

## Resilience through Social Infrastructure

**ROBERT SPROULL**

Auburn University

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**The Peacock Tract in Montgomery, Alabama is one of Montgomery, Alabama's first African-American neighborhoods. Originally a plantation where enslaved people worked the land, the rise of this community included the city's first African-American churches which helped change the course of American history by becoming one of Montgomery's centers of civil rights activity. The churches of the Peacock Tract were the places that witnessed the election of Martin Luther King as leader of the Montgomery Improvement Association, the vote to extend the city bus boycott, and the final rest stop on the Selma to Montgomery March.**

**Later, the community was the site of racially and politically motivated retributive urbanism when the city's African-American social infrastructure was intentionally targeted by Interstates. The effects of this massive disruption are still evident. The interstates quartered the community and severed it from the rest of the city, and at first look, this retaliatory urban maneuver may appear successful. However, the Peacock Tract has endured despite the immense piece of critical infrastructure positioned to intentionally disrupt it.**

**This paper proposes that due to the strength and history of the enduring pieces of social infrastructure, specifically the historic churches, the area has yet to be overridden or abandoned, and supports the argument that the resilience of a place is inextricably tied to the strength of the social infrastructure within it. The paper highlights several interdisciplinary interventions proposed by undergraduate environmental design students. It presents a design research course where students are asked to consider infrastructure as an agent of connection, inclusion, or restoration, as opposed to division. Students worked with community partners to develop proposals providing a suture, between the quadrants left in the interstate's aftermath. While each project proposes a unique programmatic solution, the intersection of social and critical infrastructure in pursuit of resilience is present throughout.**

### INFRASTRUCTURE (CRITICAL AND SOCIAL)

"If states and societies do not recognize social infrastructure and how it works, they will fail to see a powerful way to promote civic engagement and social interaction, both within communities and across group lines."

—Eric Klinenberg, *Palaces for the People*

Infrastructure serves as an underlying foundation or framework of society, and when most people think about it what comes to mind are those systems that are relied upon to maintain the functions of everyday life<sup>1</sup>. These projects often serve purposes that people consider basic to a society and are essential to daily modern life. This type of infrastructure is known as critical infrastructure, and it was explicitly defined by the U.S. government in the aftermath of the September 11th terrorist acts in the Patriot Act. The law lays out sixteen sectors of infrastructure so critical that their destabilization could considerably incur the normal function of day-to-day life in the United States<sup>2</sup>. These consist of constructions, systems and industries commonly considered infrastructure; (transportation, power, industry, healthcare, water, etc.)<sup>3</sup>.

The systems listed above often have a direct quantifiable outcome. (For example, electrical grids provide power, roads provide mobility, etc.). Because of this, most people easily understand the value of critical or hard infrastructure, however, this is not always the case with social infrastructure, and, in its typical sense, one does not necessarily equate critical infrastructure with social spaces<sup>4</sup>. This type of infrastructure includes the built environment that allows people to engage and connect with their communities and their surroundings. These are places such as churches, parks, recreation and community centers, libraries, childcare centers, schools, health care facilities and public transit. However, it goes beyond typical civic spaces to include anywhere that allows people to gather in some form without requiring financial patronage. Spaces like these are integral to the urban fabric, and more broadly can be considered the "networks of spaces, facilities, institutions, and groups that create affordances for social connection."<sup>5</sup>



Figure 1. Image *caption*. Image credit.

When communities prioritize and construct well-functioning social infrastructure it contributes to overall health and well-being, better economic opportunities, lower crime rates, and more sustainable places. Despite these benefits, projects of this type are often neglected financially, partly because assets of this type do not correlate directly to sufficient revenues like critical infrastructure typically does. Because of this, social infrastructure is often under-valued and under-funded. Additionally, existing social infrastructure often requires significant improvements to meet the needs of the people who utilize it. For example, currently 53% of schools, (especially in disadvantaged communities), require improvements to reach “good” condition.

#### **INTERTWINING CRITICAL & SOCIAL INFRASTRUCTURE**

Occasionally there are projects that begin to intertwine critical and social infrastructure programmatically. These spring from the idea that Infrastructure need not be monofunctional. Instead, it can exist simultaneously as an integral part of the social fabric while still serving the critical needs of a society. This ‘thickening’ of program is not a re-thinking of infrastructure, but an “expansion of projects to include elements that enhance civic and public spaces or the adaptation of existing, single-purpose infrastructural landscapes into more robust, multifunctional systems.” This merging of the two can allow for public investments that include the goal of enriching diverse communities<sup>6</sup>.

Approaching critical infrastructure as a social possibility can begin to re-envision it from something historically creating divisions between different communities<sup>7</sup>, to one which might begin to reconnect them. Overlapping these programs means that the critical version prioritizes the social aspects of the

places it occupies and creates as much of a benefit by what it does not do, (i.e., disrupt the social balance of communities through the creation a monofunctional interventions), as what it does (contribute to a sense of community). Intertwining social infrastructure with critical infrastructure can help to build the local communities and create civic pride through activities it supports that bring people together<sup>8</sup>.

#### **CASE STUDIES**

As a means for evaluating the notion that social and critical infrastructure can combine to strengthen communities, Auburn University’s Environmental Design Program created a course that explored this topic. To introduce the idea that these two programs can overlap in meaningful ways, students were assigned case studies from a curated list of projects from around the world that intertwine the two. These were presented through drawings and images, as well as a single in-depth original drawing of the student’s making. This last part of the assignment required that the student’s digitally model and draw section perspectives highlighting the overlaps between the social and critical aspects of the infrastructure case studies

The drawings were limited in their freedom for artistic expression and intended to be analytical in nature. Only black lines on a white background were permitted with two line-weights – the section cut line and all other lines. This was intended to create a prosaic quality that would allow the relationship of the social and critical spaces to become the focus.

Through critiques and class discussions, three viable scenarios emerged as means of creating these types of projects. One origination method for these is an ‘afterlife’ scenario. This occurs when a project built initially as critical infrastructure



Figure 2. Mount Zion AME Zion Museum. Hettiaratchi and K. Carnes.

becomes disused and is converted to social infrastructure at the end of its functional life. A second scenario involves modifications of existing infrastructure. In this case the original critical infrastructure is still in use and remains so in its new form. Social infrastructure within this reconsidered scenario is added to existing projects without compromising their function as the original work's value makes it too important to decommission. Lastly, designers can weave social and critical infrastructure together from a project's conception. All these scenarios produce a finished project that helps society function while promoting social interaction.

### FIELD STUDIES & COMMUNITY PARTNERSHIP

As a specific site for design research, students researched, (both through traditional methods and in the field), the Peacock Tract, a neighborhood in Montgomery, Alabama that has historically had a complex relationship with infrastructure. Originally a 300 acre plantation that utilized enslaved people for its production of corn and cotton, it was named after the original owners and sold off in pieces after the Civil War. Much of this land became one of the first African American communities in the city and with its rise came the city's first African American churches .

Eventually, this community developed into a thriving middle class African American neighborhood that by the 1960's included almost every type of business needed to be self-sustaining. The churches continued to grow over the decades and became an epicenter of civil rights activism that would alter the course

of American history. It was the robust pieces of social infrastructure of the Peacock Tract that witnessed the election of Martin Luther King as leader of the Montgomery Improvement Association, the vote to begin and extend the city bus boycott, and the final rest stop on the Selma to Montgomery March. Later, the Peacock Tract was the site of racially and politically motivated retributive urbanism against civil rights activists when the city's African American social infrastructure was intentionally targeted by Interstates<sup>9</sup>. These decisions and actions by the state displaced 1,859 families from the Peacock Tract and surrounding neighborhoods and shuttered 74 small businesses<sup>10</sup>. The effects of this massive disruption are still seen today. I-65 runs parallel to the former business district severing it from many residences to the west. I-85 separates the remaining eastern section from Montgomery's downtown to the north.

Coupled with the field study element of the course, students worked with a community partner, Mount Zion African Methodist Episcopal Zion Church, (one of the first African American churches established in Montgomery after the end of the civil war). Through meetings and interviews, students engaged this church as a both a resource for understanding the history and current state of the community as well as a pseudo client with potential project goals derived from their needs.

Work from this portion of the course resulted in two products. First each student created digital models of sections of the Peacock Tract. These models were aggregated together to form a more complete picture of certain streets within the community. Secondly the students created drawings that were



Figure 3. *Mapping Reverence*, Hollen Terry

required to describe a narrative about the place. Many of the drawings presented ideas about the history of the place with emphasis placed on the influence of the interstate. Both projects provided an opportunity to understand the neighborhood on a physical and cultural level.

### DESIGN RESEARCH

The final part of the course utilized the neighborhood as a site while asking the question, can infrastructure be re-conceived such that critical and social programmatic elements commonly fit seamlessly together? The students attempted to answer this through an optimistic approach to the Peacock Tract's situation suggesting the disruption can be overcome through design at multiple scales. Based on the historically influential relationship that the Peacock Tract has had with infrastructure the neighborhood presented a worthwhile setting for interventions of various scales as Environmental Design at Auburn does not focus on any single discipline or size of project. As is typical within this program, the work produced in the course covered a multitude of scales and touched on an array of design disciplines. Many of the projects resulted in work like that found in the case studies, often attempting to utilize the residual spaces left from the interstate by converting them to social public space. However, a few projects attempted to look deeper into the place and identify specific needs of the community partner.

In doing so they produced unique and unexpected outcomes at varying scales. A few are detailed below:

In a small scale project Evanthi Hettiaratchi and Katie Carnes set out to understand the people of the Peacock Tract and propose an exhibit design to be housed in the future Mt. Zion AME Museum. Through presentations by Mt. Zion AME Church and further discussions, an idea for a museum about the normal everyday people who reside here became the focus of this project. It attempted to reestablish this specific building as a community center while exhibiting items from the personal histories of the residents. Items like wedding dresses, church roles, funeral programs, records of baptisms and even mug shots of Freedom Riders became the focus of the museum. The program became a personal shared history of the community, as well as a sort of bank of collective memories that recall personal stories. It is intended to be for both visitors to the Peacock Tract as well as those who reside there. The design scale focus for this project was the exhibit itself as well as the interior of the existing building.

In *Mapping Reverence* Hollen Terry begins by locating all the razed properties resulting from the I85/I65 right of way. Within this space the proposal calls for a large-scale temporary land art installation that remakes these structures in a ghosted



Figure 4. The Peacock Tract United States Geological Survey, Cartographic Research Laboratory, University of Alabama

form from simple steel or aluminum tubes and excavations in the banks of the interstate. These small-scale structures are intended to be constructed where possible, however, where this is not feasible, the footprint of former buildings is re-established in two ways. First, if the footprint occurs in impermissible locations along the highway right of way, they are created by planting colorful flowers in the grass. This is ineffective in areas where paved highway occurs. Because of this, where interstate occupies the space where structures once sat, temporary chalk or paint is proposed as a reminder of what was once here. The student used the colors associated with the Sanborn Maps of the neighborhood, (created just prior to the interstate being constructed), as a palette for the colors of the markings and plantings and coincides the paint and flowers with the previous building typologies. The temporal quality means it is intended to serve only as a brief reminder of what was, so that it might serve as a catalyst for further discussion and progress within the community. The design scale focus for this project was the installation itself with obvious overlaps into landscape architecture and planning.

In their project, *The Loop*, Aubrey Sanders and Hannah Miracle's proposal recognizes that Montgomery has equity degradation of the highest order in the country, and so it begins with the question, 'what does this community need'? In identifying the isolated nature of the neighborhood today, the students determined that a multiscale reordering of resources is the true or best answer. As a remedy the issue of connectivity leads to

a proposal for a large-scale network of pathways connecting the Peacock Tract to many areas of Montgomery. It aspires to create a solution that is self-sustaining and equitable which can support social wellbeing through economic and environmental policy. The Loop recollects the idea of Atlanta's Beltline in that it utilizes infrastructure already in place. The goal of this system is to connect the Peacock Tract to the city again. It takes a long view regarding the project timeline and attempts this through bold moves like burying Interstate 85 and converting rail lines into walking paths. The emphasis of this is to provide a social connection between the community and the rest of the city through vehicular, pedestrian, and light rail mass transit systems thereby providing access to as many people as possible. The design scale focus for this project was city planning with overlap into Landscape and urban design.

These three projects present strong cases that critical and social infrastructure can overlap and be beneficial even to a neighborhood as neglected as the Peacock Tract has become. The exhibit design for Mount Zion AME specifically focuses on the people of this place and serves as a record of them throughout the life of the community. Mapping Reverence again focuses on the people as well through the act of remembering the setting of the lives lived here, and the Loop begins with the people by evaluating their needs. Much of this success also stems from the value found in a community partner that is so embedded in the community and students' interactions with them.

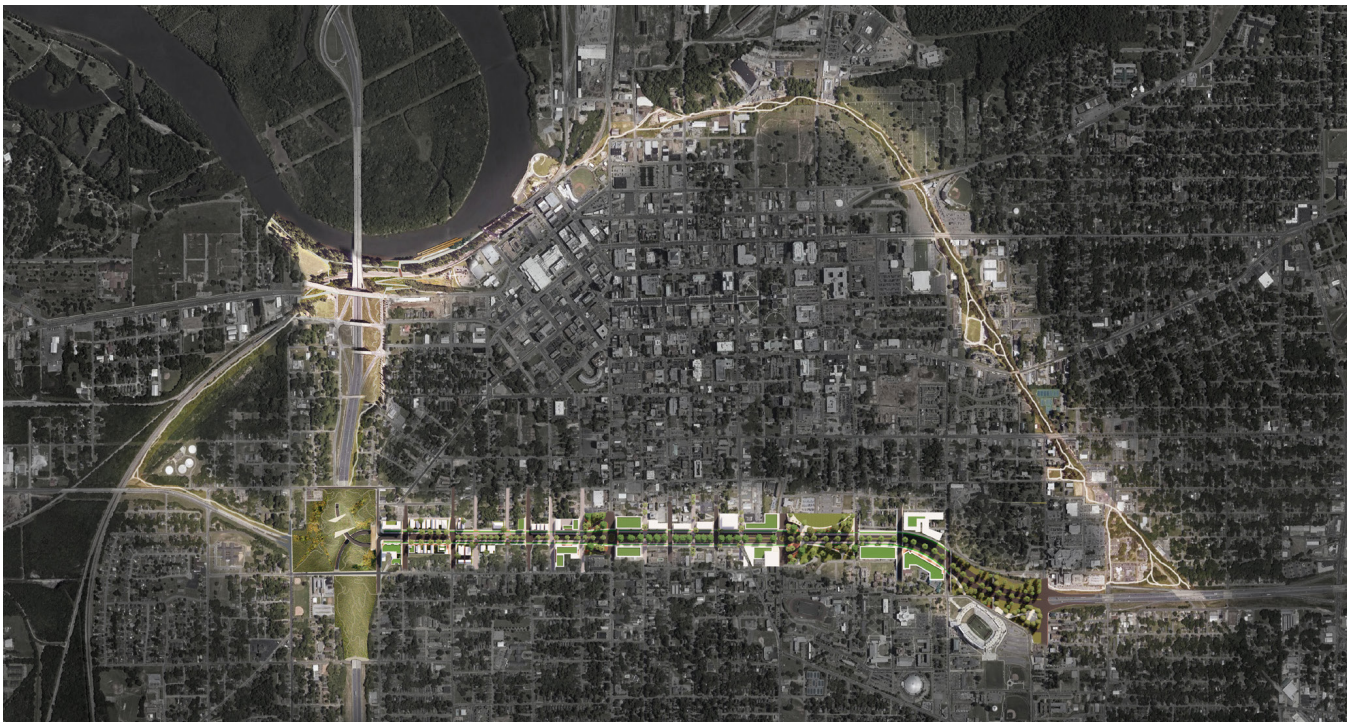


Figure 5. *The Loop*. Aubrey Sanders and Hannah Miracle.

## CONCLUSION

The interactions between the Peacock Tract community and infrastructure throughout its history have been both inspiring and profoundly destructive for its residents. At one point, the place was part of an agricultural infrastructure that subjugated people to slavery through oppression and violence. Later, it was the social infrastructure that infused the place with the support needed to grow and thrive throughout the first half of the 20th century and eventually become one of the birthplaces of the civil rights movement. Finally, it was targeted with transportation infrastructure by a state government set on disrupting the civil rights and voting apparatus of a minority group growing in potency.

This most recent action had the potential to erase the Peacock Tract, but due to the strength and history of the enduring pieces of social infrastructure, (specifically the historic churches), the area has yet to be overridden or abandoned. This resilience comes from the social infrastructure within it. It does this by helping people connect with others during times of crisis, helping to rebuild communities, and facilitating communication and coordination between different organizations who share their interests and values. This is possible through the churches specifically because they have an established credibility within the community and city. That they endured ensures the community will as well.

## ENDNOTES

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2. The Critical Infrastructures Protection Act of 2001 designates 16 infrastructure sectors as having a critical importance to the functioning of the United States. They are: Chemical, Commercial facilities, Communications, Critical manufacturing, Dams, Defense industrial base, Emergency services, Energy, Financial services, Food and agriculture, Government facilities, Healthcare and public health, Information technology, Nuclear reactors, materials, and Transportation systems, Water and wastewater systems
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6. Susan Rogers, *Thick Infrastructure*, 2011 ACSA Conference Proceedings Local Identities Global Challenges
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