CULTURE & DEMOGRAPHY
Latino population forecast to more than double by 2060 in CA’s rural counties

ECONOMY
Are robots to blame for workers’ declining wages?

EDUCATION
How college instructors influence student performance
Looking at benefits, costs of smaller class sizes in early childhood education

EMPLOYMENT
Strategies to fill CA’s expected shortfall of primary care physicians

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Californians should prepare for the big storm that could flood the Central Valley

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Tokyo’s green policies promote mental health, serve as a model for other cities

HEALTH
Preventing lead exposure could yield $84B in benefits to U.S.

HUMAN SERVICES
Contrary to critics’ claims, SNAP designed to encourage work

SCIENCE & TECHNOLOGY
Methods for reducing gender bias in photo-recognition software

CULTURE & DEMOGRAPHY


“The Latino population in California is growing at a much faster rate than the state’s non-Latino population.... It is projected Latinos will comprise 43 percent of California’s population by 2030, increasing to 49 percent by 2060. The largest relative increase in the Latino population is projected to occur in small metro and rural counties, where it is expected the Latino population will more than double
by 2060.” This report discusses comparative statistics of Latino with non-Latino populations on age distribution, family size, citizenship status, language use, income/poverty, use of social services, education and housing.

ECONOMY


“In short: The robots are mostly to blame…. The labor share declined fairly steadily starting in 1960, accelerated in the 2000s, hit bottom in 2011, and has since rebounded slightly…. The fall hasn't been uniform across … workers in the ‘information’ sector … have seen their incomes fall the most relative … manufacturing is close behind…. Automation … has been responsible for between 44 and 57 percent of the decline in the labor share of income since 2000. International factors, which include offshoring of tasks as well as competition from imports, account for between 37 and 54 percent, and the rest can be attributed to the decline in unions." ([Albany Times Union](http://www.albanytimesunion.com), July 25, 2017).

EDUCATION


This study examines data on algebra instructors at the University of Phoenix, a for-profit college offering both online and face-to-face classes. “We find substantial variation in student performance across instructors, both in the instructor’s class and in a subsequent class. Differences are substantial in both online and in-person courses, though they are larger for in-person classes. Notably, instructor effects on students’ future course performance are not significantly correlated with student end-of-course evaluations, the primary metric through which instructor effectiveness is currently judged. Our findings suggest that colleges could improve student outcomes by paying more attention to who is teaching their classes.”


In early childhood education (ECE), is there an association between class size, class-teacher ratio, and children’s achievement? This study examines 47 years’ worth of ECE program data. “Based on our findings, we conclude that current regulations that hold class sizes at or below 20 and child–teacher ratios at or below 10:1 are largely adequate for most children. There is no clear advantage to slight reductions in these numbers…. Studies in K–12 have found that large-scale efforts to reduce class sizes by hiring more teachers may yield even smaller benefits than found in demonstration studies because of the difficulty in finding a sufficiently skilled pool of new teachers. Moreover, the costs of sustaining such small classes and ratios would be high and could well lead to a reduction in resources in other areas, like teacher training, that may affect class-room quality and the long-term impacts of ECE.”

EMPLOYMENT
While demand for physicians in California is expected to increase 12 to 17 percent above current levels, researchers predict that physician supply will decline between 2016 and 2030 across multiple scenarios. Nurse practitioners and physician assistants will make up the bulk of California’s health care clinicians instead. Strategies to fill potential gaps include: “Actively recruiting primary care physicians to practice in California; Expanding primary care residency programs, particularly in the regions at greatest risk for long-term shortages; Ensuring scope-of-practice regulations for NPs and PAs maximize their capacity to provide primary care and to work at the highest level of their education and knowledge.”

ENERGY & ENVIRONMENT


“A day before Hurricane Harvey inundated Houston, an obscure arm of the California Department of Water Resources delivered a report detailing the impact of the Central Valley deluge that will surely strike, and how best to prepare for it…. The plan calls for … multi-benefit flood management, a notion that floodways and bypasses must be expanded and building in floodplains must be limited…. The report urges … lawmakers (to) increase the $40 million currently spent annually on flood management to $190 million by the end of (a) 30-year period.” (Sacramento Bee, Aug. 30, 2017).

GENERAL GOVERNMENT


“The Center for Urban Design and Mental Health … recommends that cities incorporate four main themes into urban design to support mental health: green spaces, active spaces, social spaces, and safe spaces. For the past year, McCay has been conducting research on how Tokyo’s design fares…. The Tokyo Metropolitan Government offers workshops that teach residents how to create green rooftops, wall surfaces, railroad areas, and parking lots, and offers tax incentives for such efforts…. Tokyo has managed to keep its cars and buses mostly to its main streets, so that just a block or two off the principal thoroughfares are tranquil, leafy areas conducive to walking, running errands in small shops, and social interaction.” (Pacific Standard, Aug. 29, 2017).

HEALTH


“Preventing childhood lead exposure will require significant policy and regulatory action, coordination across levels of government, and public and private investments, but it has the potential to generate substantial economic and public health gains…. Eliminating lead hazards from the places where children live, learn, and play will pay dividends in terms of social and educational outcomes, and this analysis
found that it also could yield $84 billion in long-term benefits per birth cohort. The federal government would reap about $19 billion, and states would gain approximately $10 billion for children born in 2018 alone. In the absence of lead, hundreds of thousands of children would be more likely to realize their full potential thanks to higher GPAs, a better chance of earning high school diplomas and graduating from college, and a reduced likelihood of becoming teen parents or being convicted of crimes.”

HUMAN SERVICES


“Some have argued that public assistance programs like SNAP [Supplemental Nutrition Assistance Program] do not do enough to incentivize work and create a benefit cliff that dissuades participants from working, trapping them in a cycle of poverty. Research has demonstrated, however, that this phenomenon is grossly overstated… The program’s gradual benefit phase-out, earnings disregards, and entitlement structure allow families to stay connected to food assistance as they work toward financial stability and self-sufficiency. And states have options to further advantage earnings, negating the risks associated with accepting more hours or higher wages.”

SCIENCE & TECHNOLOGY


“Two prominent research-image collections—including one supported by Microsoft and Facebook—display a predictable gender bias in their depiction of activities such as cooking and sports. Images of shopping and washing are linked to women, for example, while coaching and shooting are tied to men. Machine-learning software trained on the datasets didn’t just mirror those biases, it amplified them. If a photo set generally associated women with cooking, software trained by studying those photos and their labels created an even stronger association.” This paper proposes methods for reducing the effect of gender bias, which will ultimately make photo-recognition software programs more useful in a wide variety of applications. (Wired, Aug. 21, 2017).

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