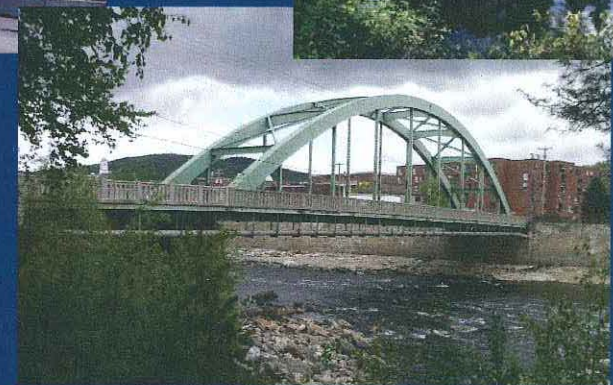
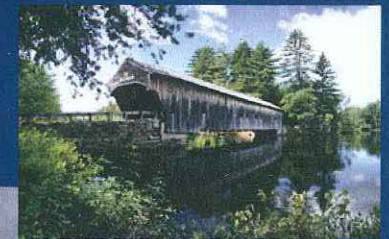
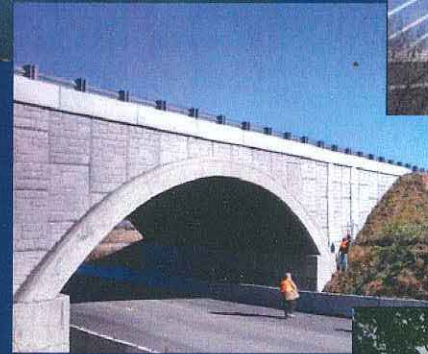
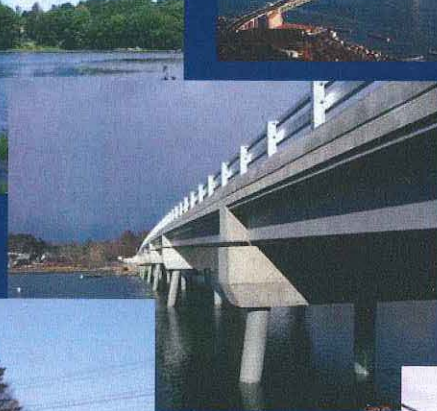
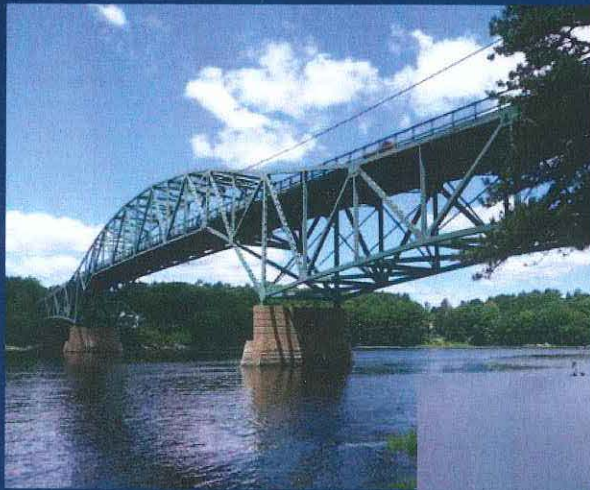


# Falls Bridge Advisory Committee Meeting #6 – Bridge Types



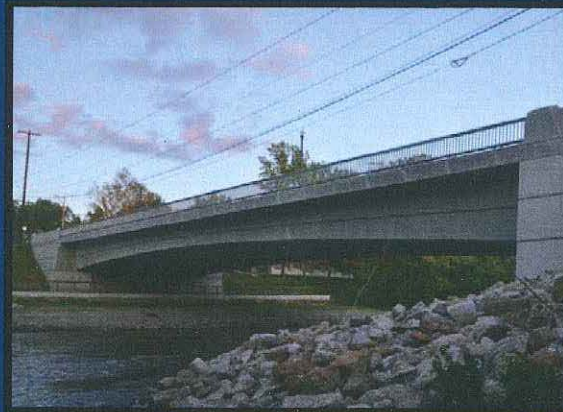
Presenter Tim Cote, PE - HNTB

# Bridge Types

**Steel Girder**



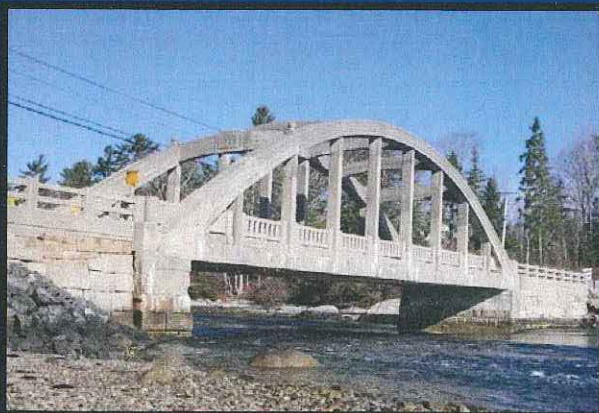
**Concrete Girder**



**Segmental Concrete**



**Conventional Tied Arch**



**Network Tied Arch**

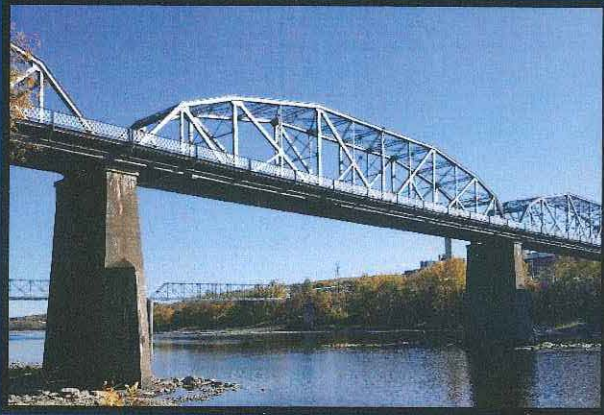


**Spandrel Arch**



# Bridge Types

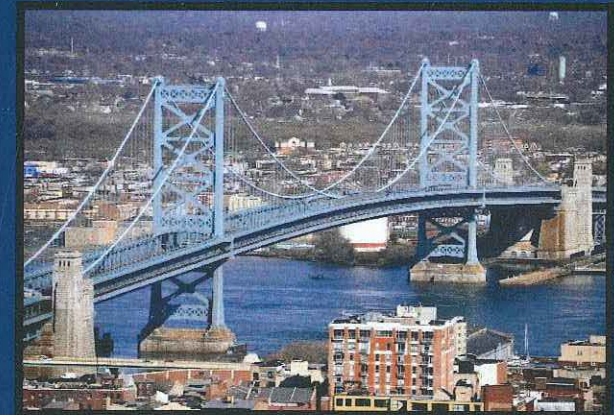
Truss



Cable Stay

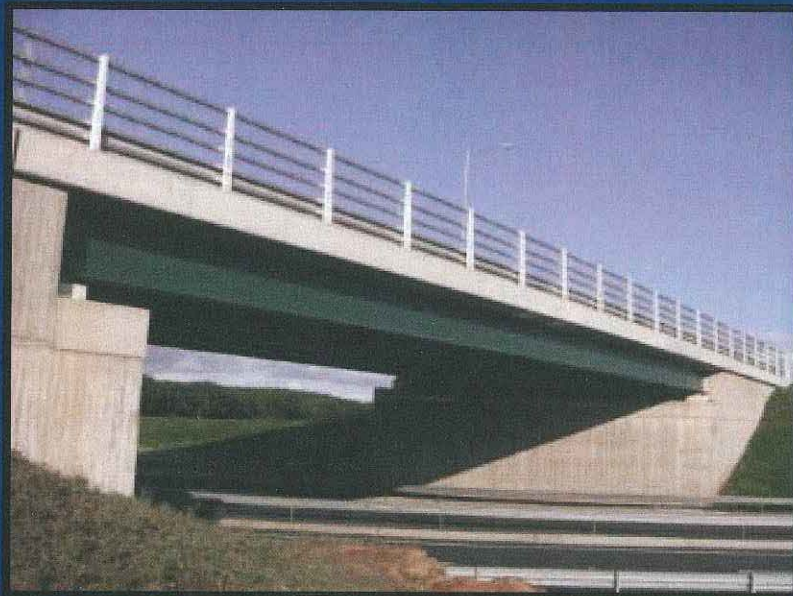


Suspension

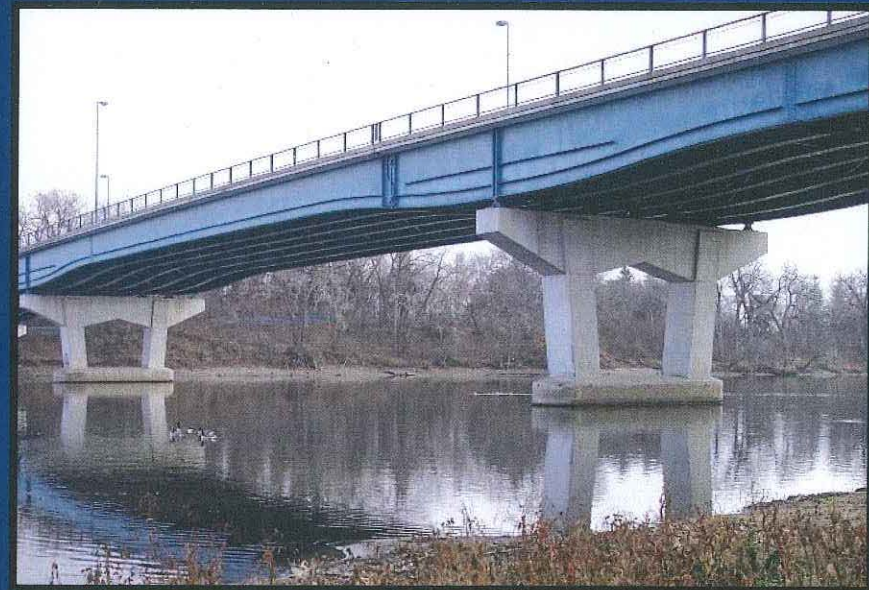


# Applicable Bridge Types

- Steel Beams
  - Painted or Galvanized
  - More Maintenance than Concrete
  - Best suited for short to intermediate spans



**Straight Girders**



**Haunched Girders**

# Applicable Bridge Types

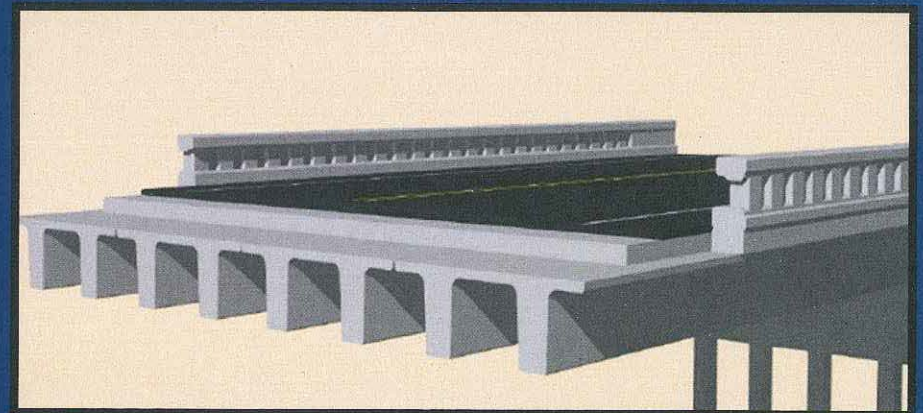
- Concrete Beams
  - Precast, prestressed concrete
  - Best suited for short to intermediate spans



**Haunched Girders**



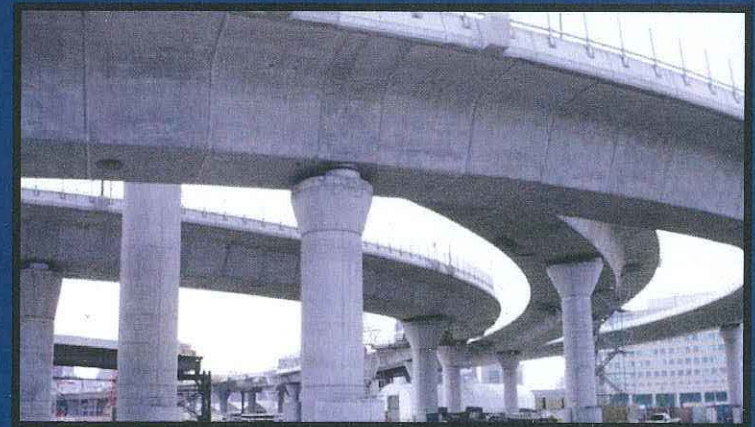
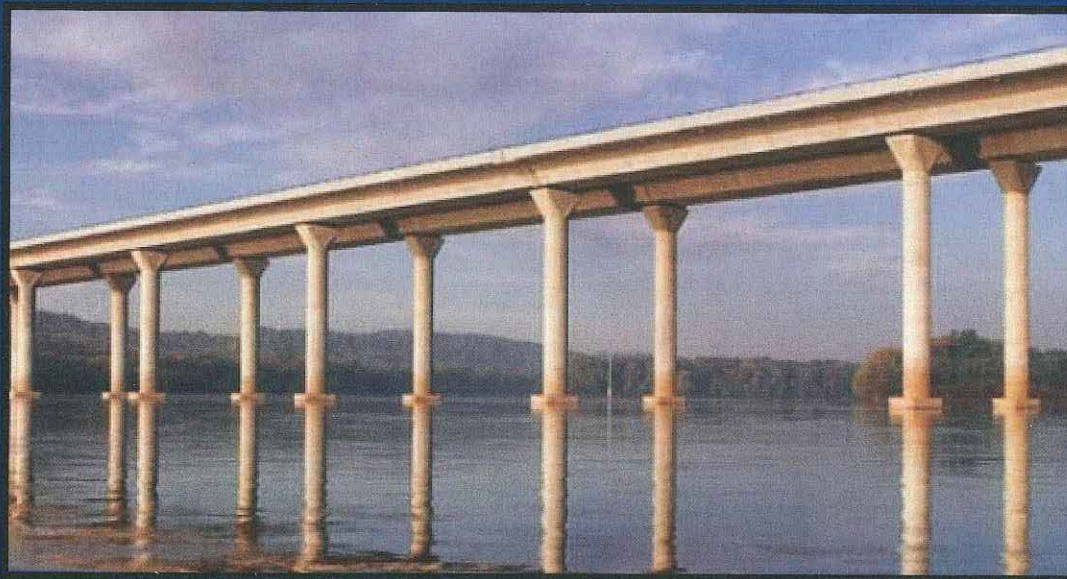
**Bulb Tee Girders**



**Double Tee Girders**

# Applicable Bridge Types

- Segmental Concrete
  - Precast and post-tensioned
  - Best suited for intermediate to long spans
  - Works well with multi-span and curved structures

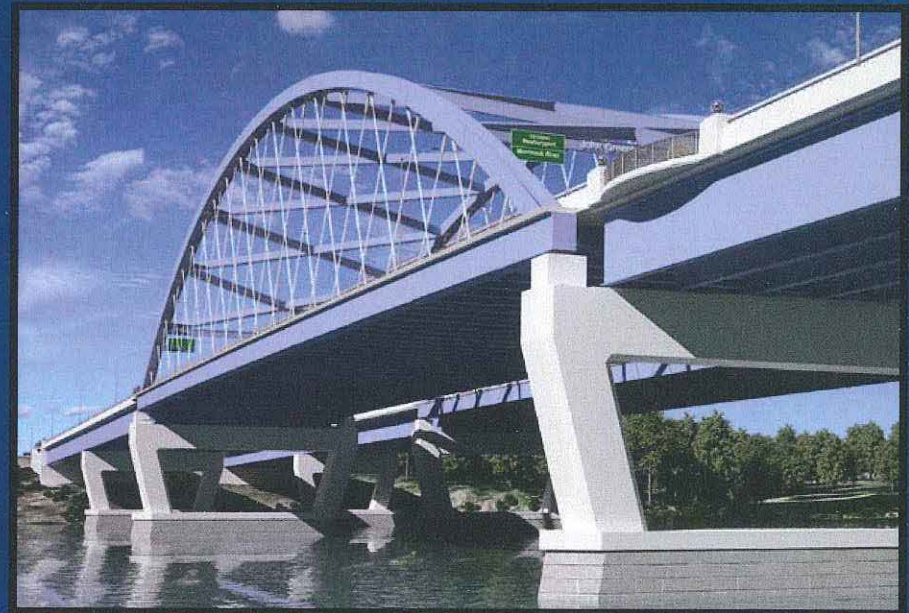


# Applicable Bridge Types

- Tied Arch
  - Steel or concrete
  - Conventional or network tied arch
  - Best suited for intermediate to long spans



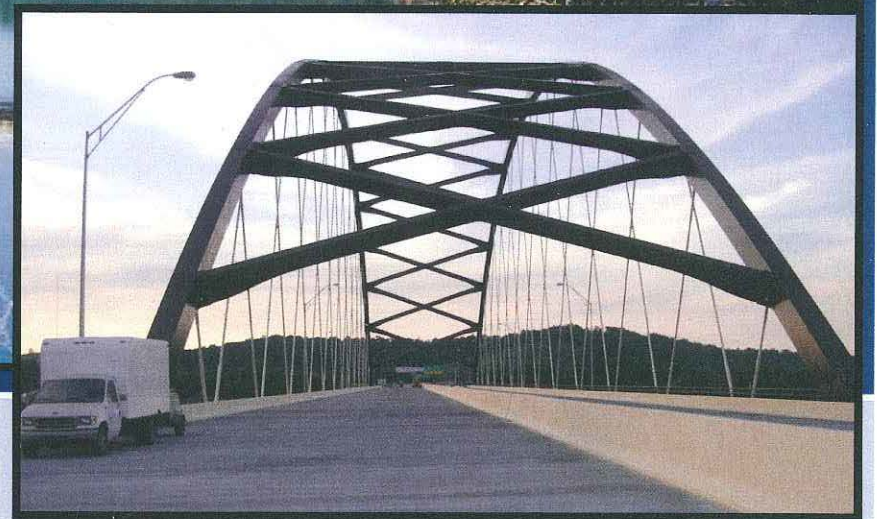
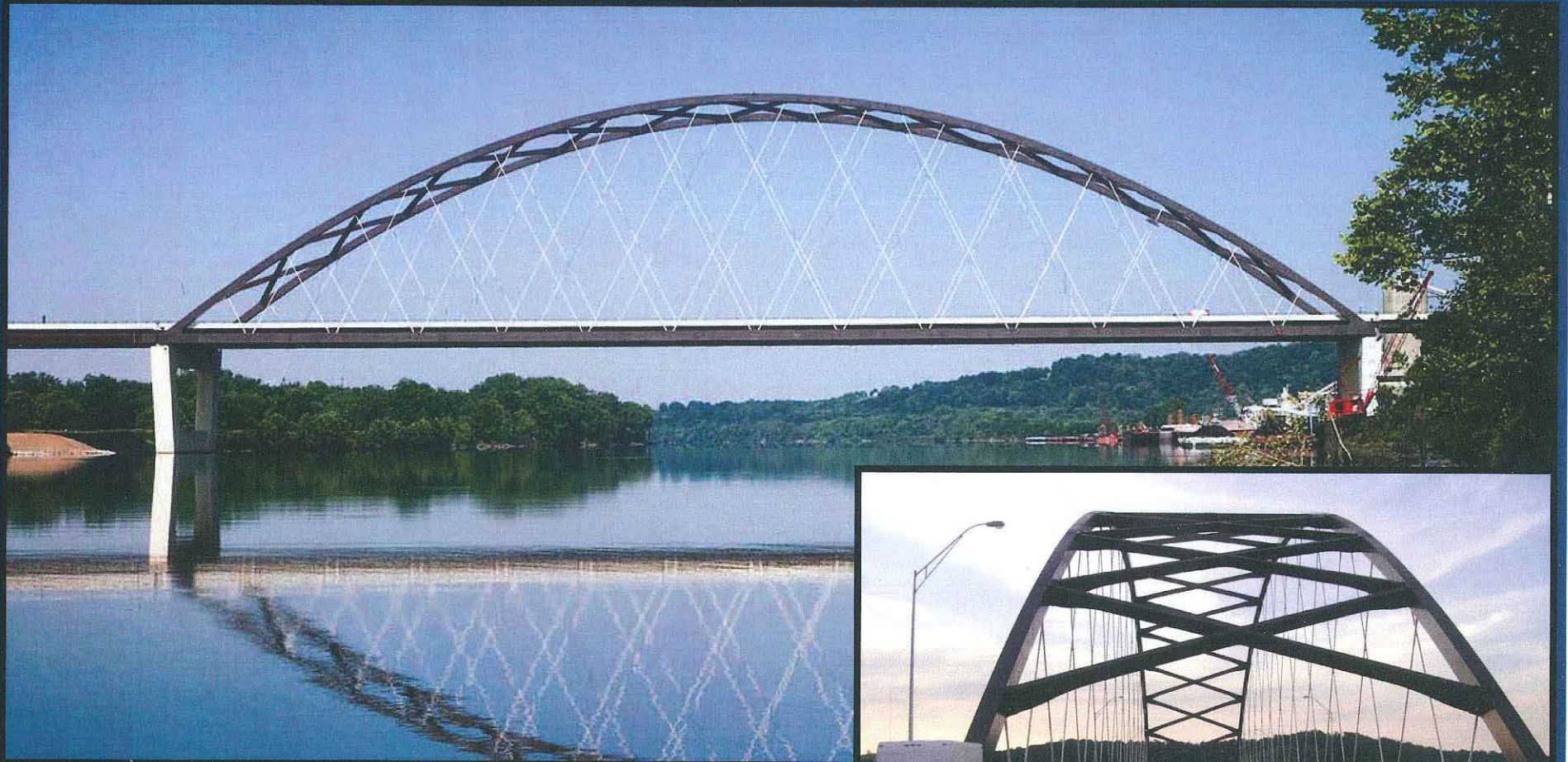
Conventional (Norridgewock Covered Bridge)



Network (Whittier Bridge)

# Applicable Bridge Types

- Tied Arch – Blennerhassett Bridge (Steel, Network Tied Arch)

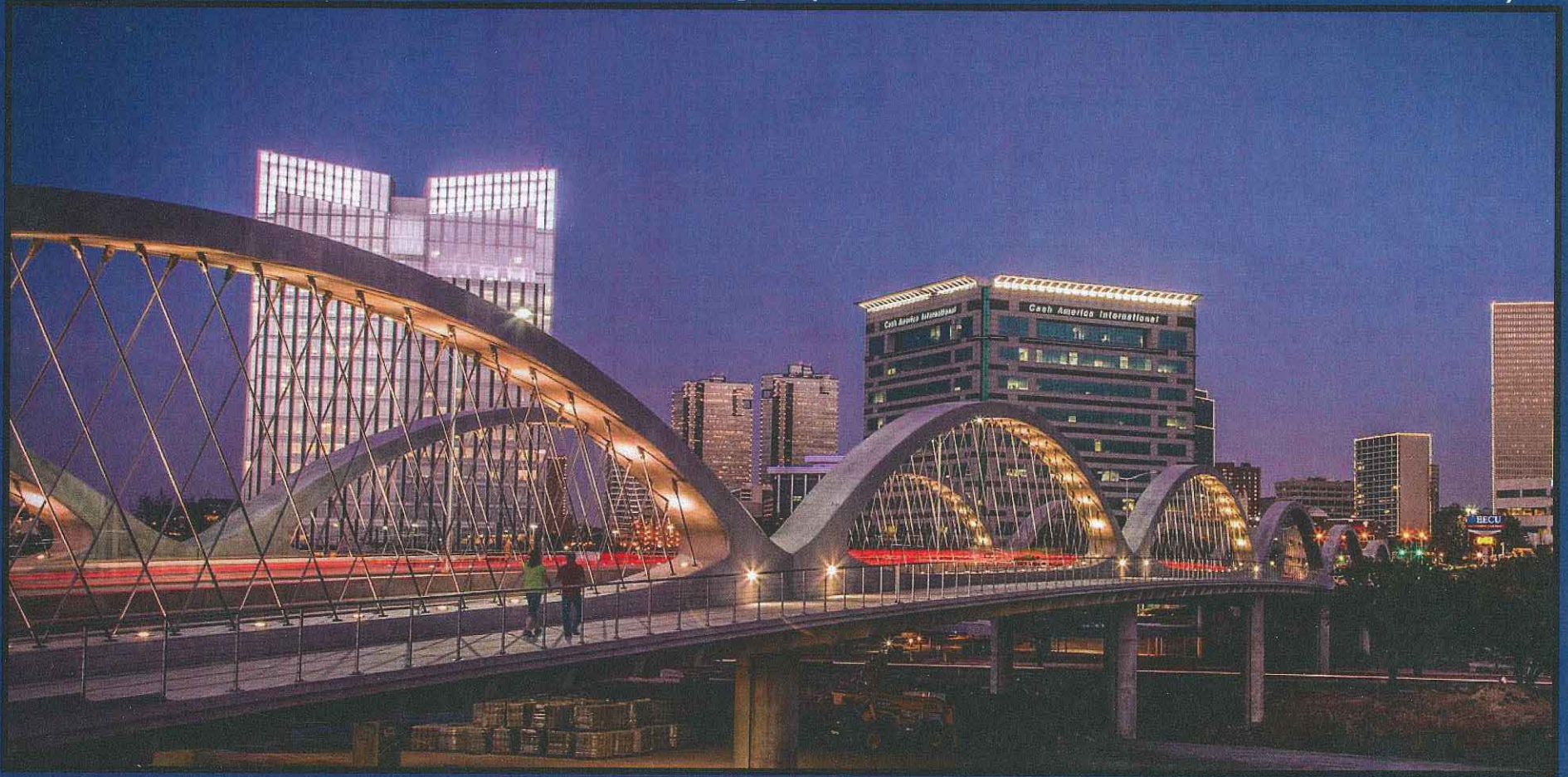


*Integrity - Competence - Service*



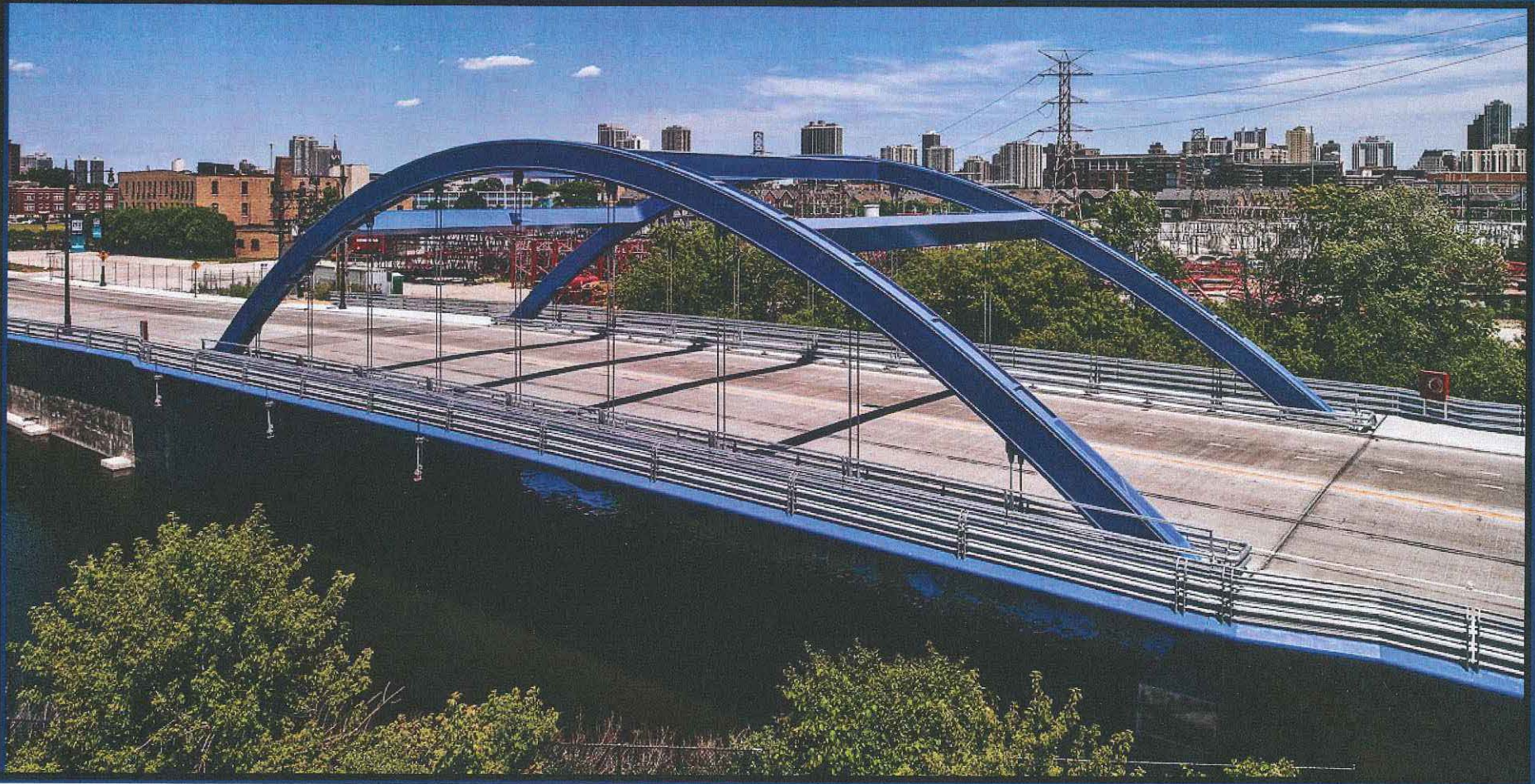
# Applicable Bridge Types

- Tied Arch – 7<sup>th</sup> Street Bridge (Concrete, Network Tied Arch)



# Applicable Bridge Types

- Tied Arch – North Halsted Bridge (Steel, Conventional Tied Arch)



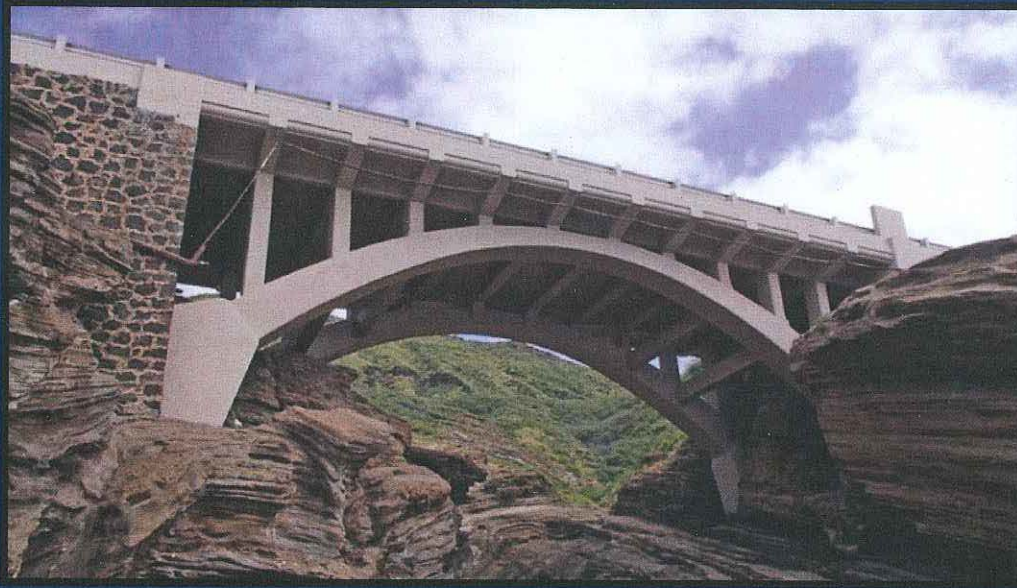
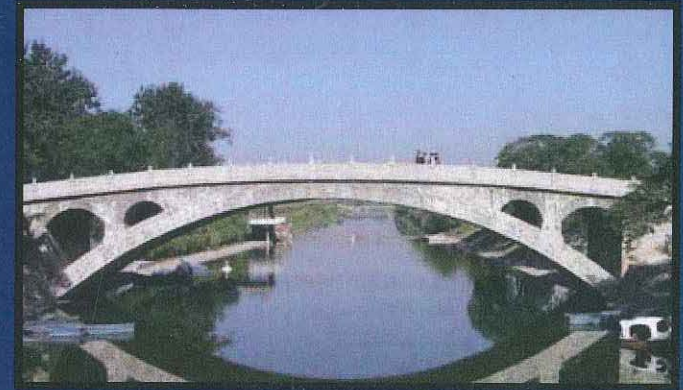
# Applicable Bridge Types

- Tied Arch – Depot St. Bridge (Concrete, Network Tied Arch)



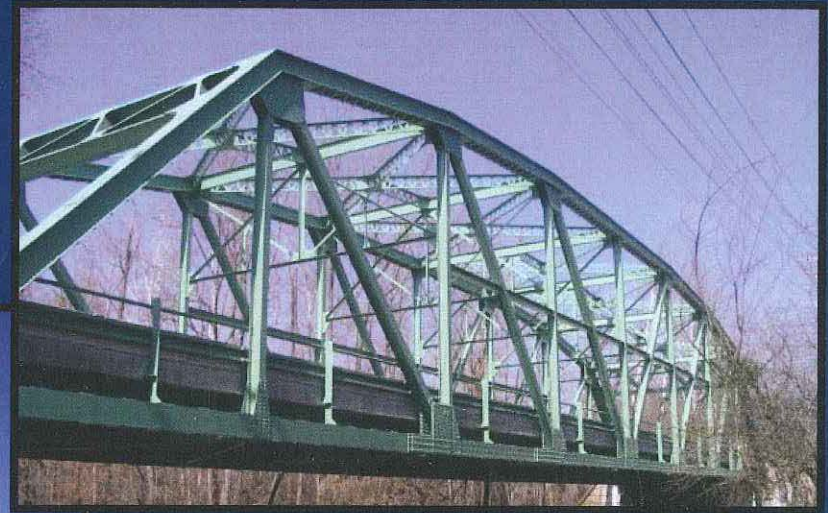
# Non-Applicable Bridge Types

- Spandrel Arch
  - Best suited for deep ravine crossings



# Non-Applicable Bridge Types

- Truss
  - Construction is labor intensive
  - Higher maintenance costs
  - Best suited for long spans



# Non-Applicable Bridge Types

- Cable Stay
  - Best suited for long spans



# Non-Applicable Bridge Types

- Suspension
  - Best suited for very long spans

