

CITT Point/Counterpoint

**Panama Canal Expansion: The Battle for Jobs and Cargo
Who Wins? Who Loses? Who Decides?**

Proceedings and Analysis

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**Panama Canal Expansion
2010 Point/Counterpoint Proceedings**

**Summary of Introductory Comments and
the Panama Canal Expansion Video**

Marianne Venieris, Executive Director of the Center for International Trade and Transportation (CITT) at California State University, Long Beach (CSULB), and METRANS Deputy Director, welcomed all participants and attendees of the forum. She expressed that she was thrilled to see many familiar faces from other CITT hosted events, such as the award-winning CITT Town Hall series. She asked those who had attended previous events to raise their hands, and was happy to see many hands in the audience. In her opening statement, she recalled Dominick Miretti's closing remarks from the 10th Annual Town Hall meeting: "We have celebrated a decade of Town Hall meetings and now CITT's signature event comes to a close. The Town Halls have been a milestone for the industry and community outreach and communication. But this does not mean the end of the university's role for providing a platform for trade stakeholders to come together to discuss controversial issues and find solutions and agreement." Ms. Venieris recognized that Dr. Miretti was right, and presented the Point/Counterpoint series as a new educational forum for industry stakeholders to meet and discuss controversial issues. She emphasized that discussion must be informative, educational, non-combative, and in a neutral setting. Ms. Venieris further explained that the goal of this forum is not to establish winners or losers, but to inform the audience.

Additionally, Ms. Venieris explained how choosing the Panama Canal expansion as the topic for the first Point-Counterpoint series was the most logical choice. She also recognized members of the CITT Policy and Steering Committee, as well as students, sponsors, and representatives from the San Diego World Trade Center Association. Ms. Venieris advised that the key presenters were Paul Bingham, Mary Brooks, and Todd Thomas. Paul Bingham was introduced as the "economist." Mary Brooks was referred to as the "behaviorist." And Todd Thomas was described, in his own words, as the "realist."

CSULB Provost and Senior Vice President, Dr. Donald Para welcomed the audience on behalf of President F. King Alexander and the CSULB faculty and staff. He noted the expansion of the Panama Canal as one that will have global implications. Dr. Para proceeded to recognize several of the dignitaries expected to be in attendance: Congresswoman Laura Richardson, Long Beach Mayor Bob Foster, Port of Long Beach Commissioners, and ILWU presidents.

Dr. Para discussed the importance of the forum as an educational tool. He recognized that the Port of Long Beach is one of the largest employers in the Southern California region, and that any impact on it is important to the entire community of Southern

California. He emphasized "the importance of these events and the research that is generated as part of these partnerships are an invaluable tool for crucial decision-making." Dr. Para closed by congratulating and thanking everyone who either sponsored or made the event possible.

Ms. Venieris introduced the video documentary. She outlined the purpose of the video as featuring a brief history and providing context for developments of the Panama Canal expansion and the global distribution of goods, as well as , presenting the challenges faced by West Coast Ports as a result of the expansion.

The Video

The Panama Canal Expansion mini-documentary is a production of the CSULB College of Continuing and Professional Education's Advanced Media Production Center (AMP). It was written, produced, and narrated by Dave Kelly, Director of AMP. The video begins with a brief history leading up to construction of the Panama Canal, and the opening of the Canal in 1914, which signified the first time an all-water route bisected the Western Hemisphere. For hundreds of years prior, explorers had been looking for such a route. A great number of "49ers" that traveled from the east coast of the United States used Panama to get to the west coast in the height of the California Gold Rush. The French were the first to attempt to build a canal crossing the Panamanian Isthmus. They were unsuccessful, and the project suffered many setbacks, including the tragic deaths of at least 20,000 workers. By 1889, the funds allocated for the project were completely spent. As a result, the French abandoned the project, which was then picked up by the United States' government.

The U.S. sought to control the Panama route, largely, as a result of foreign policy at the time. U.S. control of the construction really began to take shape under Theodore Roosevelt, who used military intervention for Panama's separation from Colombia. After presenting the origins of the canal, the video moved to the present day and the expansion of the canal. The video notes that the expansion is an historic milestone in the same way as the construction in 1914. However, the expansion is under the control of the Panamanian government. The cost of the expansion is estimated to be \$5.25 Billion US. The expansion consists of a larger third set of locks that will allow larger vessels to transit the canal than is currently possible. These Post-Panamax vessels will be able to carry up to 12,000 twenty-foot equivalent units (TEUs), which represents an increase in capacity per vessel of 7,500 TEUs. The expected increase in capacity per vessel has many broad implications for the global supply-chain.

The video featured interviews with experts. Dr. Joseph Maggadino (Dept. of Economics, CSULB) explained that trade shifted from U.S. East Coast ports to the West with the development of Asian countries over the last 40 years. Since then, West Coast ports have enjoyed a competitive advantage over east coast ports. However, the Panama Canal expansion presents an opportunity for an increase in market share for east coast ports.

The video discussed the development of the Ports of Los Angeles and Long Beach, which had achieved hegemony in goods movement. The success of these ports was fueled by several factors: large local demand of consumer goods, a conveniently located and

extensive rail network, fast shipping times due to close proximity to origin of goods, and infrastructure able to accommodate larger vessels. The Ports of Los Angeles and Long Beach had seen great success for around 40 years, but even without the Panama Canal expansion, they are facing increased competition from other West Coast ports. The video discussed the Port of Prince Rupert as one potential competitor. Two key advantages of Prince Rupert are its closer proximity to producer countries in Asia and its access to a large rail network. Additionally, the Canadian government has declared their support for the Port of Prince Rupert. Another longer-term potential competitor is a proposed project in Lazaro Cardenas, Mexico. This project would entail developing a direct rail network from Mexico to Kansas City. If successful, the project would likely capture market share from the Ports of Long Beach and Los Angeles.

The video also considered the actions of decision-makers in the shipping industry. Some decision-makers have built distribution centers at numerous ports around the country in an attempt to limit their firms from exposure to certain costs. Additionally, there are several large port complexes that are able to facilitate an increase in traffic by way of the Panama Canal. Firms using these ports to move goods from East Asia into the U.S. would face an increase in travel time, but the move would afford them a significant decrease in handling costs. Overall, firms may choose to diversify their transportation strategy by using multiple ports. This strategy could keep costs down by increasing competition and protect firms from any one port exercising monopolistic pricing.

The video next pointed out that despite a highly motivated shift toward East Coast ports increasing their market share, there are several obstacles to be overcome. Among these is the need for better infrastructure, which could accommodate Post-Panamax vessels. The Port Authority of New York faces challenges such as the Bayonne Bridge, which currently prevents such vessels from entering the port complex. Additionally, there is a need for rail infrastructure sufficient to transport goods from the port to end-users. These obstacles may eventually be overcome, but the advantage of total travel time rests with the west coast ports.

Aside from east coast competition, the video discusses some other potential game-changing issues within goods movement. One example is the increase in transloading shipping, during which goods are taken from a standard TEU to a mixed goods domestic cargo carrier. In addition, the Panama Canal Expansion will require an annual 3.5% increase (in container fees) for 20 years. This may limit some of the competitive advantage east coast ports realize from the expansion. However, the video stresses that what will happen is uncertain, because west coast ports will also likely have to raise fees as the result of several factors: environmental mitigation costs, community congestion consideration, and infrastructure improvement expenses.

The video also discusses the potential shift in manufacturing to locations such as India and South Asia (given current affairs). Goods produced in these areas could be shipped to the East Coast via the Suez Canal. South American countries may also begin to be competitive producers, which would increase competition further. Ultimately, the shippers are going to be the deciding factors in where goods are received in the United

States. They will consider factors such as capacity, efficiency, reliability, flexibility, and cost. The ports that maximize these variables will be successful over those that cannot.

The Discussion

Following the video, Dr. Thomas O'Brien, Director of Research at the CITT and Associate Director of Long Beach Programs for the METRANS Transportation Center was the Point/Counterpoint Moderator. Dr. O'Brien commended Dave Kelly and his team at AMP for producing a comprehensive and informative video. Dr. O'Brien then mentioned that additional information, including a timeline and other context-providing data would, was in the program and can also be found online at the METRANS website (www.metrans.org). He also asked that audience questions be limited to one question and suggested that audience members may write their questions on cards that were distributed. Then, Dr. O'Brien introduced the speakers: Paul Bingham, Economic Service Line Leader for Wilbur Smith Associates; Dr. Mary Brooks, William A. Black Chair of Commerce at Dalhousie University in Halifax, Nova Scotia; and Todd Thomas, Los Angeles Branch Manager for Expeditors International. Mr. Bingham began his presentation by thanking organizers and participants of the Point/Counterpoint event. He also expressed that his view that Panama Canal expansion is a very important topic and he was excited to be able to discuss it. Mr. Bingham's approach to the topic was to look at it from a macro perspective.

First, Mr. Bingham discussed the reason for canal expansion. The primary reason is that the people of Panama saw opportunity in the growth of world trade. In addition, pre-expansion capacity of the canal limited the amount of growth Panama could capture. Taken together, these two factors alone justified Panama's decision to expand the canal.

Mr. Bingham next looked at some external trade variables that could affect the flow of goods into the United States. Among the most important of these is the shift in economic dominance from U.S. and Europe to Asian countries, especially China. Another important factor to consider is a shift in production to different parts of Asia. Goods produced west of Singapore would be shipped most efficiently by way of the Suez Canal. A large shift in production could potentially result in increased market share for east coast ports in the U.S. at the expense of west coast ports, regardless of the expansion of the Panama Canal.

Mr. Bingham concluded his presentation by proposing answers to the key questions: Who Wins? Who Loses? Who Decides? In answering these questions, he echoed a point expressed in the video, which is that there are already decisions being made that will influence the answers to the key questions. Clearly, the Panamanians will win from the expansion in the long-run, but how long the long-run will be is uncertain. The losers of the expansion will be those that are slow to adapt their decisions to the increase in competition brought about by the expansion. Those who decide are the individuals that collectively make up the supply-chain: shippers, carriers, infrastructure providers, etc. These decision-makers will influence the balance of market share of U.S. imports among different ports.

Following Mr. Bingham's presentation, Dr. Mary Brooks took the podium. Dr. Brooks first informed the audience of her view that the decisive power rested in the hands of large shipping agents rather than the ports themselves. Next, Dr. Brooks said that the global trade market has changed since the inception of the Panama Canal expansion, and it will likely change more before the project is finished. She outlined some of the large changes, including increase in concerns about security and environment and increased communication between buyers and sellers facilitated by technology. One result of these developments is a massive investment by shipping lines in larger ocean vessels. Additionally, Dr. Brooks emphasized the prevalence of time-based competition among carriers.

Dr. Brooks then discussed the costs and benefits of all-water routes such as the Panama Canal. From her perspective, the Panama Canal offers the benefits of lowering carrying costs and having a lesser environmental impact, but suffers from a greater travel time than intermodal routes offered by west coast ports. The result is that shipping routes will compete based on service volatility or reliability.

Next, Dr. Brooks showed a map of the U.S., which broke down the distribution of imports (in % market share) received by 5 regions from the West Coast to East Coast. The image showed that San Pedro Bay ports clearly dominated with almost 40% of all imported goods. With respect to the changing market, Dr. Brooks posed the question: Will these ports lose some of their share? Her answer was that the result will be based on service reliability.

To elaborate on this view, Dr. Brooks showed the audience some statistics. One important statistical comparison is that the best carrier schedule reliability is 69 percent, with a majority of carriers guaranteeing their schedule reliability less than 50 percent of the time. This means that the carrier who is able to step-up reliability will capture more market share. Another important statistical category is the amount of carbon emissions per each transit mode. Dr. Brooks' table showed that ocean vessels have the lowest carbon emissions per ton-kilometer, with rail being slightly higher.

Dr. Brooks' presentation concluded with her projections of winners, losers, and decision-makers. The winners will be the U.S. consumer, ports who focus on service reliability, and railways and distributors who are well connected to ports. The losers will be complacent ports and complacent carriers who do not increase their service reliability. The decision-makers will be those who pay for freight transport and the ports.

Following Dr. Brooks was Todd Thomas, the final speaker contributing to the discussion. Mr. Thomas commended both Mr. Bingham and Dr. Brooks on their research and contributions to the discussion. Mr. Thomas began his presentation by emphasizing that the shortest distance between the production center of goods and the United States is and always will be the West Coast. He then proposed the "importers' challenge" which is to decide how best to ship goods. Primarily, importers will choose the lowest cost option.

Mr. Thomas next looked at some of the infrastructure developments of East Coast ports, particularly in Jacksonville and Houston. Since 2002, the Jacksonville Port has seen quite a few importers develop distribution centers on port land, with a total development of 9.8 million square feet of distribution space. Likewise, the Port of Houston stands to gain from the expansion of the Panama Canal, due to its position and capacity for expansion. However, Mr. Thomas pointed out that there are not many large firms that can afford to have multiple distribution centers, such as Walmart and Home Depot. Thus, it is uncertain if these ports will be able to increase market share.

Mr. Thomas next looked at the Los Angeles and Long Beach ports in terms of capacity and infrastructure. Looking at a picture of the Port of Long Beach revealed the immense capacity for handling goods. Mr. Thomas referred to marketing material for the Port of Los Angeles to show that it has 660 million square feet of warehousing space. This represents a very great difference from the space currently at Jacksonville.

Mr. Thomas concluded by answering the key questions proposed by the event. His answers were contingent ones, based on short-term and long-term factors. In the short-term, Mr. Thomas predicted the steamship lines would win, by using their larger vessels to save money on shipping costs by way of the newly expanded Panama Canal. Panama loses in the short-run due to the substantial debt undertaken to expand the canal. The decision-makers in the short-run are going to be the steamship lines who will likely choose to save on operations costs by using larger vessels through the canal.

Mr. Thomas' outlook for long-run winners, losers, and decision-makers showed that Panama would win in the long-run. Ultimately, Panama had little choice to expand, because an unexpanded canal would surely suffer a significant loss in market share, due to its inability to facilitate the transit of Post-Panamax vessels. Mr. Thomas projected that the long-run losers could be West Coast ports, but that this is not a certainty. The long-run decision makers would be the cargo owners.

Audience Questions

Dr. O'Brien began the audience question portion of the event by reading some questions submitted by the audience on cards. The first question was directed to Todd Thomas: **With regard to your comments about Home Depot and Walmart establishing distribution centers in Houston, what relationship is there, if any, between the decision to establish these DCs and the Panama Canal expansion?** Mr. Thomas said that there is likely no relationship between the two decisions, because the former was made before the latter. From this perspective, it is more likely that the establishment of the distribution centers was a response to concerns about risk and an attempt to diversify options. Regardless, the existence of the distribution centers and the completion of the expansion will benefit the Port of Houston. Dr. Brooks added that, in addition to risk diversification strategies, firms are sometimes induced by other factors to move locations of operations. According to her, this may have also been the reason for the decision to construct the two distribution centers.

The next question was directed to Mr. Bingham: **Who is paying for the Panama Canal Expansion?** Mr. Bingham explained that in the short-run, funds must be provided by someone other than the users, which amounts to the Panama Canal Authority (by way of retained earnings) and Asian banks that have agreed to loans. Ultimately, the expansion will be paid for by users through tolls.

The first question from an audience member came from an executive member of the ILWU. Mr. Sanchez directed his question to anyone who wanted to answer it: **In each of your presentations, you mentioned rail transport, but did not say much about transport of goods by truck. Are you not overlooking a key aspect of the supply-chain? And isn't the Southern California supply-chain industry at risk from lack of road and highway improvements?** Mr. Bingham offered to answer the question. He acknowledged the legitimacy of the concern by saying that the region is indeed at risk from lack of action to build needed road networks that would enable more goods to move from rail yards to end-markets. He identified this as an issue of capacity that would limit growth of market share if not addressed.

The next question came from Hugh Constant, World Trade Center of San Diego. His question was directed to any member of the panel: **If Africa were to become the low-cost production center of the world, would this be a benefit for the West Coast Ports?** Todd Thomas elected to reply. Mr. Thomas said that given the geographic location of Africa, the only logical transit option would be to use East Coast ports.

The next question was read by Dr. O'Brien from a card submitted. The question was directed to Dr. Brooks: **What steps are being made by the international community that would suggest that other countries and ports are buying into the notion of going green?** She indicated that most ports have come to the conclusion that to abstain from environmental concerns is not a viable option, due to the concern of the general public. These ports believe that not making environmentally beneficial improvements in infrastructure and policies would put them at a disadvantage relative to competing ports. In this way, ports are to some degree compelled to make these improvements.

The next question came from an ILWU member: **What factors determined the wide spread between minimum and maximum efficiency costs for LA/LB ports and if bottlenecks are the cause, where do the bottlenecks occur?** Dr. Brooks answered the question by stating that the chart used in her presentation was looking at the ports as a whole. The wide spread was an indication that Los Angeles and Long Beach ports can be more unreliable than other ports which have a smaller spread. The bottlenecks that do occur are landside bottlenecks. This means inland congestion must be managed to maximize cargo flow.

Dr. O'Brien read a related question from a card: **What role does productivity play in landside bottlenecks?** Dr. Brooks responded by saying that productivity is not a cause of bottlenecks. Rather, gate congestion has been a larger cause of bottlenecks in the flow of goods within the ports.

The next question came from the audience and was directed to Paul Bingham: **What role do you see transshipping playing in Panama Canal trade and how might transshipping affect our local ports?** Mr. Bingham explained that transshipping at the Panama Canal is not something that will affect West Coast ports. He said that it would not be advantageous for carriers to transship goods to the West Coast. However, Mr. Bingham said that transshipping may become more common in South America as emerging economies, such as Chile, continue to grow.

The next question came from a member of the San Diego World Trade Center: **What affect or role will U.S. exports have with respect to the Panama Canal expansion?** Dr. Brooks answered the question by saying that imports are a much larger share of the total number of goods being moved through U.S. ports, which means that the decision-making process is focused on imports rather than exports.

Mr. Thomas agreed with Dr. Brooks by adding that at the current volume of U.S. exports, any shipper that wants to transit the Panama Canal is able to without constraint.

Mr. Bingham expanded on the previous two answers by explaining that exports could become more influential in a few decades. Mr. Bingham referred to forecasts of the U.S. trade deficit narrowing in the long-term.

The next question was asked by a professor of International Business at National University: **With so many factors that stand to change the location(s) of sourcing and outsourcing, do you see China remaining as a dominant source for goods?** Mr. Thomas answered the question by explaining that China is in the midst of shift from producing goods on its eastern coast to producing goods westward, where the bulk of China's population resides. This shift is expected as a result of rising labor costs as China's economy continues to grow. With this in mind, Mr. Thomas predicted that China will remain a major source of production for the long term.

The next question came from a member of the ILWU: **Upon completion of the Panama Canal expansion, what will the sources of imports be? What emerging markets do you foresee?** Dr. Brooks began by saying that imports will likely grow from India and Vietnam. She also mentioned the possibility of Africa and South America as emerging suppliers of U.S. imports. Dr. Brooks finished by saying that the dynamics of trade patterns do not provide for easy forecasting. In addition, the Panama Canal is only one of many factors that determines overall trade patterns. Thus, Dr. Brooks said that the completion of the Panama Canal is not going necessarily to change the overall patterns of trade.

Mr. Bingham agreed with Mr. Thomas that China is making large infrastructural investments that are going to expand their ability to produce cheap goods. In addition, firms that have invested in production facilities will find it difficult to shift their

production location in the short-term. Therefore, it is likely that China will remain the dominant source of U.S. imports for some time.

Dr. O'Brien read the next question from an audience-submitted card. The question was directed to Todd Thomas: **Do you think the expansion of the Panama Canal in conjunction with a push for a trucker-employee mandate will cause beneficial cargo owners to move cargo away from Southern California?** Mr. Thomas said that beneficial cargo owners are always concerned with any fee they have to pay. Whether any particular fee will cause cargo owners to move their cargo to another location is contingent upon several factors. Regardless, additional fees at a particular port do deter discretionary cargo owners from using that port.

The next question came from an audience member and was directed at all three speakers: **In light of rising costs at the Los Angeles/Long Beach port complexes, can you provide some expected cost-comparisons with the newly expanded Panama Canal?** Mr. Bingham began by saying that ports often look to the Port of Los Angeles and Port of Long Beach as leaders in all sorts of things, including assessing fees. With this in mind, he said that it is likely that increasing fees and costs associated with Los Angeles and Long Beach will be echoed in other West Coast ports. Lastly, Mr. Bingham reiterated Dr. Brooks' statement that fees are but one of many factors that decision-makers have to consider when choosing where best to move their goods.

Dr. Brooks added that there are many studies that have been done to try to measure the effect of additional fees on decision-making. She said that the effect of additional fees is variable among different goods. For some goods, the additional fee is enough to drive decision-makers to choose a different shipping route, but for other goods the fee is inconsequential.

Todd Thomas added that there is enough competition among West Coast ports to gather some empirical evidence on the effect of fees on decision-making. He said that if fees become too excessive at Los Angeles and Long Beach, there are enough alternatives that decision-makers will move cargo to those other ports. The alternative ports include Oakland, Seattle, and Prince Rupert.

The next question came from a representative of the Marine Exchange of Southern California. His question was directed to all three speakers: **Given projections of international trade growth, doesn't everybody win?** Mr. Bingham answered the question by agreeing that the potential loss for Southern California ports is in terms of market share, rather than absolute cargo volume. In other words, the growth in volume of U.S. imports is such that Southern California ports may face capacity constraints even in the face of market share loss to East Coast ports.

The last question came from a member of the CITT Steering Committee and the ILWU who directed his question to all three speakers: **Will the East and Gulf Coast ports be ready to take on the potential additional cargo resulting from the Panama Canal expansion? Will these ports face capacity constraints in the**

near future? Will Los Angeles and Long Beach ports be able to capture some cargo trade from ships traveling west from places such as South America? Mr. Bingham answered the question by saying that West Coast ports have invested heavily into infrastructure designed to accommodate additional capacity. The recession has allowed these ports to catch up with long-term increasing demand. Additionally, East Coast ports have suffered from the recessionary pressures to restrict infrastructural expansion. Thus, while it is uncertain how ports will perform when the expansion is finished, it is certain that Los Angeles and Long Beach ports are in a better position to take on more cargo than are the East Coast and Gulf ports.

Dr. Brooks added that the recession has allowed most ports in the U.S. and Canada to take stock of their situation and make decisions about how best to proceed. She noted that many ports are currently at capacity and that in the long-term most ports will require additional investment to expand. Of all the ports on the East Coast, Dr. Brooks said that Norfolk is in the best position to take on additional cargo. In reply to the last question, Dr. Brooks said that the emerging economies of South America will likely provide additional U.S. imports that could be captured by West Coast ports.

Todd Thomas replied that East Coast ports will be ready, but suggested that East Coast ports may not necessarily gain additional market share. He said that each port in the Gulf and on the East Coast has made investments, and some are currently ready to handle Post-Panamax ships. However, some of these investments may be made in vain, due to the number of competing ports in the eastern region of the U.S. Mr. Thomas predicted that Norfolk and Houston are likely to win amongst these competing interests.

Closing Remarks

Dr. Genevieve Giuliano, Director of METRANS Transportation Center, gave closing remarks that summarized the night's discourse. Dr. Giuliano explained that she would summarize the night's events as "the who, what, when, where" as her interpretation of what was said. She began by describing the "what" as in "**what matters?**" First is where the goods end up at, i.e., where the population is. Second, Dr. Giuliano noted that the location of the most efficient producers was of great importance. A third underlying concern discussed was how trade patterns may change over time. One example discussed was the possibility of production shifting from dominant productive countries (e.g. China) to emerging economies (e.g. Africa).

Dr. Giuliano next proposed the question, "**Where is the battle?**" She answered this question by identifying the Midwestern section of the U.S. as the market where supply-chain interests will compete either to increase market share (as is the case with Gulf and East Coast ports) or to maintain/mitigate loss of market share (as is the case with West Coast Ports, specifically Los Angeles and Long Beach). Dr. Giuliano reiterated that the determinants of who will win are time and money.

Dr. Giuliano next addressed the question "**How is the battle going to be fought?**" She explained that the battle will be fought "in terms of who has the cheapest routing (in terms of time and money), who has the best reliability, and therefore, who has the resources and the infrastructure."

Dr. Giuliano followed by posing the question "**Who are the actors...who will make the decisions?**"

While she recognized that the majority of the discourse focused on cargo owners as the primary decision-makers, Dr. Giuliano stated that she wished to address other actors that will try to influence cargo owners in decision-making. The first of these external actors are Federal, State, and Local governments. Dr. Giuliano mentioned the Heartland Corridor Project on the East Coast as an example of government influence on decision-making. Another highly influential group is railroad companies. Dr. Giuliano acknowledged that no port could be successful without an efficient rail route to destination markets. Additionally, Dr. Giuliano explained that intermodal carriers, distribution center owners, and warehousing all play a role in influencing the decisions of cargo owners.

Dr. Giuliano next mentioned some key observations she had during the event. First, there is a sense of intense competition among the different routes for imports. She took this to mean that very small changes in relative time-cost will have a great influence on decision-making. She said that at the same time, there is much flexibility in supply and logistics systems. For her, this means that predicting what decisions will actually be made is very difficult. Lastly, there are several "wildcard" or "what-if" factors that could change the entire shape of the competition. These include new environmental regulations, developments in technology that would reduce costs, and shifts in trade patterns.

Dr. Giuliano concluded that the most important idea expressed at the event was that the future of Southern California ports will be most influenced by the individuals that make decisions within those ports and how they collaborate with other interests in the supply-chain.

Additional Questions from Audience

Due to time constraints not all questions from the audience were answered. The show of interest from the audience was exemplary and thus we would like to include those questions in these proceedings. The following is a list of additional questions related to the concerns about the effects of the Panama Canal expansion:

What local (in LA/LB) initiatives exist (or can be put in place) to address a decrease in wages for Port-related jobs due to increased competition?

What, if any, are the effects of the Arctic Circle trade routes on trade with respect to West Coast ports?

How will hurricane season affect the supply-chain, especially the Panama Canal and Long Beach routes?

How will the expansion of the Panama Canal affect the real estate market and employment in Panama in the future?

Will Mexico's ports benefit from expansion of the Panama Canal?

Dr. Mary Brooke's stated in her comments that the biggest bottleneck at ports is the gate. How can/should this be changed to reach a more efficient level of operation?

How will the Panama Canal expansion affect labor relations at the San Pedro Bay ports?

Will the Port of Los Angeles' push for a trucker mandate cause retailers to use alternate routes such as the Panama Canal?

What is the likelihood that West Coast ports will achieve the productivity levels experienced by the ports of Hong Kong and Singapore?

Sustainability is an important topic for U.S. ports. What interest and/or actions have the international supply-chain community shown to address this issue?

Who is paying for the Panama Canal expansion?

What will the impact of the new pricing structure for the Panama Canal be like, and how will the shipping industry react?

Is Walmart's decision to move their California operations to the Houston area an indication that the Panama Canal expansion will be detrimental to West Coast ports?

If imports move to the Gulf and East Coast, will exports follow?

Why would banks finance \$5 billion with a 7-year loan if they did not believe that the Panama Canal would divert cargo from West Coast ports? And, since many of the carriers have registered their ships in Panama, what would the ACP (Panama Canal Authority) be willing to do to make sure they get the cargo to pay off their new debt so quickly?

What effect(s) will an increase in transloading have on the global supply chain?

As CITT develops future P/CP events, these questions can help shape the direction of the debate.

Reflections: What did we learn from this event?

The inaugural event for the new Point/Counterpoint series was very successful. It brought together three very talented speakers, representatives of the local and national port communities, and key community leaders. The short film viewed at the event was concise in its analysis and gave historical context conducive to a better understanding of the possible effects of the Panama Canal expansion. But, with all of its success, there were no decisive answers to the questions posed in the title of the event: Who Wins? Who Loses? Who Decides?

Perhaps this is an understandable result, given the inherent imperfection in human predictive capacity. But it seems the reason the answers to these important questions are elusive has more to do with it. The outcome of the Panama Canal expansion is uncertain because the expansion is merely one event among many that will influence decision-making within the supply-chain. With so many actors involved, it would be impossible to say how a single event, such as the canal's expansion, will influence outcomes. One of the "take-home" messages of the evening was that cargo will be shipped via routes that are most competitive in terms of factors such as price, quality, and reliability and transit time. This view contends that the Panama Canal expansion will threaten West Coast ports, in terms of market share, only if those ports do not maintain a competitive price structure and expand infrastructure in a way that maintains quality and reliability of service. Thus, one can imagine a situation in which West Coast ports respond to customer demand for improvement in these areas in a way that would render the expanded canal a lackluster alternative. This seems unlikely, however, because ports will not be able to respond to satisfy all demanded improvements for everyone.

Another view presented was that West Coast ports need not worry, because the inherent advantage of being the closest ports to the (current) center of production in China is enough to keep customers from switching to an alternative route such as the expanded Panama Canal. This view addresses a critical issue of time. Many products must be shipped as quickly as possible, and customers moving these products through the supply chain are more likely to be influenced by the advantage of shipping times. But what about the cargo for which time does not affect cost as much? Customers moving these products will likely be intrigued, if not moved, by the predicted cost-advantage of the expanded Panama Canal. While the distance advantage remains a powerful one, it is contingent upon there being more time-sensitive cargo than cargo for which time is not as big of an issue.

Another issue is whether West Coast ports should be concerned with market share loss. This question was raised by one of the audience members. Paul Bingham agreed that, in facing expected trade growth, West Coast ports may reach capacity even if they lose some market share. This view holds that expected capacity constraints will mean that any market share loss due to the expansion of the Panama Canal will be inconsequential. A further confounding issue is the question of who determines where the cargo goes, the shipping companies or the ports. The audience heard Dr. Brooks say that the decisive role is played by shipping companies. This raises the question of what then must the ports do to keep the beneficial cargo owners as customers. Obviously, the general criteria are competitive pricing, best quality, and maximum reliability of service. But what does this mean with respect to particular projects, such as expansion of truck routes? How will ports decide which improvements will be most fruitful? Questions such as these help us understand the complexity of the situation.

After hearing all the arguments made at the inaugural Point/Counterpoint event, it is evident that the jury is still out on the actual effects of the Panama Canal expansion. The expansion is clearly a significant event in the goods movement industry, and will likely have substantial effects. But it remains only one among many deciding factors on the future of the supply chain and the actors within it. The one thing everyone could

agree on, however, is that competition is increasing. If ports want to grow their business, or even prevent substantial market share loss, they had better keep pace with the competition, both foreign and domestic.