

### **Box Beam Bridges**



**Photo 5-36. SR-115A Flyover to SR-10A, Duval County (No. 720100)**

#### **SR-115A Flyover to SR-10A**

Duval County

FDOT #720100, 8DU21149

Improvements and innovations to transportation engineering and design included the introduction of the flyover. The introduction of this bridge type connects two roadways and crosses an existing roadway. It is often included at urban interchanges where space constraints exist and/or there are multiple roadways to connect at a critical transportation juncture. This 1961 flyover connects SR-115A to SR-10A over Gator Bowl Blvd. and the Martin Luther King Jr. Parkway in downtown Jacksonville.

This small, reinforced concrete box beam bridge measures 545 feet in length. It features typical mid-century railings and a cast-in-place concrete deck. This structure is notable as Florida's earliest box beam, a type that did not become common until the 1980s. Similarly, the use of reinforced concrete appears to be unique, as this material presents construction challenges for this bridge type. Casting reinforced concrete in place in a continuous arced form is counterintuitive as concrete does not like to bend. This material constraint undoubtedly presented some construction challenges. For this reason, most box beams today are constructed of steel, a material with more malleable properties.

The SR-115A Flyover is newly recommended NRHP-eligible under Criterion A in the area of Transportation and under Criterion C in the area of Engineering as an early excellent example of reinforced concrete box beam that retains its integrity. It is one of three bridges of its type in Florida that date to the 1960s, and is the earliest of the three.