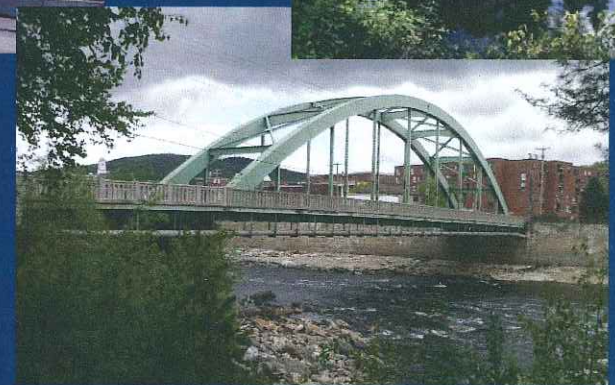
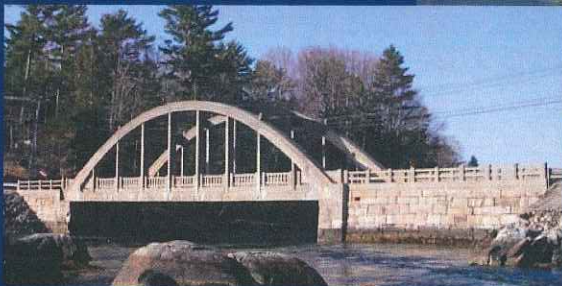
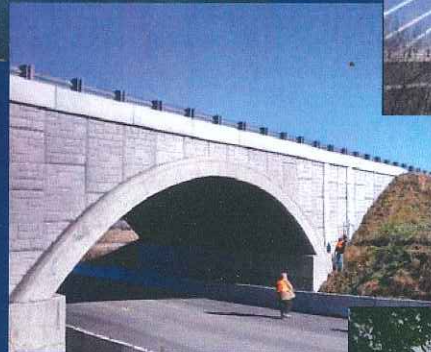
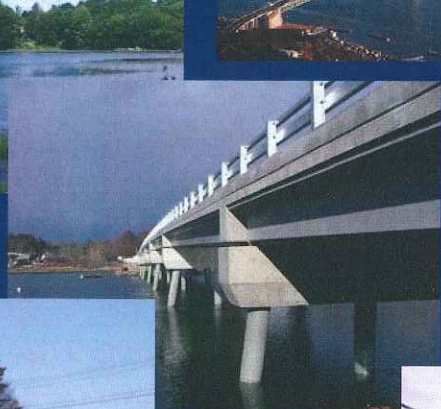


Falls Bridge Advisory Committee Meeting #6 – Bridge Types



Presenter Tim Cote, PE - HNTB

Bridge Types

Steel Girder



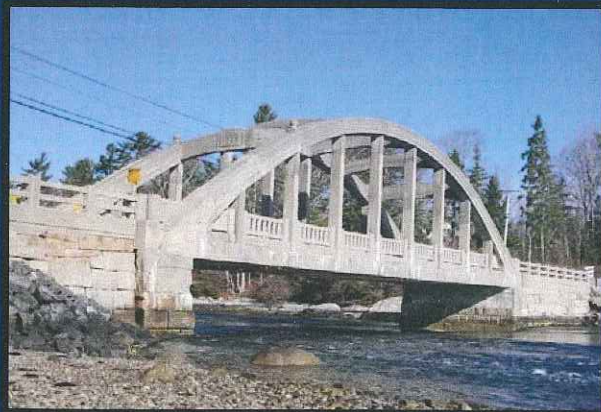
Concrete Girder



Segmental Concrete



Conventional Tied Arch



Network Tied Arch



Spandrel Arch



Bridge Types

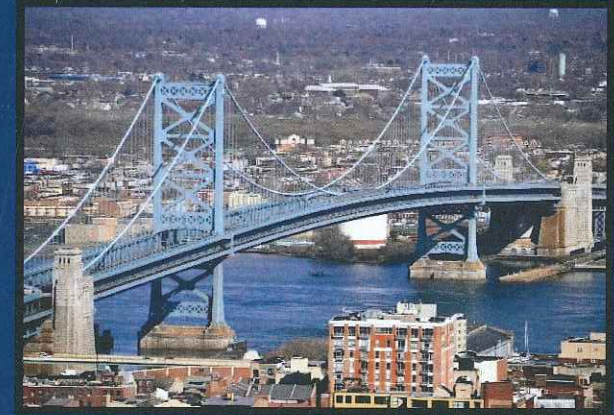
Truss



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

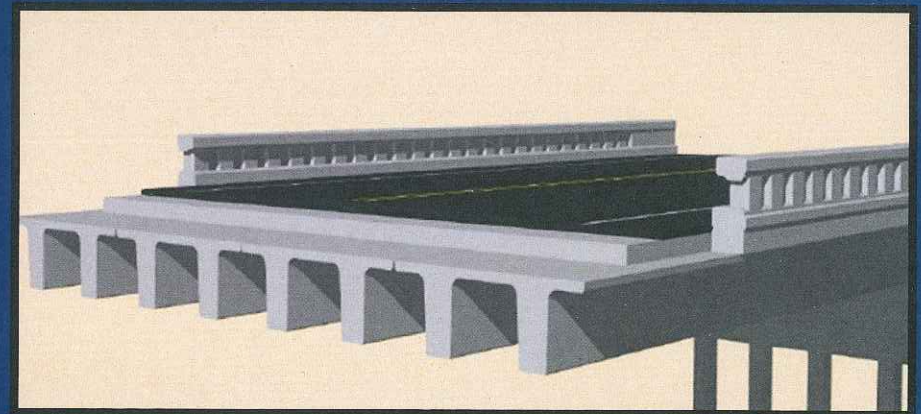
- Concrete Beams
 - Precast, prestressed concrete
 - Best suited for short to intermediate spans



Bulb Tee Girders



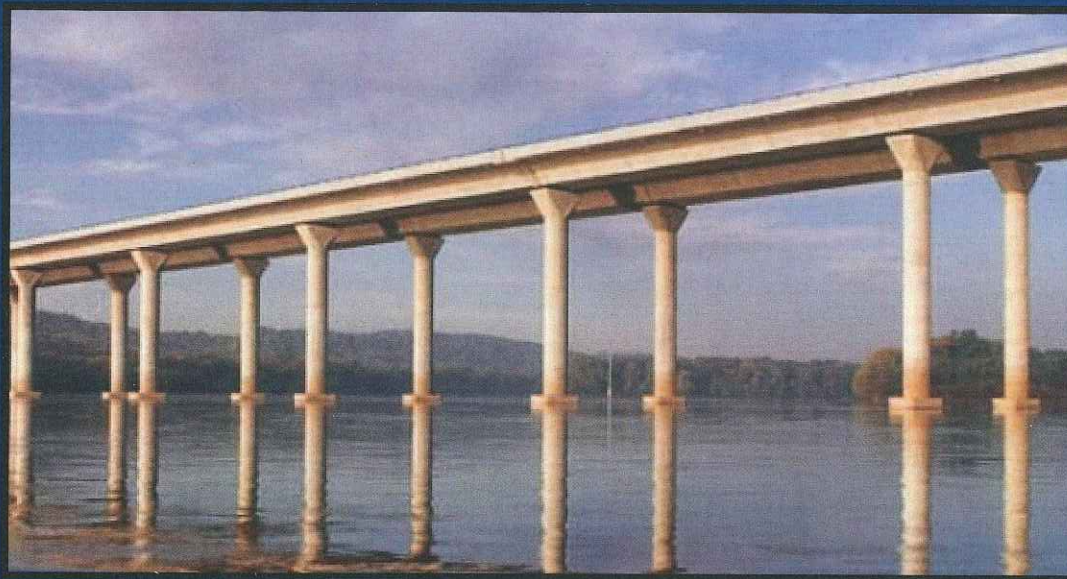
Haunched Girders



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



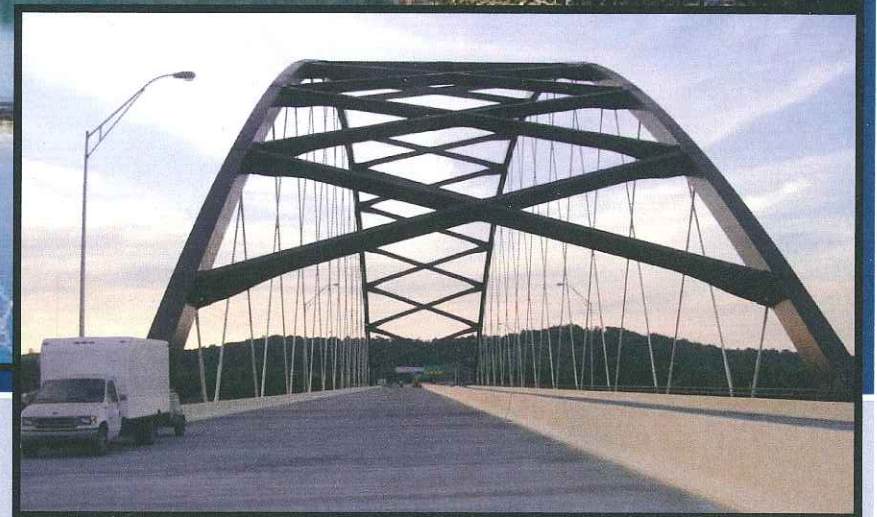
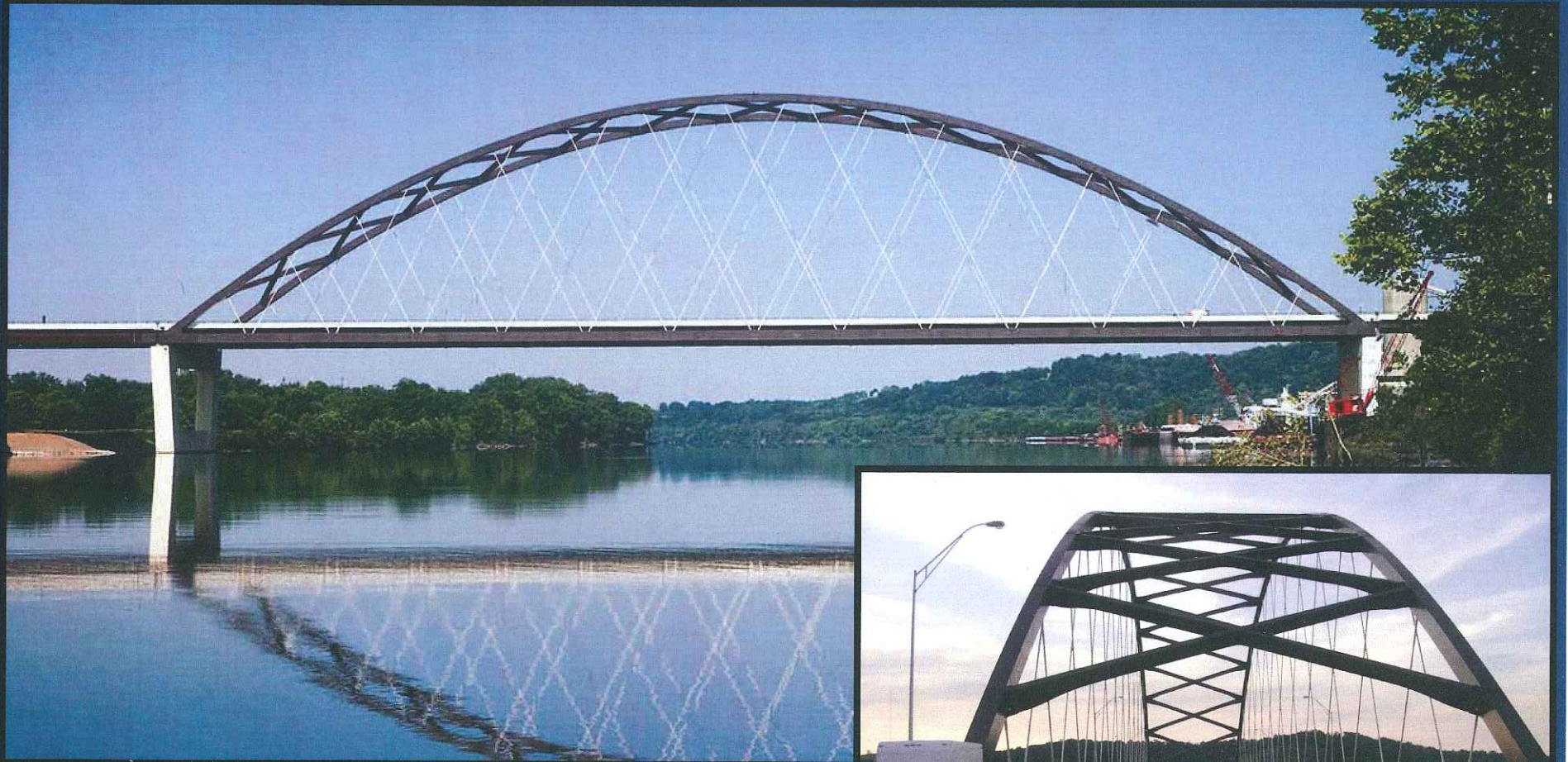
Conventional (Norridgewock Covered Bridge)



Network (Whittier Bridge)

Applicable Bridge Types

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



Integrity - Competence - Service

Applicable Bridge Types

- Tied Arch – 7th Street Bridge (Concrete, Network Tied Arch)



Applicable Bridge Types

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



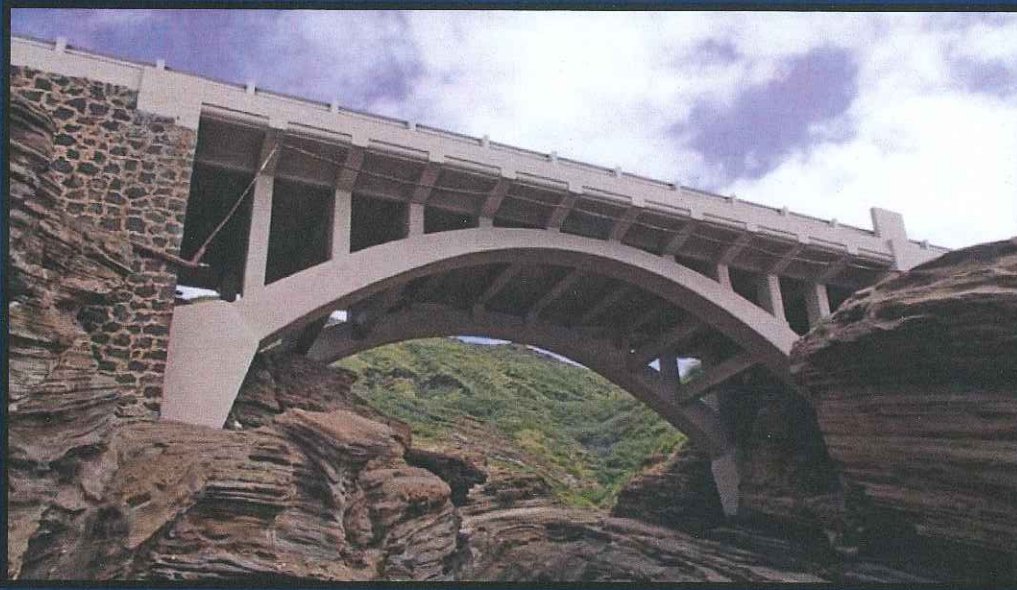
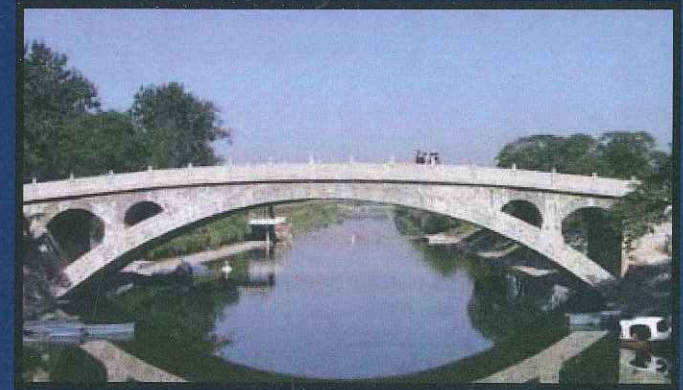
Applicable Bridge Types

- 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

