INTERNATIONAL CONFERENCE REPORT

Bering Strait Tunnel Back on World Agenda!

by Rachel Douglas

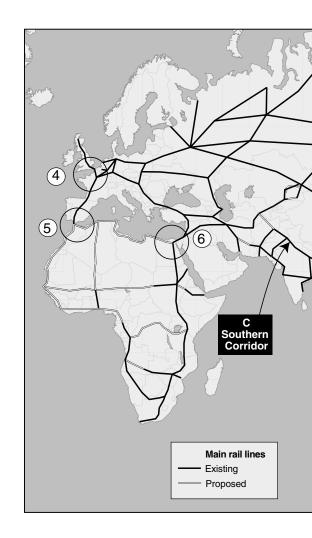
Introduction

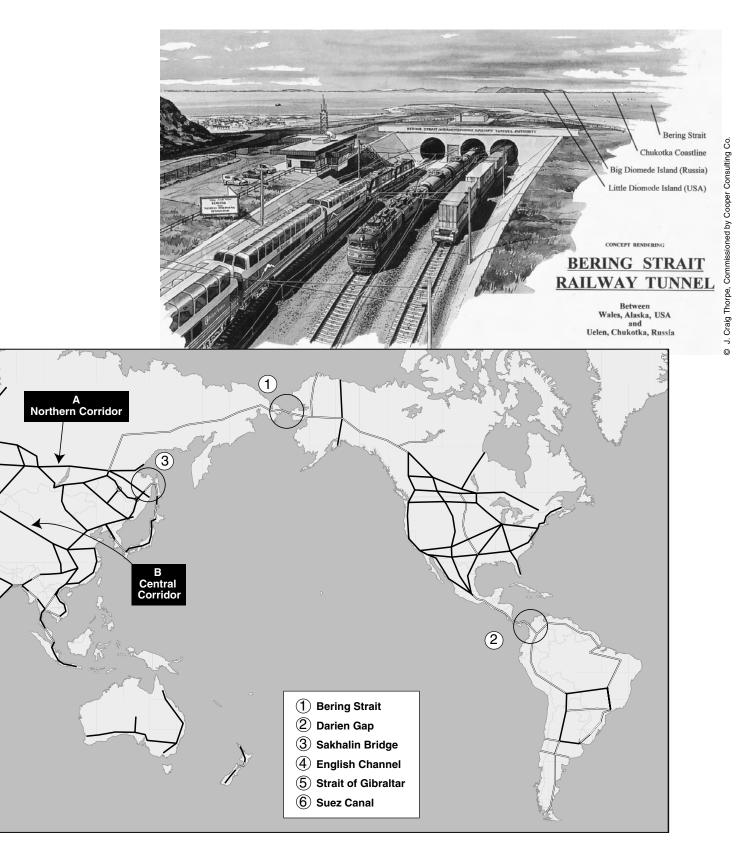
Several hundred people gathered in Moscow on April 24 at a conference called "Megaprojects of Russia's East: A Transcontinental Eurasia-America Transport Link via the Bering Strait." News of their discussions touched off a wave of optimistic thinking in many countries, that the time has arrived for one of the greatest of great infrastructure projects: a tunnel beneath the Bering Strait between the U.S. state of Alaska and Russia's Chukotka Region.

The participants issued an appeal to governments of the Group of Eight member countries, to place the Bering Strait megaproject on the agenda of the G-8 summit in Heiligendamm, Germany, in June (see p. 43). Russia's Ambassador to Canada Georgi Mamedov told the Toronto *Globe and Mail* that he is now optimistic that the tunnel will be built. Mamedov expects President Vladimir Putin to discuss the Bering Strait project with Canadian Prime Minister Stephen Harper, when they meet in Heiligendamm. "We need Canada aboard," he said.

It is fitting that two American participants from the World War II generation put forward the idea that such great development projects are the path leading away from war. They were former U.S. Secretary of the Interior and Governor of Alaska, Walter Hickel, a strong backer of the Bering Strait tunnel project for many years, and economist and *EIR* founder, Lyndon LaRouche. LaRouche, who as early as 1978 called for a Bering Strait bridge-tunnel crossing, wrote a conference presentation, "The World's Political Map Changes: Mendeleyev Would Have Agreed," in response to a request from conference organizers. His contribution was

The megaproject to link Eurasia and America, as part of the World Land-Bridge, was propelled to center stage by an international conference in Moscow.





THE PROPOSED WORLD LAND BRIDGE

The proposed Bering Strait connection between Russia's Chukotka Region and Alaska is shown at (1). Source: EIR



ORUM International

Maxim Bystrov, deputy head of Russia's Federal Agency for the Management of Special Economic Zones, addresses the Moscow conference. The Russian government is giving enthusiastic support to the Bering Strait project.

read to the gathering and will appear in a publication in connection with the event.

The Americans radiated confidence that the Bering Strait project can be done, bringing North America into the Eurasian development perspective that is otherwise being promoted through such agencies as the Shanghai Cooperation Organization. It would be, as LaRouche said in Moscow in 2001, part of "the greatest transformation of the biosphere in history."

High-level Russian specialists from Federal agencies, regional governments, and the Russian Academy of Sciences took part in the Bering Strait meeting, along with specialists from Japan and Korea. It was the first of a "Megaprojects of Russia's East" conference series, organized by the Russian Academy of Sciences Council for the Study of Productive Forces (SOPS), in conjunction with the Russian Ministry of Economic Development and Trade (MERT), the Russian Ministry of Transport, the state-owned company Russian Railroads, and several regional governments in Siberia and the Russian Far East.

Victor Razbegin, who works in the Ministry of Economic Development and Trade's Industrial Research department, gave a press conference on April 18 with other members of the Bering Strait project group, to publicize the forthcoming conference. Their huge map of the Arctic connection, and their enthusiasm for the \$65 billion multi-modal project, with its associated long-distance rail and power lines, grabbed headlines in Russia. More than 60 stories about it appeared in press, web, and other electronic media, including a report on

NTV, Russian national television Channel 2. NTV showed a dynamic map of the projected rail line from Yakutsk in East Siberia, through Nome and Fairbanks, to Fort Nelson in Canada.

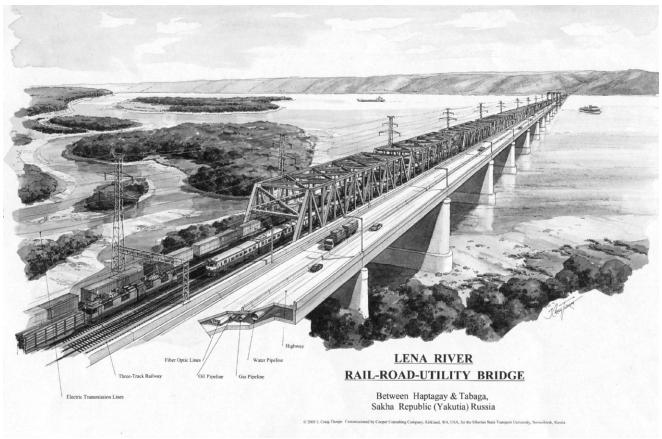
Academician Alexander Granberg, head of the Council for the Study of Productive Forces, described the project's advantages, in an April 16 interview for the economics website OPEC.ru. He said the road, rail, and pipeline connection would handle 3 percent of total world trade in physical goods. It will make it possible to harness more of eastern Russia's hydroelectric potential. It will allow development of previously inaccessible mineral resource deposits. And, said Granberg, the connection of the power systems of Siberia, the Russian Far East, and North America will create economies in electricity supply, worth \$20 billion annually.

Russia's leadership, according to Granberg, now sees the development of transportation infrastructure as essential for uplifting Russia's vast outlying regions. Demonstration of this, he said, was an April 10 presentation by Vladimir Yakunin, head of the state-owned company Russian Railways, at a meeting on rail transport, chaired by Putin. There, Yakunin laid out the construction of a 3,500-km rail line from the Lena River to the Bering Strait, as a high-priority task. The Lena is the easternmost of Siberia's three great river systems, and is the tenth longest river in the world.

Feasibility and Financing

Victor Razbegin, who works in the Ministry of Economic Development and Trade's Industrial Research Department, like Governor Hickel, has been closely involved in efforts to secure action on the Bering Strait project, for more than a decade, as our review of its history shows (see below). Another longtime Bering Strait tunnel enthusiast is the American engineer Hal Cooper, whose overview of the scheme *EIR* published in 1994, and whose detailed work-up of its parameters has recently drawn renewed attention from Russian, as well as American promoters of a Bering Strait crossing. Cooper told *EIR* the week of the Moscow conference, that the push for the project may have reached "a real phase shift" now.

Speaking at the April 24 event, under big banners with maps of the intercontinental project, Academician Granberg said that the next step should be design and feasibility studies for the 6,000-km rail-road-pipeline-power



© J. Craig Thorpe, Commissioned by Cooper Consulting Co.

This proposed bridge would cross the Lena River near the city of Yakutsk, in Russia's Sakha Republic, creating a rail link that would sweep east to Alaska and south to China.

corridor from Yakutsk to Fort Nelson, including 85-100 km of tunnel under the Bering Strait. There will really be two tunnels, Granberg pointed out, because Big Diomede Island (Russia) and Little Diomede Island (U.S.A.) lie close together in the middle of the strait. Since Japan already has built 50-km underwater tunnels between its islands, Granberg remarked, the technologies involved are proven ones.

Conference participant Louis Cerny of the American Railroad Association also presented the technical feasibility of the Bering Strait crossing, noting that the schedule for the project as a whole could be sped up by simultaneous construction of its different parts.

Many of the Russian speakers referred to recent government decisions, which make the Bering Strait project a live option. One of these is the Federal Target Program called "Development of the Far East and Transbaikal Region" to 2013. Russian Prime Minister Mikhail Fradkov has been active in launching an array of measures to address the underdevelopment and depopulation of these regions.

Dr. Jonathan Tennenbaum, a collaborator of LaRouche for many years, and a member of the *21st Century* Scientific Advisory Board, introduced LaRouche's paper to the conference as the work of the American economist, best known in Russia for his science of physical economy and his advoca-

cy of basic infrastructure projects. LaRouche's discussion of the legacy of chemist and national economist Dmitri Mendeleyev, as well as his relating the cooperation of great nations on the Bering Strait project to the tasks of waravoidance, were received with interest by the Russian participants.

Tennenbaum, who is known in Russia especially as a coauthor of *EIR*'s 1997 Special Report *The Eurasian Land-Bridge: The 'New Silk Road'—Locomotive for Worldwide Economic Development*, then elaborated the concept of infrastructure corridors, and networks of intersecting such corridors. Building them in the far north is a challenge for the 21st Century, he said, which can be met by building chains of nuclear-powered cities. U.S. work on building the nuclear-powered research town, Camp Century, under the ice in northern Greenland in the 1960s, together with Russia's city-building experience in Siberia, makes this a tailor-made area for U.S.-Russian cooperation, Tennenbaum said.

Maxim Bystrov, deputy head of Russia's Federal Agency for Special Economic Zones, picked up on LaRouche's and Tennenbaum's remarks about the enormous financial bubble that exists today, as against the potential for directing funds into productive investment like these infrastructure projects. Liquidity won't flow into long-term projects on its



David Atwood/U.S. Army-ERDC-Cold Regions Research and Engineering Laboratory

The United States has experience working and building in the Arctic temperatures. This photo was taken in 1964 at the nuclear-powered Camp Century, Greenland, which operated for five years. Here, work underground with Arctic ice cores.

own, Bystrov stressed. He said that the Russian government would advocate attracting private concessionaires for the project, rather than rely solely on state funding from the countries involved. At the same time, Bystrov said that his agency was prepared to put up \$120 million for the feasibility studies.

Governor of Yakutia (in the Sakha Republic) Vyacheslav Shtyrov, whose paper was read to the meeting by the region's representative in Moscow, discussed the enormous development potential of that East Siberian region. With a land area equal to half the size of the lower 48 U.S. states, covering three time zones and extending to the Arctic Coast, Yakutia's population is less than that of Rhode Island. Shtyrov noted that "we have all of the elements of Mendeleyev's periodic table" in Yakutia, as well as enthusiasm for Mendeleyev's ideas about development.

Contagious Optimism

News of the high-level Russian backing for the Bering Strait tunnel project was welcomed across Eurasia, from Sweden to Japan. *Dagens Industrie*, a Swedish business newspaper, reported favorably on it in the April 25 issue. German press coverage cited enthusiastic responses from China, Korea, and Japan, including the view of some Japanese business circles that the tunnel could be built for \$60 million per kilometer, half the price that that was cited in Moscow. Germany's Spiegel Online in its coverage added mention of an article on the project, penned by Vladimir Brezhnev, CEO of the Russian construction firm Transstroi, in 2005 in the magazine *Tunneling and Underground Space Technology*. In that article, Brezhnev and co-authors wrote: "Among tunnel experts, there is no doubt that the imple-

mentation of the described tunnels is technically feasible."

In Denmark, where national attention has been focussed on the Schiller Institute's program for magnetic levitation rail infrastructure, Schiller Institute leader Tom Gillesberg pointed out that Vitus Bering, for whom the strait is named, was a Dane in the service of the Russian Navy, during the time of Peter the Great in the early 18th Century.

Publication of a story about the Bering Strait project on the Saudi Arabian news website Elaph.com brought forth contagious optimism. The report said, "The cost of this gigantic transport project, \$65 billion, will be quickly paid back through the revenue, created by the transit of goods between the countries in the region." Comments on the site, from readers in Arab countries, as well as Arab-Americans and Arab-Canadians, urged the Arab states to learn from Russia, Canada, the U.S.A., and Asia, and launch construction of a network of railroads and bridges throughout the Arab world, from the Persian Gulf to North Africa.

In Russia itself, many identify the Bering Strait project with LaRouche. The Bering Strait rail line was shown on maps in *EIR*'s 1997 Special Report on the

Eurasian Land-Bridge (see map pp. 38-39). Academician Sergei Rogov of the Institute of the U.S.A. and Canada, and Academician Vladimir Myasnikov, then of the Far East Institute, used reproductions of *EIR*'s map, to illustrate their articles on Eurasia's development potential, appearing in major Russian publications in the late 1990s.

On his return from Moscow, Jonathan Tennenbaum reported that the conference was a central event in a very broadranging debate in Russia, around the absolute need for great projects. There was extensive debate and discussion at the Moscow event on the problem of financing the Bering Strait tunnel and development corridor. The deputy chairman of Russia's Federal Agency for Special Economic Zones, during his presentation, concurred with Tennenbaum's remarks regarding the need to immediately invest existing liquidity, such as the Russian government's stabilization fund derived from oil and gas revenues, into such big high-technology projects of new infrastructure.

Typical of the Bering Strait project's reputation as LaRouche's idea, and of the growing sense of such ideas' potential to change even the most rigid institutional attitudes, is a Russian blogger's comment, posted April 23. With reference to a recent U.S. State Department report, which pledged support for regime-change in the former Soviet region under the banner of "pro-democracy" movements, the writer commented: "This I must mentally applaud: answering the State Department's latest attack, by proposing a gigantic, joint investment project—the dream of Lyndon LaRouche, who advised the Democrats during the most recent Congressional elections; and this from the Ministry of Economic Development and Trade, no less, though it's headed by one of our dyed-in-the-wool liberals!"

Conference Directs Appeal For Bering Strait Link To G-8 Summit

This communique was issued April 25, as an "Appeal from the participants of the international conference an Intercontinental Eurasia-America Transport Link via the Bering Strait, to the heads of state and governments of Russia, the U.S.A., Canada, South Korea, Japan, China, and the EU member-states." Along with the Appeal, the participants at the April Moscow conference sent a draft Memorandum of Cooperation, proposing that those nations endorse the project and consider financing feasibility studies for the Bering Strait project at the June 6-8 summit of the G-8 in Heiligendamm, Germany. The studies could be completed by 2010, the communique stated.

Subheads have been added.

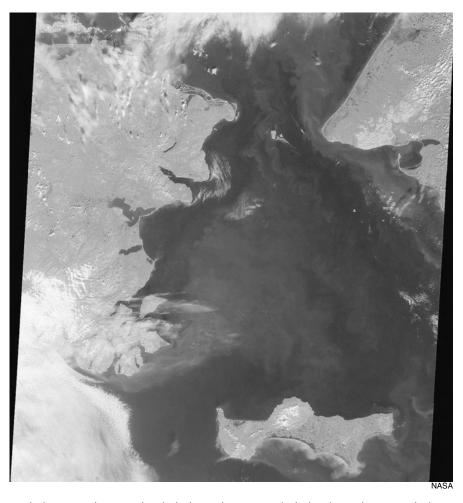
The idea of creation of a global land transportation system connecting four out of six continents (Eurasia, North and South America, and Africa) has occupied the minds of mankind for centuries.

The issues of economic growth and global energy security, strengthening political and trade ties, containing and preventing wars and civil conflicts, and cultural interaction are directly related to the global community's ability to clear the hurdles in the way of solving global problems and ensuring constructive cooperation in all spheres of the world economy.

Today, on the agenda, are expansion and diversification of trade ties between countries, combining their energy, transport, and information resources for developing uncultivated territories and exploiting their natural resources. Now is the time to pay most serious attention to projects aimed at peace and creation; it's time to revisit humankind's great ideas.

Continuing Great Projects

The past 150 years were marked by numerous ambitious projects. These are the 9,000-kilometer-long Trans-Siberian Railroad, the Transcontinental Railroad in the U.S.A., the tunnel between the Japanese islands of Honshu and Hokkaido,



With the Seward Peninsula of Alaska to the east, and Chukotskiy Poluostrov of Siberia to the west, the Bering Strait separates the United States and the Russian Federation by only 90 kilometers

the Great Belt Fixed Link in Denmark, the Eurotunnel, and many others.

The 21st Century will see the construction of tunnels underneath the Straits of Gibraltar and the Bosporus, a tunnel under the Yangtze River, tunnels between the Russian mainland, Sakhalin, and Japan, and a tunnel between Newfoundland and Labrador Peninsula in Canada.

The construction of the intercontinental link uniting Eurasia and America, Intercontinental Link (ICL)-World Link, could become a crucial contribution to the creation of the Global Transportation System (GTS) as it pulls together global experience in implementing international projects.

Today, the main deterrent to a multimodal GTS and the actual linking of the two continents is the absence of a connection between Eurasia's and America's transportation and energy systems.

In order to overcome this hurdle, it is necessary to build 6,000 kilometers of railroad from Yakutsk, Russia to the North American railway network via Magadan, Chukotka, the Bering Strait, and Alaska incorporated in a single corridor with a power transmission line and fiber-optic lines.

The project's feasibility has raised no doubts among the international engineering community.

The necessary target investment in the project is estimated at \$65 billion. Providing financing for the project as of 2008 would ensure that the feasibility study is completed by 2010. The approximate cost of the feasibility study, including all necessary research and an ecological assessment, is estimated at \$120 million and may be divided among the countries participating in the project. A major portion of the Russian share of joint financing will be disbursed under the program for development of the Russian railway transportation system, which was approved at a government meeting held on April 10, 2007.

Economic efficiency of the project is ensured by large volumes of cargo to be shipped (400-500 billion tons/kilometers per year), synergies between hydro- and tidal-power generation systems, and the effects of competitive exploitation of the plentiful natural resources in the area covered by the ICL-World Link.

However, the project's geopolitical significance appears to be even greater, as it unites continents and creates conditions for multifaceted and fruitful cooperation among the peoples of many countries.

In just 15 to 20 years, the new multimodal transport artery will change the world. Humankind will gain access to new energy and natural resources. The ICL-World Link will provide access to territories colossal both in physical dimensions and economic potential.

To implement the international research program and coordination of efforts to prepare and realize the project, the international nonprofit organization Interhemispheric Bering Strait Tunnel & Railroad Group (IBSTRG) was created in 1992.

As of today, the basic technical and economic characteristics of the link, and the possibilities and ways of hooking it up to Russia's and America's transport routes, have been defined, and the preliminary analysis of the economic and social effects of the project has been completed.

Creating Economic Potential

We, the participants of the International Conference on an Intercontinental Eurasia-America Link via the Bering Strait, which took place in Moscow on April 24, 2007, having discussed the prerequisites, opportunities and the expected effects of the project, and appreciating:

- the unquestionable economic potential of creating a global transport, energy, and telecommunications system with the key element being a land link between the continents of Eurasia and America;
 - the urgency of combining efforts to implement the project;

- the advisability of further research pertaining to the project;
- the necessity for the participants of the project, and members of the political and business communities of all countries involved, to coordinate their activities,
- hereby put forward this proposal to the governments of Russia, the U.S.A., Canada, Japan, China, Korea, and the EU member states:
- 1. We propose that the countries assess the merits of the project for building the ICL-World Link, at the level of ministries and agencies responsible for this area, and its inclusion in their respective strategies of economic development on the macroeconomic and industry levels.
- 2. Provided that the construction of the ICL-World Link is deemed advisable, we propose that the governments appoint their representatives for participation in further elaboration of the project, and discussion of different options of the countries' involvement in construction and operation of the ICL-World Link.
- 3. We propose that the governments consider the financing of feasibility studies for constructing the ICL-World Link at the highest international level in June 2007 within the framework of the G-8 meeting. We propose that they pass a memorandum outlining the governments' positions on developing the global transportation network, and the feasibility of building the ICL-World Link as a key element of providing intercontinental energy and infrastructural ties.
- 4. We propose that a working group be created for further elaboration and promotion of the project. We think it advisable for the sources and amount of financing to be defined at this stage.
- 5. We propose that the governments consider the appointment of the international nonprofit organization IBSTRG as the authorized international project coordinator for the duration of the feasibility study of the ICL-World Link. All participating governments will have representation on the IBSTRG Board of Directors.

Signed:

- Alexander Grigoryevich Granberg, chairman of the Council for Studies of Productive Forces at the [Russian] Ministry of Economic Development and Trade and the Academy of Sciences;
- Viktor Nikolayevich Razbegin, deputy chairman of the Council for Studies of Productive Forces at the [Russian] Ministry of Economic Development and Trade and the Academy of Sciences, vice president of the international corporation IBSTRG;
- George Koumal, president of the international corporation IBSTRG;
- Alexander Yuryevich Sergeyev, member of the managing board, HydroOGK company;
 - Joseph R. Henry, general counsel of the IBSTRG;
- E. Yamaguchi, president of Aikyo International Consultant Co., Ltd.;
- Louis T. Cerny, railroad consultant, track and bridge specialist;
- Craig Burroughs, chairman of BXB Corporation, director and treasurer of the IBSTRG.

The 19th Century Origins of The Bering Strait Project

by Richard Freeman

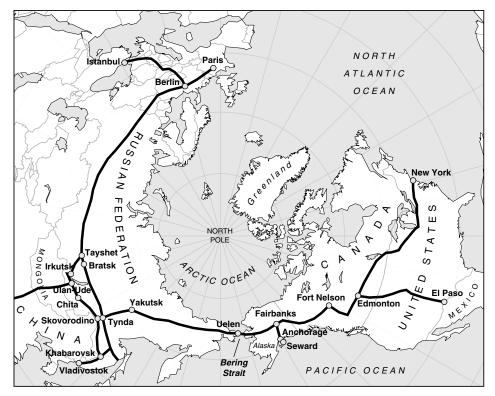
It was the great railway-building thrust led by President Abraham Lincoln and his economic advisor, Henry C. Carey, that laid the basis for creating a rail network crossing the Bering Strait. In 1869, at Promontory Point, Utah, the Union Pacific and Central Pacific railroads were joined, creating the Transcontinental Railroad, which linked the United States from coast to coast—Lincoln's great vision. At the U.S. Centennial Exhibition in Philadelphia in 1876, exhibits and discussions were held on building rail networks, including by international figures such as the Russian scientist and railway builder Dmitri Mendeleyev. In the 1890s, American nationalist networks joined their Russian counterparts in building the Trans-Siberian Railroad.

- William Gilpin (1813-1894), an American System ally of President Lincoln, proposed a railroad line going over the Bering Strait, as part of his idea that all great cities would be linked by railroads. In 1861, Lincoln appointed Gilpin the first Governor of the Colorado Territories.
- Toward the end of the 19th Century, the first proposals were made in Russia, for building a railroad between Yakutsk, Russia, and the Bering Strait. Several options were considered for the railroad, which was to head southeast, and connect Yakutsk with the Sea of Okhotsk, and continue along the coast via Magadan to the Strait.
- At the start of the 20th Century, capital was raised to form the Trans-Alaska Siberia Company, which would build a railroad line extending from North Dakota (which was already connected to U.S. rail lines) through Canada to Nome, Alaska, which is within 100 miles of the Bering Strait. There would also be a railroad built from the Chukotka region of Russia (now the Chukotka Autonomous Region), which borders on the Strait, heading southwest, which would connect to Russia's Trans-Siberian Railroad.

Funds were raised to pay for

the initial feasibility studies for the 5,650-mile rail system. The idea was that New York, Moscow, and Paris could all be joined together for world peace. The company was advancing toward raising the \$300 million required in 1907 to complete both the Russian and American railway land components, when British-allied interests halted the railway. The alliances of World War I put a permanent halt to this effort.

In 1902, Loicq de Lobel, the French explorer, approached the Russian Imperial Technical Society with a proposal to explore the length of the future track from Yakutsk to the Bering Strait, and farther to Alaska, up to the point where it would connect with an existing track. Upon receiving the approval of the Russian and French governments, Lobel set up the first committee for promotion of this project, and a second such committee, affiliated with the American Railroad Administration, was created in New York. The explorer delivered several reports on his work at the Paris Geographical Society at the Sorbonne.



FUTURE GLOBAL RAIL CONNECTIONS, AS SEEN FROM NORTH POLE

In the 19th Century, the Bering Strait was part of a plan to link all the great cities by railroads. Source: Adapted from H.A. Cooper

In 1905, Tsar Nicholas II proposed building a Bering Strait rail link.

In **October 1906**, a Russian Government Commission on the creation of the Great Northern Route held discussions attended by four American, one French, and one Canadian representative. It was decided to expedite work on the project, putting Lobel and the American engineer James Waddell in charge. Preliminary technical parameters for the track were set. Construction was supposed to be carried out by the New Jersey Construction Company, under a 90-year contract which entitled it to a strip of land 24 kilometers wide. Plots of land on both sides of the track were to be divided in chessboard pattern between Russia and the contractor.

In March 1907, the Russian government terminated the contract, having decided that its terms were not favorable.

In **April 1918**, Russian leader Vladimir Lenin addressed the All-Russian Executive Committee on the need to intensify the construction of railroads, first of all in the North, including those reaching the Bering Strait, to expedite exploration of natural resources. Projects for building a track from Yakutsk to the ports Ayan and Eikan, and to Nikolayevsk-on-Amur, reaching the Bering Strait, were again on the agenda.

During the **1930s-1950s**, Josef Stalin put himself in charge of the Polar Track project for building a Northern Siberian railroad from Vorkuta to Anadyr.

In **1942**, During World War II, the Seattle District of the U.S. Army Corps of Engineers conducted a feasibility study to build a proposed railroad line, from Prince George, in British Columbia, Canada, to Fairbanks, Alaska, and thence to Teller, a city in Alaska's Northwest. The Army Corps projected for this project, a capital construction cost of \$87 million for the 1,417-mile route, and a purchase cost for rolling stock of \$24 million.

The initial idea was to ferry wartime supplies needed by Russia, from the Alaskan port of Teller, to the Chukotkan port of Uelen, *until a railway tunnel across the Bering Strait would be built*. Another railroad would then be built, heading westward, from Uelen to Egvekinot, and to a junction, where it could then proceed to one or both of two Russian rail corridors. One rail corridor would go along the south shore of the Arctic Ocean to Vorkuta, to join the newly completed 1,100-mile rail line to Moscow.

President Franklin Roosevelt's personal emissary to Russia, Harry Hopkins, had raised this rail proposal, following a trip to Moscow, and briefed Roosevelt, Secretary of State Cordell Hull, and Roosevelt's uncle, Frederic Delano. Roosevelt's uncle, among others, urged him to fund the Army Corps feasibility study. After the June 1942 U.S. defeat of a Japanese carrier force at Midway Island, the project was deferred.

After the end of World War II, Stalin contacted President Harry S Truman to restart discussions about connecting the Russian and U.S. rail networks, through a tunnel under the Bering Strait. Truman rebuffed Stalin.

In **1991**, the nonprofit corporation Interhemispheric Bering Strait Tunnel and Railroad Group (IBSTRG), known as "Transcontinental," was officially registered in Washington, D.C. The founding members on the American side were the State of Alaska, the American Railroad Association, and several large railroad, construction, consulting, and extraction com-

panies. In Russia, a division of the corporation was set up under director V.N. Razbegin, a vice president of IBSTRG, as well as a Coordination Research and Development Committee, whose first chairman was Academician P.A. Melnikov. Participants on the Russian side included the Railroad Ministry, the Energy and Fuel Ministry, the Committee on the North, the Economics and Finance Ministry, the Construction Ministry, Unified Energy Systems, Transstroi Corporation and the Russian Academy of Sciences. Overall, 40 organizations were involved.

In 1992, Lyndon LaRouche and Helga Zepp-LaRouche began presenting proposals, later known as the Eurasian Land-Bridge, which would connect Europe, Asia, and ultimately the whole world, through efficient, high-speed rail networks and accompanying development corridors to reconstruct the shattered world economy. The proposals called for either a tunnel or a bridge to connect rail systems across the Bering Strait.

In **1994**, the American Engineering Association held a conference in Fairbanks, Alaska, entitled, "The Bering Strait Tunnel." Participants included V.N. Razbegin, vice president of IBSTRG, and Hal Cooper, a consulting engineer of Cooper Engineering.

In its **April 16, 1994** issue, *Executive Intelligence Review* published an article by engineer Hal Cooper, "Bering Strait Tunnel and Railway Project Will Boost Pacific Development."

From May 7-9, 1996, in Beijing, at a conference entitled "International Symposium on Economic Development of the Regions Along the Euro-Asia Continental Bridge," Helga Zepp-LaRouche gave a speech, "Building the Silk-Road Land-Bridge." In the wake of this conference, EIR published a Special Report entitled The Eurasian Land-Bridge, The 'New Silk Road'—Locomotive for Worldwide Economic Development, which included discussion of worldwide plans for development through infrastructure corridors, and also the physical economic principles upon which such plans are based.

In March 1998, a draft resolution was introduced to the Russian government on the necessity to conduct complex research on the possibility of building a polytrack, which was coordinated with the Railroad Ministry, the Construction Ministry, the Committee on the North, the head of the administration of the Chukotka Autonomous Region, and the presidents of Unified Energy Systems and the Transstroi Corporation.

At the end of **2000**, Viktor Razbegin, of the Moscow Regional Transportation Institute, announced a feasibility study of building the connecting rail to the Bering Strait, indicating that it would be very economically feasible, and would benefit freight transport between the interior of Asia and the interior of the United States.

On **Nov. 20-28, 2002**, the 70th Anniversary Conference on the Railroad Transportation Developments in Siberia was convened at the Siberian State Transport University in Novosibirsk, at which the Bering Strait tunnel proposal was raised.

In **July 2006**, IBSTRG president George Koumal addressed U.S. President George W. Bush on this subject.

On **Sept. 28, 2006**, at a meeting at the Federal Agency for Railroad Transport (Roszheldor), the decision was taken to build the Yakutsk-Magadan track with its further extension to the Bering Strait.

The World's Political Map Changes: Mendeleyev Would Have Agreed

by Lyndon H. LaRouche, Jr.

This article was delivered on April 24, by Dr. Jonathan Tennenbaum, to the Moscow conference on "A Transcontinental Eurasia-America Transport Link via the Bering Strait," and will appear in Russian and English in a forthcoming issue of FORUM International. The meeting was sponsored by the Russian Academy of Sciences, State Scientific and Research Organization, Council for the Study of Productive Forces (SOPS), in conjunction with the Russian Ministry of Economic Development and Trade, the Russian Ministry of Transport, Russian Railroads, and regional governments in Siberia and the Far East.

The intention to create a trans-Siberian rail system, implicitly extended, across the Bering Strait, to North America, dates implicitly from the visit of Dmitri Ivanovich Mendeleyev to the 1876 U.S. Centennial Exposition in Philadelphia. The defeat of Lord Palmerston's scheme for destroying the United States, by U.S. President Abraham Lincoln's leadership, spread the influence of what

was called The American System of political-economy into Russia, as also the Germany reforms under Bismarck, the industrialization of Japan, and elsewhere. These global, so-called geopolitical developments of the post-1865-1876 interval, have been the focal issue of all of the spread of great wars throughout the world from the British orchestration of the first war of Japan against China, in 1894-1895, until the 1945 death of U.S. President Franklin Roosevelt.

Throughout the ebbs and flows of global economic and geopolitical history, up the present day, the realization of Mendeleyev's intentions for the development of Russia remains a crucial feature of that continuing history of the post-1865-1876 world to the present moment. The revival of the intention launched by him, now, is presently renewed as a crucial quality and included feature of crucial importance for the world as a whole today.

The same impulse toward new world wars persists in new guises today. At the present moment, the world is gripped by what threatens to be, very soon, the greatest global monetary-financial collapse in the entirety of modern history to date. The spread of warfare and related conflict out of Southwest Asia is nothing other than a reflection of the same, continuing, so-called geo-political impulse which has prompted all of the world's major wars since the 1763 Treaty of Paris, but, more emphatically, the rise of the U.S.A.'s 1865-1876 challenge to the Anglo-Dutch Liberal monetary-system.

This onrushing collapse of the world's presently hyper-inflat-



LaRouche: "The bridging of the Bering Strait becomes now, the navel of a new birth of a new world economy."

ed, disintegrating world monetary-financial system, requires early concerted emergency action by responsible leading nations. A sudden change in U.S. political trends, back to the traditions of President Franklin D. Roosevelt, is urgently needed for this purpose. Such a change in U.S. policy must be realized through emergency cooperation which would be led by a concert of leading world powers. These must include the U.S.A., Russia, China, and India, as the rallying-point for a new, spreading partnership among perfectly sovereign nation-state economies.

In such cooperation, the development of a great network of modern successors to old forms of rail transport, must be spread across continental Eurasia, and across the Bering Strait into the Americas. The economically efficient development of presently barren and otherwise forbidding regions will enter into the urgently needed future development of the planet as a whole.

Such a plan was already crafted, during 1990-1992, under the direction of my wife, Helga Zepp-LaRouche, who remains the principal political and cultural leader among my associates in Europe and beyond. This perspective must now be revived to become a global actuality.

Technologically, the leading thrust of scientific development is located in the succession of the work of such exemplary figures as Mendeleyev and Academician V.I. Vernadsky, and the work of the relevant, but too little heralded leader in the same field, the American pioneer William Draper Harkins.

This requires the creation of long-term diplomatic agreements among nations, creating a new system of relatively fixed-exchange-rate treaty-agreements, at very low prime interest-rates, over forward-looking intervals of between a quarter to half century. These present periods cover the economic-financial half-life-span of principal long-term investments in the development of that basic economic infrastructure which the needs of the present and coming generations of the peoples of these nations require.

We have thus entered a time, measured by the clock of nuclear-fission and thermonuclear power's development, when the long history of the domination over the landmasses of the planet by actually or implicitly imperial maritime powers, is no longer an acceptable practical proposition. Instead, the science-driven, capital-intensive mode of development of the basic economic infrastructure and standard of living of the populations, will dominate any successful form of civilized development of relations among the sovereign nations of the planet. To this end, the tundras and deserts of our planet must be conquered by the forces of science-driven technological development of the increased productive powers of labor. Development must now proceed from the Arctic rim, southwards, toward Antarctica.

The bridging of the Bering Strait becomes, thus, now, the navel of a new birth of a new world economy.

Megaprojects As Alternatives to War

by Walter J. Hickel

This is former Alaska Governor Walter Hickel's presentation on April 24 to the Moscow conference on "A Transcontinental Eurasia-American Transport Link via the Bering Strait." The full title of the paper is "The Price of Progress Does Not Have To Be Blood. It Can Be Sweat. Megaprojects With Peaceful Purposes as Alternatives to War."

Hickel served as Governor of Alaska from 1966-1968 and 1990-1994, and as U.S. Secretary of Interior in the Nixon Administration (1969-1970).

The world joins Russia in its sadness over the passing of Boris Yeltsin yesterday. His courage changed a nation.

Bringing Russia and America Together Will Change the World

Congratulations to Academician Granberg, the Council for the Study of Productive Forces, and our other hosts for this important gathering. By initiating this series of International Conferences on Transport Megaprojects of the 21st Century, you are doing a service for all peoples. And Alaska wants to help.

These conferences may prove to be one of the most significant initiatives of this century. And I share your vision.



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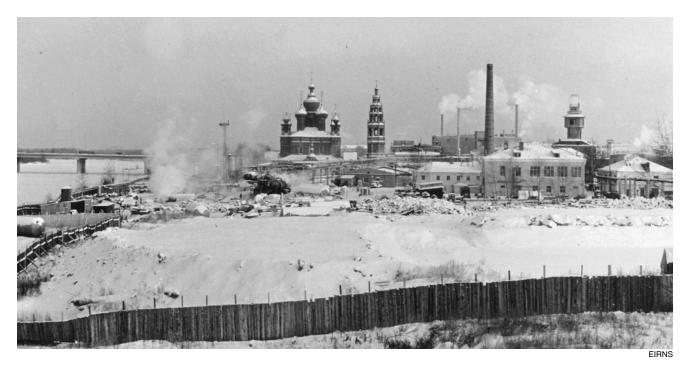
Former Alaska Governor Walter Hickel addressing the Moscow conference on April 25: "I believe that if we bring Russia and America together, it will change the world."

This Can Be an Alternative to War

In recent years, the clash of cultures in many parts of the world has expanded from misunderstanding and suspicion to hostility and violence. Countries that aspire to becoming cultures of freedom have become cultures of fear.

Having watched the world's conflicts all my life, I have long believed that war rarely solves problems.

Historically, the most cynical political and business leaders



The view from the Trans-Siberian Railroad: here, the town of Vladimirovka. "We in the North understand the power of big projects to change society for the better," Hickel said. "Russia did it with the 10,000-kilometer Trans-Siberian Railway. Alaska did it with the great trans-Alaska oil pipeline. These modern wonders mobilized our people, gave them a challenge, and a goal."

have used it as an economic strategy. Wars can unite and mobilize people. Wars put people to work and give them a purpose. But my question is, why war? Why not big projects? War is just a big project.

The price of progress does not have to be blood. It can be sweat.

Big projects are the alternative to war. This idea is as old as the pyramids of Egypt, the aqueducts of Rome, and the cathedrals of Europe.

In that tradition, let's fulfill the theme of these conferences: Let's create a worldwide transportation infrastructure for the 21st Century.

Why not transport fresh water to where it is dry?

Why not replace coal and diesel fuel with natural gas and electrical power to clean up our smoggy cities?

Why not open Russia's pioneering Northern Sea Route to the world?

Why not explore space for the resources man needs? All of this is possible. And much more.

When I was elected Governor of Alaska in the late 1960s, I proposed a railroad around the world—a railroad from the continental United States, through Alaska, across the Bering Strait into the Russian Far East, connecting with the Trans-Siberian Railway and on to Europe.

Time magazine had fun with the idea. They labeled it the "Vladivostok, Nome, and the Santa Fe." But they weren't thinking big enough. Imagine boarding that train in London or Paris and riding it to Moscow, then across Siberia to Alaska, and on to the Great Lakes and New York City.

Such a rail link would carry a wealth of ideas, curiosity,

and commerce. It would be one of the great wonders of the world.

`Workers, Unite the World'

For years, philosophers have dreamed of building a new world. My belief is that the way to build a new world is to actually *build* it.

It begins with the optimists and the visionaries, like those gathered here. Then we need leaders who can make decisions. So the engineers can step forward. And the skilled workers. Tens of thousands, even millions, can get involved. It's time to rewrite the old slogan, "Workers of the world unite." It's time to proclaim, "Workers, unite the world."

We have gathered today to discuss the prospects for the creation of a Multi-Modal Transport Corridor via the Bering Strait. On our side, it is still in the visionary stage.

In Alaska our attention is focussed on another big project, a natural gas pipeline from Alaska's North Slope to the tidewater or across Canada. We expect construction of the Alaska gas line to begin as soon as 2010.

A transport corridor to link Europe, Asia, and North America will require leadership both from Alaska and from our President and Congress to permit access across Alaska's Federal and state lands and waters.

This will require the support of the Alaskan and American people. The key to winning that support is the validity of the vision. Here is how I would describe that vision.

As we look at goals for the 21st Century, it's fitting that we bring Russia and America together. There couldn't be a more important symbol.

I have believed for many years that it will happen. And the place to start is the Bering Strait.

Let's build a link between our two great nations—a tunnel to move people, resources, and goods east to west, and west to east.

The world's greatest reserves of natural resources await in Siberia, Alaska, and Northern Canada.

Let's build a rail connection to take that wealth to the world.

Let's build a fiber optic cable link to improve world telecommunications.

Let's build long-distance transmission lines to the 1.6 billion people on Earth who have no electricity.

Show me any area in the world where there is a lack of energy, and I'll show you basic poverty. There is a direct tie-in between energy and poverty, energy and war, energy and peace.

In the 1970s, inventor Buckminster Fuller launched the idea of a Global Energy Network. Existing electrical generators, unused during the nights in the North, can be tapped at the speed of light to bring poverty-fighting power to the South.

The technology to move electricity very long distances still needs improvement. Let's dedicate some of the world's greatest minds to this task. This can be a vast and visionary undertaking worthy of our generation and the next. And one of the few missing links is across the Bering Strait.

Some ask, "Where will the money come from?" My experience is that money is never the problem. I remember the dark days of the Great Depression in the 1930s. We were struggling to save our farms and keep our families fed. When we asked the politicians for help, they told us there was no money. Then Japan invaded Pearl Harbor, and we had all the money in the world!

Today, there are critics who doubt that a tunnel can be built beneath the Bering Sea. They say, "It can't be done."

When I moved to Alaska as a young man, I argued for a highway from the south 48 states to Alaska. They said it was impossible to build a highway over 2,000 kilometers across some of Alaska and Canada's most remote wilderness. But once World War II began, the U.S. Army built the Alaska Highway in nine months!

The Bottom Line Is Not the Only Line

Other critics of the Bering corridor believe that "small is beautiful" and "wilderness is the world." They say that the rail link will be too expensive or will ruin the environment. They oppose all big projects. But we in the North understand the power of big projects to change society for the better. Russia did it with the 10,000-kilometer (6,500-mile) Trans-Siberian Railway. Alaska did it with the great trans-Alaska oil pipeline. These modern wonders mobilized our people, gave them a challenge, and a goal.

And so will the Eurasia-North America transport corridor. In fact, I believe it will be great for the world environment. Because there will be no answer to pollution until we find an answer to poverty. That truth is as real as the Ten Commandments.

Today, I want to salute Russia for taking the lead in think-

ing about big projects. The fact that this conference is taking place in Moscow is a sign of the new role Russia is playing in the world. I predicted this when I visited here as Governor of Alaska in 1992.

"You will see a new and prosperous Russia," I said. "Not overnight, but in one generation."

Today, you have surpassed even my optimism. You are the world's largest energy exporter. Your major cities are flourishing. And you are now ready to expand your prosperity from the center to your far-flung regions.

This is where Alaska may be helpful. Alaska is a remote region, historically poor, ignored, and exploited, that has found its own road to prosperity. Our solution began with an understanding of the commons.

There are vast, commonly owned lands in Alaska. And it is the government, not the private sector, that controls these assets.

Other than Alaska's indigenous, Native corporations, that own 12 percent of our land, the government owns 99 percent of the rest. Private individuals own less than 1 percent.

The United States and Western Europe have a tradition of private ownership, but that is not true in Alaska. And it is not true in the world as a whole. Eighty-four percent of the world is owned in common, including the oceans.

The United Nations calls these commonly owned lands, waters, and resources the "global commons." So to care for this commons and to use it for the benefit of mankind, we must learn to work together.

How do we do this? Unbridled capitalism may not be the answer. When dealing with the commons, the bottom line is important, but it is not the only line. Without concern for other people, for their needs and wants, activities for strictly private gain become destructive not only to others, but eventually to oneself.

The indigenous people of the North have always lived on the commons. They learned long ago that in a cold, harsh environment, you have to care about others. You waste nothing. You care for the total. You share to survive. Every hunter shares his whale, walrus, or caribou with others, especially the very old and the very young.

These same principles are enshrined in the Alaska Constitution. What we own in common in Alaska must be managed not in the interest of a few but for the "maximum benefit" of all. The obligation rests with government both to care for the land and to make it productive. That's why I call Alaska the "Owner State."

In conclusion, I believe that if we bring Russia and America together, it will change the world.

First, we can create a new generation of hope, and a lessening of tension.

Second, a transport corridor will greatly improve communications and commerce.

And third, Russia and Alaska can offer a model for both conservation and development to other nations around the world that are owned in common.

The result can be a truly better world. Let's do it!

In closing, let me say, right out of the blue, our hearts are with the Russians, too.

Thank you.



RAIL EXPERT HAL COOPER

Bering Strait Conference Marked 'Major Phase Shift'

Hal Cooper, Ph.D., is a Seattle-based transportation consultant and a longtime advocate for an intercontinental railroad connection across the Bering Strait, as well as development corridors on key routes in the Americas and worldwide. His article "How to Revolutionize American Transport" by building 42,000 miles of electric rail and maglev appeared in the Summer 2005 21st Century.

Dr. Cooper was interviewed by Richard Freeman in the Executive Intelligence Review on May 1, for his views on the

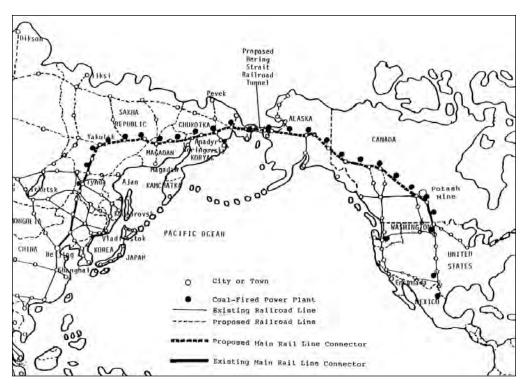
Bering Strait project and the Moscow conference. Here is an excerpt from the interview.

think what has happened in Moscow is the indicator of a major phase shift in the world. The old-time forces that have been in control in this country and this world for so long, are beginning to be removed, and no small amount of the credit for that happening belongs, of course, to the Lyndon LaRouche organization, in which you and I have both played

a part.

And I think that in Russia, they have basically decided to adopt the LaRouche infrastructure development policy, with emphasis on nuclear energy, the emphasis on railroads, the emphasis on economic development and employment creation, which are so contrary to so much of the thinking in the United States today. I think the people in Russia and many of the countries of the world do not have this obsession with political correctness that we have developed in this country, that has prevented us from being responsive to the need for economic development, and for our own national self-interest throughout the world....

"You're going to have to actually build about 5,000 to 6,000 miles of railroad to connect everything. And you would be connecting, on the east side of the Lena River, near the city of Yakutsk, in the Sakha Republic. You don't actually have to go into



PROPOSED ROUTE FOR INTERCONTINENTAL RAIL LINE BETWEEN ASIA AND AMERICA (including power plants and transmission lines)

This sketch map was part of a paper by Hal B.H. Cooper, Jr. (Cooper Consulting Co.) and J. David Broadbent, president of the Canadian Arctic Railway Co. (British Columbia), for presentation to the 70th Anniversary Conference on "Railroad Transportation Developments in Siberia." The conference took place at the Siberian State Transport University at Novosibirsk, Nov. 20-28, 2002.

The coal plant sites are shown to indicate the importance of power for both electrified rail and regional economic activity along the corridor, which would be powered by nuclear energy for the most advanced development.

Yakutsk, but it would be helpful to do that, because it's the largest city in that region. I was there in 1996.

You would come out through the Magadan region, and through the Koryak region, into the Chukotka region in Russia, and then a place called Egvekinot, which is a gold-mining place. It would be a junction for a future connection of lines going to the west, to Vorkuta, far in the west of Russia, 1,100 miles northeast of Moscow, which was originally laid out under the direction of Josef Stalin, prior to World War II, as well as the line going to the southwest, to Yakutsk, which ultimately would go to China over a 3,000-mile route.

"The railroad would then go through the Tenkanyi Mountains in the eastern part of the Chukotka Peninsula, and then go into a tunnel which would be about 65 miles long, west of the town which is called Uelen, right at the edge of the Bering Strait, on the Chukotka side. And then it would go through a tunnel....

"[I]t would go under the Bering Strait. Actually the water there is 180-200 feet deep; it's relatively stable limestone chalk, there are no major rock fissures or earthquake faults, or anything like that. There are two islands in the middle: There's Big Diomede Island, which is about two miles by four miles wide (that's in Russia), and then there's Little Diomede Island on the U.S. side, which is about three miles away; its about one mile by two miles. It is an inhabited island, there are some native people who live there; whereas on the Russian side, I believe there is only a weather station, military facilities.

"Each of the islands is about 20 miles away from the shore. On the U.S. side, you would come to Wales, and then to the edge of the Brooks Mountains, and then through, ultimately, a place called Galena, and you would parallel the north side of the Yukon River, and ultimately cross the Yukon River, and go into Fairbanks."

How Much Time and Money?

When asked how long the Bering Strait project would take to build, and how much it would cost, Cooper replied:

"The minimum would be 10 years. If you got serious, you could get it built in 10 years. It could be as long as 20 years. Actually, what I think is going to happen is it can be built in increments.... I noticed my cost projections, if you built just from Yakutsk to Fort Nelson, they were looking at \$65 billion, with a double-track system. And the tunnel cost was about \$15 billion, which is about the same as the cost of the English Channel tunnel—a shorter link, but more complicated.

"My assessment was, if you build a double-track tunnel, it's about \$15 billion, but I think you're going to need three tracks, and my estimate is, it's \$25 billion. And my estimate is probably \$75 billion for the same distance, instead of \$65 billion."

The Eurasian Land-Bridge locomotive for worldwide

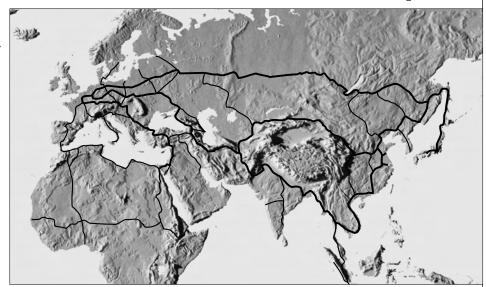
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