University of Pennsylvania School of Design Department of Landscape Architecture and City Planning Fall 2019, LARP 701 Option Studio/CPLN 700 City Planning Studio

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Designing a Green New Deal: The Spatial Politics of Our Response to Climate Change



Studio Context

Americans are living through the early days of the climate crisis—through Hurricane Maria and its impact on the Puerto Rican diaspora, through Hurricanes Sandy and Harvey and the drowning of America's coastal cities, through this spring's record flooding in the Heartland and its devastating effects on farming communities and Indian Country, through the wildfires in Paradise and last year's second Big Burn, and through this summer's roiling heat that can no longer be viewed as a wave but as the beginning of our planet's big, long sweat. Yet the conspiratorial neglect of climate change by Republicans and its trivialization by Democrats at the federal level has left the nation in a perpetual state of triage—trying earnestly, if hopelessly, to recover from these disasters with limited funds and authority while an endless queue of worsening floods, storms, droughts, and wildfires approach. The climate crisis is here and there is no plan to address it.

The absence of federal climate action has given some urbanists leeway to trumpet claims that cities and metropolitan regions are now leading on the issue. At its most basic level, this is true—without any real federal investment in

climate change, cities and regions have had to become leaders, regardless of the insufficiency of the measures taken. It is easy to lead on climate when the bar for doing so is on the floor. Mayors simply must step over it.

Much of the work mayors and urbanists now point to as evidence of their ability to lead on climate can be traced back to the Rockefeller Foundation and its recent focus on resilience—first, its jointly administered "Rebuild by Design" (RBD) competition in New York after Sandy with the U.S. Department of Housing and Urban Development that began in 2012, and then through the many derivatives modeled after RBD, including the recently canceled "100 Resilient Cities" (100RC) initiative aimed at accelerating investments in climate adaptation across the world's most vulnerable communities. These programs focused on metropolitan regions and cities, addressing specific challenges to resiliency, overseen by city government. But leaving the challenge of climate adaptation in the hands of a massive private foundation and a handful of city officials—all of whom are constrained by short-term thinking and limits on the scale and scope of their action—has proven ineffective at best and disastrous at worst. Nearly a decade after Sandy, none of those local, resilience-focused projects have a clear path to implementation. All that most of the communities have to show for their efforts are a few glossy renderings—fictions of a world never built. It shouldn't be surprising when technocrats like Andrew Yang proclaim that the only option left is to give each individual American a "Freedom Dividend" which they could use to adapt to the changing climate by moving inland or out of flood zones. Without strong, federal leadership, this—and planetary geoengineering—might become our best available option.

This is not to say that cities and mayors have no place in whatever national action that might be taken on climate. Quite the opposite, as any national-scale plan will require coordination by local officials in cooperation with municipalities across the country under federal oversight. But whatever action we take on climate, most people will not experience or comprehend the scale, scope, and pace of transformation by turning on a light powered by wind instead of coal or natural gas. Rather, they will experience it through the building energy retrofits that result in new, electric appliances and green roofs of public and market-rate housing. It will be recognized through massive investments in public transportation, including electrified Bus Rapid Transit systems and High Speed Rail between cities. It will be recognized through the cleanup of every single toxic or polluted parcel of land in this country, an effort that could form the backbone of a federal jobs guarantee that puts millions of people to work in communities long abandoned by the government. These, and many other major spatial propositions, are at the core of the **Green New Deal**.

On February 7th, 2019, Representative Alexandria Ocasio-Cortez (NY-14) and Senator Ed Markey (MA) introduced H.R. 109, a non-binding resolution "Recognizing the duty of the Federal Government to create a **Green New Deal**." In it, they provide a framework for a "10-year national mobilization" that calls on Congress to pass legislation that builds resiliency against climate change-related disasters, repairs and upgrades the infrastructure of the U.S. (including universal access to clean water), establishes a zero-emission energy standard, develops an energy-efficient and distributed 'smart' grid, upgrades every existing building to and requires that all new construction in the U.S. achieve maximum energy and water efficiency (among other standards), reinvigorates federal industrial policy to guide the growth of a 'clean manufacturing' sector, works collaboratively with farmers and ranchers to lower agriculture-driven GHG emissions, overhauls the U.S. transportation system through the development of inter- and intra-city public transit, invests in conservation lands and other 'low-tech' carbon sequestration solutions that also enhance biodiversity, remediates or repurposes hazardous waste and abandoned sites, and focuses on several other technology-driven emissions reducing investments.

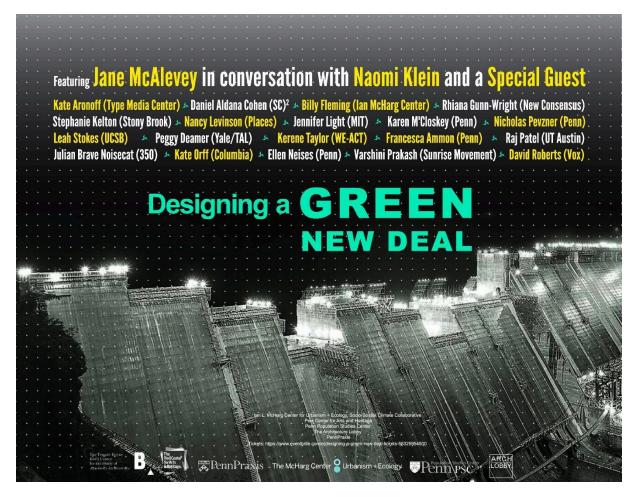
In their press conference announcing the resolution, Ocasio-Cortez remarked that the public should view the **Green New Deal** legislation as a "Request for Proposals...we've defined the scope and where we want to go. Now, let's assess where we are, how we get there, and collaborate on real projects." Since then, a new body of policy development and economic research, headquartered at New Consensus, has emerged. But the work accomplished to date on the Green New Deal has been focused on abstract, national-scale economic and political strategies. None of it has dealt directly with the unprecedented scale, scope, and pace of landscape transformation that it implies.

A national climate plan like the Green New Deal will be understood by most people through the buildings, landscapes, infrastructures, and public works agenda it inspires. Given the scope of these efforts, it's clear that designers will play a central role in project managing the nation's response to climate change both at the scale of the national plan and the built works through which Americans will experience this transition.

This studio will be the first such effort to give form and visual clarity to the scale, scope, and pace of transformation that the Green New Deal implies. Its results will be carried forward into the spring as part of a joint research effort with Data for Progress, New Consensus, and the Socio-Spatial Climate Collaborative aimed at developing a national infrastructure, public works, and built environment agenda for the Green New Dealers in Congress.

Special Events

There will be two conferences this studio will participate in: "Designing a Green New Deal" at Penn on September 13th and "Climate Futures, Design, and the Green New Deal: Cyborg Ecologies, Design Justice, and Racial Capitalism" at RISD on December 5th. Students are expected to attend both. Transit to Rhode Island TBD.



Method + Seminar

A studio built on the seminar model, this course will require reading and discussion as well as four multi-week assignments. Roughly divided into three parts, the studio will progress from precedents to prototypes to propositions for a Green New Deal. We will convene for 8 seminars throughout the semester, frontloaded to allow more time to sit with the material and to produce your deliverables in the last half of the course. Your assignments will accumulate as we go—assignment one will force us to come to common ground in our understanding of H.R. 109; assignment two will give us a collective understanding of the lessons and limits of the New Deal era's approach to national-scale planning; assignment three will do the same for contemporary, international attempts to mobilize national resources around a set of major environmental issues; and assignment four will challenge us to translate the big, bold ideas of the Green New Deal into real, spatial propositions for decarbonization and adaptation.

All students are expected to have done the reading and come to class prepared to engage with the material. Throughout the semester, guest critics will be facilitating discussions around their topics of expertise as they relate to the GND, either in the seminar or in desk crits. The deep readings will prompt engagement with bodies of knowledge that give shape to the spatial transformations of the Green New Deal.

Our method will follow that of policy development and applied research teams in government, industry, think-tanks, and campaigns—to read and engage deeply with new material and stakeholders, to think and discuss the ideas critically and collegially as a group, to draw or design or otherwise apply these ideas to our work, and to repeat. We will engage with some of the most complex, wicked problems the world has to offer. You won't be expected to solve any of them. But you will—or rather, we will—be challenged to sit with those problems, to struggle with them, and to use that struggle to imagine a new, better world designed through the Green New Deal.

For evaluations, students will meet 1:1 with Billy after each major review (mid, ³/₄, and final) to receive their marks and discuss their work (this will be accompanied by written feedback throughout the semester).

All readings can be found in the course folder.

Deliverables

Assignment One: The Markup

House Resolution 109 (H.R. 109) is an aspirational document—a series of goals to decarbonize the economy and adapt the nation for climate change, all within an operational framework that's focused labor and industrial policy. It is not, as some have mistakenly argued, a standalone bill that, if passed, would somehow usher in the Green New Deal with the stroke of a pen (or, as it's often done these days, with the stroke of a robotic arm grasping the pen). The resolution is intended to frame how a new generation of policy-making might emerge—one in which the public sector is activist, experimental, and newly empowered (and funded) to mobilize and reshape the nation around climate change.

H.R. 109 is not a perfect document. Rather, it is the product of intense negotiation between a diverse coalition of environmentalists, labor unions, activists and organizers, and technocrats. It is necessarily a comprise resolution, even at this early, aspirational stage in the Green New Deal's development. As we'll discuss in class, H.R. 109 is the plan B for climate activists—plan A was a select committee on climate change with subpoena power in the House; one that could compel expert testimony and draft a more comprehensive Green New Deal legislative program with it. Plan B is a much slower, more piecemeal operation.

As a way to draw yourself into the resolution—and the broader Green New Deal conversation—your first assignment will be to "mark-up" H.R. 109. In this context, you can think of a mark-up in the way that political campaigns and advocacy organizations often do—as a way to use your voice and tone to highlight aspects of the resolution that are confusing, problematic, inspiring, unrealistic, extremely your sh*t, or otherwise noteworthy. There are a few examples of how these might be done below.

You will present your resolution for 3 minutes—so embrace the brevity this kind of exercise demands and use your "pen" judiciously. I will share any/all of the mark-ups from those who grant permission during the class.

- https://www.nytimes.com/2018/05/27/us/politics/trump-letter-english-teacher.html
- https://twitter.com/IndivisibleTeam/status/830508416745472000?s=20
- https://www.huffpost.com/entry/donald-trump-chuck-schumer-healthcare-tweet_n_5c9a781ae4b07c88662c
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Assignment Two: Precedents (New Deal Legacies)

Over the course of the semester, you will produce a series of maps and memos that should serve two purposes: (1) to give a visual and written record of the precedents and prototypes you'll be drawing from for the bulk of your Green New Deal work; and (2) to provide a beautiful collection of objects worthy of exhibition, if only as a backdrop for your final review.

For this assignment, you will each choose from a list of alphabet agencies—the constellation of federal agencies that proliferated during FDR's New Deal program. The list below represents those that deal in some substantial way with land, infrastructure, public works, and other major spatial propositions. Some of you may be assigned more than one.

For each agency, you will produce two deliverables. The first will be a briefing memorandum (3-page maximum) that covers the origins, mission, evolution, accomplishments, and failures of the agency, particularly as they relate to their work in the built and natural environment. This memo should contain enough information to help us draft the final studio report (a section of which will be dedicated to these precedents) and produce text panels for the pop-up exhibit at your final review.

The second will be a map of the agency's proposed and completed work. The map projection system and sizing will be determined as a group during the class. For the "due date", these will be somewhat eclectic—you'll all share size, projection, and possibly other features, but each map will be your own. For the final review, these maps will be finished by a single student so that they all read as a set—and they will then be installed in makeshift "light boxes" that can be easily hung and removed (it's likely this studio will present its work in early 2020 in D.C. and New York, so these need to be somewhat portable).

Alphabet Agencies:

- Civilian Conservation Corps
- Subsistence Homesteads Division
- Civil Aeronautics Administration
- Works Progress Administration
- Federal Housing Administration
- Resettlement Administration/Farm Security Administration
- Federal Works Agency
- Public Works Administration
- Rural Electrification Administration
- Tennessee Valley Authority
- US Army Corps of Engineers
- Delta Regional Authority
- Appalachian Regional Commission

Assignment Three: Prototypes (Major Spatial Propositions)

Over the course of the semester, you will produce a series of maps and memos that should serve two purposes: (1) to give a visual and written record of the precedents and prototypes you'll be drawing from for the bulk of your Green New Deal work; and (2) to provide a beautiful collection of objects worthy of exhibition, if only as a backdrop for your final review.

For this assignment, you will each choose from a list of contemporary exemplars of climate or environmentally focused, state-led planning efforts. Some of these will be familiar, domestic efforts. Others will be international exemplars featured in the recently closed Design With Nature Now exhibition. The list below represents those that deal in some substantial way with land, infrastructure, public works, and other major spatial propositions. Some of you may be assigned more than one. You will work in pairs on this assignment.

For each, you will produce two deliverables. The first will be a briefing memorandum (3-page maximum) that covers the origins, mission, budget/financials, accomplishments, and failures of each effort, particularly as they relate to their work in the built and natural environment. This memo should contain enough information to help us draft the final studio report (a section of which will be dedicated to these prototypes) and produce text panels for the pop-up exhibit at your final review.

The second will be a map and/or other drawings of the proposed and completed work in each effort. The map projection system and sizing will be determined as a group during the class. For the "due date", these will be somewhat eclectic—you'll all share size, projection, and possibly other features, but each map will be your own. For the final review, these maps will be finished by a single student so that they all read as a set—and they will then be installed in makeshift "light boxes" that can be easily hung and removed (it's likely this studio will present its work in early 2020 in D.C. and New York, so these need to be somewhat portable).

Prototypes:

- Rebuild by Design
- Resilient by Design
- National Disaster Resilience Competition
- Germany's IBA, Emscher Landscape Park
- The Netherlands' RBIA, Room for the River
- China's Grain for Green program
- Great Green Wall of Africa
- Yellowstone to Yukon Initiative
- Others as determined by the class.

Assignment Four: Propositions (Design and the Green New Deal)

The primary focus for this studio will be developing a series of major spatial propositions for the Green New Deal—think of these as the priority sites, investments, infrastructures, and interventions in the built environment in the service of decarbonization and adaptation to climate change. You will need to think through the spaces of these interventions, to be sure, you will also be expected to consider the spatial politics of such an agenda, and how the political economy of your propositions might guard against the inevitable backlash to big, structural reforms like the GND. Put another way, you will be asked to develop radical spatial propositions (projects) and structural reforms (policy design) that are linked together, and to consider how you might use the logic of policy sequencing to build momentum and support for more of each as you go.

This is, in a way, an exercise in world-building. It will require developing an alternative story about the future, and designing a world around it—one, in this case, inspired by the promise of a Green New Deal. You will be asked to think radically about the management and acquisition of public lands as instruments of decarbonization that maximize biodiversity (see Yellowstone to Yukon); to consider a managed retreat program for the United States (a Room for the River in the Midwest and a Space for the Sea along the coasts); to develop a plausible model of low or

no-carbon transportation within and between cities; to spur rural economic development around shifting agricultural practices and transmission infrastructure; to decarbonize public and market-rate housing; and to package it all into a built environment agenda for the Green New Deal that's connected to a high-level policy design and more expansive role for the public sector, one that expands the scope, scale, pace, and capacity of government to take on the large, complex projects climate change will demand.

This assignment will have three types of products. The first will be a national-scale map (likely a set of maps), coordinated amongst the entire studio, to show how, where, and when these major spatial propositions would occur. You will be expected to produce high-resolution still imagery as well as .avi, .mp4, and/or .gif files for digital and analog use. The second will be a series of more detailed maps and drawings, exploring your propositions in real places (e.g. a HSR line running through exurban Minnesota, a brownfield cleanup program in Philadelphia (including disposal operations), or a low-carbon New Town in Montana). You will be asked to produce perspectives, sections/elevations, and other supporting drawings to accompany your map work. Finally, the studio will also produce a draft report on the built environment agenda for a Green New Deal. It should capture the breadth of depth of your fall studio work (from precedent to prototype to proposition) and will serve as the rough draft for a series of reports the McHarg Center is developing with Data for Progress, New Consensus, and several elected officials.

Schedule

Week 1:	M 08/26 F 08/30	Studio Lottery Studio Introduction, Assignment One Due
Week 2:	M 09/02 F 09/06	No Class (Labor Day) Seminar I: Operationalizing the Green New Deal
Week 3:	M 09/09 F 09/13	Seminar II: New Deal Legacies Designing a Green New Deal Event (Friday + Saturday)
Week 4:	M 09/16 F 09/20	Workday Assignment Two Due
Week 5:	M 09/23 F 09/27	Seminar III: National-Scale Planning (Richard Weller) Seminar IV: Speculative Fiction + Design (Chris Marcinkoski)
Week 6:	M 09/30 F 10/04	Seminar V: Major Spatial Propositions for the Green New Deal Workday
Week 7:	M 10/07 F 10/11	Workday Fall Break, No Class (possible trip to DC)
Week 8:	M 10/14 F 10/18	Seminar VI: Just Transitions Workday
Week 9:	M 10/21 F 10/25	Mid-Review, Assignment Three Due Seminar VII: Design and the Green New Deal
Week 10:	M 10/28 F 11/01	Workday Seminar VIII: Policy Sequencing, Policy Design
Week 11	M 11/04 F 11/08	Workday Workday
Week 12	M 11/11 F 11/15	Internal Pin-ups Workday
Week 13	M 11/18 F 11/22	Workday + Quick-pin 3/4 Review
Week 14	M 11/25 F 11/29	Debrief + Workday No Class
Week 15	M 12/02 F 12/05	Workday Workday + RISD Event Debrief
Week 16	M 12/09 F 12/12	Workday No Class, Desk Crits by appointment
Week 17	M 12/16 S 12/22	Final Review Celebration

Friday, August 30th | Studio Introduction

Agenda:

Today will be focused on creating a shared knowledge of House Resolution 109, otherwise known as the Green New Deal resolution introduced by Rep. Ocasio-Cortez and Senator Markey last spring, and the recent historical context of the GND in the popular imagination. The day will be broken into three parts: (1) an overview of the syllabus and the GND's formulation from Billy; (2) a discussion of the readings by the class; and (3) a presentation of assignment one, the HR 109 markup exercise.

Readings:

- 1. H.R. 109 https://www.congress.gov/116/bills/hres109/BILLS-116hres109ih.pdf
- 2. "The Nobel Prize for Climate Catastrophe," Jason Hickel, Foreign Policy, 6 December 2018, https://foreignpolicy.com/2018/12/06/the-nobel-prize-for-climate-catastrophe/
- 3. "The Uninhabitable Earth (Annotated Edition)," David Wallace-Wells, New York Magazine, 01 July 2017, https://nymag.com/intelligencer/2017/07/climate-change-earth-too-hot-for-humans-annotated.html?gtm=to
- 4. "A Warning from the Garden," Thomas Friedman, New York Times, 19 January, 2007, https://www.nytimes.com/2007/01/19/opinion/19friedman.html?mtrref=undefined&gwh=A92E05396E239 FE0BAA12794C97CE85E&gwt=pay&assetTvpe=REGIWALL
- 5. "How to make the next Green New Deal work," Edward Barbier, *Nature*, 01 January 2019, https://www.nature.com/articles/d41586-018-07845-5
- 6. "An Insider's Guide to the Climate Debate," Julian Brave Noisecat, *Data for Progress*, http://filesforprogress.org/memos/insiders-guide-climate-debate.pdf
- 7. "A Green New Deal to Win Back Our Future," Kate Aronoff, Alyssa Battistoni, Daniel Aldana Cohen, and Thea Riofrancos, 01 February, 2019. https://www.iacobinmag.com/2019/02/green-new-deal-climate-change-policy
- 8. [OPTIONAL] "The case for a Green New Deal," Julian Brave NoiseCat, The Weeds, 09 August 2019, https://podcasts.apple.com/us/podcast/the-weeds/id1042433083?i=1000446501379
- 9. [OPTIONAL] "The Conservative Movement with Corey Robin," Why is This Happening? With Chris Hayes, 15 May 2018, https://podcasts.apple.com/us/podcast/why-is-this-happening-with-chris-haves/id1382983397?i=100041156 3509&mt=2

Assignment:

H.R. 109 is an aspirational document—a series of goals and framework for action. It is not, as some have mistakenly argued, a standalone bill that, if passed, would somehow usher in the era of the Green New Deal. It's also not a perfect document—it is the product of intense negotiation between a diverse coalition of environmentalists, workers, organizers, and policy wonks. It is necessarily a compromise resolution, even at this early, aspirational stage.

As a way to draw yourself into the resolution—and the broader Green New Deal conversation—your first assignment will be to "mark-up" H.R 109 (links to examples below). In this context, you can think of a mark-up in the way that political campaigns and advocacy organizations often do—a way to use your voice and tone to highlight things that are confusing, missing, problematic, inspiring, extremely your sh*t, or otherwise noteworthy within the document at hand. You will present your marked up resolution for 3 minutes—so embrace the brevity this kind of exercise allows and use your "pen" judiciously. I will share any/all's work who grant permission.

- https://www.nytimes.com/2018/05/27/us/politics/trump-letter-english-teacher.html
- https://twitter.com/IndivisibleTeam/status/830508416745472000?s=20
- https://www.huffpost.com/entry/donald-trump-chuck-schumer-healthcare-tweet_n_5c9a781ae4b07c88662c <u>a54e</u>

Guests: None.

Friday, September 6th | Operationalizing the Green New Deal

Agenda:

Today will be focused on understanding the various plans, frameworks, and reports driving the conversation amongst Green New Dealers. We'll want to use this seminar to begin probing (and creating a running list) of built environment-related aspects of each GND proposal, how we might test or expand on them in the studio, and, just as important, what aspects of the GND are firmly outside our purview. The day will be divided into two parts: (1) a discussion of the readings; and (2) a briefing for assignment two (possibly with time to begin work on it).

Readings:

- 10. "The Green New Deal: Mobilizing for a Just, Prosperous, and Sustainable Economy," Rhiana Gunn-Wright and Robert Hockett, New Consensus, https://s3.us-east-2.amazonaws.com/ncsite/new conesnsus gnd 14 pager.pdf
- 11. "A Green New Deal: A Progressive Vision for Environmental Sustainability and Economic Stability," Greg Carlock and Emily Mangan, Data for Progress, http://filesforprogress.org/pdfs/Green New Deal.pdf
- 12. "A Centuries-Old Idea Could Revolutionize Climate Policy." Robinson Meyer. *The Atlantic*, 19 February 2019, https://www.theatlantic.com/science/archive/2019/02/green-new-deal-economic-principles/582943/
- 13. "Democrats are Shockingly Unprepared to Fight Climate Change," Robinson Meyer, *The Atlantic*, 15 November 2017. https://www.theatlantic.com/science/archive/2017/11/there-is-no-democratic-plan-to-fight-climate-change/5 43981/
- 14. "The Green New Deal, explained," David Roberts, Vox, 30 March 2019, https://www.vox.com/energy-and-environment/2018/12/21/18144138/green-new-deal-alexandria-ocasio-co
- 15. "Industrial Policy and Planning: What It Is and How to Do It Better," Todd Tucker, July 2019, https://rooseveltinstitute.org/wp-content/uploads/2019/07/RI_Industrial-Policy-and-Planning-201707.pdf
- 16. [OPTIONAL] "With a Green New Deal, Here's What the World Could Look Like for the Next Generation," Kate Aronoff, *The Intercept*, 5 December 2018, https://theintercept.com/2018/12/05/green-new-deal-proposal-impacts/
- 17. [OPTIONAL] "The Wretched, Climate-Killing Truth about American Sprawl," Alex Baca, Wired, 11 February 2019, https://www.wired.com/story/new-green-deal-american-sprawl/

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Discussion.

Guests:

Daniel Aldana Cohen, Kate Aronoff

Monday, September 9th | New Deal Legacies

Agenda:

Today will be focused on mining the New Deal era for lessons on national-scale landscape planning and transformation. What agencies were integral to this work? How did they operate? What happened to them and why? How might we reimagine a new generation of alphabet agencies and institutions tailored to the Green New Deal? The day will be divided into two parts: (1) discussion on the readings; and (2) desk crits for assignment two.

Readings:

- 18. *The Public Landscape of the New Deal*, Phoebe Cutler, New Haven: Yale University Press (1985). **Chapters One, Three, Four, Five, Seven, Nine, Ten.**
- 19. *The Nature of Cities: Ecological Visions and the American Urban Professions, 1920-1960*, Jennifer Light, Baltimore: Johns Hopkins University Press (2009). **Chapters Two and Four.**
- 20. *Radical Suburbs: Experimental Living on the Fringes of the American City*, Amanda Kolson Hurley, Cleveland: Belt Publishing (2019). **Chapters Introduction and Three.**
- "The Green New Deal, Landscape, and Public Imagination," Nicholas Pevzner, *Landscape Architecture Magazine*, 23 July 2019,
 https://landscapearchitecturemagazine.org/2019/07/23/the-green-new-deal-landscape-and-public-imaginatio
- 22. "The Public Works," Nancy Levinson, *Places*, January 2010, https://placesjournal.org/article/the-public-works/
- 23. "Environmentalisation and Environmentality: Re-Conceiving the History of 20th Century Architecture," Daniel Barber, *Design and Philosophy Papers*, http://www.thestudioattheedgeoftheworld.com/uploads/4/7/4/0/47403357/02barberenvironmentalisation_andenvironmentalityarchitecture.pdf
- 24. "Building a "Green New Deal": Lessons From the Original New Deal," Matt Huber, Verso, 19 November 2018,
 - https://www.versobooks.com/blogs/4131-building-a-green-new-deal-lessons-from-the-original-new-deal
- 25. Hold for Kian Goh

Assignment:

Discussion + Desk crits on assignment two: the landscape of FDR's alphabet agencies.

Guests:

Nicholas Pevzner, Daniel Barber

Friday, September 13th | Designing a Green New Deal Event

Agenda:
The class is expected to attend the Friday and Saturday events. Studio will not meet. Friday: $9:30-7:30$ Saturday: $9:00-1:00$.
Readings:
None
Assignment:
Attending the events.
Guests:
None.

Monday, September 16th | New Deal Legacies

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Today is primarily a workday. It will be broken into three parts: (1) a quick debrief of the event, followed by; (2) a discussion of the upcoming, core assignments for the studio (thinking about the major spatial projects of a Green New Deal); and (3) time to work on assignment two ahead of the Friday review.

Reading	ngs:			
	None.			
Assignment:				
	Workday.			
Guests:	Σ			
	None.			

Friday, September 20th | New Deal Legacies REVIEW DAY

Agenda:
Assignment two (maps and memos on the alphabet agencies) to be presented. Slides are due to Zach Hammaker at a time TBD. Memos due to Billy by Thursday, 9.19 at 10pm.
Readings:
None.
Assignment:
Assignment Two Due.
Guests:
None.

Monday, September 23rd | National-Scale Planning (Richard Weller)

Agenda:

Today will be focused on national and/or continental scale planning outside of the United States. The class will be divided into three parts: (1) a lecture on work in Australia and through the Design With Nature Now project from Richard Weller; (2) a discussion of the readings; and (3) time to begin work on assignment three: mapping the major spatial projects of a Green New Deal.

Readings:

- **26.** *Made in Australia*, Richard Weller and Julian Bolleter, Perth: University of Western Australia Press (2013). **Chapters Preface, One, Two, and Three.**
- 27. *Boomtown 2050*, Richard Weller, Perth: University of Western Australia Press (2010). **Chapters Introduction, One, Ten, and Eleven.**
- 28. *Room for the River: Safe and Attractive Landscapes*, Dirk Sijmons, Yttje Feddes, Eric Luiten, Fred Feddes, and Marc Nolden, Wageningen: Uitgeverij Blauwdruk (2017).
- 29. Emscher tbd
- 30. "The Politics of the Rhinzosphere," Anna Tsing and Rosetta S. Elkin. 2018. Harvard Design Magazine. Cambridge, MA: Harvard University Graduate School of Design.

Assignment:

Lecture + Discussion.

Guests:

Richard Weller, Frederick Steiner

Friday, September 27th | Speculative Fiction and Design (Richard Weller + Chris Marcinkoski)

Agenda:

Today will be focused on the role of speculation and narrative development in planning and design. The class will be divided into two parts: (1) a discussion led by Chris Marcinkoski on speculative design and fiction; and (2) a review of work done thus far by Richard Weller.

Readings:

- 31. One Giant Leap, Charles Fishman, New York: Simon & Schuster (2019). Chapters Preface, One, Two, and Nine.
- **32.** *Speculative Everything*, Anthony Dunne and Fiona Raby, Cambridge: The MIT Press (2013). **Chapters One, Three, Five, Eight, and Nine.**
- 33. "Cheat Sheet for a Non- (or Less-) Colonialist Speculative Design," Pedro Oliviera and Luiza Prado, Medium, A Parede, 14 Sept. 2014, medium.com/a-parede/cheat-sheet-for-a-non-or-less-colonialist-speculative-design-9a6b4ae3c465.
- 34. *No Time to Spare: Thinking about What Matters*, Ursula K. Le Guinn, New York: Houghton Mifflin (2017). **All of Part 2**.

Assignment:

Lecture + Discussion, followed by interim review.

Guests:

Richard Weller and Chris Marcinkoski.

Monday, September 30th | Major Spatial Propositions for the Green New Deal

Agenda:

Today will be focused on developing the infrastructural, public works, and other built environment-related agendas for the Green New Deal (the primary focus of this studio). This might include shifts in the management and protection of public lands to maximize biodiversity and decarbonization (ala Yellowstone-to-Yukon); Room for the River-like managed retreat programs along the coast and in the Midwest that would necessarily include buyouts, new town developments, and selective investments in new protective infrastructure; sweeping reformulations of federal agencies like the Department of Transportation and U.S. Army Corps of Engineers to, for example, set a moratorium on new road construction while diverting funds into building a public transit system (including HSR, commuter rail, light rail, and BRT); energy systems (extraction, generation, storage, and transmission); housing (public and market), to include HR 109's goal of a maximally low-carbon building energy retrofits and codes; and how this might all fit into a national public works agenda, tied to a wave of Green New Deal policy-making, that expands the scope, scale, pace, and capacity of public sector action on climate (primarily decarbonization and adaptation).

Readings:

- 35. "Climate Change and Land," IPCC, https://www.ipcc.ch/site/assets/uploads/2019/08/4.-SPM_Approved_Microsite_FINAL.pdf (PUBLIC LAND)
- 36. "Adding 1 billion hectares of forest could help check global warming," Alex Fox, Science, https://www.sciencemag.org/news/2019/07/adding-1-billion-hectares-forest-could-help-check-global-warming (PUBLIC LAND)
- 37. "Climate-wise landscape connectivity: why, how, and what's next," Annika Keeley et al., *California's Fourth Climate Change Assessment*, https://www.energy.ca.gov/sites/default/files/2019-07/Biodiversity_CCCA4-CNRA-2018-001.pdf (PUBLIC LAND)
- 38. "The Case for Retreat," Liz Koslov, *Public Culture*, https://read.dukeupress.edu/public-culture/article/28/2%20(79)/359/85821/The-Case-for-Retreat (MANAGED RETREAT)
- 39. "Urban Waterscapes: The Hydro-Politics of Flooding in a Sinking City," *IJURR*, https://onlinelibrary.wiley.com/doi/full/10.1111/1468-2427.12756 (MANAGED RETREAT)
- 40. "Migration induced by sea-level rise could reshape the US population landscape," Matt Hauer, *Nature Climate Change*, https://www.nature.com/articles/nclimate3271 (MANAGED RETREAT)
- 41. "The British new towns: lessons for the world from the new-town experiment," Ann Forsyth and Richard Peiser, *Town Planning Review*, https://online.liverpooluniversitypress.co.uk/doi/abs/10.3828/tpr.2019.17 (NEW TOWNS)
- 42. "High-Speed Rail in America," Dan Schned, *America 2050*, http://www.america2050.org/pdf/HSR-in-America-Complete.pdf (TRANSIT)
- 43. "Low-Carbon Rail Challenge," International Union of Railways, https://uic.org/IMG/pdf/low_carbon_rail_challenge_technical_report.pdf (TRANSIT)
- 44. "Transit and a Green New Deal," Transit Center Blog,
 http://transitcenter.org/2019/03/28/transit-and-a-green-new-deal/ and
 http://transitcenter.org/2019/04/25/transit-the-green-new-deal-a-just-transition/ (TRANSIT)
- 45. "The value of energy storage in decarbonizing the electricity sector," Fernando Sisternes, Jesse Jenkins, and Audun Botterud, *Applied Energy*, https://www.sciencedirect.com/science/article/pii/S0306261916305967 (ENERGY)
- 46. "A critical review of global decarbonization scenarios: what do they tell us about feasibility?", Peter Loftus et al., *WIREs Climate Change*, https://onlinelibrary.wiley.com/doi/full/10.1002/wcc.324 (ENERGY)

- 47. "Getting to zero carbon emissions in the electric power sector," Jesse Jenkins et al, Joule, https://www.sciencedirect.com/science/article/abs/pii/S2542435118305622 (ENERGY)
- 48. "The political logics of clean energy transitions," Hanna Breetz, Matto Mildenberger, and Leah Stokes, Business and Politics, https://www.cambridge.org/core/journals/business-and-politics/article/political-logics-of-clean-energy-trans itions/3EBB1887089929B48CD623309C6751A9 (ENERGY)
- 49. "A Green New Deal for Agriculture," Raj Patel and Jim Goodman, Jacobin, https://jacobinmag.com/2019/04/green-new-deal-agriculture-farm-workers (AGRICULTURE)
- 50. "The need for a food and agriculture platform in the Green New Deal," Agroecology Research-Action Network, https://agroecologyresearchaction.org/green-new-deal/ (AGRICULTURE)
- 51. "A Green New Deal for Public Housing," Daniel Aldana Cohen, Jacobin, https://iacobinmag.com/2019/02/green-new-deal-housing-ocasio-cortez-climate (HOUSING)
- 52. TBD from AOC's office
- 53. "The Last Stimulus," Daniel Aldana Cohen, Jacobin, https://jacobinmag.com/2017/08/the-last-stimulus (PUBLIC WORKS)
- 54. Anand, Nikhil, Akhil Gupta, and Hannah Appel, eds. The promise of infrastructure. Duke University Press, 2018. **Introduction** and **Chapters TBD**. (Public Works)

Assignm	ment:	
	Discussion.	
Guests:		
	TBD.	

Friday, October 4th | Major Spatial Propositions for the Green New Deal

Agenda:

Today will be focused on a wrap-up discussion of Monday's extended session and a turn to production. The day will be split into two parts: (1) discussion, and (2) desk crits.

Readings:

55. *A Crisis Wasted: Barack Obama's Defining Decisions*, Reed Hundt, New York: Rosetta Books (2019). **Chapters Ten, Eleven Twelve, and Fourteen.**

Assignment:

Discussion + Desk Crits.

Guests:

TBD.

Monday, October 7th | Major Spatial Propositions for the Green New Deal

Today will be focused on continued development of your major spatial propositions. The day will be split
into two parts: (1) a group check-in at 2pm; and (2) desk crits.

Readings:
None.
Assignment:
Desk Crits.
Guests:

TBD.

Agenda:

Monday, October 14th | Just Transitions

Agenda:

Today will be focused on the just transition aspects of the Green New Deal. The intent here is that you will have rough formulations of your public works and built environment agendas, and that this moment of pause and discussion will ensure they're calibrated towards redistributive ends. The day will be focused primarily on a discussion with guests Jesse Jenkins and others TBD.

Readings:

- 56. "Just Transitions/Design for Transitions: Preliminary Notes on a Design Politics for a Green New Deal," Damian White, Capitalism Nature Socialism, https://www.tandfonline.com/doi/abs/10.1080/10455752.2019.1583762?journalCode=rcns20&
- 57. "Slaying the Carbon-Consuming Colonial Hydra: Indigenous Contributions to Climate Action," Julian Brave Noisecat, *Development*, https://link.springer.com/epdf/10.1057/s41301-017-0099-4?author access token=CFmJNOuUdlPCHt1xitd dolxOt48VBPO10Uv7D6sAgHs8LUbX0vYUn9s9gTvvSWWzfA FVeRiUMXXPgmaxYaOXOC-AaMCw 4LUnnBKmsddW6D9b2HEjwWnr360qjNuIwt3TX8xTY9E8o62bMFNTHfJxQ=
- 58. "Decolonizing energy: Black Lives Matter and technoscientific expertise amid solar transitions," Myles Lennon, Energy Research & Social Science, https://www.sciencedirect.com/science/article/pii/S221462961730172X
- 59. [OPTIONAL] "Why Carbon Pricing Falls Short," Jesse Jenkins, Kleinman Center for Energy Policy, https://kleinmanenergy.upenn.edu/sites/default/files/policydigest/KCEP-Why-Carbon-Pricing-Falls-Short-Digest-singles.pdf
- 60. [OPTIONAL] "Coal is over: the miners rooting for a Green New Deal," Michael Sainato, The Guardian, https://www.theguardian.com/environment/2019/aug/12/west-virginia-appalachia-miners-green-new-deal
- 61. "Plan, Mood, Battlefield—Reflections on the Green New Deal," Thea Riofrancos, Viewpoint Magazine, https://www.viewpointmag.com/2019/05/16/plan-mood-battlefield-reflections-on-the-green-new-deal/

Assignm	nent:
	Discussion.
Guests:	
	Jesse Jenkins.

Friday, October 18th | Major Spatial Propositions Workday

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Today will be focused on preparing for the mid-review—a presentation that will focus on major spatial propositions, but also include the precedent and prototype work.

Reading	gs:
	None.
Assignn	nent:
	Work at desks.
Guests:	
	TBD.

Monday, October 21st | MID-REVIEW Agenda: Today will be our mid-review. Assignment 3 due to Billy by Sunday, 10.20 at 10pm. Readings: None. Assignment: Assignment Three Due. Guests:

Critics.

Friday, October 25th | Design and the Green New Deal

Agenda:

Today will be our opportunity to debrief as a group and to turn our attention to the final push in the studio—designing the pop-up exhibit materials (assignments two and three), revising the major spatial propositions work (the beginning of assignment four), and turning to our priority sites and projects in the first wave of the Green New Deal's public works agenda.

Readings:

- 62. "Contradictions of the Climate-Friendly City: New Perspectives on Eco-Gentrification and Housing Justice," Jennifer Rice, Daniel Aldana Cohen, et al, *IJURR*, https://onlinelibrary.wiley.com/doi/full/10.1111/1468-2427.12740
- 63. "Could a Green New Deal Make Us Happier?," Kate Aronoff, *The Intercept*, https://theintercept.com/2019/04/07/green-new-deal-happiness/
- 64. "Low Carbon Leisure, Low Carbon Pleasure," Dominic Boyer, Cymene Howe, and Daniel Aldana Cohen, https://vimeo.com/251512019
- 65. [OPTIONAL] "Design and the Green New Deal," Billy Fleming, *Places*, https://placesjournal.org/article/design-and-the-green-new-deal/
- 66. [OPTIONAL] "The Shorter Work-Week: A Radical and Pragmatic Proposal," Will Stronge and Aidan Harper, *Autonomy*, http://autonomy.work/wp-content/uploads/2019/01/Shorter-working-week-final.pdf

Assignment:

Discussion and review debrief.

Guests:

TBD.

Monday, October 28th | Priority Sites Workday Agenda: Today will be a workday focused on identifying priority sites. Readings: None. Assignment: Workday. Guests: TBD.

Friday, November 1st | Policy Sequencing, Policy Design

Agenda:

Today will be focused on the concepts of policy sequencing and design—the former a proxy for the notion of building momentum for a broader goal—like decarbonization—by stringing together a series of policy "wins" along the way that expand one's base of support before the inevitable backlash sets in; the latter a proxy for thinking through the efficacy and justice implications of the policy instruments you'll employ to usher in the Green New Deal era

Readings:

- 67. "Sequencing to ratchet up climate policy stringency," Michael Pahle et al, *Nature Climate Change*, https://www.nature.com/articles/s41558-018-0287-6
- 68. "The political economy of decarbonization: a research agenda," Eric Biber, Nina Kelsey, and Jonas Meckling, *Brooklyn Law Review*, https://heinonline-org.proxy.library.upenn.edu/HOL/Page?collection=journals&handle=hein.journals/brklr8 2&id=623&men tab=srchresults
- 69. "Winning coalitions for climate policy," Jonas Meckling et al, *Science*, https://science.sciencemag.org/content/349/6253/1170
- 70. "Political economy constraints on carbon pricing policies," Jesse Jenkins, *Energy Policy*, https://www.sciencedirect.com/science/article/pii/S0301421514000901
- 71. "Decarbonizing the US Economy: Pathways Toward a Green New Deal," Mark Paul, Anders Fremstad, and JW Mason, *Roosevelt Institute*, https://rooseveltinstitute.org/wp-content/uploads/2019/06/Roosevelt-Institute_Green-New-Deal_Digital-Final.pdf

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Discussion.

Guests:

Nina Kelsey, Mark Alan Hughes

Monday, November 4th | Workday

Agenda:

Today will be focused on further development of the priority sites assignment. Students will need to begin work on the final products (if not before) this date, including the exhibition materials, the report(s), and drawing set expected for the final review in December.

Readings:
None.
Assignment:
Desk crits + workday.
Guests:

TBD.

Friday, November 8''' Workday		
Agenda.		
	Today will be focused on further development of the priority sites assignment.	
Reading	s:	
	None.	
Assignment:		
	Desk crits + workday.	
Guests:		
	TBD.	

Monday, November 11^{th} | Internal Review Agenda: Today will be an internal pin-up and discussion. Readings: None. Assignment: Internal pin-up. Guests: TBD.

Friday, November 15th | Workday Agenda: Today will be a workday. Readings: None. Assignment: Workday. Guests: TBD.

Monday, November 18 th Workday + Quick Pin		
Agenda.		
	Today will be a workday, focused on desk crits with a quick pin-up the final hour of class	
Reading	gs:	
	None.	
Assignment:		
	Workday + desk crits + quick pin.	
Guests:		
	TBD.	

Friday, November 22nd | 3/4 Review

Agenda:

Today will be our ¾ review. There should be draft materials for everything you plan to present and deliver at the final review. It is OK for these to be rough at this point—we need to use this day to figure out where your final weeks should be spent.

Readings:

None.

Assignment:

3/4 Review.

Guests:

TBD.

Monday, November 25 th Debrief + Workday		
Agenda		
	Today will be focused on a quick group discussion and then working at your desks.	
Reading	gs:	
	None.	
Assignment:		
	Workday.	
Guests:		
	TBD.	

Monday, December 2 nd Workday Agenda:		
Reading	gs:	
	None.	
Assignı	ment:	
	Workday.	
Guests:		
	TBD.	

Friday, December 6th | Workday + GND Event Recap Agenda: Today will be focused on a debrief from the RISD event the day before. Students will have time for work at their desks too. Readings: None. Assignment: Workday. Guests:

TBD.

Monday, December 9th Workday		
Agenda:		
	Today will be focused on desk crits and final production work.	
Readings:		
	None.	
Assignment:		
	Workday.	
Guests:		
	TBD.	

Monday, December 16th | FINAL REVIEW Agenda: Today will be our final review. Assignment 4 due to Billy by Sunday, 12.15 at 10pm. Readings: None. Assignment: Final Review. Guests:

Critics.