Thruport to the future

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A burly man with his tie loosened stands at a conference table covered with marked, Styrofoam coffee cups turned upside down. He moves one here, one there. He puts one on top of another and turns to scribble a note on a clipboard.

John Lanigan Sr., founder and chairman of Mi-Jack Products, of Hazel Crest, looks like he might be playing a children's shell game.

But the 1992 video produced at Mi-Jack wasn't about fun and games. It was made to illustrate a concept called Thruport, which Lanigan believed could revolutionize cargo container shipping in the United States.

By using giant precision gantry cranes spanning up to 10 railroad tracks, Lanigan believed container transfers could be executed five times faster. Thruport would speed up shipments, cut costs and take up to 50 million truckloads of freight off the nation's highways.

The 79-year-old founder and chairman of Mi-Jack still believes that. And now transportation experts are taking another look at the Thruport concept in the face of mounting road congestion and fuel costs.

"In the past decade, container shipping has just exploded," said Jean-Paul Rodrigue, an assistant professor of transportation economics and geography at Hofstra University in Hempstead, N.Y. "It's (Thruport) probably the next big step in intermodal."

America's stuff stuffs Windy City

In a soon-to-be-published study, Rodrigue points out the advantages of the Thruport concept, which involves transferring cargo containers directly from one major railroad to another. And he argues Chicagoland is one of the most suitable locations for Thruport.

About 1,200 trains per day hauling 37,500 freight cars load and unload in Chicago every day, representing about 50 percent of American freight volume, according to Rodrigue's study.

Many of those carry containers that come by ship from Asia and points around the world before being offloaded to railroads on the West Coast.

"All the rail companies say we have no more capacity," Rodrigue said. "They are whining and complaining they have no capacity. Well, here is how you build the capacity you need."

Point A, to point B, to point C ...

Currently, western railroads coming to Chicago have their containers transferred to tractor-trailer trucks in Chicago. The trucks then run the containers down a road to an eastern railroad's freight yard. The
containers are then lifted again and placed on the train before heading east. The opposite process takes place for cargo heading west.

It can take as long to get a freight container through Chicago as it takes to run it by rail from the West Coast to Chicago.

"When traffic wasn't so bad, it was not an inefficient way of doing things," said Professor Laurence Rohter, an Illinois Institute of Technology professor of engineering. "So that's one reason it (Thruport) wasn't done last week or last year."

Rohter has overseen classes at IIT that have spent two semesters studying the Thruport concept in conjunction with Lanigan and Mi-Jack engineers.

The IIT study points out a Thruport would be an environmentally friendly alternative to traditional intermodal yards with their acres of asphalt and long lines of trucks. A Thruport could be built on only 97 acres.

The largest environmental benefit would come from taking truckloads of freight off roads and transporting them by train, which are seven times as fuel efficient, according to the IIT study.

**Universities may do heavy lifting**

With advantages like that, deciding to build a Thruport now would seem like a no-brainer.

But many open questions remain on the concept, from logistics and economic viewpoints.

"In my view, for Thruport to be successful requires a number of somewhat elusive conditions," said Gerald Rawlings, director of operations analysis with the Chicago Area Transportation Study (CATS) and an adviser on the IIT project.

Thruport still requires that trucks bring products to stores and other consumers of goods. And shippers must decide whether to use truck or rail for transporting domestic products.

Also, competing railroads may not jump at the chance to exchange containers between themselves at a neutral site operated by a third party.

"I would like them to succeed, but I think it's a little further from idea to implementation than Jack (Lanigan) has been able to measure," Rawlings said.

Rawlings has suggested Thruport might work better in a less congested hub, such as St. Louis.

Purdue University, Georgia Tech and the University of Denver may soon answer some of the Thruport question marks with new studies.

Railroads have been hesitant to comment on the idea. That includes CSX Corp., which has said it is on the hunt for a new intermodal site in the south suburbs or Northwest Indiana.

**Beltway to the future**

A local railroad, Indiana Harbor Belt Railroad, would be a key to building a Thruport system in Chicagoland, according to the IIT study.

The railroad runs through Chicagoland from north to south and into Northwest Indiana. It transfers cargo from one railroad to another, mainly by breaking up trains of one railroad and reassembling them for another.
"That's what we do every day," said Dave Nelson, IHB superintendent. "This (Thruport) is just increasing the capacity to do that.

"It certainly would benefit IHB if anything like this comes about."

From little acorns

Another factor in Thruport's favor is Lanigan and Mi-Jack. The company operates 70 rail terminals in the United States and is one of the nation's two leading producers of mobile gantry cranes.

The company has grown from an idea Lanigan had more than 50 years ago while working as a Chicago utility employee. He designed a crane that lifted and then placed telephone poles in the ground, speeding up what had been a labor-intensive process.

Over the years, the cranes and the company have grown bigger. Much bigger. Mi-Jack Products, now organized under the corporate banner of Lanco, has grown into more than a dozen companies employing 2,700 people around the world.

Lanco also is half owner of the Panama Canal Railway, the intermodal link for the Panama Canal.

At 79, Lanigan continues to work at the company. Sons Jack, Mike, Dan and Bill are part owners and company executives.

Fast forward

At Mi-Jack offices Monday, Lanigan showed the 1992 Thruport video and explained the concept along with company Treasurer Eugene Larken and product engineer Peter Mirabella.

In the video, Lanigan's swept-back hair was only streaked with white. Now, it's nearly all white. There are more lines in his face and his jowls are heavier.

Other things have changed as well. Oil is approaching $80 per barrel. And rail and road congestion have become a national concern, grabbing the attention of politicians.

"How did our country ever get in this state?" Lanigan asked. "Sooner or later, it will get to the point where this country will just not be able to ship anything."

U.S. Sen. Dick Durbin, D-Ill., toured Mi-Jack facilities last fall and was briefed on Thruport. U.S. Sen. Dick Lugar, R-Ind., also has received information on Thruport.

At Mi-Jack offices Monday, Lanigan spoke about rail transport, Mi-Jack, Thruport and his pride in family and America. When he puts a pen to paper and starts diagramming the Thruport concept, his eyes flash and his big hands thump the table to emphasize his points.

He spins off the benefits of Thruport: $250 million in annual economic benefit for Chicagoland, 35 percent cost savings for railroads, 50 million truckloads off the road, 12.56 billion gallons of diesel fuel saved in the future.

Larken and Mirabella backed those figures up with more numbers, graphs, brochures and a thick booklet including economic analysis.

The big man becomes a little shy near the end of the hour-and-a-half meeting as he explains just a little further.
"It's sort of my last hurrah," he said.