

# “Path to Progress”: The Road to Community Design

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## INTRODUCTION

A Community Design Workshop that operates under the auspices of the School of Architecture is addressing the very questions posed by this conference. It has been working collaboratively with city government and community neighborhoods to confront real problems in real communities. Recognition of the need to improve the lives of people, the health of cities, the condition of the environment, and the quality of architecture is fundamental to the mission of the Workshop. As such, it actively seeks responses to community diversity that are both politically sensitive and architecturally creative.

The basic commitments of the Workshop are: 1) to rebuild neighborhoods and downtown areas, 2) to establish clearly defined public spaces, such as streets, squares and parks, 3) to integrate the pedestrian world into the urban fabric, and 4) to create a greener and more sustainable environment. The specific ways in which these commitments are met vary with each project.

### Community Design Workshop

Workshop members include School of Architecture faculty of different disciplines and areas of expertise working with fourth and fifth year architecture students. In addition to establishing an “office” in the project area, the Workshop engages in a “charette” process that is the heart of the Community Design Workshop. This process invites and encourages active participation by the constituent communities in the act of defining “progress” for each specific context and then incorporating that definition into specific design proposals for future development. The transparency of the Workshop’s design process also ensures that solutions it devel-

ops are in direct response to the concerns and desires of those most affected. Through this process of on-site, hands-on, cooperative engagement, the Workshop has gained credibility with government agencies and with community groups in project neighborhoods.

Our “charette” process is essentially educational - all of the collaborators serve both as teachers and as students in our effort to discover effective real world solutions. The result is a dynamic sharing of knowledge, experience, and empathy among all of the collaborators. The traditional academic roles of teacher and student, and practice roles of designer and client have become transformed. The involvement of government agencies also contributes to the economic viability of proposed solutions.

### Historical Context of Lafayette’s Urban Condition

The urban development and growth of the city of Lafayette provide a case study of both the promise and the threat that 20th century progress has brought to neighborhood communities and to the city at large. The success of Lafayette’s original settlement in the early 19th century established a pattern of piecemeal development, whereby additions to the original settlement grid were each independent and separately identified. While enhancing the economic viability of the city, “progressive” interventions, such as the railroad line (established in the 1880’s) and major arterial roadways (constructed throughout the 20th century), have continued to separate one neighborhood community from another, and have stymied community identification with the larger city context. Economic expansion, along with its promise of greater economic opportunity for the city’s residents, has brought with it commercial development and speculation in what were essentially residential areas.

These challenges have contributed to the continued fragmentation of the city and its difficulty in identifying itself as a unified urban community.

Also contributing to the Lafayette's fragmentation is its division into predominantly African-American neighborhoods on the northside and predominantly white neighborhoods to the south-west. The historic racial divide has been reinforced by the presence of the railroad tracks and a major north/south thruway running parallel to them, both of which separate the original downtown city center from the northside neighborhoods and create in between an almost impenetrable zone or no-man's-land. While the downtown area has been undergoing a significant revitalization in the last five to ten years, economic expansion and growth during the same period has been focused on the southwest side of the city and away from northside leaving those neighborhoods even more disadvantaged and divided. Now, at the beginning of the 21st century, planned development of the north/south thruway into a major interstate highway connector threatens to further fragment the fragile stability and community identification of the northside neighborhoods.

## I-49 INTERSTATE HIGHWAY CONNECTOR PROJECT

### Project Context

The interstate connector project represents the largest capital construction project in the history of Lafayette, and its physical and economic impact on the city will be evident for a very long time. The social impact, while perhaps less self-evident, will also be immense. The integrity of the neighborhood communities immediately adjacent to the project and their relationship to the city of Lafayette are the issues at stake. Given the potential that a project of this magnitude presents for both positive and negative consequences, Lafayette's Metropolitan Planning Organization is attempting to work comprehensively and cooperatively with the state's Department of Transportation and the Federal Highway Administration to design and build this facility. Each of these entities naturally has a different agenda. Their combined efforts have revealed various attitudes toward the development of this project. These attitudes run the gamut from support for an underground "cut and cover" strategy that would have the least negative impact on the existing neighborhoods to the idea of "just pour six lanes of concrete" and let the consequences be the consequences. The first strategy is unworkable for both economic and topographical reasons, and the other, what one might call a "20th century 'slash and trash' solution," is unacceptable, particularly to the city of Lafayette, given the negative impact on the citizens and the neighborhoods of northside and downtown.

Seeking new strategies, the Lafayette's Advisory Committees of the Metropolitan Planning Organization hired the Community Design Workshop to investigate ways to weave the project into the community fabric. The investigations were to explore two different alignments for the elevated interstate along the existing thruway and to suggest urban design strategies for each.

### Community Design Workshop Methodology

As the most comprehensive project to date undertaken by the Workshop, this connector project has allowed the collaborators, including the faculty and student participants, government officials and community groups, to redefine the "paradoxes of progress." The first step in the process was to demonstrate to federal, state and local officials, along with the public, that highway design could become more comprehensively integrated into the materiality of the city. The Workshop began by conducting an extensive series of charrettes and public meetings bringing all the constituencies together.

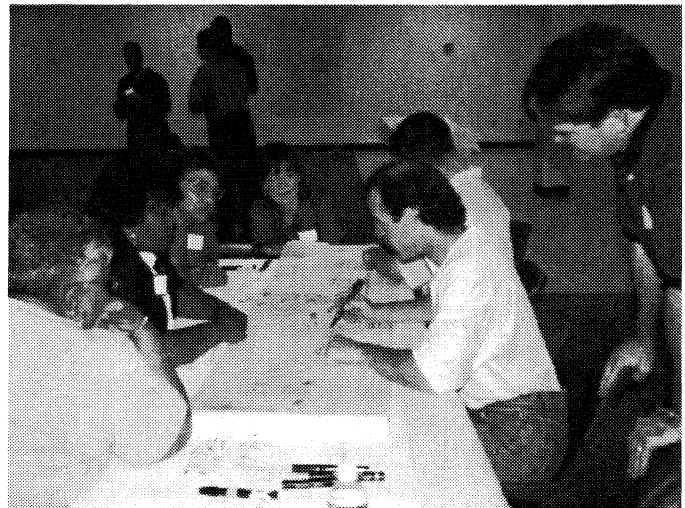


Fig. 1. Community residents and architecture students collaborate during a design charrette.

In these meetings the Workshop members presented international examples of contemporary transportation infrastructure design. These examples demonstrated that successful interventions were possible and suggested ways that landscape, neighborhood amenities, and various community facilities could be integrated into roadway design. Various government groups shared their concerns about land use, policies and procedures, and structural necessities. The neighborhood organizations brought their interest in economic development and their concerns about residential displacement and relocation to the table. The result of this process was a consensus regarding the importance of planning, architecture, and landscape.

The next step, growing naturally out of the first, was the transformation of the project's challenges into opportunities for design. The Workshop identified three major challenges that required the intervention of design expertise: 1) the challenge to maintain and enhance urban revitalization efforts already underway without sacrificing the welfare and integrity of the residential neighborhoods on northside, 2) the challenge to maintain strong social and cultural links within the community in the face of the removal of residences located in the path of the roadway, and 3) the challenge to ensure that the economic benefits generated by the project are not gained at the expense of the quality of life for the citizens around and near the project.

### Green Space, Urban Connections, and the Architectural Wall

The Workshop exploited the opportunity to use green space to connect rural landscapes at Lafayette's northern and southern edges. It proposes a linear park extending along the six-mile length of the proposed roadway providing a threshold into the city. Gate pieces at either end of this linear park would signal entrance into and exit from the city. While the gateways would provide greater identification of the city to travelers on the elevated roadway, the green space below could impact the city on territorial, urban and pedestrian scales.

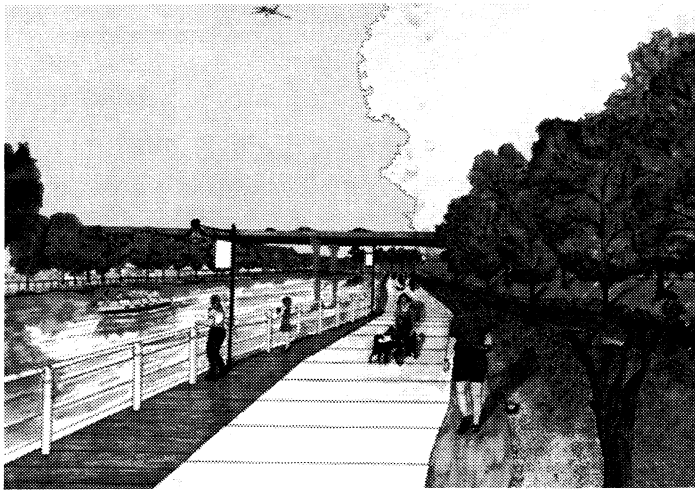


Fig. 2. A park system with bike and walking trails share right-of-way with light rail transportation and the elevated highway.

At the territorial level, the cloverleaf at the intersection of I-10, running from Jacksonville, FL to Los Angeles, CA, and I-49, a NAFTA highway, eventually connecting Winnipeg, Canada with New Orleans, LA will locate the city of Lafayette at this pivotal intersection. On an urban scale, the linear park would become a green corridor marking a transition from the highway to the city. At the pedestrian level, the view of the park and gardens can be experienced on foot, at a slow pace. The area offers opportunities for community gardens, a farmer's market, walkways connecting the residential neighborhoods to downtown and a riverwalk with bike paths and recreational facilities.

Opportunities for connection were also explored in the form of special entry spaces defined by terraces and landscaping, and the redesign of major arterial roads and local streets into boulevards connecting to the green space and to the downtown area. The Workshop has also proposed that a local and regional light rail system share the same right of way as the interstate and be integrated into the infrastructure. This rail system could help to alleviate much of the traffic congestion in Lafayette and provide an alternative connection to the city for people in out-lying communities.

The Workshop's architectural proposals sought to make a clear distinction between the urban field of the city and the linear green space. The proposal for an architectural "wall" not only delineates

the city's edge, but also provides a buffer between the elevated highway and the neighborhoods. The buffer would include a 30-foot setback of green space from a service road. In the downtown area, the "wall" consists of a commercial district with a three-story height minimum and a maximum of four for new construction. This requirement allows the architectural edge to become a visual barrier as well as a sound deflector. Future commercial development would be encouraged along the corridor further defining this edge and buffering the residential areas beyond.

### Neighborhood Redevelopment

Perhaps the most intractable challenge of this project is how to minimize the social and cultural damage that construction of the elevated highway will necessarily do to the northside communities and their residents. The new interstate means the destruction of houses in its path and the displacement of their residents. As viewed by many residents, this project is simply the latest assault by the "progress" of transportation on an area of the city that has been historically fragmented and disadvantaged. Culturally, the population of these neighborhoods is predominantly African-American, Creole and Acadian. Given the unique cultural and racial mix of these neighborhoods, each has a distinct identity and its own specific needs.

Some housing problems, however, are common to the project area as a whole. These include a significant number of substandard structures due to the age and size, and relatively low percentage of home ownership among the residents. These problems were illuminated in a housing survey developed and conducted by the Workshop at the beginning of the project, and were reinforced by information gained in the charrettes.

The housing study also revealed housing types common to the project area and the use of a porch as a primary living space in 95% of the existing housing stock. The consistency of the vernacular vocabulary, in fact, provides an overall coherency that ties the neighborhoods together. Porches, wood construction on piers, and composite roof profiles were identified as common house features on such vernacular house types as the shotgun, the Creole cottage, and the Craftsman bungalow. Based on this vocabulary, the architecture faculty and students developed housing prototypes to serve as models for new construction in the area.

To minimize the impact of displacement on neighborhood residents, the Workshop's first proposal to address housing issues is to move existing homes to vacant lots in the neighborhood. Three major benefits are achieved in this way: 1) family connection to home is maintained, 2) existing housing stock is preserved, and 3) vacant areas in the neighborhoods are in-filled. In some cases the possibility exists to move long-term neighbors to adjacent vacant lots, thus preserving more of the social fabric. The survey revealed that this relocation of existing housing, however, will accommodate only 30 to 40 percent of the housing need in the area.

The Workshop's second strategy involves the construction of new housing that is both affordable and responds to the character and

scale of the existing neighborhoods. Using the vernacular house types already present in the neighborhoods, the architecture faculty and students designed prototypes for one- to four-bedroom houses.

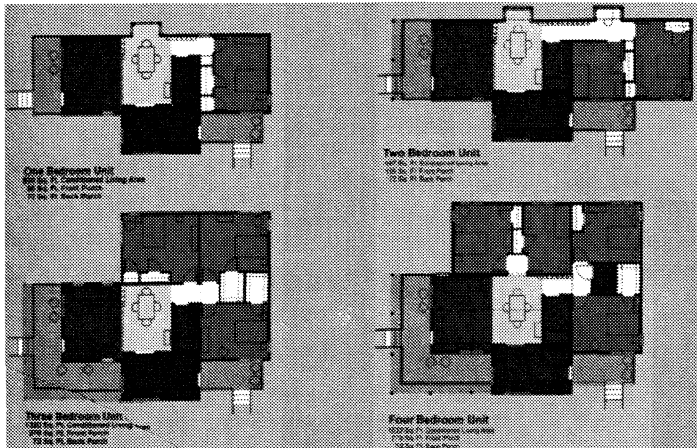


Fig. 3. Housing prototypes for affordable new construction: one-, two-, three- and four-bedroom houses.

Each house consists of a common living core (including a kitchen, dining room, family room, and bathroom). Variations from house to house occur based on number and location of bedrooms and size of porches. Research into the federal definition of "equal and comparable" when replacing a residence shows that given the prevalence and usage of porches in the project area, the porch could be considered an essential component for all replacement houses in the project area. This element expands the size of the house physically, and fosters a greater sense of neighborhood identity by bringing residents out of the house and providing a space in which to interact with neighbors.

The Workshop has proposed three different development strategies to address the need for transitional housing: 1) row houses between the commercial district adjacent to the roadway, 2) mixed-use housing in the central business district, and 3) micro-neighborhood developments on larger vacant lots. These three different housing types present opportunities to address other concerns in the project area.

Three-story townhouse structures can effectively reduce sound levels, and thus serve as both a sound buffer and a transitional zone between the commercial district and the existing residential neighborhoods. Mixed-use development provides in-fill in the central business district and introduces a residential element into the downtown area that can further stimulate its development. By employing zero lot lines and linear footprints, the micro-neighborhood developments can provide economical, transitional housing that can serve later as housing for the elderly or as starter homes for first-time home buyers.

### Quality of Life: Light, Sound and Public Art

Illumination and sound abatement studies conducted in the context of this project necessarily went beyond a mere calculation of required foot candles and decibels-to-distance ratios. The overriding goal for both of these studies was to address "quality of life" concerns raised by the project area residents in the charrettes and public meetings. Images of harsh and ugly highway lighting, along with fears of unpleasant and unwanted highway noise in the neighborhoods were issues at the forefront of discussion by the residents and their representatives in city government.

The illumination solution proposed by the Workshop includes a system of "lighting layers," that would be realized through the use of several different fixture types, various lamp sources, and a variety of mounting heights and styles. Essentially, the solution employs two distinct layers: "over" and "under" the roadway. While the need to meet federal highway safety and security standards would dominate the lighting choices made for "over" the highway, lighting adjacent to and visible from the highway can be used also to create visual events that enhance the identity of Lafayette and help define it as a "place." Areas of special significance and interest, both to the residents and to visitors would be enhanced through a variety of light sources and fixture types. More gentle illumination is suggested for pedestrian paths, signage and fountains found in the park areas "under" the facility. At street level, the proposal recommends a closer-to-the-ground, lower level of illumination from lighting fixtures that reflect the character of the architecture.

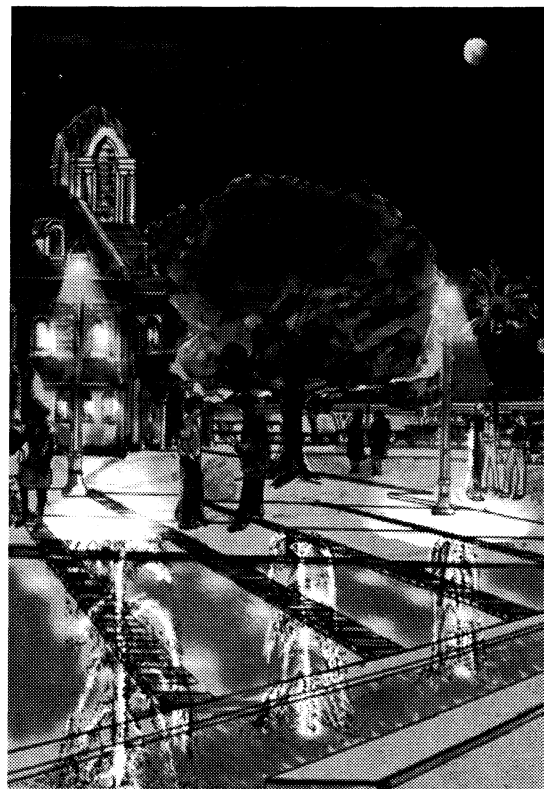


Fig. 4. Significant architecture and special features, like fountains, under and near the roadway are enhanced by multiple, low-level lighting fixtures.

Administrative and physical noise-reduction techniques form the basis of the Workshop's recommendations for sound mitigation. Zoning and other legal restrictions are administrative techniques often employed by local governments to control noise levels. Physical techniques involve four methods of masking or minimizing unwanted noise: 1) acoustical site planning, 2) acoustical architectural design, 3) acoustical construction techniques, and 4) construction of noise barriers.

The Workshop has recommended that any new development or construction in the project area employ both administrative and physical sound mitigation techniques. For example, the recommendations for the location of new housing and for the development of a commercial zone reflect employment of the site planning strategy. Design techniques are seen in the details of proposed new three-story townhouses that include the placement of storage, laundry and restrooms on the side adjacent to the road, and the reduction of the number and size of windows on that side. Details such as building heights, room arrangement, window size, number and placement, and balcony and courtyard design can contribute to the minimization of unwanted noise. Increasing building mass and the rigidity of materials, and providing air spaces in walls, floors and ceiling are all construction techniques that can "soundproof" a building.

Finally, in some instances actual noise barriers must be constructed. These barriers may take the form of berms made of sloping mounds of earth or walls and fences. Berms require a lot of land if they are high, while noise walls take less space and may be built from a range of material that can be visually appealing and blend with the surroundings. Some noise-sensitive sites in the project that are within 200 feet of the roadway will require these noise barriers. The Workshop suggests that these barriers may become opportunities to introduce symbols of local or regional identity through the manipulation of materials, form, surface treatment, and color. The structural system of the roadway itself also provides the opportunity to explore structural support alternatives in relation to these types of manipulations. Working with a structural engineer, the Workshop designers studied a variety of forms and materials that offered variations of color and texture to enhance their aesthetic appeal.

Lighting and the sound mitigation proposals as well as structural elements of the roadway provide opportunities for the direct incorporation of architectural or place-making elements that might also be described as public art. In the charrettes and public meetings, community participants expressed a desire for the integration of art into the overall design proposals for the area. A review of precedents revealed that public art, when supported by the community, helps to establish and define the identity of a place. It can provide both cultural and historical orientation as well as spatial orientation. Art also can humanize public space that might otherwise intimidate and overwhelm. By providing opportunities for tactile, visual and metaphoric interaction between people and place, public art allows for moments of surprise, revelation and aesthetic pleasure. These experiences have the potential to promote a higher quality of life, and engender greater economic success for the community.

The 1980's controversy over Richard Serra's *Tilted Arc* in Federal Plaza, New York City increased awareness of the need to more effectively engage the affected community in the generation and/or selection of public art. This awareness has lent support for a more integrated planning approach to public art, as opposed to the "plop" art approach where individual pieces are simply planted in a space without regard to context. An integrated planning approach requires the meaningful participation of the community.

The Workshop has identified the following strategies for eliciting community participation in the development of public art: 1) Involve area artists, residents, and students through participation in existing programs sponsored by the Arts Council of Acadiana, 2) through the Arts Council, its constituencies, and community groups develop criteria for the selection of art to be used in the project, 3) locate funding sources to sponsor an art competition based on the established criteria, and 4) promote interaction with neighborhood and community groups throughout the design and implementation phases. Community involvement in the process of selection can also help to ensure that the art will be maintained and respected rather than vandalized.

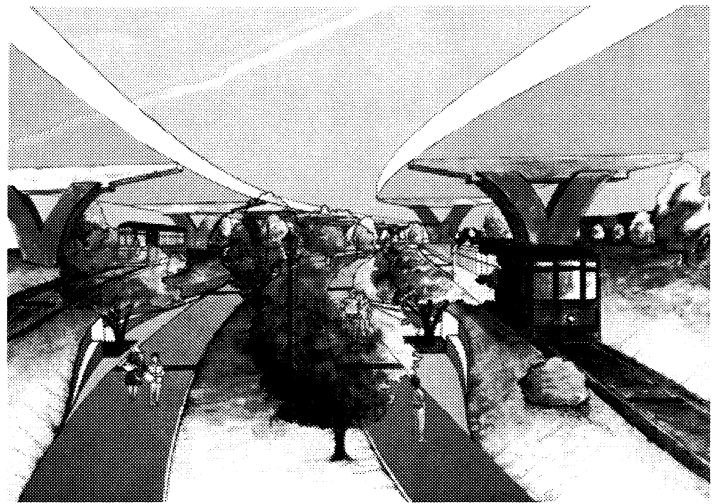


Fig. 5. Green-space walkway: sites where public art could invigorate the pedestrian's experience of place.

## CONCLUSION

The process of building consensus for the Community Design Workshop's proposals has transformed the major challenges confronting the project into opportunities for community renewal and development. The identification and public discussion of each of the challenges have empowered the community with a greater sense of the positive potential that the interstate connector holds. With this power comes an evolving perception of the project as a "front door" and "living room" extension of the community. Public involvement in setting the priorities for the project has increased the likelihood of greater public support for the project, especially when funding initiatives are presented. At this stage in the project the

measurement of progress might be the degree to which this collaboration has changed who is asking and answering the questions.

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