## III. Build, Build, Build!

### KNITTING THE NATION TOGETHER—

# From Portland to Minneapolis: Build It, Don't Burn It

by Brian Lantz

I think ... that the wild lands of the country should be distributed so that every man should have the means and opportunity of benefitting his condition.

—Abraham Lincoln, reflecting on the proposed Homestead Act

Oct. 16—Consider the terror that has been orchestrated in Minneapolis and then the similar horror show in Seattle and Portland. Then consider the vast tracts of farmland and also vacant land in between these "bookends." How shall we transform this entire northwestern portion of our United States, to aid in integrating our nation once again into a productive whole?

Hint: We walk in the footsteps of such as John Quincy Adams and William Tecumseh Sherman.

The answer: With rail, energy, water, man-made climate change, new cities—and more people! Such an approach will most definitely Make America Great again in a second Trump Term.

During 16 years of *deindustrialization* under George W. Bush and Barack Obama, tens of thousands of U.S. factories closed. Family farms were lost. Industrial jobs were lost. Millions of Americans were left to suffer and die. Whole areas of the country that should long ago have been developed with modern industry, infrastructure, and farming were left to decay.

Part of this horrific nightmare is that U.S. transportation routes and logistics became obsessively focused on projects that served the new era of *globalization*. This included the north-south NAFTA transportation route, as well as projects associated with imports, such

as Coastal Ports of Entry and the movement of goods into the interior along truck and rail routes.

What became lost, what was discarded and deliberately allowed to decay and disappear was any notion of the *development of the nation*. The concept of *corridors of development* completely dropped from the picture, with the exception of a few transcontinental freight routes and the orphaned AMTRAK. The national development commitment of Abraham Lincoln's Transcontinental Railroad was jettisoned.

A 2002 *EIR* Special Report, featuring Lyndon La-Rouche's paper, "Special Report: U.S. Science and Infrastructure," documents the take-down of much of the U.S. national rail system, including regional railroads, during the 1980s and 1990s. As a consequence, we have been left with the infamous "fly-over states," occupied by Hillary Clinton's so-called "deplorables." "Fly-over" indeed, as there is relatively little in between the Pacific and Atlantic Coasts, except what's hugging the Great Lakes, and the Third Coast, the Gulf Coast.

Of course, the "West-North Central States" are regarded as constituting the core of the nation's "Farm Belt." Formally, seven states compose the division: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. Here, however, let us allow our eyes to shift a little further westward, and let us consider what we might call the "Northern-Western" states as a whole, roughly that "empty" space lying between the railroad hubs of Minneapolis/Chicago and the West Coast dystopia of "Cascadia"—Seattle/Portland/Vancouver, British Columbia.

These are sometimes called the "Northern Plains States," but that term does not usually include Montana and Idaho. These "empty" states were originally linked

FIGURE 1
The Nine Nations of North America



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by J.J. Hill's Northern Pacific Railroad, and much of it historically was known as "The Dakota Territory," stretching down into Wyoming. There is not even a name for this region. *The Nine Nations of North America* (1981) simply terms it "The Empty Quarter," as shown in **Figure 1**, a region extending up through Canada and including Alaska. As regarding this region of the United States and North America, the message is, "Nothing to see here; just move on."

Any time we, as a nation, really thought about the development of the United States, we thought about developing the country as a whole, as in the construction of East-West development corridors, or FDR's "Four Corners Project." In the last 75 years the only relatively recent example of this thinking that comes to mind is the building of the Interstate Highway System under President Eisenhower, God bless his soul.

A National Academy of Sciences report (2002) stated:

The most striking demographic feature of the basin is the twentieth-century exodus from rural to urban areas. Populations are declining in much of the region, in some cases dramatically.

During the 1990s, eastern Montana, for example, experienced a net population loss. Small net population gains in the Dakotas mask the fact that nearly all the population growth has been in the states' cities; most rural areas are experiencing population declines. Many areas in the upper basin are populated by fewer than six

people per square mile. North Dakota's and South Dakota's 1990-2000 population gains were among the smallest in the nation and eastern Montana experienced a net population loss. Population densities decrease as one moves upstream along the Missouri River. Montana, North and South Dakota, and Wyoming are the four least densely populated states in the contiguous United States. North Dakota's population growth of 0.5 percent in the 1990s was the lowest of any U.S. state.<sup>1</sup>

Here we jump off from Lyndon LaRouche's 2002 *EIR* report, the second half of which is reprinted in this issue of *EIR*. To develop that "empty space" between Minneapolis/St. Paul and Seattle/Portland is a national security priority for these United States, and to thus envelop and transform those metropolitan "bookends," now dominated by synarchist (anarchist/communist/fascist) oligarchic powers intent on tearing the nation apart.

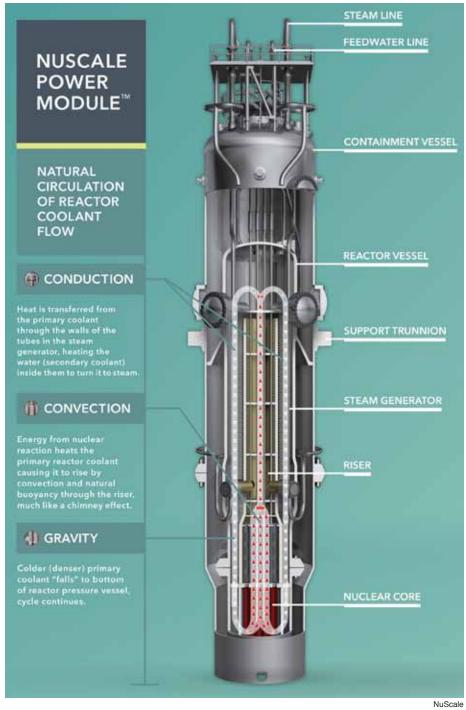
We point out five features—levers—for the development for the region that we identify here: Energy, Rail, the great Missouri River Basin, the Central Corridor, NAWAPA—and New Cities for more productive, creative people!

## Modular Nuclear Energy—A Public-Private Partnership

First, we must take happy note that the Idaho National Laboratory, one of the premier U.S. national science laboratories managed by the Department of Energy, will soon be the site of the first NuScale Power modular nuclear reactor module, tagged JUMP (Joint Use Modular Plant). The Trump Administration and NASA have made major commitments to developing small modular reactors (SMRs) for domestic use and international export, as well as for use in NASA's Artemis space program. The JUMP program itself will be dedicated to wide-ranging nuclear energy research, to improve the efficiency and reduce the time required for subsequent module deployments.

Think of the implications for the Plains States and beyond. Any review of state-by-state electricity con-

<sup>1.</sup> National Academy of Sciences. *The Missouri River Ecosystem: Exploring the Prospects for Recovery (2002).* The study was conducted at the request of the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers. The <u>report</u> has all the faults that such a shotgun wedding can be expected to produce.



NuScale's small modular reactor. The containment vessel is 76 feet tall and 15 feet in diameter. The reactor and containment vessel operate inside a water-filled pool below ground level.

sumption shows the "West-North Central" and "Mountain" States are among the lowest, in terms of <u>energy consumption</u>, for industrial and even just commercial and residential purposes. Assembly-line production of SMR's could be developed as a major high-tech indus-

try for powering industry and city-building in this vast region and for global export markets.

The NuScale/INL JUMP reactor module is only part of the "Carbon Free Power Project (CFPP)," a full nuclear power plant that NuScale Power and Utah Associated Municipal Power Systems (UAMPS) are committed to building in the mid-2020s, in conjunction with the Idaho National Laboratory (INL). INL is the nation's leading center for nuclear energy research and development. See the report, "Nation's First Small Modular Reactor Plant to Power Nuclear Research at Idaho National Laboratory."

Ironically, the state of Idaho has no commercial-scale nuclear power plant. In fact, the entire region is almost devoid of nuclear plants. There are none in Montana, Wyoming (coal states), the Dakotas, or even Colorado. The sole plant in Kansas is Wolf Creek. Nebraska is down to one plant, at Brownville, after the shutdown in 2016 of the Ft. Calhoun nuclear station in Omaha. Iowa also has one nuclear plant, the Duane Arnold Energy Center, as does Missouri at the Callaway Energy Center. In contrast, further East. Illinois has 11 plants—a great industrial potential. To the West, Washington State still has a nuclear plant, in Richland, and plentiful hydroelectric power, from the FDR era.

Under the JUMP program, twelve SMRs—60 megawatts electric each—will be constructed offsite and shipped to the plant located in the desert west of Idaho Falls. That is 720 megawatts total, including the first research module. Most Americans don't know that in the past, at the Idaho National

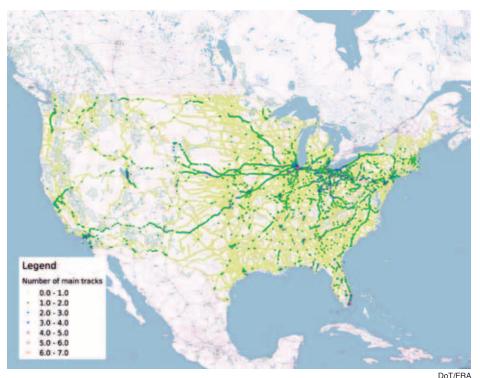
Laboratory, various organizations have built more than 50 reactors at what is commonly called "the Site," including those that gave America its first usable electricity from nuclear power, as well as the power plant for the world's first nuclear submarine. Although many are now decommissioned, these facilities are the largest concentration of reactors in the world <sup>2</sup>

In addition to existing shale and coal, nuclear energy is required to up-shift energy-flux densities for city-building. We are also going to need a lot of electricity to power a national electrified rail, which is long overdue. Modular nuclear reactors, such as those built by NuScale, create new flexibility. In addition, new large nuclear power plants can be constructed utilizing the existing "brown-

field" sites, where nuclear plants are already located, and which are already partially prepared for the siting of additional reactors. We can rationally phase out the extensive, wasteful wind energy throughout the entire Midwest, and likewise, phase out the completely wasteful ethanol production system that ties up so much productive agricultural land.

#### Rail—To Knit the Nation Together

Planning for the next fifty years, and with the intent of knitting together our nation, a dense, modern rail grid is necessary for and through this central region of the nation. Extended from the existing Minneapolis/St. Paul rail yards and those of Chicago, expansive rail de-



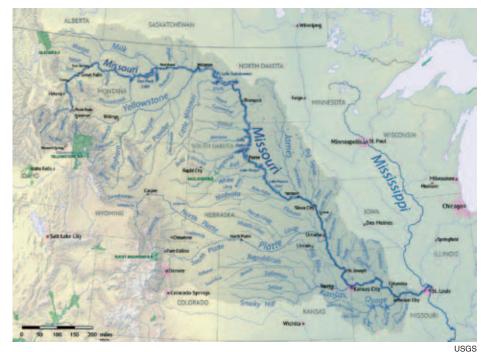
To adequately serve and develop the central region of the U.S., a dense, modern rail grid will have to be built. The so-called "empty quarter" is starkly revealed in this map of at-grade crossings of main railroad tracks, taken from the Highway-Rail Crossing Inventory in 2015.

velopment for passengers and freight through the Dakotas, Nebraska, Montana, and Idaho is a must. There they link to North-South rail lines up and down the West Coast and down the potential Central Corridor (discussed below). This perspective requires selected East-West high-speed rail routes, double- and triple-tracking to separate and expedite both future growing freight and future passenger traffic, and a coherent set of "local" lines fanning out through the region, as once existed.

The 2002 *EIR* Report, part two of which is reprinted in this issue of *EIR*, focuses on rail development, and the rail crisis which had by then emerged in the United States. The Report contains an entire series of maps in part one, reprinted in the October 16, 2020 *EIR*, which show the withering away of rail lines throughout these western states—freight, passenger and local—maps which are just as stunning today as in 2002.

The vast majority of today's rail infrastructure is single tracked, only allowing trains to travel in one direction at a time on segments of track that don't have passing sidings. Double and triple tracking are going to be very important to allow upgraded transport. Even

<sup>2.</sup> In collaboration with the Idaho National Laboratory, Utah's major utilities, and the Department of Energy, NuScale is going forward with plans for the production of commercial modular reactors. It has opened a London office and has an agreement with Ukraine's nuclear agency. Note also that Terrapower—Bill Gates' nuclear power company—wants to locate its first plant at the Idaho National Laboratory as well. Terrapower officially gave up on its partnership with China, given recent U.S. rulings against such technology-sharing. See an article on this here.



Having roughly one-fourth of the nation's agricultural land, the Missouri River watershed demands a Missouri River Basin Authority to fully realize the full potential of the 1944 Pick-Sloan Plan for flood control, irrigation, and hydroelectric power generation.

short of projected high-speed rail or maglev, such double and triple tracking is a necessity.<sup>3</sup>

# The Missouri River—Vital Resource and East-West Linkage

The Missouri River is the longest river in North America and the longest river valley. *This is a powerful, completely underutilized river!* Rising in the Rocky Mountains of western Montana, the Missouri flows east, a little bit north and then south-southeast to link to the Mississippi at St. Louis, Missouri.

The Missouri River was one of the main routes for the westward expansion of the United States during the 19th century. Covering over 500,000 square miles, extending across ten U.S. states, reaching into two Canadian provinces, and encompassing 29 Native American Reservations, the Missouri River Basin holds a wealth of natural resources, provides nearly half of U.S. wheat, a quarter of its corn, and holds a third of its cattle with an annual value of more than \$100 billion. With more than 170,000 square miles being farmed, the Missouri River watershed includes roughly one-fourth of all the agricultural land in the United States. However, only some 23,000 square miles of farmland in the basin is irrigated, largely by drawing on groundwater, so the potential for agricultural and development is enormous.4

Even Montana's irrigation water storage and distribution infrastructure is in many cases nearly a century old, and has become increasingly inefficient in storing spring runoff and delivering it to crops during the ir-

rigation season. The cost of maintaining and/or altering water storage and delivery infrastructure there is too high to be paid by local water users alone. In North Dakota, only 300,000 acres of land are actively irrigated, which is slightly more than 1.1 percent of the total cultivated land in the state. Irrigated land is only one percent of farmland acres in South Dakota. Downstream, in Mis-

<sup>3.</sup> The U.S. Freight Rail Network. Running on almost 140,000 route miles, the U.S. freight rail network is widely considered the largest and most cost-efficient freight system in the world. The nearly \$80 billion freight rail industry is operated by seven Class I railroads (railroads with operating revenues of \$490 million or more) and 22 regional and 584 local/short line railroads. See the Federal Railroad Administration's report, "The Freight Rail Network" here. A map of single-tracking is available here.

<sup>4.</sup> More information on the irrigation needs of the region, is available from the Bureau of Reclamation <a href="https://heres.ps.">heres.</a> Nebraska would seem to be the exception. By the end of 2007, Nebraska had a reported 8.5 million acres under irrigation, or approximately 13,281 square miles, the most in the nation. Today, 25 percent of Nebraska's harvested acres are irrigated. However, Nebraska is one of eight states that have access to portions of the High Plains Aquifer that extends from Texas to South Dakota. A set of <a href="maps">maps</a> and graphics show the saturated thickness of the aquifer, with Nebraska having a substantial area of more than 600 feet of saturated thickness. In total, over 65 percent of the water stored in the aquifer is located inside the Nebraska borders.

The Platte River is otherwise a major source of water for Nebraska agriculture, but overall use exceeds availability, and the use of ground water, or pumped water from the aquifer, depends on weather conditions. In a giant step backwards, the Nebraska State Department of Natural Resources and a number of local natural resource districts are engaged in programs to "bring consumption back to native supplies," which means retiring water uses, including irrigation.

See <u>Section H</u>, "Nebraska Agriculture Water Management Network," published by the University of Nebraska's Institute of Agriculture and Natural Resources.

#### FIGURE 2



A multi-modal concept showing an integrated highway, railway, and utility corridor, proposed by transportation engineer Hal B.H. Cooper, Jr.

souri, a majority of the water currently used for irrigation comes from groundwater sources. Kansas farmers are casting their gaze at the Missouri River, and have proposed the "Missouri River Aqueduct" which would extend 360 miles—about three-fourth the width of Kansas—to bring water to their dry counties.

However, the sustainability of irrigation in the Great Plains is otherwise threatened by soil salination and groundwater depletion.

Now is the time for a Missouri River Basin Authority! drawing on the never fully realized Pick-Sloan Plan of 1944. We have brought this to the fore again and again, most recently following the disastrous 2019 flooding of the Missouri River.

Irrigation and flood control: *The Missouri River reservoir system is the largest in the United States*, with a storage capacity of 74 million acre-feet and a surface area exceeding one million acres. From 1946 through the 1970s, important features of the Pick-Sloan plan were carried out, including five new "main stem" dams completed by 1966—Garrison, Oahe, Big Bend, Fort Randall, and Gavins Point. The six dams, built in Montana, Nebraska, North Dakota, and South Dakota, transformed one-third of the Missouri River ecosystem into "lake environments." In its entirety, the Pick-Sloan Plan planned for some 107 dams, 1,500 miles of protective levees, 4.7 million acres of irrigation systems, and 1.6 million kilowatts of electric

power. However, the irrigation and flood control systems envisioned under a "Missouri Valley Authority" or by the Pick-Sloan compromise were never developed.

The result has been, along with a lack of rational irrigation development, repeated and absolutely devastating floods. After the terrible 1993 Missouri Basin/Upper Mississippi flood, EIR News Service published a definitive report on the Pick-Sloan Plan titled, "No More Floods! Build the Missouri River Development Project," by Anthony DeFranco. After the terrible 2011 flooding in the same region, *EIR* reprinted the article in June 2011,—and again, a third time, in

2019. It is long overdue for national action.<sup>5</sup>

#### The Central Corridor

Onto a map of this region, overlay the proposal by transportation engineer Hal B.H. Cooper, Jr., PhD, P.E. He delineated a proposed Central Corridor Route as part of the World Land-Bridge. Coming down from Alaska and the Bering Strait, a U.S. route, integrating roadway, pipeline and utility lines into a single corridor, would come down through the Dakotas, skirting the Black Hills, going southward through Nebraska via Valentine and North Platte, proceeding into the Oklahoma Panhandle through Liberal, Kansas, thence into the Texas Panhandle and onward to Mexico. Cooper commissioned an artist's rendering of this "Central North America Land Bridge Corridor" (see **Figure 2**) as part of the World Land-Bridge.

Dr. Cooper was not talking through his hat. On September 28, 2020, a private-sector proposal was endorsed by U.S. President Donald Trump to build a railway from Canada's oil sands to ports in Alaska. President Trump wrote on Twitter over that weekend that he would issue a permit for the "Alaska-Alberta Railway Develor".

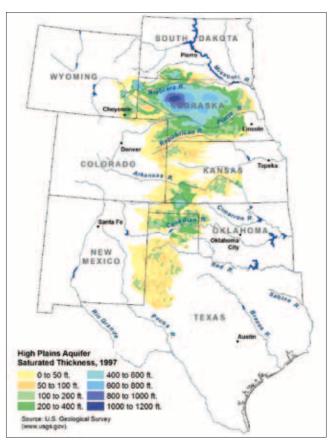
<sup>5.</sup> The full *EIR* report is available here. Also see "Midwest Flooding Is National Emergency: Space-Age Mobilization Required," in *EIR*, Vol. 46, No. 16, April 26, 2019.

For the Missouri Valley Authority (1949), see <u>Senate Remarks</u>. <u>Here</u> is a map of Missouri "Main Stem" Dams.

FIGURE 3

#### Mid-Continental Trade and Transportation Corridor





Mankind's future water supply depends on creating new sources of freshwater, through large-scale, inter-basin water transfers, desalination, managing precipitation, and less dependence on subsurface aquifers such as the High Plains Aquifer.

opment Corporation (A2A Rail)," a project to move Alberta crude 1,600 miles (2,570 km) to the Alaskan coast, as well as freight in the other direction.6 In the 2002 EIR Special Report, "LaRouche's **Emergency Infrastructure Program** for the U.S.," the natural "Central Corridor," down through U.S. is shown. The regional maps of that corridor are available in EIR, October 25, 2002, page 23, which were part of the late Hal Cooper's presentation in the full 2002 report. Cooper's plans included a number of possible water transfer projects.

By way of further background, see the schematic, **Figure 3**, of the national "Mid-Continental Trade and Transportation Corridor" (rail is in green), proposed in the context of the NAFTA heyday and still

only partially built. As Lyndon LaRouche and Dr. Cooper recognized, a World Land-Bridge will ultimately link all of the Americas from North to South, making a major contribution to the United States.

#### **NAWAPA**

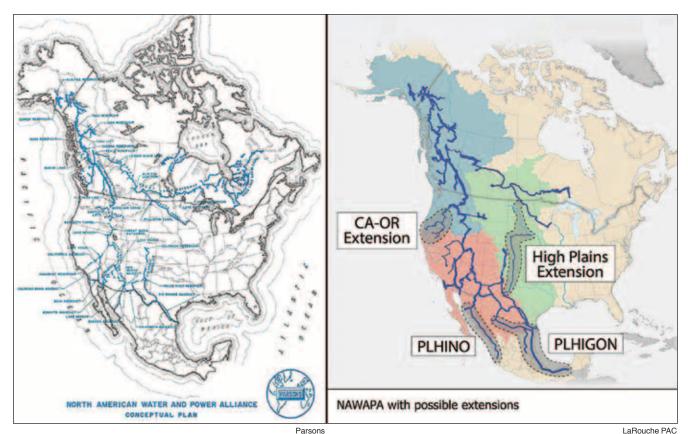
Now overlay NAWAPA, right over energy, rail, the Central Corridor, and the regional water development of the great Missouri River Basin, including tributaries. One can begin to see the outlines for the rich development of this entire "empty" western region of the U.S. One begins to grasp how such a vast upgrading of physical-economic development will impact and transform the beleaguered "bookends" of St. Paul/Minneapolis and Seattle/Portland.

What was done to create California is a relatively small case study for what can be done throughout the entire western half of the North American continent with the North American Water and Power Alliance (NAWAPA).<sup>7</sup>

About 10 times larger than the California projects in terms of water delivered and land area affected, the original 1960s design of NAWAPA done by the Parsons Corporation would have diverted a fraction, in the

<sup>6.</sup> See here and here.

<sup>7.</sup> See the article, "The Nuclear-Thermonuclear NAWAPA XXI" in *EIR* Vol. 40, No. 34, August 30, 2013, pp. 4-15.



At left, the original 1960s conceptual plan for the North American Water and Power Alliance (NAWAPA). Adding nuclear power for pumping, makes possible a number of extensions to the original plan.

range of 10-20 percent, of the massive freshwater runoff from the Northwest to the south as far as Mexico, and to the east as far as the Great Lakes. Over decades, Lyndon LaRouche and our movement have improved upon and campaigned for the implementation of an upgraded NAWAPA program, utilizing nuclear power, and featuring extensions to bring additional water to California, the Great Plains states, and Mexico.

With the use of nuclear power for pumping, additional extensions to NAWAPA are more feasible, including bringing water east, into the central region of the continent with the Great Plains Canal, feeding most of Nebraska, the western regions of Kansas, and down into Oklahoma, and Texas (where the Ogallala Aquifer has long been overdrawn). For more on this, see Benjamin Deniston's 2013 article in *EIR*.

Hydrologists have studied how to make the core NAWAPA plan coherent with the Missouri-Mississippi basins—to augment the flow in these rivers during drought and to divert the flow westward when the rivers are flooding, as has been a continuing problem.

As to management of the Water Cycle, beyond building these large-scale, inter-basin water transfer projects, the necessary future of mankind's water supply is the management of the water cycle in general, which depends on creating new sources of freshwater through desalination, and managing the precipitation of water in the atmosphere through ionization techniques. These are truly space-age endeavors, but they will utterly transform the harsh climate of the Plains region.

#### **New Cities!**

There are no big cities in the entire region. Billings, Montana, is the largest and has about 110,000 people. Bismarck (about 73,000) is North Dakota's capital and the largest city in the middle of that state.

Given the smaller population of the region's existing cities, and given their existing locations along rivers, and existing railways and highways, it might be wise to consider taking two or three of these "cities" and transforming them into New Cities, such as "science cities."

Modular nuclear reactors will be critical to such a city-building process, as they can "scale up" as requirements grow. The nuclear energy industry and its off-shoots can also be an important high-wage and high-skill employer, as briefly discussed in the NAWAPA section, above.

This would have an appeal to the local city boosters and such a collaboration would be beneficial to all. As well, the complexities of laying the underground infrastructure and building of additional educational and cultural complexes, in and around these existing, core city centers, would be generally welcomed and relatively simple compared to a re-do of the "old" and big cities located on the east coast and on the Great Lakes. Much planning could be a matter of "adding onto," and "surrounding" the existing inner city/town layouts, given their existing small dimensions. Hospitals can be added, research facilities and major schools and training centers. It is to be noted that most cities are located on plains and near water—or where water can be delivered.

Existing city cores would remain integrated as the central cultural, dining and shopping area,—the center of social life and upgraded over time. Industry would be added on the outskirts, and additional residential communities with their K-12 schools and amenities located in-between the city core and the industrial perimeter. This will likely produce a rapid doubling, tripling, or quadrupling of their populations over a period of a few decades. Throughout the region there are multiple Indian Reservations, and so there will be new aspects to economic development and city building here, and new

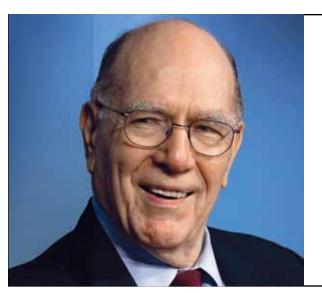
concepts brought to the table by the Native American Nations and communities.

Urban density is a very positive thing for cities and the world. This is particularly true for medium-sized cities, which are better at generating physical wealth while providing jobs, recreation, relationships, and good services to its citizens.

This is not to rule out totally new cities, but perhaps, starting with the small existing cities in the region would be a good way to get some practice! There are still many, many questions to be answered, but if we cannot answer them, how will we ever manage to colonize the Moon or Mars?

How do we knit—or re-knit—the entire Missouri Basin region together? Consider: today virtually the only "manufacturing" concentrations in the entire Great Plains region are slaughterhouse and meat processing facilities, from North Dakota down through north Texas, most of which is already technologically backward. By building up nuclear-powered energy capacity, the rail network, and water projects, we will call into being new manufacturing and create a 21st century advanced manufacturing sector,—to meet demand over decades to come

Where will rail lines, including high-speed rail lines, be sited? Billings, Montana is the jumping-off point going west for traveling through the Rocky Mountains. The next major stop for a high-speed rail would be Spokane, Washington, about 500 miles away. From there, Seattle and Portland are but a hop and skip away. How about going east?



The Jan. 27, 1989 Jailing of Lyndon LaRouche Defined an Era, Which Now Must End

Watch The LaRouche Case video
Watch the LaRouche Memorial video

**Sign** the **Petition** to Exonerate LaRouche at lpac.co/exonerate