2.0 Urban Design Issues Case Studies

Introducing a bridge structure to the intersection of New York Avenue and Florida Avenue will require careful attention to a number of urban design factors. Not only would the bridge itself have to be a strong artistic expression worthy of surrounding neighborhoods and entry into the Nation's Capitol, but it would also have to address some site-specific factors. These include: the scale and form of the structure, materials and methods of construction, wall treatments, streetscape treatments, lighting, quality of the pedestrian environment, and relationship to the surrounding context.

One important factor to consider is the changing intensity and scale of urban development that will surround the intersection of New York Avenue and Florida Avenue in the near future. While open parking lots and low rise buildings dominate the intersection today, mid- and high-rise buildings close to the street edge have been approved and are anticipated to surround the intersection in the future.

To put things in perspective, a bridge structure at the point where it crosses over Florida Avenue would be approximately 24 feet high, shorter than a two-story retail building. Two story retail buildings have been approved for the GSA Block just south of the intersection. Taller buildings have been approved for the block between the People's Building and New York Avenue. Crossing under the bridge deck on Florida Avenue would be the equivalent of walking approximately 66 feet or the distance across a single parking lot aisle.

To explore these issues further, the following case studies and additional imagery illustrates projects where attractive pedestrian environments were created under bridge structures in urban settings. These case studies offer strong precedents and possible prototypes for consideration in the further refinement of proposals for the intersection of New York Avenue and Florida Avenue.

Case Study Overview:

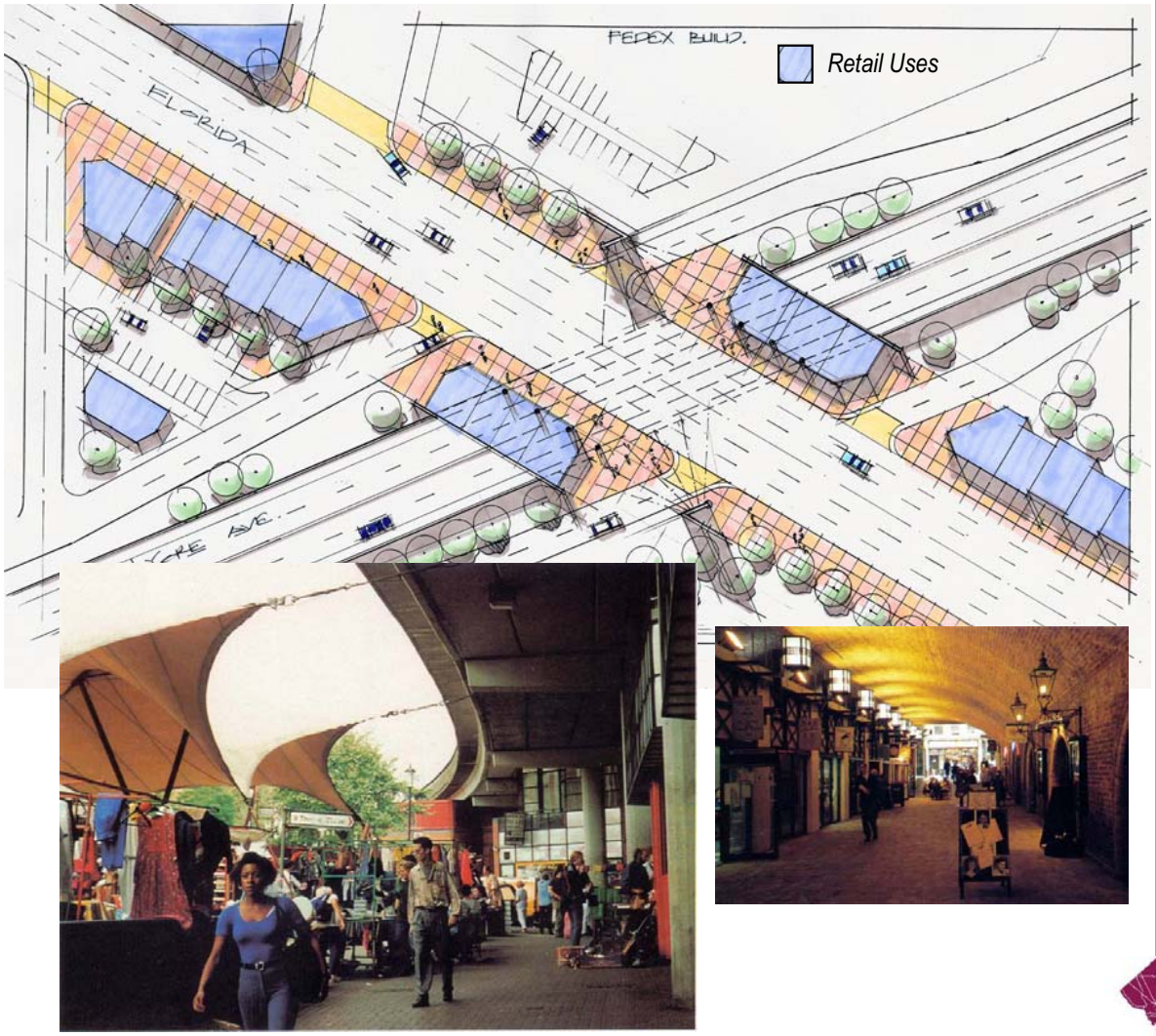
1. Retail Emphasis (Figure 5) – Example plan at Florida Avenue and built examples of retail uses under bridges and overpasses.
2. Deck at Central Avenue (Figure 6) – Example of split bridge deck to allow natural light to pedestrian space below connecting two urban park/plaza spaces.
3. Lake Street/I-35W (Figure 7) – Example of retail uses and urban gateway approach to a freeway overpass
4. Church Street/I-4 (Figure 8) – Example of use of landscape and natural lighting to enhance pedestrian environment under overpass connecting a retail street.
5. Ft. Washington Way Bridges (Figure 9) – Example of use of landscape under bridges to enhance pedestrian environment and connections in a park.
6. Dallas Galleria (Figure 10) – Example of treatments to avoid a barrier effect of an elevated roadway in a dense urban environment.

There are many innovative uses and environments that have been created under bridges and roadway overpasses across the US and in Europe. The Burnside Bridge Saturday Market in Portland (top) and the movie theaters at Union Station in St. Louis are just two examples of the creation of active pedestrian spaces and destinations under bridge structures.

In addition, many cities such as Phoenix, Cincinnati, Portland, Miami, Vancouver, Barcelona, Montreal, Amsterdam, Brisbane, and London have created active park spaces, schools, spaces for non-profits, markets, and other uses under their urban bridges.

Case Study: Retail Emphasis

Figure 5



Lining Florida Avenue with retail uses is one concept that could be used to create a vibrant pedestrian environment along Florida Avenue at the intersection with New York Avenue (top left). This idea would allow retail buildings, sidewalks and plazas to occupy spaces under and around the bridge where pavement and an at-grade intersection would otherwise be located. The concept illustrated at the left shows retail uses extending north and south of the intersection as well to create a cohesive district and help make linkages across New York Avenue.

Examples of this concept are illustrated in photos from the Portobello Road Bridge (lower left) and Villiers Street Arches Underpass (lower right) in London and the Bridgemarket project in New York City (below).

Case Study: The Deck at Central Avenue

Figure 6

Phoenix, AZ: *The Deck at Central Avenue is a unique bridge structure that crosses Phoenix's important civic space, the Margaret T. Hence Park adjacent to the City's award-winning Library. The structure features a horizontal split alignment (lower right) to allow light to the pedestrian environment below and a place for the prominent display of sculptural elements (lower left).*

The resulting pedestrian space below the Deck offers an inviting connection to both sides of the Park (upper left and below).

Both the Deck and Park sit on top of Interstate Highway 10 which was placed in a tunnel in this section to mitigate it's impact on adjoining neighborhoods and to create this great civic park and plaza space (middle left).

Case Study: Lake Street/I-35W

Figure 7

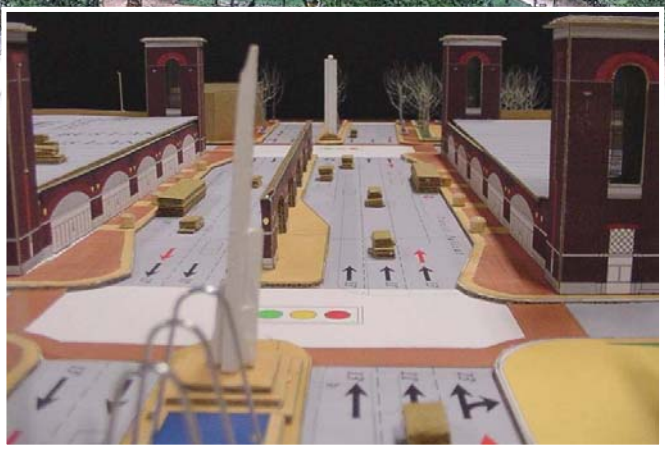


Image to the right shows configuration of space under the proposed bridge deck

Minneapolis, MN: *The Lake Street I-35W Overpass reconstruction project is an effort to remove a barrier built between two neighborhoods in the 1960's during the original freeway construction. Urban designers used the reconstruction opportunity to create an inviting portal (below and left) and pedestrian environment on either side of the bridge through the re-establishment of a vibrant retail street edge on Lake Street that would continue under the bridge. The use of "towers" at the bridge portals offered signature gateway elements as well as entrances to shops.*

To improve pedestrian activity, a mainline transit station was added to the upper bridge deck with waiting areas, restrooms and connections to Lake Street located underneath the bridge. A community police station is also contemplated in one of the storefronts under the bridge.

The project is currently under final design.

Case Study: Church Street/I-4

Figure 8

Orlando, FL: *Church Street in Downtown Orlando is one of the city's vibrant retail and entertainment corridors. Church Street is crossed by I-4 separating the mostly entertainment oriented portion of Church Street east of the freeway from an emerging retail and residential district west of the freeway (upper right). Streetscape enhancements are used extensively to provide an attractive pedestrian linkage under the freeway between these two sections of Church Street (upper left and lower right). Separation in the overpass above allows light to come through the area below the freeway offering the opportunity for a focal point of plantings (lower left and below).*

Case Study: Fort Washington Way Bridges

Figure 9

Cincinnati, OH: *The Fort Washington Way Bridges (I-470) represent a sensitive treatment of the area underneath a bridge structure in the heart of Riverfront Park along the Ohio River. The park master plan (below) called for the space beneath the bridges to be a linkage between the more urban park space to the west (upper right) and a more passive space to the east.*

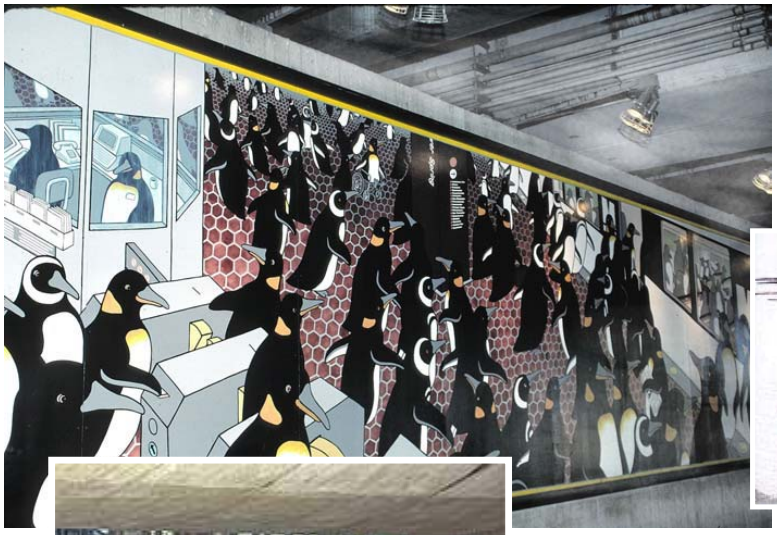
Designers accomplished this linkage by placing tree plantings, grass mounds, shrub beds, paved walks, sitting areas, play structures, and sculpture beneath the bridge structure itself (upper right and lower left and right). Pedestrian scale lighting is used to augment natural day light and improve nighttime use of the space.

Case Study: Dallas Galleria/Dallas North Tollway

Figure 10

Dallas, TX: *Landscape Architects and Engineers worked together during the conversion of the at-grade Dallas Parkway into the elevated Dallas North Tollway. A chief concern was reducing the potential barrier effect of the elevated roadway at the entrance to the Galleria development. The design solution employed effectively extended the "Galleria Image" and sense of entry under the Tollway overpass at the primary entry point to the Galleria (above left). This was accomplished using extensive landscape treatments and use of bridge treatments that complimented the architecture of the Galleria buildings and parking garages (below left and right). The resulting roadways that parallel the elevated tollway offer a unique image and identity for the Galleria project and provide for reasonable pedestrian accommodations to access transit stops.*

Other Precedent Images

Figure 11

There are a wealth of design measures that can be implemented to create a vibrant space under the Florida Avenue bridge. Besides the introduction of potential retail uses, the space can become a quality pedestrian environment through the use of public art, lighting, day-lighting, streetscaping, water elements, landscaping, or a combination of all the above. The images to the left illustrate some examples of these techniques.