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The 15-minute city : a new avatar of proximity and a pillar of European urban transition

An analysis of the academic knowledge produced by the ENUAC programme and collected by the ACUTE project for the present and future inspiration of urban practice

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- 1. ACUTE Project**
- 2. The concept of “Proximity” as an indicator for the 15-min cities**
- 3. 5 identified areas of Research**
- 4. The Knowledge Hub**

ACUTE : Accessibility and Connectivity knowledge hub for Urban Transformation in Europe

- **Keyword** : "Knowledge Hub" ENUAC (Era-Net Cofund Urban Accessibility and Connectivity) financed over 24 months 2023-2024
- **Main objective** : Connecting scientific knowledge from academic research and practical skills from practitioners at the local level
- **Purpose** : to create a space for exchange and co-creation for practitioners, researchers, policy makers, entrepreneurs, social innovators...



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- First initiatives: "Accessibility and Connectivity of the 15 min city" in March, 8th in Milan (Italy) and in October, 11th in Antwerp (Belgium), scientific seminar open to practitioners Results: 22 presentations subsequently downloaded on ZENODO, ~80 participants, ~15 practitioners, 1 roundtable with practitioners

<https://acute-uera.sciencesconf.org/>



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RISE

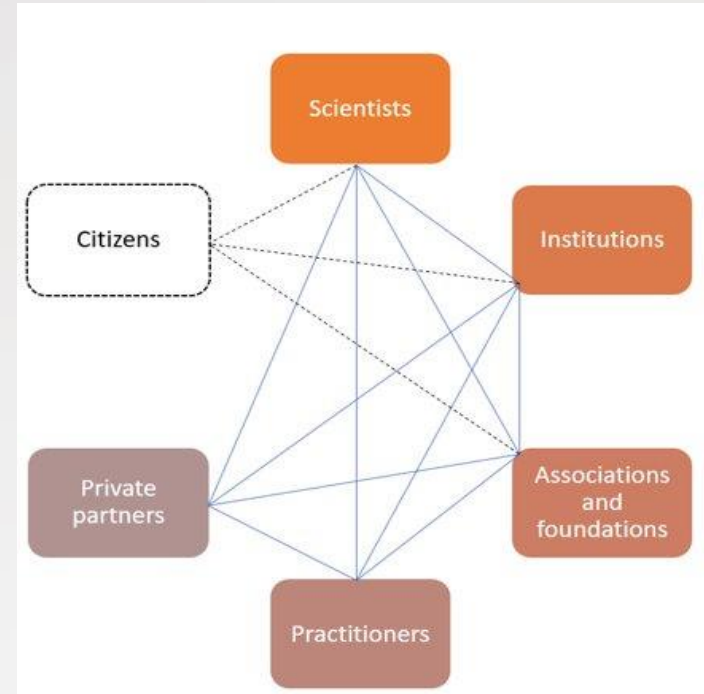
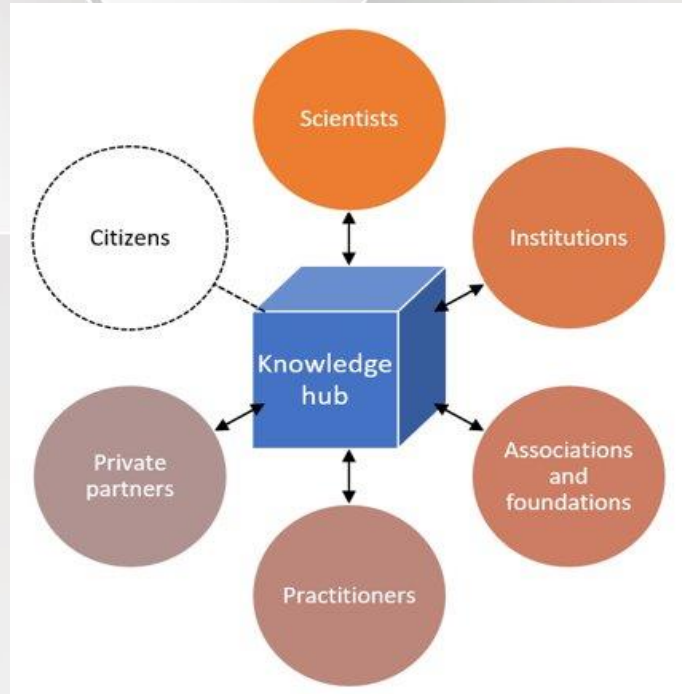
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A Knowledge HUB



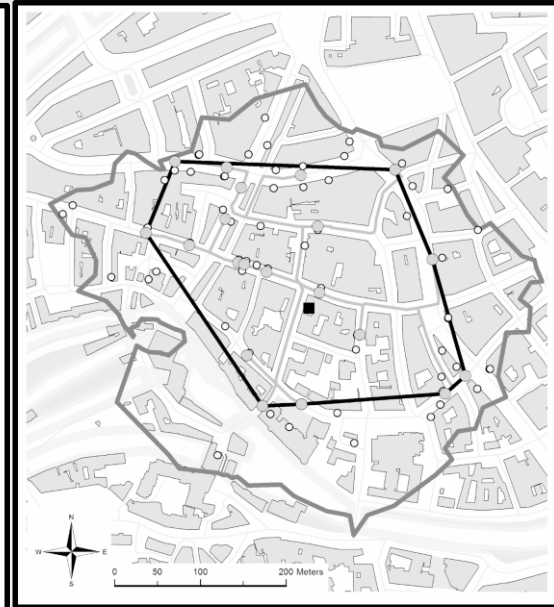
5 key Research questions identified at 1st ACUTE Seminar, Milan, 8th of March 2023

1. How to define the Concept of 15-mn City ?
2. Which travel mode to promote for improving « proximity » in 15-mn cities ?
3. How can we make proximity a key factor in urban planning?
4. What is the place of Inclusivity in the 15-min city concept ?
5. How to evaluate the 15-min city ?



Proximity as a key indicator in the 15-minute city concept

- Proximity can have several dimensions (geographical, urban, social, emotional, temporal) that evoke short distances.
- Strong link between the 2 notions with various concepts related: accessibility, walkability, bikeability, motility, spatial ergonomics, access ergonomics, etc
- The **15-minute city concept** provides :
 - A **“City branding”** dimension
 - An **indicative time limit** for proximity (5, 10, 15, 20 minutes...)



Hached W (2019) Ergonomie d'accès aux ressources de la vie quotidienne en mobilité douce : application à l'Eurométropole de Strasbourg. Phdthesis, Université de Strasbourg

Question 1 : How to define the Concept of 15-mn City ?

- The 15-minute city is "accessibility through proximity" as opposed to "accessibility through mobility" (Rauli & al. 2023. Defining Proximity-centred Accessibility, Milano. [Zenodo](#))



Question 1 : How to define the Concept of 15-mn City ?

- The 15-minute city is "accessibility through proximity" as opposed to "accessibility through mobility" (Rauli & al. 2023. Defining Proximity-centred Accessibility, Milano. [Zenodo](#))
- From a classic definition of "access to essential services in less than 15 minutes on foot or by bicycle" (Moreno et al. 2021 "Introducing the "15-Minute City": Sustainability, Resilience and Place Identity in Future Post-Pandemic Cities". Smart Cities 4, no. 1 (March 2021): 93-111. [https://doi.org/10/gk7stc.](https://doi.org/10/gk7stc)) towards the need to add reduced mobility (PRM), universal design, and the idea that essential services vary according to urban contexts (Büttner et al. The Inclusive ± 15-Minute City. Milano. [Zenodo](#)).
- The 15-minute city combines walkability, access to services in 5, 10, 15 minutes, perception and quality of the urban environment, and is broken down by **walking**, **cycling**, **reduced mobility** (EX-TRA) (Lanza, & al 2023. From mobility to accessibility by proximity: an Inclusive Accessibility by Proximity Index (IAPI). Milano. [Zenodo](#))

Question 2 : Proximity using a given mode

- Cycling can make the 15-minute city a reality, as in **Strasbourg** (Liziard, Sophie, Propeck, Eliane, & Conesa, Alexis. 2023. What about cycling conditions in the 15-min city? A comprehensive assessment of bikeability in the urban area of Strasbourg, France. Milano. [Zenodo.](#)), **Vancouver** (Hosford, Kate, Jeneva Beirsto, et Meghan Winters. « Is the 15-Minute City within Reach? Evaluating Walking and Cycling Accessibility to Grocery Stores in Vancouver ». *Transportation Research Interdisciplinary Perspectives* 14, 2022): [100602.](#)), **Utrecht** (Knap, Elizabeth, Mehmet Baran Ulak, Karst T. Geurs, Alex Mulders, et Sander van der Drift. « A Composite X-Minute City Cycling Accessibility Metric and Its Role in Assessing Spatial and Socioeconomic Inequalities – A Case Study in Utrecht, the Netherlands ». *Journal of Urban Mobility* 3, 2023: [100043.](#))

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- There are also a number of walk-related indicators in the literature, eg WalkScore, PTAL (Public Transport Accessibility Levels)... (Choubassi & al. 2023. Walkability for Women and the 15- minute City Framework: The STEP UP Project. Milano. [Zenodo.](#))

Question 3 : Integrating «proximity» in urban planning

- For Gaglione et al. the 15-minute city measures (London, Naples, Aberdeen) make it possible to target public interventions to create accessible, safe, well-connected neighbourhoods for pedestrians and cyclists, but also to create quality public spaces and provide services to support local life. (Gaglione et al. 2023 Urban accessibility planning: comparing 3 cases studies through the 15-minute city approach. Milano. [Zenodo.](#))

Question 4 :Inclusivity in the 15 min-city

- There is a **lack of information on the intersection of walking and gender.** (Choubassi & al., 2023. Walkability for Women and the 15- minute City Framework: The STEP UP Project. Accessibility and Connectivity of the 15-minute-city, Milano. [Zenodo.](#))



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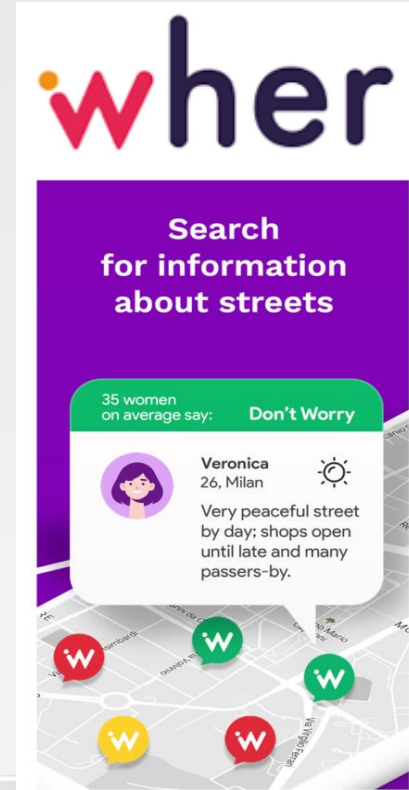


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Question 4 : Inclusivity in the 15-min City

- There is a lack of information on the intersection of walking and gender
- Women have a particular perception of safety when walking (Choubassi & al., 2023. Walkability for Women and the 15- minute City Framework: The STEP UP Project. Accessibility and Connectivity of the 15-minute-city, Milano. [Zenodo.](#));
- An application called “Wher” aims, on a participative basis, to develop city maps as perceived by women. It has been tested in Milan (35% of streets at the time of the seminar were evaluated).

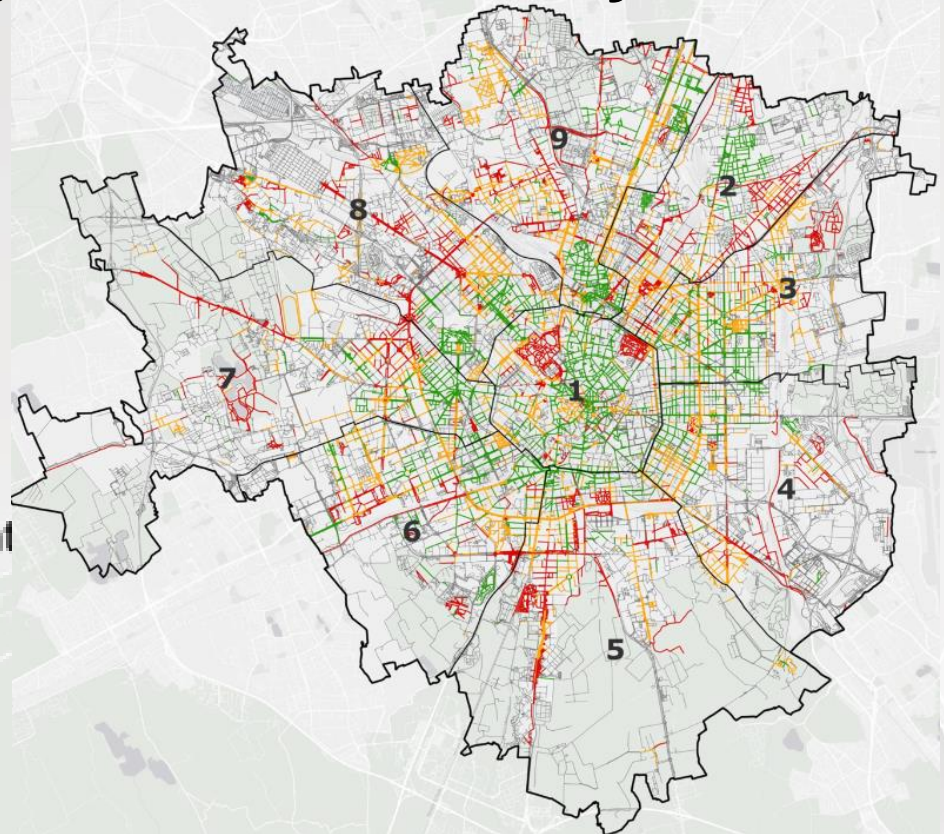


Question 4 : Inclusivity in the 15-min City

- Milan mapping in the STEPUP project
- Example **Milan by Night**
(Choubassi & al. (2023, March 8). Walkability for Women and the 15- minute City Framework: The STEP UP Project. Accessibility and Connectivity of the 15-minute-city, Milano. [Zenodo.](#))

Female-perceived safety in Night

- No data
- Avoid
- Be careful
- Go easy



Question 4 : Inclusivity in the 15-min City

- The indicator **IAPI** (Inclusive Accessibility by Proximity Index) developed within the **project EXTRA** combines walkability, access to services in 5, 10, 15 min, perception and quality of the urban environment, by mode of transport: walking, reduced mobility, cycling (Lanza, Giovanni, Pucci, Paola, & Carboni, Luigi. (2023, March 8). From mobility to accessibility by proximity: an Inclusive Accessibility by Proximity Index (IAPI). Accessibility and Connectivity of the 15-minute-city, Milano. [Zenodo](#))



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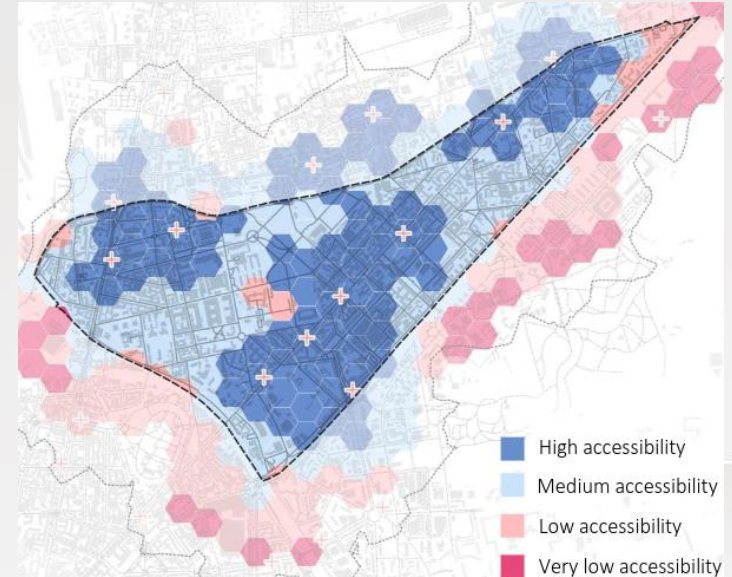


Question 5 : Evaluate the 15-min City

- "Women's Walkability Index" (WWI), under development as part of the STEPUP project, will combine perception and GIS measurements to access facilities as part of a 15-minute city approach. (Choubassi, Rawad, Gorrini, Andrea, Gargiulo, Carmela, Guida, Carmen, Andreola, Florencia Natalia, Muzzonigro, Azzurra, Gargiulo, Eleonora, & Walker, Jim. (2023, March 8). Walkability for Women and the 15- minute City Framework: The STEP UP Project. Accessibility and Connectivity of the 15-minute-city, Milano. [Zenodo](#).)

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Question 5 : Evaluate the 15-min City

IAP1 (EXTRA)

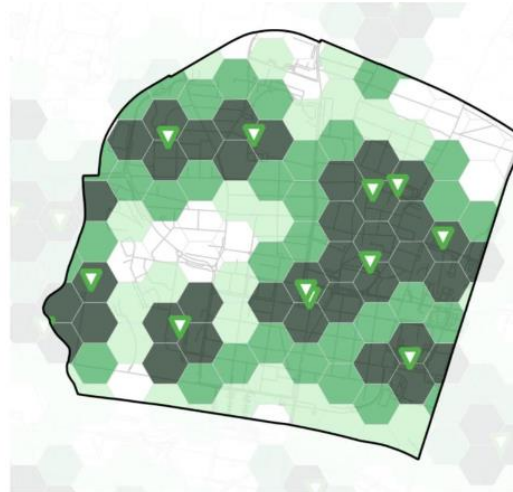
Evaluation of the impact of a street experiment in Bologna (rebalancing of roadways, improving playfulness)

Procaccini Street Experiment



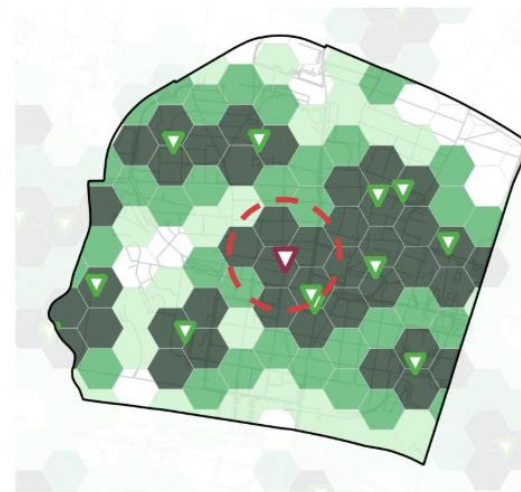
3) Assess the impact of a small intervention of public space redesign as a new playground

 Pedestrian Accessibility



Before

 Pedestrian Accessibility



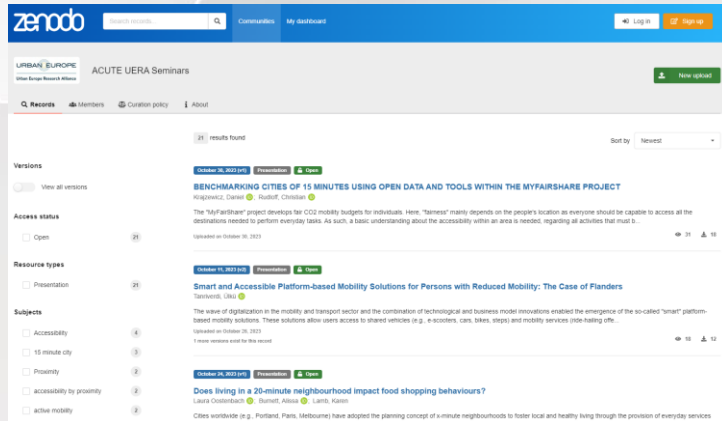
After implementing the experiment

Conclusion

- Proximity in its various forms (accessibility, 15-minute city, TOD, etc.) remains a central topic of study and debate.
- Mobilizes and engages both researchers and practitioners
- (Almost) Unanimous agreement on the importance of proximity (citizens, decision-makers, researchers...)
- Several areas of development (research and practice) continue to grow (5 identified)
- Rethinking the city through proximity and sustainable modes, far from the logic of speed
- Availability of studies and tools that can help decision-making and change the reality on the ground towards greater sustainability.
- Abundance and difficulty of transferring and transposing experience
- Lack of links and interconnections between experiences
- The ACUTE project aims to **build bridges between science and practice through an adapted knowledge hub.**

Next ACUTE Seminar

Find out more about the research on the 15 min-City which was presented at our previous seminars



https://zenodo.org/communities/acute_uera_seminars



20th and 21st of February 2024 at Karlsruhe (Germany):

Key dates :

- Deadline for submission of abstracts : **31st of January 2024**
- Registration: open until **16th of February 2024**
- Seminar date : **20th and 21st of February 2024**



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Thank you for your attention !

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