

POLIS

CITIES AND REGIONS FOR TRANSPORT INNOVATION

ANNUAL
CONFERENCE

2022

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#POLIS2022

Lisbon's journey towards the digital transformation of the urban mobility system

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EMEL - Municipal Company for Mobility and Parking of Lisbon

VOXPOP

Lisbon Mobility
Goes Digital





THE PROJECT

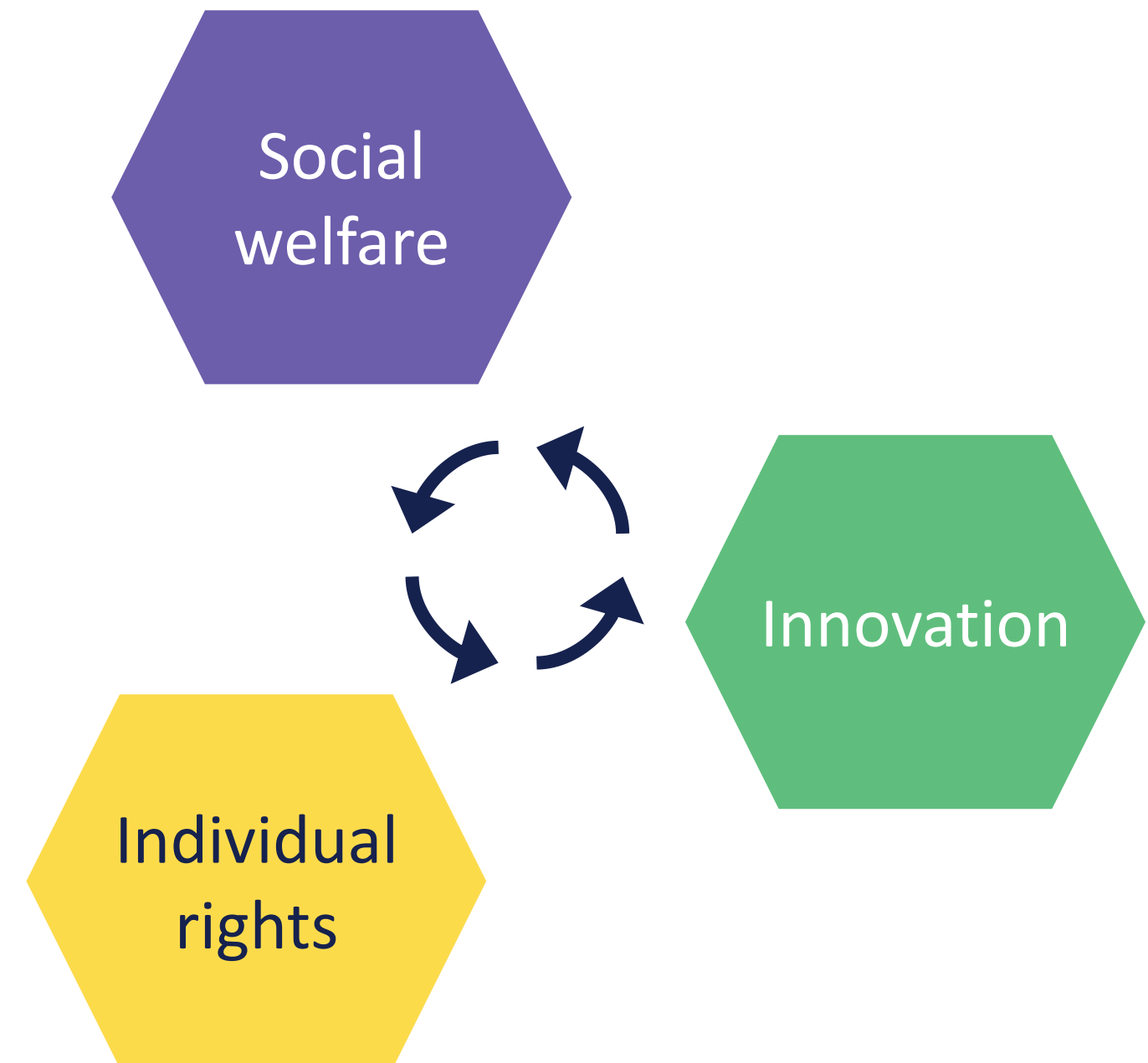
at a glance

- 2019 - 2023
- Digital transformation based on an integrated, participative approach to challenges with a particular emphasis on people-centred methodologies



our goals

- better inform decision-making processes and the creation of policies and measures, aiming the increase of social welfare
- foster innovation and economic development



the objective

work in a more collaborative and transparent fashion the sharing of data of public interest, to address a number of non-technological challenges of data sharing between public and private organisations

why?



Dormant, scattered and siloed **operational data**



Lack of systematic approaches and processes poorly adopted into daily practices to enable their future use



Inefficient **public space management**



Regulatory blind spots that allow innovators to exploit fragilities



Public transport users, and **vulnerable users** of the mobility system in general have a quiet voice



Service providers, especially large companies, **promoting the use of intrusive (and proprietary)** solutions, with **non-transparent** data usage policies

The background is a dark blue gradient. It features several white, thick, curved lines that intersect and flow across the frame. Scattered throughout are small, solid-colored circles in purple, green, red, and yellow. The text is centered in the middle of the image.

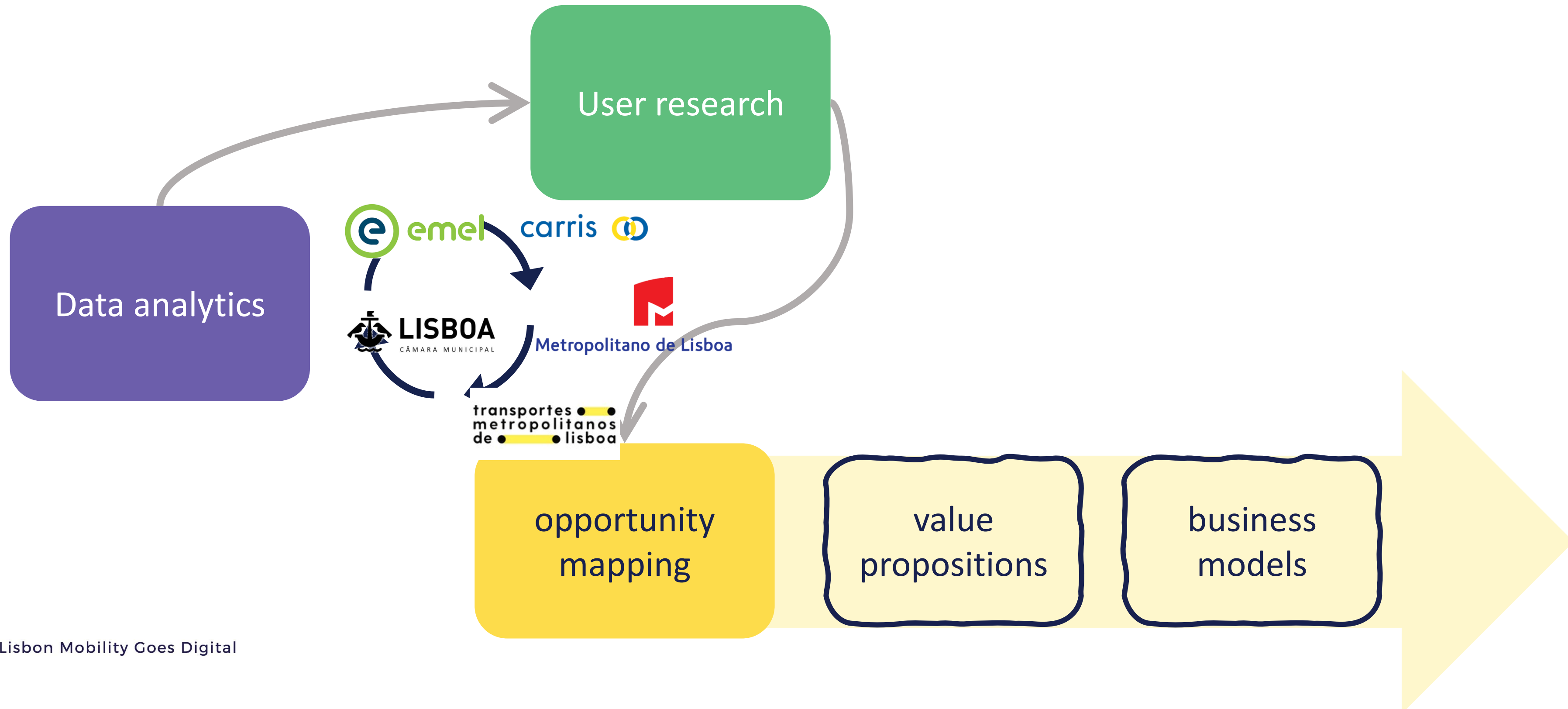
Creation of a voluntary trading ecosystem of data
of public interest, based on
reciprocity and balanced trade-offs

The background is a dark blue gradient. It features several white lines: some are straight and intersect, while others are curved and wavy. Scattered throughout are small, solid-colored circles in green, red, yellow, and purple. The number '2' is prominently displayed in the center in a large, white, sans-serif font.

2

HOW?

the approach



some of our challenges

- Making dissuasive car parks more appealing
- Collective passenger transport alternatives more suited to students' demand
- Creating mobility hubs to improve accessibility to Lisbon neighbourhoods
- Increasing commercial speed for buses
- Identify bicycle parking needs in the city
- Improving the cycling network

The background is a dark blue gradient. It features several white lines: some are straight and intersect, while others are curved and wavy. Scattered throughout are small, solid-colored dots in shades of green, red, yellow, and purple. The number '3' is centered in a large, white, sans-serif font.

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SOME EXAMPLES



Areeiro

Superfície



Av.ª Almirante Gago Coutinho (junto ao Clube de Campismo de Lisboa)
1000-010 Lisboa (Areeiro)

07:00-24:00

Concessão CML Rentabilidade 2019

Ver Planta da Infraestrutura: [PDF](#)

180 LUGARES EM EXPLORAÇÃO

120 60 €/DIA: 5,30 €

ALTERNATIVAS (VALOR/HORA):

1,20 €	0,9 €	725m	1,7€
Parque	ZEDL		Roma - Empark

Lug. PMR	Lug.VE	Motociclos	Bicicletas	Cabine	WC	Leitor Matrículas	Leitor Cartão
4	12	-	-	cap. 1 pax	Uso Interno	Instalado - Não funciona	Cartão Próprio + Cartão Navegante

COMPORTAMENTO (OCUPAÇÃO 2019)

ESTADIA (MÉDIA)

0 d 15 h 11 m

0 d 03 h 50 m

(MEDIANA)

0 d 09 h 14 m

0 d 01 h 35 m

REGISTOS (ENTRADAS E SAÍDAS)

26%

74%

DIA DE SEMANA

Registos Entrada



FIM DE SEMANA

Registos Entrada




REGISTOS SAÍDA




SERVIÇOS E PRODUTOS DISPONÍVEIS

CVE | Via Verde

Produtos disponíveis	Assinaturas/Mês (2019)	Facturação (2019)	Lista espera (2021)	
Público-24 Horas	€ 50	45	88,7%	29
Passo Lisboa VIVA-24 Horas	€ 54	14	11,3%	4



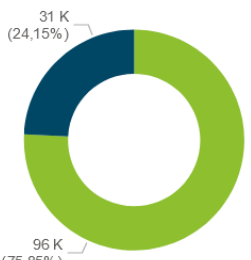
Calçada do Combro

01-01-2019 a 31-12-2019

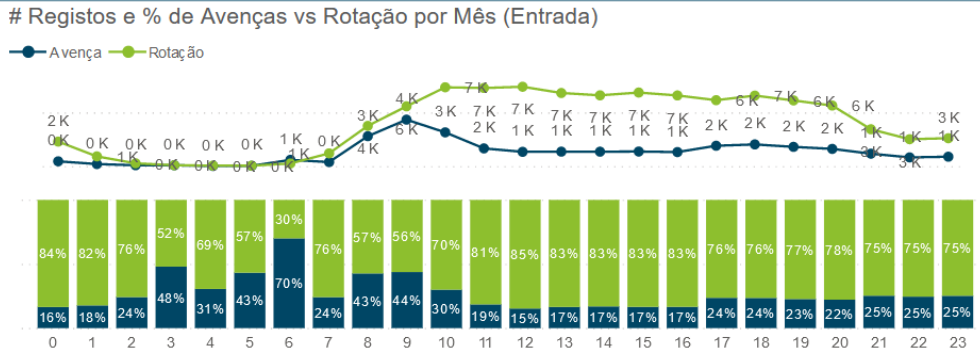
248 Capacidade Total 126.817 # Registos 10 LoS Horas Média

Registos por Tipo de Produto

● Rotação ● Avença



Registos e % de Avenças vs Rotação por Mês (Entrada)



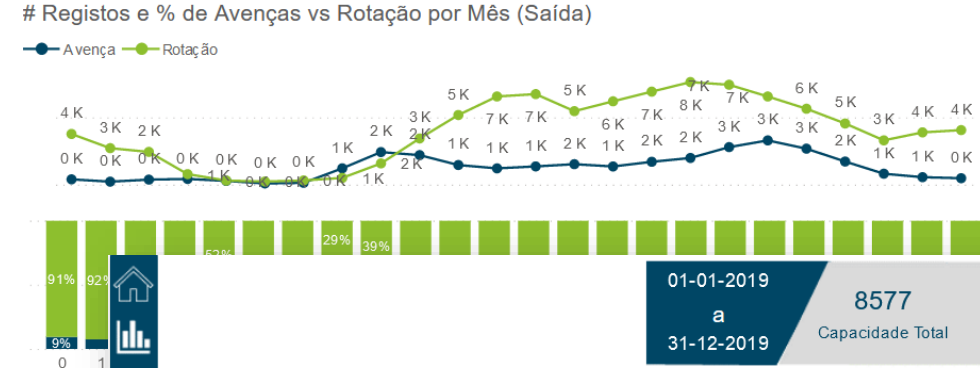
Avenças LoS Horas


7988 Máx
22 Média
10 Mediana
0 Min
1 Moda

Rotação LoS Horas

2500 Máx
6 Média
2 Mediana
0 Min
0 Moda

Registos e % de Avenças vs Rotação por Mês (Saída)





Rotação

01-01-2019 a 31-12-2019

8577 Capacidade Total 1.108.370 # Registos 4 LoS Horas Média

● Tarifa ePark (500m) + Barata que Parque

● Tarifa ePark (500m) + Cara que Parque

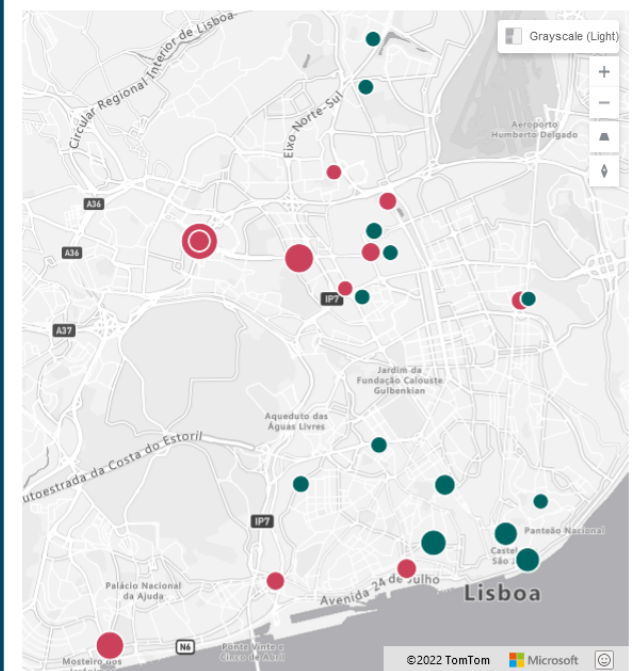
Amarela 1,20

Castanha 2,00

Verde 0,80

Vermelha 1,60

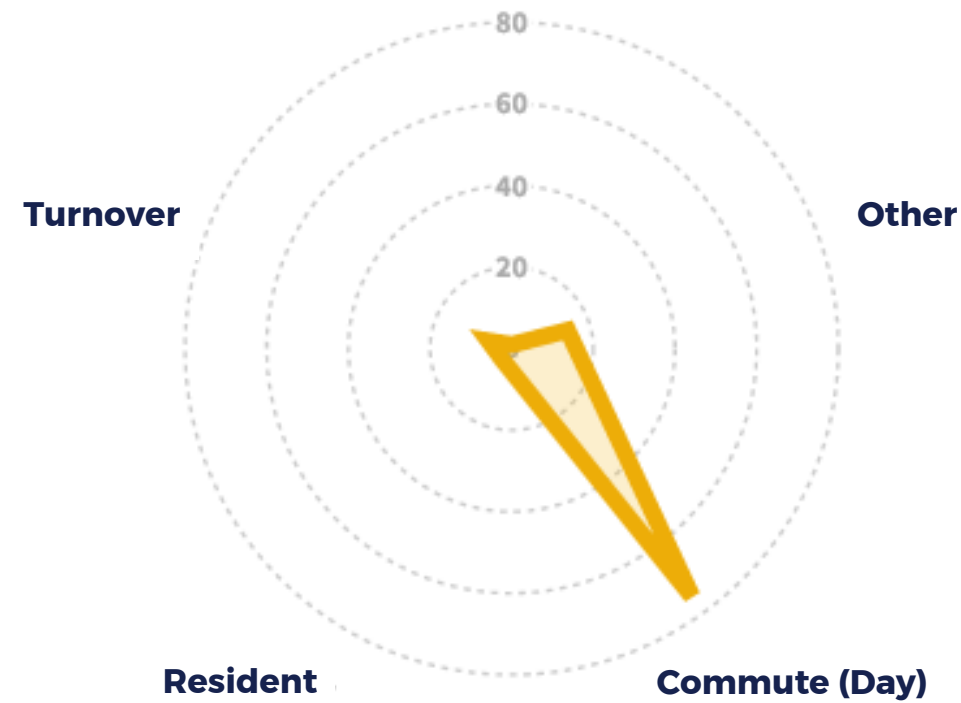
Parque	Preço Rotação 1ª Hora	Tarifa Rotação Média 500m Atual	Tarifa Média Hora Atual Dif 500m	Tarifa Min Rotação 500m Atual	Tarifa Min Hora Atual Dif 500m
Ameixoeira	0,50 €	0,8 €	0,3 €	0,8 €	0,3 €
Manuel Gouveia	0,50 €	0,9 €	0,4 €	0,8 €	0,3 €
Calçada do Combro	1,45 €	1,6 €	0,1 €	1,6 €	0,2 €
Campo das Cebolas	1,50 €	1,8 €	0,3 €	1,6 €	0,1 €
Campo de Ourique	0,80 €	0,9 €	0,1 €	0,8 €	0,0 €
Cidade Universitária	0,80 €	0,9 €	0,0 €	0,8 €	0,0 €
Graça	0,80 €	0,9 €	0,1 €	0,8 €	0,0 €
Lumiar	0,80 €	0,8 €	0,0 €	0,8 €	0,0 €
Parque Mayer	1,25 €	1,5 €	0,2 €	1,2 €	-0,1 €
Alto dos Moinhos	1,00 €	0,8 €	-0,2 €	0,8 €	-0,2 €
Belém	1,00 €	0,8 €	-0,2 €	0,8 €	-0,2 €
Rego	1,00 €	1,1 €	0,1 €	0,8 €	-0,2 €
Campo Grande	1,10 €	0,9 €	-0,3 €	0,8 €	-0,3 €
Colégio Militar	1,10 €	0,8 €	-0,3 €	0,8 €	-0,3 €
Universidade	1,10 €	0,8 €	-0,3 €	0,8 €	-0,3 €
Alcântara	1,20 €	0,8 €	-0,4 €	0,8 €	-0,4 €
Areeiro	1,20 €	0,9 €	-0,3 €	0,8 €	-0,4 €
Casal Vistoso	1,20 €	0,8 €	-0,4 €	0,8 €	-0,4 €
Combatentes	1,20 €	1,0 €	-0,2 €	0,8 €	-0,4 €
D. Luís I	1,20 €	1,0 €	-0,2 €	0,8 €	-0,4 €
Sousa Pinto	1,20 €	1,2 €	0,0 €	0,8 €	-0,4 €
Teixeiras Nascente	1,20 €	0,8 €	-0,4 €	0,8 €	-0,4 €
Teixeiras Poente	1,20 €	1,2 €	0,0 €	0,8 €	-0,4 €
Av. Lusitana	1,25 €	0,8 €	-0,5 €	0,8 €	-0,5 €
Estrada da Luz	1,25 €	0,8 €	-0,5 €	0,8 €	-0,5 €
Chão do Loureiro	1,45 €	1,7 €	0,3 €	0,8 €	-0,7 €



profiling demand to assess induced behaviour

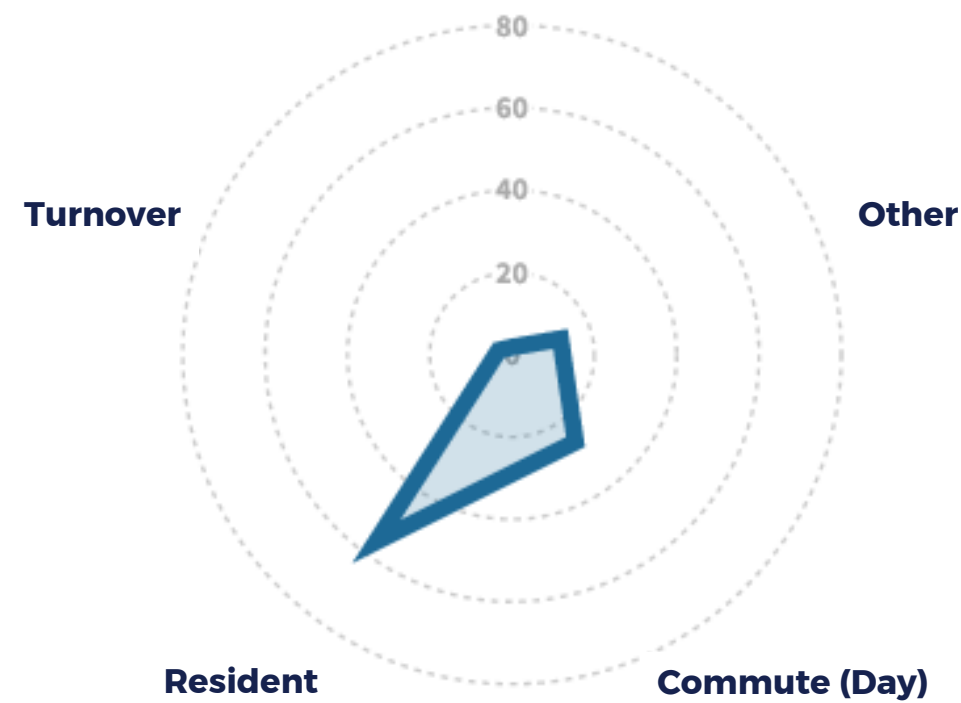
Car park A

High Turnover



Car park B

High Turnover

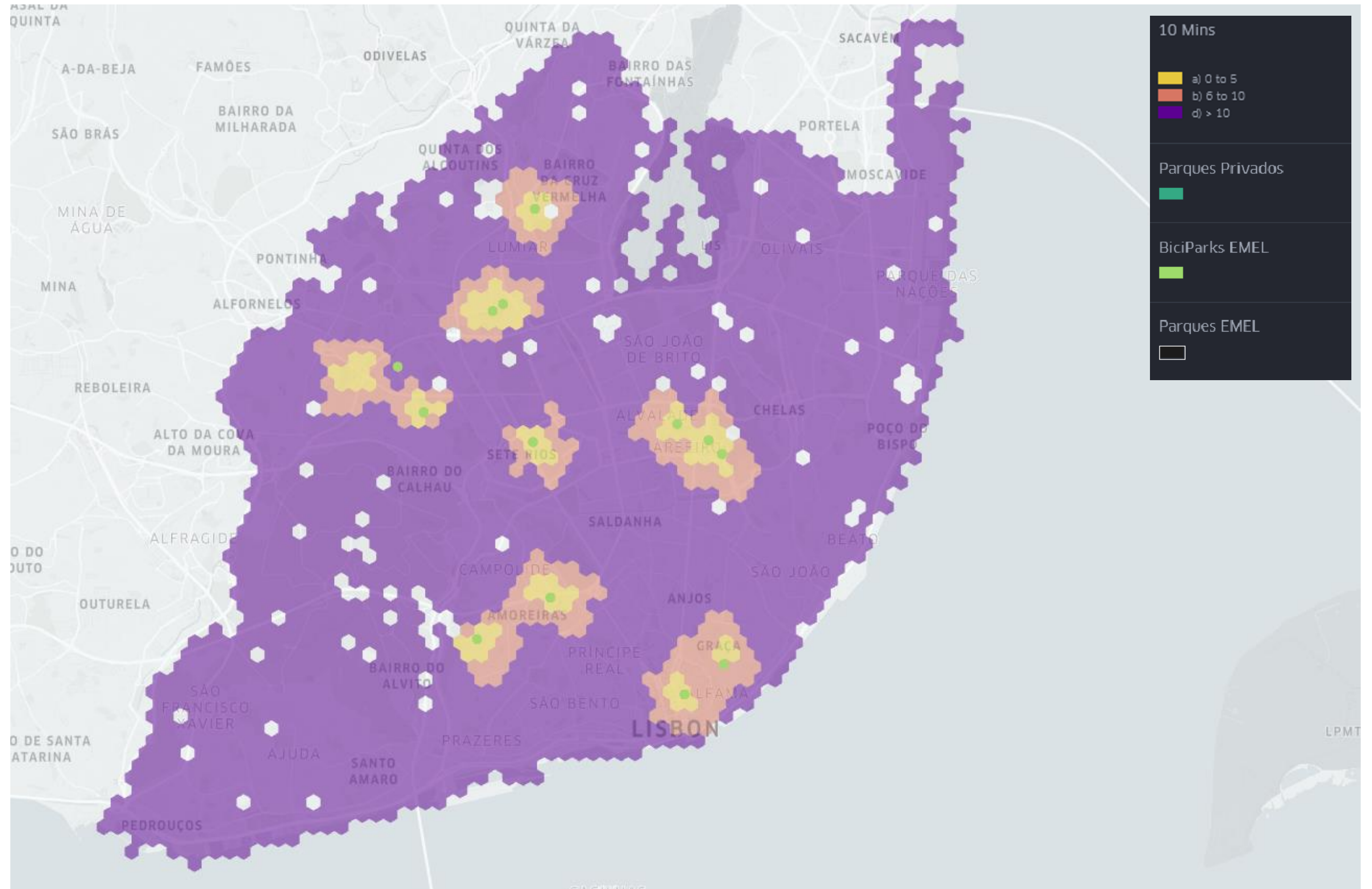


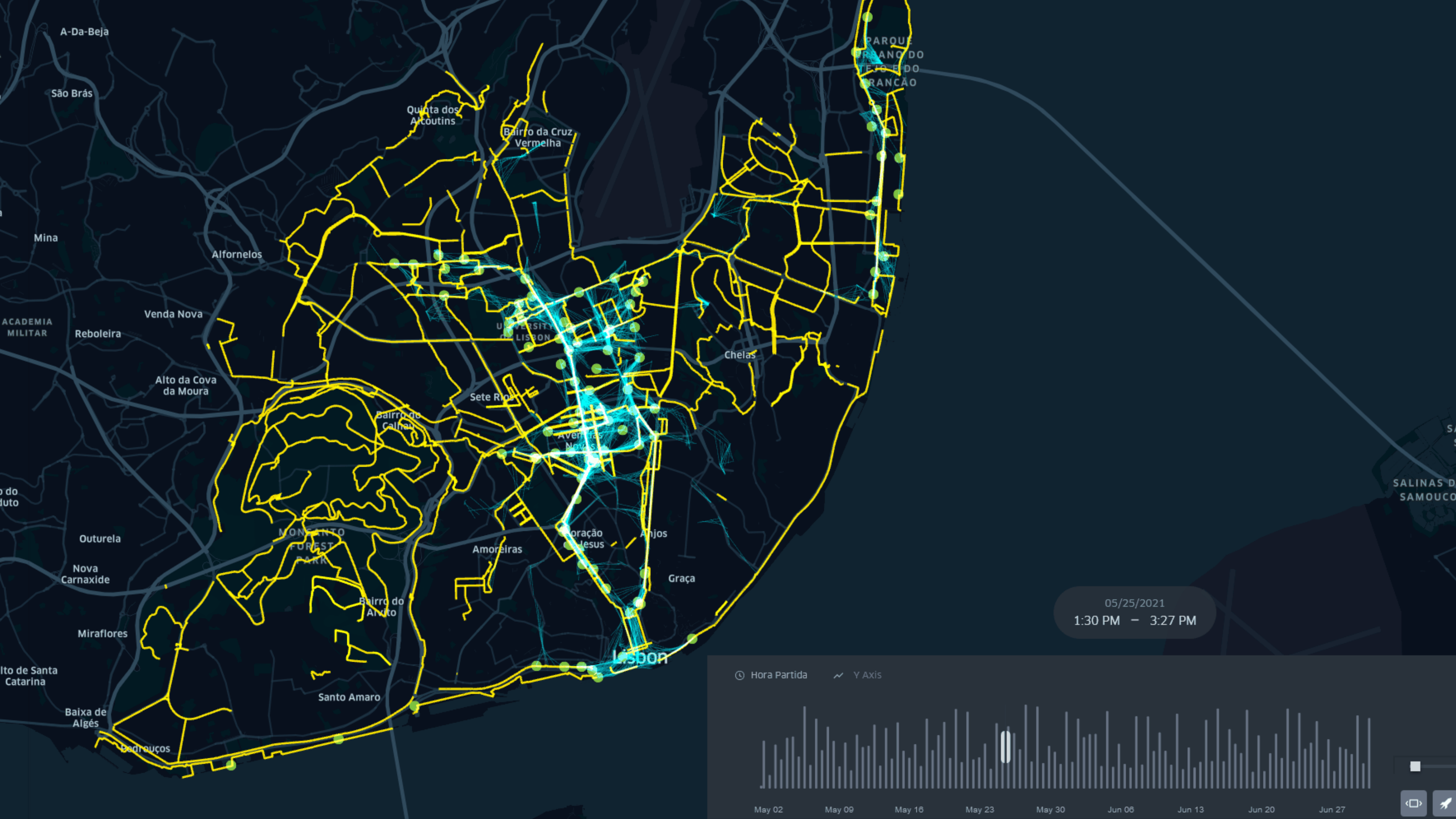
Car park C

High Turnover



Walkable distance from secure bicycle parking locations (10 min)





05/25/2021
1:30 PM - 3:27 PM

🕒 Hora Partida ~ Y Axis



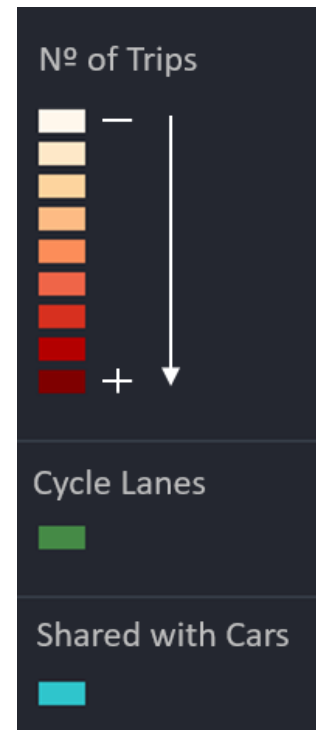
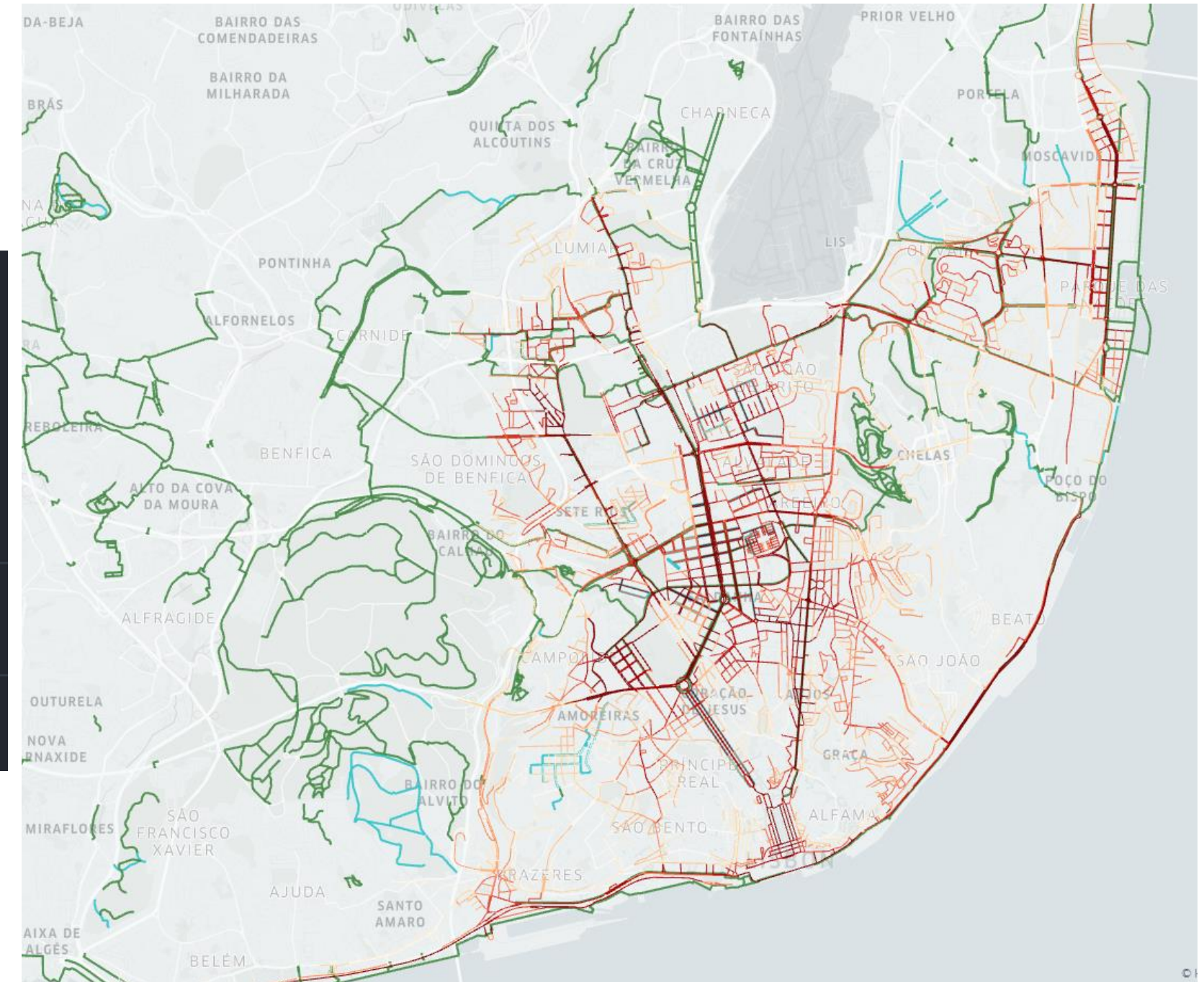
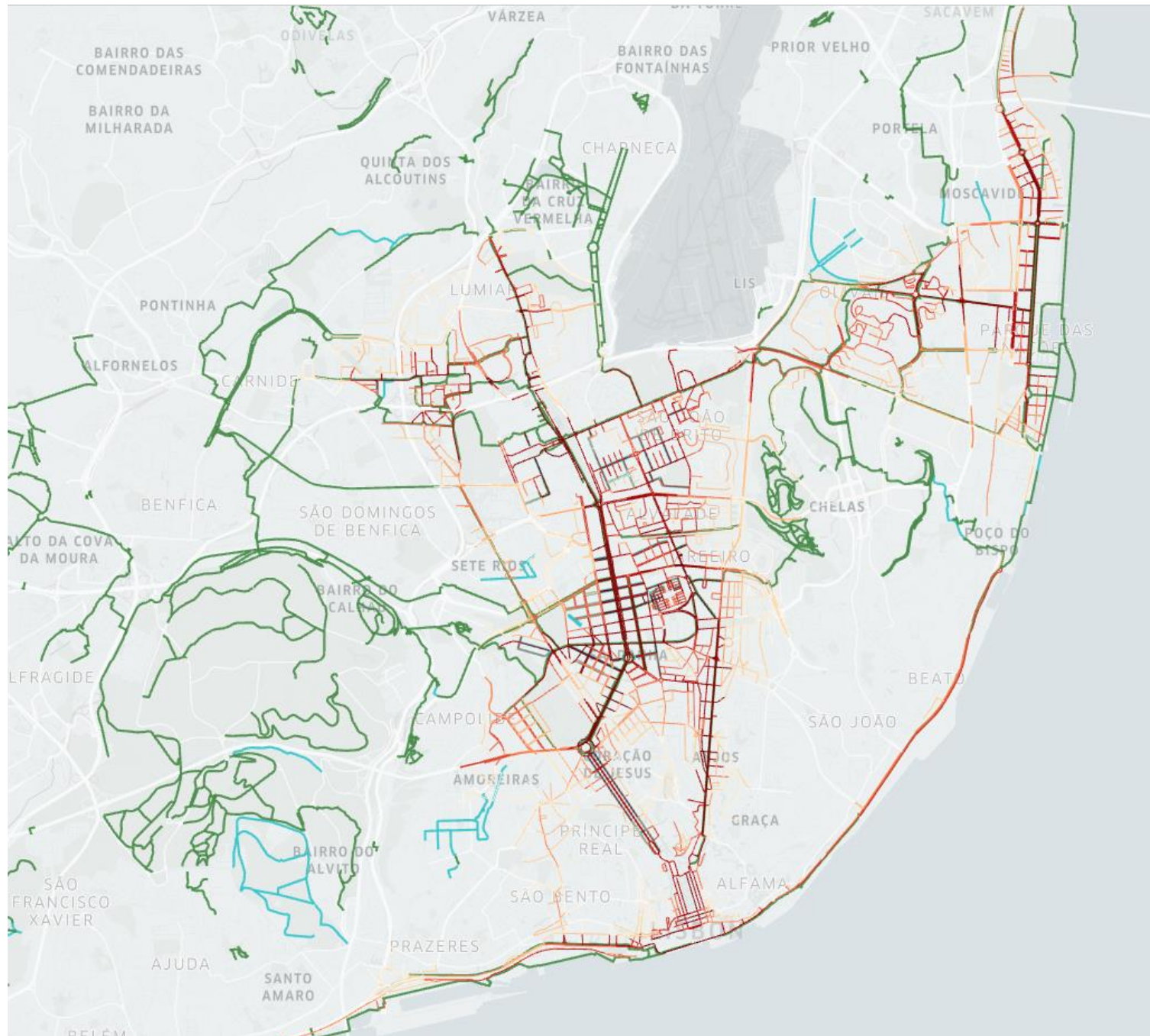
May 02 May 09 May 16 May 23 May 30 Jun 06 Jun 13 Jun 20 Jun 27



on the importance of multiple data sources

GIRA (Lisbon's bike-sharing system)

Micromobility



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SOME OF THE
OTHER METHODS
& TOOLS






BSSIC PACKAGE



50€

Estrutura de acesso restrito



0€

Acesso com chave



0€

Bicicletário instalado em ângulo de câmara videovigilância ou operador



0€

Porta de abertura manual



50€

Estrutura semi-opaca (permite visibilidade apenas para fora)



50€

Acesso com cartão personalizado



75€

Câmara de videovigilância dentro do bicicletário



25€

Porta manual facilitada



25€

Estrutura totalmente opaca



75€

Autenticação do utilizador



50€

Sistema de controlo remoto de portas (se porta for deixada aberta)




100€

Cacifos individuais

VOXPOP

Lisbon Mobility
Goes Digital

Sofia Taborda
 @s_taborda



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Our Partners

