



**REPORT ON THE
CUMBERLAND BRIDGES
OF NASHVILLE,
TENNESSEE**

FINDINGS AND RECOMMENDATIONS

2002

The Nashville Civic Design Center conducted the following design research and analysis to help guide the community in the future use and appearance of the downtown bridges over the Cumberland River. The study area included that section of the Cumberland inside the innerloop. The work was produced by the Nashville Civic Design Center in concert with Metro Public Works. The staff of the Civic Design Center during the study was: Astrid Schoonhoven, Research Intern, Abbie Lee Majors, Ted Booth and Blythe Bailey, Design Interns; John Houghton, Design Assistant and Mark M. Schimmenti, Design Director. Judy Steele of the Metropolitan Development and Housing Agency; Randall Hutcheson of the Metro Planning Department; and Jeff Campbell of Metro Public Works contributed significantly to the report.

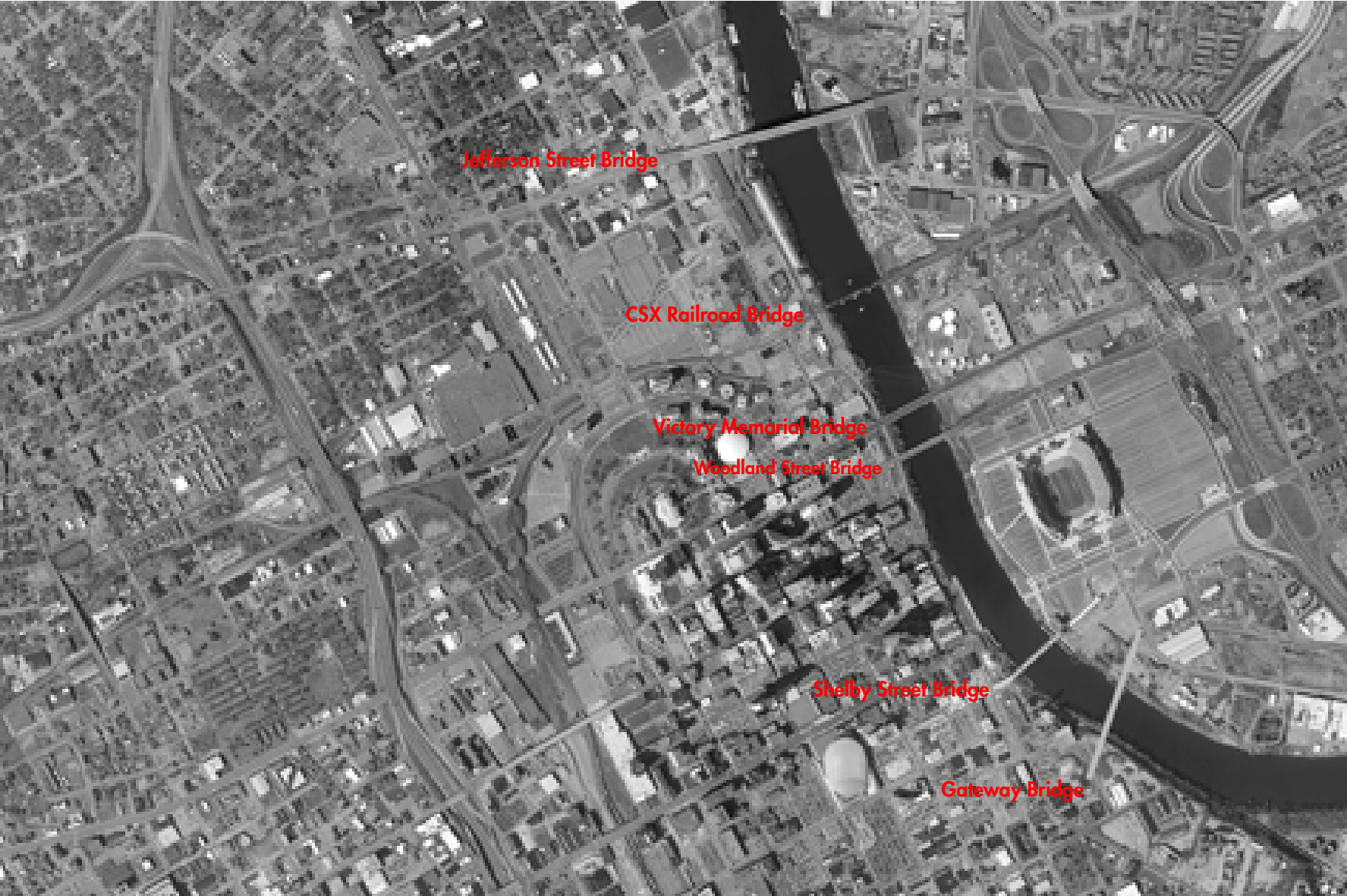
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The Bridges over the Cumberland River



EXECUTIVE SUMMARY

In February of 2001 the Civic Design Center was asked to assist Metro Public Works in the selection of a color for the proposed Gateway Bridge. On July 12 the study was expanded to include all of the bridges that connect East Nashville and the downtown, from north to south: The Jefferson Street Bridge, The CSX Railroad Bridge, The Victory Memorial Bridge, The Woodland Street Bridge, The Shelby Street Bridge and the soon to be constructed Gateway Bridge. The charge for the Civic Design Center was threefold: one, to determine the history and tradition of bridge color in the study area; two, to determine a strategy for painting the structures; and three, to determine a color or palate of colors based on aesthetics as well as technical factors.

The study was conducted by constructing a scale model of the Cumberland River with scale bridges, by utilizing computer simulations of the bridges, by conducting on-site investigations, and by research in the various local archives. Interviews were conducted with persons involved in the construction and maintenance of the bridges, (paint) manufacture's representatives, a painting contractor, and other members of the community.

Background

After research into the construction and painting of all of the bridges built over the Cumber-

The Shelby Street Bridge viewed from First Avenue. (below)

land since 1823, the Civic Design Center found that there has never been a tradition of bridge color or decoration. There is no evidence that any of the constructed bridges were designed to reflect any meaning. The Victory Memorial Bridge, for example, has great significance in its dedication to those who perished in World War II, however this did not change the form, design, decoration or color of the structure. It is a standard highway bridge of that era.



The Gateway Bridge will be the first structure over the Cumberland to have its form determined by an idea. The bridge is being conceived as a major approach and a marking of entry: a gateway. This is true both from the standpoint of those who pass over the bridge and those who travel underneath on the proposed greenway or the river itself. The arch form was introduced to symbolize this idea and was emphasized by the naming of the structure. The

The Shelby Street Bridge viewed from Riverfront Park. (below)



designers considered painting it Columbia Blue to be consistent with bridges they designed in other areas.

The Shelby Street Bridge is being converted into a bridge mainly for pedestrian use. It is symbolic as well as practical. It is a link between East Nashville and the downtown that symbolizes the beginning of a shift in the way we build Nashville. It symbolizes the natural linkage from the development of the large scale, single projects of our immediate past and the building of neighborhood and community that is our immediate future.

The Shelby Street Bridge is a natural setting for colorful illumination and/or patterns of light. It towers above the riverfront and can be seen from great distances. This concept would allow the bridge to change character and meaning to suit the occasion.

Issues

- The bridges form a context of linkage between east and west and no bridge should be considered as independent of this context.
- They should evoke recognition, over time, for the City of Nashville.
- They should celebrate and mark the passage underneath by the river and the proposed greenway.
- Selection of colors and types of coatings should take into account weathering and other factors that affect the appearance and use of the bridges over time.
- The bridges are of the whole city and should not be permanently colored or decorated to celebrate a single entity.
- The recommendations should have some flexibility within a strong conceptual idea to accommodate issues of budget and time.

Recommendations

The Nashville Civic Design Center makes the following recommendations to address the above issues:

1. The City should hire a consultant to study the artistic possibilities in illuminating the Shelby

Street Bridge in color and pattern. The Civic Design Center should work with the consultant.

2. The colors used on the bridges should be the same on each of the six spans to promote visual unity.
3. The bridges should be painted close to the same time to permit uniform aging.
4. The substructures and the superstructures should be painted in contrasting colors to enhance and celebrate the different experience of passing over and passing under the spans.
5. The Shelby Street Bridge should be lighted or painted in contrast to the other bridges to celebrate its unique place in the history of Nashville.

Illumination

The consultant to the project will determine the exact nature of illumination of the Shelby Bridge. The other bridges should be illuminated to display their structure.

Colors

Cherokee Red (Pantone Warm Red CVU)

Red evokes the bricks of the historic structures of 2nd Ave. and the light standards of the stadium.

Model showing the bridges over the Cumberland River (below)



The shade of the color goes with the festivity of the carousel and the waterfront. Red is a great color to contrast the machine like qualities of bridges with the river and the proposed greenway. Red also projects a

boldness that expresses our city's optimism about its future. (Note: This is not the standard Safety Red that was specified before this study. The exact shade should be determined working with the Civic Design Center.)

Aircraft Silver (Aluminum)

Aircraft Silver has the necessary contrast with the red and still stands out on its own as a bold statement from a community that has much to



expect from the future. The silver color will allow the use of colored lighting to commemorate special occasions. Silver generally holds up better in the weathering process, allowing the steel to maintain a more consistent appearance over the years. Silver alludes to the industrial past of the site and to the technological future of the region.

Application

The substructures would be red and the superstructures silver except the Shelby Street Bridge where all steel should be painted silver.

- The Shelby Street Bridge: silver substructure and superstructure if it is to be illuminated in a variety of colors and patterns. If the illumination is not possible the bridge should be painted a silver substructure and a red superstructure.
- Jefferson Street Bridge, Victory Memorial Bridge, and Woodland Bridge: red substructure, no superstructure.
- The Railroad Bridge: red substructure, silver superstructure.
- The Gateway Bridge: red substructure, silver superstructure.

Areas painted red with exposure to direct

sunlight should be painted with fade resistant coatings and areas of the steel that come in contact with pedestrians should be treated so that the paint does not rub off soiling hands and clothing. The finish should be inspected and touched-up after one year.