

Fernando Lozano

Metro Málaga



metro
Málaga

CONNECTING COMMUNITIES

Metro de Málaga's thriving network through line extensions

2024 European Light
Rail Congress

Fernando Lozano, Chief Executive Officer



1

Doubling ridership (is it possible?)



10.8 km network – 17 stations



1

Doubling ridership (is it possible?)

Extension of lines 1 & 2 to the center



12.8 km network – 19 stations



2

About Metro de Málaga

Málaga is the most heavily populated coastal city in southern Spain: >550,000 inhabitants





2

About Metro de Málaga. Current network



LRT, 84% underground

Since 2014

2 lines, 19 stations

Total commercial length: 12,8 km

18 trains CAF Urbos III & 100

Frequency: 5 minutes

13,6 Mill passengers/year

Customers satisfaction rate: 8,8





2

About Metro de Málaga. Metro or tram?



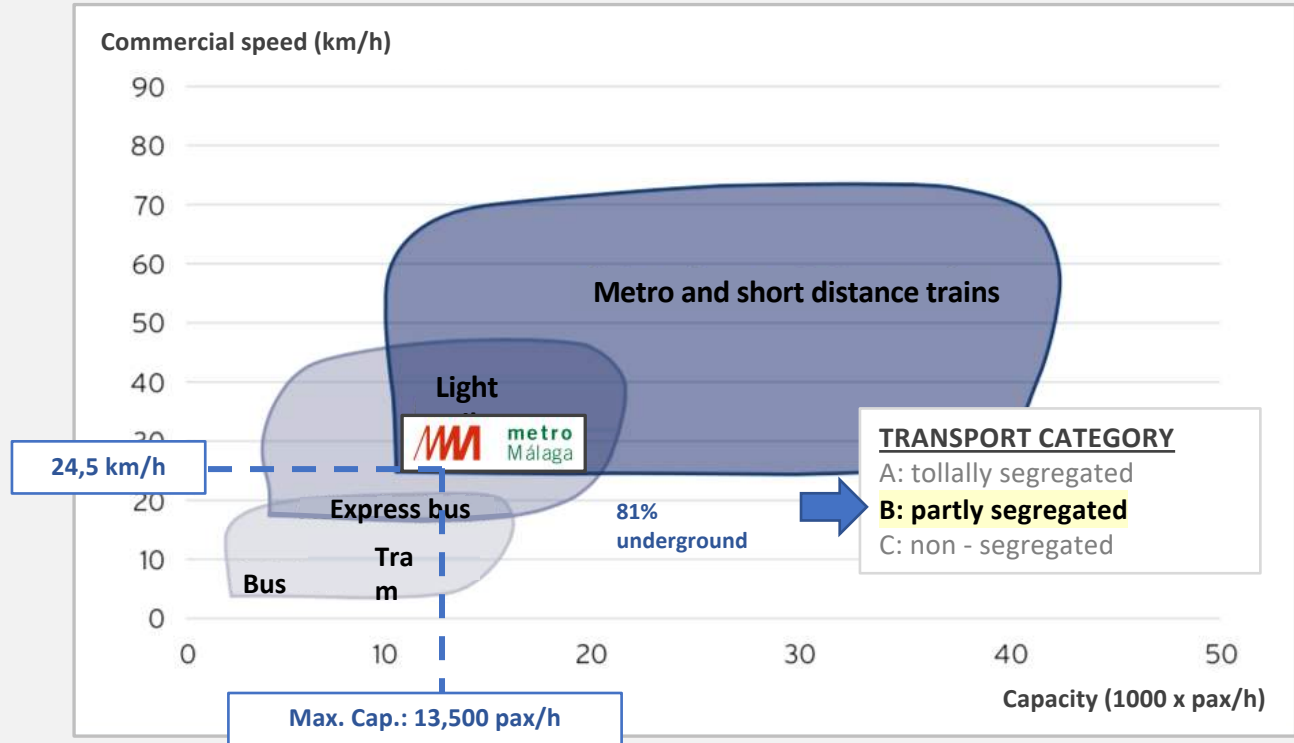
METRO DE MALAGA: Metro or tram?

What type of LRT do we have?





Public transport categories



Graph, source: Manual de tranvías, metros ligeros y sistemas en plataforma reservada; Clara Zamorano, Joan M. Bigas, Julián Sastre





2

About Metro de Málaga. SDGs

SUSTAINABLE DEVELOPMENT GOALS

<p>1 NO POVERTY</p>	<p>2 ZERO HUNGER</p>	<p>3 GOOD HEALTH AND WELL-BEING</p>	<p>4 QUALITY EDUCATION</p>	<p>5 GENDER EQUALITY</p>	<p>6 CLEAN WATER AND SANITATION</p>
<p>7 AFFORDABLE AND CLEAN ENERGY</p>	<p>8 DECENT WORK AND ECONOMIC GROWTH</p>	<p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	<p>10 REDUCED INEQUALITIES</p>	<p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>
<p>13 CLIMATE ACTION</p>	<p>14 LIFE BELOW WATER</p>	<p>15 LIFE ON LAND</p>	<p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	<p>17 PARTNERSHIPS FOR THE GOALS</p>	





2

About Metro de Málaga. SDGs

1 NO POVERTY

2 ZERO HUNGER

3 GOOD HEALTH AND WELL-BEING

4 QUALITY EDUCATION

5 GENDER EQUALITY

6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

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15 LIFE ON LAND

16 PEACE AND JUSTICE STRONG INSTITUTIONS

17 PARTNERSHIPS FOR THE GOALS

THE GLOBAL GOALS





2

About Metro de Málaga. New photovoltaic plant

Generation with photovoltaic power plants, “in situ”

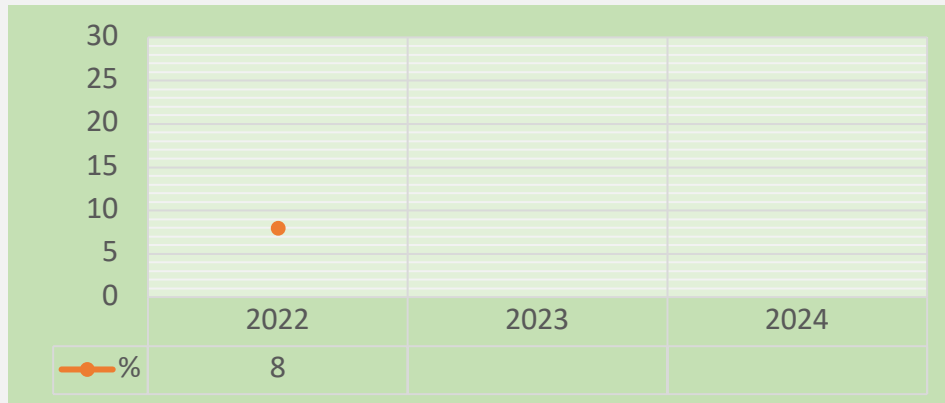
Phase 1:

4.514 m²

545 kW

900 MWh (8% of total energy consumption)

7 AFFORDABLE AND
CLEAN ENERGY





2

About Metro de Málaga. New photovoltaic plant

Generation with photovoltaic power plants, “in situ”

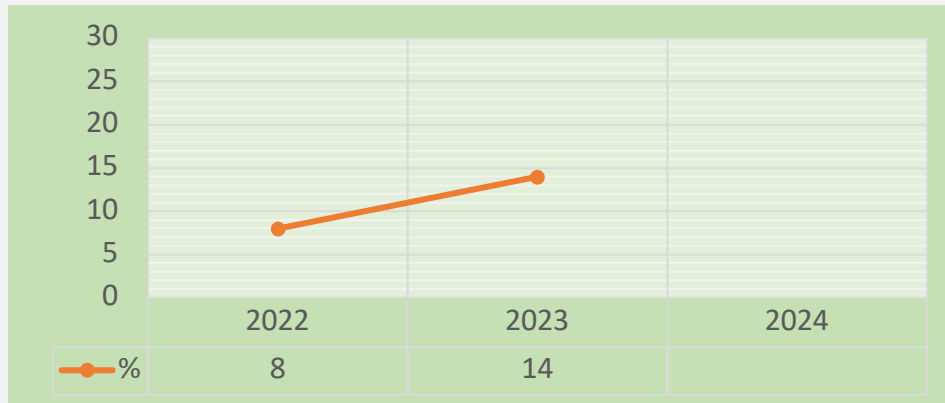
Phase 2:

3.235 m²

400 kW

650 MWh (6% of total energy consumption)

7 AFFORDABLE AND
CLEAN ENERGY





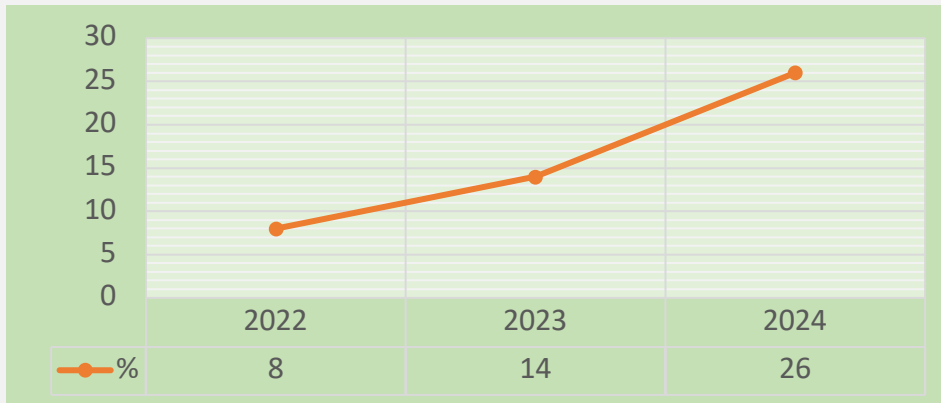
Generation with photovoltaic power plants, “in situ”

Phase 3:

5.500 m²

900 kW

1400 MWh (**12%** of total energy consumption)





New accessibility features

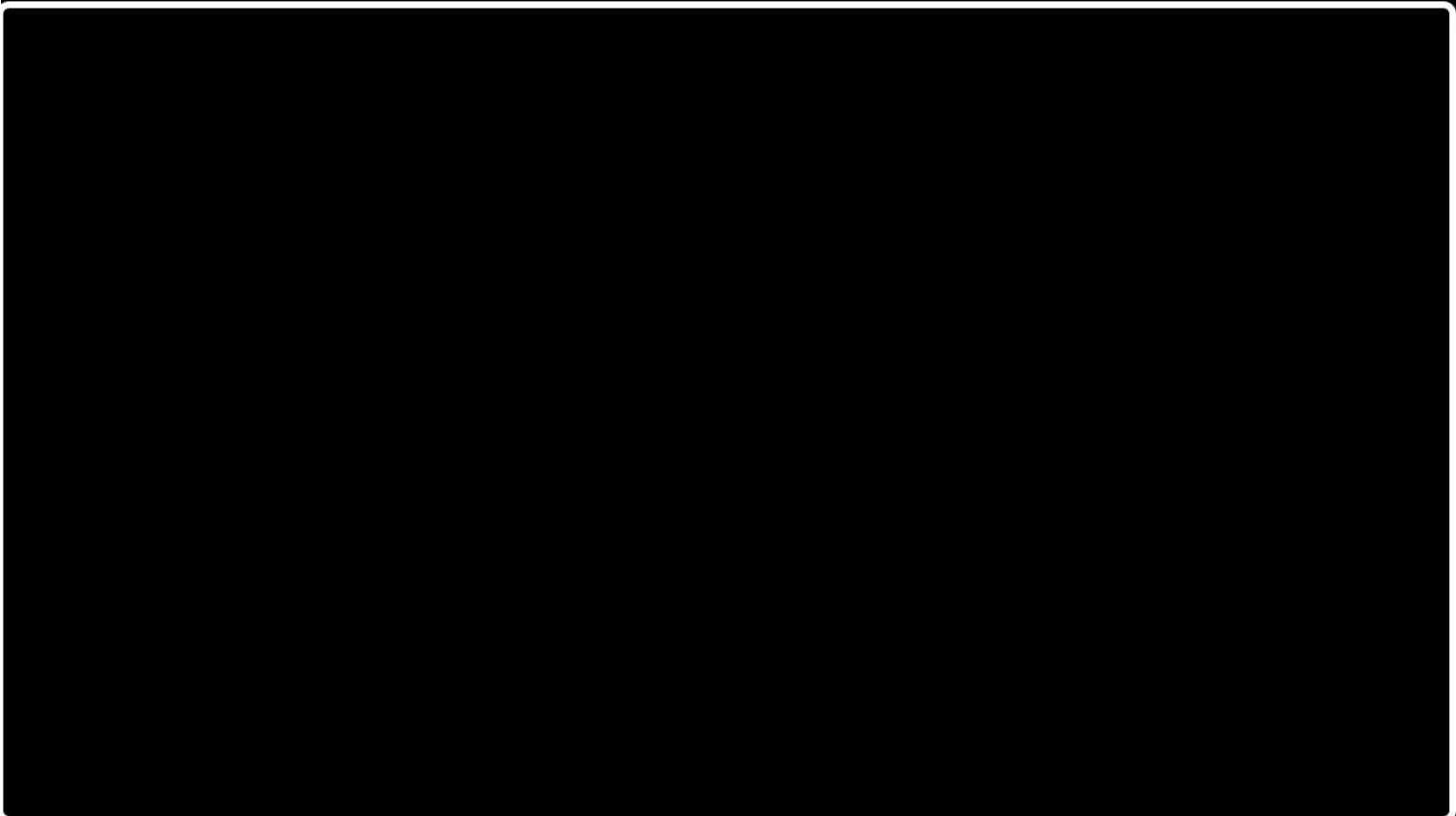
Completely renovated train systems

Challenge of integration with the signaling system



2

About Metro de Málaga. Driving simulator





- 1) Fare discount
- 2) Time reduction
- 3) Service quality
- 4) Ultra-fast interchange
- 5) Spacious, clean and well-lit stations
- 6) Reduced previous public transport modal split
- 7) The importance of connecting to the city center

- Se amplía hasta el 31 de diciembre de 2024 -

Tu viaje en metro ahora es aún más barato



Con el título Monedero:
antes **0,82€** ahora **0,33€**

El 60% de descuento en la línea de validación **es adicional** a las bonificaciones existentes en los títulos del consorcio.



- Tarjeta Joven: **0,26€**
- Tarjeta familia numerosa: **0,26€**
- Tarjeta familia numerosa especial: **0,17€**
- Tarjeta de familia numerosa general + Tarjeta Joven: **0,21€**
- Tarjeta de familia numerosa especial + Tarjeta Joven: **0,13€**

60%
de descuento

* Descuento aplicado en el momento de validar el billete.

Transporte público por mucho menos



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60% discount on
multi-journey
tickets



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3

Keys to success. Time reduction

50% time savings in travel



La Luz-La Paz to Atarazanas in 12 min





3

Keys to success. Time reduction

50% time savings in travel



Ciudad de la Justicia to Atarazanas in 13 min





3

Keys to success. Service quality

High frequency service with a train every 5 minutes in peak hour

Reliable regularity





3

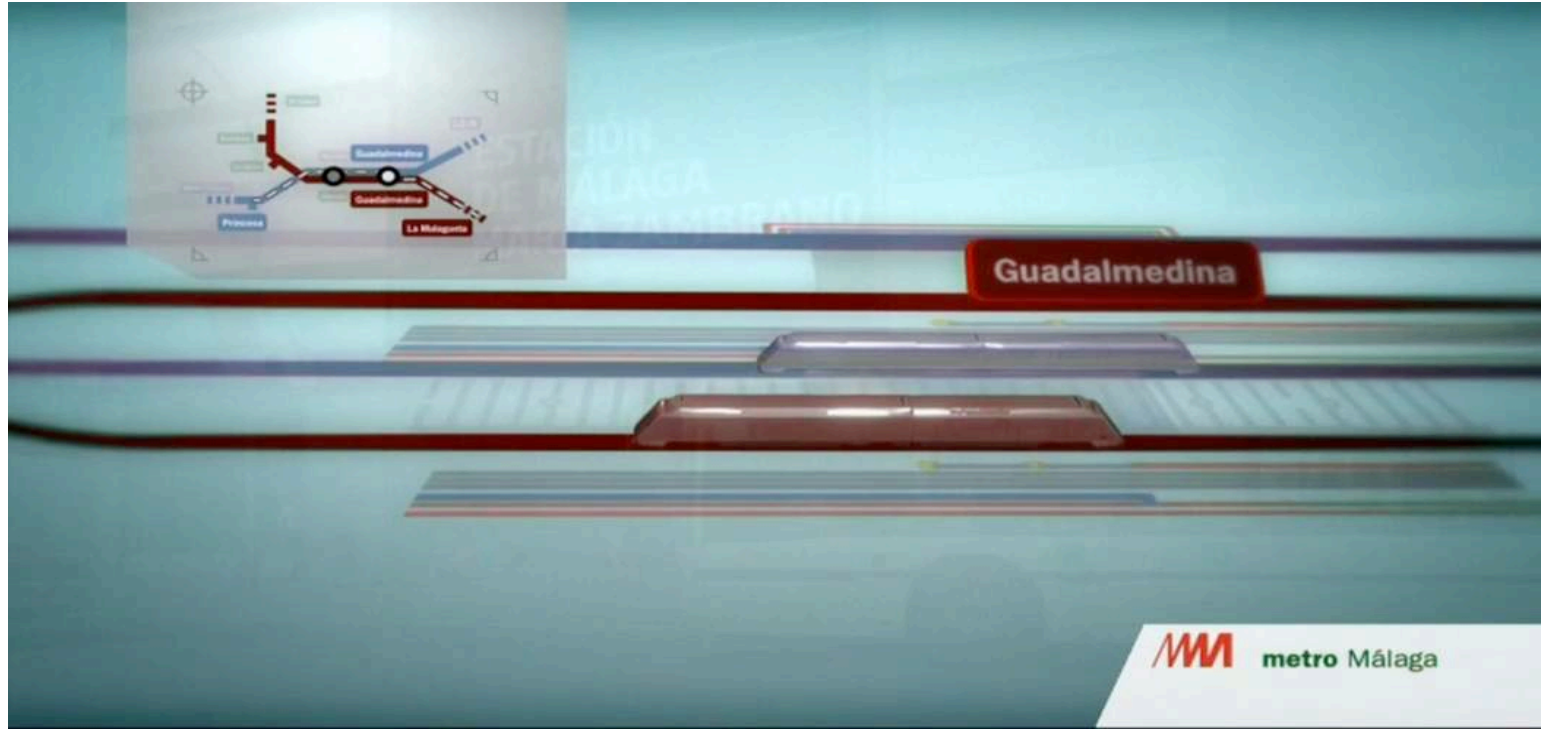
Keys to success. Ultra-fast interchange





3

Keys to success. Ultra-fast interchange





3

Keys to success. Spacious, clean and well-lit stations





3

Keys to success. Spacious, clean and well-lit stations





3

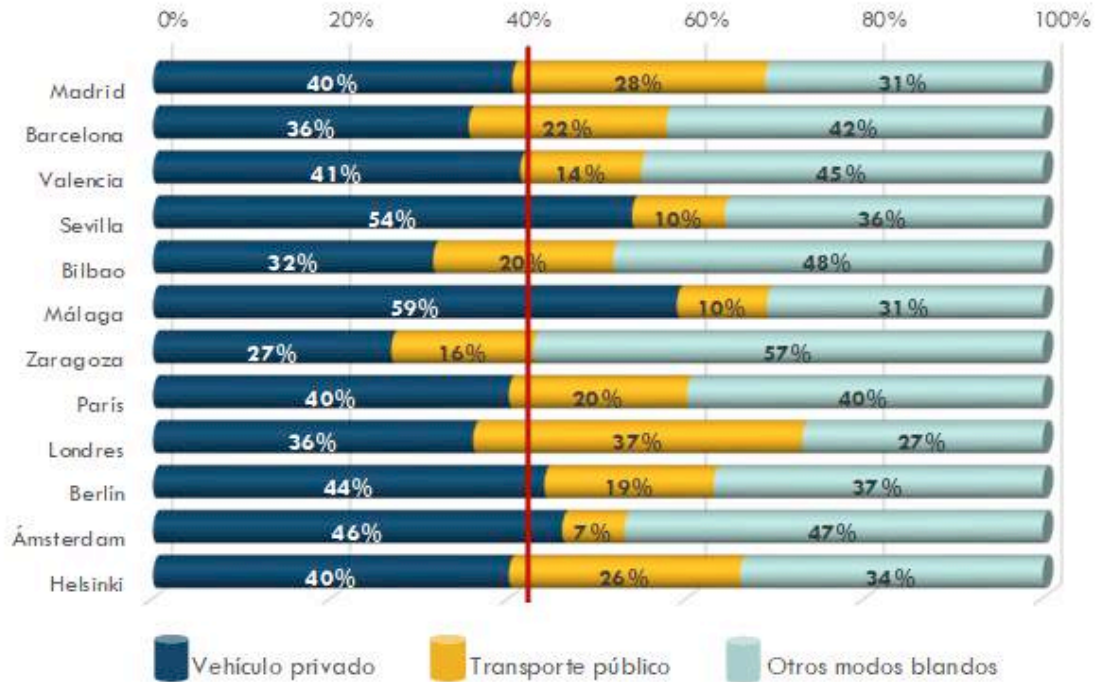
Keys to success. Spacious, clean and well-lit stations





3

Keys to success. Reduced previous public transport modal split



Source: Transport & Logistics Observatory in Spain



3

Keys to success. The importance of connecting to the center





4

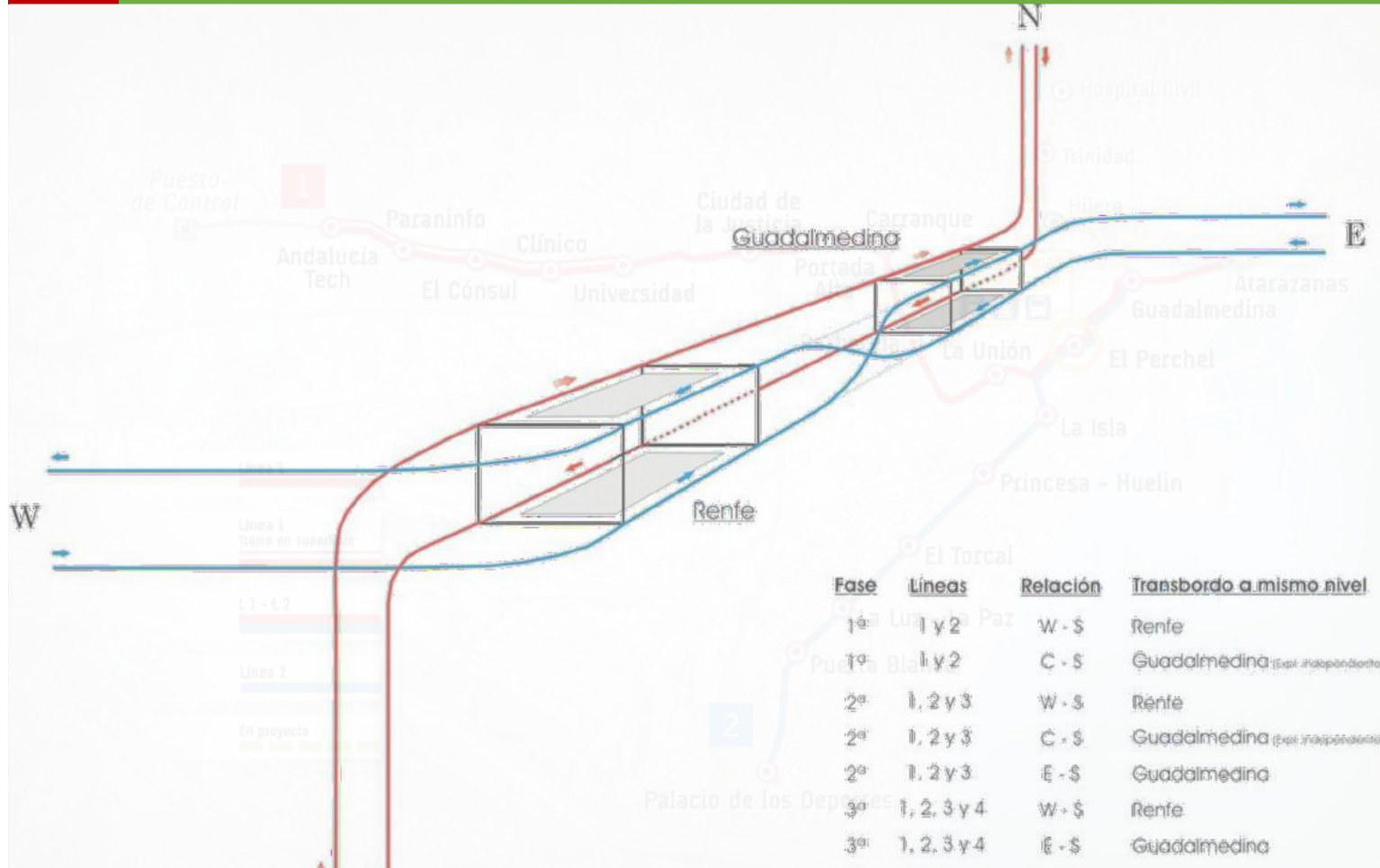
Next extension. Under construction





4

Next extension. Under construction





4

Next extension. Under construction

Ridership expectation (passengers per year)





5

Conclusion

Metro de Malaga contributes to make the city a better place to live: creating healthy, safety, inclusive, economically competitive, zero-carbon areas. The network extensions undoubtedly enhance all these benefits.





5

Conclusion

Cities must build strong institutions that work together. At Málaga, regional government commitment is fully aligned with this vision and by 2030 Málaga will deliver, when the planned network is finished, one of the most powerful metro network in the world in a medium-sized city

