



## Prize Bridges 1963-1964

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 1963-1964.

## **Jury of Awards**



WALDO BOWMAN

Past President, American Society of Civil Engineers

Publisher, Engineering News-Record

New York, New York



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Omaha, Nebraska



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## **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 Awards 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.

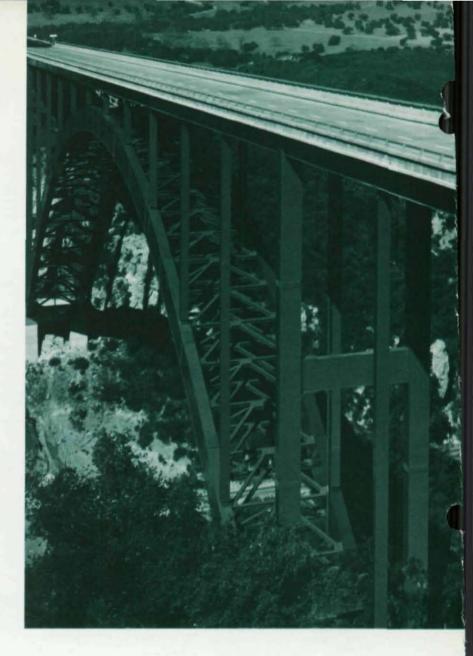
To establish an equitable basis for competition, awards are made in each of four contest classifications. Size, cost and operating conditions determine the class in which each entry is eligible to compete. The prize winning bridges are marked with a stainless steel plaque, and the designers, owners and 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. Since 1957 the Institute has recorded 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.



## LONG SPAN PRIZE BRIDGE

for bridges with one or more spans of over 400 feet.



Cold Spring Canyon Bridge 23.3 miles east of junction with Route 101

OWNER: State of California, Sacramento, California DESIGNER: State of California, Sacramento, California

FABRICATOR: American Bridge Division, U.S. Steel Corporation,

Pittsburgh, Pennsylvania

GENERAL CONTRACTOR: American Bridge Division,

U. S. Steel Corporation, Pittsburgh, Pennsylvania

Opened to Traffic: December 1963



### JURORS' COMMENT:

"A steel arch. Very simply and directly handled. The integration of the arch and approaches is well done. There is a handsome use of steel: integrated, lightweight, but still a long span. It fits beautifully into the site and appears to be an economical bridge."





### AWARDS OF MERIT

Long Span Bridges with one or more spans over 400 feet

### **Vincent Thomas Bridge**

San Pedro, California

OWNER: State of California, Sacramento, California

DESIGNER: State of California, Sacramento, California

FABRICATOR: Kaiser Steel Corporation, Montebello, California

GENERAL CONTRACTOR: Kaiser Steel Corporation,

Montebello, California

Opened to Traffic: November 1963

#### JOHN FITZGERALD KENNEDY MEMORIAL BRIDGE, Louisville, Kentucky

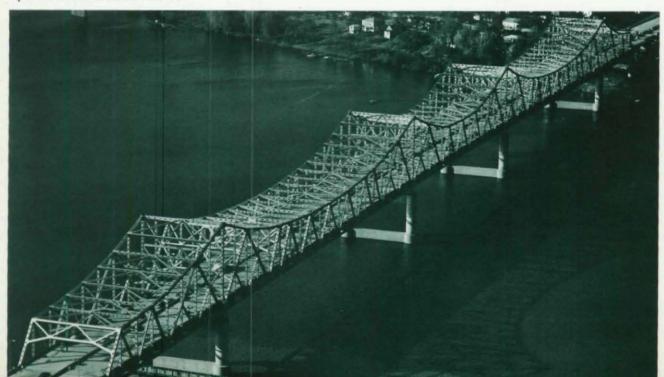
OWNER: Commonwealth of Kentucky and State of Indiana

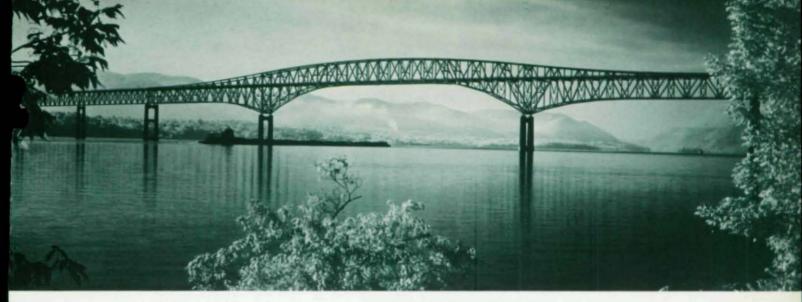
DESIGNER: Hazelet & Erdal, Louisville, Kentucky

FABRICATOR: Allied Structural Steel Company, Chicago, Illinois

GENERAL CONTRACTORS: Substructure: Roy Ryan Sons Company, Inc., Evansville, Indiana Superstructure: Allied Structural Steel Company, Chicago, Illinois

Opened to Traffic: December 1963





### NEWBURGH-BEACON BRIDGE, Newburgh, New York

OWNER: New York State Bridge Authority, Poughkeepsie, New York DESIGNER: Modjeski and Masters, Harrisburg, Pennsylvania FABRICATOR: Bethlehem Steel Company, Bethlehem, Pennsylvania GENERAL CONTRACTORS: Bethlehem Steel Company, Bethlehem, Pennsylvania Snare-Dravo, New York, New York

Opened to Traffic: November 1963

### CALCASIEU RIVER BRIDGE, Lake Charles, Louisiana

Interstate Route I-210

OWNER: Louisiana Department of Highways, Baton Rouge, Louisiana DESIGNER: Howard, Needles, Tammen & Bergendoff, Kansas City, Missouri

FABRICATORS: Main Span: American Bridge Division, U. S. Steel Corporation, Pittsburgh, Pennsylvania East Approach: Nashville Bridge Company, Nashville, Tennessee West Approach: Mosher Steel Company, Houston, Texas

GENERAL CONTRACTORS: Substructure (four main piers): F. Miller & Sons, Lake Charles, Louisiana

Superstructure (main span): American Bridge Division,
U. S. Steel Corporation, Pittsburgh, Pennsylvania
East Approach: Massman Construction Company, Kansas City, Missouri
West Approach: Blount Brothers Construction Company,

Opened to Traffic: June 1964





## MEDIUM SPAN + PRIZE BRIDGE

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

### WHITE RIVER BRIDGE, Beaver Reservoir, Rogers, Arkansas

OWNER: Arkansas State Highway Department, Little Rock, Arkansas

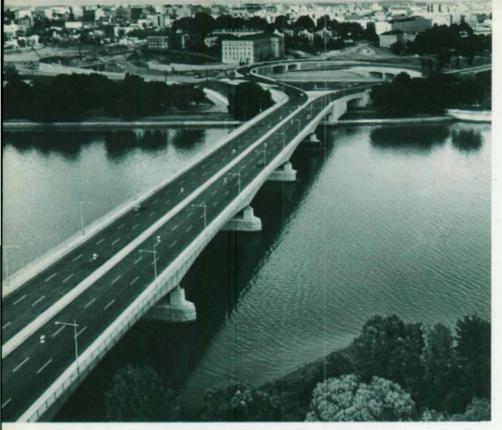
**DESIGNER:** Howard, Needles, Tammen and Bergendoff, Kansas City, Missouri **FABRICATOR:** St. Joseph Structural Steel Company, St. Joseph, Missouri

GENERAL CONTRACTOR: Guy H. James Construction Company, Oklahoma City, Oklahoma

Opened to Traffic: August 1963

#### JURORS' COMMENT:

"It represents a use of steel to obtain what might be called a ribbon of steel and it's well integrated into the substructure to obtain a satisfying over-all appearance. We were also struck by the absolute simplicity and the slenderness of the vertical supports. The relationship of the span lengths is very good."





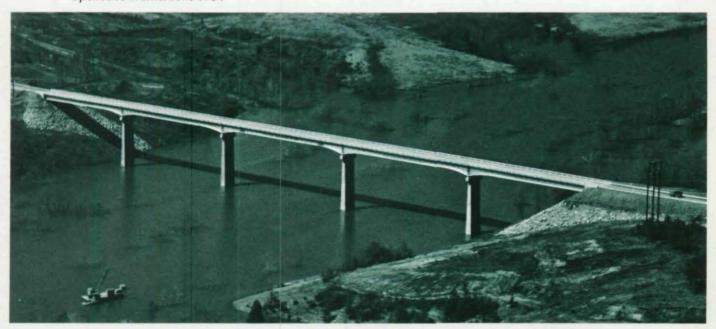
### **AWARDS** OF MERIT

Medium Span Bridges with fixed spans under 400 feet and costing more than \$500,000.

### THEODORE ROOSEVELT BRIDGE, Washington, D. C.

OWNER: District of Columbia Government, Washington, D. C. DESIGNER: Modjeski and Masters, Harrisburg, Pennsylvania FABRICATOR: Nashville Bridge Company, Nashville, Tennessee GENERAL CONTRACTOR: Substructure: Peter Kiewit Sons' Company, Omaha, Nebraska Superstructure: McCloskey and Company, Philadelphia, Pennsylvania

Opened to Traffic: June 1964



### **BRIDGE OVER ROANOKE RIVER** AT HALES FORD

Franklin County-Bedford County, Virginia

OWNER: Virginia Department of Highways

DESIGNER: Hayes, Seay, Mattern & Mattern, Roanoke, Virginia

FABRICATOR: American Bridge Division, U.S. Steel Corporation, Pittsburgh, Pennsylvania GENERAL CONTRACTOR: McDowall and Wood, Inc., Salem, Virginia

Opened to Traffic: April 1963

#### BBER CREEK BRIDGE

6 miles East of Sacramento County ine, California

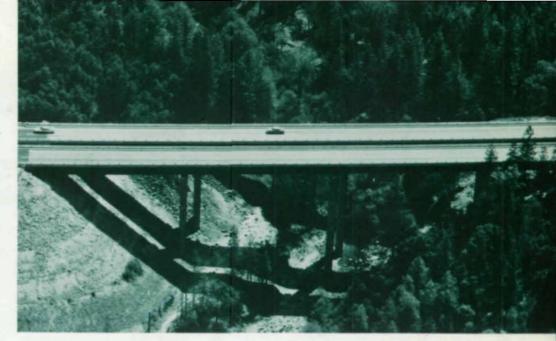
WNER: State of California, Sacramento, California

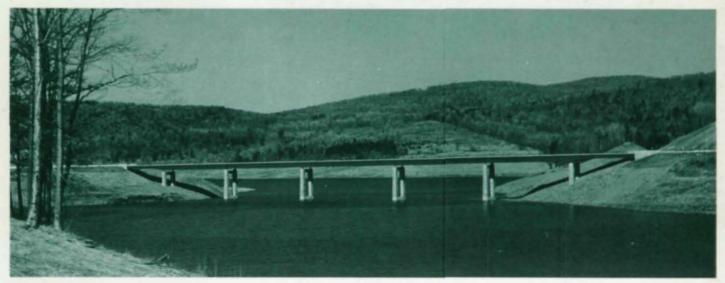
ESIGNER: State of California, Sacramento, California

ABRICATOR: San Jose Steel Company, Inc., San Jose, California

ENERAL CONTRACTOR: Fredrickson & Watson Construction Company, Oakland, California

Opened to Traffic: July 1963





CANNONSVILLE BRIDGE, 9 miles east of Deposit, New York

OWNER: Board of Water Supply, City of New York, New York
DESIGNER: Board of Water Supply, City of New York, New York
FABRICATOR: The Ingalls Iron Works Company, Birmingham, Alabama
GENERAL CONTRACTOR: Walsh Construction Company, New York, New York

Opened to Traffic: June 1963



## BRIDGE ACROSS PICKWICK LANDING DAM

Pickwick Dam, Tennessee

OWNER: Tennessee Valley Authority, Knoxville, Tennessee

DESIGNER: Tennessee Valley Authority, Knoxville, Tennessee

FABRICATOR AND ERECTOR: American Bridge Division, U.S. Steel Corporation, Pittsburgh, Pennsylvania

GENERAL CONTRACTOR: Markwell & Hartz, Inc., Memphis, Tennessee

Opened to Traffic: June 1963



## SHORT SPAN + PRIZE BRIDGE

for bridges with fixed spans and costing less than \$500,000.

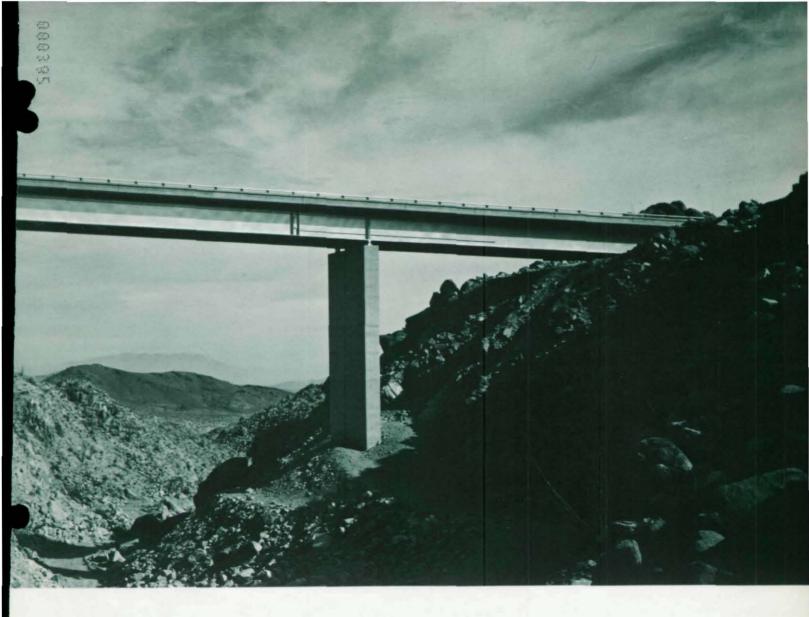
### **DEVIL'S CANYON BRIDGE NO. 2**

5 miles east of San Diego County line, California

OWNER: State of California, Sacramento, California DESIGNER: State of California, Sacramento, California

GENERAL CONTRACTOR: Isbell Construction Company, Reno, Nevada

Opened to Traffic: December 1963



### JURORS' COMMENT:

"Done in rather complete, harsh simplicity, appropriate to the country around it. It is a graceful structure using straight cantilever beams. The approaches are good and look solid. We particularly like the proportion and simplicity of the piers that carry the spans of this fine bridge."





### **AWARDS** OF MERIT

Short Span Bridges with fixed spans and costing less than \$500,000.

### KENO ROAD OVERHEAD BRIDGE, Burnside, Kentucky

OWNER: Southern Railway System, Washington, D. C.

DESIGNER: Sverdrup & Parcel and Associates, Inc., St. Louis, Missouri

FABRICATOR: Allied Structural Steel Company, Chicago, Illinois

GENERAL CONTRACTOR: Vecellio and Grogan, Inc., Beckley, West Virginia

Opened to Traffic: April 1963

## YELLOWSTONE NATION

Yellowstone National Park

OWNER: U. S. Department of the Interior, National Park Service, Washington, D. C.

DESIGNER Bureau of Public Roads, Western Bridge Design Office, San Francisco, California

FABRICATOR: Western Steel Company, Salt Lake City, Utah GENERAL CONTRACTOR: MacGregor Triangle

Company, Boise, Idaho

Opened to Traffic: June 1963

IA RIVER BRIDGE, 40 miles North of Phoenix, Arizona

OWNER: Arizona Highway Department, Phoenix, Arizona

DESIGNER: Bridge Division, Arizona Highway Department, Phoenix, Arizona

GENERAL CONTRACTOR: Vinnell Corporation, Phoenix, Arizona

Opened to Traffic: September 1964





### APEX BRIDGE, 15 miles East of Deposit, New York

OWNER: Board of Water Supply, City of New York

New York

DESIGNER: Board of Water Supply, City of New York

FABRICATOR: Lehigh Structural Steel Company,

Allentown, Pennsylvania

GENERAL CONTRACTOR: Lane Construction Corporation,

Meriden, Connecticut

Opened to Traffic: November 1963

### ASH STREET BRIDGE, Londonderry, New Hampshire

OWNER: State of New Hampshire, Concord, New Hampshire

DESIGNER: Robert J. Prowse, assistant bridge engineer,

State of New Hampshire, Concord, New Hampshire

CONSULTANT: The Clarkeson Engineering Company, Inc.

FABRICATOR: American Bridge Division, U. S. Steel Corporation, Pittsburgh, Pennsylvania

GENERAL CONTRACTOR: Palazzi Corporation, Hooksett, New York

Opened to Traffic: June 1963



### SOUTH STREET BRIDGE, Middlebury, Connecticut

OWNER: Connecticut State Highway Department, Wethersfield, Connecticut DESIGNER: Connecticut State Highway Department, Bridge Design Section, Wethersfield, Connecticut FABRICATOR: The Ingalls Iron Works Company, Birmingham, Alabama GENERAL CONTRACTOR: Oneglia & Gervasini, Inc., Torrington, Connecticut

Opened to Traffic: July 1964





# MOVABLE SPAN + PRIZE BRIDGE

bridges having a movable span.

### NORTH DEARBORN STREET BRIDGE, Chicago, Illinois

OWNER: City of Chicago, Chicago, Illinois

DESIGNER: Bureau of Engineering, Department of Public Works,

City of Chicago

**FABRICATOR:** American Bridge Division, U. S. Steel Corporation, Pittsburgh, Pennsylvania **GENERAL CONTRACTOR:** Substructure: States Improvement Company, Chicago, Illinois

Superstructure: Overland Construction Company, Chicago, Illinois

Electrical Equipment: Garden City Engineering Company, Chicago, Illinois

Opened to Traffic: October 1963

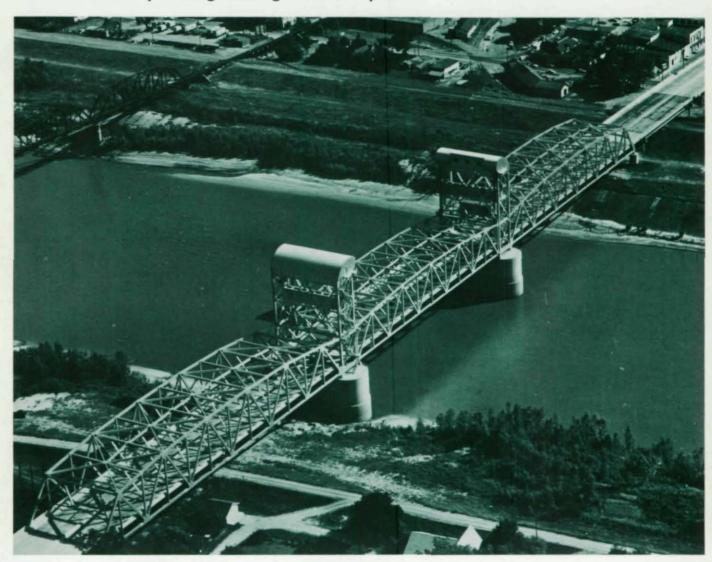
#### JURORS' COMMENT:

"It solves the difficult problem of the bascule bridge in a very simple manner. It is difficult in a bascule bridge to have any individuality and pleasing appearance and in this case we think they have accomplished this by integrating the abutments with the truss work. Their use of very large gusset plates with the trusses give it a feeling of solidity. The arch is very pleasing and their details on the deck and the heavy girders supporting the roadway and sidewalk are excellent."

### **AWARD OF MERIT**



Movable Span Bridges having a movable span.



### RED RIVER BRIDGE, Alexandria, Louisiana

OWNER: Louisiana Department of Highways, Baton Rouge, Louisiana

DESIGNER: Bridge Design Section, Louisiana Department of Highways,
Baton Rouge, Louisiana

FABRICATOR: River Spans: The Ingalls Iron Works Company, Birmingham, Alabama Approach Spans: Orleans Materials & Equipment Company, Inc., New Orleans, Louisiana

GENERAL CONTRACTORS: River Spans: Blount Brothers Construction Company,

Montgomery, Alabama Approach Spans: Hall and Holland, Inc., Montgomery, Louisiana

Opened to Traffic: April 1963

### **TOP AWARD WINNERS SINCE 1928**

	LONG SPAN	MEDIUM SPAN	SHORT SPAN	MOVABLE SPAN
1962	Lewiston-Queenston Bridge Lewiston, New York and Queenston, Ontario	George J. Cole Memorial Bridge Humboldt County, California	Parker Bridge Yakima County, Washington	Georgiana Slough Bridge Walnut Grove, California
1961	Sherman Minton Bridge New Albany, Indiana and Louisville, Kentucky	New Sixty-Second Street Bridge Pittsburgh, Pennsylvania	Skykomish River Bridge Sultan, Washington	
	CLASS I	CLASS II	CLASS III	CLASS IV
1960	Summit Bridge Summit, Delaware	Roosevelt Boulevard Bridges Philadelphia, Pennsylvania	Cemetery Access Bridge Milwaukee, Wisconsin	Rio Vista Bridge Rio Vista, California
1959	Glen Canyon Bridge Page, Arizona	Huasna River Bridge Santa Maria, California	Modrow Bridge Cowlitz County, Washington	Grant Line Canal Bridge Stockton-Tracy, California
1958	Mackinac Bridge Mackinac Straits, Michigan	Louis Morris Memorial Bridge Hartnell, Georgia	Norwood Bridges Norwood, Massachusetts	
1957	Walt Whitman Bridge Philadelphia, Pennsylvania	General James Longstreet Memorial Bridge Gainesville, Georgia	Hampton Road Overpass Dallas-Ft. Worth Turnpike Dallas, Texas	Madison-Monroe Street Bridge Two Rivers, Wisconsin
1956	Missouri River Pipeline Suspension Bridge Plattsmouth, Nebraska	Buffalo Bayou Bridges Houston, Texas	Allegheny River Bridge Salamanca, New York	
1955	Leavenworth Centennial Bridge Leavenworth, Kansas	Cuyahoga River Bridge Ohio Turnpike, Ohio	Old State Route 8 Bridge Ohio Turnpike, Ohio	Welfare Island Bridge New York, New York
1954	Missouri River Bridge Kansas City, Missouri	Little Chute-Kimberly Combined Locks Bridge Outagamie County, Wisconsin	Garrison School Pedestrian Bridge Kansas City, Missouri	
1953		Ninth and Tenth Street Connections San Francisco, California	Robert Street Underpass Fort Worth, Texas	New York Central Railroad Bridge Cleveland, Ohio
1952		Neches River Bridge Beaumont, Texas	Morris Ferry Bridge Franklin County, Tennessee	S. E. Fourth Avenue Bridge Miami, Florida
1951	Delaware Memorial Bridge Wilmington, Delaware	Forebay Channel Bridge Arizona-Nevada	Grove Street Overpass Lexington, Massachusetts	Harlem River Pedestrian Bridge New York, New York
1950	Columbia River Bridge Wenatchee, Washington	South Holston River Bridge Tennessee State Highway, Tennessee	Caldwell Avenue Bridge Cook County, Illinois	
1949	North Main Street High Level Bridge Akron, Ohio	Pinto Creek Bridge Superior, Arizona	Tenth Street Bridge Atlanta, Georgia	Passaic River Bridge Rutherford, New Jersey
1948	Watuaga River Bridge Carter County, Tennessee		Airport Apron Overpass New York International Airways	
1947		Saco River Bridge Maine Turnpike, Maine	Old Alfred Road Underpass Maine Turnpike, Maine	

### TOP AWARD WINNERS SINCE 1928 (Continued)

	CLASS I	CLASS II	CLASS III	CLASS IV
1946				Absecon Boulevard Bridge Atlantic City, New Jersey
1945			Fontana Access Bridge Little Tennessee River	President Harry S. Truman Bridge Kansas City, Missouri
1944		Pecos River Bridge High Bridge, Texas		
1943	Julien Dubuque Mississippi River Bridge Dubuque, Iowa & East Dubuque, Illinois			
1942		Charter Oak Bridge Hartford & East Hartford, Connecticut	Martin Interchange Bridge Middle River, Maryland	
1941	Rainbow Bridge Niagara Falls, New York & Niagara Falls, Ontario		Fairmount Boulevard Bridge Hunting Valley Village, Cuyahoga County, Ohio	Passaic River Bridge Newark & Kearney, New Jersey
1940	Susquehanna River Bridge Havre de Grace, Maryland	Dunnings Creek Bridge Bedford Township, Pennsylvania	Klamath River Bridge Orleans, Humboldt County, California	Oceanic Bridge Locust Point & Rumson, New Jersey
1939	Bronx-Whitestone Bridge New York, New York		Valley River Foot Bridge Murphy, North Carolina	Second Avenue Bridge Alpena, Michigan
1938	Middletown-Portland Bridge Middletown, Connecticut	Capital Bridge Frankfort, Kentucky	Middle Fork of Flathead River Bridge Belton, Montana	Lafayette Avenue Bridge, East Channel Saginaw Rive Bay City, Michigan
1937	Golden Gate Bridge San Francisco, California	Little Hell Gate, Low Level Bridge Randall's Island & Ward's Island, New York, New York	Chesterfield-Brattleboro Bridge New Hampshire & Vermont	Marine Parkway Bridge New York, New York
1936	East River Crossing, The Triborough Bridge New York, New York	Hurricane Deeck Bridge Camden County, Missouri	Astoria Boulevard Over Grand Central Parkway Extension New York, New York	
1935	North Grand Island Bridge Niagara Falls, New York	Lorain Road Viaduct Cleveland, Ohio	Mortimer E. Cooley Bridge Wellston, Michigan	
1934	Bourne Bridge Bourne, Massachusetts		Douglas County Bridge Nebraska	
1933	Cedar Street Bridge Peoria, Illinois	Shark River Bridge Avon, New Jersey	Dr. John D. McLoughlin Bridge Clackamas County, Oregon	
1932	Pulaski Skyway Hudson County, New Jersey	French King Bridge Erving, Massachusetts	Bryan Bridge Valentine, Nebraska	
1931	Bayonne Bridge Bayonne, New Jersey Staten Island, New York	Waldo-Hancock Suspension Bridge Bucksport, Maine	West Stewartstown Bridge West Stewartstown, New Hampshire	
1930	Wabash Avenue Bridge Chicago, Illinois		Delton Bridge Delton, Wisconsin	
1929	Mount Hope Bridge Portsmouth, Rhode Island	Mount Pleasant Bridge Mt. Pleasant, New York		
1928	Sixth Street Bridge Pittsburgh, Pennsylvania			

