



# American Society of Civil Engineers

*Los Angeles Section*

*100 years* of Civil Engineering Excellence  
1913 - 2013



*AuthorHouse™ LLC  
1663 Liberty Drive  
Bloomington, IN 47403  
www.authorhouse.com  
Phone: 1-800-839-8640*

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*Cover design by: MBI*

*Book editor: Mark R. Norton  
with additional editing support by Andy Machen and Joe Buley  
of ASCE Los Angeles Section Centennial Committee.*

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*Published by AuthorHouse 9/30/2014*

*ISBN: 978-1-4969-2006-5 (sc)*

*ISBN: 978-1-4969-2008-9 (e)*

*Library of Congress Control Number: 2014911645*

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## Foreword

The ASCE Los Angeles Section celebrated its one hundredth anniversary in 2013. The year represented a monumental milestone that many will look back upon fondly for years to come. It has been our honor to serve as your chair and honorary chair of the Centennial Committee.

Our 2013 Centennial year was a year of spectacular celebration. Our activities recognized the contributions civil engineers have made and will continue to make in the development of Southern California. Our premier event was the joint ASCE Region 9 Infrastructure Symposium and Awards Dinner and Los Angeles Section Centennial Celebration held at the Union Station in Los Angeles in March 2013. Other events and activities included the production of a Centennial video; a commemorative coin medallion; K-12 Outreach; Engineers Week; the History and Heritage programs; Younger Member Forum events; and Student Chapter events.

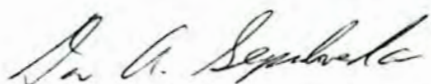
As with any great organization, the Los Angeles Section relied on an outstanding team of ASCE past leaders and members to accomplish our goals. So many members of the Section joined together to make our Centennial Celebration a tremendous success. But it was the advance planning of the Centennial Committee that really made the difference over the 2013 year. Their many hours of volunteer support created a legacy of memories shared by all. A heartfelt thank-you goes out to each and every one of them.

To document the of the Centennial year activities as well as to highlight civil engineers and civil engineering accomplishments in the Los Angeles Section over the past century, this commemorative Centennial book has been produced. It highlights the historical significance of these legendary individuals and their work. The book serves as a testament and legacy for future generations, showing what we can accomplish together. We hope it will stimulate your interest and imagination in recognizing the outstanding accomplishments in the great profession of civil engineering in providing the quality of life that we have today.

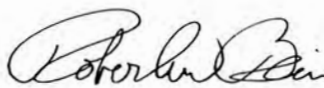
Let it be our hope that those of us in practice today leave the same legacy of accomplishments as those who have gone before us, so that the next one hundred years will provide the same inspiration for celebration as the one we honor today.

In closing, we also wish to recognize the book editor and contributor, Mark R. Norton, PE, F.ASCE, without whose valiant efforts to pull the necessary resources and volunteers together, this book would not have been possible.

Warmest regards,



**Don Sepulveda, PE, F.ASCE**  
Centennial Committee Chair



**Robert W. Bein, PE, LS, Pres.01.ASCE**  
Centennial Committee Honorary Chair



### CENTENNIAL COMMITTEE

**Bob Bein, P.E.**

Honorary Chair,  
Section President 1992,  
Society President 2001

**Don Sepulveda, P.E.**

Chair  
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**Greg Heiertz, P.E.**

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# Founding of the Los Angeles Section of the American Society of Civil Engineers

ANDREW MACHEN, PE, M.ASCE, ASCE LOS ANGELES SECTION 2013  
HISTORY AND HERITAGE CHAIR







The Los Angeles Section of ASCE, initially the Southern California Association of Members of ASCE, was organized between March 1913 and January 1914.



Homer Hamlin

At the time, most civil engineers in the area were members of the Engineers and Architects Association of Southern California, since there was no local organization representing ASCE. Los Angeles City Engineer Homer Hamlin and Deputy City Engineer Andrew C. Hansen had been approached by several civil engineers suggesting that there appeared to be widespread interest in the local civil-engineering community in forming a local arm of ASCE and that the city should investigate the possibility.

Under their direction, on March 22, 1913, Wilbur C. Sawyer, an engineering draftsman in the office of the city engineer—also a graduate civil engineer and a former civil-engineering lecturer at the University of Vermont—wrote to Charles Warren Hunt, executive director of ASCE, inquiring about the possibility of a local branch of ASCE being established in Los Angeles. Hunt responded on April 22, 1913, conveying the national board's approval of the concept, but since several other regions in the United States had been approved as Associations of Members of ASCE, and the designation of Sections had not yet been established, it was suggested that Los Angeles form an association.

Sawyer was then directed to send a letter to all ASCE members and associate members in the Los Angeles area and to some in San Diego, polling them on their interest in establishing an Association of Members of ASCE. The response was decidedly in favor of forming a new organization.

On October 14, 1913, a dinner meeting at the Sierra Madre Club in Los Angeles was attended by about forty-five engineers who agreed to form the Southern California Association of Members of the ASCE, appointing J. B. Lippencott as acting president and Wilbur Sawyer as acting secretary. Lippencott then appointed a constitution and bylaws committee chaired by Andrew Hansen, with members George S. Binkley, Fulton Lane, J. R. Conley of San Diego, and W. K. Barnard.

At a second dinner meeting, on November 7, 1913, a draft of the proposed constitution, modeled after that of the San Francisco Association of Members of ASCE, was reviewed by about forty-five members, and a final draft was adopted. Present at the meeting were Leonard Metcalf, an ASCE board member from Boston, and F. C. Nermann, a member of the San Francisco association. At the conclusion of the meeting,





Lippencott appointed a temporary board of directors chaired by Capt. C. J. Leeds, with board members W. D. Larabee, F. E. Trask, Homer Hamlin, and Burdett Moody. The board's primary purpose was to arrange for a formal election of officers.

The constitution was forwarded to Charles Warren Hunt by Andrew Hansen on November 12, 1913, and on December 8, 1913, Hunt informed Hansen by letter that the board had approved it on December 3, 1913.

Between December 8 and 30, ballots were sent to charter members for the election of the association's first officers. On the ballot for president were J. B. Lippencott and William Mulholland; for vice-president with a one-year term were A. C. Hansen and C. T. Leeds; for vice president with a two-year term were G. S. Binkley and F. E. Trask; for secretary were W. K. Barnard and W. C. Sawyer; and for treasurer were C. H. Lee and C. S. Pope.



AC Hansen

Votes were counted on January 3, 1914, by Leeds, W. D. Larabee, and Trask. Lippencott was elected president; Leeds was elected vice president with a one-year term; Binkley was elected for a two-year term as vice president; Barnard was elected secretary; and Lee was elected treasurer.

On January 5, 1914, the first annual meeting of the Association was held at the University Club at Sixth and Hill Streets in Los Angeles and was attended by about sixty charter members. The election returns were reported to the membership, and the new officers were introduced by William Mulholland. It was decided that all members signing the constitution on or before the second regular meeting, to be held on February 11 at the University Club, would be entered as charter members of the local association, and eighty-five did so. The association's first paper, on the Thomas System of Reinforcing and Three Hinged Arch Bridges, illustrated with lantern slides, was presented by W. M. Thomas.

The constitution is reproduced below as it was originally written.



# Past Leaders of the ASCE Los Angeles Section

ANDREW MACHEN, PE, M.ASCE, ASCE LOS ANGELES SECTION 2013  
HISTORY AND HERITAGE CHAIR



MAYOR SAMUEL WM. YORTY presents to President Norman B. Hume and John D. Parkhurst a Proclamation of the City of Los Angeles honoring the Fiftieth Anniversary of the Los Angeles Section, ASCE.







Since its formation in 1913, the Los Angeles Section of the American Society of Civil Engineers has been blessed with a long list of notable and respected civil-engineering professionals, many of whom have gone on to serve important roles of distinction in the public and private sectors and in the ASCE Society at the national level.

Following are Section members who have served as both Section and Society president:

Louis C. Hill, Section president 1918 and Society president 1937  
Wallace Chadwick, Section president 1946, and Society president 1965  
Irvan Mendenhall, Section president 1965 and Society president 1981  
William Carroll, Section president 1967 and Society president, 1989  
Bob Bein, Section president 1992 and Society president 2001

In addition, the LA Section has provided numerous committee members, chairs, directors, and vice presidents for service to the ASCE national organization. Since the founding of the Section, one hundred Section presidents have served the Section membership with distinction and leadership. Due to space limitations, biographies of all these outstanding leaders could not be included, but profiles and interesting anecdotes of just a few noteworthy past ASCE LA Section presidents have been pulled from the ASCE Section archives to be showcased in celebration of the Centennial of the Section.



**Joseph Barlow Lippincott**

The LA Section's first president, formally sworn in on January 5, 1914, after the Section's formation in 1913, was Joseph Barlow Lippincott, a hydraulic engineer who served as a construction manager on the Los Angeles Aqueduct and aided in the construction of major water-supply projects throughout California, Alaska, Hawaii, and Mexico.

A handwritten signature in cursive script, reading 'J. B. Lippincott'.





### **William Mulholland**

The Section's third president in 1916 was the noted engineer William Mulholland. He was responsible for building the City of Los Angeles's water infrastructure and providing a water supply that allowed the city to grow into one of the largest in the world. Further, Mulholland supervised the building of the Los Angeles Aqueduct, a 233-mile system that still moves water from the Owens Valley to the San Fernando Valley today.



### **Samuel Brooks Morris**

Samuel Brooks Morris was born in Los Angeles on August 24, 1890, to B. Samuel and Elizabeth (Shoemaker) Morris. The youngest of three brothers, he went through the high school grades at Throop Polytechnic Institute, a vocational and preparatory school founded in 1891 by Amos G. Throop and which became the California Institute of Technology in 1921. Upon graduation from Throop in 1907, he took a summer job with Greene & Greene, a residential architectural firm, mostly doing tracings. As a result of that experience, Morris decided on a career in civil engineering and enrolled at Stanford University, receiving an AB in civil engineering in 1911.

At that time, the bachelor of arts was the only degree offered by Stanford, but years later, the University of California awarded Morris an honorary doctorate.

Upon graduation from Stanford, Morris returned to Pasadena and obtained a job with the North Pasadena Land and Water Company, of which his father was a director. For a short time, he drew water system maps and prepared an appraisal of the system, while also working on park and water development projects for the City of Pasadena. He was then hired by the city to do an appraisal of the three water companies that were selling water to city residents and that were being considered for acquisition by the city: the Pasadena Land and Water Company, the Lake Vineyard Land and Water Company, and the North Pasadena Land and Water Company.

In 1912, the city passed a \$1.25-million bond issue and purchased the three companies, which became the Pasadena Water Department. A few months later, when the city engineer resigned, Morris was appointed to that position, which he held for the next twenty-two years under various titles ranging from chief engineer to general manager.





During 1912 to 1934, Morris oversaw the construction of many improvements to the city's water system as well as of electrical power generation and transmission facilities for the city. One of the most notable of his projects was the design and construction between 1932 and 1934 of Morris Dam, named in his honor, on the San Gabriel River in the mountains above Pasadena. Upon completion in 1934, former US President Herbert Hoover dedicated it.

In 1935, Morris accepted an appointment at Stanford University as professor and executive head of the Department of Civil Engineering and was appointed dean of the School of Engineering in 1936, succeeding Theodore Hoover, the brother of Herbert Hoover. While in Palo Alto, he served as chairman of that city's Board of Public Works. He served as dean at Stanford until 1944, when he accepted an appointment as general manager and chief engineer of the Los Angeles Department of Water and Power, a position he held until his retirement in 1955.

Morris's legacy has lived on through his descendants. One of his two sons, Brooks T. Morris, and his grandson, John Morris, also chose civil engineering as a profession and became members of ASCE. John Morris is a water resources engineer who served as the Los Angeles Section's president in 2007 and represented his community, San Marino, on the board of directors of the Metropolitan Water District.



#### **Trent R. Dames**

Trent R. Dames graduated from the California Institute of Technology in 1933 and received his MS in civil engineering there in 1934. He started his career in the field of soil mechanics when it was relatively young, and he contributed materially to the rapid progress this field has experienced. His early experience was with consulting firms and with the US Bureau of Reclamation.

In 1938, Dames founded the firm of Dames & Moore in a one-room office in Los Angeles with William W. Moore—and with Dame's wife as secretary. By 1964 the firm operated in the field of applied earth sciences from ten offices, covering the United States. In 1999, when Dames & Moore was acquired by URS for \$600 million, it was one of the largest engineering and construction services firms in the world, with over 7,800 employees and offices in more than thirty countries.

The ASCE Trent R. Dames and William W. Moore Fellowship was established in 1990 by Dames & Moore to advance the science and profession of engineering and to enhance the overall welfare of humankind. The income of the \$100,000 fund provides for the exploration of new applications of geotechnical engineering or





the earth sciences to social, economic, environmental, and political issues. In 1995 Dames established the Fund for the Heritage of Civil Engineering at the Huntington in San Marino with an endowment of \$500,000.

Dames served as president of the Los Angeles Section in 1953, and also served on many important committees of the Section before and after. On the national level, he served as a member of the National Board of Direction and again was active on many committees. In October 1962, he was named Engineer of the Month in the *Engineer of Southern California*.

For the Los Angeles Section's Fiftieth Anniversary Celebration in 1964, Dames agreed, at the request of Section's past president, C. Martin Duke, to write the Section history. Here is what Dames said about his introduction to the Section's history, which he presented at an all-day meeting of the Section in May 1964:

When last year's President, Martin Duke talked me into writing the Section History, he failed to tell me that this task had been assigned twice before, once in 1937 and again in 1953. In each case the "historian" wiggled off the hook after discovering what was involved. You see, the Section's records consist of 20 standard file drawers full of paper. However, Martin was a better fisherman than his predecessors, and so with the help of his able secretary of many years, Miss Kathleen Christie, the 20 filing drawers to a text of some 20,000 words was reduced down to a brief 8 page document highlighting every year or two of Section activity.



#### **William J. (Bud) Carroll**

Bud Carroll served as chairman and chief executive officer of Montgomery-Watson in Pasadena, which became MWH Global in 2001. He was president of the Los Angeles Section in 1967 and national president of the American Society of Civil Engineers in 1989, as well as the first US president of the World Federation of Engineering Organizations, in recognition of which he was awarded the Hoover Medal in 1994. Carroll received the Sustained Achievement Award of the Renewable Natural Resources Foundation for his contributions to sustainable development and his global leadership in water and wastewater projects.

The following article is drawn from his remarks at an international conference in Moscow on science and engineering (See "Sustainable Engineering for Cities," *AAES/ASEE Newsletter*, January 2001).

Environmental and sustainable development concerns are now prevalent throughout the world and considerable emphasis is being placed on them by national governments. Many governments are setting national strategies for attaining sustainable development and are giving considerable attention to the long-term consequences of





their actions. They are bringing into the planning cycles such concepts as life-cycle analysis, risk versus benefits analysis, impact assessments, recycling and reuse of materials, and pollution prevention.

It is also necessary that cities develop similar strategic plans in developing their industrial and manufacturing bases, so that industries that are attracted to the city enhance the city's economic well-being, but do not adversely impact the economic health of the city. As part of a city's plan, a framework has to be developed within which industry understands its responsibility to employ technologies that are both clean and resource-efficient. Its products must be safe in their intended use, efficient in their consumption of energy and natural resources, and can be recycled, or disposed of safely. There is increasing evidence that industry is accepting this mandate from governments and people.

The report, "Technology for a Sustainable Future," prepared by the US National Science and Technology Council, states that "one major change will be in the nature of environmental technology itself. The past focus has been largely on controlling releases and cleaning up pollution that is already in existence; building scrubbers that remove sulfur dioxide from a smokestack, for example, or cleaning up waste sites that are already contaminated. Increasingly, environmental technology is being designed and deployed to avoid pollution altogether. Energy systems will shift toward clean fuels ... Manufacturing firms will increasingly adopt products and processes designed from the outset to minimize the use of raw materials and the output of pollutants.

Industrial development is very important to cities and they must work in partnership with industry to bring this development about. Industry has to recognize that cities must integrate very complex issues dealing with social, economic, environmental and political conditions.

Cities must be concerned with the health problems created by inadequate infrastructure to handle the treatment and distribution of water and the disposition of domestic sewage and industrial waste. At one time these functions were basically municipal functions, but there is now a major trend toward privatization, wherein these facilities are designed, constructed, operated, and owned by private enterprises. In planning its future infrastructure, cities must recognize the rapid changes occurring in technology. In my field, which is water and waste water, we are doing research continually on treatment processes, and have been concentrating on membrane technologies, such as micro and ultra filtration and reverse osmosis. They are very effective in removing microbiological contaminants, viruses, and such difficult protozoa as giardia and cryptosporidium. In the near future we will have the ability to recycle our waste water back into our potable water systems in a safe manner.





### **H. George Osborne**

H. George Osborne was born on December 7, 1915, in Penticton, British Columbia, Canada (just north of the Washington state border). His family moved to the United States and settled in the Fullerton, California, area, where he attended elementary and high school. He obtained a BS degree in civil and mechanical engineering in 1942 from California Institute of Technology. Osborne studied naval science at Harvard University in 1942 and studied diesel engineering at Cornell University in 1943. He served on active duty in the US Navy from 1942 to 1946 and retired with the rank of commander. After World War II ended, he remained as a reserve naval officer in the civil engineering corps and served as commanding officer of Construction Battalion, Division 11-7, in Santa Ana, California, from 1957–60. Among his ex-navy pals he was popularly known as the Gray Fox.

Osborne was a registered civil engineer in the State of California and held registration certificate 7188. He served as the third president of the newly formed Orange County branch of ASCE in 1954–55. He also served as vice president of the Los Angeles Section in 1963–64 and was president in 1981–82. In the mid-1980s, Osborne served as chairman of the branch's History and Heritage Committee. He also served as president of the Orange County Engineers Club in 1966.

In 1994, Osborne was nominated for the ASCE Civil Government Award and received the Zone IV 1994 Government Civil Engineer of the Year Award later that year. In the nomination documents it was stated that "probably his three greatest accomplishments have been the organizing of the Environmental Management Agency of the County of Orange, and then managing that Agency, and leading the efforts of the Counties of Orange, Riverside and San Bernardino, California in securing from Congress of the United States the funds to create major flood-control facilities along the Santa Ana River within those Counties."

Osborne, who was known as HGO within county office circles, was appointed by the Orange County Board of Supervisors to the position of chief engineer of the Orange County Flood Control District (OCFCD) in 1955. He was known as a disciplined engineer, a demanding mentor, and a politically astute administrator. As chief engineer, he spearheaded the successful 1956 flood-control bond election, a \$43 million financing program. This bond issue was the financial backbone under which the countywide system of flood-control channels was constructed. The implementation of the program allowed residential and commercial development of otherwise flood-prone areas of Orange County.





In 1974 Osborne was selected by the Board of Supervisors as the first director of the new Environmental Management Agency (EMA), which consolidated the former departments of Planning, Building, Flood Control, Roads, Surveyor, Solid Waste, Water Pollution, Harbors, Beaches, and Parks into a single unit of management reporting directly to the board. Osborne retired from the county in 1980, but was not inactive during his retirement. He served from 1981 to 1999 as executive director of the Santa Ana River Flood Protection Agency (a consortium of public agencies dedicated to securing political support for completion of the Army Corps of Engineers Santa Ana River Mainstem Project as authorized by Congress in 1988).

He was appointed to the Orange County Planning Commission by the third district supervisor and eventually served as commission chairman. Later he was appointed to the board of directors of the Orange County Water District (OCWD) representing the City of Fullerton. Eventually, he served as the OCWD's chairman.

Osborne passed away on January 12, 1999, in Fullerton, California.

## ABOUT THE AUTHOR

**Andrew Machen, PE, M.ASCE**, is a registered civil engineer in California and Alaska. A life member of ASCE and a member of the History and Heritage Committee of the Los Angeles Section, Machen earned a BS in civil engineering from Penn State and certificates in cold regions engineering from the University of Alaska, Fairbanks; project management, engineering management, and management of technical projects from CalTech; design of communications systems from UCLA; intelligent transportation systems from MIT; and geographic information systems from UC Riverside. He is currently vice chair of the Region 9 History and Heritage Committee.





## PAST ASCE LOS ANGELES SECTION OFFICERS

Year	President	Vice President	Vice President	Secretary	Treasurer
1914	*J. B. Lippincott	*Charles T. Leeds	*George S. Binckley	*Wilfred K. Barnard	Charles H. Lee
1915	*Charles T. Leeds	*George S. Binckley	*Harry Hawgood	*Wilfred K. Barnard	Charles H. Lee
1916	*William Mulholland	*Harry Hawgood	*Louis C. Hill	*Wilfred K. Barnard	Charles H. Lee
1917	*Harry Hawgood	*Louis C. Hill	Homer Hamlin	*Wilkie Woodward	Charles H. Lee
1918	*Louis C. Hill	*Homer Hamlin	George C. Anderson	*Harry W. Dennis	*Ralph J. Reed
1919	*George C. Anderson	*Harry W. Dennis	*Wilfred K. Barnard	*Floyd G. Dessery	*Ralph J. Reed
1920	*Wilfred K. Barnard	*Harry W. Dennis	*Ralph J. Reed	*Floyd G. Dessery	*Wilkie Woodard
1921	*Harry W. Dennis	*Ralph J. Reed	*Franklin D. Howell	*Floyd G. Dessery	*Edward R. Bowen
1922	*Ralph J. Reed	*Franklin D. Howell	*William H. Code	*Floyd G. Dessery	*Edward R. Bowen
1923	*Franklin D. Howell	*William H. Code	*Franklin Thomas	*Floyd G. Dessery	*Edward R. Bowen
1924	*Franklin Thomas	*Samuel B. Morris	Clarence E. Noerenberg	*Floyd G. Dessery	*Edward R. Bowen
1925	*Samuel B. Morris	*Raymond A. Hill	*H. A. Van Norman	Lloyd Aldrich	Ralph F. Ware
1926	*Raymond A. Hill	*H. A. Van Norman	*Robert V. Orbison	Ralph F. Ware	*Archer F. Barnard
1927	*H. A. Van Norman	*Robert V. Orbison	Walter E. Jessup	Ralph F. Ware	*Archer F. Barnard
1928	*Robert V. Orbison	Walter E. Jessup	*Archer F. Barnard	*Ormond A. Stone	Roy L. Anderson
1929	Walter E. Jessup	*Archer F. Barnard	*Edward R. Bowen	*Ormond A. Stone	Roy L. Anderson
1930	*Archer F. Barnard	*Edward R. Bowen	A. L. Sonderegger	*Ormond A. Stone	*Merrill Butler
1931	*Robert Linton	A. L. Sonderegger	*Ormond A. Stone	*H. Macy Jones	*Merrill Butler
1932	A. L. Sonderegger	*Ormond A. Stone	*Merrill Butler	*H. Macy Jones	*Kenneth O. Volk
1933	*Ormond A. Stone	*Gerald C. FitzGerald	Alfred Jones	Andrew L. Gram	*Kenneth O. Volk
1934	*Merrill Butler	*Kenneth O. Volk	Harold L. Doolittle	Andrew L. Gram	John C. Albers
1935	*Alfred Jones	*Ralph W. Lawton	Oliver G. Brown	*D. Arnold Lane	John C. Albers
1936	*Gerald C. FitzGerald	*A. M. Rawn	*H. Macy Jones	*D. Arnold Lane	*Milo C. Halsey
1937	*Kenneth O. Volk	Donald M. Baker	R. R. Martel	William C. Hogoboom	*Milo Co. Halsey
1938	*A. M. Rawn	J. W. B. Blackham	William W. Hurlbut	William C. Hogoboom	*Don Hull McCreery
1939	*H. Macy Jones	*Robert V. Labarra	*Julian Hinds	Ray L. Derby	*Don Hull McCreery
1940	William H. Hurlbut	*Harry F. Blaney	Andrew L. Gram	Ray L. Derby	*Fred D. Bowlus
1941	*Edward R. Bowen	Harold E. Hedger	*Don Hull McCreery	*Trent R. Dames	*Fred D. Bowlus
1942	*Harold E. Hedger	Fred D. Bowlus	Paul Bailey	*Trent R. Dames	+*Clayton W. Paige
1943	*Julian Hinds	E. E. East	*M. E. Salsbury	A. H. Jessup	*Louis J. Alexander
1944	*Don Hull McCreery	*W. L. Chadwick	*Louis J. Alexander	A. H. Jessup	Sterling S. Green
1945	*M. E. Salsbury	*Claude Shopp	Robert A. Skinner	Arthur Pickett	Sterling S. Green
1946	*Wallace Chadwick	Charles R. Compton	*Trent R. Dames	Arthur Pickett	*David Wilson
1947	Charles R. Compton	Ray L. Derby	*Finley B. Lavery	*George Brandow	*David Wilson
1948	Ray L. Derby	*D. Lee Narver	Arthur Pickett	*George Brandow	Robert J. Kadow
1949	*D. Lee Narver	Robert R. Shoemaker	Sterling S. Green	Homer W. Jorgenson	Robert J. Kadow





# 100 Years of Civil Engineering Excellence 1913- 2013 AMERICAN SOCIETY OF CIVIL ENGINEERS - LOS ANGELES SECTION

Year	President	Vice President	Vice President	Secretary	Treasurer
1950	*Robert R. Shoemaker	Paul Baumann	Linne Larson	++Homer W. Jorgensen	Ralph C. Durke
1951	*Finley D. Lavery	*Roy L. Anderson	*Walter H. Cattes	L. LeRoy Crandall	Ralph C. Durke
1952	*Roy L. Anderson	John O. Jewett	*George E. Brandow	L. Leroy Crandall	John C. Merrill, Jr.
1953	*Trent R. Dames	S. B. Barnes	John M. Server, Jr.	*C. Martin Duke	John C. Merrill, Jr.
1954	Sterling S. Green	Ralph W. Spencer	**Walter S. Hollingsworth	*C. Martin Dike	Gilbert W. Outland
1955	*Lois J. Alexander	*Nathan D. Whitman, Jr.	David L. Narver, Jr.	*Jack E. McKee	Gilbert W. Outland
1956	*George E. Brandow	Earnest Maag	L. LeRoy Crandall	*Jack E. McKee	Alfred E. Waters
1957	*Nathan D. Whitman	Harold Omsted	Dean E. Stephen	Samuel B. Nelson	Alfred E. Waters
1958	*Walter E. Cates	Jack E. McKee	*H. George Osborne	Samuel B. Nelson	William J. Carroll
1959	Robert A. Skinner	*C. Martin Duke	Samuel B. Nelson	Irvan F. Mendenhall	William J. Carroll
1960	*Jack E. McKee	Norman B. Hume	Lewis K. Osborne	Irvan F. Mendenhall	John B. Howe
1961	Samuel B. Nelson	Lyall A. Pardee	Irvan F. Mendenhall	L. Harrison Newport	John B. Howe
1962	L. LeRoy Crandall	Alfred E. Waters	Harris Cranshaw	L. Harrison Newport	Samuel H. Keller
1963	*C. Martin Duke	William J. Carroll	*James E. Ballinger	George W. Adrian	Samuel H. Keller
1964	Norman B. Hume	*Alfred G. Ingersoll	*Jack W. Pierce	George W. Adrian	Jack C. Coe
1965	Irvan F. Mendenhall	John B. Howe	*John D. Parkhurst	Robert Chieruzzi	Jack C. Coe
1966	*James E. Ballinger	Robert Y. D. Chun	J. D. Kirkhard	Robert Chieruzzi	Rodney P. Lundin
1967	William J. Carroll	George W. Adrian	Alfred L. Himelock	H. Thomas Holton	Rodney P. Lundin
1968	*Jack W. Pierce	Donald C. Tillman	*Philip Abrams	H. Thomas Holton	Donald R. Strand
1969	*Jack D. Parkhurst	Samuel H. Keller	David R. Miller	Berton R. Bradley	Donald R. Strand
1970	Lyall A. Pardee	Ronald A. Kolar	Douglas Brown	Berton R. Bradley	James E. Foxworthy
1971	*Alfred C. Ingersoll	L. Harrison Newport	Arthur E. Bruington	*LeVal Lund	James E. Foxworthy
1972	*Phillip Abrams	Robert V. Phillips	Berton R. Bradley	*LeVal Lund	James McWee
1973	Donald C. Tillman	John A. Lambie	Donald R. Strand	Schaefer J. Dixon	James McWee
1974	Samuel H. Keller	John Comer	Franklin L. Dryden	Schaefer J. Dixon	Robert P. Stearns
1975	George W. Adrian	*Frank Bowerman	Rodney P. Lundin	L. Lawrence Lewis	Robert P. Stearns
1976	John B. Howe	Jack J. Coe	Harold L. Purdy	L. Lawrence Lewis	Norman L. Buehring
1977	*John A. Lambie	LeVal Lund	Bill C. Mann	Irving Sherman	Norman L. Buehring
1978	J. D. Kirkhard	Albert Dorman	Ray Morales	Irving Sherman	Donald Rosenberg
1979	Arthur E. Bruington	Thomas S. Maddock	Mark J. Rifkin	Roger A. Beeken	Donald Rosenberg
1980	Alfred E. Waters	Robert Chieruzzi	Schaefer J. Dixon	Roger A. Beekan	Donald E. Hughes
1981	*H. George Osborne	Harry Blaney, Jr.	Robert Weight	Richard F. Luthy	Donald E. Hughes
1982	Bert Bradley (1)	Irving Sherman	Robert Stearns	Richard F. Luthy	George Brodt
1983	Jack Coe (1)	Hugh Halderman	Joseph Dobrowolski	Bryan Stirrat	George Brodt
1984	Rodney Lundin (1)	Gordon S. Magnuson	Norm Buehring	Bryan Stirrat	Winston Wu
1985	Albert Dorman (1)	Robert Swalley	James McWee	Jerry Kovacs	Winston Wu
1986	Don Strand (1)	Charles Rendall	Gary Dysart	Kerry Kovas	Jim Van Beveren



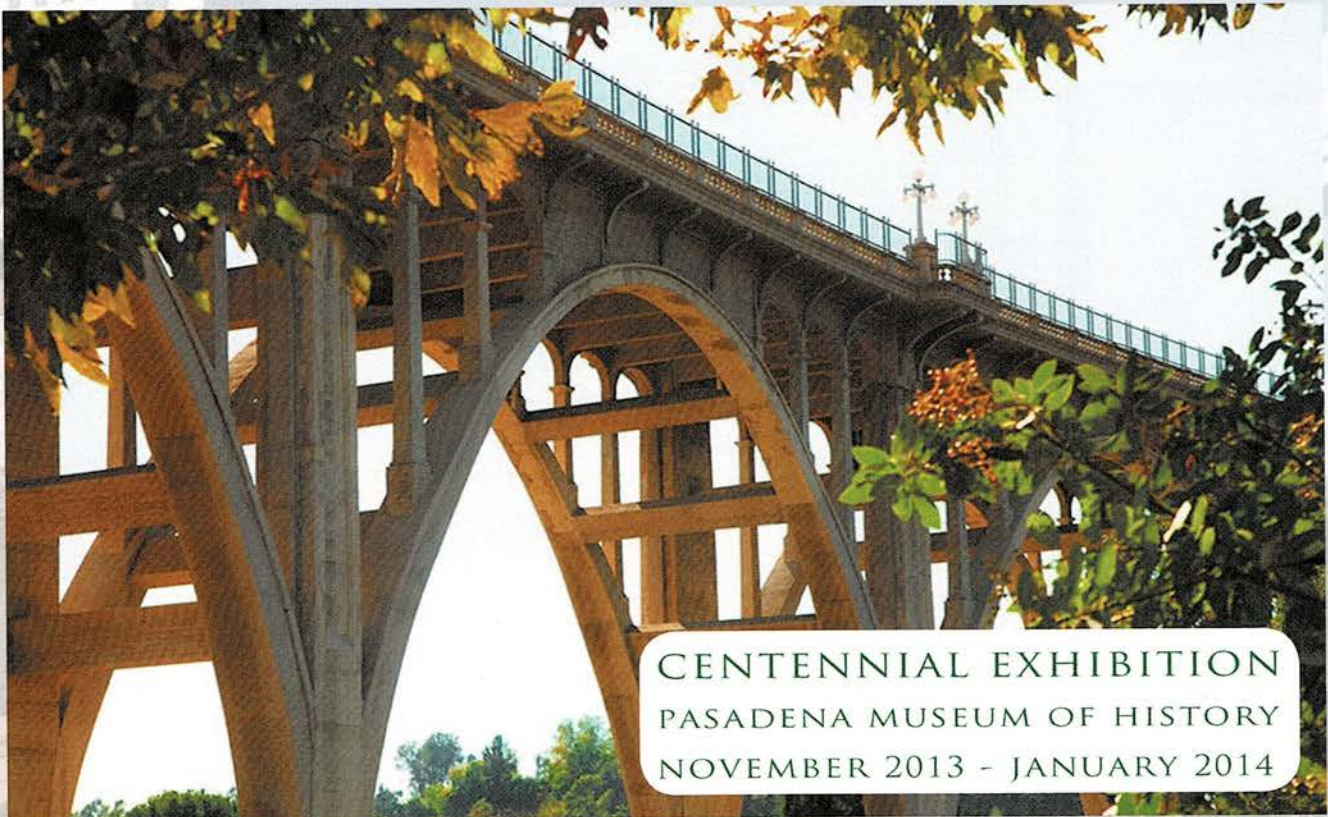
PROSPECTUS



100

ASCE LOS ANGELES SECTION CENTENNIAL YEAR HIGHLIGHTS

Dec. 7, 2013  
Colorado Street Bridge,  
Centennial Exhibition,  
Pasadena Museum of History



Colorado Street Bridge Centennial Exhibition program cover





## HISTORIC CIVIL ENGINEERING LANDMARK



### COLORADO STREET BRIDGE

WADDELL & HARRINGTON OF KANSAS CITY, MISSOURI, DESIGNED THE COLORADO STREET BRIDGE IN 1912. J.D. MERCEREAU CONSTRUCTION OF LOS ANGELES WAS THE CONTRACTOR. DEDICATED AND OPENED TO TRAFFIC ON DECEMBER 8, 1913. DESIGNATED AS A HISTORIC CIVIL ENGINEERING LANDMARK BY THE LOS ANGELES SECTION OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS IN 1975, AND AS A CULTURAL HERITAGE LANDMARK OF THE CITY OF PASADENA IN 1979, IT WAS PLACED ON THE NATIONAL REGISTER OF HISTORIC PLACES BY THE NATIONAL PARK SERVICE IN 1981.

DESIGNED AS A SERIES OF LARGE PARABOLIC ARCHES, THE STRUCTURE INCLUDES FIVE SPANS OF 133 FEET AT THE BASE, ONE SPAN OF 114 FEET, AND ONE SPAN OF 233 FEET, WITH SIX SMALL GIRDER SPANS IN THE FORM OF ARCHES AND ABUTMENTS AT EACH END.

UNDER THE BRIDGE, BETWEEN PIERS 9 AND 10, IS A SMALLER BRIDGE, THE PARKER-MAYBERRY BRIDGE, A THREE-SPAN ARCH CONCRETE STRUCTURE, BUILT IN 1914 TO ACCOMMODATE LOCAL TRAFFIC ACROSS THE ARROYO SECO.

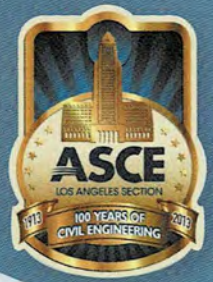
THE COLORADO STREET BRIDGE WAS THE FIRST STREET LEVEL CROSSING LINKING PASADENA AND LOS ANGELES AND WAS A LINK IN THE TRANSCONTINENTAL HIGHWAY SYSTEM CALLED THE NATIONAL OLD TRAILS ROUTE.

DEDICATED: 1913

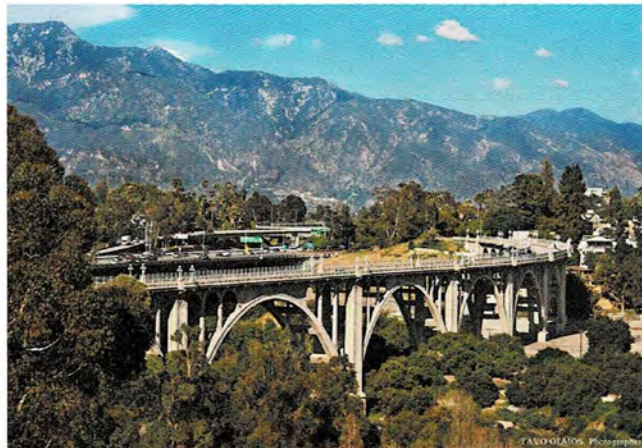
REDEDICATED: 2013

Bridge plaque photograph,





Tavo Olmos, photographer



Tavo Olmos, photographer



Tavo Olmos, photographer

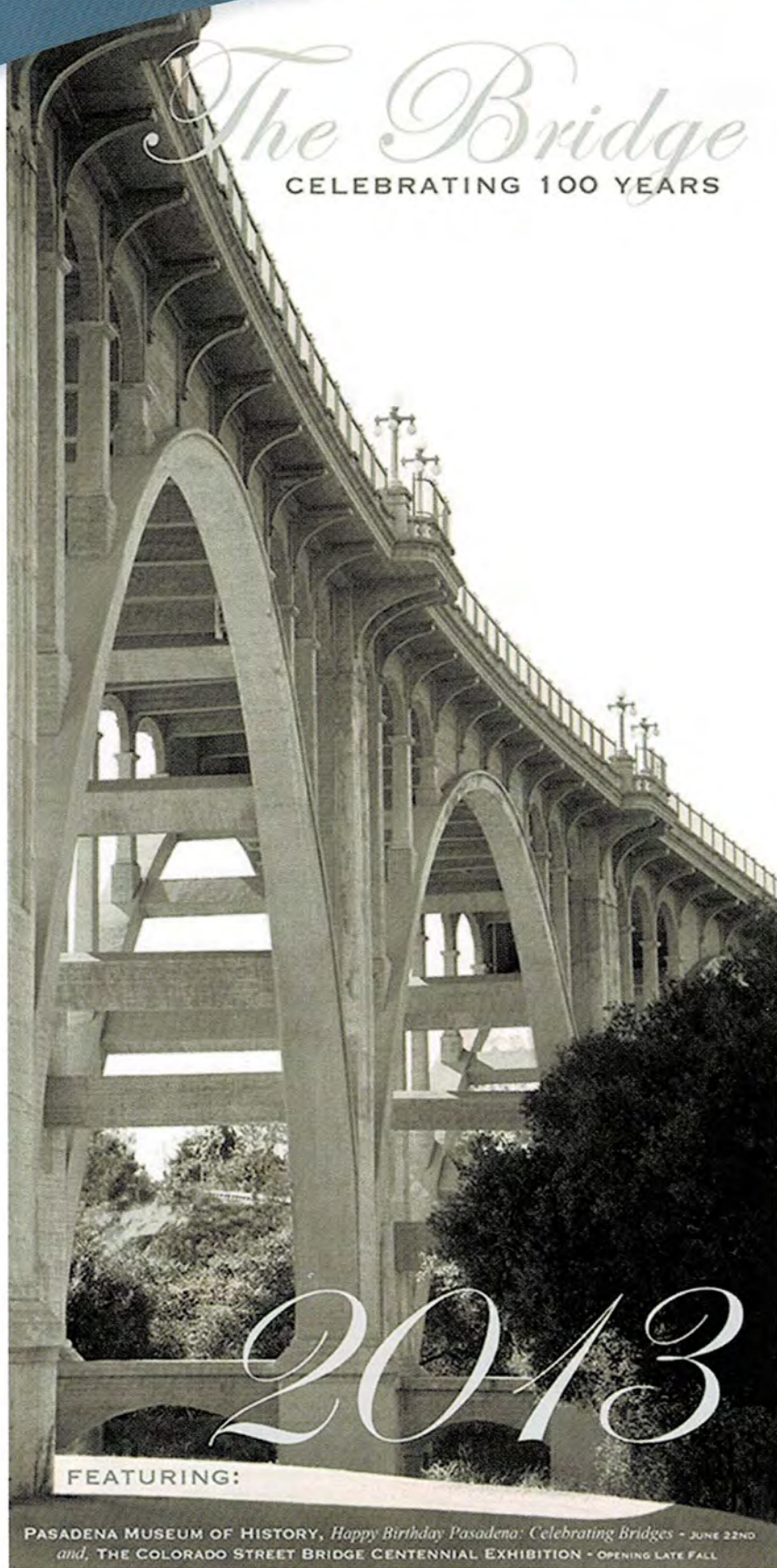




100 Years of Civil Engineering Excellence 1913- 2013  
AMERICAN SOCIETY OF CIVIL ENGINEERS - LOS ANGELES SECTION

# *The Bridge*

CELEBRATING 100 YEARS



FEATURING:

PASADENA MUSEUM OF HISTORY, *Happy Birthday Pasadena: Celebrating Bridges* - JUNE 22ND  
and, THE COLORADO STREET BRIDGE CENTENNIAL EXHIBITION - OPENING LATE FALL

Tavo Olmos, photographer





In the group photo, left to right, Art Krieger, Pasadena Public Works Director (ret.); Bill Bogaard, Mayor, City of Pasadena; Andrew Machen, ASCE Region 9 History & Heritage; Sue Mossman, Executive Director, Pasadena Heritage; Jeannette L. O'Malley, Executive Director, Pasadena Museum of History.





As part of the Life Member Forum and the Centennial celebration, Walter H. Preston, PE, a member of ASCE for over seventy-five years and one of the Los Angeles Section's original Life Member Forum members was honored with two Resolutions of Appreciation, one signed by Assemblywoman Diane L. Harkey of the California State Legislature and the other by the ASCE Los Angeles Section board.

Preston's civil engineering career started in 1935, when he worked for the Metropolitan Water District on the Colorado River Aqueduct, and under his direction, Seabees constructed causeways on the D-day beaches in France in World War II. In addition, he designed structures for Disneyland and Disney World and engineered many structures in the redevelopment of the City of Los Angeles.

After retirement, Preston worked with the Life Member Forum, using his expertise on volunteer Habitat for Humanity projects and other efforts, such as the issuance of a US postage stamp showing a civil-engineering project. Preston celebrated his ninety-ninth birthday in March 2013 and passed away in September 2013. His support and contribution to the ASCE Los Angeles Section on its Centennial year will be long remembered.



Garvin Pederson, P. Singh Sawhney, Joe Buley, David Wright, Walt  
and Mary Jane Preston, Andy Machen, Larry Lewis





# ASCE, Los Angeles Section Centennial Celebration

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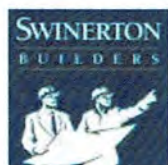
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In 2013, the Los Angeles Section of the American Society of Civil Engineers celebrated its 100th anniversary. The Centennial year is highlighted herein with photos of the many celebratory activities held by the ASCE Los Angeles Section, its Branches, Younger Member Forums, Life Member Forums and Student Branches from Oct. 2012 through December 2013. Articles authored by various civil engineering leaders are included as posted on the Section website throughout the 2013 year describing various forms of civil engineering infrastructure in the region. Additionally, as the second largest Section in the ASCE Society and covering most of the Southern California, southern San Joaquin valley and much of the eastern portion of California, the founding of this remarkable organization is described including profiles of many of the civil engineering leaders who supported ASCE and civil engineering projects that provide the quality of life so many enjoy in Southern California today. A Section Timeline and Civil Engineering Landmarks Review is also included that provides important historical reference for how far we have come over the past century. Together, the remarkable Centennial year for the Section highlights the extraordinary contributions that civil engineers have made, and will continue to make, for generations to come.