

In Partial Fulfillment of the Requirements for the Degree of

**Doctor of Philosophy**  
**Nigel Forrest**

Will defend his dissertation

**Selecting Programs for Urban Transformations towards  
Sustainability**

**Abstract**

Despite widespread acknowledgement of the need for transformation towards sustainability, the majority of cities appear stuck in incremental change when far-reaching, radical change is what is needed. While there are numerous obstacles to transformational change, one critical aspect is the process of selecting impactful sustainability programs. The unique and complex nature of sustainability suggests a different approach is needed to program selection than is normal. But, to what extent are cities adapting selection processes in response to sustainability and what effect does this have on sustainable urban transformation? Could there be a more effective process to select programs with greater transformational potential? This dissertation investigates these questions using case studies and action research to add to the general knowledge of urban sustainability program selection and to develop practical knowledge (solutions) for more effective sustainable urban transformation.

The dissertation consists of three studies. Study 1 uses a case study approach to investigate existing sustainability program selection processes in three cities: Avondale, USA; Almere, the Netherlands; and Freiburg, Germany. These cities all express commitment to sustainability but have varying degrees of sustainable development experience, accomplishment, and recognition. Study 2 develops a program selection framework for sustainable urban transformation drawing extensively from the literature on sustainability assessment and related fields, and on participatory input from municipal practitioners in Avondale and Almere. Study 3 assesses the usefulness of the framework in a dual pilot study. Participatory workshops were conducted in which the framework was applied to real-world situations with the city's sustainability working group in Avondale and with a local energy cooperative in Almere.

Overall, findings suggest cities are not significantly adapting program selection processes in response to the challenges of sustainability. Processes are often haphazard, opportunistic, driven by a small set of (powerful) actors, and weakly aligned with sustainability principles and goals, which results in selected programs being more incremental than transformational. The proposed framework appears effective at opening up the range of program options considered, stimulating constructive deliberation among participants, and promoting higher order learning. The framework has potential for nudging program selection towards transformational outcomes and more deeply embedding sustainability within institutional culture.

Tuesday, November 10, 2015  
1:30pm  
Wrigley Hall 102

Faculty, students, and the general public are invited.

Supervisory Committee:  
Dr. Arnim Wiek (co-chair),  
Dr. Daniel Schugurensky (co-chair),  
Dr. Rob Melnick (member)