



Northern Corridor  
Transit and Transport  
Co-ordination Authority

# Northern Corridor Performance Dashboard Outline

August 2016





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## SUMMARY

The Monthly Mombasa Port Community Charter Report provides an overview of key performance trends within the port, as well as the Northern Corridor Transport System. It is of great interest to track the performance of the Northern Corridor so as to gauge whether measures to improve efficiency are yielding the desired outcomes. This report summarizes the August 2016 status of implementation of 9 key indicators which are tracked by the Northern corridor performance dashboard as stipulated in the Mombasa Port Community Charter and also other key indicators notably container uptake by CFS and delivery of cargo by road and rail.

The report tracks changes in performance and identifies the main deficiencies/improvements. Where possible, a comparison is made with the results from the previous period in 2015. Nine of the indicators that are reported on are categorized into Maritime, Port and Corridor indicators. From the analysis for the month of August 2016, it is evident that there are improvements in performance on most of the indicators when compared with the month of July, 2016. Table 1 below gives a picture summary of performance for the month of August 2016 as follows:

**Table 1: Monthly status summary August 2016**

Category	Indicator	Unit of measure	Target	August Status/Progress
Maritime Indicators	Vessel turnaround time	Hrs	72	66.70
	Ship waiting time before berth	Hrs	24	10.31



<b>Port Indicators</b>	Containerised Cargo Dwell time	Hrs	72	112.78
	One Stop Centre Time	Hrs	24	38.72
	After customs release	Hrs	36	55.29
	Document Processing Centre Time	Hrs	2	2.29
<b>Corridor Indicators</b>	Weighbridge traffic	No of trucks weighed		Athi-River – 5709 Mariakani- 2327 Gilgil – 2805 Webuye - 957 Busia-471
	Weight compliance at weighbridge	%	100	Busia-75%, Other weighbridges had over 90%
	Transit time (Mombasa to Malaba)	Hrs	72	119.88
	Transit time (Mombasa to Busia)	Hrs	72	234.83



## 1. INTRODUCTION

The main objective of this report is to provide an analytical dimension on how well the Mombasa Port and Northern Corridor is performing in relation to the realization of the commitments set in 2014 Mombasa Port Community Charter. From the analysis, bottlenecks hindering performance are identified and interventions geared towards improved trade and operations along the corridor proposed.

The Charter provides for the commitments to be undertaken by respective stakeholders in order to facilitate trade along the corridor. Towards this end, this report shows the progress achieved in the month of August 2016 in implementation of the Charter particularly for the 9 key indicators which are tracked by the Northern Corridor Dashboard. These indicators cover the period from the time the ship enters the port area and leaves, to the length of time associated cargo movement until it exits the borders either at Malaba or Busia in Kenya. It is equally important to highlight the uncertainties in delays which may increase the cost of transportation.

The monitoring of the implementation of the Mombasa port community charter is done through the Northern corridor performance dashboard which can be accessed via [www.kandalakaskazi.or.ke](http://www.kandalakaskazi.or.ke) or <http://top.ttcanc.org>

The Mombasa port community charter envisions various targets to be achieved. Key among them which affect the nine indicators being monitored by the dashboard are:

- Achieve a dwell time of below 3 days (72 hours) within 120 days after signing the Port Community Charter;
- Achieve 70% cargo throughput through the green channel;
- An improvement of 900 moves per day in 90 days after the charter was signed.

The Mombasa Port Community Charter may be accessed via [http://ttcanc.org/documents/Port\\_Comm\\_Charter\\_Final.pdf](http://ttcanc.org/documents/Port_Comm_Charter_Final.pdf).



## 2. MARITIME INDICATORS

Maritime operations include container vessel movement from the arrival of the ship at the outer port waiting area, the beginning of its entrance into the port, the arrival at berth, the departure from berth, and the release of the ship.

The table below gives a summary of the container vessel movements (waiting time before berth and the average monthly turnaround time) at the port of Mombasa in the month of June to August 2016.

**Table 2: Maritime Indicators**

Month	Turnaround Time (Hrs.)	Waiting Before Berth (Hrs.)
Aug- 2016	66.7	10.31
Jul-2016	70.88	10.40
Jun-2016	75.48	10.94
<b>Target</b>	<b>72.0</b>	<b>24.0</b>

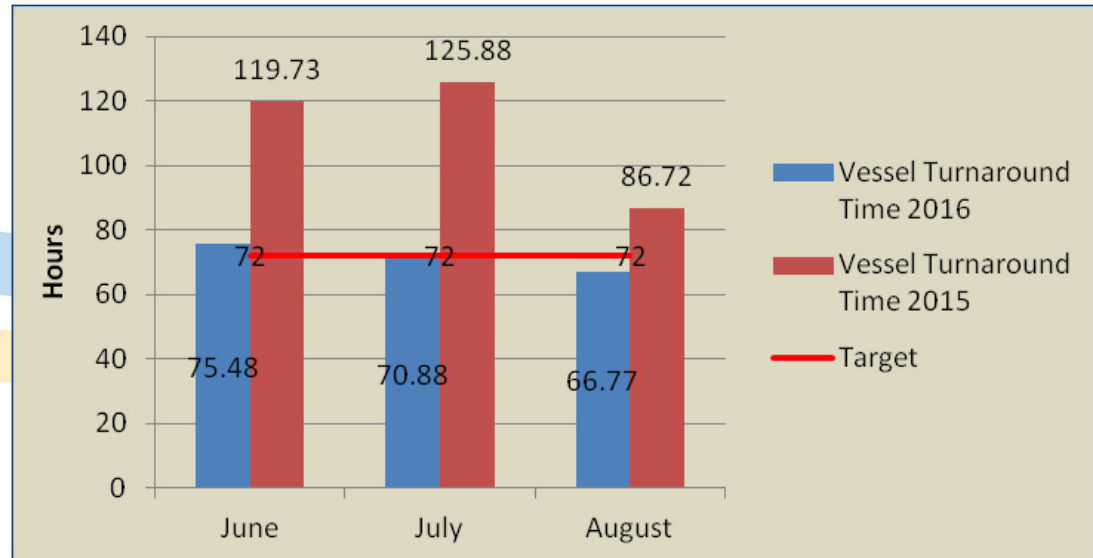
### 2.1 SHIP TURNAROUND TIME

Time from ship entry in port to exit from the port area is measured from the time the vessel arrives at the fairway buoy to the time it leaves the port area.

The target for ship turnaround time is 3 days (72 hours) as set out in the charter for the year 2013.



Figure 1: Ship Turnaround Time (Hrs)



From the analysis in figure 1, ship turnaround time for the month of August 2016 was recorded at 66.77 hours indicating a remarkable streak of improvement when compared with 70.88 hours and 75.48 hrs recorded in the months of July and June 2016 respectively. The August achievement exceeds the set target of 72 hours.

Comparing trends in August performance between the year 2016 and 2015, the vessel turnaround time has improved from 86.72 hours recorded in August 2015 to 66.77 hours in August 2016. This suggests that initiatives towards improving this indicator are rewarding. Among the initiatives was to review and realign the ongoing port expansion projects. Thus the positive achievement could be attributed to the



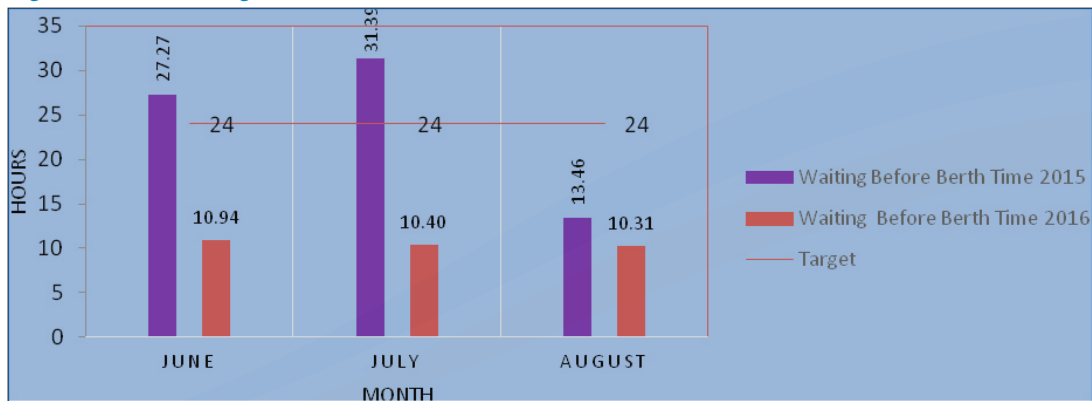


expansion of berth number 21 which has a 350-meter long quay and a depth of 15 meters that is capable of accommodating post-Panamax vessels of 8,000 twenty-foot equivalent units (TEU) capacity. It is expected that this time will improve further in future.

## 2.2 VESSEL WAITING TIME BEFORE BERTH

This time is measured from the time the vessel arrives at the fairway buoy to the time at its first berth.

Figure 2: Vessel waiting before Berth (hours)



The vessel waiting before berth which is a subset of the ship turnaround time was 10.31 hours for the month of August 2016 indicating a slight improvement from 10.94 and 10.40 in June and July 2016 respectively. A comparison with the previous year shows that in August 2015 the waiting before berth time was 13.46 hours against a target of 24 hours.

From figure two it is clear that waiting before berth time has considerably improved compared to the same period last year.



This performance is excellent and could be improved further by increasing crane productivity, berthing space and implementing the fixed berthing window. These initiatives are important because they have a significant bearing on reducing port congestion and attendant costs.

Ideally, an efficient port system should have a waiting time before berth near to zero as possible. The Port Authority should further enhance the measures in place to realize improved performance.

## 3. PORT INDICATORS

### 3.1 CARGO DWELL TIME AT THE PORT OF MOMBASA

Cargo dwell time refers to the period from the time cargo is offloaded at the port to the time goods leave the port after all clearances have been obtained.

In the month of August containerised dwell time deteriorated to 112.78 from the 86.64 hours that was realised in the month of July 2016. This performance is still far from the envisaged target of 72 hours.

Furthermore, the performance of the month of August 2016 was lower compared with August 2015 which recorded containerised cargo dwell time of 100.97 hours.

However, it is informative to note that the performance for July 2016 exceeds the performance for July 2015 which registered 100.82 hours.

This notwithstanding, the time recorded is still way above the targeted 72 hours which could be partly explained by persistent delays in evacuation of cargo after customs release. This means there is still need to pursue strategies aimed at improving port efficiency.



Figure 3: Containerised Port Dwell time at Mombasa Port (Hours)



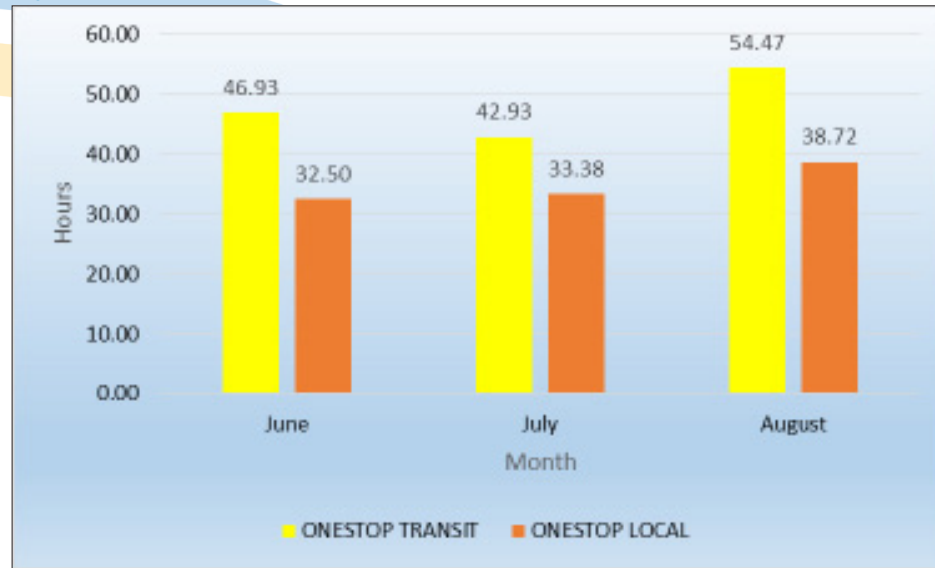


### 3.2 ONE STOP CENTRE CLEARANCE TIME

One Stop Centre Clearance Time measures the average time between passing of customs entry registration and issuance of release order.

The One Stop Centre Clearance Time is measured by subtracting the time when an entry is passed from Release Time. Data for this indicator is obtained from the Kenya Revenue Authority SIMBA system and does not include goods for transits cleared under the Single Customs Territory.

Figure 4: One Stop Centre (hrs)





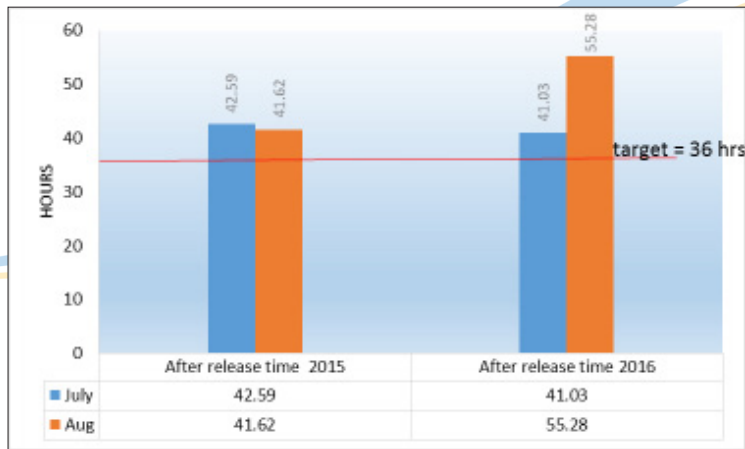
Time spent at One Stop Centre for local cargo increased from 33.38 hours in July 2016 to 38.72 hours in August 2016. Similarly, the time taken by transit cargo increased from 46.9 hours in July to 54.47 hours in August 2016. It is evident that performance at the One Stop centre not only declined in the last two months but also did not meet the 24 hrs target. This could be partly attributed to late submission and revision of documents by clearance agents and uncoordinated joint verification of cargo that results in delays. Implementing mechanisms for speeding-up clearance of cargo processes by all the stakeholders involved to realize the required results of one day is paramount.

### 3.3 DELAY AFTER CUSTOMS RELEASE

Delay after Customs Release refers to the time lapse between release and evacuation of cargo from the Port.

The time in delay after customs release increased from 41.03 hours in the month of July 2016 to 55.28 hours in August 2016 as shown in figure 5. This performance shows a decline and it is still way above the set 36 hours

Figure 5: Delay after Customs Release



target. At the same period in 2015 the time recorded for delay after release was 41.62 hours in August 2015 compared to the 55.28 hours recorded in August 2016. This indicates there has been no improvement in the elimination of bottlenecks that cause the long time after customs release in the past one year which has made the 36 hours target remain elusive and points to prevailing inefficiencies.

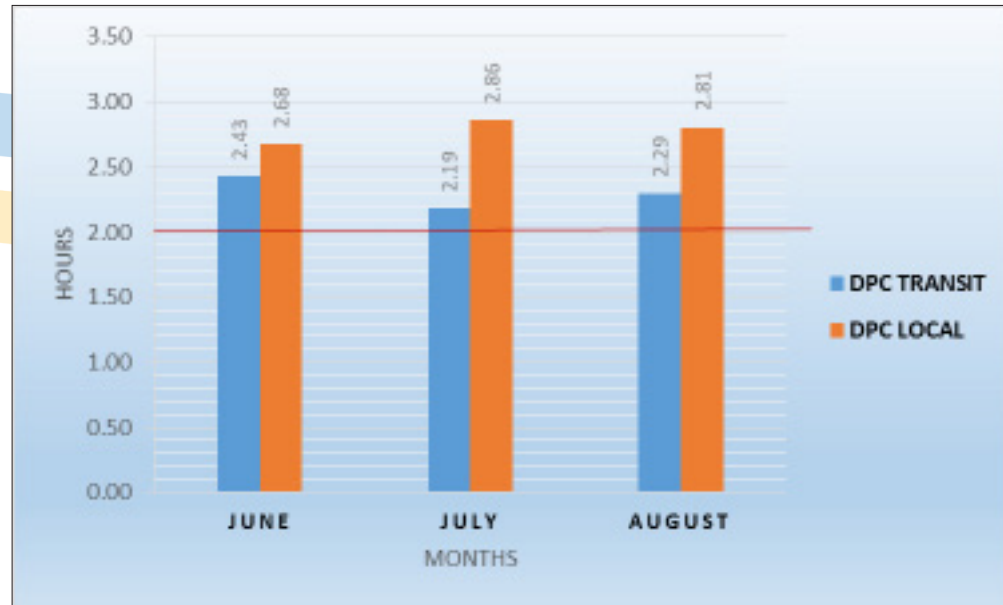
This performance points to the need for improvement in cargo evacuation process and infrastructure to minimize these delays after Customs Release.



### 3.4 TIME TAKEN AT THE DOCUMENT PROCESSING CENTRE (DPC)

This is the time taken by customs to pass an entry lodged by a clearing agent. The document processing centre involves clearance by Customs.

Figure 6: Time Taken at the Document Processing Centre (DPC)



As presented in figure 6, performance for Document Processing Centre (DPC) time for local cargo declined marginally moving from 2.19 hrs in July to 2.29 hrs in August 2016.



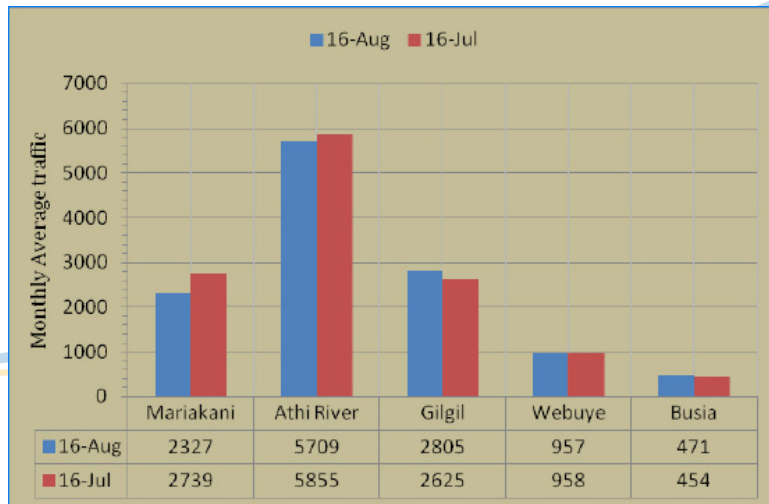
On the other hand, average time spent for clearance at the Document Processing Centre for transit Cargo improved in performance from 2.89 hrs in July to 2.81 hrs in August 2016. This is still higher than the target for DPC time of 2hrs. Nonetheless, the time taken for document processing for transit cargo has improved and could partly be attributed to digitization of documentation and the implementation of one stop centres.

## 4. CORRIDOR INDICATORS

This refers to the number of trucks crossing the weighbridges

### 4.1 WEIGHBRIDGE TRAFFIC

Figure 7: Weighbridge Monthly average traffic



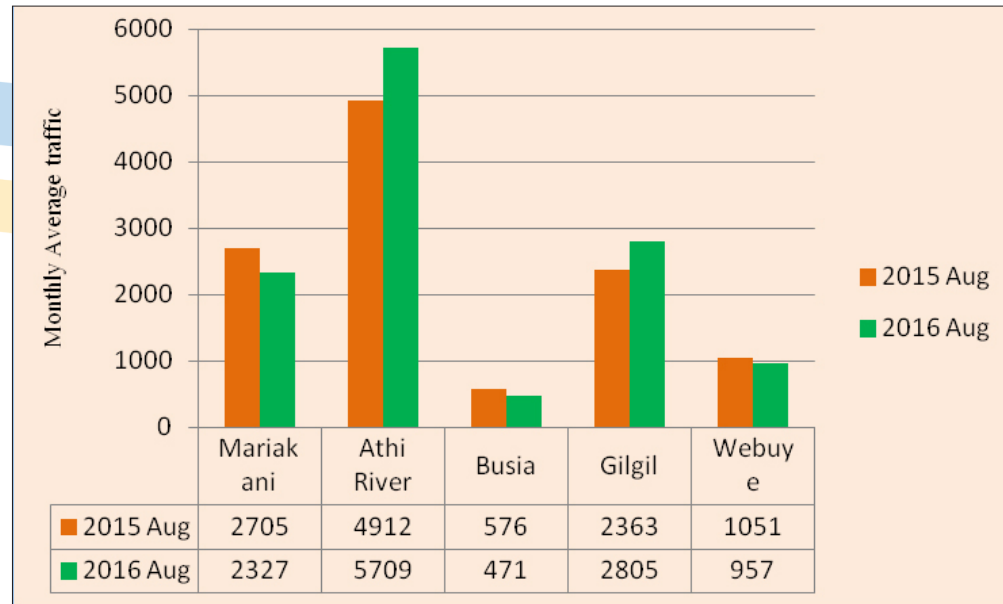
For weighbridges that have both High Speed Weigh in Motion (HSWIM) and Static, the average number of trucks weighed per day is given by the total number of vehicles weighed using HSWIM and are either flagged to proceed or diverted to the fixed static scale.

Results from the data analysed show that Busia and Athi River registered the least and highest average number of traffic weighed respectively in the month of August 2016 as demonstrated in figure 7.



When comparing the same trend with the previous year (August 2015), there was 5.7 percent increase in number of trucks weighed with Athi River still registering the highest average number. The high traffic at Athi River can be attributed to additional cargo originating from Namanga route to Nairobi, and Nairobi and its environs.

**Figure 8: Weighbridge Monthly average traffic for August 2015 and 2016**



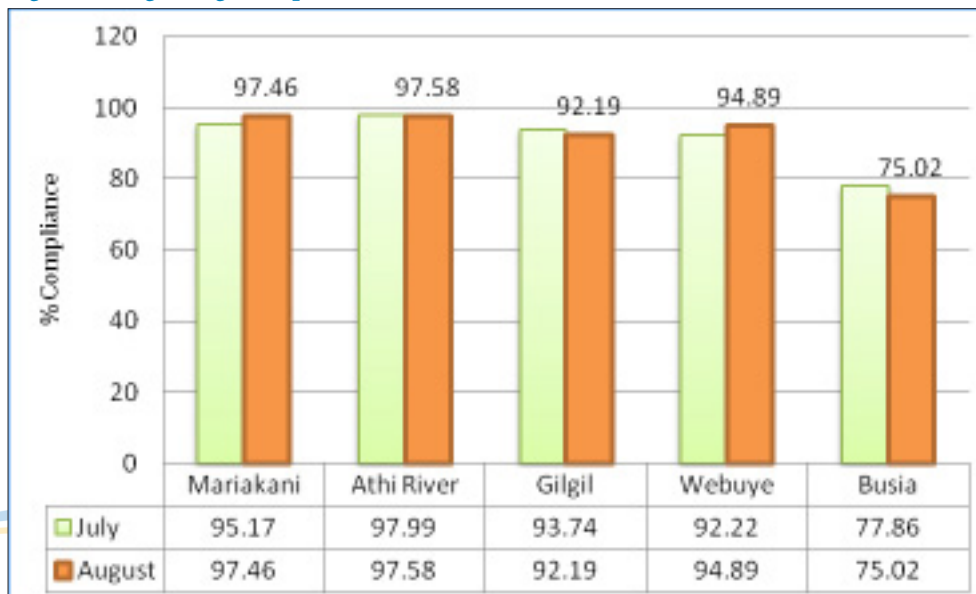




## 4.2 WEIGHT COMPLIANCE AT WEIGHBRIDGE

The management of axle-loads for heavy trucks is a very important aspect of the road policy. Overloading on axle leads to faster deterioration of the road pavement while exceeding vehicle load gross limits destroys bridges. Therefore, trucks are expected to comply with the set vehicle load limits to protect the road infrastructure.

Figure 9: Weighbridge Compliance (%)



Results for the month August 2016 show that most weighbridges recorded over 90 percent performance in terms of compliance level except for Busia weighbridge which had 75.02 % level of compliance in the month of August 2016 declining from 77.86% compliance recorded in July 2016.



The only Weigh bridge that recorded improvement in compliance levels was Webuye moving from 92.22% in July to 94.89 % in August and Mariakani from 95.17% to 97.46% within the same period. All the other weighbridges had marginal decline in performance for the month of August when compared to July. Nonetheless the Athi River weighbridge recorded the highest compliance level after redistribution.

### 4.3 TRANSIT TIME IN KENYA

Transit time in Kenya can be defined as to the average time for transit trucks to move from Mombasa Port to Malaba or Busia exit points.

Transit time must be assessed by route, from origin to destination, and by modal combination being a critical parameter for transport costs. The scope of the transit time in this report is on road mode of transport. It can be estimated from the time release order is issued at the port of Mombasa to the time the export certificate is issued after crossing the border at Malaba or Busia.

Table 3 gives summary of transit time in June, July and August 2016 from Mombasa Port to Malaba and Busia

**Table 3: Transit Time in Kenya**

Month	Mombasa-Malaba/Kenya (hrs)	Mombasa-Busia/Kenya (hrs)
June 2016	137.05	189.76
July 2016	118.62	213.17
August 2016	119.88	234.43
<b>Target</b>	<b>72</b>	<b>72</b>

There has a significance improvement in transit time from Mombasa to Malaba (933km) from around 7 days in August, 2015 to 5 days in August 2016. Contrary to this improvement transit time from Mombasa to Busia (947 Km) deteriorated from 8.7 days to 9.7 days in August, 2015 and 2016 respectively.



Data for the month of August 2015 indicates that Transit Time from Mombasa to Malaba and Busia increased to 119.88 hours and 234.43 hours in August respectively from 137.05 hours and 189.76 hours in June 2015. The respective average time clocked in July was 118.62 and 213.17 hours for Transit Time from Mombasa to Malaba and Busia respectively. This transit time is still long shot from the targeted 72 hours.

The poor performance could be attributed to delay of cargo at the port after release, border clearance procedures and drivers delays along the way due to personal reasons.

## 5. CONTAINER UPTAKE AT MOMBASA PORT

Container Freight Stations (CFSs) are an extension of the port and are privately managed. Decongestion of the port of Mombasa enormously depends on the efficient performance of the CFS cargo clearance process. Cargo to the CFSs is either client nominated or KPA nominated.

As shown in Figure 10, 70% of the cargo to CFSs was nominated by clients compared to 30% that was nominated by KPA. The actual containers were 27,609 client nominated and 11,737 for KPA-nominated.

When compared to the same period last year, it can be noted that client nomination was slightly higher at 75% in 2015 compared to 70% recorded in August 2016 showing that the CFS nomination patterns have remained relatively stable over the period.

Figure 10: CFS nomination August 2016

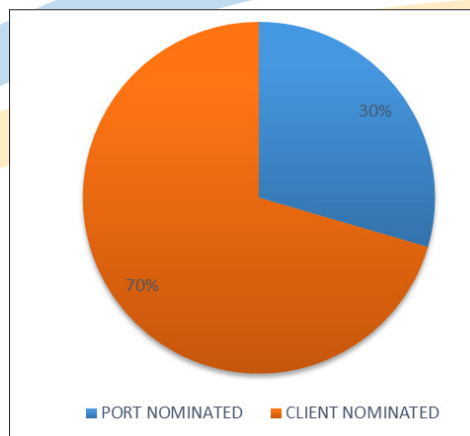
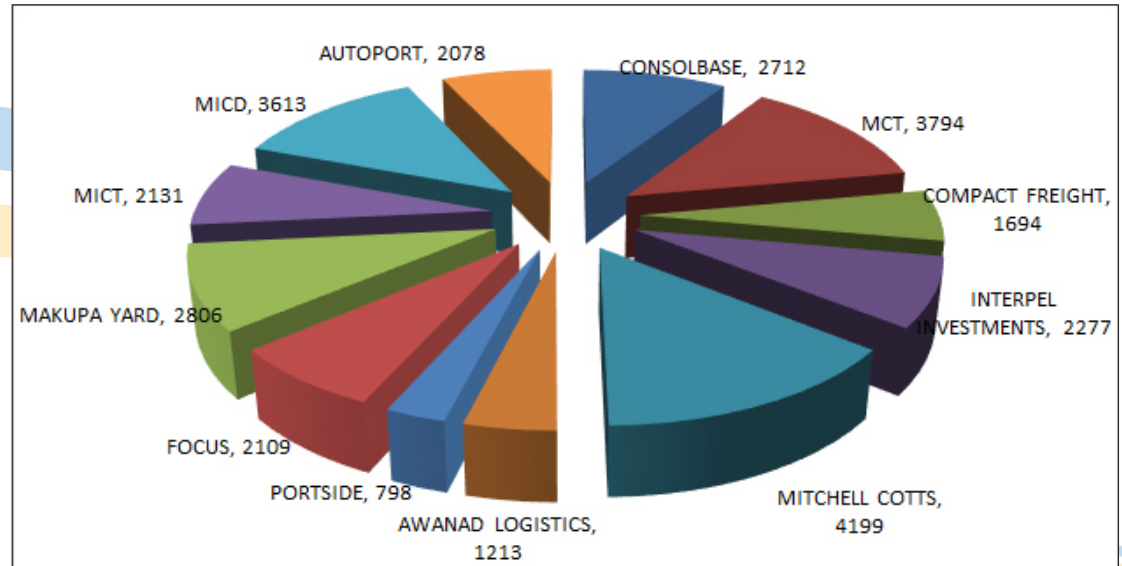




Figure 11 shows that Mitchel Cotts had the highest uptake with 4199 TEUs followed by MCT with 3794 TEUs and MICD with 3613 TEUs in the month of August 2016. The three CFS remain the dominant ones and have recorded the highest container uptake

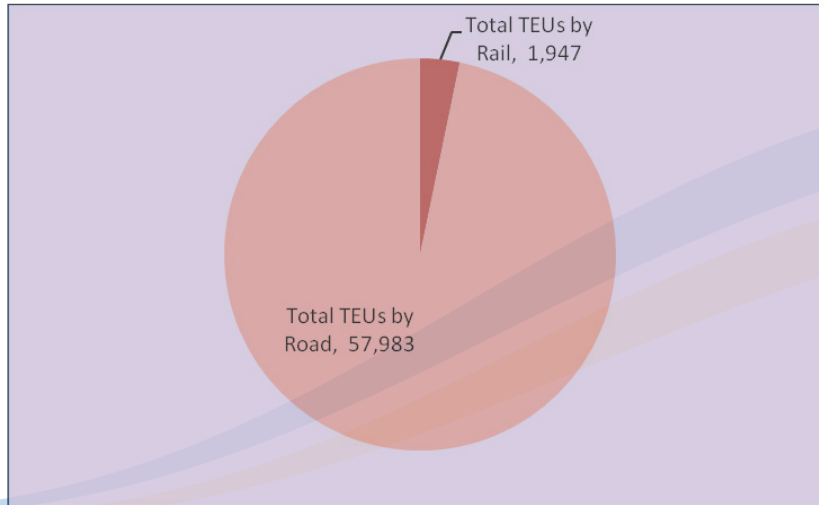
**Figure 11: Container Uptake by CFSs (TEUs)**



## 6. DELIVERY OF CARGO BY ROAD AND RAIL

Figure 12 below shows delivery of cargo by road and rail. In the month of August 2016, 57,983 twenty-foot equivalent units (TEUs) were delivered by road whereas 1,947 TEUs (an equivalent of 3 percent of the total cargo) was delivered by rail which shows that road transport is favoured over rail.

**Figure 12: Comparison on delivery of cargo in TEUs**



Further breakdown of the cargo delivered by road indicates that around 66% represented local cargo and 34% represented transit cargo delivered in the month of August 2016.

So far road transport remains the preferred mode of shipment partly due to unreliability of rail transport. However with the implementation of standard gauge rail (SGR), it is expected to shift a bigger proportion of transit delivery of cargo from road to rail along the Corridor.

One train will haul 216 TEUs in a journey that is the equivalent of 108 trucks on the road which translates to a total of 4,644 trucks taken off the road if all the 43 freight trains are running. This in turn will have a great positive impact on efficiency by making transportation faster, reliable and cheaper in the long run.





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