

# City of Milwaukee Department of Public Works Major Bridge Program

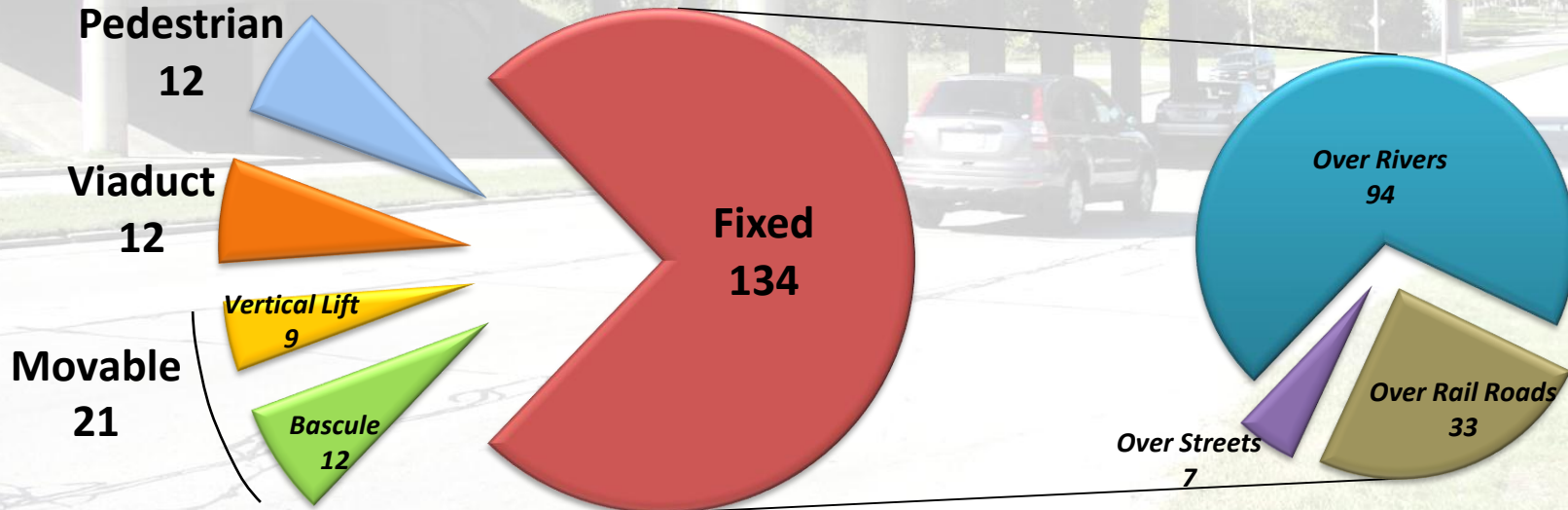


5  
NO WAKE  
ENTIRE RIVER



# City Bridge Inventory

- 179 City-owned and maintained bridges
- Relative comparison of bridge types:



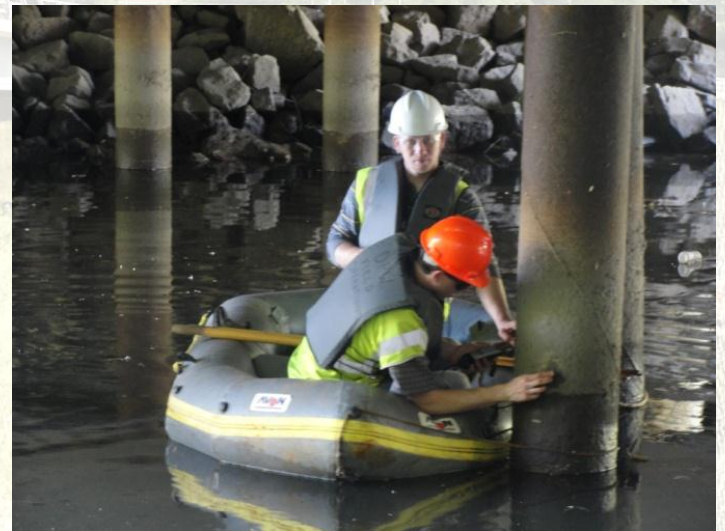
# Bridge Structure Inspection

- In accordance with FHWA and WisDOT standards
- Conducted by DPW personnel
  - FHWA certified Bridge Inspectors
- Bridges inspected *every* 24 months, except:
  - Annually for:
    - Movable bridges
    - Structurally deficient bridges



# Types of Bridge Inspection

- Initial
- Routine
- Fracture Critical
- In-Depth with Non-Destructive Testing



# Types of Bridge Inspection (Cont'd)

- Interim
- Movable
- Underwater Survey (New)
- Underwater Visual Probe
- Underwater Dive (Every 5 years)

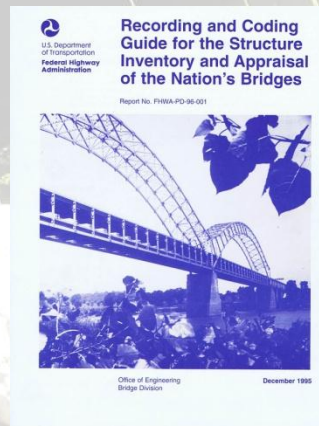




# Sufficiency Rating (SR)

- FHWA standard measures service condition
- Three separate group factors determine SR Rating
  - Structural adequacy (Deck, Superstructure, and Substructure)
  - Serviceability and functional obsolescence
  - Essentiality for public use
- Condition and function are rated to current standards (not what the bridge may have been built to)

FHWA Coding Guide



# Sufficiency Rating (SR) Cont'd

- 100 percent would represent an entirely sufficient bridge; 0 is insufficient or deficient bridge
- Rating is not a quantitative measure of safe versus unsafe
- Example, a 50 year old bridge may be structurally adequate but deficient due to current roadway widths, standards, or clearance



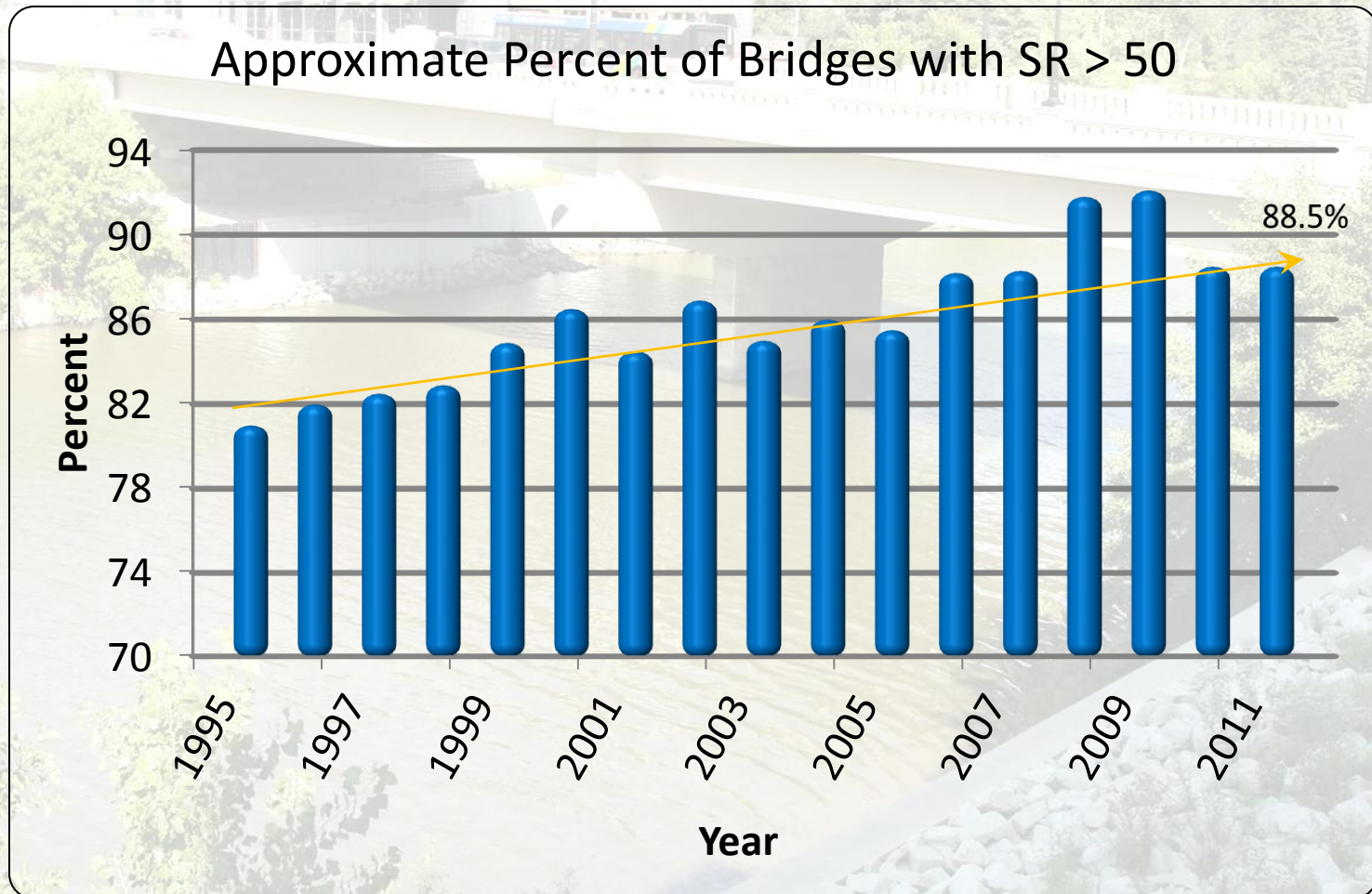
U.S. Department  
of Transportation

**Federal Highway  
Administration**



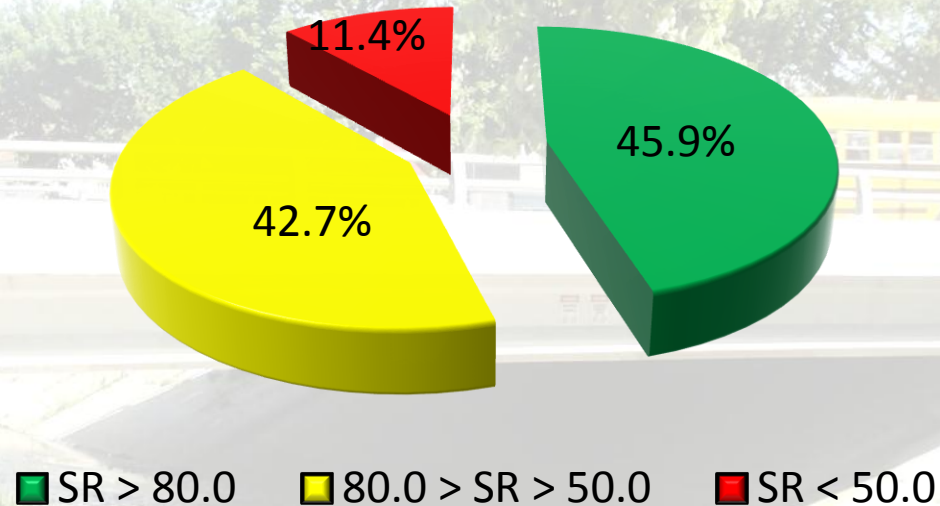
# Milwaukee Bridge Performance

- SR of bridge inventory trending upwards



# Milwaukee Bridge Performance

- Relative comparison of SR for city rated bridges, 2011

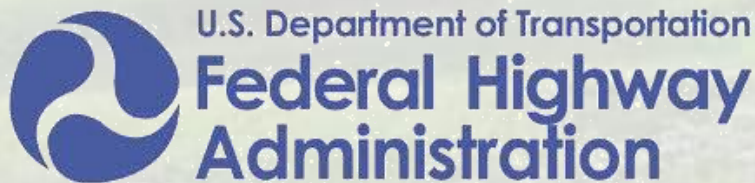


- **Federal/State funding eligibility**

- SR < 80.0 : Bridge eligible for rehabilitation
- SR < 50.0 : Bridge eligible for rehabilitation or replacement

# Federal/State Program

- Available only for those bridges deemed as federally eligible
- Competitive application process for limited state-wide program dollars
- Applied for on a 3 year cycle
- Generally 80% Federal/State funded with 20% local share
- Project schedule generally established by limits on available funding

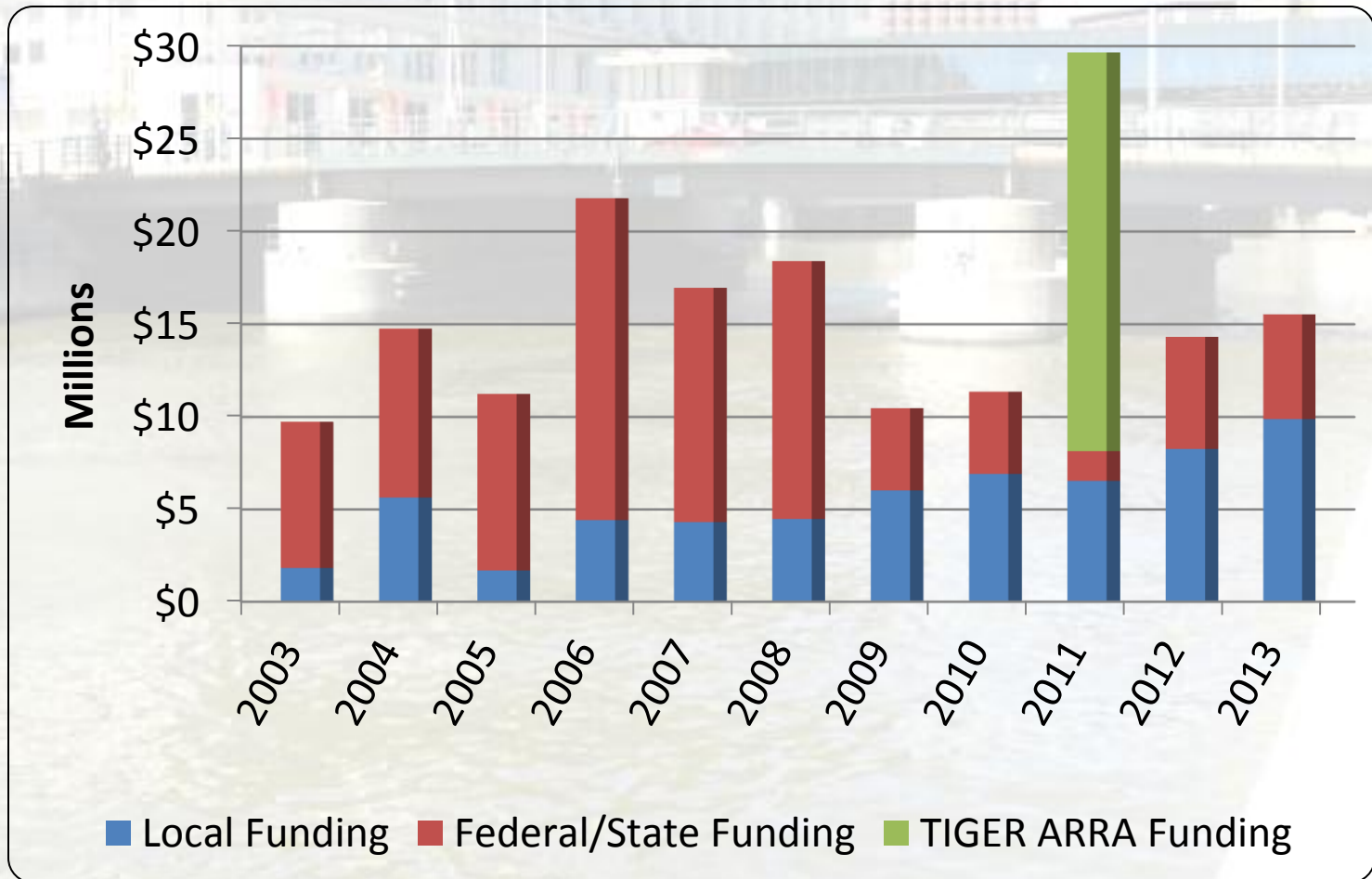


# Local Program

- Bridges not deemed Federal/State eligible
- Bridges in which Federal/State funds not available or insufficient
- Maintenance work including structure repair, painting, mechanical upgrades, inspections, pre-engineering activities, etc.



# Summary of Capital Bridge Program 2003-2013



# Questions?

