The individual who contributes to making society good is worth a thousand times the individual who wanders through life scattering only individual good deeds. For, a bad society will crush the good contributed by its individual members.... Who makes society good thus preserves the goods contributed by thousands and millions of individuals.

—Lyndon LaRouche,
*The Science of the Human Mind*, 1984

Mankind is now living with the terrible consequences of tolerating the “bad society,” of which Lyndon LaRouche warned. The COVID-19 pandemic has exposed the criminal failure of the neo-liberal imperial system resulting in hundreds of thousands of deaths, an unprecedented disruption of economic and food supply chains, historic levels of unemployment, and uncounted millions of lives threatened with other diseases and starvation. Looming over this cost in lives and livelihoods is a $1.8 quadrillion financial bubble which cannot survive, despite the central banks’ hyper-inflationary attempts to do so.

This is not a series of individual crises. This is systemic, and can only be addressed by a new system, based on fundamentally different principles than those
of the current monetarist, Malthusian globalist structures. At the heart of this evil, this “bad society,” is the denial of the right of billions of people, including hundreds of millions of Americans, to contribute to the physical development and scientific advance of their economies. That is what has left so many nations defenseless in the face of the virus and ensuing economic collapse. The economic breakdown crisis we are facing today was not created by the coronavirus pandemic. It has been in plain view for 50 years of bad policies for anyone willing to think it through, which is why Lyndon LaRouche was able to forecast that this sort of pandemic would necessarily emerge at some point. And now it has.

Lyndon LaRouche challenged us to make society good. What does that look like? Are you among the 50-plus million Americans who are out of work? Need a productive job? So do 1.5 billion other people on this planet.

The world needs 1.5 billion productive jobs which currently do not exist, and could not exist under the current monetarist system. The American economy must be completely reconfigured, employing half of its labor force into real goods-producing—not “gig economy” service jobs—with a target of creating 50 million productive jobs. Those jobs would be driven by the mission of producing the food, health care, infrastructure, and capital goods to rebuild our own nation and to help transform underdeveloped nations, ensuring that they have the power to transform their economies and workforce similarly, creating 1.5 billion new productive jobs globally. The 50 million new jobs in the U.S. is only 3% of the total required worldwide. But it is actually the key to the success of the whole effort, planet-wide. Here’s why.

When Lyndon LaRouche first ran for President in 1976, his campaign theme was, “This man wants to give you a job, rebuilding the world!”

The Physical-Economic Approach

Twenty years later, addressing new potentials for that same idea, LaRouche declared,

There is no need for anybody on this planet, who is able to work, to be out of work! It’s that simple…. If the United States, or the President of the United States, and China, participate in fostering that project—sometimes called the “Silk-Road” Project, sometimes the “Land-Bridge” Project—if that project of developing development corridors, across Eurasia, into Africa, into North America, is extended, that project is enough work, to put this whole planet, into an economic revival....

So that, what we have here, is a set of projects, which are not just transportation projects, like the transcontinental railroad in the United States, which was the precedent for this idea, back in the late 1860s and 1870s. But you have development corridors, where you develop an area of 50 to 70 kilometers on either side of your rail link, your pipeline, so forth—you develop this area with industry, with mining, with all these kinds of things, which is the way you pay for a transportation link. Because of all the rich economic activity: every few kilometers of distance along this link, there’s something going on, some economic activity. People working; people building things; people doing things, to transform this planet, in great projects of infrastructure-building, which will give you the great industries, the new industries, the new agriculture, and other things we desperately need.

Lyndon LaRouche’s Four Laws (“The Four New Laws to Save The U.S.A. Now! Not an Option: An Immediate Necessity,” June 10, 2014) will reorganize the U.S. economy to do that. His proposal for a Four Power Summit between the United States, Russia, China, and India to organize a new international financial system, a New Bretton Woods, should be convened immediately to address the urgent pandemic, hunger and financial
crises before us—that is, to replace the modern-day British Empire with a New Paradigm based on sovereignty, development and classical culture.

We must break Americans out of the polarized and controlled agenda of the mass media, which declares that there only two alternatives—defeat the virus and kill the economy, or “open” the economy even if it means losing lives of the most vulnerable. In reality, the economy was already dead, killed by the $1.8 quadrillion financial parasite (which the central banks continue to bail out at rates far, far greater than the emergency funds being allocated to people, businesses, and governments). That is not the economy that should be reopened. Nor can it be one based on a new, zero-growth “Green” financial bubble to replace the current, collapsing one, which the City of London and Wall Street are now intent on conjuring into existence.

In the following pages, we present to you a mission, and we present to you a method, informed by Lyndon LaRouche’s thinking, for accomplishing that mission.

How Did We Get Here?

In the 1930s, the Tennessee Valley Authority was considered the eighth wonder of the world, taking one of the poorest sections of America and transforming it into a powerhouse of higher energy-flux density economic production. In the 1940s, Americans created a manufacturing and machine tool miracle which allowed allied soldiers to win the war against fascism. In the 1960s, President Kennedy challenged us to land a man on the Moon by the end of the decade, and we did, discovering new physical principles and revolutionizing our economy.

Two years after the Moon landing, on August 15, 1971, our economic sovereignty was stolen by the financial lords of Wall Street and the City of London, who used their monetary power to create a globalized modern-day British Empire.

For the next five decades, most Americans accommodated to that monetarist system, protesting aspects of it at times, but, basically learning how to survive within it. Americans gradually stopped producing and started hustling.

Lyndon LaRouche, instead, challenged that system. He warned that it would inevitably fail, by virtue of its profoundly evil and fatal policy of sacrificing physical economies, human productivity, and lives to speculative financial income streams and the anti-human intentions of the global elite. He developed the scientific principles needed for sovereign nations to reclaim their economies in the tradition of Alexander Hamilton’s American System, and urged peoples and nations to act before the inevitable happened.

The inevitable has happened.

The global pandemic has only removed the façade, exposing the tragic transformation of the agro-industrial base of western economies into hollowed out consumer- and entertainment-driven service economies. It has ripped the mask off the equally tragic idea that the “underdeveloped” countries could remain permanently underdeveloped, without genocidal consequences.

Fifty million Americans are unemployed or barely employed, many of them discovering painfully that their jobs have nothing to do with meeting real human needs, and are not coming back.

Throughout the world, but especially in underdeveloped nations, people are faced with the impossible choice of continuing their informal activities and likely contracting or spreading COVID-19, or locking down and subjecting themselves and their families to hunger—and in the case of hundreds of millions of people, especially in Africa, outright starvation. World Food Program Executive Director David Beasley recently warned that 821 million people worldwide are chronically hungry, another 135 million are “acutely food insecure, meaning they are on the brink of starvation.” He added that under the hammer blows of locust plagues, collapse of supply chains and the pandemic that number could double. He warned of 300,000 preventable deaths daily, and “multiple famines of biblical proportions.”

How can this be happening in a world where American farmers are euthanizing their livestock and chickens and dumping milk? How can the basic needs of survival be lacking in the face of mass unemployment and underemployment which pre-dated the pandemic?

Because this is the intention of the British Empire. It has been politely rebranded as “globalization,” but Prof. Niall Ferguson, an unabashed promoter of British imperialism, more accurately identified it as “Anglo-globalization.” The spokesmen of that Empire have been explicit, for centuries, about their preference for genocidal Malthusianism, which they are today trying to repackage as “Green environmentalism.”

They Say It Themselves

Take the case of Prince Philip of the United Kingdom, who in 1988 stated:
The more people there are, the more resources they’ll consume, the more pollution they’ll create, the more fighting they will do. We have no option. If it isn’t controlled voluntarily, it will be controlled involuntarily by an increase in disease, starvation, and war.... In the event that I am reincarnated, I would like to return as a deadly virus, in order to contribute something to solve overpopulation.

Or Bertrand Russell before him, whom Lyndon LaRouche called the most evil man of the 20th Century, who stated in 1951:

War has hitherto been disappointing in this respect [population control], but perhaps bacteriological war may prove effective. If a Black Death could spread throughout the world once in every generation, survivors could procreate freely without making the world too full. [Emphasis added.]

Or go back a couple of centuries to the evil Parson Thomas Malthus, who wrote in his 1791 Essay on the Principle of Population:

We should facilitate, instead of foolishly and vainly endeavoring to impede, the operations of nature in producing this mortality; and if we dread the too frequent visitation of the horrid form of famine, we should sedulously encourage the other forms of destruction, which we compel nature to use. In our towns we should make the streets narrower, crowd more people into the houses, and court the return of the plague. [Emphasis added.]

This kind of imperialism or oligarchism, as LaRouche defined it, is grounded in the idea that man is no more than a creature of his senses, an animal which has to react to the world as it is, a hedonist in search of maximizing pleasure and minimizing pain, and which can be manipulated and culled as needed. The idea of “herd immunity,” which argues, “let nature take its natural course, we have no power over it,” is a recurrent incarnation of this idea.

To the contrary, Lyndon LaRouche located man’s unique ability to create new and better ways of doing things, based on the discovery of new universal physical principles, as the substance of economics. LaRouche’s original and unique conception of Potential Relative Population-Density corresponds to the power of society to maintain a rising total population, with rising longevity, a rising standard of living, and with augmented access to classical culture, such that the rate of future scientific discovery and technological advance can outpace the growth of population per se. This depends on the ability to produce improved market baskets of consumer goods, production goods, and infrastructure, on a per-capita and per-square-kilometer basis.

If such capability falls, then society will predictably devolve, to the point where the Potential Relative Population-Density drops below the actual total population—as has happened globally over the past 50 years, with the disastrous consequences we are witnessing with the coronavirus pandemic today, and as LaRouche warned in studies in the 1970s and 1980s.

The solution lies in a dramatic about-face in the world’s plunging relative potential population-density, through the equally dramatic increase in the productive powers of labor, a concept at the heart of Alexander Hamilton’s American System and Lyndon LaRouche’s Four Laws.

LaRouche’s Physical-Economic Forecast

With his ability to forecast the future in order to change it, Lyndon LaRouche described the nature of today’s crisis and its solution in 2007:

If the United States—and this is not impossible—if the United States should extend a proposal to Russia, to China, and to India to co-sponsor the formation of a new international monetary financial order, that could be done.... We have now an incalculable crisis worldwide in progress. This is not a financial crisis.... This is a crisis to see who is going to run the world. Is it going to be a group of nations, or is it going to be the re-emergent British Empire which never really went away—which takes over from the United States and establishes its world rule through globalization?

President Donald Trump came into office with the mandate for and the intention to rebuild American infrastructure, revitalize industry, and relaunch our space program; to end perpetual wars and normalize relations with Russia and China; to put an end to the speculative
looting of economies with a return to the FDR-era Glass-Steagall law. For the past three years, the British Empire and their American assets have been engaged in an attempted coup against the President to prevent any movement in the direction of those policies. Now is the time for that coup to be defeated, and those policies immediately implemented—along with the full program we present below.

The pandemic, the economic collapse, and the immediate threat to hundreds of millions of lives, now call the question on the fight between the two systems—the one based on encouraging, not millions, but billions of lives to be eliminated; the other, based on increasing the creative and productive output of those same billions and future billions.

What follows is a concept of how to unleash the people of the United States to play their indispensable role in that fight, by creating 50 million new productive jobs, by reconfiguring the American economy and workforce with directed investments in manufacturing, agriculture, space exploration, and advances in thermonuclear fusion, as part of a global crash program to create 1.5 billion new, productive jobs worldwide. These are guidelines of the needed approach, with further details to be filled in based on input from engineers, farmers, scientists, manufacturing workers, and others.

CHAPTER 2

Brother, Can You Spare a Job?

As of the second week of May, 50 million Americans are now unemployed or forced into part-time employment. Even before this employment collapse, about 44 million, did not have productive (e.g., goods-producing) employment—manufacturing, construction, mining and drilling, agriculture and forestry, transportation—nor were they scientists or engineers. This exposed a shocking fact: Before the coronavirus crisis struck, the old joke had come true: “Millions are idle!—fortunately, most of them have jobs.” Some 69% of the American labor force (including those who were unemployed, had stopped looking and dropped out of the labor force) did not have productive employment. This was almost 120 million people. (See Figure 1.) Now, a very large share of those Americans is truly unemployed, or forced into part-time work.

This shows the absurdity of textbook definitions of unemployment: someone wants to work but doesn’t have a paying job, i.e., not receiving income.

Contrast that monetarist view to Lyndon LaRouche’s concept which started from the standpoint of physical economy: of a person’s participation in the process of producing the physical goods, and related necessary services (such as health and education), required to increase society’s power to provide an improved standard of living and culture to a growing population—a power Lyndon LaRouche referred to as potential relative population-density. Having a “job” in the drug trade and making $1 million a year is not actual productive employment. LaRouche developed a unique pedagogy of “bar diagrams” (see Figure 4) to focus our attention on that actual physical-reproductive process:

Since potential relative population-density is a material relationship of society to nature, this potential is determined most immediately solely through activities in the form of production of goods…. This approach must replace the methods of national-income analysis associated with the U.S.A. usage of “Gross National Product.”

From that standpoint, now look at the U.S. and world economies.
Figure 1 shows the result of five decades of deindustrialization and deterioration of the American economy, once the “Arsenal of Democracy,” into a globalized “service economy” which is now in collapse. Some service sector jobs are useful and necessary, such as healthcare and education, and are also productive in that sense; but the lion’s share of service jobs in the American economy today are not—such as financial, hospitality, and so-called professional business services. Taken together with the unemployed, this amounts to a shocking 73% of the current labor force. Moreover, many of the roughly 5 million Americans who had productive jobs and are now not working (and this is almost 25% unemployment among America’s productive workforce), face the potential of their jobs not coming back. How many airline employees, oil drilling company employees, and auto industry employees will be working in those industries next year? If we look at the world labor force from the same physical-economic standpoint, as shown in Figure 2, we find that total real unemployment for the planet can be estimated at about 46% of the labor force.

That is 1.585 billion people who do not produce any physical economic value because, over the past half century and more, they have been dumped onto the human scrap heap by the British imperial system of the City of London and Wall Street—and barely survive from day to day. In the case of Africa the real unemployment rate is 65%. In the case of Ibero-America it is 42%. (See Figure 3.)

We arrived at these numbers by not only looking at official unemployment statistics (which grossly understate the reality), but also the masses of people who hustle and scramble so that they and their families can eat from one day to the next, but who don’t actually produce anything. This is the case with so-called “informal employment” worldwide, which involves a staggering number of people: more than two billion, in fact, which more than 60% of the planet’s total labor force. Youth are particularly victimized by this “informal” disease—in the 15-24 age cohort worldwide, 77% of all employment is informal. According to the definition provided by the International Labor Organization (ILO):

The informal sector consists of units engaged in the production of goods or services with the primary objective of generating employment and incomes to the persons concerned…. The main intended destination of the production is wholly for own final use.

This includes: (1) Informal employment in agriculture: desperately poor peasants and their families engaged in subsistence agriculture (this is about 25% of the total informal employment); (2) A smaller number of “informal” (or off the books) employees in the formal sector as such (about 10% of the total); and (3) The deregulated netherworld of street salesmen, service workers, and—in the worst cases—virtual slaves of Dope, Inc.’s drug trade and prostitution/pornography black economy, run by the British Empire’s banks (about two-thirds of the total).

It can be argued that the first group at least produces
enough for their own and their families’ immediate consumption, albeit at a horribly low level of productivity. We consider them as “employed,” along with the second group, in an effort to present a conservative estimate of real unemployment. The third group, however, produces zero net physical economic value. They are de facto unemployed, from the standpoint of the physical economy. Now that the coronavirus pandemic is striking the underdeveloped sector with a vengeance, even the meager daily incomes and food supply of the gigantic informal sector is going up in smoke.

The ILO estimates that people in the informal sector have already had a 75-85% drop in income. As ILO Director-General Guy Ryder succinctly put it on April 29: “These are the real faces of the world of work. If we don’t help them now, they will simply perish.” There is no greater source of waste on this planet than this mass unemployment—and resultant death by disease and starvation—of millions and even billions of precious human beings. The path to recovery lies in productively employing and mobilizing them to vastly increase the productive powers of labor—the only actual source of wealth in a human economy.

**LaRouche on the Bar Diagrams**

Since potential relative population-density is a material relationship of society to nature, *this potential is determined most immediately solely through activities in the form of production of goods*. If other forms of activities, other than production of goods (or, the transportation which is the conveyor-belt for the production and distribution of goods), do affect this potential, they accomplish this through the mediation of the relative productivity of the labor producing goods....

Education, medical services, and administration of production and distribution directly affect the productivity either of productive labor or of the organization of the productive process as a whole, and also determine the effectiveness with which necessary services and administration mediate such improvements in productivity....

This labor-force is, so to speak, the input to the productive process defined by production of goods and associated transportation. The right-hand bar depicts the input-output relationships....

This geometric proportioning of the elements of the reproductive cycle is the basic geometry of the economic process for purposes of defining national income.

This approach must replace the methods of national-income analysis associated with the U.S.A. usage of “Gross National Product,” and the “Gross Domestic Product” usages of the UNO and various nations.

(From Lyndon LaRouche’s 1981 report, “The Principles of Statecraft for Defining a New ‘North-South’ Order.”)
CHAPTER 3

How to Create Millions of New, Productive Jobs for the U.S. and the World

Faced with an unemployment crisis similar to today’s, President Franklin Roosevelt created 4-5 million jobs during 1933–44, using a national credit institution. He made the Reconstruction Finance Corporation (RFC) act as a large national commercial bank issuing credit for investment in production and infrastructure. (See Chapter 7 for further elaboration of American System credit policies.)

In March and April 2020, the economy and its 50 million un- and underemployed workers have been subordinated to the Federal Reserve’s policy of bailing out trillions of dollars of worthless speculative debt, while industry, small businesses, and other elements of the real economy are scrambling for the equivalent of pennies. Putting the fox in charge of the hen house, Blackrock, the world’s largest asset-management fund, has been put in charge of allocating federal stimulus money. Blackrock is a leader in the drive for “financial regime change,” placing central banks, and their green fascist agenda, above nations. Meanwhile, the U.S. House of Representatives has now proposed to borrow and spend no less than $3 trillion in one piece of legislation, without creating a single new, productive project or job.

The failure of the monetarist policies which gave us five decades of deindustrialization and the deterioration of the American economy into a globalized, service economy must now be reversed.

Raising Up America’s and the World’s Workers

Many of the roughly 5 million Americans who had productive jobs and are now not working, face the potential of the demand that supports their jobs not coming back. But many auto and auto parts workers this Spring have proven that there are much more important—and more rewarding—services they can perform in the plants where they were making cars and trucks—producing medical devices and public health equipment which is in critically short supply in the nation’s fight against the novel coronavirus pandemic, and gaining in their machining and engineering skills in the process. Some of those workers had to mobilize and demonstrate to get the right to step up and do something better, produce something vital.

Now expand the horizon of that kind of thinking, to the more than 190 nations around the world fighting this pandemic, many of them in the developing sector, with shortages of hospital beds, electric power, clean water supplies, and medical devices and equipment that are far beyond “critical.” Some are virtually defenseless, except by trying to lock down people who must work every day to live. Now they face worsening shortages of food, as well.

Moreover, the United States does not have the hospital infrastructure it needs either. The number of beds per population has been cut by more than half since the 1970s; hundreds of rural areas have no full-service hospital that is reachable in an emergency or for frequent chronic health episodes. Despite the efforts of the Army Corps of Engineers and of hospital administrators to create new beds, tens of thousands of Americans have died at home or in nursing homes without getting hospital treatment in this pandemic, and tens of thousands more have died of diseases not COVID-19 because they did not want to go to hospitals which were treating both COVID and other patients. Compare this to the lightning hospital-building mobilization in Wuhan, China in January, where “pop-up” modular hospitals were constructed for serious COVID cases, and temporary ones for mild cases, enabling other hospitals not to take COVID infections at all.

Such modular hospital and clinic facilities can and should be constructed rapidly all over the world. It’s been done before in local crises; doing it worldwide, with the electrical power and clean water supplies needed, will take a new international credit system and the joint effort of the leading technological nations.

The COVID-19 disease is unlikely to disappear or be prevented or cured any time soon, possibly not for several years. That means that all those new facilities for treating the sick while isolating them from their
households and coworkers are going to be needed. And there is time to build them if the leading technological nations of the world act fast, and cooperate.

Those hospitals and power and water supplies can be built fast, and on the absolutely massive scale required, if the United States, Russia, China, India, other leading nations mobilize their labor forces and their people to create new capabilities—new industries, new jobs at technological and even scientific frontiers.

**What America’s Economy Was Capable Of**

In the period 1935–75 the U.S. economy transformed itself from Great Depression to world powerhouse. And don’t buy the eyewash that this was the “obsolete old industry” period. We have been living since on the scientific and industrial inventions of that time—the transistor, the radar/laser/directed energy beam, the computer, the nuclear reactor, isotope separation, the satellite, jet and rocket engines, etc. The Tennessee Valley Authority’s multi-purpose hydroelectric/navigation/irrigation dam system has been unsurpassed and rarely equalled since for economic development. Some of that period’s technologies have been supplanted by their inferiors: The electric locomotive, for example, is faster, more powerful, more fuel-efficient than today’s dominant diesel-electric traction.

Let’s take a snapshot of that progress using Lyndon LaRouche’s most basic principle of sustained economic progress. LaRouche showed that the share of an economy’s total production going to the consumption sustaining skilled, educated productive workers and their households had to increase. At the same time the share going to produce infrastructure and other capital goods for production had to increase even faster. That would mean that the capital intensity (capital goods per productive worker) of the economy would increase at the same time as consumption or living standards of productive households rose. Then, LaRouche showed, the economy would be generating “free energy” (call it “surplus” or even “real profit” if you want) to allow improvement in technology, culture, and science in order to put future progress on a sound basis.

But there’s another big factor: overhead. Overhead is the share of the “work” done in the economy which is not productive. Some of it is necessary, even critical: the work of the doctor or nurse, for example, or the teacher. But it is overhead which is supported by the work of the power and goods producers, transporters, miners, drillers, etc. And during the past 50 years of deindustrialization of the American economy, overhead employment has grown massively at the expense of productive employment. And it has become less and less necessary, to where retail is the biggest economic sector, the MBA is the degree every student wants, and even the mathematics geniuses work at hedge funds and banks instead of teaching science.

LaRouche used the letters “V” to refer to the consumption of the productive employees; “C” to refer to capital goods and their use, as with the generation and use of electricity; “C/V” to refer to the capital intensity of the economy’s production; “D” to refer to the share of employment which is overhead; “S” to refer to surplus production beyond the share of “V” and “C”; and “S-D”—or “S-prime”—to refer to free energy generated in the economic system (see Figure 4, Chapter 2).

**Figure 1** compares the shifts in relationships among these factors between 1935–75 and 1975–2015, when the economy was heading in a healthy direction and in an unhealthy direction, respectively.

Here is 1935–75:

“V” increased by 1,000%. This is both more productive workers, and a higher standard of living of their households. The *Statistical Abstract of the United States* has for 120 years reported every five years the number of productive workers and their real wages, a reasonable measure of their households’ standards of living.

“C” increased by 2,200%. We use here a basic “marker” for the huge variety of capital goods, namely electricity generation and use in terawatt-hours (a terawatt-hour is a billion kilowatt-hours).

“C/V” increased by 1,400%.

“D,” the overhead ratio in the workforce, never went above 70%; and during WWII it was less than 50% and goods-producing work was more than 50%.

You can get a feel for the “S-prime” being gener-
ated, although we don’t show it here as a quantity or share of production, because it is actually the appearance of inventions which are new to the economy and of new fields of work. But we know the rate of growth of productivity averaged 2.85% per year. The growth of multifactor productivity—the increase in productivity caused by technological progress—was a high 2.6% per year.

Here is 1975–2015:

“V” decreased by 25% because of the mass disappearance of productive employment.

“C” increased by just 70%.

“C/V” increased by 160%, but mainly because of the decline of productive workers, “V.”

“D” rose to 85% overhead employment.

We don’t need to mention the fate of “S-prime” or free energy of this economy. It’s been below breakeven. Productivity growth has averaged 1.9% per year. Multifactor productivity growth has been 1.0% per year.

When the United States was fighting a great war against fascism 80 years ago—and what are we in now, if not an international war against disease, hunger and unemployment?—more than half of America’s entire labor force was productively employed. In the 1960s, as we went to the Moon, it was still 35% productively employed, with 400,000 Americans working on the Apollo project. So in 2020, with just 15% of the U.S. workforce productively employed, America was unprepared to be an arsenal of healthcare and nutrition for the world.

Now, the United States can transform its economy quickly into that arsenal, while keeping its sights on its missions to the Moon and Mars.

A New World System of Public Health

America now has a labor force of about 170 million people; 164 million of these people are working or have worked recently enough to be counted in the labor force by the Labor Department (which has forgotten another five or six million who could work but haven’t looked for work in a good while). Just fewer than 30 million are productively employed; another 19 million are in healthcare and education.

At least 100 million Americans in the labor force are not involved in building, operating, or maintaining the physical economy of the United States which produces all the goods and services we live on, nor in the creative invention of new physical and biological processes, which is the real source of any nation’s wealth.

What is needed in this global, five-alarm fire of a crisis—and this is “the big one,” as we know it so far—is for some 50 million of those 100 million Americans to enter new, productive employment—or, to replace someone now productively employed, who transitions to a more demanding job in the space program, power engineering, technology development, or scientific research—or to go straight to that kind of new and challenging employment themselves. With 50 million new productive jobs the United States would be equaling the level it reached in 1944 when the Arsenal of Democracy was going full bore: half of the entire workforce with productive jobs.

New hospitals and public health centers: If the United States joins with the other leading technology powers in mobilizing new hospitals, equipment, staffing, and specialists across the developing nations of South America, Africa, and Asia, that process will create 6 million new productive, skilled jobs in America and well more than 100 million such jobs worldwide. Here’s how.

Under the Hospital Survey and Construction Act (Hill-Burton Act) of 1946, the United States is mandated to have, in every county, a standard of 4.5 hospital beds of various capacities per 1,000 residents. The era of for-profit hospital chains has abandoned this standard, effectively cut it in half or worse depending on the county. The coronavirus pandemic has given us an order: Restore the Hill-Burton standard.

In fact, we should work with other major economic powers to restore it worldwide. The President of Ghana, for example, in his State of the Union address May 12, realized that his country must build 100-bed hospitals in 88 districts plus six new regional hospitals as fast as humanly possible—he said in one year!—to save lives in the pandemic. How could Ghana do this? With the help of at least the four powers which must launch a new “Bretton Woods” credit system for critical infrastructure projects and capital goods exports. The President of one of those, China, said on May 19:

We must provide greater support for Africa. Developing countries, African countries in particular, have weaker public health systems. Helping them build capacity must be our top priority in COVID-19 response…. The world needs to provide more material, technological, and personnel support for African countries.
In the United States, we’ll add about 600,000 new hospital beds in nearly 1,800 hospitals—600 of 800-bed capacity, and 1,200 of 100 beds each. Across the world, we need to add 10 million, in about 30,000 new community hospitals.

In the United States, this will create 5-6 million new jobs based on the current staffing of our hospitals and hospital wards. These would include about 300,000 physicians and surgeons, 1.4 million registered nurses, 170,000 diagnostic technicians and technologists, and more than 117,000 clinical lab technicians, not to mention pharmacists, dieticians, electricians, plumbers, and so on. Moreover, at least 500,000 construction workers and engineers will be directly employed for a decade in building these new hospitals, and hundreds of thousands more building the materials for them. This is based on diverse workforces of 250-300 building 100-bed community hospitals, and larger workforces constructing the 800-bed hospitals.

The new world public health system building can’t take a decade—it must be done as rapidly as possible, as in Ghana, to prevent a massive number of human beings dying of COVID-19 or of lack of necessary treatment for other diseases. This will mean more than 90 million construction workers and new professionals to build and staff the hospitals, with isolation and intensive care capacity, clinics, and new “CDCs” and research centers.

How many construction engineers and medical professionals will go from the United States into this worldwide public health mobilization? We don’t know; but we do know that the new, productive employment from it will be in the range of 100 million worldwide, and the American hospital-building aspect of it, 6 million or more jobs here.

**Electric Power:** The United States and cooperating powers will need much more electric power to mobilize this production. Powering these new hospitals alone, in countries across the world many of which generate and use 100 kwh/person/year or less (compared to 10,000 in the United States and 7-8,000 in Europe) will mean producing and siting 1,000 or more power plants of 50-100 megawatts each, and fast. Worldwide, more than a billion people have no access to electricity at all. Some 500,000 jobs constructing and operating these plants will be created.

As soon as possible, small modular nuclear reactors (known as “SMRs”), for more reliable electricity generation with higher power efficiency and no need for transporting large volumes of natural gas fuel, should be brought into this process of powering up the world electrically. SMR operational prototypes have been produced and more are being developed in the United States, Russia, China, Canada, and several European countries; the capacity for commercial factory production of these small modular nuclear units does not yet exist. Nonetheless, South African Energy Minister Gwede Mantashe announced May 7 the interest of his ministry in SMRs. His ministry will begin work on a roadmap for the procurement of 2500 MWe of new nuclear capacity, and will consider all options, including SMR projects led by private companies and consortia.

In the United States, Americans have less electric power available per capita now than they did in 2005—we’ve been going backwards. Industrial use of power has shrunk 30% since the 1980s. Electricity is the most important capital and machine-tool of all modern societies. If we participate with other major nations in building new infrastructure of several critical kinds—electrifying the railroad corridors for high speed, desalination plants to combat drought, deeper ports and new inland locks and dams all with automated equipment—then thousands of gigawatts are needed (a gigawatt is 1,000 megawatts or equivalent of one large nuclear reactor).

Another 10 million jobs will be created internationally just building barely reasonable levels of electric power; more than 1 million in the United States including construction workers, power engineers, and line workers.

The “science driver” for this entire effort is a crash program to develop the electric power of the future—fusion power—and the plasma and laser technologies associated with it. This crash program is not negotiable for human progress: Fusion propulsion is the only rocket technology fast enough for travel to and from Mars and elsewhere in the Solar System, and plasmas are the best power technologies for developing the Moon—where we will also mine the ideal fuel for fusion power, Helium-3.

Nearly 5,000 scientists were working on fusion in U.S. labs in the 1980s. That should have doubled by now; instead, funding cuts have reduced it to about 2,000 scientists.

**Fresh water:** Providing fresh water for all the hospitals, clinics, and research centers to be built throughout the developing countries against the COVID-19 pandemic is only one aspect of the huge need for fresh
water, irrigation, and navigation we need to get to work on.

The United States uses far less water than we did 40 years ago for industry (we shut that down!) and agriculture; only urban water use has grown during our great globalisation and deindustrialisation. This will be changed; and internationally, large water control projects like the TransAqua project in Africa’s Sahel are the key to spreading modern high-technology farming.

President Franklin Roosevelt, with his Bretton Woods system, wanted to help build “Tennessee Valley Authorities” in other continents—the most successful and famous development project in history was the TVA. He also wanted to create a Missouri River Authority, an Arkansas River Authority, and a Columbia River Authority in the Northwest. Twenty years after his death these ideas became a plan for a truly great project of infrastructure, supported by President John Kennedy and by Robert Kennedy as a Senator. This is the North American Water and Power Alliance (NAWAPA) plan. After their assassinations this great project was abandoned by America’s political leadership in the maelstrom of the Vietnam War.

The Schiller Institute and LaRouchePAC have revived and updated the NAWAPA plan, which has been described as the equivalent of “a dozen TVAs.” Our study showed it will create 6-7 million new productive American jobs over a decade—construction workers, tunnel drillers, heavy equipment makers, civil and heavy construction engineers, and on and on.

Irrigated agriculture in the Southwest could expand from 22 million to 41 million acres through the NAWAPA infrastructure project. Our study also located 42 coastal and Great Lakes sites ideal for electric-powered desalination of salt water. This means still further development of nuclear electric power.

The TransAqua plan for the African Sahel, another such “super-TVA” project, would recharge the once very large and productive Lake Chad, which has been drying up. There are estimated another 5 million or more productive jobs to be created carrying out the TransAqua plan.

Worldwide, this kind of project—new TVAs—will create a very large number of new productive jobs, certainly not less than 20 million over the next generation.

Electrified, high-speed railroad lines: In the largest new infrastructure project of the 21st Century thus far, China for five years has been building out new railroad corridors across Eurasia; and with South Asian and European countries including Russia collaborating, this network of Pacific-to-Atlantic rail corridors and some North-South routes has already reached more than 10,000 miles. These are not the nearly 20,000 miles of high-speed rail corridors, including some magnetic levitation routes, built in China itself in the past decade or so. The Eurasian Land-Bridge lines are not yet high-speed.

Lyndon and Helga LaRouche and the Schiller Institute have promoted the Eurasian Land-Bridge, or “New Silk Road” projects since the 1980s; expanding their idea into the World Land-Bridge by the late 1990s.

The lines built from China to Europe have been successfully replacing air freight, especially during 2020, and increasingly gaining cargo share relative to ocean freight. Nothing except speed—which means electrification and soon magnetic levitation rail—keeps rail from replacing air travel up to 1,000-mile and even longer distances; and this includes travel in North and South America as well as Eurasia, the Mideast, and Africa.
The President of China has put out a goal of connecting every African capital city with high-speed rail, as the President of Russia has proposed finally providing Africa with adequate electricity with nuclear power. The World Land-Bridge to be built out will certainly reach or exceed 200,000 miles. And in addition, EIR for nearly 20 years has proposed a grid of about 40,000 miles of electrified, high-speed rail in the United States.

Building a high-speed rail network to a tunnel under the Bering Strait will connect this network to the Eurasian Land-Bridge routes. This is a further 3,000-mile Alaska-Canada rail connector. And a 2,000-mile corridor through Central American and South America down to Tierra del Fuego, Chile has been foreseen for many decades but never built. It is only one axis of a new network of high-speed rail across Central and South America for which European and Chinese railroad construction companies have been planning. It requires “new Bretton Woods” credit issuance.

The manpower requirements to build these double-tracked rail main corridors and connectors are 80,000 new skilled and productive jobs for each 5,000 miles of such high-speed or mag-lev rail. That’s 650,000 employment to build the “lower 48” electrified rail network; 60,000 more for an Alaska-Canada corridor to the Bering Strait; and about 5 million in the building out of the World Land-Bridge. This is the work of up to a full generation.

The all-electric locomotives and train sets are a job for the auto industry, along with its current emergency tasks producing medical equipment and devices demanded by the coronavirus crisis. The 6,000 megawatts of new electric power capacity are part of the build-up we described above. The many millions of tons of steel will demand new productivity from the steel industry.

**The Moon-Mars mission and space colonization:** Nearly half a million American scientists, engineers, and skilled craftsmen worked on the Apollo project which took human beings to the Moon. That NASA-centered workforce is down to far less than 100,000 now.

If we gear up the Moon and Mars mission President Trump and NASA have named Artemis, doubling NASA’s budget to start with, and if we are going to cooperate with all the other space-faring nations that want to send human beings into the Solar System, then *Artemis will employ, directly and indirectly, at least a million scientists, engineers, and skilled workers.*

But as science drivers for the new discoveries, processes, and technologies being developed in *all* of the great infrastructure projects we have been describing here, crash programs for space travel and colonization along with fusion power and plasma sciences will result in far more employment, and professions in frontier industries which as yet scarcely exist.

**The Coming Transformation of the Economy**

Thus we have shown—and could show in much more detail—that *just the direct employment on the international infrastructure projects most urgently needed to meet “the big one” and transform the world economy in the process, will create at least 135 million new, productive and skilled jobs and professions worldwide, and 15 million of those in the United States.* This will take place over a generation but its largest component is the mobilization for new world healthcare and public health systems which must be built fast, now. It will in fact create far more *indirect* jobs than that, as reindustrialization on a higher level takes place across the “advanced” economies and, at last, industrial development and high-technology agriculture is brought to the developing sector.

But this, above all, will take a great collaborative push from the leading technological powers—LaRouche always pointed to the United States, China, Russia, and India, but others will join—to launch a new global credit system, a new Bretton Woods as FDR intended it.

U.S. speculative post-industrial policies have caused a precipitous collapse in manufacturing employment,
1998 to present, which has never been corrected (see Figure 2). In 1998, U.S. manufacturing employment stood at 17.6 million workers. Then the take-down: It fell through the remaining Clinton years, and through the George W. Bush years, until it stood at 13.1 million in October 2008; then the 2008 financial-economic crash smashed the economy, and manufacturing employment plunged further to a level of 11.5 million in March 2010. Thus, from 1998 through March 2010, manufacturing employment fell 5.7 million workers, a fall of a full third. Under Obama and then Trump the U.S. gained back 1.4 million manufacturing jobs through February 2020, but the U.S. is still 4.3 million manufacturing jobs below the insufficient levels it had in 1998, and more than 30 million manufacturing jobs beneath where it would be under LaRouche’s program.

In the American economy we can immediately start a strong increase in productivity of employment by starting a crash mobilization of hospital construction and public health production worldwide—including, definitely, in the United States. This draws people now unemployed, non-productively employed, and simply those wanting to help create this critical economic infrastructure. Lyndon LaRouche’s economic teams already 40 years ago showed that infrastructure and productivity are directly related. At that same time, LaRouche himself specified that a really productive and technologically advanced “full-set economy” aims for 50% of its labor force in goods production and 5% more in scientific research and development (see Figure 3). Technological leaps can then keep coming, be put into new infrastructure, and shift the whole economy upwards.

The LaRouche plan will transform the U.S. economy from service-sector/financial domination to one of productive development. By 2045, one generation from now, the labor force will so surge that the economy will employ 91.5 million productive workers (compared to 30.4 million in 2020), 45.7 million manufacturing workers (compared to 12.9 million in 2020), and 9.14 million research and development (scientific) workers (compared to 3.1 million in 2020)—a tripling in all these critical categories. In 2045, through the increase in the manufacturing sector’s workforce size, and powered by scientific breakthrough-spillovers in fusion, space exploration, and similar advanced areas, the productive powers of labor in the U.S. economy could rise by an order of magnitude.

For the world as a whole (see Figure 4), a labor force today dominated by de facto unemployment in the so-called “informal sector,” combined with horribly low productivity subsistence agriculture, will be shifted in a generation to one where half of the labor force will be productive operatives, and another 5% of the labor force will be part of the critical R&D sector. The agricultural workforce will shrink as a percentage of the total, as per capita and per hectare agriculture productivity rises through mechanization, irrigation, use of fertilizers, and increased energy and water inputs. Following the approach taken by China over the past 40 years, where 850 million people were lifted out of poverty, the world as a whole, one generation from now, will be in a position to finally eliminate all poverty around the middle of this century.
CHAPTER 4

Double Food Production: Millions of High-Tech Family Farms

The emergency food aid measures we must now take to prevent a “hunger pandemic,” alongside the healthcare gear-up against COVID-19, create the momentum for a new food and agriculture system serving the interests of all nations, now and in the future. This would put an end to the practices of the Anglo-globalist cartel system of food and farm control, which made the modern world vulnerable to food scarcity and disease in the first place.

Two basic considerations are involved: What are the volumes of production needed? What are the factors required to achieve this?

At the time of this report, the 2019–2020 world grains harvest has fortunately had no major crop disasters, which is important for meeting huge food aid needs from the pandemic. But the world harvest, from the current level of 2.7 billion tons yearly of grains production (all types—wheat, rice, corn), must be doubled as soon as possible. The level of 5.5-6 billion tons of cereals grains a year can provide all persons of our 7.8 billion world population with sufficient direct, and indirect (animal protein), consumption, as well as reserves against disaster and supplies for a growing population.

Even before COVID-19, world hunger, which has been steadily increasing for the past four years, reached the level of 821 million people chronically food “insecure” (i.e., without enough food, for lack of the means to buy it, or because of food scarcity). Of those, 100 million relied on food aid, or they would perish. In the coming months, that figure will rise to at least 265 million, according to estimates by the World Food Program, whose Director-General David Beasley told the UN Security Council April 23, that we face a hunger pandemic of “Biblical proportions.”

Factors of Production

Land and Water: Basic elements in the equation for increasing agricultural output are land and water, both of which can be increased. Africa is in the forefront, with half of all the world’s remaining arable land not yet under cultivation. Sizable areas remain for development in the Americas and elsewhere.

Apart from soil fertility (which can be manmade, as in Brazil’s Cerrado) and favorable temperature regimes, water is the key element. Launching the work...
needed on the backlog of major hydraulic projects on every continent will open new farmlands. For the United States, Canada, and Mexico, the North American Water and Power Alliance (NAWAPA) will divert some 15% of run-off now flowing toward the Arctic in the Mackenzie and Alaska River Basins, taking it southward to the dry southwest of the continent. This will make irrigation possible from the Canadian Prairies all the way to western Mexico. NAWAPA had backing since the 1960s in Washington, DC, but was thwarted by the London/Wall Street financial crowd.

In Africa, the TransAqua Project, first proposed in the 1970s, will resupply water to the Lake Chad Basin, benefitting the entire Sub-Saharan region, by diverting a small percentage of the flow of the Congo River Basin, which in turn will benefit from new agriculture, transportation, power, and water management systems.

First proposed in the 1970s, the TransAqua project will divert water from the Congo River Basin in the Democratic Republic of Congo to resupply water to the Lake Chad Basin, benefitting the entire Sub-Saharan region with new agriculture, transportation, power and water management systems.

In addition to these large-scale conveyance programs—whose most recent outstanding example is China’s South-North Water Transfer Project, moving water (716 miles) from the Yangtze to the Yellow River Basin—there also is vast agriculture potential from desalinated sea and inland saline waters, through nuclear power.

Mechanization: Farm equipment enables high production, with specialized planting and harvesting machinery, and tractors for all purposes. The highest productivity comes from conforming the size and power of the equipment to the scale of operation best for that region. For example, in parts of Brazil or the U.S. farm belt, 48-row corn or soybean planters serve extensive, high-yield farming. In Japan, micro-farms produce
high-yield rice, with highly advanced, very small scale planters, drones, and other machines. Germany and Belarus are famous for powerful tractors of all sizes for Eurasian agriculture.

Part of the same picture, is the necessity for high-technology crop storage, and food processing and handling. Food preservation through irradiation will prevent losses, allowing huge gains in supplies, as will more extensive use of long-standing methods, from freeze-drying to ultra-high-temperature pasteurization.

**Bioscience:** Hybridization and genetic engineering revolutionized crop yields over the past century, but more breakthroughs are possible with R&D, such as CRISPR and other techniques, to improve even the basic profile of crops. For example, there is the C4 Rice Project, to boost yields by half through more efficient photosynthesis. Most urgent is to conduct the basic research to protect against plant and animal diseases, especially zoönoses—diseases which jump from animal to man. COVID-19 is in this category. Currently, there is no vaccine for African swine fever, highly lethal and contagious among pigs. One-quarter of the world’s pork supply was lost in 2019 to this disease.

**Power:** Electricity and all forms of power are critical to every phase of modern food production, beginning with the manufacturing of all the inputs to water systems, irrigation structures, farm and food processing machinery, and storage and transportation. Cooling raw milk in bulk tanks was revolutionary to dairy farming in the 1930s; it improved the average diet with more milk. Even farmers’ household electricity is vital to productivity, as the Tennessee Valley Authority showed, when farm output increased after their homes got lighting, heating, refrigeration, cookstoves, in-home water, laundry machines, and similar advances.

**Energy-Flux Density:** The metric involved in this improvement is energy-flux density. This refers to the density of energy brought to bear across the relevant area of function, so that denser amounts create the condition for higher productivity. The rank order of energy itself is evident in the differing sources, going from low-density energy sources such as wood-burning, up through coal, oil, gas, nuclear fission, and, one day, thermonuclear fusion. With high-energy-flux density, farms of a half-acre—using aeroponics, or hydroponics—can yield tons of food.

**The Astronaut Farmer, Millions of Family Farms**

The workforce needed in agriculture, from “field to fork,” is very large, counting those who produce all the inputs, and even using mechanization. This means millions of new jobs. At the forefront are two concepts—the astronaut farmer, and family-scale farming. Space-age agriculture involves satellite monitoring, global positioning, data banks, drones, and more. In command is the astronaut farmer, who must become the norm the world over. The other requisite is family farming. The ingenuity and mission of family farm members—with the living standard, education, and science to go along—are the best guarantees of food security for every nation and worldwide.

**‘Give Us This Day Our Daily Bread’**

Instead of answering this universal prayer, governments have allowed the monetarist casino system of the past 50 years to de-structure sound agriculture, and even prevent agro-industrial development in Africa at all, a land of vast agriculture potential, home to 1.3 billion people. Governments must exert sovereignty, for the people. Break up the cartels, whose multi-nationals are now monopolizing all food groups and inputs including grains, meat, dairy, produce, fertilizer, agro-chemicals, and even seeds—the means to life.

Because of cartel “global sourcing,” commodity speculation, consolidation of food processing, and other practices, millions of people are needlessly suffering hunger, while farmers in the U.S. and elsewhere are forced to destroy food—kill off meat animals, dump milk. This must stop. No one should make speculative profits off food, while the food producers go broke. Put in parity-based farm production prices. No farm foreclosures. Take all other emergency measures to save farming capacity, and expand agriculture massively. Provide emergency pandemic food relief and a future with “daily bread” for all.
The greatest of all resources is the human mind.

It is the source of all revolutionary scientific concepts, powerful new technologies, and beautiful works of art. How many priceless contributions to human progress have been lost due to grinding poverty, a lack of education, or early death? To develop and safeguard this most precious of resources, we require a global health infrastructure, which itself depends on the essential physical infrastructure laid out elsewhere in this report.

We will begin with measures to be taken in the United States, then discuss the needs for less-developed countries.

No Debate Between Health and the Economy

Failing to defeat the virus in a timely manner will have far more devastating effects on the economy than will measures taken to stop its spread. The sooner case numbers are brought down and new infections can be tracked individually, the sooner we can take up the task of restarting work—both old jobs, and, emphatically, employment in the development projects discussed throughout this report! China, which responded very strongly to the virus (something that was obvious to anyone in the world watching at the time), was able to keep cases relatively contained and is already seeing industrial recovery, with year-on-year manufacturing growth already seen in April.

The United States should immediately take up the task of achieving the following:

- Bring testing capacity to a level of 5 million per day (150 million per month) within two months. This level will allow for export of test equipment and materials, of which the United States should become an exporter to assist those nations unable to manufacture their own.
- Hire at least 100,000 contact tracers. This deserves special federal funding earmarked for these positions.
- Produce enough masks and more sophisticated personal protective equipment (PPE) to allow a dramatically increased number of health care workers to perform their jobs safely.
- Fund research for treatments and vaccines, such as the U.S. crash program called Operation Warp Speed, and speedy production and distribution of these new capabilities.

Developing a Global Health System

But the broader requirements of developing a global health system for every nation on the planet requires much more.

Basic Health Infrastructure: Water and Sanitation

Ask a group of public health experts what has done the most to improve human health and they will imme-
diately give the answer: “sanitation.” But today more than two billion people lack access to clean water, adequate sanitation, or both. This leads to 800,000 children under 5 dying from diarrhea every year. Proper disposal of sewage and the protection and purification of water sources have saved hundreds of millions if not billions of lives over the nearly two centuries since such measures have begun to be implemented most rigorously.

The deployment of temporary sanitation facilities (which could be mass-produced and then distributed) will be a stop-gap measure while durable improvements in infrastructure are constructed. And that construction will be a source of meaningful employment for literally millions of people across the world.

**Hospitals and Medical Equipment:** The world as a whole possesses a current inventory of 18.6 million hospital beds. This constitutes a huge deficit. The standard developed by the United States, under the Hill-Burton Act, was 4.5 hospital beds per 1,000 people for each county, in order to ensure the health and well-being of the population.

Current levels are 2.8 hospital beds per 1,000 people in the United States, 0.7 for South Asia, 0.7 for the Heavily Indebted Poor Countries, and 0.5 for Nigeria, which comprises one-fifth of the population of sub-Saharan Africa. To meet a standard of 4.5 beds per 1,000 people, the world would have to increase its hospital bed inventory to 35 million beds, nearly double the current level. This would require the construction of 35,200 new modern hospitals, especially in Africa, Ibero-America, and Asia.

Beds themselves do not save lives. Medical staff are required, and acute cases demand additional equipment, such as ventilators.

The total global inventory of ventilators is hard to determine, but there are certain figures that point to the problems of dealing with COVID-19 in impoverished nations lacking health infrastructure (see Table 1). The United States currently has about 500 ventilators per million for its 330 million people.

**Going on the Offensive: Revolutions in Biology**

We must advance our understanding of viruses themselves, such that in the near future we can do more than react to each new outbreak. Viruses perform many functions besides causing disease, and demand to be understood in a broader scope than the Earth itself.

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### Table 1: Ventilators per Nation

<table>
<thead>
<tr>
<th>Country</th>
<th>Ventilators per million people</th>
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</thead>
<tbody>
<tr>
<td>USA</td>
<td>500</td>
</tr>
<tr>
<td>Germany</td>
<td>300</td>
</tr>
<tr>
<td>India</td>
<td>15</td>
</tr>
<tr>
<td>Nigeria</td>
<td>2.5</td>
</tr>
<tr>
<td>Sudan</td>
<td>1.9</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>0.6</td>
</tr>
<tr>
<td>Liberia</td>
<td>0</td>
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</tbody>
</table>

*For the entire world to be at the United States’ per-capita level of ventilators would require a global inventory of 4 million.*

In the opening section of his 1927 writing, *The Biosphere*, Russian scientist Vladimir Vernadsky says,

The history of the biosphere is ... sharply distinguished from that of the rest of the planet, and the role it plays in the planetary mechanism is quite exceptional. It is as much, or even more, the creation of the Sun as it is a manifestation of terrestrial processes.

Viruses themselves are an area of study that could give us unique insight into the role of extraterrestrial factors in the shaping of the biosphere and its evolution. After the discovery of viruses in the 19th Century, we have learned that viruses are inseparable from life—they are pervasive throughout the biosphere and are known to infect every type of organism. There are millions of virus particles in each teaspoon of seawater; billions of viruses float in the air currents high in the atmosphere. Inside the human body, just has we have a microbiome of trillions of bacteria, we and other living things also have a virome of likely trillions of viruses living inside us as a regular part of our organism.

Viruses play an important role in a phenomenon called horizontal gene transfer. We normally think of genetic material being passed from parent to offspring, but in horizontal gene transfer, genetic material from one organism is transferred to and incorporated into the genome of another, unrelated organism. This has been known to occur regularly in single-cell organisms, but studies in the past decades have shown horizontal gene transfer occurring between many types of more complicated organisms, such as plants, fungi,
and even animals. Some researchers suggest that upwards of 100 genes in the human genome were transferred there at some point long ago by viruses, including genes dealing with metabolism and immune system response. This idea disrupts the typical textbook “tree of life” with its separate, parallel branches, and posits an evolutionary process which is much more interconnected.

Now let’s look at this in the context of the Solar System and galactic environment. First is some very interesting research begun in the 1980s on the seasonal pandemics of influenza, which, like many other seasonal phenomena connected with solar radiation, breaks out somewhat simultaneously each year in the Northern hemisphere, then migrates across the tropics to the Southern hemisphere, and back north again the following year.

One element that interested researchers was the rhythm of outbreak of new strains of influenza over the past century, which shows an interesting, even if not complete, correlation with the 11-year solar cycle. However, looking over a longer period of time, 300 years, we see the possible fingerprint of a galactic driver. Not only do pandemics tend to occur more frequently during periods when the solar maxima have been more powerful (indicated by the blue curve), but it is also the case that the anomalous years of pandemic during solar minimum were periods during which Earth received a higher influx of cosmic radiation from outside of our solar system, due to bright supernovae.

A question mark left by researchers involved in these studies is the possible mechanism. It is known that viruses can be activated and deactivated by certain frequencies of light. It has also been observed that in some astronauts on the International Space Station, latent viral infections have suddenly become active. While all this research is still quite preliminary and requires further investigation, it is undeniable that the anomalies highlighted here hint at a higher causality and modulator of the development of life on Earth than mere earthbound chemical reactions.

Fundamental discoveries about these topics could revolutionize the way we understand and treat viruses—and human health in general.
American’s space sector will play a decisive role in shifting 5% of the U.S. labor force into research and development. As specified by LaRouche, this is the key to increasing the productivity of the entire labor force.

Increases in productivity come directly, only, from improvements in technology derived from fundamental scientific discoveries; the higher the rate you convert fundamental physical discoveries into practice, the greater the rate of increase of productivity per capita of population, and per square kilometer of area.

—Lyndon LaRouche, September 2, 2000 speech

We are faced with an extraordinary challenge: how to address the immediate needs of our own and endangered populations around the world, while simultaneously beginning the transformation of national economies to higher platforms of economic activity. The concept for meeting that challenge is located in the following by LaRouche:

Mankind’s existence is based on the fact that mankind is the only species of which we know, which has the willful power to increase the energy-flux-density of life as a whole, on our planet Earth, and beyond.

—Lyndon LaRouche, September 30, 2011 broadcast

The multiplicity of crises which have swept the world since the outbreak of the COVID-19 pandemic points to failure of using our power to increase the energy-flux density of life as a whole on our planet. And, indeed, looking beyond the Earth, we see even greater threats, such as asteroid strikes and space weather. These common threats to the planet motivated Lyndon LaRouche to call upon nations to join in a “Strategic Defense of Earth,” to cooperate in the frontier areas of space exploration and thermonuclear fusion and to make the scientific and technological advances to defend the planet.

Such common aims of mankind have often been expressed by those men and women who have gone into space, as did Apollo 11 astronaut Michael Collins:

I really believe that if the political leaders of the world could see their planet from a distance of 100,000 miles their outlook could be fundamentally changed. That all-important border would be invisible, that noisy argument silenced. The tiny globe would continue to turn, serenely ignoring its subdivisions, presenting a unified facade that would cry out for unified understanding, for homogeneous treatment. The earth must become as it appears: blue and white, not capitalist or Communist; blue and white, not rich or poor; blue and white, not envious or envied.

—Michael Collins, Carrying the Fire: An Astronaut’s Journeys, 1974
The potential is there. At this very moment, leading nations, including the United States, Russia, China, India, and Japan, and the European Union and others, are on their way to the Moon and Mars—this year! We see that Mankind is in the process of building out, in both cooperative and competitive ways, the beginnings of an interplanetary space infrastructure platform for mankind.

In 2019, LaRouche PAC released a pamphlet, *We Commit to the Moon-Mars Mission*, which develops in detail why a 50-year, international crash program for lunar industrialization and Helium-3 mining, the development of fusion-powered space flight, and Mars colonization will be the most important driver for the U.S. and global economies.

A Space CCC: Rebuilding a National Workforce of Rising Productivity

With that mission in mind, now look at the potential for a dramatic increase in the participation of our workforce in the space program, with a special emphasis on the younger generation.

Just as President Kennedy’s Apollo project transformed our economy in the 1960s, President Trump’s Artemis project, with the stated goal of landing a man and a woman on the Moon by 2024 and developing the technologies to go to Mars and beyond, must become one of the key drivers for the reconfiguration of our workforce.

During the Apollo project mobilization of the 1960s, 35% of our workforce was productively employed (as opposed to 15% today). With 400,000 people working on the Apollo project, and 4.4% of our budget devoted to space (instead of 0.48% today), the economic return to our economy was estimated to be $10 for every $1 spent.

As then, a space program is where the nation’s leaps in productivity and future lies, and unleashing it is the mission of Artemis, which must be fully transformed as the leading edge of a nation-building revival, vectored once again toward unparalleled rates of scientific and technological progress. The Artemis program can and must be fully conceptualized as a daring, multi-generational project to colonize the Moon and Mars.

Project Artemis is not only vital for the nation and the world as a whole, but it must become a critical component in rescuing our young people from the no-future, zero-growth, hedonistic culture of today. This is reflected in a 2007 National Research Council report which said,

Students need to believe that what they are doing will contribute to compelling (even transformational) scientific or engineering research and/or contribute to an important national goal such as space exploration. The goals need to be viewed as real and stable and as having the potential to contribute to important advances in a meritorious field.

What are we giving our younger generations today? The millennial generation (ages 23-38) numbers approximately 56 million, and the following Generation Z (just beginning to enter the workforce) numbers 32 mil-

AMPed NH/Desiree Crossley

*A student in Nashua Community College’s precision machine tool teaching lab, Nashua, New Hampshire.*

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U.S. Army Reserve/Corey Beal

*Equipment maintenance training in the U.S. Army Reserve.*
lion. That is about 90 million people, more than half of the workforce. Does anyone think that we are “firing their imaginations” with jobs in the hospitality “industry,” rideshare jobs, or growing and selling legalized pot?

Rebuilding and rapidly transforming the U.S. economy today, to fully participate in creating this “interplanetary space infrastructure platform” for tomorrow will require the development of today’s and tomorrow’s workforce in many creative ways:

We will increasingly be working with those aspects of nature that lie in the micro-physical and macro-physical domains, requiring an increasingly sophisticated reliance on instrumentation that extends beyond the reach of our five senses. This includes, emphatically, the study of living processes and their applications.

Our workforce will be working with much higher energy-flux densities which require increased precision and sophistication in instrumentation and machine tool design and applications. The concentration spans must dramatically increase. The recent statement by a Pentagon spokesman that the United States needs a “precision manufacturing capability” only indicates the scale of what is required.

As we know, the cultural level of our workforce, and the communities from which they are drawn, must be dramatically and joyfully “up-shifted,” to reflect a growing mastery and celebration of the creative capabilities in each person. This requires, as Lyndon and Helga LaRouche have developed, a conscious return to Classical cultural principles. These qualities will necessarily be reflected in the growth and development of our families and family life.

This requires that we mobilize the potential which exists in the young. We must “fire their imagination.”

First Tier

The first tier of a modern day “Space CCC” can draw again on the model of the original Civilian Conservation Corps (CCC) program of the 1930s and early 1940s.

Looking back at the original CCC’s lifespan (1933–42), there are admirable aspects of the program which could be imitated today. The New Deal CCC effort put a total of 3 million young men—between the ages of 17 and 28—to work, over the years from 1933 to 1942. An average of 300,000 people per year went through the one-and-a-half-year program, with the peak reaching 500,000. This was approximately 5% of all young men in that age range. The enrollee’s family had to be receiving some form of government financial assistance to qualify. It became, at the time, the most popular government program by far.

Today, there are about 30 million Americans identified as between the age of 18 and 24 years of age. So a similar “first tier” program with a scope similar to that of the 1930s might enroll 600,000 a year. Because this time women will also be enrolled, the program would encompass 1 million or more. That would require between 5,000 and 6,000 campuses, with facilities, multiple skilled LEMs (what the CCC called “locally experienced men”) assigned to each facility, and 10-20,000 teachers, along with staff and logistics providers.

This time campuses could be urban as well as rural based, with significant educational and cultural components, and collaborate with community-based organizations. This “first tier” would play a vital part in building out a new national infrastructure platform for our nation, and participants can be expected to deploy as productive cadre in building up modern healthcare and food production systems in developing countries.
Many will also go on to become part of our advanced high-tech workforce.

As in the 1930s there are advantages to locating Space CCC campuses near work projects. Additional training and broader educational and cultural programs would occur at the facility or nearby. Otherwise, there is too much time wasted and attention spans lost. The initial mapping of prioritized infrastructure projects, urban and rural, will therefore be important, and the logistics then worked through for siting of campuses. Adequate housing on site, as well as flexible study and training/teaching facilities would be required, making use of now-vacant manufacturing facilities, urban shopping centers and military bases, vacated farms, facilities in rural areas, and so forth.

Clearly the creation of a new CCC today requires that the cultural programs be developed, initiating programs that infuse young men and women with Classical culture, sparking through beauty a passion for discovery and creation. This would optimally include choirs in every campus with maestros, concerts, traveling performances involving the recruitment of well-qualified theater groups, and scientist-pedagogues.

**Second Tier and the Machine Tool Principle**

What we might call a higher, “second tier” within an overall Space CCC, would be organized, not around workforce campuses, as might less skilled jobs training, but immediately around advanced training centers, those that exist and new “manufacturing and innovation centers” to be built. The second tier would address the young men and women who already have, or soon will have, a high school education or GED, and are ready to think about their future in terms of a career and technical education. NASA’s in-house training programs could provide useful insights. These programs would overlap with and be federally coordinated with existing and expanded apprenticeship programs, which would also need continued federal support and to be further incentivized.

At the core of this is what Lyndon LaRouche calls the “machine tool principle.” In a July 1997 address to a Washington audience, Lyndon LaRouche said:

> When you’re dealing with science, scientific discovery, when you discover an idea, you’ve got to prove it, haven’t you? You say, “I’ve discovered a solution to this problem.” Someone says, “Well, how can you prove it’s true, how can you prove it’s right? How can you prove it in nature?”

> So, you construct what’s called an experiment. It’s called a crucial, or proof-of-principle, experiment, to prove that nature works the way your discovery says it works. That’s called a Machine-Tool Principle. Now, when you take the apparatus, which you used to construct that experiment, you walk into a guy who designs machine tools, or similar kinds of products. This guy, having seen your experimental device—he probably helped you build the experiment—now says, “Look, I can design a whole group of new kinds of products, and new kinds of machine tools, on the basis of this discovery which you demonstrated, by looking at your experiment, understanding your experiment, I can see how to build a whole new class of products and processes out of that…” And that’s the way it works. You combine the development of the mind, with the development of the products and processes, which the mind’s discovery of principle has devised. And that’s how you produce—that’s called scientific and technological progress.
Re-creating a base of skilled machinists is central to this.

What might our Moon/Mars Mission and the broader, renewed national manufacturing base require? There are currently 469,000 machinists working in the United States, according to the U.S. Labor Bureau of Statistics, for example, with a median income of $45,750 ($22 per hour). We are intending to bring back critical supply chains, build 21st Century infrastructure, and build up the high-tech manufacturing base of a U.S. “full set” economy. In the short term, if we were to triple this number of machinists needed for such efforts, what would that involve? This would require training an additional 800,000 motivated men and women in at least an initial two-year professional machinist program, over a decade at most. They would already need a high school education or GED, and have a serious interest before entering these programs. There would then be continued on-the-job training, and opportunities for additional certifications and advanced work.

If this initial “burst” effort to produce 800,000 young, new qualified machinists was to be completed within approximately a seven-plus-year period (for example), this would require approximately 125,000 students entering the program each year and successfully completing the program in two years. Multiply that by similar advanced programs for engineering techs, nurses, welders, and plumbers.

How do we recruit people to such jobs? One skilled machinist and teacher explained that the biggest hurdle in getting students interested is convincing them that the work is not dirty, hot, and physically hard. Because people have the idea that this is like working as a car mechanic or otherwise working in a shed, this teacher’s community college program has been able to fill less than 50% of the available training program positions. But, once a student starts the program, he or she quickly get hooked by the process of learning the skills, problem solving, and creating.

This gets back to the national and international mission.

In galvanizing a full-stop Moon-Mars colonization effort, led by Presidents Donald Trump, Xi Xinping, Vladimir Putin, Prime Minister Modi and others, we will thus provide the missing ingredient to our global workforce quandary.

There is no trade-off among space exploration, feeding the world, and ensuring healthcare for all of humanity! What is required is leaps in physical productivity—waves of “spin-offs” propagating throughout the entire world economy. This in concert with optimistic waves of up-shift in the cultural life of our societies.

That is, inspiring all of our youth to become the newly upgraded workforce of skilled high-tech machinists and electricians—as well as engineers and scientists—that we require. We can, in accomplishing this, also inspire our parents and grandparents with newfound hope for our nation’s future and our place in the world.

CHAPTER 7

A Hamiltonian Credit System for Development

We will generate the investment credit necessary to carry out the job creation program outlined in this proposal through the American System of economy, rather than continuing with the suicidal policy of trying to bail out a $1.8 quadrillion speculative bubble with endlessly increasing quantitative easing and other bankers’ bailouts at taxpayers’ expense.

The American System was founded on the knowledge that human invention and creative ideas are the source of wealth; they represent the human capacity to understand the laws of the physical universe and to act on them, more powerfully with every new discovery of those laws. The American System of economy appeared as early as the 17th Century Puritan colonists of the Massachusetts Bay republic. It directly opposed the British free trade system which destroys us today, which teaches that wealth comes from advantage in trade (buy cheap, sell dear) and financial speculation; the Physiocratic system, which peddles the superstition that wealth is simply ownership of land; and the
socialist idea that wealth comes simply from physical labor.

No, said the brilliant first American Treasury Secretary Alexander Hamilton: Wealth is the product of human invention which has been provided with credit to become new machinery, a new form of power or chemical process, a new tool. Hamilton’s idea that the purpose of banks is to “put the savings of the nation in the hands of those able to use it most productively,” created commercial banking in America. His creation of national banking enabled a bank, acting between the government and private banks, to leverage the savings of the nation for years into the future, as national credit for manufactures and infrastructure. Hamilton’s Report to Congress on Manufactures was the first appearance in America of the full intention that the United States would become a great manufacturing nation, not a playground where European financial speculators prey upon impoverished American farmers.

British monetarism inculcates the idea in the credulous that money has a value in itself. The modus operandi is to corral the power to create money in central banks, controlled by private banks and private financial concentrations, which can use that power to indebt not only entire industries, but governments as well. And when private debt speculations collapse, print large volumes of money to paper over the losses, and thereby further indebt the population. When a large speculative bubble collapses, the central bankers’ job, in a British monetarist system, is to inflate the next, larger speculative bubble. They’ve been doing it for centuries wherever they’re allowed to.

The late Lyndon LaRouche identified the characteristic of this system with his “Triple Curve: A Typical Collapse Function” (see Figure 1). Physical economic production is suppressed in this process, and declines in real terms, while the volume of debt and other financial aggregates increases at an increasing rate; and money (“monetary aggregates”) is printed (electronically or otherwise) at an accelerating rate to pay at least part of debts which are tending to collapse. When these curves become hyperbolic, and particularly when money printing starts to accelerate its rise even faster than debt (“financial aggregates”), while the physical economy plummets, the financial system crashes.

We are going to reverse that disastrous pattern.

The recovery from this deep, global crisis requires the United States to return to the policies of Alexander Hamilton, which made America the world’s leading industrial nation. Hamilton’s policies were employed over 150 years during great crises, not just by Presidents George Washington and John Quincy Adams, but also by Presidents Abraham Lincoln and Franklin Delano Roosevelt, each time lifting higher the American economy—and, in FDR’s case, the economies of several other nations as well.

LaRouche’s ‘Four Laws’

The great economist Lyndon LaRouche applied the American System to industrial and agricultural development of the planet, for more than 60 years until his death in 2019. In a 2014 work he specified it in four fundamental policies:

1. Restore the Glass-Steagall Act to break up the immense “universal banks” in the orbit of the City of London and Wall Street, and put the entire speculative bubble—today exceeding $1.8 quadrillion—through bankruptcy reorganization (see Figure 2, World Financial Aggregates).

2. Establish Hamiltonian national banking to provide credit for recovery, for example, by nationalizing the Federal Reserve and taking it out of the hands of the private financial predators who run it today.
3. Direct credit to develop new-technology economic infrastructure and technologies that increase the energy- and power-density of production, working closely with other sovereign nations on such global infrastructure projects.

4. And finally, launch “science drivers,” including scientific crash programs for advanced fission and fusion power, and exploring the Moon, Mars, and the Solar System.

To launch this great mobilization, the United States President and Treasury should start by nationalizing the Federal Reserve Bank, consolidating their direction of the Federal Reserve as a Bank for the economic purposes of the United States—not Wall Street and the City of London.

Then the purposes for which the Fed now prints and issues currency—bailing out financial markets and the biggest banks, acquiring vast hoards of financial assets to prop up their value—will be ended by the new direction of the nationalized bank. Corporations can be set up within the Federal Reserve, not to continue speculation, which must simply be wiped out, but to provide credit to infrastructure, in particular health infrastructure.

The nationalized Federal Reserve, or new Hamiltonian National Bank, will act as the credit channel for new economic infrastructure built nationally, including by buying the infrastructure bonds of states and municipalities.

And whereas the Federal Reserve is now providing nearly half a trillion dollars in loans (“swaps”) to foreign central banks, the new bank will instead provide credit for the export of capital goods—especially for the building of hospitals and public health infrastructure in developing countries. It will do this in joint credit operations with the development banks of China, Russia, Japan, India—this will be a new international credit system as President Franklin Roosevelt intended the Bretton Woods system to be after World War II. And the nationalized Federal Reserve can also provide capital to the United States Export-Import Bank and other agencies that are supposed to help build health, energy, and agriculture infrastructure abroad.

In the United States, we will develop the “science drivers” to accelerate the inventions and breakthroughs in technology and lift the economy to a new level while reindustrializing it. This means doubling NASA’s budget immediately for the mission to return to and develop the Moon in order to go on to Mars. We will finally bring the laser-machine-tool revolution into our industry. Within a few years we will be producing advanced nuclear reactors, inherently safe and made in small modules to site throughout North America and abroad, and using them also for desalination against drought. We will electrify the railroads and make them high-speed—soon magnetic levitation—rail corridors.

The big banks won’t like losing the Federal Reserve that has always backstopped Wall Street speculation. But we will have to break up those banks by reinstating the Glass-Steagall Act to put them through bankruptcy reorganization. We will need “clean” commercial banks that are not in the business of speculating and broker-dealing with depositors’ funds, but rather, commercial banks that can work with the nationalized Federal Reserve to provide the loans to designers, builders, inventors, and staffers of this new infrastructure for human life.

These actions—domestic scientific and technological development, and international cooperation in building new world public health infrastructure and a “world land-bridge” including high-speed rail—are the means to create many millions of new, productive jobs, 50 million such jobs over a decade. They will transform the knowledge, skills, and occupations of the American workforce in the direction of rising productivity, improved standard of living, and increasing power over nature.
We have come to the point where the citizens of the United States need to recall the best tradition of their history: the American Revolution, the War of Independence against the British Empire, the principles expressed in the Constitution and Declaration of Independence, and the principles of the American system of economics as developed by Alexander Hamilton, Henry Clay and Henry C. Carey.

The essence of all these aspects of U.S. history is very clearly stated in the Preamble to the Constitution:

We the People of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defense, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America.

This intention of the Constitution, expressed in the preamble, to promote the general Welfare not only for the present generation, but also for all future generations, contains an implicit rejection of the so-called “shareholder value” policy and the unbridled free trade of globalization, promoted then and now by the British Empire, which has not only widened the gap in the United States itself between a caste of increasingly rich billionaires and the growing numbers of impoverished, but is also responsible for the catastrophic underdevelopment in so-called developing countries.

Clearly, the world will never return to the status quo that existed before the coronavirus pandemic broke out. We are at an absolute turning point in history, where we will either be able to put the world in order with the program we have outlined in these pages, to defeat underdevelopment, or we are threatened with plunging into a dark age. The phase of unrestricted globalization—which the protagonists of a unipolar world have attempted to implement, in particular after the collapse of the Soviet Union in 1991, and which led to a global wave of protests, including the election of Donald Trump—is over for good.

Lyndon LaRouche had forecast the catastrophe now unfolding before our eyes in all its aspects, from his characterization of President Nixon’s disastrous destruction of the Bretton Woods System in 1971 and his forecasts of the danger of pandemics resulting from the monetarist policy, to the systemic collapse of the financial system. During the same time, spanning half a century, he presented an unprecedented number of solutions for overcoming the crises in the United States and internationally, and it is in that same spirit that the program herein has been conceived.

Any honest person who reads these analyses and programmatic proposals today, in light of the current pandemic and the destruction of the real economy, will conclude that Lyndon LaRouche was a man of providence. The idea of providence is not meant here in a strictly religious sense, but in that his entire method of thinking was so highly in accordance with the principles of the physical universe, that his analyses and creative proposals were of a tremendous, almost prophetic precision. He thought and worked “in tune” with the intention of the universe, and if correctly understood, of the Creator.

Therefore, the greatest crime committed against LaRouche by his unjust jailing and lifelong vilification by that same McCarthyite apparatus that is responsible for the ongoing coup attempt against President Trump, is not only the outrageous injustice done to LaRouche personally, but above all that it has made it extremely difficult for Americans and others around the world to have access to these solutions. In many ways, the enormous hardships that the population now endures, due to the combination of pandemics and the economic crisis, are the result of the political persecution of this extraordinary thinker.
And unfortunately, his warning that no one would be safe if his persecution were tolerated has been borne out. When one considers, for example, how General Michael Flynn has been and will be prosecuted, the famous quote by Martin Niemöller comes to mind: “When the Nazis came for the Communists, I was silent; I wasn’t a communist. When they locked up the Social Democrats, I was silent; I wasn’t a social democrat. When they came for the trade-unionists, I was silent; I wasn’t a trade unionist.”

It is past time for Lyndon LaRouche, the man and his ideas, to be fully exonerated, and I personally call on President Trump to do so.

But Lyndon LaRouche’s ideas are alive, as this program for the creation of 1.5 billion new, productive jobs worldwide underscores. The United States has now reached a breaking point in its history, where the ideas in the tradition of the pledge of the U.S. Constitution will be realized, or the financial reconquest of the American colony by the British Empire will plunge the entire world, together with the United States, into a dark age.

This is the time when the demand that Nicholas of Cusa—who had already laid the foundation for the American Republic back in the 15th Century with his works—set out in his *Concordantia Catholica*, has become a question of survival for the entire world. He established that the only legitimate basis for a nation’s existence is its commitment to the common good of all nations, and to such a relationship among all nations. Precisely that was the intention of Benjamin Franklin, of the U.S. Constitution and the Declaration of Independence against the British Empire. It was also the foreign policy conception of President John Quincy Adams, that the United States should be part of an alliance of completely independent sovereign republics, linked together by a common idea, and that America was not called upon to “go abroad in search of monsters to destroy.”

The key to building such an urgently needed alliance today is positive cooperation between the United States and China. The coronavirus pandemic has made it undeniably clear that the hollowed-out combined industrial capacity of the global economy is nowhere near sufficient to feed and to sustain in dignity the world population today. Cooperation between the two largest economies in the world is therefore an essential prerequisite for overcoming the impact of pandemics, starvation and poverty in Africa, Latin America, parts of Asia and even regions in Europe and the United States.

Although, thanks to the manipulations of the British secret services and Anglophile politicians in the U.S., a great deal of damage has been done to the U.S.-China relation through the “blame game” regarding the origin and handling of the Coronavirus, and although the current “China-bashing” evokes the darkest memories of the McCarthy period, constructive cooperation between the United States and China not only is absolutely possible, but also points the way toward a new era in human history. This era must be characterized by the overcoming of geopolitics, and the promotion of the general welfare of all nations on this planet.

Given the existential problems that many people in America are facing due to the pandemic, there may not be much public awareness of the huge gap that exists between the image the United States enjoyed in the world at the time of the American Revolution and during the presidencies of George Washington, John Quincy Adams, Lincoln or Franklin Delano Roosevelt, and the United States that has waged endless wars throughout the world since the end of the Soviet Union under the Bush and Obama administrations. America was once regarded by all republican circles around the world as a temple of liberty and a beacon of hope, as a country whose Constitution served as a model for republican aspirations in many countries around the world. But the admiration and friendship gave way during the Bush and Obama Administrations to fear, or worse, U.S. military power.

It is five minutes to midnight to deliver on the promise for a constructive relationship with President Xi Jinping and China that emerged in the early days of the Trump Administration. Given the complete discrediting of “Russiagate” and the likely legal proceedings against the British-inspired coup plotters, nothing stands in the way of constructive cooperation between the United States and Russia, as has been indicated between NASA and Roscosmos. If the U.S. now takes the lead in the economic reconstruction program and the creation of 1.5 billion productive jobs in the world, and helps to make the New Silk Road become the World Land-Bridge, then the United States will regain the place it once had in the eyes of the whole world: as a pioneer of freedom and hope for all mankind.