Zheng Chang

ISTP, ETH Zürich

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EDUCATION

•	Harvard University, Cambridge, USA	Sep 2008 - May 2012	
	Doctor in Urban Planning and Public Policy		
	Dissertation: Financing New Metros: The Beijing Metro Financing Sustainability Study Thesis Committee: Jose A. Gomez-Ibanez, Alan Altshuler, Anthony Saich		
•	Harvard University, Cambridge, USA	Sep 2005 - June 2007	
	Master in Urban Planning		
•	Peking University, Beijing, China	Sep 2002 - July 2006	
	Minor in Economics		
•	Tsinghua University, Beijing, China	Sep 2001 - July 2004	
	Master in Architecture		
•	Tianjin University, Tianjin, China	Sep 1996 – July 2001	
	Bachelor in Architecture		

EXPERIENCES

•	ETH Zürich, Zürich, Switzerland	April 2021- now	
	Visiting Scientist - Institute of Science, Technology and Policy		
•	Harvard University, Cambridge, USA	Jan 2020 - now	
	Visiting Fellow, Taubman Center for State and Local Government, Kennedy School of Government		
	Working on a book – "Infrastructure Economics and Policy: International Perspectives", with Prof Jose Gomez-Ibanez and Edward Glaeser etc.		
•	Beijing Normal University – Hong Kong Baptist University	Jan 2021- now	
	United International College, Zhuhai, China		
	Associate Professor in Applied Economics, Division of Business and Management		
	Beijing Normal University, Zhuhai, China		
	Researcher, Center for Innovation and Development		
•	City University of Hong Kong, Hong Kong, China	Oct 2012 - Dec 2020	
	Assistant Professor, Department of Architecture and Civil Engineering		
•	Vanke.Co, Shenzhen, China	Sep 2007 - Aug 2008	
	Project Manager		
•	Beijing Institute of Architecture Design, Beijing, China	Aug 2004 - July 2005	
	Architect		

RESEARCH INTERESTS

Urban and Regional Economics, Transportation and Land Use, Housing and Real Estate, Environmental Sustainability, Big Data Analytics, Emerging Market.

RESEARCH PAPERS

- Journal Articles (*corresponding author)
 - 1. Z Chang*, L Zheng, T Yang, F Long, 2022. High-speed rail, new town development, and the spatial mismatch of land leases in China. *Land Use Policy*, 115:106014.
 - 2. Z Chang* and L Zheng. 2022. High-speed rail and the spatial pattern of new firm birth: Evidence from China. *Transportation Research Part A: Policy and Practice*. 155: 373-386.
 - 3. **Z** Chang and M Diao*. 2021. Inter-city transport infrastructure and intra-city housing markets: Estimating the redistribution effect of high-speed rail in Shenzhen, China. *Urban Studies*. 00420980211017811.
 - 4. **Z Chang***, M Diao, K Jing, W Li. 2021. High-speed rail and industrial movement: Evidence from China's Greater Bay Area. *Transport Policy*.112:22-31
 - 5. **Z** Chang, C Deng, F Long, L Zheng*. 2021. High-speed rail, firm agglomeration, and PM2.5: Evidence from China. *Transportation Research Part D: Transport and Environment*. 96:102886.
 - 6. **Z** Chang*, W Li, X Li and C Deng. 2021. Waste disposal and housing price: new evidence from the landfill clean-up program in Hong Kong. *Journal of Environmental Planning and Management*. 64(10): 1795-1815.
 - 7. **Z** Chang and X Li*. 2021. How regulation on environmental information disclosure affects brownfield prices in China: a difference-in-differences (DID) analysis. *Journal of Environmental Planning and Management*. 64(2): 308-333.
 - 8. **Z Chang***, J Chen, W Li, and X Li. 2019. Public transportation and the spatial inequality of urban park accessibility: New evidence from Hong Kong. *Transport Research Part D: Transport and Environment*, 76: 111-122.
 - 9. Guo H, **Z Chang**, J Wu, and W Li*, 2019. Air pollution and lung cancer incidence in China: Who are faced with a greater effect? *Environment International*, 132:105077.
 - 10. Zheng L, F Long, **Z Chang***, and J Ye, 2019. Ghost town or city of hope? The spatial spillover effects of high-speed railway stations in China. *Transport Policy*, 81: 230-241.
 - 11. Z Chang* and J Murakami, 2019. Transferring land-use rights with transportation infrastructure extensions: Evidence on spatiotemporal price formation in Shanghai. *Journal of Transport and Land Use*, 12(1): 1-19.
 - 12. Song J, **Z** Chang, W Li*, Z Feng, J Wu, Q Cao, and J Liu, 2019. Resilience-vulnerability balance to urban flooding: A case study in a densely populated coastal city in China. *Cities*, 95:102381.
 - Song J, R Yang, Z Chang, W Li, and J Wu*. 2019. Adaptation as an indicator of measuring lowimpact-development effectiveness in urban flooding risk mitigation. *Science of the Total Environment*. 696: 133764.
 - Z Chang*, 2018. Understanding the Corruption Networks Revealed in the Current Chinese Anticorruption Campaign: a Social Network Approach. *Journal of Contemporary China*, 27:113, 735-747.
 - 15. Z Chang* and J Li, 2018. The impact of in-house unnatural death on property values: Evidence from Hong Kong. *Regional Science and Urban Economics*, 73:112-126.
 - 16. Murakami J and Z Chang*, 2018. Polycentric development under public leasehold: A spatial analysis of commercial land use rights. *Regional Science and Urban Economics*, 71: 25-36.

- 17. Z Chang*, 2018. Immigration and the Neighborhood: New Evidence from Recent Immigrants in Hong Kong. *International Real Estate Review*, 21(4): 549-566.
- 18. **Z Chang***, 2018. Information Barriers, Housing Searches, and Residential Satisfaction: A Study of Mainland China Students in Hong Kong. *International Real Estate Review*, 21(3): 343-365.
- 19. Z Chang and SY Phang*, 2017. Urban rail transit PPPs: Lessons from East Asian cities. *Transportation Research Part A: Policy and Practice*, 105:106-122.
- 20. Z Chang*, 2017. Non-local students, housing demand and rental impact: evidence from mainland students in Hong Kong. *International Real Estate Review*, 20 (4):525-548.
- 21. Chen J* and Z Chang, 2015. Rethinking urban green space accessibility: Evaluating and optimizing public transportation system through social network analysis in megacities. *Landscape and Urban Planning*, 143: 150-159.
- 22. Z Chang*, 2014. Financing new metros The Beijing metro financing sustainability study. *Transport Policy*, 32: 148-155.
- 23. Z Chang*, 2013. Public-private partnerships in China: a case of the Beijing No.4 Metro line. *Transport Policy*, 30: 153-160.

Book Chapter:

 Z Chang, 2022. "High-Speed Rail and City Clusters in China" in Infrastructure Economies and Policy: International Perspectives, ed. by Jose Gomez-Ibanez and Z. Liu., Cambridge, Massachusetts: Lincoln Institute of Land Policy: 414-433.

• Under Review:

- 1. **Z** Chang* and L Zheng. High-speed rail, market access and the rise of consumer city: Evidence from China. (**Revised and Resubmitted** by Transportation Research Part A: Policy and Practice).
- 2. T Yang*, J Ying, **Z Chang**. Unlocking the long-term potential of land value uplift in new subsidiary centres: How does planning matter? (**Under Review** by Journal of Planning Education and Research).

• Papers in Progress:

- 1. Z Chang* and K Jing. Industry parks, TFP improvement and global spillover: Evidence from China
- 2. **Z** Chang* and L Zheng. How does high-speed rail stimulate urban innovation: Evidence from the patent data in China.
- 3. Z Chang* and C Deng. Congestion and pollution: a big data approach.
- 4. **Z Chang*** and C Deng. The impact of home-purchase restriction policy on family formation and birth rate: Evidence from China
- 5. **Z** Chang. Market access and the cost-benefit analysis for large scale transportation network: Evidence from high-speed rail development in China.
- 6. Z Chang. Speed limit and car accident: A regression discontinuity approach.

RESEARCH GRANTS:

- External Grant:
 - 1. Z Chang. "The Impacts of High-Speed Rail on Cluster City Formation in China: Evidence from the land market in the Greater Bay Area", March 2020- Aug 2021, Lincoln Institute of Land Policy, China Program International Fellowship. (C24R003-CZC030520) (PI, 35,000 USD).

- Z Chang. "Estimating the Social Benefits of Landfill Restoration and Redevelopment in Hong Kong: Evidence from Housing Market". Policy innovation and co-ordination office, Hong Kong. Ref No. 2020.A1.094.20A. May 2020-May 2021. (PI, \$308,172. HKD)
- Z Chang. "Student Visa Holders in Rental Market: A Study of Mainland Students Housing Choice and Their Impact on Hong Kong's Housing Market". Public Policy Research (PPR) Funding Scheme, Central Policy Unit, Hong Kong. Ref No. 2014.A1.009.14E. Dec 2014-Mar 2016. (PI, \$294,883 HKD)

Internal Grant:

- 1. Z Chang. "Commercial Land Use Pattern in Shanghai", CityU SRG, Ref No. 7004871, Sep 2017-Aug 2019. (PI, \$100,000 HKD).
- 2. Z Chang. "Residential Satisfaction for Non-Local Students: A Case from Mainland Students in Hong Kong", CityU SRG, Ref No. 7004626, Sep 2016- Aug 2018. (PI, \$100,000 HKD).
- 3. Z Chang. "Residential Land Use Pattern in Shanghai and Selected Chinese Metropolises". CityU SRG, Ref No. 7004376, Sep 2015-Aug 2017. (PI, \$100,000 HKD)
- 4. **Z Chang**. "Industry Land Use Pattern in Shanghai and Selected Chinese Metropolises". CityU SRG, Ref No. 7004186, Sep 2014- Aug 2015. (PI, \$100,000 HKD)
- 5. Z Chang. "Mobility and housing tenure choice for new immigrants in Hong Kong". CityU Start-Up Grants, Ref No. 7200361, Sep 2013- March 2015. (PI, \$200,000 HKD)

PRESENTATIONS

- Z Chang. "High-speed rail, market access and the rise of consumer city: Evidence from China." VPL Brown Bag Series Fall 2021, ETH, Zurich, Nov 29, 2021.
- 2. **Z Chang**. "High-speed rail and the spatial pattern of new firm births: Evidence from China", 21th Swiss Transport Research Conference, Switzerland, Sep 13, 2021.
- 3. **Z Chang,** L Zheng. "High-speed rail and the spatial pattern of new firm births: Evidence from China", 2021 Virtual AsRES-GCREC-AREUEA Joint International Real Estate Conference. Singapore, July 21, 2021.
- 4. **Z Chang.** "The Impact of High-Speed Railway Network on New Firm Establishment in China". Chinese Economists Society 2020 North America Virtual Conference, Aug 14, 2020.
- 5. **Z Chang.** "China's effect to create clustered cities with High Speed Rail- Evidence from the China Greater Bay Area". Harvard Kennedy School, zooming conference, Aug 7, 2020.
- 6. **Z Chang**. "The impact of High Speed Railway on industry clustering and housing market" VPL Brown Bag Series Summer 2020, ETH, Zurich, June 22, 2020.
- Z Chang. "Ghost town or city of hope? The spatial spillover effects of high-speed railway stations in China." Hosted by East Asia Urban Forum & DDes program, Harvard Graduate School of Design, Cambridge, MA, USA. March 11, 2020
- 8. Z Chang. "Waste disposal and housing price: Evidence from the landfill restoration and redevelopment program in Hong Kong". 2019 SMU Conference on Urban and Regional Economics, Singapore. Dec 19-20, 2019.
- Z Chang. "The impact of in-house unnatural death on property values: Evidence from Hong Kong." 2019 Asian Real Estate Society Annual Conference, Shenzhen, P.R. China. July 7-10. 2019.
- 10. **Z Chang**. "Ghost town or city of hope? The spatial spillover effects of high-speed railway stations in China." 2019 Asian Real Estate Society Annual Conference, Shenzhen, P.R. China. July 7-10.

2019.

- 11. Z Chang. "Estimating the Spatial Spillover Effects of High-Speed Railway Stations in China using Nighttime Light Satellite Images", 2019 International Conference on China's Urban Development. Beijing, P.R. China, June 28-29, 2019.
- Z Chang. "Ghost town or city of hope? The spatial spillover effects of high-speed railway stations in China", The 13th International Association for China Planning (IACP) Conference, Chengdu, P.R. China, June 14-16, 2019.
- 13. **Z Chang.** "Public transportation and the spatial inequality of urban park accessibility: New evidence from Hong Kong", The 13th International Association for China Planning (IACP) Conference, Chengdu, P.R. China, June 14-16, 2019.
- Y Li., Z Chang. "Equalizing the rights to access local public service between homeowners and renters: Does the new housing policy in Guangzhou affect property value?", The 13th International Association for China Planning (IACP) Conference, Chengdu, P.R. China, June 14-16, 2019.
- C Yin., Z Chang. "The effect of home purchase restriction on housing price: Evidence from Guangzhou", The 13th International Association for China Planning (IACP) Conference, Chengdu, P.R. China, June 14-16, 2019.
- Z Chang. "Polycentric Development under Public Leasehold: A Spatial Analysis of Commercial Land Use Rights", 2018 Asian Real Estate Society Annual International Conference, Incheon, South Korea, July 8-11, 2018.
- 17. Z Chang. "Estimates of the impact of unnatural death on property values-evidence from Hong Kong's housing market", The 12th International Association for China Planning (IACP) Conference, Xian, P.R.China, June 30-July1, 2018.
- Z Chang. "The Impact of In-house Unnatural Death on Property Values Evidence from Hong Kong", 2018 The American Real Estate and Urban Economics Association (AREUEA) International Conference, Guangzhou, P.R. China, June 12-15, 2018.
- 19. Z Chang. "Land leasehold, transportation infrastructure, and residential suburbanization: Evidence from Shanghai, China." XIth World Conference of the Spatial Econometrics Association, Singapore, June 13-15, 2017.
- Z Chang. "Immigration and the Neighborhood: New Evidence from the recent Immigration in Hong Kong." 2016 APNHR (The Asia-Pacific Network for Housing Research) Conference. Dec, 2016. Guangzhou.
- Z Chang and L Lam, "Does Public Housing Crowd Out Private Development?- Evidence from Hong Kong", The 8th Annual Conference of the Global Chinese Real Estate Congress (GCREC), Hangzhou, P.R.China, July 2016.
- 22. **Z Chang**, "The Effect of Social Networks on Housing Outcomes: New Evidence from Mainland Students in Hong Kong", The 10th International Association for China Planning (IACP) Conference, Beijing, P.R.China, July 2016.
- 23. Z Chang, "Housing demand and rental effect of student visa holders: evidence from mainland students in Hong Kong", The 9th International Association for China Planning (IACP) Conference, Chong Qing, P.R.China, June 2015.
- 24. Z Chang, "Public and private partnership in metros- the practice of HK MTR on metro development and management in Mainland China", 1st International Conference on Rail Development and Management for Sustainable Urbanism, Hong Kong, Dec 2014.
- 25. Z Chang, "Metro development in China", Urban Transport and Land Use in Rapidly Growing Asian Cities, Indonesia Program at Harvard Kennedy School of Government (HKS) and the

Fulbright School of Economics in Vietnam, Ho Chi Minh City, Vietnam, June 2014.

SKILLS

- 1. Analytics: Causal Inference; Statistical Analysis; Spatial Analysis; Social Network Analysis; Cost Benefit Analysis
- 2. Software: Stata; R; Python; Gephi; ArcGIS; Adobe CS Design; MS Office
- 3. Language: Chinese (Native), English (Fluent), German (A1)

TEACHING

- Courses Taught at City University of Hong Kong
 CA 3230 Real Estate Investment and Interest Theory, 2013-2020
 CA 4229 Land Use Planning and Applied Valuation, 2013-2015
 CA 5217 Environmental Economics, Planning and Policy, 2014-2020
 CA 6220 Urban Economics and Regional Planning, 2015-2020
 CA 6223 Property Economics, 2014-2020
 CA 6234 Economics for the Built Environment, Fall, 2013, 2017
- Full Year Teaching Evaluation Report (Excellent if Weighted Average Score>=5.8) 2020-2021 (Full score=7, department average 5.97)
 6.75
 2018-2019 (Full score=7, department average 5.74)
 2017-2018 (Full score=7, department average 5.57)
 2016-2017 (Full score=7, department average 5.65)
 2015-2016 (Full score=7, department average 5.70)
 6.38
- Teaching at Harvard University as Teaching Fellow
 - API 105 Markets and Market Failures, Professor Jose Gomez-Ibanez, Harvard Kennedy School, Fall, 2009 & 2010
 - SUP 651 Transportation Policy and Planning, Professor Jose Gomez-Ibanez, Harvard Kennedy School, Spring 2010.
 - SUP 601 Urban Politics, Planning and Development, Professor Alan Altshuler, Harvard Kennedy School, Spring 2010.
 - DPI 405 The Political Economy of Transition in China, Professor Anthony Saich, Harvard Kennedy School, Spring 2010.

SERVICE

• Refereeing

Applied Geography; Cities; International Real Estate Review; Journal of Transport and Land Use; Journal of Transport Geography; Transport Policy; Transportation Research Part A: Policy and Practice; Transportation Research Part D: Transport and Environment; Regional Science and Urban Economics; Spatial Science; Urban Studies.

REFEREES

Jose A. Gomez-Ibanez Derek C. Bok Professor of Urban Planning and Public Policy Kennedy School of Government & Graduate School of Design, Harvard University 79 John F. Kennedy St, Taubman Bldg 316, Cambridge, MA, 02138 Phone: 617-495-1341 Email: jose_gomez-ibanez@harvard.edu

Alan Altshuler Ruth and Frank Stanton Professor of Urban Policy and Planning Harvard University Distinguished Service Professor Kennedy School of Government & Graduate School of Design, Harvard University 79 John F. Kennedy St, Taubman Bldg 372, Cambridge, MA, 02138 Mailbox 114, 79 JFK Street, MA 02138 Phone: 617-495-0709 Email: <u>alan_altshuler@harvard.edu</u>

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