

Future Sustainable Mobility for Colorado

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Abstract : In this paper, we present the main results achieved during an eight-week international design project on Colorado Future Sustainable Mobility carried out at Metropolitan State University of Denver. The project was born with the intention to seize the opportunity created by the Colorado government's plan to promote e-bikes mobility by creating a large network of dedicated tracks. The project was supported by local entrepreneurs who offered financial and professional support. The main goal of the project was to engage design students with the skills to design a user-centered, original vehicle that would satisfy the unarticulated practical and emotional needs of "Gen Z" users by creating a fun, useful, and reliable life companion that would help users carry out their everyday tasks in a practical and enjoyable way. The project was carried out with the intention of proving the importance of the combination of creative methods with practical design methodologies towards the creation of an innovative yet immediately manufacturable product for a more sustainable future. The final results demonstrate the students' capability to create innovative and yet manufacturable products and, especially, their ability to create a new design paradigm for future sustainable mobility products. The design solutions explored in the project include collaborative learning and human-interaction design for future mobility. The findings of the research led students to the fabrication of two working prototypes that will be tested in Colorado and developed for manufacturing in the year 2024. The project showed that collaborative design and project-based teaching improve the quality of the outcome and can lead to the creation of real life, innovative products directly from the classroom to the market.

Keywords : sustainable transportation design, interface design, collaborative design, user-centered design research, design prototyping

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