



# **PHOEBE Project Reaches Midway Milestone:**

## **Enhancing Road Safety for Vulnerable Urban Road Users Across Europe**

**Press Release**



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## Enhancing Road Safety for Vulnerable Urban Road Users Across Europe

The EU-funded [PHOEBE](#) (Predictive Approaches for Safer Urban Environment) project proudly announces the successful completion of the first half of the project, marking a significant milestone in the journey towards enhancing road safety for vulnerable urban road users. This cutting-edge project, which commenced in November 2022, is dedicated to improving the safety of those who use active mobility through advanced traffic simulation and road safety assessment techniques. PHOEBE is operational in three key pilot locations: West Midlands (UK), Athens (Greece), and Valencia (Spain). The consortium invites you to learn more about the project on [our website](#) and by staying in contact with us through our [newsletter](#) and social media channels ([LinkedIn](#) & [Twitter](#)).

### Road safety remains a significant challenge across Europe

Even though the number of road fatalities steadily decreased over the last decades, still 'more than 20,000 people were killed in road crashes in the EU last year, a small 1% decrease in 2022. Despite some progress since the baseline year of 2019, few Member States are on track to meet the target of halving the number of road deaths by 2030'. Of these 20,000, 38% or around 7600 people are killed in urban areas. Cyclists are an especially vulnerable road user group, since "the trend in the number of cyclists killed on EU roads is a serious concern: more than 2,000 cyclists were killed in 2022" ([European Commission](#), 8/3/2024).

### PHOEBE enhances road safety and save lives

We aim to reduce road fatalities by providing tools to city administrations and their planning departments, while revolutionising urban road safety by integrating predictive approaches and interdisciplinary methodologies. The project's core objective is to create safer urban environments for vulnerable road users, including cyclists, pedestrians, and e-scooter riders. This initiative aligns with the European Union's broader goals of promoting sustainable mobility, reducing traffic-related injuries, and fostering healthier urban living.

### The 'PHOEBE framework' – a detailed set of methodological aspects

The PHOEBE Framework is a methodological approach designed for cities to better understand the future safety implications of changes in transport systems. These could include changes in road user behaviours, the redesign or creation of new infrastructure, or the introduction of a new transport mode. It aims to be an instructive 'blueprint' for how cities can establish and apply the predictive safety assessment framework efficiently and cost-effectively. The framework brings together existing elements currently used in transport planning, assessment, and modelling. This includes human behaviour models to anticipate road users' responses to different interactions on the streets, travel demand and mode shift models, road safety- and socio-economic impact assessments. Thus, the PHOEBE Framework will demonstrate that the innovative framework can predict holistic road safety impact, enhancing cities' capabilities to design, develop and deliver urban changes that ensure safe travels.



## PHOEBE pilots

All three pilots of Athens, Valencia and West Midlands provide several use cases to test the various modelling solutions and the PHOEBE framework, which are summarised below, while further detailed information is available on our dedicated pages of the PHOEBE website.

### Athens

The focus of PHOEBE is the Athens Great Walk, an infrastructure project, which aims to increase public spaces and provide more dedicated areas for active mobility in the historic centre of the Greek capital. Vulnerable road users are in the spotlight of the assessment, which includes the creation of travel profiles with various KPIs related to speed, mode choice, gender, age, and disability rate (among others). Additional scenarios will be made for different times of the day, as well as (off-)peak hours.

First achievements were made with the collection of comprehensive datasets on traffic patterns, accident hotspots, and road user behaviours, which provide valuable insights into the root causes of road safety challenges. Thanks to the great partnership between the project partner National Technical University of Athens and the local authorities, as well as the setup of the Athens Great Walk, PHOEBE has created great base to apply its framework in the Greek capital. These steps will be used to implement interventions that aim to create safer, more sustainable urban environments in the future.

### Valencia

The assessment of the iRAP methodology will be based on four cycling corridors and will include over forty safety features, such as infrastructure width and protective barriers, ensuring a detailed understanding of cycling infrastructure safety. These include, among others, illegal crossing, red light violations, and crossing tram tracks, are pivotal in comprehensively assessing road safety challenges.

Future infrastructure plans, which will be informed by the research and modelling of the PHOEBE partners, will potentially include the relocation of existing bike lanes from sidewalks to roadways, physically separated by barriers or parking lanes where feasible. Enhancing visibility at intersections through improved signage and road markings is another critical aspect of improving road safety.

### West Midlands

Data gathering and surveying exercises took place to identify the significant routes with expected infrastructure changes in the area. Additionally, road assessment surveys to determine the road quality and safety level were conducted. Afterwards, partners started the data integration process from government sources, the local mobility agency, and the local experts of 'The Flow'.

Besides the consideration of hypothetical scenarios, various local initiatives are studied, including the potential plan to reduce the speed limit on all forty miles per hour roads in Birmingham. Thanks to these assessments, PHOEBE has the opportunity to influence local policy by highlighting the importance of urban road safety, such as speed limit reduction and infrastructure implementations.

For further information please visit [WWW.PHOEBE-PROJECT.EU](http://WWW.PHOEBE-PROJECT.EU)