

Fixing Port Drayage

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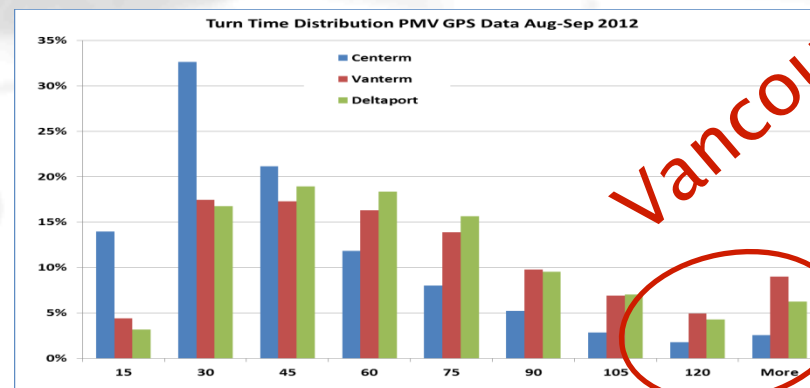
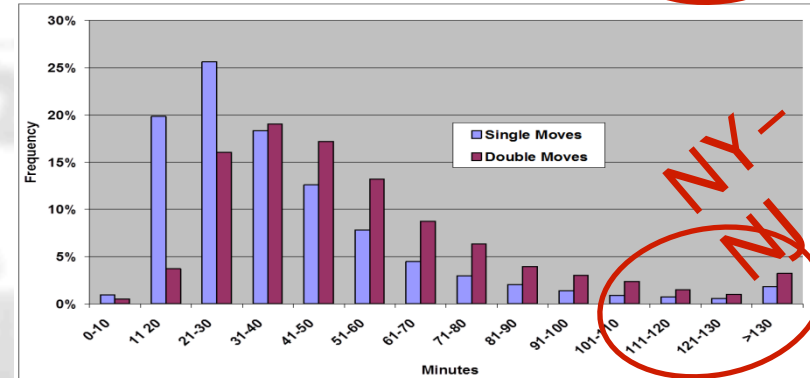
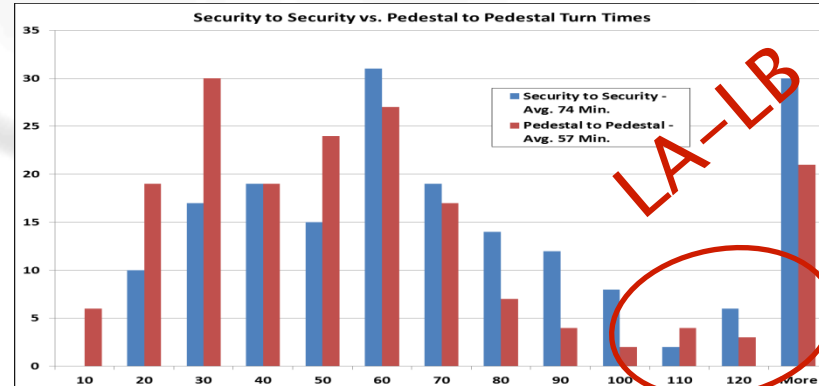
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Cut trouble tickets

- About 5% of transactions are delayed by trouble tickets and account for 15% of total truck time
- Trouble tickets add about 60 minutes of delay each time
- Trouble tickets add 3 minutes to average turn times and delay clean transactions



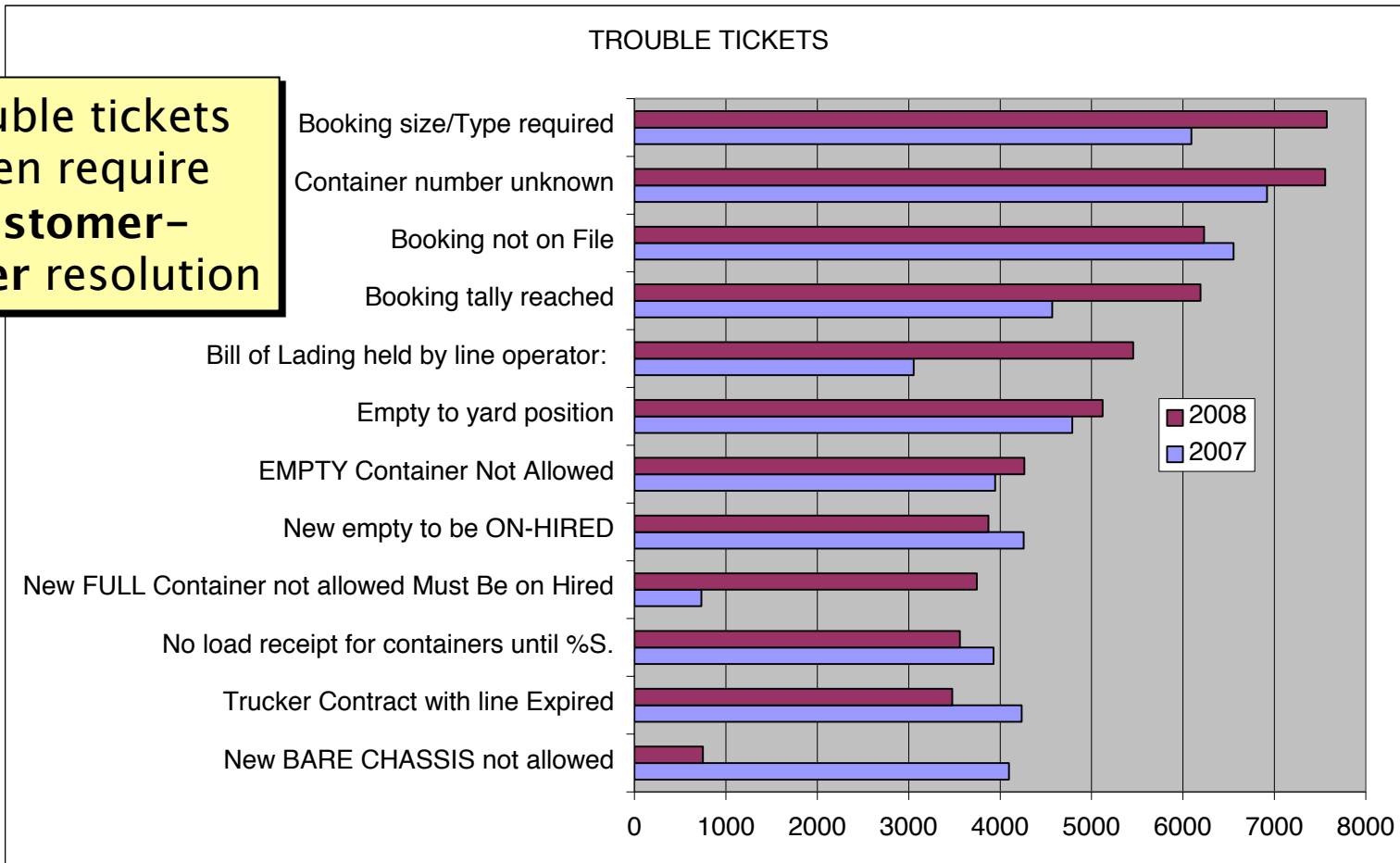
LA-LB

NY-NY

Vancouver

Trouble tickets are mostly preventable process and information problems

Trouble tickets often require customer-carrier resolution

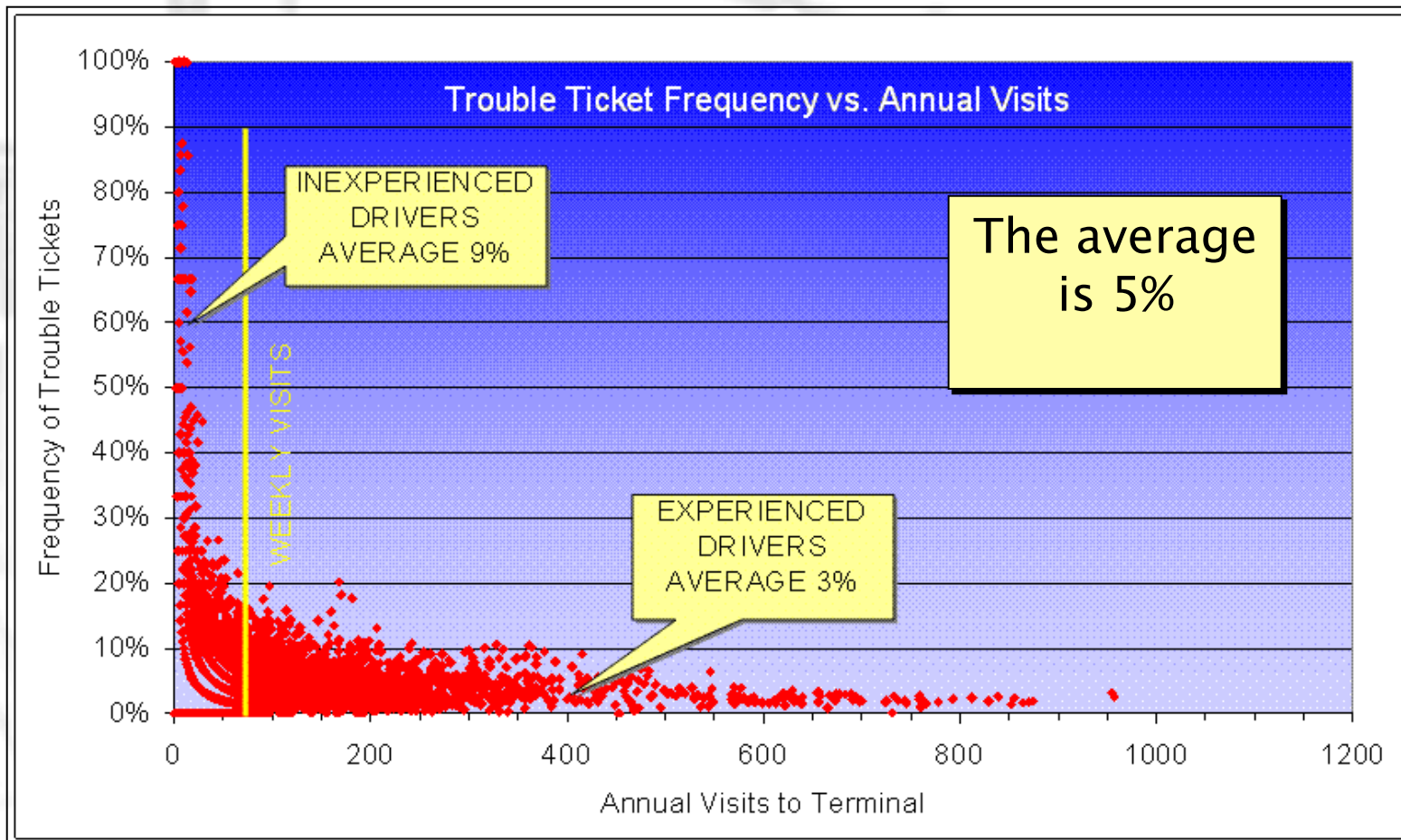


- About 80% of trouble tickets are preventable process errors
- Terminal systems errors account for at least 25% of trouble ticket delays

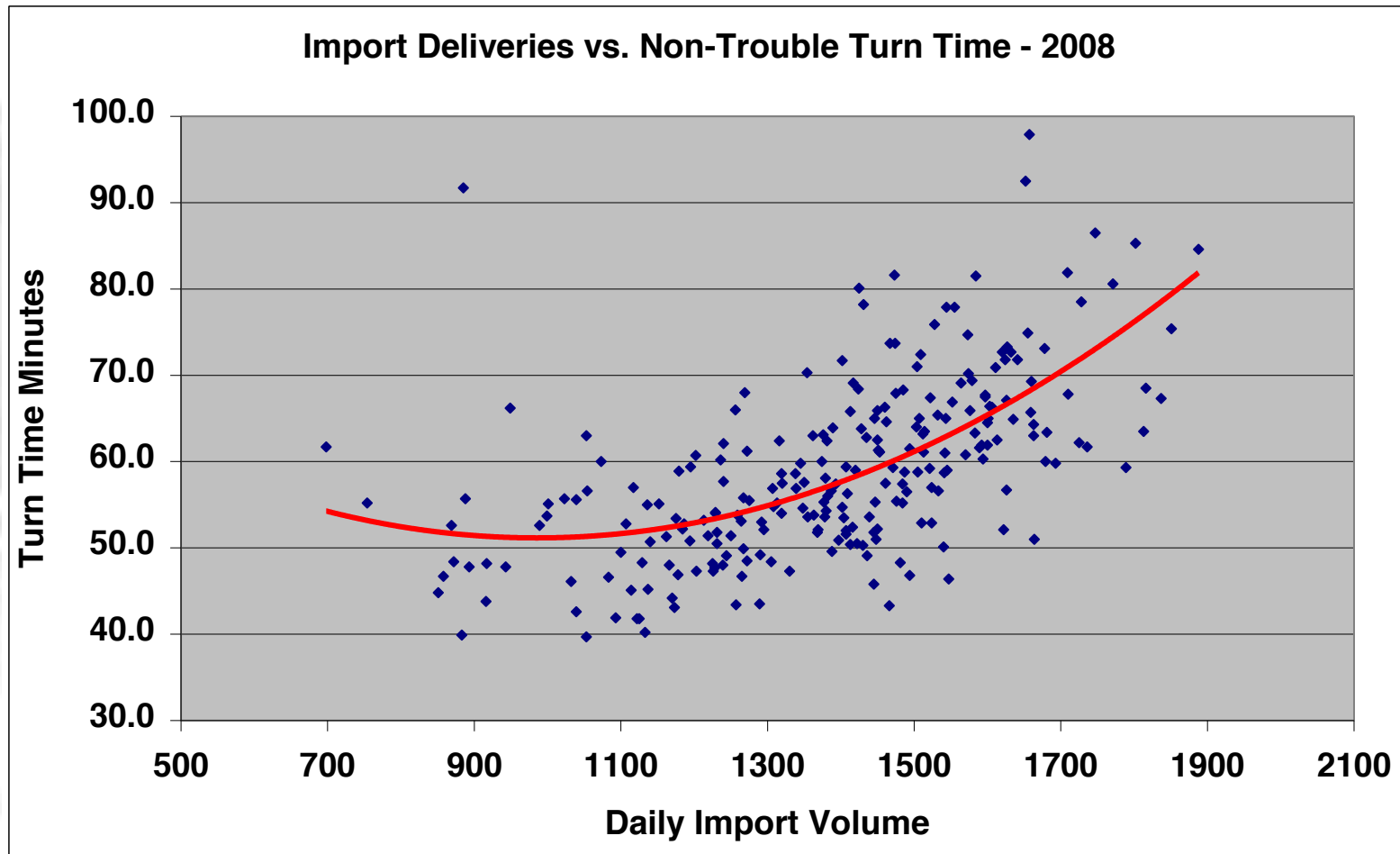
Category/Reason	Share
Booking Problems	28%
Booking does not match equipment type	
Booking is not on file	
Booking tally has already been reached	
Missing notice for hazardous cargo	
Booking quantity exceeded for equipment type	
Dispatch Problems	29%
Cargo not yet released	
Driver or motor carrier credential problem	
Empty container/chassis not allowed	
Past cargo cutoff	
Demurrage due (unpaid bills)	
Container exceeds maximum safe weight	
System Problems	22%
Container/chassis not recognized*	
Duplicate transaction	
Container not found in yard	
Other	20%
Total	100%

* May include Hazmat or other unusual loads

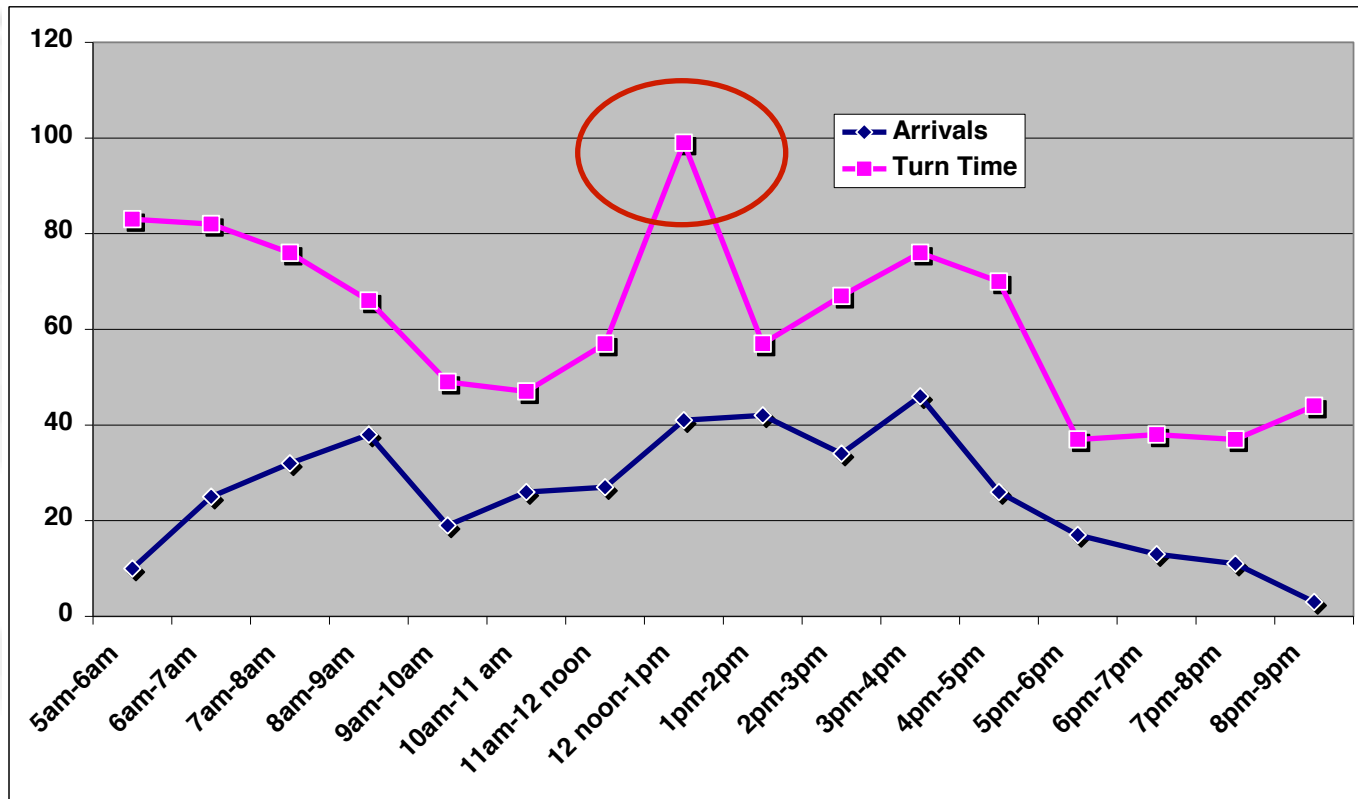
Inexperienced drivers receive more trouble tickets and cause problems for everyone

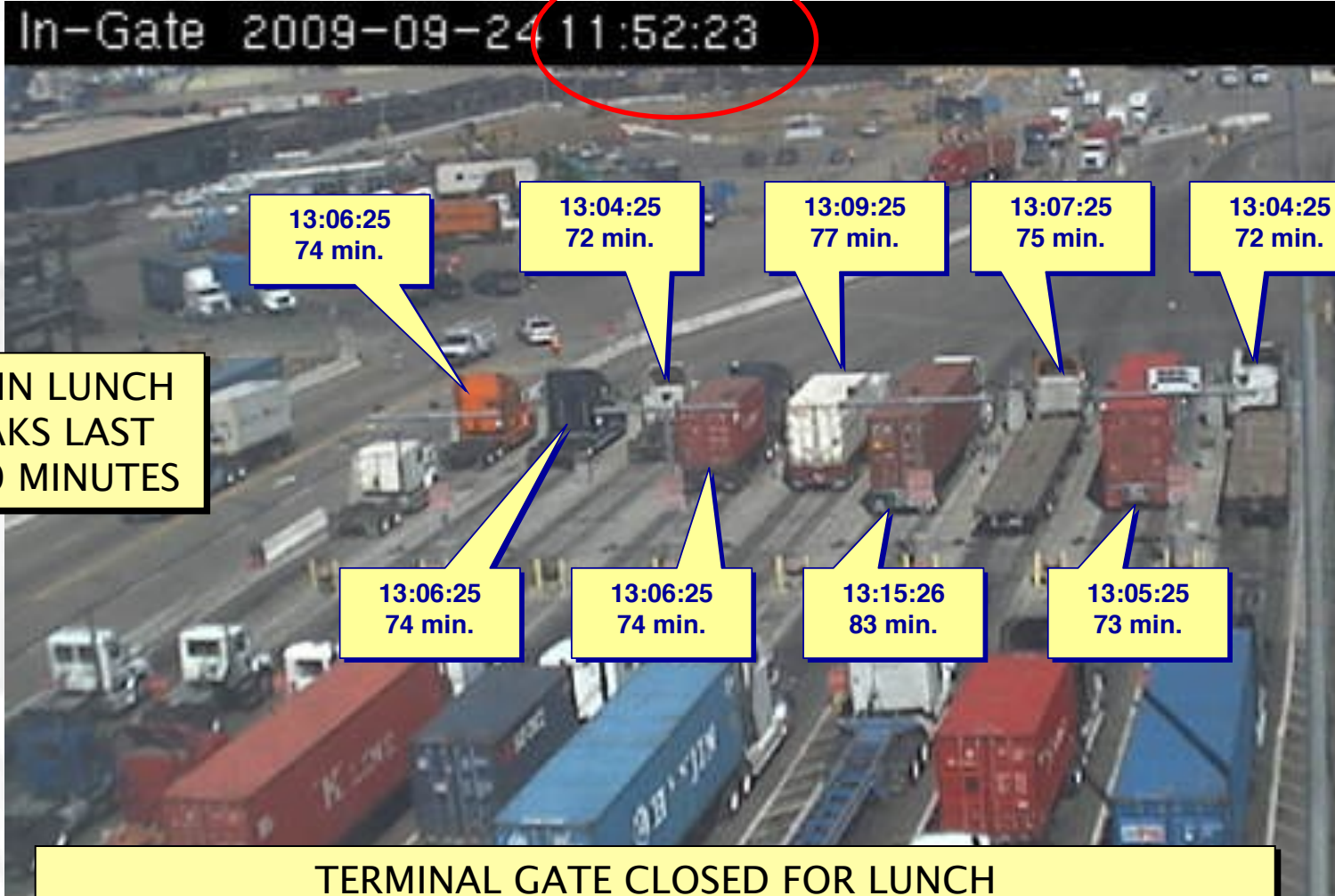


Congestion drives up in-terminal turn times



- Closing for lunch and coffee breaks causes turn time spikes and idling
- The cost to customers probably exceeds the savings to terminals

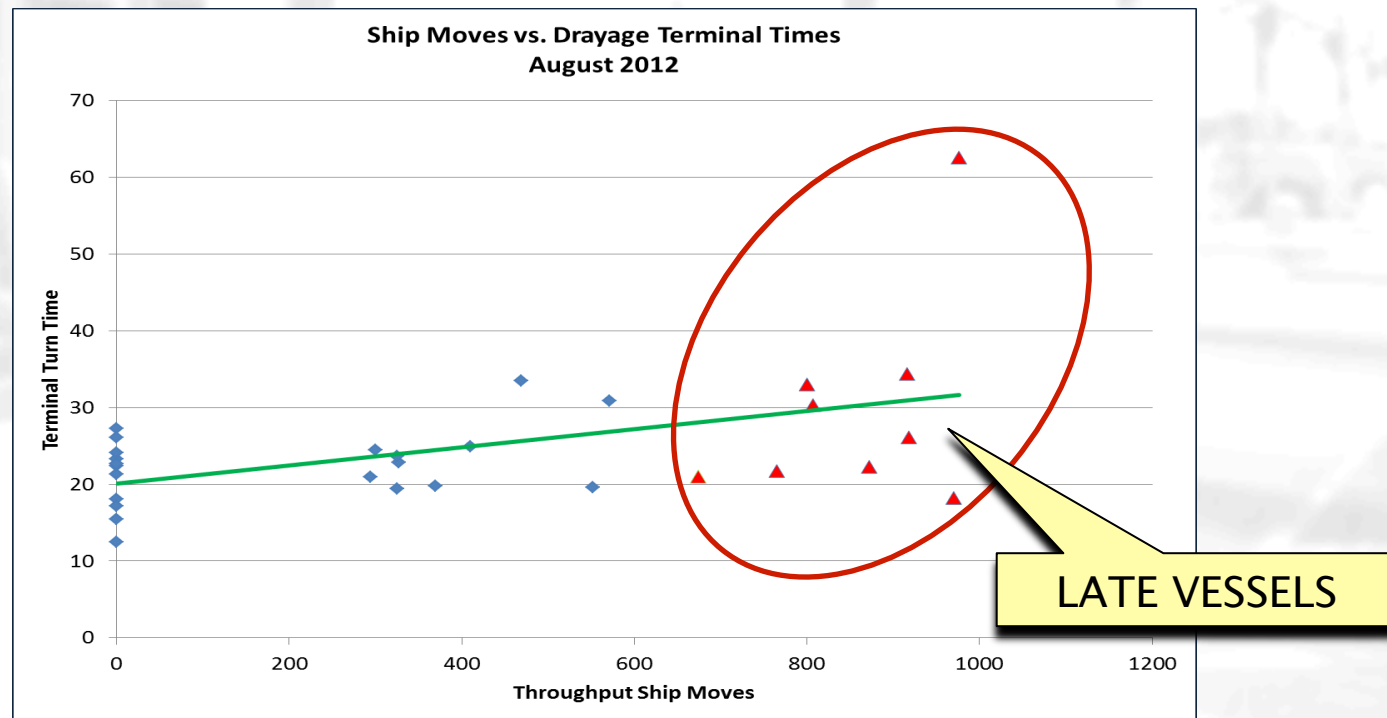




60-MIN LUNCH BREAKS LAST 75-90 MINUTES

TERMINAL GATE CLOSED FOR LUNCH
- FRONT ROW SPENDS 72-83 MINUTES AT PEDESTAL

- Terminal times tend to rise with daily ship moves, and ship moves rise with late vessels.
- Terminal ability to cope with late vessels and high move counts varies – good days and bad days.



Ocean carrier alliances are destroying empty return efficiency

- Truckers need to plan
- Daily changes in equipment return instructions are bad
- Ad hoc changes during the day are worse

ShiplineCode	ShiplineName	20ft Standard Dry Box	40ft Standard Dry Box	40ft High Cube Dry Box	45ft	Reefer	Any other size or type
AI	Alianca	NNIT	PPCY	PPCY	SNIT	SNIT	SNIT
AP	American President Line	SNIT	NCY/PPCY	SNIT	SNIT	INELIGIBLE	SNIT
AL	Atlantic Container Line	PPCY	PPCY	PPCY	SNIT	SNIT	SNIT
AN	Australian Natl Line	APM	PY ANNEX	PY ANNEX	NNIT	APM	APM
CV	Chilean Line (Csav)	PPCY	PPCY	PPCY	SNIT	SNIT	SNIT
CS	China Shipping Container Line	NNIT	NNIT	NNIT	NNIT	NNIT	NNIT
CA	Cma-Cgm (America) Inc	APM	PY ANNEX	PY ANNEX	NNIT	APM	APM
PA	Compania Libra De Navegacion	PPCY	PPCY	PPCY	SNIT	SNIT	SNIT
CH	Cosco (China Ocean Shipping)	APM	PPCY	PPCY	APM	APM	APM
IC	Eimskip U.S.A. Iceland	NCY/PPCY	NCY/PPCY	PPCY	SNIT	SNIT	SNIT
EV	Evergreen Marine	PPCY	PY ANNEX	PPCY	APM	APM	APM
CO	Hamburg Sud Na	NNIT	NNIT	NNIT	SNIT	SNIT	SNIT
HJ	Hanjin Shipping Line	APM	PPCY	PPCY	SNIT	SNIT	SNIT
HP	Hapag Lloyd Container Line	PPCY	PPCY	PPCY	NNIT	SNIT	NNIT
HY	Hyundai America Shipping Agcy	PPCY	PPCY	PPCY	SNIT	NNIT	APM
KL	K-Line	APM	PPCY	PPCY	APM	APM	APM
MA	Macandrews	APM	PPCY	PY ANNEX	NNIT	APM	APM
MS	Maersk Line Agency	APM	PPCY	PPCY	APM	APM	APM
MD	Mediterranean Shipping	PY ANNEX	PY ANNEX	PY ANNEX	APM	APM	APM
MI	Mitsui Osk Lines	PPCY	PPCY	PPCY	SNIT	NNIT	INELIGIBLE
NY	N.Y.K. Lines	PPCY	PPCY	PPCY	SNIT	SNIT	SNIT
OS	Ood Usa	PPCY	NCY/PPCY	NCY/PPCY	SNIT	INELIGIBLE	NNIT
SA	Safmarine	APM	APM	APM	APM	APM	APM
SY	Schuyler Line Navigation Co	PY ANNEX	PY ANNEX	PY ANNEX	SNIT	SNIT	SNIT
TR	Turkon Line	PPCY	NNIT	NNIT	NNIT	NNIT	NNIT
UA	United Arab Line	PPCY	PPCY	PPCY	SNIT	SNIT	SNIT
MY	Yang Ming	APM	PPCY	PPCY	APM	APM	APM
MZ	Zim American Israeli Shipping	APM	PY ANNEX	PY ANNEX	APM	APM	APM

BAD

Fri 2/21/14 8:55 AM: XXX Empty Elimination Friday 2/21
 All dry containers - Return to [unclear]
 Reefers - Return to [unclear]
 Open Tops- Return to [unclear]
 Return to [unclear] Thank You,

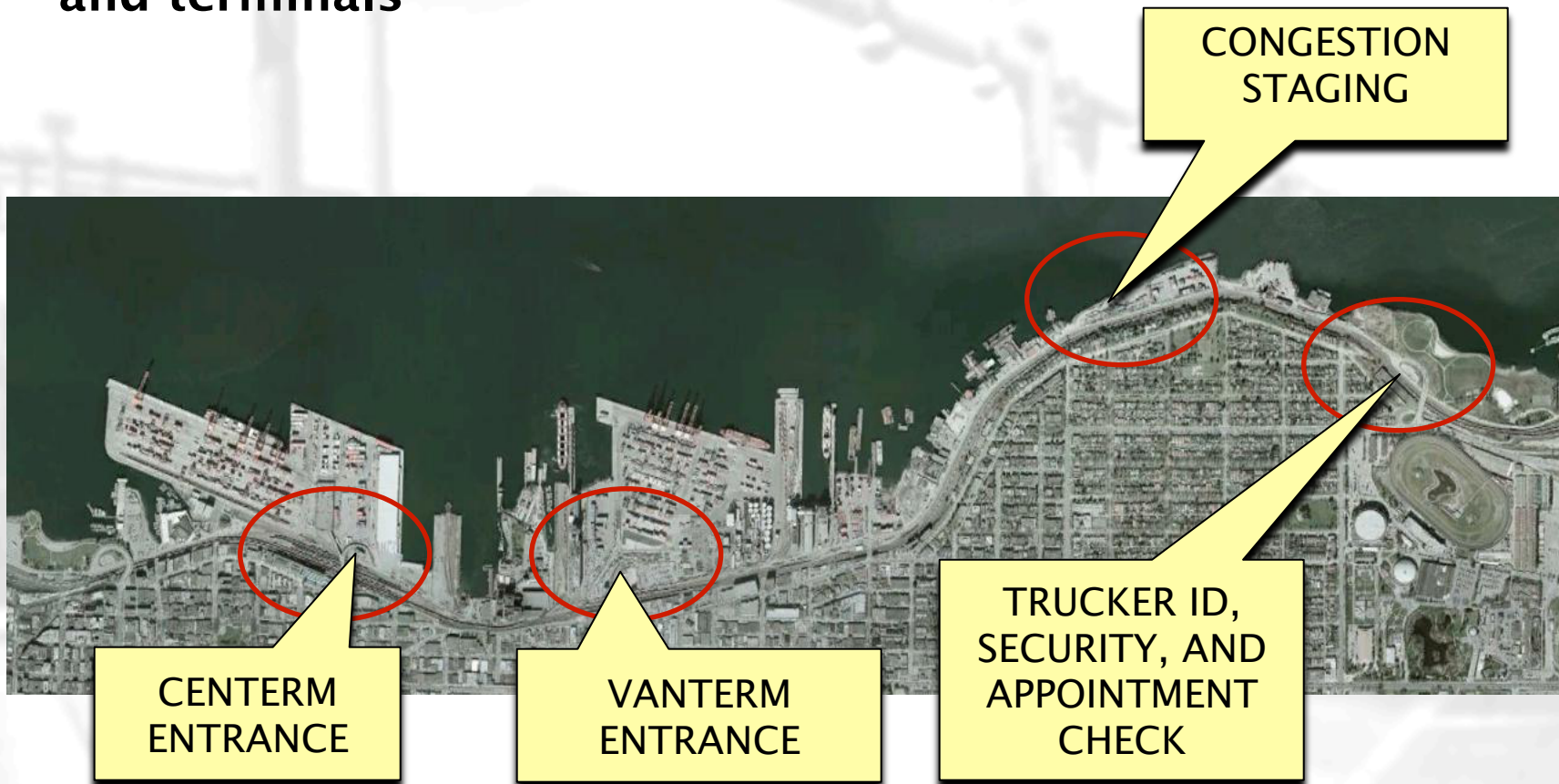
WORSE

- We built an entire shipping system around chassis provided by ocean carriers
- Withdrawal of the carriers from chassis supply has left broken pieces to be fixed:
 - Wheeled terminals
 - Shipper pools
 - Wheeled rail ramps
 - Legacy jobs

If you need a working chassis in the right place at the right time, you have to be willing to pay for it

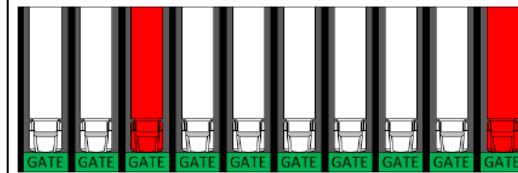


Screen early to keep problem transactions out of lines and terminals



- “Supermarket” lines delay good transactions behind bad ones and force idling and creeping
- “Bank teller” lines can move 18% faster

Better yet, virtual check-in via paging can allow virtual lines and remote lots



- Use smartphones for check-in, paging, and appointments
- Let drivers shut down engines until they are called
- Keep bad transactions out of the line, the gate, and the terminal
- Get rid of the lines, the pedestals, and the screw-ups



Web-Based Wait List Management/Paging

SmartCall™ SMS

Manage Customer Flow Affordably and Efficiently

Using secure web-based software, SmartCall SMS makes managing the flow of customers and ever being out of range of a text message. Ideal for restaurants, medical offices, repair shops, and pharmacies.

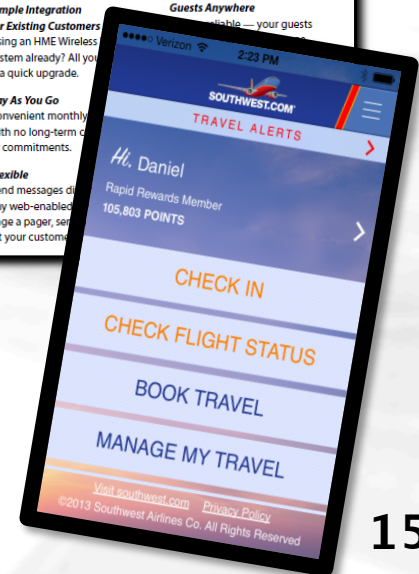
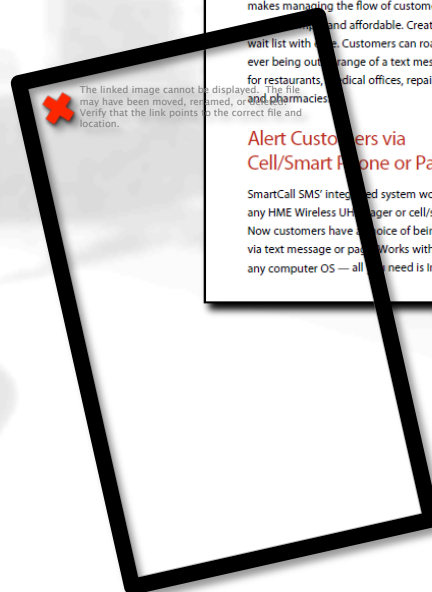
Alert Customers via Cell/Smart Phone or Pager

SmartCall SMS' integrated system works with any HME Wireless UP pager or cell/smart phone. Now customers have the choice of being contacted via text message or pager. Works with virtually any computer OS — all you need is internet access.

A simple click of a button can page a pager or send a text alert to waiting customers.

SmartCall SMS Highlights

- > **Easy and Affordable**
Nothing to install or maintain; works with any computer with internet access, mobile phone and smart phone.
- > **Simple Integration for Existing Customers**
Using an HME Wireless system already? All you need is a quick upgrade.
- > **Pay As You Go**
Convenient monthly pricing with no long-term contracts or commitments.
- > **Flexible**
Send messages directly to any web-enabled mobile phone. Page a pager, send a text message, or let your customers know they are next in line.
- > **Simple Wait List Management**
Manage customer flow from one simple list.
- > **Reach Waiting Guests Anywhere**
Visible — your guests can see the wait list from anywhere.





What is it worth?



Drayage delays are costing \$348 million, 14 million hours, and 9 million gallons of fuel annually, and emitting 103,000 tons of GHGs

Scenario	Hours (million)	Fuel (million gal)	CO2 (tons)	Pollutants (tons)	Cost (million)
2012 National Estimate	45	80	891,052	11,309	\$ 1,640
30 vs. 40 Minute Terminal Time	4	2	17,821	253	\$ 90
10 vs. 20 Minute Queue Time	3	2	24,949	355	\$ 79
0% vs. 5% Trouble Tickets	1	0	4,455	67	\$ 23
Chassis Solution	7	5	56,136	794	\$ 156
Fix it All	14	9	103,362	1,469	\$ 348



Thank you! Questions?



Follow-ups and Contacts

NCHRP Report 11:

<http://www.trb.org/Main/Blurbs/165528.aspx>

Vancouver Turn Time Study:

<http://www.apgst.ca/projects/pdfs/PortMetroVancouverTruckTurnTimeStudy2013.pdf>

EPA SmartWay DrayFLEET:

<http://www.epa.gov/smartway/forpartners/documents/drayage/420b12065.pdf>

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