

# **PLA1801H: Urban Infrastructure Planning**

Fall 2016

Tuesday 1:00 to 3:00 pm, room SSH 5017A

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Office hrs: Wednesday, 11pm – 1pm

## **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

50% Assignment 2: Project Evaluation Paper – November 29, 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

Siemiatycki, M. (2013). Riding the wave: explaining cycles in urban mega-project development. *Journal of Economic Policy Reform*. 16(2), 160-178.

#### **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;

Graham, S. and Marvin, S. (2001). *Splintering urbanism: networked infrastructures, technological mobilities and the urban condition*. New York: Routledge. Prologue and Introduction, p1-36.

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

#### **Week 3: Mega-Projects and Risk, September 27**

Cost overruns; delivery delays; unmet expectations;

Flyvbjerg, B. (2009). Survival of the unfittest: why the worst infrastructure gets built—and what we can do about it. *Oxford Review of Economic Policy*, 25(3), 344–367.

Kelman, L. and Soberman, R.M. (2010). “Getting it Right”: Lessons from the St. Clair Streetcar for the Implementation of Transit City. Toronto: Toronto Transit Commission

### 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

Priemus, H. Flyvbjerg, B. and van Wee, B. (2008). *Decision-making on mega-projects: cost/benefit analysis, planning, and innovation*. Northampton, MA: Edward Elgar. Chapters 3-5.

**\*Assignment 1 Due\***

## **Week 6: Infrastructure Planning and Community Engagement, October 18**

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

Lehrer, U. and Laidley, J. (2008). Old mega-projects newly repackaged? Waterfront redevelopment in Toronto. *International journal of urban and regional research*, 32(4), p. 786-803.

Siemiatycki, M. (2007). What's the Secret? The Application of Confidentiality in the Planning of Infrastructure Using Public-Private Partnerships. *Journal of the American Planning Association*. 73:4, 388-403.

*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

Kessides, I.N. (2005). *Infrastructure Privatization and Regulation: Promises and Perils*. *The World Bank Research Observer*. 20(1), p.81-108.

Henisz, W.J., Zelner, B.A. and Guillen, M.F. (2005). The Worldwide Diffusion of Market-Oriented Infrastructure Reform, 1977-1999. *American Sociological Review*; 70(6), 871-897.

### **Week 8: Infrastructure and Resilience, November 1**

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

O'Rourke, T.D. (2007). Critical Infrastructure, Interdependencies, and Resilience. *The Bridge*. 37(1), 22-29. (Available online at: <https://www.nae.edu/Publications/Bridge/EngineeringfortheThreatofNaturalDisasters/CriticalInfrastructureInterdependenciesandResilience.aspx>)

Davoudi, S. (2012). Resilience: A Bridging Concept or a Dead End? *Planning Theory & Practice*. 13(2). 299

### **Week 9: Infrastructure Public-Private Partnerships, November 8**

Hodge, G. and Greve, C. (2010). Public-Private Partnerships: Governance Scheme or Language Game? *Australian Journal of Public Administration*. 69(1), p. 8-22.

Siemiatycki, M. (2010). Delivering Transportation Infrastructure through Public-Private Partnerships: Planning Concerns. *Journal of the American Planning Association*. 76(1), p. 43-58.

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

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

Altshuler, A. and Luberoff, D. (2003). The Changing Politics of Urban Mega-Projects. *Land Lines*. 15(4), 1-4. (Available Online at: [http://www.lincolnst.edu/pubs/850\\_The-Changing-Politics-of-Urban-Mega-Projects](http://www.lincolnst.edu/pubs/850_The-Changing-Politics-of-Urban-Mega-Projects))

Young, D. and Keil, R. 2010. Reconnecting the disconnected: The politics of infrastructure in the in-between city. *Cities*. 27 (2), pg. 87-95.

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

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

Luiz, J. 2010. Infrastructure investment and its performance in Africa over the course of the twentieth century. *International Journal of Social Economics*. 37 (7), 512-536.

Patel, U.R and Bhattacharya, S. (2010). Infrastructure in India: the economics of transition from public to private provision. *Journal of comparative economics*, 38(1), p. 52-70.

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

Blackouts; terrorism threats; safety and security

Little, R. (2009). Managing the Risk of Cascading Failure in Complex Urban Infrastructure. In *Disrupted Cities: When Infrastructure Fails*. S. Graham (ed), pp. 27-39.

*Major assignment due*  
*Class Presentations*