

JUSTICE IN PLACE

Design for Equity and Regional Currents
The Case of Poughkeepsie, New York,
and the Hudson Valley

Fall 2016 Urban Design Studio II: American Cities & Regional Contexts

FACULTY

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SITE PARTNERS City of Poughkeepsie, Dutchess County, Family Partnership Center at Poughkeepsie



SOURCES AND RESOURCES

Essays, Reports, News Articles, and other materials are listed in the syllabus margins. Additional resources will be collected and distributed on an ongoing basis on social media:

Twitter @ColumbiaUD

On twitter and instagram

#CUinPoughkeepsie

#CUinHudsonValley #CUinHV

top left 19th Century Railroad Map between New York and Erie.

top center Hudson River, View from Walkway Over the Hudson

top right Mill Street / East-West Arterial
middle left Free Family Fitness Class at College Hill Park

middle center Poughkeepsie Housing Authority Development

middle right Hudson River Region

bottom left Fall Kill Creek at E-W Arterial

bottom center Main Street

bottom right Vassar College



PROVOCATION

READING:

Soja, Edward W., *Seeking Spatial Justice* (Minneapolis: University of Minnesota Press, 2010)

“All who are oppressed, subjugated, or economically exploited are to some degree suffering from the effects of unjust geographies, and this struggle over geography can be used to build greater crosscutting unity and solidarity.”

Edward W. Soja: Seeking Spatial Justice

INTRODUCTION:

THE MEASURE OF (IN)JUSTICE

Justice is more clearly understood where and when it is denied. While justice and injustice are political constructs, the latter is more visceral, it is legible, experienced and perceived in the lives of individuals, social groups and communities. Particular struggles over space and place challenge the normative and ideological constraints to which abstract concepts of Justice are often bound. Injustice is found not only in overt violence but in state-sanctioned administration and governance, in local matters of concern and attention, in flows of power and in the capillary details that make up daily life. If injustice is embedded in geography, as Soja suggests, it is also embedded in the socio-spatial networks that produce places over time, through contestation.

READING:

Lefebvre, Henri, *The Production of Space* (Oxford, OX, UK: Blackwell, 1991)

New spaces, alternative spaces, democratic spaces, or contested spaces also challenge the Western historical premise that space is thought of as a container. In contrast, after Lefebvre (1991) and others, space can more usefully be understood as a dynamic assemblage of relations. In other words, space is not a vessel but a landscape in flux, a shifting play of unequal pushes and pulls through which individuals, social groups, communities and governing bodies struggle to concretize their positions.

READINGS:

<http://www.legacycities.org/2015/09/why-we-need-a-new-word-for-blight/>

<http://www.newyorker.com/magazine/2016/08/22/bryan-stevenson-and-the-legacy-of-lynching>

<https://impactdesignhub.org/2016/05/11/can-we-measure-impact-from-design/>

Urban neighborhoods once labeled as blighted, ready for demolition and “renewal” have, in recent years, been understood as the infrastructure that enables injurious denial of access to the city as a political and social place. If, as Bryan Stevenson of the Equal Justice Initiative has argued, the opposite of poverty is not wealth but justice, then the abandoned and derelict buildings that litter underserved cities, towns and Main Streets, need not be slated for development or revitalization until we also make manifest, and address, the decisions and dynamics that created these uneven landscapes in the first place. This makes for some uncomfortable discussions among stakeholders of all types and requires considerable remapping of extant conditions.

To the extent that spatial justice and design impact can be identified, charted, even measured, the Fall 2016 studio will necessarily challenge the language and assumptions of urban design practice. Defining metrics of spatial justice, both quantitative and qualitative, are still developing; new technologies and modes of information gathering open up new views. Parameters such as access to public services, condition of transportation infrastructure, ratings of educational systems, and socio-economic mobility are potential if also partial indicators. Yet in an emerging era of “Big Data,” policy, government funding, and even philanthropic initiatives are entwined with performance metrics. Yet data is neither innocent nor apolitical, not only are there gaps but bias becomes algorithmic. How does urban design make conscious and critical use of available information to guide decisions? What indicators might we use to evaluate the impact, to know that our decision help dissolve barriers rather than reinforce them?

**STUDIO INQUIRY:
CITY AND REGION,
CENTER AND PERIPHERY**

READINGS:

Welter, M. V. *Post-war CIAM, Team X, and the Influence of Patrick Geddes*. Five Annotations by Volker M. Welter.

<http://www.team10online.org/research/papers/delft1/welter.pdf>

The Fall Columbia Urban Design Studio looks beyond New York City to the Hudson River Valley, a region defined by multiple systems, histories and geographies that touches the lives of millions, and requires an expanded set of tools, concepts and conversations to define, interpret, and design. For this studio, region is defined neither by a political boundary nor a physical area but, in the tradition of Patrick Geddes, the region is understood to be composed of non-contiguous territories defined by specific parameters, from income to sewage, from topography to zoning, among many others. In this sense, a city is always part of a region, as a concentration and particularization of densities, ecologies, and economies of the larger territory. The definition of a region is malleable and may shift and change with time or perspective. For the purpose of this studio, Poughkeepsie and the Hudson Valley are not considered as pre-defined 'sites' but as complex places which warrant study, interpretation, definition, and design.

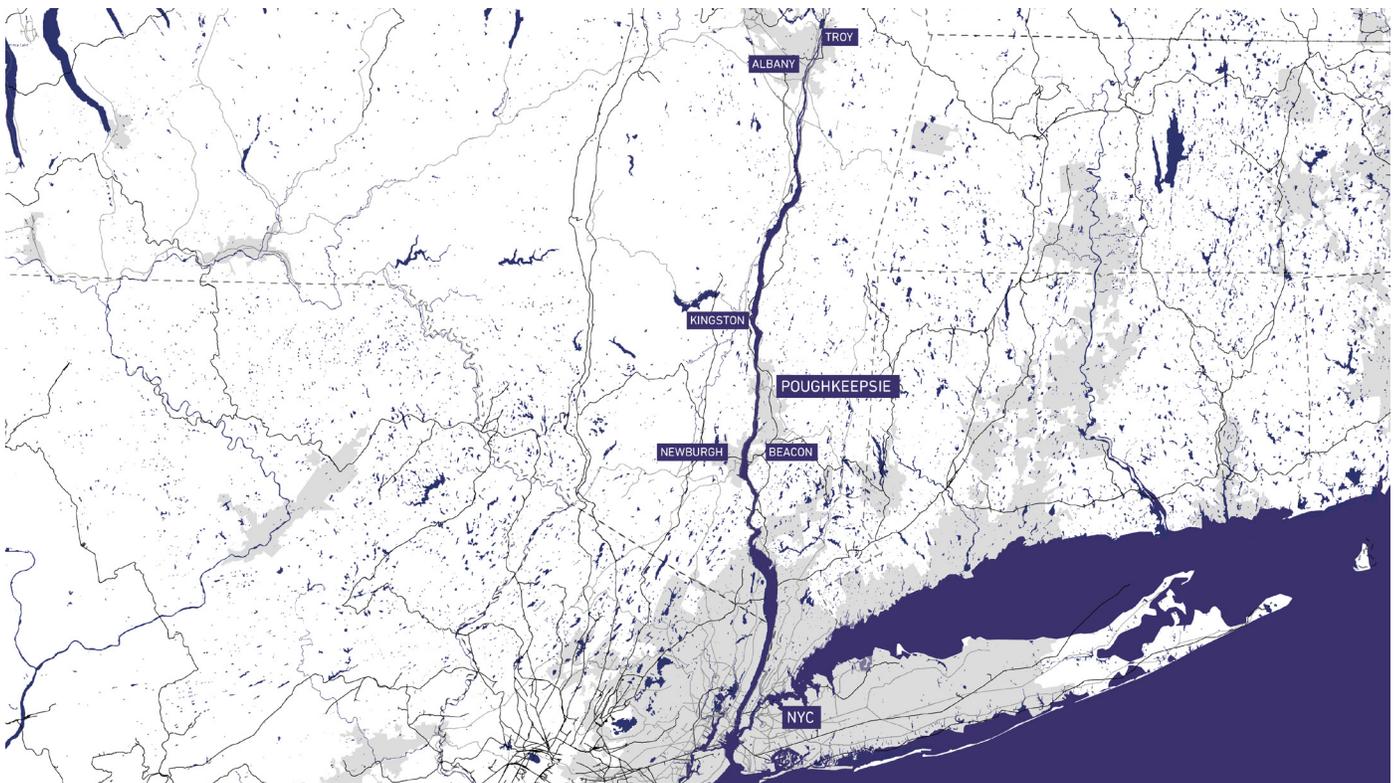
The studio is an interdisciplinary project. Our work grows from the multi-scalar relationships between design and the lived and built environment, from community concerns to infrastructural planning, from public policy and economics to nature of public space. At all stages, research and design engage with the multiple and often conflicting voices and communities, agencies that make up any social agglomeration. Resources are not necessarily urban or regional but part of a distributed intellectual and physical territory; proposals may range across scales and merit different types and methods of intervention.

**POUGHKEEPSIE AND
THE HUDSON VALLEY**

Narratives of the Hudson River Valley often begin with the histories of pioneering European settlers that first started making their marks on that landscape over 400 years ago, supplanting indigenous peoples, or of the American revolutionaries who did the same 175 years later, and of course of the prosperous Empire State. Images of progress, the picturesque, and the sublime have served to illustrate the Valley as idyllic. Water and steam power changed the economic and social bases of the valley, and transportation infrastructures – the Erie Canal in 1812, the Hudson River Railroad in 1849, and the ever-growing network of roads and bridges that eventually smoothed the way for the automobile and trucking brought industry and economic prosperity to the region. Each of the region’s resources is in some way marked by its proximity and accessibility - or lack thereof - to New York City, a global “capital of capital” and the undisputed core of the American Northeast “BosWash” megalopolis.

The prosperity of the region and its small cities, however, was and remains precarious. After the flourishing of small scale industries in the Valley, the mid-20th century changes to transport, industry, employment, and demographics have decimated Main Streets and farming districts. Reliant on the economy of the metropole, the vulnerabilities of the marketplace hit the peripheries the hardest. Cities such as Newburgh, Kingston, and Poughkeepsie slowly shed population, employment, investment, and the social networks necessary for health. While some places have managed to stage “comebacks,” income, employment, education, and real estate data show that disparities continue to increase, in the Valley, and nationally (EIG Distressed Communities Index, 2016).

Today new “pioneers” are finding their way up the Hudson River to cities like Beacon and Hudson, looking for places of opportunity: access to resources, the promise for growth and a higher quality of life at lower costs. At the same time, people who have lived in the Valley and its cities for generations and those who live there by necessity rather than by choice, are also striving to make their cities better places to live, work, and thrive. This variety of people, purpose, and perspectives makes the region both diverse and dynamic, but can also manifest itself in challenging inequalities. Within the region a place’s identity can shift quickly from high-crime inner city blocks with degraded infrastructure and vacant buildings to a postcard picture of “sustainable” pastoral life, local organic farm-to-table bliss, within commuting distance of NYC.



CITY OF POUGHKEEPSIE

Located on the eastern bank of the Hudson River halfway between New York City and Albany, the City of Poughkeepsie is home to 33,000 residents in an area of 5.7 sq. miles (15 km²). It is surrounded by the Town of Poughkeepsie, a separate municipal entity that houses 42,000 more in area: 31.2 sq. miles (81 km²).

READING:

Harvey Flad, Clyde Griffen, *Mainstreet to Mainframes, Landscape and Social Change in Poughkeepsie* (Albany: State University of New York Press, 2009)

First settled by the Dutch in 1687, the “Queen City of the Hudson” gained a reputation in the 1800s as an industrious hive: from a major center for whale rendering, to the early 19th century industrialization, the city thrived, taking advantage of its proximity to the river and the significant water and trade traffic. The port quickly became a hub for the transportation of both goods and people. The coves provided a place for ships to anchor and the Hudson River Railroad further enhanced the city’s stature as an economic crossroads.

Poughkeepsie’s proximity to the metropolis brought significant population increase, from the Irish and Italian immigrants in the 1850s, to the many African Americans that moved from the South during the Great Migration (1915-1960s), all in search for employment, education, and services. In the late 19th and early 20th centuries, heavy industries developed along the river including iron, glass, and lumber manufacturing, as well as garment factories and paper mills along the Fall Kill creek. In the years after World War II, changing industrial needs and technologies shuttered many of the city and region’s industries, leaving behind polluted landscapes and high unemployment.

National trends of suburbanization and white flight selectively affected Hudson Valley cities. The opening in 1948 of IBM’s manufacturing facility just outside city limits enabled the establishment of an affluent, largely white, community. At the same time, Main Street gave way to strip malls outside the city, while urban renewal and new arterial roads created a scarred landscape at the heart of the city.

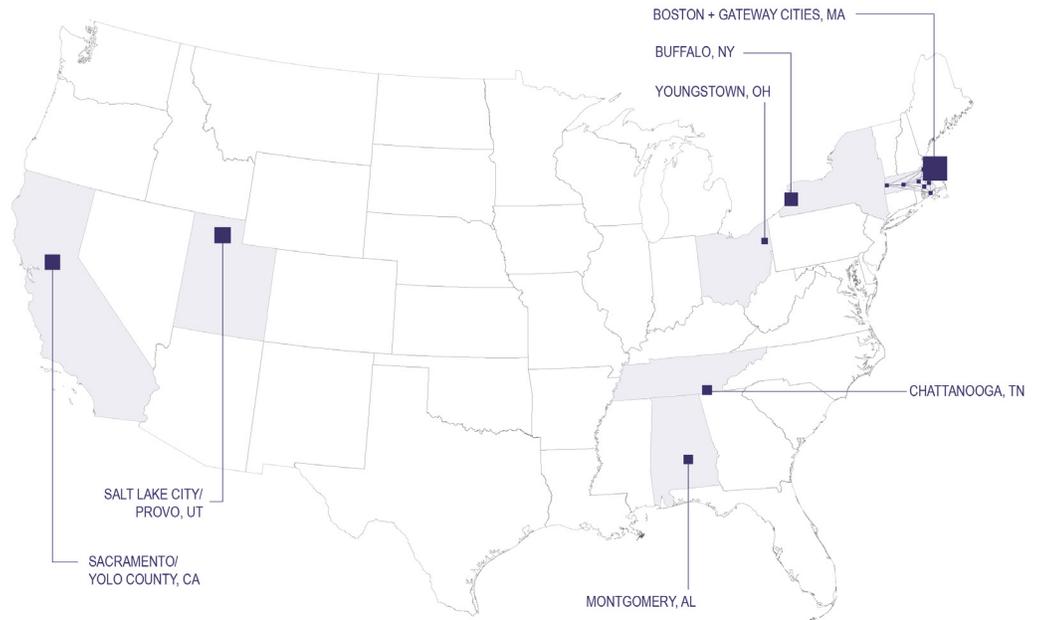
Today, the city’s economy is based on the service industry, with 60% of Poughkeepsie residents working within the municipality. The median household income is \$39,482 a year, and despite a low unemployment rate of less than 4%, one in four households in the city lives in poverty. The disparities are evident when compared to Dutchess County, where the median household income fluctuates around \$72,000, and only



one in ten households lives in poverty. Poughkeepsie maintains its diverse population, with 39% White, 34% Black or African American, 20% Hispanic or Latino and 1% Asian, and includes the largest population of Oaxacans outside of Oaxaca, Mexico. In the surrounding Town of Poughkeepsie, however, the population is predominantly White (63%) and Black or African American (38%), with the Hispanic and Asian populations making up an additional 5% each.

Regionally, the Hudson Valley population has been growing steadily, gaining primarily 18-34 year old Black and Hispanic residents of lower income. Unique in their natural, political, and economic geography, the Valley and the City offer an otherwise familiar narrative, currently unfolding in many American cities and regions.

AMERICAN CITIES
AND REGIONAL CONTEXT



The American City is complex and in many ways undefined. References to the “urban grid” or the “urban suburb” and a host of images of skyscrapers, highways, never-ending repeating urban fabric, or grand public parks may come to mind. The studio will collectively research, conceptualize and design for new or reinterpreted images for cities and their regions.

Important to the studio’s discussion are unique relationships amongst American cities as well as relationships between individual cities and their own greater regional contexts. We will be working primarily in our home New York metropolitan context, with the city of Poughkeepsie as our primary focus, and secondary regional sites of interest selected for each group’s urban program and site strategies, and their architecture, urban spaces, and landscape proposals. Given the studio’s agenda to better understand regional relationships between and within cities’ cores and regions, and to leverage those relationships for long-term growth and development of a competitive advantage, we will start the semester with a comprehensive investigation of other American cities and regions using comparative case studies in Sacramento River Valley/ the city of Sacramento and Yolo county, CA; Salt Lake Valley/ the metropolis of Salt Lake City and Provo, UT; Alabama River Valley/ the city of Montgomery, AL; Tennessee River Valley/ the city of Chattanooga, TN; the Mahoning River Valley/ the city of Youngstown, OH; Niagara River Valley and Lake Erie/ the cities of Buffalo and Niagara Falls, NY and Canada; and Massachusetts Bay, the metropolitan area of Boston and the Gateway Cities, MA.

The studio has been designed to support the premise that the practice of architecture and urban design is interdisciplinary and is the result of a kinetic relationship between design and other multi-scalar factors affecting our total living environment, from community concerns to infrastructural planning, public policy and economics. Throughout the semester and with an ongoing non-linear process of simultaneous research and design, the studio will examine the influences exerted by a wide range of factors and multiplicity of views and the impacts that these have on the making of urban design proposals for an American city.

THE PRACTICE OF URBAN DESIGN

READING:

Robert A. Beauregard, *From Place to Site: Negotiating Narrative Complexity*, in *Site Matters : design concepts, histories, and strategies*, ed. Carol J. Burns and Andrea Kahn (New York : Routledge, 2005)

"All sites exist first as places. Before places become objects of urban planning and design, they exist in personal experience, hearsay, and collective memories. Standing between planners and designers and the sites on which they hope to act are socially embedded narratives. And, while these place narratives can be ignored, they cannot be wholly erased. Places are never empty."

Robert A. Beauregard, *From Place to Site: Negotiating Narrative Complexity*, in *Site Matters*, ed. Carol J. Burns and Andrea Kahn

The studio takes on the provocation that urban designers can and should bring into their process and practice a broader scope of scales, activities, contexts, and voices that together form and inform urban environments. As professionals and academics we bring with us an assumption of knowledge as well as an embedded privilege, often imposing a point of view informed by literature and experience but lacking a thorough understanding of local social assets, ingrained challenges, and cultural constructs. The studio does not establish a relationship with a specific entity or 'client', but instead strives to build multiple lasting partnerships and develop a diverse and broad understanding of place. This understanding is a skill, responsibility, and a necessary 'state of the art' for the study and practice of urban design to produce the cities and environments that are needed and deserved.

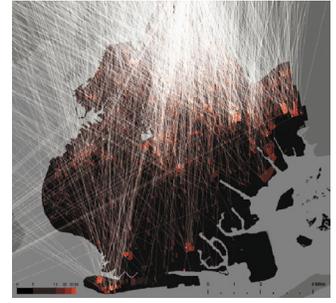
Urban life is full of overlapping qualities. These can be physical, perceptual, sensorial, textural, emotional, phenomenal, temporal, etc. Each quality reinforces the city's capacity to accommodate heterogeneous energy within an ever-changing matrix of passions and desires. These wills are often tracked through historical or real-time data but their shape-shifting nature makes us question our choice of descriptive media.

Such influences cannot be completely captured in the form of a single drawing or cascade of diagrams, as there is often an extra subtext to the context. It is in this flux of many different systems that we begin to understand the complexities of urban life. Fortunately, the question of media is not a difficult one, as our culture becomes more fluent in the languages of moving imagery. The challenge is to couple this ambition with clear narrative and technique.

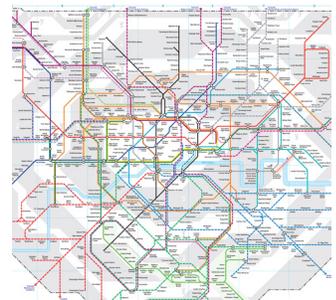
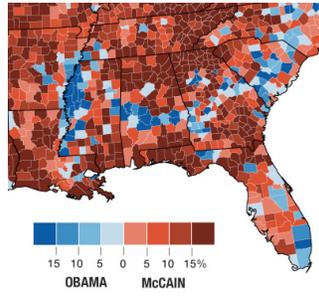
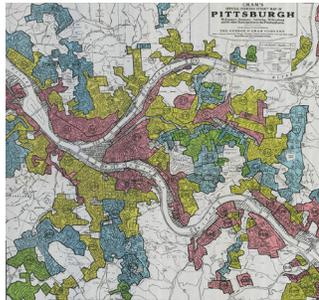
This studio attempts to catalyze ideas through a series of filmic maneuvers. These include inventive combinations of video footage, video/photo montage and animation, mapping/diagramming/dynamic modeling, spatial drawings and illustrations, voiceover, sound overlays, and more. This allows for an opportunity to use moving images to transform the understanding of place and experience into one that also investigates the strange, the weird, the extraordinary, the surreal, and the imaginary of design.

1. WHAT IS A REGION?

TEAM Individual
SITE Home Region
DELIVERABLE 11"x17" Drawing/Collage
DATE THURS. SEPT 8th



top left Yangtze River
top center Western United States Drawn According to Watersheds
top right Million Dollar Block Project
bottom left Redlining in Pittsburgh
bottom center Votes by U.S. Census Block
bottom right London Underground System



PROMPT

What is a Region? What is your region?

READING:

Regional Plan Association 1920's plan
<http://library.rpa.org/pdf/RPA-Shaping-the-Region.pdf>

McHarg, Ian, *Design with Nature* (Garden City, N.Y., Published for the American Museum of Natural History, Natural History Press, 1969)

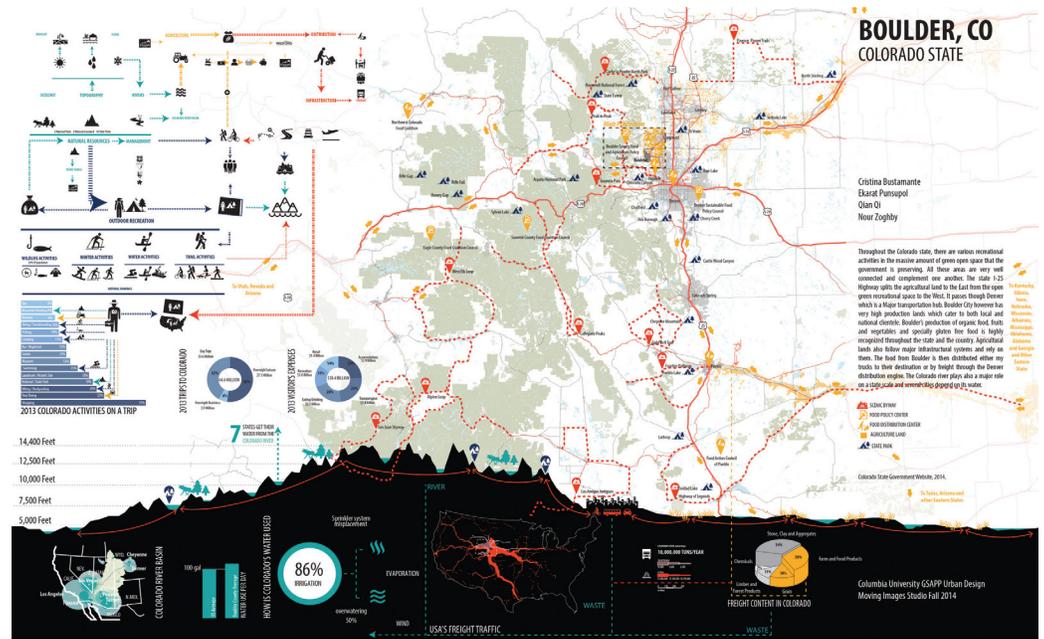
The definition of a "region" is an ideological construct. Historically defined in geographic and biophysical terms, the region was considered to be a manifestation of stable systems, bounded territories, and unified operations, all enabling discreet, large-scale interventions. However, the concept has changed. Thinkers such as Patrick Geddes introduced social and ecological categories into the regionalist point of view, the Regional Plan Association (in the 1920s) linked engineering and technology to regional thinking, and years later Ian McHarg introduced disaggregated layers of social, economic and cultural matters into the mapping of regions. Over time, the term has been recognized not as a singular designation of territory but as a more complex negotiation among disparate factors and actors.

The implications of this reframing of the region are substantial. Following Foucault (among others), some observers have reframed the region as a biopolitical problem, examining how political power takes life, in all its variety, as the privileged object of management and control. For Urban Design this means that infrastructures, materials, government(s), funders, policies, organizations, businesses and especially residents are necessarily drawn into what amounts to a struggle to define a region. This new region, no longer singular, is an uneven assemblage of parts and systems, a tense plurality of apparatuses, that are contingently, unevenly, temporally and spatially connected.

On a single sheet of 11x17 paper, draw / sketch / collage / assemble a representation of the region you call home. Consider a scale or a frame of reference you have not represented before. When responding to the question 'where are you from?' we often think of people, culture, food, landmarks or other significant places. What are the regional spatial manifestations of those? How can they help you define a territory that challenges political boundaries and reads a different system as an organizing mechanism?

2. AMERICAN REGIONS, CITIES, AND SYSTEMS

TEAM 14 Groups of 4
 SITE 7 American Cities and Regions,
 4 Systems
 DURATION 2 weeks
 DELIVERABLE 4 +1 Boards
 22"x34" Boards (template by TA)
 1 Page Summary (250-500 words)
 DATE ASSIGNED THURS. SEPT 8th
 REVIEW DATE THURS. SEPT 22nd



Cristina Bustamante, Ekarat Punsupol,
 Qian Qi, Nour Zoughby, Fall 2014

PROMPT

Cities are not autonomous. They rely on networks of interconnected systems: infrastructural, economic, environmental, political, social, and many others. The complexity of these networks is tied to hierarchies of historical and ongoing decisions made across geographies and scales. Urbanization, in other words, is shaped by systems and actors in an evolving process of chance.

CITIES AND REGIONS

- Sacramento River and American River Valley, Sacramento, CA
- Salt Lake Valley, Salt Lake City and Provo, UT
- Alabama River Valley, Montgomery, AL
- Tennessee River Valley, Chattanooga, TN
- Mahoning River Valley, Youngstown, OH
- Niagara River and Lake Erie, Buffalo + Niagara Falls, NY
- Massachusetts Bay, Boston + Gateway Cities, MA

In this assignment, you will examine particular American cities and regions whose functioning is tied to their natural or man-made boundaries and conditions. Each of these territories will be analyzed through selected and assigned system categories which enable the region to operate and change. How do urban and regional systems interact, overlap, and co-produce spatial and social conditions? The cities selected for this assignment are of different sizes, and they perform very different roles in their respective regions. You will decipher these roles and study how each system operates within the city, and how the relationships among these systems inform exchanges between cities, their regions, and their inhabitants. Your research should not merely document the city and region but instead enable you to rethink and remap the systems at work.

Each research team will be assigned a city and region from the list below (each city will be investigated by two teams). Teams will be assigned two research systems and will then select two additional systems to investigate. When choosing the additional systems, consider how the systems intertwine to produce a narrative about the place in question. All of these urban and regional systems are to be researched, questioned, and delineated as to how they inform systematic, programmatic, spatial, and narrative relationships to justice and place under varied conditions.

Using four boards, one for each distinct scale of investigation, you will communicate how these systems operate in space and time and what impact they have on each other, on the city, and on its surroundings. Each team will construct one additional board to conceptually represent the team's urban and regional narrative as constructed through the different systems analyzed, and to articulate the team's narrative for the identified geographies of justice (or injustice) in the context. Revisit the first "What is a Region"

workshop as a means to question and discover how assumptions, relationships, rules, adjacencies, and scales can define a place. Finally, each team will provide a one-page written summary of the five boards. The summaries are to articulate not only positive or negative data, delineation, and narrative, but the potential starting points for design agency and operations. What are the embedded capacities or latent resources for the design and definition of place and justice?

READING:

Edward R. Tufte, *Envisioning Information*
(Cheshire, Conn.: Graphic Press, c1990)

The collective work on this assignment will create an introduction to American cities and their regions, and provide a lens for drawing comparisons to the New York metropolitan region and the Hudson River Valley. This body of research will serve the entire studio as a reference library for understanding key urban systems and infrastructures across varied scales and landscapes; a collective case study catalogue and a point of entry for the studio's ongoing questioning of spatial justice and its impact on people, cities, and regions.

An example: where does the garbage go? A city truck picks up garbage from your front door, at least once a week, bringing it to a landfill that, in the case of New York City's five boroughs, means thousands of tons per year moved 500 miles away. What does the map of garbage disposal look like for that city? What routes are taken? Who has decided on this particular method of disposal? Who is most affected by these decisions, which neighborhoods suffer the impacts of truck traffic or noxious odors from landfills? What other means have been disregarded? Is this a long term arrangement? Does this involve crossing state boundaries? Does this landfill, and the roads to it, become part of the region in which that city is located? How does this system of disposal relate to other systems of management of the city? And what of the garbage itself: is it "clean," is it processed – where? – inspected and certified, by whom? More broadly, a map of this garbage system is likely to be different from a watershed map or an income map. How does recycling, in its many forms and techniques, alter the map, the actors or the region? How do we speak of a region except as an elastic set of infrastructures, operations, and activities which sometimes overlap, and other times do not?

RESEARCH TOPICS		
1	AGRICULTURE & FOOD	Production & Processing, Distribution, Retail, Green Markets, Food Deserts, Urban Farming, Diet, Nutrition Assistance Programs, Culinary Arts
2	WATER	Watershed(s), Potable Water Supply, Sewage System, Storm Water Management, Recreational Use, Water-Based Transportation, Water Quality, Access
3	WASTE	Household Waste, Commercial Waste, Wastewater, Recycling, Landfill, Brownfields, Waste Transfer Stations, Underutilized Resources
4	ENVIRONMENT & ECOLOGY	Topography, Geology, Natural Features, Habitats, Ecologies/Ecological Systems, Air Quality, Heat Island Effect, Climate Resilience
5	OPEN SPACE & RECREATION	Parks and Playgrounds, Exercise, Game fields, Little Leagues, Informal/Micro Recreation, Physical Education, Private Clubs, Beaches, Schoolyards, Amusement Parks
6	EDUCATION	Higher Education, Primary And Secondary School Systems, Private and Public Education, After School Programs and Spaces, Adult Learning, Special Education, Informal Education
7	TRANSPORTATION	Public Transit Systems, Streets and Sidewalks, Rail and Highways, Air Travel, On-demand Car Services, Ferries and Water Taxis, Bicycling Infrastructure, Bike and Car Share Systems
8	PUBLIC SAFETY	Public Space, Police and Community Interaction, Crime Rates, Surveillance Cameras, Defensible Space, "Natural Surveillance", Broken Windows theory, Prison and Justice Systems

**RESEARCH TOPICS
(CONTINUED)**

9	REAL ESTATE & URBAN DEVELOPMENT	Land Use Policies, Property Values, Urban Development Patterns, Building Typologies, Architecture, Open Spaces, Waterfronts, Growing vs. Shrinking, Development Incentives
10	ENERGY	Production, Sources, Distribution, Access, Renewable Resources, Pollution, Waste, Efficiency, Dependence, Policies and Incentives
11	ECONOMY & FINANCE	Jobs, Equity, Income, Growing vs. Shrinking, Local Businesses, Economic Sectors, Dependence vs. Independence, Federal Assistance, City Budget, Economic Development Incentives
12	PRODUCTION & MANUFACTURING	Industrial Zones and Landscapes, Products, Processes, Jobs, Distribution, Storage, Raw Materials, Lifecycle, Industrial Waste, Brownfields
13	TECHNOLOGY & INNOVATION	Health Invention, Medical Research & Experimentation, Data Management, Tech Companies, Big Data, Incubators and Accelerators, Tech Investment
14	POPULATION & DEMOGRAPHICS	Age, Race and Ethnicity, Household Size and Income Mental and Physical Health, Access to Services, Immigration Trends and Policies, Social Services
15	HOUSING	Typologies, Costs, Equity, Ownership vs. Renting vs. Shared, Density, Renovations vs Reuse vs New Construction, Public and Affordable Housing, Homelessness, Shelters
16	POLICY & POLITICS	Mayoral Initiatives, City Council, Local Vs. State Positions, Privacy, Political Structure, Land Use Regulation, Economic Development Incentives, Housing Policy, Federal Aid
17	CULTURE & RELIGION	Cultural and Religious Institutions, Personal and Community Identities, Histories and Narratives, Cultural or Religious Industries and Economies, Delineated Territories

**SACRAMENTO RIVER AND AMERICAN RIVER VALLEYS
SACRAMENTO, CA**

CITY

Land Area 100.1 sq mi (259 sq km)

Founded 1850

POPULATION

City 495,480

Metropolitan Area 2,149,127

POPULATION DENSITY

4,700/sq mi (1,800/km2)

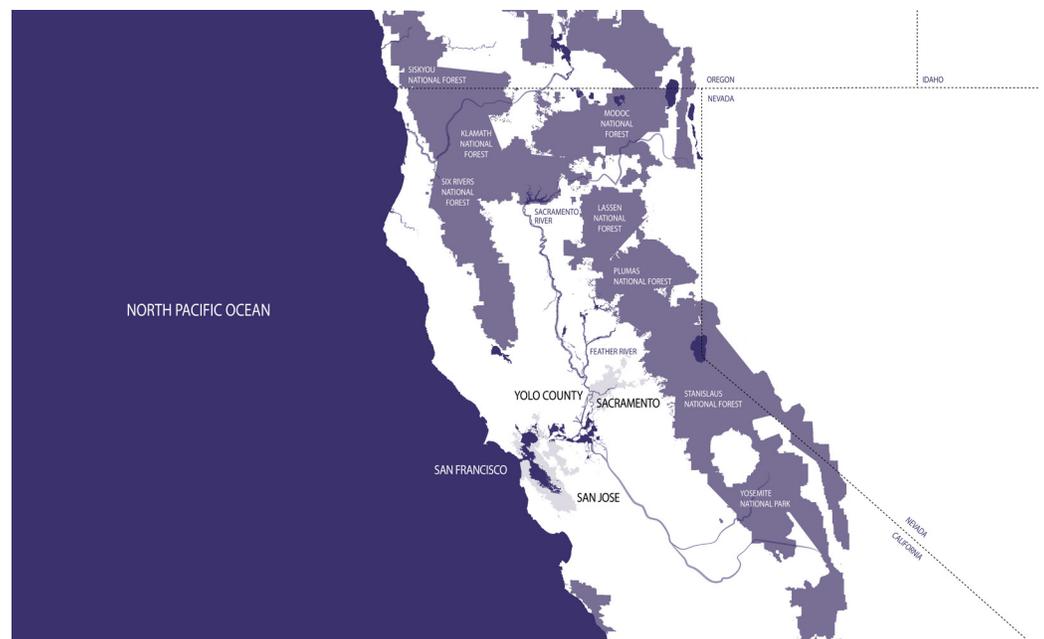
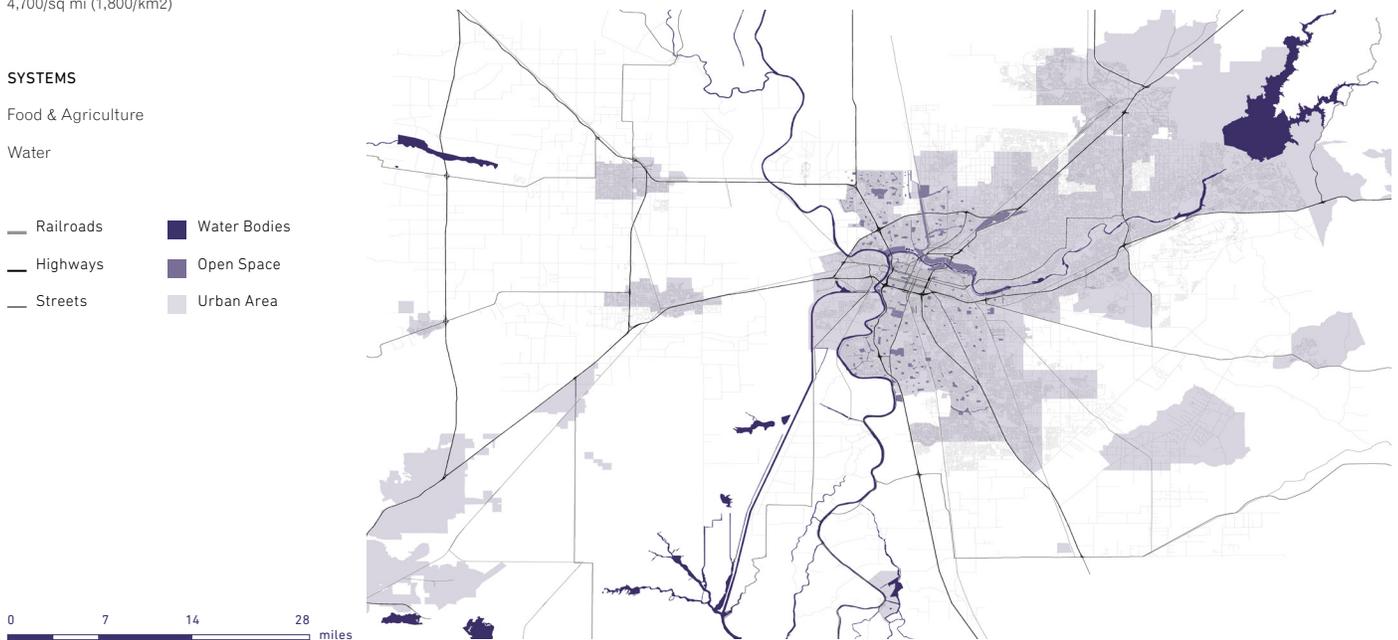
SYSTEMS

Food & Agriculture

Water

- Railroads
- Highways
- Streets
- Water Bodies
- Open Space
- Urban Area

Once known as the 'most diverse city' in America, the city of Sacramento sits at the confluence of the Sacramento and American Rivers. Notwithstanding the ongoing Californian drought, the city has been historically vulnerable to floods: the county of Yolo, an area abound in agriculture and home to a thriving food and agriculture industry, is permanently reserved as a vast flood control basin. However, in the face of climate change-related challenges, the outdated infrastructure that will heavily impact the most vulnerable populations residing in the western part of the city, is under scrutiny. As part of a regional strategy, Sacramento is examining new water technologies, as well as progressive management techniques to address and provide alternatives for its imminent infrastructural failures. The Greater Sacramento Economic Council plays a crucial role in this process, as it resists 'importing' of new industries and develops new, comprehensive plans for the utilization of existing assets in the metropolitan area.



SALT LAKE VALLEY
SALT LAKE CITY & PROVO, UT

CITY

Land Area 109.1 sq mi (282.5 sq km)

Founded 1847

POPULATION

City 186,440

Metropolitan Area 1,153,340

POPULATION DENSITY

1,666/sq mi (643.3/ sq km)

SYSTEMS

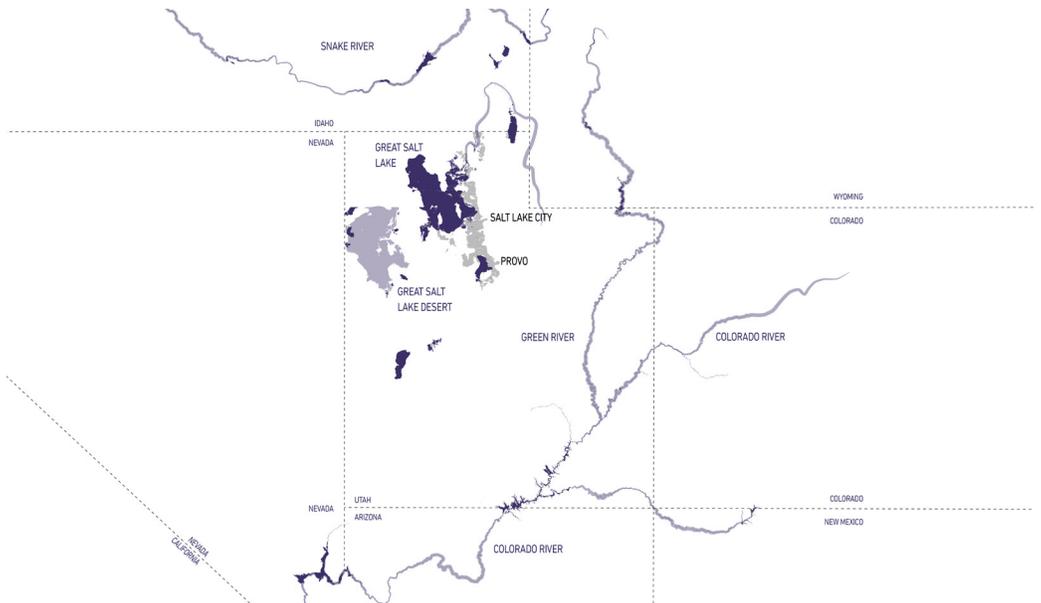
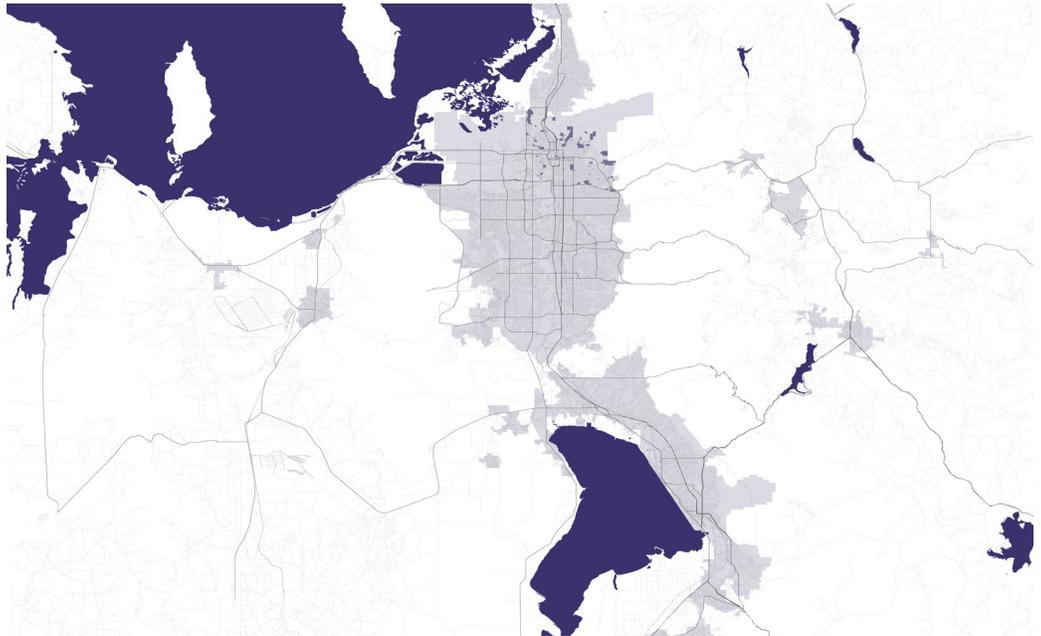
Environment and Ecology

Recreation

- Railroads
- Highways
- Streets
- Water Bodies
- Open Space
- Urban Area



At the core of the Salt Lake-Provo metropolitan area, spanning a 120-mile segment of the Wasatch Mountain Range at an elevation of 4,327 feet lies Salt Lake City. The city was founded by followers of the Mormon religion and continues to be a center for Mormon culture and influence. The host of the 2002 Winter Olympic Games maintains a strong service-based economy and a steadily growing tourism industry that takes advantage of the proximity to the scenic beauties of the Great Salt Lake and Desert, as well as the Grandview Peak. The numerous natural assets have been transformative for the regional economy, thus encouraging systematic efforts for their conservation. Salt Lake City is at the forefront of this venture with the adoption of the 'Sustainable Code Revision', a ground-breaking initiative to incorporate sustainability provisions into zoning and subdivision ordinances. At the same time, the city is intensively working on a larger vision of riparian corridor restoration, studying closely the potential of remediation in the inner-city portions while a regional Watershed Preservation plan is being discussed.



ALABAMA RIVER VALLEY

MONTGOMERY, AL

CITY

Land Area 155.38 sq mi (402.43 sq km)

Founded 1819

POPULATION

City 201,332

Metropolitan Area 374,536

POPULATION DENSITY

1,300/sq mi (510/sq km)

SYSTEMS

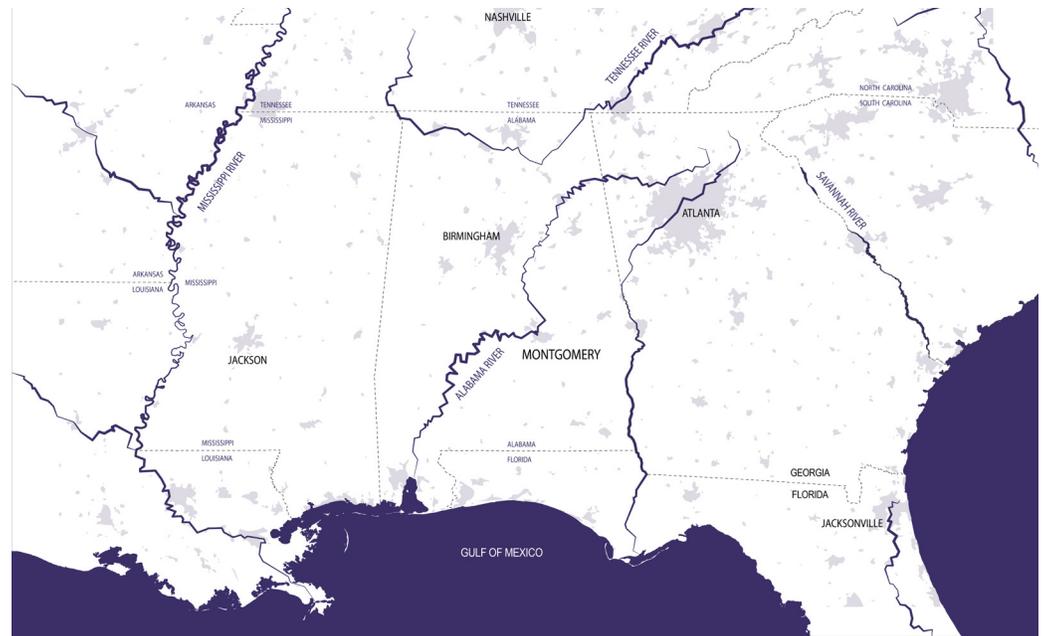
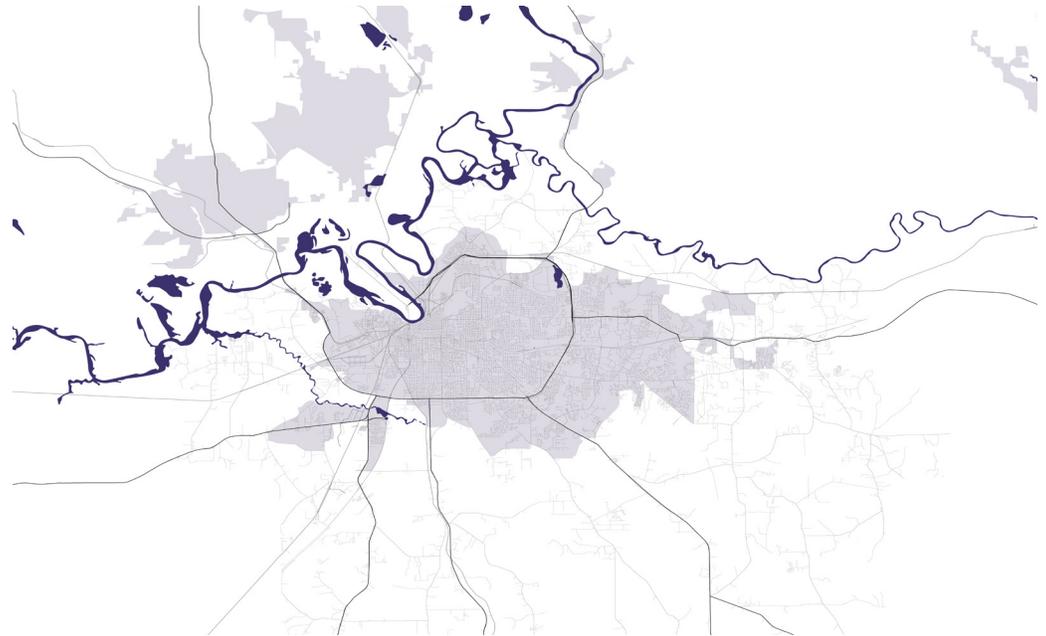
Agriculture and Food

Transportation

- Railroads
- Highways
- Streets
- Water Bodies
- Open Space
- Urban Area



Montgomery, the capital of the U.S. state of Alabama, is located on the banks of the Alabama River in the Gulf Coastal Plain. Montgomery's central location in Alabama's Black Belt has long made it a processing hub for commodity crops such as cotton, peanuts, and soybeans. By virtue of its location along the river and extensive rail connections, Montgomery has and continues to be a regional distribution hub for a wide range of industries. Since the late 20th century, it has diversified its economy, attracting employment in sectors such as healthcare, business, government, and manufacturing. The construction of a minor league baseball stadium and a riverfront park were the catalysts for a downtown revitalization project in the city. The city has an important place in American history as one of the bases for the Civil Rights Movement, and issues around race and social justice are major factors in the city's history and development.



**TENNESSEE RIVER VALLEY
CHATTANOOGA, TN**

CITY

Land Area 135.2 sq mi (352.2 sq km)

Founded 1886

POPULATION

Cities 176,588

Metropolitan Area 547,776

POPULATION DENSITY

1,222.5/sq mi (471.9/sq km)

SYSTEMS

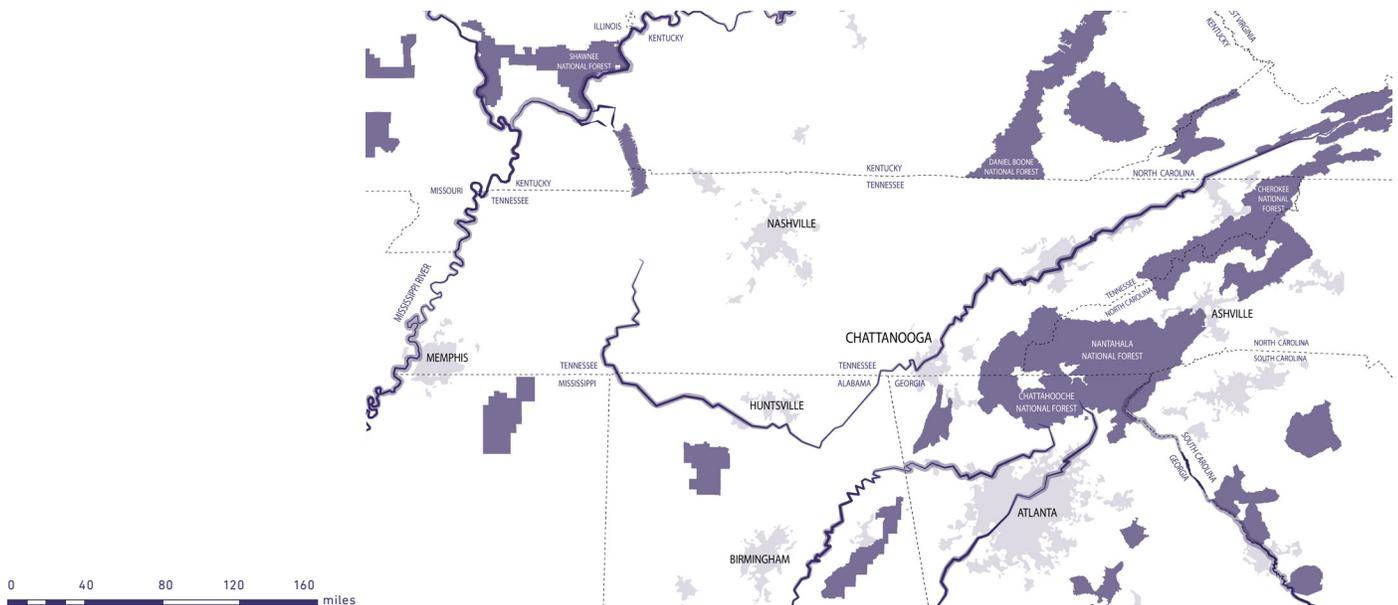
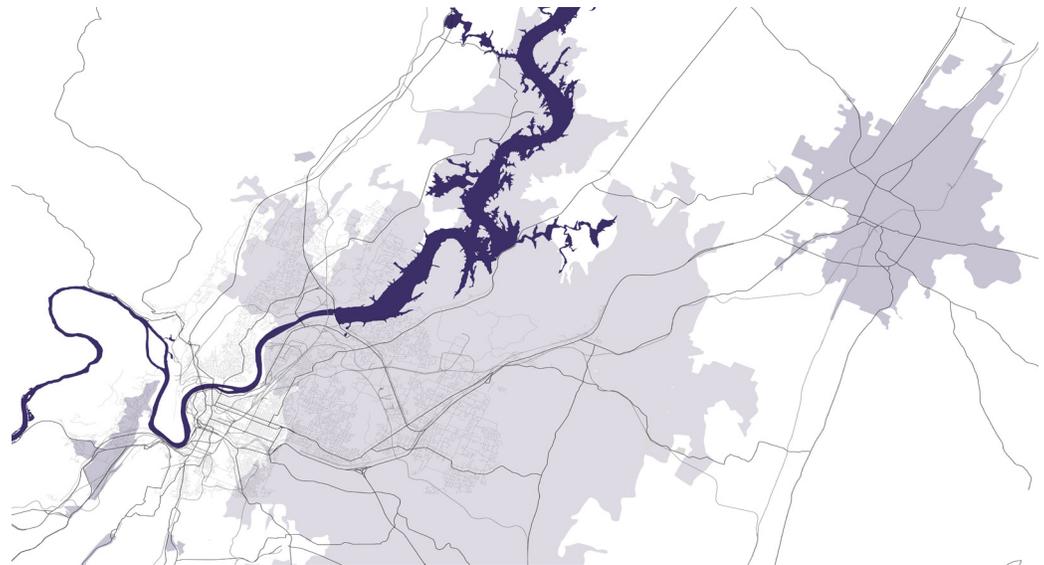
Water

Production and Manufacturing

- Railroads
- Highways
- Streets
- Water Bodies
- Open Space
- Urban Area



Chattanooga is located on the border of Tennessee and Georgia on the banks of the Tennessee river, between the Appalachian Mountains and the Cumberland Plateau. The river is the largest tributary of the Ohio river, and it flows through East Tennessee toward Chattanooga before crossing into Alabama. Chattanooga is the fourth-largest city in the state and sits at the confluence of three interstate highways. Industries that provided the city with jobs also created pollution; in 1969 the federal government had declared Chattanooga's air the filthiest in the country. The decline of industry and the impact of environmental regulation have resulted in cleaner air and water; and now the official nickname for Chattanooga is the Scenic City, which is reinforced by the city's growing national reputation as a haven for numerous outdoor activities. The city faced an economic crisis in the 1980's including deindustrialization and layoffs, however, it is the only city in the United States to lose a proportion of its population in the 1980s and then regain the same proportion in the next two decades. The 120 million dollar riverfront redevelopment plan was instrumental in reviving the city. The recent redevelopment of the city toward creative and technology post-industrial economies is now playing out on both sides of the river.



MAHONING RIVER VALLEY

YOUNGSTOWN, OH

CITY

Land Area 33.9 sq mi (87.8 sq km)

Founded 1796

POPULATION

City 66,982

Metropolitan Area 555,506

POPULATION DENSITY

2,312.9/sq mi (893.0/sq km)

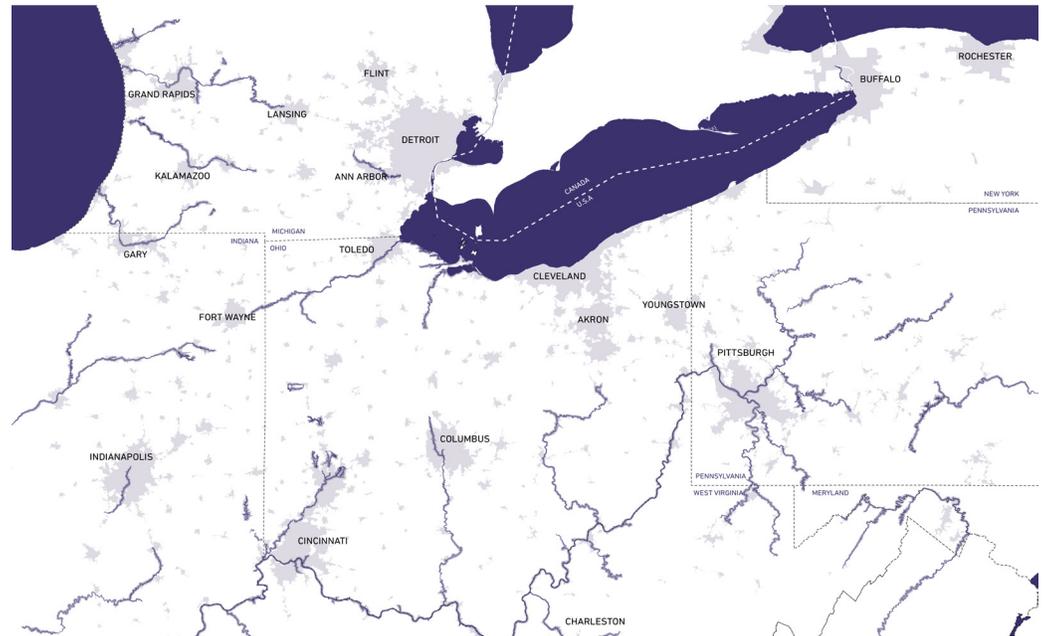
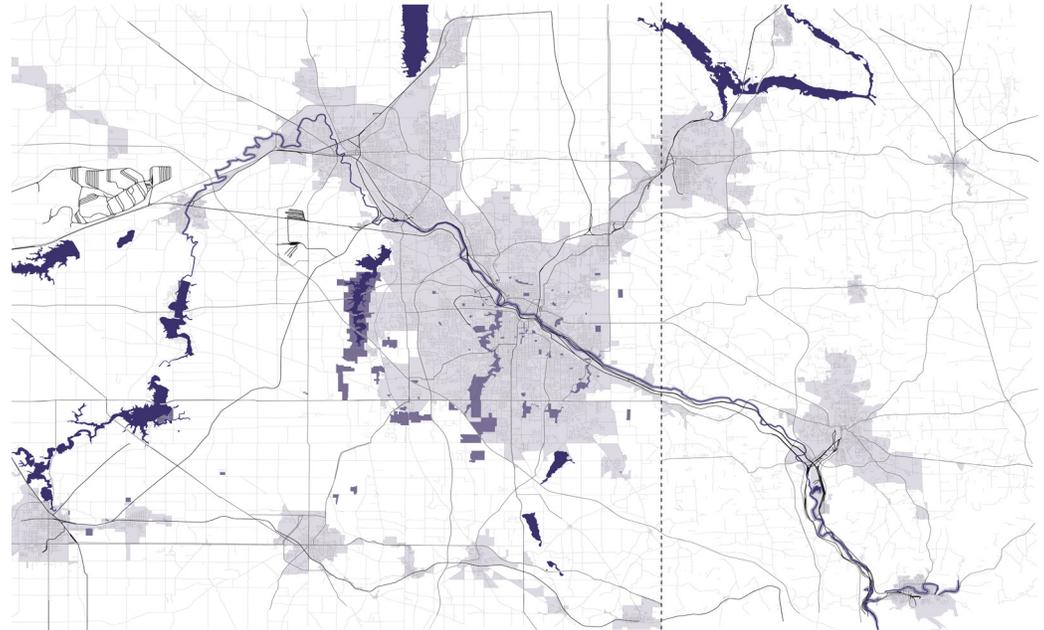
Steel and metalworking operations are still ostensibly present in the city of Youngstown Ohio, yet not at the scale of the Steel Valley's glory days. After the wave of deindustrialization that hit the northeast, the city located on the banks of the Mahoning River, has gradually lost thousands of jobs and half of its population since 1959. Youngstown today has adopted a plan of 'smart shrinkage'. In order to revitalize its downtown and attract new economic opportunities that will alleviate the heavy unemployment, the city has invested in a property code to demolish neighborhoods that face high rates of vacancy: demolition budgets quadrupled in the course of two years, since 2005. Studies to identify the city's and region's assets that will be critical for its growth and development are in constant motion and proposals for reuse of vacant land work in concert with policies to reduce criminal activity and attract investment. The city was featured in one of the narratives in George Packer's *The Unwinding*, highlighting the city's place as a trope in the American urban imaginary.

SYSTEMS

Real Estate and Urban Development

Public Safety

- Railroads
- Highways
- Streets
- Water Bodies
- Open Space
- Urban Area



**NIAGARA RIVER AND LAKE ERIE,
BUFFALO + NIAGARA FALLS , NY
CITY**

Land Area 40.6 sq mi (105.2 sq km)

Founded 1789

POPULATION

City 258,959

Metropolitan Area 1,134,210

POPULATION DENSITY

6,436.2/sq mi (2,568.8/sq km)

SYSTEMS

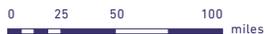
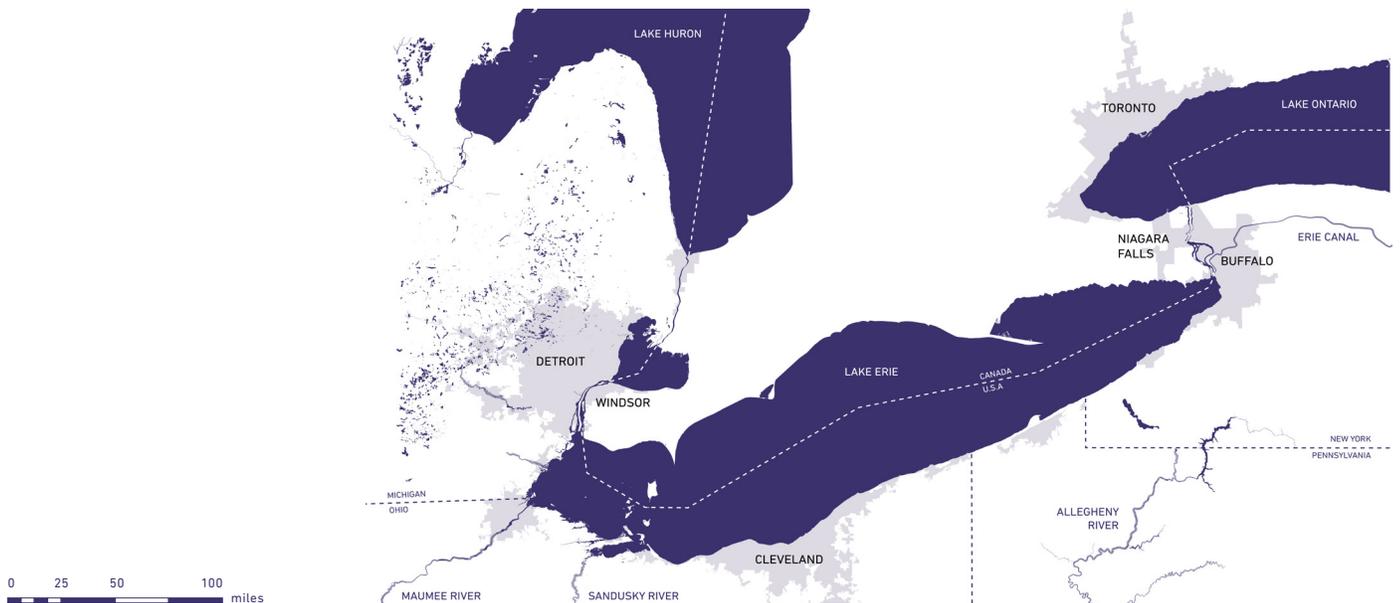
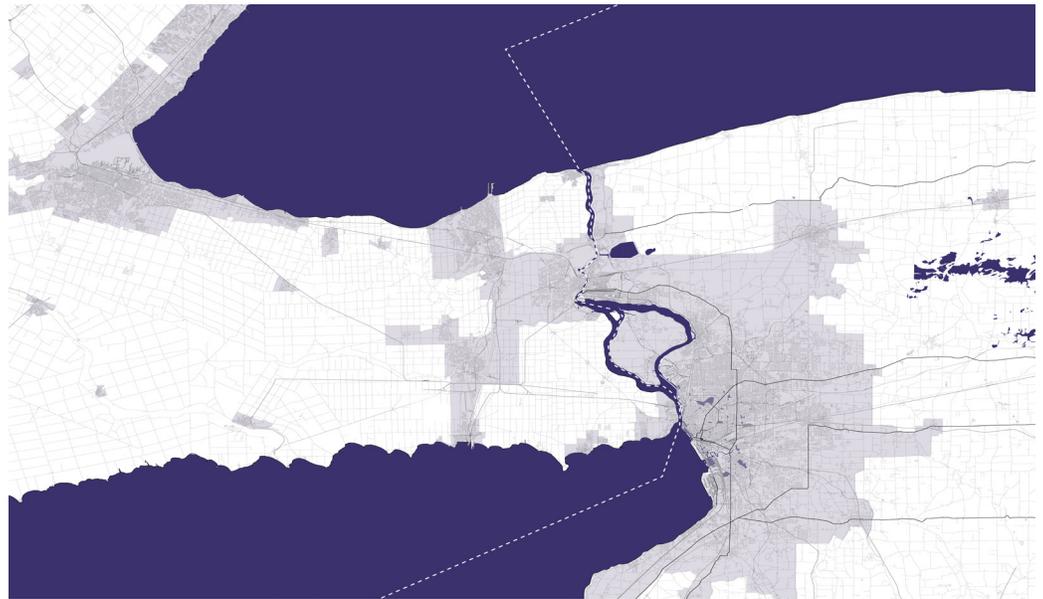
Waste

Energy

- Railroads
- Highways
- Streets
- Water Bodies
- Open Space
- Urban Area



Located at the head of the Niagara River on the border with neighboring Canada, Buffalo is the seat of the Erie county and the state's second most populous city. The completion of the Erie canal in 1825 attracted a surge of population and commerce to Buffalo, which remained prosperous until the opening of the St. Lawrence Seaway in 1957, which, coupled with deindustrialization, lead to the deterioration of the city's economy along with other rust-belt cities. After the economic downturn, Buffalo's economy has transitioned to sectors like financial services, technology, biomedical technology, and education. The city of Niagara Falls, located in the Buffalo - Niagara Falls Metropolitan Statistical Area, is the seat of the Niagara county, across the national border from Niagara Falls, Ontario, Canada, and has long since been a source of inexpensive hydroelectric power. The city, like other rust belt cities in the region, was affected by the mid-century economic downturn that led to a loss of population. The Niagara State Park and the city's downtown closest to the Niagara Falls continues to attract tourism which along with the supply of energy is a major source of income for the city.



**MASSACHUSETTS BAY,
BOSTON + GATEWAY CITIES, MA
CITY**

Land Area 48.42 sq mi (125.41 sq km)

Founded 1630

POPULATION

City 4,180,000

Metropolitan Area 4,628,910

POPULATION DENSITY

13,841/sq mi (5,344/sq km)

SYSTEMS

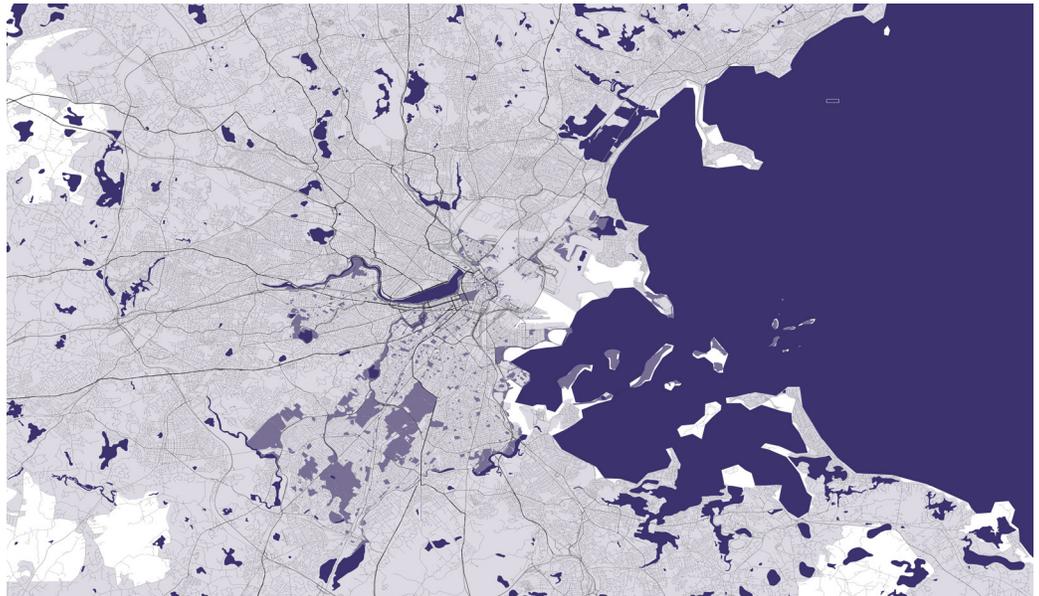
Education

Policy and Politics

- Railroads
- Highways
- Streets
- Water Bodies
- Open Space
- Urban Area



One of America's oldest continuously occupied cities, Boston is not only an architectural and urban palimpsest but also one of the largest economies in the United States. Attracting more than 350,000 students annually, the major educational institutions in its metropolitan area exert a significant power, shaping the city's economy and evolution. This power expands well beyond Boston itself, to its region, if not the entire New York-Boston megalopolis. However, the distinct ability to attract innovators and entrepreneurs along with a 'place to live' is not accidental: Boston is at the helm of a comprehensive regional network, which identifies goals and objectives to address a wide range of challenges, from economic potential to statewide ecological restoration. Known as the Gateway Cities, small to mid-size urban centers in Massachusetts that have faced a common past of post-industrial hardships, consider regional collaboration the key to unlocking their individual economic potentials and strengthening a cohesive agenda for the Commonwealth of Massachusetts as a whole.



3. MILE BY MILE

TEAM Individual

SITE Poughkeepsie, NY

DELIVERABLES 1 Quicktime.mov video

(~1280x720px) 30 sec

silent video presentation of slides/footage/
animated mapping. (No voiceover, but audio
recorded from the site is allowed)

ASSIGNED DATE THURS. SEPT 22nd

REVIEW DATE MON. SEPT 26th



PROMPT

You have been assigned a grid square located in or around the city of Poughkeepsie. These will function as points of departure for your personal investigation. Each student will explore, document, analyze, and represent the assigned locale in no more than 30 seconds of digital moving image. The goal is to reveal latent as well as apparent elements which, in this case, temporally suggest a site. This will entail your representation of found fabrics, landscapes, spaces, or people, as well as organizations, institutions, policies, or resources. This constructed narrative can generate new literal and conceptual boundaries that challenge the familiar distinctions between natural and man-made, urban and suburban, center and periphery, or between public and private experience.

READING:

Brian McGrath and Jean Gardner.

Cinematics: Architectural Drawing Today,
Wiley, 2007. pp36-61.

Use animated images, massings, and drawings over time to explore the temporal and dynamic nature of the spaces you observe, and try to communicate and postulate on how these affect the physical environment. With the Cinematics reading as a guide, utilize affection and/or perception shots, to help calibrate your documentation and convey your experience. All sound must be acquired through site research for this investigation. No words, spoken or written are to be made by the designer, nor shall overlaid musical soundtracks be added to this video. You may utilize numbers and graphics, both found and created, to help illustrate metrics regarding these environs.

The thirty second digital moving image will be your opportunity to gather and communicate information in a deliberate and innovative way using digital media, and to initiate arguments for your perspective on and reaction to place. You are especially encouraged to consider the format of this digital canvas to allow for full vs. cropped footage, keymaps or careful overlays of data running concurrently. Consider using a range of analytical media, including photography and video, as well as Geographic Information Systems, 3D modeling/animation/dynamics, After Effects, or other digital analysis and representation tools.

4: DESIGN INVESTIGATIONS

TEAM 14 groups of 4

SITE Poughkeepsie and Hudson Valley

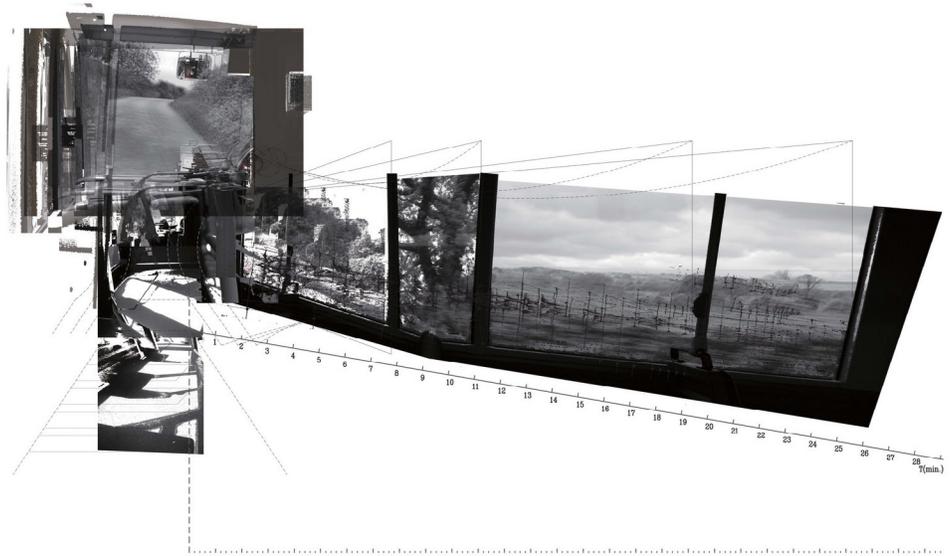
TIMING 2 weeks

DELIVERABLES 5 Minute Presentation
(slideshow or video) Including Interaction
Proposal (see Design Interaction
assignment)

1 Page Summary (250-500 words)

DATE ASSIGNED FRI SEPT 23rd

PINUP DATE MON. OCT 10th



Case No. 00-17163 (Fragment),
Diller+Scofidio

PROMPT

What is site?

To frame an answer, each team will seek cues, signs, and evidence that inform a particular understandings of the term site. Through observation, mapping, measurement, analysis, and interpretation of key urban and regional elements and relationships you will identify and construct your site. This investigation may take place at the scale of the neighborhood, the city, the county, the metropolis, or the region, and will ask not only how they function today but how they might change in the future. As we consider the problem of site, we may also redefine the concept and role of the region.

Building upon your individual Mile by Mile interpretations, as well as the cities, regions, and systems you studied in the previous assignment, you will construct a shared reading of the city as site, and develop a regional framework based on this reading.

Exploring the history of natural and man-made development in the Hudson River Valley and documenting current conditions and plans for the future, you will establish a preliminary approach to developing your own particular definition of 'region'. You will document, research, and distill the physical and non-physical conditions of the city and its environs, and identify additional locations that are connected to the city through the systems you have defined as critical to the region. Consider the boundaries and territories (political, environmental, demographic, cultural, economic or others) at work in your defined region as well as in Poughkeepsie, and how they inform the network of larger regional relationships.

In a slideshow or video format, you will present a draft narrative that clearly outlines your reading of the city and definition of region through the lens of justice - spatial, social, environmental, or otherwise - and demonstrate how this narrative can guide you toward design thinking.

4.5: DESIGN INTERACTION

TEAM 14 Groups of 4

SITE Poughkeepsie and Region

DELIVERABLES Case Study Report,
Site Intervention / Workshop + 30 sec.
Moving Image Documentation

ASSIGNED DATE MON. OCT 3rd

CASE STUDY THUS. OCT 6th

PROPOSAL MON. OCT 10th

SITE WORKSHOP SAT. OCT 15th

MOVING IMAGE MON. OCT 17th

* Notice this task overlaps with the
Design Investigation task

Site Interaction, UD Students

Fall 2014, 2015



PROMPT

Designing the way in which urban change is introduced and integrated into behaviour and perception of place can be as important as the design of any physical manifestation. In this exercise, you will design, plan, and implement a transformative, temporary intervention in one of two pre-selected sites.

Building on your reading of Poughkeepsie and the region, you will design this intervention as an event, a built hypothesis. Your installation will test and measure your reading of actors and factors, systems and relationships, spaces and potentials in an interactive manner. You will directly engage a specific place, adapting your concepts to lived conditions, and considering your local stakeholders (business owners, local residents, visitors, and organizations).

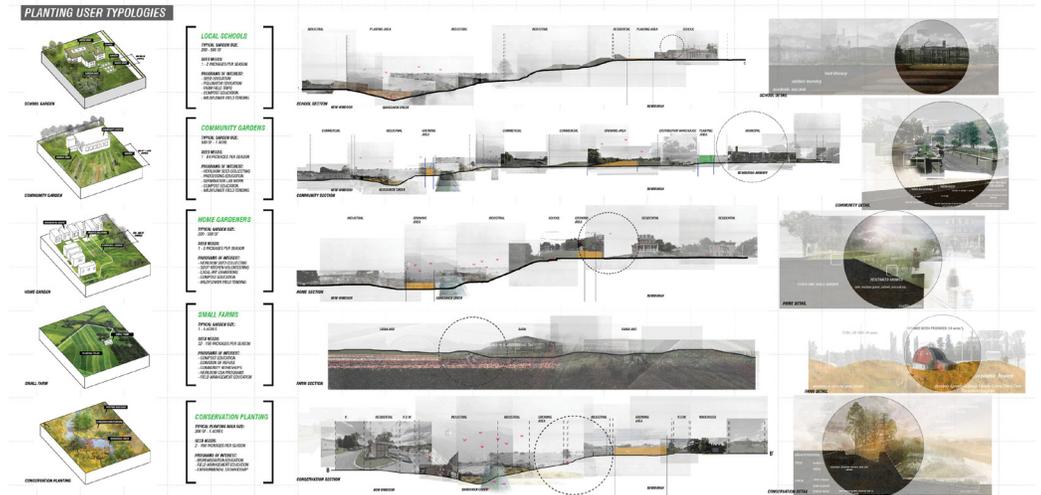
Interventions may include interactions with constructed forms, construction of forms/artwork onsite with onsite volunteers, alteration of access, challenge of typical movement on site, urban performances, games, working with existing or lacking programs, or any other type of relevant installation and activity developed by the group. Most importantly, your installations must be focused on key themes or provocations which your group has developed.

Documentation of the onsite interactions should be conceived as an integral part of the interaction and planned in advance of the event, so that footage and other captured information might be incorporated into future studio deliverables. Consider how evidence of on-site opportunities and challenges might be captured, and how the various key actors and factors are represented. Explore how a moving image might represent the key questions or themes, illustrate the intent of the intervention, capture on-site reactions, and utilize multiple camera angles of concurrent action. Consider this representational process as a thesis experiment, and use the on-site work to evolve the reading and understanding of site.

5. DESIGN ARGUMENT

TEAM 14 Groups of 4
 SITE Poughkeepsie and Hudson Valley
 DELIVERABLES 2-3 Boards 36"x60"
 Moving Image (1:45-2:00 min)
 1 Page Summary (250-500 words)
 MIDTERM REVIEW SAT. OCT 29th

Hannah Beall, Fei Xiong, Mahima
 Pandya, Aminata Seck, Fall 2015



PROMPT

READING:
 Richard Buchanan, *Wicked Problems in Design Thinking*, Design Issues, Vol. 8, No. 2 (Spring, 1992), pp. 5-21, <http://www.jstor.org/stable/1511637>

Mohsen Mostafavi and Gareth Doherty, editors, *Ecological Urbanism* (Baden, Switzerland: Lars Müller, c2010)

Charles Waldheim, ed. *Landscape Urbanism Reader*. (Princeton Architectural Press, 2006).

Reflecting on information and experiences gathered through your research on cities, valleys, regions, systems and on their representation, you will now design a multi-scaled proposal that operates tectonically and in a new regional framework. You will identify or create a territory or site, that is, a particular geography, which aligns with the details, scope, and spaces implicated in your narrative, and change it: add, subtract, revise, replace, adjust, reject, improve, refine. This includes spatial, technological, policy, and programmatic change. The scope and extent of change is your decision. Consider the impact you hope to achieve with these changes, who or what you hope to impact, and to what end.

Identify areas of opportunity for intervention. Investigate the competitive advantages and disadvantages of these sites, and identify key conditions and characteristics that inform your design thinking. Consider interested stakeholders and explore specific dependencies and relationships that implicate your site. Your proposal should combine programmatic and spatial interventions and account for existing and future social change. Projects should operate at multiple scales, multiple phases, and establish connections with local and regional systems. Use various techniques of representation to communicate your proposal, and include existing conditions, mapped and perceived. This is a first step in your overall strategy for the Valley Region.

Throughout the design process, continuously test your assumptions, ideas, and proposals by asking:
 WHO | WHAT | WHEN | WHERE | HOW | WHY

6. DESIGN PROPOSAL

TEAM 14 Groups of 4

SITE Poughkeepsie and Hudson Valley

DELIVERABLES 3-4 Boards 36"x60"

Moving Image (2:00-2:30 min)

Physical Model

1 Page Summary (250-500 words)

PINUP MON. NOV 21st

FINAL REVIEW SAT. DEC 10th



Final Review, Fall 2015

PROMPT

READING:

Richard Buchanan, *Wicked Problems in Design Thinking*, *Design Issues*, Vol. 8, No. 2 (Spring, 1992), pp. 5-21, <http://www.jstor.org/stable/1511637>

Mohsen Mostafavi and Gareth Doherty, editors, *Ecological Urbanism* (Baden, Switzerland: Lars Müller, c2010)

Charles Waldheim, ed. *Landscape Urbanism Reader*. (Princeton Architectural Press, 2006).

As urban designers, we don't often build, plant, fund, or write policy, but we represent. We represent in two ways: we communicate stories about design ideas and we interpret the stories of others. These are intertwined projects made fascinating and tendentious because of ever evolving representation technologies. The creation of what we call moving images or digital narratives is thus central to urban design as an engaged practice. We examine the complexity of a place, its physical and social infrastructure, its people and their associations, and the policies and conventions which shape and respond to action. The stories which grow from all this enable us, and our many partners, to imagine alternate futures. Consider your roles as designers, the tools at your disposal as you design an alternate future. Imagine its form, its operational logic, its tactile and experiential qualities.

Consider the following:

How RESOURCES and EXCHANGES play a role in the project

The COMPETITIVE ADVANTAGES addressed or created by the proposal

The KEY URBAN INFRASTRUCTURAL SYSTEMS engaged to bring about change

MULTIPLE SCALES of intervention, and their effect/impact (scale of object, building, block, neighborhood, city, region etc.)

Key PARTNERS/ ACTORS/ PLAYERS

Identified OPERATIONAL STRATEGIES for achieving this intervention (policy, partnerships, financing, incentives, mechanisms etc)

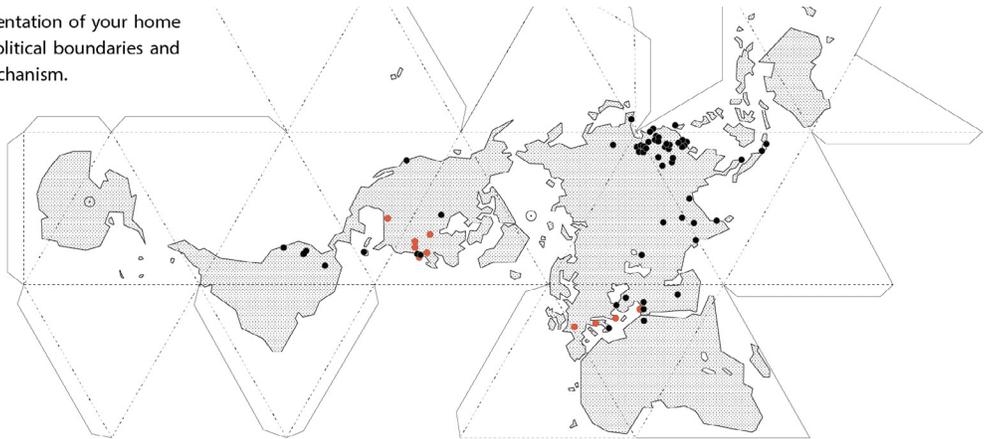
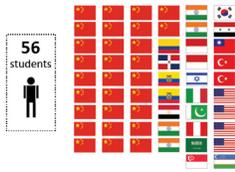
Suggested TIMELINE (or phasing) of implementation for different aspects (immediate, temporary, short term/ long term, pilot project)

RELATIONSHIP of multiple sites

Key METRICS that can be used to evaluate the project's impact

DESIGN AND RESEARCH GROUPS

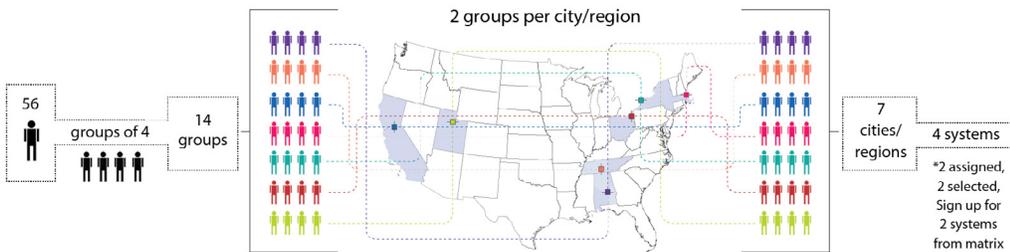
Draw, sketch, collage, or assemble a representation of your home region. Define a territory that challenges political boundaries and reads a different system as an organizing mechanism.



AMERICAN CITIES, REGIONS, AND SYSTEMS

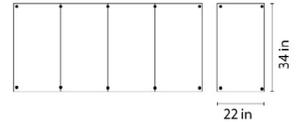
What is America Like?

Each research group [groups of 4] will be assigned a national city and region to investigate through the lens of two assigned and two selected systems. Teams will use the city and this region to explore the different systems comprehensively across multiple scales and synthesize the research, critically questioning how all of these systems combine to influence the city and region.



DELIVERABLES

4 + 1 boards

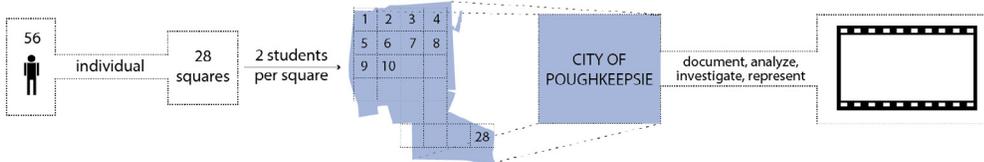


250-500 word description

MILE BY MILE

What defines the city of Poughkeepsie?

You have been assigned a grid square located in or around the city of Poughkeepsie. You will explore, document, analyze and represent the assigned locale in no more than 30 seconds of digital moving image.



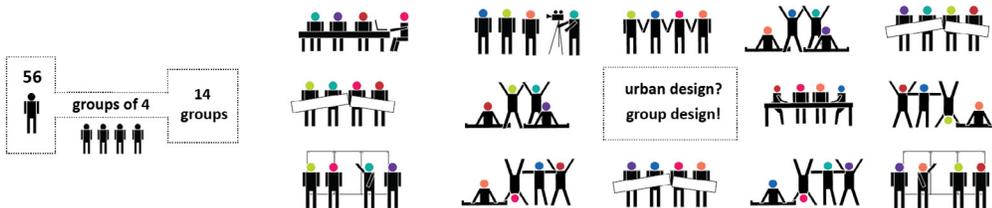
x 56 videos



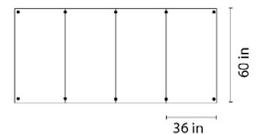
DESIGN INVESTIGATION

Design groups will be composed of 4 students who have studied different cities and regions, and have explored different Mile by Mile squares.

In order to encourage cross-cultural dynamics, team members should come from at least two different countries of origin and speak different first languages. Once the design groups have been formed, group members will work together throughout the semester to develop studio projects.



MULTIPLE MEDIA



WEEK 1	SEPT 08	Th	discussion Introductions and syllabus review, Regions Workshop	Ware Lounge
	SEPT 09	F	boat trip 10:00am - 5:00pm Leaving from pier 66 in Manhattan	
	SEPT 10	Sa	workshop GIS Refresher - sign up!	202 Fayerweather
	SEPT 11	Su	workshop GIS Refresher - sign up!	202 Fayerweather
WEEK 2	SEPT 12	M	desk crits	
	SEPT 15	Th	desk crits	
	SEPT 16	F	guest discussion Spring Semester Introductions and Logistics (1:30-2:30) guest lecture Film Techniques Thatcher Bean, MASS Design Group	Ware Lounge Ware Lounge
WEEK 3	SEPT 19	M	desk crits	
	SEPT 22	Th	review Regions, Cities & Systems	115, Ware Lounge
	SEPT 23	F	guest lecture + movie Hudson Rising Liz McEnaney	Ware Lounge
	SEPT 24	Sa	independent site visit Mile by Mile	
WEEK 4	SEPT 26	M	pin up Mile by Mile moving image desk crits	113, 200S Fay.
	SEPT 29	Th	guest lecture Poughkeepsie Paul Hesse (1:30-3:00pm) desk crits	114
	SEPT 30	F	lecture Spatial Justice Michael Murphy, Justin G. Moore (3:00-5:00pm)	Ware Lounge
	> OCT 01	Sa	site visit 8:30am - 7:00 pm Poughkeepsie	
WEEK 5	OCT 03	M	discussion Defining a Region desk crits	tbd.
	OCT 06	W	discussion Designing Interaction Case Study Presentations desk crits	114
	OCT 07	F	lunchtime movie / Conflict Urbanism panel discussion	
	OCT 08	Sa	independent site visit Installation Prep	
WEEK 6	OCT 10	M	pin up Site Research + Interaction Proposal	Ware Lounge
	OCT 13	Th	desk crits	
	OCT 14	F	workshop Interaction Dry Run	
	> OCT 15	Sa	site interaction + Design Sprint 8:30am - 7:00pm Poughkeepsie	
WEEK 7	OCT 17	W	pin up Site Interaction Documentation desk crits	200S Fay.
	OCT 20	Th	desk crits + Design Sprint	
	OCT 21	F	panel discussion Urban Storytelling with Columbia School of Journalism	114

WEEK 8	OCT 24	M	desk crits	
	OCT 27	Th	desk crits	
	OCT 28	F	no class	
	> OCT 29	Sa	midterm review	113, 114, 115, and hall
WEEK 9	OCT 31	M	desk crits Inter-group Workshop	
	NOV 03	Th	desk crits	
	NOV 04	F	lecture Design Perspectives Pippa Brashear, James Carse (1:30-3:00)	114
WEEK 10	NOV 07	M	no class Academic Holiday	
	NOV 10	Th	desk crits + Design Sprint	
	NOV 11	F	lecture Criminal Justice Don Clinton, Sam Sinyangwe (1:30-3:00)	114
WEEK 11	NOV 14	M	desk crits	
	NOV 17	Th	desk crits + Design Sprint	
	NOV 18	F	guest lecture Implementation Strategies Measuring Impact	114
WEEK 12	NOV 21	M	pin up 1:30-3:30pm	Ware Lounge
			desk crits	
	NOV 24	Th	no class Thanksgiving	
	NOV 25	F	no class Thanksgiving	
WEEK 13	NOV 28	M	desk crits	
	DEC 01	Th	desk crits Mock up boards at full size + Video draft	
	DEC 02	F	workshop Inter-group crits	
WEEK 14	DEC 05	M	desk crits	
	DEC 08	Th	desk crits Dry run	
	DEC 09	F	no class	
	> DEC 10	Sa	final review	113, 114, 115, and hall