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Los Angeles Section

Monthly: Est. 1913

ORANGE / SAN_BERNARDINO/RIVERSIDE / SAN_LUIS_OBISPO / SANTA_BARBARA/VENTURA / DESERT / SOUTHERN SAN_JOAQUIN / METROPOLITAN LOS ANGELES

OFFICERS'S MESSAGE

Daniel Cronquist, P.E., P.L.S Los Angeles Section President



President's Message

Hello and welcome to the combined March/April 2020 Newsletter. We apologize for not issuing a standalone March issue, but recent events delayed the issuing of our newsletter until now. Like the rest of you, ASCE Los Angeles Section is taking steps to protect the health and safety of our members during the COVID-19 crisis. In accordance with the Governor's orders and requirements of local health officials, our local branches, younger member forums, institutes, and student chapters have postponed or canceled events. We realize how much

these events mean to you and we all look forward to when we can meet together again.

Many of us are working from home now, myself included. ASCE has taken a lighthearted approach to make this work from home experience better. See their website at collaborate. asce.org/covid-19. Because of this I wanted to share some of my own observations. My dog now attends corporate conference calls while sitting on my lap in front of the webcam. My commute in the morning is shorter. The coffee is significantly better. I also get to dress like a programmer with tee shirts and jeans instead of dress shirts and slacks.

I've also learned quite a few things about my house. The most important is that my dining room chair is not ergonomic. After a week of mild back pain, I made a trip back to the office and borrowed my desk chair. The chair worked so well that I found myself coming back several additional times to collect just about everything else. I would have taken the entire desk, but it was too heavy, and my car was too small. Instead I purchased a new desk from IKEA, which is working wonderfully.

If you too find yourself working from home and simultaneously homeschooling your children like me, please take time to keep it lighthearted. There are many terrible things in the world, but none of them should depress us. After all, we're civil engineers – and we can make it through any difficulty. Even if that difficulty is trying to connect to your company VPN at the same moment 80,000 of your closest colleagues are trying to do their timecards.

Editor's Note: The COVID-19 crisis has altered the way we live; but we are here to continue to serve you our members. Be healthy and safe out there.

Hot Topics in Transportation & Development

by Tapas Dutta, PE, QSD, ENV SP, F. ASCE, ASCE Region 9 Transportation & Development Committee Chair



The ASCE Region 9 Transportation & Development Committee (Committee) has over 40 members and we always welcome interested new members. The Committee continues to collaborate with the California Symposium 2020 Committee for the 2020 California Infrastructure Symposium & Region 9 Awards Dinner event to be held on September 25, 2020 at Hilton Sacramento Arden West, 2200 Harvard St, Sacramento, California 95815

https://caisregion9.org/. As in previous years, the Symposium will have dual tracks comprising Water & Environment, and Transportation & Development. For the Transportation Track, speakers for a variety of topics are being planned. Some of the expected subject areas include:

- The ASCE 2019 California Infrastructure Report Card;
- Innovations in Roadway Projects;
- Housing and its relation to Transportation;
- Active Transportation; and
- Transportation Legislations.

On January 10, 2020 Governor Newsom presented his proposed state budget to the Legislature. Some of the highlight of the Plan are outlined here.

As California grapples with a housing crisis, the impacts on transportation access and affordability are increasingly apparent. Californians are driving more as they are forced to commute longer distances due to the lack of proximity between affordable housing options and job centers, further exacerbating California's aging road infrastructure as well as climate impacts from transportation. But there is also opportunity for innovative solutions as the sector experiences rapid change through electrification, automation, ridesharing, and other mobility options. California, home to many of these innovations, must create a transportation system that is flexible and open to the potential for better travel options that meet the state's growing population needs while supporting sustainable, inclusive growth.

To tackle these challenges, over the next five years, the Governor's Plan invests approximately \$5 billion in public transit and rail infrastructure, and \$1.1 billion for active transportation projects, to increase access to multi-modal transportation options. Additionally, the Plan includes continued investment in High Speed Rail. This system is intended to be an economic backbone for the Central Valley, promoting new housing and jobs near rail stations, and the project will also provide connectivity between Central Valley cities and, ultimately, the coastal cities.

The High-Speed Rail Authority is continuing to construct the Central Valley segment completing electrified High-Speed Rail from Merced to Bakersfield with Proposition 1A bonds, federal funds, and 25 percent

of the continuously appropriated funding from annual Cap and Trade auction proceeds. Additionally, the state has committed \$1.1 billion to locally sponsored projects in northern and southern California that will improve local rail service and benefit High Speed Rail when the system is connected to those areas. The funding provides resources to continue meeting commitments to federal and regional partners and advancing Phase 1 environmental clearances.

Over the next five years, \$22 billion will be available for new state highway repair and rehabilitation projects in the State Highway Operations and Protection Program (SHOPP). The Road Repair and Accountability Act of 2017, Chapter 5, Statutes of 2017 (SB 1), increased available SHOPP funding capacity by \$8 billion through 2022-23. As the state invests in ongoing road maintenance, it is seen as critical that the state does so in a way that is resilient in the face of physical climate impacts like floods, fires, extreme heat, and sea level rise. The Climate Budget includes investment in the climate research that will underpin these decisions, as well as in programs such as cool road surface investment in areas of the state experiencing extreme heat impacts from climate change.

Over this same five-year period, \$3.3 billion will be available for the State Transportation Improvement Program, which provides funding for future multi-modal transportation improvements throughout California. This program supports the implementation of regional Sustainable Community Strategies (75 percent), as well as interregional travel (25 percent). An additional \$1 billion for partnerships with local transportation agencies is also included in the Plan.

The Region 9 T&D Committee tracks important Transportation-related legislation in Sacramento. Two bills for the current legislative year are outlined below:

State Senator Scott Wiener (D-San Francisco) is the author of Senate Bill 50 that reduces specified local zoning standards in "jobs-rich" and "transit rich areas," when a development proponent meets specified requirements. The bill also requires a neighborhood multifamily project containing up to four dwelling units to be subject to a streamlined, ministerial approval process.

The bill is co-sponsored by the California Association of Realtors, California YIMBY ("Yes in My Backyard"), and the Non-Profit Housing Association of Northern California. It is opposed by most Cities in California who are opposed to replacing local control over project standards by a state-mandated density policy.

SB 50 was previously stopped in the Senate Appropriations Committee by the Committee Chairman. Senate President Pro Tempore Toni Atkins however pulled the bill out of the committee and had it placed on the floor for final Senate action at the behest of Wiener. SB 50 failed on the Senate floor in late January 2020 by a vote of 18-15. Several senators rejected the bill, citing concerns about gentrification, displacement and pushback from local governments. Atkins responded to SB 50's collapse by saying "we need a housing

production bill" and vowing to work in subsequent weeks to produce one. Wiener is also the author of SB 127 – that would have changed state policies for the management of the state highway system, including requiring the California Department of Transportation (Caltrans) to incorporate new pedestrian and bicycle facilities into projects in specified areas. SB 127 was vetoed by Governor Newsom last year – heeding in part to opposition from the construction industry, including organized labor. This opposition was predicated on a fiscal analysis issued by the Department of Finance (DOF), noting that Caltrans estimated that the bill would increase the State Highway Operation and Protection Program (SHOPP) project costs by \$1.1B annually to incorporate the complete streets elements required by the bill. ASCE was also concerned that SB 127 might replace the local decision-making of transportation planning authorities by legislative mandates.

Supporters of SB 127 were disappointed by the veto, and Senator Wiener has shown tenacity in pursuing major policy initiatives. It remains to be seen whether Senator Weiner might bring the policy of SB 127 back in a new bill in 2020.

Transportation is undergoing dramatic changes fueled by technology, climate change and congestion. Ride-hailing services, Micro-transit, newer options for First Mile/Last Mile personal connectivity, and app-based delivery services (including food) are altering trip patterns on the vehicular side. Active Transportation and Complete Streets are altering design approaches and are increasing multi-modal and context-sensitivity in design. Programs such as Congestion Pricing and occupancy-based toll roads are modifying driving habits also. The shift in quantifying traffic impacts from Level of Service (LOS) to Vehicle Miles Traveled (VMT) is changing how development projects are programmed. The ASCE Region T&D Committee continues to monitor all these developments for comment and consistency with the Society's general Public Policies.

To learn more about the activities of the Region 9 Transportation & Development Committee, please contact me, Tapas Dutta, at tdutta@cnc-eng.com

ARTICLE

ASCE Region 9 Infrastructure Policy Committee Update

by Yazdan T. Emrani, P.E., ENV SP, M. ASCE, Chair, Region 9 Infrastructure Policy Committee



The 2019 California Infrastructure Report Card ("CAIRC") released last May, evaluated 17 different categories of our State's infrastructure and assigned a letter grade to each. The overall average report card grade of the 17 categories was a C-! This was in comparisons to an overall average of C in the 2012 CAIRC. Of the current 17 categories examined, eleven are in mediocre condition and six are in poor condition. The purpose of producing a Report Card on Infrastructure

is to be able to outline key areas where California's infrastructure is doing well, and where it could improve.

Now that the Report Card has been released, the important next step is to bring this information to the attention of our citizens and policymakers. To that end Region 9's Infrastructure Policy Committee or IPC will be a key vehicle in moving this process forward.

The IPC's goals and objectives include, to:

- 1. Promote the results and recommendations of the 2019 California Infrastructure Report Card to technical (ASCE, APWA, AWWA, etc.) as well as non-technical (Chambers of Commerce, PTOs, business groups, etc.) audiences throughout California;
- 2. Work with Region 9's Government Relations Committee to champion policies that are supported by Region 9 and to communicate to the same aforementioned groups; and,

3. Develop ideas and potential policy positions for legislative considerations and support by Region 9.

The current makeup of the Committee consists of:

- 1. Yazdan Emrani, Chair
- 2. Ruwanka Purasinghe, Vice Chair
- 3. Jerry Burke
- 4. Howard Lum
- 5. Guy Hopes

The committee would like to make a call out to interested members of the ASCE California community, including all those involved in the preparation of the Report Card, to contact the committee if you would be interested in getting involved in our future activities in disseminating the results. These efforts would include updating Region 9's informational web sites, developing promotional videos for the CAIRC, and possibly speaking in front of various groups to publicize the Report Card results and recommendations. The Committee is also looking for additional members in both Northern and Southern California, and specifically for volunteers from the Sacramento, San Francisco Bay area, San Joaquin and San Diego areas.

If you are interested in helping with any of the aforementioned tasks, please contact me, Yaz Emrani, at yemrani@glendaleca.gov.

A full copy of the 2019 Report Card for California's Infrastructure is available at https://www.infrastructurereportcard.org/state-item/california/

State Investments and Legislative Update

by Richard Markuson, CA Region 9 Legislative Advocate



The Legislature reconvened in its last year of the two-year session on January 6. January was a busy month, with only a few two-year bills moving out of their house of origin by January 31.

The big news was the resurrection and then eventual defeat of Senator Scott Wiener's (D-San Francisco) <u>Senate Bill 50</u>. As CalMatters reporter Matt Levin put it, "Developers, landlords, Facebook, construction unions, the state Chamber

of Commerce, Realtors, environmental groups and even the AARP wanted to see the bill pass. So did big city mayors including San Francisco's London Breed and San Jose's Sam Liccardo. Not to mention Sen. Toni Atkins, Democratic leader of the state Senate, who typically has a pretty big say in which bills make it out of her chamber. Nonetheless Senate Bill 50, a measure that would have forced cities to allow more mid-rise apartment buildings around public transit and next to some single-family homes, failed to get enough votes in the California Legislature to survive in 2020 before time ran out." (You can see how your State Senator voted here).

Assembly Member Luz Rivas – the only "engineer legislator," has introduced two resolutions: $\underline{ACR\ 153}$ – the E Week resolution, and $\underline{ACR\ 154}$ that proclaims February 20, 2020, as Introduce a Girl to Engineering Day. You can learn more about E Week and Girl Day here.

New Reports of Interest

California Natural Resources Agency, California Environmental Protection Agency, and Dept. of Food and Agriculture have released a draft water resilience portfolio in response to Gov. Newsom's April 29th Executive Order calling for "a portfolio of actions to ensure the state's long-term water resilience and ecosystem health;" portfolio provides recommended actions to maintain and diversify water supplies, protect and enhance natural ecosystems, build connections, and be prepared for "new threats, including more extreme droughts and floods and hotter temperatures."

Lack of Plumbing "More than 2 million people in the U.S. lack running water and basic indoor plumbing, according to a new report by the human-rights nonprofit DigDeep and the nonprofit US Water Alliance — and race and poverty are key determinants of who has access to clean water and sanitation.... Racial water gaps for Latino and African-American households are particularly salient at the regional level; the authors added: 'In parts of the South, African Americans are the group most likely to lack complete plumbing. In California and Texas, Latino people are the most affected.'"

U.C. San Diego Scripps Institute of Oceanography released Atmospheric River Storms Create \$1 Billion-a-Year Flood Damage. "Researchers at Scripps Institution of Oceanography at the University

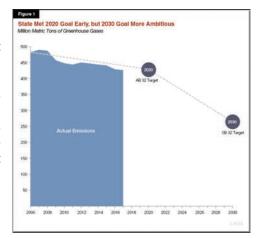
of California San Diego and the U.S. Army Corps of Engineers analyzed the economic impact of the winter storms that deliver an increasingly large share of rain and snow to California and the West." The team found that over the past 40 years flooding has caused nearly \$51 billion in damages; with more "than 84 percent of these damages were caused by atmospheric rivers (ARs), which are long narrow corridors of water vapor in the atmosphere capable of carrying more than twice the volume of the Amazon River through the sky." Anticipating that global warming trends will increase their intensity, scientists and emergency officials believe information related to ARs may become more significant and are calling for more research to improve forecasting for use in guiding management decisions related to flood releases, development in flood-prone areas, restoring natural floodplains, and developing green infrastructure.

KQED reported on SGMA. Time's Up on Groundwater Plans: One of the Most Important New California Water Laws in 50 Years Explained "Much of California's water supply is a hidden asset: Deep below the surface, rocks, gravel and sand store water like a sponge, in an underground zone called an aquifer. In dry years, this groundwater has been tapped to save farms, keep grass green and provide drinking water to millions of Californians. But over time, people have taken more water out than nature has put back in. Estimates vary, but according to the U.S. Geological Survey, California pumped 41 trillion gallons of water from the ground in about 100 years, through 2013. In some parts of the Central Valley, that means land has been dropping around a foot a year. The landmark Sustainable Groundwater Management Act, or SGMA, requires some of the state's thirstiest areas form local "Groundwater Sustainability Agencies" and submit long-term plans by Jan. 31 for keeping aguifers healthy. Together, those plans will add up to a big reveal, as groundwater managers finally disclose how badly they believe their aquifers are overdrawn, and a collective picture emerges. It's a major shift and arguably the most important new California water law in 50 years."

Lawrence Livermore National Laboratory released <u>Getting to Neutral</u>, about how California can reach its ambitious greenhouse gas goals with a multibillion-dollar statewide project to remove carbon dioxide directly from the air and extract energy from plant fibers and sewage. The study, commissioned by the ClimateWorks Foundation, presents a vision of infrastructure designed to collect and process agricultural and forest waste, sewage and landfill gas, as well as the commercial deployment of machines that capture carbon dioxide from the air and bury it in geologic formations under the Central Valley.

The Legislative Analyst's Office (LAO) released "Assessing California's Climate Policies – Electricity Generation," It finds: "(1) state policies likely are a substantial driver of emission reductions, but the overall reductions attributable to state policies versus other factors is unclear; (2) the Renewable Portfolio Standard (RPS) program is likely a significant driver of emission reductions at relatively moderate costs per ton; (3) rooftop solar policies are generally a more costly

emission reduction strategy, but could provide significant benefits in certain instances; (4)relatively little is known about the effects overall of legislation to effectively prohibit coal contracts and the benefits from cap-and-trade; and (5) 'resource shuffling' between



different states could potentially offset some of the observed emission reductions."

Public Policy Institute of California released its report, "California's Future," analyzes "state's most pressing long-term policy challenges in several key areas:" climate change; criminal justice; economy; health care; higher education; housing; K-12 education; political

landscape; population; safety net; and water.

The LAO has released, "Assessing Vulnerability of State Assets to Climate Change," outlines efforts being made by state departments to assess the potential for severe risks to state facilities posed by climate change, such as sea level rise and more wildfires, finds "several agencies with substantial infrastructure under their control—specifically, the University of California, California State University, judicial branch, and CalFire—have not completed systemwide assessments of their vulnerability to climate change," LAO recommends that the Legislature conduct ongoing oversight of individual state departments for "assessing progress and providing direction."

Speaker's Appointments.

To the **California Transportation Commission**: Joseph Lyou, Hawthorne, President and CEO of Coalition for Clean Air. Term expires January 1, 2024.

To the **California High-Speed Rail Authority**: Martha Escutia, Whittier, Vice President of government relation at USC. Pleasure term.



San Francisco Section Structural Engineering Institute Update – Bridging Bay Area's Structural Engineers

by Vladimir Calugaru, PhD, PE, Chair, Structural Engineering Institute of ASCE, San Francisco Section



Structural engineering is among the most underappreciated and underpaid professions. It is difficult to think of a place where that statement is truer than in the San Francisco Bay Area. While everyone knows the name of the criminal Al Capone who spent a few years enjoying views of the Bay from Alcatraz, few can name the structural engineers behind the Golden Gate Bridge or those dedicating their lives to developing modern seismic design guidelines that help save millions

of lives worldwide. And where else can a recent grad with a computer science degree expect to earn nearly twice as much as a senior principal at a leading structural engineering firm. This is where the Structural Engineering Institute of ASCE, San Francisco Section (SEI SF) comes in. We understand the challenges that today's structural engineers face and make it our goal to help advance the careers of our individual members, as well as to help earn broader recognition of the structural engineering profession.

This has been the most exciting year for our organization. The Structural Engineering Institute of ASCE, San Francisco Chapter (SEI-SF) has grown to more than 1,600 members and has built up substantial momentum. We have hosted and co-hosted a number of important technical events, as well as social and public outreach events, and approved an ambitious long-term budget aimed at supporting and strengthening the Bay Area's structural engineering community – all in line with our vision and mission.

The 50BC (5th International Orthotropic Bridge Conference), the symposium on resilience held on the exact 30th anniversary of the Loma Prieta earthquake, and the mini-series on the design and construction of the Chase Center, the new home of the Golden Gate Warriors, have been our recent bright highlights. These events took a strong team effort to organize resulting in great success. The 50BC brought together the world's leading experts in the design, operation, and maintenance of orthotropic bridges. The symposium on resilience featured a panel of prominent speakers representing the Bay Area's major infrastructure and transportation companies, as well as building departments. The technical presentations on the Chase Center provided insight into the geotechnical, structural, and construction aspects of constructing a world-class stadium on poor soils in a high seismic region. The wide range of topics covered by these events underlines the defining characteristic of SEI SF – supporting the Bay Area's structural engineers working in all areas of the profession, not limited to building design (a common misconception and the primary focus of other local organizations).

One new initiative for 2020 that I am most pleased to announce is the SEI of ASCE San Francisco Chapter Scholarship. The annual scholarship will be awarded based on academic and professional merit to undergraduate and graduate students studying structural engineering in the Bay Area and the broader Northern California region covered by the San Francisco Section. Our Board has voted to increase the total scholarship awarded each year to make an everlarger contribution to the local structural engineering community.

It is for events and initiatives like these that SEI SF has been selected to receive the 2019 SEI Chapter of the Year Award in recognition of its exemplary activities and efforts to advance the structural engineering profession. We truly appreciate this recognition and feel motivated to keep improving.

For more information about SEI of ASCE, San Francisco Section, please visit www.seisf.org or contact Vladimir Calugaru, PhD, PE, Chair of the SEI of ASCE, San Francisco Section, at vcalugaru@infraterra.com.



LA Sustainability Leaders Panel

by Sam Potts



The Metropolitan Los Angeles Branch cohosted with Asian-American Architects and Engineers Association (AAa/e) a panel to discuss LA's future in sustainable practices and development on February 19, 2020, at the Gensler DTLA office. Over 75 people came to the event.

The night featured four panelists across several Los Angeles agencies:

• Dr. Cris Liban, PE - Los Angeles Metropolitan Transit Authority (Metro) - Executive Officer of Environmental Compliance and Sustainability

- Dr. Youn Sim, PE Los Angeles County Department of Public Works Head of Strategic Planning and Sustainability Office
- Nancy Sutley Los Angeles Department of Water and Power Chief Sustainability Officer
- Doug Walters, PE City of Los Angeles, Bureau of Sanitation Chief Sustainability Officer and Chief Resiliency Officers

• Our Awards Chair, Paul Lee, PE, was the moderator.

Topics discussed included local and regional impacts of green policies, climate change, innovative projects, what engineers can do to create a more sustainable environment, and inter-agency collaboration.





Getting involved in ASCE Committees

Each year, thousands of civil engineering professionals participate in ASCE's activities by volunteering their technical and professional expertise in support of the Society's vision and mission to advance the practice of civil engineering.

Serve on a Committee

Service on an ASCE committee is just one of the many ways in which you can give back to the profession. Selected applicants are subject to approval by the Board of Direction in July. Constituent Committee members are approved by the respective Society Committee by September. Committee assignments are effective at the conclusion of the Society's Annual Business Meeting, typically held in October.

- o Membership on Board and Constituent Committees is limited to ASCE members in good standing, unless an exception is granted.
- o Composition of committees is designed to ensure a diverse membership.
- o Terms begin and end at the conclusion of the Society's Annual Business Meeting.
- o A term is one (1) year and may be renewed up to a maximum of six (6) years.
- o Reimbursement is available to members in good standing, according to the Society's travel policy.
- o The President-elect recommends for Board of Direction approval the nominees for Board and Society Committees.
- o Society Committees are responsible for approving their constituent committee rosters by September.

Now Accepting Applications

Applications will be accepted from January 15 to March 15. If you have any questions, please contact Wendy Dinwiddie at wdinwiddie@ asce.org.

o Committee for America's Infrastructure

Charge: The Committee for America's Infrastructure shall coordinate all activities related to the Report Card for America's Infrastructure.

o Committee on Accreditation

Charge: The Committee on Accreditation shall administer all activities involving ASCE's participation in ABET accreditation, specifically including strategic accreditation priorities, policies, and programs.

o Committee on Developing Leaders

Charge: The Committee on Developing Leaders shall empower civil engineers to develop their leadership and interpersonal skills more purposefully, identify knowledge and skills gaps, and navigate existing and new tools/resources that ASCE offers in this area.

o Committee on Education

Charge: The Committee on Education shall focus on matters that affect the undergraduate and graduate education of civil engineers.

o Committee on Faculty Development

Charge: The Committee on Faculty Development shall create and implement programs to foster the development and advancement of faculty as effective educators.

o Committee on Licensure

Charge: The Committee on Licensure shall promote the licensure of civil engineers, collaborate with others involved in professional licensure, and monitor, support, and encourage licensure activities.

o Committee on Pre-College Outreach

Charge: The Committee on Pre-College Outreach shall develop, implement, and support quality programs and resources, based on research, to increase awareness, understanding and interest in civil engineering among students in grades pre-K through 12 with the goal of developing a large diverse population of future engineers and a more knowledgeable public.

o Committee on Preparing the Future Civil Engineer

Charge: The Committee on Preparing the Future Civil Engineer shall advance the Society's educational qualifications and professional standards for the practice of civil engineering.

o Committee on Professional Advancement

Charge: The Committee on Professional Advancement shall build opportunities in global leadership, engagement, and service to advance the civil engineering professional.

o Committee on Professional Career Growth

Charge: The Committee on Professional Career Growth shall update existing and develop new resources to help members identify career paths, set goals for achieving career milestones, progress toward career goals, and track progress toward reaching career milestones.

o Committee on Professional Conduct

Charge: The Committee on Professional Conduct shall investigate charges of misconduct against members of the Society as provided in the governing documents and shall provide support and guidance on Society policies and programs to advance the ethical practice of engineering.

o Committee on Student Members

Charge: The Committee on Student Members shall provide for the development and engagement of students through activities and programs that enhance the formal education process and the transition of Student Members into the profession as ASCE members.

o Committee on Sustainability

Charge: The Committee on Sustainability shall direct, oversee, and coordinate the Society's implementation of ASCE's Sustainability Roadmap. The Committee on Sustainability shall also provide oversight of ASCE's involvement in the Institute for Sustainable Infrastructure (ISI).

o Committee on Technical Advancement

Charge: The Committee on Technical Advancement shall collaborate with the Technical Region, the Institutes and the Academies on the technical activities of the Society.

o Committee on Younger Members

Charge: The Committee on Younger Members shall focus on matters of the professional development of civil engineers 35 years of age and younger, and facilitate their engagement with, and participation in, the society. [Applicants must be 35 years old or younger at the time of appointment.]

o Department Heads Coordinating Council

Charge: The Department Heads Coordinating Council shall assist and advise the Committee on Education on the initiation, development, and execution of policies, programs, and procedures designed to enhance civil engineering education and research; foster communication on educational and research matters among all civil engineering department heads, faculty, students, and practitioners; and represent the Society to peer engineering societies' department heads groups both nationally and internationally.

o Energy, Environment and Water Policy Committee

Charge: The Energy, Environment and Water Policy Committee shall develop and maintain ASCE policies related to the areas of energy, environment and water.

o Engineering Practice Policy Committee

Charge: The Engineering Practice Policy Committee shall develop and maintain ASCE policies related to the area of engineering practice.

o Governing Documents Committee

Charge: The Governing Documents Committee shall provide oversight for proposed amendments to the Society's governing documents and provide counsel to the Board of Direction on issues related to the governing documents; and, as directed, review amendments to the governing documents of Organizational Entities.

o History and Heritage Committee

Charge: The History and Heritage Committee shall promote the civil engineering profession's history and heritage.

o Infrastructure and Research Policy Committee

Charge: The Infrastructure and Research Policy Committee shall develop and maintain ASCE policies related to the areas of infrastructure and research.

o Leader Training Committee

Charge: The Leader Training Committee shall be responsible for the coordination and delivery of leader training to Society leaders.

o Member Communities Committee

Charge: The Member Communities Committee shall be responsible for member support, engagement, and communication. The Member Communities Committee shall provide support and oversight to the Society's Geographic Units.

o Members of Society Advancing Inclusion Council

The Members of Society Advancing Inclusion Council shall act as a representative, informed, and responsible decision-maker advancing diversity, equity, and inclusion interests of the civil engineering community; monitor the development and coordination of products and resources within the civil engineering community that promote and advance diversity, equity, and inclusion; and represent the interest of ASCE to the wider STEM and professional engineering communities.

o Membership Application Review Committee

Charge: The Committee processes applications for the ASCE Fellow grade as well as applications for admission or advancement where qualifications do not exactly meet the defined criteria for a particular grade of Society membership. [No travel reimbursements are available for service on this Committee.]

o Public Agency Peer Review Committee

Charge: The Public Agency Peer Review Committee shall provide the leadership for and the organization and management of the peer review for public agencies program. The Public Agency Peer Review Committee shall also establish criteria for selecting and training reviewers and conducting reviews.

o Program and Finance Committee

Charge: The Program and Finance Committee shall oversee the Society's financial resource planning including budget development and investment management.

o Public Policy Committee

Charge: The Public Policy Committee shall coordinate public policy and government relations activities affecting the civil engineering profession and work with allied organizations on matters of mutual interest.

o Society Awards Committee

Charge: The Society Awards Committee shall annually consider and recommend to the Board of Direction nominations for Distinguished Membership in the Society in accordance with the Constitution and Bylaws; recommend to the Executive Committee the recipient of the Norman, Croes, Wellington, and ASCE State of the Art of Civil Engineering prizes; recommend to the Executive Committee nominations for the Outstanding Projects And Leaders (OPAL) Leadership awards; oversee Society Award, Scholarship and Fellowship endowments and the establishment of new Society Awards, Scholarships, and Fellowships; and consider nominations for and award Society Scholarships and Society Fellowships.

o State Government Relations and Grassroots Committee

Charge: The State Government Relations and Grassroots Committee shall assist ASCE's local units and individual members with programs to effectively participate in legislative activities that are of significance to the civil engineering profession.

o Transportation Policy Committee

Charge: The Transportation Policy Committee shall develop and maintain ASCE policies related to the area of transportation.

ARTICLE

2020 Report Card for San Bernardino and Riverside Counties Inland Empire's Infrastructure

by Alexa Lopez



The Report Card was released today by the San Bernardino and Riverside Counties Branch, giving eight categories of infrastructure an overall grade of a 'C' Civil engineers evaluated the following individual categories: aviation (C), drinking water (C), parks, open space and recreation (C), urban runoff (B), local streets (C-), solid waste (B-), flood control (C) and wastewater (C+).

In general, the regional transportation network has received some attention and improved levels of service, thanks to major investments over the past 10 years. However, sustainable funding is crucial to maintain these upgraded assets

sustainable funding is crucial to maintain these upgraded assets and to shift attention to what the region says are deteriorating local streets.

Most of the region's infrastructure is in mediocre condition, demonstrating investments are being made, but in order to keep up with operation and maintenance costs, more funding is needed. In the Inland Empire region, there are three major international airports: Ontario (ONT), San Bernardino (SBD) and Palm Springs International (PSP) Airports, five mid-size airports and numerous smaller aviation airports, indicating the importance of robust aviation infrastructure, which is evident in the investments made. ONT received \$11.8 million in grants from the Federal Aviation Administration in 2018 to repair taxiways develop an Airport Pavement Management Program and other improvements; PSP is currently in the middle of a \$122 million, 20-year expansion plan, which includes funding for airport rents and landing service fees and more; and SBD, which serves as a major West Coast freight hub and is also in the middle of a \$100 million investment in the facility. While airport pavement and navigational aids are in good to fair condition, some of the maintenance is falling behind, causing facilities to appear in a weathered state – with ages between 15 and 30 years. Additional funding is needed to support this operation and maintenance.

Agencies in the region are focused on funding projects to improve access to reliable sources of water, such as the Western Municipal Water District in Riverside, which invested \$36 million into the la Sierra Regional Conveyance System project to provide access to more local supply. Additionally, drinking water infrastructure owners and operators are investing in regular operation and maintenance in order to provide consistent service to residents. Overall, existing pipeline capacity in the Inland Empire is adequate for the next 15 years and the region's water infrastructure is considered adequate, but aging infrastructure must be replaced.

Solid waste (B-) and urban runoff infrastructure (B) both sit in the 'B' range, indicating the infrastructure is in a state of good repair and is adequate for now, Both San Bernardino and Riverside Counties have sufficient landfill capacity for the next 20 years and have planned for the needs of the next 100 years. In 2017, San Bernardino and Riverside Counties generated about 3.22 million tons of municipal solid waste (MSW). The average resident disposed 4.12 pounds per day of MSW, which is less than the 2017 national average of 3.30 pounds per day. Within the region's urban runoff infrastructure, iurisdictions in Riverside and San Bernardino Counties employ hundreds of staff and spend millions of dollars annually to implement Urban Runoff Management Programs in the Inland Empire, which exist to address stormwater quality concerns and enhance water quality in the region. These programs are now shifting towards requiring new capital infrastructure investments to address waterbody-specific pollutants as required by the U.S. Environmental Protection Agency, along with new state-mandated water quality regulations to control trash in urban runoff.

Local streets' infrastructure received the lowest grade of a 'C-,' indicating that due to the growing population at a rapid rate in the region, there has been increased vehicular traffic which has a significant impact on the condition and capacity of the existing roadway system. Civil engineers recommend a holistic strategy that considers all road users and all modes of transportation, which should incorporate roadways, commuter railways, and transit systems, sidewalks and bikeways. According to the Pavement Condition Index (PCI), 78% of major locally and state-maintained roads in the Inland Empire were classified as being in poor or mediocre condition, costing the average motorist an additional \$795 each year in extra vehicle operating costs.

"It is only fitting to kick off this report card during the annual Engineers Week. I'm proud of the work that has gone into evaluating the region's airports, local streets, drinking water systems and more that are crucial to so many residents' daily lives," said George Johnson, P.E., M.ASCE, Riverside County CEO. "While transportation investments have been made in the last 10 years, the recommendations provided in this report are crucial to ensure the Inland Empire has a well-maintained infrastructure network to support our growing population and varied industries."

Recommendations to raise the grades include the following:

- Protect water resources in the Inland Empire by supporting Statewide water bonds that include Integrated Regional Water Management grant programs that authorize funding for water infrastructure, groundwater supply and storage, dam repairs, habitat protections and restoration and improve water quality in our streams and lakes.
- Resurface local streets and roads by supporting legislation similar
 to Senate Bill 1- Road Repair and Accountability Act, and local
 measures that provide direct funding to Inland Empire cities and local
 governments for the maintenance of local streets and roads and
 also enhances pedestrian and bike safety in the region's communities.

- Increase drinking water and wastewater treatment system capacities by supporting funding initiatives and capital improvement projects that will allow water agencies to keep up with system demands over the next couple decades and ensure that water and wastewater networks will continue to be properly maintained.
- Grow public awareness of solid waste resources by supporting programs that better inform residents about how to separate organic materials for composting and recyclable materials for processing, and how to turn solid waste into resources and reduce the amount of materials buried at landfills.
- Provide consistent and reliable funding for trail construction by preparing a comprehensive plan in Riverside and San Bernardino Counties to provide detailed trail inventories and implementation strategies for trail design and construction.

A full copy of this report is available at https://www.infrastructurereportcard.org/sbrivercounties/





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