

RUSSIAN FAR EAST PROJECT
A TRAINING AND EDUCATION PROGRAM
FOR THE FAR EAST RAILROAD

Gene C. Griffin
Upper Great Plains Transportation Institute
North Dakota State University

April 1998

TABLE OF CONTENTS

INTRODUCTION	1
TRAINING PROGRAM	7
EDUCATION PROGRAM	9
NEXT STEP	11

INTRODUCTION

The Russian Far East faces a significant challenge for its transportation sector as it adjusts to the break-up of the former Soviet Union. The challenge is that of adopting, and adapting to, a more market-oriented system in which the forces of supply and demand determine pricing and resource allocation. This is a complex process for any system regardless of its degree of free market orientation. It is doubly difficult for a system characterized as a command economy for the past 70 years. The picture is further complicated because of the unique and vital role that transportation plays in the development of any country's economy. An efficient transportation and logistics system which provides the type of service and prices that allow firms to be competitive in national and global markets is essential for economic success. Without the availability of the required transportation and logistics services priced to allow enterprises to compete, firms and even entire industries can disappear from the local economic landscape. Because of this all important role, just how the Russian Far East meets this challenge will have a profound effect on how the rest of the region's economy develops, perhaps even survives.

The Russian Far East is a unique part of Russia with challenges that are quite dissimilar from the western and urban parts of the country. The region is considered remote from the rest of Russia. It is bordered on the south by China, on the east by the sea of Japan and other seas as well with Japan and Alaska just beyond, on the north by the East Siberian Sea, and on the west by East Siberia (Figure 1).

Its economy can be characterized as commodity- oriented dominated by natural resource industries. Timber, minerals including gold and diamonds, and fishing are responsible for the

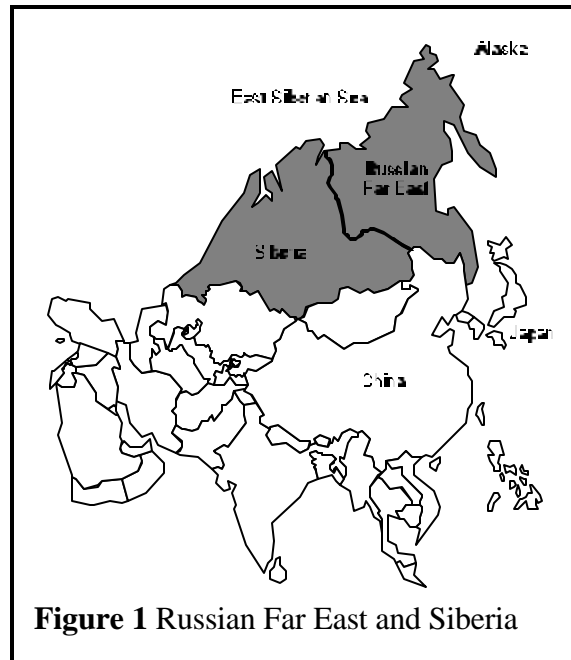


Figure 1 Russian Far East and Siberia

bulk of the economic activity. Although the economy is dominated by natural resources, the region has other industrial sectors such as manufacturing. The region is sparsely populated with much of its citizenry concentrated in a few major cities.

These cities and a small part of the rural area are connected by a limited transportation network. This network consists primarily of the *Far East Railroad* which serves Vladivostok on the east and runs as far west as Belogorsk. The railroad serves five seaports on the east. The main commodities are timber, petroleum products, coal, construction materials, and containers. It operates two mainlines, which when combined, are more than 9,000 kilometers long.¹ These mainlines were formerly two different railroads that operated parallel to one another in the southern portion of the region. The region is also served by a limited road system that, for the most part,

¹ Personal Communications, Nancy Luther, University of Alaska — Anchorage, e-mail, February 9, 1998.

runs on the same route as the *Far East Railroad*. The railroads dominate the bulk of the freight movement, in *tkm*, with the road network serving as a gathering function of freight for transfer to the railroad.

The competitive logistical environment resulting from this situation is that shippers are almost exclusively dependent on rail for all practical purposes. Although there were formerly two rail companies, as was mentioned earlier, they did not offer competitive alternatives for shippers since they were located several hundred kilometers apart. Cross country competition is all but impossible due to the lack of roads and a motor carrier industry. The essence of this economic environment is that the railroads that serve the Russian Far East have a monopoly on freight moving almost any distance.

The situation is further complicated by the system of ownership. The railroads are state owned and operated. Although some industries in Russia are being privatized, railroads, at this time, are not. However, even if they were privatized, many of the same challenges would remain since the monopoly environment would still exist with its attendant problems. Further, the railroad is also responsible for a considerable amount of non-railroad assets. These assets are part of the infrastructure of cities located in the region and include libraries, housing, etc. These are probably much like the company towns once found in remote regions of the United States which were built to serve employees of a company, usually in the natural resource extraction business; e.g., company mining towns. This may explain why the railroad employs 80,000 people.

Prior to the breakup of the former Soviet Union and the elimination of the command economy, funding for the railroad was provided by Moscow. An annual budget was promulgated from the Capital to operate both the railroad and the city infrastructure it was also responsible for.

However, there has been a significant change in the way the railroad is operated and financed compared to the former command economy. The railroads are now required to become self-sufficient through revenue they generate from charging for their services. Funding resulting from budgeted funds from Moscow is gradually being reduced with the expectation that the railroads will have to become fully self-sufficient at some time in the future. A further complicating issue is that Moscow presently retains pricing authority. It is believed that this may be relinquished to railroad management sometime in the future.

This changing socioeconomic environment presents an extremely difficult situation, assuming that the overarching goal is the development of the Russian Far East economy, which is supported by a state-owned railroad which must become a financially viable business. There are four fundamental challenges the railroad must succeed at if it hopes to achieve any degree of financial success, and make a substantive contribution to the Russian Far East economy at the same time.

- Develop an operating system which results in efficiencies normally associated with a firm operating in a competitive environment. In a competitive environment the forces of competition result in improved efficiency or result in exit of the firm from the industry.
- Continually adopt innovative management and operating strategies that provide service excellence to the railroad's customers and improve operating efficiency for the railroad at the same time. Competitive business environments usually spur the development of new technologies and innovative management schemes that improve service and increase efficiency.

- Provide services to customers at prices which enhance the viability of the industries and firms the railroads serve and at the same time allow the railroad to be profitable. Pricing and service levels are determined, to a large extent, by the level of competition faced by the firm. In the absence of such competition the firm must be aware of global competition and the need for its customers to survive in this environment.
- Promote the development of new and existing businesses that will result in profitable business growth for the railroad. The railroad is a high fixed cost industry. Development of new business that provides additional revenue to the railroad is critical to further development of the railroad and its long term success.

These challenges are largely the direct result of the lack of a competitive environment in the transportation sector. Competition normally provides discipline in pricing preventing excessive prices, fostering technological and management innovation, and encouraging a customer-oriented service. Private sector ownership normally results in investment and operating efficiency. The prevailing competitive environment is not likely to change in the foreseeable future given the lack of infrastructure, the underdeveloped nature of the economy, the lack of alternative modes of transportation, and the fact that the railroad will remain state owned. Even in the event the railroad becomes privately owned the economic environment will remain much the same. One key to solving, or mitigating, this problem is to attempt to mimic a competitive environment. A necessary condition for achieving such a solution is enlightened leadership and management within the railroad.

A training program aimed at training Russian Far East present-day railroad management is proposed by the University of Alaska Anchorage *American Russian Center* and the North Dakota

State University *Upper Great Plains Transportation Institute*. It is further proposed that a university education program also be developed to educate the management of the future. The purpose of this effort is not to suggest how the Russian Far East can develop an Americanized transportation system, but to provide insight and information based on the American experience that will help the Russia Far East develop a Russian transportation system which meets and exceeds the needs of the 21st Century Russian Far East economy and society. It is proposed that this challenge be met by developing a two-pronged approach: (1) A training program focused on existing rail management; and, (2) An undergraduate and graduate education program for students who are potential entry-level management hires.

TRAINING PROGRAM

The main goal of the training program would be to provide existing rail management the knowledge and information necessary to understand the market oriented economic environment that they are transitioning to and how to successfully function in that environment. The objective would be to deliver training courses that provide existing management with knowledge and information that would help them adapt to a market oriented economy. The training program would be developed for existing management at all levels. The content of the training program will reflect that the railroad remains state owned and will function as a true monopoly while being cognizant of operating in a global economic environment. This means that management has to be aware of such concepts as geographic and product competition, performance based systems, and human capital as a source of competitive advantage. Prospective topics that will be considered, but not limited to, include:

- Fundamentals of the Economics of the Rail Industry
- Conduct, Structure, and Performance of the U.S. Rail Industry — A Benchmark
- Pricing in a Monopoly Environment — Price Discrimination
- Competition in a Monopoly Environment — Geographic, Product, etc.
- Logistics and its Role in a Global Economy
- Performance Based Systems as a Substitute for a Competitive Environment
- The Role of Human Capital in Creating a Competitive Advantage
- Economic Development as a Means of Business Growth
- Management Information Systems

- Rail Costing and its Role in Pricing
- Measuring Operating and Investment Efficiency
- Strategic Business Planning

The training would be conducted on-site in the Russian Far East. Interactive telecommunications will be explored as a method of enhancing the training. The actual selection of training courses will be done in conjunction with the University of Khabarovsk.

EDUCATION PROGRAM

The main goal of the education program would be to provide students from the Russian Far East who are interested in pursuing careers in rail management with an academic experience resulting in an understanding of economics and business management that allows them to excel at managing the railroad in a market oriented environment. The will of the education program will be to provide them with the knowledge, logic and analytical capability necessary to understand the market oriented economic environment and apply that knowledge to the successful management of the Far East Railroad. The proposed education program will consist of students from the Russian Far East attending NDSU at both the graduate and undergraduate levels. The programs that they will be registered for will be in business administration and/or agricultural economics. The students will participate in the graduate transportation emphasis at the graduate level. The curriculum will build on the existing graduate transportation program currently offered at North Dakota State University (NDSU). Some examples of courses are:

- Introduction to Transportation
- Introduction to Logistics
- Organization of the Transportation Industry and Carrier Management
- Rural and Non-Metropolitan Transportation Systems
- Analytical Techniques in Transportation
- Rural Logistics and Distribution Management
- Statewide Transportation Planning
- Transportation Administration

Students from the Russian Far East who will attend NDSU will be proficient in English. Some of the students may come with a bachelors degree in Business from the University of Alaska - Anchorage.

Additionally, an intern program with regional short line railroads will also be considered as a mechanism for giving students a first hand experience in how a railroad is actually operated in the United States. Several short lines exist within easy driving distance of NDSU. The Transportation Institute has a positive business relationship with these railroads which include the Red River Valley and Western in Wahpeton, ND, Dakota, Missouri Valley and Western, Bismarck, ND, and the Northern Plains Railroad, Devils Lake, ND.

NEXT STEP

The director of the Upper Great Plains Transportation Institute will make an orientation trip to the Russian Far East in April. The purpose of the trip is to verify existing perceptions and to learn more about the economy and the railroad itself. With this information, a more detailed proposal will be developed for funding from the U.S. Agency for International Development.