

# Hamiltonian Credit To Link the Americas to the Belt and Road

This is an edited transcript of Hal Cooper's [address](#) to the La-Rouche PAC Manhattan Project Dialogue, on Saturday, Jan. 13, 2018.

**Hal Cooper:** I would like to talk today about how we can rejuvenate our infrastructure and I'm going to talk about how we can connect the continents to New York, the nerve center of the United States, and connect Europe and Asia to North America.



Schiller Institute

Hal Cooper

We have the Silk Road program, and interestingly enough, in the very pro-establishment *New Yorker* magazine there's a big article this week about the Silk Road. Just to give you an example that it's becoming reality, within the last year the number of freight trains going between China and Europe on a round-trip basis, ending up in Duisburg, Germany, has increased from 3 a day to 25 a day. And that shows how much additional traffic

FIGURE 1

Eurasian Railway Network

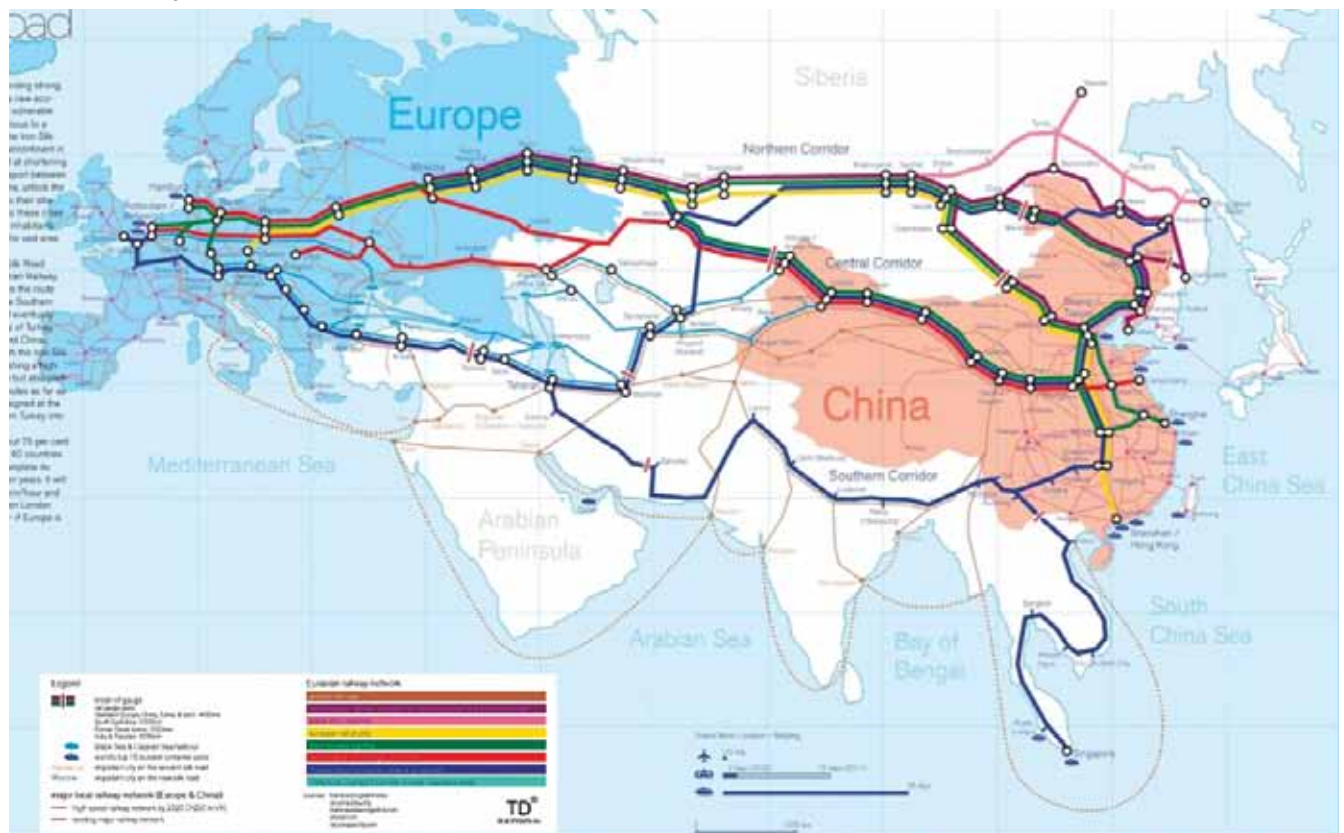
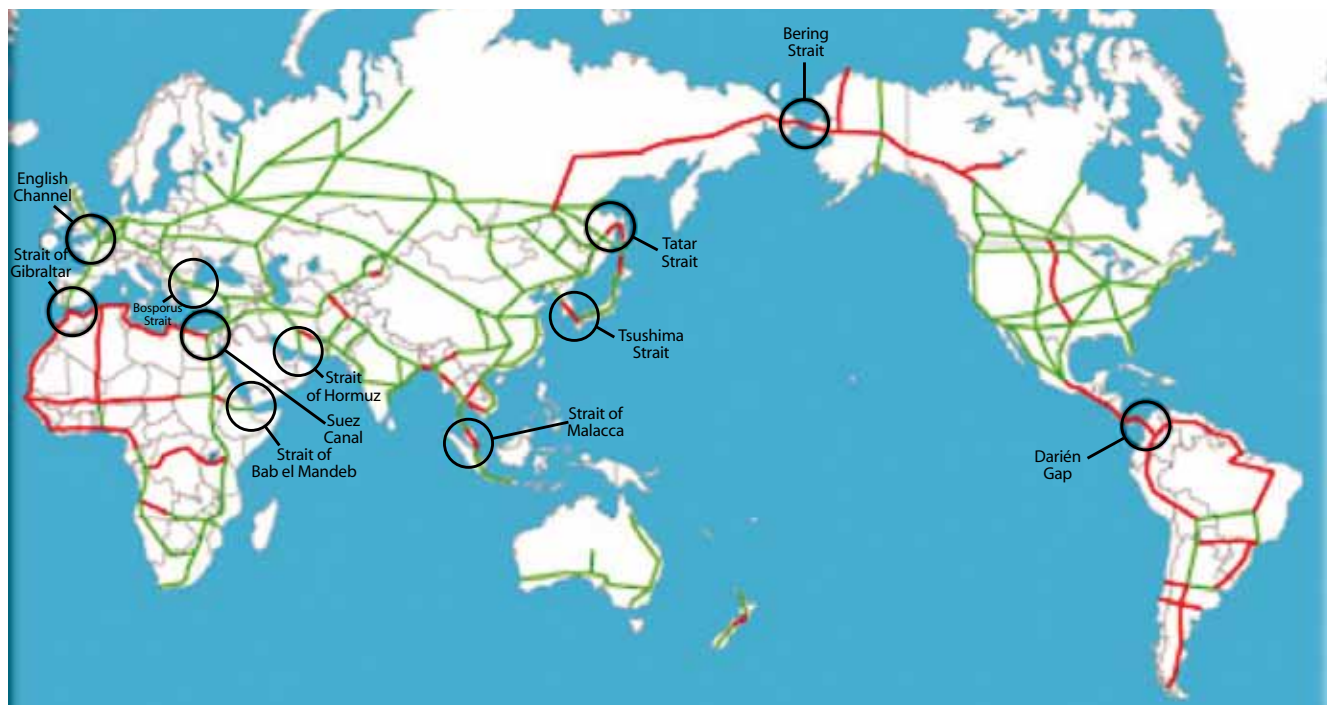


FIGURE 2

Proposed Intercontinental Connection Points for the Worldwide Railway Network



there's going to be, and that basically brings us more business and more economic activity, and more prosperity. China has very much taken the lead on this.

Unfortunately, we end up with more exports from China and more imports in Europe, and we need to balance that out, which means we need more manufacturing all over the world, including in Europe and especially here in the United States.

On this slide [Fig. 1], we see the Silk Road, the One Belt, One Road network as it is in Asia, and how it will be connecting to Africa, from a conjunction point on the rail line connecting Europe and Asia. There is already major investment in Asia from many of the countries—China and Russia in particular. One of these shown here is the Trans-Siberian Railway between Beijing and Moscow, where an almost 5,000-mile separate double-track electrified line is being built from Beijing to Moscow. This will make it possible to move freight and passengers between those two cities in two days or less, at speeds of up to 300 mph. Unfortunately, we are not doing this in the United States, and we're going to need to, if we want to ship things very quickly from point of origin to destination.

The Chinese high-speed rail system has over 10,000 miles of track now. Within five years it will be 15,000 miles of track, and rapidly building. The Chinese have

been utilizing an approach of building two parallel, electrified high-speed rail lines, one for passengers, one for freight, and later on in this presentation, I'll be talking more about that. That's a model we should be using in the United States. Unfortunately, our thinking on the subject of railroad building is not in a progressive mode.

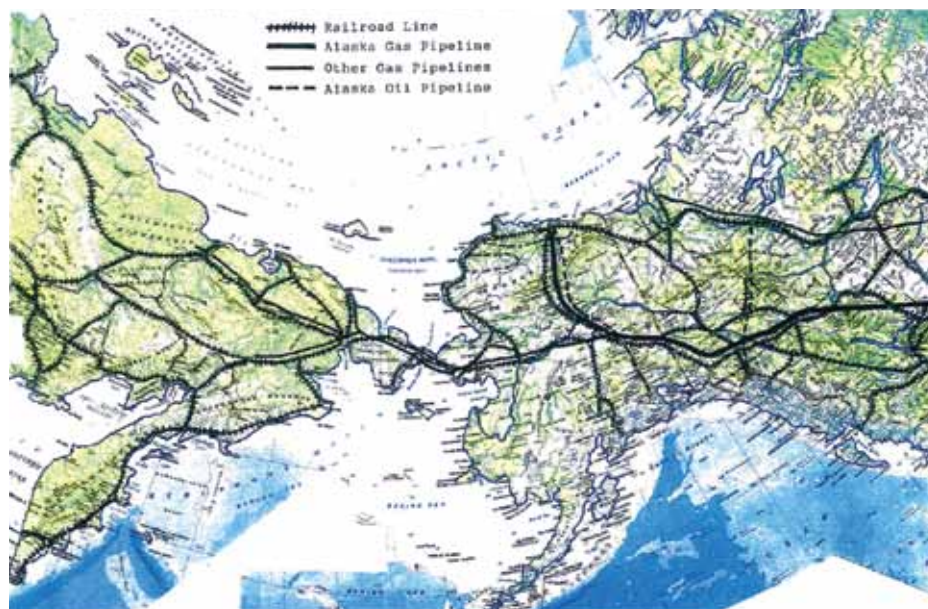
In the United States, private freight railroads received the highest mark for infrastructure because they have basically maintained their infrastructure. The problem is, that it is very limited, and sufficient emphasis is not put on passenger service, because they basically don't want passenger service. It's very narrow thinking, which is based entirely on the idea of 90-day profits, rather than 50 year sustainability, which represents the difference in economic thinking between the United States and China.

The next slide [Fig. 2] shows the proposal for the world railway network. It would connect all the continents of the world together, particularly between North America and Asia, and that involves the critical infrastructure at the Bering Strait with the Bering Strait Tunnel, and of course a number of other major junction points in the world. In addition, we need to connect North America and South America together, and that means the Darién Gap between Panama and Colombia. China is now beginning to make major investments in



FIGURE 3

**Proposed Bering Strait Railroad Tunnel and Natural Gas Pipeline Network**



Central America and in South America, to bring that about. I think rather than trying to build a wall between the United States and Mexico, what we really need to be doing is developing the infrastructure to improve prosperity at the same time that we make an all-out war on the drug gangs and crime. We can't just have safety while doing nothing to improve the economic conditions of these countries. There has to be a major effort to redevelop and develop the economies, not only in the United States, but also in Mexico, Central America, and South America, all at the same time.

### **Linking Russia and the United States**

This is the Bering Strait. [Fig. 3] We connect Alaska in the United States with Chukotka in Russia. I have been in both places. At the present time, western Alaska and Chukotka are devoid of a large population and there is not a lot of economic activity there. The thing that's missing is transportation. Now, there have been extensive studies done of connections to the Bering Strait Tunnel in Russia, but there's been virtually nothing done in the United States, with the exception of a feasibility study I did several years ago for the Canadian Arctic Railway, which sadly did not have the funds to go ahead with the project.

You can see these rail lines; you can see a loop around Alaska, and there are many resources there, oil and coal, and a number of minerals that need to be developed and

exploited. The same is true for Russia. Rather than spending all this effort, as some of our various defense-oriented people are trying to do, and spending it all on the military, we should be doing what Russia is doing, which is promoting economic development in the Arctic region.

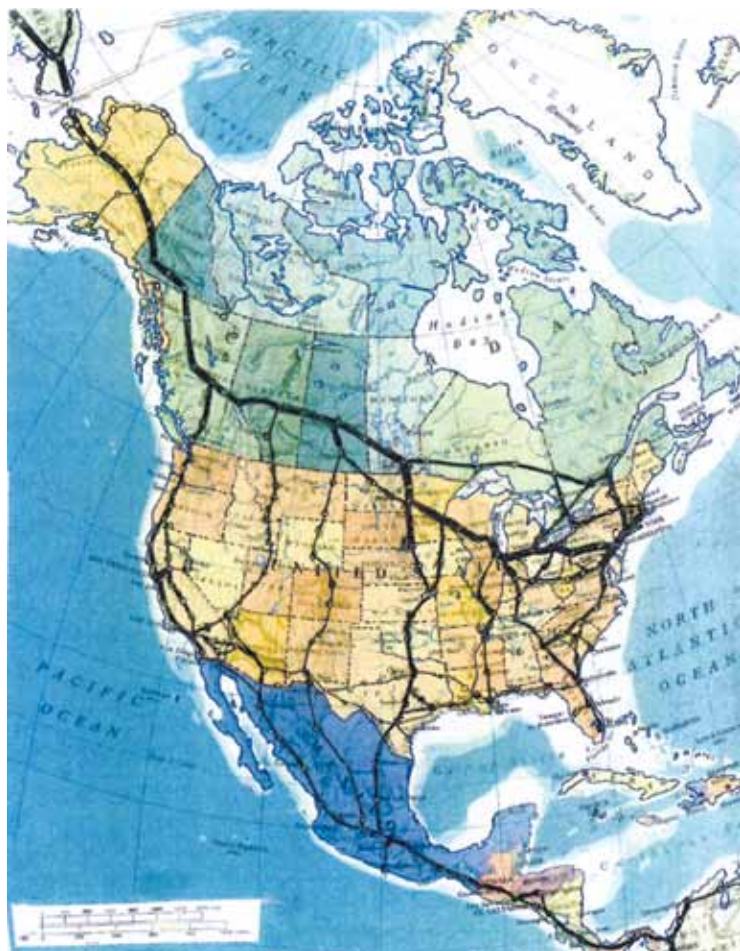
At its eastern terminus, the Bering Strait Tunnel would begin at Wales, Alaska. From there, it would progress to Little Diomed Island, which is on the United States side of the Bering Strait, and then to Big Diomed Island on the Russian side, with a four-mile separation between them, with trains going in and out of the tunnel.

The Bering Strait Tunnel proposal would be 53 miles under water, with the two islands in the middle. On the Chukotka (Russian) side you have the Tekhany Mountains, and on the Alaska side you have the Brooks Mountains, and you would need to have the tunnels extended so that the rail line on each side would extend beyond those mountains. And the water there is between 150 and 180 feet deep. It's in a zone of relatively stable geologic conditions. The volcanic activity and earthquakes are in the Aleutian Islands, several hundred miles to the south.

The One Belt, One Road, or Silk Road, extension from Asia into North America would need to come through the Bering Strait, and there would be a line across Alaska, and believe it or not, Alaska has already designated a 500-foot-wide corridor all across Alaska from Alcan in the east to Wales in the west—about 800 miles—which would be where the railroad would be located, connecting down to Anchorage. Then it would also need to go up to the areas along the North Slope, including where the Arctic National Wildlife Refuge is located. It would come down through the Yukon territory and British Columbia, through Alberta, Saskatchewan, and Manitoba. From there, rail lines would go through the northern tier of the United States and the northern Great Lakes region, and also across Ontario and Quebec, as far east as Montreal and Quebec City. Lines would come to New York, Boston, and Washing-

FIGURE 4

One Belt, One Road Extension to North America



ton, by way of Chicago.

One of the key new developments is that the state of West Virginia has recently signed an agreement with the Shenhua coal company, the largest coal company in the world—it's a state-owned company in China—to develop the petrochemical industry, to improve and increase the natural gas production from the Marcella shale, to expand utilization of coal, and to make coal into chemicals, as well as for additional electric power generation. The Shenhua coal company has a subsidiary which develops, manufactures, and sells air pollution control equipment for coal-fired power plants. So they are way ahead of the United States in terms of the development of coal.

The next slide [Fig. 4] is an expanded view of the One Belt, One Road, and it's really focusing on what lines would need to be built through the United States, and how they would connect the southwestern United States with the One Belt, One Road, and also then go

down through Mexico to Central America and from there to South America through the Darién Gap.

We need to do something besides having a drug economy. In fact it's reached the point in Mexico, where it's now very dangerous for Americans to go there because the level of crime and violence resulting from the propensity for drugs has just reached the point that it has created a very serious safety and law enforcement problem. We need to get that corrected, but we're not going to do it only on the basis of law enforcement. We've got to change the economies of those areas, and that means economic growth and development. The two best ways to make that happen are to build a railroad through there and then improve the electricity transmission and generation so that there is ability to have industrialization and development in Central America and in Mexico.

### Water

In addition to rail and to roads, there is the issue of water, and there are areas of the United States that have too much water, and other areas that have too little. There is too much when we have a hurricane along the Gulf Coast, but, unfortunately, too little when we don't have enough water in California. We need to have a water distribution system that would start from the Mackenzie River in the Northwest Territories of

Canada, and come down through the eastern part of British Columbia in the Rocky Mountain Trench, exactly as what the report by the LaRouche organization and the North American Water and Power Alliance (NAWAPA) plan showed. This is a report that has been suppressed. Water would come to California, and there would be no net loss out of the Columbia River. There would be water going east to the Courtenay River into the Missouri and then south. And believe it or not, the state of Arizona and the state of Nevada are looking at a new Interstate 11 Highway corridor going from Nogales, Arizona to Reno, Nevada, which could go through Tucson, Phoenix, and Las Vegas. This corridor would also have rail, water, and a freeway. So that shows that at least some thinking is going on.

The other major development project would be to build an irrigation canal going down through the Great Plains, because the Ogallala Aquifer—one of the largest in the world—is located there, and is running out of



FIGURE 5

**Proposed Intercontinent High-Speed Rail Network**



water. This is the biggest agricultural food-growing area of the United States, other than the San Joaquin Valley in California.

To go one step further, we need to be building facilities for the storage of water, and for water transport. We have areas of the United States which are getting too much rain—we’ve certainly seen that on the Gulf Coast, in Florida and Texas this year, but we have it in other places—and then we also see places such as in California and parts of the Western United States, including in some places in West Texas, where we don’t have enough water. We should be collecting storm water and moving it around the country to where it’s needed, and that means building lots of storage reservoirs as well as canals. I propose that these could be built along and underneath existing railroad lines, where we would have water transmission pipelines and perhaps even a magnetic levitation rail or hyper-loop tubes, should that technology ever be developed. We would have parallel, double track, electrified high-speed passenger and freight lines just exactly like what are being built and already in operation in China, and we need to follow

FIGURE 6

**Proposed Route of the Darién Gap Railway Line**



their model, and have these corridors specifically designated for transportation.

The *New Yorker* magazine this week has been forced to acknowledge the fact that the Silk Road is coming and that it should be coming to the United States. This is the model we should be following in terms of what we do. In Lanzhou, China is building a new city in parallel with the old one, so they can foster their economic growth and development. Here in the United States, instead of investing in productivity and development, we’ve invested in gambling and speculation: One brings us benefits, and the other doesn’t bring us anything at all except trouble.

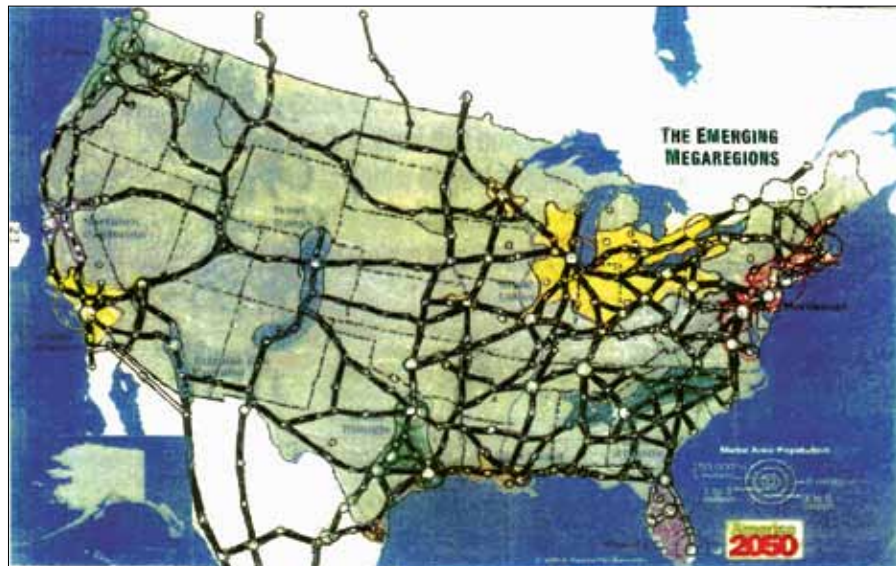
### **A Rail System for the Americas**

Now, this is a proposed network for rail through both North America, Central America, and South America, with a connection at the Darién Gap. [Fig. 5] China is talking with Chile, Argentina, Brazil, and Peru. There’s a bi-oceanic railroad being proposed between Santos in Brazil and Lima in Peru, going through Bolivia and Brazil and Peru, plus other rail systems as well.

This is where the Darién Gap would be, [Fig. 6] which would be the parallel to the Bering Strait, in completely opposite conditions, in tropical conditions

FIGURE 7

Proposed National High-Speed Rail System



where it's warm, versus where it's dry and cold up in the Bering Strait. You would need a 15-20 mile long bridge over the Gulf of Uraba, just inside Colombia. I would suggest building on the mountain range to the east so you didn't have to go through the swamp, although that route is a possibility as well, where the present highway is partially built. There's a critical section going from the far south in Panama, into northwestern Colombia, and there's opposition to building the road because they don't want this being used as a conduit for drug dealers.

This proposal would need to have governmental participation, and preferably as a part of the entirety of what is needed for Central America, aiming into South America.

That ends the One Belt, One Road part. Now, we're going to talk about New York.

### The United States

In last Sunday's edition of the *New York Times Magazine*, they had an article called "The Case for the Subway," and why we should continue the subway, why we should fix it and take care of the many problems it has, which all of you know much better than I.

This is a map [Fig. 7] of a national high-speed rail system connecting the major urban regions of the United States, the Northeast, the Midwest, the Southeast, Florida, Texas, the Rocky Mountains, the Southwest in Arizona and New Mexico, California, and the Pacific Northwest. This would be needed for both

freight and passengers, and it should be done according to the same concept of the design that China is doing right now, and of course could become very much a component of the One Belt, One Road system.

One of the possibilities for this, is a proposal from a company here in the state of Washington—which owns some land—of rebuilding the old Milwaukee rail between Chicago and Seattle as a high-speed rail corridor for both passengers and freight, and it would go across the central part of the state of Washington, and it would connect Spokane and Seattle with Missoula, Bozeman, and Billings, and then go south with a connection

into the Twin Cities [Minneapolis/St. Paul], and Milwaukee, and then to Chicago. Another route is the present Amtrak Cardinal route, going through West Virginia—which already has the beginnings of a major Chinese investment, much ahead of anything in the United States. This could be connected to the Northeast Corridor near Richmond, Virginia, and going all the way up to Washington and Philadelphia and New York, all the way to Boston. The Northeast Corridor is probably the most critical rail element in the United States.

### Coal

We need to reorient our coal-based generation, and rather than following the environmentalist mode of "let's get rid of coal and fossil fuels, and let's just have renewable energy," we need to actually think about capturing the rare-earth metals and precious metals, and base metals and strategic metals and other mineral resources that are in the coal, because it's Mother Nature's own activated carbon absorption system, and this should be done in conjunction with electric power generation, including reconstitution of some of the coal plants. Interestingly enough, a lot of the coal has quite a bit of uranium in it! And that would be a very good way of capturing that resource and using it for nuclear power plants, which we need to do more of, rather than trying to find ways to close them down.

Coal is one of the major resources of the United States, with large deposits located in the Rocky Mountains, in the Midwest, in Appalachia and in Texas, too.



FIGURE 8

**U.S. Major Coal Deposits by Type**

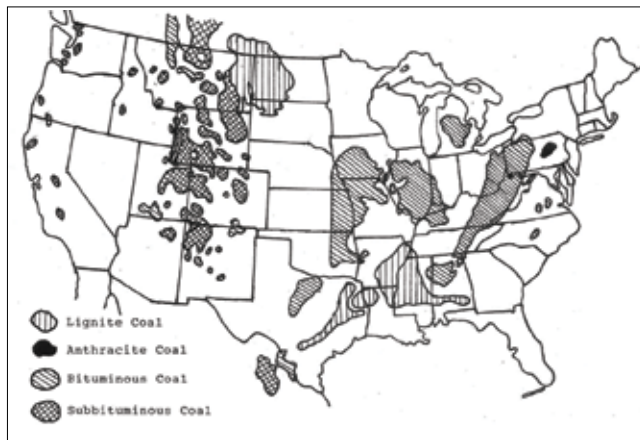


FIGURE 9

**New York City Area Major Commuter Railroad Lines**



[Fig. 8] Because West Virginia has become the subject of this major investment by China, it certainly will become much more important, especially as it begins to grow economically. We would eliminate the economic depression conditions that were associated with the Obama Administration, and instead create much more the conditions for prosperity. Their goal is to greatly expand petrochemical production in that region, including from the Marcella shale, which in addition to coal comes into West Virginia.

**New York**

China now has 60% of the total distance of high-speed rail lines in the world within their country; and they're building more and more. They're going to be exporting to other countries. China has built a system where you have the passenger line, with the freight line right next to it. This gives you the ability to move very large numbers of trains very quickly between the cities, and that's something we need to follow China's lead on and it will take the efforts of China to support us.

At the opposite end of the pole, is the situation we have in New York with our subway system, and in contrast to the modern Chinese system, we now have a very decrepit system, because we lack development and maintenance.

The system that currently services New York consists of the existing subway system, the commuter rail lines, Amtrak and the PATH. These are all different systems, and in some cases they don't even connect. I'm proposing that we build a line from Hoboken to 14th Street on the west side of Manhattan up to Penn Station, for both subway trains and also for the inter-city trains, so we take some of the pressure off the line which is for the Gateway Project—which we badly need to have built—into Penn Station. Penn Station will need to be expanded. We also need to have a connection between Grand Central Station Terminal and Pennsylvania Station.

The subway system is the key growth factor in New York, and many other proposed expansions are needed. One of these is the 63rd Street East Side Access Project; another is a new PATH line from Lower Manhattan over to Brooklyn, so you have the ability to connect directly between Newark Airport and Kennedy Airport in New York. We need a rail connection between Brook-



lyn and Staten Island, from the Fort Hamilton area to Point Richmond in Staten Island; and then a series of additional routes for the subway, serving areas of New York City that are not covered now. In the meantime, we also have to immediately fix up the existing subway lines. We need to have a fix on where the problems are—including PATH and Amtrak—and what we need to do; and this all needs to be electrified if it's not already.

This is a view [Fig. 9] of the major rail lines coming into New York City from Connecticut, from Westchester, Dutchess County, from Rockland and Orange Counties on the west side of the Hudson in New Jersey, and the Long Island Railroad, which is the most extensively used rail system in the United States. It has a significant electric demand, and the Consolidated Edison Company in particular might be hard-pressed to serve additional lines if they're built. Interestingly enough, when we look at the population projections of the New York Metropolitan Area, in the future they're going to be primarily in New Jersey and that means we're going to need more for more transit, serving more areas, farther and farther away from New York City. We're going to need to build them if we're going to maintain the prosperity of the city, which we must do. A number of new connections also need to be built: The Long Island Railroad, the Metro North Railroad, the New Jersey Transit, plus Amtrak.

This is a view [Fig. 10] of the trackage of the Metro North Railroad and the Long Island Railroad,



A J train leaving the Chambers Street station in Manhattan.

FIGURE 10  
Metro-North Railroad



Long Island Railroad





FIGURE 11  
East Side Access Project



and the lines in red are electrified, and ones that are not are in black. We need to expand the electrification. Unfortunately we have up to seven different voltages, for different systems that are either third rail or overhead catenary. That all has a long historical basis, but we do need to unify, and put them all under the same technology, if we can.

We also have the East Side Access Project [Fig. 11] going from Sunnyside Yard in Queens into Grand Central and unfortunately, that's coming in at a cost of \$3.5 billion a mile; whereas, by comparison, the Chinese are building their tunnels for \$450 million a mile, and I think we'd better get the cost factors under control in New York.

The Gateway Project in New York would be connected to New Jersey, and this is one that so far the Trump Administration has not agreed to provide the financing for. They may be balking at the \$29 billion cost—that works out to about \$2.5 billion a mile—and it just doesn't seem like this is very realistic and needs to be reduced.

Under the Gateway

Project, here is what the future would be. [Fig. 12] In addition, we need a series of loops to make it easier for existing train traffic to flow. Any future track configuration must be mostly four-track lines because they're going to handle lots of traffic. There's about 450 trains a day coming into Penn Station from the west and 700 a day coming in from the east. So there's a lot of traffic! And a lot of people are being moved—650,000 a day use Penn Station and 350,000 a

day use Grand Central.

There is also the issue of freight traffic. We need to build a tunnel between Greenville Yard in Jersey City and Fort Hamilton, so that we can connect these, finally. The original proposal for that was in 1910, but it was never built. They built the tunnel into Manhattan for the passengers, but they never built the freight line. In the 1920s, Robert Moses stopped it all from being built. All the way back in 1895 they had a plan for building tunnels, both for passengers into Manhattan and freight

FIGURE 12  
Proposed Route for the Gateway Project New Railroad Tunnel

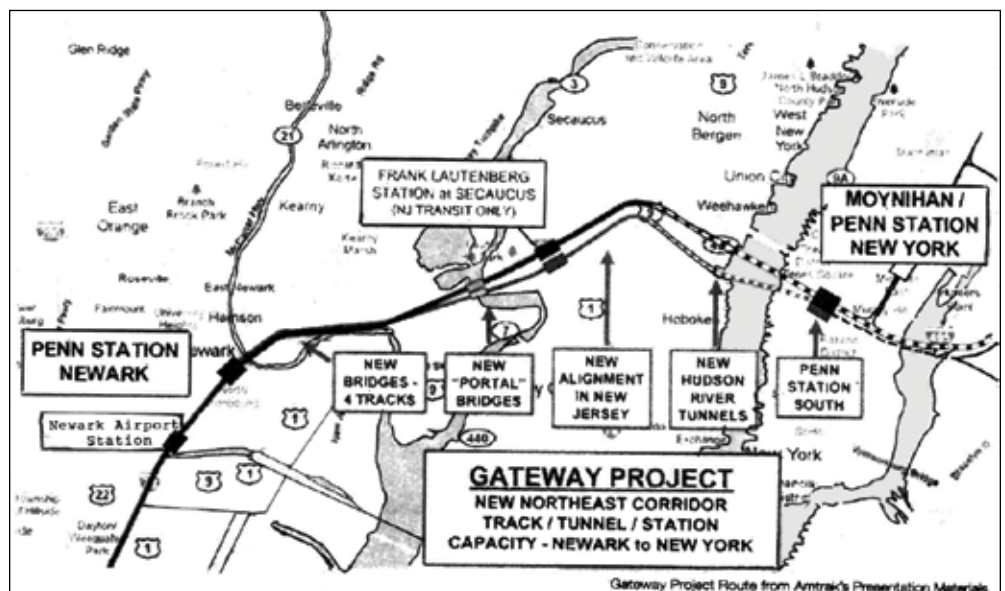


FIGURE 13

Existing Freight and Passenger Railroad Corridor Across the Northeast U.S.



into Brooklyn. They built the passenger part, but they never built the freight line.

### Hamiltonian Credit

The Pennsylvania Railroad when it existed—it doesn't exist any more, it's been broken up into Conrail, CSX Norfolk Southern, and Amtrak owns the Northeast Corridor—was throughly electrified, beginning in 1928, up until 1932. The Pennsylvania Railroad financed this with its own bonds, but then it could no longer. When the Reconstruction Finance Corp. was created, their main project was a \$200 million project to complete that electrification, financed through the RFC with a credit system, exactly as LaRouche has proposed today. The Reconstruction Finance Corp. needs to be

recreated, and my guess is the legislation that created it could still be there, but you have to set up a national infrastructure bank and this would be a good project to show how it would really work, because it did in the past. In World War I, the rail system broke down. The trains all had steam locomotives, and they all had to be serviced, and the logistics just broke down—there was tremendous difficulty getting traffic to the ports. Whereas, in World War II, once the electrification was completed, they were able to move lots of traffic of goods and people without any significant delays or major disruptions. It was very successful.

This [Fig. 13] is the Northeast Corridor, which is the most important single railroad and the most heavily used, and also overused, rail line in the United States. A lot of maintenance and upgrading must be done. We saw this in the problem with the bridge over the Hackensack River, getting stuck open. It happened the day before yesterday, as an example of the fact we need to do a lot, to fix it up.

A modernized and expanded rail system in the Northeast Corridor would get freight moving through the New York area, because right now it has to stop at the Hudson River and we need rail connections for that. We will also have to address the question of high-speed rail and the fact that our

present Northeast Corridor is going to get overloaded and therefore we need to build an expansion onto that, and we also need to find where people can live far away, in affordable housing, and be able to get to business or work or pleasure, relatively easily. And we of course have the same problem in California, and here in the Pacific Northwest.

The LaRouche movement is really showing the way it has to be done to get these infrastructure programs underway. I think the example we have of the Reconstruction Finance Corp.'s support for the Pennsylvania Railroad electrification in the 1930s is a good way to start, in conjunction with a national infrastructure bank and the creation of a credit system.

Thank you. [applause]