**University of Toronto** 

# **GGR 424: Transportation Geography and Planning**

Winter 2020, Mondays, Noon-2pm, MY 320

Dr. Matthew Palm

Email: matthew.palm@utoronto.ca

Office hours: Mondays, 2:30-4:30 pm & Tuesdays, 12:30-2:30 pm, or by appointment, Room 5030

# **Course Description**

Transportation geography touches everyday life and transportation planning generates intense interest. This course is an interdisciplinary, introductory overview of major issues in urban transportation. Using geographies of mode and drawing on case studies from around the world, we will explore transportation economy and finance, politics and path dependencies, congestion and demand management, social equity and justice, sustainability and resilience.

#### **Evaluation and Due Dates**

# Travel fieldnotes (25) due Feb 3

Your personal impressions of various modes of transportation as you experience them. Using autoethnography and thick description, you will write about your feelings, perceptions and observations taking various forms of transit, walking, cycling, and/or driving. 5 pages single spaced (2,500 words).

# TTS data analysis & interpretation (25) due March 2

An analysis and interpretation of some aspect of data from the Transportation Tomorrow Survey (TTS). This trip diary is collected every 5 years across the Greater Toronto and Hamilton Area and asks people to describe their travel on one day. It includes a wealth of information that is the basis for transportation demand models and transportation planning. Variables include trip origins and destinations, purpose, mode, time of day, length, household/individual vehicle ownership, income, size, gender, and housing type. Your assignment is to query this database and communicate your findings on an issue or question of interest to you. The report should be approximately 5 pages and will include charts, graphs, and maps along with textual interpretation.

## Transportation improvement plan/proposal (25) due March 30

Building on your travel notes and data interpretation, you will propose an intervention, solution, or improvement to a transportation problem you identified in either your fieldnotes or TTS data analysis. This plan or proposal can vary by mode, geography, and goals. You will be evaluated on how evidence-based and well-reasoned it is as well as how effectively it is communicated. Big and small ideas welcomed, as well as imaginative ones that address particular problems that exist in the transportation landscape and issues such as transportation equity, sustainability, potential mode shift, efficiency. You should demonstrate how your plan achieves some aspect of the public good. The plan should be 7-10 pages. Feel free to consider using a variety of communication methods for your plan, including design, story-maps, street plans and sections, and sketches or perspectives.

# Plan presentation (10) - March 23 or March 30

You will present your plan to the class in a 7-minute presentation of your transportation plan, followed by questions and discussion. This feedback can be incorporated into your assignment.

# Participation – reading review (5), attendance and in-class engagement (10)

The quality of your learning experience depends as much on your participation as what the instructor brings. Each week, 3 or 4 students will together review and briefly discuss the week's readings, giving short summaries and commentaries, seminar-style, in class. There will be many interactive aspects to the class, including discussion and reflection exercises. Attendance will be noted.

There is no class on January 13<sup>th</sup> and you are required, in lieu of class, to complete an activity described in the Schedule below for January 13<sup>th</sup>. Failure to complete the activity will mean the loss of one point for in-class engagement. That activity will be due at the start of class on January 20<sup>th</sup>.

#### **Course contract**

# **Accessibility Needs**

The University of Toronto is committed to accessibility. If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible: <a href="mailto:accessibility.services@utoronto.ca">accessibility.services@utoronto.ca</a>.

#### **Course Website**

The course website is available through the University of Toronto course website (<u>q.utoronto.ca</u>). All students enrolled in the class should be able to view the link to the course with your UTORID and password. All course materials will be posted on the website and assignments will be uploaded there.

# **Academic Integrity and Respect**

Plagiarized work (which includes the submission of someone else's work as your own and the resubmission of academic work that had been previously submitted in another course for credit) is not accepted. Please consult the "Rules and Regulations" section of the Arts and Science Calendar <a href="here">here</a> for further information and check the 'How not to plagiarize' website <a href="here">here</a>. Your essays will be submitted to Turnitin software to compare it to other known writings and a database of student papers.

In class discussion, we operate on principles of respect and reciprocity. We listen to each other and take turns contributing to the discussion. We encourage a diversity of perspectives.

#### **Mental Health**

Students registered with fees paid at the University of Toronto are eligible for health services described <a href="here">here</a>. If you need support, do not hesitate to utilise those resources.

## Writing

Clear writing and communicating is essential. You will be expected to write clearly and effectively on assignments. The University provides some resources through the writing <u>centres</u>. Brief advice on specific elements of writing for university courses can also be found <u>here</u>.

# **Assignment Submission**

All written assignments are to be submitted hard copy in class. If you anticipate missing class on the day an assignment is due, you are expected to email a copy to me at the email above prior to class start time at 2:00pm on the due date. Should I receive your assignment after 2:00pm on the due date, it will be counted as late a day.

# Late assignments

Unless you have arranged an extension with the instructor, late assignments will be docked 5% every 24 hours, starting from 2pm on the day the assignment is due.

# **Missing Class**

If you need to miss class for medical reasons, please provide paper documentation along the lines of a sign U of T medical certificate. This can be found here: <a href="http://www.illnessverification.utoronto.ca/">http://www.illnessverification.utoronto.ca/</a>

# **Returning Assignments**

I will endeavor to provide you marks on assignments no later than two weeks after submission during the term. This will be done in class. For the final end of term paper marking will be completed within a week, by April 6<sup>th</sup>, and final papers can be picked up in my office on Tuesday, April 7<sup>th</sup> from 9-11am or 3-5pm, or Wednesday, April 8<sup>th</sup> from from 9-11am or 3-5pm. If you are unable to make these times, it is incumbent upon you to arrange a separate meet up time with me to receive your marked essay.

#### Schedule

# January 6 Introduction to transportation geography and planning

Review syllabus, assignments especially travel fieldnotes, class participation; introductions and names. Overview of course material and themes. Learning objectives. Choosing days for reading reviews.

# January 13\* Contemporary Transportation Planning

There is no class on this day, as I will be presenting at the Transportation Research Board Conference. In lieu of class, you are required to watch this recent episode of The Agenda on a proposed highway for the GTA (GTA West Corridor): https://www.tvo.org/video/highways-and-our-transportation-future.

To earn participation credit for this day, you are asked to complete a one-page paper, single spaced, reviewing the debate. Your review must answer the question: Who won the debate, in your view, and why? This is due 2pm on January 20<sup>th</sup> in class, and counts as your participation point for this week. Students who want to present readings assigned this week will present on the 20<sup>th</sup>.

Metz, D. (2008). The Myth of Travel Time Saving. Transport Reviews, 28(3), 321-336.

Beimborn, E. & Kennedy, R. (2009). Inside the Blackbox: Making Transportation Work for Livable Communities. Citizens for a Better Environment and the Environmental Defense Fund. **1-38 only**!

Litman, T. (2011). Measuring Transportation: *Traffic, Mobility and Accessibility*. Vitoria, BC: Victoria Transportation Policy Institute, 1-17.

# January 20 Automobility

How the infrastructure of automobiles has transformed transportation and urban design.

Zacharias, J. (2012). Resisting motorization in Guangzhou. *Habitat International*, *36*(1), 93–100. https://doi.org/10.1016/j.habitatint.2011.06.007

Norton, P. (2007) Street Rivals: Jaywalking and the invention of the motor age street. *Technology and Culture*, 48(2), 331-359.

Henderson, J. (2006) Secessionist Automobility: Racism, Anti-Urbanism, and the Politics of Automobility in Atlanta, Georgia. *International Journal of Urban and Regional Research*, 30.2, 293-307.

# January 27 The Future of Automobility

The implications and potential impacts of ridehailing, electric vehicles, and autonomous vehicles.

Dudley, G., Banister, D., & Schwanen, T. (2017). The Rise of Uber and Regulating the Disruptive Innovator. *Political Quarterly*, 88(3), 492–499. https://doi.org/10.1111/1467-923X.12373

Fagnant, D. J., & Kockelman, K. (2015). Preparing a nation for autonomous vehicles: Opportunities, barriers and policy recommendations. *Transportation Research Part A: Policy and Practice*, 77, 167–181. https://doi.org/10.1016/j.tra.2015.04.003

Millard-Ball, A. (2018). Pedestrians, Autonomous Vehicles, and Cities. *Journal of Planning Education and Research*, 38(1), 6-12.

## February 3 Active transportation

Review the TTS assignment

Walking and cycling in the city.

Hess, P. (2009) Avenues or Arterials: The struggle to change street building practices in Toronto, Canada. *Journal of Urban Design*, 14(1), 1-28.

Pucher, J., & Buehler, R. (2008). Making cycling irresistible: Lessons from the Netherlands, Denmark and Germany. *Transport Reviews*, 28(4), 495–528. https://doi.org/10.1080/01441640701806612

Norcliffe, G. & B. Gao. (2018) Hurry-slow: Automobility in Beijing, or a resurrection of the Kingdom of Bicycles? Chapter 5, in Mackintosh, P. G., Dennis, R. & D. Holdsworth, editors. *Architectures of hurry – Mobilities, Cities and Modernity*. Oxon: Routledge, 83-99.

## February 10 Public transportation

The theory and practice of public transportation network design and operations.

Ocejo, R. E., & Tonnelat, S. (2014). Subway diaries: How people experience and practice riding the train. *Ethnography*, *15*(4), 493–515. https://doi.org/10.1177/1466138113491171

Taylor, B. D., & Morris, E. A. (2015). Public transportation objectives and rider demographics: are transit's priorities poor public policy? *Transportation*, *42*(2), 347–367. https://doi.org/10.1007/s11116-014-9547-0

Walker, J. (2012). Frequency is Freedom. Chapter 7 of *Human Transit: How Clearer Thinking About Public Transit Can Enrich Our Communities and Our Lives*. Washington: Island Press, 85-96.

# February 17 Reading week - no class

# February 24 Environmental justice

Unequal access and impacts of transportation systems.

Sheller, M. (2015). Racialized Mobility Transitions in Philadelphia: Connecting Urban Sustainability and Transport Justice. *City and Society*, 27(1), 70–91.

Farber, S. & Allen, J. (2018) Transit in Toronto: Socioeconomic Status and Transit Availability (Storymap here)

Linovsky, O., Baker, D. & Manaugh, K. (2018) Equity in practice? Evaluations of equity in planning for bus rapid transit. *Transportation Research Part A*, 113, 75-87.

# March 2 Transportation democracy and demand

Review the transportation plan assignment.

Transportation management, travel patterns and planning.

Karner, A., & R. Marcantonio. (2018) Achieving transportation equity: Meaningful public involvement to meet the needs of underserved communities. *Public Works Management & Policy*, 23(2), 105-126.

Grengs, J. (2002). Community-Based Planning as a Source of Political Change. *Journal of the American Planning Association*, 68(2), 165. https://doi.org/10.1080/01944360208976263

Turner, S. & N.T. Hanh. (2018) Contesting socialist state visions for modern mobilities: informal motorbike taxi drivers' struggles and strategies on Hanoi's streets, Vietnam. *International Development Planning Review*, early view.

## March 9 Transportation politics and economics

Transportation evidence and decision-making, budgets and finance.

Muhammad, U. (2018) Politicizing public transit in Toronto. The Bullet, Online here.

Wachs, M. (2001). Forecasting versus Envisioning, *Journal of the American Planning Association*, *67*(4), pp. 367–372.

Flyvbjerg, B., Holm, M., & Buhl, S. (2005). How (In)accurate Are Demand Forecasts in Public Works Projects? *Journal of the American Planning Association*, 71(2), pp. 131-146.

# March 16 Global case studies and potential for transformative mode shift

We look at a selection of places around the world to discuss a variety of transportation issues, and we discuss the potential for transformational mode shift. No readings this week.

March 23 7-minute presentations

March 30 7 minute presentations