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1ST ANNUAL SUPPLY CHAIN CONNECTIONS CONFERENCE

INTERCONTINENTAL TRANSPORTATION 2005

PLANES, TRAINS AND SHIPS

FEBRUARY 22, 2005
Planes, Trains and Automobiles Ships
Intercontinental Transportation 2005

Proceedings
Held at the Fort Garry Hotel, Winnipeg, Manitoba
February 22, 2005

Edited By:
Doug Duncan
Sharon Cohen

ISBN 1-894218-38-8

Transport Institute, University of Manitoba
www.umti.ca

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Welcome

Dr. Ed Tyrchniewicz, Associate Dean
I.H. Asper School of Business
Morning Chairperson

It gives me great pleasure to welcome you to this inaugural event, a new approach to looking at Supply Chain Management. This is an initiative of the Transport Institute at the University of Manitoba. In many ways it is the first visible sign of a very concerted effort on the part of industry with the support of the Manitoba Government through Transportation and Government Services, to put more focus on transportation, logistics and supply chain management education and research in Manitoba. These efforts gave rise to the establishment of the new department of Supply Chain Management that came into being on July, 1 2004 with 8 academic staff members plus myself. The person who is the spark plug behind development does not need an introduction to this group, Dr. Barry Prentice.

Barry Prentice is the Director of the Transport Institute, which is now part of the Supply Chain Management Department. Barry runs world famous conferences such as Field on Wheels and Airships to the Arctic. When Barry proposed the concept of a Shipper/Carrier conference, it was natural to launch Planes, Trains and Ships. We are delighted that you are here for what we hope will become an annual event.

We have lined up a number of very good quality speakers to give perhaps a little bigger picture of what some of the forces are that are driving supply chain management, both on the macro-economic side and the operational side. We will have time for questions from the floor and the wrap up will
come from one of our new professors in the Supply Chain Management Department, Dr. Paul Larson. Paul will tell us what we have learned during the course of the day.

A conference like this comes about as a result of a lot of co-operation. The Transport Institute and Palliser Furniture, created the conference agenda. Manitoba Transport and Government Services provided general conference sponsorships, Thunder Bay Terminals sponsored a coffee break and The Winnipeg Airports Authority is a conference sponsor. I want to acknowledge these very fine supporters.

Let us move into the program for the day. Each of the speakers will have thirty minutes to make their presentation followed by 15 minutes of questions.

Our first topic will focus on the global economic outlook for 2005 in a Canadian import/export context. To do this we have Mr. Peter Hall who is Deputy Chief Economist of Export Development Canada.
Session 1

Global Outlook of Canadian Import/Export

Peter Hall, Deputy Chief Economist
Export Development Canada
Speaker

Well thank you very much Ed. It is my pleasure to be here today. I just wanted to make a point of clarification; I am with Export Development Canada.

I am here today to announce to you that Chicken Little is alive and well. Remember the story of Chicken Little? Let me refresh your memory if you do not remember.

Chicken Little was walking through the forest one sunny day and was hit on the head with an acorn. Without knowing what had happened, looking up, and not knowing what had actually struck her, Chicken Little immediately came up with the conclusion that the sky was falling. Of course! And if it were not bad enough that she was so zealously convinced of this, she decided to spread this news to all of her friends. As you know, in the story, the list of people that were going to go to the king and announce this grew longer and longer.

Since 9-11 we have entered what we at EDC like to call, a new age of uncertainty. It is not that the uncertainty was not there before, but 9-11 was a catalyst for this uncertainty. We have seen in the aftermath, economic indicators that have gone all over the map and levels of uncertainty that have manifested themselves in a number of different ways. It is a breeding ground for Chicken Littles. There are a number of people out there, analysts
of different stripes saying that in one-way shape or form that the sky is falling.

It should not be a surprise then that economic forecasts are all over the map. At this point I would like to turn to the title of the presentation because it runs counter to that general sentiment. Our feeling is very strongly that we are in a not too hot, not too cold, Goldilocks kind of situation in terms of the international economic outlook. That is very much not the kind of message that you hear if you are reading the papers every day and listening to what they are saying. It is a much calmer message than you would expect. Chicken Little we are not. You have to decide if we are the Wylie fox that is trying to deceive you all so that he can drag you into the hole so that he can have a nice lunch. Or, whether we are the noble king that says, no I see the acorn on your head; it was actually an acorn that fell on your head. It is not the sky falling, go home and be happy. I am hoping that you will find me to be the latter.

Let us highlight what these turbulent times are: 9-11 of course ushered in a period of geo-political uncertainty. This has given rise to some alarming imbalances. Dealing with the war on terror and so forth, has created some very prominent imbalances. We see there are some very large changes in the economic landscape that are happening and at the same time they are contributing to the amount of uncertainty out there. That is really the rise of China. The rise of emerging markets are a real player on global markets. With all this uncertainty, what is it giving rise to? It is giving rise to a tremendous amount of volatility. In terms of the macro-economic indicators, we see volatility in currencies, commodity prices and stock markets move all over the place. This is not a mystery to anyone, but this is what gives rise to some of the sentiments that you see in terms of the analysis and in terms of doing a longer-term business plan. It is complicating things.
There are indicators in all kinds of industries of new things happening. To pick on one in the transportation industry; the Baltic dry index, shows how it is that an indicator can depart from a long term trend and give rise to the sense that the world is different and the sky might indeed be falling. These are staggering proportions. Here, you can go to a number of things, if you look at other kinds of shipping prices, spot rates for bulk containers or tankers. Phenomenal changes in these series. Anyone who is into data analysis is staggered by what is going on. Container traffic is certainly part of this.

There is a second question that needs to be asked. Is Chicken Little alive and well in terms of transport analysis or not? However, I am not going to attempt to answer that question. I would like to give some background in terms of the macro-economic picture. What kind of macro-economic forecast is it that we are facing? What kind of context does that lay for transport projections as we go forward? I am going to leave the details up to the experts that we are going to hear from today in the Transport Industry.
I am going to sit and listen with very interested ears because the micro-economic analysis that unfolds throughout the rest of the day is going to be quite interesting.

Let us lay the context for this by looking at recent history. We came out in the spring of 2004 with an assessment of the global economy, and that was that it was reaching high tide. The nice thing about high tide is it lifts all boats. We saw for the first time in a long while, a generally synchronized increase in global growth. That was the recovery that we were all looking for following 9-11. 2002-2003 were global rebuilding years, they set the stage for this rebound in 2004. It was very good. It was so good that economic growth out-performed its long-term trend. That is something that always concerns economists. One might think that any kind of growth is good; any kind of growth is a positive thing. But it is not. There are capacity constraints and you are feeling them in your industry right now. You know very well that you can only sustain an above trend rate of growth before you start bumping into those constraints.

In reality we were on an unsustainable growth path in a number of different countries. Globally we were really on an unsustainable path. What happened towards the end of last year, and we are seeing as we move forward into the forecast is a much more sustainable rate of growth. That is the good big news coming out of the presentation. We do not feel that the mad, panicky, unsustainable, excessive growth model is what is going to be happening as we go forward. We are slowing, but it is still strong. We believe that the global economy is showing signs of staying on a very sustainable path right now. The numbers are 4.4% in 2004 and edging down to 3.9% in 2005. It may not seem like a whole lot, but that is a manageable pace. The .5% wedge is a very significant one in terms of stability. We have reached a point where monetary and fiscal stimulus have done the work that policy makers have desired and so interest rates will rise from this point on. They have already begun to do that, as this information is a little bit dated and we are already seeing this start to happen.
Global and economic imbalances will improve over the next twelve to eighteen months as a result of this sustainable growth path that we have embarked upon. The economy is much better able to withstand shocks.

**Figure 1.2**

**Economic Growth Forecasts**

What does it look like in numbers? If you look at our number for the United States, we have a situation there that is almost like a back to the future type situation. In the late part of the 1990’s the United States was the driver of world economic growth. It was the place to be and in some respects the only game in town. It is getting back into that mode again. Our view of the US economy is a very good one, a very strong one. I would like to put forth that positive message and we will spend some time talking about it.

In terms of overall global growth, you can see that we are not going back to a situation like we had in 2001. We definitely have a global situation that is back on the rails and expected to do quite nicely as we move through 2005 and into the future.

Canada is battling to make the same kind of progress as the rest of the world. What we are dealing with is our currency situation and reaction to that.
Let us put our forecast into context. You have Chicken Littles on either side of the picture.

**Figure 1.3**

Rising Equities and Narrowing Bond Spreads Point to Lower Risk in Emerging Markets

The too hot outlook has that the world economy is too hot and growth will remain above trend. The focus is really on China and the net new demand that economies like China and India bring into the world. Higher energy and commodity prices are here to stay, and will keep pushing the Canadian dollar higher.

On the other hand the too cold outlook has the US economy falling off a cliff because of imbalances, and then has China heading for a hard landing. We just do not see that these things are manifesting themselves out there.

Why is it that we disagree with the too hot outlook? Well, it is already in the data, that there are clear signs already that the economy is slowing. Most US economic indicators are showing some signs of deceleration. The OECD, covering a number of different nations is showing the same thing. We see some slowing signs in China. A key indicator of this was towards the end of last year when base metal prices started to level off. There is some risk
around this right now. Bond markets are telling us that the demand for credit is not overwhelming.

Why do we disagree with the too cold outlook? That view holds that central banks will tighten to the point that economies will collapse. We believe that central banks are a little smarter than that. If they realize that there is economic collapse on the way, they will hold back and will not pummel the economy. It is not their desire to do that, they just want stability. Also, oil market dynamics have changed and most economic indicators are telling us that we are heading into a normal situation worldwide.

When we are looking at the overall outlook, EDC pays a lot of attention to emerging markets. That is an important thing to do right now because a lot of new activity is being generated in emerging markets. They often get ignored when you talk about world growth because the G7 and the large industrial economies are the ones that everybody pays attention to. But these are nascent economies that are becoming a larger and larger share of overall global growth. What the two indicators in Figure 3 tell us is that equity markets are very, very strong right now and that bond spreads against industrial economies are at historical lows. That means that the risk of dealing with emerging markets are low and growth prospects are strong. I wanted to leave that with you before we get into the numbers.

What are the key features of the global outlook? The NAFTA zone is doing quite nicely. The US economy is taking the global lead. EU and Japan are not completely up to snuff; they are dealing with structural changes. If anything they are dragging world growth down. It is an interesting feature because as the rest of the planet is taking off, these two economies are having very difficult times dealing with a couple of key structural issues.

Emerging markets are doing very well and it will be no surprise to you that China is the powerhouse in Asia. The potential outlook for the Chinese economy is that 8% could be sustained over a ten-year period without
causing too much difficulty. Given the size of the growing overall economic pie, that is a very significant number for all of us in the room. This is going to have very interesting implications for transport as we move forward.

India is also performing well, another economy that had tremendous potential in terms of overall growth. South America is riding the commodity price boom. Some very good opportunities there as well. These are a source of strength for the global economy.

Let us move from this to talking about some of the manifestations of this growth on the overall economic situation. Commodity prices come to mind right away. Why is it that in our global outlook primary producers are faring well and profitability is high? The question is, are these changes permanent?

Let us first talk about oil. We do not believe that price increases in oil are permanent. We have seen ups and downs in oil markets before. Our forecast is that we are going to average about $35.00 in 2005. That was an awful hard sell a couple of months ago when we were dealing with $50.00 and even before that when the price was higher. This is our view. The reasons that prices have spiked? There is a global uncertainty issue that has added about $5.00 to the overall trend price. World demand is another kind of permanent feature, which has added about $4.00 to the overall price. If you add that to what the base level prices were when we started this whole exercise off, OPEC was aiming for a price of $18-22.00. So you are working from a level like that and adding these numbers to that price. In addition, supply disruptions were manifold last fall, hobbling inventory rebuilding for the critical winter heating season, and we are still dealing with the fallout. During the period of time between the end of the winter season and the beginning of the summer driving season, we believe that there will be a reasonable amount of catch up in terms of inventory management, and that will bring prices down quite a bit.
The final point here is that there was a period of capital discipline. All the Chicken Littles forget that at the end of 1998 we had world oil prices of about $12.00 a barrel. Well, what do you think the Chicken Littles were doing at that point in time? There was a very prominent magazine, whose name I will not mention, that came out with a landmark article arguing for $5.00 per barrel oil over the 5-10 year horizon. That is often what happens to analysis when you get price movement like this. Oil prices are a very volatile indicator and developments at the time made this a very compelling argument, together with technological changes that were foreseen in the coming 5-10 year period. That is a very short planning horizon. If it is going to go to $5.00, your planning process is going to be very different than if you think it is going the other way. What then happens is you get a few wrinkles and it starts heading the other way. The Chicken Littles on the other side of things say that prices will go to $60-80.00 per barrel. We like to stand back and say, “What are the fundamentals that are driving this particular situation? What is a stable situation that we can get back to?” Two out of four of the issues that I raised were temporary issues and yet they had quite an impact on the overall story. We believe that the way those four issues are going to shake out over time will take us to the $35.00 per barrel number in fairly short order.

Why is that important to us today? It is a feedstock for transportation, so in terms of overall transportation costs, oil is an issue. We do have a situation, world demand growth, that is a permanent feature and it is here to stay. Part of this price spike has to do with the fact that the world demand growth has fundamentally changed. What does that mean to us? Demand increases, investments will increase, production will then increase and shipping will increase. You will see greater oil flows and a greater demand on the transportation infrastructure.

The same dynamic covers other commodities as well. We are in a situation where the non-energy commodity price index, in US dollar terms is doing some really wild things. If you were to cast this number back to the mid
1800’s you would see there is a real long term down price cycle. What happens when you have an industry where there is a long term down price cycle? It affects the way that you carry on investments. Then along comes a shock to world demand, like what we are currently seeing in the cases of China and India. This is net new demand, for all kinds of goods and services. It rocks the boat a bit. That long-term decline in commodity prices has affected the investment cycle. If you are in that business you are not going to be pumping a whole lot of money into those primary products. The investment cycle is behind the curve. What happens in a situation like this? When you get a price spike like we have seen in the last couple of years, all of a sudden there are all kinds of investors that are interested in exploiting resources that have been ignored up until this point. EDC’s view is that whether you are talking about base metals or forestry products there is a lot of product out there that has suffered under-investment. So the investment cycle will catch up and the implication is that prices will go back down and volumes will increase. Once again the transportation network is going to have to absorb this as we go forward.

Where I would back away from the Chicken Littles, is on the price side and say okay, let us get calm prices and not prices that are continuing to go ballistic. The underlying implication is that there is a net drain or a net increase in demand for transportation infrastructure. That is the story on commodity prices.

On to the largest economy in the world, the one that everybody’s eyes are fixated on right now. If you look at the headlines in the newspapers, you see that something is horribly wrong with the US economy right now. You look at the imbalances that people talk about. Imbalances on the debt side, imbalances on the trade side, imbalances on fiscal policy. You would think that the economy was going to Hades in a hand basket. And if you look at the employment numbers, it just does not seem like there is much spark down there. Yet if you look at GDP growth, something phenomenal is going
on in the US economy. It is the world leader again. It is the engine in the industrialized world that is keeping everything going.

**Figure 1.4**

**U.S. Economy: what do the ISM Indexes Say?**

I chose one indicator to look at – it is from The Institute for Supply Management. The Institute goes throughout the US economy and talks to buyers and asks, “What is your buying activity like?” giving us an indication of where the economy is going in the near future. So for both the manufacturing and non-manufacturing industries, we have very good forward looking indicators of US activity. We might look at this and say, “The number is going down, this is not a happy news story”. Please do not misinterpret this information. Everything here above 50 indicates growth going forward. The fact that we see a downward slide in the manufacturing indicator means that growth will not be as hot as it was during the global recovery period. This indicator will stabilize, but in a growth situation. This is looking six months out, and this is an economy that looks to me like it is doing very well. Given the weakness in the US currency, the prospects for the US manufacturing sector are very good looking forward.

If we can de-bunk one myth, it is that the US is going to the netherworld in a hand basket. It is actually sustaining a lot of activity in the rest of the
planet. There are a couple of reasons that people think that the US economy might come off the rails. One of them is higher oil prices. We are in a very different oil consumption world than we use to be just a few years ago. If you go back to 1980, it took 1.2 barrels to produce every thousand dollars of US GDP. That number has been cut down by a factor of about 33% now. So we see much less usage. Is it just a US phenomenon? No. It is a planet wide phenomenon. Oil intensities are down and you can see oil price spikes that do not de-rail GDP growth.

**Figure 1.5**

Soaring Debt Levels: A Ticking Time Bomb?

*(Household Debt as a Share of Disposable Income, %)*

EDC believes that the line of reasoning that says that oil price spikes are going to de-rail things is bunk, stock markets have it wrong. Another aspect of the US economy that gets picked on is consumer indebtedness. Consumer debt levels are at 115% of GDP, that is the story. But that is not just the case for the United States, it is the case for Canada, France, Germany, South Korea and the Netherlands. The Netherlands has 200% debt to GDP ratio. The US is in very good company right now. Is this a situation that we should be worried about? We do not think so. Why? You have seen asset prices rise in the United States. You have seen home prices increase in the United States. The bottom line is that net wealth positions are in very good shape. The fact that you have a current indebtedness situation like this completely ignores the fact that wealth increases on the
part of US, Canadian consumers and in all these other countries as well. It is a very good situation, a situation from which consumption can be sustained. We also look at the job creation numbers in the United States, which are OK but not great, but you look at productivity growth in the United States and the capacity for increases in real wages. You see a current income situation that is very good. We really do not think that the debt situation is a ticking time bomb. The Chicken Littles that have decided to pick on this particular indicator are overstating the case.

We are in a situation where the US economy is strong, monetary stimulus is not needed anymore. The US Federal Reserve Board is backing away from the extremely loose monetary conditions that were introduced in 2001.

What about the US dollar? Let us take a retrospective look at how this time series has evolved over the last while. If you go back to 1995 when the Mexican Peso crisis happened, that kind of kick-started the rise in the US dollar. There was a lot of flight of capital to a quality location, into the United States, that initially boosted the US currency up. That was a temporary impact. At the same time the Tech boom got underway. The US economy became a place that drew capital like a magnet. Through the later half of the 1990’s, we had currency crisis upon currency crisis. It started in Asia Pacific, moved to Russia, then migrated to South America. There were a sequence of these things that happened in the late 1990’s that boosted up the US currency and made it ride high above everything else. What happened at this point in time was that it became very expensive for certain producers in the United States because they were getting uncompetitive. They started investing off shore and expanding their supply chains like good globalizing companies.

As they did this, it changed the entire trade dynamic in the United States. The trade imbalance started to open up and as a result of that, there has been a correction, a rebalancing of the US currency. What else has rebalanced the US dollar? Interest rates have been very low in the United
States, so it has been harder to earn interest income there. People have been rebalancing their portfolios to areas of the world that have a higher yield. As risk premiums have been dropping in emerging markets, that also been a draw away from US shores. As a result, we have seen an 18 per cent drop in the US currency. Do we expect this to continue? Absolutely not. We think that it is over now.

In fact there might be some upside for the US currency. You can see a growing, yawning trade imbalance in the United States. You read about it almost every day in the papers. This currency still needs to correct by 15-20% to rectify this enormous imbalance.

**Figure 1.6**

US Trade Balance as a % of GDP

Globalization is changing the theory around trade balances because as investment left US shores, a good part of this was U.S. companies globalizing their supply chains around the world. The result was a growing trade imbalance, but it was embodied within US companies. If you have a trade imbalance within a company, does it really matter where it is that they are producing? Our contention would be that, no it does not. Do you really need to sell US bonds all over the world to cover for this? No you do not. Companies are more than happy to finance this themselves. It is not an imbalance that requires a currency correction at all. The changing dynamic of globalization means that this is a more stable situation than it appears.
The bottom line is, we just do not believe that there is more downside for the US currency.

At the same time, what are the prospects for the Canadian dollar? I hope I have made the argument that there is no need for the US dollar to weaken further. The impact of the recent currency appreciation on the volume of activity is scathing. It is about to be revealed in the next quarter’s GDP numbers. When those numbers do come out there is going to be some downside for the currency right off the bat. And our forecast for oil prices dropping sharply is a clear negative for the Canadian dollar, since it is a petro-currency. What is more, non-energy commodity prices, if they have peaked, will take some steam out of the Canadian dollar. The interest rate between Canada and the United States is closing on the short end, that is also a negative for the Canadian currency. All of those things are negatives. We do believe that we are going to average about seventy-eight cents this year. That is not a normal forecast, there are a lot of Chicken Littles saying that we are going to ninety cents or even to parity with the United States. But EDC just does not believe that the dynamics are there to support that kind of thing. But do expect volatility to continue. Do not use seventy-eight
cents as your planning price, use something a bit higher than that, because of the volatility factor. This is where we feel that the currency is going to be, it could even go as low as seventy-six cents by the end of the year according to our forecast. That should stir up some questions.

We are not the only currency that has appreciated versus the US currency. We are in good company. What are the implications then for Canadian exports? We had a very strong year in 2004 following three years of export recession. We are in a situation where we have recovered on the export side, the high dollar is going to impact things on the volume side. We are not going to see the amount of increase that we saw last year. That gives the transportation infrastructure time to take a breath and catch up to the level of activity that is going on. That is good news on the Canadian front. Slower world economic growth, although still at a decent clip, is also going to somewhat dampen the pace of Canadian growth.

You can see the impact that Canadian currency is having on Canadian export volumes. It is considerable. We saw an upturn in December, but it was not enough to move the three-month moving average appreciably. If the currency stays above the 80-cent level, exports will remain under pressure. However, with the currency weakening through the forecast period, export volumes are expected to continue rising.

What is the outlook by country and region? It generally follows the chart that we had on GDP growth, expect Trans-Pacific travel to continue to be very strong. Exports to China and East Asia are doing very well as a result of the economic growth that is going on in that region. Exports to South America are doing quite well because of the prosperity there. Central and Eastern Europe, because of accession is creating growth that one would want to take advantage of at this point, although the EU has moved into those markets in a very big way.
I want to finish with a couple of thoughts on globalization. We at EDC like to talk about globalization as having three dimensions.

The first dimension is the globalization of sales, which is a no brainer. You increase your business by operating not just in a country context or a region context but also in a global context. The more people you can sell your goods and services to the better. You reap the gains that come from trading goods and services. We are all very well aware of that; it is something that has been true down through history.

The next two elements of globalization are different, and need some explanation. What we are seeing right now is a transformation of global trade. The globalization of production is what is happening right now and what this conference is all about today. Moving supply chains all around the world to take advantage of higher productivity and comparative advantages. Sourcing parts of the pieces that you are putting together to form a final product from all parts of the planet. The important implication of this is that trade flows are well outpacing the growth of GDP because of this. Buy the time that you get to a final product you have traded it two or three times. We are seeing a situation of sustainable export growth, real volume export growth that is twice that of overall GDP growth. It is changing the econometric relationships, changing what economists will tell you about this. If you look at people who are analyzing the transportation sector they will acknowledge that this is the case. A very prominent transportation analyst says we can no longer depend on the standard economic relationships for doing transportation projects. That is why globalization of production is important.

The third element is the globalization of distribution. Companies actually investing in foreign locales, to take advantage of not just having another company with a comparative advantage producing things, but having units of the same company all across the world, harnessing advantages that other regions possess. We see this growing network of intra-firm trade, which is
even greater than the rate of growth of trade itself. As investment flows, trade goes. The investment rates are three times the rate of GDP growth, so if that portends what is coming in term of overall trade growth going forward, then we are seeing trade growth outpacing GDP growth by an even greater factor. This structural element is having a key bearing on transportation networks as we go forward. You can see that we still have stable GDP growth as we go forward that will sustain underlying activity. You overlay the structural changes that are happening planet wide and you have a situation where transportation networks are going to have to catch up. Am I Chicken Little on the economic side? I am not. But I would throw the question out to the floor, does one need to be Chicken Little when it comes to transportation networks? With that I will close. Thank you very much.

Dr. Ed Tyrchniewicz
Morning Chairperson
Thank you Peter for a very broad, interesting and positive perspective on where the world is going.

I will ask the first question. Peter you talked about the US situation and what your prognosis is. You also mentioned China and the great potential there, could you go into where you think China will end up visa vie a possible soft landing, the currency issue, etc, given that China is very important in our trading picture here.

Peter Hall
Speaker
If you look at current economic indicators for China, it seems like at the end of last year there could have been excessive tightening by the government. Monetary policy reacts or is conducted in a different way in China. There is a lot of state control in the provision of financial services. There is a lot of scope for tightening monetary conditions without high profile interest rate increases or the like. Although one did happen in China toward the end of last year. It almost seems as if whatever action was taking place behind
closed doors, it was really having an impact on Chinese production toward the end of last year.

China’s endow-amative resources is what is fundamental here. What China has, that not a lot of the rest of the developed world has, is a very ready, capable and able population. In fact the Chinese economy is kind of like riding a bicycle, if you ride too fast you are going to miss the turns, if you ride too slow you are going to fall off. The difficulty for policy makers in China is to keep that middle road, keep enough growth going on so that you can absorb the vast army of labor that is coming from the country into the urban centers and try to keep infrastructure up in tandem with the demands that are being placed on it. It is a very tricky exercise. Not one that many economies have to deal with. I hope that helps. That is how we see the Chinese economy, the prognosis is very good for the short term and in the longer term as well.

Barry Prentice

Question
There is a lot of discussion that the Chinese currency is undervalued and creating trade imbalances. Do you see the value of the Chinese currency re-valuing soon?

Peter Hall
Speaker
The outlook for the Chinese currency is a difficult call, you have a lot of people speculating whether the currency is going to start a managed float to rectify some of the imbalances that are occurring. Remember that Chinese imbalances are not just with the United States, but a growing imbalance with EU as well. It is a global phenomenon that China is going to have to come to grips with. What is interesting about that, is that nobody is going to be able to tell China how to manage their currency. Frankly they do not care as long as they do not have any domestic reason for doing anything different, they simply will not. They will just tell the rest of us to get packing and say fix
your own economies and we will worry about our own. That is the way that they have conducted any kind talks, including the G7 talks that just occurred. That is the way that they deal with this situation.

Are there imbalances? Yes. Do currencies normally adjust to take care of this? Yes they do. Ultimately there will be a rebalancing of currencies to take account of this, but right now we do not see that it is imminent. There was a lot of speculating on this that something was going to happen this year. I do not think that we see anything happening in the near term on that front.

On the agriculture side of things, I have stayed very much away from weather forecasting. Unfortunately that is the dynamic of agriculture forecasting. You get vast changes in the supply demand balance from one year to the next. In terms of crop production, that is just something that God has just given us and we are going to have an Ag cycle. Depending upon where we are at in that cycle we will get Ag price movements that often run counter to what is happening in the rest of the planet. If you look at livestock side, you have some issues there and Canadian producers are dealing with a closed border situation. On the pork side you have pork cycles that can be very volatile as well and that is a part of Ag that is doing not half badly right now.

**Dr. Ed Tyrchniewicz**
**Morning Chairperson**
Any other questions anyone would like to raise to Peter?

**Matt Seguire**
**Question from Audience**
Mr. Hall, in the context of your presentation, you introduced the notion of “emerging markets” as a prominent element of the global economy. While China and India have received a considerable amount of attention for their contributions to the current global environment, should Canadian
stakeholders be looking beyond the giants of China and India given their economic prowess?

**Peter Hall**  
**Speaker**

We have comparative advantages with some of these. We have seen quite an interesting increase in the amount of bilateral business that we are doing with Russia. In EDC, when we analyze the prospect of doing business with emerging markets we look at a number of different risk factors. My division is all about analyzing these risk factors. We do it in five ways. We look at economic risk, political risk, environmental risk, the engineering side of things whether it is feasible to actually do a project, and finally all the legal ramifications. We are very comprehensive in terms of covering all of this and in terms of looking at emerging markets through this particular lens. Each country has a different mix of all of these risk issues. When we first look at an opportunity matrix the first thing we look at is the potential for GDP growth and the sustainability of that growth. We analyze the market for its overall potential. How many untapped resources does the market actually have in terms of people, capital, infrastructure of the economy and also in terms of resources. We look at country after country and assess whether what is going on there is a cyclical phenomenon or whether there is something deep and structural that is worthy of tapping over the long term. In many emerging markets, based on the stage of development that they are at, they tend to be heavy on the primary production side.

It does not seem to matter what emerging market you go to right now, depending upon which mix of resource endowment they have, the situation is pretty good. Commodity prices are rising high so profitability is there and the economies like China and India are going all over the world trying to secure for themselves these primary resources. This is the net new demand that is breathing brand new life into demand for these primary products and causing prosperity not just in specific locales in the world, but anywhere you see a comparative advantage if you happen to have nickel or copper, that
type of thing. South America is burgeoning because of that, and that is something that we do not think is going to go away. Instead of going to particular countries, I prefer to paint a broad picture to answer your question and to say that broadly speaking, prospects are good. The only areas that are having difficulties are sub-Sahara and Africa. The whole African sub-continent really is the one with the most difficulties out there right now. Everybody else, if I can broad brush it, is in a pretty good situation.

Session 2

Constraints, Trends and Opportunities in Trans-Atlantic Transportation

Dr. Ed Tyrchniewicz, Associate Dean
I.H. Asper School of Business
Morning Chairperson

Now that we have had a good overview of the general economic outlook, we want to start focusing more on the freight side. The next three speakers are going to focus on Trans-Atlantic trade, the Port of Montreal as well as Trans-Pacific trade. Our first presentation will be on constraints, trends and opportunities in Trans-Atlantic transportation and to make this presentation we have invited Hans-Georg Brinkmann, President and CEO of Kuehne + Nagel.

Mr. Hans-Georg Brinkmann, CEO
Kuehne + Nagel Ltd.
Speaker

You gave away all my secrets, I was born at Kuehne + Nagel, it is true. Good morning Ladies and Gentleman.

I started in the industry some 30 years ago. One of my co-workers once said “The Mediterranean is a sea of the past, the Atlantic is the ocean of the
present, the Pacific is the ocean of the future.” That was thirty years ago, and I think we have been right.

I will use this opportunity to talk about Kuehne + Nagel and what we do. The main growth of our organization occurs mostly here in North America and especially in the Far East. This is the size and scope of today’s organization. We have been in Canada for 53 years. Kuehne + Nagel’s first branch outside of Germany was in Montreal. This is something very special. Canada is still a large part of the Kuehne + Nagel organization.

What do we do? We are number one in sea freight logistics worldwide. We grow double digits every year, even with all the problems that come with it. We are one of the top 10 in contract logistics, and just yesterday I signed an investment application to add another million square feet to the 3.6 million square foot, footprint here in Canada. I think this also underlines how important Canada is in the Kuehne + Nagel world.

One of our biggest investments every year is Information Technology, be it operational or customer application. On average we spend about 75 million Euros per year in software and hardware because of how important the flow of information is today.

**Figure 2.1**

GDP Growth

GDP growth is the key driver of demand growth. Measured by GDP growth, 2004 is witnessing a sustained re-bound of the World economy.

Source: JP Morgan (August 2004)
What does GDP growth mean to the volume of transportation? Transportation and GDP development are related to each other. After 9-11 it affected the market worldwide, especially the Trans-Atlantic.

**Figure 2.2**

The economic rebound is expected to reflect global container trade growth of...

In 2004, over 100 million TEU (twenty foot containers) were shipped worldwide. That is an increase of 11% over 2003. The expectation is that the growth will be higher in 2005, about 11.5%. If we place all those containers end to end, it would cover a distance to the moon and back. This extraordinary growth trend is not just based on GDP growth and traffic. In addition to the general economic recovery, the further expansion of free trade agreements plays a major role in the outsourcing of manufacturing as well as assembly. Hence, an increased need for containerized transportation. The demand will be enormous in the next couple of years.

Carriers had a very positive year in 2004, they made money. They made money in certain trades where we all allowed them to make some money. Basically it is good news that they make money because then it guarantees that these guys re-invest in new container ships and new containers. All the things that we will need tomorrow to do our business. After a capacity shortage in 2004, the order books of the shipyards are basically full till the end of 2007-2008. Nearly a thousand new container ships are on order.
That will add more or less the capacity of 3.9 million TEU by the end of 2008. In 2008 we will have 200 more container ships that have a capacity of more than eight TEU’s. However, the numeric size of the current order books might be impressive, but the growth rates on an annual basis are barely in line with what the historical growth rates are.

We have to look at some structural indicators. Twenty years of data clearly indicates that there was an average growth of 8.5%. If we look at supply and demand scenarios, and every vessel was full both ways, then ships would be half empty by now. This is not the case. The main reason for the difference between supply and demand is the increasing trade distances. A lot of carriers simply decide to go somewhere else because of congestion. Cargo is like water, it takes the easy route to get to its destination. If LA and Vancouver are not the easy route because of congestion, it might take the longer route through the Panama Canal and go to Halifax and other places.

What we carry around in the world today is a lot heavier than it was in the past. A lot of raw material means that a vessel that might normally have a capacity of 8000 TEU, but it cannot carry 8000 TEU. The golden rule in the shipping world always was 90% was full.

**Figure 2.3**

**Trade Imbalances 1997**

Source: Drewry Shipping Consultants, Container Market Quarterly Dec. 2003
The most impressive part is the trade imbalances. In 1997, the Trans-Atlantic was nicely balanced. Paradise for all the carriers. On the Trans-Pacific, we already had to deal with certain imbalances. The Far East to Europe also had some imbalances. But by far not what we see today.

**Figure 2.4**

**Trade Imbalances 2003 - 2004**

![Trade Imbalances Map](image)

Source: Drewry Shipping Consultants, Container Market Quarterly Dec. 2003

On the Trans-Atlantic, the imports are much more than the exports. Look at the Trans-Pacific, basically two containers imported for each container exported. The Far East and Europe have basically, the same scenario. What would we do as business people do if we were in the carrier’s shoes? We would go where the money is, where the trade balances are, where we had easy access to the markets and where we do not find any constraints. Ocean carriers have to be very careful how they spend their money. For the most favorable size of vessel, charter rates tripled. The cost of doing business for shipping lines more than doubled in the last couple of years. When we look at the rate developments, this is not reflected in the rates. When we look at these rates and take into consideration that they need money left over at the end of the day to invest into paying the rail guys properly and re-investing where it is needed. Otherwise shipping lines only go where the booming markets are, South America for instance.
How did Canadian ports perform over the last few years? Vancouver, had an all time record, +8%. But look at the top line, world markets grew by 11%. Vancouver is doing fine, but just below average. Is this fine, with congestion like we have never seen before? Halifax reported their second best result in history. Somehow you have to make those press releases look nice, but it is not that great. It is a 3% decrease and moving forward. Not knowing where that additional volume should come from is a little bit scary. Montreal on the other hand, is close to the world wide average + 10%, with all the problems that is created by that.

**Figure 2.5**

Container Volume 2004 reached + 100 Mio TEU Worldwide (+11%)
- Port of Vancouver 2004
  1,660,000 TEU (+8% - an all time record)
- Port of Halifax 2004
  525,500 TEU (-3% - 2nd best result in history)
- Port of Montreal 2004
  1,220,000 TEU (+10% - best year since 1984)

The north continent and the Mediterranean Sea to the US and Canada represent on the import side a volume of around about 3.2 million containers. Do not forget 100 million world wide. What do we ship? About 2 million TEU eastbound to Europe. The Canadian portion of that is about 500 thousand, on the way back around 700 thousand. Still a lot compared to the total North American market, but not too impressive.

The annual volume through the port of Montreal in 1990 was around about 300 thousand TEU. Today we are around 500 thousand TEU on the import side, on the export side we end up with about 400-415 thousand TEU.
According to a forecast for the year 2005, the peak season is obviously in the third quarter. With today’s nominal load capacity we end up with a load factor of 92% in the third quarter. 2005 numbers are based on a growth rate of about 5% both East bound and West bound.

Just a few words on Air Freight. In 2004, 16 million tonnes of cargo were flown around the world. That is a lot. It is only 3% of world trade, but it is still a large amount. By 2010 the expectation is 23 million tonnes world wide based on an average of 5.3%.

**Figure 2.6**

Airfreight – Inbound vs. Outbound 2003

- South America: 2,531,993 tons
- Africa: 3,938,598 tons
- Near East: 3,938,598 tons
- North America: 3,938,598 tons
- Asia Pacific: 3,938,598 tons
- Europe: 3,938,598 tons

2003 Inbound Cargo: 3,938,598 tons

Airfreight – Inbound vs. Outbound 2003

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2003 Outbound Cargo: 2,531,993 tons

In 2003 the inbound tonnage was close to 4 million tonnes, while the export volume was 2.5 million tonnes, which again underlines that the imbalance in trade is growing and growing.

Canada plays a minor role, 5.7% in one direction, and 6.7% in the other of the North American volume. But on the other hand, Canada is growing fast, 11.2% inbound, 14.1% on the outbound. We all know airfreight is a sensitive issue. Production delays result in shipments as airfreight, but not as planned air cargo. A quick look at rates for the last ten years. From a level of 125% in 1995 on the export side, we are down to about 60% of what we used to pay. On the import side, there was a little bit of recovery in
2004. It is quite interesting how little we pay per kilogram when we ship by airfreight.

**Figure 2.7**

Airfreight – Focus Canada - Europe
Rate Development Inbound and Outbound

In 2008, I predict that we will be fine when it comes to ship supply and demand. The bigger struggle for us is the infrastructure in Canada. I brought Karl Ollek with me to give a brief presentation on the innovative communication systems that have been created by industry. The major carriers, the major freight forwarders, the customers; just to share with you what is available.

**Karl Ollek, IT**
**Kuehne + Nagel**
**Speaker**

Hello. I am here to talk about the sexy topic of IT. Basically, to continue on the topic that Mr. Brinkmann brought to the table and show how Information Solutions ties into the whole picture. The key is to have transparency. If we do not have transparency we are going to have problems. Using the analogy of the iceberg, when we do have problems because of lack of transparency the first thing that jumps into people’s heads is the high logistics cost, late deliveries, etc. There is a lot below the surface: litigation, unsatisfied
customers, etc. Is it important to share the information to minimize the effects of the bottlenecks that we are currently experiencing? If you do not have the data you cannot measure it and you cannot control it. It is essential to have a free flow of data with all the partners in the supply chain. In the airfreight industry, they have come up with the concept of Cargo 2000. Basically it is a membership of airlines, freight forwarders, etc. They came together to create a platform of continuous improvement. It serves the purpose of providing a common platform of data, but more important than that, it has data quality measurements built into the system. I will go into more details when we look at the route maps that are behind the scenes. But essentially, the data quality tool behind that is what helps clients gain confidence in the airfreight industry and have a more secure data flow.

An article that came out on Cargo 2000 stating that Cargo 2000 certification is going to become the same thing ISO standards has in the airfreight industry. In the future, if you are not Cargo 2000, you will not be able to bid on available tenders. It is really gaining importance in the airfreight industry.

**Figure 2.8**

This is where my IT side comes out; this is the brains behind Cargo 2000. It is a route map, and it is the beautiful part of the system. It monitors all the
milestones in the supply chain and it gives the clients confidence. The nature of transportation is that stuff happens. There are delays, rough seas, delayed planes, etc. At least with this system you can monitor those exceptions and react to it proactively. That is the beauty of this system. Every single milestone is a measure for duration, you will know that from point A to point B will take 30 minutes; point C to point D will take 8 hours and 10 minutes. Everything is recorded so that it lends a lot of confidence to clients.

How does Cargo 2000 work exactly? Essentially there are three phases, but I will discuss two. First is the airport-to-airport move. All members are certified for phase one. Phase two is the door-to-door moves, when we monitor the supply chain from that perspective. Kuehne + Nagel was certified in 2002, DHL in January of 2004. Initially these were test lanes, but subsequent to that Kuehne + Nagel was certified world wide in 2003, which is great. Phase three is an order management level where you have line item details, and it gets very specific, like a package level.

What about the challenges from the sea freight side? The seaside challenges are more pronounced. As we know, you have congestion, operating efficiencies, carrier inefficiencies, competitive advantage and co-ordination of all the different information systems. It is how we use that to our benefit to better manage the data and ultimately the cargo flow. As Mr. Brinkmann mentioned, it is just as important to move the information as well as the cargo.

Some of the steamship lines have come up with a partnership called INTRA that is similar to Cargo 2000. You have one platform for all the carriers, you can do online bookings, sailing schedule information, tracking and tracing, you have reporting functionality, and EDI. As opposed to going to one carrier, you go to Intra and have on EDI message for the whole group of members. It is very important to have the least number of interfaces otherwise, you have data integrity problems.
What do we need to do? The challenge is that we have very good integration with the steam ship lines, the freight forwarders, etc.; the key now is to alleviate the port congestion that we have.

We wanted to show you Cargo 2000 and Intra just to open your minds to EDI. In the past it was something that people did not want to touch but now it is becoming much more common in the industry. If we can harness the power of the information flow we can make some really good things happen. We can alleviate clients calling and asking where their container is, “Is it on a ship?” “No, it is in the yard in storage.” Although we cannot solve the problems overnight, with good data exchange we can alleviate the problems and reduce them to a minimum.

In conclusion, it goes without saying that we have a lot of challenges ahead of us. With the looming increase in traffic, we know that we have many more challenges ahead. Questions that we need to look at are: How do we alleviate the bottleneck that we have in the supply chain? How do we increase efficiencies through co-operation, communication and integration? We need to enforce investments in infrastructure.

Some students in Germany came up with the concept of building a bridge across the Atlantic. They had a grand vision from the Americas to Europe. It is a loft idea, but if you aim for the stars you might not make it, but you will land on the moon. If we aim big, maybe we can achieve some good results. Thank you.

**Question from Audience**

*(in-audible)*

**Hans-Georg Brinkmann**

**Speaker**

That is the booklet that you will get on your desk after the break. It is interesting reading. It is a little far away. I hope that bridge ends up here in Canada, maybe somewhere in Halifax. Thank you very much.
Dr. Ed Tyrchniewicz, Associate Dean  
Morning Chairperson  
Thank you very much gentlemen. I think that is a very good overview of what is happening on the Atlantic situation and particularly the Cargo 2000 concept.

Question from Audience  
(in-audible)

Hans-Georg Brinkmann  
Speaker  
That is a lot of speculation. If you look back at 2004, the overall view of Trans-Pacific side, rates went up as an average. On the Trans-Atlantic, a lot of general rating fees also. At the end of the day, it is supply and demand. One thing is for sure, the carrier business is a cutthroat business. If there is a dollar to find, they will find it and get it, but it is also the right time to call for a fair price in transportation. Transportation costs do not define where buyers go to buy. It means even if you pay $100.00 more, what drives all of us? It is the scary feeling that your competitor might pay $25.00 less for that container. But back to your question, Trans-Pacific rates, there is a little room for increases. Trans-Atlantic rates have to go up, otherwise there will not be any carriers.

Dr. Ed Tyrchniewicz, Associate Dean  
Morning Chairperson  
I would like to ask Karl a question. I think this Cargo 2000 concept is a very intriguing one. I know the focus is on airfreight and possibly sea freight. But could you comment on the potential in the trucking industry or is there something comparable already?
Karl Ollek
Speaker
I think in the trucking sector, unfortunately, as far as IT is concerned, there has not been that much movement. They have been one of the partners in the supply chain that has not been up to snuff. I think the best way for them to get into the picture would be with either bar coding or with a technology like a transponder. When you go through checkpoints the data would get uploaded to the server. I think that is the direction we are going. Another thing with the trucking industry that would be nice would be for POD’s to automatically upload into our system as opposed to chasing for the hard copies.

Question from the Audience  (in-audible)

Hans-Georg Brinkmann
Speaker
The easy answer would be yes, I think it has an impact. To what extent? The forecasting is not that big. It might hurt one or the other industry. It might hurt a lot of raw material producers. It will not be the key player in the Trans-Atlantic trade, no.

Question from the Audience
(in-audible)

Hans-Georg Brinkmann
Speaker
I always smile when it comes to band-aid solutions, such as Prince Rupert, be it Suez Canal into Halifax. Cargo is like water, it uses the easiest way or means. Whatever we do over the next couple of years, we have to remember that this will dry up again. As soon as all the obstacles are gone, Prince Rupert will dry up. As soon as there is a direct flow from the Far East into West Coast ports, that string into Halifax will dry out. There is no way to artificially promote trade routes that are not there anymore. We have to face reality.
Session 3

Service Expectations for Ocean Ports in 2005

Dr. Ed Tyrchniewicz, Associate Dean
I.H. Asper School of Business
Morning Chairperson

We have Mr. Normand Fillion, Vice President of Marketing and Development for the Port of Montreal. Normand worked in banking for 9 years prior to joining the port of Montreal in 1984. He assumed his current position in 1997. He is active in the Chamber of Maritime Commerce, trained as an economist and has an MBA from the University of Western Ontario.

Mr. Normand Fillion
Vice President, Marketing and Development
Port of Montreal

Good morning everyone. We will be talking about the Port of Montreal, but I would like to take the opportunity to talk briefly about the Montreal Port Authority.

The Montreal Port Authority is a federal agency created on March 1, 1999 in accordance with the Canada Marine Act. In fact the Montreal Port Authority has existed since 1830, and it was the first harbor commission in Montreal. This year we are 175 years old. The board is comprised of seven members. One of them is nominated by the federal government, one by the province, one by the city of Montreal and the other four members are nominated by the Minister of Transport from a list given to the Minister by users of the port. Board members elect their own chairman. The mission is to provide port facilities to accommodate the market place, and increase port activity in Montreal by increasing competitive advantages and promoting the same to the private sector. Our objective is to foster business development, maintain
the competitiveness of the gateway, and ensure financial self-sufficiency. We try to maximize the efficiency of our human resources, and in the port business the biggest expense is the human resources. Finally, we try to maintain good relations with the community. In the city of Montreal, it is very easy to have conflict between alternate land uses, and we have to defend our turf to some extent.

What do we do? What does the private sector do in Montreal? The Port provides the land. We construct the terminals and sublet them on a long term basis to private firms such as Montreal Gateways, Termont, etc. We operate our own grain elevator, passenger terminal and our rail network which interconnects with CN and CP. We have about 100 km of railway track and 6 engines operated by the Port of Montreal. Finally we promote the gateway. CP ships promote CP ships, which is fine, but the Port of Montreal is promoting the whole of the gateway and all of the shipping lines involved with the port.

The private sector provides the transportation services. The Port of Montreal does not have any ships, as we do not do transportation. The private sector provides the cargo handling services and that is always true, except for the grain business, which we handle ourselves. The private sector provides cranes and all other equipment needed to handle the cargo. They promote their individual companies and they are the employers of the longshoremen and the checkers.

From 1960 to 2004, on a plus side, the containerized cargo had moved from 0 to 10.8 million metric tones. We have lost some of our break bulk cargo business to smaller competitors that have different labor conditions and different work environment. In the grain industry we are still profitable, but it is not what it used to be. In other dry bulk commodities we have gained a little bit. In petroleum products it is about the same now as it was in 1960. Overall traffic has increased by 7.6 million metric tonnes.
The big picture is that Montreal continues to be a multifunctional port and we intend to continue to do so, otherwise it would be detrimental to the Montreal region.

In terms of performance, the average annual rate of growth in the container trade has been 4.8%. Last year we reached an 11.2% rate of growth, but we reached that also in 1996. We have had a good performance record. We expect some growth to continue.

Montreal handles as much cargo on the North Atlantic as the Port of New York. That is the trademark on Montreal. We had three shipping lines back when I joined the Port of Montreal. Nowadays, 12 of the 15 biggest shipping lines are active out of the port.

About 55% of all inland shipments of containers out of the Port of Montreal is by rail. You are talking about 12-13% in New York, 14-15% in Rotterdam, Montreal is 55%. We are really rail dependant as a port. We move about 50 trains a week in and out of Montreal.

The economic growth is good for the USA in the future. It is looking good for Europe, much better than 2002-2003. The relationship between trade growth and economic growth is what I want to bring to your attention.

Growth is not equal on all trading lanes.

What about our competitive environment? In Canada we compete with Halifax. There is still about 7% of Canadian business that is handled out of American ports. Halifax, I would guess, handles about 22%, the rest is Montreal, and this is just for Canadian markets. In the USA our market share depends upon the market that you are looking at. We have about 8-10% of the US Northeast market. We handle 40-50% of all Mid-West business. In the US we compete with New York and Norfolk. New York has been very active of late.
The reality is that Montreal must remain financially self-sufficient by law. It is a North-Atlantic port and totally dedicated to maritime shipping. When you compare Montreal to the competition in the US, they are more subsidized.

Why are we a little bit optimistic about a future? Well, basically because of the unification of Europe and the benefit of economies of scale. You create wealth and with wealth you create trade, and this bodes well for the Port of Montreal. As well, the former Eastern block countries will be gradually developing.

Our challenge is first to accommodate growth. We require infrastructure, equipment and manpower to be put in place to accommodate growth. We need to protect our existing port and rail infrastructure as well. If you remove a track within the city of Montreal there is no way that you will put it back.

We have to maintain the competitiveness of the gateway. Somebody said that trade is like water, it takes the easiest route. People come to us because we are cheaper and more efficient and we have to defend that.

After 9-11, security has become much more important than before. We have to make sure that we continue to meet international and Canadian security norms. We have to insure that the Canadian border is very fluid because of the sheer trade between the Port of Montreal and US markets. We have to maintain the Montreal Port Authority financial self sufficiency. To accommodate growth, we have, in the past, sat down with the CP group, because it was the bulk of the business in Montreal at the time and we looked at the capacity concerns. In the last few years, we have had some congestion problems but for different reasons. In the past the bottleneck was the availability of land in Montreal and the rail network. But last summer for instance, if labor had been there when we needed it, the port would not have had any congestion. It started with a lack of rail equipment.
Then summer came. It was vacation time and we had a lack of manpower. Usually business slows during the summer, but last year for the first time we had months of 24% growth. We have the same number of longshoremen as we had 10 years ago when traffic was 50% of what we have now.

We have introduced some incentive for the railway. If you bring a very clean train into the Port of Montreal, you will pay less than with the previous system. But if you bring a dirty train, you will pay much more. As well, we have introduced an incentive for the railways to come and pick up the train when it is totally built and waiting for them within 12 hours. We build the train, deliver it to the inter-switching yard and CN or CP are free to come and pick it up. If they do so within 12 hours, they will pay less. If they go beyond that, they have to pay on an hourly basis. This is to insure the velocity of what is happening in the Port of Montreal.

To maintain the competitiveness of the gateway we are updating a comprehensive cost study. We have spent about $5 million on security so far and we expect to spend another $9 million in the next 5 years. This is not insurmountable for the Port of Montreal. As I said before, the Government of Canada will probably be financing up to 75% of that, however there are different criteria. We are not sure that we will qualify for the full 75%.

We have our own fire prevention team that was prior to 9-11, which handles dangerous goods. We have customs agents and various police corps having access to the port at all time. They have full access to the pictures from our video camera system. We have about 50 cameras taking pictures of the Port of Montreal right now. Each spot is covered from about 2 different angles right now. That system was in place prior to 9-11. We did not begin from scratch, we even had fencing. We have security guards patrolling 24 hours a day, 7 days a week. We have issued, at this time, 3,000 identity cards to everyone circulating on the Port of Montreal property.
As far as the border is concerned, we are, with the Montreal shipping industry, part of the Canada/USA security project. This is a project of about 1 million dollars USA. We are hiring a US lab to develop a sensor able to determine all kinds of goodies within the containers, from CO₂ to nuclear material. As well, we are going to check on the total trip of a couple of containers from Europe through Montreal to US destinations. The whole trip will be monitored, failure will be reported and opportunities to secure the cargo further will be noted. Montreal and other interested parties are contributing to what is called the Quebec/New York trade corridor. This began when the Mayor of Plattsburg saw congestion coming at the custom border entry. We were very quick in helping develop that.

In order to maintain our self-sufficiency we have on-going cost control efforts at the port and, we are pursuing new cargo opportunities vigorously. We are making investments to accommodate changes in the market place.

**Question from the Audience**

Impact of increasing vessel size on the Port of Montreal.

**Mr. Normand Fillion**

**Speaker**

With the opening of the seaway, the Port of Montreal was supposed to die. With the big ships, the Port of Montreal was supposed to die. There are a few things to comment on regarding ship size. The very biggest ones are used between Asia and the Trans-Pacific to America or Europe. Right now in direct services on the North Atlantic, the biggest vessels are those of CP ships with 4,100 TEU capacity. Economies of scale are very big when you move from 500 TEU to 4000 TEU, but when you increase from 4,000 TEU to 6,000/8,000 TEUs or more, the economies of scale are decreasing. Montreal is blessed to be the closest port to Europe, except for Halifax. The ships are completely unloaded and loaded in Montreal. This is not the case at any other port in the American East coast. So turn around of ships is faster in Montreal. We are cost competitive, even on the ocean. When you come to
cargo handling, in Montreal you pay the longshoremen in Canadian dollars. In America you pay them in American dollars. The American dollar has lost value relative to the Canadian currency, but still, we have a cost advantage at that level as well. When it comes to inland transportation, we have straight-line services out of Montreal. New York has crooked rail-lines. Add them all up and we are competitive.

**Question from the Audience**
Could you comment on the review of the Canada Marine Act?

**Mr. Normand Fillion**
**Speaker**
Up to a few days ago, Vancouver was limited in its borrowing capacity, but that has been changed. The act is there, the act was a transition to something new. I strongly believe that the good of the country will dictate what the government will be doing. The law is not as restrictive for the Port of Montreal right now, we do not expect to have to borrow money in the next 5 years. We have a land bank already, security investments have been made. I believe the country will change to accommodate trade. Trade is so important to this country. I cannot see the day where government will really limit the potential and the necessary infrastructure in this country. They would be losing out.

**Question from the Audience**
Potential of Latin American cargo for the Port of Montreal?

**Mr. Normand Fillion**
**Speaker**
I wish I could have that trade, but because of geography I am on the short cut between Europe and the American mid-west because we are on the straight line linking the two continents. However, because of geography and competitive factors like the choice of having many lines servicing Latin
America out of New York as opposed to Montreal, we found out over the years that we are losing that cargo in Montreal. Our strength on the North Atlantic really becomes a weakness when it comes to serving Latin America or Asia. When you come to Montreal through the St. Lawrence River you have to come in and go out again, you are talking about 5 days of sailing which you do not have to sustain if you go through New York or Halifax. So Montreal is not a very good position to service Latin America and we do not expect to be. We were in the past, we lost it.

**Question from the Audience**

(in-audible)

**Mr. Normand Fillion**

**Speaker**

I think trade will adjust. A few years ago in Montreal we had a shipping line called Norasia, they tried to cater to the high value cargo. But it turned out to be big competition, a blood bath for everyone. Rates went way down and finally Norasia decided to go back to the Pacific. Right now there have been a lot of newcomers to the Atlantic in the last year and half to two year. The whole of the logistic chain has to make money to survive. A few years ago the Trans-Pacific was the pits, now it is the opportunity. Shipping lines will adjust, but there will be growth on the North Atlantic as well, not 10%, not 15% but at least 3-4%. I wish I had the opportunity to be on the Pacific coast, but I am not, so I am going to do the best that I can to give an alternative to American and Canadian shippers that want to go to the North Atlantic and a little bit beyond. That is were I will concentrate.
Session 4

Constraints, Trends and Opportunities in Trans-Pacific Transportation

Dr. Ed Tyrchniewicz, Associate Dean
I.H. Asper School of Business
Morning Chairperson

For our final session of the morning we will move to the West Coast where we will look at constraints, trends and opportunities in Trans-Pacific transportation. To make this presentation we have Mr. Reg Leeson who is Vice President of Trans-Pacific Trade for Panalpina Canada. He is a life-long resident of Toronto and with that we welcome Reg Leeson.

Reg Leeson
Vice President Trans-Pacific Trade
Panalpina Inc. Canada
Speaker

I am going to start out with a little history about how containerization evolved from Asia into North America.

In the early 1970’s containerization was introduced into the market. The routings available were predominantly through the all-water service through the Port of New York. Through the mid 1970’s the term MLB was introduced and at that time the majority of the gateways were through the US, in Oakland, California. At that time we had not opened up the Vancouver market. In the 1980’s Vancouver began to evolve as one of the major gateways as well as the Ports of Halifax and St. John’s. As we entered into the 1990’s and the high costs of interest, carrying inventory, and the expression “just in time inventory”, Vancouver began to evolve as a much more dramatic gateway due to reduced transit times over the east-coasts ports of entry.
Back in the early 1970’s everything was made in Japan. Bicycles, novelty items, clothes, optical goods and, transistor radios. During the 1980’s the business evolved out of Japan and into Taiwan, Hong Kong and Korea. Taiwan was on their own exporting garments, foot wear, electronics, you name it they exported it. Hong Kong was basically an assembly point for Chinese components. The Koreans were into stitch and sew, footwear, garments and also gift wear. During the 1990’s the giant of China opened up.

Over the last 10-15 years, most of the business in China has evolved along the coast. 
The one thing that I want to emphasis is the growth in the business. From 2001, we had roughly 500,000 TEU’s. In 2003, we were up to 713,000 TEU’s, that is a growth of 45%!

**Figure 4.1**

![CTSA Volume Development (2002 – 2003)](chart)

CTSA stands for Canadian Trans-Pacific Stabilization Agreement. There are 13 carriers that are a part of this association. Collectively in 2003, they moved 213,000 TEU’s. Take into consideration the non-CTSA members
which would be carriers such as China Shipping and, Zim and we are probably in the area of 250,000 TEU’s. 45% of the cargo moving through the Port of Vancouver is not Canadian destined cargo. We all know the current dilemma that we have there with delays and rail car shortages and this is further compounding the situation.

These are key characteristics in the Trans-Pacific trade. North America is the second largest market for Asia, the largest market is Europe. China is now taking about 65% of the business coming across the Trans-Pacific into North America. The California basin still dominates the largest percentage of the business.

Imbalance? There is a massive imbalance in inbound versus outbound. Last year there were approximately 5 million empty containers returned to Asia. The reasons the carriers are returning empty is because they can turn them much quicker at the origin port. Moving raw commodities, you lose 2-3 weeks because the volumes are large, the importers take a long time to unload the containers. Whereas, if you return empties, you can turn them around in a weeks time and have them coming back.

The break bulk business continues to grow and this is because of the demand in raw materials going into China, wood, pulp, coal and scrap. There are 30 carriers competing in the Trans-Pacific market, but there is no price leader. We have what we call “talking shops” instead of conferences. The CTSA is a perfect example, they are not known as a conference, but they are an agreement at the owner’s level to collaborate on pricing, fuel, surcharges, peak seasons and other items.

Approximately 85% of the business on the Trans-Pacific is under contract. Most of these contracts run through a period of May through to April. Peak season is a term that we have used for years, which represented a period between July and September. If you look at the lifting of the carriers coming out of Asia, it is not evenly balanced, but the movement of sourcing and the
movement of other industries, has almost created a 12-month balance of cargo coming out of Asia. We do have a peak in July and August, but with the increase of sourcing to China we have lost that real peak season where carriers were able to create additional money.

**Figure 4.2**

This is the supply and the demand on the Trans-Pacific trade. As we can see in 2005 the capacity is still going to outweigh the demand. This may sound great, thinking that we can move all of our cargo, but the problem that we run into is the infrastructure in North America. Once the ships arrive, especially the 8-10,000 TEU vessels, these will virtually smother the ports. Although the capacity is increasing against the demand, we still have major infrastructure problems.
The growth in rates in the Trans-Pacific supply and demand. In 2004 and 2005, the capacity has stayed marginally ahead of the growth. So far as moving the cargo from the origin points, I do not see a problem.

Rates have gone up since 2002, and the projections we have for 2005 are that they will continue to increase. The carriers are going to the table with the railways and the railways will be increasing their costs.

Key factors in rate negotiations are that supply and demand remains tight. The situation looks tight until at least 2006. These big deployments, the 8-10,000 TEU vessels will go into the Europe/Far East trade. That is where the largest volume is and by far the largest growth. China, with a strong GDP growth and the rise in production, will continue to fuel the export. I do not see a decrease in China exports for at least the next 10 years. The consumers keep buying. It is staggering the amount of Chinese made products made in the stores now. 70% of the goods now sold in Walmart are of Chinese origin.
Trade protectionism. There are a lot of policies in the US because a lot of jobs have left the United States and gone to China. We have had some trade scares, which had a minor impact: the bird flu, mad cow, and SARS. But the Chinese rebound very quickly. The perception is that of a war on wills and I do not think that North America or China is willing to give in first.

Carrier strategies. To achieve better operating economies at sea and on land the carriers will deploy larger ships because the cost from port-to-port gets smaller as the ships get larger.

Boosting of margins. Their philosophy is to keep the boxes moving. One of the key factors that we are going to see over the next year is equipment detention. Carriers are going to be very strict on the amount of time the containers are going to be allowed to sit at port, or at one’s warehouse. Over the last two years, with the price of steel, both the carriers and leasing companies have virtually cut the production of new containers. What was a life span of 10 years is now 12-13 years. Therefore the amount of equipment that the carriers have is not increasing.

Of course they will continue to increase their markets into China with direct calls. Starting in June we will have the first direct call from Shanghai to Vancouver. You will also see some growth in the market of India. The uplift capacity from India into North America is very limited. It is limited to the AX service through the east coast.

Ed Tyrchniewicz
Morning Chairperson

You talked in general terms about the trade with Canada, but could you comment on the potential for the Port of Prince Rupert. Particularly with the congestion in the Port of Vancouver.
Reg Leeson
Speaker
In the Port of Prince Rupert, the carriers have a logistical problem. They have to import cargo, which they can discharge there, but the problem is export cargo. A carrier will not call on a port to discharge cargo that is strictly one way. As one carrier has said, Vancouver is not going to lie down and die and let cargo move from Vancouver up to Prince Rupert.

Question from the Audience
(in-audible)

Reg Leeson
Speaker
Ultimately the carriers have to replace their equipment. Some are ordering equipment, but they are expanding the lifespan of a container. They are trying to get a little more time out of the units. The only indications that we have is the life expectancy of a container which will be expanded from 2-4 years. That way the cost of the fleet goes down, offset by the cost of steel.

Question from the Audience
(in-audible)

Reg Leeson
Speaker
Reefers are very difficult pieces of equipment for a carrier, especially when you are dealing with an inland point. The carrier’s preference for reefer business is port to port. With respect to Winnipeg; in the past, a lot of the cargo was being trucked in reefer trailers to the port and being trans-loaded into reefer containers in the port. The carriers have offered incentives to get the equipment from various Asian ports into places like Winnipeg, but due to the inside capacity of the reefer, most people are ordering in standard or high-cube containers. The unit becomes an odd size when you are
importing. Often carriers will take them to the west coast and possibly move them into Toronto or Montreal.

Question from the Audience
(in-audible)

Reg Leeson
Speaker
The majority of importers over the last year, year and a half, have allowed an extra two weeks in the window. If it was normally 4 weeks, they are allowing 6 weeks. A new word that is coming back into our vocabulary in the forwarding business is trans-loading. You are going to see a dramatic increase in 2005 in trans-loading. The carriers acknowledge it, many are coming up with trans-loading allowances to entice that type of move. In the Port of Vancouver they have a deficiency of equipment I understand. If you come from the east, we are literally sitting on thousands of containers. Along with this port problem the carriers are going to do whatever they can to have the containers left at the origin port. It makes it easier to return the containers, instead of having it move 5000 km inland.

Question from the Audience
(in-audible)

Reg Leeson
Speaker
That is a loaded question. The railways have admitted that the inter-modal business provides the lowest return on investment. So as far, as investing in the future, we do not know how much they are going to put into adding new rail cars. CP, has in the last year or two, taken delivery of numerous new rail cars, the quantity I do not know, more than CN. But that was more to replace an antiquated type of equipment.
There is one thing that Prince Rupert offers. It has a connection point to the rail lines beyond the congestion point out side of Vancouver.

Ed Tyrchniewicz
Morning Chairperson
You did make reference to the opening of a direct service between Shanghai and Vancouver. As you are aware, there is a huge port development being planned some 32 km off shore in Shanghai that will increase the capacity of China to lift more containers out of there. How do you think that will impact Canada as we already have a fairly significant imbalance of movement?

Reg Leeson
Speaker
I do not think that it is going to have a major impact. The cargo is already moving from Shanghai. This new service is basically just going to speed up transit time and reduce the cost to the carrier. I do not see it increasing the volume from Shanghai.

Question from the Audience
(in-audible)

Reg Leeson
Speaker
That is an average. In Canada the CTSA has announced 350 on the inland, 250 to the ports. Included in those calculations also were the US, where the rates are slightly different on the increases. In general we are looking between 250-300 dollars per TEU from the carriers. That excludes any increases that the railway might be passing along. Along with the exchange of the US dollar to the Canadian dollar, we are almost looking at half of the ocean freight cost to be in Canadian dollars, which is going to have an effect on the steam ship line paying the railways with the exchange. That may create some kind of currency adjustment to be applied later on in 2005.
Luncheon Key Note Speaker

Dr. Barry Prentice
Director, Transport Institute
Afternoon Chairperson

It is my honor to introduce our luncheon speaker Mr. Henry Lasslo, the manager of corporate logistics at SAAN Stores Ltd. During a career that spans nearly 40 years, Henry has been involved in Transportation and Logistics from both the carrier and shipper standpoints. He has held various positions in retail distribution, heavy industry, freight forwarding, customer brokerage and freight costing.

Since joining SAAN Stores in 1980, he has been influential in the development of in-house distribution channels supporting time defined movement of merchandise to stores located throughout Canada and has been extensively involved with import and trade finance.

He has received a certificate in logistics from the University of Manitoba, is a graduate member of the Canadian Institute of Traffic and Transportation, has been awarded membership in the Canadian Institute of Logistics and Transport in North America and is an accredited member of the Canadian Professional Logistics Institute.

Henry teaches professionally in the field and is a sessional instructor in Freight Forwarding at the University of Manitoba Transport Institute.
Winston Churchill once remarked, back in 1925, that aviation was changing so rapidly one needed wings to keep up with it. Experience indicates that his humorous insight applies equally well, not just to the separate modes of transport, but also to the ways in which we choose to approach distribution and logistics as a whole. Change, like the future, tends to come in steps and stages. Our understanding of change however seems to be a matter of hindsight, just as easily as foresight. Bearing this in mind I would like to consider a few of the past events that have helped move our thinking and infrastructure into what we have today. So let us begin by looking for that "foundation" point in time when today’s patterns of logistics infrastructure began to take recognizable shape. I think that time was the world of transportation back in 1965.

Gasoline is selling for around 40 cents a gallon. Much of the nation’s freight moves in boxcars, and those move over an extensive web-work of Canadian National and Canadian Pacific trackage, particularly the main trans-Canada lines that connect Montreal, Toronto to Vancouver. This “carload traffic” is being priced to the shippers under tariffs that are jointly issued by both railways as a measure to insure stability in operation. Disputes are referred to the Board of Transport Commissionaires for resolution.

The federal government has given both railways a two-fold mandate and often-divisive mandate. First, particularly addressed to CP Rail, is to operate as a profit making company. The second, particularly addressed to CN Rail, is to do likewise but in addition continue to serve as an instrument of national policy. This emphasis on the “national interest” had produced several interesting pieces of legislation such as the Crow’s Nest Pass Agreement and the Maritimes Freight Rates Reduction Act. Understandably, the railways find themselves under stress from eroding revenues.
Competition is not so much from the fledgling trucking industry as from the growing number of well established less than carload “poolcar” consolidators. Speed in transit is not yet an objective for shippers - even Canada Steam Ship Lines is a rail competitor in the lucrative East/West trade lane through operation of a “laker” vessel for general cargo from Montreal to Fort William and then poolcar service beyond.

Debate concerning the future of rail express is becoming serious. Should the railways even continue offering less than carload service? If it is to do so, then how? Should the service continue to be handled, as the railway express agency suggests, in express train baggage cars? Or can this freight be moved in boxcars? And if it is converted to boxcar traffic, who will provide the pickup and delivery services at either end?

It is just this “door-to-door utility” being provided by the emerging trucking industry that captivates the attention. Several truck lines have begun advertising full Trans-Canada LTL services. Others are branching out as regional carriers from the emerging main line “hubs” created by the long haulers. Extended 45 foot long trailers are becoming the market norm. Provincial transport boards continue to exercise stringent controls over all aspects of carrier entry, licensed service points, types of freight to be hauled, the freight rates themselves, and minutely detailed specific services which truckers may or may not perform or even offer to the public.

Traffic managers are much in demand. They find themselves fully occupied in the movement and warehousing of goods. Freight cost reduction is of major importance to all shippers. Accordingly, the most common response from these employees is to learn on the job and become both “filed tariff” and freight consolidation specialists. Winnipeg continues to be the gateway to the Canadian West.

Now onto 1985. Gasoline is now selling at 40 cents per liter. Railways are in the process of abandoning the use of boxcars for general traffic. They are
adopting the use of door-to-door “piggyback” trailers to compete with the services offered by the long distance truckers. Household name “giants” of the trucking industry dominate the domestic long haul business. Movement is still largely East/West, generally following the Trans Canada highway, though early effects of NAFTA are being felt and some truckers begin converting to hauling full load traffic only and starting to run North/South. Deregulation of highway transportation is gaining ground with “fit, willing and able” criteria replacing specific point-to-point licensing. Freight pricing is becoming market driven. The federal government is moving to exit the policy of rail subsidies and slowly beginning to consider other options such as privatization of Via Rail and CN.

Data processing capacity is growing. The average computer still occupies much of a full room, but its capabilities are fully recognized, even if still reserved for mainly financial and accounting purposes. IBM is talking about developing a “serious” personal computer for home and business applications using the new 8086 chip, which may be capable of a “blistering” 13,000 operations per second.

Distribution Managers are emerging from the transportation silo as companies redefine and broaden the scope of their duties. “Just-in-time” inventory movement comes on the horizon at the same time as corporate downsizing sharply reduce mid-management levels. This poses serious questions about the type of education needed, and its availability, to support new entrants into this field. Winnipeg continues being a gateway to western markets.

And now, on to 2005. Gasoline is selling at 95 cents a liter. Canada now exports 40% of its domestic production, 85% of which moves trans-border to the United States. Imports have risen yearly to the point that Vancouver’s Deltaport has declared force majeure and holds high capacity container vessels at anchor waiting for space to unload. Security of product in the supply chain against terrorist action has become an over-riding issue across
all modes of transport. Rail infrastructure has also reached a capacity
 crunch, which it cannot resolve without injection of substantial funding.
Debate now revolves around exactly where such funding is going to come
from. Truck transport capacity is also stretched thin due to the chronic
shortage of drivers, high operating costs and surging freight volumes.
Indications are that a sellers market in transportation capacity may be
forming.

Supply Chain Managers have become specialists in global or international
operation and have full access to a wide range of information systems. With
the advent of these tools the channels of distribution are shifting from the
conventional, linear factory/wholesaler/retailer model to faster more flexible
customer focused networks. An MBA level education in logistics is available
and widely recognized. Winnipeg continues to develop the North/South
corridor concept.

So... here we are back in 2025.

Don’t know about you, but I am glad to be out of that last place particularly.
Sounds like they had some real challenges. But, seriously, I really do not
know if people 20 years ago truly realized the changes facing them.
Everyone expected hydro power and the bio med fields to do well, but they
would have been amazed to see what global weather changes have done to
the value added food and agriculture sectors. Today those are the single
biggest export commodities from Manitoba to a hungry world.

In a way, it was a lucky coincidence that the Freight Assistance Act of 2009
funded the restoration of rail and road capacity in a major effort to end the
import backlog, which had plagued us for over 5 years. And I guess it was
just as well for us that the sharp decline in imports, when China switched
from low-priced/low-tech export production to what is today pretty much
state of the art, did not happen sooner. We needed that time to develop
capacity, as today it is that capacity which can handle Canadian exports to an
increasingly affluent Asia. And now India is estimated to be only 10 years behind the Beijing planners in research and development.

Gasoline is still hanging stubbornly at slightly more that $2.00 per liter, not that I think most of us use it very much, not with the new “Sunflare” electric cars we all seem to be driving. It is consumption, mainly in China, India and the United States, and not artificial forces that keep our current prices this high. In retrospect, I guess it must have hit the U.S. pretty hard, that double punch of complete dependence on oil and then slipping behind China in research and development. Still, if the Salt Lake fusion project comes on line by 2032 as predicted the Americans should regain some of their edge. I also note, with some pride, the reports in the press last week that research teams from the University of Manitoba and the University of Saskatchewan have been awarded key parts in the development of that project. And I still have to smile when I think of the possible looks on peoples faces 20 years ago, had they had known back then, that the air ship would become the third largest manufacturing industry in Manitoba.

All in all, things seem to have turned out pretty well, not that we do not have problems. Your being here today, considering how to deal with trade and economic competition between the six super trading blocks on the planet is proof of that. Yet many times I must still wonder at how it all came about - how we managed to make the right choices at the right times, and how we managed to skirt all the hidden pitfalls. I think that is what I like most about those people back in 2005. We know that they came to make those right decisions. What many of them did individually to make it happen, we mostly do not know. But we owe them all a debt of thanks.
Our speaker today is Judy Harrower, General Manager, Domestic Intermodal, Canadian Pacific Railway. Judy was born in Edmonton, Alberta, and graduated from the University of Alberta in 1985 with a Bachelor of Commerce degree. After working for one year with the Alberta Government (Transportation Services branch of the Economic Development Department), she joined Canadian Pacific Railway in Calgary in the marketing department. Judy held various positions in Calgary, until 1989, when she relocated to Toronto as the Manager of Marketing for the Mines and Metals commodity group.

After participating in an Operations Crossover Program and becoming a terminal supervisor in Sudbury, Judy returned to the marketing group in Toronto in early 1993. From there she relocated to Minneapolis, MN managing CPR’s North American marketing for Mines, Metals and Steel and playing a major role at integrating the US marketing departments into the Canadian departments.

In June of 1999, Judy completed a two-year MBA through the University of Western Ontario videoconference program, and moved into a strategic role at CPR as General Manager, Commercial Development. Moving back to Toronto in September 2001 in the capacity of General Manager, Intermodal Operations, Judy was responsible for the performance of all 21 intermodal terminals across Canada and the US. In September 2003, Judy moved back to the commercial side of the railway as the General Manager of Domestic Intermodal, and is responsible for the
profitable sustainment and growth of an approximate $500 million revenue base.

**Judy Harrower, General Manager**  
**Domestic Intermodal, Canadian Pacific Railway**  
**Speaker**

I would like to begin by contexting CPR overall. As you can see from the slide, CPR is a North American franchise. We have global reach through three ports: Vancouver, Montreal and New York. We have 10 connections to US railways, some at border crossings and some through our U.S. network – which used to be the SOO Line railway property, now 100% owned and operated by CPR. If you look at our business, you can divide our total volume into four different buckets on a global basis. Business to or from North America represents approximately 39% of our total volume. Trans-border business, to or from the US, is about 28% of our volume. Our domestic intra-US business is about 23% and domestic within Canada represents approximately 10%.

**Figure 5.1**

Looking at the business another way, we are organized on the commercial side of the organization around three different business groups. We have the
Intermodal container business representing about 28% of our overall business. We have the merchandise business, which includes mines, metals, steel, aggregates, chemicals, forest products and, some food products making up another 28%. The rest is the bulk business, at 44%. This group includes coal, grain, sulfur, potash and fertilizer.

I would like to focus in on the Intermodal business specifically, as a good portion of this conference is around the container business. Since 1999 we have experienced a compounded annual growth rate of over 6%. We have a very diverse customer base and market a medium-to-long haul truck-like service moving a wide array of merchandise and food products. We do both retail and wholesale marketing. An interesting part of CPR’s structure is that the Vice President has control of not just marketing and sales, but of the terminal operations and assets as well. This way, he can make decisions that take into consideration the whole picture as opposed to just one side of the picture and balance demand from each of his businesses.

We have a very strong intermodal terminal footprint. We have invested substantially over the last 5 years, in excess of $150 million in both Intermodal Terminals and assets. We have a very highly modernized capacity fleet.

CPR’s Intermodal business is segregated into two segments, International and Domestic. International consists of business to-or-from a port. Domestic is business that is moving anywhere within North America including traffic to or from Mexico.

On the International side we have about a 75% market share at the Port of Montreal. We have about a 50% market share at the Port of Vancouver. These numbers can change modestly by month, depending on vessel arrivals and other factors, but they remain relatively consistent around these numbers. The customers on this side of the business are the steamship lines. The top 10 customers account for about 90% of the business, versus
on the domestic side, which I will talk to in a few moments. We have had a longstanding position in China and it is paying off in terms of really understanding what is going on in Asia from a growth perspective. We have an office in Beijing and a joint venture in China, which allows us to keep up with trends and play in the logistics field in that market.

**Figure 5.2**

In the domestic portfolio, 85% of our business moves in long-haul service across Canada. Some of this business does not actually originate in Canada. It is traffic that is being imported in containers and then being trans-loaded into a domestic box for shipment across Canada. For the purposes of this slide however, this is still business that is counted as domestic trans-Canada business. The remaining 15% of our business is cross border, which continues to see growth year after year. Unlike the International business, the top ten customers in domestic account for about 40% of our business. There are a few thousand making up the remaining 60%. Importantly, we do have long-term partnerships with our top 5 customers. Most of these are retailers like Canadian Tire, Hudson’s Bay and Sears.

Last year we made the decision to exit the trailer business except for the Expressway operation and we are now 100% containerized. This was a big
decision, but substantially improved our capacity and the ultimate use of an existing train. A trailer is a single stack operation. Containers provide for double-stack operations and make a big difference in terms of fully utilizing our network.

Expressway is our only trailer business, and it runs in the Toronto/Montreal corridor. It is very successful within that corridor.

I would like to transition now to the railway industry in general, the changing landscape and talk about how we got to where we are today. If you go back to the beginning, railway infrastructure was really built for passenger movement prior to the building of highways, cars and trucks. Over the last 20 years, we have seen significant rail restructuring as we moved from passenger to freight business. This restructuring however has been focused on industry and network consolidations, trying to find a way to do more with less. Improvements have been made through carrying capacity innovations as opposed to network modernization. This was the sign of a mature industry.

Fast forward to the present and we find that rail is not a mature industry. It is a growing and very exciting industry. The fact of the matter is that today, we need more rail capacity in key corridors in order to reach the full economic potential as a Country or as a Continent.

Figure 5.3
The point I would like to make is that this is not just a CPR issue but rather a North American issue. Given this fact, it needs to have a greater public focus than it ever has in the past. Public policy can be part of the solution and it needs to be part of the solution if we are in fact going to get to the next stage of rail capacity.

As I have already shown you on previous slides, network capacity to handle trains has decreased over the years. What has increased however is the carrying capacity per train – as you can see from this slide. Let me give you some very specific examples. In 1955, we were able to handle 4 automobiles per rail car at 50 cars per train, so 200 automobiles per train. In 2004, we now carry 15 automobiles on a tri-level car, with 80 cars per train, giving us a capacity of 1200 cars per train. A six times increase carrying capacity.

Likewise on the Intermodal side, in 1955 we had the carrying capacity of 140,000 cubic feet per train, which was essentially two 18-foot trailers on a car on a 70-car train. In 2004 we now have the ability to move 253 double stack containers on a 125-car train. Again, a six times increase in carrying capacity. This is how we have managed to grow the business so far.

But as you can see from the next slide, “The network holiday is coming to an end!” We cannot continue to put more business on the network as it exists today. This slide speaks specifically to the transition from a relatively balanced passenger/freight portfolio to a more dominant freight only portfolio while at the same time depicts the infrastructure changes through removal of double track, the creation of fewer but longer sidings and the introduction of technology like central traffic control and dieselization.
Figure 5.4 depicts the specific areas of unprecedented demand and where the bottlenecks for CPR are unfolding. As you can see, the key area for immediate focus is the corridor between Moose Jaw and Vancouver. This corridor serves the Port of Vancouver and with growth expected to continue in both imports and exports, it is our prime area of focus right now. US Ports will also continue to experience growth and congestion and that will continue to put demands on Canadian Ports and the need for a fluid network.

The next set of slides provides a more in depth overview of the commodity flows and growth prospects. In the interest of time, I will hit only the highlights and move onto the “where do we go from here”.

Figure 5.5
On the grain slide, you can see the major flows by way of the arrows on the screen. Let me give you some key facts as it pertains to grain, and our prospects for continuing growth in volumes through this year. In 2002 the crop yield was approximately 38 MM metric tonne. In 2003, it dropped to 27 million metric tonne. 2004 yielded 42 million metric tonne, which is a more normal crop size and 2005 is again expected to be “at least” normal if not a little higher. Significant demand continues to exist from Asia, the Middle East and Brazil as each of them continues to build their economies. In summary, we see continued growth in this commodity line.

In sulphur and fertilizers we have record sales to Asia and Brazil with Canpotex adding an incremental 1300 cars to the fleet. Of note is that Canada has the only existing production capacity available. Again, we expect growth to continue on this front.

Turning to coal we see continuing high demand for the B.C. metallurgical coal to both India and China as steel output continues to boom. Canadian metallurgical coal is of high quality, and is second only to Australia in terms of production costs so we see demand continuing here.

The merchandise business is also strong in many areas including chemicals and plastics, and aggregates and minerals. Automotive is the only area where we see flat demand based on recent record sales in this area.

So where does a Company like CPR go from here? Before one makes a substantial investment in infrastructure, we need to ask ourselves some key questions – which we have. (1) Is the growth a bubble or is it sustainable? (2) If we do anything, is everyone else in the supply chain also lined up for capacity expansion? (3) Have we done everything that we can ourselves – i.e. self-help? And (4), Is the environment, from a regulatory standpoint, appropriate for investment?
I have talked about question 1, the growth prospects, through the previous group of slides, and we do believe that this growth is more than a bubble. We know that the ports are also building capacity so we believe others in the supply chain are gearing up for growth as well. I would like to talk more about the 3rd question around the subject of self-help before I move onto the last question.

At CPR, we have done a number of things to improve our capacity and we call these things self-help. Things you do before you jump to “building a bigger building”.

On the mobile asset front, we have invested substantially in new and additional locomotives and now have one of the youngest fleets in North America. The fleet is more efficient and effective and provides us with much more reliability over the road.

On the crew front, we have brought on a substantial number of running trades employees that, net of retirements, total approximately 650 incremental employees over 2004 and 2005 combined. This allows us to ensure we have the people in place at the right time to move the business.

We have also implemented our Maxstax program in Intermodal. This involved bringing on 6500 new double-stack railcars in order to get maximum train lengths and weights per train. Today, in our east-west corridor, every intermodal train is equipped with these high efficiency double-stack (as opposed to conventional) railcars and every slot is filled. Combined with the siding extensions completed in 2002/3 and the new AC locomotives, we are able to optimize the use of a train slot and have added substantial capacity the network.

The other area we have focused on is workload smoothing through our allocation system. This is a process that we put in place for container business originating in Vancouver consisting of both imports and domestic transload business. Each steamship line or shipper is provided with a daily
allocation on the CPR network ex Vancouver. In the past, we saw huge demand volatility, the need to reposition empty railcars and overall service inconsistency. With the allocation system, we are now able to better balance the flows, have workload smoothing and improved fluidity, and provide enhanced predictability to our customers.

**Figure 5.6**

<table>
<thead>
<tr>
<th>Capacity Self Help</th>
<th>CN Co-Production</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vancouver Port Fluidity</strong></td>
<td></td>
</tr>
<tr>
<td>Improved access for CPR to intermodal facilities at Fraser Surrey Docks using a shorter route</td>
<td></td>
</tr>
<tr>
<td>Direct access to Neptune Terminals plus ability to operate longer, heavier trains</td>
<td></td>
</tr>
<tr>
<td>Reciprocal interchange at CN’s Thornton Yard and CPR’s Coputam Yard to replace a less efficient interchange arrangement</td>
<td></td>
</tr>
<tr>
<td><strong>Other Co-Production Initiatives</strong></td>
<td></td>
</tr>
<tr>
<td>Northern Ontario</td>
<td></td>
</tr>
<tr>
<td>Thunder Bay</td>
<td></td>
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<tr>
<td>D &amp; H</td>
<td></td>
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</tbody>
</table>

The last area of self-help that I would like to speak on briefly lies with the co-production initiatives we have put in place with CN. The map on the slide depicts the co-production put in place to improve Vancouver port fluidity. Other areas we have worked together on are listed there – directional running between Sudbury and the Parry Sound area, a haulage arrangement in the Thunder Bay area and an extensive partnership arrangement between CN, CPR and the NS on the D&H property.

All of these areas have been key to improve both capacity and fluidity.

So where do we go from here? As I mentioned before, there are key questions that must be addressed before we “build a bigger building”. The questions again are: Is demand sustainable? Have we made sure our partners will be in sync with us? Have we done everything possible ourselves in terms of capacity self help to improve capacity and fluidity? We think we have worked on all of these aspects over the last year. But the network holiday is over. We now have to look at other ways to increase the capacity
– and that means building. The plan that we have developed, subject to all of the successful conditions being met, is a gated expansion plan that would allow for incremental investment and train capacity over the course of the next 5 years.

**Figure 5.7**

You can see from the slide that in phase 1, an incremental 4 trains would be afforded by the plan with the possibility of growing up to 10 incremental trains per day, should the entire plan be implemented. The plan has been presented to the CPR board and we believe that phase 1 is the right thing to do, but there are some conditions that must be met. I come back to the 4th question that I posed earlier: “Is the environment, from a regulatory standpoint, appropriate for investment?” Public policy has to be part of the solution. The key conditions are a strong regulatory environment, and some taxation policies that are more favorable in terms of investing in the network. Why would we build a larger network if there were a chance that others would be allowed to use our network at a minimal cost. In particular, at a cost that does not compensate us for the massive investment that needs to be made.

We have asked the federal government to provide us a clear indication that there will be regulatory stability, a position that is supported by many of our
customers. The argument that favors forced access is extremely shortsighted. It would create long-term pain in the form of a rail industry that cannot afford to renew and revitalize itself already, to support our nation’s continued economic growth. Forced access would undermine our ability to increase capacity – when capacity is at a premium – and fluidity.

To add to this, the tax side of the situation is appalling. The railways pay property taxes on every single mile of our right-of-way, yet you will never see a government (Federal or Provincial) come out to clear our tracks of snow like they do the highways. Furthermore, none of the tax money the railways are paying comes back to us to improve and expand infrastructure. This is undermining the strength and potential of Canada’s rail system. We would much rather take that money and expand our infrastructure for the benefit of shippers and to support the economic growth of our nation. And keep in mind that North America is the only place in the world where there is an integrated railway network funded entirely by private business.

We are ready to move forward with a plan and we have asked the government for regulatory stability and improved tax policies. Stakeholders can increase the impact of this message. Everyone in this room is a stakeholder and can play a role. Governments have a key role to encourage and enable investment because rail can do more.

Champions like yourselves are needed. It is a critical part of success for all the people in this room. Thank you.

**Question from the audience**

What do you mean by forced access?
**Judy Harrower**  
**Speaker**  
Forced access at one extreme would be any entity having the right to operate over our railway for a cost that does not adequately compensate us for our investment and ongoing costs of operating that line. The entity could be a short line, a shipper, anyone.

**Question from audience**  
Are there any examples of that happening? I would hate to see the railroad standing behind forced access as an excuse for not developing what has become necessary infrastructure.

**Judy Harrower**  
**Speaker**  
There have been applications for access in the past. They have not been successful at this point but we want the rules in place to ensure that it will not happen. To your direct question – is it likely to happen? We sure hope not. But we want it taken off the table to make it a non-issue for all of us.

**Question from the audience**  
If it is taken off the table, are you comfortable that the in-house plans that you have put together will keep up with the kind of growth that we are projecting out of say Vancouver?

**Judy Harrower**  
**Speaker**  
Yes we are. I am not going to speak for Rob Ritchie though who has the ultimate decision in terms of timing and coordination with the market growth prospects.

**Question from the Podium**  
You were going to mention something about the equipment. I am not sure if I missed that.
Judy Harrower  
Speaker  
Someone in a previous presentation had asked about the railways making investments in railway equipment and whether or not this was really increasing capacity or whether it was simply replacing existing equipment. Specifically as it pertains to intermodal railcars – it is definitely increasing capacity. We have invested in 6500 double stack Intermodal rail cars. While some of this replaces existing cars, remember that the cars they are replacing are conventional (single-stack) cars. So in essence you get 2 for 1. Each single-stack car carries one container. Each double-stack (for virtually the same use of train length) carries two containers. So in fact, even if the 6500 double-stack cars “were” replacement, you would still be substantially increasing your capacity.

Comment from the Audience  
I think that I am forced to speak on behalf of CN. We are not taking the same position as CP in terms of rail capacity, if we talk about the next 3-4 years. I am not talking 10 years or the 2025 scenario. For the next 3-4 years, CN has the capacity on its current infrastructure including initiatives. Including self help co-production with CP. There are a few ideas that we have included in our infrastructure to accommodate the growth over the next 5-6 years.

Question from Audience  
I am impressed with the detail of the flow of the planning that is going into this. I noticed that the maps that you showed indicated large volume movements. You showed arrows going from Montreal to Vancouver, Vancouver to Chicago and so forth. My problem is that here we are here in Winnipeg. Can you comment please on where you see the freight volumes in Winnipeg as far as speed, for example, going in the next several years. Or are we developing a backwater in central Canada approach where it is faster
to get freight from Vancouver to Montreal than it is to get it from Vancouver to Winnipeg?

**Judy Harrower**

**Speaker**

Winnipeg is still a critical station for CPR. On the domestic side of the business we have significant volumes of business to and from Winnipeg that was not shown on the flow charts. The volumes are not of the same order of magnitude in terms of the volumes of the other flows, which is why they were left off the diagrams. Speaking to service in particular, we build our train plans based on expected demand between two points. Given the volume that flows from (for example) Toronto to Vancouver, we are able to build a full train per day and provide a consistent service. The volume between Toronto to Winnipeg or vice versa however does not constitute an entire train. So there are times when service is hampered by this and consolidations of two days worth of business must be made. That said however, Winnipeg is a major station point for CPR today, and will continue to be.

**Question from the Audience**

I would like to use export containers otherwise returning empty on your railroad. There are not enough containers positioned to central Canada to meet my demand. I would like to see the railways position more containers for this use.

**Judy Harrower**

**Speaker**

The reality of it is that the export containers are not ours. We can facilitate the movement of those containers, but we really do not have control over where the steamship lines want to direct their assets.

**Question from the Audience**

(Inaudible)
Judy Harrower  
Speaker

That should not be a limiting factor. We subcontract our drayage services. Our desire is to bring in the appropriate number of drivers and trucks to meet the demand. I will say that we need to spread the demand over an entire day and not simply bring on resources to manage a peak during the day. However, it should not be a limiting factor so long as we are seeing a smooth demand.

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Session 6

Trends and Opportunities in Air Freight

Dr. Barry Prentice, Director  
Transport Institute  
Afternoon Chairperson

From DHL Danzas Air and Ocean we have Jeremy Shrubbs, Director of Business Development. Jeremy is a native of Great Britain, educated in England and Ireland; he immigrated to Canada in 1976. A career in international logistics seemed predestined when a summer job offer involved flying thoroughbred horses to events around Europe. In his words, “understanding the needs and expectations of global trade requires a fascinating balance of commerce, logistics knowledge, and people skills. Approaching 30 years in the business, I can honestly say, every day invites new and exciting challenges.” His credo is trust, commit, connect and belong.
Jeremy Shrubbs  
Director, Business Development, Lifescience  
DHL Danzas Air and Ocean

I would like to talk about trends and opportunities in the airfreight industry. Let us start with a look at global trade and GDP over the past 5 years.

**Figure 6.1**

*Facts & Figures – Global*

![Graph showing world trade and OECD GDP over several years.](image)

GDP growth shows very modest steps, while global trade growth has been more pronounced. Global trade is here to stay. We have rebounded to a level this year that is just below 2001. On the airfreight side of our business, global trade has followed the numbers. Final figures have not been reported for 2004, but the indicators show a 10-15% increase again this year.

Looking forward, major market indicators point to a more modest GDP increase this year. Global airfreight trends are more positive with a 5-year average projected at 5.3% per annum. This is subject to stability in our air cargo business, which has some very unique aspects to it.
Figure 6.2 represents the volume of airfreight, measured in freight kilometers flown; it parallels and reinforces the global airfreight forecast.

Looking at a summary of where the business happens, 2003 reported volumes by region and shows that Asia/Pacific retains its position as the largest consumer of Air Cargo.

US volume is expected to grow towards the end of 2004 and into 2005 with prospects of increased growth through the dip in the US dollar. US to Europe growth is expected to be slightly lower than the total worldwide growth percentage. The Canadian market continues to recover, but we see just modest growth in the index through 2005.
We have seen dramatic fluctuations in market conditions, notably in US exchange rates. Also in 2004, the cost of fuel dramatically impacted airline industry profitability.

On a more local note, it is great to see Air Canada come out of the bankruptcy protection they had been in for the past two years and at the same time separate Air Canada Cargo, as a stand alone business unit. Air Canada Cargo kicked these changes off with the decision to discontinue operating the 747 Combi and establish a freighter service on the Canada/Germany/Canada trade lane.

We are also seeing a stronger Canadian dollar. For importers this is, and can be, an opportunity to reduce the landed costs.

Carrier surcharges have become a real bind in our business. They are impossible for us to nail down in terms of long-term contracts. We have all tried approaches to control these charges. Unfortunately, they are a component of Airfreight cost that we are going to be living with for the foreseeable future. It should be noted that it is a component that we do not profit from. When I first came into this industry, if you paid a dollar, we
made commission on that dollar. Now if you pay a dollar, on average thirty-five cents of that is surcharges and commission is paid on the sixty-five cents. We have seen a significant change in the way we profit from airfreight transactions. We have to find ways to adapt to these changes.

There are further challenges in the area of security. The Canadian Border Services Agency (CBSA) is in the process of implementing a new risk assessment program this month covering Exports leaving Canada. It is not going to be an issue that will cost the exporter anymore, but there will be documentation changes. You need to make sure that you are using the correct B-13 version. Additional information will be required. In essence, we will be required to submit the B-13 on an air cargo shipment 2 hours prior to loading and 48 hours prior to loading of an ocean freight container. The timetable for these events is similar to that required at Origin for Exports to North America. We have logically got to step up to the plate and prove to our customers abroad that we are safely and securely storing Exports leaving Canada and the Exporter has complied with additional responsibilities.

Risk assessment on the air Import trade, that we saw implemented on the ocean side a year ago, will become effective in December of this year with Advanced Commercial Information (ACI) filing. One of the frustrations of our industry is that these additional steps are all coming into play with, by and large, an additional cost to the buyer/seller, whomever is paying the ticket. There are currently no interfaces between export country filing and import country filing.

Finally to the issue of air freight challenges, specifically capacity constraints that are existing in the world, especially from Asia, as we heard several times today. From the airfreight perspective, we saw the introduction of a Peak Season Surcharge (PSS) in the Canadian market for the first time in 2004. The indications are that we will see that same factor come into play again this year. When it will take place is hard to tell, but it is a fair projection to give to the buyer that we will see it very early on in the second quarter. We
are likely to see figures of up to 10% (PSS) of contract rate on the airfreight transactions.

So, what is driving a lot of this? One of the key factors is the availability of aircraft to support supply lines, specifically those that are required for peaks in seasonal demand. Available freighter capacity has declined because of the war and demand that the US and other allied forces have created in the Middle East. While we are seeing a scaled increase in older 747 conversions to freighter configuration, it is a slow process. Additional lift capacity will trail demand in the next year or two. I am told the conversion rate will be 10 aircraft per annum, by the end of this year.

On the constraint side, we are still seeing further realignment and right-sizing in the US and European carrier community. Some of these realignments are starting to prick the ears of parties that have not been involved to date. I think it is safe to say we will see more cooperation and merger agreements between Airlines in both the EU and the USA in come years.

I would stress that lift is available to support the needs of the Committed Customer. By this I mean that the spot market in the Import sector in Canada right now has gone by the way side. In fact, it has been gone for the last 12-18 months. We suggest that you tie down your Supplier and secure a transportation commitment, when you become a Customer.

Moving on, I would like to give an overview of the Cargo 2000 program. It really is a fascinating and huge step that has been undertaken in our industry. Cargo 2000 is a consortium of Airlines, Freight Forwarders and industry associates that came together in 1995 to try to establish an agreed upon set of processes and process controls in the airfreight industry relating to the physical handling of cargo. It is really getting underway now and it is exciting to see where it is going. The idea of process control starts with
quality data, with the ultimate goal of improving customer satisfaction and reducing costs.

The master plan is built around standardized processes that all members will participate in. Right now everybody’s map is different. The implementation is phased in three steps. This first phase of Cargo 2000 is the airport-to-airport model, measured at a Master Bill level. This phase is well under way.

Phase 2, Housebill/Shipment planning and tracking door-to-door, is currently being rolled out by two companies, Kuehne + Nagel and DHL. We hope to see many more new players stepping up later this year and actively engaging in implementation of Phase 2.

**Figure 6.4**

**The three phases of Cargo 2000**

<table>
<thead>
<tr>
<th>Chain definition</th>
<th>Monitoring level</th>
<th>Visual Representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Airport to Airport (A2A)</td>
<td>Master AWB level; Shipment planning &amp; tracking</td>
<td></td>
</tr>
<tr>
<td>2 Door to Door (D2D)</td>
<td>House AWB level; Shipment planning &amp; tracking (Example of 3 HAWB)</td>
<td></td>
</tr>
<tr>
<td>3 Door to Door (D2D)</td>
<td>Shipment planning &amp; tracking at piece level with document tracking</td>
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</tbody>
</table>

Ultimately we would like to be able to tell the customer where their shipment is, at a piece level, with the documentation associated with that shipment. This will become not just information on where your shipment is, but more importantly, is your shipment meeting the transportation benchmarks that have been set forth.
The member community now certifies over 300 sites. One or more members are measuring service in 75 cities and 5,200 individual trade lanes worldwide. That compares with only 400 trade lanes a year ago.

I want to wrap up by talking a little bit about the pricing situation for 2005. Though I have hinted at it, we can see no significant change in air cargo costs for imports moving forward for the next twelve months. We can expect a peak season Surcharge on cargo from Asia. On the air export side, the situation is reversed. It is a buyers market. In the US/Canada trans-border market we are seeing further shrinkage in terms of significant players.

**Barry Prentice**  
**Moderator**

Is Cargo 2000 a response to the competition from the integrators and a concern that they are going to get a lot larger and start taking over a lot more of the airfreight side?

**Jeremy Shrubbs**  
**Speaker**

I think the simple answer is yes. In the historic, big picture, with Cargo 2000 launching around 1995-96, we were seeking a standardized information exchange partnership with our airline partners. We had nowhere to start from. There was absolutely a zero point and yet we were starting to see the integrators step into the international market place. They were aggressively marketing themselves based on one advantage, the advantage of knowing what was going on because they had full control.
Barry Prentice
Moderator
We heard just a few weeks ago that the Airbus 380 was being introduced. A massive airplane with some 150 tonnes of lift. What effect on the market will that have as that aircraft becomes more widely utilized?

Jeremy Shrubbs
Speaker
The CEO of Emirates Airlines, the second Airline to step forward with an order for the Freighter version has stated that he wishes they were being delivered this year. That statement is obviously a reflection on the lack of freighter availability today.

It is going to be an interesting step in cargo lift. With three decks configured for freight this aircraft will have the ability to carry 150 metric tonnes of air cargo over 6,000 nautical miles at an improved efficiency over the MD11 of 15-20%. What it should do is make those parties involved more competitive. Fed Ex has a hard order for ten; Emirates Airlines has an order for 2. I am sure we will see other carriers step forward in the next year or so. The first aircraft is going into service in 2008; I believe. It is too long term to say what effect it is going to have. I think other aspects of the airfreight market place will change the configuration. I hope we will see a greater balance in the air cargo trade between continents. I would like to see industry pick up in North America, and this may be underway with the decline in value of the US dollar. I believe that these factors will change in the long term. And that aircraft will add a new dimension.

Question from the Audience
(Inaudible)
Jeremy Shrubbs  
**Speaker**

You are absolutely right. On a positive note, there are steps being taken. First, it is important to know that Chinese authorities are liberalizing their operational and ownership regulations for Airline operating within their borders.

The issue that I raised, relating to quotas, comes from first hand experience. My fear is that we will see a further squeeze on lift out of Asia as higher end textiles that have traditionally been made in the US and Canada move offshore. We are already seeing some major US manufacturers decide to unplug the very last of their manufacturing capacity in North America.

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**Rapporteur**

Dr. Barry Prentice, Director  
Transport Institute  
Afternoon Chairperson

Our last speaker for the day is Dr. Paul Larson who is going to give us some thoughts on what he has heard over the course of the day. Professor Larson joined our new department of Supply Chain Management last summer. We are delighted to have him come to Manitoba. Dr. Larson has published many articles in leading SCM and logistics journals, and has made numerous presentations at academic and practitioner conferences. He has consulted and conducted executive seminars in Europe, North America, South America, the Caribbean and China on logistics, purchasing and SCM. Paul is an Associate Editor of the *Journal of Business Logistics* and serves on the Editorial Review Board of the *Journal of Supply Chain Management*. 
Dr. Paul Larson  
Professor, Supply Chain Management  
University of Manitoba

I have the difficult task of briefly summarizing today’s events. I have seven hard acts to follow. These are very exciting times to be in Supply Chain Management and to be in Manitoba. While I sat listening to the talks today, I hear things with the ears of a teacher and researcher. I listen for things I can share with students or perhaps use to facilitate my own research. Today, it occurred to me much of the Supply Chain Management research focuses on the role of technology to solve supply chain problems. Other research focuses on analytical systems for supply chain management.

In focusing on technology, it can be forgotten that we have to move the freight. We have to move it from point-to-point, which involves many other supply chain issues and actors (service providers, freight forwarders, airlines, carriers, etc.).

Information overload was also on my mind today. We say information is power, it is a beautiful thing, and it helps us make better decisions. However, it seems this may be true only up to a point. If we get too much information things turn the other way. I might be suffering from a bit of information overload today.

The whole emerging markets issue is very interesting. Something I had not thought about is the concept of trade with Latin America about to explode. There is so much focus on certain key markets (e.g. USA or China), but there are other markets that are growing, perhaps poised to explode, and of course infrastructure and logistics systems have to be in place to help exploit these markets.
Another highlight today was the beautiful phrase from Mr. Brinkmann: “cargo is like water, seeking the path of least resistance.” Cargo seeks the best path from origin to destination. For instance, some of my Mexican friends are talking about containers being taken off at Pacific Ocean ports in Mexico, to avoid congestion further to the north. However, rail connections to such ports are a remaining problem.

Another fascinating discussion point during the day pertains to trade and ocean shipping across the Pacific. While we all know there is a Trans-Pacific trade imbalance, hearing the magnitude of the imbalance is always startling. There is now more than a 2-to-1 (eastbound versus westbound) ratio.

In addition, the Cargo 2000 initiative is very interesting. This is certainly a supply chain management initiative coming from the transportation industry. I wonder if Cargo 2000 will expand beyond primarily the transportation players into the total supply chain? Certainly buyers and sellers are interested in communicating electronically to track freight even before it reaches the port. Maybe this is an opportunity to exploit the role of transport in the wider supply chain.

I had no idea that 70% of Wal-Mart goods were made in China. This is particularly fascinating given Wal-Mart’s buy-American promotions of days past. Back then the imports on Wal-Mart’s shelves were a lot less than 70%. Wal-Mart is the 7th largest buyer from China and Canada is the 9th largest!

The Port of Prince Rupert discussion is quite interesting because of the interplay between Vancouver and Prince Rupert. Some news articles argue that the Port of Vancouver will fight this tooth and nail; others suggest the Port of Vancouver has capacity problems, and maybe in consortium with Prince Rupert they can get back to their just-in-time roots. It seems that in major transportation initiatives we drift into the question: what is the role of government in all of this? I am not going to answer that question today.
The breakdown of the freight in Ms. Harrower’s talk was very interesting, in terms of only 10% of the railroad’s freight being truly domestic. However, if we look at it in the context of NAFTA and integration of railroads across the border, 61% of the freight is domestic (continental).

Another fact about CP that I found interesting is the shift of freight moved by container versus trailer. Virtually 100% of intermodal freight is now moved by container rather than in trailers. In the railroad context, we drifted again into the role of government and public policy in providing infrastructure.

There was also the issue of forced access, various schemes to increase rail competition, leading (in theory) to rate reductions and better service. Of course, if it were my railroad, I would certainly not be in favor of such a thing.

One final thing I found quite interesting is the development of a new billion dollar, high capacity, long distance airplane. Will we see more categories of cargo shifted away from the ocean carriers towards the air carriers?
Planes, Trains and Ships:  
Intercontinental Transportation 2005  
Presenter Profiles

Morning Chairperson

Dr. EDWARD W. TYRCHNIEWICZ, CTRF VP Program (1977)  
Department Head, Dept. of Supply Chain Management  
I.H. Asper School of Business

Trained as an Agricultural Economist (PhD – Purdue University), Ed has worked in Universities for more than 35 years with more than 20 of those years being in various academic administrative positions. While at the University of Manitoba ((1967-88), he was a Professor of Agricultural Economics, Head of the Department of Agricultural Economics, and Founding Director of the Transport Institute. He then served as Dean of the Faculty of Agriculture and Forestry at the University of Alberta (1988-96).

Since taking early retirement from the University of Alberta in 1997, he has held a variety of part-time appointments, including Senior Fellow at the International Institute for Sustainable Development (1996-99), founding Executive Director of the Manitoba Rural Adaptation Council (1997), and Adjunct Professor (Agricultural Economics) at the University of Manitoba from 1998 to 2004. He is currently Associate Dean of the Asper School of Business at the University of Manitoba, and Acting Head of a new Department of Supply Chain Management in the Asper School.

Session 1

Mr. Peter Hall  
Deputy Chief Economist  
International Trade Advisory Services  
Export Development Canada

Mr. Peter Hall joined Export Development Canada (EDC) in November 2004. He has more than 15 years of experience in economic analysis and forecasting. Most of Mr. Hall’s career has been at the Conference Board of Canada, most recently as Director of Economic Forecasting Services.
Earlier roles at the Conference Board included working with the National Forecasting Team, the Provincial Forecasting Team, and having sole responsibility for the Board’s International Outlook. He also spent time as a forecaster with Ontario Hydro.

Mr. Hall has an MA in Economics from Carleton University and a BA in Economics from the University of Toronto. EDC provides trade finance and risk management services to Canadian exporters and investors in up to 200 markets. Founded in 1944, EDC is a Crown corporation that operates on commercial principles.

Session 2

Mr. Hans-Georg Brinkmann
President & CEO
Kuehne + Nagel Ltd

Born near Bremen in Germany, Hans-Georg Brinkmann started his professional career with Kuehne + Nagel in 1972 by completing a three-year apprenticeship as licensed Freight Forwarding Clerk. He continued his career with Kuehne + Nagel in Germany in various positions of increasing responsibility and management functions.

In 1982 Hans-Georg Brinkmann was transferred to Kuehne + Nagel’s New York office. His responsibilities included Sales and Marketing in addition to the further development of transatlantic tradelanes.

After his return to Kuehne + Nagel Bremen, Germany, Hans-Georg Brinkmann was promoted to Vice President and in 1988 he became Head of the Seafreight Import Department of both the Bremen and the Hamburg branches. Due to his capabilities and successes he took on responsibility for nationwide seafreight imports for Kuehne + Nagel’s German operations. During that time he significantly increased the growth in volume, especially in the LCL (less than container load) field.

In 1996 Hans-Georg Brinkmann was promoted to Branch Manager Bremen, the largest branch within the worldwide Kuehne + Nagel organization.

In July 1999 he was appointed President & CEO of Kuehne + Nagel’s Canadian organization. Under Hans-Georg Brinkmann’s leadership over 1 million square feet of logistic facilities were added to the Canadian network. Lead logistics capabilities were developed, the division KN Lead Logistics was formed and supply logistic solutions were implemented.

Since 2004, Mr. Brinkmann has served as Chairman of the Board of Directors of the Canadian German Chamber of Industry and Commerce Inc., Toronto, Canada.
Session 3

Mr. Normand Fillion  
Vice President, Marketing and Development  
Montreal Port Authority

Mr. Normand Fillion was born in Arvida, Quebec on July 8, 1950. He graduated from York University in Toronto with a Bachelor of Arts Degree (Honours) in Economics in 1973. He obtained his MBA from the University of Western Ontario in 1977.

Mr. Fillion worked in banking for nine years prior to joining the Port of Montreal as Manager, Economic Research and Analysis in 1984. He was appointed Vice-President, Marketing in January 1991, and Vice-President, Marketing and Development in February 1997.

Mr. Fillion is Vice-President of the Executive Committee of Sodes. He is also active in the Transportation Committee of the Conférence régionale des élus de Montréal and the Chamber of Maritime Commerce.

Mr. Fillion and his wife Maria have three children.

Session 4

Mr. Reg Leeson  
Vice President Trans Pacific Trade  
Panalpina Inc.

Bio Unavailable

Afternoon Chairperson

Dr. Barry E. Prentice  
Director, Transport Institute

Barry E. Prentice is the Director of the Transport Institute and a Professor in the I.H. Asper School of Business. His major research and teaching interests are logistics, transportation economics, urban transportation, economic development and trade policy.

Dr. Prentice has authored or co-authored more than 150 research reports, journal articles and contributions to books. His scholarly work has been recognized for excellence in national paper competitions and awards. In 1999, National Transportation Week named him Manitoba Transportation Person of the Year
Dr. Prentice has served on the Boards of Directors of several transportation organizations: Winnipeg Airports Authority, Inc. (1994-2002), National Transportation Week (Canadian President, 2001 and 2003), and the Canadian Transportation Research Forum (Past President, 1997). He is Associate Editor of the Journal of Transportation Research Forum, and Honourary President of the Canadian Institute for Traffic and Transportation (2001-3). In addition, Dr. Prentice has served Winnipeg TransPlan 2010, the Mid-Continent International Trade Corridor Task Force and expert committees. In 1999, he received a University of Manitoba Outreach Award.

Session 5

Judy Harrower
General Manager, Domestic Intermodal
Canadian Pacific Railway

Born in Edmonton, Alberta, Judy Harrower graduated from the University of Alberta in 1985 with a Bachelor of Commerce degree. After working for one year with the Alberta Government (Transportation Services branch of the Economic Development Department), she joined Canadian Pacific Railway (CPR) in Calgary in the marketing department. Judy held various positions in Calgary, until 1989 when she relocated to Toronto as the Manager of Marketing for the Mines and Metals commodity group.

After participating in an Operations Crossover Program and becoming a terminal supervisor in Sudbury, Judy returned to the marketing group in Toronto in early 1993. From here she resided in Minneapolis, MN managing CPR’s North American marketing for Mines, Metals and Steel and playing a major role at integrating the US marketing departments into the Canadian departments.

In June of 1999, Judy completed a two-year MBA through the University of Western Ontario videoconference program, and moved into a strategic role at CPR as General Manager, Commercial Development. Moving back to Toronto in September of 2001 in the capacity of General Manager, Intermodal Operations, Judy was responsible for the performance of all 21 intermodal terminals across Canada and the US.

In September 2003, Judy moved back to the commercial side of the railways as the General Manager of Domestic Intermodal, and is responsible for the profitable sustainment and growth of an approximate $500 million revenue base.
Jeremy Shrubbs  
**Director, Business Development, Lifescience**  
**DHL Danzas Air and Ocean**

Jeremy Shrubbs is a native of Great Britain, educated in England and Ireland; he immigrated to Canada in 1976. A career in international logistics seemed predestined when a summer job offer involved flying thoroughbred horses to events around Europe. In his words, “understanding the needs and expectations of global trade requires a fascinating balance of commerce and logistics knowledge, and people skills. Approaching 30 years in this business, I can honestly say, every day invites new and exciting challenges.”

Credo: Trust, Commit, Connect, Belong

**Rapporteur**

**Dr. Paul D. Larson,**  
**Professor, Supply Chain Management**  
**University of Manitoba**

Dr. Larson has published many articles in leading SCM and logistics journals, and has made numerous presentations at academic and practitioner conferences. He has consulted and conducted executive seminars in Europe, North America, South America, the Caribbean and China, on logistics, purchasing and SCM. Paul is an Associate Editor of the *Journal of Business Logistics*, and serves on the Editorial Review Board of the *Journal of Supply Chain Management*. 
PLANES, TRAINS, AND SHIPS: INTERCONTINENTAL TRANSPORTATION 2005

PARTICIPANTS

SPEAKERS
(In order of appearance)

Ed Tyrchniewicz    I.H. Asper School of Business
Peter Hall     Export Development Canada
Hans-Georg Brinkmann    Kuehne + Nagel
Normand Fillion    Port of Montreal
Reg Leeson      Panalpina
Barry Prentice   Transport Institute
Henry Lasslo    SAAN Stores Ltd.
Judy Harrower    Canadian Pacific Railway
Jeremy Shrubbs    DHL Danzas Air & Ocean
Paul Larson    I.H. Asper School of Business

PARTICIPANTS

Steve Aubut    Canadian Transportation Agency
Michael P. Banville    TransX
John Baron     Matrix Freight Services Ltd.
Hart Berger
Bev Bolton
Kevin Bresson   I. H. Asper School of Business
Brian Brockmann
Norbert Boisjoli   Palliser Furniture Ltd.
Lynn Cabak    Transportation & Government Services
Shannon Campbell Western Diversification
Paul Casciano   Manrex Limited
Mark Conrad    Transport Canada
George Clark    Monarch Industries
Ian Douglas    Canadian Pacific Railway
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<th>Name</th>
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<tr>
<td>Ross Eagleton</td>
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<td>Diana Morin</td>
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**Transport Institute**

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<td>Kathy Chmelnytzki</td>
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Planes, Trains and Automobiles Ships

Intercontinental Transportation 2005

Fort Garry Hotel, Winnipeg, Manitoba
TUESDAY, FEBRUARY 22, 2005

8:00 to 8:25 am  Registration and Continental Breakfast

8:25 to 8:30 am  Morning Chairperson  I.H. Asper School of Business

Session 1 - GLOBAL ECONOMIC OUTLOOK FOR 2005 IN A CANADIAN IMPORT/EXPORT CONTEXT

8:30 to 9:00 am  Mr. Peter Hall, Deputy Chief Economist
Export Development Canada

9:00 to 9:15 am  Questions from the Floor

Session 2 - CONSTRAINTS, TRENDS AND OPPORTUNITIES IN TRANS-ATLANTIC TRANSPORTATION. An examination of current trends in supply, demand, rates, and regulations in Ocean and Air Freight between Europe and North America and predictions for 2005.

9:15 to 9:45 am  Hans-Georg Brinkmann, CEO
Kuehne + Nagel Ltd.

9:45 to 10:00 am  Questions from the Floor

10:00 to 10:30 am  Coffee and Networking Break

Session 3 - SERVICE EXPECTATIONS FOR OCEAN PORTS IN 2005. Outlook on ocean trade and the role of the port in facilitating trade in competition with other East coast ports. Some of the topics include, efforts to attract new marine services, resolution of port-to-rail interface issues, and new security challenges.

10:30 to 11:00 am  Normand Fillion, Vice President
Marketing and Development
Port of Montreal, Montreal PQ

11:00 to 11:15 am  Questions from the Floor

Session 4 - CONSTRAINTS, TRENDS AND OPPORTUNITIES IN TRANS-PACIFIC TRANSPORTATION. An examination of current trends in supply, demand, rates, and regulations in Ocean Freight between Asia and North America.

11:15 am to 11:45 am  Mr. Reg Leeson, Vice-President Transpacific Trade
Panalpina Inc. Canada

11:45 to 12:00 pm  Questions from the Floor

12:00 to 2:00 pm  Lunch
Luncheon Keynote Speaker
Mr. Henry Lasslo, C.Log., CITM
Logistics Director
SAAN Stores
2:00 to 2:05 pm  Dr. Barry Prentice, Director Transport Institute
Afternoon Chairperson  I.H. Asper School of Business, University of Manitoba

Session 5 - RAIL INFRASTRUCTURE CONSTRAINTS. An overview of the
intermodal rail issues in North America specifically as it pertains the growing trade
between North America and the Asian countries. Specific topics to include
infrastructure constraints, co-ordination challenges and policy concerns

2:05 to 2:35 pm  Judy Harrower, General Manager
Domestic Intermodal, Canadian Pacific Railway

2:35 to 2:50 pm  Questions from the Floor

2:50 to 3:20 pm  Coffee and Networking Break

Session 6 - TRENDS AND OPPORTUNITIES IN AIR FREIGHT. A synopsis of
current air freight capacity and constraints, lanes where opportunities exist, pricing
changes for 2005, and the impact of regulation changes

3:20 to 3:45 pm  Jeremy Shrubbs
Director, Business Development Lifescience
DHL Danzas Air & Ocean (Canada) Inc.

3:45 to 4:00 pm  Questions from the Floor

4:00 to 4:15 pm  What Did We Learn Today? A brief summary of the
day’s proceedings

Dr. Paul D Larson, Professor
Department of Supply Chain Management
I.H. Asper School of Business, University of Manitoba
Thank You

To

EQ3

For providing the Speaker Gifts for the Conference