

Preface

The discipline of Human Factors and Sustainable Urban Planning and Infrastructure provides a platform for addressing challenges in human factors and engineering research with the focus on sustainability in the built environment, applications of sustainability assessment, demonstrations and applications that contribute to competitiveness and well-being, quantification and assessment of sustainable infrastructure projects, and the environmental, human, social, and economic dimensions of sustainable infrastructure. A thorough understanding of the characteristics of a wide range of people is essential in the development of sustainable infrastructure and systems and serves as valuable information to designers and helps ensure design will fit the targeted population of end users.

This book focuses on the advances in the Human Factors in Sustainable Urban Planning and Infrastructure, which are a critical aspect in the design of any human-centered technological system. The ideas and practical solutions described in the book are the outcome of dedicated research by academics and practitioners aiming to advance theory and practice in this dynamic and all-encompassing discipline.

A total of three main sections presented in this book:

- I. Ergonomics in Building and Sustainable Architecture
- II. Public Building and Urban Design
- III. Infrastructure Planning and Learning for Sustainable Future

Each section contains research paper that has been reviewed by members of the International Editorial Board. Our sincere thanks and appreciation to the board members as listed below:

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We hope that this book, which is the international state of the art in Urban Planning and Sustainable Infrastructure domain of human factors and ergonomics, will be a valuable source of theoretical and applied knowledge enabling human-centered design for global markets.

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