



Intelligent Hinterland Integration into Ports and Logistics Hubs

May 29th, 2024

What **Ports/Hubs** Want from the Hinterland



More transactions



Flattening of the curve



Min. truck turn-around time



Less incoming trucks



Less Carbon Footprint



Better Yard Capacity

What the **Hinterland** Wants from the Ports/Hubs



High Visibility



Flexible arrival



Synchronization



Less Carbon Footprint



Min. truck turn-around time



No Waiting

What Ports/Hubs Want from the Hinterland



Hinterland Cycle

Basics

Assume "No Friction":

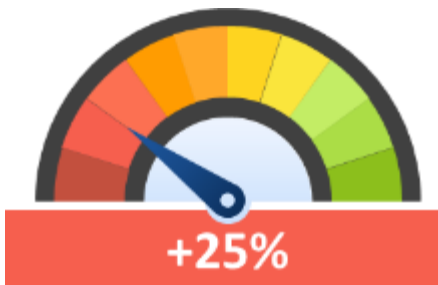
- Info before arrival of trucks
- Booking/appointment system
- Digitalize pre-gate and out-gate processes
- Install eGates, auto-Weighing
- Capacity management of everything – MAXIMIZE
- Operate at max efficiency ... all the time

Friction is:

- Teamsters
- Labor Unions
- Trucking unions
- Equipment shifting
- Equipment maintenance
- Traffic outside the port
- Capacity Management at adjacent ports

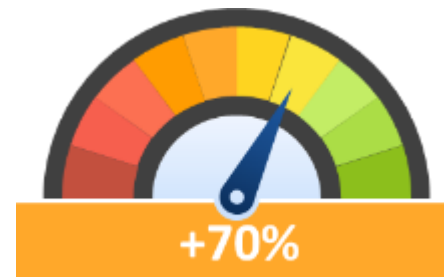
Hinterland Cycle Efficiency by Mode

Maximize Port/Hub Capacity



Standard Booking

- Operate at your own risk of congestion
- Deal with truck waiting times, outside the port
- High truck dwell times
- More delay at the gate
- Slow port gates
- Negative environmental effect
- Higher hinterland transport costs



Truck Appointment

- Digitalizes a wide part of the Hinterland cycle
- Very small Infrastructure investment
- Prone to port Friction
- Pre-determined capacity = max capacity
- Open slots are lost capacity
- Data analytics yield negligible enhancement
- Port specific, negative optimization of Logistics for multiple ports in one zone



Scheduling Appt System

- Step up from the Appointment System
- Mutes Friction effects
- Operate at max capacity, or even higher
- Apply Data analytics to reach extreme optimization
- Close coupling with Yard and Berth cycles
- Requires minor infrastructure investment
- Can be a Port Authority project to add an extra layer of logistics optimization

Nfident iGates

for Logistics Hubs



Click to PLAY video

Tools & Technology

IoT, D/L, Edge Tech



eSeals
Secure Cargo on the Move



eID Cards
Long Range For Truck drivers and Access Mgmt



Truck eID
Secure RFID tags, Trailer/Chassis eSeals



Deep Vision
Deep Learning Edge Technology for Traffic Sensing



Weigh In Motion
Axle Load Mgmt, Advanced Vehicle Sensing



Internet of Things
Continuous Development into the Future

Tools & Technology

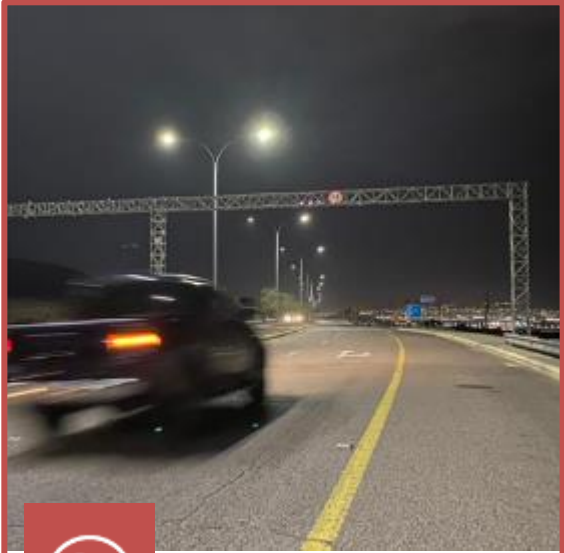
IoT, D/L, Edge Tech






iGates
Centrally controlled

iGates are manufactured and delivered by NFIDENT, a wholly owned factory/subsidiary of Nafith






iPortals
Sense everything


iPortals Categorize vehicles, streamlined monitoring, using Deep Learning/Vision






CC Centers
Control & Monitor

Command and Controls Center that covers all logistics events and interventions





Logistics Systems
NFlow, NCheck, NStar

Platforms are web, mobile, GIS, Data Analytics, Dashboards, accessible within a centralized entry point

Thank You
Please visit our Booth!

NFident

Live the experience in a
Virtual Reality Tour of
NFident iGates

