

# **RISK AS A FUNDAMENTAL BARRIER TO ADOPTION OF LOW IMPACT DESIGN(LID) TECHNOLOGIES**

**JOSHUA OLORUNKIYA, M.SC, MACOSTE, ICIOB, ABIFM**

**DR. ELIZABETH FASSMAN**

**ASSOC.PROF. SUZANNE WILKINSON**

*The University of Auckland*

*Department of Civil and Environmental Engineering*

*20 Symonds Street, Auckland, New Zealand*

*Tel: +64212628688*

*Email: [jolo006@aucklanduni.ac.nz](mailto:jolo006@aucklanduni.ac.nz)*

# Outline

- Research Background/ Objectives
- Methodology
- Findings
- Conclusion

# Research Background

- Negative Environmental impacts associated with stormwater runoff
- LID technologies to maintain or restore the natural hydrologic functions on a site and
- Slow rate of LID adoption despite economic and environmental benefits

## **Objectives**

-Develop contractual framework that promotes proper implementation of LID projects.

## LID technologies:

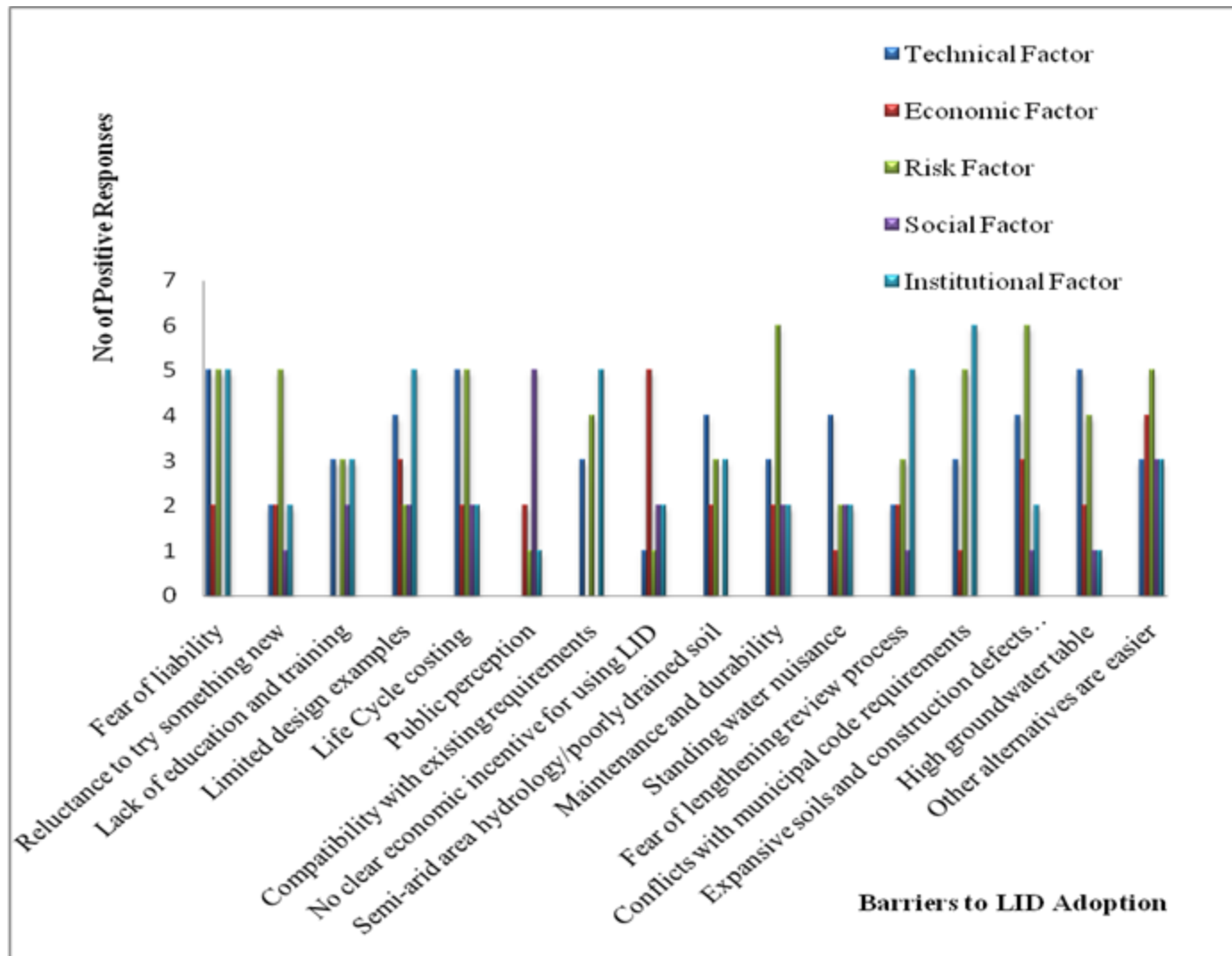
- Structural devices (engineered systems)
  - Green roofs
  - Permeable pavement
  - Rain gardens
  - Etc.
  
- Non-structural devices (vegetated, natural systems)
  - Impervious area disconnection
  - Reduced set backs

# Methodology

The methodology adopted are:

- Interview with stakeholders and,
- On the Spot survey

# Respondents' perception of LID adoption barriers



# Categorical barriers to LID adoption



# Conclusion

Risk is a major factor responsible for high cost of adoption and is not profession specific;

Implementation of LID on publicly funded projects will change public perception and enhance familiarity

Familiarity will bring about positive perception maintenance and ultimate transition to large-scale adoption for sustainable urban environment.

Incentive and Risk sharing framework will promote adoption, proper implementation of LID projects and overall capital cost reduction.



**THANK YOU**