



LDB ANALYTICS : May'18 Report



The current report highlights the performance of the stakeholders for the month of **May 2018**.

- The port performance of JNPT Port region for the month of May 2018 , saw a decrease by approximately 21% in comparison to the performance in April 2018 , primarily due to the below reasons:
 - Import dwell time performance of JNPT port region saw a decline by 41% in month of May'18 in comparison to previous month.
 - Dwell time for Truck bound container movement during the Import cycle of JNPT port region increased by 39% in comparison to April 2018.
- GTI terminal in JNPT is the best performing terminal across western corridor with overall dwell time of 52.9 hrs
- There was a increase in the Lead time between Port and NCR region ICD by 15% for the month of May'18.



Container Movement around JNPT region

Container Lifecycle (Import Cycle)

IMPORT

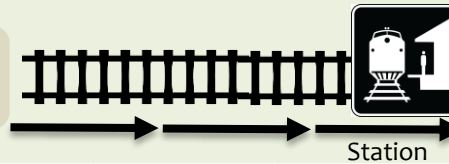
Port



Mode	May'18 (Import Cycle) Dwell Time	April'18 (Import Cycle) Dwell Time
Overall	51.80 hrs	33.8 hrs.
Truck	47.58 hrs	30.7 hrs.
Train	87.88 hrs	72.1 hrs.

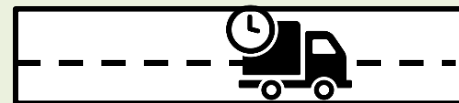
Transit

Toward
ICD



Transit Cycle	May'18 Transit Time	April'18 Transit Time
Port to ICD	71.20 hrs	70.9 hrs.
Port to CFS	2.37 hrs	2.39 hrs.

Toward
CFS



CFS/ICD



ICD



CFS

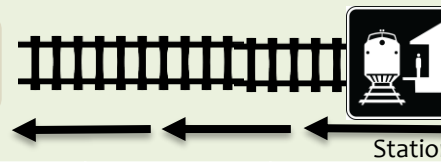
LCO	May'18 Dwell Time	April'18 Dwell Time
CFS	80.69 hrs	83.8 hrs.
ICD	141.07 hrs	130.9 hrs.

EXPORT



Mode	May'18 (Export Cycle) Dwell Time	April'18 (Export Cycle) Dwell Time
Overall	69.28 hrs	70.4 hrs.
Truck	66.56 hrs	67.4 hrs.
Train	103.7 Hrs	112.8 hrs.

From
ICD



Transit Cycle	May'18 Transit Time	April'18 Transit Time
ICD to Port	67.84 hrs	70.2 hrs.
CFS to Port	4.04 hrs	5.36 hrs.

From
CFS



Container Lifecycle (Export Cycle)

The marked entries showcase the increase in performance as compare to previous month

The marked entries showcase the decrease in performance as compare to previous month



Export/Import Cycle Container Movement around JNPT region

IMPORT CYCLE DWELL TIME (May'18)

PORT DWELL TIME	<i>Overall Dwell Time For Train & Truck Bound Containers</i>	51.80 hrs
	<i>Train bound Container</i>	87.88 hrs
	<i>Truck Bound Container (DPD + CFS/ICD)</i>	47.58 hrs
	• Direct Port Delivery Containers	51.56 hrs
	• CFS/ICD bound Containers	50.78 hrs
TRANSIT TIME	<i>Port to ICD</i>	71.20 hrs
	<i>Port to CFS</i>	2.37 hrs
LCO DWELL TIME	<i>CFS DWELL TIME</i>	80.69 hrs
	<i>ICD DWELL TIME</i>	141.07 hrs

EXPORT CYCLE DWELL TIME (May'18)

PORT DWELL TIME	<i>Overall Dwell Time For Train & Truck Bound Containers</i>	69.28 hrs
	<i>Train bound Container</i>	103.7 Hrs
	<i>Truck Bound Container (DPD + CFS/ICD)</i>	66.56 hrs
	• Direct Port Delivery Containers	64.35 hrs
	• CFS/ICD bound Containers	70.47 hrs
TRANSIT TIME	<i>ICD TO Port Terminals</i>	67.84
	<i>CFS TO Port Terminals</i>	4.04 hrs
LCO DWELL TIME	<i>CFS DWELL TIME</i>	80.69 hrs
	<i>ICD DWELL TIME</i>	141.07 hrs



JNPT region Port Performance

The below tables depicts the detailed JNPT region port performance in the month of May'18

IMPORT

Port Dwell time based on transit type

May'18	Direct Port Delivery containers	Containers bounds for CFS/ICD
Volume	5 %	95 %
Dwell time	51.56 hrs	50.78 hrs

Port Dwell time based on container type

May'18	Laden Containers	Empty Containers
Volume	90 %	10 %
Dwell time	49.91 hrs	60.22 hrs

EXPORT

Port Dwell time based on transit type

May'18	Direct Port Export containers	Containers bounds for CFS/ICD
Volume	25 %	75 %
Dwell time	64.35 hrs	70.47 hrs

Port Dwell time based on container type

May'18	Laden Containers	Empty Containers
Volume	76 %	24 %
Dwell time	66.82 hrs	74.18 hrs





Performance Benchmarking based on Dwell time - Port Terminals



Performance benchmarking for Western Corridor for May'18

Top Performing Terminal

GTI

Dwell Time : **52.9 hrs.**

Low Performing Terminal

AICT

Dwell Time : **75.8 hrs.**

*AICT was the low performing terminal last month also, however it has improved its performance by 14%

Performance Index – Port Terminals

In order to assess the relative performance Port, Container Freight Station and Inland Container Depot ,the relative dwell time as well as the volume of containers handled by them are depicted graphically in the form of an index to portray the performance of a particular organisation on the basis of these two combined factors.

The figure depicts the Frequency Index i.e. volume by dwell time performance for Port terminals covered under LDB for May'18. The Quadrant II represents the high performing ports with high frequency Index i.e. high container volume at lower dwell time

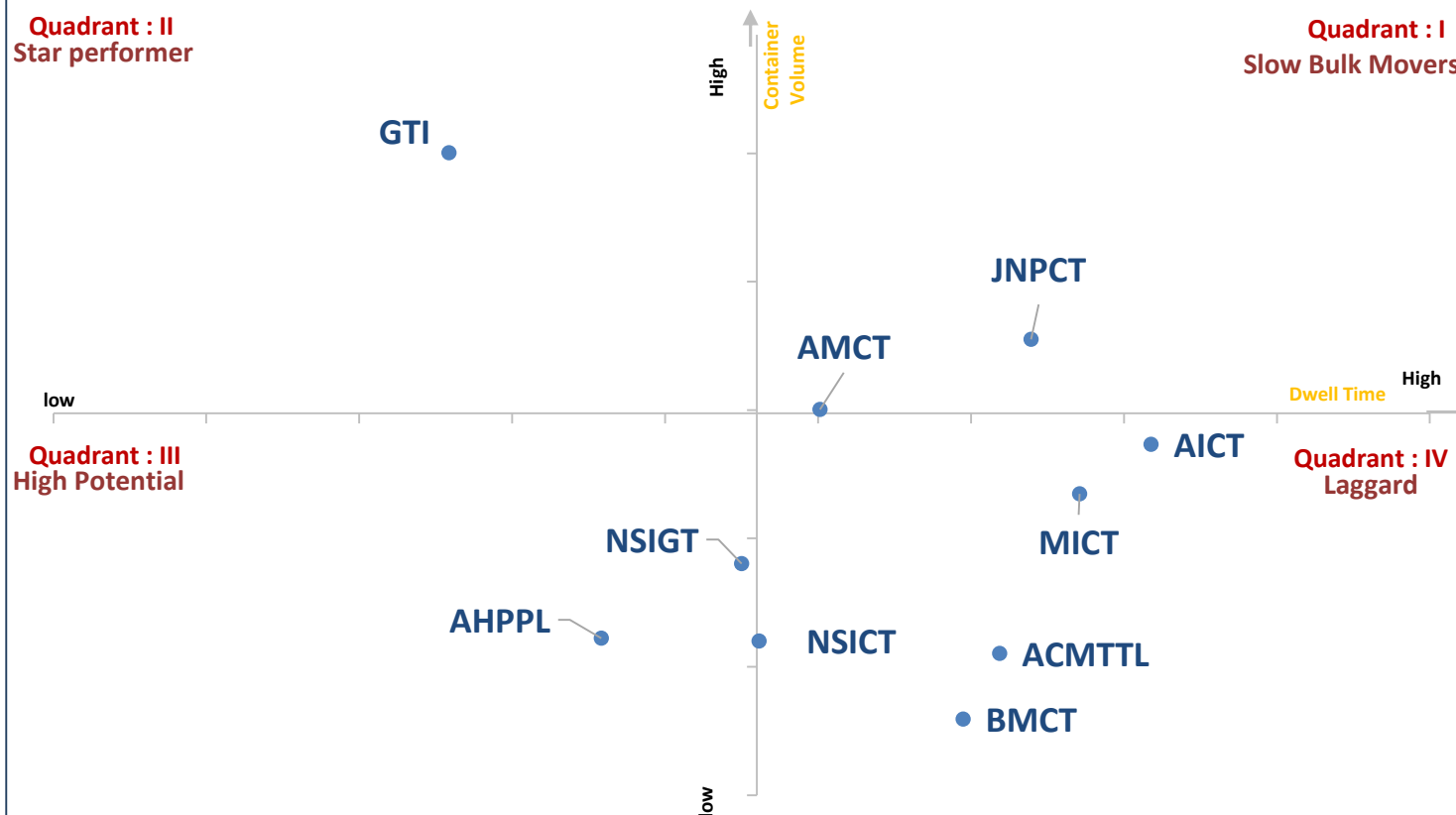
Slow Bulk Movers : consist of Ports which have catered higher container volume at higher dwell time

Star Performer: consist of Ports which have catered relatively high container volume in lower dwell time

High Potential : consist of Ports which have catered relatively lower container volume in lower dwell time

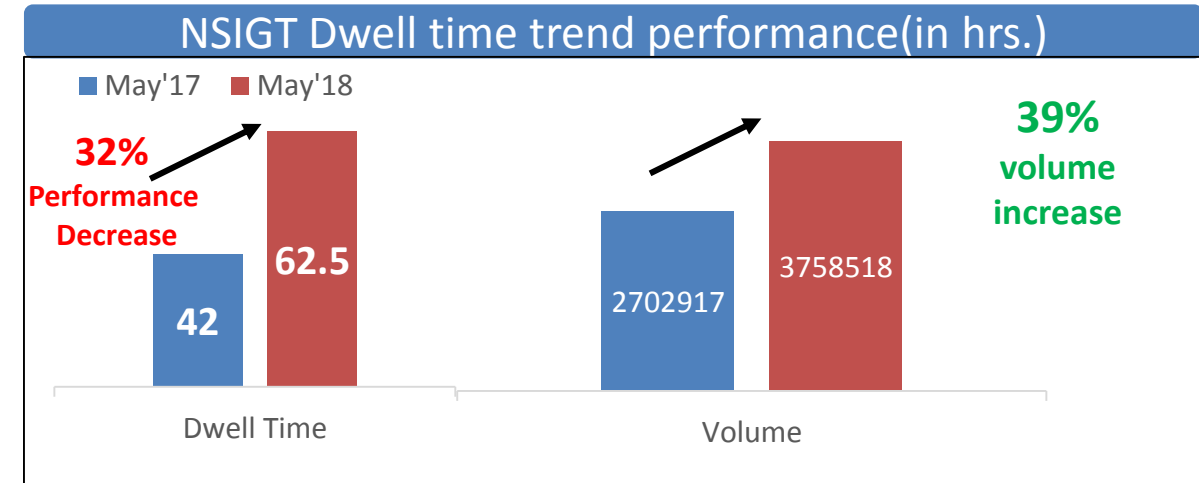
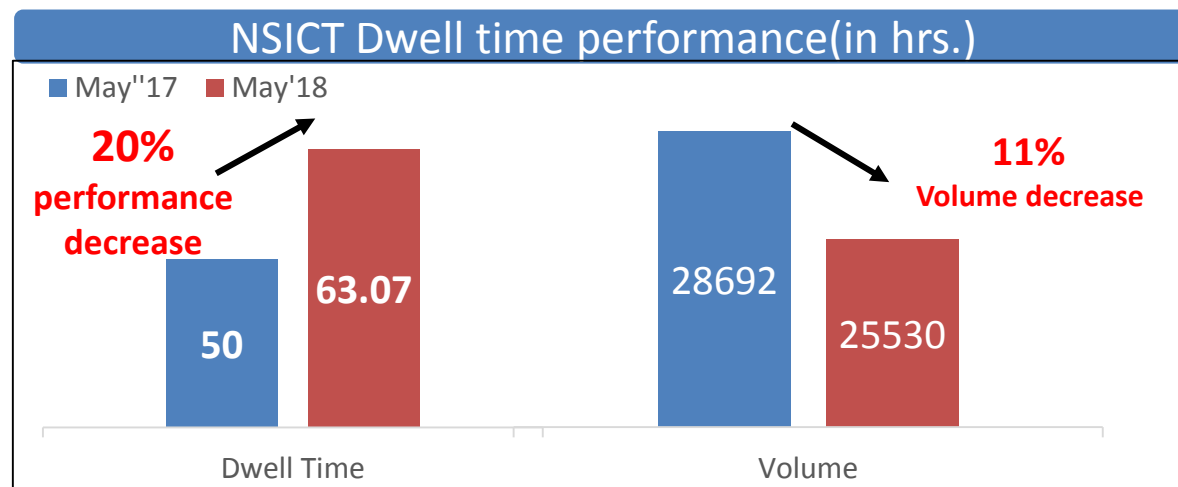
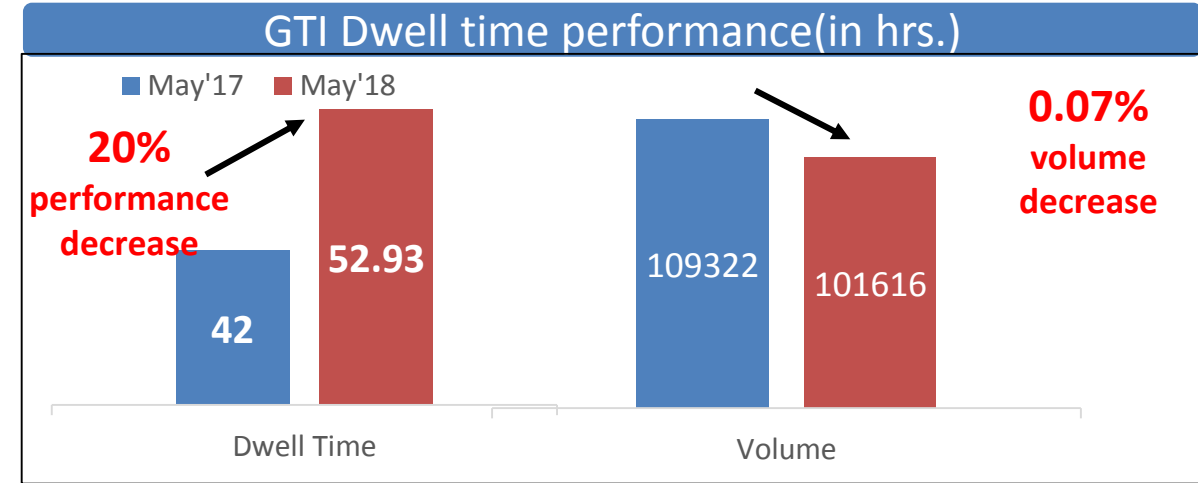
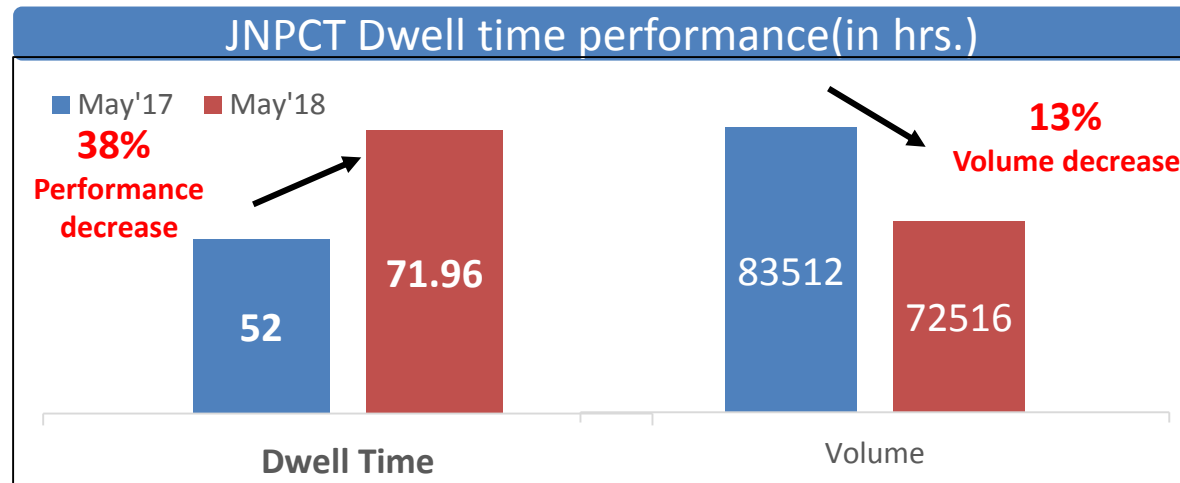
Laggard : consist of Ports which have catered relatively lower container volume at higher dwell time

Port Terminal Performance Index : May18



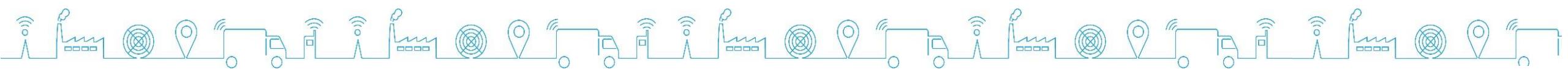
JNPT Port terminals performance(Year-on-Year)

The below graphs display the Year-on-Year overall dwell time performance and volume across the JNPT Port terminals for May'17 and May'18.



Dwell time for all terminal has been increased from previous year(may'17) although the volume handled by all terminals expect NSIGT is lesser than the previous year





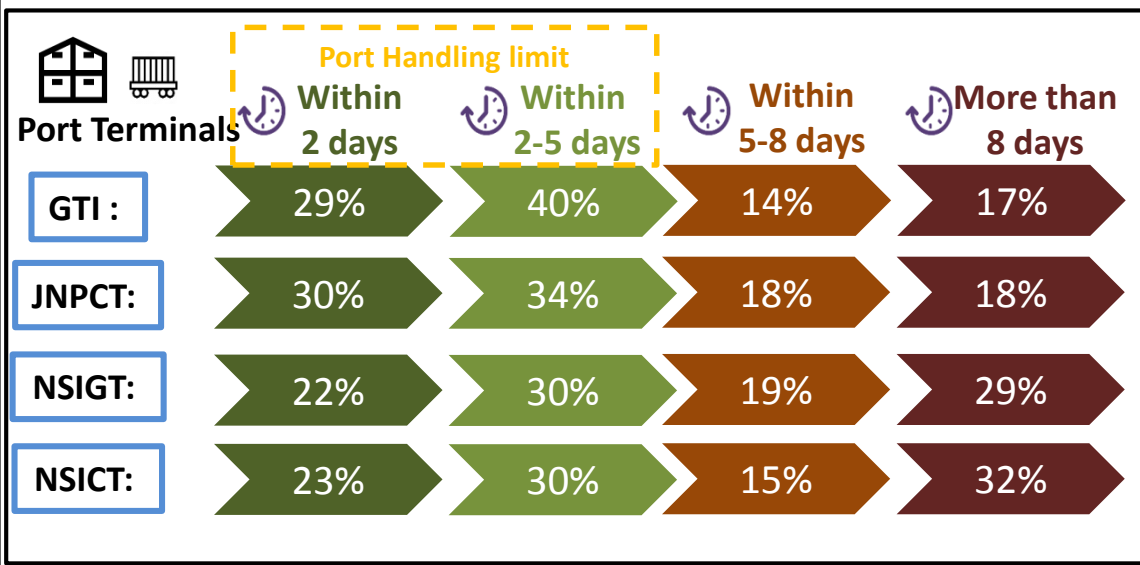
Port performance Import Cycle : JNPT region

PORT IMPORT via TRAIN

The Port Dwell time data for train movement in import cycle is depicted below. Port dwell time is the time duration between the entry of the container in Port terminal to the time it moves out of the Port terminal

Port	Apr'18 (in Hrs)	May'18 (in Hrs)
GTI	62.05	82.91
JNPCT	62.68	77.98
NSIGT	86.49	114.91
NSICT	115.22	113.78
BMCT	-	91.59

PORT IMPORT via TRAIN

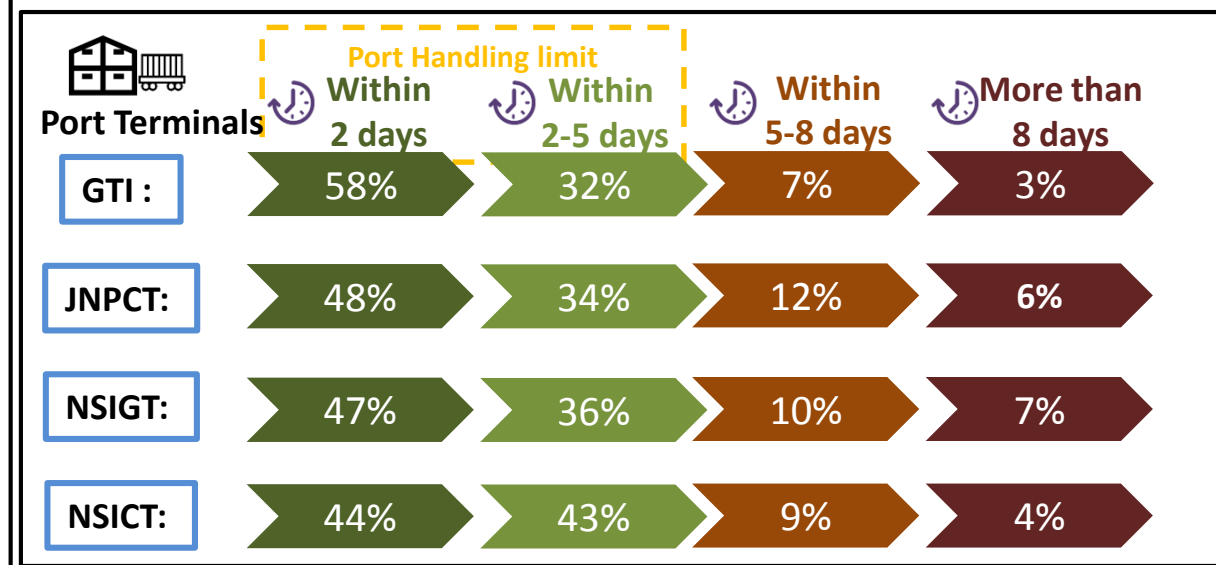


PORT IMPORT via TRUCK

The Port Dwell time data for Truck movement in import cycle is depicted below. Port dwell time is the time duration between the entry of the container in Port terminal to the time it moves out of the Port terminal

Port	Apr'18 (in Hrs)	May'18 (in Hrs)
GTI	26.4	40.18
JNPCT	30.7	50.80
NSICT	42.5	51.23
NSIGT	32.2	53.83
BMCT	-	60.64

PORT IMPORT via TRUCK



JNPT region Port Performance Import Cycle

The below tables depicts the detailed JNPT region port performance in the month of May'18

JNPCT

Port Dwell time based on transit type		
May'18	Direct Port Delivery containers	Containers bounds for CFS/ICD
Volume	2155	37787
Dwell time (in hrs)	36.45	56.48
Port Dwell time based on container type		
May'18	Laden Containers	Empty Containers
Volume	34669	5271
Dwell time	54.31	52.43

GTI

Port Dwell time based on transit type		
May'18	Direct Port Delivery containers	Containers bounds for CFS/ICD
Volume	4755	51862
Dwell time	67.55	43.49
Port Dwell time based on container type		
May'18	Laden Containers	Empty Containers
Volume	51439	5176
Dwell time	43.54	67.3



JNPT region Port Performance Import Cycle

The below tables depicts the detailed JNPT region port performance in the month of May'18

NSICT

Port Dwell time based on transit type

May'18	Direct Port Delivery containers	Containers bounds for CFS/ICD
Volume	9615	1554
Dwell time	55.3	98.12

Port Dwell time based on container type

May'18	Laden Containers	Empty Containers
Volume	738	10421
Dwell time	60.78	58

NSIGT

Port Dwell time based on transit type

May'18	Direct Port Delivery containers	Containers bounds for CFS/ICD
Volume	0	21721
Dwell time	-	56.93

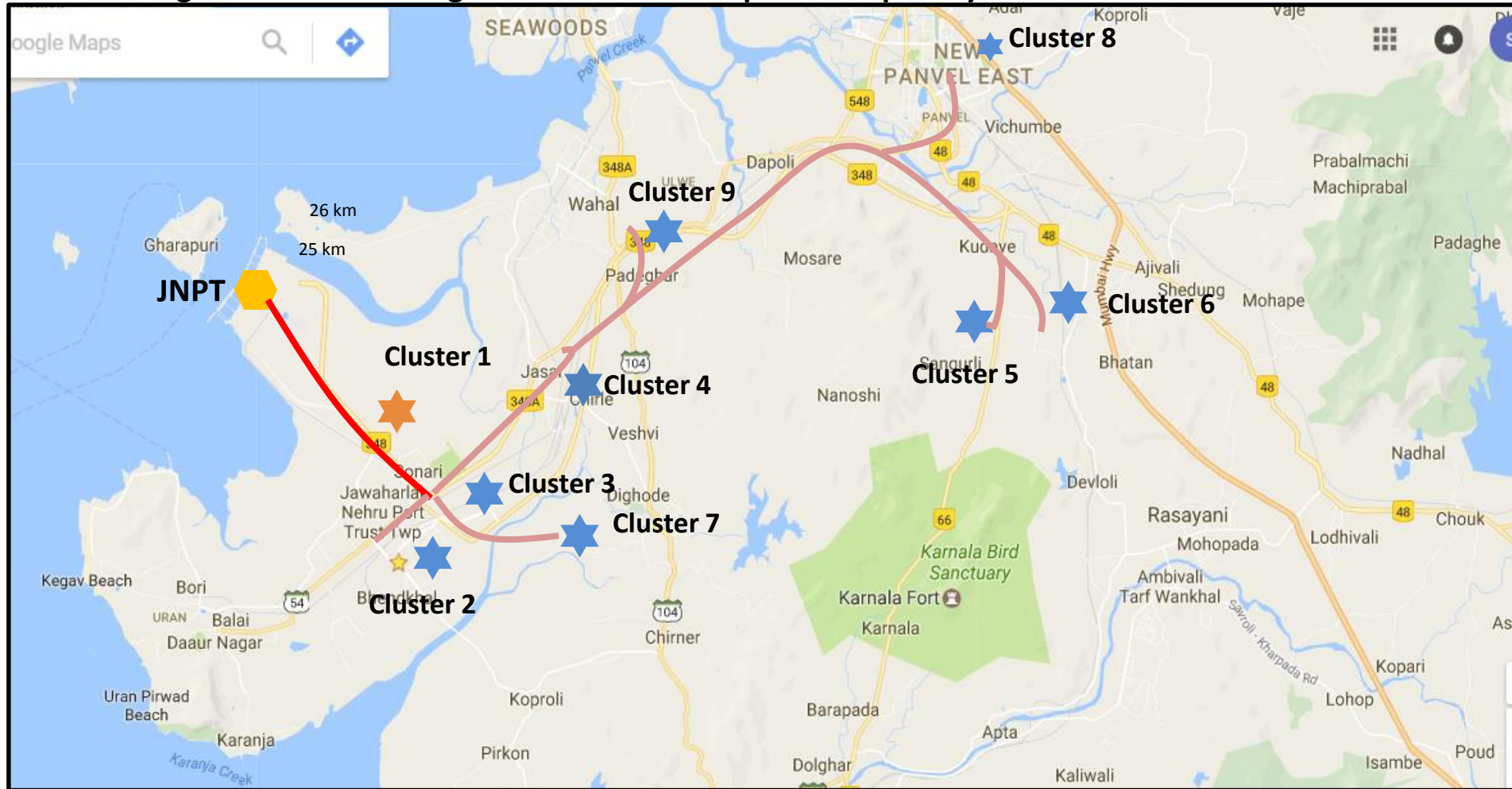
Port Dwell time based on container type

May'18	Laden Containers	Empty Containers
Volume	20388	1331
Dwell time	57.9	47.8



JNPT TRANSIT TIME: CONGESTION ANALYSIS

The below figure shows the congestion around JNPT port in Import cycle



Cluster 1	Cluster 2
JNPT Area	Bhendkhal area, Khopate road
Cluster 3	Cluster 4
Sonari area, JNPT road	Chirle area, JNPT road
Cluster 5	Cluster 6
Plaspa area, Coachi kanyakumari Highway	Salva apta rd area, Bangalore highway
Cluster 7	Cluster 8
Patilpada area, Khopate JNPT road	Taloja, Navi Mumbai
Cluster 9	
Padhegar area	

Note : Please find the respective CFS in each cluster in annexure section

GTI Terminal	JNPCT Terminal	NSICT Terminal	NSIGT Terminal
Congestion Level	Congestion Level	Congestion Level	Congestion Level
Import Cycle :-	Import Cycle :-	Import Cycle :-	Import Cycle :-

Note : Congestion is measured w.r.t actual time taken to cover the respective distance between clusters and terminals

Legends	
	High Congestion
	Medium Congestion
	Low Congestion
	Cluster with bottleneck
	Cluster without bottleneck



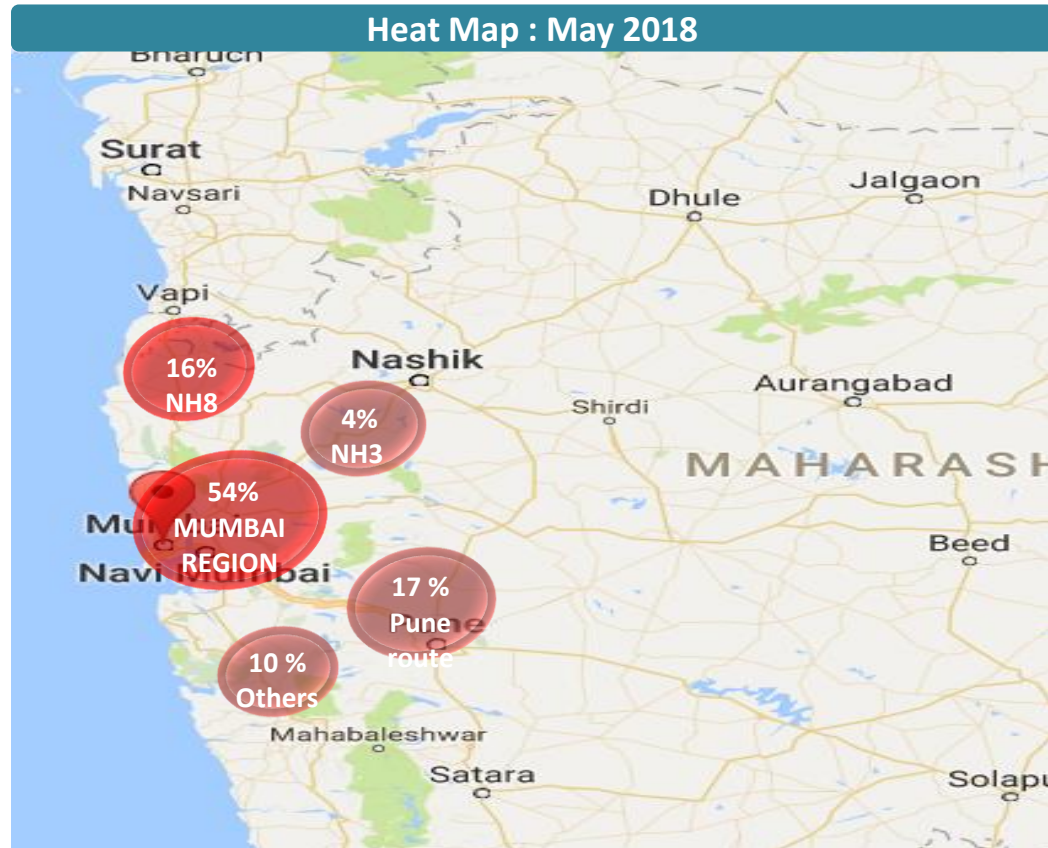
JNPT TRANSIT TIME: Container Movement

Via Truck

HEAT MAP : OVERALL MUMBAI REGION

Region	Transit Time- May '18
Mumbai Region	54%
NH1	16%
NH3	3%
Pune Route	17%
Others	10%

The figure depicts the movement of containers via truck in and around Mumbai region.

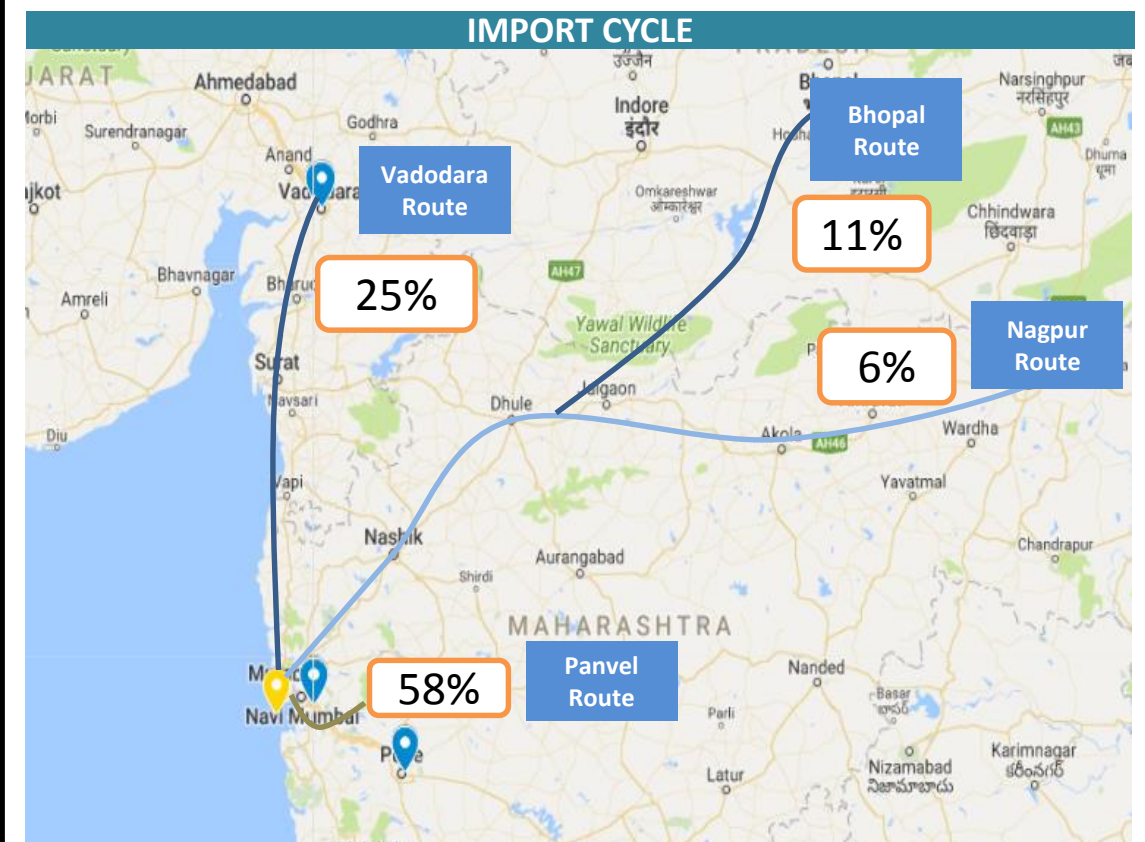


via Train

VOLUME WISE CONTAINER MOVEMENT

Region	Transit Time- May '18
Vadadora Route	25%
Bhopal Route	11%
Nagpur Route	6%
Panvel Route	58%

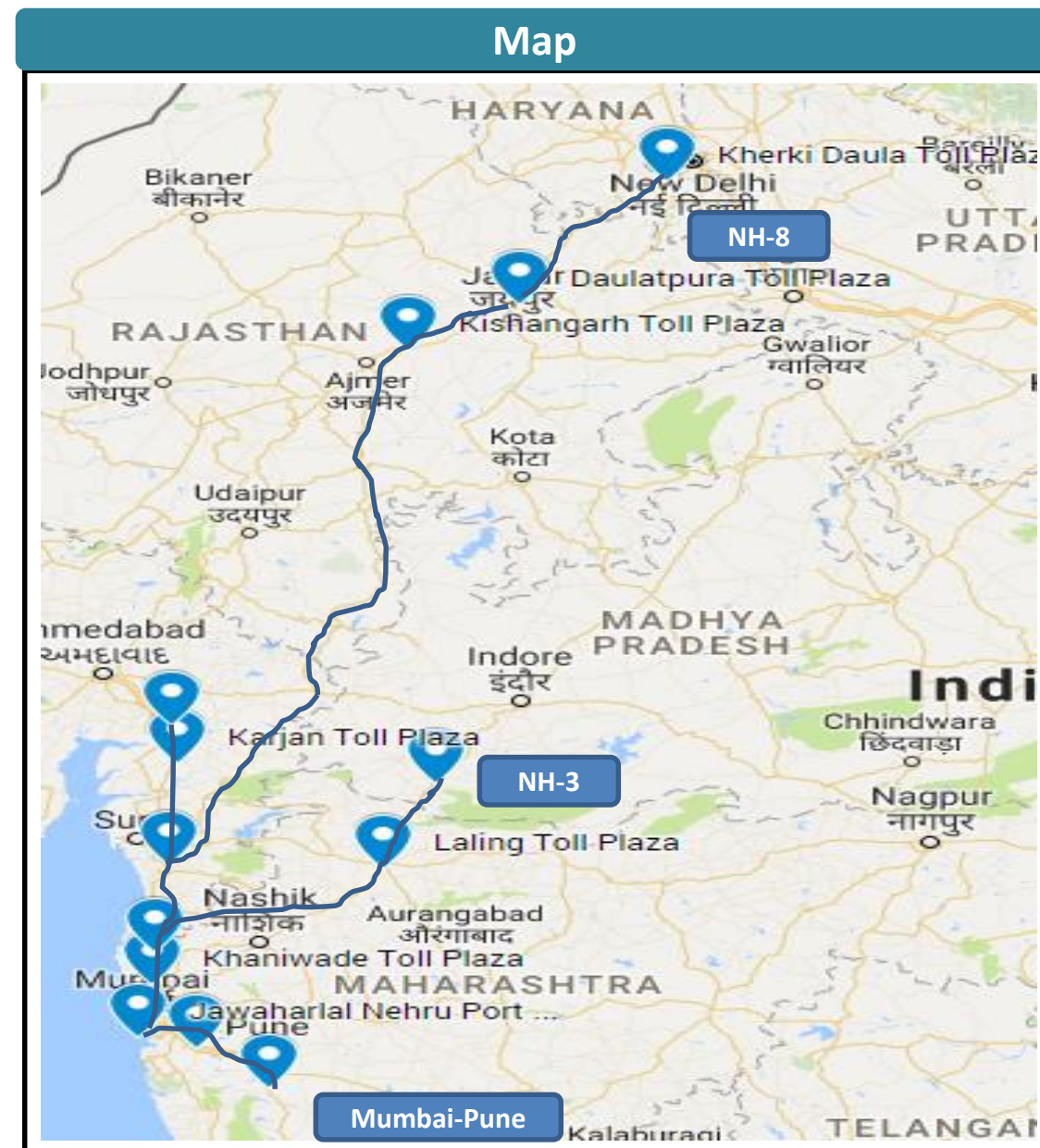
The map shows the volume wise container movement through different railway routes in import cycle for **May '18**



JNPT TRANSIT TIME: Toll Plaza Congestion Analysis

The below table shows all the toll plazas covered under DLDS connected with JNPT

Avg. Travel Time & Speed between Toll Plazas (May'18)					
Source	Destination Toll Plaza	Inter Distance (Km)	Avg. Travel Time (Hr)	May'18 Avg. Speed (Km/Hr.)	Apr'18 Avg. Speed (Km/Hr.)
JNPT	Khaniwade	94	7.3	13.3	12.7
JNPT	Khalapur	60	4.1	18.5	13.6
Khaniwade	Charoti	50	1.30	24.9	35.6
Charoti	Boriach	126	4.60	20.3	23.7
Boriach	Bharthan	142	4.30	31.6	31.8
Bharthan	Vasad	60	1.53	38.4	38.2
Kishangarh	Daulatpura	128	3.10	36.7	36.7
Khalapur	Khedshivpur	105	3.7	28.6	28.5
Daulatpura	Kherki	199	8.8	24.0	22.7



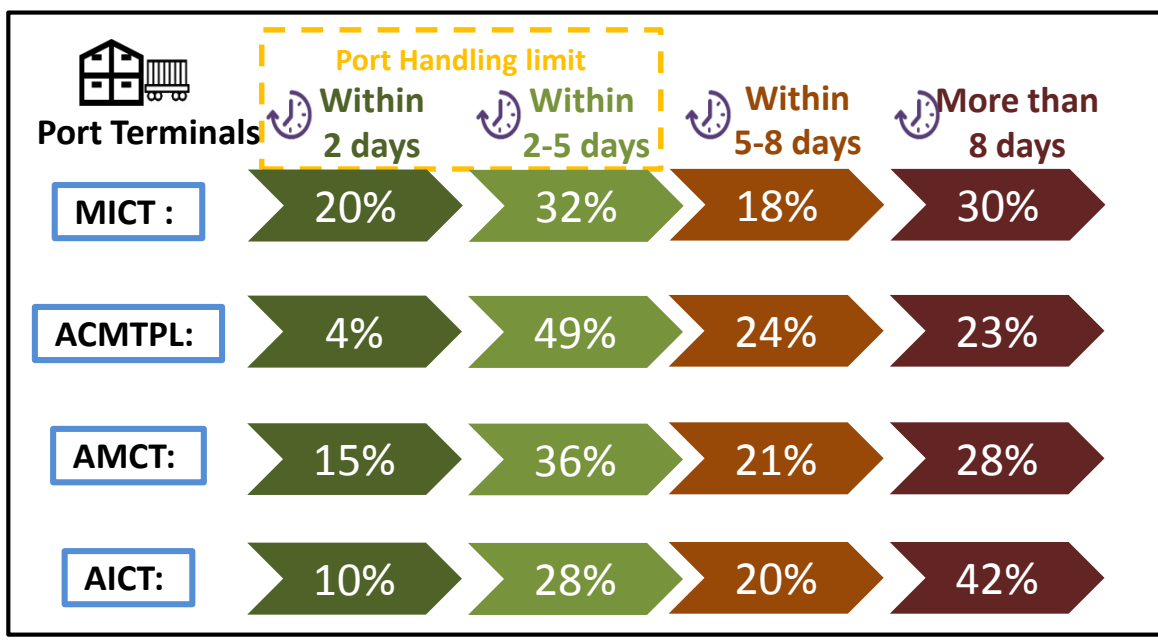
APSEZ PORT DWELL TIME ANALYSIS : IMPORT CYCLE

PORT IMPORT via TRAIN

The Port Dwell time data for train movement in import cycle is depicted below. Port dwell time is the time duration between the entry of the container in Port terminal to the time it moves out of the Port terminal

Port	Apr'18 (in Hrs)	May'18 (in Hrs)
MICT	72.46	117.24
ACMTPL	71.70	116.46
AMCT	73.58	119.28
AICT	115.21	145.10

PORT IMPORT via TRAIN

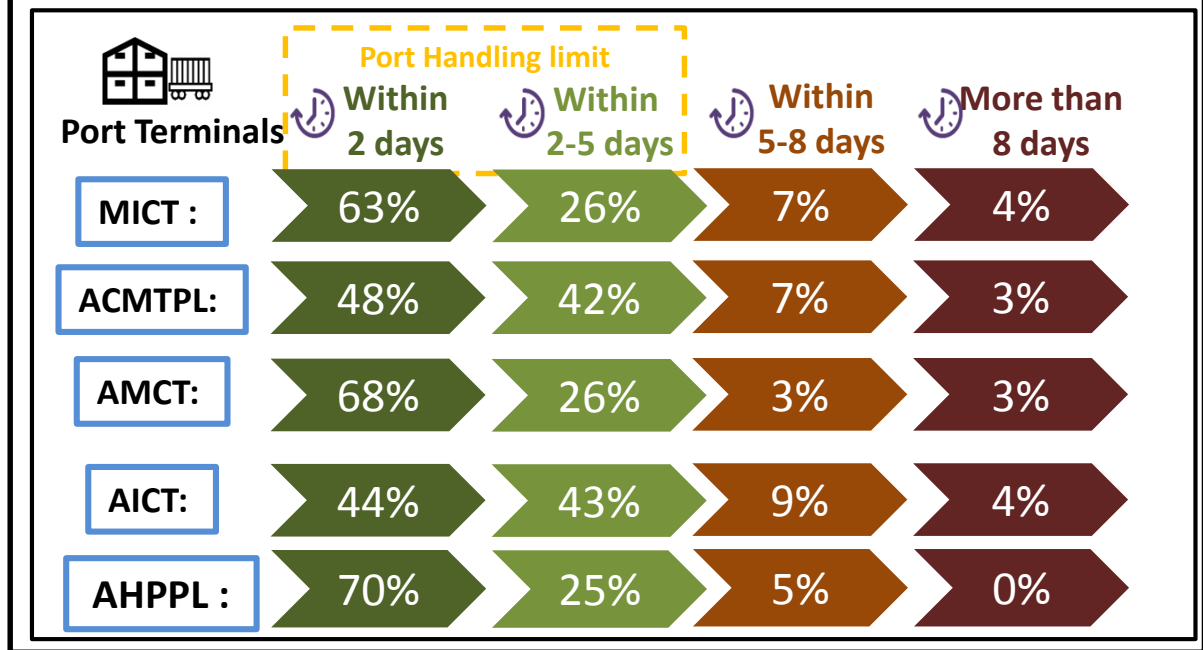


PORT IMPORT via TRUCK

The Port Dwell time data for Truck movement in import cycle is depicted below. Port dwell time is the time duration between the entry of the container in Port terminal to the time it moves out of the Port terminal

Port	Apr'18 (in Hrs)	May'18 (in Hrs)
MICT	28.58	35.88
ACMTPL	36.19	49.58
AMCT	29.54	33.01
AICT	46.16	53.43
AHPPL	25.75	30.89

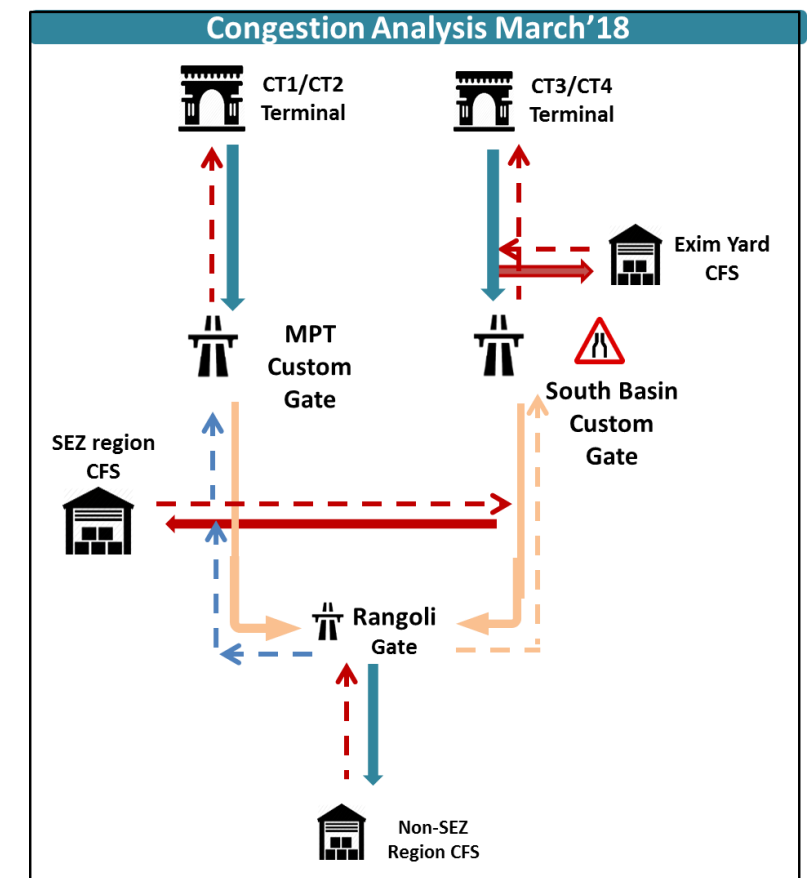
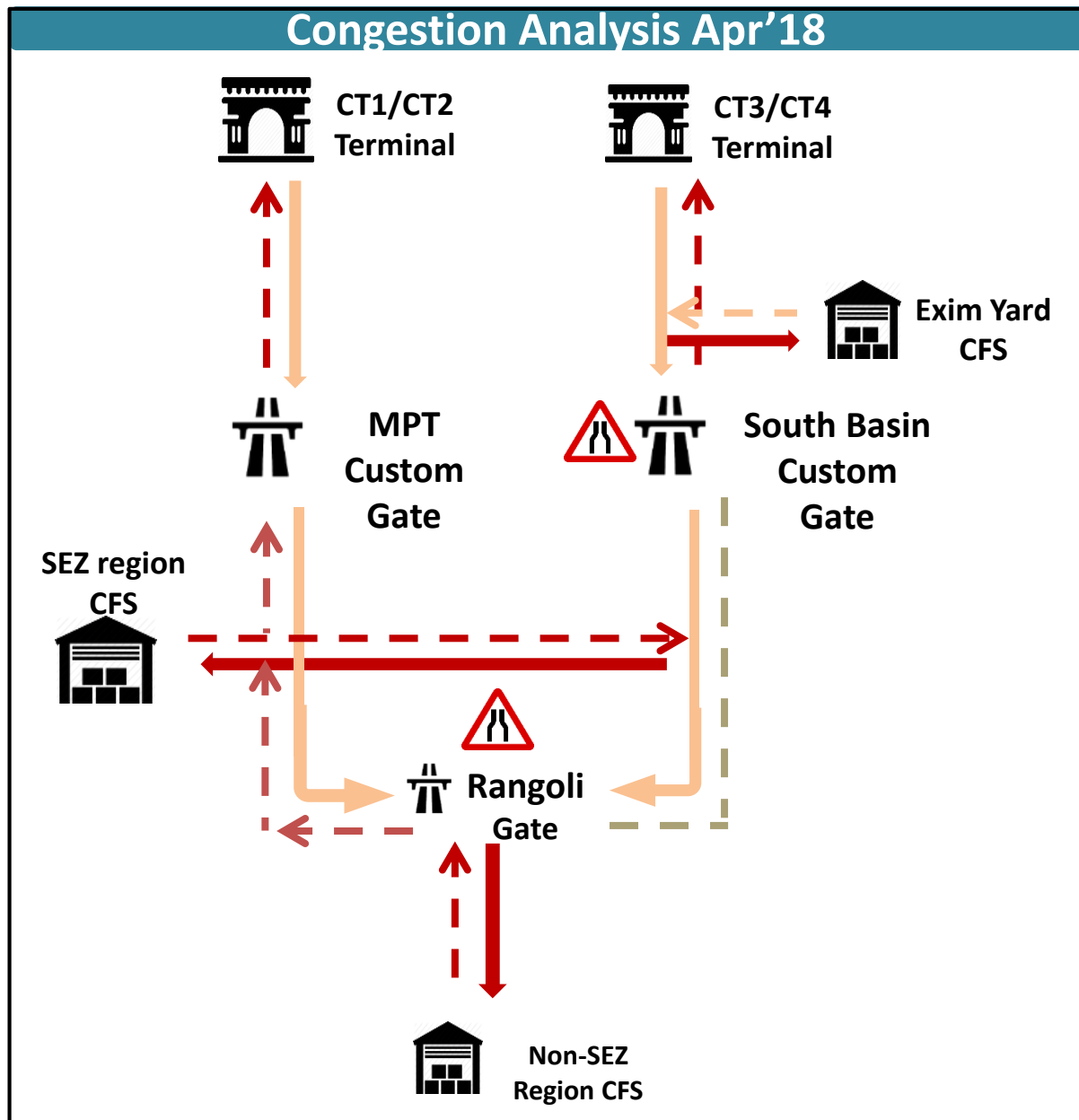
PORT IMPORT via TRUCK



APSEZ MUNDRA Region : Congestion Analysis

Custom Gate and Rangoli Gate Analysis

The congestion scenario at custom gate and rangoli gate at Mundra region is shown.



legend

- Import Cycle
- - Export Cycle
- High Congestion
- Medium Congestion
- Low Congestion
- ⚠ Excessive bottleneck

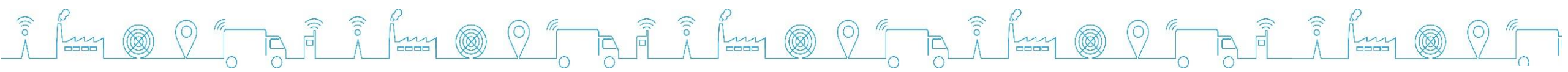
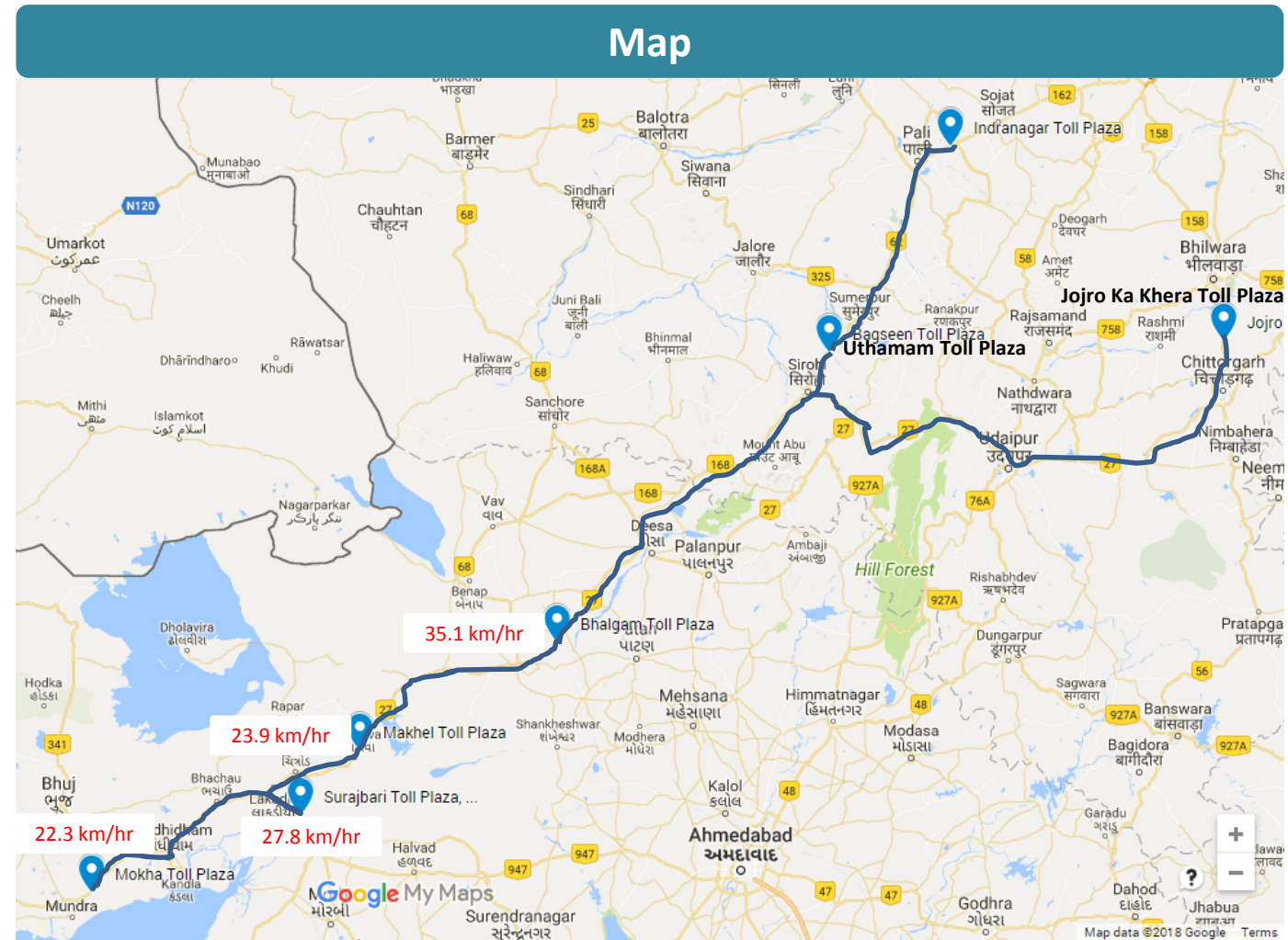


APSEZ MUNDRA Region : Toll Plaza Congestion Analysis

The below table shows all the toll plazas covered under DLDS in **Mundra region**.

Avg. Travel Time & Speed between Toll Plazas (May'18)

Source	Destination Toll Plaza	Inter Distance (Km)	Avg. Travel Time (Hr)	Avg. Speed May'18 (Km/Hr.)	Avg. Speed Apr'18 (Km/Hr.)
MICT	Mokha	28	1.3	22.3	22.3
Mokha	Makhel	150	6.1	23.9	24.5
Mokha	Surajbari	115	4.2	27.8	27.5
Makhel	Bhalgam	108	2.9	35.1	37.2
Bhalgam	Uthamam	209	6.9	-	30.3
Uthamam	Indranagar	109	3.1	-	35.6

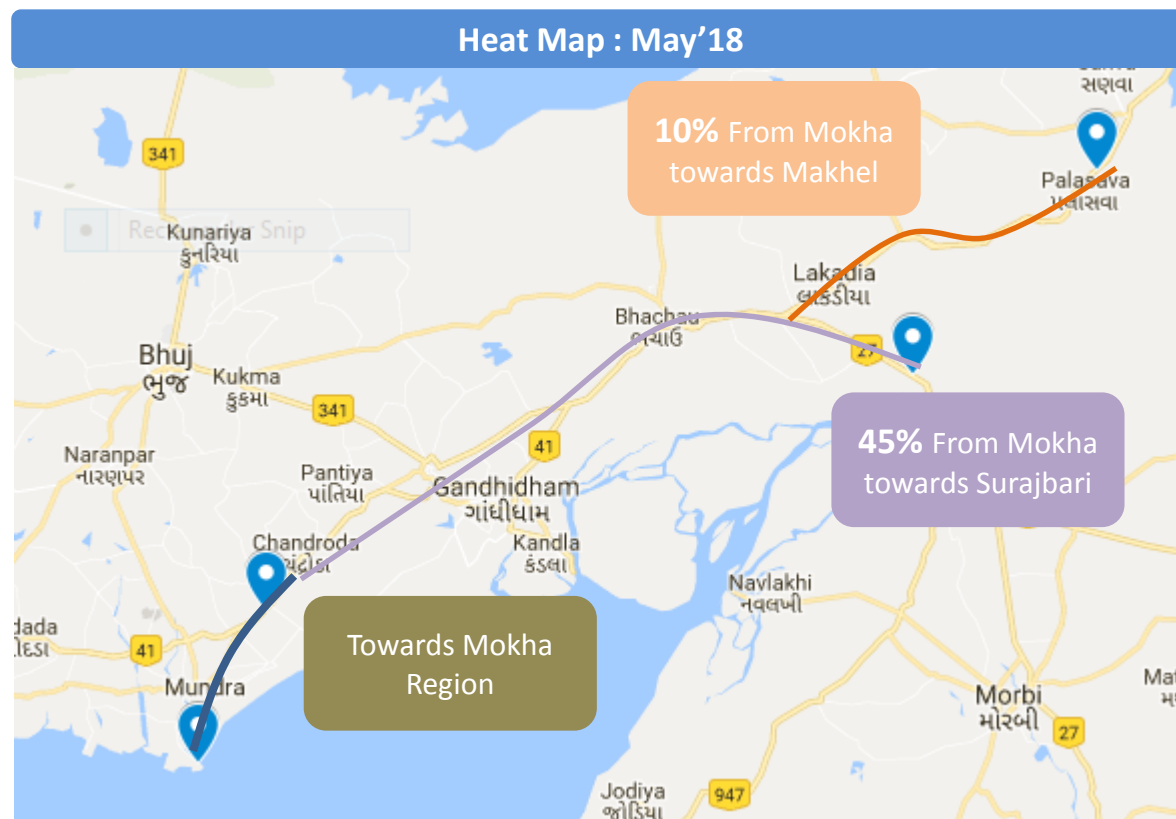


APSEZ MUNDRA Region : Container Movement via Truck

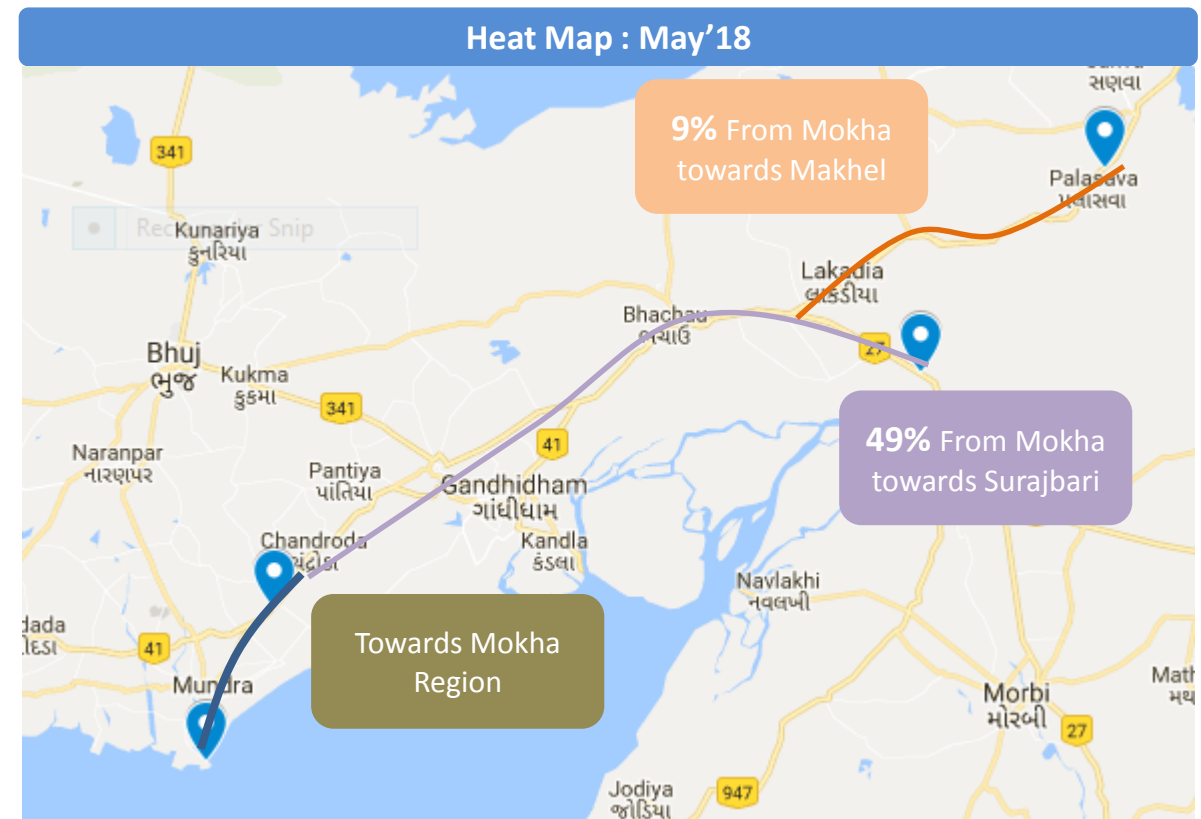
The below graphs display the container traffic bifurcation from Mundra region towards Mokha and Surajbari routes for overall Mundra region and South Basin Custom Gate

HEAT MAP : Overall Mundra Region

i.e. all 4 terminals at Mundra port region i.e. MICT, AICT, AMCT, AHPTL



HEAT MAP : South Basin Custom Gate



From Mokha towards		
Region	April'18	May'18
Surajbari	45%	48%
Makhel	10%	6%

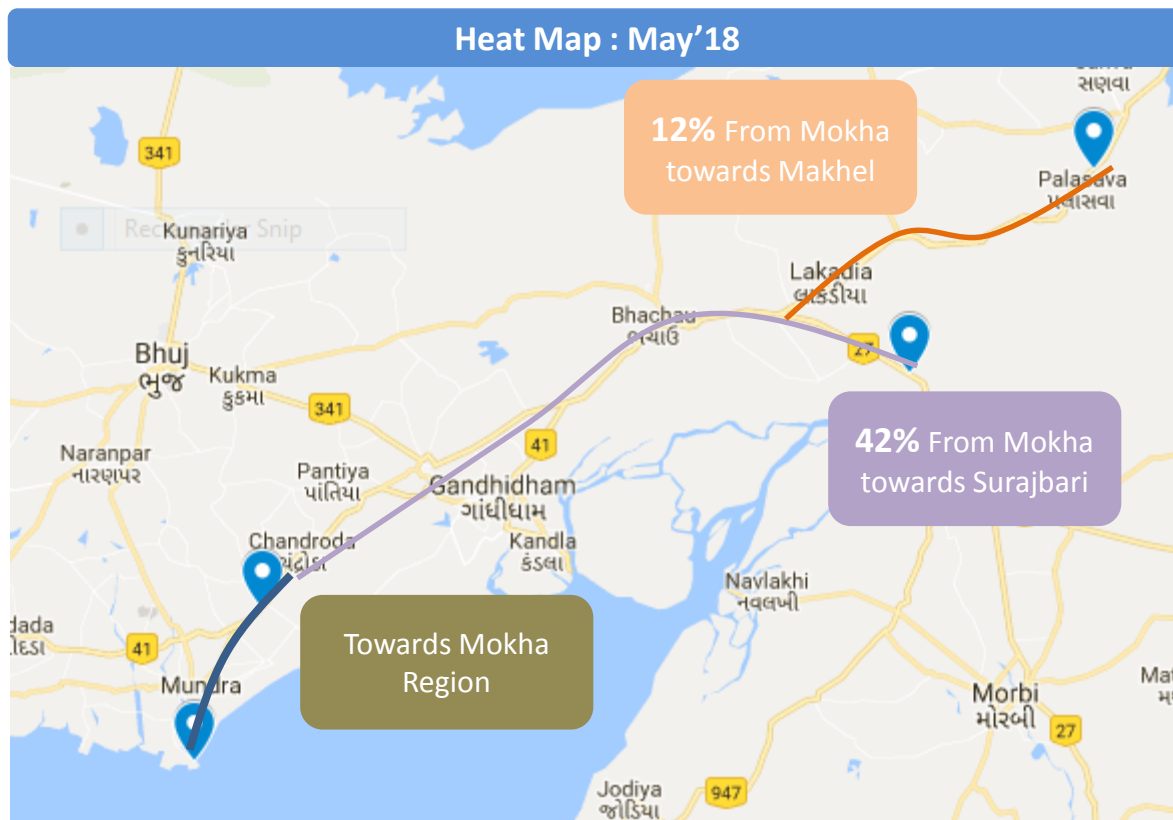
From Mokha towards		
Region	April'18	May'18
Surajbari	49%	54%
Makhel	9%	4%



APSEZ MUNDRA Region : Container Movement via Truck

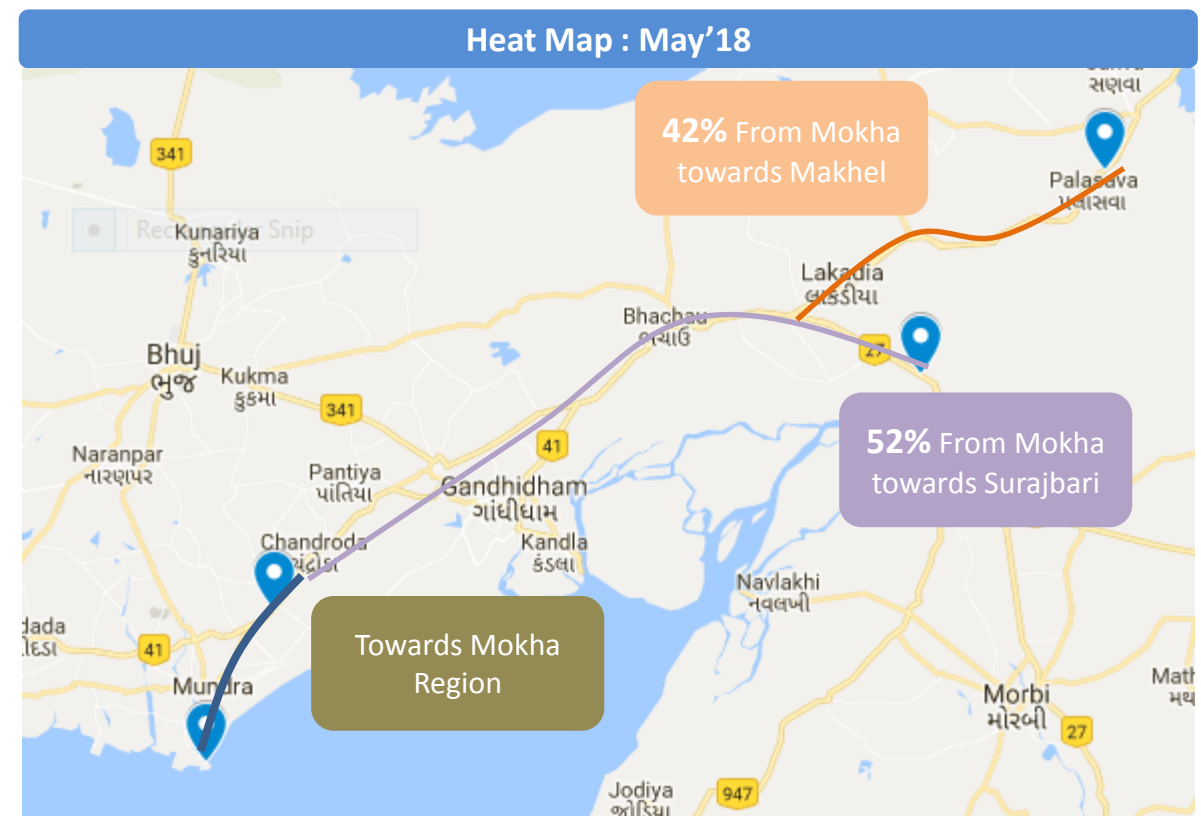
The below graphs display the container traffic bifurcation from Mundra region towards Mokha and Surajbari routes for overall MPT Custom gate and APSEZ Region

HEAT MAP : MPT Custom Gate



HEAT MAP : APSEZ Region

i.e. only Adani port terminals at Mundra port region i.e. AICT, AMCT, AHPTL



From Mokha towards		
Region	April'18	May'18
Surajbari	42%	38%
Makhel	12%	7%

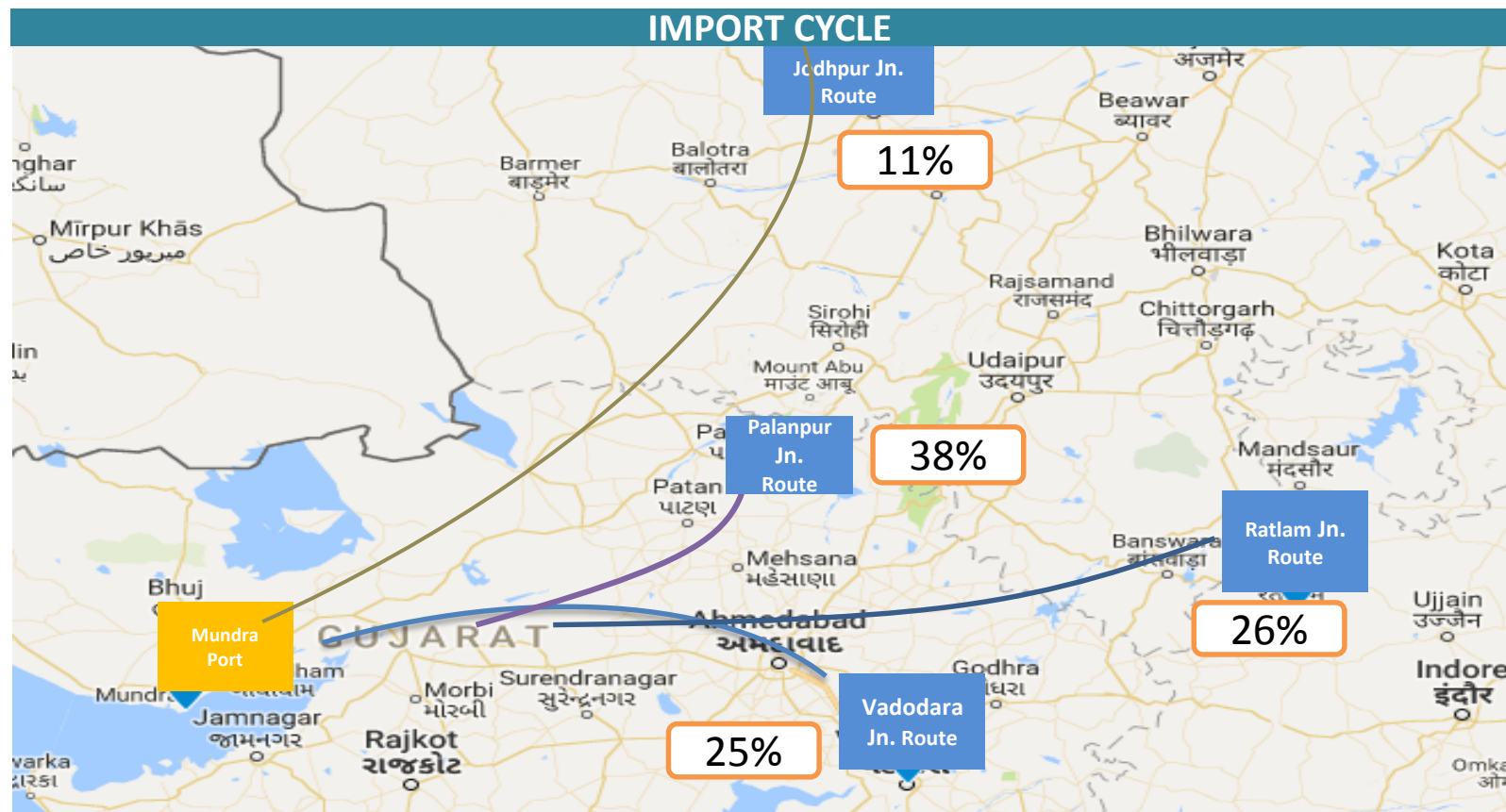
From Mokha towards		
Region	April'18	May'18
Surajbari	52%	37%
Makhel	42%	33%



APSEZ MUNDRA Region : Container Movement via Train

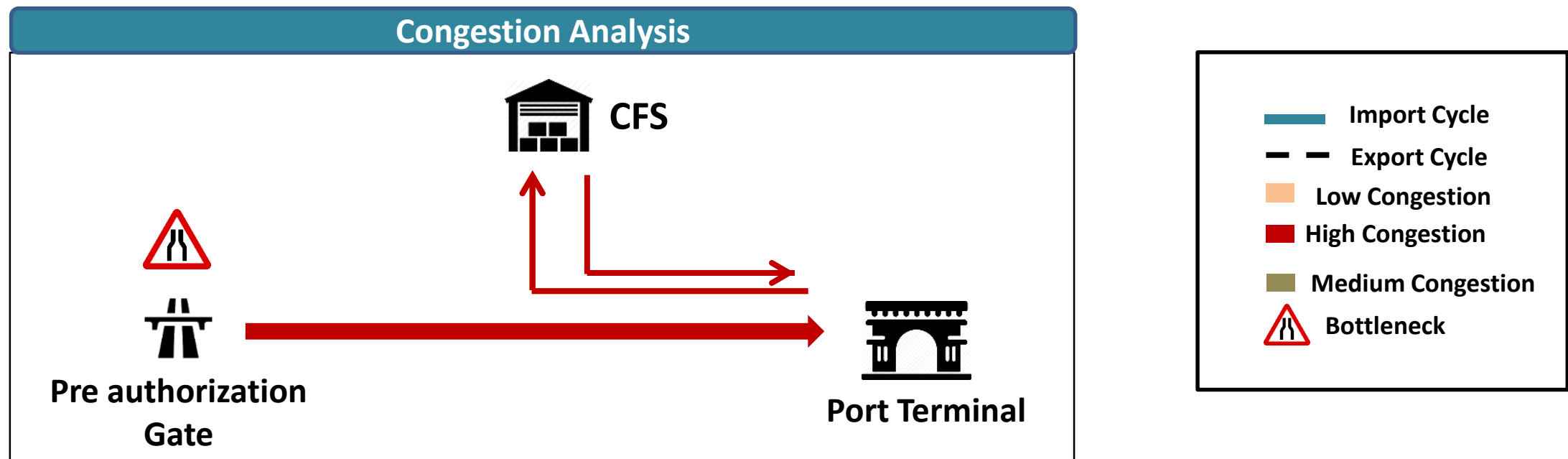
From Mundra Port Towards	
Route	Percentage of Container Movement
Mundra Port to Jodhpur Junction	11%
Mundra Port to Palanpur Junction	38%
Mundra Port to Ratlam Junction	26%
Mundra Port to Vadodara Junction	25%

The map shows the volume wise container movement through different railway routes in import cycle for the month of May'18

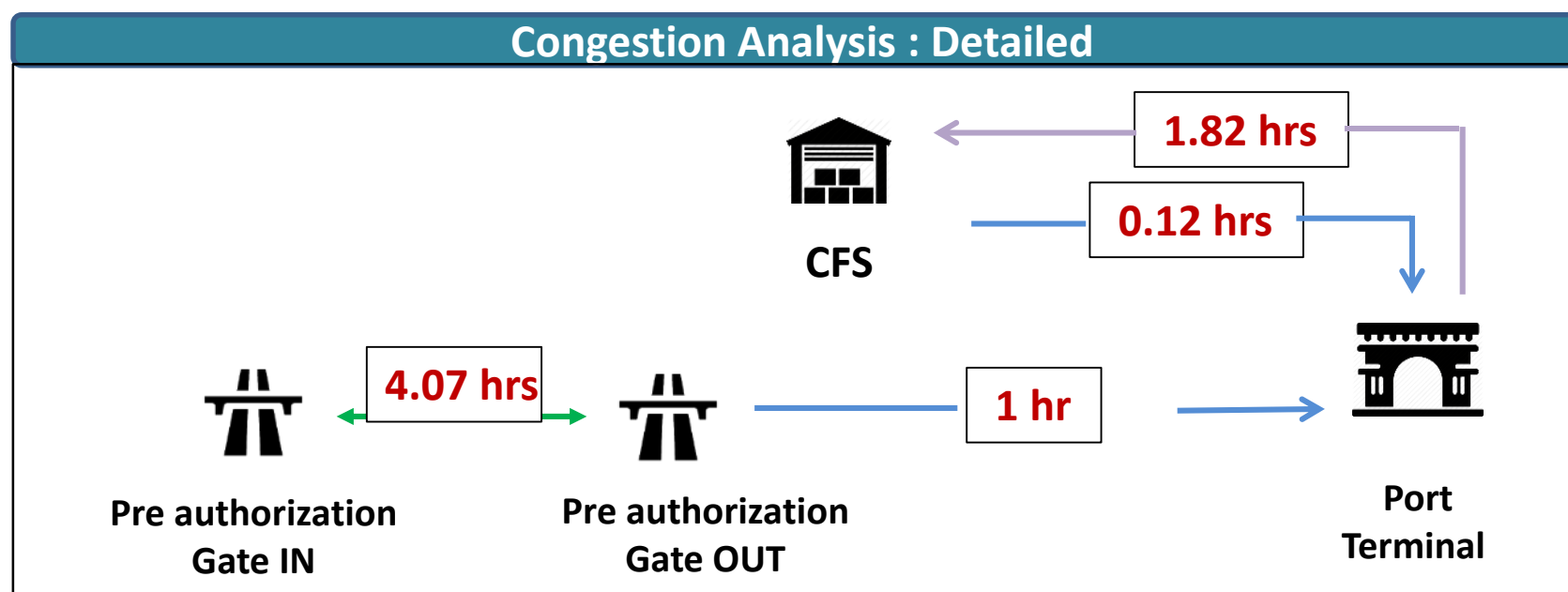


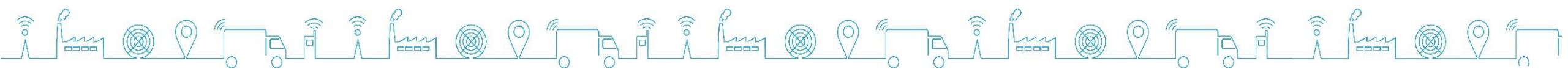
APSEZ HAZIRA Region : Congestion Analysis

The congestion at APSEZ region is shown :



It can be seen that Pre-authorization gates posses a major congestion bottleneck in the region





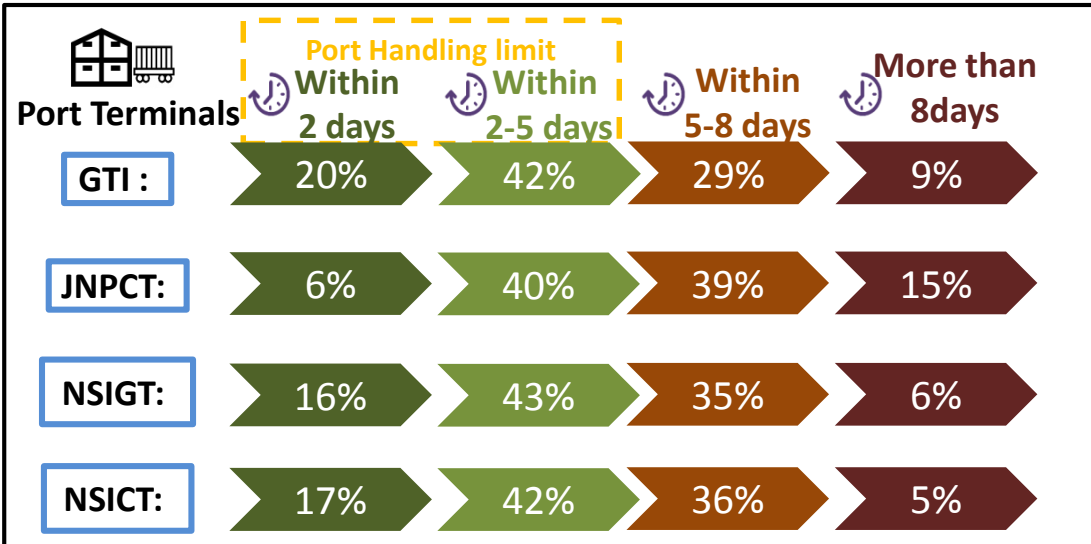
JNPT PORT DWELL TIME ANALYSIS : EXPORT CYCLE

PORT EXPORT via TRAIN

The Port Dwell time data for train movement in Export cycle is depicted below. Port dwell time is the time duration between the entry of the container in Port terminal to the time it moves out of the Port terminal

Port	Apr'18 (in Hrs)	May'18 (in Hrs)
GTI	108.79	95.84
JNPCT	136.35	127.77
NSIGT	99.81	101.31
NSICT	120.68	103.69
BMCT	-	-

PORT EXPORT via TRAIN

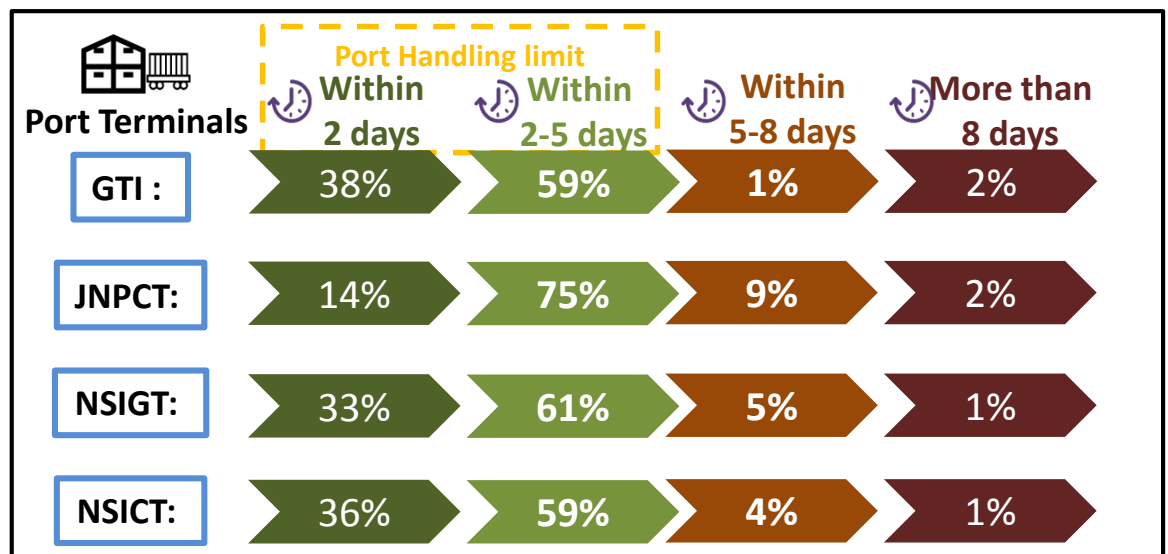


PORT EXPORT via TRUCK

The Port Dwell time data for Truck movement in Export cycle is depicted below. Port dwell time is the time duration between the entry of the container in Port terminal to the time it moves out of the Port terminal

Port	Apr'18 (in Hrs)	May'18(in Hrs)
GTI	61.70	56.25
JNPCT	76.61	82.81
NSIGT	63.53	62.81
NSICT	67.87	61.96
BMCT	-	80.02

PORT EXPORT via TRUCK



DLDS
Logistics Redefined
DMICDC LOGISTICS DATA SERVICES LTD

The below tables depicts the detailed JNPT region port performance in the month of May'18

JNPCT

Port Dwell time based on transit type		
May'18	Direct Port Export containers	Containers bounds for CFS/ICD
Volume	10194	22380
Dwell time (in hrs)	76.89	123.50

Port Dwell time based on container type		
May'18	Laden Containers	Empty Containers
Volume	20030	12543
Dwell time (in hrs)	78.20	92.06

GTI

Port Dwell time based on transit type		
May'18	Direct Port Export containers	Containers bounds for CFS/ICD
Volume	16839	28160
Dwell time (in hrs)	57.29	60

Port Dwell time based on container type		
May'18	Laden Containers	Empty Containers
Volume	34482	10483
Dwell time (in hrs)	59.88	56.5



JNPT region Port Performance Export Cycle

The below tables depicts the detailed JNPT region port performance in the month of May'18

NSICT

Port Dwell time based on transit type

May'18	Direct Port Export containers	Containers bounds for CFS/ICD
Volume	0	14371
Dwell time	-	65.68

Port Dwell time based on container type

May'18	Laden Containers	Empty Containers
Volume	12177	2194
Dwell time	67.18	57.4

NSIGT

Port Dwell time based on transit type

May'18	Direct Port Export containers	Containers bounds for CFS/ICD
Volume	0	15864
Dwell time (in hrs)	-	67.18

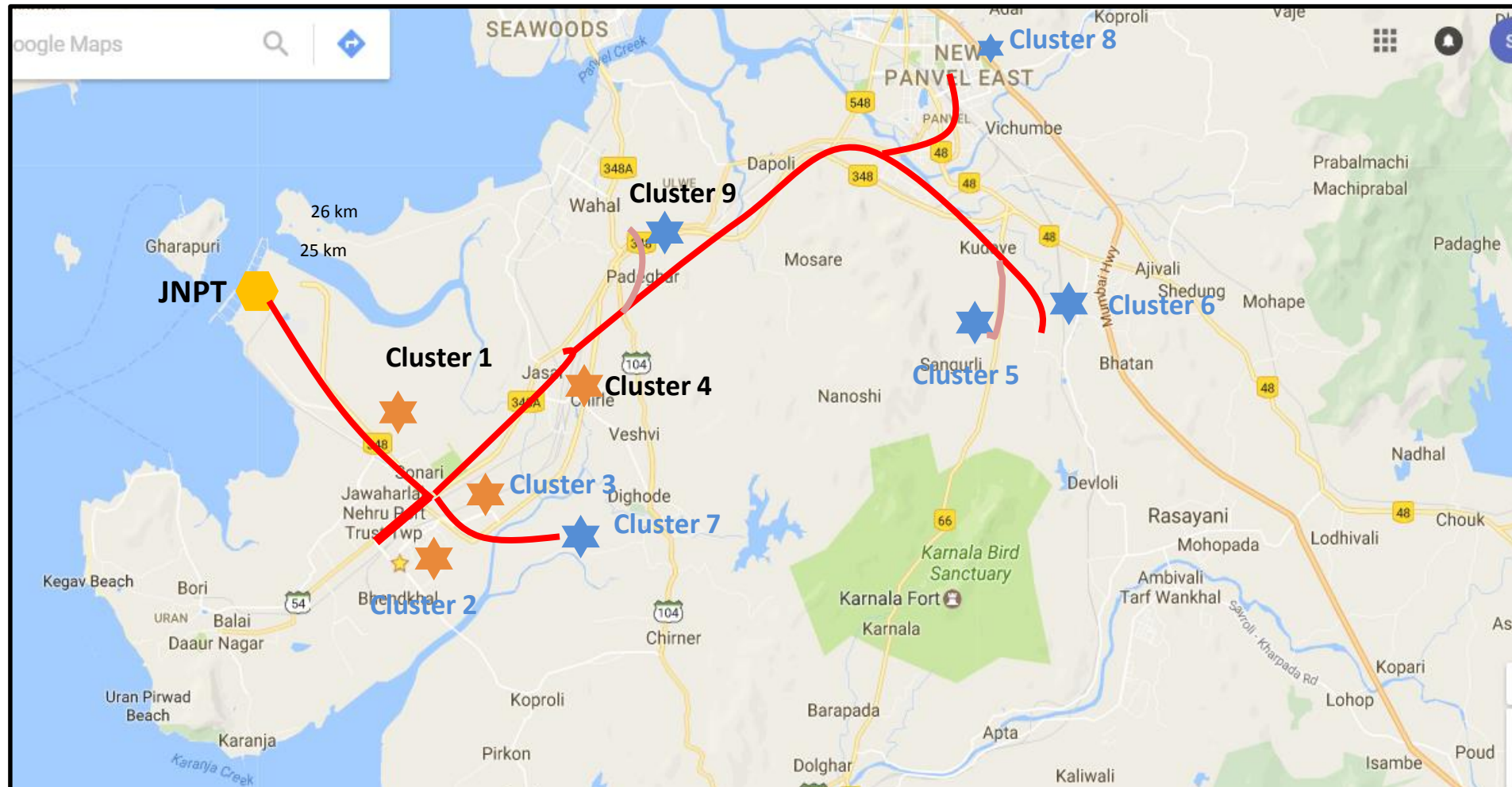
Port Dwell time based on container type

May'18	Laden Containers	Empty Containers
Volume	15562	302
Dwell time (in hrs)	67.2	66.97



Congestion Analysis around Mumbai Region

The below figure shows the congestion around JNPT port in Export cycle



Cluster 1	Cluster 2
JNPT Area	Bhendkhal area, Khopate road
Cluster 3	Cluster 4
Sonari area, JNPT road	Chirle area, JNPT road
Cluster 5	Cluster 6
Plaspa area, Coachi kanyakumari Highway	Salva apta rd area, Bangalore highway
Cluster 7	Cluster 8
Patilpada area, Khopate JNPT road	Taloja, Navi Mumbai
Cluster 9	
Padhegar area	

Note : Please find the respective CFS in each cluster in annexure section

GTI Terminal	JNPCT Terminal	NSICT Terminal	NSIGT Terminal
Congestion Level	Congestion Level	Congestion Level	Congestion Level
Export Cycle :-	Export Cycle :-	Export Cycle :-	Export Cycle :-

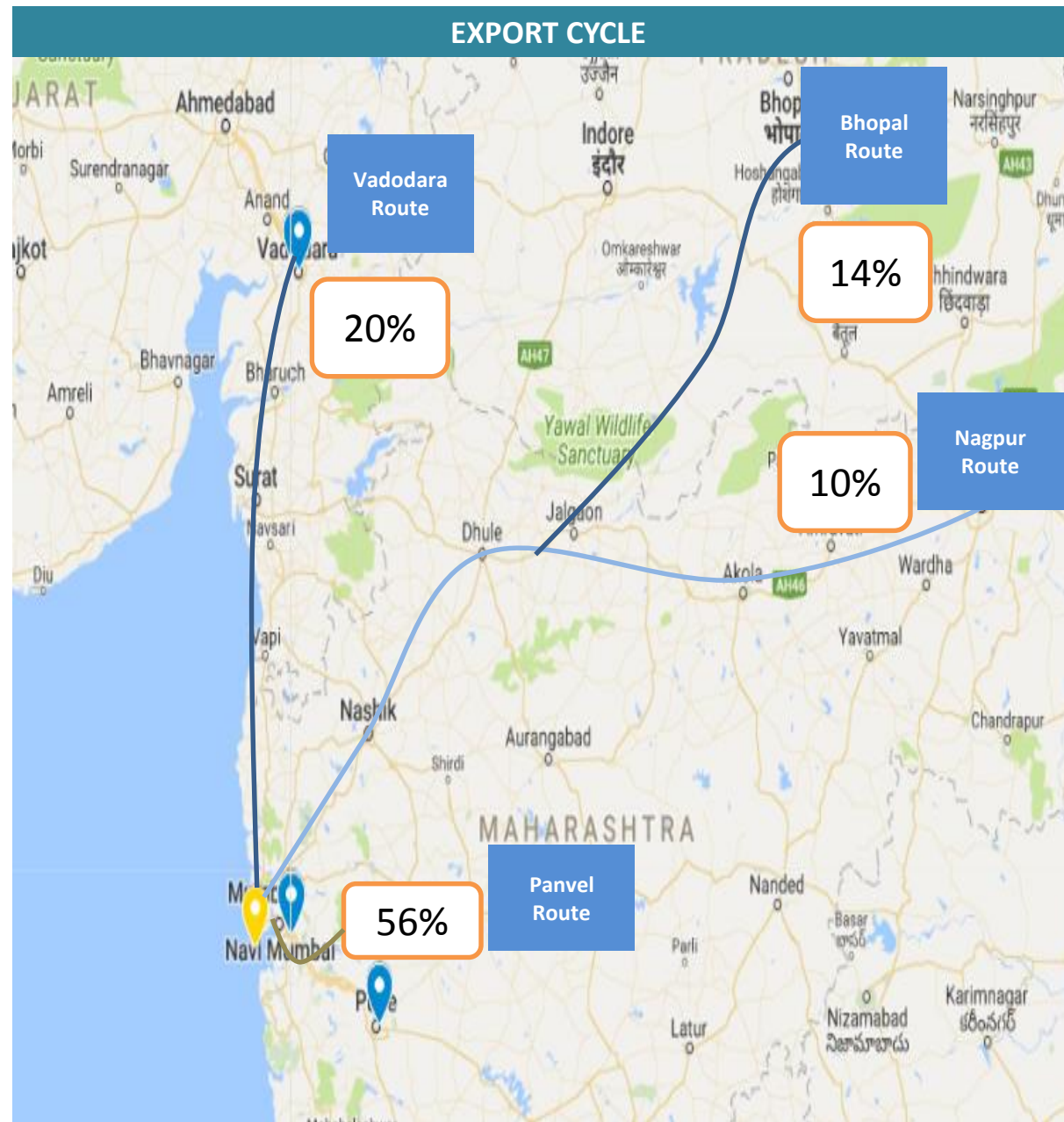
Legends
High Congestion
Medium Congestion
Low Congestion
Cluster with bottleneck
Cluster without bottleneck

Note : Congestion is measured w.r.t actual time taken to cover the respective distance between clusters and terminals



Container movement around JNPT Port terminal region via Train

The map shows the volume wise container movement through different railway routes in export and import cycle for May'18



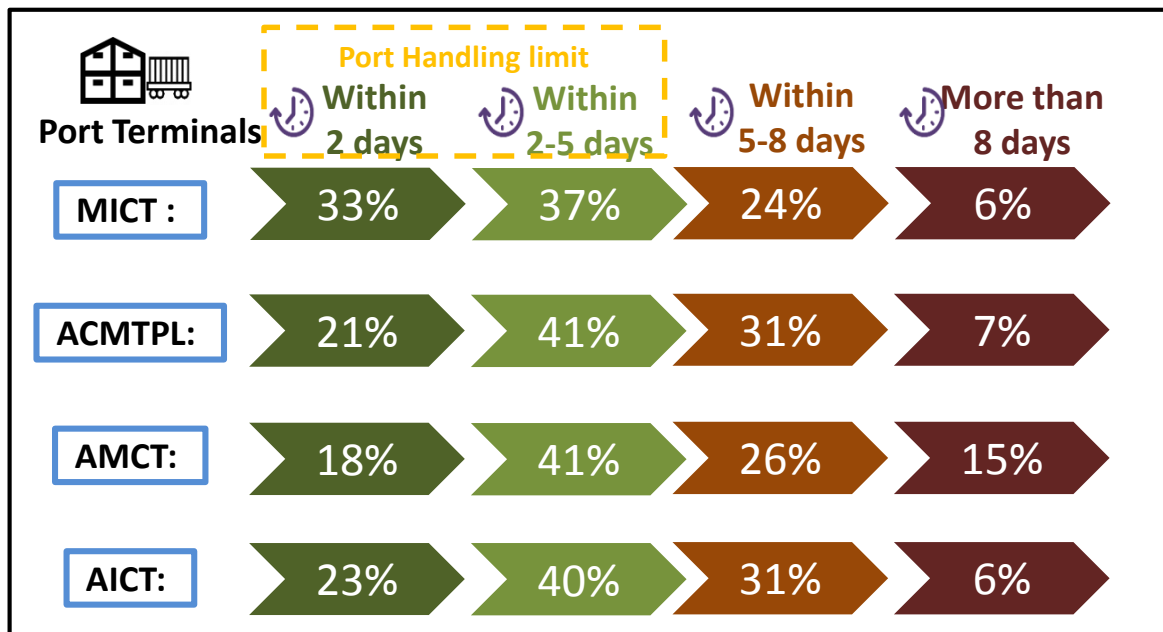
APSEZ PORT DWELL TIME ANALYSIS : EXPORT CYCLE

PORT EXPORT via TRAIN

The Port Dwell time data for train movement in Export cycle is depicted below. Port dwell time is the time duration between the entry of the container in Port terminal to the time it moves out of the Port terminal

Port	Apr'18 (in Hrs)	May'18 (in Hrs)
MICT	73.5	72.78
ACMTPL	118.1	98.04
AMCT	121.3	105.16
AICT	128.1	94.40

PORT EXPORT via TRAIN

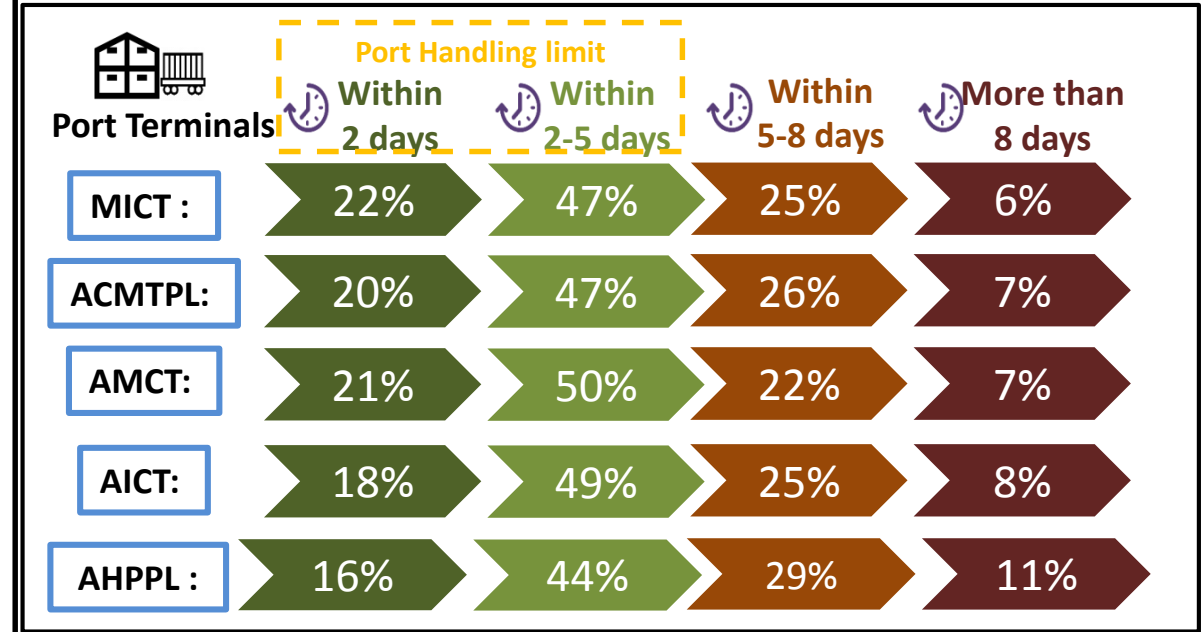


PORT EXPORT via TRUCK

The Port Dwell time data for Truck movement in Export cycle is depicted below. Port dwell time is the time duration between the entry of the container in Port terminal to the time it moves out of the Port terminal

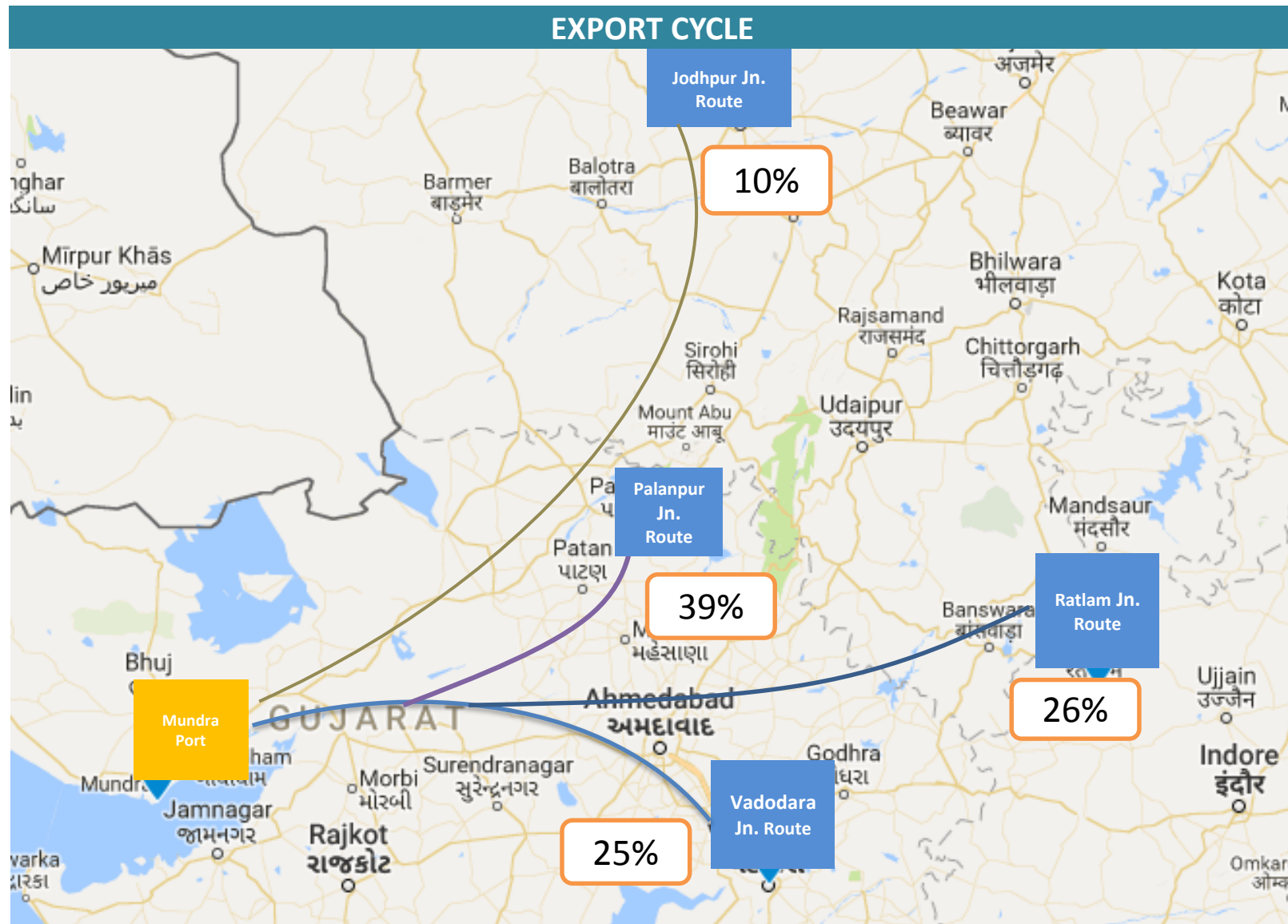
Port	Apr'18 (in Hrs)	May'18 (in Hrs)
MICT	94.73	89.74
ACMTPL	118.28	90.85
AMCT	93.15	87.63
AICT	117.19	91.22
AHPPL	91.8	104.70

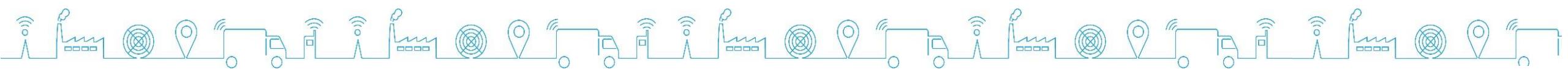
PORT EXPORT via TRUCK



Container movement around APSEZ Port terminal region via Train

The map shows the volume wise container movement through different railway routes in export cycle for the month of May'18





Below table shows the dwell time for the respective CFS's .

CFS – DWELL OVERVIEW (IN HRS)

Average: 80.29 hrs.

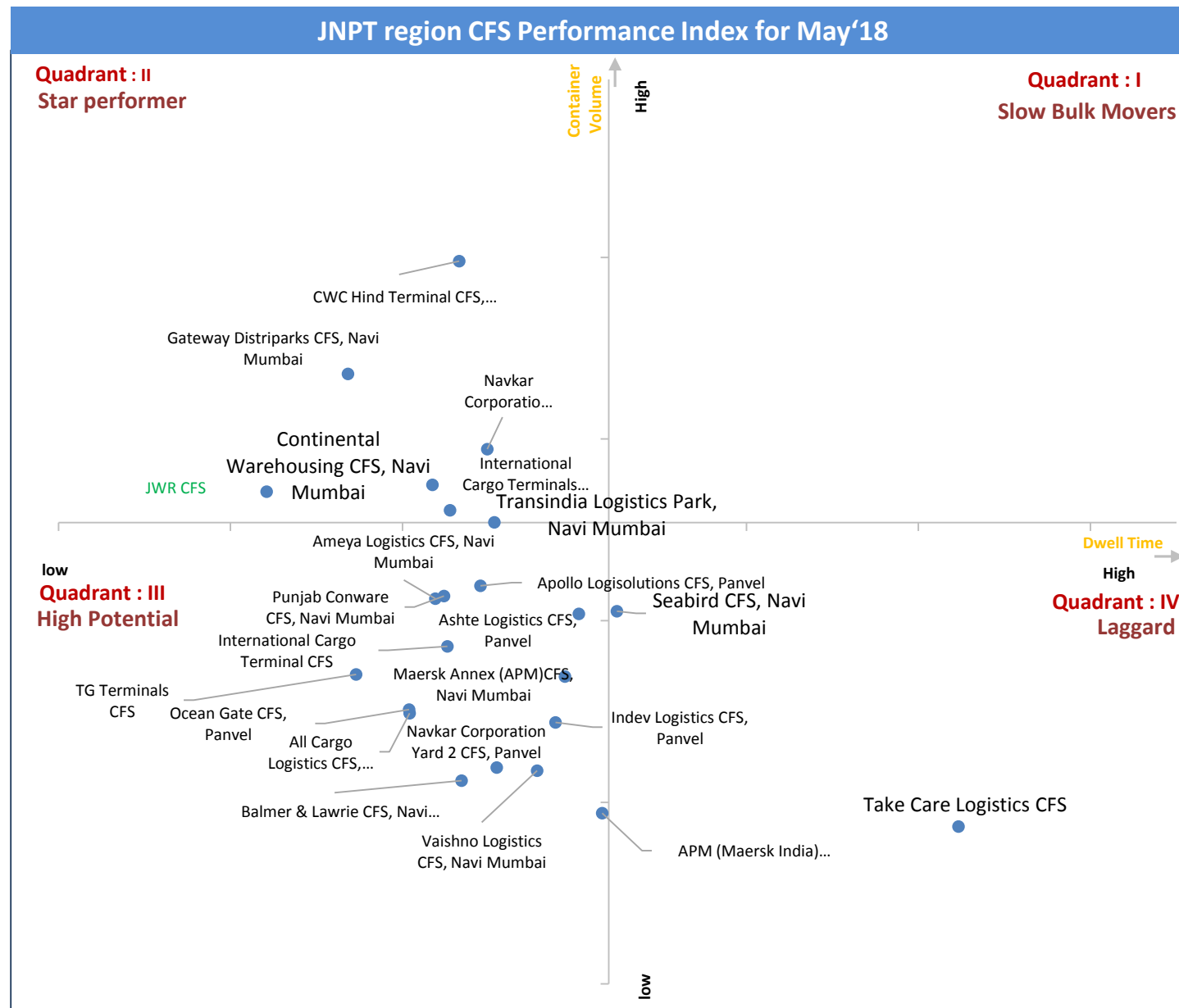
Location	Dwell Time (Hrs)
All Cargo Logistics CFS, Navimurugan	70.85
Ameya Logistics CFS, Navimurugan	73.82
APM (Maersk India) CFS, Navimurugan	93.22
Apollo Logisolutions CFS, Panvel	79.08
Ashtu Logistics CFS, Panvel	90.52
Balmer & Lawrie CFS, Navimurugan	76.88
Continental Warehousing CFS, Navimurugan	73.47
CWC Hind Terminal CFS, Navimurugan	76.59
Gateway Distiparks CFS, Navimurugan	63.65
Indev Logistics CFS, Panvel	87.79
International Cargo Terminal CFS	75.23
International Cargo Terminals CFS	75.52
JWR CFS	54.19
Maersk Annex (APM)CFS, Navimurugan	88.90
Navkar Corporation Yard 2 CFS, Navimurugan	80.95
Navkar Corporation Yard 3 CFS, Navimurugan	79.86
Ocean Gate CFS, Panvel	70.78
Punjab Conware CFS, Navimurugan	74.84
Seabird CFS, Navimurugan	94.94
Take Care Logistics CFS	134.65
TG Terminals CFS	64.60
Transindia Logistics Park, Navimurugan	80.69
Vaishno Logistics CFS, Navimurugan	85.67

Top Performing CFS		Low Performing ICD	
JWR CFS	Dwell Time : 54.19 Hrs	Take Care Logistics CFS	Dwell Time : 134.65 Hrs



JNPT region CFS : Performance Index

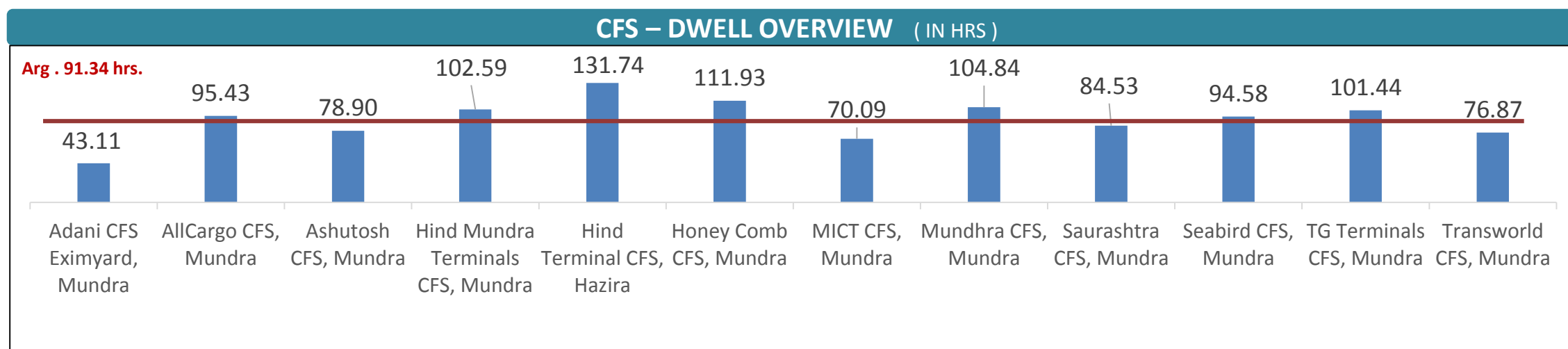
The below graph depicts the Performance Index for all CFS for Apr'18 quarter. The Quadrant II represent the best CFS with high frequency Index i.e. high container volume at lower dwell time



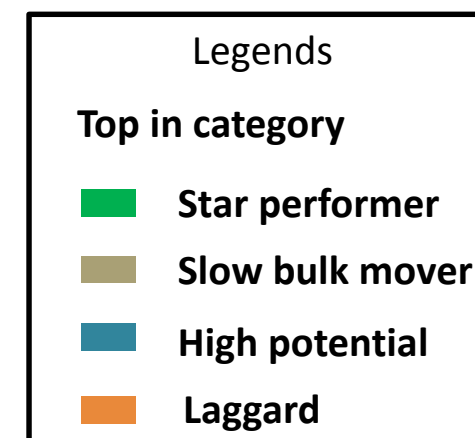
The table on the right depicts the dwell of all CFSs for month of Apr'18 and OND17

Top Performing CFS	
Adani CFS Eximyard, Mundra	Dwell Time : 43.11 hrs.

Low Performing ICD	
Hind Terminal CFS, Hazira	Dwell Time : 131.74 hrs.



The below graph depicts the Performance Index for all CFS for month of Apr'18. The Quadrant II represent the best CFS with high frequency Index i.e. high container volume at lower dwell time



The table below depicts the dwell of all ICDs for month Apr'18 and May'18.

Top Performing ICD	
Gateway Rail ICD	122 hrs.

Low Performing ICD	
APM Terminals ICD, Dadri	140 hrs.



The below graph depicts the Performance Index for all ICDs for May'18. The Quadrant II represent the best ICD with high frequency Index i.e. high container volume at lower dwell time



ICD ANALYSIS : Transit Time Analysis

Transit Time Analysis

Below table shows the average delivery time of ICD in import cycle i.e. Port out to ICD in via rail transportation

ICD- AVG DELIVERY TIME PORT OUT TO ICD IN (TRAIN)	
Region	May'18
NCR region	3.41 days
Aurangabad	2.25 days

Below table shows the average delivery time of ICD in export cycle i.e. ICD out to port in via rail transportation

ICD- AVG DELIVERY TIME ICD OUT TO PORT IN (TRAIN)	
Region	May'18
NCR region	2.83 days
Aurangabad	2.42 days

LEAD TIME ANALYSIS

Below table shows the average lead time of ICD in import cycle i.e. Port in to ICD out via train. The ICD's in NCR region have low dwell time as compare to Aurangabad region, thus making the lead time for the Aurangabad region higher as compare to NCR region

ICD- AVG LEAD TIME (TRAIN)		
Region	May'18	April'18
NCR region	8.36 days	9.85 days
Aurangabad	6.79 days	11.65 days

Calculation :

Port Dwell Time + Port to ICD Delivery Time + ICD Dwell Time = Avg. Lead Time from Port to ICD





Thank You !!