On February 22nd, the IURC kicked off the thematic cluster of Sustainable Urban Mobility and Transport. Twenty-three people attended from nine different countries to discuss the challenges and solutions their cities are working on related to sustainable urban transport. This session was moderated by Susana Arellano, Sustainable Urban Development Expert- IURC North America, and the keynote presentation was given by Miguel Ángel Ania, Senior Technical Advisor of the Zaragoza City Council. His presentation was followed by short interventions by six other EU and North American cities talking about challenges and solutions related to public transport.

Zaragoza
Miguel Ángel Ania

- Public transport accounts for 24% of mobility in the City of Zaragoza.
- Between 2013 and 2022, the City reduced emissions considerably. However, it still needs improvement to reach the 2030 zero-emissions target.

Pandemic
- During the original 4-month lockdown, no private vehicles were allowed on the streets. Only public buses and last-mile distribution vans moved around the City.
- CO_2 emissions were reduced by 50% - to below the levels recommended by the WHO
- This shift demonstrated that a dramatic decrease in emissions is possible.

Tramway
- The electrical tram service started in Zaragoza in 1902. These trams were manufactured in Zaragoza for nearly 120 years.
- A new version of the tram system began operation in 2013, contributing to a 15-40% decrease in road traffic across different parts of the City.

Tramway, Zaragoza

- However, the tram faces a couple of challenges:
  1. It is not economically viable – loses approx. 5-million EUR per year
  2. These new trams substituted some bus lines creating a public transport 'scar' that divides the City.

Result: 11% decrease in public transport users from 2009 to 2016 (beginning of construction to 3 years of full operation) – this indicates a new public transportation network is needed.

Buses
- The City of Zaragoza has implemented 4 electric buses since 2019.
- These were selected based on 19 different electric models tested and 1 hydrogen fuel cell model.
- All new buses will be zero-emissions going forward (Electric or hydrogen). With an entire zero-emission bus fleet, the City will save 621 thousand tons of CO_2 emitted per year.
- By the end of 2022, Zaragoza will have 72 new electric buses, which is 1 in every 5 in their fleet.

New Public Transport Network
- To achieve their goals, the City must also attract new users.
- A new network will allow users to reach any destination in a maximum of 2 transfers.

Objectives of new network:
1. Reduce Travel time by 20%
2. Maintain intervals of 5 minutes throughout the network
3. Have bus stop at less than 300 m for 98% of citizens
4. 2 transfers maximum
5. Integrate the tramline in the network
6. Any place in the City should be reachable in 15 minutes
7. Increase public transport users by 20% and decrease private vehicles by 30%
- This will include introducing a new traffic control center, a new accessible app to navigate the network and the continued introduction of bike lanes.

Additional Mobility/Emissions Information
- It's introducing a pilot project of last-mile distribution for delivering packages.
- Zaragoza will be one of the main nodes of the European Hyperloop network.
- Forest of citizens' initiative, 1 tree planted per citizen (700 thousand trees, 2 million shrubs over 1200 hectares).

Santa Monica
Ariana Vito, EV Program Coordinator

Battery Electric Buses, Santa Monica

Buses
- Santa Monica has been adopting a zero-emissions bus fleet, with an original 19 buses and then an additional 17 being implemented this year.
- Their current project is working on charging infrastructure to support the entire fleet.

Bike Infrastructure
- The City adopted a bike action plan in 2011 that saw 100 miles of bike lanes being introduced in 8 square city miles. It included additions of protected bike lanes on higher traffic roadways.
- There has been a 19% increase in ridership.

First/Last Mile Delivery Pilot
- A zero-emissions delivery zone pilot began to reduce carbon emissions from the first and last mile of deliveries and the consolidation of loading zones.
- The idea is to get major delivery companies partnered to develop a blueprint that could be used in other cities.

Madrid
Pedro Fernandez Lopez, , Transport and Mobility Department

BiciMad, Madrid

Buses
- Madrid has a new line of buses called Linea 00 to indicate their zero-emissions and zero cost.
- These operate from the most important railway station in Spain.
- The VAO bus is a long-distance service and links Madrid to other local cities, contributing to daily traffic and emissions.
- They will introduce a green-vehicle lane on the highways to help solve the problem.
- A concern related to the green-vehicle lane would be having on the farthest left the bus stops while the green lane is on the farthest right.

Bike Infrastructure
- The City is creating bike parking at metro stations to provide convenient access to secure bike storage.
- They want to have biking infrastructure within 1 mile of all metro stations to incentivize biking to the metro stations instead of driving.

Metropolis GZM
Ewa Lutogniewska, Sustainable Mobility Unit

- It took ten years to develop their bus network, which just became operational.
- Trip distance should significantly decrease due to this new network and reduce traffic.
- They look forward to monitoring and seeing these changes take effect in real-time.

San Diego
Claudia Brizuela, Senior Traffic Engineer

- The most considerable challenge they are currently facing is a lack of curb space.
- This has become a more significant issue due to COVID, with parklets taking up more space and an increase in deliveries.

Electric Buses- Línea 00, Madrid

LOADING ZONE FOR ZERO EMISSION VEHICLES ONLY 10 MINUTE LIMIT
Zero Emission Delivery Zone Pilot, Santa Monica

Families Pilot Project, Umea

Ottawa
Jennifer Armstrong, Transportation Policy & Networks

- There has been significant progress in the development of the public transportation network in Ottawa.
- Light rail and buses dominate, but there is a large gap between what they currently have available and what they need to meet their 2030 mode share and emissions targets.
- They face significant obstacles in financing and gaining both public and political support for the further changes required.

Umea
Philip Naslund, Strategic Development Officer

- Umea has developed a pilot project to support the public transport expenses of families with children.
- They have incentivized non-car travel and comprehensively analyzed the pattern of travel between genders to connect neighborhoods within the City.
- They ran the project for three months, and the overall sentiment of the participants was that it was easier than they anticipated while also saving them money. Some families sold their cars once the project was over as they felt they no longer needed them.