

CALIFORNIA FOR ALL



My Plan to Save Our State

by Michael Shellenberger

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Introduction

In 1993, after I graduated from college, I filled my Honda Civic with books and a few clothes and moved west to pursue the California dream.

I am grateful to have achieved it. I have a loving family, meaningful work, and a home in Berkeley.

But over the last few years, I have grown increasingly concerned by what's happening to my state.

A severe housing shortage has led to skyrocketing housing costs, a massive homelessness crisis, and the highest poverty rate in America.

Our schools are worsening, taxes are high and regressive, and air pollution and energy prices are rising. Good manufacturing and other high-wage jobs are fleeing the state.

Where over half of Californians could afford a home a decade ago, today, just one out of four can. The young are burdened with a \$366 billion debt to public employees that grows by the day.

The California dream of homeownership, a good job, and world-class schools is being destroyed by organized selfishness.

There will always be special interests. The problem is when they become too powerful and greedy and corrupt the government.

The good news is that our democracy gives Californians the chance to elect new leaders to clean up the government.

I am running for governor to end the corruption, restore trust in government, and make the human and infrastructural investments needed to create a California for all.

California's prosperity has long rested on shared state and federal investment in modernizing infrastructure, technology, and education. These investments helped give rise to Apple, Google and Facebook.

We can capture the benefits of the automation revolution (including self-driving vehicles), raise the minimum wage, and end poverty.

We can accelerate the transition to electric cars while cutting carbon emissions and lowering energy prices.

We can create abundant housing by closing a frivolous lawsuit loophole blocking new construction, and by building modestly taller buildings in cities and suburbs.

We can personalize education and eliminate homework for students and schoolwork for teachers by reforming the school schedule.

And we can make our taxes fair and sustainable. Beyond specific reforms, we need a collective shift in consciousness. We must move from a governing paradigm of competing interests to one that emphasizes common interests, fairness, and reasonableness.

A growing number of Californians recognize that the system needs to change. Nobody likes corruption. My plan can unify young and old, rich and poor, workers and employers, Democrats and Republicans.

Everyone has a part to play.

1. Prosperity for All

Summary

- California has the highest rates of poverty and inequality in the United States as a result of the state's tax and regulatory policies.
- We need economic growth that is broadly shared and does not disproportionately benefit the wealthiest Californians.
- We can create good jobs and end poverty by embracing automation, keeping and attracting manufacturing, lowering energy prices, and raising the minimum wage.
- As one of the nation's richest states, California should also aim to have the lowest rates of poverty and inequality.

Problem

California has the highest rate of poverty and inequality when our high cost of living is accounted for, according to the Census Bureau.¹ In Los Angeles, the cost of housing has risen four times faster than incomes since 2000.² Of the large states, California is the most unequal in terms of well-being,³ education,⁴ and other measures.^{5,6}

The high cost of living is driving good jobs and employers like Toyota out of state to places like Portland, Oregon and Austin, Texas, which are building new homes twice as quickly as the Bay Area.⁷ As that happens, the chance of capturing good manufacturing jobs declines.⁸

Manufacturing job growth rebounded only 4 percent in California where it rebounded 9 percent nationally.⁹ California attracted just one-quarter of the manufacturing investment as the rest of the United States, despite having the largest manufacturing sector in the nation.¹⁰

Energy is more expensive in California than in most of the rest of the U.S.¹¹ Expensive energy hurts poorer Californians

directly and drives manufacturers out of the state.¹² Electricity prices rose five times more between 2011 and 2017 in California than they did nationally,¹³ so that today we spend 60 percent more than the rest of the nation.¹⁴

High-paying manufacturing jobs are being replaced by lower-paying service jobs. A California manufacturing worker makes \$96,711 per year compared to state average of \$58,628.¹⁵ Los Angeles over the last decade lost 89,000 good manufacturing jobs that paid twice as much as service sector jobs.¹⁶

California is hostile to manufacturing.¹⁷ California manufacturers pay nearly 100 percent more for electricity than manufacturers pay nationally.¹⁸ “California is not a competitive place for a manufacturing company,” concluded a report that surveyed manufacturers. “Costs, regulations, permitting delays, a lack of incentives, high labor costs and a high tax rate among other factors make it very difficult for manufacturers to do business in California.”¹⁹

California remains home to over one-third of the nation’s poorly treated farmworkers – about 500,000 people.²⁰ Most are undocumented and many are denied a decent wage and basic rights. Farmworkers suffer a death rate seven times higher than other private sector workers,²¹ and 80 percent of farmworker women say they’ve suffered sexual harassment including rape.²²

The right of workers to quit their jobs and seek a new one is denied to seasonal Latin American farmworkers and South Asian H1B computer programmers alike. The reason is because quitting would require leaving the country.

More than 4,600 Californians died from opioid overdoses in 2016, the second most of any any state.²³ ²⁴ Meanwhile, in San Francisco, drug company McKesson’s CEO personally earned \$700 million over the last decade as he turned a blind eye to the massive diversion of his company’s opiate drugs to the black market.²⁵

The autonomous vehicle revolution is arriving and it will soon impact California's 346,660 professional drivers.²⁶ Of those, 130,640 are heavy and tractor-trailer truck drivers.²⁷

The Solution

California should seek "high-road" of high-productivity, high growth, and high wages focused on exports. The traded (export) sector of the economy produces most of all GDP gains despite being one-third of the economy.²⁸

California should make it easier for manufacturers by streamlining permitting and regulation and other incentives.²⁹ Despite declines, manufacturing still comprises one-tenth of California's economic output, which is ten times more than agriculture³⁰ and employs eight percent of the workforce.³¹

We must embrace the automation revolution (including autonomous vehicles) which could either destroy jobs and worsen inequality or create good jobs and reduce inequality. What's clear is that the revolution is coming: analysts estimate that the global market for AVs alone will be \$42 billion in 2025.³² California is uniquely positioned to benefit from it thanks to California-based AV leaders Google, Uber, and Apple.³³

AVs could radically reduce traffic accidents. In just California alone, over 3,500 people die each year in traffic accidents.³⁴ More people are dying annually,³⁵ which may be due to higher use of mobile devices while driving.³⁶ Experts predict AVs could reduce road accidents by 90 percent, according to one firm's research.³⁷ Beyond lives saved, reducing accidents could save \$190 billion annually.³⁸

AVs could reduce travel times and increase efficiency in many ways. Nearly one third of cars in San Francisco at any given time are trying to park.³⁹ Los Angeles and San Francisco today have the first and fifth highest congestion rates, respectively, in the world.⁴⁰ AVs could increase significantly mobility for everyone, including the elderly, minors, and the disabled at lower cost than existing public transit.⁴¹

AVs could allow policymakers to reduce street parking thereby allowing more space for movement⁴² and encourage the adoption of roving robot cars.⁴³

California should learn from Germany's vocational education and technical apprenticeship programs. In 2005 Germany reformed its educational system to allow students to gain more real world experience in vocational education. The reforms worked. The percentage of Germans in the 20s without formal employment qualifications dropped by nearly four percentage points. Today, most German students ages 16-20 have a chance to gain workplace training in addition to classroom learning.⁴⁴

We must raise the minimum wage to abolish poverty and make automation cost-effective.⁴⁵ It should be done gradually to give industries the time needed to make the investments in automation they need to make.

California should impose a "local sourcing" requirement on automobile companies that sell in-state, just as it imposes fuel efficiency standards on them. This worked to help attract manufacturing to the American South.⁴⁶

California should support a revitalized agricultural industry including accelerating animal-free meat production⁴⁷ and the more widespread use of drones.⁴⁸

We need a grand bargain on immigration. This starts with protecting equal rights for all workers who are here while also regulating the border and implementing an "e-verify" system that puts the burden of verification on the employer.

2. Abundant Housing

Summary

- California is in the worst housing and homelessness crisis since the Great Depression.
- Abundant housing is the key to more homeownership, lower housing prices, and lower rents.
- We can create homebuilding and abundant housing by up-zoning cities and suburbs and closing the loophole in the California Environmental Quality Act (CEQA), which allows frivolous, repetitive, and anonymous lawsuits
- We must organize a movement to overcome selfish NIMBY (not-in-my-backyard) interest groups, a small group of labor unions, and anti-development environmental groups including Sierra Club and NRDC.

Problem

California homes are more expensive than those in every other state except Hawaii. Where 56 percent of Californians could afford a middle-class home in 2012, in the third quarter of 2017, just 28 percent could.⁴⁹

Rents are the highest in the nation and rising – 49 percent in San Francisco and 25 percent in Los Angeles since January 2011.⁵⁰ Most of the country's most expensive rental markets are in California.⁵¹ Deaths of homeless people on the street are rising.^{52 53}

The high price of housing is choking-off half of all economic growth nationally⁵⁴ while it is causing California to lose \$140 billion annually in economic output.⁵⁵

Homeownership still matters. People who own homes have 36 to 45 times more wealth than people who rent.⁵⁶

The young are disproportionately impacted. While just one out of four Californian Millennials (25–34) own a home – the

third lowest homeownership rate among Millennials in the U.S. – homeownership among baby boomers is nearly the same as the national average.⁵⁷

It takes three times longer to save up for a home downpayment in California than nationally. It would take a median-income resident 29 years to save for a downpayment on a median priced home in San Francisco (27 years in Los Angeles).⁵⁸

The housing shortage is behind high housing costs. San Francisco added 38,000 jobs but just 4,500 new housing units between 2015 and 2017,⁵⁹ and now seven million more people are expected to move to California over the next 20 years.⁶⁰

There is plenty of land available for new homebuilding in cities and suburbs.⁶¹ California cities are low-density. San Francisco, Los Angeles, and San Diego have one-fourth, one-eighth, and one-seventeenth as many people per square mile as Manhattan.⁶²

California government is refusing to address the crisis. Proposed subsidies cannot address the problem because demand is too large, housing is too expensive, and NIMBYism and greed – not lack of demand for homes – are the main problems.⁶³ Local governments are currently able to reject new housing even when it complies with the rules.⁶⁴

California’s most important environmental law (CEQA) is being abused. CEQA allows multiple parties to sue anonymously after work on a project has been started and even completed.⁶⁵ Most CEQA lawsuits are filed against projects in urban areas, and only 13 percent are filed by environmental groups.⁶⁶

Solution

We need to triple the rate of building homes, apartments, and condos in cities and in suburbs by allowing modestly larger buildings. I support California YIMBY’s proposal to “up-zone” neighborhoods in walking distance of mass transit.

But alone it is not enough and would risk creating land speculation that could make housing prices even higher.

We must reform CEQA, our state's most important environmental law. We must end anonymity in lawsuits to expose the corporations and labor unions seeking to harm their business competitors. We must end duplicative lawsuits like is done with class action lawsuits.⁶⁷

We should allow a modest amount of degraded farm and ranch lands to be used for housing. In the name of protecting the natural environment, California reduced the amount of agricultural land allowed for homebuilding to decline by half between 2002 and 2012.⁶⁸ But cattle ranching reduces the biodiversity of California's oak forests and increases carbon emissions.^{69,70} Cities and suburbs can support significant amounts of native and non-native species.⁷¹

We need to be fair. Five times more of California's land mass is used for ranching and farming than cities and suburbs.⁷² Ranch lands and farmlands can be beautiful, but California's people also need decent shelter. It's not fair that an industry that generates one percent of the state's GDP should have five times more of the state's land than places of human habitation.⁷³

3. World-Class Schools

Summary

- California has world-class universities and is at the center of the global knowledge economy. It should aspire to have world-class K-12 public schools.
- California students are performing below the national average despite an increase in schools funding.
- California spends the least of all but four states on its public schools when our high cost of living is accounted for, even after recent increases in funding.
- We have all the tools we need to "flip the classroom" and turn teachers into tutors and the Internet into an instructor.
- We need a grand bargain to professionalize teaching, raise teachers' wages, and modernize the school day.

Problem

California's schools are uniquely unequal, home to the highest and lowest ranked districts in the nation.⁷⁴ California's schools are also the most unequal when it comes to student performance by race.⁷⁵ Student performance of African American and Latino students has been declining⁷⁶ – the latter to second-poorest in the U.S.⁷⁷ Only 40 percent of non-white and non-Asian students meet state education standards.⁷⁸

California increased funding for schools but did not improve student performance.⁷⁹ Other states saw their student performance improve which led to an overall decline in California's relative performance, from 33rd to 42nd for overall grades and scores nationwide between 2012 to 2016.⁸⁰ Four out of ten students in the California State University system are required to take remedial English and Math.⁸¹

California’s high cost of living makes life hard – especially for teachers. Just 17 percent of them can afford a median-priced home in the community where they teach.⁸²

Accounting for the high cost of living, California spends the least per student of all but four other states.⁸³ As a result, California has the fourth worst teacher-student ratio in the U.S.. 22.5-to-1.⁸⁴

College attendance rates are low. Only 30 percent of California’s ninth graders will go to college.^{85,86} By 2030, if trends continue, California companies will lack the one million college-educated workers they need to continue operating in the state.⁸⁷

School reform in Washington, D.C. suggests that student performance can improve by dismissing underperforming teachers and financially rewarding performance.^{88,89}

But school reform has so far not dealt with the fundamental problem of the lack of instructional time. Scholars have known for decades that academic instruction time at three hours a day is too short and more like five and a half are needed.⁹⁰ Recently, researchers have found that summer vacation worsens the race and class gap in student performance.^{91,92}

California’s establishment has given up on serious educational reform and deferred to teachers’ unions. Gov. Brown dismisses the ability of Sacramento to improve the state’s schools and has simply devolved ever more control to local school boards.

Solution

We need to personalize education for every student by automating lecturing and freeing up teachers to better meet the needs of each student. This is called “flipping the classroom,” and it is already being implemented in many schools to significant student performance improvements and teacher and parent satisfaction.^{93,94}

The digital revolution makes flipping the classroom possible through online lectures and instruction from Khan Academy and other high quality series. While some students are watching online lectures – appropriate for their level and pace – other students are being tutored by teachers who might be specialists in math, reading, science and other subjects.

Personalizing instruction allows for the cultivation of the social and emotional intelligence needed in an increasingly automated world. Leadership, empathy, teamwork, and coaching are skills that cannot be automated.⁹⁵

For flipping the classroom to work, we need to reform the school day and school year. Society is long overdue in aligning the school day to the 9-5 work day. A school day of that length would allow schools to eliminate both homework for students and after-school work for teachers. It would better integrate aftercare, sports, physical education, and the arts into the school day and make it available to all students. And it would reduce the negative impact of summer vacation, especially on low-income children.⁹⁶

Teachers would work a normal 40 hour work week and be rewarded as professionals. A normal school schedule would not require any increase in total hours worked since they work 10 hours and 40 minutes per day on average currently.⁹⁷ Normalizing the schedule into a 40 hour week would allow teachers to work shorter days for more weeks, like other professionals.⁹⁸

Under such a reform, teacher salaries should be raised to professional levels with continuous education required to improve student performance. A new regime would require a grand bargain where teachers would exchange higher pay for a reformed school day and the end of tenure.

4. Clean Government

Summary

- Government projects worth billions of dollars are routinely negotiated in secret and awarded to well-connected insiders and campaign contributors.
- California's news media report on corruption scandals but fail to connect the dots for voters.
- California's political machine is controlled by family dynasties whose wealth has come from oil and real estate since the 1960s.
- We must break up the corrupt California Public Utilities Commission, which is currently under federal and state criminal investigation.
- We need a New Sunshine Act that requires transparency for government contracting, permitting, regulating and other activities.
- We need to allow digital signature gathering to reduce the cost to put a voter initiative on the ballot and make the democratic process more accessible.

Problem

Californians spend billions more for gasoline than other Americans due to price manipulation the government won't investigate. The average Californian family is paying \$600 more for gasoline per year than they should for gasoline, according to a government panel, but nobody in Sacramento will investigate *why*.⁹⁹ Oil "refiners hid imports and exports from view of the market in order to command higher prices," concluded an investigation by an independent consumer organization.¹⁰⁰

Electricity Price Rip-Off. We pay 60 percent more on average for electricity than other Americans.¹⁰¹ Our electricity

prices rose five times faster between 2011 and 2017 than they did in the rest of the country.¹⁰²

Big Oil is the main source of wealth for Gov. Jerry Brown and Lt. Gov. Gavin Newsom. Both Brown and Newsom owe their family wealth to oil and natural gas money. Brown family wealth is from a monopoly on imports of Indonesian oil into California. Newsom's family wealth is almost entirely from the Getty Oil fortune. For example, Gordon Getty financed 96 percent of Newsom Jr.'s vineyard.¹⁰³

Lt. Gov. Newsom and Gov. Brown take actions that directly benefit their families and friends. In the 1970s, Brown's lobbying for oil and gas interests while governor sparked an investigation by the FBI and *The New York Times*. Brown in 2014 had a government agency look for oil and gas deposits on his family's ranch. The agency produced – at taxpayer's expense – a 51-page report for Brown.¹⁰⁴ Brown fired two state fracking regulators because his former chief of staff – now working for Occidental Petroleum – asked him to.¹⁰⁵ And Brown's actions have directly benefitted his sister's energy investments.¹⁰⁶

Brown awarded California's proposed train project to a firm with the lowest safety and technical rating. The Brown administration awarded a massive train contract to Tutor Perini Corp. – a company whose bid had the lowest technical and safety rating of all competing firms. Why? Perhaps because Tutor donated the maximum allowable to Brown's campaign.¹⁰⁷ Brown even intervened with the California Supreme Court on Tutor's behalf.¹⁰⁸

California Water Commission is creating water scarcity by refusing to build desperately-needed infrastructure. The California Water Commission is refusing to spend most of the \$7.5 billion in bond funding for water management that voters approved. "It's causing lots of people to scratch their heads," Tim Quinn, head of the Association of California Water Agencies, told the *L.A. Times*.¹⁰⁹

Sweetheart deal for prison guards union makes incarceration as expensive as as Stanford. While the

number of prisoners incarcerated in California declined 12 percent between 2011 and 2015, the total amount California spends on prisons rose by \$560 million.¹¹⁰ California spends more per prisoner than any other state – \$65,000 annually – the same amount it costs to attend Stanford.¹¹¹ The reason is because Gov. Jerry Brown raised prison guards salaries in exchange for campaign donations.¹¹²

Newsom and Brown seek to build ecologically damaging water tunnel for mega-donors. While California government creates water scarcity by not investing bond money into infrastructure, Gov. Brown and Lt. Gov. Newsom want to build a water tunnel that independent experts say we don't need.¹¹³ The tunnel would benefit Stewart and Lynda Resnick, a couple whose farms use more water than every home in Los Angeles,¹¹⁴ and at \$116,800 in contributions are one of Newsom's largest donors.¹¹⁵ "The couple could score big if a \$15 billion water project championed by Governor Jerry Brown is officially approved in the next few years," reported *Fortune Magazine*.¹¹⁶

CPUC awarded a major battery deal to a company of a former CPUC Commissioner who makes neither batteries nor the software to run them. The CPUC awarded Brown and Gavin Newsom ally Susan Kennedy a battery contract reportedly worth \$100 million – despite the fact that her company didn't make either batteries or the software to run them.¹¹⁷

CPUC fired a judge who was cooperating with federal criminal investigators. A former CPUC judge has filed a lawsuit saying she was fired after because she did her job and helped federal investigators look into a natural gas explosion and the San Onofre closure.¹¹⁸

John Doerr's polluting fuel cells. Brown's corrupt California Public Utilities Commission awarded most available subsidies for energy storage (\$219 million out of \$328 million in total) to a single fuel cell company partially-owned by billionaire donor John Doerr even though they produced energy that was dirtier than the electricity from California's grid.¹¹⁹

Elon Musk’s regressive wealth transfer. Since 2017, the CPUC has given \$20 million in contracts to Solar City, and \$4 million to Tesla. Elon Musk, a major political contributor to Brown and Brown-affiliated initiatives, owns a large share of and controls both companies.¹²⁰ Between 2007 and 2014, the wealthiest 40 percent of California households received three times more in solar subsidies than the poorest 40 percent.¹²¹

The criminal investigation of California Public Utilities (CPUC) is stalled. There is an open criminal investigation of CPUC for its role in forcing the closure of San Onofre nuclear plant, but the investigation appears to be stalled for unknown reasons.¹²²

Brown has vetoed critical reforms. Brown vetoed bills to reform the CPUC and to require greater disclosure of campaign finance information.¹²³

Qualifying an initiative for the ballot costs \$3 million, and winning often costs millions more. The current situation thus puts the process out of the hands of the people for whom the process was intended. Many political donations exchanged for state contracts – such as those for Doerr and Musk companies – were donations to ballot initiatives sought by Gov. Brown.

Solution

In 1910, Californians elected the progressive Republican, Hiram Johnson, as governor. Gov. Johnson ended the price gouging by Southern Pacific Railroad and its political grip on Sacramento. To clean up its corrupt government, California must once again elect a real reformer. As governor I would:

Impose **radical levels of transparency** on all government agency regulation, contracting, and other activities through a New Sunshine Act.

Cancel the proposed San Francisco to Los Angeles train and the proposed water tunnels and redirect the money to more sensible mass transit projects and to the schools.

Renegotiate the contracts for prison guards and the retirement pensions for other public employees.

Request that the federal Justice Department take over the investigation of the California Public Utilities Commission (CPUC), and investigate possible price fixing in California's energy markets.

Lower the cost of ballot initiatives by legalizing digital signature gathering. The rest of society allows digital signatures, including for taxes and home buying. This simple reform will radically lower the cost of signature gathering and thus reduce the influence of special interests groups.

5. Fair Taxes and Equal Benefits

Summary

- California's taxes are high, regressive, and biased against younger Californians, thereby exacerbating socioeconomic and generational inequality.
- Californian public employees receive much larger retirement benefits than the taxpayers who fund them.
- The pension and retirement debt to public workers today stands at \$366 billion and is growing.
- We need significant tax and budgetary reform to reduce inequality and increase fairness.

Problem

California has a relatively high and regressive tax system.

Its sales tax, which is regressive, is the largest in the country at 7.25 percent. California also has the highest income taxes in the country.¹²⁴

California's most progressive tax, the property tax, is significantly lower than it is in other states. Proposition 13, passed in 1978, restricts property taxes significantly. As a consequence, homeowners saw their home values grow significantly but their tax burden grow only modestly.

The generational bias of California's property tax makes it regressive, punishing newer and usually poorer entrants to the housing market. Two-thirds of the tax relief from Proposition 13 accrues to those with incomes over \$80,000, and most of that accrues to those with incomes over \$120,000.¹²⁵

The consequence of Proposition 13 is the accumulation of unproductive inherited wealth, which is an unfair aristocratic privilege. Homeowners keep their homes and pass them on to their children who not only inherit their

parents extremely valuable homes but also the low taxes their parents paid.

Taxpayers fund retirement benefits for public employees far larger than they themselves receive. Most private sector employees do not have a pension and rely almost entirely on Social Security benefits totaling an average of \$16,000 per year. By contrast, California's public employees have pensions that pay an average of \$96,000 per year that they start to enjoy at the age of 54, which is eight years earlier than the national average.¹²⁶

Public employees contribute to a small percentage of their retirement pensions. Most state workers contribute to just 5 to 11 percent of their retirement, and in their retirement are usually paid more than they received on average while working. By contrast, one-third of Americans have no savings for retirement at all, and the median amount saved is \$111,000.¹²⁷

Californians today owe public employees \$366 billion for future pension and health care costs.¹²⁸ The debt is growing every year because California is underfunding future pension obligations at a rate of 20 percent per year. California's fund is currently 35 percent short of the amount needed to pay future pensions.¹²⁹

The California governor who signed into law the overly generous retirement pensions says he now regrets it. The \$5.4 billion that California taxpayers spend annually on public pensions is 30 times more than they paid before 2000. The governor, Gray Davis, received \$5 million in donations from public sector unions before and after he signed the legislation.¹³⁰

A slowing economy would once again devastate California's unstable finances. If a recession arrives, state economists predict a three-year, \$55 billion budgetary shortfall.¹³¹

California's tax and public pension system thus exacerbates the inequality between rich and poor, old and young, and property-owners and renters.

Solution

We need equal rights for public and private sector employees. Both groups should be responsible for their own retirement savings beyond Social Security. Neither should have the right to make others pay for their retirement benefits. Public employees hired after 2020 should be responsible for contributing to their own retirements.

We need to reform public pension system to make it more fair and to stop the exploitation of taxpayers. It is unfair for taxpayers to pay public employees for two to three times as many years as they worked. Public sector unions should agree to a reasonable reform of pensions, especially since the U.S. Supreme Court is soon going to prevent them from forcing government employees to pay dues.

We need fairness and reasonableness. Today's system is extremely unfair. We need to mitigate the unfairness – but in a way that recognizes that homeowners should not be forced out of their homes due to radical increases in taxes.

Property taxes should be readjusted to market rates whenever ownership transfers including upon death. America must maintain its historic opposition to the creation of rent-seeking aristocrats, even middle-class ones.

Fairness dictates tax reform be overseen by a "citizens jury" and be written into the state constitution through referendum. The jury should come from a randomly selected representative sample and should deliberate in an evidence-based way to create a truly fair system.

6. Environmental Progress

Summary

- California can have cheap and abundant clean energy, fresh water, and wild nature.
- We must end discrimination against our largest and most affordable source of clean energy, nuclear power.
- We should embrace a bold new wilderness agenda that includes “re-wilding.”

Problem

California has made little progress on air pollution over the last 10 years. We still have seven of the 10 most polluted cities in the U.S.¹³² We have the worst smog.¹³³ Over nine out of 10 Californians live in counties with unhealthy air.¹³⁴

Carbon emissions rose between 2011 and 2015 even as they declined in the rest of the nation.¹³⁵ In 2016, emissions from electricity produced within California decreased mostly because of more hydro-electricity from the state’s dams due to rain, not policies.¹³⁶

The kind of drought California suffered between 2012 to 2017 may become frequent, and yet California is not spending its water bond money to increase storage, as noted in chapter four.¹³⁷

California’s cap and trade system is not significantly reducing emissions. Instead, it is primarily used as a way to raise money for the proposed train and other programs.¹³⁸ A better use of resources would be to create high-speed “hyperlanes” for autonomous vehicles, and rail connections in places of high population density.¹³⁹

Closing California’s nuclear plants increases carbon emissions and air pollution. When both San Onofre and Diablo Canyon plants were operating, they constituted about 40 percent of in-state electricity from clean energy.¹⁴⁰

Emissions rose between 2011 and 2015 after the closure of San Onofre Nuclear Generating Station.^{141,142} California's power sector produces 250 percent more emissions than if the state had kept open, and built, planned nuclear plants.¹⁴³

California's greatest climate challenge comes from transportation, not electricity, which accounts for 39 percent of California's emissions.¹⁴⁴ Eliminating those emissions requires moving to electric vehicles (EVs) and fuel cell vehicles (FCVs).

California lacks ambition when it comes to wilderness protection. The state favors farms and cattle ranches, which reduce biodiversity and prevent the regeneration of oak woodlands, over human communities and wilderness alike.

The Solution

AVs create an opportunity to move to EVs and FCVs. That's because AVs could solve the main problem with EVs, which is their short range and high cost. Fleets of AV EVs could allow for some percentage of vehicles to be charging while others roam.¹⁴⁵

Electrifying transportation would require replacing most petroleum use in California and would require at least a one-third larger electricity sector and likely more, given longer miles travelled with AVs.¹⁴⁶

Nuclear is the safest way to produce electricity, according to major scientific surveys. Natural gas accidents kill an order of magnitude more members of the public than nuclear accidents.¹⁴⁷ Pollution from natural gas kills 54 times more people and injures 136 times more than nuclear does.¹⁴⁸ As a result, replacing California's Diablo Canyon nuclear plant, the state's last, with natural gas and renewables could increase deaths.¹⁴⁹

Protecting the air and land requires using nuclear energy. That starts with Diablo Canyon and San Onofre nuclear plants, which should be used to electrify transportation, desalinate, and recycle wastewater. Both should continue operating for

several decades to come, and new reactors added to them, in order to meet California’s growing need for clean energy.

Five million EVs would require the same amount of electricity produced annually by Diablo Canyon.¹⁵⁰ Five Diablo Canyon-sized plants could generate enough power for 24 million EVs.¹⁵¹

Nuclear produces more power on less land. Diablo Canyon, for example, produces 15 times as much electricity as Topaz Solar farm – but on 4 percent of the land.¹⁵²

We should end the discrimination against nuclear energy by including it in the state’s renewable portfolio standard. Doing so would prevent Diablo Canyon from closing and create a fair incentive to restart San Onofre.¹⁵³

California should be a leader in testing advanced nuclear fuels. Nuclear plants in other parts of the country will soon test accident-tolerant fuels, which could dramatically improve the economic efficiency of nuclear energy by as much as 30 percent, making nuclear more competitive with natural gas. Diablo Canyon and San Onofre should be test plants for the new fuels.¹⁵⁴

We should “re-wild” California by re-introducing the grizzly bear, the state animal. Some amount of California’s oak woodlands, or Sierras, should be used to gradually reintroduce the grizzly, perhaps within fenced protected areas, as in African game parks.¹⁵⁵

Conclusion

While this platform may be ambitious, I also believe it is necessary, pragmatic, and feasible. California's problems are not small and therefore neither can be the solutions. And there is growing demand – and an emerging coalition – for such reforms.

The housing crisis is acute. The cost of housing is so high that in 2017, 56 percent of all Californians surveyed said they had considered moving and 27 percent said they had considered moving out of state.¹⁵⁶

Millennials yearning for homeownership and lower rents are becoming more sophisticated in organizing politically, particularly online, and more active in local politics.

Many unions are starting to see the urgency of reforms – including ones that require breaking with other unions. Specialized construction unions that make housing more expensive hurt all workers, particular low-income service workers and construction workers.

Civil rights groups are coming to see the urgency of reforms and breaking with those groups who are narrowly focused on gentrification, displacement, and rent control and not equally on increasing the supply of housing.

A similar opportunity exists for unions to break from public sector unions and support reasonable public pension reform.

On other issues such as the schools and immigration, it is my hope that society-wide agreement can be built around a series of “grand bargains.” The situation for both is reaching a breaking point where almost nobody is happy: not parents, teachers, students, employers, or foreign workers.

While achieving the above will not be easy, I believe the crisis we face will force a political realignment and reform agenda – if not in 2018, then not long after.

About Me

I am a lifelong Democrat and have worked for progressive causes all of my life.

I fell in love with California as a boy and moved here after college. I have achieved the California Dream: a loving family, meaningful work, and a home.



In the 1990s, I helped win improvements to working conditions in Nike's Indonesian factories, save the last ancient redwoods in northern California, Headwaters Forest, and keep juvenile offenders out of adult prisons.

In the 2000s, I helped persuade the Obama administration to make a big investment in clean energy, won the "Green Book Award," and was named a *Time Magazine* "Hero of the Environment" for my writings on climate change.

I was against nuclear energy for most of my life but changed my mind after I learned the scientific facts. You can see me discuss my conversion on "[The Colbert Report](#)."

Today, I am president of Environmental Progress, an independent research and policy organization located in Berkeley. I write for everyone from the *New York Times* to *Scientific American* to *Foreign Affairs*.

You can email me at michael@shellenberger.org.

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For most journalists, SONGS had to be closed in response to a mechanical failure of the steam generator. Southern California Edison, its owner, then used its influence to get a sweetheart deal out of the CPUC Commissioners. In this story, CPUC was "captured" by SoCalEdison.

But the evidence does not support the story of regulatory capture. In fact, the evidence is overwhelming that it was the Brown Administration, through CPUC, that captured Southern California Edison and, now, Pacific Gas & Electric. It was CPUC's president that raised the issue of permanently closing SONGS – something Edison executives were not contemplating. In fact, they were working with the Nuclear Regulatory Commission to restart the plant.

Further, CPUC's president dictated the exact terms of the deal that were eventually accepted by all parties, including the anti-nuclear groups that were in on the secret meetings. It wasn't Edison who laid out the terms. The terms CPUC's president Peevey laid out were so specific that the Edison executive famously grabbed the Polish hotel stationary so he could write it down.^[41]

The terms of the deal the CPUC president offered Edison were so specific, and involved such a large sum of money from California's citizens – \$4.7 billion – that it is inconceivable for this researcher to believe Gov. Brown lacked foreknowledge.

There is now 40 years of evidence of Gov. Brown interfering at even the smallest levels with CPUC and other energy business: changing pollution regulations to benefit his family's Indonesian oil monopoly; killing Sundersert; and lobbying Mexico's President to approve a natural gas project; lobbying a Commissioner to win a PG&E natural gas project; his firing of two state environmental regulators at the behest of Occidental Petroleum; and Brown's request that the state map his ranch for possible oil and gas deposits.

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¹⁵⁰ The Nissan Leaf needs 30 kWh of electricity to travel 100 miles, or .3 kWh per mile. Department of Energy, 2016. <http://www.fueleconomy.gov/feg/Find.do?action=sbs&id=37066>

¹⁵¹ This figure is calculated by assuming 5,000,000 Nissan Leafs at 0.3kWh per mile, multiplied by 12,000 miles (California per-vehicle yearly average)

¹⁵² From the U.S. Energy Information Agency, Topaz Solar Farm produced 1.27 TWh of electricity in 2016. Diablo Canyon produced 18.91 TWh. Topaz is located on 9.5 square miles, of which the plant covers about 7.5 square miles. Diablo Canyon is located on 1.4 square miles of land, of which the plant and its associated facilities covers about 0.35 square miles. The ratio of electricity output between Diablo Canyon and Topaz is

¹⁵³ Gabe Base, "[After Diablo Canyon](#)," *Utility Dive*, June 30, 2016. "Many times in past decades we've tried to get things like nuclear included in the definition of renewables," said Tony Earley, "because if you don't include it, it's lower in the dispatch order, so you may end up being in a position where your nuclear plant does not dispatch because you've got so many renewables on the system...So, if I had to do it over again, I'd go back and say let's include everything in the definition."

¹⁵⁴ Nick Gallucci and Michael Shellenberger, "Will the West Let Russia Dominate the Foreign Nuclear Market?" *Foreign Affairs*, August 3, 2017.

¹⁵⁵ Martin Lewis, "Rewilding Pragmatism," *Breakthrough Journal*, Summer 2015.

¹⁵⁶ Mark DiCamillo, "[Half say housing affordability an 'extremely serious' problem](#)," *Berkeley IGS Poll*, September 19, 2017