GEOG3422 Contemporary Urban Transportation Issues
Department of Geography
The University of Hong Kong

Level 300 (for Year 2 to Year 4 students); Semester 2 (Complementary to GEOG3420 Transport and Society)

From 2024-2025 onwards, this course is offered biennially. In biennial odd years (e.g. 2025-2026), the teacher offers GEOG3422 Contemporary Urban Transportation Issues. In biennial even years (e.g. 2026-2027), the teacher offers GEOG3420 Transport and Society. The two courses are complementary. Students interested in transportation are recommended to take both courses.

1. Objectives

To provide students with an advanced understanding of the nature of urban transportation issues in the context of public health, social equity and spatial trends in metropolitan settings.

2. Course Synopsis

This course focuses on urban transportation in the context of public health, social equity and spatial trends in metropolitan settings. It explores a wide range of issues related to public health and transportation: the dimensions of climate change and transportation in cities; how transportation is a social determinant of health and how transportation policy contributes to social equity; the relationships between infectious diseases, such as COVID-19, and mobility including travel modes and restrictions; the relationships between health and active travel; how ageing and demographic changes are related to transportation; and finally, road safety and Vision Zero policies.

3. Lecture Overview

This course will cover the following six major topics:

- Walkability, health and well-being
- Transport decarbonization and electric mobility
- The ageing population
- Social equity
- Infectious diseases and mobility
- Improving road safety from a holistic perspective

Lectures will be taught in CPD-1.24 on Wednesdays from 1100 to 1250.

	Topic	Date
1	From a vehicle-oriented to a people-oriented and place-based paradigm	21 January
2	Seamless transport and towards “walking” cities	28 January
3	Transport decarbonization and electric mobility	04 February
4	Wider implications of electric mobility	11 February
Chinese New Year Holidays (17-23 February)		
5	The ageing population and “walkability”	25 February
6	Generational change and older people’s travel characteristics	04 March
Reading Week (9-14 March)		
7	Concepts and indicators of social equity in transport systems	18 March
8	Addressing social equity through urban transport	25 March
9	Infectious diseases and mobility	01 April

10	COVID-19 case studies	08 April
11	Road safety as a social and public health issue	15 April
12	Towards a road safety strategy	22 April

4. Learning Outcomes

4.1 Course learning outcomes (CLOs)

This course has the following CLOs:

4.1.1 Knowledge

- Understand the critical importance of walkability in promoting health and wellness of the urban population
- Integrate knowledge about infectious diseases and strategies to reduce transmission through transport policy
- Describe strategies of how urban areas are preparing transport systems to endure climate change and the ageing population
- Identify key indicators of social equity in transportation, data to assess, and strategies to reduce inequities
- Understand the core components of a road safety strategy

4.1.2 Skills

- Critical thinking about diverse urban transport policies and the many outcomes related to public health and wellbeing
- Use sustainable transport concepts to identify policy options to address issues with climate change, disease spread and an ageing population
- Evaluate strategies to improve road safety for all users and communicate trade-offs related to different policy options

4.2 Geography Programme Learning Outcomes (PLOs)

The Geography Major Programme Learning Outcomes are listed below:

PLO1: Critically analyze the geographical aspects of the relationship between people and the environment
PLO2: Demonstrate and develop an understanding of how these relationships have changed with space and over time
PLO3: Identify, collect and utilize primary and secondary data to investigate and analyze the issues and problems facing people, places and society
PLO4: Integrate, evaluate and communicate information from a variety of geographical and other sources
PLO5: Participate in promoting social, economic, and environmental sustainability at the local, regional and global scales
PLO6: Effectively apply a range of transferable skills in academic, professional and social settings

This table shows the matching of CLOs with the Geography Major PLOs.

Course Learning Outcomes (CLOs) *After completing this course, students would be able to:*		Alignment with Programme Learning Outcomes (PLOs)						Course Assessment Methods
		PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	
1	Understand the critical importance of walkability in promoting health and wellness of the urban population	✔	✔		✔			Reflections and exam
2	Integrate knowledge about infectious diseases and strategies to reduce transmission through transport policy	✔	✔	✔	✔			Reflections and exam
3	Describe strategies of how urban		✔			✔	✔	Reflections and

	areas are preparing transport systems to endure climate change and the ageing population							exam
4	Identify key indicators of social equity in transportation, data to assess, and strategies to reduce inequities			✔	✔	✔		Reflections and exam
5	Understand the core components of a road safety strategy	✔	✔	✔	✔			Reflections and exam
6	Critical thinking about diverse urban transport policies and the many outcomes related to public health and wellbeing			✔	✔	✔	✔	Reflections and exam
7	Use sustainable transport concepts to identify policy options to address issues with climate change, disease spread and an ageing population			✔	✔	✔	✔	Reflections and exam
8	Evaluate strategies to improve road safety for all users and communicate trade-offs related to different policy options			✔	✔	✔	✔	Reflections and exam

For alignment with the Programme Learning Outcomes of "Urban Governance Major", please refer to the Department website http://geog.hku.hk.

5. Assessment

40% Coursework (two individual reflections)
60% Examination (two hours)

5.1 Coursework Assessment

- Students are required to write short reflections on selected lectures. Each reflection should relate to the contents **discussed in two or more lectures**. Each reflection should have 1500-2000 words (font size 12, single-line spacing and printed on both sides of papers), and a maximum of two figures/tables. Cover page and references are not included in the word limit.
- There should be a total of **two reflections**. The first one should be based on two or more lectures from Lecture 1 to Lecture 6; and the second one should be based on two or more lectures from Lecture 7 to Lecture 12. All submissions should be made both as a hard copy to Room 10.48 and via Turnitin Assignment in Moodle. All references must be cited them properly.
- Each reflection should critically engage with lecture materials and extended readings. State the lectures that the reflection is based on at the beginning of the essay. Each reflection should also include an original case study, supported by data.

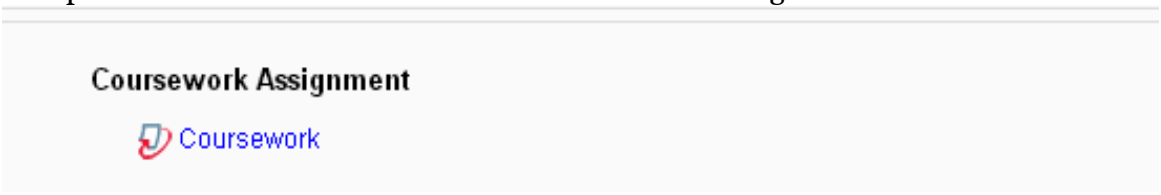
Submission deadline

First reflection: 18 March, 2026 by 5pm (about one week after the Reading Week)
Second reflection: 29 April, 2026 by 5pm (about one week after the last lecture)

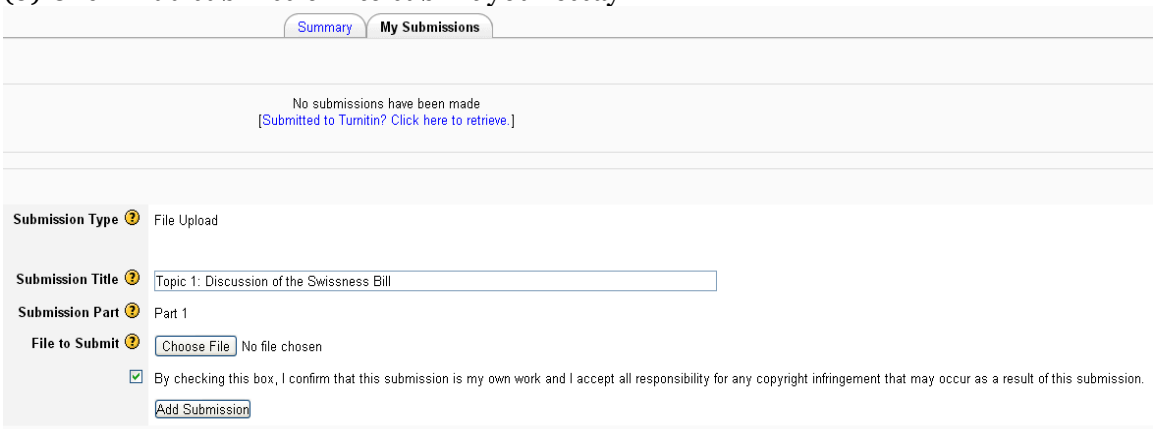
Important Notes

1. You need to submit your reflections in Moodle via Turnitin.

- Turnitin is a software programme which checks papers for any sign of plagiarism and use of Generative Artificial Intelligence (GenAI). To submit your paper to Turnitin, please select "Coursework" under the Coursework Assignment section on Moodle.



(1) Choose the "My submission" tab
(2) Input your essay title
(3) Click "Choose File" to upload your essay
(4) Check the box to indicate your consent
(5) Click "Add submission" to submit your essay



*NOTE: **You can upload your essay to Turnitin only once.** In other words, you must make sure that only the most updated version of your essay is submitted to Turnitin. To avoid confusion, the Turnitin link will only be available one week before the submission deadline.

- The course instructor and the course TA will check the originality report prior to marking. We view breaches of copyright and plagiarism, as well as the improper use of GenAI, very seriously.
- When the detected AI percentage surpass the threshold of 30%, course teachers will provide the relevant students with the AI detection reports, and ask them to explain the process whereby they arrived at the submitted assignment, accompanied with any supporting documents (e.g. initial drafts, sources of data, and references read).
- When grading the assignments with AI detection rate over the threshold, the teachers will consider the AI detection report (including which part of the writing is flagged) together with the student explanation.
- Plagiarized work or work with improper use of AI will receive a fail grade. There may also be disciplinary action against the student who commits the above offence.

2. Late submissions will be penalized according to the Departmental policy.
3. Individual feedback will be provided to students. An announcement will be made via Moodle when the comments are ready.

5.2 Examination

Examination will be held at the end of the Semester. Comments on previous examination performances are available in Moodle.

5.3 Grade Descriptors

In order to facilitate students to understand their performance in this course and to improve, some descriptions of the different grades are listed below.

Grade	Descriptions
A	Excellent foundation knowledge of the subject. Demonstrate evidence of original thought, logical thinking, and strong analytical skills. Excellent organizational and presentation skills.
B	A good foundation knowledge of the subject. Demonstrate evidence of critical and analytical thinking and skills. Good organizational and presentation skills. No serious flaws in the answer.
C	Reasonable foundation knowledge of the subject. Little evidence of critical thinking or insight, although the answer has some structure/coherence. Mostly descriptive in the work. Some flaws in the answer.
D	Limited foundation knowledge of the subject. Mainly descriptive with limited evidence of critical thinking and poor structure/coherence. Not well organized in presentation. A number of flaws in the answer.
Fail	No foundation knowledge of the subject. Major flaws in the answer. Poor organizational and presentation skills.

6. Course Readings

Giuliano, G. and Hanson, S., eds. (2017). *The Geography of Urban Transportation*, 4th edition. New York: Guilford Press.

Loo, B.P.Y. (2019). *Unsustainable Transport and Transition in China*. New York: Routledge.

Highly-recommended readings are typed in blue.

Lectures 1-2 Walkability, Health and Well-being

Appleyard, D. (1981) *Livable Streets*. Berkeley and Los Angeles: University of California Press.

ARUP (2016) *Cities Alive: Towards a Walking World*. London: ARUP.

Blecic, I., Congiu, T., Fancello, G. & Trunfio, G.A. (2020) "Planning and design support tools for walkability: A guide for urban analysts." *Sustainability* 12: 4405.

Essen, H., Bello, O., Dings, J. & Brink, R. (2003) *To Shift or Not to Shift, That's the Question*. Delft: CE.

Forsyth, A. (2015) "What is a walkable place? The walkability debate in urban design." *Urban Design International* 20(4): 274-292.

Gehl, J. (2006) *Life Between Buildings: Using Public Space*, sixth edition. Kobenhavn: The Danish Architectural Press.

Guo, Z. & Loo, B.P.Y. (2013) "Pedestrian environment and route choice: Evidence from New York City and Hong Kong." *Journal of Transport Geography* 28: 124-136.

Hall, P. (2014) *Good Cities, Better Lives: How Europe Discovered the Lost Art of Urbanism*. London: Routledge.

Li, L. & Loo, B.P.Y. (2016) "Towards people-centered integrated transport: A case study of Shanghai Hongqiao Comprehensive Transport Hub." *Cities* 58: 50-58.

Loo, B.P.Y. (2021) "Walking towards a happy city." *Journal of Transport Geography* 93: 103078.

Loo, B.P.Y. & Tsui, K.L. (2016) "Contributory factors to critically wrong road-crossing judgments among older people: An integrated research study." *Hong Kong Journal of Emergency Medicine* 23(1):13-24.
Loo, B.P.Y. (2020) "Transport, Urban". In: (Ed.), *International Encyclopedia of Human Geography*, second edition, ed. Kobayashi, A. (Oxford: Elsevier), vol. 13, pp. 457–462.
Loo, B.P.Y. & du Verle, F. (2017) "Transit-oriented development in future cities: Towards a two-level sustainable mobility strategy." *International Journal of Urban Sciences* 21(Supp 1): 54-67.
Loo, B.P.Y. & Lam, W.W.Y. (2012) "Geographic accessibility around elderly health care facilities in Hong Kong: A micro-scale walkability assessment." *Environment and Planning B: Planning and Design* 39(4): 629-646.
Loo, B.P.Y., Cheng, A.H.T. & Nichols, S.L. (2017) "Transit-oriented development on greenfield versus infill sites: Some lessons from Hong Kong." *Landscape and Urban Planning* 167: 37-48.
Olsen, J.R., Leung, K.Y.K., Nicholls, N. & Loo, B.P.Y. (2021) "Do neighbourhood characteristics matter in understanding school children's active lifestyles? A cross-region multi-city comparison of Glasgow, Edinburgh and Hong Kong" *Children's Geographies* 19(4): 488-504.
Preston, J. (2012) *Integration for Seamless Transport*. Southampton: OECD/ITF.
San Francisco Planning Department (2010) *Better Streets Plan*. San Francisco: San Francisco Planning Department.
Transport for London (2018) *Walking Action Plan*. London: Transport for London.
Wang, B., Loo, B.P.Y. & Lu, L. (2020) "Situating high-speed railway (HSR) stations within local urban contexts: Passenger satisfaction about intermodal integration at the Hong Kong HSR Station." *Built Environment* 46(3): 362-378
Westminster City Council (2017) *Westminster Walking Strategy 2017-2027*. Westminster: Westminster City Council.

Some useful websites and links:

http://content.tfl.gov.uk/walking-tube-map.pdf
https://globaldesigningcities.org/publication/global-street-design-guide/streets/pedestrian-priority-spaces/parklets/case-study-pavement-to-parks-san-francisco-usa/
https://londonblog.tfl.gov.uk/2020/09/01/short-local-walks/
https://www.c40knowledgehub.org/s/article/How-C40-cities-are-implementing-zero-emission-areas?language=en_US
https://www.sfmta.com/getting-around/walk/sunday-streets
https://www.sundaystreetssf.com/
https://amp.scroll.in/article/1023119/mumbais-sunday-streets-initiative-could-helps-residents-reimagine-safer-accessible-public-spaces
MATPP programme: https://www.matpp.hku.hk/
https://pedestrianspace.org/exploring-perceptions-definitions-of-walkability/

Lectures 3-4 Transport Decarbonisation and Electric Mobility

Geurs, K. & Van Wee, B. (2000) "Backcasting as a tool to develop a sustainable transport scenario assuming emission reductions of 80-90%." *Innovation: The European Journal of Social Science Research* 13(1): 47-62.
IEA (International Environmental Agency) (2020) *Global EV Outlook 2020 - Entering the decade of electric drive?* IEA.
Jaroszweski, D., Hooper, E., & Chapman, L. (2014) "The impact of climate change on urban transport resilience in a changing world." *Progress in Physical Geography: Earth and Environment* 38(4): 448–463.
Loo, B.P.Y. & & Banister, D. (2016) "Decoupling transport from economic growth: Extending

the debate to include environmental and social externalities." *Journal of Transport Geography* 57: 134-144.
Loo, B.P.Y. & Tsoi, K.H. (2018) "The sustainable transport pathway: A holistic strategy of five transformations." *Journal of Transport and Land Use Planning* 11(1): 961-980.
Loo, B.P.Y., Tsoi, K.H. & Banister, D. (2020) "Recent experiences and divergent pathways to transport decoupling." *Journal of Transport Geography* 88: 102826.
Markolf, S.A., Hoehne, C., Fraser, A., Chester, M.V., & Underwood, B.S. (2019) "Transportation resilience to climate change and extreme weather events – Beyond risk and robustness." *Transport Policy* 74: 174–186.
OECD (2018) *Policy Coherence for Sustainable Development 2018: Towards Sustainable and Resilient Societies*. Paris: OECD.
Rietmann, N. & Lieven, T. (2019) "How policy measures succeeded to promote electric mobility–worldwide review and outlook." *Journal of Cleaner Production* 206: 66-75.
Sims, R., Schaeffer, R., Creutzig, F., Cruz-Núñez, X., D'Agosto, M., Dimitriu, D. ... Tiwari, G. (2014) "Transport." In Edenhofer, O., R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlömer, C. von Stechow, T. Zwickel and J.C. Minx (Eds.), *Climate Change 2014: Mitigation of Climate Change*. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (599-670). Intergovernmental Panel on Climate Change.
Tapio, P., Banister, D., Luukkanen, J., Vehmas, J., & Willam, R. (2007) "Energy and transport in comparison: Immaterialisation, dematerialisation and decarbonisation in the EU15 between 1970 and 2000." *Energy Policy* 35(1): 433-451.
Tsoi, K.H. & Loo, B.P.Y., Tal, G. & Sperling, D. (2021) "Pioneers of electric mobility: Lessons about transport decarbonisation from two bay areas." *Journal of Cleaner Production* 330: 129866.
Wamsler, C., Brink, E., & Rivera, C. (2013) "Planning for climate change in urban areas: From theory to practice." *Journal of Cleaner Production* 50: 68–81.
Presentation by Secretary KS Wong: Hong Kong's Pathway to Carbon Neutrality
Some useful websites and links:
https://slocat.net/tda/
https://www.ev-volumes.com/
https://www.iea.org/reports/transport
https://www.iea.org/reports/net-zero-by-2050
https://theicct.org/electric-vehicles
https://www.wilsoncenter.org/event/hong-kongs-pathway-carbon-neutrality?
https://www.youtube.com/watch?v=RSoH_lmCY_c&t=11s

Lectures 5-6 The Ageing Population

Banister, D., & Bowling, A. (2004) "Quality of life for the elderly: The transport dimension." *Transport Policy* 11: 105–115.
Bardazzi, R. & Pazienza, M. (2018) "Ageing and private transport fuel expenditure: do generations matter?" *Energy Policy* 117: 396–405.
Boschmann, E.E., & Brady, S.A. (2013) "Travel behaviors, sustainable mobility, and transit-oriented developments: A travel counts analysis of older adults in the Denver, Colorado metropolitan area." *Journal of Transport Geography* 33: 1–11.
Cui, J., Loo, B.P.Y. & Lin, D. (2017) "Travel behaviour and mobility needs of older adults in an ageing and car-dependent society." *International Journal of Urban Sciences* 21(2): 109-128.
Hjorthol, R. J., Levin, L., & Siren, A. (2010) "Mobility in different generations of older persons." *Journal of Transport Geography* 18: 624–633.

Lam, W.W.Y., Loo, B.P.Y. & Mahendran, R. (2020) "Neighbourhood environment and depressive symptoms among the elderly in Hong Kong and Singapore." *International Journal of Health Geographics* 19:48

Li, L. & Loo, B.P.Y. (2017) "Mobility impairment, social engagement, and life satisfaction among the older population in China: A structural equation modelling analysis." *Quality of Life Research* 26(5): 1273-1282.

Liddle, B. (2004) "Demographic dynamics and per capita environmental impact: using panel regressions and household decompositions to examine population and transport." *Population and Environment* 26 (1): 23–39.

Liddle, B. (2011) "Consumption-driven environmental impact and age-structure change in OECD countries: A cointegration-STIRPAT analysis." *Demographic Research* 24: 749–70.

Loo, B.P.Y. & Tsui, K.L. (2016) "Contributory factors to critically wrong road-crossing judgments among older people: An integrated research study." *Hong Kong Journal of Emergency Medicine* 23(1):13-24.

Loo, B.P.Y., Mehandran, R., Katagiri, K. & Lam, W.W.Y. (2017) "Walking, neighbourhood environment and quality of life among older people." *Current Opinion in Environmental Sustainability* 25: 8-13.

Loo, B.P.Y., Lam, W.W.Y., Mehandran, R. & Katagiri, K. (2017) "How is the neighbourhood environment related to the health of seniors in Hong Kong, Singapore and Tokyo? Some insights for promoting ageing-in-place." *Annals of the American Association of Geographers* 107(4): 812-828.

Newbold, K. & Scott, D. (2018) "Generational differences in trip timing and purpose: evidence from Canada." *Growth and Change* 49 (2): 361–73.

O'Hern, S., & Oxley, J. (2015) "Understanding travel patterns to support safe active transport for old adults." *Journal of Transport & Health* 2(1): 79–85.

Siren, A., & Haustein, S. (2013) "Baby boomers' mobility patterns and preferences: What are the implications for future transport?" *Transport Policy* 29: 136–144.

Thigpen, C. & Handy, S. (2018) "Driver's licensing delay: a retrospective case study of the impact of attitudes, parental and social influences, and intergenerational differences." *Transportation Research Part A* 111: 24–40.

Tsoi, K.H. & Loo, B.P.Y. (2020) "Generational change and travel" in *Handbook of Sustainable Transport*. Edited by C. Curtis. Edward Elgar, pp. 357-267.

United Nations (2015) *World Population Ageing Report 2015*. New York: United Nations. Available at: http://apps.who.int/iris/bitstream/10665/186463/1/9789240694811_eng.pdf

United Nations Department of Economic and Social Affairs, Population Division (2020). *World Population Ageing 2020 Highlights: Living arrangements of older persons* (ST/ESA/SER.A/451). Available at: www.un.org/development/desa/pd/

Yan, W., Wong, S.C., Loo, B.P.Y., Wu, C.Y.H., Huang, H., Peng X. and Meng, F. (2022) "An assessment of the effect of green signal countdown timers on drivers' behavior and on road safety at intersections, based on driving simulator experiments and naturalistic observation studies." *Journal of Safety Research* 82: 1-12.

Zhang, F., Loo, B.P.Y., & Wang, B. (2022) "Aging in place: From the neighborhood environment, sense of community, to life satisfaction." *Annals of the American Association of Geographers* 112(5): 1484-1499.

Useful website:

https://www.chp.gov.hk/en/statistics/data/10/27/111.html#

https://www.police.gov.hk/ppp_en/05_traffic_matters/rs_200702.html#:~:text=Elderly%20pedestrians%20have%20been%20the,people%20aged%2065%20and%20above.&text=Through%20Project%20TOGETHER%2C%20we%20promote,make%20Hong%20Kong's%20roads%20safer.

https://www.who.int/data/gho/data/indicators/indicator-details/GHO/life-expectancy-at-birth-(years)

Lectures 7-8 Social Equity

Adli, S.N., & Donovan, S. (2018) "Right to the city: Applying justice tests to public transport investments." *Transport policy* 66: 56-65.

Di Ciommo, F. (2018) *How the Inaccessibility Index can improve transport planning and investment*. Paris: OECD/ITF.

Deboosere, R. & El-Geneidy, A. (2018) "Evaluating equity and accessibility to jobs by public transport across Canada." *Journal of Transport Geography* 73: 54-63.

Farber, S., Bartholomew, K., Li, X., Páez, A., & Nurul Habib, K.M. (2014) "Assessing social equity in distance based transit fares using a model of travel behavior." *Transportation Research Part A: Policy and Practice* 67: 291–303.

Golub, A., & Martens, K. (2014) "Using principles of justice to assess the modal equity of regional transportation plans." *Journal of Transport Geography* 41: 10-20.

Guzman, L.A., Oviedo, D., & Rivera, C. (2017) "Assessing equity in transport accessibility to work and study: The Bogotá region." *Journal of Transport Geography* 58: 236-246.

Li, L., & Loo, B.P.Y. (2016) "The promotion of social equity through railways." In: *Sustainable Railway Futures: Issues and Challenges*, ed. Loo, B.P.Y. & Comtois, C. (Surrey: Ashgate), pp. 129-44.

Loo, B.P.Y., & Lam, W.W.Y. (2015) "Does neighbourhood count in affecting children's journeys to schools?" *Children's Geographies*, 13(1), 89-113.

Loo, B.P.Y. (2021) "Walking towards a Happy City." *Journal of Transport Geography* 93: 103078.

Litman, T.A. (2021) *Evaluating Transportation Equity: Guidance for Incorporating Distributional Impacts in Transport Planning*. n.p.: Victoria Transport Policy Institute. www.vtpi.org/equity.pdf

Pereira, R.H.M., Schwanen, T., & Banister, D. (2017) "Distributive justice and equity in transportation." *Transport Reviews* 37(2): 170–191.

Sanchez, T. (2018*) The right to transportation: Moving to equity.* Routledge.

Swift, A., Cheng, L., Loo, B. P.Y., Cao, M., & Witlox, F. (2021) "Step-free railway station access in the UK: the value of inclusive design." *European Transport Research Review* 13(1): 1-12.

Welch, T.F. (2013) "Equity in transport: The distribution of transit access and connectivity among affordable housing units." *Transport Policy* 30: 283-293.

Useful website:

https://www.sfchronicle.com/food/restaurants/article/S-F-restaurants-are-tearing-down-their-parklets-16680270.php

Lectures 9-10 Infectious Diseases and Mobility

Adam, D.C., Wu, P., Wong, J.Y., Lau, E.H.Y., Tsang, T.K., Cauchemez, S., Leung, G.M., & Cowling, B.J. (2020) "Clustering and superspreading potential of SARS-CoV-2 infections in Hong Kong." *Nature Medicine* 26(11): 1714–1719.

Balcan, D., Colizza, V., Gonçalves, B., Hu, H., Ramasco, J.J., & Vespignani, A. (2009) "Multiscale mobility networks and the spatial spreading of infectious diseases." *Proceedings of the National Academy of Sciences* 106(51): 21484–21489.

Galvani, A. & May, R. (2005) "Dimensions of superspreading." *Nature* 438: 293–295.

Loo, B.P.Y. & Huang, Z. (2022) "Spatio-temporal variations of traffic congestion under work from home (WFH) arrangements: Lessons learned from COVID-19." *Cities* 103601.

Loo, B.P.Y., Tsoi, K.H., Axhausen, K.W., Cao, M., Lee Y., & Koh K. (2024) "Spatial risk for the formation of a superspreading environment: A systematic study of six common facilities in

six global cities across four continents", *Frontiers in Public Health* 11: 1128889.
Loo, B.P.Y., Tsoi, K.H., Wong, P.P.Y. & Lai, P.C. (2021) "Identification of superspreading environment under COVID-19 through human mobility data." *Scientific Reports* 11: 4699.
McKinsey & Company (2020) *From No Mobility to Future Mobility: Where COVID-19 has Accelerated Changes*. McKinsey Center for Future Mobility.
Soto, S.M. (2009) "Human migration and infectious diseases." *Clinical Microbiology and Infection* 15: 26–28.
Wang, H. & Noland, R.B. (2021) "Bikeshare and subway ridership changes during the COVID-19 pandemic in New York City." *Transport Policy* 106: 262-270.
Wesolowski, A., Buckee, C. O., Engø-Monsen, K., & Metcalf, C.J.E. (2016) "Connecting mobility to infectious diseases: The promise and limits of mobile phone data." *The Journal of Infectious Diseases* 214(suppl_4): S414–S420.
World Health Organization (2006) *SARS: How a Global Epidemic was Stopped?* Geneva: WHO.
Yang, B., Wu, P., Lau, E.H.Y., Wong, J.Y., Ho, F., Gao, H., Xiao, J., Adam, D. C., Ng, T.W.Y., Quan, J., Tsang, T.K., Liao, Q., Cowling, B.J., & Leung, G.M. (2021) "Changing disparities in Coronavirus disease 2019 (COVID-19) burden in the ethnically homogeneous population of Hong Kong through pandemic waves: An observational study." *Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America* ciab002.
Zhang, H., Lin, Y., Wei, S., Loo, B.P.Y., Lai, P.C., Lam, Y.F., Wan, L. & Li, Y. (2021) "Global association among satellite-derived nitrogen dioxide and lockdown policies under the COVID-19 pandemic." *Science of the Total Environment* 761: 144148.

Lectures 11-12 Road Safety

Christie, N. (2018) "Why we need to view road safety through a public health lens?" *Transport Reviews* 38(2): 139-141.
Hughes, B. P., Anund, A., & Falkmer, T. (2016) "A comprehensive conceptual framework for road safety strategies." *Accident Analysis and Prevention* 90: 13-28.
Hyder, A. A. (2019) "Measurement is not enough for global road safety: implementation is key." *The Lancet Public Health 4*(1): e12-e13.
Kristianssen, A., Andersson, R., Belin, M. & Nilsen, P. (2018) "Swedish Vision Zero policies for safety – A comparative policy content analysis." *Safety Science* 103: 260-209.
Loo, B.P.Y. (2006) "Validating crash locations for quantitative spatial analysis: A GIS-based approach." *Accident Analysis and Prevention* 38(5): 879-886.
Loo, B.P.Y. (2009) "The identification of hazardous road locations: A comparison of the black site and hot zone methodologies in Hong Kong." *International Journal of Sustainable Transportation* 3: 187-202.
Loo, B.P.Y. & Siiba, A. (2019) "Active transport in Africa and beyond: Towards a strategic framework." *Transport Reviews* 39(2): 181-203.
Loo, B.P.Y. & Tsoi, K.H. (2022) "Road safety strategies necessary in the second Decade of Road Safety." *Journal of Global Health* 12: 03081.
Loo, B.P.Y. & Tsui, K.L. (2007) "Factors affecting the likelihood of reporting road crashes resulting in medical treatment to the police." *Injury Prevention* 13: 186-189.
Loo, B.P.Y., Chow, C.B., Leung, M., Kwong, T.H.J., Lai, S.F.A. & Chau, Y.H. (2013) "Multi-disciplinary efforts toward sustained road safety benefits: Integrating place-based and people-based safety analyses." *Injury Prevention* 19: 58-63.
Loo, B.P.Y., Hung, W.T., Lo, H.K. & Wong, S.C. (2005) "Road safety strategies: A comparative framework and case studies." *Transport Reviews* 25(5): 613-639.
Loo, B.P.Y., Wong, S.C., Hung, W.T. & Lo, H.K. (2007) "A Review of the road safety strategy in Hong Kong." *Journal of Advanced Transportation* 41(1): 3-37.
Satria, R., Tsoi, K.H., Castro, M. & Loo, B.P.Y. (2020) "A combined approach to address road

traffic crashes beyond cities: Hot zone identification and countermeasures in Indonesia." *Sustainability* 12(1801): 1-19.
Tsoi, K.H., Loo, B.P.Y. & Banister, D. (2021) ""Mind the (Policy-Implementation) gap": Transport decarbonisation policies and performances of leading global economies (1990-2018)" *Global Environmental Change* 68: 102250.
Wegman, F. (2017) "The future of road safety: A worldwide perspective." *ITASS Research* 40: 66-71.
World Health Organisation (WHO) (2015) *Global Status Report on Road Safety 2015*. Geneva: WHO.
World Health Organisation (WHO) (2018) *Global Status Report on Road Safety 2018*. Geneva: WHO.
World Health Organisation (WHO) (2021) *Decade of Action for Road Safety 2021-2030* at https://www.who.int/groups/united-nations-road-safety-collaboration/decade-of-action-for-road-safety-2021-2030
Wong, S.C., Leung, B.S.Y., Loo, B.P.Y., Hung, W.T. & Lo, H.K. (2004) "A qualitative assessment methodology for road safety policy strategies." *Accident Analysis and Prevention* 36(2): 281-293.

Useful websites

Grubenmann, T., Tsoi, K.H. & Loo, B.P.Y. (2019) "Hotzone generation add-in for ArcGIS." Available at http://arcg.is/1T0bKv (Free download)
https://www.youtube.com/watch?v=wfWEl8DTqgQ (TVB feature on road safety, in Cantonese)
https://www.news.gov.hk/isd/ebulletin/en/category/lawandorder/030506/features/html/030506en08005.htm
https://www.police.gov.hk/ppp_en/05_traffic_matters/enforcement.html#:~:text=Selected%20Traffic%20Enforcement%20Priorities%20(STEP)%202021&text=Road%20Safety%20is%20one%20of,element%20is%20addressed%20via%20STEP.&text=STEP%202021%20focuses%20on%20offences,flow%20and%20affect%20the%20community.
https://www.who.int/groups/united-nations-road-safety-collaboration/decade-of-action-for-road-safety-2011-2020#:~:text=The%20Decade%20of%20Action%20for,behaviour%20of%20road%20users%3B%20and
https://www.who.int/teams/social-determinants-of-health/safety-and-mobility/decade-of-action-for-road-safety-2021-2030
Tsoi, K.H. (2020) Where are the most dangerous road locations in Hong Kong? https://storymaps.arcgis.com/stories/3d09f8a127f04db28a2347c35628846e

7. Teacher

Professor Becky P.Y. Loo
Professor, Department of Geography
Founding Co-Director, Joint Laboratory on Future Cities
Room 10.34, The Jockey Club Tower
The University of Hong Kong
Pokfulam Road, Hong Kong
URL: www.bpyloo.hku.hk
E-mail: bpyloo@hku.hk

8. Teaching Support

Teaching support is to be confirmed.

<End>