PLA1801H: Urban Infrastructure Planning
Fall 2016
Tuesday 1:00 to 3:00 pm, room SSH 5017A

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Course Description

Infrastructure is the term that describes the transportation systems, sewers, pipes, and power lines that provide urban dwellers with necessary public services. In recent years, billions of dollars of public money have been spent upgrading existing infrastructure, and planning and delivering new facilities. Infrastructure has many impacts on the way that people in cities live. The way that infrastructure systems are planned, financed, and distributed impact on environmental sustainability, job creation, social equity, economic development, and urban livability. Moreover, infrastructure has the potential to both serve existing populations, and shape the way that future communities are built.

Through lectures, discussions, workshops, readings of scholarly articles and case studies, the course will aim to engage students in the key topics and debates related to the provision of urban infrastructure. Topics to be covered will include: project planning, causes and cures for cost overruns, financing mechanisms such as public-private partnerships, and the politics of facility planning and management.

Evaluation and Key Dates

35% Assignment 1: Infrastructure Usage Diary Assignment – October 11, 2016


15% Class Participation/Presentation

Detailed descriptions of each assignment will be distributed to students in class during the term. All assignments are due at the beginning of class, and will not be accepted by email. There will be a 5% penalty per day for late assignments, which counts on weekends as well. Assignments will only be accepted for one week after the deadline.
Course Schedule and Readings

PART I: FOUNDATIONS

Week 1: Introduction: Concepts, Challenges, Opportunities, September 13

Stimulus spending; ‘do no harm planning’; rent-seeking; strategic misrepresentation


Week 2: Infrastructure, Economic Growth, Land Use and Sustainability, September 20

History of infrastructure – developed and developing countries; Importance of connectivity; economic growth; social equity for those excluded; peak oil; climate change; disasters;


Assignment 1 Handout: The Importance of Infrastructure – Usage Diary Project

Week 3: Mega-Projects and Risk, September 27

Cost overruns; delivery delays; unmet expectations;


PART II: INFRASTRUCTURE POLICY AND DECISION MAKING

Week 4: FIELD TRIP – TORONTO WATERFRONT TOUR, October 4

Review plans and proposals on Waterfront Toronto website.

Week 5: Infrastructure Project Appraisal and Procurement, October 11

Program and project appraisal approaches; Procurement strategies


*Assignment 1 Due*
Week 6: Infrastructure Planning and Community Engagement, October 18

Public participation; deliberative planning; social marketing; opposing infrastructure projects


Assignment 2 Handout: Infrastructure Assessment Project

PART III: Current ISSUES IN INFRASTRUCTURE PLANNING

Week 7: Infrastructure Ownership, Finance and Regulation, October 25

Crown corporations; Privatization; Deregulation; public-private partnerships; foreign ownership


Week 8: Infrastructure and Resilience, November 1

From sustainability to resilience?; smart cities; big data.


Week 9: Infrastructure Public-Private Partnerships, November 8


**Week 10: Politics of Urban Infrastructure, November 15**

Stimulus spending; ‘do no harm planning’; rent-seeking; strategic misrepresentation


**Week 11: Infrastructure in Developing Countries, November 22**

Role of international development agencies such as the World Bank and IMF; economic growth; social equity


**Week 12: Great Infrastructure Disasters, December 29**

Blackouts; terrorism threats; safety and security


*Major assignment due
Class Presentations*