



URP 526: Scenario Planning

Fall 2025

Course Staff and Schedule

Instructor: Prof. Robert Goodspeed (rgoodspe at umich.edu)
 Office: Inside Suite 2150, Art & Architecture Building
 Office Hours: Generally Thurs/Fri. 3:00-5:00 PM (sign up via Canvas link)
 Prerequisites: Intro. GIS course suggested, but not required.

Class Schedule: Monday and Wednesday, 4-5:30 PM, 2108 Art & Architecture Building

Summary

Growing uncertainty about the future has made considering the long-term implications of public decisions more difficult than ever. All planning must now consider uncertainties associated with forces like climate change, new technologies, economic restructuring, and changing social preferences. Given the failure of conventional methods of prediction, professionals are increasingly turning to scenario planning to consider future uncertainty. Instead of proposing only a most likely or must desired future scenario, practitioners using scenario planning construct multiple possible futures. Doing so requires combining art with science: applying not only creativity but also rigorous analysis. The goal of scenario planning is to make better plans and decisions by challenging stakeholder assumptions and encouraging learning.

The goal of the course is to introduce students to this exciting professional technique, as well as provide hands-on experience using GIS-based planning support systems (PSS) used to implement scenario planning. The course will involve readings, discussion, and a series of individual and group assignments which culminate in detailed student-generated scenarios for sites in Ann Arbor.

Learning Goals and Objectives

Scenario planning has emerged as an important professional technique for urban planning and related fields since it allows for the integration of diverse systems analysis, future-oriented thinking, and a consideration of uncertainty. However, the field of scenario planning encompasses diverse approaches, methods, and tools tailored to different problems and areas, and continues to evolve to respond to new challenges. As a consequence, this course has two overarching motivations: (1) to cultivate *reflective practitioners* who are equipped to help cities become more sustainable and resilient through scenario planning, and to (2) provide *specific technical skills* to empower students to implement these ideas themselves or by working with a team. In the terms of Bloom's developonomy¹, this course focuses on two types of knowledge: conceptual knowledge (what scenario planning is) and procedural knowledge (how it is effectively conducted through collaboration and technical analysis), with the long-term goal of

¹ Anderson, Lorin W. and David K. Krathwohl. 2000. *A Taxonomy for Learning, Teaching and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. Pearson.

allowing students to develop metacognitive knowledge, such as reflection about the best ways scenario planning can be implemented and an understanding of the best roles for them.

Guided by these motivations, the course seeks to achieve the following learning goals. After taking the course, students will be able to:

- **Create** urban scenarios using qualitative and quantitative techniques
- **Apply** scenario planning methods to novel situations through the development of knowledge of a range of methods, cases, and approaches developed in the class

To achieve these goals, each module incorporates ongoing reflection activities, and has the following specific learning objectives:

Module 1: Setting the Stage

- Understand the key assumptions and concepts underpinning scenario planning
- Appreciate the diversity of perspectives and knowledge required for effective planning through stakeholder research and conversations

Module 2: Constructing Scenario Narratives

- Apply the intuitive logics method to create qualitative scenarios
- Analyze diverse professional cases illustrating scenario planning applications

Module 3: Modeling Land-Use Scenarios

- Create and analyze future land-use scenarios using a Planning Support System (UrbanFootprint) informed by qualitative scenarios
- Evaluate the strengths, weaknesses, and risks associated with different digital planning tools.
- Communicate the results of a scenario planning project to a diverse audience

Course Overview and Assignments

The assignments are weighted as follows:

- **Class Attendance and Participation** (5%)
- **Synthesis and Reflection Posts:** *Before* any discussion class (generally Wednesday) class, students should post 250-word response, reaction, or question emerging from the materials to the Canvas forum. These should not summarize the content of the reading, but instead offer a response from your personal experiences or perspectives. These are due by 5PM on the day before. Students must complete comments for all but one week for each module (except the last class), for a total of 10. Posts will be graded according to a separate rubric. (20%)
- **Project Assignments:** See below. (55%)
- **Other Assignments:** Described below. (20%)

Assignments:

The schedule and diagram below provide a description of how these assignments are related, and are linked to the course readings and cases.

Project Assignments (8% each, except final presentation is 10%)

- **Trends & Stakeholder Reports:** Each student is asked to prepare summary slides exploring stakeholder views and related issues.

- **Scenario Narrative Development:** Students work as a group in class to construct scenario narratives.
- **Building Prototypes:** Working individually, students construct building prototypes.
- **Site Scenarios & Analysis:** Working in groups, students present their site-level scenarios.
- **Scenario Visualization & Communication:** Students will work in groups to produce representations of their scenarios, which will be used for the final presentation. This includes charts, tables, maps, and/or 3D representations.
- **Final Presentation and Report (15%):** Using the outcomes from the previous labs, the class as a group prepares and delivers a summary presentation open to Taubman College and invited stakeholders.

Other Assignments

- **Futures Method Scan (10%):** A slide summarizing the method used by a plan of your choosing.
- **Planning Horizons Memo (10%):** A one-page memo on a topic of your choosing relevant to the future of cities.

Project Context

For fall 2025, the class will collectively develop scenario narratives for the seven-county Southeast Michigan Region. Then, working in small groups, students will model land-use futures for specific locations within the region, such as neighborhoods or future station areas.

Materials

The course uses one textbook. I'm confident it's the best book on scenario planning from an urban planning perspective—not because I wrote it, but because it's the only one! Although some instructors donate the royalties generated by requiring their own textbook to avoid an ethical conflict of interest, I received a fixed payment for the book and therefore receive no royalties from ongoing sales. It is available for sale from all major retailers in the softcover (\$35) and ebook formats.

Goodspeed, Robert. 2020. *Scenario Planning for Cities and Regions: Managing and Envisioning Uncertain Futures*. Cambridge, Mass.: Lincoln Institute of Land Policy. (referred to below as **SPCR**)

In addition, we will make extensive use of the digital scenario planning tool **UrbanFootprint**, which has been purchased for our use by Taubman College.

Course Policies

In addition to those specified here, policies that apply to students in this class include those of the Urban and Regional Planning Program, Taubman College, students' home academic units, and the University. This course will also follow all COVID-19 related policies adopted by the College and University, refer to University websites for updated information.

Policy on Late Work

Late student work may be accepted due to unavoidable personal or family emergencies or religious observance. In these cases, the norms from professional workplaces will be applied. Generally, this means students are expected to communicate as they are able with course staff, complete work ahead of time for foreseeable issues, and establish timelines with course staff for completing missed or late work due to emergencies. Unexcused late work will be penalized at 10% per day.

Taubman College Academic and Professional Student Conduct Policies

The Rackham Graduate School policy states: "Integrity in research and scholarship is a fundamental value of the University of Michigan. It is the responsibility of all students to conduct research and scholarly activities in an ethical manner at all times." This requires that you are honest in all your course work.

Plagiarism is the use of someone else's words, ideas, or work as one's own in writing or presentations, and failing to give full and proper credit to the original source. It is failing to properly acknowledge and cite language from another source, including paraphrased text. Plagiarism is a serious offense that will lead to grade penalties and a record filed with Taubman College. It may lead to failing a course or expulsion from the university.

[These policies](#) apply to all Taubman College students as well as non-Taubman College students who take courses within the college.

AI and Writing Policy

For this class, for simplicity I prohibit all uses of AI tools like ChatGPT or other LLMs for all uses related to the written assignments (brainstorming, outlining, drafting, or revising). Spellcheck and grammar checking tools integrated into word processors (Google Docs, Word) are OK.

Taubman College Compact

The [College Compact](#) is a description of the environment we wish to create and the behaviors we hope our community members will exhibit.

Taubman College Statement on Audio and Video Recordings and Protecting Privacy

The pandemic crisis may require that synchronous class activities be recorded and posted for students who are unable to participate in-person. But recording lectures, discussions, and other similar course-related activities raises important privacy concerns. Instructors must balance the need to include all class members against the need to protect privacy concerns. Recording may stifle discussion and interfere with the free exchange of ideas, particularly when discussing sensitive subjects. Instructors may choose to have some sessions not recorded in order to encourage the free exchange of ideas, or they may choose to pause recording when discussion of sensitive subjects begins. Instructors will share recordings only with members of the class through a platform that is only accessible by members, such as Canvas, to ensure that only members of the class in which the recording was made can access the recording. Faculty should take steps, such as preventing downloading capability, in order to protect the privacy of

the members. Recordings and chat sessions are private and cannot be shared outside the classroom. Sharing recordings or chat sessions with anyone outside of the class will be considered academic misconduct. Course activities may be audio or video recorded and made available to other students in this course. As part of your participation in this course, you may be recorded. If you do not wish to be recorded, please contact the instructor the first week of class, or as soon as you enroll in the course, to discuss alternative arrangements. [The university provides additional resources on recordings and privacy concerns.](#)

Statement on Student Mental Health and Wellbeing

Taubman College is committed to advancing the mental health and wellbeing of its students. Studies and surveys indicate clearly that a variety of issues, such as strained relationships, increased anxiety, alcohol/drug problems, and depression, directly impact student academic performance. If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, please reach out to any of the following for assistance:

- Counseling and Psychological Services (CAPS) can be reached at (734) 764-8312 and <https://caps.umich.edu/> during and after hours, on weekends and holidays. When precautions for COVID-19 are in place, please contact CAPS at caps-uofm@umich.edu or schedule online here: <https://caps.umich.edu/article/caps-initial-consultation-request>
- For medications, contact University Health Services (UHS) at (734) 764-8320 and <https://www.uhs.umich.edu/mentalhealthsvcs>, or for alcohol or drug concerns, see www.uhs.umich.edu/aodresources.
- For an extensive listing of mental health resources available on and off campus, visit: <http://umich.edu/~mhealth/>.
- To get help right away, if you or someone you know is in a crisis situation, please do one of the following: Call 911 or Call (734) 996-4747 (U-M Hospital Psychiatric Emergency).
- If you are experiencing concerns, seeking help is a courageous thing to do for yourself and those who care about you. If the source of your stressors is academic, please contact me so that we can find solutions together. For personal concerns, U-M offers many resources, some of which are listed at [Resources for Student Well-being](#).

Accommodations for Students with Disabilities

It is Taubman College policy to "meet the educational needs of all persons, including those with physical or perceptual limitations, who are interested in the study of architecture, urban planning and/or urban design." If you think you need an accommodation for a disability, please let me know at your earliest convenience. Some aspects of this course, the assignments, the in-class activities, and the way the course is usually taught may be modified to facilitate your participation and progress. As soon as you make me aware of your needs, we can work with the Services for Students with Disabilities (SSD) office to help us determine appropriate academic accommodations. SSD (734-763-3000; <http://ssd.umich.edu>) typically recommends accommodations through a Verified Individualized Services and Accommodations (VISA) form. Any information you provide is private and confidential and will be treated as such.

Accommodations for Religious Holidays and Observances

The guidance on this issue issued by the Office of the Provost is as follows: "Although the University of Michigan, as an institution, does not observe religious holidays, it has long been the University's policy that every reasonable effort should be made to help students avoid negative academic consequences when their religious obligations conflict with academic requirements. Absence from classes or examinations for religious reasons does not relieve students from responsibility for any part of the course work required during the period of

absence. Students who expect to miss classes, examinations, or other assignments as a consequence of their religious observance shall be provided with a reasonable alternative opportunity to complete such academic responsibilities. It is the obligation of students to provide faculty with reasonable notice of the dates of religious holidays on which they will be absent. Such notice must be given by the drop/add deadline of the given term. Students who are absent on days of examinations or class assignments shall be offered an opportunity to make up the work, without penalty, unless it can be demonstrated that a make-up opportunity would interfere unreasonably with the delivery of the course. Should disagreement arise over any aspect of this policy, the parties involved should contact the Department Chair, the Dean of the School, or the Ombudsperson. Final appeals will be resolved by the Provost.”

Grading

The following scale will be used for grading in this course.

Grade	Minimum %
A+	100
A	95
A-	90
B+	87
B	83
B-	80
C+	77
C	73
C-	70
D+	67
D	63
D-	60
E	50
F	40

Resources

The syllabus incorporates many professional resources; however these books, journals, and organizations may be of interest if you are interested in learning more about the scenario planning world.

Optional Texts

Hopkins, Lewis D., and Marisa Zapata. 2007. *Engaging the future: forecasts, scenarios, plans, and projects*. Cambridge, Mass.: Lincoln Institute of Land Policy.

Dixon, Timothy J, and Mark Tewdwr-Jones. 2021. *Urban Futures: Planning for City Foresight and City Visions*: Policy Press.

Journals

Environment and Planning B (<http://www.envplan.com/B.html>)

Computers, Environment, and Urban Systems (<http://www.journals.elsevier.com/computers-environment-and-urban-systems/>)

Futures (<http://www.journals.elsevier.com/futures/>)

Technological Forecasting and Social Change
(<http://www.journals.elsevier.com/technological-forecasting-and-social-change/>)

Professional Organizations

Consortium for Scenario Planning (<https://www.lincolnst.edu/research-data/data-toolkits/consortium-scenario-planning>)

Winter 2026 Conference Feb. 2-6, Salt Lake City

Computation in Urban Planning and Urban Management (CUPUM) (<https://cupum.co/>)
Biannual international conference of scholars and practitioners involved in urban modeling and analysis.

2027 – Sydney, Australia

2025 – London, England (<https://www.ucl.ac.uk/bartlett/casa/cupum-2025>)

2023 – Quebec, Canada (<https://osf.io/6yr5v/>)

2021 – Helsinki, Finland (<https://www.cupum2021.org/>)

2019 – Wuhan, China (<https://cupum2019.aconf.org/>)

2017 – Adelaide, Australia (<http://www.unisa.edu.au/cupum>)

2015 – Boston, Mass. (<http://cupum2015.mit.edu>)

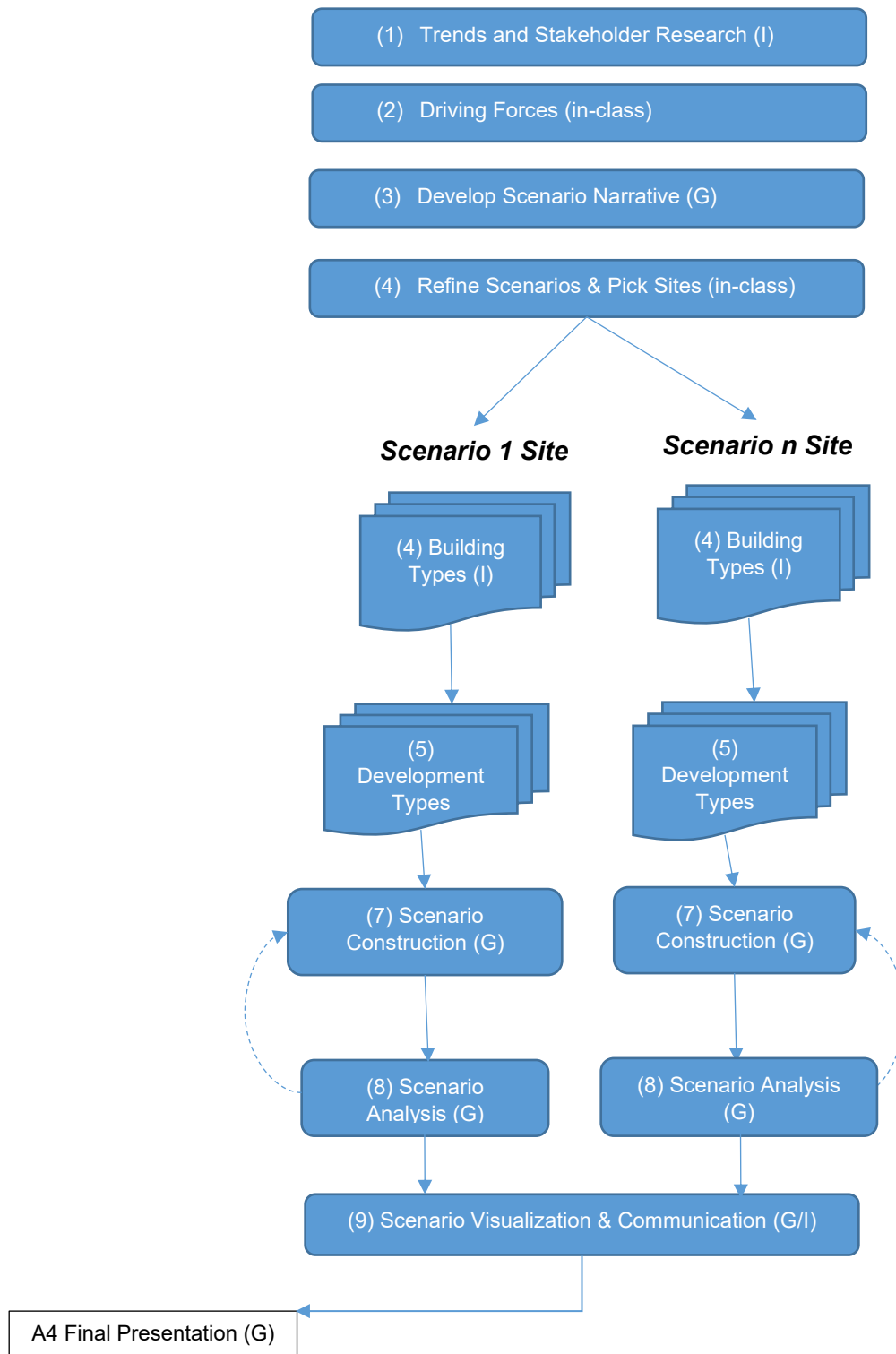
2013 – Utrecht, Netherlands (<http://cupum2013.geo.uu.nl>)

U.S. Federal Highway Administration Scenario Planning Group
http://www.fhwa.dot.gov/planning/scenario_and_visualization/scenario_planning/

Course Overview

Week (Mon.)	Mon Topic	Wed Topic	Assignments (due)
Module 1: Setting the Stage			
1 8/25	Course Introduction	Urban Complexity	
2 9/1	No Class - Labor Day	Visioning, Forecasting, Strategic Planning	Futures Methods Scan
3 9/8	Trends & Stakeholder Research	Scenario Planning Concepts & Organizational Applications	Trends & Stakeholder Research
Module 2: Constructing Scenario Narratives			
4 9/15	Driving Forces/Uncertainties	Scenarios for Resilience	
5 9/22	Assess Uncertainties & Identify Axes	Case Study #1: Design Workshop Projects	
6 9/29	Scenario Discussion	Scenarios in Urban Planning	Scenario Narrative
7 10/6	Group Formation & Planning	Trauma, Equity, and Change	
8 10/13	<i>No Class – Fall Break</i>	Case Study # 2: U. Buffalo Climate Resilience in NY State	
Module 3: Modeling Land-Use Scenarios			
9 10/20	Development Type Construction	No Class	Building Types
10 10/27	Scenario Creation	Digital Tools Overview & Sketch Tools	
11 11/3	Scenario Analysis	Systems Modeling	Preliminary Scenarios
12 11/10	Scenario Refinement	Case Study #3: Monterrey, Mexico Case Study	Scenario Analysis
13 11/17	Draft Presentation	Scenario Revisions	Draft Presentations
14 11/24	Outcomes & Evaluation	<i>No Class - Thanksgiving</i>	
15 12/1	Planning Horizons	Final Presentations	Planning Horizon Memo Final Presentation
16 12/8	Course Wrap-up	-	

Project Overview – Illustrative Structure



Key

(G) – Group Assignment

(I) – Individual Assignment

Week 1

Mon., Aug. 25: Intro. & Scenario Planning in Today's World

Additional Readings:

- Wiechmann, Thorsten. 2008. "Errors Expected—Aligning Urban Strategy with Demographic Uncertainty in Shrinking Cities." *International Planning Studies* 13 (4):431-446.

Wed., Aug 27: What is a city & Bay Area Case

1. SPCR, Preface and Ch. 1
2. Ch 1+2, PDF pages 1-12, Association of Bay Area Governments / Metropolitan Transportation Commission. 2020. *Futures: Resilient and Equitable Strategies for the Bay Area's Future*.

Additional Readings:

- Skrimizea, Eirini, Helene Haniotou, and Constanza Parra. 2018. "On the 'complexity turn' in planning: An adaptive rationale to navigate spaces and times of uncertainty." *Planning Theory*:1473095218780515. doi: 10.1177/1473095218780515.
- Marshall, Stephen. 2012. "Planning, Design and the Complexity of Cities." In *Complexity Theories of Cities Have Come of Age: An Overview with Implications to Urban Planning and Design*, edited by Juval Portugali, Han Meyer, Egbert Stolk and Ekim Tan, 191-205. Berlin, Heidelberg: Springer Berlin Heidelberg.
- Wilkinson, Angela, Roland Kupers, and Diana Mangalagiu. 2013. "How plausibility-based scenario practices are grappling with complexity to appreciate and address 21st century challenges." *Technological Forecasting and Social Change* 80 (4):699-710. doi: <https://doi.org/10.1016/j.techfore.2012.10.031>.
- Portugali, Juval. 2012. "Complexity Theories of Cities: Implications to Urban Planning." In *Complexity Theories of Cities Have Come of Age: An Overview with Implications to Urban Planning and Design*, edited by Juval Portugali, Han Meyer, Egbert Stolk and Ekim Tan, 221-244. Berlin, Heidelberg: Springer Berlin Heidelberg.
- Meadows, Donella. 1999. "Leverage Points: Places to Intervene in a System." Donella Meadows Institute.

Week 2

Mon., Sept . 1: No Class – Labor Day

Wed., Sept. 3: Visioning, Forecasting, Strategic Planning

1. Isserman, Andrew M. "Dare to Plan: An Essay on the Role of the Future in Planning Practice and Education." *Town Planning Review* 56, no. 4 (1985): 483.

References for the Assignment

Visioning

- Snapshot of the method: Maine State Planning Office. 2003. *Community Visioning Handbook: How to Imagine – and Create – a Better Future*.

- Ames, Steven C. 1993. *A Guide to community visioning : hands-on information for local communities*. Portland, OR: Oregon Chapter, American Planning Association. (Note: I can't easily find an electronic copy, but this is a classic)
- Academic Articles:
 - Helling, Amy. 1998. "Collaborative Visioning: Proceed With Caution!: Results From Evaluating Atlanta's Vision 2020 Project." *Journal of the American Planning Association* 64 (3):335-349.
 - Shipley, Robert, and Ross Newkirk. 1998. "Visioning: Did Anybody See Where It Came from?" *Journal of Planning Literature* 12 (4):407-416.
 - Shipley, R. 2002. "Visioning in planning: is the practice based on sound theory?" *Environment and Planning A* 34 (1):7-22.
 - Shipley, R., and R. Newkirk. 1999. "Vision and Visioning in Planning: What do These Terms Really Mean?" *Environment and Planning B: Planning and Design* 26 (4):573-591.

Strategic Planning

- Bryson, John M., and Robert C. Einsweiler. 1988. *Strategic planning : threats and opportunities for planners*. Chicago, Ill.: Planners Press, American Planning Association. (Chapter 2)
- Albrechts, L. 2004. "Strategic (spatial) planning reexamined." *Environment and Planning B* 31:743-758.
- Bryson, John M. 2004. *Strategic Planning for Public and Nonprofit Organizations: A Guide to Strengthening and Sustaining Organizational Achievement*. 3rd ed. San Francisco: Jossey-Bass.
- Kaufman, Jerome L, and Harvey M Jacobs. 1987. "A Public Planning Perspective on Strategic Planning." *Journal of the American Planning Association* 53 (1):23-33.

Forecasting

- Isserman, ETF Ch. 9
- Wachs, M. 2001. "Forecasting versus Envisioning: A New Window on the Future." *Journal of the American Planning Association* 67 (4):367-372.
- Næss, Petter, and Arvid Strand. 2012. "What Kinds of Traffic Forecasts are Possible?" *Journal of Critical Realism* 11 (3):277-295.
- Tetlock, Philip E., and Dan Gardner. 2015. *Superforecasting: The Art And Science Of Prediction*. Crown.

1. Assign Trends Research/Stakeholders:
 - a. Climate Change
 - b. Demographics
 - c. Economy

Week 3

Mon., Sept. 8: Trends & Stakeholder Research

- Student presentations
- *Michigan Planner*, Vol. 27, No. 5, "People, Population and Planning: Data not Dreams."

Thurs., Sept. 10: Scenario Planning Concepts & Organizational Applications

- SPCR, Ch. 2
- Waldron, Lindsey, Robert Searle, and Alexandra Jaskula-Ranga. 2020. Making Sense of Uncertainty: Nonprofit Scenario Planning in the COVID-19 Pandemic. The Bridgespan Group. <https://www.bridgespan.org/insights/library/strategy-development/nonprofit-scenario-planning-during-a-crisis>

- Related Tool: “Scenario Planning for Nonprofits Amid COVID-19”

Additional Readings:

There is a large amount of published about scenario planning in the management and futures studies literature, primarily about its use for corporate or organizational strategic planning. Here are several additional references if you are interested in exploring this area further.

- Schwartz, Peter. 1991. *The Art of the Long View*. New York, Doubleday Currency.
- Ralston, Bill, and Ian Wilson. 2006. *The Scenario-Planning Handbook: A Practitioner's Guide to Developing and Using Scenarios to Direct Strategy in Today's Uncertain Times*. Australia; Mason, Ohio: Thomson/South-Western.
- Chermack, Thomas J. 2011. *Scenario Planning in Organizations: How to Create, Use, and Assess Scenarios*. Berrett-Koehler Publishers.
- Varum, Celeste Amorim, and Carla Melo. 2010. "Directions in scenario planning literature – A review of the past decades." *Futures* 42 (4):355-369.
- Van der Heijden, Kees. *Scenarios: The Art of Strategic Conversation*. 2nd Edition. 2005. London: John Wiley & Sons.
- Schoemaker, P.J.H. 1995. "Scenario Planning: A Tool for Strategic Thinking." *Sloan Management Review* 36:25-25.

Week 4

Mon., Sept. 15: Driving Forces/Uncertainties Workshop

Wed., Sept. 17: Scenarios for Resilience

1. Hallegatte, Stephane. 2009. "Strategies to adapt to an uncertain climate change." *Global Environmental Change*, 240-247.
2. Quay, Ray. 2010. "Anticipatory Governance -- A Tool for Climate Change Adaptation." *Journal of the American Planning Association* 76 (4):496 - 511.
3. Weeks, D. Patrick Maolne, Leigh Welling. "Climate change scenario planning: A tool for managing parks into uncertain futures." *Park Science* 28(1): 26-33.
4. Chapter 3, and Chapter 5, and skim Chapter 4, *Futures: Resilient and Equitable Strategies for the Bay Area's Future*.

Additional Readings:

- Professional Tool: National Park Service. Using Scenarios to Explore Climate Change: A Handbook for Practitioners, and many project reports: <https://www.nps.gov/subjects/climatechange/scenarioplanning.htm>
- Hamstead, Zoé A, David M Iwaniec, Timon McPhearson, Marta Berbés-Blázquez, Elizabeth M Cook, and Tischa A Muñoz-Erickson. 2021. *Resilient Urban Futures*: Springer Nature. <https://link.springer.com/book/10.1007%2F978-3-030-63131-4>
- Norton, Richard K., Stephen Buckman, Guy A. Meadows, and Zachary Rable. 2019. "Using Simple, Decision-Centered, Scenario-Based Planning to Improve Local Coastal Management." *Journal of the American Planning Association* 85 (4):405-423. doi: 10.1080/01944363.2019.1627237.
- Star, Jonathan, Erika L. Rowland, Mary E. Black, Carolyn A. F. Enquist, Gregg Garfin, Catherine Hawkins Hoffman, Holly Hartmann, Katharine L. Jacobs, Richard H. Moss, and Anne M. Waple. 2016. "Supporting adaptation decisions through scenario planning: Enabling the effective use of multiple methods." *Climate Risk Management* 13:88-94.

Week 5

Mon., Sept. 22: Assess Uncertainties & Identify Axes

Wed., Sept. 24: Case Study 1: Emily Burrowes, Design Workshop, *Louisville Comprehensive Plan* and *MesaTogether: Mesa County Master Plan*

Week 6

Mon., Sept. 29: Scenario Discussion

Wed., Oct. 1: Scenarios in Urban Planning

1. SPCR, Ch. 4, and pick one of the professional guides below:
2. Avin, Uri, Robert Goodspeed, and Lily Murnen. "From Exploratory Scenarios to Plans: Bridging the Gap." *Planning Theory & Practice* 23, no. 4 (2022): 637-46.

Professional Guides & Examples:

- Normative (land-use centric): *Oregon Department of Transportation, Scenario Planning Guidelines: Resources for Developing and Evaluating Alternative Land Use and Transportation Scenarios (& Technical Appendix)*
<https://www.oregon.gov/ODOT/Planning/Pages/Strategic-Assessment.aspx>
- Normative (transportation centric): *Next Generation Scenario Planning: A Transportation Practitioner's Guide* (2017), *FHWA Supporting Performance-Based Planning and Programming Through Scenario Planning* (2016), and *FHWA Scenario Planning Guidebook* (2011)
https://www.fhwa.dot.gov/planning/scenario_and_visualization/scenario_planning/
- Exploratory (qualitative): Stapleton, Jeremy. 2020. *How to Use Exploratory Scenario Planning: Navigating an Uncertain Future (XSP)*.
<https://www.lincolnst.edu/publications/policy-focus-reports/how-use-exploratory-scenario-planning-xsp>
- Exploratory (horizon scanning): Greater Philadelphia Futures Group:
<https://www.dvrpc.org/LongRangePlan/FuturesGroup/>

Additional Readings:

- Myers, D., and A. Kitsuse. 2000. "Constructing the Future in Planning: A Survey of Theories and Tools." *Journal of Planning Education and Research* 19 (3):221.
- Dalton, Linda C. 2001. "Thinking about Tomorrow: Bringing the Future to the Forefront of Planning." *Journal of the American Planning Association* 67 (4):397-401.
- Cole, S. 2001. "Dare To Dream: Bringing Futures Into Planning." *Journal of the American Planning Association* 67 (4):372-383
- Avin, Uri, and Robert Goodspeed. 2020. "Using Exploratory Scenarios in Planning Practice." *Journal of the American Planning Association*:1-14.

Week 7

Tues., Oct. 6: Group Formation & Planning

Thurs., Oct. 8: Trauma, Equity and Change

- SPCR, Ch. 10
- Baum, Howell S. 1999. "Forgetting to plan." *Journal of Planning Education and Research* 19 (1):2-14.
- Engelberg, Daniel L. 2024. "A Framework for Using Regional Scenarios in Racial Equity Planning." *Journal of the American Planning Association*, August, 1–15. doi:10.1080/01944363.2024.2372368.

Additional Readings:

- Comelli, T., Pelling, M., Hope, M., Ensor, J., Filippi, M. E., Menteşe, E. Y., & McCloskey, J. (2024). Normative future visioning: a critical pedagogy for transformative adaptation. *Buildings and Cities*, 5(1), pp. 83–100. DOI: <https://doi.org/10.5334/bc.385>
- Poe, Jocelyn. 2021. "Theorizing community trauma: Examining the relationship between race, spatial imaginaries, and planning in the U.S. South" *Planning Theory*, online ahead of print.
- Moser, Susanne C. 2021. "The Adaptive Mind," in *All We Can Save: Truth, Courage, and the Solutions for the Climate Crisis*, eds. Johnson, Ayana Elizabeth and Katherine K. Wilkinson, New York: One World Press.

Week 8

Mon., Oct. 13: No Class – Fall Break

Wed., Oct. 15: Case Study # 2: U. Buffalo Climate Resilience in NY State

Readings about Participation, Collaboration & Visualization

1. SPCR, Ch. 6
2. Chakraborty, A. 2011. "Enhancing the Role of Participatory Scenario Planning Processes: Lessons From Reality Check Exercises." *Futures* 43 (4):387-399.
3. Senbel, Maged, and Sarah P. Church. 2011. "Design Empowerment: The Limits of Accessible Visualization Media in Neighborhood Densification." *Journal of Planning Education and Research*. doi: 10.1177/0739456x11417830.

Additional Readings:

- Haas Lyons, Susanna, Mike Walsh, Erin Aleman, and John Robinson. 2014. "Exploring regional futures: Lessons from Metropolitan Chicago's online MetroQuest." *Technological Forecasting and Social Change* 82: 23-33.

Week 9

Mon., Oct. 20: Development Type Construction & Nick Branch (UrbanFootprint) Visit

Wed., Oct. 22: No Class - Groupwork

Week 10

Mon., Oct. 27: Scenario Creation Workshop

Wed., Oct. 29: Digital Tools Overview & Place-Type Tools

1. SPCR, Ch. 5

2. Holway, Jim, C.J. Gabbe, Frank Hebbert, Jason Lally, Robert Matthews, and Ray Quay. 2012. *Opening Access to Scenario Planning Tools*. Policy Focus Report. Cambridge, Mass.: Lincoln Institute of Land Policy. (Chapter 3-6)
3. Schoner, Jessica, Jim Chapman, Allen Brookes, Kara E. MacLeod, Eric H. Fox, Nicole Iroz-Elardo, and Lawrence D. Frank. 2018. "Bringing health into transportation and land use scenario planning: Creating a National Public Health Assessment Model (N-PHAM)." *Journal of Transport & Health* 10:401-418.

Additional Reading:

- California Department of Transportation. 2007. *Assessment of Local Models and Tools for Analyzing Smart-Growth Strategies*. Report.
- Walker, Doug, and Thomas L. Daniels. 2011. *The Planners Guide to CommunityViz: The Essential Tool for a New Generation Of Planning*. Chicago: Planners Press, American Planning Association.
- Fregonese Associates. 2012. *Envision Tomorrow Scenario Builder User Guide*. Tool website: <http://www.envisiontomorrow.org/>

Week 11

Mon., Nov. 3: Scenario Analysis

Wed., Nov. 5: Systems Modeling

1. Couclelis, H. 2005. "Where Has The Future Gone? Rethinking the Role of Integrated Land-Use Models in Spatial Planning." *Environment and Planning A* 37 (8):1353-1371.
2. Waddell, P. 2002. "UrbanSim - Modeling urban development for land use, transportation, and environmental planning." *Journal of the American Planning Association* 68 (3):297-314.
3. Bates, Lisa K. What are the Prospects for a Politically intelligent Planning System? *Planning Theory & Practice*.
4. Modeling information from Bay Area case

Additional Reading:

- Moira Zellner & Scott D. Campbell (2015) "Planning for deep-rooted problems: What can we learn from aligning complex systems and wicked problems?", *Planning Theory & Practice*, 16:4, 457-478, DOI: 10.1080/14649357.2015.1084360.
- Landis, J.D. 2011. "Urban Growth Models: State of the Art and Prospects." In *Global urbanization*, edited by Eugenie L. Birch and Susan M. Wachter, 126-150. Philadelphia: University of Pennsylvania Press.
- Lee, Douglass B. 1973. "Requiem for Large-Scale Models." *Journal of the American Planning Association* 39 (3):163.
- Lee, Douglass B. 1994. "Retrospective on Large-Scale Urban Models." *Journal of the American Planning Association* 60 (1):35.

Week 12

Mon., Nov. 10: Scenario Refinement

Wed., Nov. 12: Case 3 Presentation & Discussion – "Shaping Monterrey, Mexico's Future: Hands-On Scenario Planning," Roberto Ponce Lopez, Jose Antonio Torre Medina, Tecnológico de Monterrey

Week 13

Mon., Nov. 17: Draft Presentation

Wed., Nov. 19: Scenario Revisions

Week 14

Mon., Nov. 24: Outcomes & Evaluation

1. SPCR, Ch. 7, 9
2. Allred, Dustin, and Arnab Chakraborty. 2015. "Do Local Development Outcomes Follow Voluntary Regional Plans? Evidence From Sacramento Region's Blueprint Plan." *Journal of the American Planning Association* 81 (2):104-120.

Wed., Nov. 27: No Class - Thanksgiving

Week 15

Mon., Dec. 1: Planning Horizons Presentations and Discussion

1. Resource: APA Foresight: <https://www.planning.org/foresight/>

Wed., Dec. 3: Final Presentations

1. SPCR, Ch. 11

Week 16

Monday, Dec. 8: Course Wrap-up

- Steffen, Alex. 2021. "Discontinuity is the Job: How climate change and the planetary crisis are changing what works." *The Snap Forward*.