PROJECT TITLE: An integrative framework for supporting wellbeing, ethics and good governance in local government Smart City projects

FIELD OF RESEARCH CODE: 1205; 1201

PROJECT SYNOPSIS:

Local governments across Australia are increasingly turning to ‘smart’ digital technological applications to address a range of urban planning and management issues in public spaces, such as parks, streets and recreational reserves. The Australia Government's Smart Cities and Suburbs fund saw $50 million dollars allocated to local governments to assist the development of Smart City programs, with many projects focused on enhancing recreational and public spaces with a range of digital technologies. More broadly, local governments are looking to the Smart Cities model to address a range of liveability and economic objectives, by improving user experiences, generating responsive and real-time data, and improving the efficiencies for the planning and management of a range of land assets and facilities.

The use of smart technology in public places – for example sensors, cameras, mobile technologies, dashboards, and augment reality – has the potential to deliver a range of
wellbeing benefits to citizens, through supporting physical activity, encouraging social connectivity, ensuring high quality facilities and services, and enabling participation in planning and decision-making. However, there are also concerns about the ways that smart technologies are being applied, with questions raised about the implications for privacy and accessibility of smart city technologies, and the unproven benefits and relative expense of ‘smart’ solutions. Despite a recent surge in smart cities research and initiatives at the local government level, there are still many gaps in realization of the Smart City vision considering the integration of health and wellbeing, ethics and governance concerns.

To support the development of smart city projects that both meet the objectives of local governments, support the wellbeing of users, and meet broader public interest, this strategic project seeks to develop research to inform a framework for a smart model to enhance the user experience, efficiency and social equity outcomes of local government smart city projects. This framework will encourage the planning of smart cities that not only rely on interactive advanced Information and Communication Technologies (ICTs) for data collection and interaction, but also ensure a range health and wellbeing benefits that are achieved within an ethical mode of governance.

A PhD student is sought to inform this integrated framework by developing an original research project focusing on one or more of the following topics relating to local government supported Smart City projects in public places:

- Evaluation of user experience in ‘smart’ parks and recreational places.
- Technologically enhanced environmental supports for physical activity, mental wellbeing and social connectivity.
- Utilisation of advanced urban sensing/data-driven methodologies.
- Citizen’s privacy and ethical issues associated with smart data collection.
- Public participation in local government programs using smart technologies.
- Governance of local government smart city projects

The study addresses agendas and pathways for smart and regenerative cities and seeks to apply empirical research to explore issues at the intersection of smart technologies, citizen’s mental and physical health and well-being, and issues of ethics and governance. Both qualitative and quantitative approaches will be encouraged to transfer citizens’, stakeholders’ and experts’ insights into the integrative framework. This research will be of interest and significance to citizens, scholars, planners, and policy makers seeking to understand the relevance of smart cities in this Anthropocene era in order to design more ethical, inclusive, ecological and healthier smart cities.

**FEASIBILITY AND RESOURCING – DESCRIPTION OF THE SUPPORT THIS PROJECT WILL RECEIVE:**

Dr. Izadpanahi and Dr. Babb are both active researchers with an existing publication track record in the field of smart cities, urban quality of life, and place-focused research. They both have experience with partnering with local governments in research and teaching projects that they can draw upon to support the PhD research. Dr Babb has an existing Smart Cities and Suburbs funded grant with City of Canning and Dr Izadpanahi has project collaborations with
City of Bayswater council. They also currently jointly supervise a PhD student focusing on the topic of “Smart active transportation infrastructure to achieve sustainable mobility”.

THE SIGNIFICANCE OF THE PROJECT/ PROGRAM FOR THE ENROLLING SCHOOL OR INSTITUTION:

The focus of this strategic project aligns with the faculty and school vision of People, Planet and Technology. The project is designed to enhance existing and facilitate new partnerships with local governments in Perth and beyond by creating collaboration opportunities for further research (e.g. ARC Linkage grants, etc.) and potential employment opportunities for the prospective PhD student. It is expected that the integrative framework will appeal to many of the local governments, and this project will generate partnership and attract funding opportunities for Curtin University and industry.

Students must express interest in this scholarship opportunity by emailing the Project Lead listed below. Please provide a copy of your current curriculum vitae and detail your suitability to be involved in this strategic project.

PROJECT LEAD CONTACT:

Name: Parisa Izadpanahi
School: School of Design and the Built Environment
Faculty: Humanities
Email: Parisa.izadpanahi@curtin.edu.au
Contact Number: 08 9266 7179