Stephen A. Young
14620 Joanbridge Street
Baldwin Park, CA 91706
Telephone: (626) 962-4047

October 7, 2014

Mr. Mario Cordero, Chairman
Federal Maritime Commission
800 North Capitol Street, N.W
Washington, D.C. 20573

Subject: Port Congestion – Ports of Los Angeles and Long Beach

Dear Mr. Cordero:

We, as a group of companies that collect and process scrap, are having a very difficult time getting our containers in and out of the dock. The terminal operators will tell you this is not true but just ask the drivers waiting in line and the shippers that are shipping containerized cargo.

Normally independent drivers would get 2-3 loads per day, each load paying from $170 - $250 per truckload depending on the distance from the port. We are currently down to 1 or 2 truckloads per day. Drivers' turnaround time is as long as 5 hours at the container terminal.

To try to manage around the congestion, we are paying an extra $133 per container in Pier Pass fees to deliver during the day. For us this is costing $100,000 to $200,000 per month and drivers are still stuck in excessive lines limiting them to an average of 1.65 loads per day.

The government has given the terminal operators anti-trust immunity. The terminal operators try to force every container load to day gate. This is abuse of truckers and shippers and must stop! Set the terminal rates so there is no differential between day and night. Make these terminal operators operate 24/7 and cover lunch at the gate.

Truckers or shippers don't want to ship export. Our cargo is being held hostage by the congestion at the ports. The abuse of power must stop! Help us move our cargo through the ports.

Sincerely,

Stephen A. Young

C: Jennifer Andberg, Deputy Director
Office of Business Liaison
U.S. Department of Commerce
1401 Constitution Avenue, N.W.
Washington, D.C. 20230

Doug Drummond, President
Port of Long Beach Harbor Commission
4801 Airport Plaza Drive
Long Beach, CA 90801

Ambassador Vilma Martinez, President
Port of Los Angeles Harbor Commission
425 South Palos Verdes Street
San Pedro, CA 90731

Federal Maritime Commission

September 15 hearing port congestion at LA Ports

Norman Duncan <normanduncan1919@gmail.com> Tue, Sep 9, 2014 at 11:35 PM
To: Secretary@fmc.gov

I note the omission of the railroads from the guest list. Truckers would rather see congestion than divert traffic to rail, their competitor. This is also a balance of payments revelation as to the amount of imports coming into the country. These shippers should be invited as well to assist in the faster turnaround of equipment by expediting unloading and not use the container for storage of cargo. Demurrage charges should be doubled to correct this practice.Norman Duncan

Federal Maritime Commission

September 15 Public Forum

Ernesto Nevarez <portofaztlan@yahoo.com> Tue, Aug 19, 2014 at 2:54 PM
Reply-To: Ernesto Nevarez <portofaztlan@yahoo.com>
To: "Secretary@fmc.gov" <Secretary@fmc.gov>
Cc: port of Aztlan <portofaztlan@yahoogroups.com>, IWW 500 <dept500@lists.iww.org>

I would like to be a registered participant in the above hearing. Also, I would request that you include that truck drivers are invited on the press release. The context in which you use the ambiguous jargon "truckers" is aimed at licensed motor carriers and gives the impression that the concerns and input of the 12,000 port drivers is not solicited. You do make a point to invite both terminal operators and their workers, the longshoremen. In regards to drayage it appears that the FMC is only interested in hearing the firms and NOT THE DRIVERS.

Please confirm my reservation and correct the exclusiveness nature of your press release. http://www.fmc.gov/public_forum_u.s._port_congestion/

Sincerely,

Ernesto Nevarez

Federal Maritime Commission

"September 15 Public Forum."

Doug Corbett <doug@chassissystems.com> Wed, Aug 20, 2014 at 11:38 AM
To: secretary@fmc.gov

http://www.youtube.com/watch?v=SGumMdWe3AI

Container Chassis shortages can be solved by using high density chassis storage (Chassis Racks). Chassis Racks provide parking capacity in a extremely small area. Chassis density is equal to stacking containers nine high.

Chassis Racks can supply enough chassis to handle surges in demand caused by large ships. Can be operated by Port Labor, and centrally located on port property to lessen pollution from chassis drays.

Chassis Racks could be operated as public parking facility supplied by public agency on public property. We have customers in Japan who pay per parking day in a "chassis park".

Chassis density is 725 chassis per acre with much greater selectivity. Used successfully by BNSF for over 25 years.

Please contact doug@chassissystems.com

3 attachments

Chassis Racks BNSF #@.pdf
664K

4,000 Chassis @ BNSF.pdf
509K

Rack 500:acre.pdf
159K

Representative Duncan D. Hunter
Chairman
Subcommittee on Coast Guard and Maritime Transportation

September 15, 2014

Chairman Cordero, I welcome this opportunity to express my views as you explore "U.S. Port Congestion: Examining Causes, Impact on Stakeholders, and Exploring Possible Solutions." As you know, I chair the House Subcommittee on Coast Guard and Maritime Transportation, and much of that Subcommittee's work involves maintaining and improving the safety, security and efficiency of the U.S. maritime transportation system. I appreciate your including my comments as part of the hearing record.

The movement of goods in commerce is enormously important to California and to the nation. The Los Angeles and Long Beach port complex (LA/LB port complex) moves more containerized cargo in and out of the country than any other port in the United States. Importers and exporters depend on an efficient and seamless supply chain and, by and large, that is what they receive. Even with the downturns during the global economic collapse, container volumes have increased exponentially over the last 30 years. With those increases in volume have come enormous increases in productivity within the LA/LB port complex. In terms of volume the port complex is within the top ten in the world. Therefore, by global standards, the industry within the port complex is doing a lot of things right. However, if the port wants to continue its growth, it must continue to make its port operations more productive. Today 14.6 million containers are moved in and out of the LA/LB port complex each year. Projections indicate that future volumes could increase to 20 million by 2025. If projected container volumes materialize, traditional stacking and sorting processes used at marine terminals to manage containers will not be adequate to support future growth.

I am a firm believer in unlocking the creative talents of business to become more efficient, particularly when it will serve a measureable public purpose. As an example, prior to 2005, marine containers transported by drayage truck drivers in and around San Pedro typically competed with California motorists during peak rush hour. Now 30 million containers have been diverted to move at night, approximately 55 percent of the daily truck traffic within the two ports. That is an incredible feat. The industry should be commended for what it has accomplished. And the Federal Maritime Commission (FMC) should encourage such collaboration. In addition to minimizing congestion within

the port complex and on California highways, what I like about this endeavor is it did not cost taxpayers a dime. More terminal capacity was created by operating at night, and that means more container volume being managed, and more jobs being created without additional capital expenditures – something currently in short supply.

As valuable and promising as this industry contribution has been, additional issues obviously exist. In 2006, the port authorities agreed to implement the Clean Air Action Plan (CAAP), later supplemented with regulations mandated by the California Air Resources Board. These initiatives were intended to replace older diesel engines in the port complex with newer, lower emission engines. The results have been notable, but there is a price associated with environmental compliance. That is one reason why policy makers need to carefully weigh new regulations against encouraging greater efficiency of operations. In this case, truck drivers were forced to purchase newer trucks if they wanted to continue working in the LA/LB port complex. Those trucks were also much more expensive. Now truck drivers reportedly need more trips during a work period to make more money and pay for those new trucks.

Despite these new regulations, the LA/LB port complex is still doing something right, and moves 14.6 million containers each year. Despite that impressive number, there is a limitation to how much productivity terminal equipment can achieve and still maintain a safe working environment for dock workers without improvements in the management of cargo movements. That is a fact and safety must remain a top priority. The number of times a truck will be available to pick up or drop off a marine container will not change if we don't encourage industry to unlock its creative talents to manage future volumes more efficiently. Productivity cannot be achieved by local, state or federal government regulation. It can be achieved through encouraging port managers and those who move cargo to find more efficient means of operating. Each terminal within the port complex is different, and each terminal and asset operator needs to work with the port authorities and regulatory authorities, like the FMC, in a cooperative fashion to maximize its capabilities.

Terminal and asset operators generate meaningful jobs, enhance the efficiency of California ports, and provide a dependable, efficient, robust supply chain that facilitates U.S. exports and imports. We have much to be proud of, but we must encourage industry to unleash its creative talents to maintain our competitive edge in the future.

STATEMENT OF JOHN CROWLEY, EXECUTIVE DIRECTOR
NATIONAL ASSOCIATION OF WATERFRONT EMPLOYERS
To Public Forum in San Pedro, CA on September 15, 2014

Chairman Cordero, I welcome this opportunity to express my views as you explore "U.S. Port Congestion: Examining Causes, Impact on Stakeholders, and Exploring Possible Solutions." This is a serious subject which has the attention of the National Association of Waterfront Employers (NAWE) and our member companies and associations. I ask that this statement be included as part of the hearing record .

NAWE appreciates that the Federal Maritime Commission, under your leadership, has provided the opportunity for lawful and thoughtful collaboration by the marine terminal industry in their search for market-based solutions to the problems we are witnessing in the intermodal supply chain.

The intermodal freight system, and certainly the global supply chain, consists of commercial entities engaged in a system of intense competition and narrow margins. Squarely in the middle of the international logistics chain, a marine terminal's stresses are immediately visible to many. Yet marine terminal operations are affected when less visible and connected modal operations do not function as they should. When it comes to port congestion, large parts of the system can be adversely affected by any one part.

American marine terminal operators, in their constant efforts to improve productivity and remain competitive, work to be responsive to the market demands of each of the intermodal components. Marine terminal operators seek out the helpful FMC authority to permit coordination as they have here in Southern California. That coordination has, in turn, been used to great effect, for example, in reducing emissions at local ports and addressing congestion on community infrastructure such as those experienced by drayage trucking.

NAWE encourages all industry sectors to collaborate, to the extent practicable and legally permissible, to achieve greater efficiencies and reduced social impacts to port related operations. All parts of the supply chain can contribute to an improved system.

We welcome positive and appropriate, but limited, Federal involvement that doesn't intrude into terminal operations but can contribute to market-based solutions.

Port-related congestion comes in many forms and in many places, both here in the United States and around the world. The logistics, technologies, manpower, changing cargo flows and other factors in play in international commerce make for very dynamic conditions. We in the marine terminal

industry work to respond to those conditions as do our supply chain partners. This year we are seeing varying forms of collaboration in Southern California, as well as on the other coasts, being used to find solutions to additional problems such as chassis supply shortages and truck wait times. Those efforts by market participants will result in market solutions that by their very nature should bring more efficiency to the system. We firmly believe that is how improvements will be realized.

September 12, 2014

Federal Maritime Commission: September 15 Public Forum

Written comments on behalf of Tyson Foods, Inc.
Submitted by: Perry M. Bourne, Director of Intl' Trans. & Rail Ops.

Background:

Tyson Foods, Inc. is a major producer of protein for the U.S & global meat markets with sales projected in 2014 of approximately $40 Billion. We produce poultry, beef, pork & various value-added branded protein items for retail and foodservice markets within the U.S. and 52 countries. We have 60 poultry plants, 12 beef, 9 pork & 23 prepared foods plants, and just recently acquired all 17 of the newly acquired Hillshire Farms facilities. Tyson has operations in 23 states & 11 countries.

Tyson was the second largest U.S export reefer commodity protein shipper in 2013. We shipped nearly 35,000 TEU's of reefer and another 5400 of animal hides/skins & leather worldwide. We ship approx. 60% of this volume thru LA/LB & Oakland, CA.

Service-Congestion issues:

Port congestion especially on the U.S West coast has been a problem for several years. My comments will address both Los Angeles/Long Beach, CA & Oakland, CA.

The first area I will address concerns issues associated with the "Pier-Pass" fee at Los Angeles/Long Beach, CA. As I checked back through my file on "Pier-Pass" I confirmed that this terminal gate management scheme was initiated in LA/LB back in July 2005 with the specific goals of reducing traffic congestion in the Port terminal area and cutting back on truck idling time thereby reducing air pollutants in the surrounding communities. The funding was to come from BCO's (beneficial cargo owners) with a fee set initially at $80/FEU. The program was designed to incentivize moving as much cargo to the port terminals as possible for delivery at night thereby significantly reducing traffic congestion and truck emissions due to idling time. The scheme's success was far greater than expected and the air quality was reported to have improved more than expected as well. So the initial goals were accomplished. The "Pier-Pass" funding was to subsidize the costs of adding extra night and week-end gates that were established to allow cargo to be delivered at non-peak times (night shift between 6PM & 3AM or whenever the terminals closed).

In addition to this "Pier-Pass" fee, we as BCO's had to pay extra to our cross-dock (CFS) operators to hire truckers willing to deliver at nights and on weekends. That incremental cost could be as much as $30/load. As a result the LA/LB port complex became the most expensive USWC port Tyson uses to handle perishable meat trans-loads for export to Asia. Our 2014 "Pier Pass" expense is projected to exceed $320,000 all of which is totally unrecoverable from our customers.

Since its inception, the fee for "Pier-Pass" has increased four times. Initially the fee in 2005 was $80/FEU; 2006-- $100/FEU; 2011--$120/FEU; 2012--$123/FEU & 2013 went to $133/FEU which remains the current fee. That's a 66% increase over 9 yrs. There are several inequities with the way "Pier-Pass" fees were setup for billing. Not all containers were subject to this fee. There are

container categories that are exempt from this fee even when the terminal deliveries for this exempt cargo are made during the peak day timeframe. All empties are exempt from paying the "Pier-Pass" fee as well as all intermodal containers. This pricing mechanism sets in place a discriminatory pricing preference favoring the steam ship owners and intermodal shippers utilizing the same gates that the BCO's use and have to pay to go thru during the day shift.

Since 2011, the number of night gates have been reduced as Imports declined from the global recession and volume at the piers were subsequently lowered. At that point, the weekend gate was eliminated and the night gates were cut from five to four per week. This reduction of off-peak gates forced more cargo back to day time deliveries and added to the terminal congestion, frustrating one of the big initial goals of the "Pier-Pass" scheme. At the same time, BCO's were told they had to pay more for fewer gates because the terminals couldn't afford to stay open at the times needed. An additional factor impacting gate availability is Union meetings that are held on Thursday nights once a month. This event reduces gate availability for that specific week from four to three night gates and rarely is a consistent weekend gate made available to accommodate the loss of that night's gate capacity.

The second issue I will address concerns issues at the port of Oakland. We have experienced difficulties resulting from the consolidation of multiple marine terminals into smaller mega terminals (SSA & Ports America). This was an extremely difficult time period starting over a year ago when these mega terminals were formed. As we understand it, these changes raised a number of concerns with the labor unions at Oakland leading to significant problems with turn/time on pick-up & delivery of containers. The port of Oakland became a very challenging port to export from due to its inefficiencies and the uncertainty of the labor situation.

For Tyson, which represents a large segment of the U.S. refrigerated protein industry, most all of our chilled beef & pork ships through Oakland which happens to be the last U.S. port of call for many Ocean carriers. Over several months we were fighting every week to get containers picked-up and trans-loads back to the terminals in time to make the vessel cut-offs on Monday & Tuesday. Each week, we were having problems picking up empty containers prior to the weekend so we could cross dock 30-plus reefer containers Monday morning from trucks that loaded at our Midwestern plts. the previous Thursday & Friday. Any disruptions at the port terminals that occurred on the previous Thursday and Friday before our cargo delivered made it nearly impossible to get all the empty containers out of the terminals in order to work these loads and get them back for a 4PM cut that Monday. We were constantly asking for late-gates and in some cases having to air-freight chilled cargo because our plans failed. Congestion and delays at Oakland weren't the exception, they became the rule.

The third issue I will address concerns the Ocean Carriers' decision to no longer own and supply chassis within the U.S, thereby forcing terminals to go to grounded operations. Although this has been a developing issue as each carrier announced they would no longer own chassis, the problems created remained as truckers and BCO's worked to develop acceptable alternatives at each and every port. This action by the ocean carriers in effect became a *de facto* rate increase for the ocean carriers as they were able to cut their operating cost of providing shippers a wheeled container to perform pick-up and delivery of the cargo while not providing BCO's with a rate reduction to compensate them for the increased cost of hiring truckers to perform the same service. What was cost effective for the Ocean carriers became a nightmare for the truckers and shippers who were forced to develop

acceptable chassis solutions. This change remains a current problem as it has added yet another layer of complexity, and ongoing delays and congestion, at the port terminals.

Instead of going in to pick up an empty refrigerated container on wheels, Tyson and other refrigerated shippers must have their truckers provide a chassis or lease one for the move, which in most cases forces the trucker to make multiple stops within the terminal. These stops are necessitated by equipment inspection and potential deficiency correction, having an empty container loaded on the chassis and for chilled loads the trucker must go to a third location within the terminal to get an electrical gen-set to power the container. In short, what previously was a "one stop shop" has grown to two or three stops within the same terminal or multiple terminals. These additional steps lengthen the turn time for the trucker which ends up costing the BCO more in wait time costs at the terminal or higher base pick-up rates to the drayage company. When making this change, Ocean carriers initially claimed that this chassis model would be more consistent with practices outside the U.S. and that it would be a more cost effective and efficient way of managing this activity. As yet, few if any BCO's have seen anything other than increased costs and increased turn times in the pick-up and delivery activity at the U.S. ports.

The final issue I will address concerns another service hampered by restricted terminal services. As most ag-product containers are heavy weight and require a special tri-axle chassis to legally accommodate the higher load weights, the truckers reuse the same tri-axles when they come in with a load and require a flip to get another empty reefer container for the return move to the cross-dock (CFS) operator's warehouse or the BCO's facility for the next load. This further extends the time inside the terminal and in some cases the night or week-end terminal operations don't provide this flip service forcing more work back to the high volume daytime operations that are already overburdened.

As I believe this Commission understands, Tyson Foods operates in a very competitive environment. As a large exporter of chilled and frozen meats our company has to deliver our goods in a consistent and timely manner or our customers who can easily find other sources of protein from various parts of the world to replace us if we can't deliver their orders on-time and efficiently. The last thing any meat supplier in our industry can afford is to be labeled as an unreliable supplier. We deal in commodity products that competitors like Brazil & Australia are very capable of supplying if we can't get the job done. Service and consistency is the name of the game for us.

For this reason, the congestion issues that have continued to plague the U.S. California ports are very serious for my company. I know that others in our industry, as well as trade groups like the Agricultural Transportation Coalition, have expressed their concerns and have made suggestions for ways to improve efficiency at the ports. On behalf of Tyson Foods, I would like to provide our own suggested list of action items that we believe will help lessen the port congestion situation which is negatively impacting current and future global commerce running thru our U.S ports.

Please consider the following:

1- Move the Union "stop work" meetings at the USWC ports to Wednesday – this will help with week-end volume. Whenever there is a monthly "stop work" meeting, there should always be a Saturday gate to recover the lost capacity.
2- We need more Saturday gates on the USWC in general. Each terminal could close one shift on Tuesday for example and open a Saturday morning gate or a Friday night gate.

3- Those terminals that operate on Saturday need to provide full service. As an example in LA/LB certain Ocean carriers are open but will not flip containers off carrier's overweight chassis – therefore, they cannot deliver overweight containers. Overweight loads are becoming more common than standard weights, but without full service we are limited and it becomes extremely critical on weekends.
4- Terminal operators do a poor job of advising CFS operators and the draymen when they plan to cancel a shift. They need to provide effective notice of any shift closing several days in advance so schedules can be reworked to accommodate the loss of gate capacity.
5- Add a Monday night gate just for the delivery of loaded refrigerated containers. This will add needed gate delivery capacity for all refrigerated perishable commodities (i.e. meat proteins, fruits, vegetables and other food grade cargo).
6- Establish designated lines for refrigerated container cargo delivery. There is no good reason to mix highly perishable time sensitive cargo in with wastepaper or other recyclables products in the same lines. Reefer cargo all pays much higher freight rates than the products mentioned, yet we are often delayed behind recyclable cargo containers that are not time sensitive and have much less of a financial impact if they miss a vessel.
7- Terminals should have refrigerated containers and gensets in the same area so multiple stops are not required by a trucker to pick up containers in one part of the terminal and then drive to another area within the terminal or worse yet go to a different terminal to get a genset.

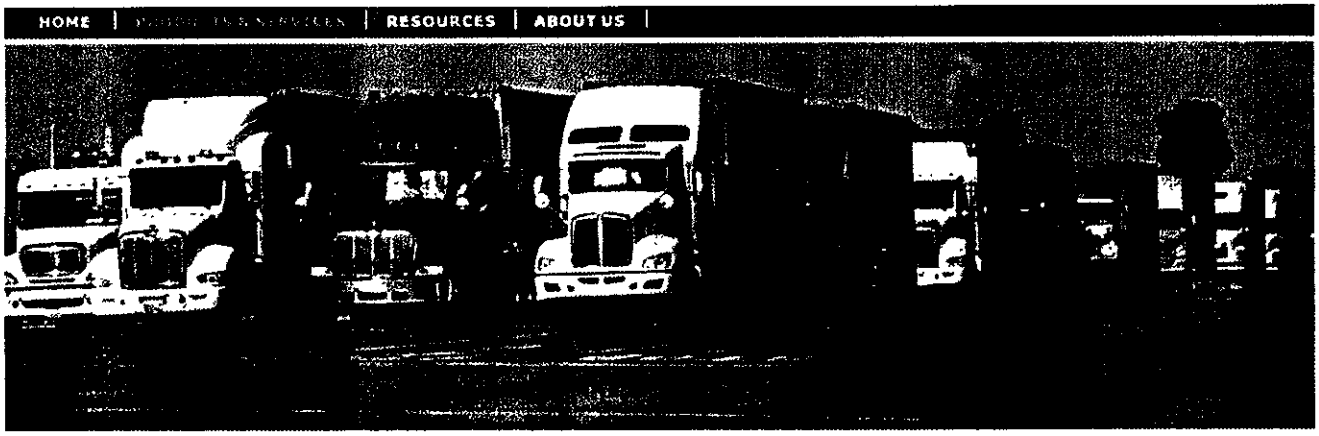
In closing, President Obama established a goal in January 2010 that he wanted to see exports from the U.S. doubled within five years. That doesn't appear to be achievable at this point in time with only five months left in the targeted time period. However, the U.S. exports have grown in terms of value by an estimated 40 percent, which is an impressive achievement. Unfortunately, the issues I have addressed in my comments are certainly having negative impacts on Tyson and other shipper's efforts to drive export numbers even higher. We must have efficient ports from which to ship our exports in order to satisfy our commodity customers' need for service of time sensitive cargo like chilled meat which is highly perishable and time sensitive due to shelf-life concerns.

I have addressed a number of critical issues that impact service through our U.S. ports. With the increased use of bigger ships at the ports, it is critical for all stakeholders to do all that is possible to look for new ways to make our U.S. exports more competitive and efficient on a service cost basis if we expect to grow in this highly competitive world market.

Respectfully submitted,

Perry M. Bourne
Director of Intl' Trans. & Rail Ops.
Tyson Foods, Inc.
800 Stevens Port Drive
Dakota Dunes, SD 57049

Metropolitan Transportation Information System
by Digital Geographic Research Corporation



Trucks queue outside a marine terminal. Photo altered to mask terminal identity

The Land Side of Port Performance: Truck Turn Time from GPS

GPS is a powerful data source for measurement of turn time. Careful analysis provides insight into origins of delay, and solutions.

2014 08 14, rev 2014 09 05 | Val Noronha, PhD

Executive Summary

Trucks: The turn time debate is motivated largely by motor carriers arguing that truck waits at the port are too long. Yet GPS studies show turn time averages an hour, which fails to make an impression. There's a problem with this: the average is not the appropriate statistic. The right statistics show that the motor carriers have a valid point. A trucker must budget at least 3 hours for a port visit to make an on-time delivery. And that number is 50% higher than it was 4 years ago. More ...

Terminals: Long turn times aren't entirely the fault of marine terminals, and singling out terminals for some kind of punitive action is premature in the absence of an adequate track record of data. It's possible to identify tiers of service levels, but not to distinguish terminals individually on a scale of performance. The record shows that turn time at terminals rises and dips every few months, and it takes years to obtain the stable data that should drive intelligent customer (BCO) decisions. More ...

Ports: High-resolution GPS data, properly analyzed and presented, can build consensus, and point to avenues for identifying problems and improving productivity. Turn time inflation is largely due to forces

that are common across the port: labor law, hours of service, chassis policy, etc. Analysis shows that in the case of Los Angeles-Long Beach, two port-wide policies have enormous negative impacts on efficiency. And they may be relatively easy to change. More ...

Synthesis—Need to know: Turn time study is not just about addressing the gripes of truckers. It's about port efficiency: optimal use of a critical national asset. There are several KPIs on the turn time dashboard, that need the attention of administrators and supply chain stakeholders, some in real-time, some annually. More ...

IN the ports of Vancouver, Oakland, Los Angeles-Long Beach and New York-New Jersey, turn time disputes have led to strikes or otherwise attracted considerable attention this past year. They're the latest developments in an intense and long standing conflict, mostly between truckers (formally, licensed motor carriers or LMCs) and marine terminal operators (MTOs).

GPS is a valuable new data resource that's being used to establish the facts of turn time: is it as bad as the truckers claim?

That's neither the full extent of the problem, nor the full value of GPS data. Turn time is a problem of national significance. The Tioga Group valuated annual U.S. losses at $300 million. Port inefficiency delays economic activity, ties up critical freight assets, creates security vulnerabilities, and has environmental and community impacts. The parties to the problem are not just LMCs and MTOs, but the entire port freight industry. With multiple competing interests, and arguments and counter-arguments this way and that, key issues of logistical efficiency tend to get obfuscated.

When properly analyzed and interpreted, good data cuts through the fog, clarifies issues and builds consensus. The causes of delay, and remedies, become crystal clear. Live congestion reports help truckers steer clear of long queues.

In this article I'm going to show how that's done.

MyTurn

TURN TIME RESOURCES

Truck Turn Time from GPS

Measuring Turn Time: Technical Hazards

Turn Time Glossary

Turn Time Report 2011

In the twin ports of Los Angeles and Long Beach (together known as San Pedro), turn time has worsened considerably over the past 4 years. GPS data build a compelling case that two straightforward, cost-neutral policy adjustments — (1) staggering longshore labor breaks, and (2) ramping down the daytime Traffic Mitigation Fee (TMF) over a few hours rather than all at once — would reduce turn time by perhaps 20%.

To begin, let's look at the GPS answer to the basic question: how bad is turn time?

Brief History of Debate

LMCs have struggled to find the objective evidence to support their claim that turn time is a problem.

In the past, MTOs' gate entry and exit timestamps were the only hard evidence available. While LMCs complained that turn times were in the range of 2-3 hours, MTO data indicated that in-terminal time

averaged 30 minutes. LMCs were certain that these numbers were dishonestly manipulated. Inevitably, accusations flew in both directions.

When it became possible to measure turn time from GPS, LMCs found they had a trump card. Now they had a data source of their own.

However, a series of GPS-based studies, most recently a program commissioned and closely controlled by the Harbor Trucking Association in Los Angeles, found turn time averaging an hour: about 20 minutes in the queue to get in, and 40 minutes inside the terminal, corroborating the MTO data.

All these numbers are rounded for clarity. We're not splitting hairs over 10-20 minutes; the argument is about 1 hour versus 2 or 3 hours.

Truths About Turn Time

I conducted the first of those GPS-based studies, for the Truck Turn Time Stakeholders Group (TTSG) in the ports of Los Angeles and Long Beach. TTSG consisted of LMCs, MTOs, BCOs and the two ports, who came together in 2010 to address deteriorating efficiency. The details of the project, participants and findings are covered on a separate page. I emphasized in my report, and continue to argue strenuously, that turn time cannot usefully be summarized in an average. (Of course, both sides excavated the average from the report, and quarreled over it.)

In statistical terms, turn time doesn't have a "normal distribution" or bell curve, like averages we're familiar with, e.g. marks on an algebra test. Turn time is heavily skewed, with a long tail on the right (Figure 1). So we can't quote a mean and standard deviation and close the case. We need to examine the data patterns carefully and find other statistics.

The following results in particular reveal crucial facets of port visits, and indicate why terminals and truckers are at odds:

1. Many visits are short. The *most likely* visit duration (the mode) is about 30 minutes.
2. Some visits are exceedingly long: 2 hours, even 8 hours. Visits over 2 hours were 14% of all trips in 2011. They're 20-25% now, 40-50% at some terminals in some months, and 60% port-wide at certain hours of the day. Let's be clear: MTOs are not exclusively to blame for this.
3. If a trucker were to schedule his trips around the median, half of his deliveries would be late. When planning a 75-mile run, he needs a near-certainty of making his delivery window, which means budgeting in grace time. Working out a range of standard allowances commonly used in transportation, it turns out that the time a trucker must budget for a port visit to meet a deadline is 3-4 hours. In 2010 that budget was 2-3 hours, precisely what the truckers' impression of turn time was.

The MTOs are right: their numbers are legitimate, the average is an hour.

The LMCs are right too: there *is* a turn time problem.

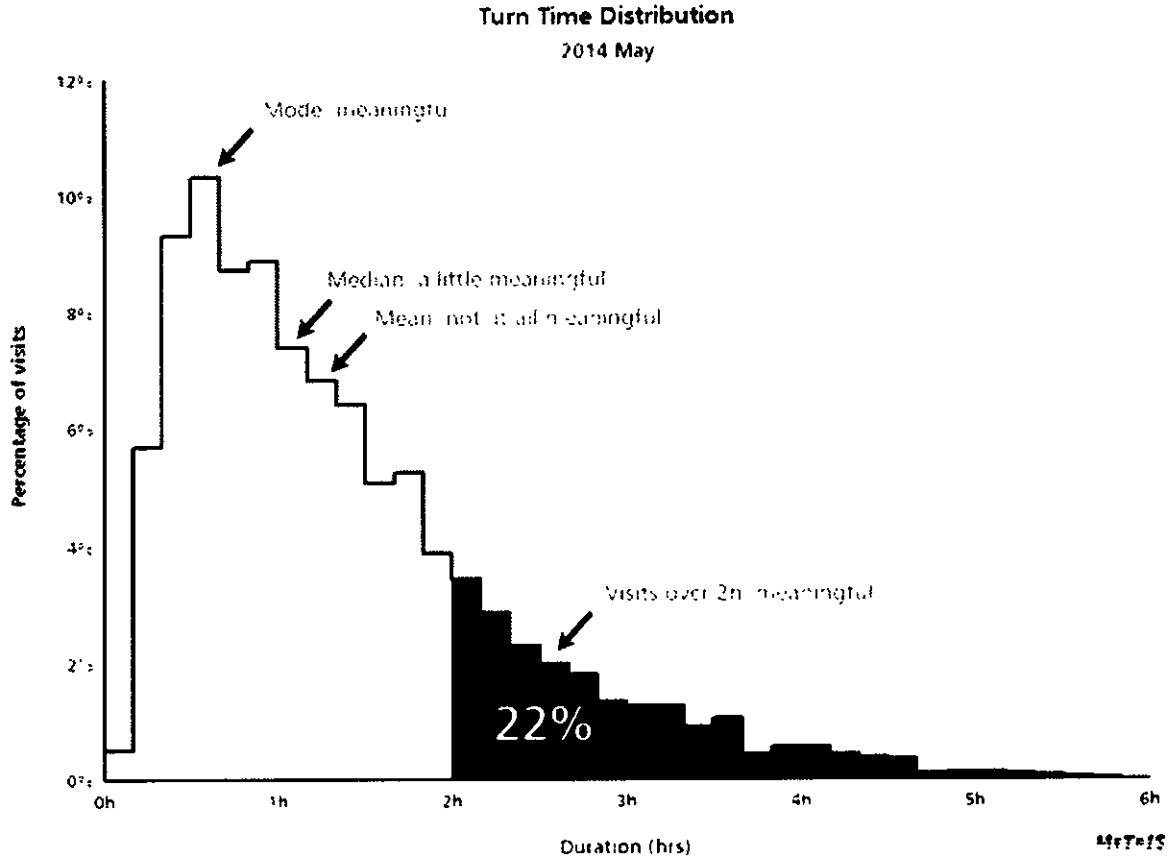


Figure 1. The distribution of turn time is heavily skewed and tailed. Standard statistics like mean and median are not significant points on the curve, and are of little value. Although the average is around one hour, because of the high prevalence of long delays, the time a trucker must budget for a port trip is 3-4 hours.

The data behind these statistics are drawn from METRIS, a product/service package that we deployed in Los Angeles under a USDOT Research and Innovative Technology Administration project in 2007, and later commercialized. METRIS GPS tracking equipment polls location 10 times more frequently than other commercial instruments. It's backed by sophisticated, purpose-built, error-proof analytical software that calculates queue and in-terminal dwell with near-100% certainty. The rigorous integrity checking of this system is unmatched by the off-the-shelf algorithms used by other consultants who analyze turn time. For example, METRIS detects the worst instance of operational confusion: a truck that makes repeated entries and exits before completing or abandoning a transaction. They constitute one trip, not several; those episodes in particular need to be documented, diagnosed and remedied. METRIS records for San Pedro go back 5 years, covering thousands of port transactions each month. No other data resource approaches it. METRIS also offers Live**Q**, a unique feed of queue information in real time. Unlike one other service at a Canadian port that clocks a truck's time in the queue after it enters the terminal, METRIS Live**Q** measures length, dwell, speed of progress and trending while trucks are still in line.

[Movie of multi-entry episode]

There are caveats on GPS-derived statistics, that should be clear. Most important, it is impossible to discern

the motive of a driver who intentionally arrives early and lines up behind a closed gate to avoid a congestion fee, to get a good spot in the queue, to take a chance on a quick entry, to grab a bite, or to kill time before an appointment. None of this behavior is unethical, but it does inflate turn time considerably, and because multiple motives and effects are intermixed there is no way to disaggregate them. The only reasonable way to deal with this is to declare the limitations and to interpret the numbers accordingly.

Differences Among Terminals

Terminals differ considerably in performance: a factor of 2× or 3× separates the fastest and slowest each month. On the surface, that's good reason to pressure low-end terminals into making the investments required to improve productivity, by shifting business to better MTOs.

METRIS offers a 5-year comparative turn time history for any container terminal in LA/LB.

It's not that easy. Aside from market realities of price/service differentiation, differences in the size of vessels that call, and other business model variables, the difficulty is that performance is impossible to predict in a monthly timeframe. It fluctuates (Figure 2). A terminal can have entire quarters of long turn times, followed by cycles of improvement and relapse. Every terminal experiences this from time to time. The best MTOs — one, maybe two, maybe three — are consistent. It is possible to discern a second and third tier, but they trade positions regularly on the metrics that matter.

Rating MTOs based on data over some years is reasonable. Over months it is not.

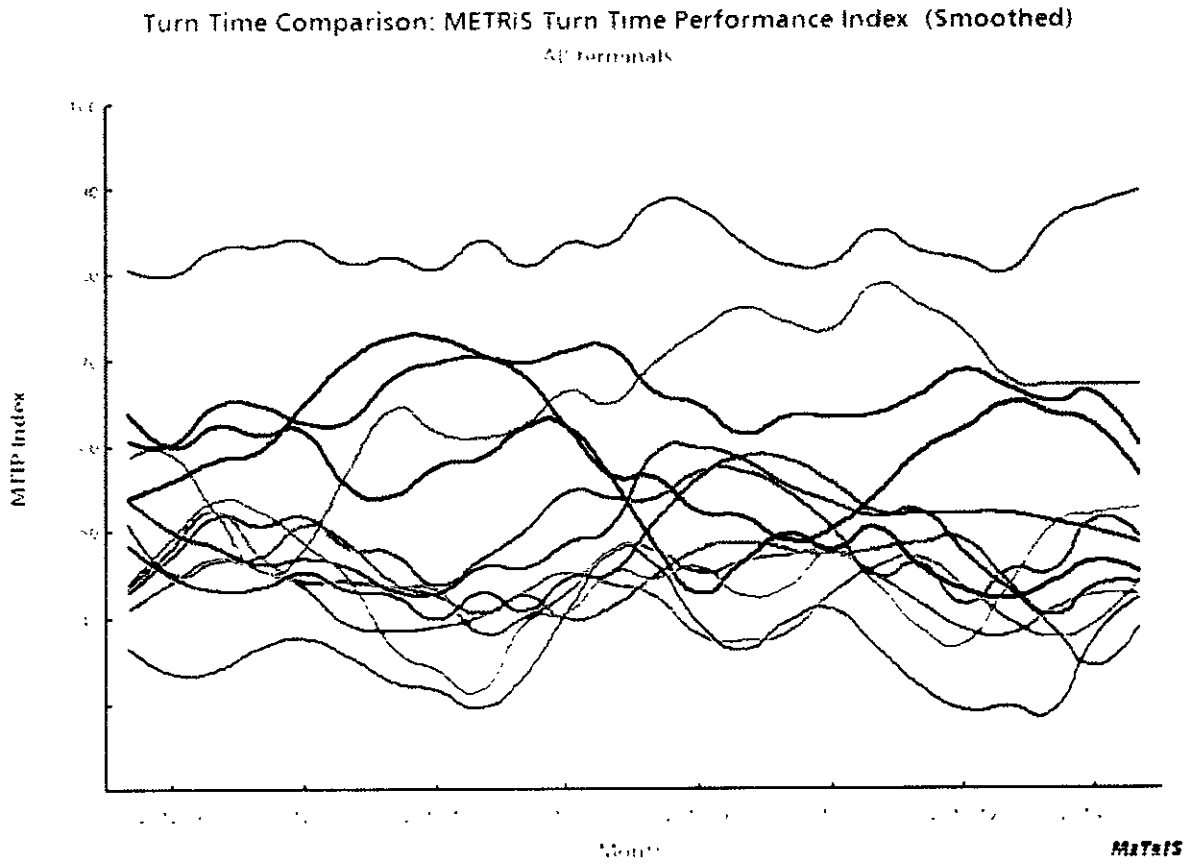


Figure 2. It's not easy to give MTOs a grade report when their performance varies like this. The graph shows one measure of performance traced over two years, for each terminal. A smoothing function has been applied to each curve to compensate for uncertainty due to sampling.

Consensus and Policy in San Pedro: Two Problems, Two Solutions

The issues covered above are generic, applicable to any port. Individual ports have their own unique patterns of turn time variation, that act as baselines that facilitate or constrain the performance of their terminals. We illustrate this with the example of San Pedro.

METRIS analysis and consulting helps MTOs, LMCs, BCOs and ports achieve consensus.

Turn time has at least five components:

1. Transaction and wait time that might be incurred in a perfect world; plus
2. Baseline delay attributable to port-wide policies such as fees, labor agreements, chassis policy and demurrage-free time, as well as port-wide conditions that are difficult for anyone to change, such as roadability inspections, security checks, union/non-union culture, work ethic and general quality control; plus
3. Terminal-specific delay, based on physical infrastructure capacity and management; plus
4. Short-term problems (crane failure, construction), lasting minutes or months, that impact the entire port or a specific terminal, plus
5. Transaction-specific delay, such as a typo on the container number in a document: usually human error that may originate with any party in the supply chain.

LMCs have been keen on highlighting differences among terminals, item [3] above. But changing a terminal's performance is expensive, and unlikely to be achieved overnight. Let's shift focus to item [2]: what's common among terminals, the role of port-wide policies in the high baseline. Variations by time of day, caused by port policies and practices, are at least as wide as the variations among terminals. The productivity improvements sought could cost little or nothing, and the data to support this are unambiguous.

1. Labor Breaks

The principal cause of delay is the labor breaks at terminals, one hour each at noon, 17:00 and 22:00. The enormous waves in Figure 3 leave no doubt about how this works: turn time doubles for trucks arriving in the hour before the break, and the backlog of trucks delayed inside and outside the terminal takes two hours to clear completely. The 17:00-18:00 break coincides with the congestion build-up at the start of the fee-free shift described under the next heading. Queue length can reach over a mile and takes more than an hour to dissipate.

Given that the demand for service at 17:00 is several times greater than at 02:00, a solution is to move the entire night shift forward an hour, from 18:00-03:00 at present to 17:00-02:00. That would keep the traffic moving at 17:00 and ease congestion throughout the night shift, when turn times are far greater than during the day. In addition, breaks at noon and 22:00 should clearly be staggered. Some terminals do admit and service some trucks during some breaks, yet this continues to be the primary productivity problem at the ports.

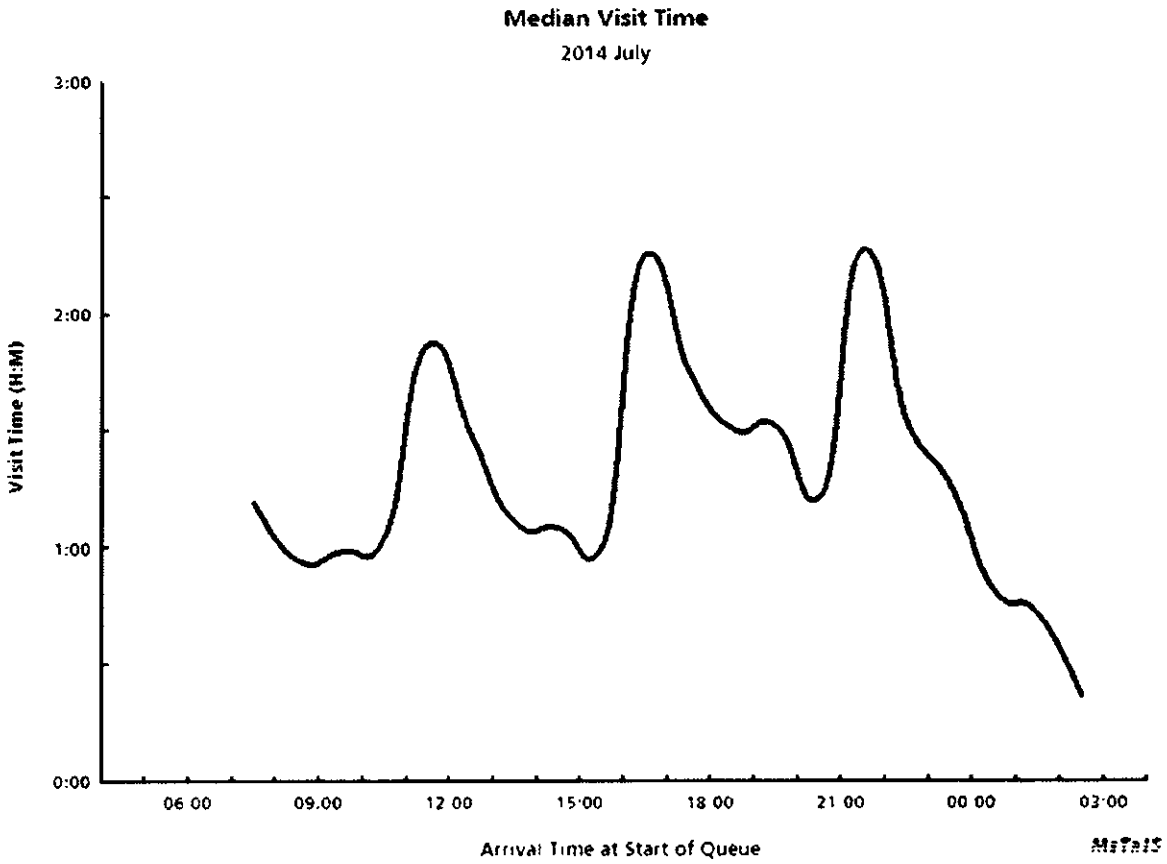


Figure 3. Enormous peaks in turn time show the impact of longshore breaks that shut down most terminals entirely, 3 times a day. Some terminals do admit some trucks, if not the peaks would be higher. The daily profile also shows the relative inefficiency of night operations, particularly 19:00 and 20:00 compared with 09:00, possibly because of the huge TMF-related backlog. Mouse-over the figure for an idealized but achievable profile.

2. Traffic Mitigation Fee

The Traffic Mitigation Fee (TMF) in San Pedro is a striking example of a public policy impacting turn time. Designed to ease traffic on freeways at rush hour, it is ironically the cause of considerable congestion in the ports. The longest queues occur at 17:00-19:00 when trucks line up — as early as 15:30, in designated lanes with separate queue management at many terminals — to take advantage of the fee-free night shift (Figure 4). This constitutes a significant portion of the 25% exception rate (2h+ visits).

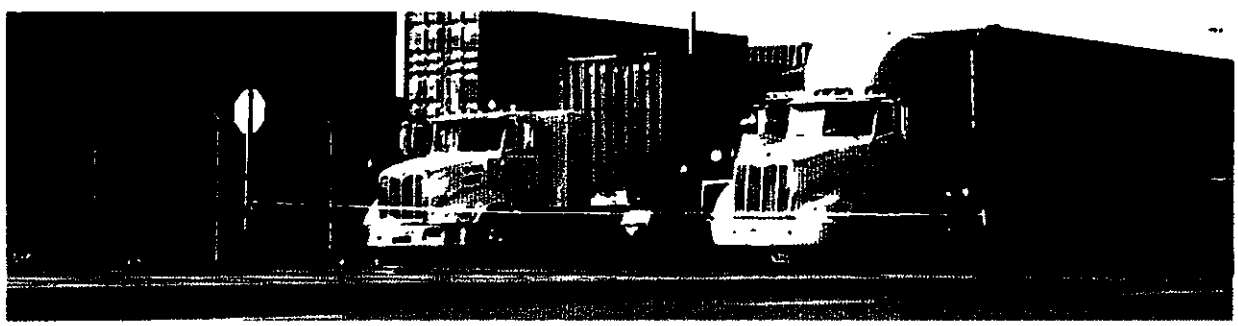


Figure 4. Trucks hang back, hesitating to enter a terminal until the Traffic Mitigation Fee ends at 18:00. MTOs accommodate this by designating dedicated waiting lanes.

Shortly after the TMF was introduced, an analysis of its impacts concluded that the fee worked as designed: it smoothed traffic on the I-710 freeway. What's required now is scrutiny of its unintended consequences: a cost-benefit analysis of freeway congestion versus the truck backup outside the night gates under a couple of different TMF-structure assumptions. The TMF does not have to be an all-or-nothing proposition. A fee that ramps down over a window of say 3 hours starting at 15:00 would encourage utilization of the terminals during that low early afternoon period, while staggering some of the queuing for the night gate.

If both these measures were implemented, a quick visual estimate based on Figure 3, basically eliminating the waves partially or entirely (mouse-over Figure 3 to see the change), suggests that a 20% turn time reduction is not a farfetched expectation. More important, it would greatly reduce the frequency of exceptional delays, improving reliability, with a significant impact on the 3-4 hour statistic.

The above are just two examples of observations and recommendations that arise from METRIS turn time analysis. To be sure, they merely skim the surface of remedies. There are many other plausible proposals for efficiency improvement, from freeway reconstruction to improved communications and coordination between LMCs and MTOs, and decongestion of the port area by better management of empties. There are policy proposals too: a uniform 24×7 TMF, and 24×7 port operations. Unlike these, the two measures above, unique to San Pedro, are modest in scope, eminently supportable by analyses, non-controversial, cost-neutral, and they deliver considerable benefits in a short time-frame.

3. Performance Timeline

A simple analysis, the variation of performance over time, can reveal causes of improvement and degradation. Figure 5 traces changes in the METRIS Performance Index, which combines "average" and worst-case metrics on a positive scale, i.e. better performance yields a higher index. Sharp and sustained turns in the curve coincide with policy changes and other events, and reflect the magnitude of impact of those changes.

The figure suggests that variations in San Pedro have little to do with container volume (there is indeed a relationship, but that's an involved discussion). The downward pattern in performance is probably due to more calls by larger vessels, changes in roadability inspections and chassis policy, and slightly increased use of night gates. The impact of the strike in November-December 2012 is clear. The period of remarkable improvement in summer 2010, coinciding with the TTSG dialog, strongly suggests that turn time is positively influenced by goodwill between MTOs and LMCs (an alternate explanation is that the summer freight volume of 2010 justified terminal actions, such as additional gates and some staggering of breaks, that ceased to be warranted when traffic subsequently dropped). Clearly, all explanations are speculative until confirmed by specific analysis. The graph points out coincidence, not cause-effect.

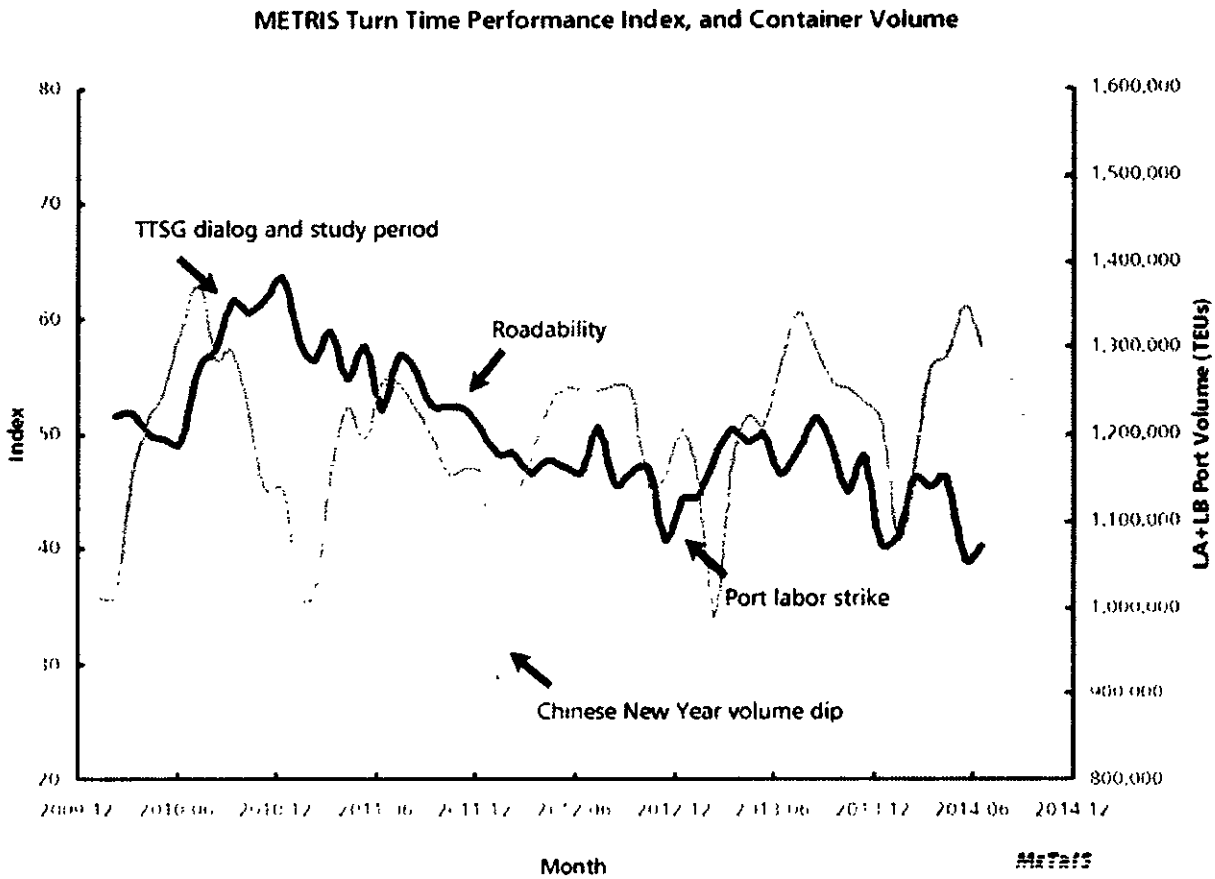


Figure 5. The METRIS Turn Time Performance Index shows current efficiency to be at a 4-year low. Performance *appears* unrelated to container volume, but there are subtle relationships. Analysis can relate changes in the index to the events that may have caused them, but this should be approached with caution

Conclusion

This is a brief illustration of some non-obvious intricacies of port performance, and how appropriately crafted GPS analysis can not only resolve disputes over facts, but also reveal patterns that point to root causes and prioritized solutions, without vilifying any industry segment.

Turn time awareness serves the decision needs of a variety of stakeholders, each requiring a unique presentation of metrics and analysis:

METRIS offers turn time products from real-time to annual

1. Policy makers — city and port executives, legislators, air quality control districts: Turn time is a key performance indicator (KPI) for strategic short- and long-horizon analyses of land side productivity, to assess a port's performance as a whole, to examine the effects of fees, labor policies, emission controls, vessel size, automation, construction, and terminal leases, and the longitudinal impacts of changes in those variables.
2. Port operations and security managers: As truck queues lengthen, tempers flare, and vulnerability to an external incident is elevated. Security personnel need a control-tower-like overview of port operations, with early warning when congestion is starting to develop. This requires real-time queue measurement such as METRIS Live**Q** (Figure 6).

3. Dispatchers require LiveQ to read queue length, duration and progress. Schedules and appointments are often made too far in advance to permit changes in response to current queue conditions. However, a single withdrawal from a long queue not only saves $120 in hourly wages, but also drops the number of $120,000 trucks the LMC requires in its fleet, making a persuasive case for live adjustment wherever possible.

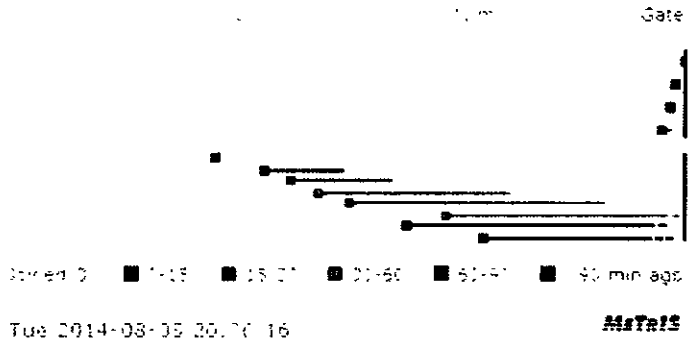


Figure 6. METRIS LiveQ provides real-time updates of queue length, dwell, speed of progress towards the gate, and trend. It uses a common schematic for all terminals, for ready comparison. This example compares two terminals, one with practically no queue, the other 1 mile long with 60 minute dwells and growing. Gate/MTO identities are masked.

4. MTOs need weekly or monthly reports to supplement their in-terminal turn time data, to monitor and address any deterioration in service levels.
5. BCOs need quarterly or annual performance reviews, terminal by terminal, to inform their choice of services, and to negotiate rates with steamship lines and detention rates with LMCs.
6. LMCs, BCOs and MTOs require daily and periodic reports on episodes to document and verify detention claims.
7. Port executives and MTOs need to draw a line in the sand, say at 4 hours. They should receive weekly reports on exceptions, and diagnose incidents in cooperation with LMCs to identify systemic problems. Animated replays of GPS data can assist.

We have seen collaborative turn time research be successful and achieve consensus. We have learned important lessons from what went wrong. It takes the right motivation, leadership and stakeholders to initiate a turn time study. It takes the right analytical methodologies to anchor it, with intelligent interpretation of the results, identifying patterns, causes, and feasible recommendations. And it takes leadership, action and continued monitoring to deliver the targeted benefits.

Acknowledgments

These observations are drawn from years of conversations with LMCs and drivers, MTOs and ports, BCOs, union leaders, legislators, state and federal officials, consultants and academic observers. The text was modified following an interview with Bill Mongelluzzo of the Journal of Commerce, who emphasized the influence of mega-vessels in worldwide deterioration in port efficiency — a point that had not previously been made in the article.

The METRIS data archive, on which this article is based, was possible due to the cooperation and patronage of leading drayage carriers who have been our partners over the past 7 years: Ability/Tri-Modal, California Intermodal Associates, Dependable Highway Express, Fox Transportation, G&D Transportation, Golden State Express, Harbor Division Inc, Port Logistics Group, Price Transfer, Progressive Transportation Services, Southern Counties Express, TK Transport, TTSI and Yamko Truck Lines.

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