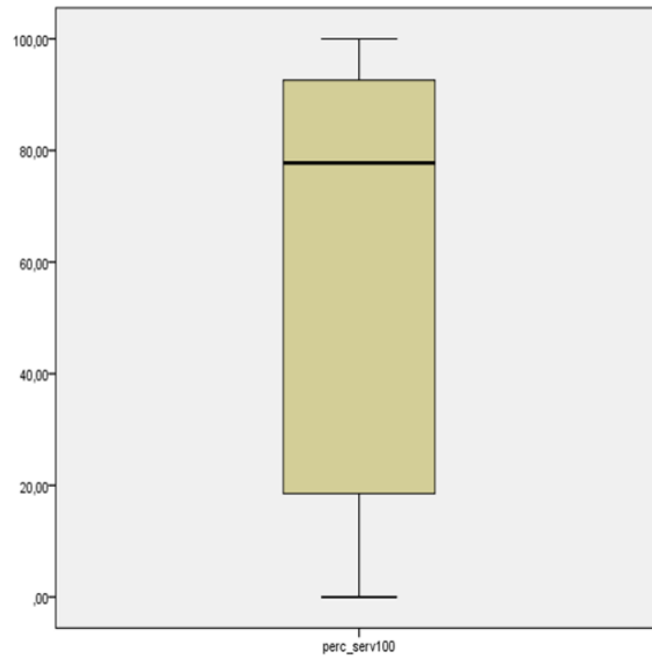
Alteran el uso del
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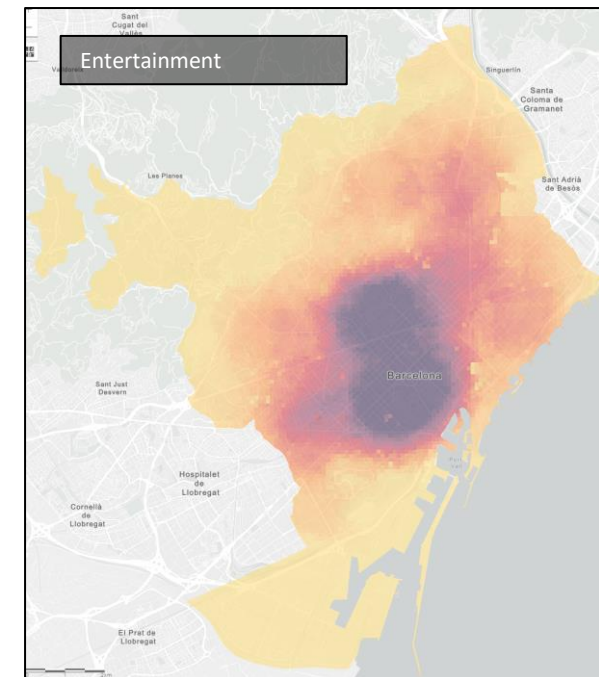
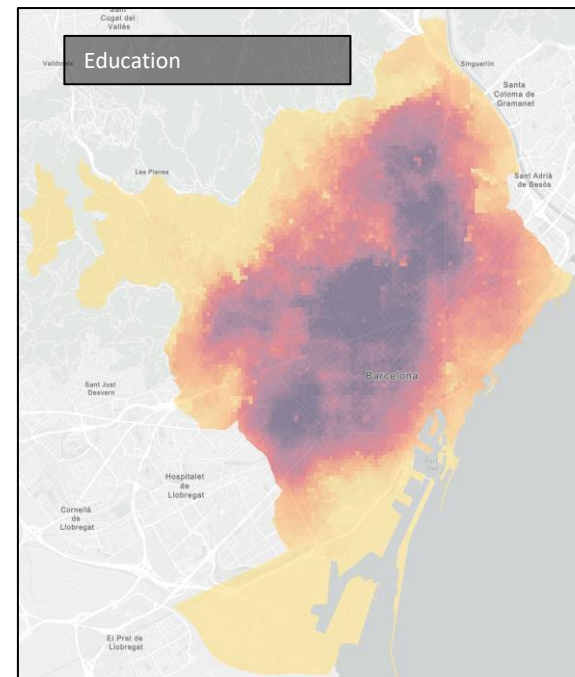
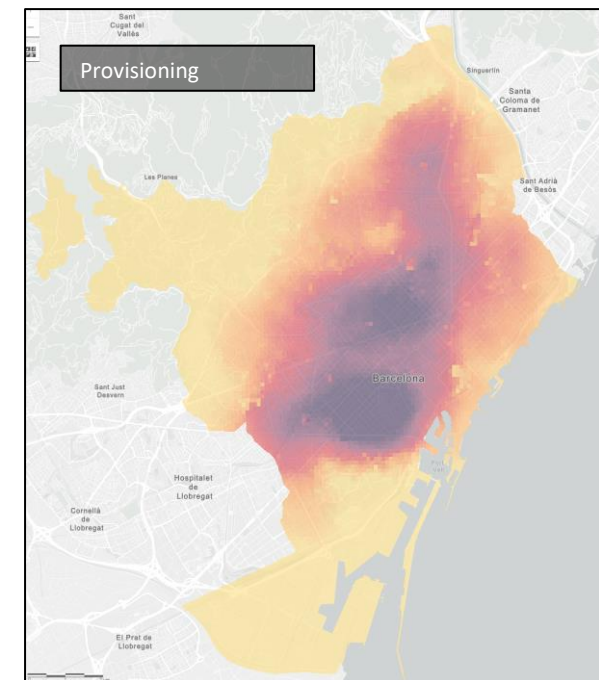
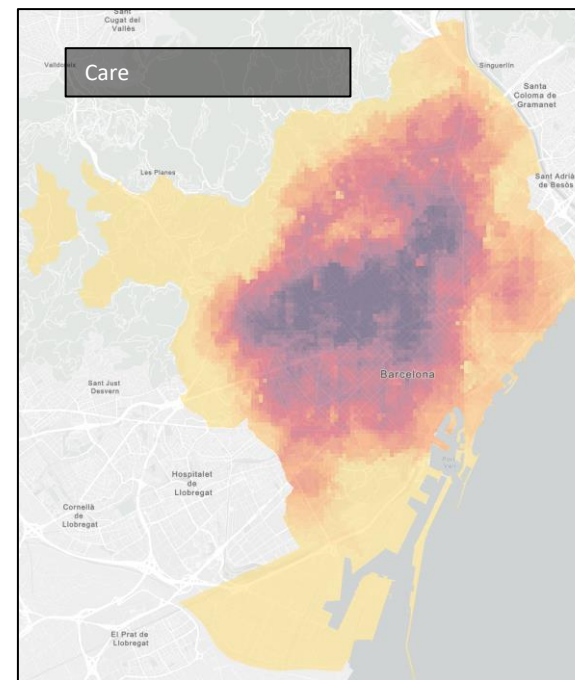
Estadísticos

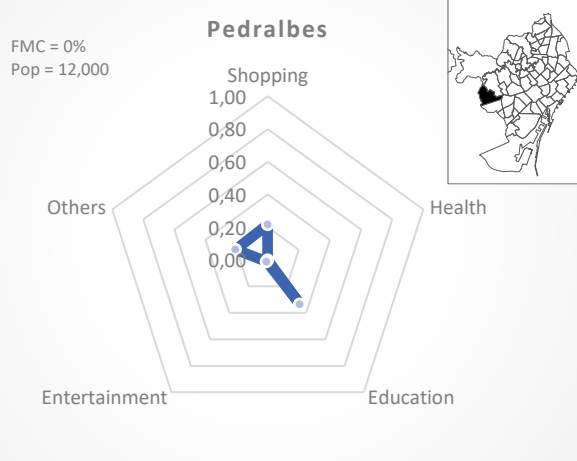
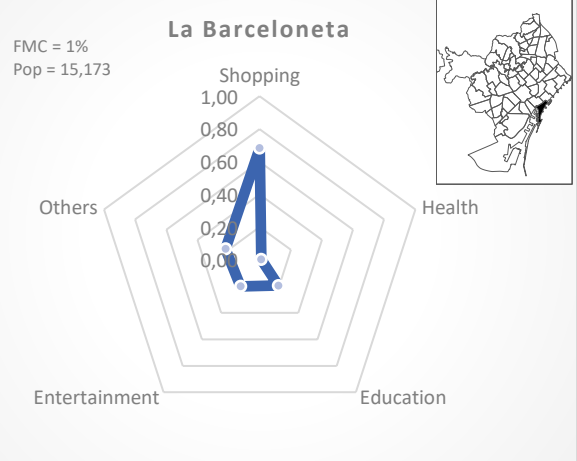
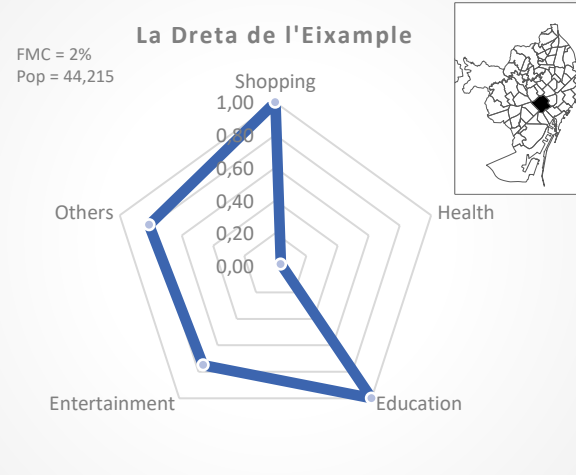
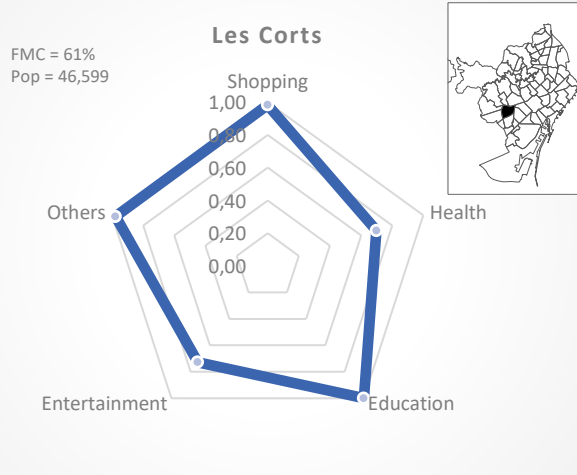
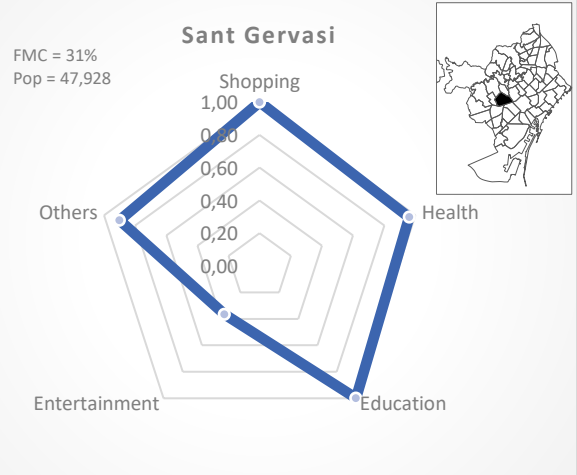
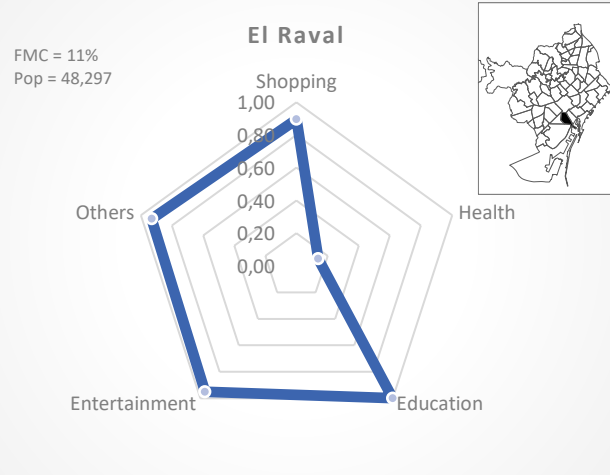
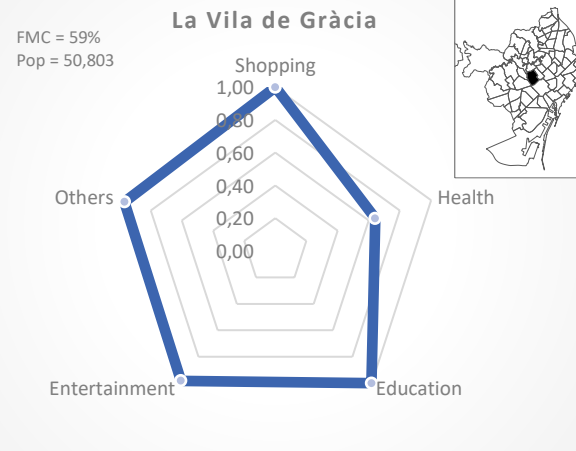
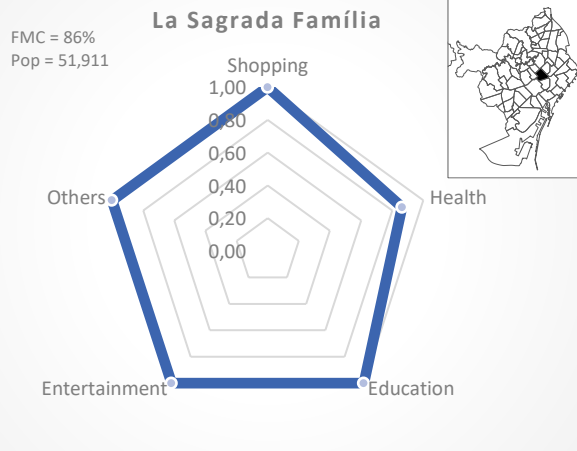
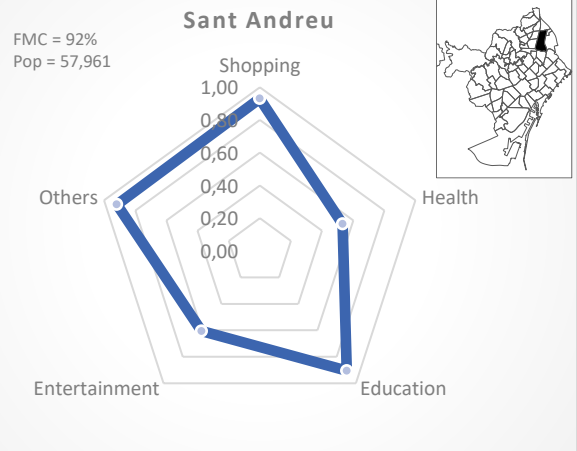
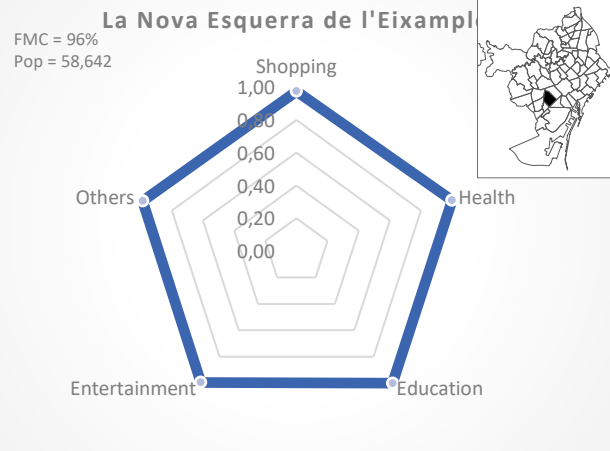
perc_serv100

Media		61,2793
Mediana		77,7778
Moda		96,30
Desv. típ.		36,43358
Mínimo		0,00
Máximo		100,00
Percentiles	10	7,4074
	20	14,8148
	25	18,5185
	30	29,6296
	33,34	40,7407
	40	62,9630
	50	77,7778
	60	85,1852
	66,67	88,8889
	70	92,5926
80	96,2963	
90	100,0000	



Categories	Variables
<i>Care</i>	Primary care center
	Primary care + emergency
	Hospitals and clinics
	Day center
	Social Services
	Senior center
<i>Education</i>	Preschool education
	Primary education
	Secondary education
<i>Provisioning</i>	Fruits and vegetables
	Market
	Supermarket
	Hardware store
<i>Entertainment</i>	Cinema
	Theatre
	Library
	Civic center
	Children playground
	Public sports facility
	Youth center
	Music school
	Urban parks
<i>Transport</i>	Underground, tram, and urban train station
	Metropolitan train station
	Local bus

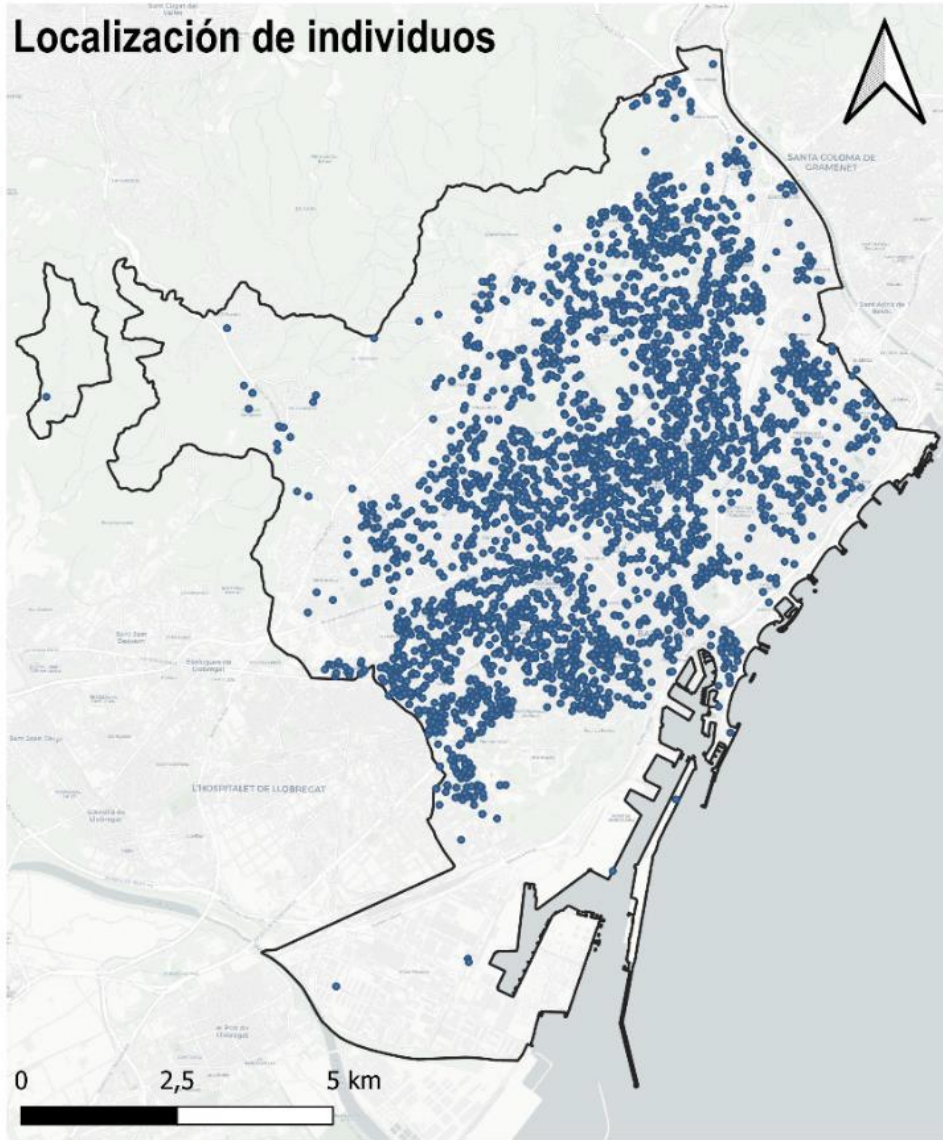






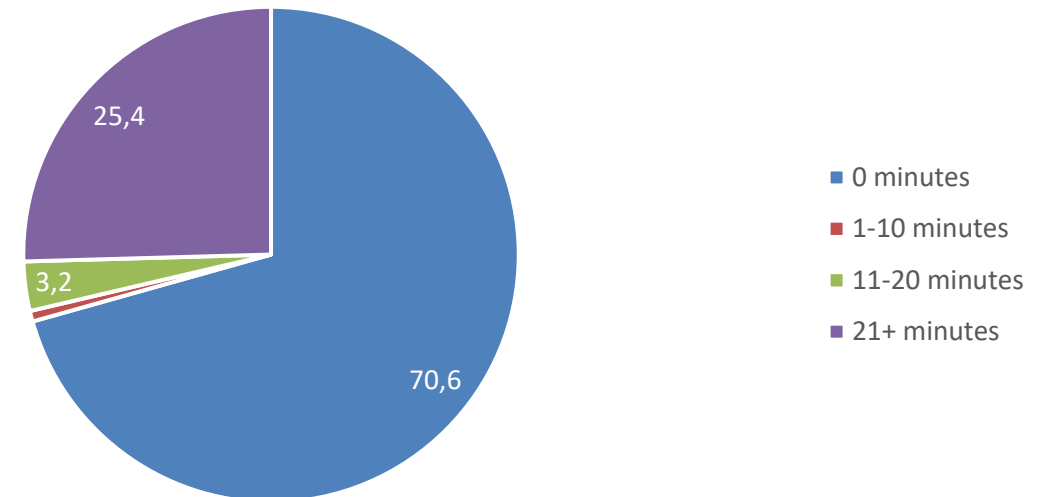
Ciudades de 15-
minutos y uso del
automóvil

Localización de individuos

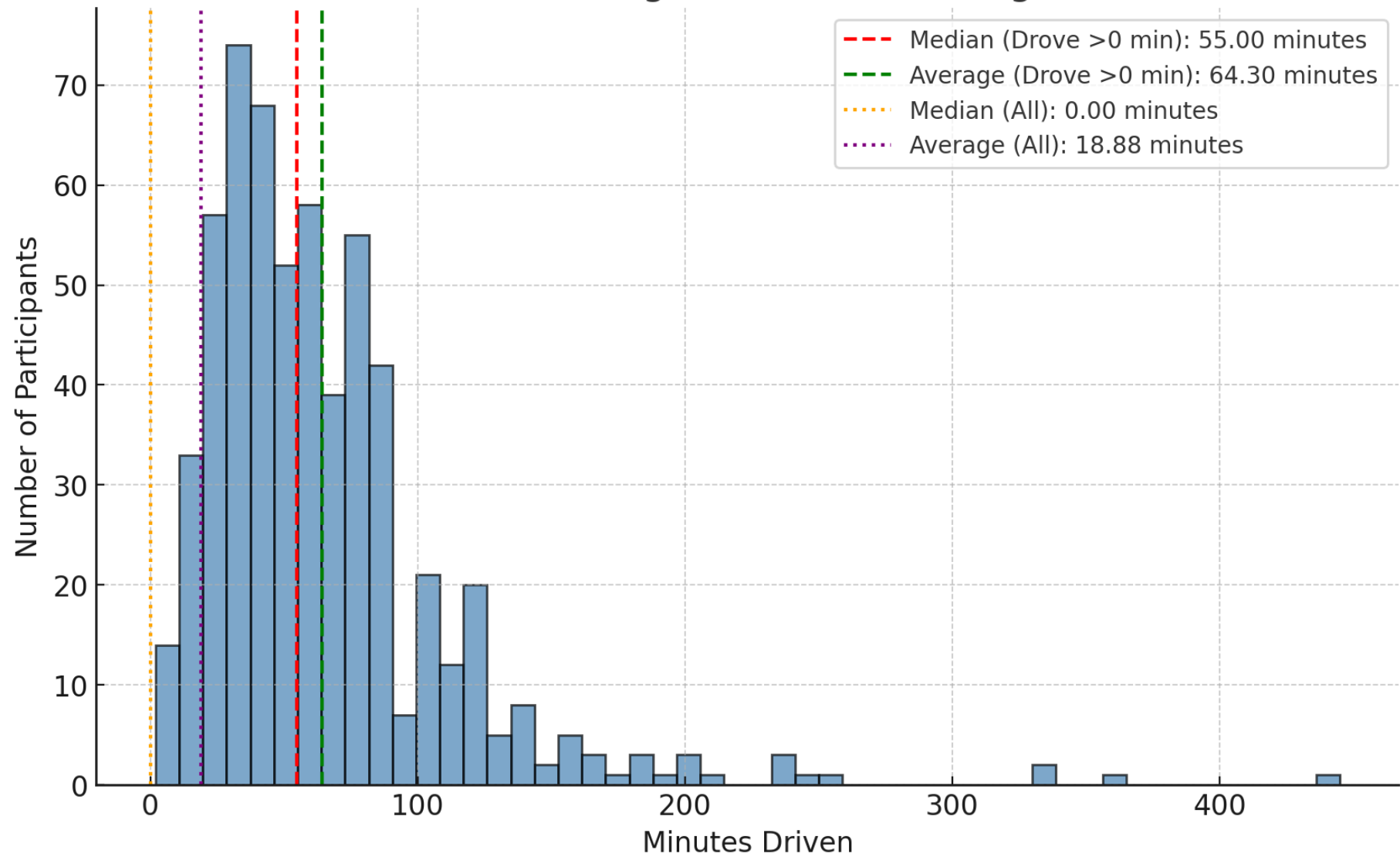


	Sample	Habitual car driver	Car trips N		Driving time	
	N	%	mean	%	mean	%
Total	2224	0.32	0.77	0.20	18.88	0.22
Gender						
Male	1045	0.44	0.99	0.26	24.60	0.28
Female	1179	0.22	0.57	0.15	13.67	0.16
Professional situation						
Employed	1300	0.41	1.03	0.27	25.36	0.29
Unemployed	185	0.16	0.47	0.12	12.91	0.13
Inactive	739	0.21	0.34	0.09	8.04	0.10
Age group						
16-29	379	0.19	0.64	0.16	13.15	0.17
30-64	1281	0.40	0.97	0.25	23.97	0.28
65+	564	0.24	0.38	0.11	10.58	0.12
Education level						
Primary	369	0.16	0.36	0.10	8.73	0.10
Secondary	715	0.29	0.67	0.18	16.74	0.20
College	1134	0.40	0.95	0.24	23.15	0.26

Percentage of Participants (%) daily driving minutes

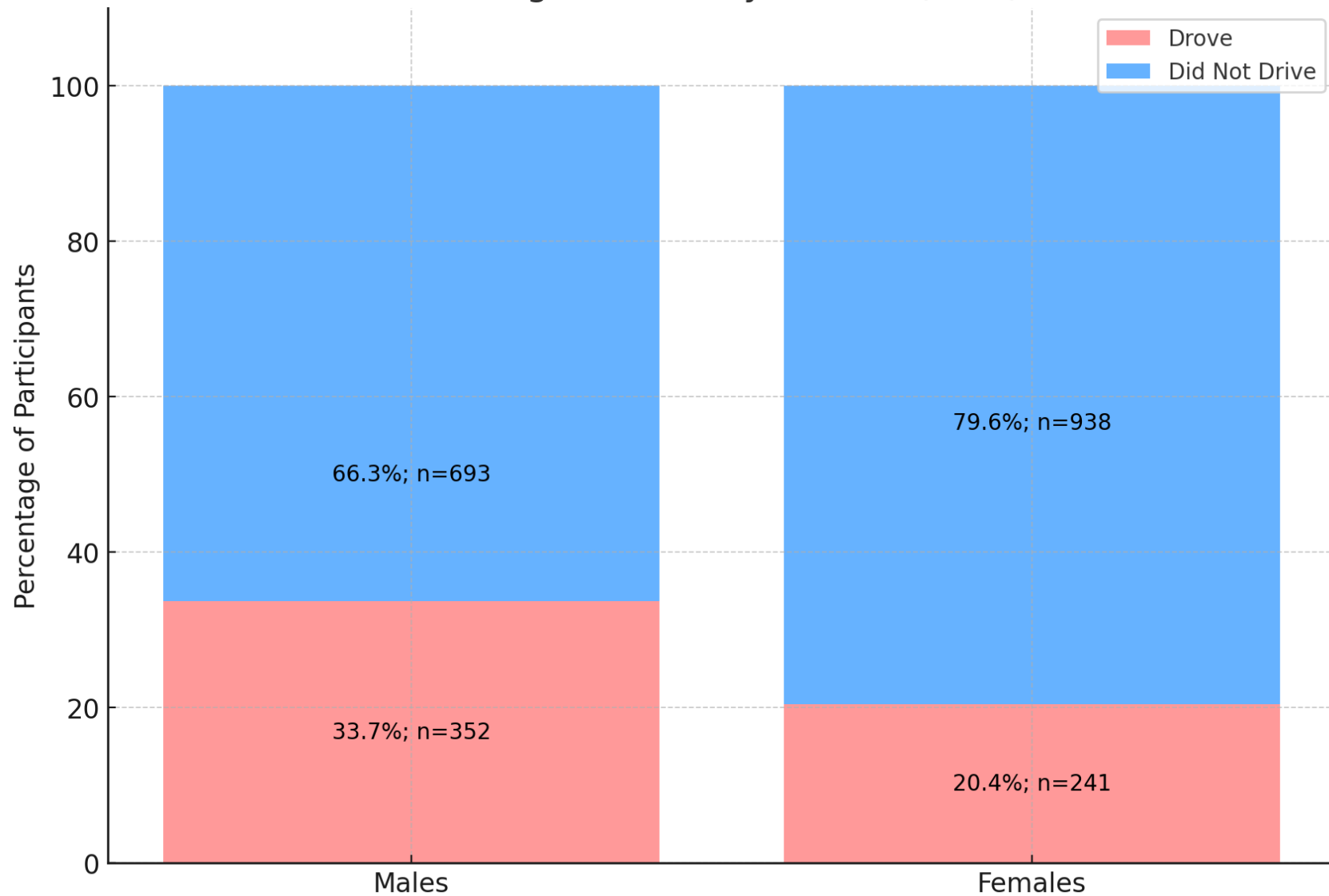


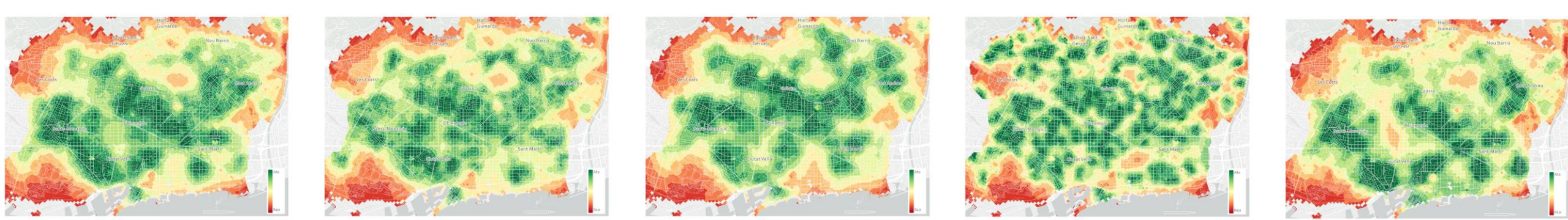
Distribution of Driving Minutes (Excluding 0 Minutes)



Chi-Square: 49.01, p-value: <0.001

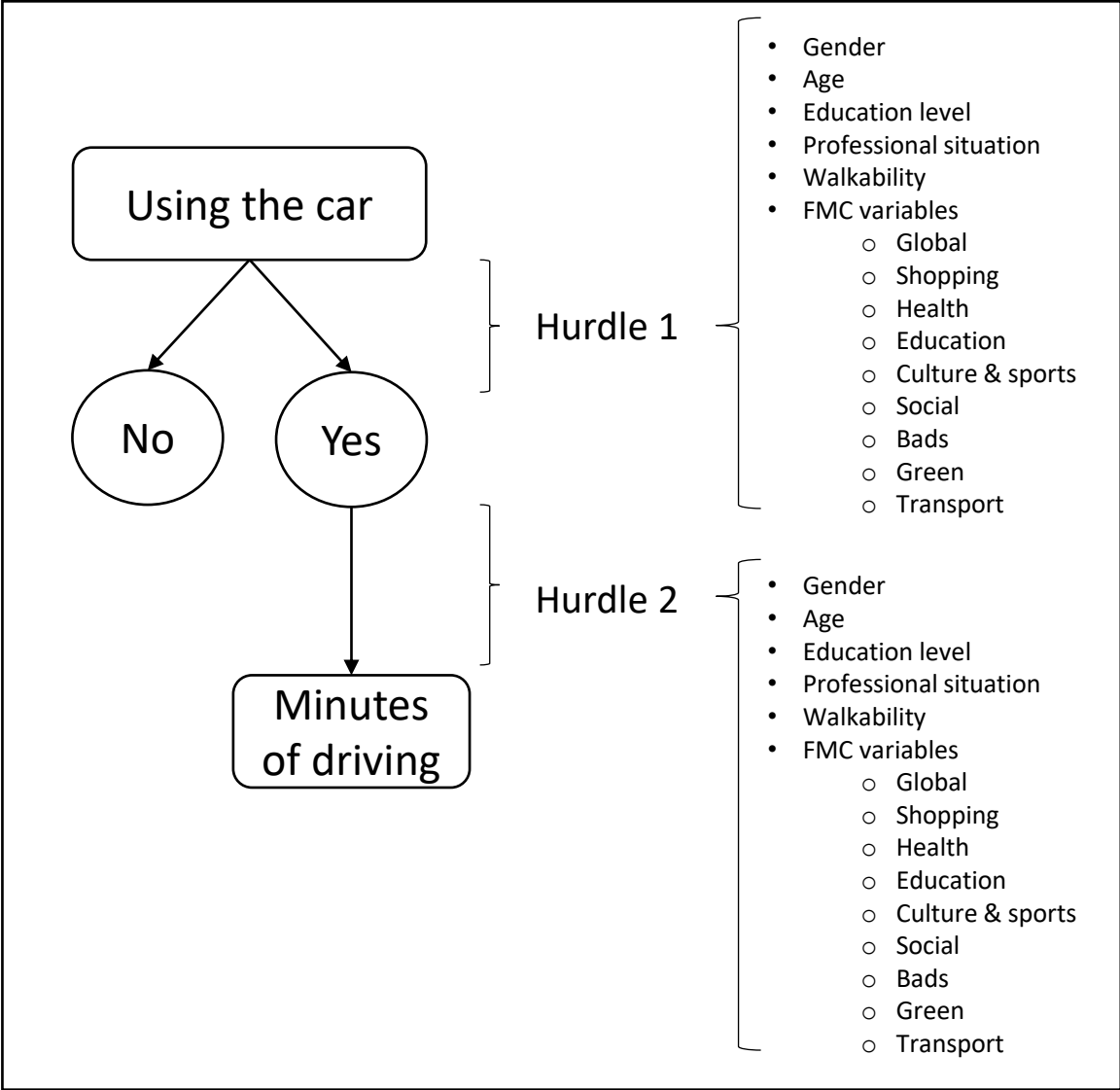
Driving Decision by Gender (in %)





Bivariate Correlations

	Average distance	Shopping distance	Health distance	Education distance	Culture and sports distance	Social distance	Environmental bads distance	Green areas distance	Transport distance
Habitual car use	0.106	0.096	0.060	0.073	0.100	0.105	0.095		0.042
Car trips N	0.110	0.096	0.061	0.081	0.098	0.106	0.108		0.063
Car trips %	0.148	0.132	0.105	0.103	0.124	0.127	0.137		0.083
Car minutes N	0.067	0.048		0.053	0.063	0.064	0.060		0.044
Car minutes %	0.135	0.119	0.094	0.093	0.113	0.120	0.125		0.074



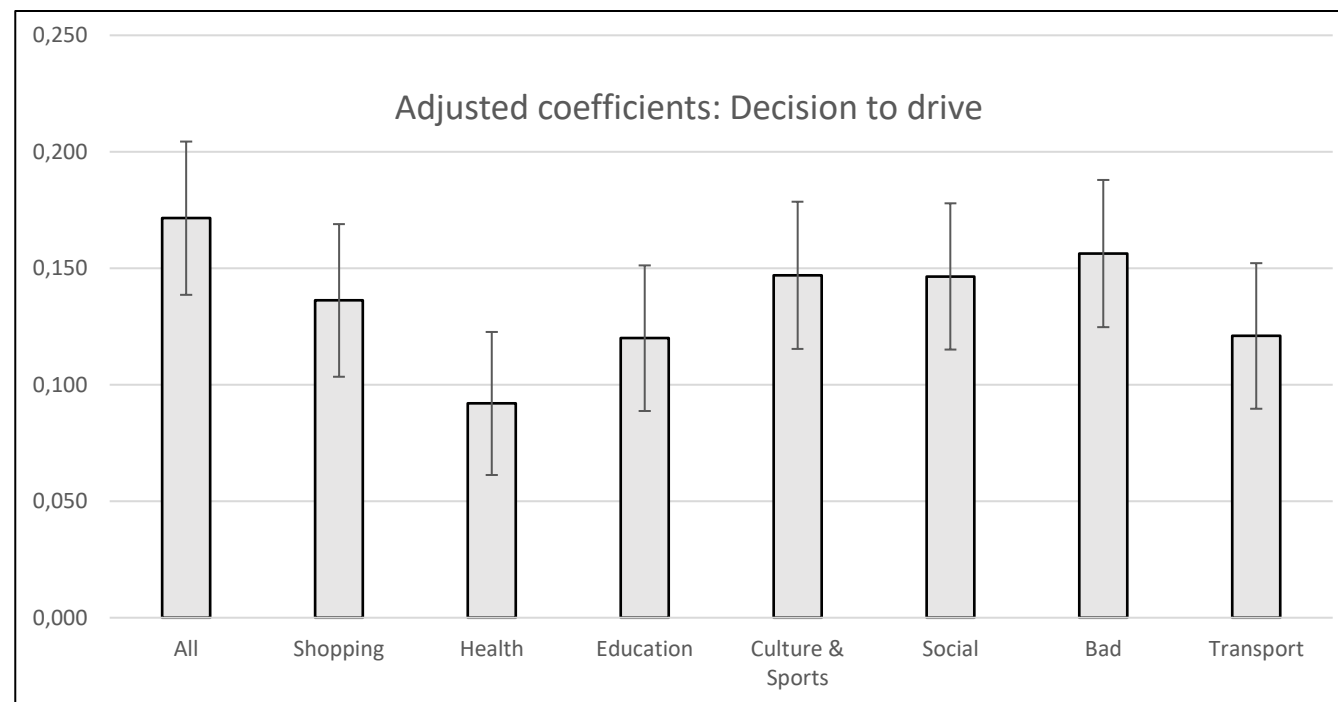
Hurdle models

Hurdle 1

Hurdle 2

	Decision to drive (<i>driving minutes</i> ≥ 1)			Driving time (<i>N Minutes</i>)		
	c	std error	p	c	std error	p
FMC Global	0.171	0.033	0.000	-3.590	4.481	0.423
Shopping	0.136	0.033	0.000	-6.639	4.696	0.157
Health	0.092	0.031	0.003	-2.579	4.307	0.549
Education	0.120	0.031	0.000	0.182	4.374	0.967
Culture & Sports	0.147	0.032	0.000	-1.460	4.681	0.755
Social	0.146	0.031	0.000	-3.442	4.398	0.434
Bad	0.156	0.032	0.000	-2.699	4.511	0.550
Green	-0.027	0.031	0.395	0.676	4.790	0.888
Transport	0.121	0.031	0.000	-3.909	4.674	0.403

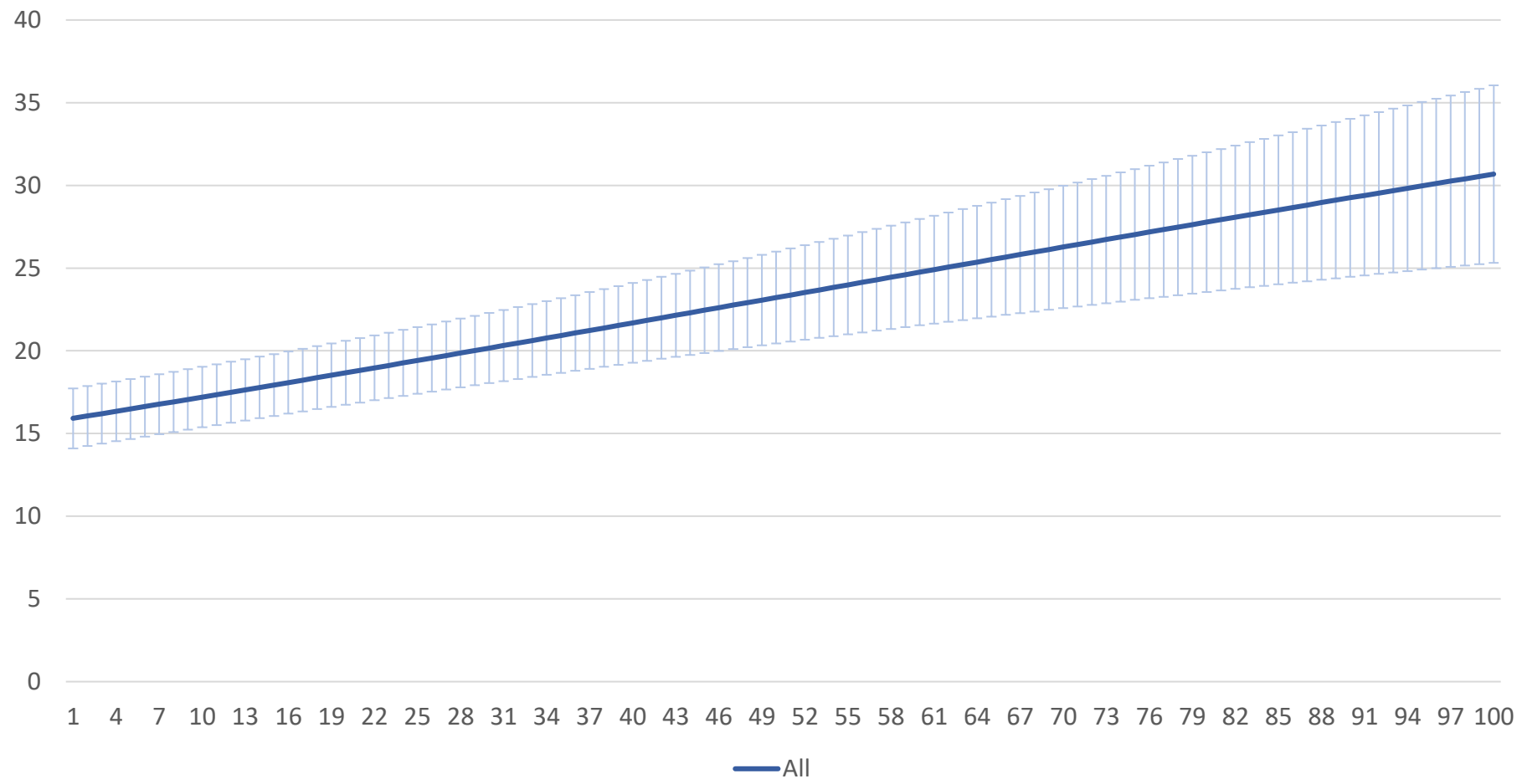
- *Independent Linear hurdle models*
- *All models adjusted by socioeconomics (age, gender, education level, professional situation, disability) and walkability.*





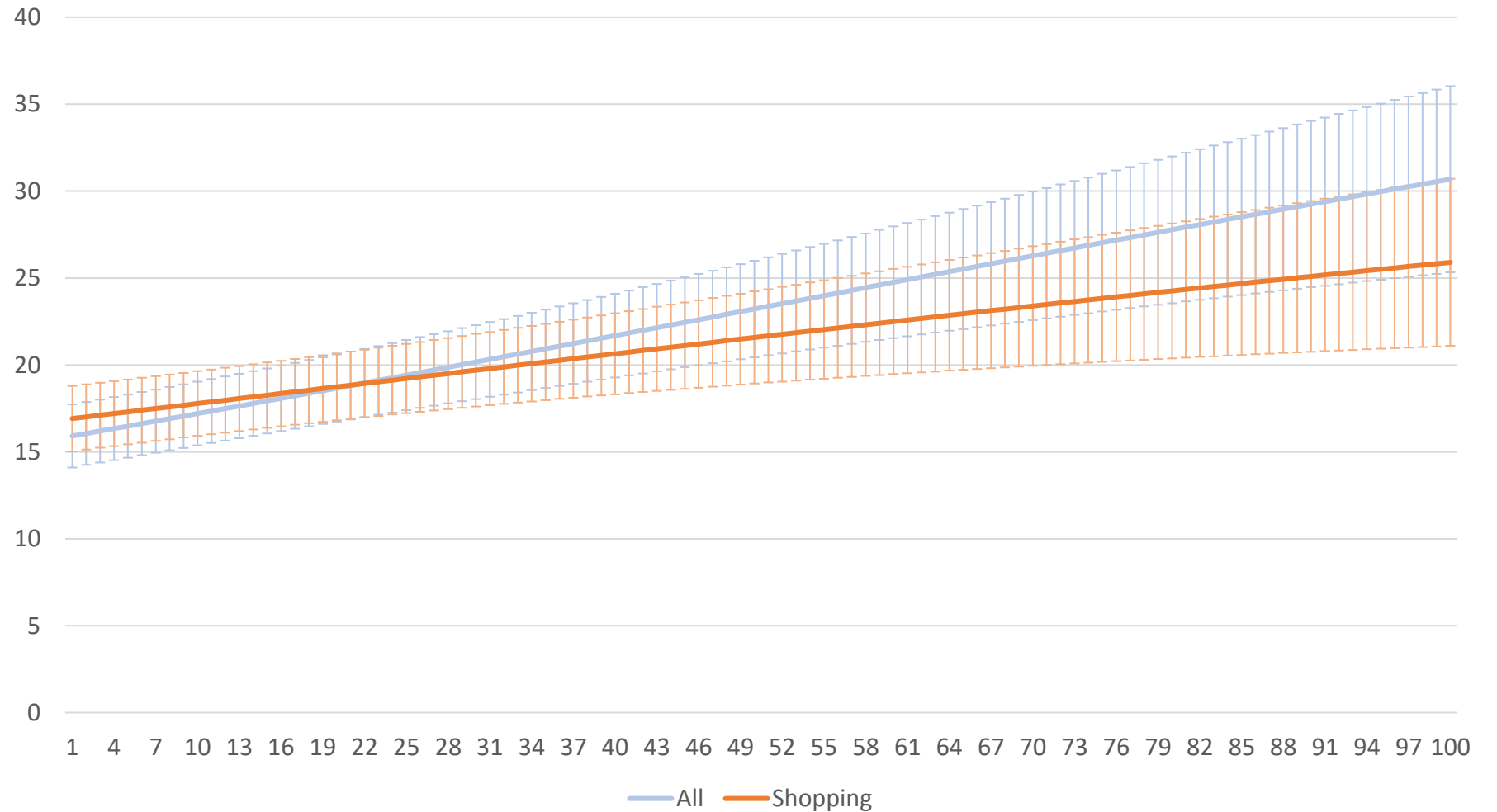
Adjusted daily driving times

Adjusted expected driving times per distance percentiles



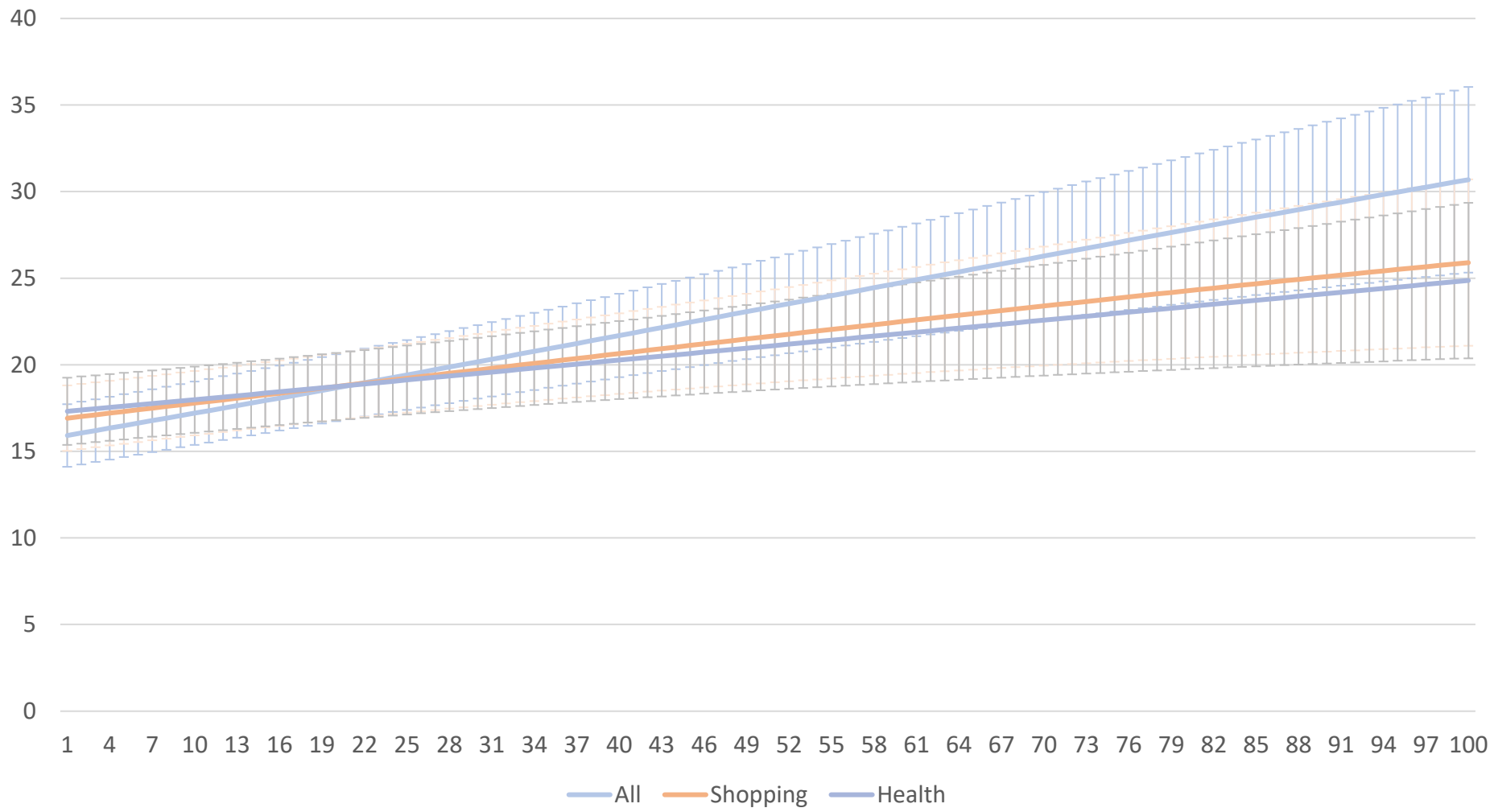
Adjusted
daily driving
times

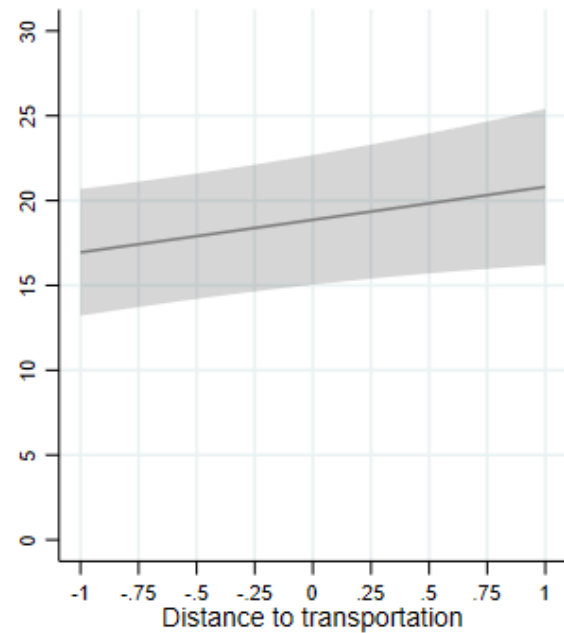
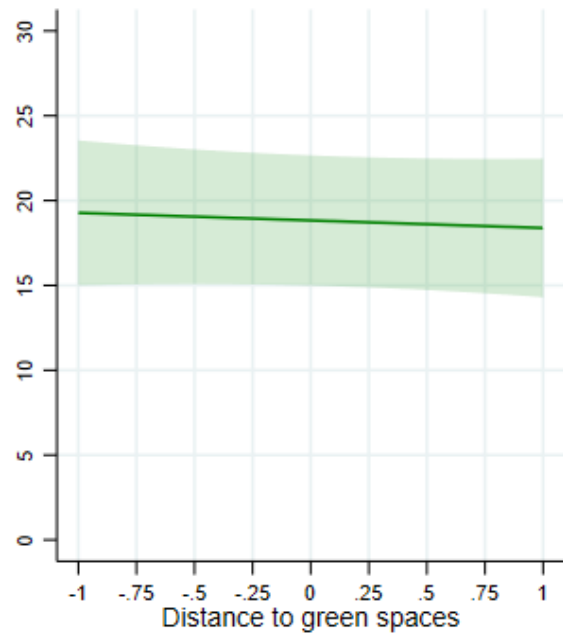
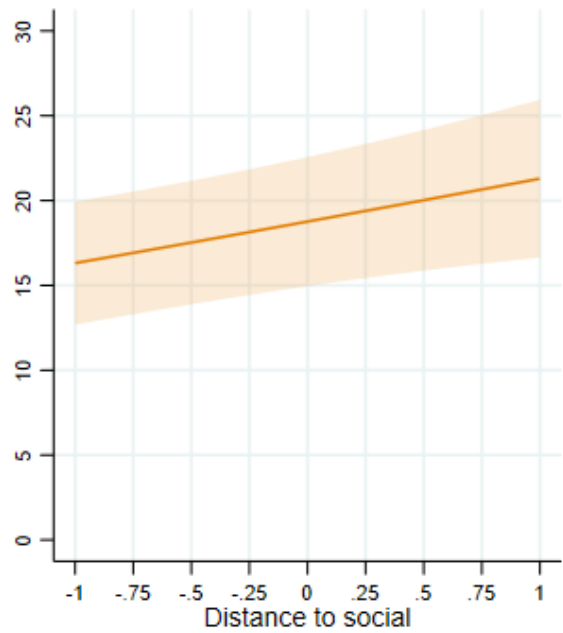
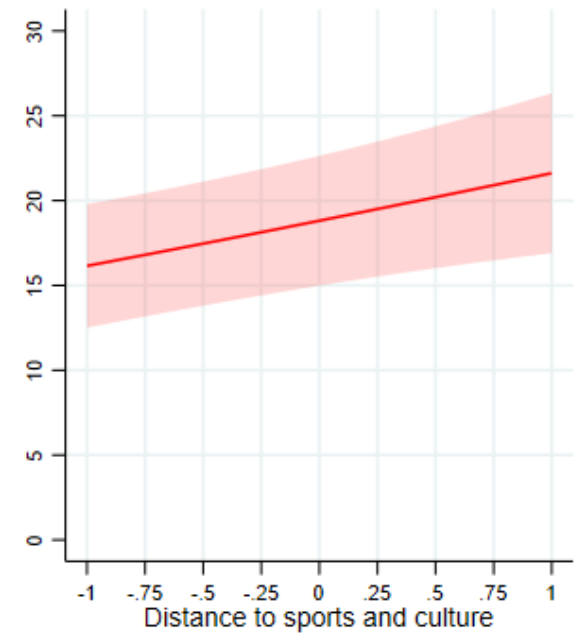
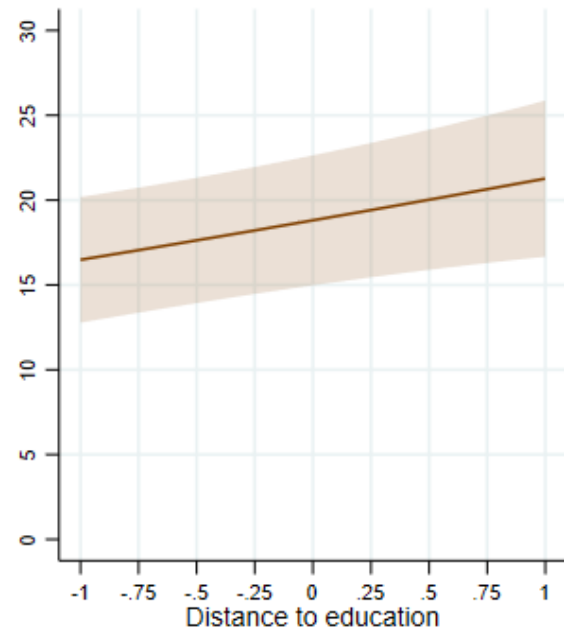
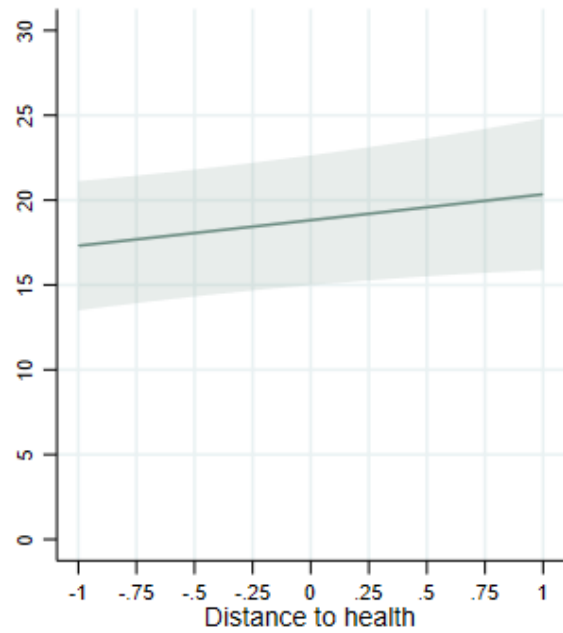
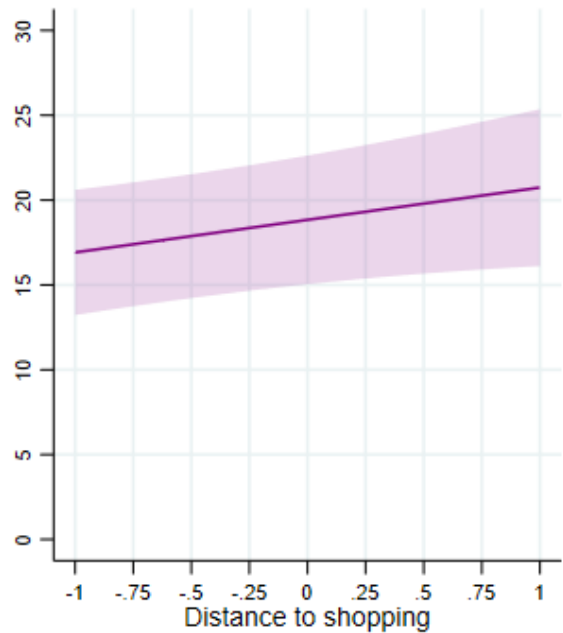
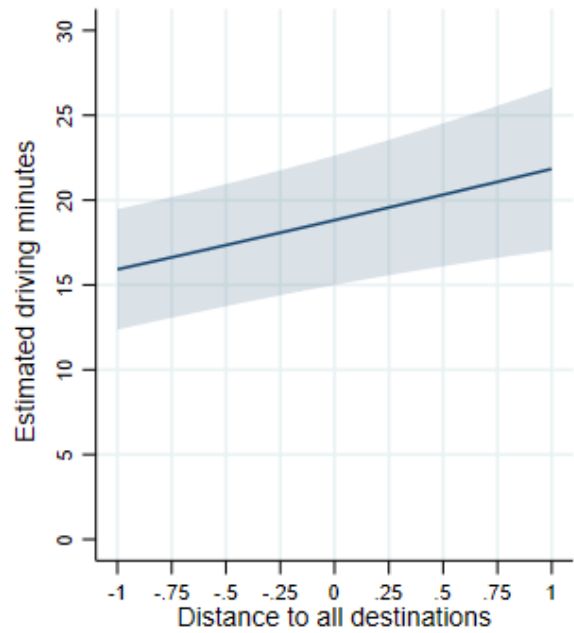
Adjusted expected driving times per distance percentiles



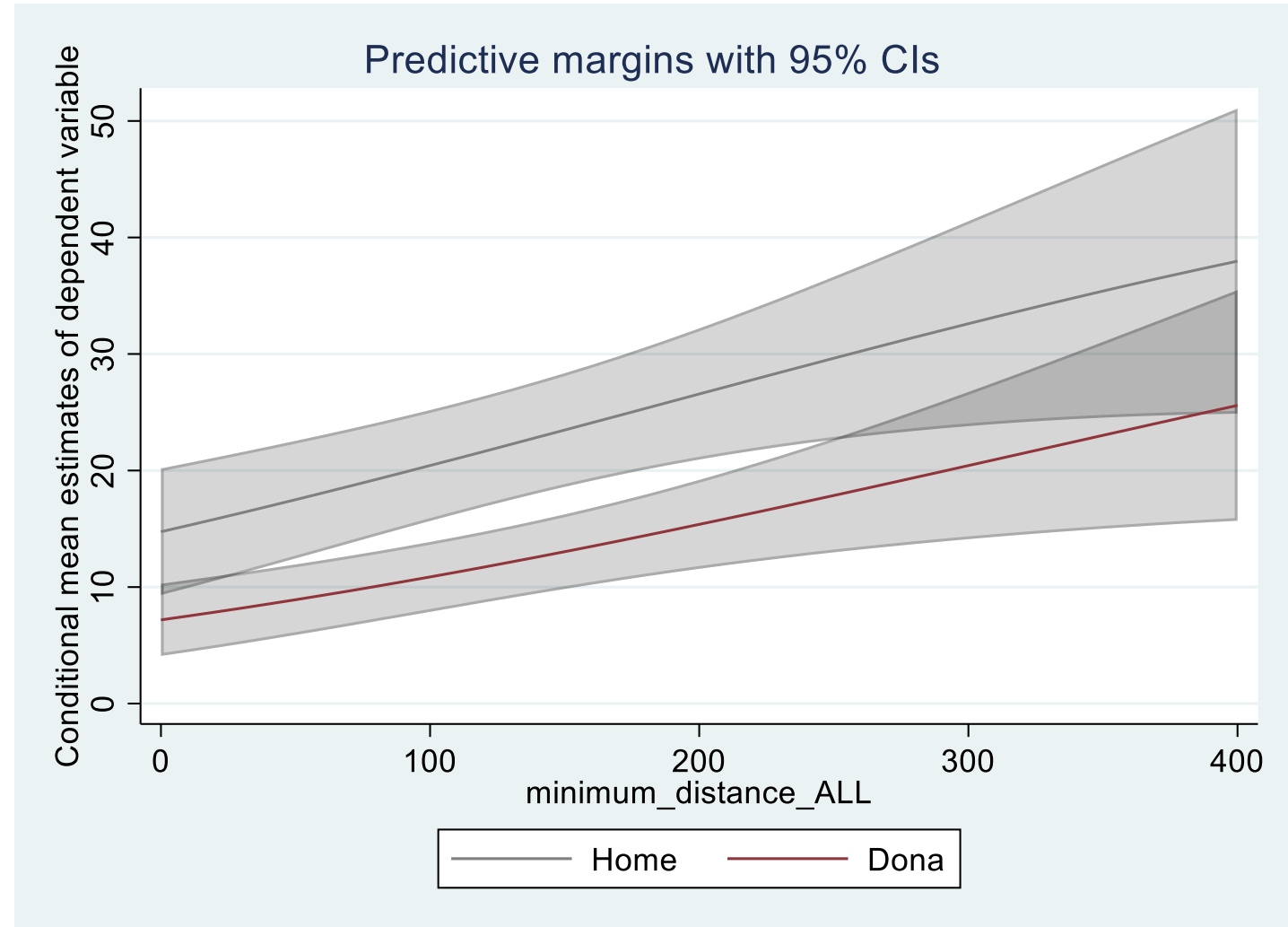
Adjusted daily driving times

Adjusted expected driving times per distance percentiles





Driving time
by average
distance to
basic
destinations
by gender

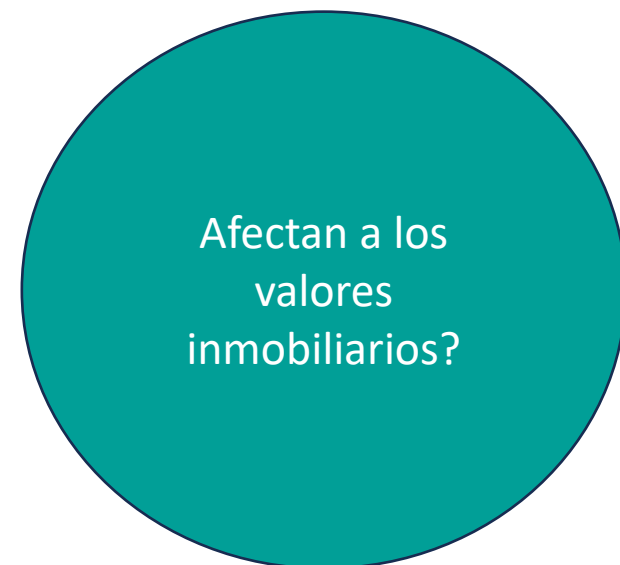
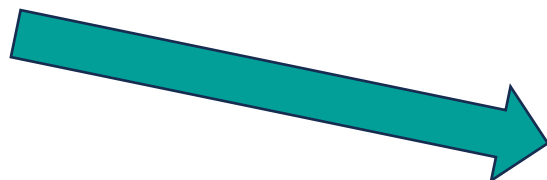
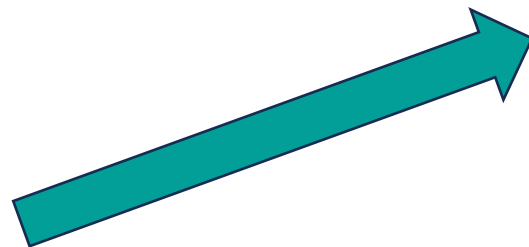
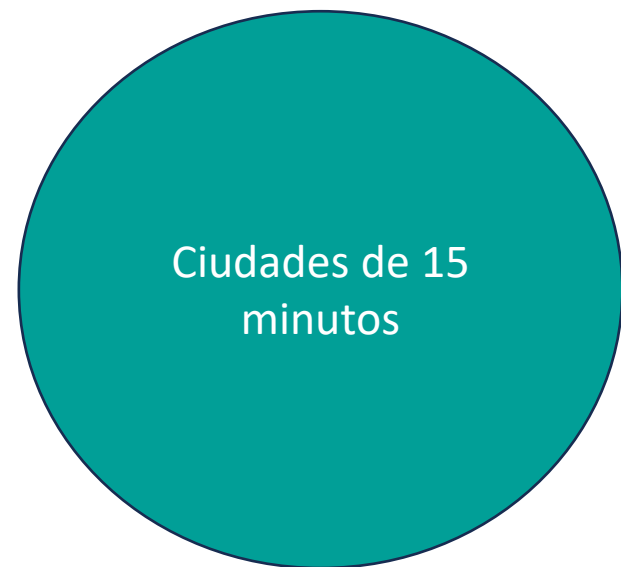




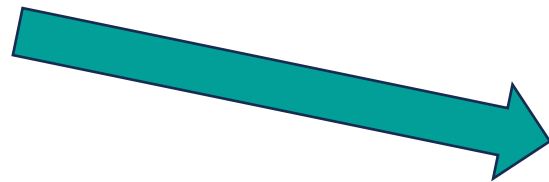
¿Vivir en una ciudad de 15 minutos está asociado con conducir menos?

- Menor probabilidad de usar el coche durante el día
- No hay asociaciones en las distancias recorridas para aquellos que usan el coche
- No es que la Ciudad de 15 Minutos esté acortando distancias, sino que está creando un cambio modal
- Efectos desiguales en términos de género y otras variables socioeconómicas

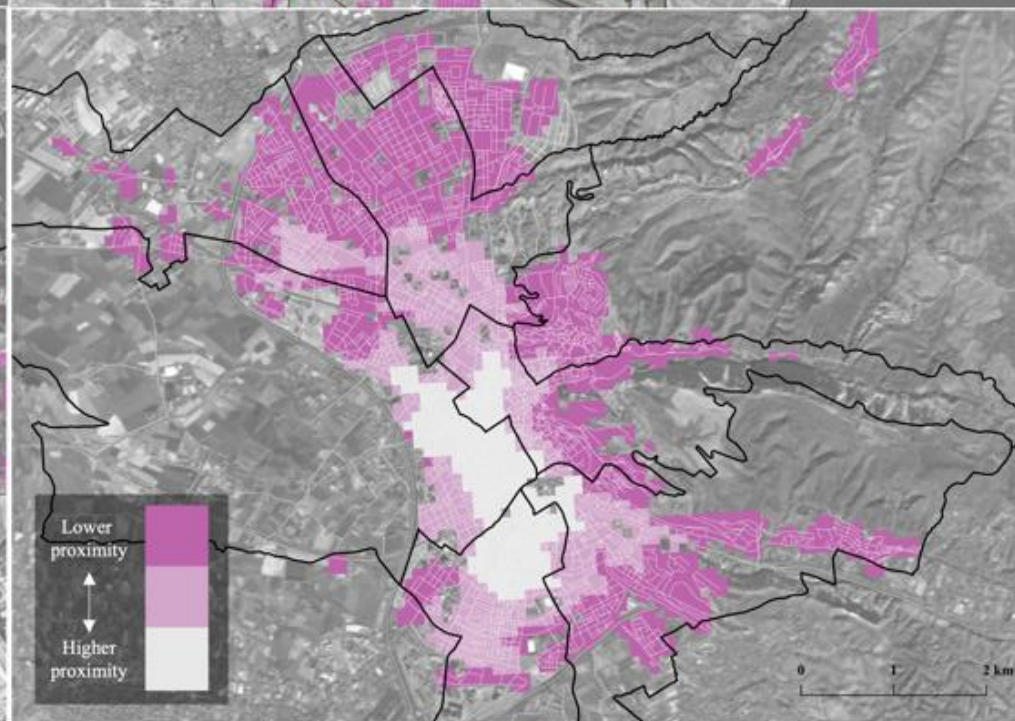
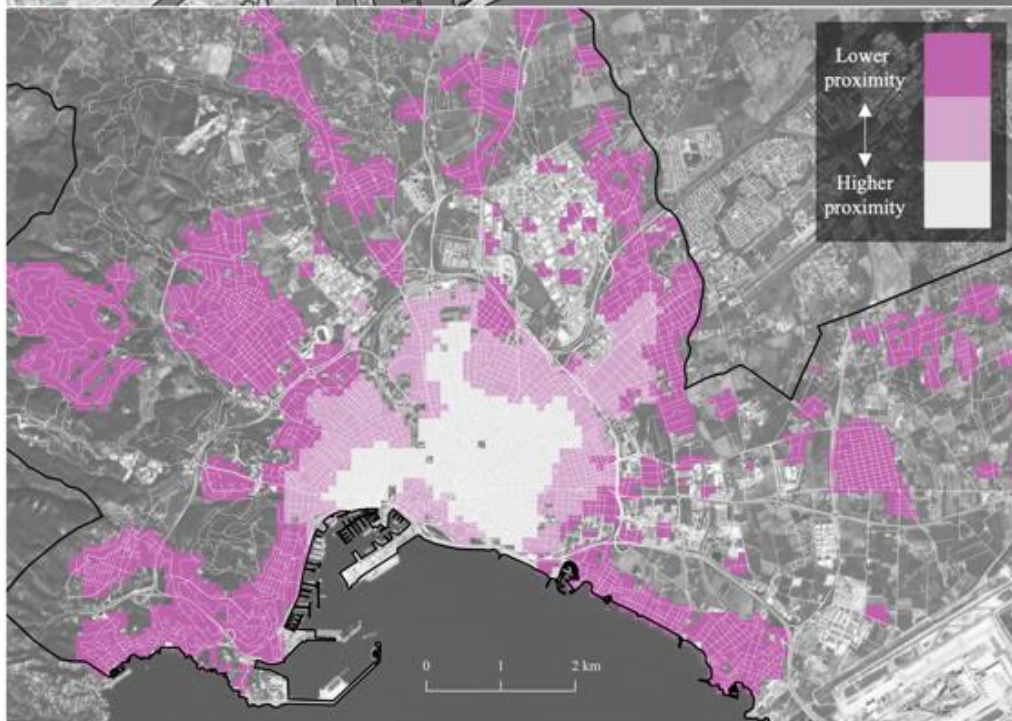
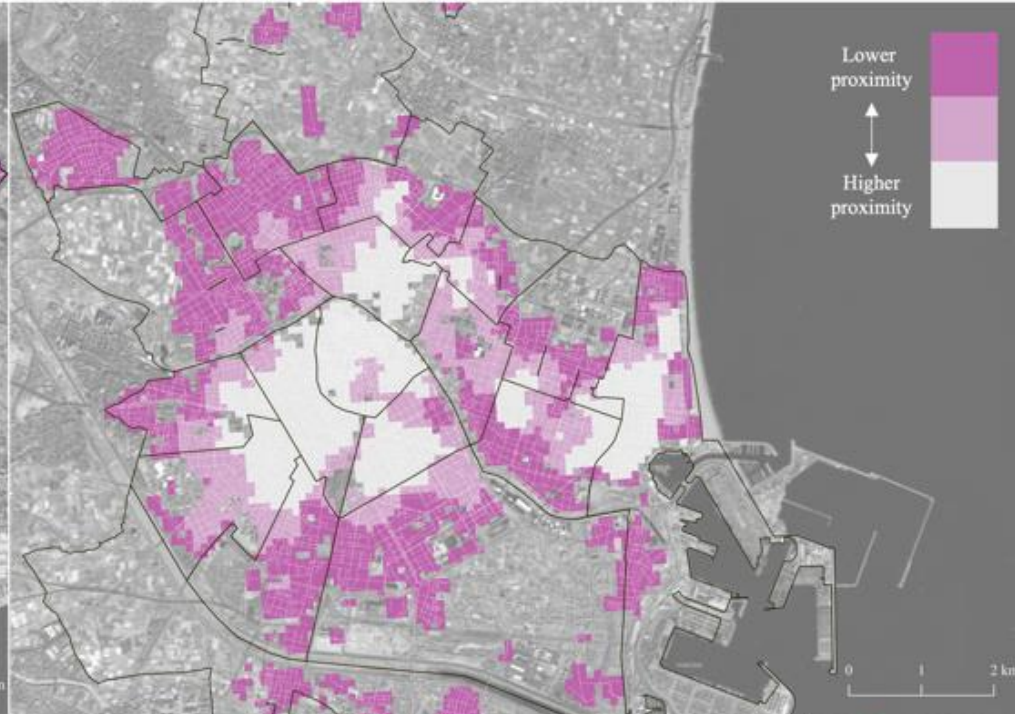
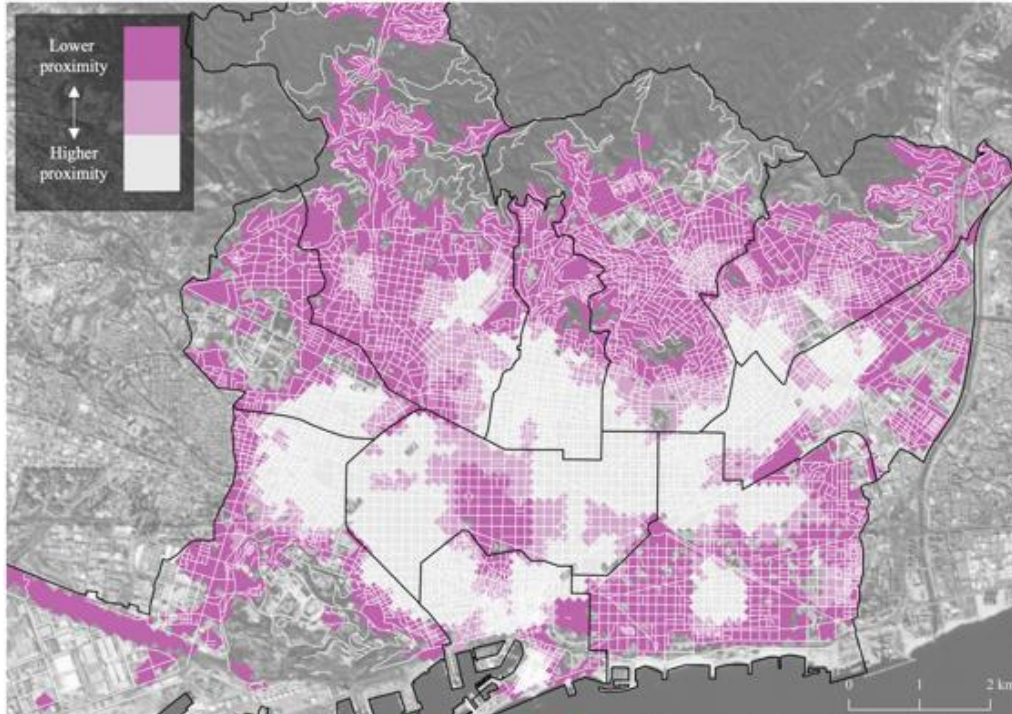
Valores inmobiliarios

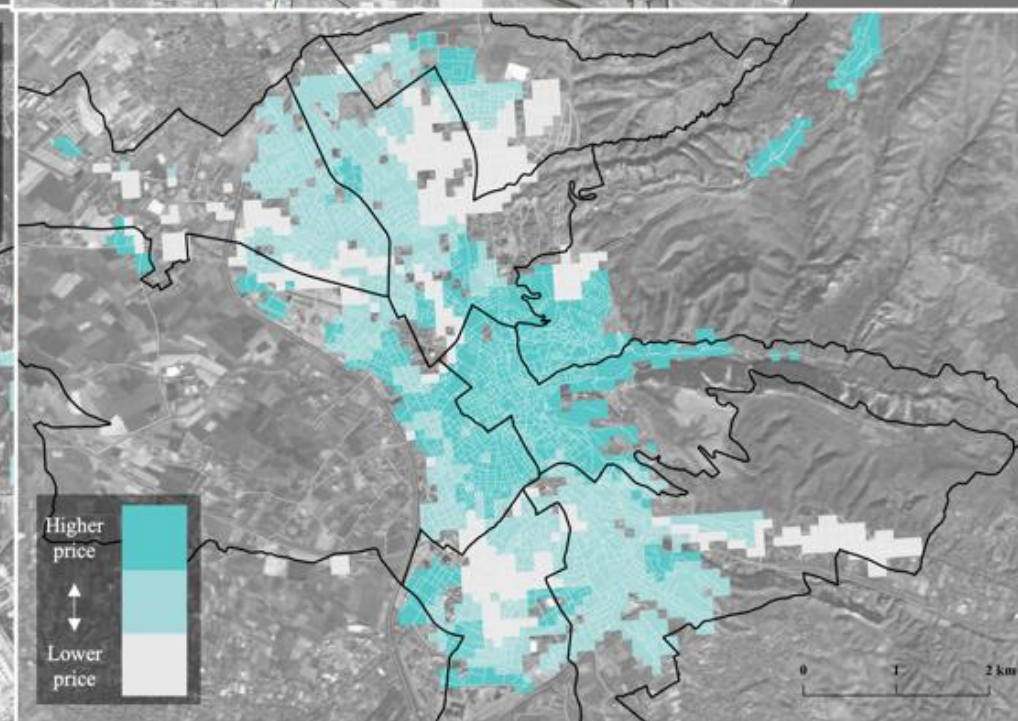
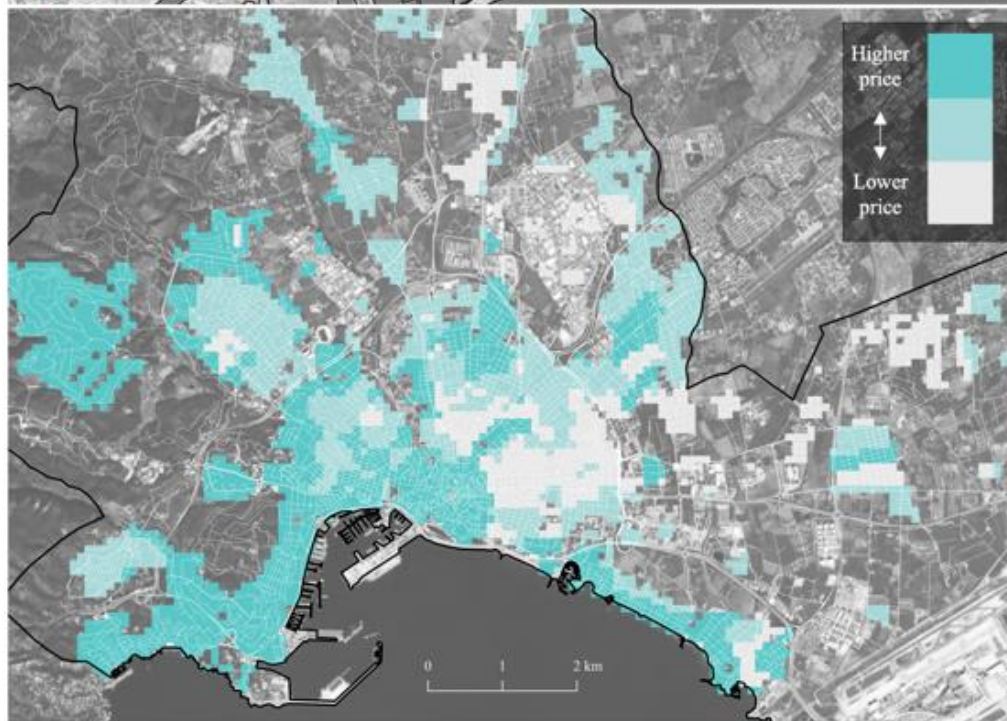
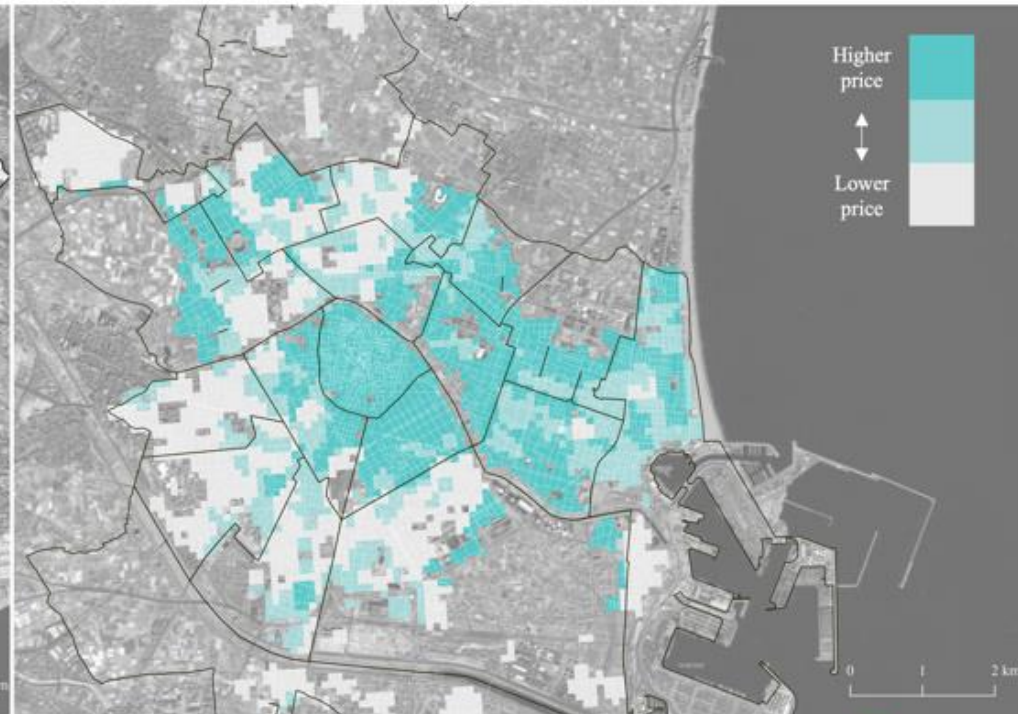
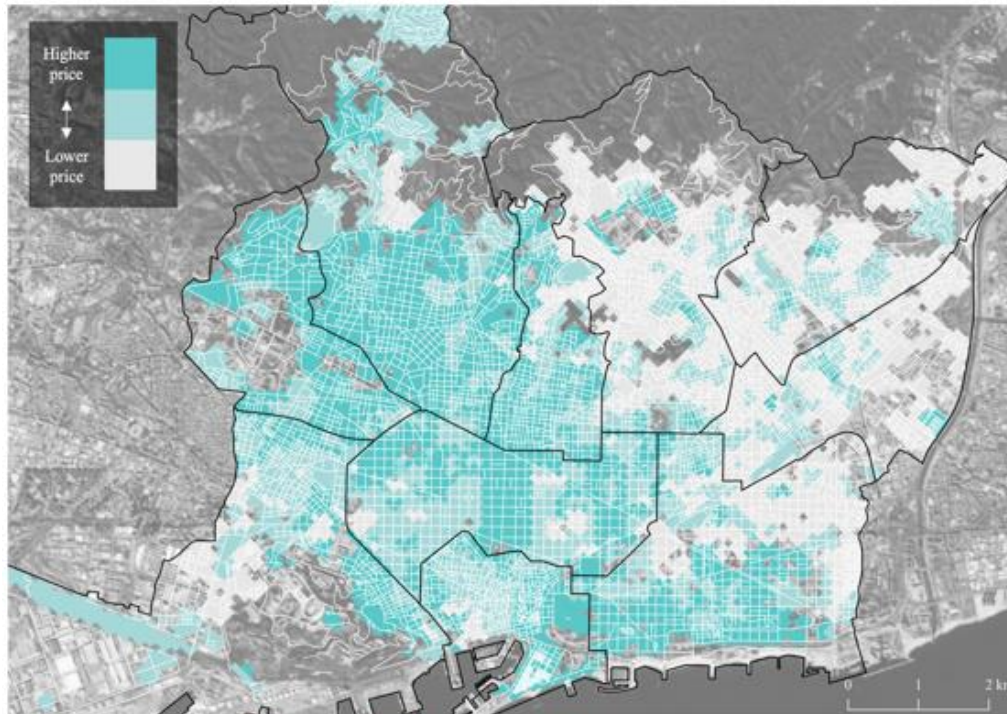


Ciudades de 15 minutos



Afectan a los valores inmobiliarios?

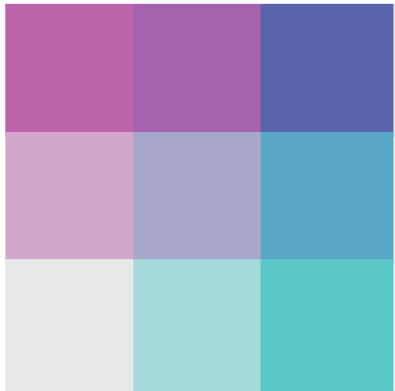




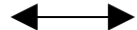
Lower
proximity



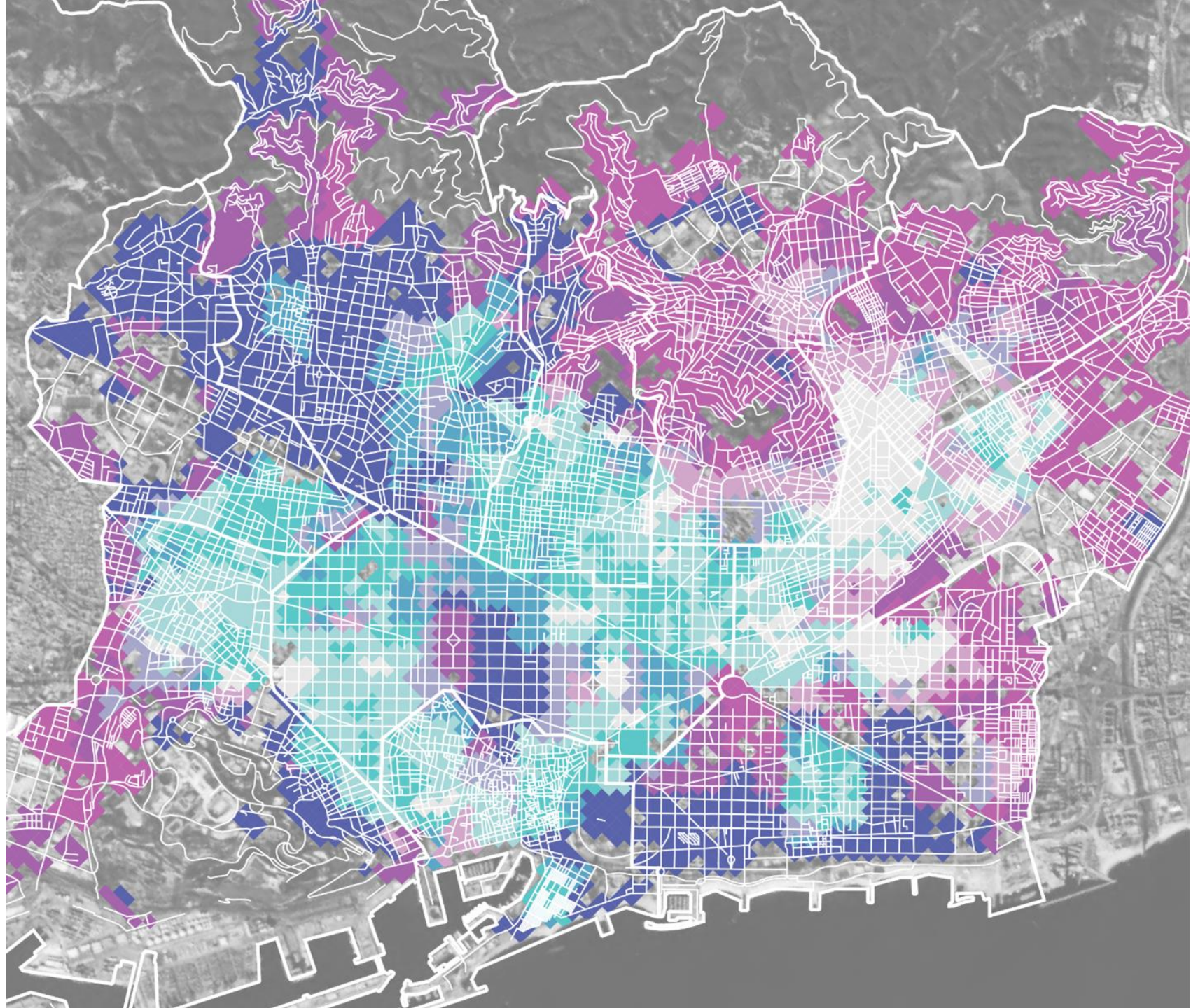
Higher
proximity

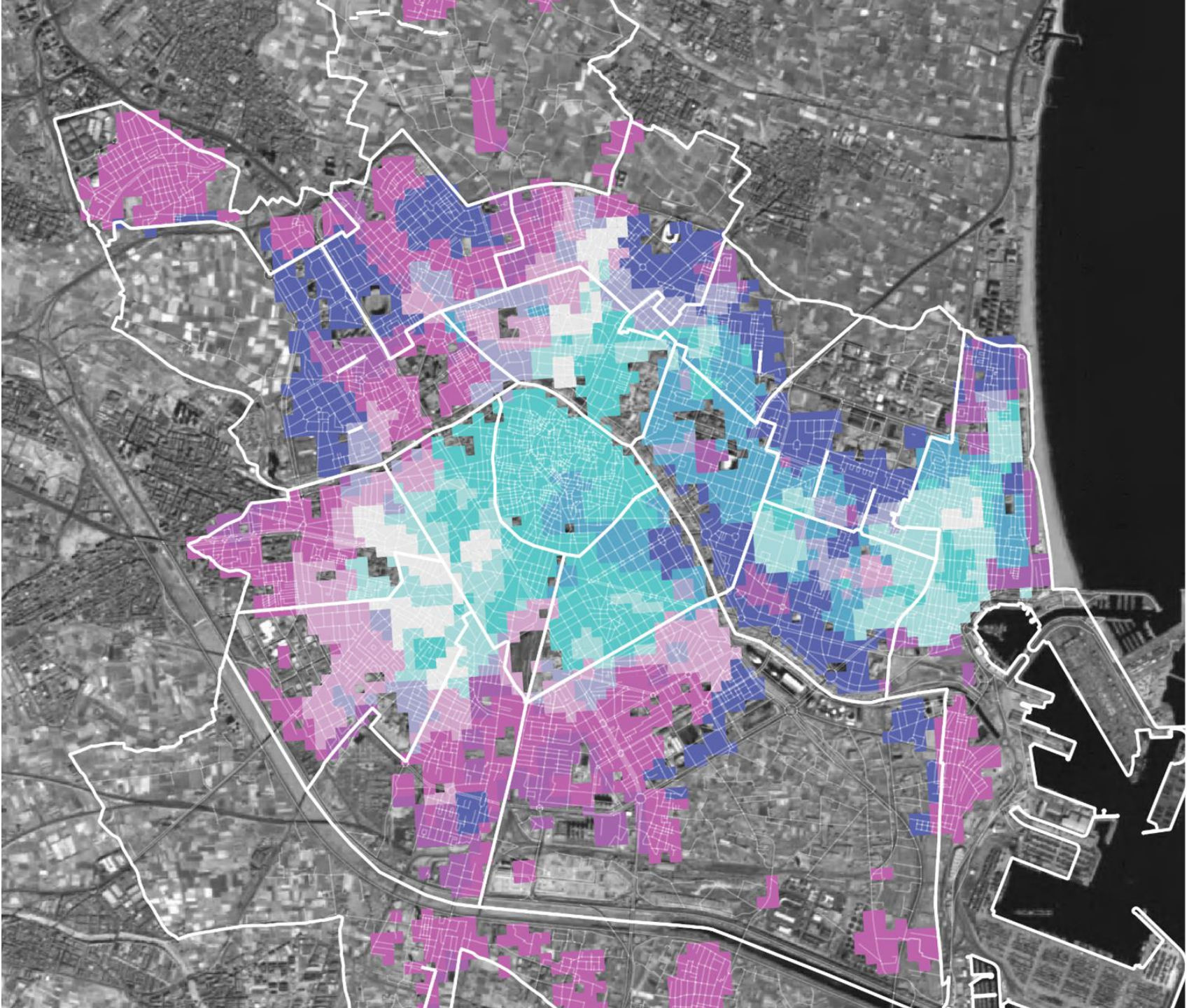


Lower
price



Higher
price





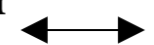
Lower
proximity



Higher
proximity



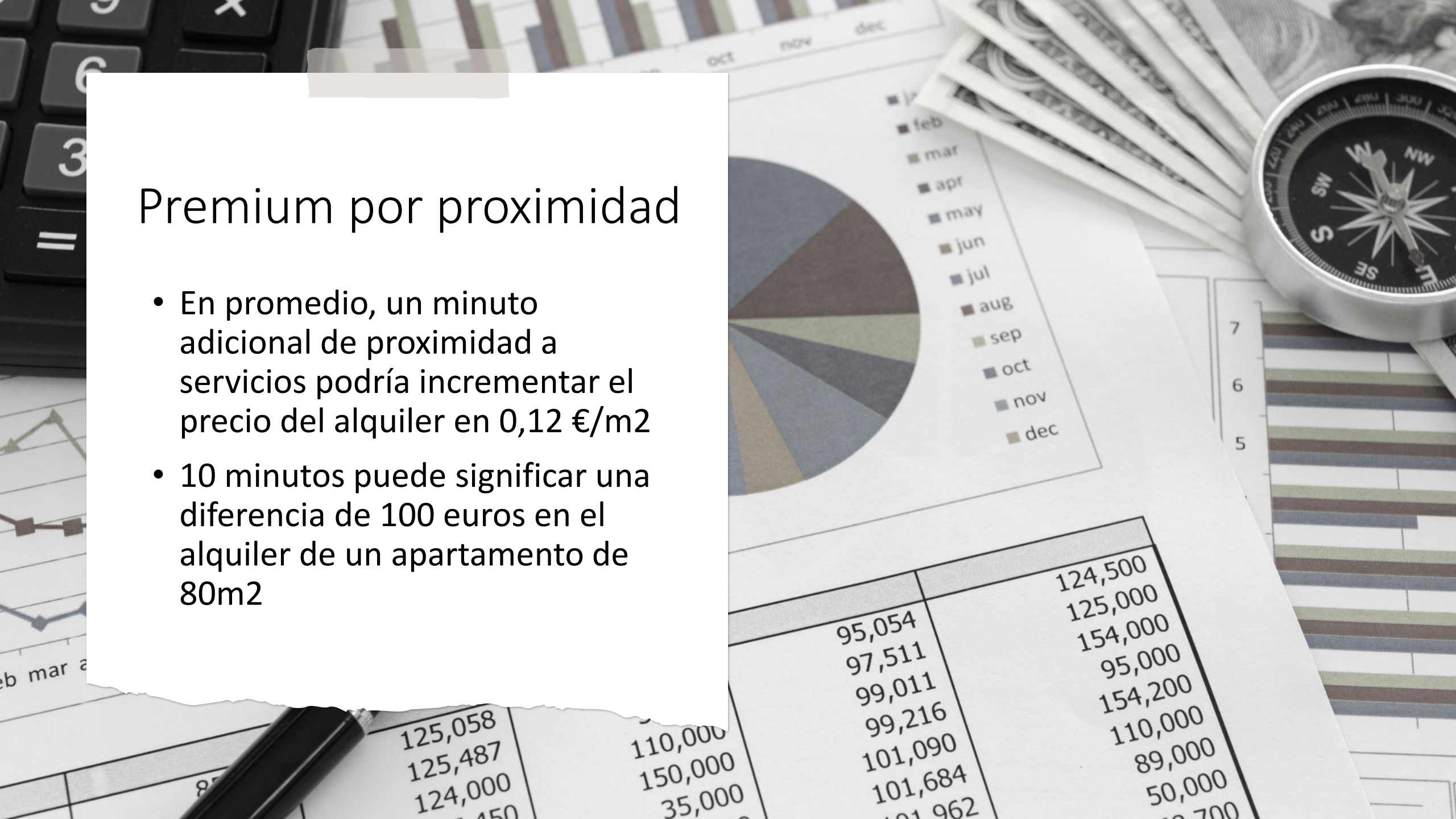
Lower
price



Higher
price

Premium por proximidad

- En promedio, un minuto adicional de proximidad a servicios podría incrementar el precio del alquiler en 0,12 €/m²
- 10 minutos puede significar una diferencia de 100 euros en el alquiler de un apartamento de 80m²



Conclusiones

- ¿Barcelona como una ciudad de 15 minutos?
 - Más bien una ciudad de 10 minutos
- El uso del coche en el centro de las ansiedades de las personas respecto a los 15 minutos
- No es que la Ciudad de 15 Minutos esté acortando distancias, sino que está creando un cambio modal
- Resultados alentadores para el concepto de ciudad de 15 minutos como una herramienta de gestión de la demanda de viajes.
- Se paga un precio premium por la accesibilidad, pero no en todas partes
- Seguir el vínculo entre la accesibilidad y los precios para prevenir problemas y preocupaciones de gentrificación
- 2 Advertencias para la generalización y reproducibilidad
 - La municipalidad de Barcelona no es la verdadera ciudad funcional
 - Estrato superior de accesibilidad. Explorar relaciones no lineales

Gracias!!

