

# Researchers develop app to improve accessibility

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Researchers of the Universitat Politècnica de València (UPV) and the Hospital Universitari i Politècnic La Fe have developed a new application, currently in beta, to facilitate the movement of people around the city of Valencia (Spain), especially those who have temporary or permanent reduced mobility. Furthermore, it will warn users of any urban barrier in a simple and intuitive way. Therefore, it is a tool of great interest for the government, as it will facilitate the diagnosis of the status of the various neighbourhoods as regards accessibility and, ultimately, help plan investments and interventions to improve this matter.

The project was coordinated by Rafael Temes and Alfonso Moya, professors of the Department of Urbanism of the UPV, and Enrique Viosca, Head of the Department of Physical Medicine and Rehabilitation of the La Fe hospital.

"The application is the result of the Proyecto Sense Barreres (Project Without Barriers) and will provide information on the best routes around Valencia depending on the degree of accessibility that the user will encounter in the public space. Our challenge was to develop a "real" mapping of urban accessibility in the city of Valencia and to implement said mapping in an interactive tool which allows the user to cross the city in a more independent, safe and free manner, improving their quality of life," says Rafael Temes.

The application calculates the adapted and viable route, complying with

current legislation on accessibility of the Valencian Community. Furthermore, it also has a series of medical tips and recommendations that are personalised depending on the type of user (with temporary or permanent reduced mobility), the length of the route and the time of year.

In order to calculate accessibility, two types of variables that affect the result of the various routes have been taken into account: physical aspects and the typology of the streets. To do so required an initial phase of field work, where an inventory of the accessibility status of all the streets of the city (including parks, river and maritime area) was conducted.

Thus, thanks to this project, a network of over 48,000 references on the real accessibility levels (adapted and viable) of the [city](#) streets has been created.

Dr. Enrique Viosca says, "From the hospital, we will contact associations of people with motor disabilities and mobility issues so they know about the app and can make contributions that improve the tool, and so they can suggest accessibility solutions. Similarly, we will exploit the knowledge we have at our department on disability and people with mobility issues, and we will offer them medical advice adapted to their needs."

Provided by Asociacion RUVID

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