Five (5) key performance hurdles presenting potential roadblocks to cargo optimization

- Port gate congestion
- Terminal operations efficiencies
- Verified Gross Mass (VGM)
- Chassis
- Systems landscape
Q3 2016 eModal enhancements will provide mobile functionality beneficial to all port stakeholders:

- Pre-Gate capabilities
- Dispatch job management
- Fee payments
- Pickup & delivery confirmation
- Chassis provider authorization
- Empty container return instructions
- Truck/driver position tracking
- Truck queue visibility

Port Gate Congestion
Port Gate Congestion

Landside operations at most major ports are very inefficient. Lack of good benchmarks and tools to measure terminal wait times. Tools available today do not provide value to all stakeholders.

- **eModal landside optimization tools today include:**
  - Truck registries
  - Appointment/Pre-arrival
  - Online Fee payment

- **eModal has been implemented to assist major landside optimization initiatives**
  - Port of Sydney
  - Port of NYNJ – TIPS
  - Ports of LA and Long Beach - PierPASS
  - Port Metro Vancouver
  - Port of Seattle
  - Port of Virginia
Terminal Operations Efficiencies

• “PreGate” is either an appointment or pre-arrival transaction serving as a pre-qualification for the terminal visit
  ✓ Help to balance congestion in the port precinct by helping to meter truck traffic, marine terminal visits
  ✓ Enable terminals to manage delivery and receipt of cargo and optimize operational pace
  ✓ Avoidance of terminal trouble transactions with pre-validation of visit details
  ✓ Provide better visibility and communication to the trucking community, higher level of service
  ✓ Chassis provider pre-authorization

• “Expedia Model”
  ✓ In ports where a common appointment platform is a challenge, eModal can integrate with existing MTO systems to provide one, common portal for the trucking community
eModal Pre-arrival is an ideal platform for providing visibility of the VGM

- Truckers will be able to identify if VGM requirements are satisfied for upcoming terminal visit
- Allow the terminal to apply their business rules based on their VGM policy with minimal operational impact
  - Allow the terminal visit
  - Prevent the terminal visit

eModal is positioned to gather VGM information from multiple sources

- Terminals
- Shipping lines
- Third party
The major chassis paradigm shift in the US has introduced new challenges for ports and terminals.

**Gate control for chassis domiciled in the port complex**
- Prevent unauthorized use of the chassis
- Common, third party solution that supports all major chassis suppliers
- Validation at the time of appointment or pre-arrival
  - Aligns with the goals of the MTO. Pre-qualify chassis usage as part of the pre-gate transaction
  - Removes dependency on gate operations to prevent unauthorized usage and gate "clogging"

**Mobile Gate Control**
- Mobile apps for authenticated chassis authorization
Many systems performing the same functions. A consolidated platform is key.

Support for port specific programs such as:

- Port Drayage Truck Registries
- Port Community Portals
- Clean Truck Programs
- Traffic Mitigation Programs
- Terminal Gate optimization - Pre Arrivals and Appointments
- Terminal and Other Drayage fee management
- Operations Performance Monitoring
- Truck Tracking & Dispatch Management
- Inland Depot/CY Operations Management

eModal is the leader in port community systems and continues to innovate to solve cargo optimization challenges in today's port complex