



By John Kjorstad

To get to *the other side*

Not unlike the philosophical musings that ponder the origin of the chicken and the egg, a similar causality puzzle has long perplexed city planners and proponents of road and rail infrastructure—if you build it, will they come?

Planners need to know that when they build a new road or rail connection, people will use it, justifying the cost of such expensive infrastructure. Cities with strong regional and international transportation links are more likely to have robust economies, but what drives their economic growth: the resourcefulness of a community, or its ability to efficiently connect and interact with a wider group?

Trade is at the heart of economic activity, and infrastructure is at the heart of global trade. However, the full relationship between investments in transportation infrastructure and near- and long-term economic growth is difficult if not impossible to predict. Investment decisions for major projects require expert advice, careful analysis, and ultimately an informed leap of faith.

Dollar for dollar, passenger and toll revenues alone do not always justify the upfront capital and ongoing maintenance resource required for a new road or railway connection. One has to

isolate and consider the wider impact completed projects are likely to have on the gross domestic product of connected regions. In some cases, this requires international cooperation.

The Oresund Regional Development between Copenhagen, Denmark, and Malmö, Sweden is a positive example of what local authorities can achieve working successfully across borders. Transportation is at the core of the Oresund Committee's agenda, which aims to bolster the region's cross-border economy. Its crowning achievement, the Oresund Bridge, opened in July 2000 providing a permanent road and rail link between the two cities and countries. Within ten years, the link has dynamically changed how people commute and work in the area. The increased activity and openness between countries already has regional planners considering further transportation projects as they aim to redress the balance between passenger and freight traffic as well as alleviate growing capacity concerns on the crossing.

CONNECTIVITY AND PROSPERITY

Transportation can define a society, and history has given us some very clear examples of how trade corridors develop and civilizations prosper.

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Three thousand years ago, the Nile River in North Africa provided ancient Egyptians with a cultural foundation that prompted trade up and down the river; years later, the Silk Road—an organic network of interlinking trade routes—established early ties among Europe, the Middle East, India, and China, facilitating the exchange of goods and ideas. More recently, extensive rail and road networks in Europe and the Interstate Highway System in the United States have supported globalization and nurtured strong economic growth on both sides of the north Atlantic over the past 60 years.

Connectivity and prosperity are intertwined, and the rest of the world is catching up fast. In the past decade, China has made extensive investments in its own impressive transport infrastructure, as well as strategic assets abroad. The other four BRICS (Brazil, Russia, India, and South Africa) are rapidly building transportation assets as well. Some employ public-private partnerships (PPPs) to attract private capital. For example, Brazil financed the western section of Rodoanel Oeste toll road in São Paulo through a PPP in 2009; Russia is currently using a PPP structure to finance its Western High-Speed Diameter project in Saint Petersburg; Indonesia's Jasamarga Bali Toll Road closed in June; and South Africa financed its flagship Gautrain Rapid Rail Link through a PPP in 2007.

THE NEXT PANAMA CANAL?

In other emerging markets, ambitious projects are being drawn up to overcome difficult

natural barriers and provide easier access to routes that have challenged mankind for centuries. In Nepal, feasibility studies have been completed for the \$9.8 billion Mechi-Mahakali and Pokhara-Kathmandu Electrical Railway—a 1,218 km planned network crossing through difficult mountainous terrain and over deep river gorges in the heart of the Himalayas. In South America, the equally ambitious \$3.3 billion Bioceánico Aconcagua Corridor between Argentina and Chile aims to link the Atlantic and Pacific oceans with a 52 km low-base tunnel through the Andes. This would create a historic new trade connection that would not only service Brazilian, Argentinean, and Chilean markets but potentially rival the Panama Canal for international cargo passing through the southern hemisphere.

These projects present unique and difficult engineering challenges as well as high price tags that question their feasibility. If built, will trade follow? Will regional economies grow, delivering additional value-for-money to private investors, users, and public stakeholders?

Some projects will always perform better than others. The physical and cultural environment in which they are constructed creates a complex fabric of unique circumstances dictating outcomes. Predicting these outcomes is perhaps the most difficult job in developing transportation projects. After all, understanding a chicken's motives for crossing a road is not nearly as important as knowing how many chickens are waiting to cross, and how much they're willing to pay for the privilege. 🚗