World heritage conservation

Washington Avenue Bridge, Minneapolis, Minnesota

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• Introduction

The Washington Avenue Bridge (Bridge No. 9360) was constructed between 1962 and 1965 by the Minnesota Department of Transportation to replace an earlier bridge built in the same vicinity. The new bridge linked the traditional East Bank campus of the University of Minnesota to the modern West Bank campus, also constructed beginning in the 1960s. The unique design separated pedestrian and vehicular traffic on two levels to facilitate travel between the two campuses. It also incorporated university buildings into its approaches.

The historical, architectural, and engineering significance of the Washington Avenue Bridge is being evaluated as part of the Supplemental Draft Environmental Impact Statement and Final Environmental Statement for the planned construction of the Central Corridor Light Rail Transit project. It had not been evaluated in any of the earlier studies.
Location

- Washington Avenue Bridge located in County Rd 122, Minneapolis. It connects the east bank and west bank of Mississippi River.
- This bridge directly connect the campus in the two side of the river.
History

The first bridge (1884–1965)
An iron truss bridge was first built here in 1884, slightly upstream from the current location (connecting Washington avenue on both sides of the river). At the time of construction, many people lived in the river flats area below. The bridge was strengthened in 1890 to accommodate streetcars, and it made up part of the first interurban line between Minneapolis and neighboring Saint Paul.
The second bridge (1965–present)
This first structure was a straight east-west bridge carrying Washington Avenue, which continued directly into downtown. The new bridge aimed the west end slightly to the south, so Washington Avenue is now disjointed at that point. Continuing straight along the roadway will carry a vehicle into downtown along a short freeway-like section that meets 3rd Street South (a one-way—returning involves traveling along 4th Street).

Substantial rehabilitation of Bridge 9360 occurred from 2011–2013 to accommodate the new Central Corridor Light Rail transit line. In order to support the new light rail transit line and existing vehicular and pedestrian loads, two lines of Warren trusses were added between the original plate girders. Additionally, two additional pier columns were added to accommodate the additional loads on the bridge. Care was taken to minimize visual impacts to the bridge and to maintain the design aesthetic.
Historic importance

- Urban plan importance
- Urban texture

With the development of the urban, the connection of the two side of river become more and more important. So, the urban texture has been changed. The new bridge can bring people into the downtown of the Minneapolis directly.
The upper deck of Washington bridge is used for walking. Traversing the bridge in the harshness of winter was very uncomfortable, so an enclosure running down the center of the pedestrian area was added by the 1970s. Originally meant to be a heated indoor pedestrian area, due to energy cost concerns, the walkway is mostly unheated. There are some heaters inside that keep the area slightly warmer than outside, and some heat loss from the steam mains, but it can still dip below the freezing point. The structure also adds a windbreak for the top level, improving conditions for people who choose to walk outside. In the summer, large overhangs also provide some shade.

The 1965 bridge was designed as a fracture-critical structure, meaning that it lacks redundancy in its design and could collapse if any single one of certain load-bearing members were to fail. In 2011, upgrades strengthened the bridge to help it carry the 106,000-pound (48,000 kg) rail vehicles and added redundancy so that the failure of a single bridge member would not cause a catastrophe.
• Importance of the bridge in campus

• The Washington Avenue Bridge is significant for as an important crossing in Minneapolis connecting the university campuses.

• In the 1950s, enrollment at the University of Minnesota reached its highest numbers up to that time and the school needed to expand its East Bank campus, but options were limited. “It was not easy to find space adjacent to the campus, which was hemmed in by railroad yards on the north and the Mississippi River to the west and south. To the east lay a residential area, Prospect Park, home to many faculty members—and Hubert Humphrey.” The neighborhood’s strong political clout meant “expansion in that direction was not likely to be popular or feasible.” The west bank of the river, with a high percentage of renters, appeared to be an easier target for expansion plans.
• Importance of the bridge in campus

• upper deck enclosure led to an annual artistic event held on the first few days of classes, where organizations of all stripes can put their brushes to panels lining the interior. While most are self-promotional messages from campus groups, some of the panels always show impressive designs.
• Importance of the structure

• The 1,130-foot-long, six-span bridge has three main spans, which are continuous welded haunched steel girders, and two steel girder approach spans. In 2012 four Warren deck-truss lines were added between the original steel girder lines to support the addition of light-rail tracks and the approach spans were also upgraded with additional supporting deck-truss lines. This bridge was one of the first in the nation to use A441 high-strength, low-alloy steel in its superstructure, which allowed for the structural connections to be welded rather than riveted. It is also the only known double-deck bridge in Minnesota with a pedestrian upper deck and a vehicular lower deck.
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2008 repairs and pedestrian-level restrictions

In August 2008, concerns about the strength of the upper level led Hennepin County to restrict the pedestrian and bicycle traffic to a 14-foot-wide section in the center. Engineers had decided that in preparation for repairs, the weight needed to be moved to the center, where there was support from the columns below. Usage of the upper deck continued to be restricted for about a year until repairs were complete.
As a long-standing tradition of the University of Minnesota, student groups across campus are annually granted permission to paint the interior panels of the Washington Avenue Bridge to advertise their groups and publicize their respective group philosophies. However, for the past two years, conservative groups’ panels were defaced and vandalized. This year, panels of the College Republicans, Turning Point USA and the Minnesota Republic were defaced with various messages denouncing the original messages on the panels.

It’s imperative to note that the messages posited by the aforementioned groups are protected by the First Amendment. This has been ruled on by the Supreme Court as late as June of this year. In addition, they were fully compliant with University policy as they did not violate any code of conduct set out by Student Unions and Activities. Disagreement with the text of the statements simply does not merit removal. For this reason, vandalism and defacement of the panels on the bridge are not only against University policy, they also directly violate constitutional rights of members in groups like the College Republicans, Turning Point USA and the Minnesota Republic.

Beyond legal implications, we believe this sets a very dangerous precedent. The idea that we should bar a viewpoint on campus simply because we disagree is not only wrong, but is highly counterproductive. It creates an atmosphere where liberal and conservative philosophies alike would be subject to removal because they would always offend some group or another. We believe that the University environment should be a place where students, regardless of their backgrounds, can come together to generate a culture of discussion and dialogue with respectful disagreement. This is truly the definition of a safe space — where individuals are able to vehemently disagree on ideologies without having to worry about their physical safety.