Spring 2014 **Prof. Janet Kohlhase**
(version current as of Jan. 3, 2014; likely revised again) **University of Houston**

ECON 7387– Section 22184

ECONOMIC ANALYSIS OF URBAN AREAS

Meets TTh 11:30am-1:00pm in 212 McElhinney Hall

Office: 201B McElhinney (M)
hours: 4:00-5:00pm TTH or by appointment 713-743-3799
email: jkohlhase@uh.edu
web pages: http://www.uh.edu/~kohlhase (general information)
http://www.uh.edu/blackboard (class website, use Blackboard Learn; password access)

TA: to be announced

Overview: This course is a Ph.D-level applied microeconomics course focusing on urban economics. The field is quite diverse and could easily take up a two-semester sequence, so we will only be able to cover selected topics in this one-semester course. The course begins by examining the monocentric city model by developing bid-rent functions and performing comparative static predictions of the model. The next section of the course reviews both parametric and nonparametric procedures for empirically testing the predictions. We analyze extensions of the basic model to polycentric cities, examine the economics of agglomeration economies, housing markets, urban transportation issues and review some recent themes in economic geography. Other topics may be added depending on the interests of the class.

Recommended Textbooks:

Edward L. Glaeser, *Cities, Agglomeration and Spatial Equilibrium*, 2008, Oxford University Press, ISBN978-0-19-929044-4

Masahisa Fujita, *Urban Economic Theory: Land Use and City Size*, 1989, Cambridge University Press, ISBN 0-521-34662-2

Other Useful Books:

Jan K. Brueckner, Lectures on Urban Economics, MIT Press, 2011, ISBN 978-0-262-01636-0. An undergraduate textbook providing much intuition.

Richard J. Arnott and Daniel P. McMillen***, A Companion to Urban Economics,*** Blackwell, 2006. A book of readings, also available online through the UH library at **[need exact URL, look at econ library website]**

Course Evaluation:

20%	Midterm (Thursday February 27, 2014 in class)
25%	Final Exam (Thursday April 24, 2014 11am-1pm in class)
30%	Research Proposal (topics due March 6, final paper due Tues May 6)
15%	Homework sets (including one empirical project)
10%	Class presentation(s)

The exams will consist of problems and will be closed-book, closed-note and given in-class. There will be about 3 homework sets, and one will involve the use of Stata. The goal of the research proposal is to develop the beginnings of an empirical project by the end of the course. The proposal should be approximately 8-10 pages and should include a literature review and proposed research project including the main hypothesis, description of the data that will be used, and the empirical strategy (more guidelines will be provided later). Each student will also be required to present one or more articles to the class and to lead the discussion.

Course Policies: I expect you to attend all classes and to be an active participant in each. Homework and other course materials will be posted on our class Blackboard website.

All exams and homeworks are mandatory. Unapproved absence from any exam counts as a zero. No late assignments accepted. Any late homework receives a score of zero. Original hard copies (but no xeroxes) of homeworks are required; no electronic submissions will be accepted. You may form homework study-groups (in fact I encourage you to do so), but each student must turn in her/his own homework sets. Each homework set turned in must be unique and original. You are expected to do your own work on the exams. No makeup exams. Any absence from an exam for medical reasons must be documented by your physician. Any other absence from an exam must be approved by me *in advance* in writing. **All exams and homeworks are covered by the Honesty code of the University of Houston** (see Student Handbook's chapter on academic honesty, access via http://www.uh.edu/dos/studenthandbook/**.**

Course Preparation: Students should have completed the first-year Ph.D. sequence in microeconomic theory, and at least one course in econometrics. Familiarity with Stata is also assumed.

Learning Outcomes:

--Students will attain through lectures, homeworks, and readings, substantive knowledge about the economics of cities and regions.

-- Students will improve their technical knowledge about a number of modelling aspects, econometrics techniques, and the link between the two.

-- Students will improve their critical thinking (and hopefully creativity) about existing research on cities and regions.

--Students will improve their ability to present complex research output in a clear and succinct way.

Course Outline

Note: This section is subject to revision; not all papers and topics will be covered. The exams will be based on a combination of the readings and lectures. I will indicate in class which papers will be required for the exams.

1. The Monocentric City Model, Theory (Glaeser, Chapter 2)

Anas, Alex, Richard Arnott, and Kenneth A. Small, "Urban Spatial Structure," *Journal of Economic Literature* 36 (1998), 1426-1464.

Berliant, Marcus and Courtney LaFountain, "Space in General Equilibrium," in Richard J. Arnott and Daniel P. McMillen (eds.), *A Companion to Urban Economics* (2006), 109-127.

Brueckner, Jan, "The Structure of Urban Equilibria: A Unified Treatment of the Muth-Mills Model," in E.S. Mills, ed., *Handbook of Regional and Urban Economics, Volume 2*, 1987.

Kraus, Marvin, "Monocentric Cities," in Richard J. Arnott and Daniel P. McMillen (eds.), *A Companion to Urban Economics* (2006), 96-108.

Fujita, Masahisa, "Locational Choice of the Household," Chapter 2 of *Urban Economic Theory: Land Use and City Size* (1989), 11-49.

2. The Monocentric City Model, Extensions (Glaeser, Chapter 2)

Baum-Snow, Nathaniel, "Suburbanization and Transportation in the Monocentric Model," *Journal of Urban Economics* 62 (2007), 405-423.

Brueckner, Jan K., "Residential Succession and Land-Use Dynamics in a Vintage Model of Urban Housing," *Regional Science and Urban Economics* 10 (1980), 225-240.

Brueckner, Jan K., "A Dynamic Model of Housing Production," *Journal of Urban Economics* 10 (1981), 1-14.

Brueckner, Jan K., Jacques-Francois Thisse, and Yves Zenou, "Why is Central Paris Rich and Downtown Detroit Poor? An Amenity-Based Theory," *European Economic Review* 43 (1999), 91-107.

Hanson, Andrew, Kurt Schnier, and Geoffrey K. Turnbull, "Drive 'Til You Qualify: Credit Quality and Household Location," *Regional Science and Urban Economics*, forthcoming.

Leroy, Stephen F. and Jon Sonstelie, "Paradise Lost and Regained: Transportation Innovation, Income, and Residential Location," *Journal of Urban Economics* 13 (1983), 67-89.

Wheaton, William C., "Urban Spatial Development with Durable but Replaceable Capital," *Journal of Urban Economics* 12 (1982): 53–67.

3. The Monocentric City Model, Empirics

Ahlfeldt, Gabriel M. and Nicolai Wendland, "Fifty Years of Urban Accessibility: The Impact of Urban Railway Network on the Land Gradient in Berlin 1890-1936," *Regional Science and Urban Economics*, 41:2 (March 2011), 77-88.

Burchfield, Marcy, Henry G. Overman, Diego Puga, and Matthew A. Turner, "Causes of Sprawl: A Portrait from Space," *Quarterly Journal of Economics* 121 (2006), 587-633.

Clark, Colin, "Urban Population Densities," *Journal of the Royal Statistical Society, Series A* (1951), 490-496.

Coulson, N. Edward, "Really Useful Tests of the Monocentric City Model," *Land Economics* (1991), 299-307.

Gin, Alan and Jon Sonstelie, "The Streetcar and Residential Location in Nineteenth Century Philadelphia," *Journal of Urban Economics* 32 (1992), 92-107.

Glaeser, Edward L, Matthew E. Kahn, and Jordan Rappaport, "Why Do the Poor Live in Cities? The Role of Public Transportation," *Journal of Urban Economics* 63 (2008), 1-24.

Glaeser, Edward L. and Matthew E. Kahn, "Sprawl and Urban Growth," in J.V. Henderson and J.F. Thisse (eds.), *Handbook of Regional and Urban Economics, Volume 4* (2004), 2481-2527.

Hamilton, Bruce W., "Wasteful Commuting," *Journal of Political Economy* 90 (1982), 1035-58.

Kau, James B., and C.F. Sirmans, "Urban Land Value Functions and the Price Elasticity of Demand for Housing," *Journal of Urban Economics* 6 (1979), 112-121.

McGrath, Daniel T., "More Evidence on the Spatial Scale of Cities," Journal of Urban Economics 58 (2005), 1-10.

McMillen, Daniel P., "One Hundred Fifty Years of Land Values in Chicago: A Nonparametric Approach," *Journal of Urban Economics* 40 (1996) 100-124.

McMillen, Daniel P., "Testing for Monocentricity," in Richard J. Arnott and Daniel P. McMillen (eds.), *A Companion to Urban Economics* (2006), 128-140.

McMillen, Daniel P., Ronald Jarmin, and Paul Thorsnes, "Selection Bias and Land Development in the Monocentric City Model," *Journal of Urban Economics* 31 (1992), 273-284.

Redfearn, Christian, "Persistence in Urban Form: The Long-Run Durability of Employment Centers in Metropolitan Areas," *Regional Science and Urban Economics* 39 (2009), 224-232.

4. Empirical Methods: Parametric Spatial Models

Anselin, Luc, Anil K. Bera, Raymond Florax, and Mann J. Yoon, "Simple Diagnostic Tests for Spatial Dependence," *Regional Science and Urban Economics* 26 (1996), 77-104.

Brown, R.P., Rork, J.C., "Copycat Gaming: A Spatial Analysis of State Lottery Structure," *Regional Science and Urban Econo*mics 35 (2005), 795–807.

Brueckner, Jan K., "Testing for Strategic Interaction among Local Governments: The Case of Growth Controls," *Journal of Urban Economics* 44 (1998), 438-467.

Brueckner, Jan K., "Strategic Interaction Among Governments," in Richard Arnott and Daniel P. McMillen (eds.), *A Companion to Urban Economics*, Blackwell.

Brueckner, Jan K. and Saavedra, Luz A., "Do Local Governments Engage in Strategic Property-Tax Competition?," *National Tax Journal* 54 (2001), 203-229.

Fredriksson, P. G. and Millimet, D. L., "Strategic Interaction and the Determinants of Environmental Policy across U.S. States," *Journal of Urban Economics* 51 (2002), 101-122.

Gérard, Marcel, Hubert Jayet, and Sonia Paty, "Tax Interactions among Belgian Municipalities: Do Interregional Differences Matter," *Regional Science and Urban Economics* 40 (2010), 336-342.

Kelijian, H. H. and Prucha, I. R., "A Generalized Spatial Two-Stage Least Squares Procedure for Estimating a Spatial Autoregressive Model with Autoregressive Disturbances," *Journal of Real Estate Finance and Economics* 17 (1998), 99-121.

Lee, Lung-Fei, and Jihai Yu, "Some Recent Developments in Spatial Panel Data Models," *Regional Science and Urban Economics* 40 (2010), 255-271.

McMillen, Daniel P., "Spatial Autocorrelation or Model Misspecification?," *International Regional Science Review* 26 (2003), 208-217.

Revelli, F., "Reaction or Interaction: Spatial Process Identification in Multi-Tiered Governmental Structures," *Journal of Urban Economics* 53 (2003), 29-53.

Rincke, Johannes, "A Commuting-Based Refinement of the Contiguity Matrix for Spatial Models, and an Application to Local Police Expenditures," *Regional Science and Urban Economics* 40 (2010), 324-330.

Saavedra, Luz A., "Tests for Spatial Lag Dependence Based on Method of Moments Estimation," *Regional Science and Urban Economics* 33 (2003), 27-58.

5. Empirical Methods: Spatial Probit and Logit

Case, Anne C., "Neighborhood Influence and Technological Change," *Regional Science and Urban Economics* 22 (1992), 491-508.

LeSage, James P., "Bayesian Estimation of Limited Dependent Variable Spatial Autoregressive Models," *Geographical Analysis* 32 (2000), 19-35.

McMillen, Daniel P., "Probit with Spatial Autocorrelation," *Journal of Regional Science* 32 (1992), 335-348.

McMillen, Daniel P. and Thomas Klier, "Clustering of Auto Supplier Plants in the United States: Generalized Method of Moments Spatial Logit for Large Samples," *Journal of Business and Economic Statistics* 26 (2008), 460-471.

Pinkse, J. and Slade, M. E. (1998), "Contracting in Space: An Application of Spatial Statistics to Discrete-Choice Models," *Journal of Econometrics*, 85, 125-154.

6. Empirical Methods: Nonparametric Approaches

Brunsdon, C., A. S. Fotheringham, and M. E. Charlton, "Geographically Weighted Regression," *Geographical Analysis*, 28 (1996) 281-298.

Brunsdon, Chris and A. Stewart Fotheringham, "Some Notes on Parametric Significance Tests for Geographically Weighted Regression," *Journal of Regional Science* 39 (1999), 497-524.

Cameron, Trudy Ann, "Directional Heterogeneity in Distance Profiles in Hedonic Property Value Models," *Journal of Environmental Economics and Management* 51 (2006), 26-45.

William S. Cleveland and Susan J. Devlin, "Locally Weighted Regression: An Approach to Regression Analysis by Local Fitting," *Journal of the American Statistical Association* 83 (1988) 596-610.

S. Farber and A. Paez, "A Systematic Investigation of Cross-Validation in GWR Model Estimation: Empirical Analysis and Monte Carlo Simulation," *Journal of Geographic Systems* 9 (2007) 371-396.

Fu, Yuming and Tsur Somerville, "Site Density Restrictions: Measurement and Empirical Analysis, *Journal of Urban Economics* 49 (2001), 404-423.

Gibbons, Steve and Stephen Machin, "Valuing Primary Schools," *Journal of Urban Economics* 53 (2003), 197-219.

McMillen, Daniel P., "Issues in Spatial Data Analysis," *Journal of Regional Science* 50 (2010), 119-141.

McMillen, Daniel P. and Thomas Klier, "Clustering of Auto Supplier Plants in the United States: Generalized Method of Moments Spatial Logit for Large Samples," *Journal of*

Business and Economic Statistics 26 (2008), 460-471.

McMillen, Daniel P. and Christian Redfearn, "Estimation and Hypothesis Testing for Nonparametric Hedonic House Price Functions," *Journal of Regional Science* 50 (2010), 712-733.

McMillen, Daniel P. and Paul Thorsnes, "The Aroma of Tacoma: Time-Varying Average Derivatives and the Effect of a Superfund Site on House Prices," *Journal of Business and Economic Statistics* 21 (2003), 237-246.

Richard Meese and Nancy Wallace, "Nonparametric Estimation of Dynamic Hedonic Price Models and the Construction of Residential Housing Price Indices," *Journal of the American Real Estate and Urban Economics Association* 19 (1991) 308-332.

James H. Stock, "Nonparametric Policy Analysis: An Appliction to Estimating Hazardous Waste Cleanup Benefits," in W. A. Bennett, J. Powell, and G. E. Tauchen (Eds.), *Nonparametric and Semiparametric Methods in Econometrics and Statistics* (New York: Cambridge University Press, 1991).

7. Polycentric Cities: Theory

A. Anas and I. Kim, "General Equilibrium Models of Polycentric Urban Land Use with Endogenous Congestion and Job Agglomeration," *Journal of Urban Economics* 40 (1996), 232–256.

Berliant, Marcus and Ping Wang, "Urban Growth and Subcenter Formation: A Trolley Ride from the Staples Center to Disneyland and the Rose Bowl," *Journal of Urban Economics* 63 (2008), 679-693.

Jan K. Brueckner, "A Model of Non-Central Production in a Monocentric City," *Journal of Urban Economics* 6 (1979), 444–463.

Fujita, M. and F. Ogawa, "Multiple Equilibria and Structural Transition of Non-Monocentric Urban Configurations," *Regional Science and Urban Economics* 12 (1982), 161-196.

Fujita, M., J.F. Thisse, and Y. Zenou, "On the Endogenous Formation of Secondary Employment Centers in a City," *Journal of Urban Economics* 41 (1997), 337-357.

Henderson, J.V. and A. Mitra, "The New Urban Landscape: Developers and Edge Cities," *Regional Science and Urban Economics* 26 (1996), 613-643.

Henderson, J.V. and E. Slade, "Development Games in Non-Monocentric Cities," *Journal of Urban Economics* 34 (1993), 207-229.

Ogawa, M. and M. Fujita, "Equilibrium Land Use Patterns in a Non-Monocentric City," *Journal of Regional Science* 20 (1980), 455-465.

8. Polycentric Cities: Empirics

Baumont, C., C. Ertur, and J. LeGallo, Spatial Analysis of Employment and Population Density: The Case of the Agglomeration of Dijon 1999," *Geographical Analysis*, **36**, 146-176 (2004).

Craig, S. and P. Ng, "Using Quantile Smoothing Splines to Identify Employment Subcenters in a Multicentric Urban Area," *Journal of Urban Economics* 49 (2001), 100-120.

McDonald, John F., "The Identification of Urban Employment Subcenters," *Journal of Urban Economics* 21 (1987), 242-258.

Giuliano, Genevieve, Christian Redfearn, Ajay Agarwal, Chen Li, and Duan Zhuang, "Employment Concentrations in Los Angeles, 1980-2000," *Environment and Planning A* 39 (2007), 2935-2957.

Craig, Steven, Janet Kohlhase and Adam Perdue, "Empirical Polycentricity: The Complex Relationship Between Employment Centers," UH Working Paper, January 2014.

Giuliano, Genevieve and Kenneth A. Small, "Subcenters in the Los Angeles Region," *Regional Science and Urban Economics* 21 (1991), 163-182.

McMillen, Daniel P., "Nonparametric Subcenter Identification," *Journal of Urban Economics* 50 (2001), 448-473.

McMillen, Daniel P., "Identifying Urban Subcenters using Contiguity Matrices," *Urban Studies* 40 (2003), 57-69.

McMillen, Daniel P. and Stefani C. Smith, "The Number of Subcenters in Large Urban Areas," *Journal of Urban Economics* 53 (2003), 321-338.

Small, K.A. and S. Song, "Population and Employment Densities: Structure and Change," *Journal of Urban Economics* 36 (1994), 292-313.

9. Hedonic Models

Bajari, Patrick and Lanier Benkard, "Demand Estimation with Heterogeneous Consumers and Unobserved Product Characteristics: A Hedonic Approach," *Journal of Political Economy* 113 (2005), 12399-1276.

Bajari, Patrick and Matthew E. Kahn, "Estimating Housing Demand with an Application to Explaining Racial Segregation in Cities," *Journal of Business and Economic Statistics* 23 (2005), 20-33.

Bartik, Timothy J., "The Estimation of Demand Parameters in Hedonic Price Models," *Journal of Political Economy* 95 (1987), 81-88.

Ekeland, Ivar, James J. Heckman, and Lars Nesheim, "Identification and Estimation of Hedonic Models," *Journal of Political Economy* 112 (2004), S60-S108.

Rosen, Sherwin, "Hedonic Markets and Implicit Prices," *Journal of Political Economy* 82 (1974), 34-55.

Sheppard, Stephen, "Hedonic Analysis of Housing Markets," in Paul Cheshire and E.S. Mills, (eds.), *Handbook of Regional and Urban Economics, Volume 3*, 1999.

Kohlhase, Janet, "The Impact of Toxic Waste Sites on Housing Values," *Journal of Urban Economics*, vol. 30, July 1991, pp. 1-26.

10. House Price Dynamics

Bailey, M. J., R. Muth, and H. O. Nourse, "A Regression Method for Real Estate Price Index Construction," *Journal of the American Statistical Association* 4 (1963), 933-942

Bostic, Raphael W., Stanley D. Longhofer, and Christian L. Redfearn, "Land Leverage: Decomposing Home Price Dynamics," *Real Estate Economics* 35 (2007), 183-208.

Case, Bradford and John M. Quigley, "The Dynamics of Real Estate Prices," *Review of Economics and Statistics* 83 (1991), 50-58.

Case, Karl and Robert Shiller, "The Efficiency of the Market for Single-Family Homes," *American Economic Review* 79 (1989), 125-137.

Englund, Peter, John M. Quigley, and Christian L. Redfearn, "Improved Price Indexes for Real Estate: Measuring the Course of Swedish Housing Prices," *Journal of Urban Economics* 44 (1998), 171-196.

Glaeser, Edward L. and Joseph Gyourko, "Urban Decline and Durable Housing," *Journal of Political Economy* 113 (2005), 343-375.

Glaeser, Edward L., Joseph Gyourko, and Albert Saiz, "Housing Supply and Housing Bubbles," *Journal of Urban Economics* 64 (2008), 198-217.

Glaeser, Edward L., Joseph Gyourko, and Raven Saks, "Urban Growth and Housing Supply," *Journal of Economic Geography* 6 (2006), 71-89.

Glaeser, Edward L., Joseph Gyourko, and Raven Saks, "Why is Manhattan So Expensive? Regulation and the Rise in House Prices," *Journal of Law and Economics* 48 (2005), 331-370.

Himmelberg, C., C. Mayer, and T. Sinai, "Assessing High House Prices: Bubbles, Fundamentals, and Misperceptions," *Journal of Economic Perspectives* 19 (2005), 67-92.

McMillen, Daniel P., "Changes in the Distribution of House Prices over Time: Structural Characteristics, Neighborhood or Coefficients?" *Journal of Urban Economic* 64 (2008), 573-589.

Quigley, John M., "A Simple Hybrid Model for Estimating Real Estate Price Indexes," *Journal of Housing Economics* 4 (1997), 93-118.

11. Spatial Equilibrium across Cities (Glaeser, Chapter 3)

Desmet, Klaus, and Esteban Rossi-Hansberg, "Urban Accounting and Welfare." *American Economic Review*, 103:6, (2013), 2296-2327.

Albouy, David, "What are Cities Really Worth? Local Rents, Local Productivity, and the Capitalization of Amenity Values," working paper, NBER and University of Michigan.

Albouy, David, "Are Big Cities Really Bad Places to Live? Improving Quality of Life Estimates Across Cities," working paper, NBER and University of Michigan.

Beeson, Patricia E. and Randall W. Eberts, "Identifying Productivity and Amenity Effects in Interurban Wage Differentials," *Review of Economics and Statistics* 71 (1989), 443-452.

Blomquist, M.C., M.C. Berger, and J.P. Hoehn, "New Estimates of Quality of Life in Metropolitan Areas," *American Economic Review* 78 (1988), 89-107.

Carlino, Gerald and N. Edward Coulson, "Compensating Differentials and the Social Benefits of the NFL," *Journal of Urban Economics* 56 (2004), 25-50.

Chan, Yong and Stuart S. Rosenthal, "Local Amenities and Life-Cycle Migration: Do People Move for Jobs or Fun," *Journal of Urban Economics* 64 (2008), 519-537.

Gabriel, Stuart A. and Stuart S. Rosenthal, "Quality of Business Environment Versus the Quality of Life: Do Firms and Households Like the Same Cities," *Review of Economics and Statistics* 86 (2004), 438-444.

Gyourko, Joseph and Joseph Tracy, "The Structure of Local Public Finance and the Quality of Life," *Journal of Political Economy* 99 (1991), 774-806.

Gyourko, Joseph, Matthew Kahn, and Joseph Tracy, "Quality of Life and Environmental Considerations," in Paul Cheshire and Edwin Mills, eds., *Handbook of Regional and Urban Economics Vol. 3* (1999).

Gyourko, Joseph, Christopher Mayer, and Todd Sinai, "Superstar Cities", working paper.

Rappaport, Jordan, "Moving to Nice Weather," *Regional Science and Urban Economics* 37 (2007), 375-398.

Rappaport, Jordan, "Consumption Amenities and City Population Density," *Regional Science and Urban Economics* 38 (2008), 533-552.

Roback, Jennifer, "Wages, Rents, and the Quality of Life," *Journal of Political Economy* 90, 1257-1278 (1982).

12 Agglomeration Economies Glaeser, Chapter 4)

Arbia, Giuseppe, Giuseppe Espa, Diego Giuliani, and Andrea Mazzitelli, "Detecting the Existence of Space-Time Clustering of Firms," *Regional Science and Urban Economics* 40 (2010), 311-323.

Ciccone, Antonio and Robert E. Hall, "Productivity and the Density of Economic Activity," *American Economic Review* 86 (1996), 54-70.

Duranton, Gilles and Henry G. Overman, "Testing for Localisation using Microgeographic Data," *Review of Economic Studies* 72 (2005), 1077-1106.

Duranton, Gilles and Diego Puga, "Cities and Urban Systems: From Theories to Facts," in J. Vernon Henderson and Jacques-Francois Thisse (eds.), *Handbook of Regional and Urban Economics Volume 4* (2004), 2063-2117.

Ellison, Glenn and Edward L. Glaeser, "Geographic Concentration in U.S. Manufacturing Industries: A Dartboard Approach," *Journal of Political Economy* 105 (1997), 889-927.

Henderson, J. Vernon, "Marshall's Scale Economies," *Journal of Urban Economics* 53 (2003), 1-28.

Holmes, Thomas J., "The Effects of State Policies on the Location of Manufacturing: Evidence from State Borders," *Journal of Political Economy* 106 (1998), 667-705.

Kim, Sukkoo, "Regions, Resources, and Economic Geography, "Sources of U.S. Regional Comparative Advantage, 1880-1987," *Regional Science and Urban Economics* 29 (1999), 1-32.

McMillen, Daniel P. and Thomas Klier, "Evolving Agglomeration in the U.S. Auto Industry," *Journal of Regional Science* 48 (2008), 245-267.

Melo, Patricia, Daniel J. Graham, and Robert B. Noland, "A Meta-Analysis of Urban Agglomeration Economies," *Regional Science and Urban Economics* 39 (2009), 332-342.

Rosenthal, Stuart S. and William C. Strange, "The Determinants of Agglomeration," *Journal of Urban Economics* 50 (2001), 191-229.

Rosenthal, Stuart S. and William C. Strange, "Evidence on the Nature and Sources of Agglomeration Economies," in J. Vernon Henderson and Jacques-Francois Thisse (eds.), *Handbook of Regional and Urban Economics Volume 4* (2004), 21190.

13. Urban Transportation and Mode Choice

Small, Ken, Clifford Winston and Jia Yan, "Uncovering the Distribution of Motorists' Preferences for Travel Time and Reliability: Implications for Road Pricing," *Econometrica*, 73 (July 2005), pp. 1367-1382.

Small, Ken, Clifford Winston and Jia Yan. “Differentiated Road Pricing, Express Lanes, and Carpools: Exploiting Heterogeneous Preferences in Policy Design,” *Brookings-Wharton Papers on Urban Affairs (*2006) 53-96.

Parry, Ian and Ken Small. “Should Urban Transport Subsidies be Reduced?” *American Economic Review* (2009) 99:3 700-724.

Baum-Snow, Nathanial and Matt. Kahn. "The Effects of Urban Rail Transit Expansions: Evidence from Sixteen Cities." *Brookings-Wharton Papers on Urban Affairs* (2005)

Duranton, Gilles and Matt Turner “The Fundamental Law of Road Congestion: Evidence from U.S. Cities,” *American Economic Review, 101(Oct 2011), 2616-2652.*

McFadden, Daniel, “The Measurement of Urban Travel Demand," *Journal of Public Economics*, Vol. 3, No. 4, 303-328, 1974.

Leroy, Stephen and Jon Sonstelie. "Paradise Lost and Regained: Transportation Innovation, Income and Residential Location." *Journal of Urban Economics*, (1983) 13:1 67-89

Brueckner, Jan and Harris Selod, “The Political Economy of Urban Transport-System Choice,” *Journal of Public Economics*, (2006) 90:6-7, 985-1005.

Fujita Chapter 7

Brueckner, Jan, “Transport Subsidies, System Choice, and Urban Sprawl,” *Regional Science and Urban Economics*, (2005), 35:6,715-733.

Vickrey, W. S., “Congestion theory and transport investment,” *American Economic Review* 59(2), 251—260 (1969).

Wheaton, William, “Income and urban residence: An analysis of consumer demand for location,” *American Economic Review* 67(4), 620—632 (1977).

Small, Ken, Urban Transportation Economics, *Harwood Fundamentals of Pure and Applied Economics series, 1992.*

Glaser, Edward and Janet E. Kohlhase, "Cities, Regions and the Decline in Transport Costs," *Papers of the Regional Science Association*, vol. 83, (Jan. 2004), 197-228.