

I-90 Jane Addams Memorial Tollway Rebuilding and Widening Project Fox River Bridge

**April 24, 2014** 

# **Bridge Overview**

- Originally opened in 1958
- Move Illinois = complete rebuilding and widening
- Construction scheduled to begin in mid-summer and be complete by end of 2016





# **Bridge Reconstruction Highlights**

#### Bridge removal and reconstruction

- Widening bridge from six to eight lanes plus full shoulders
- Removal and replacement of pedestrian bridge
  - In cooperation with Forest Preserve District of Kane County
- Stormwater management improvements will protect Fox River and forested fen
  - In cooperation with the Illinois Nature Preserve Commission
- Comply with IDNR April 1 June 15 water restrictions

	Existing Structure	Future Structure
Span	6 lanes	8 lanes
Length	1,383 feet	1,315 feet
Width	115 feet	162 feet



# Benefits of Larger Contracts for Complex Construction Sites

## Reduces impact to the customer

- Ability to better coordinate maintenance of traffic
- Shorter construction duration affecting mainline traffic

## Improves efficiency

- Improved accountability, coordination and response
- Less mobilization and demobilization
- More schedule flexibility within the contract

#### Promotes contractor innovation

#### Decreases costs

- Reduced administration and overhead costs
- Improved economies of scale
- Improved schedule control



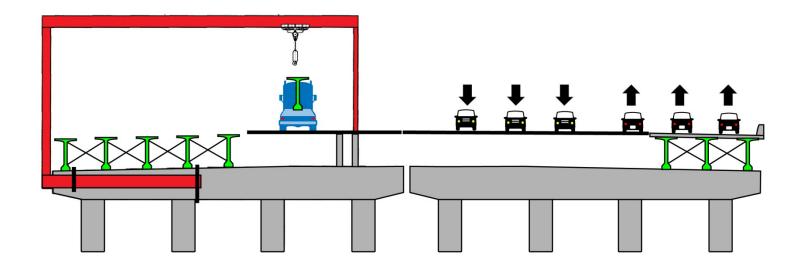
# **Construction Challenges**

- Limited work space due to:
  - Fox River
  - Forested fen (east bank)
  - Com Ed lines (north side)
- Restricted access to water from April 1 – June 15
  - Annual water management period for fish spawning
- Complex maintenance of traffic
- Building new structure while maintaining existing bridge
- Multiple construction seasons





# **Innovative Construction Opportunity**





# **Benefits of Overhead Gantry System**

#### Extends the life of bridge by reducing longitudinal joints

- Reduction in maintenance costs (saving more than \$2.2 million over 75 years)
- Eliminates construction materials and stage changes (saving \$3.6 million)

#### Reduces impact to customers

- Maintain same number of traffic lanes throughout construction
- Simplify maintenance of traffic

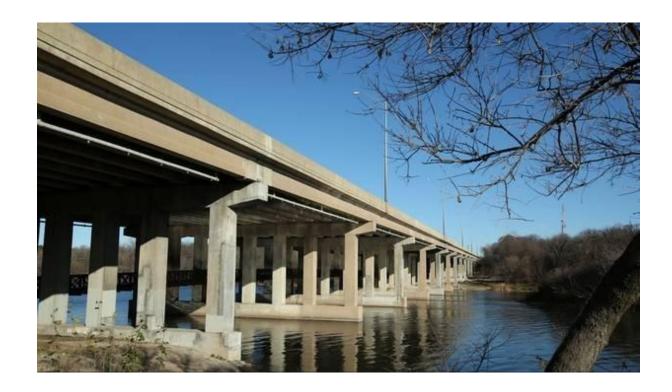




# **Construction Benefits for the Environment**

## Fewer piers in Fox River

- Reduced from six to three
- ▶ Longer spans through use of 90" beams





# **Construction Benefits for the Environment**

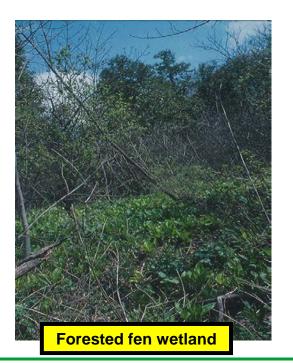
## Improved stormwater treatment

Eliminates direct stormwater discharge into river

Stormwater will be captured and filtered

Prevents cross-contamination of stormwater with forested fen

groundwater









"There is no place like it in the whole state."

Dr. Henry Cowles (1923)



# **Construction Benefits for the Environment**

## Replacing pedestrian bridge

- Pedestrian bridge spans Fox River and is part of the Forest
   Preserve District of Kane County bike path system
- New pedestrian bridge will accommodate lift trucks to conduct bridge inspections
- Bridge will be reopened for public use after construction







# THANK YOU