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A comprehensive framework for evaluating and measuring sustainability of smart mobility solutions

According to United Nations (2015), all three dimensions of sustainability - economic, social, and environ-mental - need to be achieved in a balanced and integrated manner. Furthermore, the Agenda 2030 target 11.2 (United Nations, 2016) is to "provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons". As many of the projects in smart mobility aim to achieve the goals and targets of the United Nations, evaluating and measuring their achievements is often difficult. The idea that this research is presenting here is a comprehensive framework to evaluate sustainability of smart mobility pilots. developed framework can be used to evaluate and measure the sustainability of all transport modes. Specifically, it is developed to evaluate the impacts and benefits that smart mobility solutions have to the society. The project expanded the said framework from qualitative measures to also include quantitative measures to allow a more wide-ranging tool to evaluate sustainability of smart mobility solutions. Furthermore, added quantitative measures have been extracted from the existing scientific literature as well as other sources.

