

Cornell University
College of Architecture, Art and Planning
Department of City and Regional Planning

Spring 2019

CRP 5530 Land Use Planning Methods



Photo by Chris Goldberg (cc). From Flickr: "Jones Beach and the Rockaways at Magic Hour Viewd [sic] from a Plane landing at JFK - New York City. This photo makes me think about how fast NYC will be underwater after climate change causes ocean level rise!"

Class Dates: January 22, 2019 - May 7, 2019

Class Day and Time: Tuesdays and Thursdays, 10:10 am – 11:25 am

Class Location: Sibley Hall 115

Instructor:

Jennifer Minner, PhD

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Office Location: 204 W. Sibley Hall

Office Hours: Thursdays, 2-4 pm and by appointment

Graduate Teaching and Research Specialist: Weng Ao

Course Overview

There are myriad lenses and approaches we use to see, steward, develop, analyze, treat, own, and take care of land. Land is a resource that shapes our daily lives; society and cultural context shape the meaning, use, and stewardship of land. The ways in which we consider and allocate uses of land reveals much about the organization of society, power relations, values, and ethics. How can land use planning processes be inclusive? Do spatial patterns, comprehensive plans, and development regulations reinforce segregation and historical inequalities? In the process of envisioning the future of a community, are non-human lives considered along with human needs and desires? Are principles of “highest and best use” and efficiency privileged over other values in planning processes? These are a few examples of relations to the land that impact communities and future generations. Land and its uses are intimately tied to the individual and collective wealth (including and beyond monetized forms of wealth). In this course, we consider and learn the ways in which land use planning methods are applied to community resources and to individually-owned private properties in the quest for sustainability, resilience, and to serve multiple publics.

This course provides an introduction to commonly used methods of analysis and participation that are used in land use planning, especially within the US. We will discuss relevant concepts, institutions, and movements that underpin those methods. Participants will gain an understanding of land use planning methods at multiple scales — from statewide frameworks to local and regional government plans to small area plans and the individual site. We will explore how development of individual properties, land use conflicts, and property rights. The course is intended to provide familiarity with a wide range of concepts, planning support tools and methods of analysis and public participation. The course includes an introduction to scenario planning tools and sustainability indicators.

Land use planning is particularly relevant to the fields of historic preservation, real estate, landscape architecture, and public administration, as well as city and regional planning. The class fulfills requirements as a methods course for the Master of Regional Planning program. Students from any field are welcome to participate.

Course Format

This course includes in-class activities, discussion, and lectures.

Prerequisites

Proficiency with geographic information systems (GIS) is valued and many of the methods build from GIS; however, prior experience is not required.

Learning Objectives

- Purpose and Meaning of Planning: appreciation of why planning is undertaken by communities, cities, regions, and nations, and the impact planning is expected to have.

- Plan Creation and Implementation: integrative tools useful for sound plan formulation, adoption, implementation, and enforcement.
- The Future: understanding of the relationships between past, present, and future in intervention to influence the future.
- Governance and Participation: appreciation of the roles of officials, stakeholders, and community members in planned change.
- Sustainability and Environmental Quality: appreciation of natural resource and pollution control factors in planning, and understanding of how to create sustainable futures.
- Growth and Development: appreciation of economic, social, and cultural factors in urban and regional growth and change.
- Social Justice: appreciation of equity concerns in planning.
- Quantitative and Qualitative Methods: data collection, analysis and modeling tools for forecasting, policy analysis, and design of projects and plans.

Textbooks

All readings are provided via Blackboard.

Evaluation

Memos	50%
Final Land Use Method or Policy Memo + Presentation	40%
Class Attendance, Active Participation in Discussions and in-class activities	10%

Classroom Policies

Laptops, Tablets, Cell phones – Use of electronic devices [has been shown to distract from learning](#). Use of laptops should be limited to specific exercises in class and should not be used during guest lectures and discussions. Please do bring your laptop to class, but keep it put away until we have activities that specifically call for it.

Attendance – Your attendance and active participation is greatly valued! You are expected to be in class and participate. Attendance is mandatory and absences will affect your grade. For every class you miss, 5% will be deducted from your class participation grade. In the event of an illness or family emergency, you should send an email indicating the reason for your absence, so that it can be excused.

Academic Integrity – Your work must be your own. When you use a map, photograph, or diagram from another source or when you quote text, you must provide a reference to the artist or author. All of your work should be consistent with Cornell’s Code of Academic Integrity, available here: <http://cuinfo.cornell.edu/Academic/AIC.html>.

Note to Students with Disabilities -- I encourage you to contact me early on if you have concerns or if there is anything I can do to accommodate and support you in this class. If you have a disability-related need for reasonable academic adjustments in this course, please provide an accommodation notification letter from Student Disability Services as soon as possible. I would like to invite you to set

up a meeting with me to discuss needed accommodations in a confidential environment. If you have not done so already, I encourage you to meet with Student Disability Services for disability verification and determination of reasonable accommodations.

Assignments

Memos

A series of assignments that involve analysis and drafting of memos, have been crafted to give you experience applying land use planning methods and scenario planning tools and techniques. Some of these assignments will be linked to a workshop Linda Shi is teaching which “explores fiscal and land-use planning policies to help local governments in coastal Massachusetts adapt to climate change.”

Final Land Use Policy Memo

The final project for this class will involve doing additional research into a land use policy or method that we did not have time to cover sufficiently in class. Examples could include: agent-based modeling, remote sensing, advanced LUCAS (for methods), or indigenous land stewardship and traditional cultural practices, YIMBYism, or siting of recreational marijuana facilities (for topics). A speed round of presentations will take place the last day of class.

Course Schedule

The contents of this syllabus may shift throughout the semester to enhance learning objectives and outcomes and respond to unforeseen circumstances. If changes are made in the readings or assignments, this information will be communicated as early as possible.

Week 1 - Class overview / Introduction to scales, frameworks, and methods of land use planning

Tuesday, January 22

- Get started on the next set of readings.

Thursday, January 24

- Metternich, Graciela. (2018). Excerpts from *Land Use and Spatial Planning*. Cham, Switzerland: Springer.
- Chapter 1 of Berke, P, Godshalk, D., Kaiser, E. J., with Rodriguez, D. (2005) *Urban Land Use Planning*. (Fifth Edition). Optional: read Chapter 2.
- Randolph. pages 27- 35, 48-53.
- Peruse the [Places Database on the Lincoln Institute of Land Policy](#) website
- [Here's how America uses its Land](#)

Week 2- Dissection of Comprehensive Plans – Purpose and Process

Readings due Tuesday, January 29

- Randolph. Chapter 3. pages 54-79
- Chapter 3 Introduction to the Comprehensive Plan. In Kelly, E. D. *Community Planning*. (2010). Washington, DC: Island Press.

Readings due for class Thursday, January 31

- The 21st Century Comprehensive Plan: Substance, Role, Form from the March 2016 issue of *Planning* magazine.
- Godschalk, David and Rouse, David. (2015) *PAS Report 578: Sustaining Places Best Practices for Comprehensive Plans*. Chicago, IL: American Planning Association. Pages 6-10, 14-23, 40-56.
- Over the next couple of weeks, you should be reading a comprehensive plan (which you will sign up for in teams) and comparing it with the Sustaining Places protocol. At the end of Week 4, you will submit a team analysis of the comprehensive plan.

Optional:

- Gene Bunnell & Edward J. Jepson Jr. (2011). The Effect of Mandated Planning on Plan Quality, *Journal of the American Planning Association*, (77) 4: 338-353

Week 3 – Planning in the Multiverse - Scenario Planning and Planning Support Systems part I / Melding of Participation and Analysis / Inventorying Land and Community

Readings due Tuesday, February 5:

- John Randolph. (2012) "Collaborative Environmental Planning for Sustainability." In *Environmental Land Use Planning and Management*. P. 80-104.
- Sonoran Institute and Lincoln Institute of Land Policy. (2019) DRAFT Exploratory Scenario Planning Policy Focus Report.

Before class on Thursday, February 7

- Watch the [Three Steps to Building Sustainable Cities with Urban Footprint video](#).
- Read: Kelley, Eric Damian. Chapter 4: Analysis of Existing Conditions. *Community Planning*.
- See *Community Inventory from the Imagine Austin website*:
<http://www.austintexas.gov/department/imaqine-austin-resources>

Week 4 – Visualizing and Shaping Urban Form; Smart Growth, Density, Growth Controls

Readings due for class on Tuesday, February 12

- *ULUP*, Chapter 5
- Chapin, Timothy. (2012) From growth controls, to comprehensive planning, to smart growth: planning's emerging fourth wave. From the *Journal of the American Planning Association*.

Readings due for class on Thursday, February 14

- Campoli, Julie and Alex MacLean. "Patterns of Density" and "Designing for Density" in *Visualizing Density*. Cambridge, MA: Lincoln Institute of Land Policy, 2007.
- Dovey, Kim and Elek Pafka. Densities. In Dovey, Kim, Pafka, Elek, and Ristic, Mirjana. (2018) *Mapping Urbanities: Morphologies, Flows, Possibilities*. New York, NY: Routledge, p. 62-81.

Assignment 1 due end of day Sunday, February 17 (plan analysis using protocol)

Week 5 – Zoning and Zoning Reform + Rural by Design / Current Planning: Scale of Site and more immediate changes in form and use

Readings due Tuesday, February 19

- Hirt, Sonia. (2014) p. 1-89, 178-185
- Minneapolis Confronts Its History of Housing Segregation.
- [Can Minneapolis's radical rezoning be a national model?](#)
- Buffalo examples of code reform (see blackboard)
- [Code Next Nixed](#)

Readings due Thursday, February 21

- Arendt, Randall. (2015). *Rural by Design*, 2nd ed. Chapters 2, 7
- Partnership for the Public Good. (2018). [Land Use and Zoning Law: A Citizen's Guide](#)
- Chapter 6 "Property Rights: The Owner as Planner" Platt R.H. (2014) In: *Land Use and Society*. Washington DC: Island Press. Pages 151-172.

Week 6 - Transportation and Community Facilities / Environmental Systems, Green Infrastructure

February Break

Readings due Thursday, February 28

- Excerpts from ULUP chapters 6-8

Assignment 2 due end of day Sunday, March 3. (Urban Footprint build out memo)

Week 7 – Resilience / Hazard Mitigation / Climate Adaptation / Susceptibility to Change

Readings due Tuesday, March 5

- Philip Berke and Mark Stevens (2016) *Land Use Planning for Climate Adaptation: Theory and Practice*. *Journal of Planning Education and Research* 36(3): 283 - 289
- Urban Footprint Materials. *Data Driven Planning for City Resilience, Climate Adaptation, and Recovery*.

- Regional Plan Association and Lincoln Institute of Land Policy. (2013) Building Coastal Resilience: Using Scenario Planning to Address Uncertainty and Change.
- Optional: Randolph pages 443-527.

Readings due Thursday, March 7

- Mitchell, Andy. The ESRI Guide to GIS Analysis. Volume 3. Redlands, CA: ESRI Press, 2012. Chapters 2 and Chapter 3 to page 128.
- Rouse, David and Andrew Dobshinsky. Memo to Garner Stoll re: Susceptibility to Change. http://www.imagineaustin.net.s134445.gridserver.com/sites/default/files/files/iacp_susceptibilitymemo.pdf Dated February 16, 2010. (Last accessed March 23, 2013).

Due Thursday March 7, end of day: Short proposal for final Land Use Method/Topic Memo- 1 page.

Week 8 - Scenario Planning Tools and Techniques continued

Readings due Tuesday, March 12

- Excerpts from *Smart Land-Use Analysis. The LUCIS Model*.
- Chakraborty, Arnab. (2011) "Enhancing the role of participatory scenario planning processes: Lessons from Reality Check exercises" *Futures* 43, pages 387–399.

Readings due Thursday, March 14

- **No class** – Dr. Minner is out of town. Teams can meet to work on Scenarios.

Week 9 – Scenario Planning continued

Readings due Tuesday, March 19:

- Review Scenario Planning / Envision Tomorrow ROI and Scenario Builder materials on blackboard.

Readings due Thursday, March 21

- Excerpts from Steinitz, Carl. (2012). A Framework for Geodesign: Changing Geography by Design. Redlands, CA: ESRI Press.

Week 10 – Equitable Redevelopment and Transit Corridor Planning

Readings due Tuesday, March 26:

- McCormick, Kathleen. (2017) Planning for Social Equity: How Baltimore and Dallas Are Connecting Segregated Neighborhoods to Opportunity: <http://www.lincolinst.edu/publications/articles/planning-social-equity>.

- Chapple, K. (2015) *Planning Sustainable Cities and Regions*. Chapter 6: Regional Growth, Gentrification, and Displacement.

Readings due Thursday, March 28:

- Elizabeth J. Mueller, Thomas W. Hilde, Marla J. Torrado. (2018). Methods for countering spatial inequality: Incorporating strategic opportunities for housing preservation into transit-oriented development planning. *Landscape and Urban Planning*. Volume 177, pages 317-327.

Assignment 3 due Friday, March 29 by end of day (Team Scenarios Memo due.)

SPRING BREAK – No class April 2 and April 4

Week 11 – Planning for Affordable Housing; Mixed Use and mixed income; Inclusive retrofitting

Readings due Tuesday, April 9:

- *Community Planning*, Chapter 20
- Chapple, K. (2015) *Planning Sustainable Cities and Regions*. Chapter 3: Infill Development Neighborhoods.
Optional, recommended: *ULUP*, Chapter 13

Readings due Thursday, April 11:

- Gentle Infill in Land Lines. <http://www.lincolinst.edu/publications/articles/gentle-infill> and Density and Chapter 4: The Challenge of Developing and Sustaining Mixed-Income
- Jackobus, Rick. (2015) Inclusionary Housing: Creating and Maintaining Equitable Communities. http://www.lincolinst.edu/sites/default/files/pubfiles/inclusionary-housing-full_0.pdf
Optional: City-CLT Partnership <http://www.lincolinst.edu/publications/policy-focus-reports/city-clt-partnership>

Week 12 - Commercial and Mixed Uses; Revitalization, Main Streets; Historic Preservation

Readings due Tuesday, April 16:

- [Preservation Green Lab. \(2014\) Older, Smaller, Better Report](#)
- Optional, Resource: Gibbs, Robert J. *Principles of Urban Retail Planning and Development*. Hoboken, NJ: John Wiley & Sons, Inc., 2012. Chapters 1, 6, 8.

Readings due Thursday, April 18:

- **Act of Preparation:** Select and read [Partnership for Building Reuse](#) plan for a city. Be prepared to discuss and compare in class.

Week 13 – Planning for Industrial Supply + Reusing former Industrial Land

Readings due Tuesday, April 23

- Lester, Thomas W., Kaza, Nikhil, and Kirk, Sarah. Making Room for Manufacturing: Understanding Industrial Land Conversion in Cities. *Journal of the American Planning Association* 79(4): 295-313.
- Hollander, Justin B., Niall G. Kirkwood, and Julia L. Gold. (2010) *Principles of Brownfield Regeneration*. Island Press. Chapters 1, 2, and 4.

Readings due Thursday, April 25

- Chapple, K. (2015) *Planning Sustainable Cities and Regions*. Chapter 9: The Challenge of Mixing Uses and the Secret Sauce of Urban Industrial Land.

Optional: Portland Bureau of Planning and Sustainability. (n.d.) *Portland's Central Eastside*. <https://www.portlandoregon.gov/bps/article/480760>

Assignment 4 due Friday, April 26 end of day - Envision Tomorrow ROI Analysis Memo.

Week 14 – Food and Land Use Planning; Regeneration and Metabolism / Global Sustainable Development Goals

Readings due Tuesday, April 30

- Hodgson, Kimberly. (2012) Planning for Food Access and Community-based Food Systems: A National Scan and Evaluation of Local Comprehensive and Sustainability Plans <http://www.planning.org/research/foodaccess/pdf/foodaccessreport.pdf>. See especially Appendix with plan language.
- Optional: Goodman, Wylie and Jennifer Minner (2019) Will the Urban Agricultural Revolution Be Vertical and Soilless? A Case Study of Controlled Environment Agriculture in New York City. *Land Use Policy*.

Readings due Thursday, May 2

- Karvounis, Alexandros. (2015) Chapter 1: Urban Metabolism. Nektarios Chrysoulakis, Eduardo Anselmo de Castro and Eddy J. Moors. Abingdon, Oxon: New York, NY : Routledge.
- Metternich, Graciela. (2018). Excerpts from *Land Use and Spatial Planning*. Cham, Switzerland: Springer.

Week 15 – Wrap up

Tuesday, May 7

- Short presentations on Individual In-depth Land Use Policy or Methods

Due by Friday, May 10, end of day:

Any revisions to Team Scenarios and Report based on comments provided by Linda Shi's workshop.

Due Wednesday, May 15, end of day:

Research Memo on Land Use Policy/Method.