

# Driver Experience at Intermodal Facilities Task Force

Gerry Bisailon, REMPREX  
September 18, 2020  
Virtual Meeting



# Objective

- The multi-stakeholder task force will solicit direct qualitative feedback from the driver community, map out the terminal process experience, identify variables affecting performance in an effort to identify best practices aimed at improving the driver experience.

# Thank You to the Members

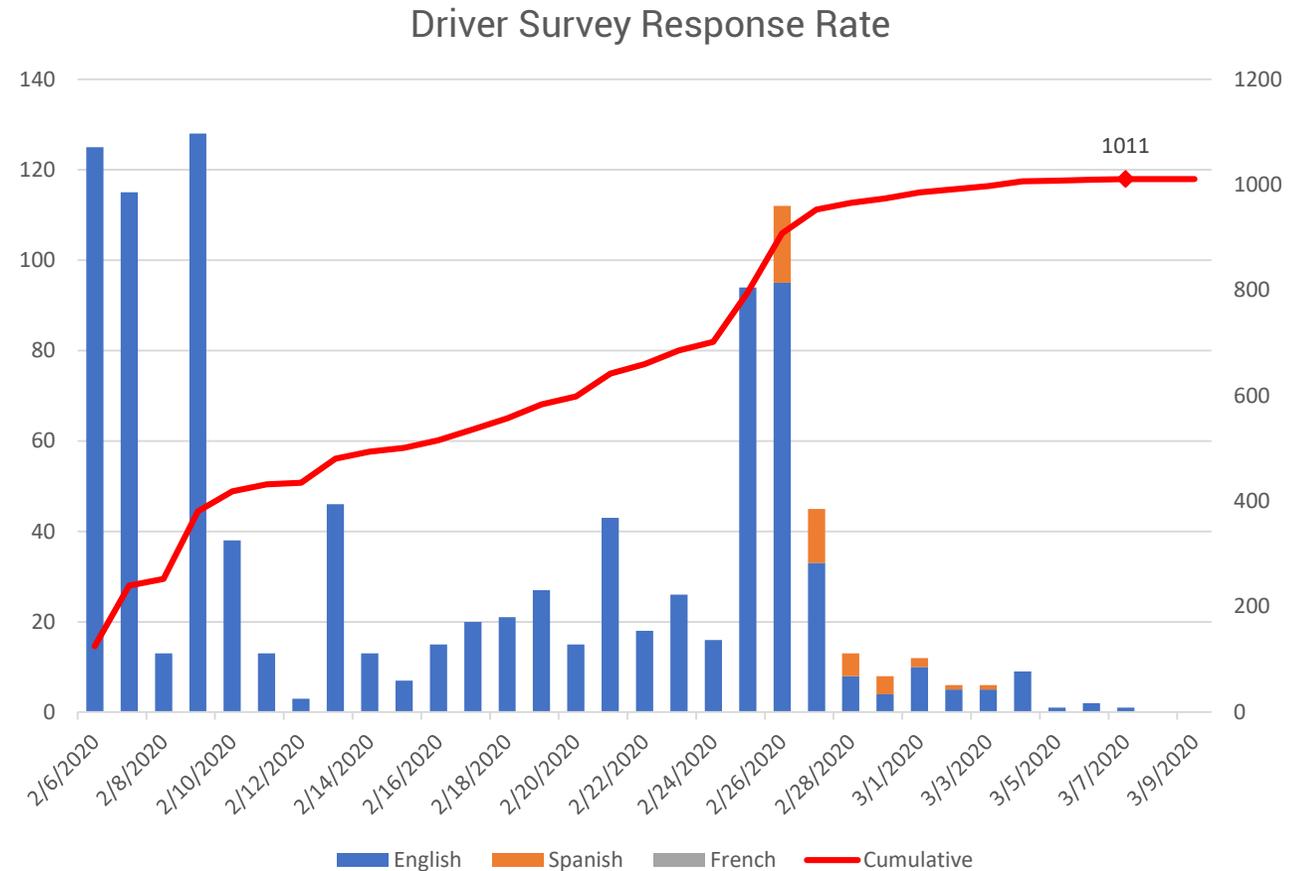
- Gene Bambach, Consolidated Chassis Management, LLC
- Mark Bartmann, Kuehne + Nagel Inc.
- Gerry Bisailon, REMPREX, LLC
- Andy Bozak, Reliable Transportation Specialists, Inc.
- Tolga Cankurtaran, NC State Ports Authority
- Gary Cornelius, TCW, Inc.
- Ingrid Crafford, Norfolk Southern Corporation
- Gordon Graham, CN
- Jeremy Hayden, Union Pacific Railroad Company
- Mark Higgins, Virginia International Terminals, Inc.
- Jordan Hunt, ContainerPort Group, Inc.
- Laurie King, MCO Transport, Inc.
- Katrina King-Lopes, Union Pacific Railroad Company
- John Kozinski, Norfolk Southern Corporation
- Hampton Lee, South Carolina Ports Authority
- Scott Movshin, CSX Intermodal Terminals, Inc.
- Lynda Parillo, NASCENT Technology, LLC
- James Schnede, South Carolina Ports Authority
- Greg Snook, Consolidated Chassis Management, LLC
- Laura Theveniau, BlueCargo
- Jason Zimmerman, DCLI

# Intermodal Driver Experience Task Force

## *Driver Input – The Survey*

### Survey Information:

- 15 Questions
- Launched Feb 6<sup>th</sup>, closed Mar 9<sup>th</sup>
- Sent via SurveyMonkey by IANA
- Very good industry support
- 3 languages – English, French, Spanish
- Over 1,000 respondents
- Over 2,300 free-form comments



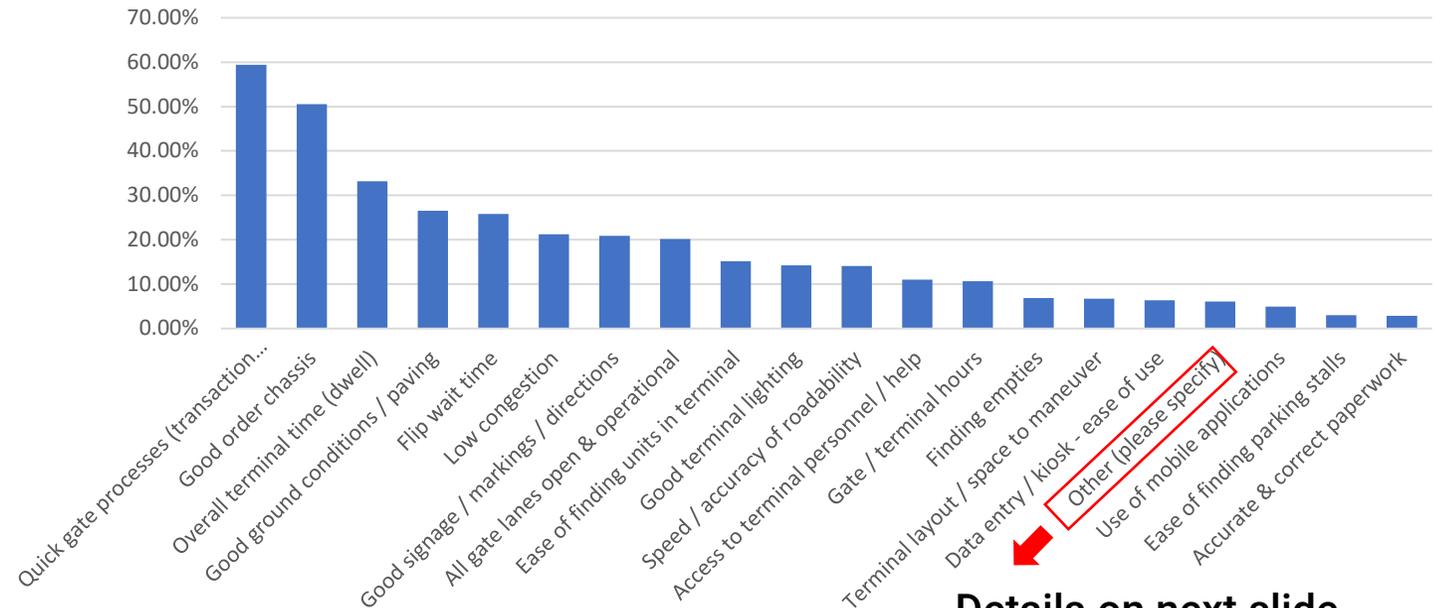
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## Driver Survey – The Results

### Top 4 Factors:

- Quick gate processes (60%)
- Good order chassis (50%)
- Overall time spent in terminal (32%)
- Good ground / footing conditions (26%)

What are the 4 most important factors for you when working in an intermodal terminal? (Choose at least 2 and no more than 4)



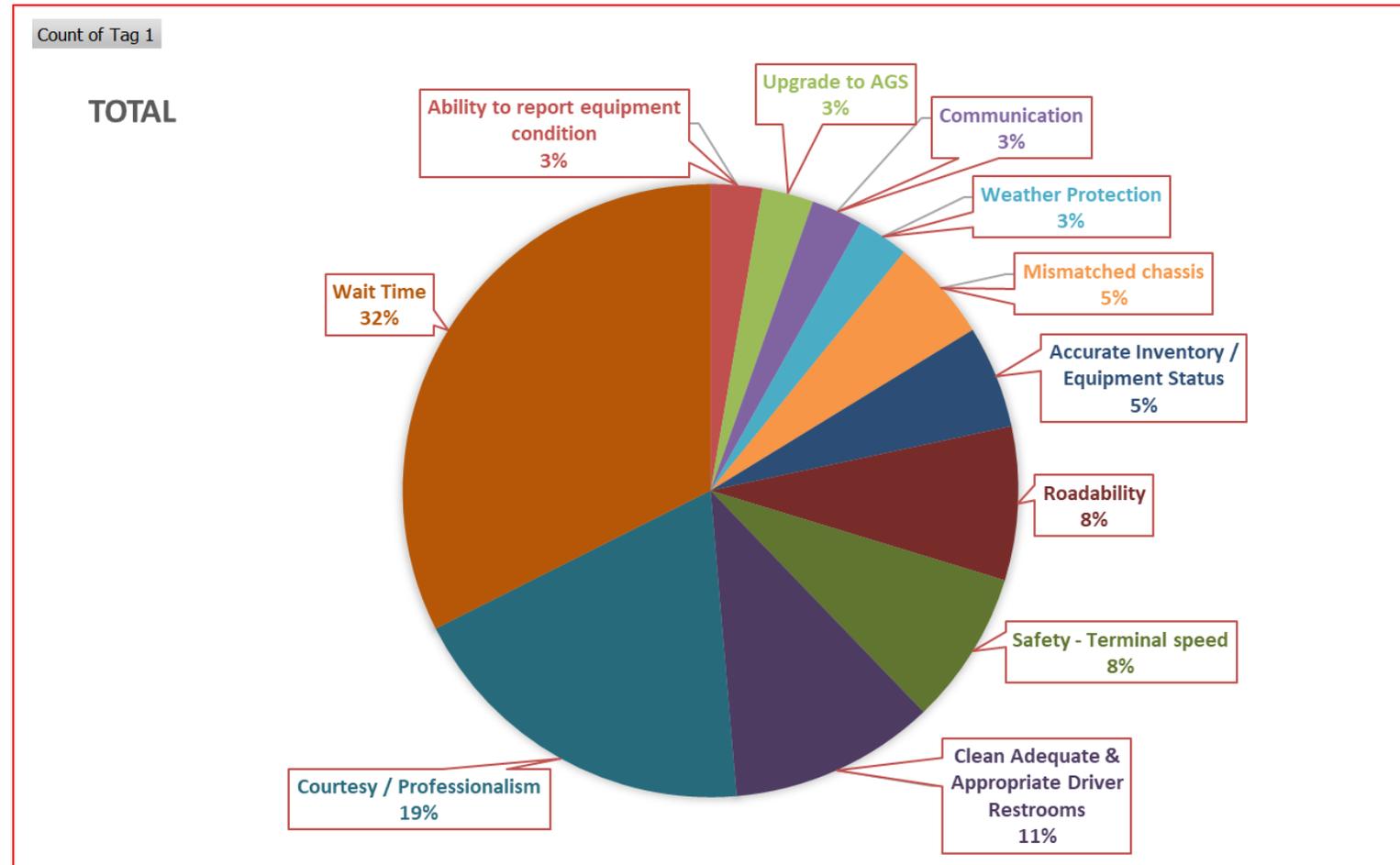
Details on next slide

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## Driver Survey – The Results

### Other noted factors:

- Wait time (32%)
- Courtesy / Professionalism (19%)
- Clean, adequate & appropriate facilities (11%)



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## *Driver Survey – The Results*

Where do you feel is the biggest bottleneck?	
Gate Processing	32%
Waiting on cranes / crane delays	21%
Getting help from terminal employees	10%
Chassis condition	9%
General overall wait time	5%
Yard organization & terminal signage	4%
Roadability	2%
Technology failure	2%
Billing	2%

Positive Experiences	
Technology & Automation	27%
Mobile Apps	17%
Yard Organization & Markings	10%
Helpful Staff	10%
Express Lanes	5%
Extended Terminal Hours	5%
Inventory Accuracy	5%
Drop & Hook	5%

Data is from open text response questions

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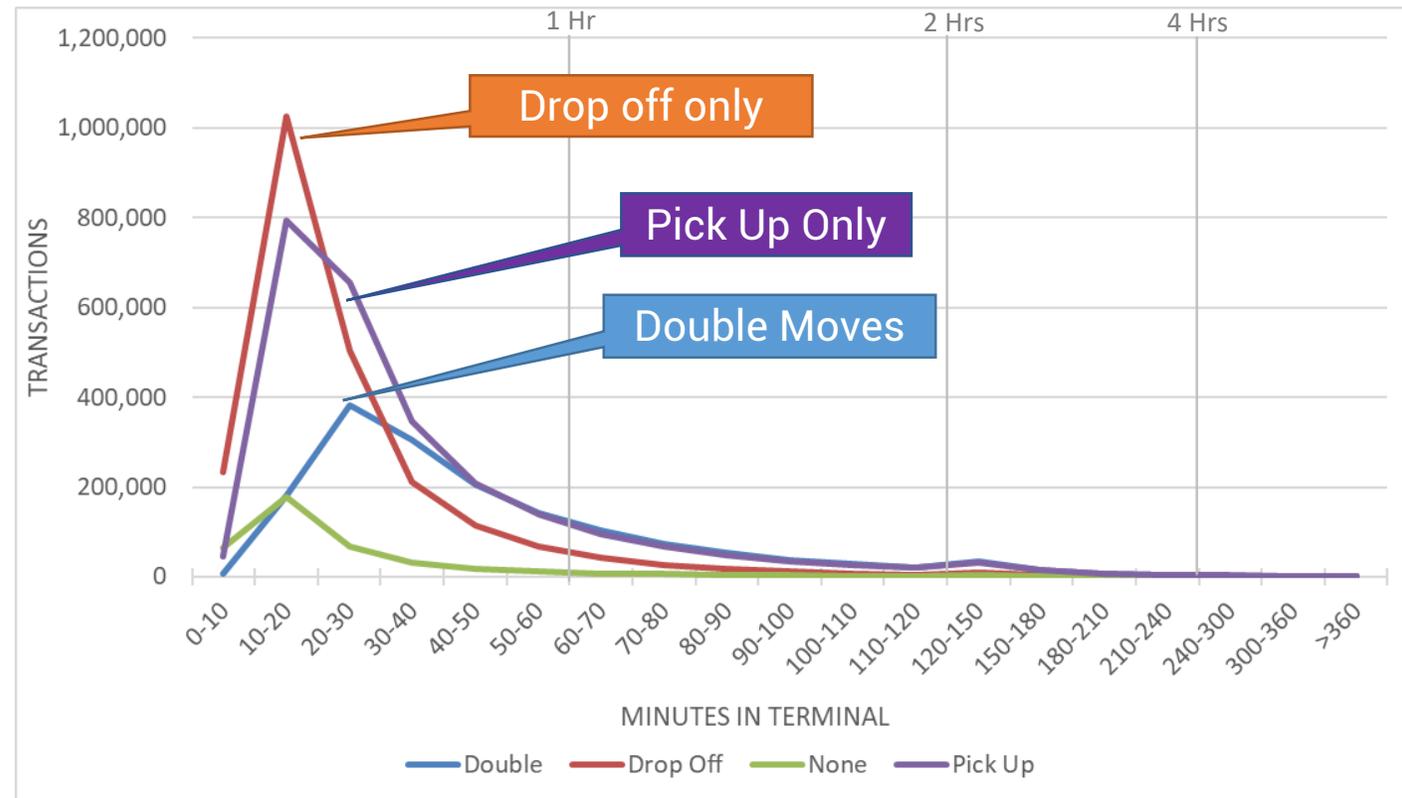
## Industry Benchmarking - Preview

### Terminal Turn Time by type of move

- All moves had similar mean times around 20-30'.
- Drop off only had tighter distribution
- Pick ups and Double moves had long distributions "tails"

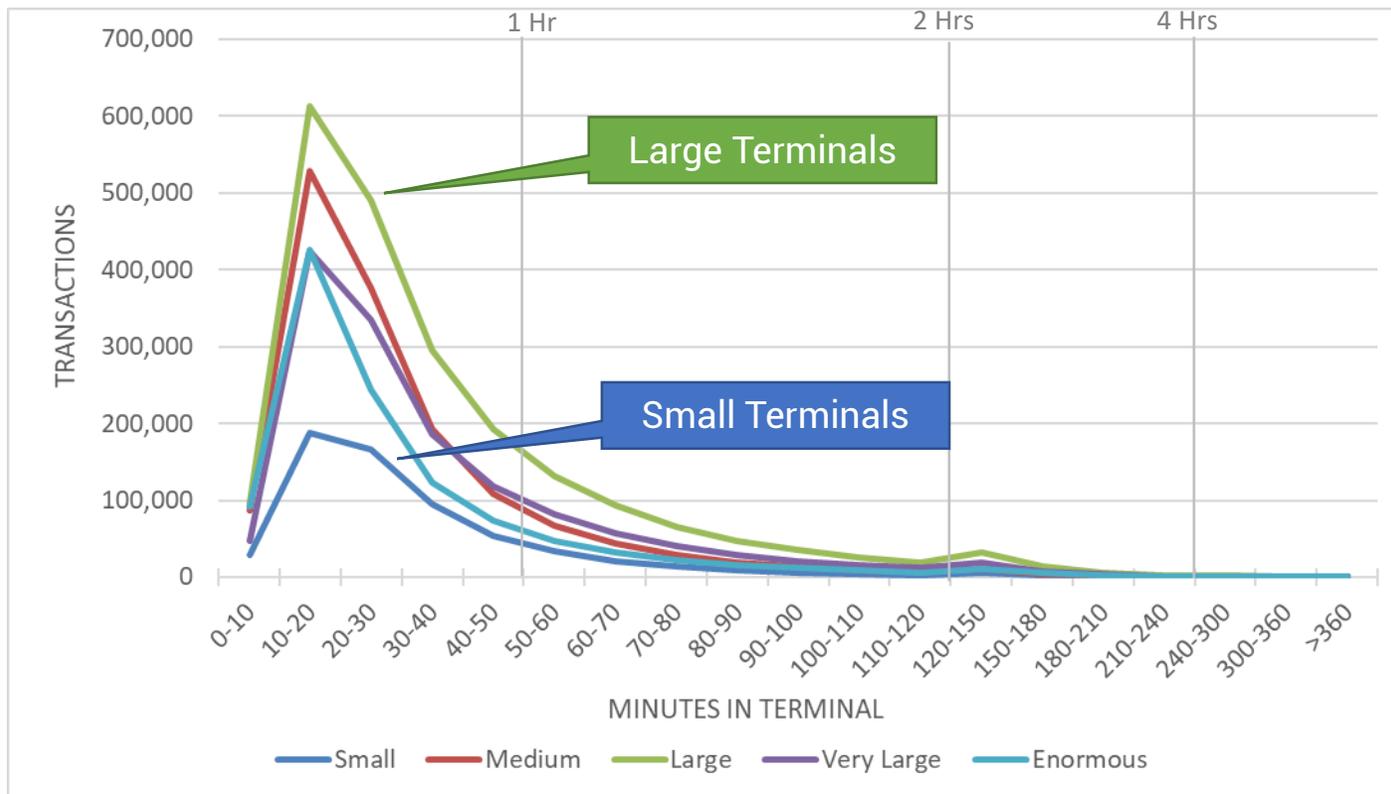
#### Data:

- 6,830,096 turns
- 6 months
- 5 Class 1 RRs
- 44 Terminals



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## Industry Benchmarking - Preview



## Terminal Turn Time by size of terminal

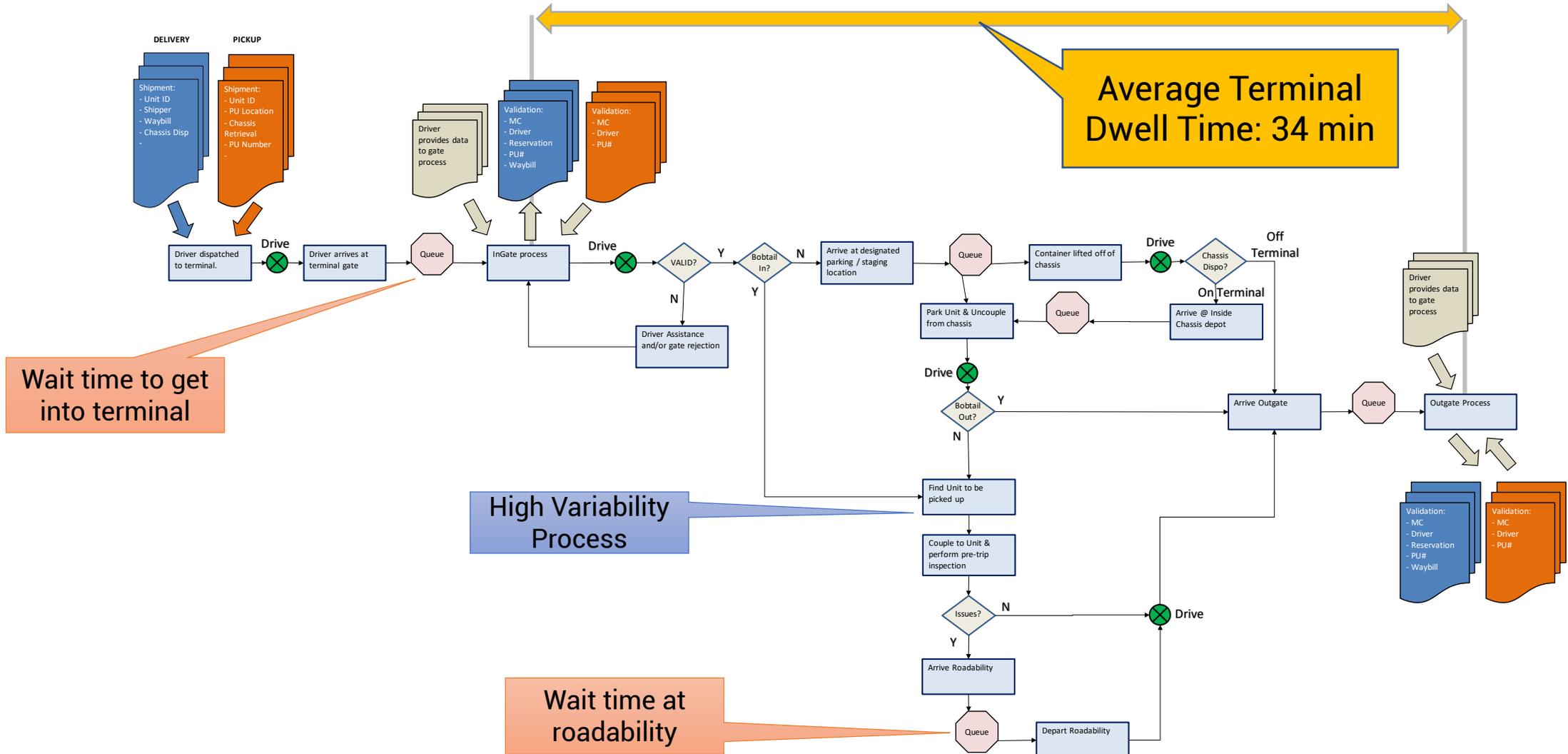
- Size of terminal did not seem to have a significant difference
- All terminals followed relatively the same distribution curve

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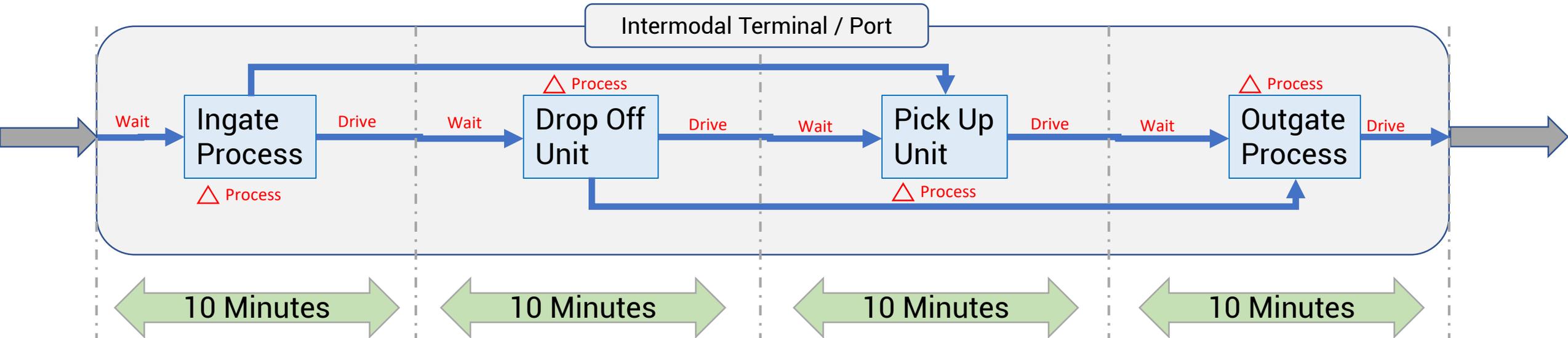
## The Intermodal Terminal Process Flow



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## *Simplified Intermodal Terminal Process Flow (Driver's View)*

### RULE OF "10s"



#### Exceptions:

- No waybill
- Invalid driver
- Invalid PU Nbr
- No reservation
- UIIA Expired

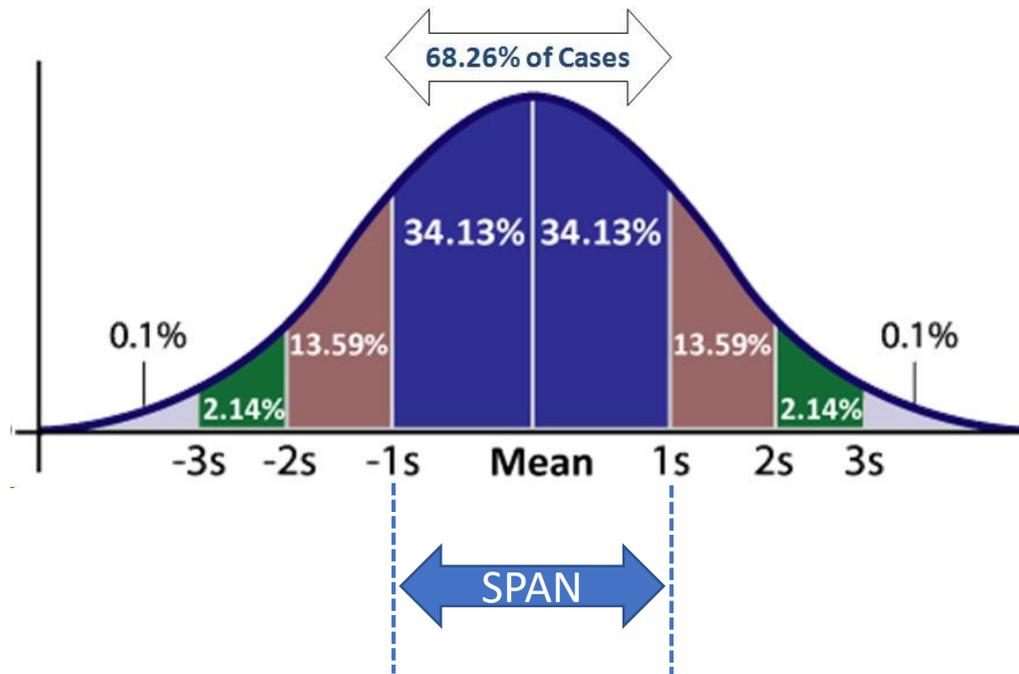
- Parking slot invalid / taken
- Traffic congestion
- Crossing delays
- Crane delays
- Mechanical issues

- Inventory discrepancy
- Unit not found
- Traffic congestion
- Crossing delays
- Crane delays
- Mechanical issues
- Damage

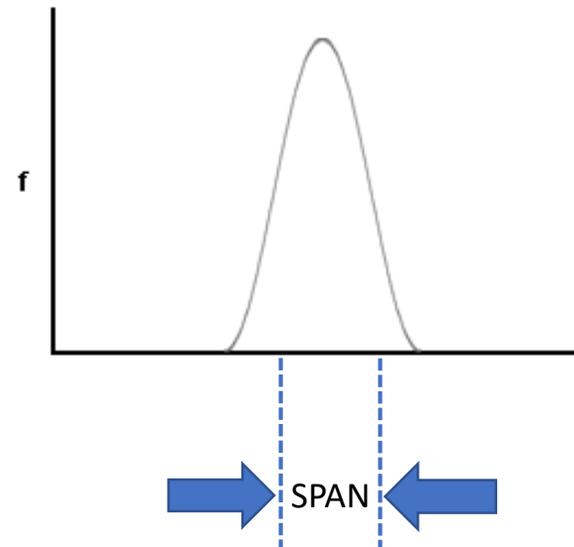
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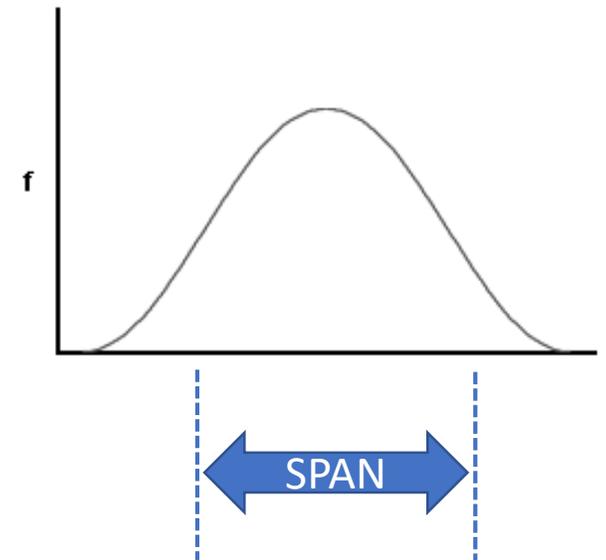
## *Intermodal Terminal Process Flow – Impact of Exceptions*



**Low Standard Deviation**



**High Standard Deviation**

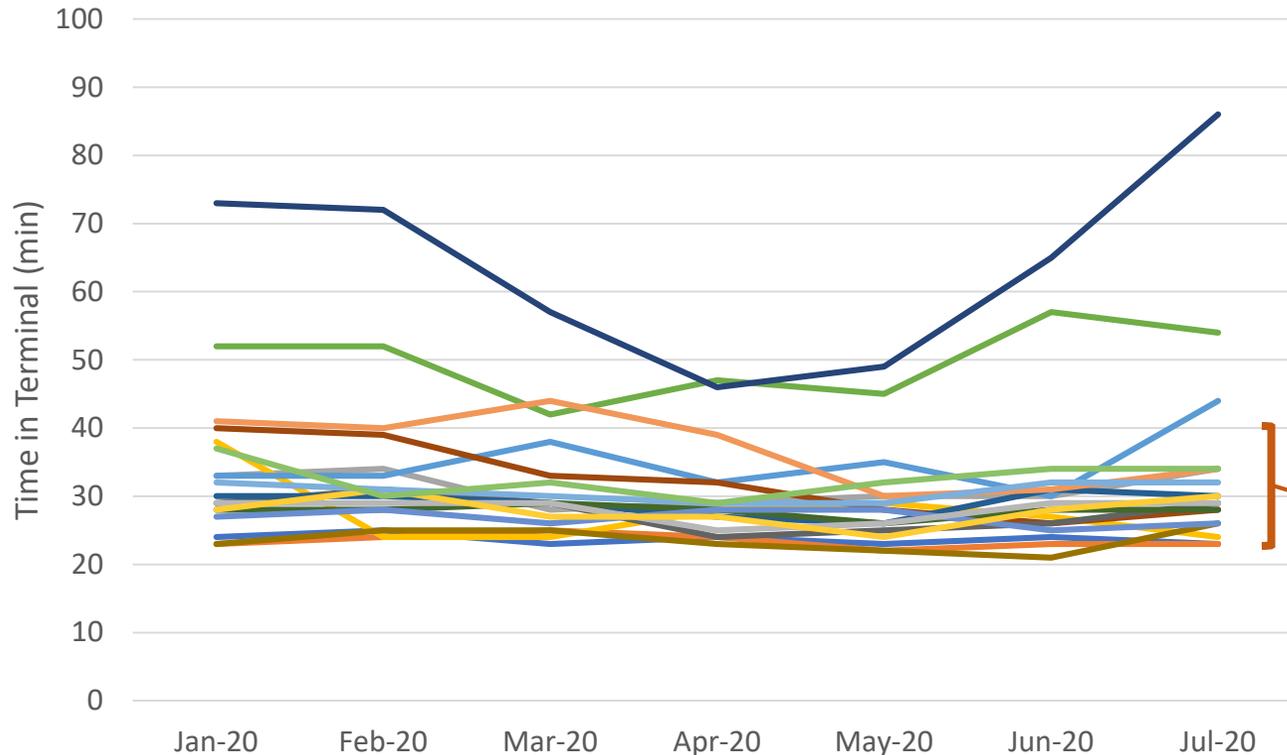


- Span is a measure of process control.
- The tighter (smaller) the span – the more consistent / reliable the process is. (Less Variability)
- Exceptions will increase the span. (Increasing Variability)
- High Variability (ie. wide span) decreases Driver Satisfaction

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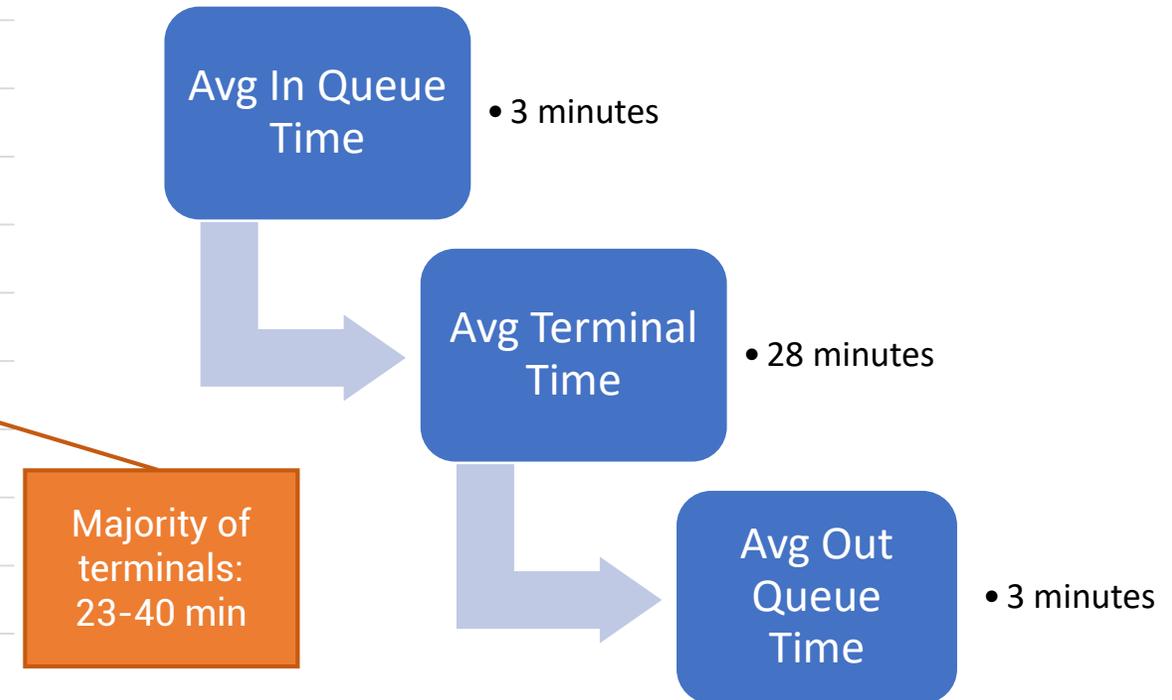
## Chicago Rail Terminal Data

Average Terminal Visit Times 2020 by Month



Based on information available for 18 Rail Terminals in Chicago

Chicago Rail Terminals July 2020



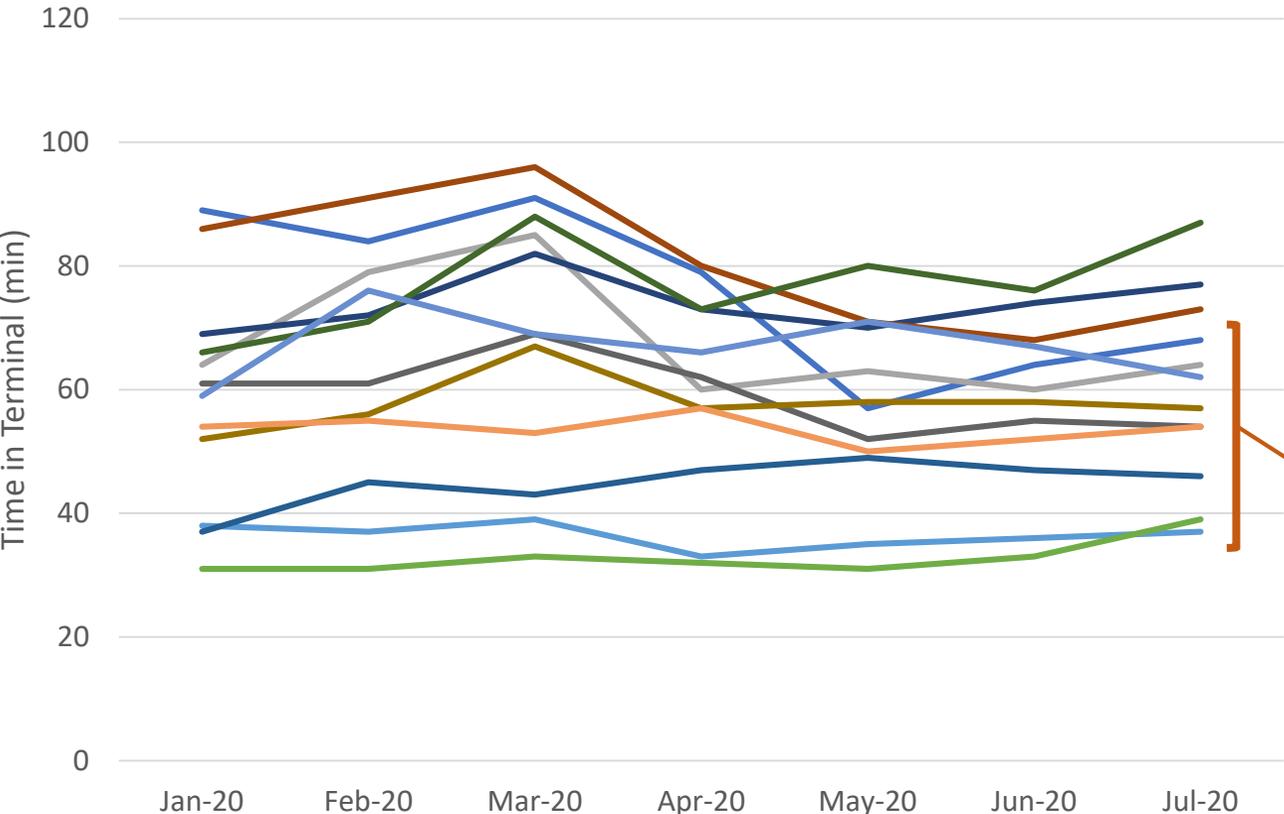
Majority of terminals: 23-40 min

Overall Terminal Time: 34 min

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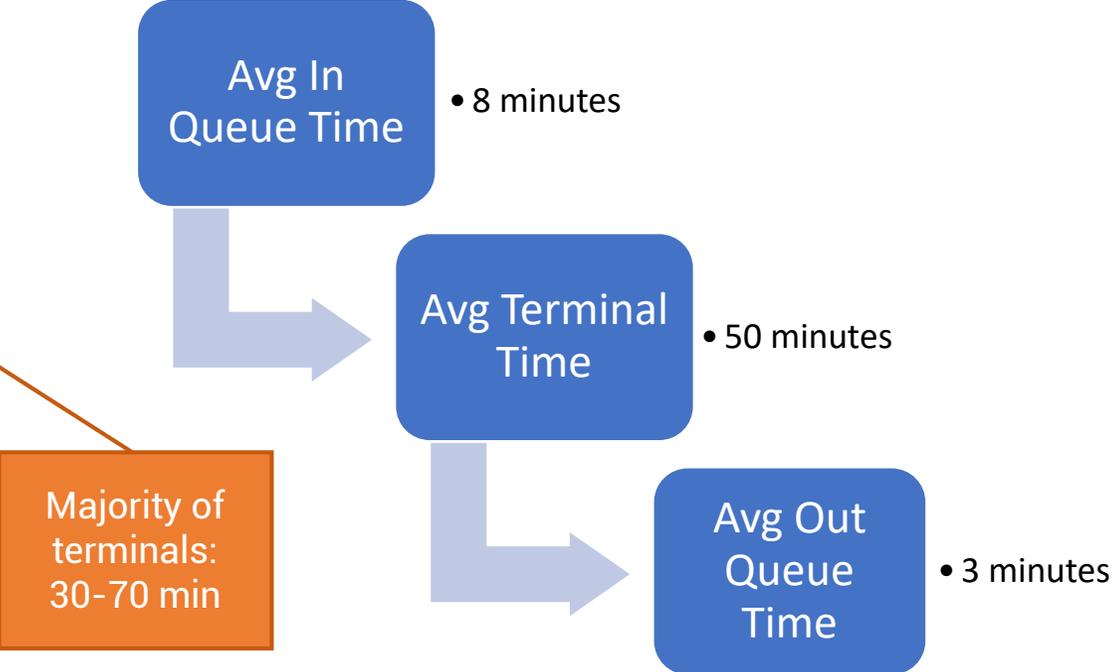
## West Coast\* Port Terminal Data

Average Terminal Visit Times 2020 by Month



Based on information available for 14 Port Terminals in LA/LB/Oak

Port Terminal Data July 2020

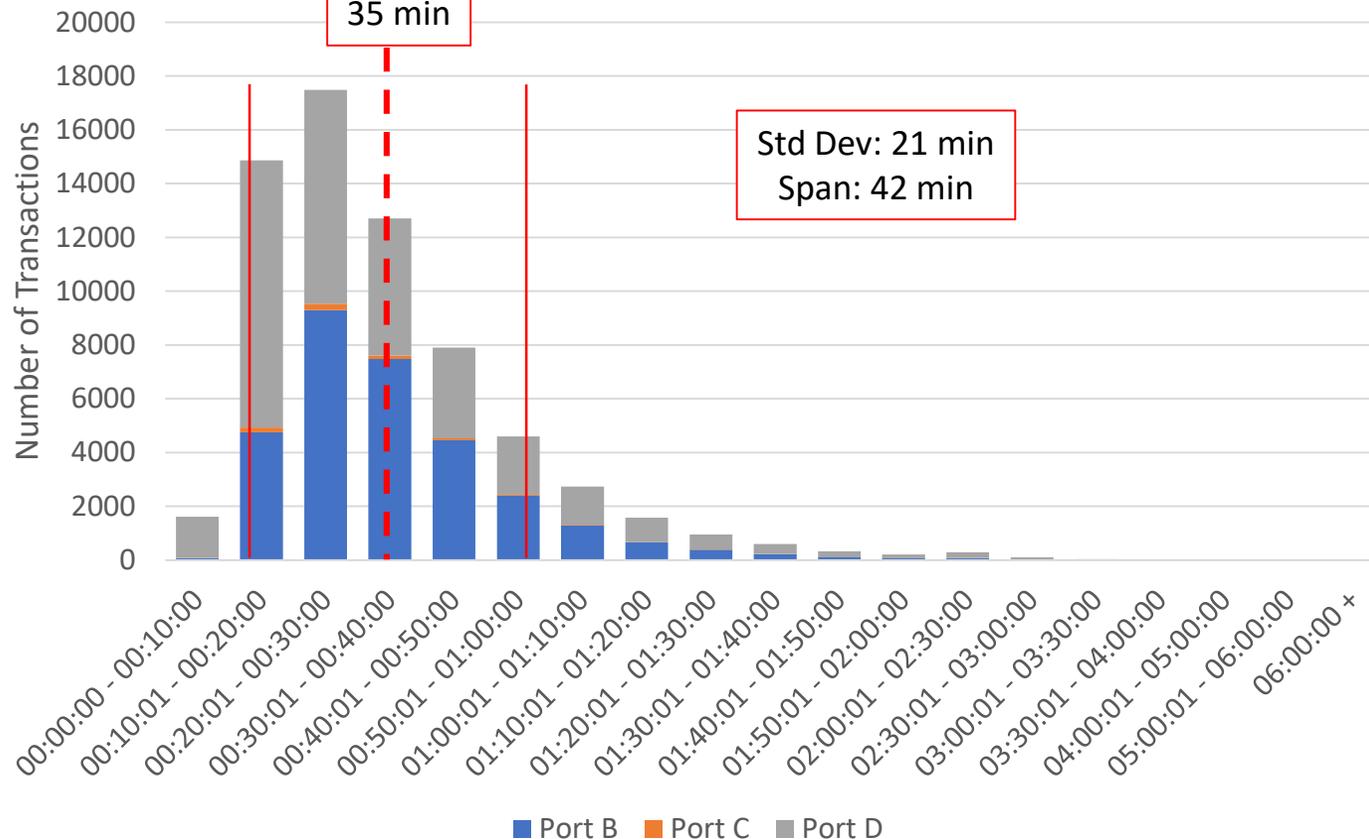


Overall Terminal Time: 61 min  
 Trouble/Exception Rate: ??%  
 Standard Deviation: 15 min

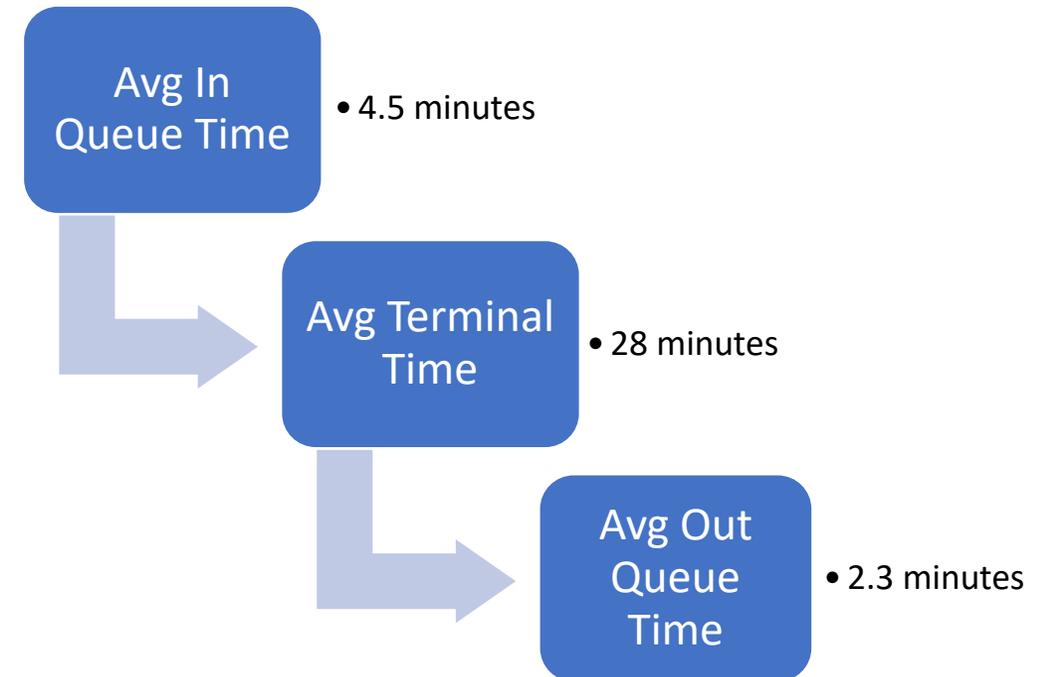
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## East Coast\* Port Terminal Data

Total Port Turn Time  
March 2020



Port Terminal Data  
Jun 2020



Overall Terminal Time: 35 min  
 Trouble/Exception Rate: 20%  
 Standard Deviation: 21 min

\* Not all East Coast Port data is represented

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## *The Intermodal Terminal Process Flow - INGATE*

Effects of Technology on Terminal Gate Processing

	Manual Gate	AGS Gate	AGS w/ Mobile App
Ingate Time	5 min	77 seconds (74% improvement)	48 seconds (48% improvement)
Ingate Exception Rate (Trouble Tickets)	N/A	5.7%	2.8% (51% improvement)
Outgate Transaction Time	4 min	55 seconds (77% improvement)	20 seconds (64% improvement)

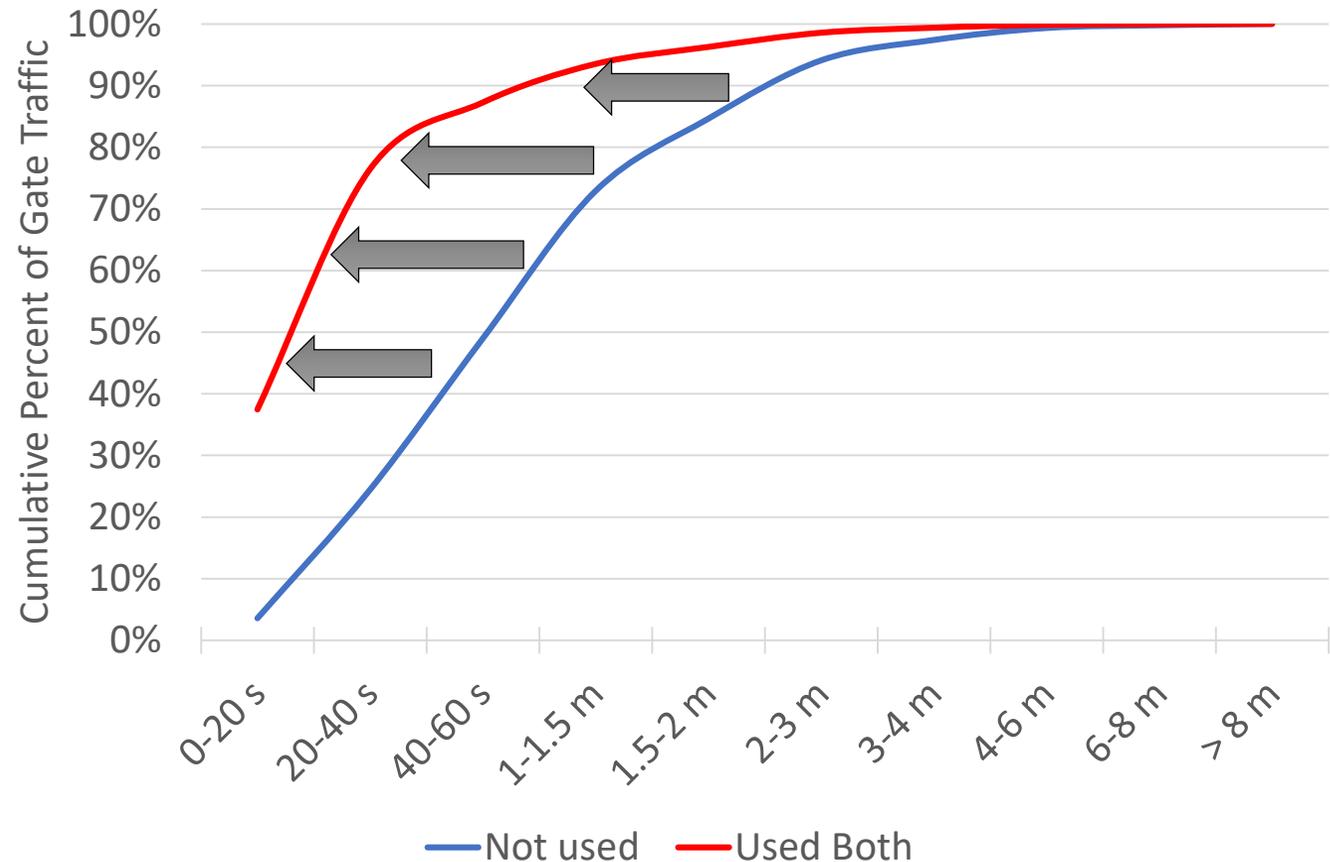
- Layered technology can further reduce transaction time and reduce the number of trouble tickets/exceptions
- Reduction in trouble tickets reduces the variability in the gate process
- Reduced variability, improved predictability improves driver experience

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## *The Intermodal Terminal Process Flow – GATE EXPERIENCE*

- Layering technology solutions provides an effective means to reduce process time and reduce variability
- Comparing gate transaction time showing transactions that did not use a mobile app (blue line), with transactions that did (red line)
- Less gate processing time, and less variability = Improved Driver Experience

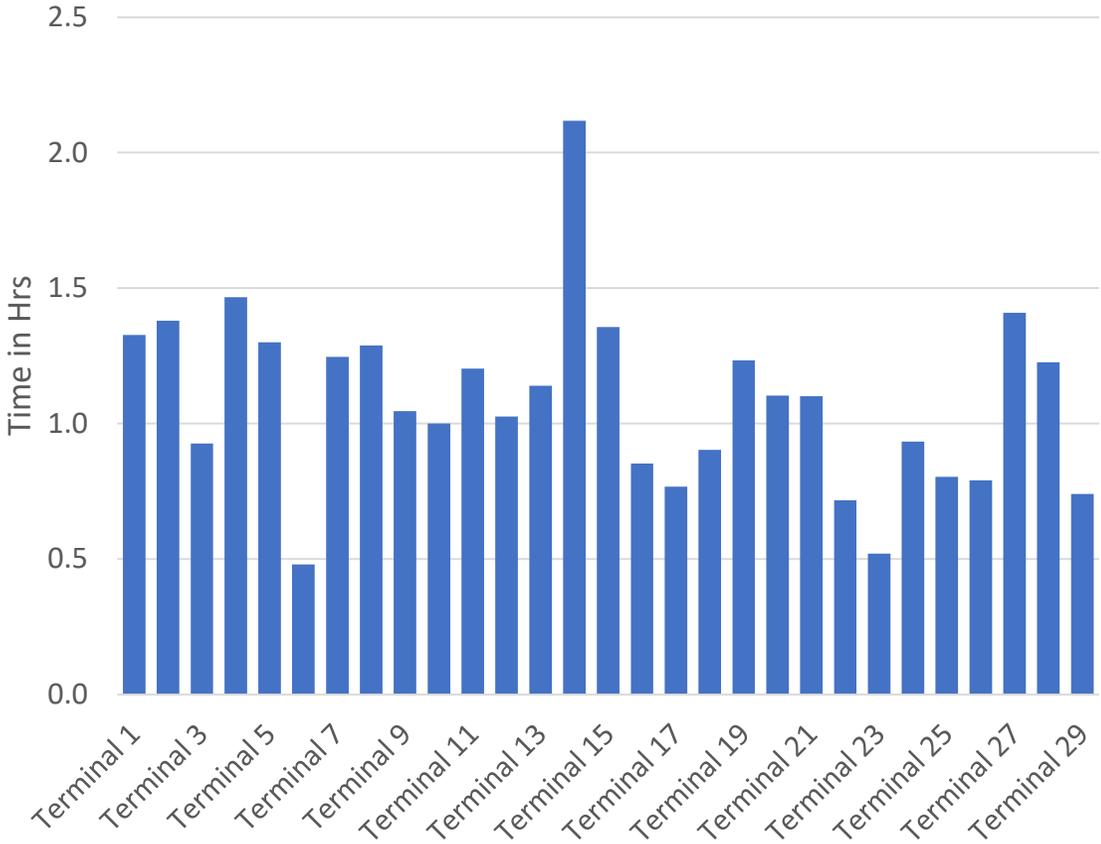
Effect of Mobile Apps on Gate Processing Time



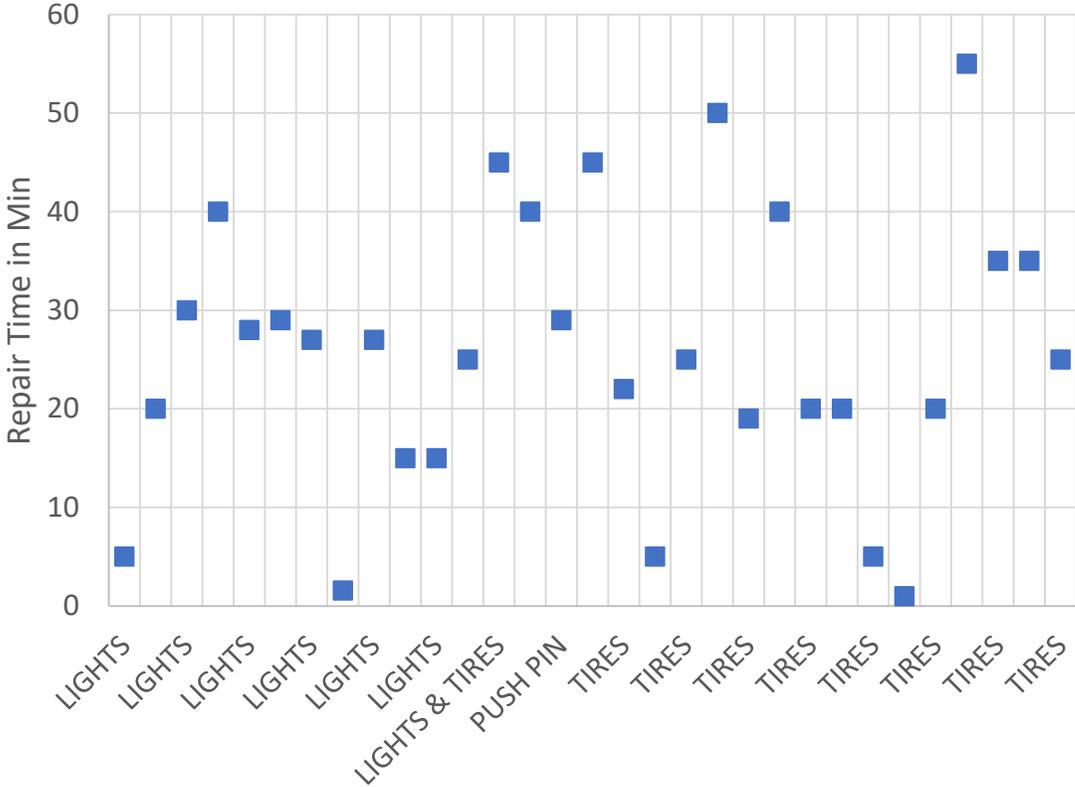
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## The Intermodal Terminal Process Flow - ROADABILITY

Time in Roadability (Billable hrs)



Repair Time Observations by Repair Type



# Intermodal Driver Experience Task Force

## *Task Force Conclusions & Recommendations*

### Quantitative

- **Standardize Processes**
  - Technology
  - Appointments
  - Communicate requirements
  - Inventory accuracy
- **Reduce/Remove Exceptions**
  - Pre-validation
  - Equipment Inspections
- **Implement Process Controls**
  - Level loading processes
    - Appointment Systems

### Qualitative

- **Driver access to information**
  - Signage
  - Directions
  - Terminal flow / intuitive
- **Driver access to help**
  - Phone / Driver booth
- **Driver facilities**
  - Clean & accessible

# Intermodal Driver Experience Task Force

## *Next Steps to Improving Driver Experience*

- Future considerations:
  - Terminal turn time analytics
    - Overall terminal time
    - Standard deviations
    - Exception rates
  - In yard process analytics / process break down
- Driver Experience Follow Up Survey
- Forum to share experiences
- Industry Data analytics
  - Agree on metrics to share?
  - High level terminal process statistics?