



# PRIZE BRIDGES 1957



# Prize Bridges 1957

*Steel bridges selected in the annual national competition conducted by the American Institute of Steel Construction as the most beautiful bridges opened to traffic in 1957.*

AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC.  
101 Park Avenue, New York 17, N. Y.

# Jury of Award

ALONZO J. HARRIMAN

*Architect*

Auburn, Maine

CALVIN S. HATHAWAY

*Director*

Cooper Union

Museum for the Arts of Decoration

New York City, New York

LEE HENDRIX

*Consulting Engineer*

Tulsa, Oklahoma

JOHN NOBLE RICHARDS

*Architect*

Toledo, Ohio

HAROLD T. SPITZNAGEL

*Architect*

Sioux Falls, South Dakota



# Beauty in Steel Bridges

The enduring beauty of steel bridges is eloquent tribute to the vision and skill of the men who plan, design and build them. The bridge designer of today is both artist and engineer. He understands the potential for strength and beauty which is inherent in steel structures, and he knows that aesthetic appearance can be achieved at no sacrifice of efficiency or economy. The simple grace of a highway overpass, no less than the majestic sweep of a river crossing reflects a creative integration of structure, function and form, skillfully executed in beautiful bridges of steel.

To promote a more widespread appreciation of the aesthetics of steel bridges and to honor the architectural excellence of modern bridge design, the American Institute of Steel Construction sponsors an annual Prize Bridge Competition. Each year a distinguished Jury of Award, composed of leading art directors, architects and engineers, selects the steel bridges which it judges to be the most beautiful of those opened to traffic in the United States during the previous year.

To establish an equitable basis for competition, awards are made in each of four contest classifications. Size, cost and operating conditions determine the class in which each entry is eligible to compete. The prize winning bridges are marked with stainless steel plaques, and the designers, owners and steel fabricators are awarded engraved certificates in recognition of their contribution and achievement.

The American Institute of Steel Construction sponsors this competition and awards the prizes in the belief that it is helping to render a public service by stimulating a deep and lasting interest in improved bridge design. Beginning with this booklet the Institute will record the prize bridges for each year in a single volume. Previous winners, covering the period 1928-56, are pictured and described in the booklet "Prize Bridges Through the Years," available from the Institute upon request.





## Award Class I

**for bridges with spans 400 feet or more**

Walt Whitman Bridge, Philadelphia, Pennsylvania

Total Cost: \$75,000,000

Designers: *Modjeski and Masters, Ammann & Whitney*

Fabricators: *American Bridge Division, United States Steel Corporation, Bethlehem Steel Company and New York Shipbuilding Company*

Owner: *Delaware River Port Authority*

Span lengths: 770 ft; 2000 ft; 770 ft



CLASS I  
FIRST HONORABLE MENTION



Laconner Bridge, Swinomish Channel,  
Skagit County, Washington

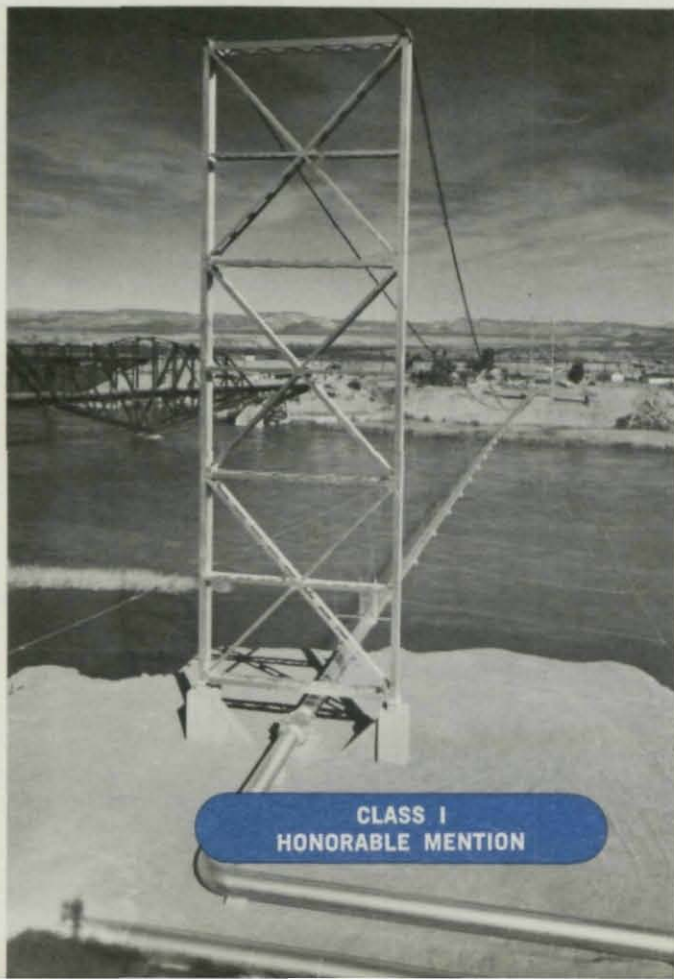
Total Cost: \$632,781

Designer: *Harry R. Powell and Associates*

Fabricator: *United Concrete Pipe Products  
Company*

Owner: *Skagit County*

Span lengths: *One at 550 ft; two at 36 ft;  
four at 35 ft*



CLASS I  
HONORABLE MENTION

Colorado River Pipeline Suspension Bridge,  
Topock, Arizona

Total Cost: \$350,000

Designers: *Harold B. Hammill and Pacific  
Gas and Electric Company*

Fabricator: *National Iron Works, Inc.,  
American Chain & Cable Co.,  
and Fisher Contracting Co.*

Owners: *Pacific Gas and Electric Company  
and El Paso Natural Gas Company*

Span length: 1080 ft



## Award Class II

**for bridges with fixed spans under 400 ft and costing more than \$500,000**

General James Longstreet Memorial Bridge, Chattahoochee River,  
Gainesville, Georgia

Total Cost: \$500,000

Designer: *Patchen and Zimmerman*

Fabricator: *American Bridge Division, United States Steel Corporation*

Owner: *Corps of Engineers, U. S. Army for the State of Georgia*

Span lengths: *Two at 153 ft; four at 127 ft-6 in.*



**CLASS II  
FIRST HONORABLE MENTION**



Trinity River Bridge, Hoopa, California

Total Cost: \$737,000

Designer: *Bridge Department, Division of Highways,  
State of California*

Fabricator: *American Bridge Division,  
United States Steel Corporation*

Owner: *State of California*

Span lengths: 200 ft; 170 ft; 169 ft-4 in.; 80 ft

**CLASS II  
HONORABLE MENTION**

Clarks Summit Bridge,  
Clarks Summit, Pennsylvania

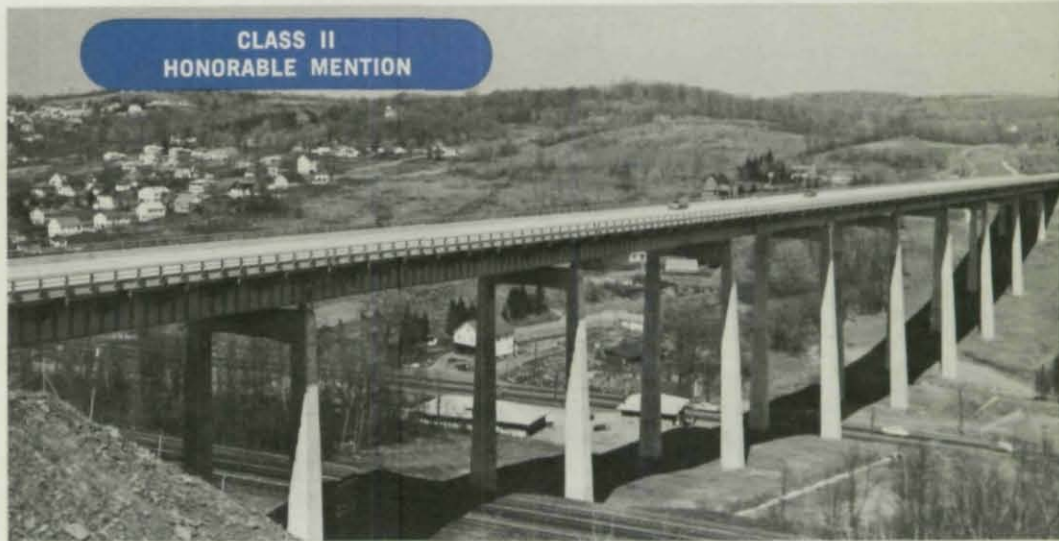
Total Cost: \$2,167,912

Designer: *Brookhart and Tyo*

Fabricator: *Phoenix Bridge  
Company*

Owner: *Pennsylvania Turnpike  
Commission*

Span lengths: *Eight spans of  
170 ft-3 in.;  
two of 132 ft-5 in.*



**CLASS II  
HONORABLE MENTION**

St. Lucie Bridge over St. Lucie Canal,  
Martin County, Florida

Total Cost: \$2,600,000

Designer: *E. Lionel Pavlo*

Fabricator: *The Mount Vernon Bridge  
Company*

Owner: *Florida State Turnpike Authority*

Span lengths: *One at 142 ft; two at 70  
ft; multiple spans at 85 ft*



## Award Class III



**for bridges with spans under 400 ft costing under \$500,000**

Hampton Road Overpass, Dallas-Fort Worth Turnpike, Dallas, Texas

Total Cost: \$325,832

Designers: *W. L. Powell, J. C. Bridgefarmer & D. A. Nettleton  
for the Turnpike Engineers*

Fabricator: *Mosher Steel Company*

Owner: *Texas Turnpike Authority*

Span Length: *192 ft*



**CLASS III  
FIRST HONORABLE MENTION**

Shell Road Ramp Bridge,  
South Approach to Baltimore  
Harbor Tunnel,  
Baltimore, Maryland

Total Cost: \$225,000

Designer: *Whitman, Requardt  
and Associates*

Fabricator: *American Bridge  
Division, United  
States Steel  
Corporation*

Owner: *Maryland State Roads  
Commission*

Span lengths: *37 ft; 93 ft; four  
at 55 ft; 62 ft; 31 ft*



**CLASS III  
HONORABLE MENTION**



Putah Creek Bridge, Monticello  
Reservoir, Napa County,  
California

Total Cost: \$444,000

Designer: *Bridge Department,  
Division of High-  
ways, State of  
California*

Fabricator: *Bethlehem Steel  
Company*

Owner: *Napa County,  
California*

Span lengths: *Four at 166 ft;  
two at 75 ft*

White Salmon River Bridge,  
Klickitat County, Washington

Total Cost: \$57,184

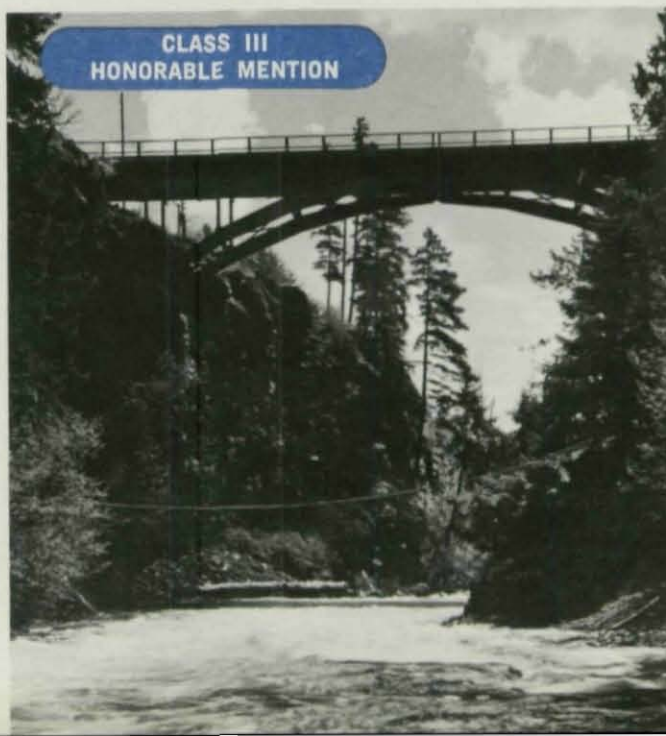
Designer: *Harry R. Powell and  
Associates*

Fabricator: *West Coast Steel  
Company*

Owner: *Klickitat County,  
Washington*

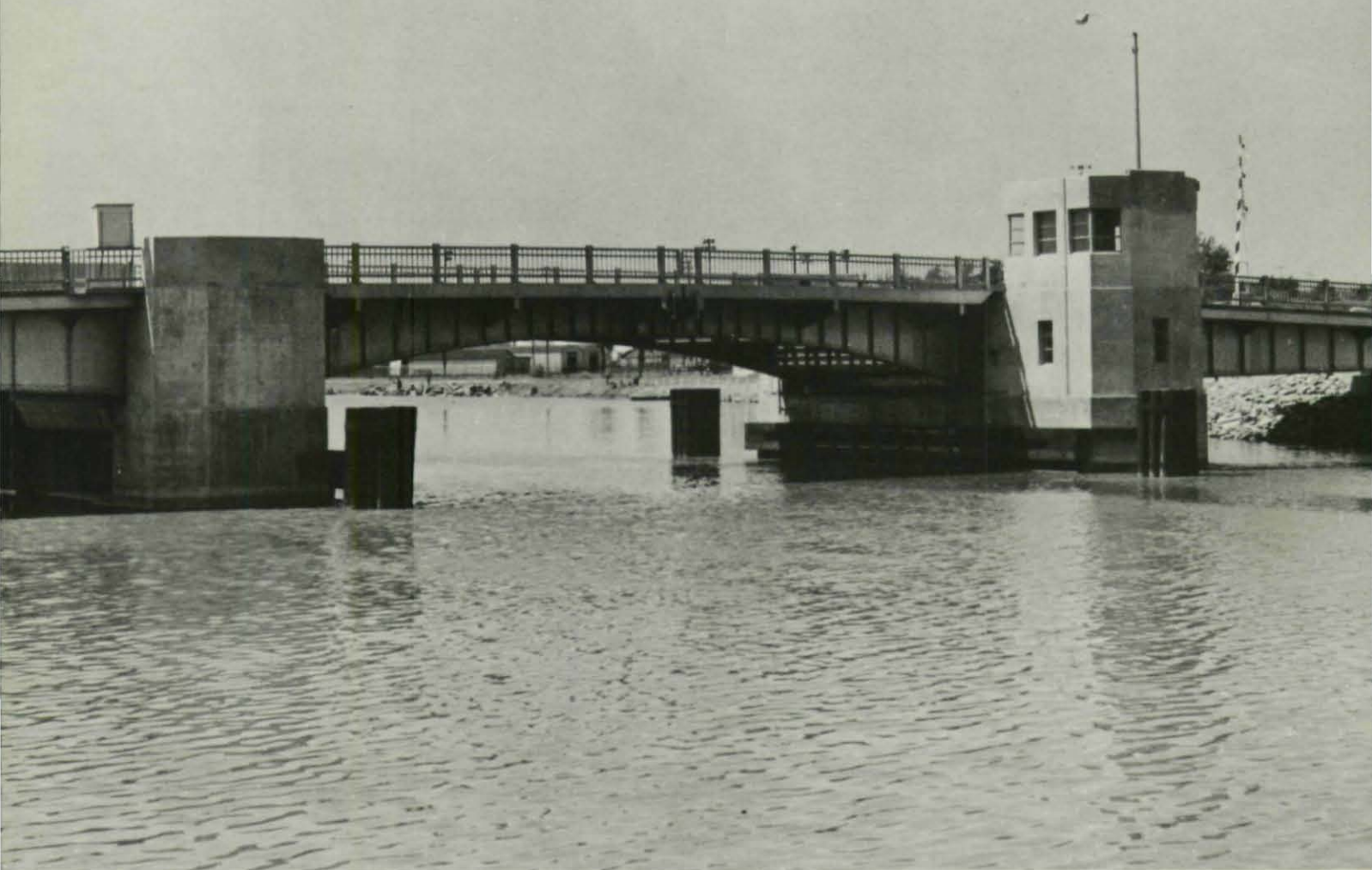
Span lengths: *One at 120 ft; two at  
14 ft-11 in.; two at  
14 ft-6 in.*

**CLASS III  
HONORABLE MENTION**





## Award Class IV



### **movable bridges**

Madison-Monroe Street Bridge, West Twin River, Two Rivers, Wisconsin

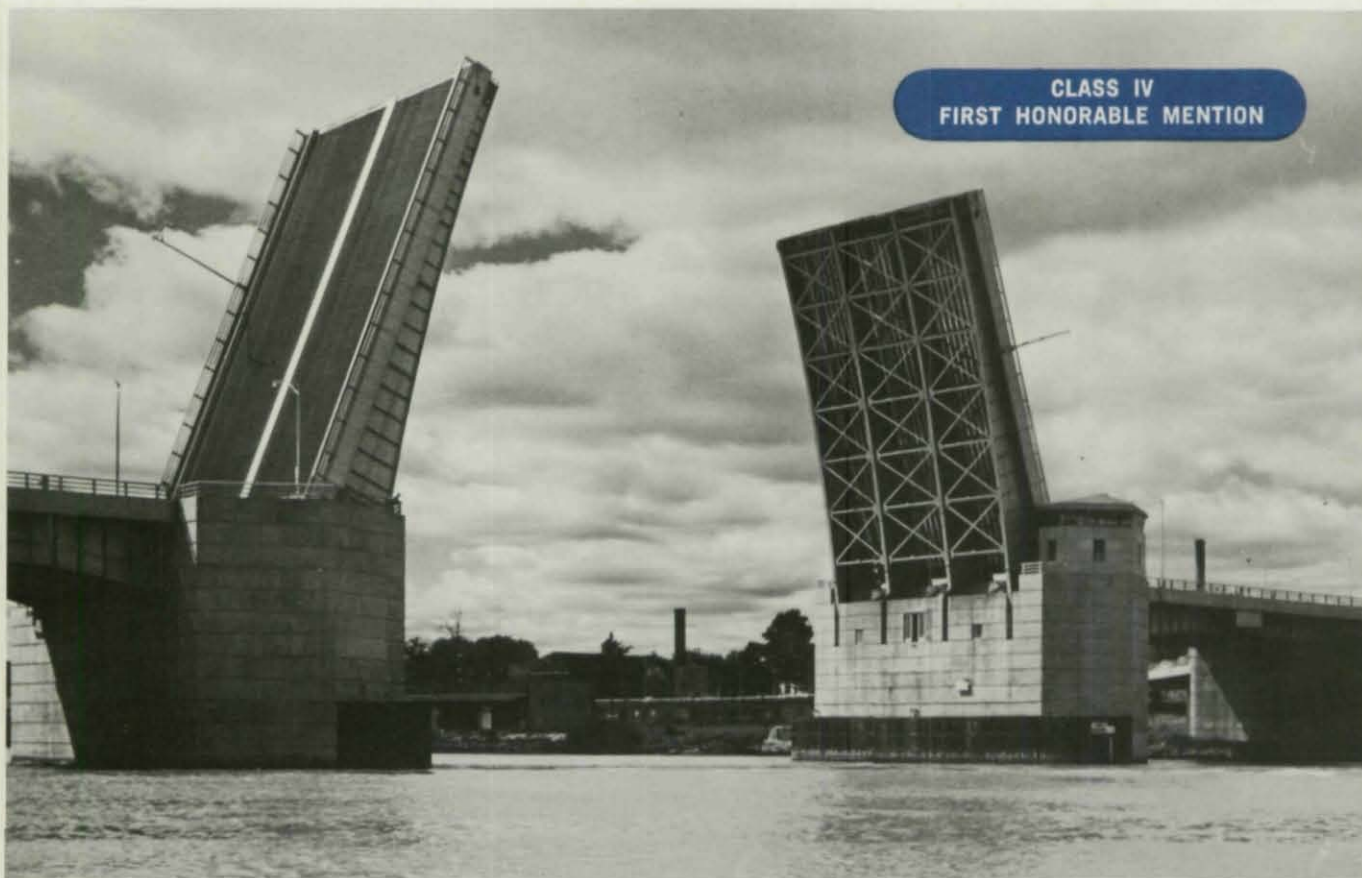
Total Cost: \$598,881

Designer: Hazelet & Erdal

Fabricator: Lakeside Bridge and Steel Co.

Owner: City of Two Rivers, Wisconsin

Span Length: 265 ft-6 in. between abutments



Robert Craig Memorial Bridge,  
Maumee River, Toledo, Ohio

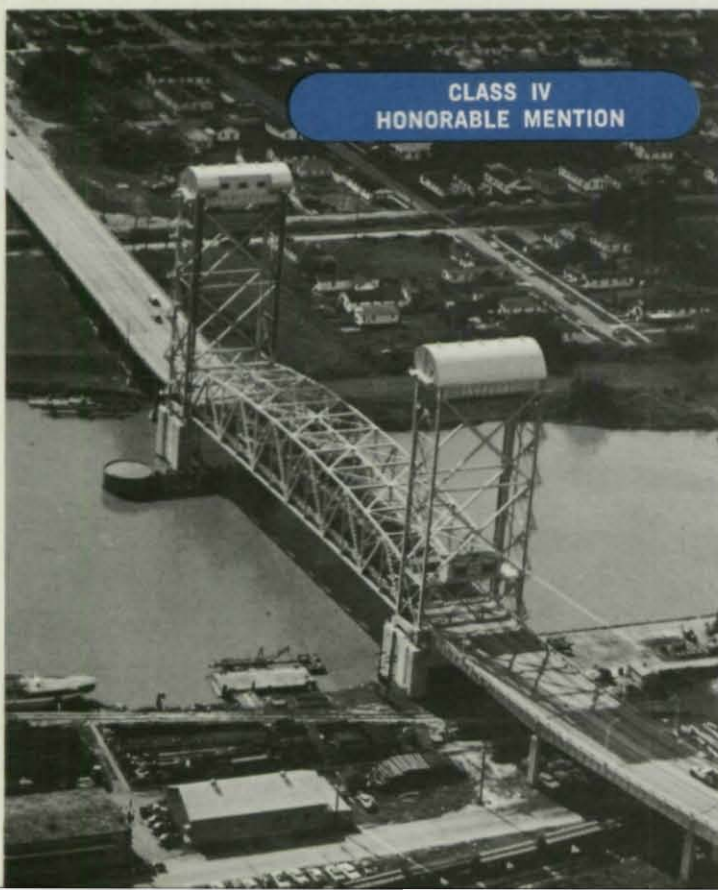
Total Cost: \$7,318,946

Designer: *Howard, Needles, Tammen & Bergendoff*

Fabricator: *Fort Pitt Bridge Works*

Owner: *City of Toledo, Ohio*

Span lengths: *Bascule span, 245 ft; three at 215 ft; one at 168 ft; one at 135 ft*



Inner Harbor Navigation Canal Bridge,  
Claiborne Avenue Extension,  
New Orleans, Louisiana

Total Cost: \$4,145,952

Designer: *Louisiana Department of Highways*

Fabricator: *American Bridge Division, United States Steel Corporation*

Owner: *Louisiana Department of Highways*

Span lengths: *Lift truss span, 360 ft; 258 ft of approach spans vary from 20 to 121 ft*



# TOP AWARD WINNERS SINCE 1928

|      | CLASS I   | CLASS II   | CLASS III   | CLASS IV   |
|------|---|--|---|--|
| 1956 | Missouri River Pipeline Suspension Bridge<br>Plattsmouth, Nebraska            | Buffalo Bayou Bridges<br>Houston, Texas                                    | Allegheny River Bridge<br>Salamanca, New York                               |  |
| 1955 | Leavenworth Centennial Bridge<br>Leavenworth, Kansas                          | Cuyahoga River Bridge<br>Ohio Turnpike                                     | Old State Route 8 Bridge<br>Ohio Turnpike                                   | Welfare Island Bridge<br>New York  |
| 1954 | Missouri River Bridge<br>Kansas City, Missouri                                | Little Chute-Kimberly Combined Locks Bridge<br>Outagamie County, Wisconsin | Garrison School Pedestrian Bridge<br>Kansas City, Missouri                  |  |
| 1953 |   | Ninth and Tenth Street Connections<br>San Francisco, California            | Robert Street Underpass<br>Fort Worth, Texas                                | New York Central Railroad Bridge<br>Cleveland, Ohio                          |
| 1952 |   | Neches River Bridge<br>Beaumont, Texas                                     | Morris Ferry Bridge<br>Franklin County, Tennessee                           | S. E. Fourth Avenue Bridge<br>Miami, Florida                                 |
| 1951 | Delaware Memorial Bridge<br>Wilmington, Delaware                              | Forebay Channel Bridge<br>Arizona-Nevada                                   | Grove Street Overpass<br>Lexington, Massachusetts                           | Harlem River Pedestrian Bridge<br>Manhattan                                  |
| 1950 | Columbia River Bridge<br>Wenatchee, Washington                                | South Holston River Bridge<br>Tennessee State Highway                      | Caldwell Avenue Bridge<br>Cook County, Illinois                             |  |
| 1949 | North Main Street High Level Bridge<br>Akron, Ohio                            | Pinto Creek Bridge<br>Superior, Arizona                                    | Tenth Street Bridge<br>Atlanta, Georgia                                     | Passaic River Bridge<br>Rutherford, New Jersey                               |
| 1948 | Watuaga River Bridge<br>Carter County, Tennessee                              |  | Airport Apron Overpass<br>New York International Airways                    |  |
| 1947 |   | Saco River Bridge<br>Maine Turnpike  | Old Alfred Road Underpass<br>Maine Turnpike                                 |  |
| 1946 |   |  |   | Absecon Boulevard Bridge<br>Atlantic City, New Jersey                        |
| 1945 |   |  | Fontana Access Bridge<br>Little Tennessee River                             | President Harry S. Truman Bridge<br>Kansas City, Missouri                    |
| 1944 |   | Pecos River Bridge<br>High Bridge, Texas                                   |   |  |
| 1943 | Julien Dubuque Mississippi River Bridge<br>Dubuque, Iowa & East Dubuque, Ill. |  |   |  |
| 1942 |   | Charter Oak Bridge<br>Hartford & East Hartford, Conn.                      | Martin Interchange Bridge<br>Middle River, Maryland                         |  |
| 1941 | Rainbow Bridge<br>Niagara Falls, New York & Niagara Falls, Ontario            |  | Fairmount Boulevard Bridge<br>Hunting Valley Village, Cuyahoga County, Ohio | Passaic River Bridge<br>Newark & Kearny, New Jersey                          |
| 1940 | Susquehanna River Bridge<br>Havre de Grace, Maryland                          | Dunnings Creek Bridge<br>Bedford Township, Penn.                           | Klamath River Bridge<br>Orleans, Humboldt County, Calif.                    | Oceanic Bridge<br>Locust Point & Rumson, N. J.                               |
| 1939 | Bronx-Whitestone Bridge<br>East River, New York                               |  | Valley River Foot Bridge<br>Murphy, North Carolina                          | Second Avenue Bridge<br>Alpena, Michigan                                     |
| 1938 | Middletown-Portland Bridge<br>Middletown, Connecticut                         | Capital Bridge<br>Frankfort, Kentucky                                      | Middle Fork of Flathead River Bridge<br>Belton, Montana                     | Lafayette Avenue Bridge,<br>East Channel Saginaw River<br>Bay City, Michigan |

# TOP AWARD WINNERS SINCE 1928 (Continued)

|      | CLASS I  | CLASS II  | CLASS III   | CLASS IV                               |
|------|--|---|---|--|
| 1937 | Golden Gate Bridge<br>San Francisco, California                | Little Hell Gate, Low Level<br>Bridge<br>Randall's Island & Ward's Island,<br>New York City | Chesterfield-Brattleboro<br>Bridge<br>New Hampshire & Vermont                 | Marine Parkway Bridge<br>New York City |
| 1936 | East River Crossing, The<br>Triborough Bridge<br>New York City | Hurricane Deeck Bridge<br>Camden County, Missouri   | Astoria Boulevard Over<br>Grand Central Parkway<br>Extension<br>New York City |  |
| 1935 | North Grand Island Bridge<br>Niagara Falls, New York           | Lorain Road Viaduct<br>Cleveland, Ohio  | Mortimer E. Cooley Bridge<br>Wellston, Michigan                               |  |
| 1934 | Bourne Bridge<br>Bourne, Mass.                                 |   | Douglas County Bridge<br>Nebraska   |  |
| 1933 | Cedar Street Bridge<br>Peoria, Illinois                        | Shark River Bridge<br>Avon, New Jersey  | Dr. John D. McLoughlin<br>Bridge<br>Clackamas County, Oregon                  |  |
| 1932 | Pulaski Skyway<br>Hudson County, N. J.                         | French King Bridge<br>Erving, Massachusetts   | Bryan Bridge<br>Valentine, Nebraska   |  |
| 1931 | Bayonne Bridge<br>Bayonne, N. J. &<br>Staten Island, N. Y.     | Waldo-Hancock Suspension<br>Bridge<br>Bucksport, Maine                                      | West Stewartstown Bridge<br>West Stewartstown, N. H.                          |  |
| 1930 | Wabash Avenue Bridge<br>Chicago, Illinois                      |   | Delton Bridge<br>Delton, Wisconsin  |  |
| 1929 | Mount Hope Bridge<br>Portsmouth, R. I.                         | Mount Pleasant Bridge<br>Mt. Pleasant, New York   |   |  |
| 1928 | Sixth Street Bridge<br>Pittsburgh, Pa.                         |   |   |  |

Contest entry rules and requirements are available upon request from the American Institute of Steel Construction.



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