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

Spring 2020

CRP 5530 Land Use Planning Methods



NASA image courtesy Jeff Schmaltz, MODIS Rapid Response Team at NASA GSFC. Caption by Holli Riebeek, NASA's Earth Observatory.

Class Dates: January 21, 2020 - May 5, 2020

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

Class Location: Sibley Hall 115

3 credits, Graded

Instructor:

Jennifer Minner, PhD

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Office Hours: Typically on Fridays 10-noon and other times by appointment.

Teaching Assistant: Eunah Jung, PhD student, ej254@cornell.edu

Course Overview

There are myriad lenses and approaches we use to see, appreciate, steward, develop, analyze, 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 reveal 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 historically inequalities? In the process of visioning 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.

What's Different this Semester

Every semester, I strive to add new challenges, ideas, and updates to concepts and class readings – after all, I like to be a co-learner along with students in the class! This year's land use challenge will include learning about and assisting the Climate Smart Communities program. We will also consider Ithaca's Green New Deal resolution. And class participants will have the opportunity to learn, test, and apply a variety of scenario planning tools, including UrbanFootprint, Envision Tomorrow, and CommunityViz.

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, but prior experience is not required.

Departmental Learning Goals

The following are Departmental learning goals that are emphasized in this course:

- Use critical thinking to examine, understand and arrive at judgments about cities and regions, and planning issues in the contexts they work.
- Be an employable professional.
- Understand and act on a code of professional ethics for planning professionals and uphold ethical standards more broadly in the field of city and regional planning.
- Act as an environmental steward and incorporate issues of environmental quality and sustainability into planning practice.
- Incorporate diversity and social justice into planning practice within the US and globally.
- Understand the importance of economic growth, efficiency and equity to communities in diverse settings.
- Demonstrate adequate research skills, including the ability to ask the right questions, to conduct an analysis using appropriate quantitative and qualitative research methods to understand, analyze, and lead to procedures and eventual solutions to planning problems.
- Demonstrate effective oral, visual, and written communication skills.
- Understand plans and different plan components and be able to create plans at different scales and in different institutional contexts from comprehensive plans to neighborhood level plans.
- Work in different situations that require collaboration, negotiation and mediation between diverse, sometimes conflicting interests within organizations and with the communities that planning serves.
- Health and Built Environment: planning's implications on individual and community health in the places where people live, work, play and learn.

These map to Planning Accreditation Board learning outcomes.

Textbooks

All readings are provided via Canvas.

Evaluation

Deliverables/Memos	70%
Acts of Preparation/Sharing	20%
Class Attendance	10%

Classroom Policies

Laptops, Tablets, Cell phones – Use of electronic devices has been shown to distract from learning not just for the user, but the people around them. Use of laptops should be limited to specific exercises in class and should not be used during 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

Acts of Preparation and Sharing

These are a series of activities that you will be asked to do related to course readings. For instance, you may be asked to bring a land use indicator for discussion or to respond to a question with a short response that you submit on Canvas. These short exercises are intended to help you focus and collectively draw meaning from the readings.

Deliverables/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. In class, you will share the conclusions in your memo and you may be asked to share with local officials or community leaders.

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 21:

Begin readings for Thursday.

Thursday, January 23:

Read for class:

- Randolph. Environmental Land Use Planning. pages 3-32.
- Mapping Chicago, A Living Atlas (Read the document) The Settler Colonial City Project. 2019
 Chicago Architecture Biennial.
- Places Database on the Lincoln Institute of Land Policy
- Here's how America uses its Land

Do for class: Check Canvas for any acts of preparation due for class.

Week 2- Dissection of Comprehensive Plans – Purpose and Process / Introduction to Climate Smart Communities + Inventories

Readings due Tuesday, January 28

- Randolph. Chapter 3. pages 54-79
- The 21st Century Comprehensive Plan: Substance, Role, Form from the March 2016 issue of *Planning* magazine.
- Chapter 3 Introduction to the Comprehensive Plan. In Kelly, E. D. *Community Planning.* (2010). Washington, DC: Island Press.
- 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.

Do for class: Check Canvas for any acts of preparation due for class.

Readings due for class Thursday, January 30:

- Climate Smart Communities website.
- 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/imagine-austin-resources

• Natural Resource Inventory Resources readings (see Canvas).

In class - Guest Speakers: Osamu Tsuda, Cornell Cooperative Extension; CJ Randall, Director of Planning, Town of Lansing.

Week 3 – Shaping Urban Form; Smart Growth, Density, Growth Controls

Readings due Tuesday, February 4:

- *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*.
- Watch the <u>Three Steps to Building Sustainable Cities with Urban Footprint video</u>.

Do for class: Check Canvas for any acts of preparation due for class.

Special instructions for Thursday, February 6: You will attend a combined class with Prof. John Carruthers, where you will learn about using regression to analyze urban form.

Before class on Thursday, February 6:

- 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.

Week 4 – Environmental Systems + Green Infrastructure / Climate Adaptation + Planning in the Multiverse - Scenario Planning

Readings due for class on Tuesday, February 11

- ULUP Chapter 6-7.
- John Randolph. (2012) "Collaborative Environmental Planning for Sustainability." In Environmental Land Use Planning and Management. P. 80-104.
- How to Design your Scenario Planning Process https://www.planning.org/publications/document/9180327/
- Sonoran Institute and Lincoln Institute of Land Policy. (2019) DRAFT Exploratory Scenario Planning Policy Focus Report.

Do for class: Check Canvas for any acts of preparation due for class.

Readings due for class on Thursday, February 13

• 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

- Regional Plan Association and Lincoln Institute of Land Policy. (2013) Building Coastal Resilience: Using Scenario Planning to Address Uncertainty and Change.
- Urban Footprint Materials. Data Driven Planning for City Resilience, Climate Adaptation, and Recovery.
- Optional: Randolph pages 443-527

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 18

- 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 Canvas)
- Code Next Nixed

Do for class: Check Canvas for any acts of preparation due for class.

Readings due Thursday, February 20

- 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.

Memo 1 due end of day Sunday, February 23 (Draft Natural Resource Inventory Section – Team Submission)

Week 6 - Transportation and Community Facilities

February Break

Readings due Thursday, February 27

ULUP chapter 8

Do for class: Check Canvas for any acts of preparation due for class.

Week 7 – Geodesign / Build Out / Susceptibility to Change / Vulnerability

Readings due Tuesday, March 3

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

Do for class: Check Canvas for any acts of preparation due for class.

Readings due Thursday, March 5

- 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).
- See Rapid Analytics Interactive Scenario Explorer (RAISE)
 cityfutures.be.unsw.edu.au/research/projects/rapid-analytics-interactive-scenario-explorerraise/
- Excerpts from Smart Land-Use Analysis. The LUCIS Model.

Thursday, March 5 at 6:30 pm — Plan to attend the Conservation Advisory Council Committee at the Lansing Town Hall.

Week 8 - Scenario Planning Tools and Techniques / Art of Community Participation

Readings due Tuesday, March 10

• Review Scenario Planning / Envision Tomorrow ROI and Scenario Builder materials on Canvas.

Do for class: Check Canvas for any acts of preparation due for class.

Readings due Thursday, March 12

See Canvas.

Memo 2 due end of day Sunday, March 15.

Week 9 – More about Equitable Planning / Displacement and Gentrification

Readings due Tuesday, March 17:

- Read about King County Equity and Social Justice Initiative.
 https://www.kingcounty.gov/elected/executive/equity-social-justice.aspx
- McCormick, Kathleen. (2017) Planning for Social Equity: How Baltimore and Dallas Are Connecting Segregated Neighborhoods to Opportunity: http://www.lincolninst.edu/publications/articles/planning-social-equity.
- City of Ithaca Green New Deal website: www.cityofithaca.org/CivicAlerts.aspx?AID=453
- <u>www.ithaca.com/special_sections/readers_writes/equity-up-emissions-down-my-dream-for-ithaca-and-tompkins/article_a5d11818-2d80-11ea-9e93-8393bb82200d.html</u>

Do for class: Check Canvas for any acts of preparation due for class.

Readings due Thursday, March 19:

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- Chapple, K. (2015) *Planning Sustainable Cities and Regions*. Chapter 6: Regional Growth, Gentrification, and Displacement.
- Chapple, K., & Zuk, M. (2016). Forewarned: The Use of Neighborhood Early Warning Systems for Gentrification and Displacement. *Cityscape*, 18(3), 109-130. Retrieved from http://www.jstor.org.proxy.library.cornell.edu/stable/26328275.

Week 10 – Commercial and Mixed Uses; Revitalization, Main Streets; Historic Preservation

Readings due Tuesday, March 24:

- Skim Preservation Green Lab. (2014) Older, Smaller, Better Report
- **Skim** Untapped Potential and <u>Partnership for Building Reuse</u> report for a city.

Guest speaker: Susan Holland, Executive Director of Historic Ithaca.

Readings due Thursday, March 26:

• Skim - Gibbs, Robert J. Principles of Urban Retail Planning and Development. Hoboken, NJ: John Wiley & Sons, Inc., 2012. Chapters 1, 6, 8.

Do for class: Check Canvas for any acts of preparation due for class.

SPRING BREAK

Week 11 – Planning for Affordable Housing; Mixed Use and mixed income; Inclusive retrofitting Readings due Tuesday, April 7:

• Community Planning, Chapter 20

 Chapple, K. (2015) Planning Sustainable Cities and Regions. Chapter 3: Infill Development Neighborhoods and Chapter 5: The Challenge of Developing and Sustaining Mixed-Income Neighborhoods

Optional, recommended: ULUP, Chapter 13

Do for class: Check Canvas for any acts of preparation due for class.

Readings due Thursday, April 9:

Gentle Infill in Land Lines. http://www.lincolninst.edu/publications/articles/gentle-infill

Jackobus, Rick. (2015) Inclusionary Housing: Creating and Maintaining Equitable
 Communities. http://www.lincolninst.edu/sites/default/files/pubfiles/inclusionary-housing-full_0.pdf

Optional: City-CLT Partnership http://www.lincolninst.edu/publications/policy-focus-reports/city-clt-partnership

In-class - Guest lecturer: Chau Pham, Rose Fellow, Ithaca Neighborhood and Housing Services.

Memo 3 due Saturday, April 11 by end of day

Week 12 - Planning for Employment + Industrial Supply + Reusing former Industrial Land Readings due Tuesday, April 14:

• 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.

Do for class: Check Canvas for any acts of preparation due for class.

Guest lecture: Joel Hochman, MRP student.

Readings due Thursday, April 16:

• 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

Week 13 – Difficult, New, and Locally Unwanted Land Uses / Food and Land Use Planning;

Readings due Tuesday, April 21:

TBD

Do for class: Check Canvas for any acts of preparation due for class.

Readings due Thursday, April 23:

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*.

Memo 4 due Saturday, April 25 end of day - Envision Tomorrow ROI Analysis Memo.

Week 14 - Other Methods and Issues / Global Sustainable Development Goals / Circular Cities

Readings due Tuesday, April 28

- Tony H. Grubesic, Danielle Wallace, Alyssa W. Chamberlain, Jake R. Nelson, Using unmanned aerial systems (UAS) for remotely sensing physical disorder in neighborhoods, *Landscape and Urban Planning*, Volume 169, 2018, Pages 148-159.
- TBD

Do for class: Check Canvas for any acts of preparation due for class.

Readings due Thursday, April 30:

- Metternich, Graciela. (2018). Excerpts from *Land Use and Spatial Planning*. Cham, Switzerland: Springer.
- Fusco Girard, Luigi; Nocca, Francesca. 2019. "Moving Towards the Circular Economy/City Model: Which Tools for Operationalizing This Model?" Sustainability 11, no. 22: 6253.

Week 15 – Wrap up

Tuesday, May 5: Readings only as needed.

Presentations and Discussion.

Final memo 5 due Thursday, May 14 end of day.