

# 2021 REPORT CARD FOR AMERICA'S INFRASTRUCTURE

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## California Water and Infrastructure Report For March 4, 2021 by Patrick Ruckert

Published weekly since July, 2014

An archive of all these weekly reports can be found at both links below:

<http://www.californiadroughtupdate.org>

<https://www.facebook.com/CaliforniaDroughtUpdate>

[patruckert@hotmail.com](mailto:patruckert@hotmail.com)

*“This is the most essential aspect of right. This is true freedom. Where this is denied there is no true freedom.”*

*Lyndon LaRouche from the statement at the end of “A Note to Readers”*

### A Note To Readers

Drought, drought and more drought. That is the news this week. From the 20 year mega-drought now ongoing in the Colorado River basin, to the intensifying drought in California, just to highlight the big ones, the Western states are crying for relief.

I am delaying my report on the real, and only viable, solution to the water deficit in North American--- the North American Water and Power Alliance-- until next week in order to feature this week a report on the real physical economy.

That **Feature** is an article by my colleague Brian Lantz on the principles of the real physical economy, and the policy that must be the foundation for the direction of the Trump re-organized Republican Party, to make it a party of workers, producers and of Lincoln once again.

And to underline the ideas Brian presents, here is Lyndon LaRouche on the Meaning and Purpose of Economics:

*“This image of the sacredness of the individual, the importance of the individual's development of this divine spark, this creative reason; the opportunity of the individual to exercise that creative reason for the good of mankind, for the good of the family; the right of that individual to walk in respect, loving*

*themselves and respected by others, because they in the short span of their mortal life are doing something which has a unique benefit, in some way, to present and future generations. The right to walk in pride and joy of life because one knows that is true. The right to walk in that joy and pride of life by means of a society which treasures that right of the individual to walk so, in such joy.*

*“All of this depends inclusively upon economy. Not money economy, not paper money, not bookkeeping, not accounting, not finance, but on the right to improve nature by means of water management; by means of transportation systems such as rails; by means increased power production and generation and distribution; by means of sanitation; by means of health systems which take care of people; by means of educational systems; all of these things they call basic economic infrastructure. The right to improve the productive powers of labor by developing the minds of the individual to produce and to assimilate new scientific and technological discoveries. By means of whose transmission, the productive powers of labor are transformed upward such that the longevity of the individual is increased on the average; the ability to overcome disease is increased; the standards of living are enhanced; more leisure for the development of the human mind is made possible; and thus man himself is developed and rendered less imperfect and thus able to accomplish more and life made richer. This is the most essential aspect of right. This is true freedom. Where this is denied there is no true freedom.”*

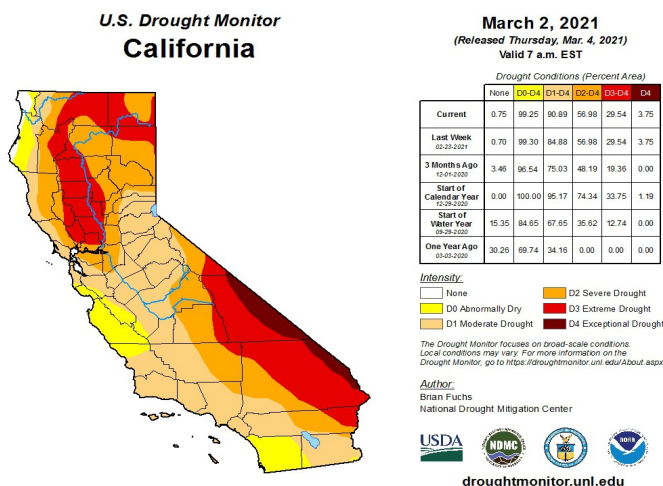
## Also in this week's report:

Mostly it is reporting on the California drought.

Also reported is the recent release of the American Society of Civil Engineers' Report Card for America's Infrastructure, which that organization publishes every four years. The report depicts the condition and performance of American infrastructure in the familiar form of a school report card—assigning letter grades based on the physical condition and needed investments for improvement. As the report from four years ago demonstrated, the U.S. infrastructure system is receiving a failing grade.

## U.S. Drought Monitor-- California

This past week has seen, as has been the case for months, the intensity of the drought continue to increase. Most notably this week, now over 90% of the state is now in Moderate Drought, and 57% of the state is in Severe Drought or worse.



Week	Date	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	<a href="#">2021-03-02</a>	0.75	99.25	90.89	56.98	29.54	3.75
<b>Last Week</b>	<a href="#">2021-02-23</a>	0.70	99.30	84.88	56.98	29.54	3.75
<b>3 Months Ago</b>	<a href="#">2020-12-01</a>	3.46	96.54	75.03	48.19	19.36	0.00
<b>Start of Calendar Year</b>	<a href="#">2020-12-29</a>	0.00	100.00	95.17	74.34	33.75	1.19
<b>Start of Water Year</b>	<a href="#">2020-09-29</a>	15.35	84.65	67.65	35.62	12.74	0.00
<b>One Year Ago</b>	<a href="#">2020-03-03</a>	30.26	69.74	34.16	0.00	0.00	0.00
Estimated Population in Drought Areas: 32,944,045							

## California

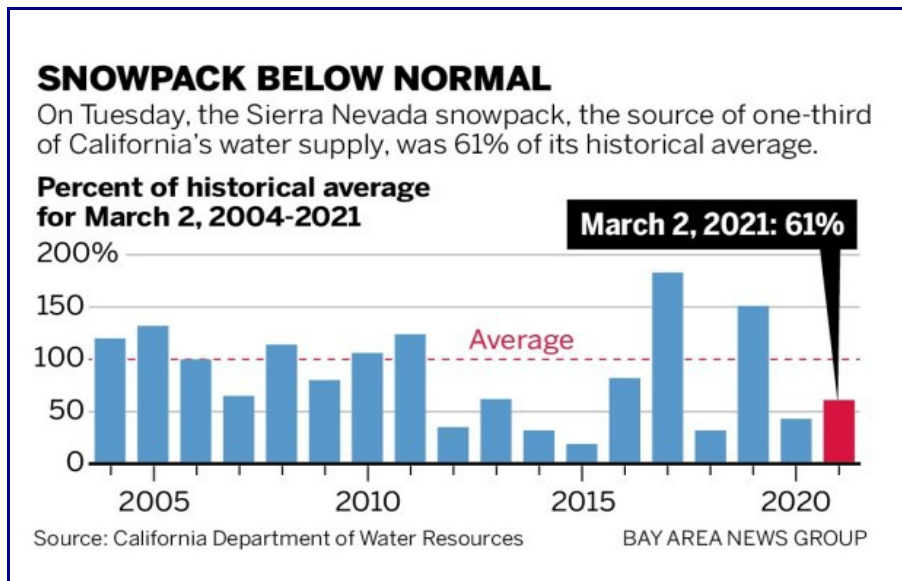
Much of California is enduring its second consecutive dry winter, with most areas below 75% of normal snowpack for this time of year. Many water agencies were discussing water conservation measures, with the North Marin Water District considering both voluntary and mandatory water conservation orders. Moderate drought was expanded over areas of southern California where drought is beginning to develop again after a fairly dry winter.

### *Sierra snowpack at 61% as new drought looms for California this summer*

*Second dry winter in a row, with rainfall totals in Bay Area, LA at only about 40% of normal*

By [Paul Rogers](#) | [progers@bayareanewsgroup.com](mailto:progers@bayareanewsgroup.com) | Bay Area News Group  
March 2, 2021

<https://www.mercurynews.com/2021/03/02/sierra-snowpack-at-61-as-new-drought-looms-for-california-this-summer/>



*Highlighting the second dry winter in a row, the Sierra Nevada snowpack on Tuesday was just 61% of its historical average for this date, the latest signal that California appears headed toward summer drought conditions, with water restrictions possible in some areas for the first time in five years.*

*The last major storm system in the state was more than a month ago, when an atmospheric river drenched the Bay Area and Central Coast in late January. Weeks of unusually sunny, dry weather came*

*before it, and have come since. As a result, this winter is shaping up to be similar to 2014, state water officials said Wednesday, a year when California was firmly in the middle of its historic 2012-2016 drought.*

*“Absent a series of strong storms in March or April we are going to end with a critically dry year on the heels of last year’s dry conditions,” said Karla Nemeth, director of the state Department of Water Resources. “With back-to-back dry years, water efficiency and drought preparedness are more important than ever.”*

*Water officials across California have watched the dry weather nervously, and have begun to plan for water conservation, and in some cases possible mandatory water restrictions*

*. Many agencies are expected to make their final decisions later this month or in early April.*

*Typically, December, January, February and March are the four wettest months of the year in California.*

*A year like this one hasn’t happened often since California became a state. The seven-month period from July 1 to the end of February has been the seventh driest in San Francisco in the past 172 years, since 1849 when records began. And over the same time, the Northern Sierra Nevada, which is key to the state’s water supply, is suffering through its sixth driest season, according to calculations from Jan Null, a meteorologist with Golden Gate Weather Services in Half Moon Bay.*

*How much snow falls every winter is critical to California’s water picture. The snow, which forms a vast “frozen reservoir” over California’s 400-mile long Sierra mountain range, provides nearly one-third of the state’s water supply for cities and farms as it slowly melts in the spring and summer months. The melt sends billions of gallons of clean, fresh water flowing down dozens of rivers and streams into reservoirs.*

*After a dry year last year, which did little to replenish them, most of the state’s largest reservoirs are currently below historical averages for this time of year.*

*Shasta Lake, the state’s largest reservoir, near Redding, is currently 50% full, or 68% of normal for this time of year. Lake Oroville, in Butte County, is 38% full, or 55% of normal. New Melones Lake, in the Sierra Foothills of Calaveras and Tuolumne counties, is in better shape, at 65% full, or 106% of its historic average. And San Luis Reservoir, near Los Banos, is 58% full, or 68% of its historical average.*

*According to the U.S. Drought Monitor, a weekly federal report, 84% of California is in at least a “moderate drought,” while 29% is in a “severe drought,” including Napa, Solano, Inyo and San Bernardino counties, along with much of the Sacramento Valley.*

*About 84% of California was in a “moderate drought” or worse, with 29% in a “severe drought,” according to the U.S. Drought Monitor, a weekly federal report, on Feb. 27, 2020.*

*If the dry weather persists in March and April, fire danger will be heightened this summer and fall because moisture levels in grasses, shrubs and trees will be low. Add to that, temperatures are rising due to climate change. Last year was the hottest year recorded on Earth since 1880 when modern temperature records began, [according to NASA and NOAA](#), the parent agency of the National Weather Service. The seven hottest years since 1880 have all occurred in the past seven years.*

**[DWR Reports California Experiences Fifth Straight Month of Below Average Snow. Precipitation - Statewide the Snowpack’s is 61 Percent of the March 2 Average](#)**

Tuesday, 02 March 2021 12:07

<https://goldrushcam.com/sierrasuntimes/index.php/news/local-news/28381-dwr-reports-california-experiences-fifth-straight-month-of-below-average-snow-precipitation-statewide-the-snowpack-s-is-61-percent-of-the-march-2-average>

March 2, 2021 - SACRAMENTO, Calif. – The Department of Water Resources (DWR) today conducted the third manual snow survey of the season at Phillips Station. The manual survey recorded 56 inches of snow depth and a snow water equivalent (SWE) of 21 inches, which is 86 percent of average for this location. The SWE measures the amount of water contained in the snowpack and is a key component of DWR’s water supply forecast.

“As California closes out the fifth consecutive dry month of our water year, absent a series of strong storms in March or April we are going to end with a critically dry year on the heels of last year’s dry conditions,” **said DWR Director Karla Nemeth.** “With back-to-back dry years, water efficiency and drought preparedness are more important than ever for communities, agriculture and the environment.”

Dry conditions require coordination among state, federal and local entities. State water leaders are preparing to address the current dry conditions adaptively, guided by lessons learned during previous droughts.

With below-average precipitation across the state, California’s reservoirs are showing the impacts of a second consecutive dry year. Lake Oroville is currently at 55 percent of average and Lake Shasta, California’s largest surface reservoir, is currently at 68 percent of average for this date.

Statewide snow survey measurements continue to reflect the overall dry conditions. Measurements from DWR’s electronic snow survey stations indicate that statewide the snowpack’s SWE is 15 inches, or 61 percent of the March 2 average, and 54 percent of the April 1 average. April 1 is typically when California’s snowpack is the deepest and has the highest SWE.

The current State Water Project (SWP) allocation of 10 percent amounts to 422,848 acre-feet of water, distributed among the 29 long-term SWP contractors who serve more than 27 million Californians and 750,000 acres of farmland. Last year the initial allocation was also 10 percent, with a final allocation of 20 percent set in May 2020.

Precipitation in the form of rain – and snowfall at higher elevations – is critical because it refills reservoirs, packs away snow for spring runoff and helps stem the risk of wildfires. As dry conditions continue to persist, Californians should look at ways to reduce water use at home. Each individual act of increasing water efficiency can make a difference. Visit [SaveOurWater.com](https://www.saveourwater.com) to learn easy ways to save water every day.

### ***‘It’s Just Not Enough’ Says Senator Caballero About 5% Water Allocation to SJV Farmers***

[Jim Jakobs](#)

March 1, 2021

<https://gvwire.com/2021/03/01/its-just-not-enough-says-senator-caballero-about-5-water-allocation-to-sjv-farmers/>

*Agricultural water service contractors south of the Delta were [allocated](#) 5% of their contract supply by the Bureau of Reclamation. Central Valley lawmakers think the state needs to do better.*

*“It’s not enough. It’s just not enough,” says state Senator Anna Caballero, D-Salinas. “We know we need more.”*

***“It’s not enough. It’s just not enough.”—Senator Anna Caballero, D-Salinas***

*The Westlands Water District responded to the Bureau of Reclamation’s announcement last week.*

*“A 5% allocation, although better than zero, will result in a human and economic disaster for families on the westside of the Valley and could result in major strains for the nation’s food supply,” said General Manager Tom Birmingham in a statement.*

*West side farmer Joe Del Bosque all growers he knows are worried. “There may not be enough water to provide crop needs. A short water supply has another dire effect- cost of water escalates, but prices of crops don’t,” said Del Bosque.*

## **California's wet season nears an end with big concerns about drought**

[Kurtis Alexander](#)

March 1, 2021 Updated: March 2, 2021 9:02 a.m.

<https://www.sfchronicle.com/drought/article/California-s-wet-season-nears-an-end-with-big-15991239.php>

- A disappointingly dry February is fanning fears of another severe drought in California, and cities and farms are bracing for problems. In many places, including parts of the Bay Area, water users are already being asked to cut back.

The state’s monthly snow survey on Tuesday will show only about 60% of average snowpack for this point in the year, the latest indication that water supplies are tightening. With the end of the stormy season approaching, forecasters don’t expect much more buildup of snow, a key component of the statewide supply that provides up to a third of California’s water.

The impact is registering. Growers in the Central Valley are having to make decisions about which crops to prioritize, and which to sacrifice, should the water situation see no improvement. Urban water agencies, meanwhile, are asking customers to think twice about long showers and outdoor watering. The calls for austerity will feel familiar to many Californians who less than five years ago faced mandatory water restrictions during the 2012-2016 drought.

## **Infrastructure, or the lack of**

Every four years, the American Society of Civil Engineers’ Report Card for America’s Infrastructure depicts the condition and performance of American infrastructure in the familiar form of a school report card—assigning letter grades based on the physical condition and needed investments for improvement.

Here is the 2021 report:



**Here is the link to the Executive Summary of the report:**

**A COMPREHENSIVE ASSESSMENT OF AMERICA'S INFRASTRUCTURE**



<https://infrastructurereportcard.org/wp-content/uploads/2020/12/2021-IRC-Executive-Summary.pdf>

## **And some press coverage of it:**

### ***New report: U.S. dams, levees get D grades, need \$115 billion in upgrades***

***Heavier precipitation caused by climate change is straining the nation's aging flood-control systems.***

***By [Jeff Masters, Ph.D.](#) | Wednesday, March 3, 2021***

***<https://yaleclimateconnections.org/2021/03/new-report-u-s-dams-levees-get-d-grades-need-115-billion-in-upgrades/>***



*Aerial view of the Sanford Dam on the Tittabawassee River in Michigan on May 26, 2020, after its failure a week earlier. Heavy rains from a 1-in-200-year rainstorm destroyed the upstream Edenville Dam, damaged five other dams, and caused \$250 million in damage. (Image credit: [Michigan Department of Environment, Great Lakes, and Energy](#))*

*The American Society of Civil Engineers (ASCE) gave America's infrastructure a C- grade in its [quadrennial assessment issued March 3](#). ASCE gave the nation's flood control infrastructure – dams and levees – a D grade. This is a highly concerning assessment, given that climate change is increasingly stressing dams and levees as increased evaporation from the oceans drives heavier precipitation events.*

### ***U.S. dams need \$93.6 billion in upgrades***

*The group's 2021 report card gave the nation's 91,000-plus dams a D grade, just as they had received in each of its assessments since the first one was issued in 1998. Drawing upon the latest data from the Association of State Dam Safety Officials, ASCE estimated the cost of rehabilitating all U.S. dams at \$93.6 billion, of which \$27.6 billion is needed for federal dams. Over half (56.4%) of U.S. dams are privately owned. The cost to rehabilitate deficient high-hazard-potential dams, whose failure would result in loss of life, is estimated at nearly \$20 billion. Over 2,300 dams in the U.S. are in this category. The average age of America's dams is 57 years.*

*The report identified one program that can help address existing funding needs – the High Hazard Potential Dam Rehabilitation Program authorized in the 2016 Water Infrastructure Improvements for the Nation Act. The goal of this program is to help fund the repair, removal, or rehabilitation of the nation's non-federal, high-hazard-potential dams. In federal fiscal year 2020, Congress appropriated \$10 million for the program, less than 0.1% of the state dam safety group's needs estimate, and a*

quarter of the \$40 million Congress had authorized for the program.



*Figure 1. Debris fills the Feather River from the damaged spillway of California's Oroville Dam, the nation's tallest dam, after its near-collapse in February 2017. The Oroville incident forced the evacuation of nearly 190,000 people and cost \$1.1 billion in repairs. (Image credit: [California Department of Water Resources](#))*

## **US infrastructure gets C- from engineers as roads, public transit deteriorate**

By: The Associated Press & Scripps National

Mar 03, 2021

<https://www.wcpo.com/news/national/us-infrastructure-gets-c-from-engineers-as-roads-public-transit-deteriorate?fbclid=IwAR38SXdCOZNcZacYyrHYL-Z32F1lgQ2uxMYEX18vaZRrAWgOH-7jkvmcYXE>

AUSTIN, Texas (AP) — America's infrastructure has scored near-failing grades for its deteriorating roads, public transit and storm water systems due to years of inaction from the federal government, according to the American Society of Civil Engineers (ASCE).

In its “[Infrastructure Report Card](#)” released Wednesday, the group gave the nation an overall C- grade and called for “big and bold” relief to fix things.

The ASCE study evaluated 17 categories of infrastructure, with grades ranging from a B for rail to a D- for Transit.

“For the first time in 20 years, the country's infrastructure as a whole received a grade in the C range, meaning on average, the nation's infrastructure is in mediocre condition, has deficiencies and needs attention,” wrote ASCE in a press release.

However, 11 of the 17 categories in the “Report Card” received a grade in the D range: aviation, dams, hazardous waste, inland waterways, levees, public parks, roads, schools, stormwater, transit, and wastewater.

Over the past four years, the U.S. made incremental gains in some categories, according to the “Report Card.” Due to increased investment, grades improved in aviation, drinking water, energy, inland waterways, and ports.

The ASCE estimates it would cost \$5.9 trillion over the next decade to bring roads, bridges and airports to a safe and sustainable level. That's about \$2.6 trillion more than what government and the private sector already spend.

If the U.S. does not pay its overdue infrastructure bill, ASCE says by 2039, the U.S. economy will lose \$10 trillion in growth and exports will decline by \$2.4 trillion. Additionally, the group says more than 3



million jobs will be lost in 2039 and each American household will bear \$3,300 in hidden costs per year.

## Feature

The *Feature* this week is an article by my colleague Brian Lantz on the principles of the real physical economy, and the policy that must be the foundation for the direction of the Trump reorganized Republican Party, to make it a party of workers, producers and of Lincoln once again.

### Build on the Trump Presidency: COVID Did Not Shut Down the Real Economy

March 02, 2021 · Brian Lantz

[https://www.larouchepac.com/covid\\_did\\_not\\_shut\\_down\\_the\\_real\\_economy?utm\\_campaign=20210302\\_coviddidnot&utm\\_medium=email&utm\\_source=larouchepac](https://www.larouchepac.com/covid_did_not_shut_down_the_real_economy?utm_campaign=20210302_coviddidnot&utm_medium=email&utm_source=larouchepac)

*(Thanks to Bill Roberts and Paul Glumaz for their contributions to this report.)*

We are not on our knees, thanks to four years of the Trump Presidency.

For all of 2020, during COVID-19, total increases in non-agricultural unemployment in the heartland states averaged around 4.5% overall, while on the west and east coasts, the numbers were roughly half again as high, or in some cases twice as high (New York, New Jersey, Massachusetts), over the course of January through November 2020.

Manufacturing, heavily centered in the red states, was down only around 4-5% for all of the COVID-dominated months of 2020. Construction also has quickly bounced back. Essential areas of employment, including aerospace, NASA, utilities, healthcare, fire and rescue, and agriculture and food processing, continued to operate, often through heroic efforts. This pattern continues today, despite the avatar occupying the White House, the “Texas Windmill Massacre,” and Game Stop-style financial swindles.

For the United States, machine tool orders in 2020 were down 15% from all of 2019, compared to the 50% drop that had been forecast. As the reader may know, machine tools make the machines that make our economy run. [In December 2020 alone, machine tool orders climbed 17.9%. In 2020 overall, orders in the Southeast were the strongest, down 8.3%; the Northeast was the worst, down 22%; and the Central states were down 12-13%, all from a year earlier.](#)

In January 2021, the bellwether Purchasing Managers Index (PMI) reflected continued U.S. economic recovery and growth, and the Federal Reserve’s industrial production figures (measuring factory, mining, and utility output) showed a similar trend.

We also see a clear distinction between red and blue states. **Citizens and state and local elected officials in red states—oriented to agro-industrial activity and real growth—showed a combativeness in fighting back against the pandemic, a refusal to lay down and accept an Orwellian blanket shutdown policy.** There has also been another clear distinction: the population of red states is growing—*families* are growing in red states compared to blue states. It is understood, even if precociously, that we as a nation must be about the business of creating our destiny. We cannot run in place.

For example, Midwest cities such as Columbus, Indianapolis, Minneapolis, St. Louis, and Cincinnati have among the lowest unemployment rates of 51 major metropolitan areas, placing heartland cities well ahead of the “blue” bi-coastal tech and financial centers. Ohio, Indiana, and Wisconsin were

selective in reintroducing COVID restrictions again in October 2020. In contrast, and in draconian fashion, Governor Gretchen Whitmer of Michigan shut down schools, restaurants, and businesses and placed limits on the size of gatherings in October 2020. Unemployment climbed to 7.9% as a consequence. This pattern is repeated across the country.

This cultural and political combat has been a critical defense of the principles of our Constitution.

**President Trump's significant efforts to improve the wage levels of working families nationally were undermined by the pandemic shutdown.** The shutdown has also meant a huge psychological toll, and particularly for our families. It was used to steal President Trump's second term, and used to attempt to smother the American people. Wealth transfer over the past year can be said to have outstripped prior periods of "corporate greed," overturning President Trump's efforts to reverse decades of economic erosion and the failing conditions of life faced by many of the forgotten men and women of America—Hillary's so-called "deplorables."

It also should be recalled that it was the lukewarm opposition to the Russiagate coup attempt against President Trump by the Wall Street/City of London-tied Republicans, and near non-existent Republican support in Congress for the Trump economic policy agenda of infrastructure and manufacturing, that led to a Democratic counter-surge in the 2018 congressional elections, bringing Wall Street Democrats like Nancy Pelosi into control of the Congress, as well as into the governorship of Michigan, followed by Wisconsin in 2019. It should be clear that rebuilding the Republican party as a Lincoln "Party of Producers," that retakes the Congress in 2022, is critical if the green fascist lunacy of the Biden collective is to be reversed, and a national infrastructure and manufacturing plan of nuclear power, water projects, urban infrastructure, hospitals, and high-speed rail are going to be realized.

So, as a fuller picture of our circumstances becomes clear, a very revealing picture emerges—and it is contrary to the depressing psyops and memes of the COVID-19 crisis, amplified by the mass media. With the Trump presidency and campaigns, we recognize a deeper and enormous political potential, elevating the deliberations of our citizenry. President Trump's Operation Warp Speed continues to produce new vaccines and therapies; economically we continue to recover—U.S. durable goods orders surged in January to pre-COVID highs. Despite the avatar named Biden currently occupying the White House, there is also a growing recognition of our nation's great economic potential, albeit raw, and President Trump's Operation Warp Speed and NASA's Artemis project have been but a foretaste.

### Teaching Lessons

Americans can recognize an irony embedded in the COVID-19 shutdown: recognition and approximate proof of an existential distinction between essential productive economic activity and what we understand as "services." In the course of the pandemic, our nation's most essential workers have held our society together; they kept working, despite real danger to themselves and their families. Already in late spring of 2020, industrial, manufacturing, and construction workers were being quickly called back to work, and by the end of 2020, an actual labor shortage was developing, for example, in manufacturing. The "Texas Windmill Massacre" of early February 2021 is another wake up call: We have to produce power, not chase quick-buck speculation.

Simultaneously, we now can see that we have millions of unemployed service sector employees—restaurant workers, apparently redundant office workers, gig economy employees, and more—trapped in what were largely low-wage and temporary jobs. These workers and their families suffered in the so-called "post-industrial economy." What a wealth of human productive potential! These members of our workforce are essential to building out the United States as the leading scientific, technological, and advanced agro-industrial economy.

## The Texas Windmill Massacre

For evidence of our problems, and to see more clearly our solutions, look no further than the latest infrastructure collapse in Texas. What happened? Yes, there were the frozen windmills and snowed over solar panels. Nothing, after all, was left “green” in Texas. However, more critically, was the insane deregulation of Texas electricity in 1999. The scheme was to break up the utility companies by using “market efficiencies” to drive down costs and increase profits. This came in the form of the Wall Street/Enron siren-song: “We can get you something for free.” It was supported by foolish Republicans and Democrats at the time—and fought against in the state capitol by the LaRouche movement.

The lessons? Wall Street finance, algorithms, and computer modeling do not cut it; greed is not a substitute for human foresight. Most importantly, it is high time to move forward our nation and mankind scientifically and technologically, harnessing more advanced forms of energy, including nuclear and associated increased energy flux densities, mirroring the negentropic development of the universe itself. That means tapping the real source of our wealth: human imagination and human productivity.

## Productive Work and a Well-Paid Workforce

We must ask an essential question: Where does wealth come from? We hear endless chatter about the “gambling industry,” the “entertainment industry,” the “prison industry,” and what-not. Also, constant talk of stock market self-promoting zillionaires pontificating about a dystopic “green” Great Reset. None of this *creates* wealth. *None of this has anything to do with a productive, physical economy!*

How does any economy “worth its salt” really work? What do we do to make it work? What, after all, do we mean by “work” itself?

The physical economy is the means through which we reproduce ourselves as a society, from generation to generation. We accomplish this by making the physical changes on nature required for our society’s continued existence, with our posterity in mind. How do we make America great again? How are we going to produce a truly human future?

We start by increasing the portion of our workforce that is productively employed. We have now, as a consequence of the COVID-19 pandemic and shutdowns, 8-10 million unemployed Americans, hotel and food service workers, gig workers, and office workers of all stripes. We can immediately start to train-up a significant portion of those 8-10 million Americans, employing them productively.

Better said, these individuals, if given the opportunities, are going to develop themselves, retrain themselves in part, as indispensable and unique contributors to our skilled and productive workforce. That is, directly making the physical changes on nature for mankind’s continued existence. We really do need all hands on deck. We will simultaneously invest in the future by building the productive capacity—real infrastructure, industry, manufacturing, mining, and agriculture—and there-in, simultaneously train and employ an ever-expanding and increasingly skilled and well-paid workforce.

How? We will do this by means of *national credit, not debt*, just as Alexander Hamilton, Abraham Lincoln, Franklin Roosevelt, and Lyndon LaRouche would do, financing major infrastructure projects across the nation. We are going to do this through apprenticeship programs, mentoring, and a critical modern-day Space CCC program, drawing on the lessons of the Civilian Conservation Corps of the late 1930s and early 1940s. We will do this in conjunction with machine shops, manufacturing plants, community colleges, and labor and business jointly-run apprenticeship programs. We cannot run in place. We must discover and realize the next wave of scientific and resource breakthroughs, and for this we must rely on our young people.

Currently less than 25% of America's workforce is productively employed, that is, making the direct changes on nature for society's continued existence. These are the goods producers—steel workers, machinists, welders, electricians, HVAC specialists, miners, transport workers, farmers, and so forth. However, during the past 50 years of criminal deregulation, greening (the first “Earth Day” was in 1970), and “financialization” of the American economy, overhead employment has grown massively at the expense of such productive employment; we have been turned into a nation of paper shufflers and hotel and restaurant workers. What was 60% of our workforce employed productively has been cut to a fraction.

We will now reverse this process of entropy and death. Further, we are not so foolish as to think we can turn back the clock. Bold new discoveries await, reaching out into the interplanetary macrocosm and into every unfolding domain of the microcosm. Through discovery and inventions, we will make America great again.

### **Where We Stand Now**

The source of all wealth, as Hamilton, Lincoln, FDR, and physical economist Lyndon LaRouche would agree, is to be found in the unique, God-given creative powers in each individual person.

To quote Alexander Hamilton, the first Secretary of the Treasury of the United States:

*“To cherish and stimulate the activity of the human mind, by multiplying the objects of enterprise, is not among the least considerable of the expedients, by which the wealth of a nation may be promoted. Even things in themselves not positively advantageous, sometimes become so, by their tendency to provoke exertion...”*

*“The spirit of enterprise, useful and prolific as it is, must necessarily be contracted or expanded in proportion to the simplicity or variety of the occupations and productions, which are to be found in a Society. It must be less in a nation of cultivators and merchants, than in a nation of cultivators, artificers [manufacturers – ed.] and merchants.”*

To make America a manufacturing superpower, that creativity must now be applied in areas such as industry, mining, advanced manufacturing, and agriculture. We must drive total goods production, as discussed above, with an eye to the future. This process is fueled by new scientific breakthroughs, made by individuals, the effects of which spread throughout society's increasing division of labor. The proven method for creating the density of such scientific breakthroughs necessary to power us out of the present depression is to undertake mission-oriented crash programs such as the Artemis program for Moon/Mars colonization, fusion energy development, and in the life sciences.

*This begins by kicking the Avatar named Biden, and his collective, to the curb. Required is a citizens' movement of candidates, and a Party of Producers that sweeps the nation, as Lincoln and his party did. We must move on from here to create a hot house for real economic growth.*



*Lincoln's Second Inaugural, 1865. At his inaugural on the steps of the newly completed Capitol, Lincoln expressed his hopes for reconstruction of the Union after the Civil War. Allyn Cox Oil on Canvas 1973-1974 Great Experiment Hall Cox Corridor. [Architect of the Capitol \(Flickr Photostream\)](#) Public Domain Picture*

Now is a time like no other to advocate for productive infrastructure projects and real skill-training, with all their benefits, by working through and putting into action [Lyndon LaRouche's Four Economic Laws](#). We will then shift the balance of our workforce from services to a heavy emphasis on physical production. We will be creating better, productive jobs for our unemployed and formerly mis-employed. Thereby we will create the increases in physical wealth that will provide for our families, including healthcare and a Classical education. Likewise, with youth. We will fire the imaginations of the young, regarding their role in the future, with science-driver programs in fusion, space, and the bio-sciences.

And we can start with the energy grid. As the Texas electrical grid collapse underscores, to expand our economy we must expand power and electricity production. No one who actually understands the prerequisites for a productive, and therefore expanding economy would move to draw down energy supplies, as with a "Green (fascist) New Deal." Economic progress requires more energy, never less. Service jobs are not the same as productive jobs. Productive jobs are those that make necessary, physical changes on nature *for us humans*. Casino gambling is about separating poor people from their money. That became most of the economy.

The Avatar's collective and mass media do not want Americans to know that manufacturing is growing—not only in the United States, but also in Japan, Germany, and other countries. Along with manufacturing, construction is growing as well. Likewise, the exploration of our solar system, with now three nations at the planet Mars. "Leisure and entertainment"? Not so much. So, what needs to be done today, and tomorrow? We hope this article has provided a challenge, as well as encouragement and clarity. We must be a truly productive nation—not green or brown. Join us!

**See the accompanying article to this piece, [The Household and the Physical Economy: Lyndon LaRouche's Heuristic Bar Diagram of the Physical Economy](#).**