

Northern Corridor Quarterly Performance Dashboard

October-December 2018



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SPECIAL EDITION
ROAD INFRASTRUCTURE
IMPROVEMENTS

1. INTRODUCTION

This report is part of the series of quarterly reports prepared by the Northern Corridor Transit and Transport Coordination Authority (NCTTCA) in furtherance of its mandate to monitor and report regularly on the performance of the Corridor. It covers the performance of port community charter indicators for the period of three months from October to December 2018.

Indicators discussed in the report presents the performance status on the implementation of the Mombasa Port Community Charter on quarterly basis.

The performance indicators have been monitored to track various initiatives agreed upon since the Charter was signed in 2014 to enhance efficiency of the port and the corridor.

A comparison is made with the same quarter of previous years. However, the scope is limited to the indicators specified by the Mombasa Port Community charter and is part of the 31 indicators being measured by the Northern Corridor Transport Observatory.

In addition, the report begins with a special edition on the road infrastructure improvements that have been realized as part of implementation of the charter.

2. ROAD INFRASTRUCTURE IMPROVEMENTS

Roads are the main mode of transport for cargo inland from the Port, accounting for over three quarters of all transfers. Congestion has been a menace towards efficient evacuation of cargo within the port of Mombasa and infringes on the movement of goods along the Northern Corridor roads. A host of factors including level of tariffs and restrictions on the amount of items or service in the NC countries have been cited as barriers to intraregional trade among the Northern corridor member states (TOP bi-annual reports) and the effective participation of countries in the global economy. In essence, provision of adequate quality infrastructure is vital in reducing trade costs, enhancing competitiveness and facilitating regional economic integration.

As observed in the Mombasa Port Community Charter, Kenya National Highways Authority (KeNHA) plays an essential role in decongesting the port and corridor route in Kenya territory. Kenyan roads serves as inevitable link as it is the main pathway route linking the landlocked countries to the port of Mombasa who lack direct access to the sea.

Kenyan roads are classified in three categories: Super Highways (Class S); International Trunk Roads (Class A) and National Trunk Roads (Class B) as shown in Table 1 below

Table 1: Classification of Kenya Roads under Kenya National Highways Authority (KeNHA)

Road Class	Paved	Unpaved	Total (Km)	Description
Super Highway (S)	40	0	40	Highways connecting two or more cities meant to carry safely a large volume of traffic at the highest speed of operation

International Trunk Roads (A)	4,609	2,221	6,830	Link centers of international importance and crossing international boundaries or terminating at international ports
National Trunk Roads (B)	5,463	6,216	11,679	Link nationally important centers
Total (Km)	10,112	8,437	18,549	

Source: KeNHA 2018

The Charter established key interventions to be implemented by KeNHA. These include:

1. Clear temporary structures and permanent encroachments and reclaim land on key roads belonging to the corridor;
2. Implement zoning regulations to control CFSs and Empty Container Depots (ECDs) along Makupa Causeway, Kibarani, Port Reitz Road, Airport and Magongo Roads;
3. Install High Speed Weigh in Motion (HSWIM) systems at Mariakani, Athi River, Gilgil and Webuye weighbridges;
4. Reconfigure Jomvu and Changamwe as one way road to enhance traffic flow; and,
5. Upgrade Moi Airport access road and Port Reitz road to dual carriage that was scheduled for completion by December 2016.

KeNHA's long-term road improvement measures in 3-10 years included:

- Development of Mombasa Southern Bypass to Kipevu Container Terminal by 2018;
- Development of Makupa Causeway as an elevated road and upgrading key sections of the Northern Corridor in 10 years;
- In liaison with other Regional Road Authorities, develop a superhighway between Mombasa and Kigali, Rwanda; and,
- Development of a dual carriageway on Changamwe – Miritini section of the Mombasa - Nairobi road by

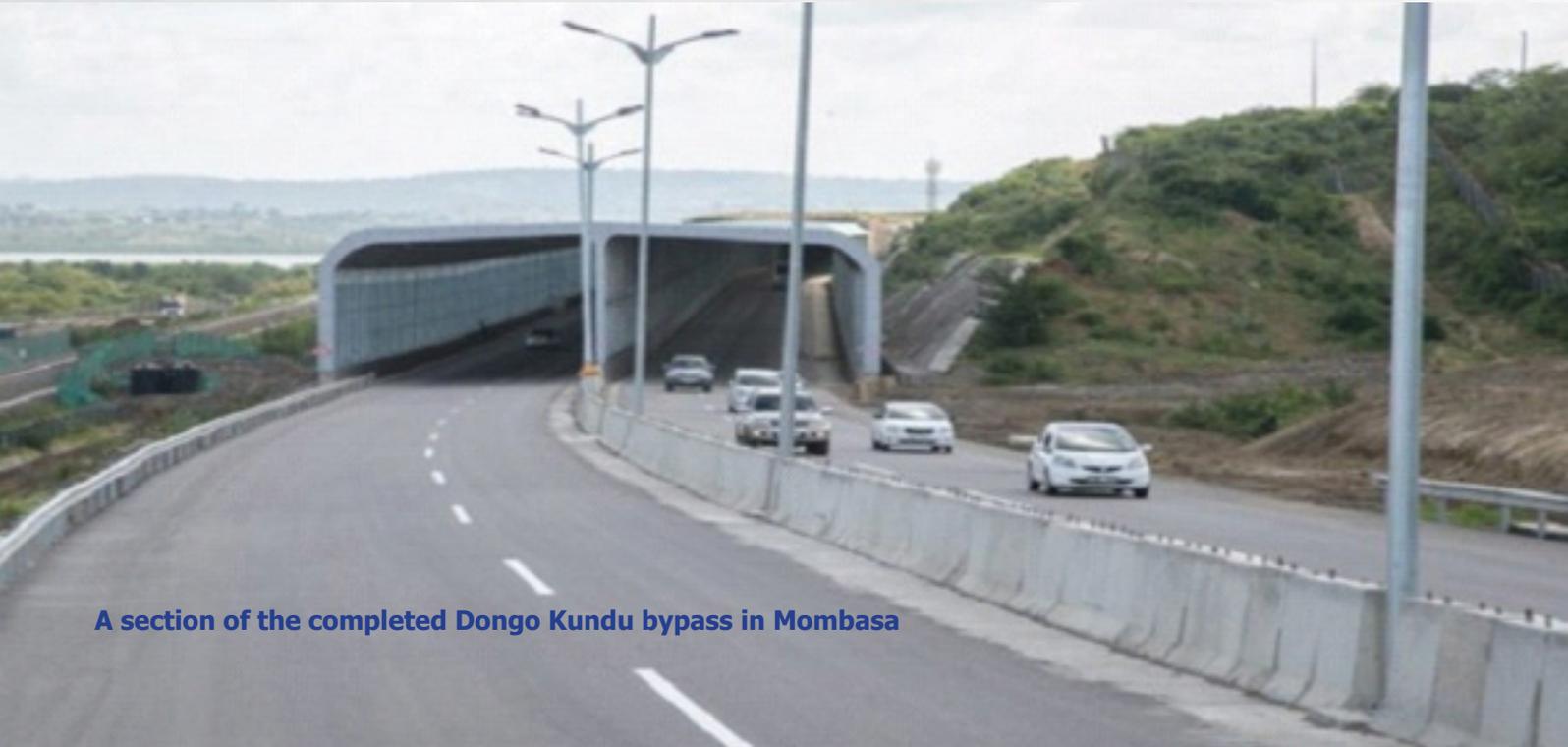
2. 1 Achievements in improvement status of road infrastructure

Since the launch of the charter KeNHA, has made progress in the implementation of the proposed interventions. Foremost the installation of High-Speed-Weigh-in-Motion (HSWIM) systems at Mariakani, Athi River, Gilgil and Webuye weighbridges has greatly improved compliance and reduced the time taken at the weighbridges. In addition, construction of a second weighing point at Mariakani and Athi River HSWIM is complete and in use and is expected to bolster the capacity and efficiency of the weigh bridges.

Secondly, the Moi Airport access road and Port Reitz road in Mombasa have been upgraded to dual carriage and are in use. The 11-kilometer (Miritini - Mwache Kipevu Link Road) linking the Kipevu Container Terminal to Mwache and Miritini Interchanges; Mombasa-Kwa Jomvu project with interchanges at Makupa, Changamwe, Mikindani and Kwa Jomvu is also complete.

There are ongoing works to complete a weighbridge at Miritini. These developments have eased congestion and facilitate the logistics from the new container terminal.

The Dongo Kundu bypass is designed with several interchanges with provisions to integrate seamlessly with the port of Mombasa, the Moi International Airport, the Standard Gauge Railway, the Nairobi-Mombasa Highway and the upcoming Mombasa Northern Bypass. Phase one of the KSh39 billion Dongo Kundu Bypass in Mombasa is complete and in use. The road runs from Mombasa Port's second container terminal and joins the Mombasa-Nairobi highway at Bonje, near Mazaras.



A section of the completed Dongo Kundu bypass in Mombasa

Southern Bypass will link Mombasa to Kwale upon completion



The Kipevu Link Road (5.7km) from the new container terminal to Mwache is complete. Phase two will see an 8.9 km road built between Mwache Junction and Mteza while the third phase will see the construction of a 6.9km road between Mteza and Kibundani. This will link the highway to the Likoni-Lunga Lunga Road to develop the traffic route to Mombasa South Coast towards Tanzania, linking Mombasa to Kwale. The Dualling of Magongo Road will ease congestion on the main highway by providing an alternative route for trucks and other motorists to Kwa Jomvu.

Other major infrastructure improvements along the Northern corridor include:

- **Northern Corridor Transport Improvement Project**

The northern corridor transport improvement project started in 2004 and was estimated at a cost of \$440 million (KSh.44billion) seeks to increase efficiency of road transport along the Northern Corridor for trade

facilitation and regional integration. Among the project components is the rehabilitation of priority road sections along the Northern Corridor to withstand traffic projections and provide reliable road transport services. The other key component is the Socioeconomic Enhancement Roadside Amenities which involves the construction of bus stops/terminals at key selected locations, to include parking areas, and utilities infrastructure. The project was financed by the World Bank and Government of Kenya.

Other improvements projects on the Northern Corridor include; Mau Summit – Kericho, Kericho – Nyamasaria, Nyamasaria – Kisian (A1, B1), Kisumu Airport – Kisian (Busia Road Part 2) Obote Otieno Oyoo and Port Roads (B1/C27).

The improvements along the Mombasa – Busia and Mombasa – Malaba stretches are expected to minimize restrictions to movement of cargo and as a result lead to reduced transit time. KeNHA has completed the interchanges at Nakuru, Njoro and Mau Summit which are now in use. Work is still ongoing on the Interchanges at Jua Kali, Kaburengu and Webuye. These interchanges are expected to minimize traffic disruptions. In addition, the completion of the Nairobi eastern and southern and Kisumu by-passes has succeeded in diverting traffic from congestion in the major urban areas along the corridor.

- **Mombasa – Voi – Taveta/Holili road**

Construction of the 1,545 km road linking the port of Mombasa and Burundi road which commenced in 2014 is complete. Kenya constructed the section between Mombasa-Voi and Taveta border while Tanzania and Burundi worked on their respective segments. The road is part of the Trans-African Highway, links the port through Holili, Singida-Kobero border and finally to Bujumbura, reducing the distance between Mombasa and Bujumbura through the Northern Corridor by over 300Km. In June 2018, the 14th Heads of States Summit of the Northern Corridor Integration Projects (NCIP) resolved to implement the road network formation of the Trans-Africa transit traffic and trans-shipment infrastructure to reach out beyond the EAC region.



A section of Voi-Holili road

- **East Africa Trade and Transport Facilitation Project**

One Stop Border Post at Taveta, Malaba, Busia, Lunga, Isebania, Construction of Axle Load Stations at Athi River and Construction of Axle Load Stations at Mariakani.

Table 2: Planned projects

Project	County	Length	Scope	Major Structures
Mwache Junction – Tsunza - Mteza Section	Mombasa/ Kwale	8.96	Construction of a 4-lane dual carriageway 3.5m wide lanes with 2m wide shoulders	One (No.1) Interchange at Tsunza (U-Turn Bay)
Mteza – Kibundani Section	Kwale	6.86	Construction of a 4-lane dual carriageway 3.5m wide lanes with 2m wide shoulder: Connection to Don-go Kundu Special Economic Zone (SEZ)	Three (No.3) Interchanges at Kibundani (with Likoni-Ukunda-Lungalunga Road), Special Economic Zone (SEZ)

<p>Mombasa Gate Bridge (Phase 1) and extension to Nyali Bridge (Phase 2);</p>	<p>Mombasa</p>	<p>15.82</p>	<p>Construction of a 1.32 Km Cable-Stayed Bridge</p> <p>Approach Viaduct at the Island and Extension towards Nyali</p> <p>Approach Road to the South</p> <p>Rehabilitation/Widening of existing roads</p> <p>Installation of Operation and Maintenance facilities</p>	
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3. MARINE INDICATORS

3.1 Vessel Waiting Time before berth (hours)

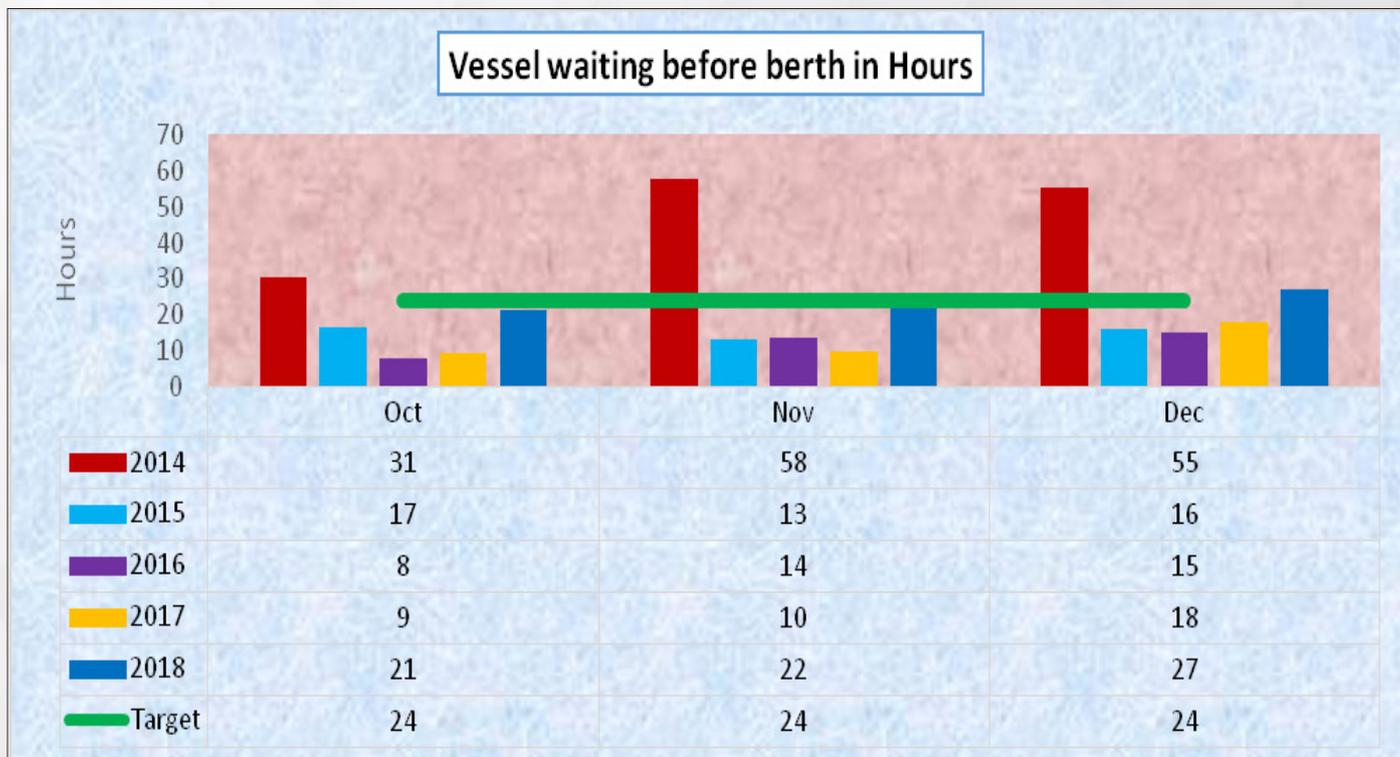
This time is measured from the time the vessel arrives at the fairway buoy to the time at its first berth, including waiting at their own convenience. The target for this indicator is 24 hours.

Vessel waiting time before berth recorded quarter average of 24 hours with a low of 21 hours in October and a high of 27 hours in December 2018. The median performance for the quarter under review period was 11 hours. The vessel waiting time before berth is less than the port charter target of one day suggesting enhanced efficiency.

2018	October	November	December	Quarter (Oct-Dec)
Mean	21.2	22.1	27.2	23.5
Median	10.0	15.5	10.6	11.4
Standard Deviation	21.8	24.2	44.4	31.7
Minimum	0.9	1.6	1.1	0.9
Maximum	93.2	122.0	236.0	236.0
Count	52	44	48	144

From figure 1 below the best vessel waiting time before berth was recorded in 2017. Some of the factors for this positive performance include; introduction of Fixed Window Berthing, crane productivity and adequate terminal capacity. Under the port charter, one of the initiatives for reducing waiting time was the conversion of berths 11 – 14 into container handling terminals.

Figure 1: Vessel Waiting time at the Mombasa Port (October – December 2018)



Source: KPA 2014, 2015, 2016, 2017 and 2018

3.2 Ship Turnaround Time

Ship turnaround time is measured from the time the ship arrives at the port area (Fairway Buoy) to the time it leaves the port area demarcated by the fairway buoy.

The port of Mombasa recorded average quarterly ship turnaround time of 3.8 days. Each of the total 72 ships that called at the port took averagely 3.4 days to dock and leave the port area.

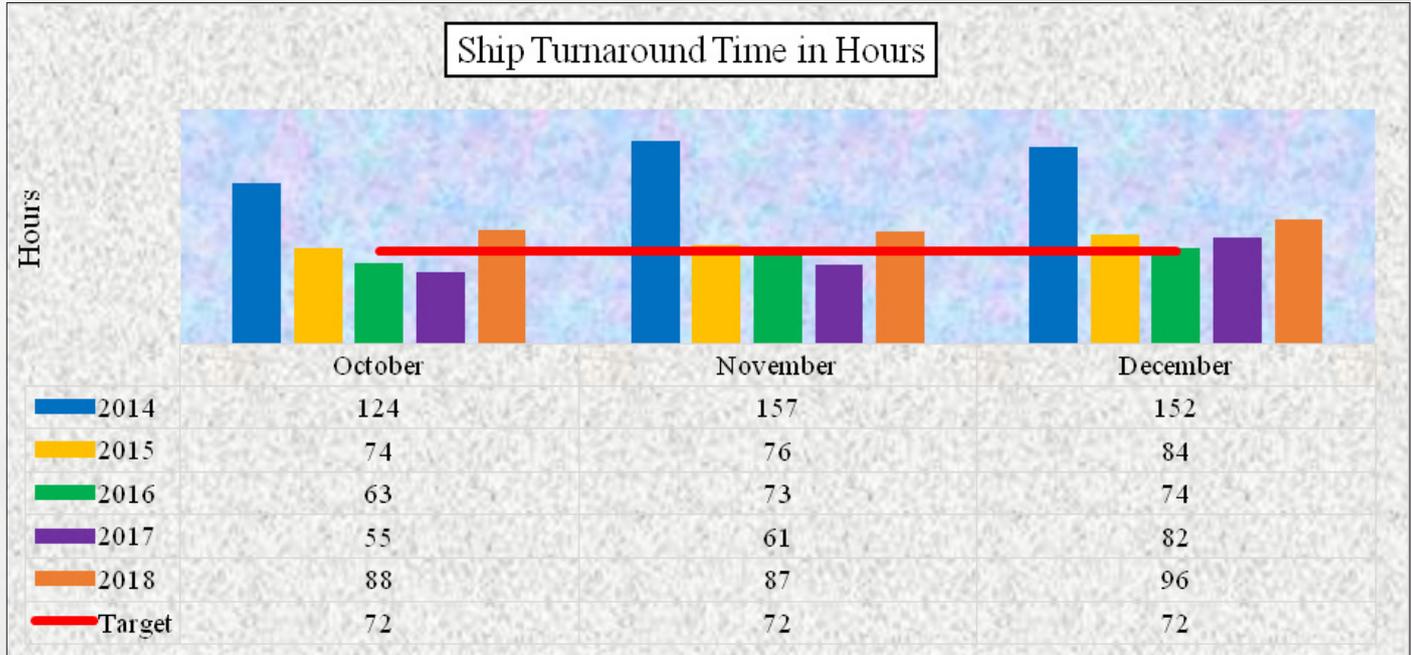
This time includes time taken for ships to waiting at their own convenience for a berth. The port Charter target for ship turnaround time is set at 3 days. The ultimate goal is to attain the 24 hours (1 day) ship turnaround global benchmark time.

2018	October	November	December	Quarter (Oct-Dec)
Mean	87.9	87.3	96.5	90.6
Median	82.9	78.7	88.9	82.5
Standard Deviation	47.6	47.0	55.3	49.9
Minimum	26.1	24.3	27.3	24.3
Maximum	267.2	222.9	281.5	281.5
Count	52	44	48	144

Figure 2 shows ship turnaround time for the months of October to December since 2014. Performance on this target has not been steady over the years. Some of the commitments under the port charter aimed at improving ship turnaround time include; vessel scheduling, availability of quality equipment and provision of additional berthing space. Other initiatives were the construction of Kipevu oil terminal 2, invest in additional

petroleum oil storage tanks, construction of an offshore Single Buoy Mooring and establishment of modern dry bulk facilities which are at different levels of implementation.

Figure 2: Ship Turnaround Time (Hrs) at the Mombasa Port (October - December)



Source: KPA 2014, 2015, 2016, 2017 and 2018

3.3 Vessel Productivity (Gross Moves per Hour)

Table 3 below describes the number of ships at the port of Mombasa for the period October to December 2018 at berths (B16, B17, B18) at container terminal 1 and berths (B20 and B21) at container terminal 2. The number of ships docked during the three-month period was 144 with the monthly call at 52 ships in October, 44 ships in November and 48 ships in December 2018. The most frequent shipping lines was MAERSK and MSC recording 34% and 24% respectively. Maersk, is a Danish business conglomerate with activities in the transport, logistics and energy sectors. Maersk has been the largest container ship and supply vessel operator in the world since 1996. This trend indicates a two-fold increase in number of ships from 73 in 2013 to 144 in 2018 during the period under review. This is an indication of infrastructure expansion and upgrade.

Table 3: Number of ships (October to December 2018)

S/No	Shipping Line/Agent	October	November	December
1.	CMA CGM	6	4	4
2.	DSS	3	1	0
3.	EVG	2	1	4
4.	EXPRESS	0	0	1
5.	MAERSK	15	15	19
6.	MSC	12	12	10
7.	PIL	7	5	7
8.	RSS	4	5	2
9.	SSA	2	0	0

10.	SAL	0	1	0
11.	WSS	1	0	1
	Number of ships	52	44	48

Source: KPA October to December 2018

Mombasa Port Charter target for Vessel Productivity measured by Gross Moves per Hour (GMH) at the Port of Mombasa is 30 Moves per Hour. Table 4 below shows that the average gross moves per hour for container vessels handled increased significantly from 29.16 GMH in October 2018 to 38.81 GMH in December 2018.

The performance indicates improved productivity compared to the port charter baseline of 16.7 Gross Moves per hour in 2013. The positive performance indicates that improved investment and utilization of ship yard equipment by the Kenya Ports Authority (KPA) is yielding desired results an indication of infrastructure expansion and upgrade.

Table 4: Vessel Productivity (October to December 2018)

Month (2018)	No of ships	Total Moves	Gross Moves per hours
October	52	81,241	29.16
November	44	74,139	31.29
December	48	75,807	38.81
Total/Average	144	231187	33.08

Source: KPA 2018

4. PORT INDICATORS

4.1 Containerised Cargo Dwell time

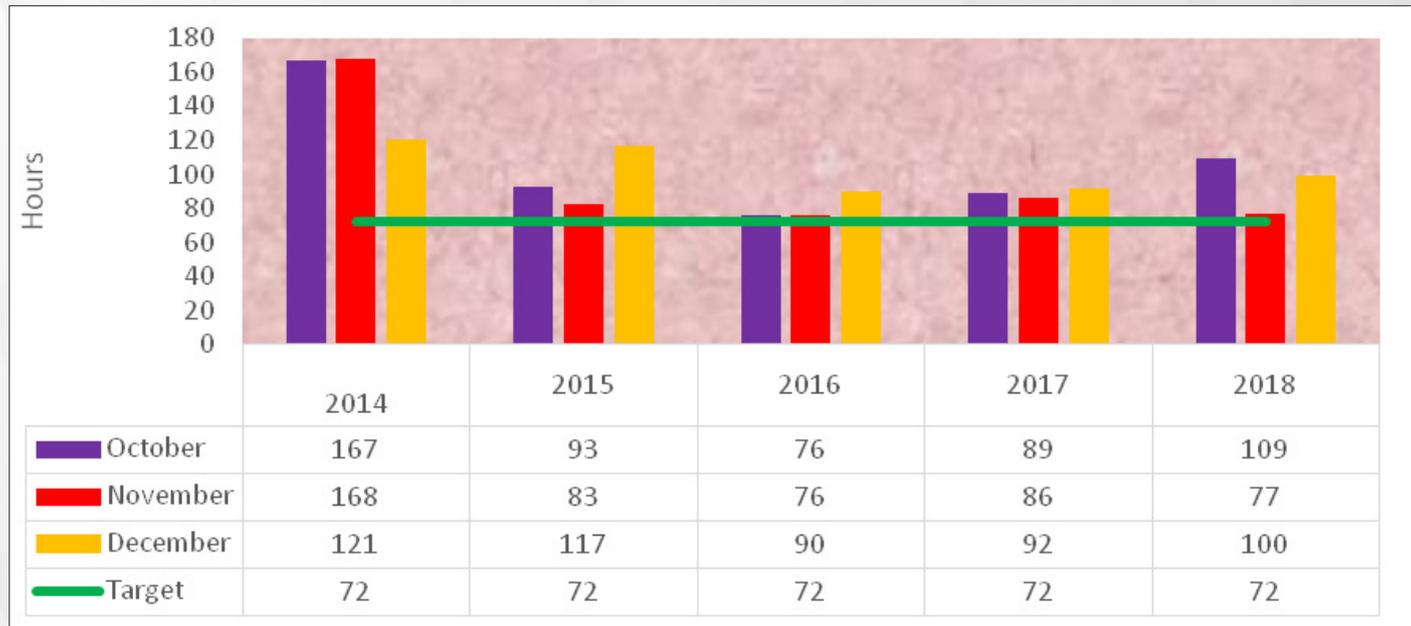
Refers to the total time spent by Cargo at the Port from when the Cargo is discharged from the vessel until it exits the Port (average number of days the container stays in the yard).

Dwell time is a vital measure of efficiency for a port to ease trade. High dwell time adds delays and costs to businesses and consumer prices. The KPA is taking major steps to decrease congestion at the Mombasa seaport gateway. Figure 3 displays cargo dwell time for three months for the quarter October to December 2018. Containers arriving at the port spend an average of 109 hours in October 2018 and 100 hours in December 2018 before exiting the port.

The quarter of 2014 shows highest dwell time. As observed from the data the indicator is still above the port charter target of three days and 2 days international benchmarking standards. Port Charter proposes 70% pre-arrival clearance, 24 hours before docking of any vessel; Conducting joint verification; Expanding the scope of services rendered by the CFSs; Outsourcing of conventional cargo operators and Moving Customs warehouse cargo to the G section.

The implementation of a modernization programmes at Mombasa port has seen improvement in productivity and efficiency of the port.

Figure 3: Average dwell time in Hrs at the Mombasa Port (October - December)



Source: KPA 2014, 2015, 2016, 2017 and 2018

4.2 Time Taken at the Document Processing Centre (DPC)

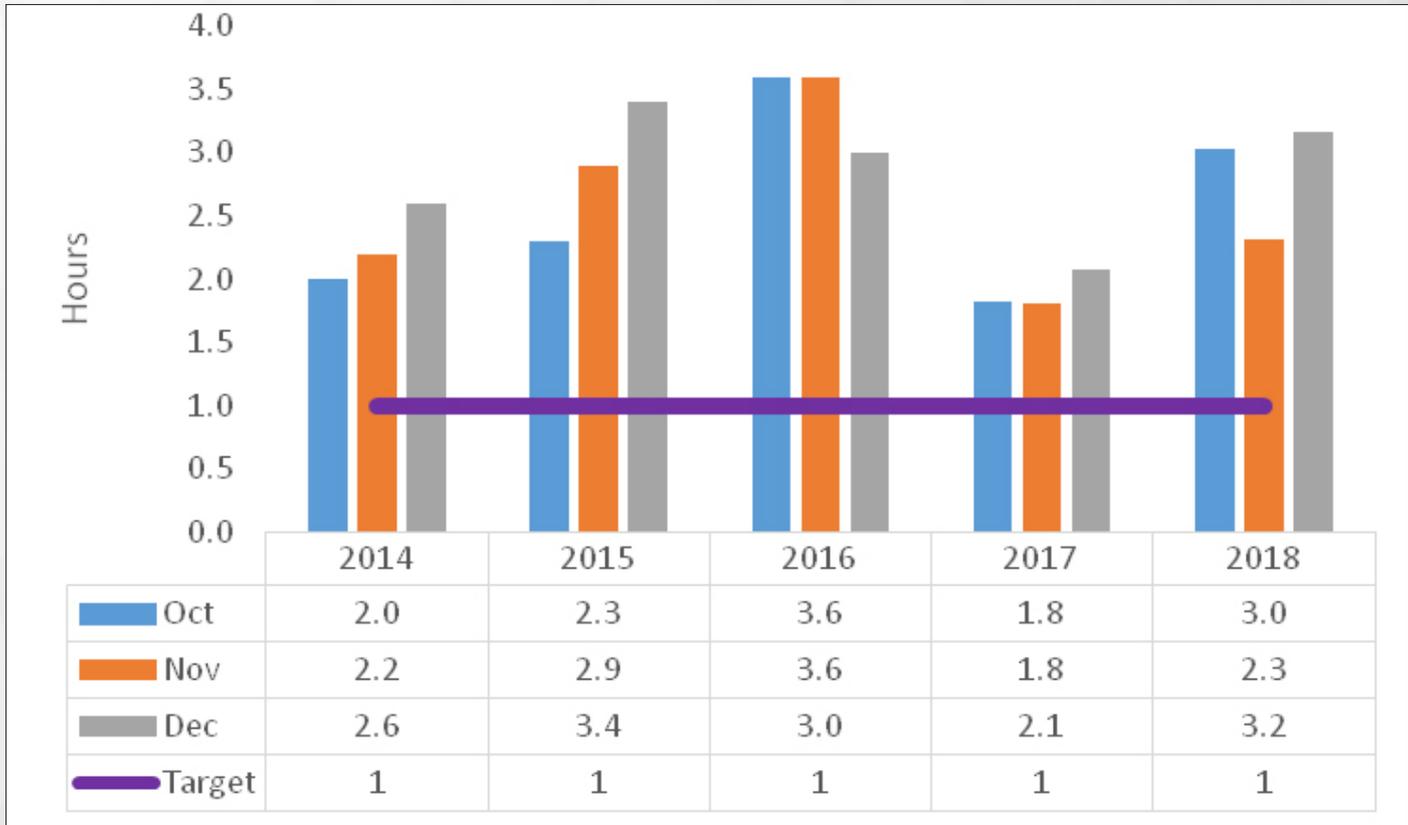
This is the time taken by customs to pass an entry lodged by a clearing agent.

When cargo arrive at the port of Mombasa, it undergoes multiple processes which take time. The cargo is unloaded, moved to customs area, inspected, cleared and finally picked up. Because these procedures take time and their duration is uncertain, they contribute to delays and costs which in turn affects trade. For instance, time taken at document processing center involves the following processes: first a manifest is submitted electronically by Ships Agent to DPC in Nairobi; then the manifest is accepted in DPC and a manifest number is generated; in case there are any enquiries the Ships Agent is sought for clarification before acceptance; the Clearing Agent submits declaration electronically to SIMBA system; DPC proceeds with Clearance process; a Lodgment of import declaration is made and finally assessment of duty payable.

The port charter established commitments for Kenya Revenue Authority (KRA) towards faster clearance of document by developing a system of pre-arrival clearance to clear 70% of the cargo within a span of 48 hours before docking of vessels, within 3 months after the charter signing. The target has not yet been met.

From figure 4 below, average DPC time increased from 3 hours in October 2018 to 3.2 hours in December 2018. This target heavily relies on the stability of SIMBA system, integrity of clearing agents, quality of declaration by the relevant agents and Document volumes waiting processing

Figure 4: Time Taken at the Document Processing Centre in Hrs (October - December)



Source: KPA 2014, 2015, 2016, 2017 and 2018

4.3 One Stop Centre Clearance Time

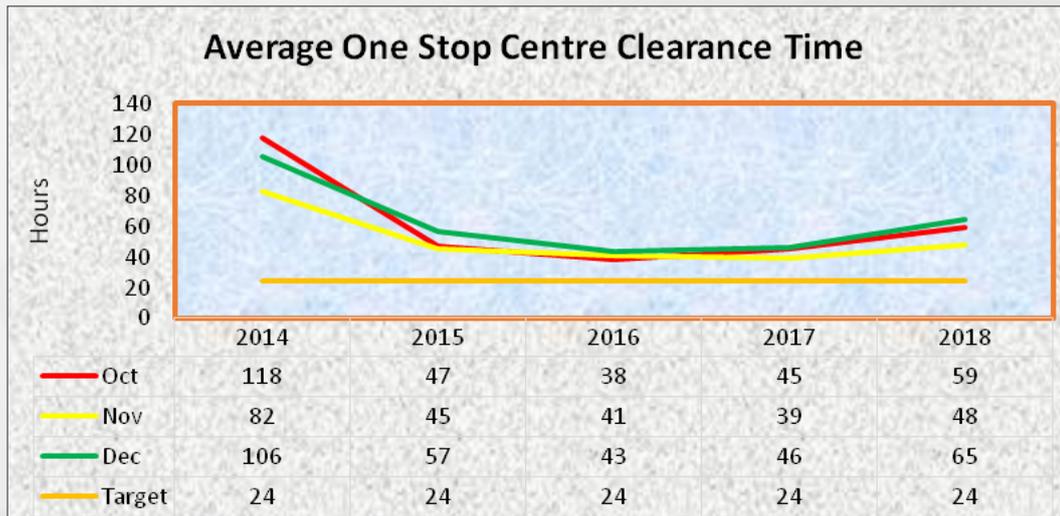
One Stop Centre Clearance Time measures the average time between passing of customs entry registration and issuance of release order.

The steps involved between passing of customs entry registration and issuance of release order are as follows:

- Agent submits documents to the receiving clerk for onward submission to the Head Verification Officer
- Clearing and forwarding Agent also submits copies of file to other concerned agencies
- Head Verification Officer reviews the documents and instructs the Verification Officer to forward them to the Receiving Clerk
- Receiving Clerk prepares a letter to KPA advising that container is subject to verification and an email sent to Clearing Agent advising of the same.
- The container is sighted to ensure that it is available for verification/inspection. Agent informs verification officer to arrange time of verification/inspection
- Joint verification by KPA and concerned agencies is conducted
- Agent obtains release stamps from all agencies involved in verification
- Document file is returned to Verification Officer who creates examination report and submits to Head Verification Officer for examination
- Head Verification Officer releases cargo on the system which generates Release Order electronically
- Release Order is electronically transferred to KPA

Figure 5 provides the trend in the time taken at One Stop Centre at the port of Mombasa. The performance shows improvement over years; however the target of 1 day is not yet attained. This was occasioned by uncoordinated joint verification of cargo, late submission and revision of documents by clearing agents and KRA system downtime. Some of the commitments aimed at improving performance for this target as per the port Charter included: Conducting joint verification and verification of transit cargo to be made at the countries of destination. The Customs Service Department is expected to co-ordinate the exercises at Mombasa Port and respective Container Freight Stations (CFSs). All cargo handling institutions are required to provide adequate equipment to support the physical verification.

Figure 5: One Stop Centre Clearance Time in Hrs (October - December)



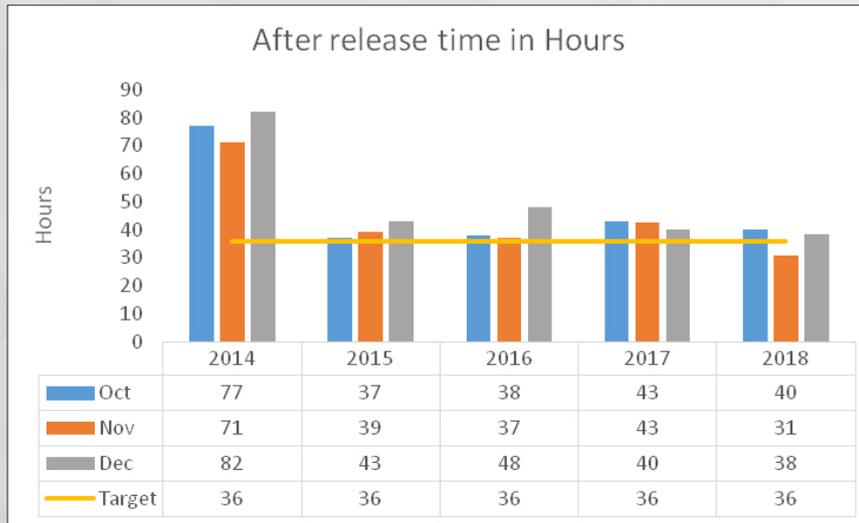
Source: KRA 2014, 2015, 2016, 2017 and 2018

4.4 Delay after customs release

Delay after customs release refers to the period it takes to evacuate the cargo from the port after it is officially released by Customs.

After cargo has been cleared by Customs, the Agent creates pick up order to which port charges are raised and invoiced. The Agent advises transporter to bring Truck to Port (in case of road transport modal shift) and Agent pay charges advised. Concurrently, KPA Security clerk generates position slip for truck and updates port charges on KWATOS. Pick up order is endorsed by KPA-logistics department, then the truck is loaded and proceeds to Port Gate where the security Clerk checks and issues the exit note to the driver.

Figure 6: Delay after Custom Release in Hrs (October - December)



The time after customs release has a significant bearing on the port dwell time. Data from figure 6 below shows time taken after customs release improved significant over the years from 2014 to 2018. Automating gate clearance procedures and ensuring 24 hour operations are some of the commitments aimed at improving performance for this target.

Source: KRA 2014, 2015, 2017 and 2018

5. CORRIDOR INDICATORS

5.1 Transit time

The northern corridor is served by a combination of surface transport modes; road, railway, oil pipeline and inland waterways. Transit time measures the time taken by transporters from the port to deliver cargo to the point's destination. Transit time is therefore a key measure of efficiency of the transport logistics system where reduction in time taken is desirable. However transit time is affected by numerous factors that occasion delays and stoppages along the corridor. Some of the main stoppage reasons include weighbridges, police checks, road conditions, company checks, custom checks and obstruction due to road accidents among other reasons that are tracked under the section on road survey in this report.

Some of the measures that have been put in place to minimize stoppages and improve transit time include the implementation high speed motion weigh bridges, one stop border points, establishment of the Northern Corridor Transit Patrol Unit among others.

5.1.1 Transit Time in Kenya using SIMBA System Data

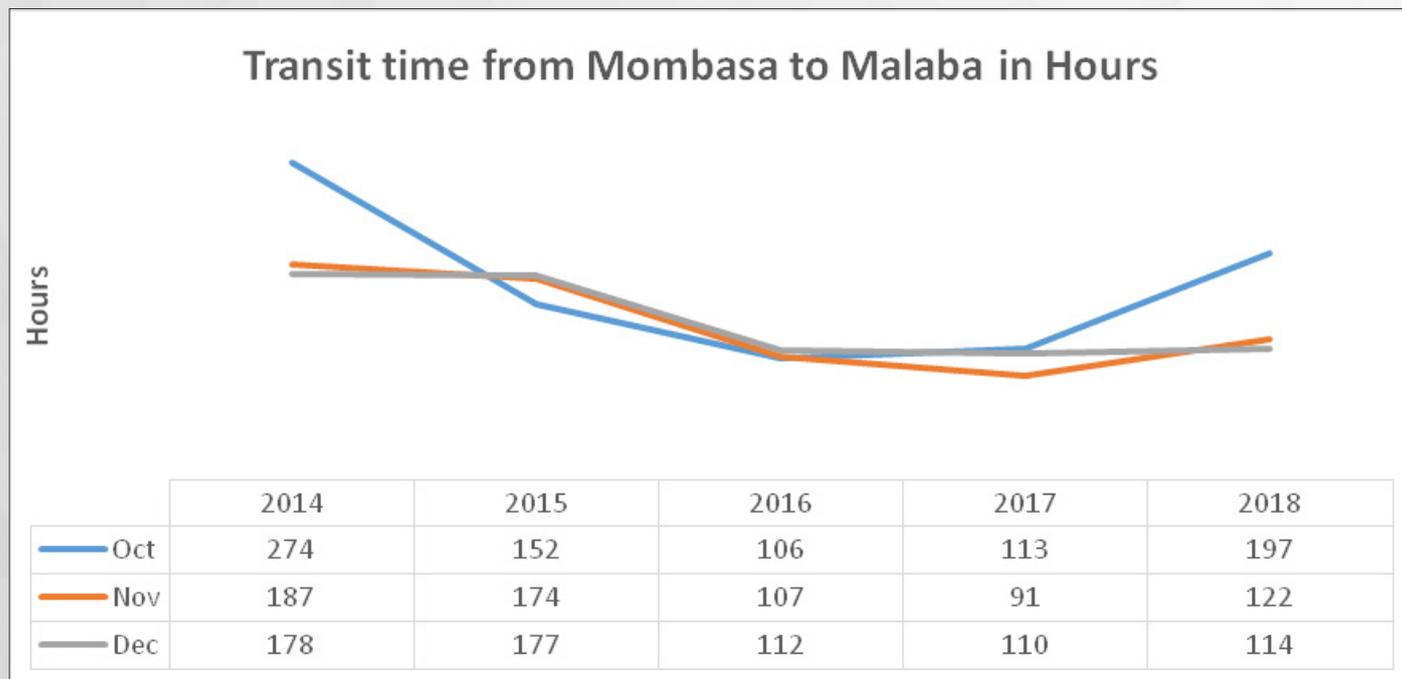
Transit time in Kenya is an estimate of the period from the time cargo is removed from the port of Mombasa to the time the export certificate is issued after crossing the border at Malaba or Busia.

The discussions focus on transit time for a truck travelling from the port of Mombasa to the key borders in Kenya along the designated Northern Corridor transit routes. The main northern corridor route runs from the port of Mombasa to Malaba and Busia borders.

The target transit time for cargo from Mombasa to Malaba (covering a distance of 933 Km) is 72 hours. The performance on transit time has improved greatly over since the launch of the port charter.

As shown in figure 7 transit time was recorded at 144 hours in December 2018 compared to 178 hours in the same month in 2014. Despite the improvement the performance is still far from the 72 hours target.

Figure 7: Transit time from Mombasa to Malaba in hours (October – December).



Source: KRA 2014, 2015, 2017 and 2018

Similarly, as shown in table 5 below, there was a significant improvement in transit time from Mombasa to Busia with the month of December 2018 setting the best record of transit time of 80 hours. The performance can be attributed to the completed interchanges at Nakuru, Njoro and Mau Summit and the completion of by-passes at Dongo Kundu, Nairobi and Kisumu.

Table 5: Transit Time from Mombasa to Busia in hours (October – December 2018)

Mombasa to Busia	2014	2015	2016	2017	2018
October	324	169	147	142	257
November	214	189	107	114	105
December	242	224	182	121	80

Source: KRA 2014, 2015, 2017 and 2018

KeNHA has implemented various infrastructural improvements along the route and some are still ongoing. Kenya National Police Service has also enhanced more patrols along the corridor and in major towns. A designated officer from office of Deputy Inspector General, Kenya Police operations has been appointed to coordinate investigations of any incidents/complaints raised by stakeholders. This is in line with maintain a 24-hour safe and free flow of traffic along the corridor. It is recommended that activities that the ongoing improvements on road infrastructure should be fast tracked.

5.1.2 Transit time using Regional Electronic Cargo Tracking System (R-ECTS) in Uganda

The Regional Electronic Cargo Tracking System (RECTS), is an electronic monitoring tool of transit cargo along the Northern Corridor. The system enables real time tracking of transit cargo from the port of Mombasa to its destination through an online digital platform. The goods are physically armed with electronic seals then remotely monitored from the Centralized Monitoring Center.

RECTS is a harmonized system connecting Kenya, Rwanda and Uganda and allows the revenue authorities in this countries to jointly and electronically track and monitor goods in transit along the Northern Corridor from Loading (Departure) to destination within Kenya, Rwanda and Uganda.

The challenge of inadequate seals remains which has a ripple effect on transit time. The transporters incur a lot of costs as they await availability of R-ECTS to have their trucks sealed before commencing their transit journeys. Fewer number of seals used, make the sample weak for objective analysis. Table 6 below shows the number of seals armed on trucks for the quarter under review.

The route from Kampala to Mombasa recorded the highest number of trucks armed with RECTS for export goods to Mombasa followed by Elegu. A total of 2,931 trucks were armed with RECT seals for the quarter ending December 2018, out of which 962; 1,135; 834 seals were for the months of October, November and December 2018 respectively.

Table 6: Number of RECT seals for Transit Time from Kampala to Mombasa, Katuna and Elegu (October – December 2018).

Month	Kampala to Mombasa	Kampala to Katuna	Kampala to Elegu
October 2018	962	18	501
November 2018	1,135	26	609
December 2018	834	14	588
Total	2,931	58	1,698

Source: URA RECTS, October to December 2018

The average transit time from Kampala to Mombasa (1,169 km) increased from 128 hours in November 2018 to 139 hours in December 2018 as shown in table 7 below. Average transit time for the quarter under review was 5.5 days. The minimum transit time used varied from 14 hours to 53 hours. During the quarter (October to December 2018), half of the trucks used transit time of 122 hours from Kampala to Mombasa.

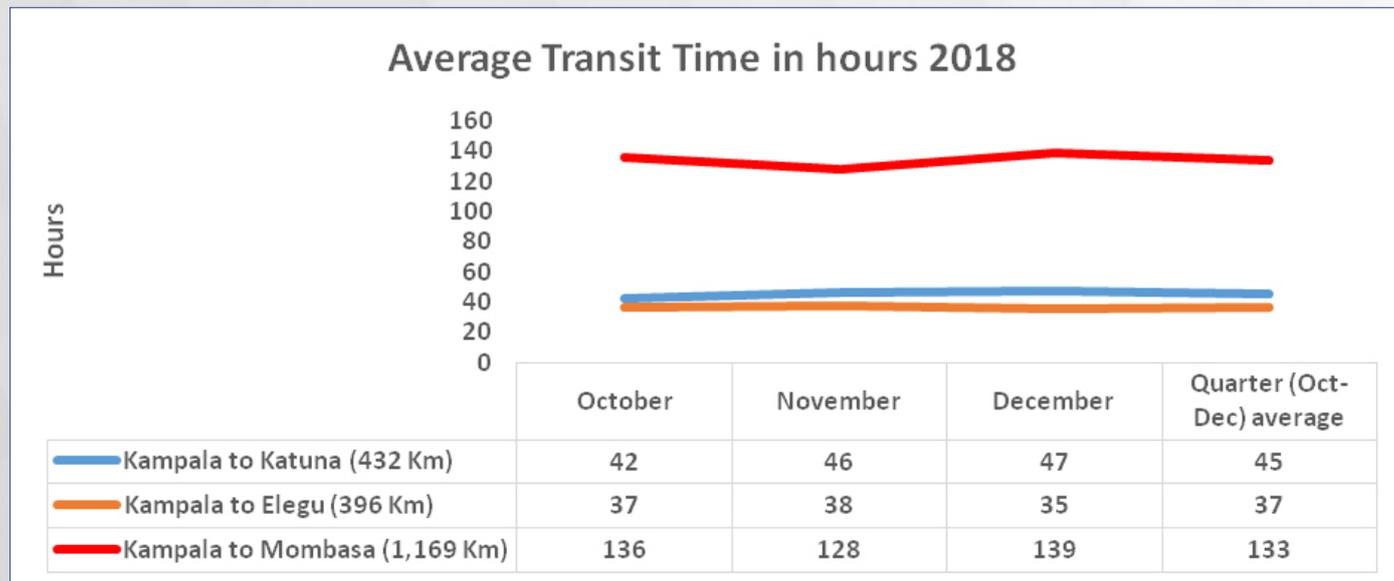
Table 7: Transit Time from Kampala to Mombasa in hours (October – December 2018)

Kampala to Mombasa	October 2018	November 2018	December 2018	Quarter (Oct-Dec)
Mean	135.7	127.6	138.6	133.4
Median	121.7	120	125.1	121.5
Standard Deviation	50.8	41.1	51	47.5
Minimum	53	14.2	40.2	14.2
Maximum	344.3	358.9	356.9	358.9

Source: URA RECTS, October to December 2018

Figure 8 shows the average time it takes for trucks to move from Kampala to various destinations in the Northern Corridor Member States. The average monthly transit time varies with the distance covered. Similarly, transit time from Kampala to Katuna increased steadily from 42 hours in October 2018 to 46 hours in November and further to 47 hours in December 2018. From the analysis, transit time from Kampala to Katuna takes longer despite the short distance compared to from Kampala to Elegu as shown in figure 8 below.

Figure 8: Average Transit time Uganda (October to December 2018) - Export route



Source: URA RECTS, October to December 2018

Table 8 below shows the frequency table for number of RECTs analyzed for the Malaba, Kampala and Katuna routes from the port of Mombasa on trucks for the quarter under review. The route of Mombasa to Kampala recorded the highest number of counts 211 followed by Mombasa - Katuna 58 for the quarter ending December 2018.

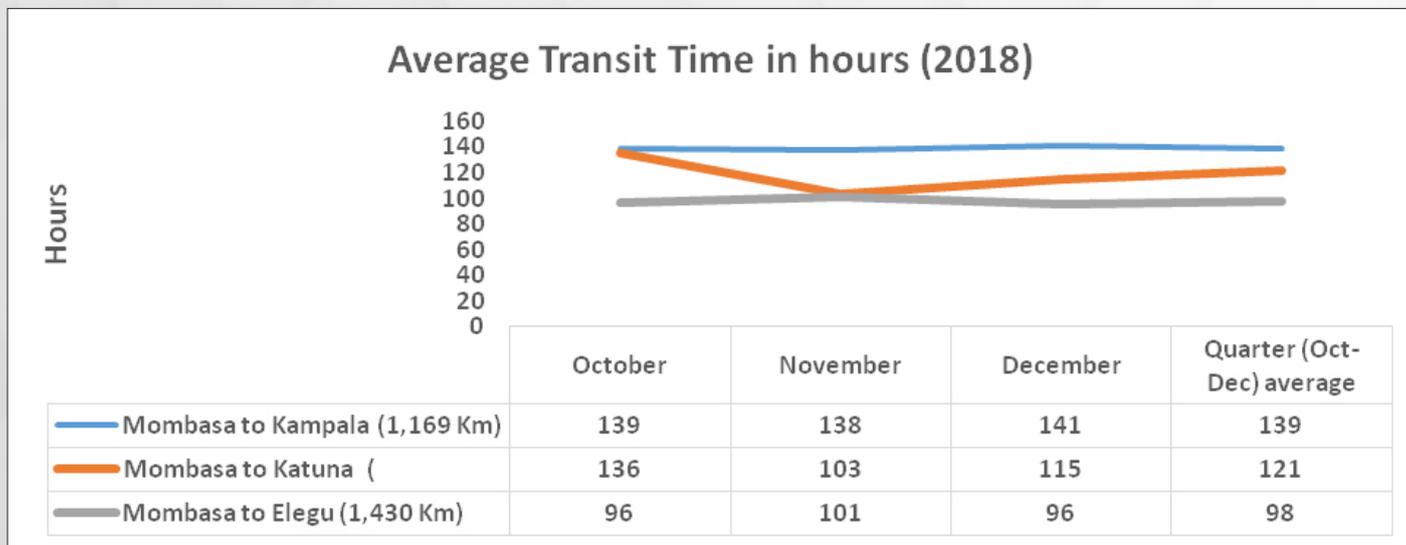
Table 8: Frequency table for number of RECTs analyzed (October – December 2018)

Month	Mombasa to Malaba	Mombasa to Kampala	Mombasa to Katuna
October 2018	32	102	31
November 2018	10	59	22
December 2018	12	50	5
Total	54	211	58

Source: URA RECTS, October to December 2018

Figure 9 shows average transit time from Mombasa remained steady on over the review period on routes to Kampala, Katuna and Elegu using RECTS. The analysis show that average transit time from Mombasa to Kampala was steady for the quarter registering 6 days with 50% of trucks using only an average of 2 days. Equally, average transit time from Mombasa to Katuna was also steady recording 121 hours during the quarter. It can be observed that transit time from Mombasa to Kampala was more compared to transit time from Mombasa to Katuna despite the fact that Kampala is a shorter distance. This is a result of delays in receipt of trucks into the customs area at destination as well as delays in disarming the seals from the trucks. The report recommends a further review on the causes of delays to propose appropriate measures of addressing those barriers. On the other hand, the Mombasa - Elegu route also recorded a steady transit time of 98 hours.

Figure 9: Average Transit time Mombasa to Kampala, Katuna and Elegu (October to December 2018)



Source: URA RECTS, October to December 2018

5.1.3 Transit time in Rwanda

Figure 10 shows transit time from Gikondo in Kigali Rwanda to Ruavu and Bugarama for the quarter ending December 2018. A total number of 53 seals were used on trucks for real time cargo trucking from Gikondo to Rubavu Poids Lourds, 86 RECT seals from Gikondo to Bugarama and 108 for the transit route of Gikondo to La Corniche which are the borders between Rwanda and Democratic Republic of Congo is shown on the next page.

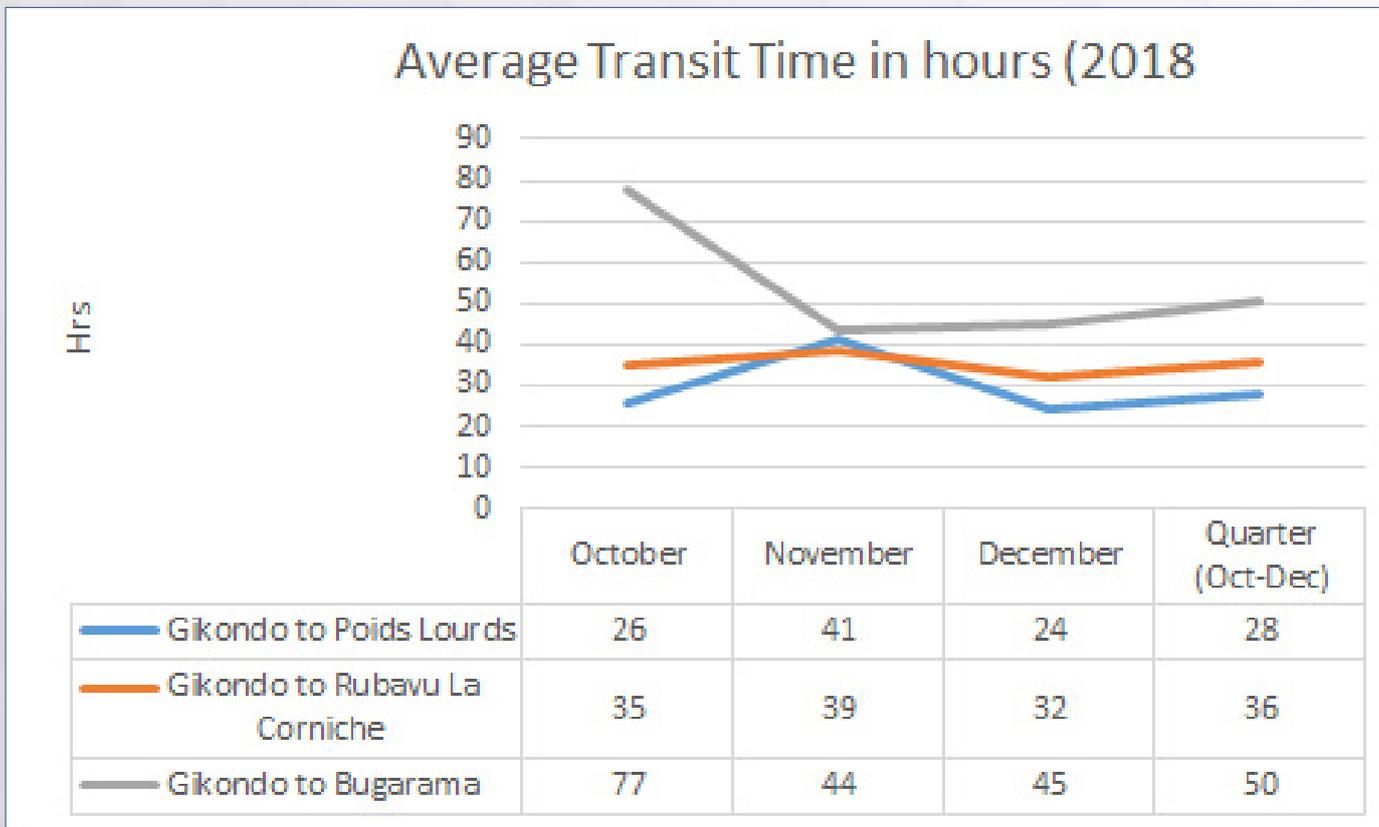
Number of trucks sampled	October 2018	November 2018	December 2018	Total
Gikondo to Poids Lourds/Rubavu	22	9	22	53
Gikondo to La Corniche/Rubavu	35	48	25	108
Gikondo to Bugarama	16	43	27	86

The distance from Gikondo to Rubavu is 160 kilometers. It can be observed from figure 10 that time taken by trucks from Gikondo to La Corniche is higher with an average of 36 hours compared to transit time of 28 hours from Gikondo to Poids Lourds for the quarter ending December 2018. Furthermore, the analysis shows the month of November 2018 registered the highest transit time on both routes; however, this time reduced significantly in December 2018.

Average transit time from Gikondo to Bugarama reduced significantly from 77 hours in October to 55 hours in December 2018 registering the quarter average of 2 days. The good performance could be attributed to the road condition which is mostly good or fair except for some few sections, which are either under development or under rehabilitation.

It is also noted that the number of RECTS seals on the route of Gikondo to Gatuna which is the border between Rwanda and Uganda were quite few with the month of October and December 2018 only registering one and two observations respectively. This means the average figures may not be adequate for conclusive analysis. Nonetheless, available data shows that average transit time from Gikondo to the Gatuna (Export bound route) increased from 4 hours to 16 hours in October and December 2018 respectively.

Figure 10: Average Transit Time from Gikondo/Rwanda to various borders in 2018



Source: RRA RECTS, October to December 2018

Table 9: Average Transit Time from Gikondo to various borders in 2018

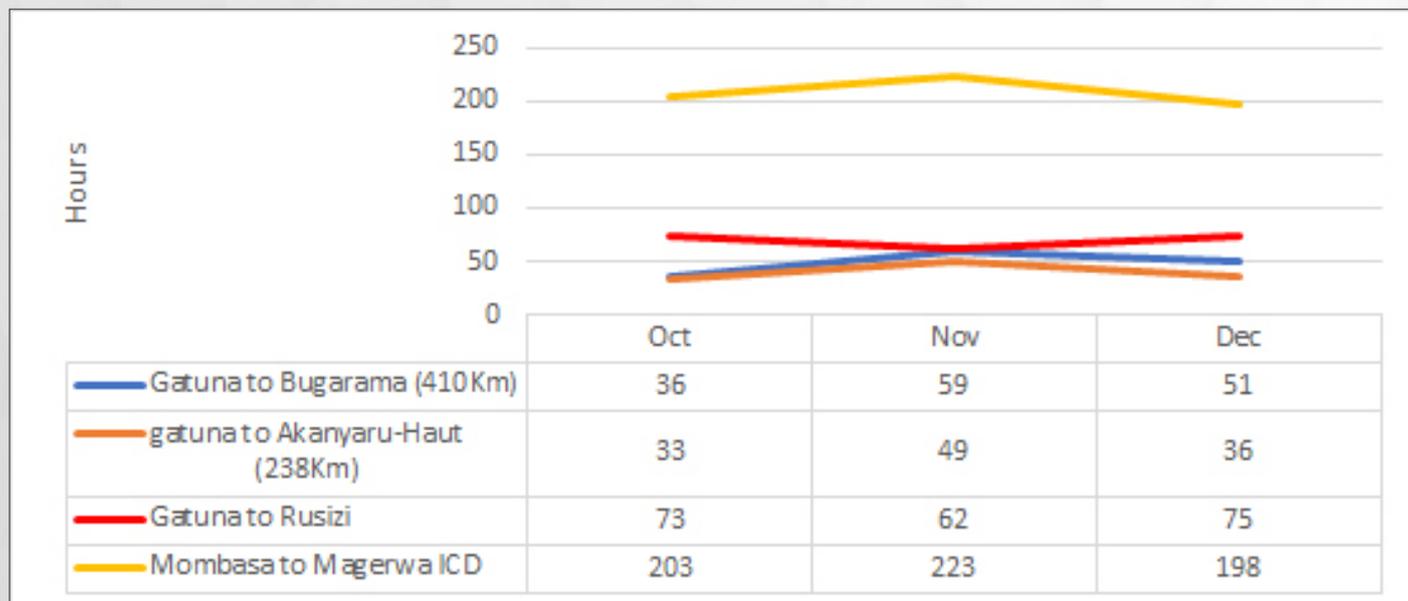
Gikondo to Gatuna	October	November	December	Quarter Average
Mean	4	11	16	11
Median	4	5	16	5
Standard Deviation		9	3	8
Frequency	1	27	2	30
Gatuna to Gikondo				
Gatuna to Gikondo	October	November	December	Quarter Average
Mean	3	12	11	10
Median	3	5	4	4
Standard Deviation	1	13	11	12
Frequency	3	11	8	22

Source: RRA RECTS, October to December 2018

5.2 Transit time in Rwanda using ASYCUDA Data

Figure 11 below presents summary on average transit time in Rwanda from Gatuna. Rwanda borders DRC through various borders including Bugarama, and Mururu/Rusizi and Akanyaru-Haut border with Burundi. Data from ASYCUDA for the period of October 2018 to December 2018 shows that transit time on these routes varies depending on the distance and route. For instance, Gatuna to Bugarama and Akanyaru-Haut all witnessed inconsistent transit time as shown below. The analysis shows that average transit time from Gatuna to Bugarama increased significantly from 36 hours in October 2018 to 51 hours in December 2018.

Figure 11: Average Transit Time from Gikondo to various borders in 2018



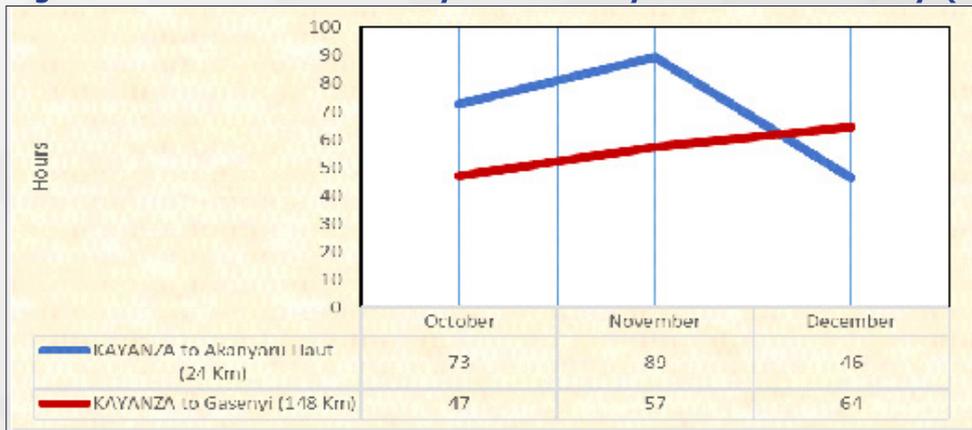
Source: RRA ASYCUDA, October to December 2018

5.3 Transit time in Burundi

Figure 12 below shows average transit time from Kayanza to Kanyaru-Haut (24 Km) and Gasenyi (148 Km) respectively for the quarter ending December 2018. Average transit time from Kayanza to Gasenyi increased significantly by 18 hours from 47 hours in October to 64 hours in December 2018. This time taken is still high considering the distance of 24 kilometers. This performance signifies that barriers to cargo movement still exist along the route pointing to prevailing inefficiencies.

On the other note, average transit time for Kayanza to Akanyaru-Haut route decreased significantly by 26 hours recording transit time of 46 hours in September 2018 from 73 hours in October 2018. Although barriers to cargo movement still exist along the route, the positive performance over the period can be related to the improvement in road infrastructure along the route.

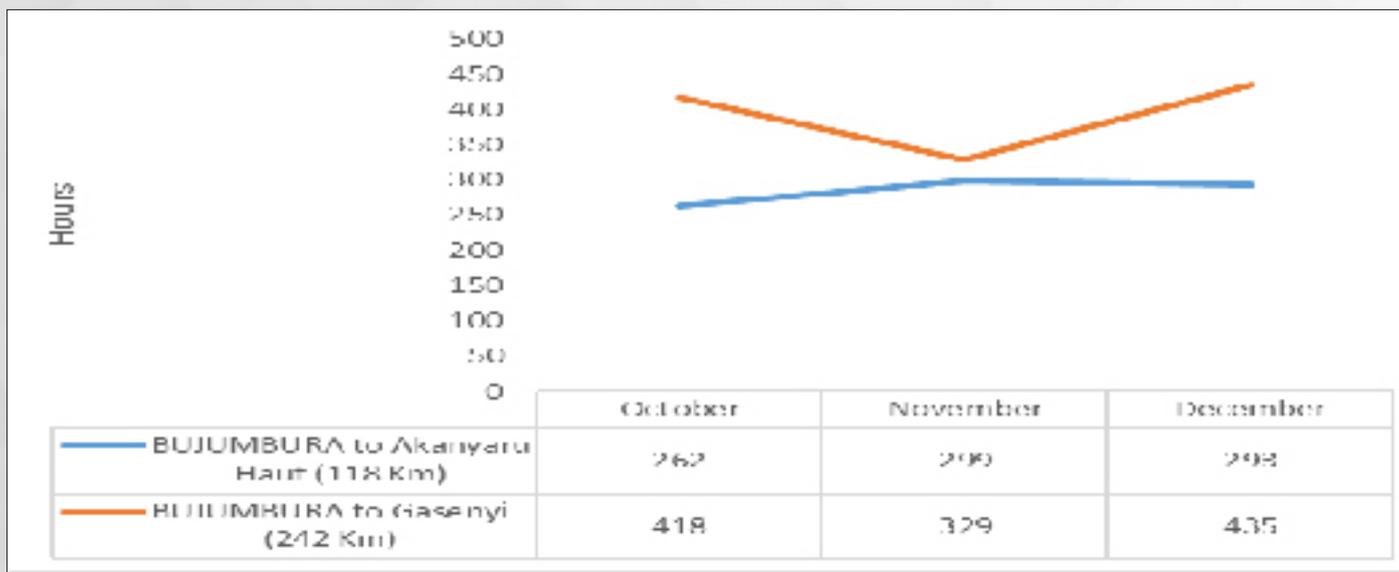
Figure 12: Transit Time from Kayanza to Akanyaru-Haut and Gasenyi (Hrs.)



Source: OBR, October to December 2018

The average transit time for Bujumbura to Akanyaru Haut which is 118 kilometers increased steadily from 262 hours in October 2018 to 293 hours in December 2018 as shown in figure 13 below. It took an average of 418 hours and 435 hours for trucks to transport cargo from Bujumbura port to Gasenyi (242 Km) in October 2018 and December 2018 respectively. The performance shows a deteriorating trend which could be attributed to existence of non-tariff barriers along the route.

Figure 13: Transit Time from Bujumbura port to Akanyaru-Haut and Gasenyi (Hrs.)



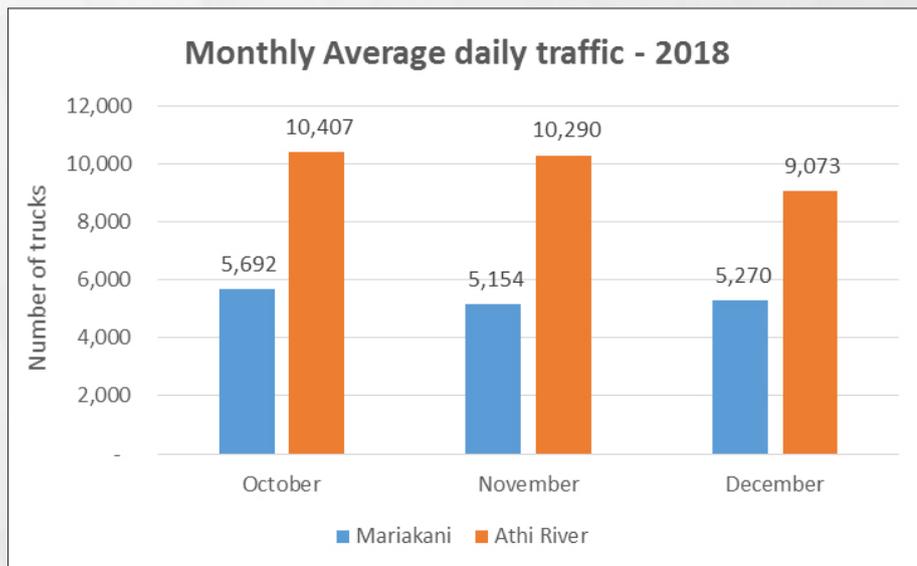
Source: OBR, October to December 2018

5.4 Weighbridge Traffic

The indicator measures the average number of trucks weighed per day at the various weighbridges in Kenya.

Figure 12 below illustrates monthly average daily traffic at weighbridges on both inbound and outbound trucks at Mariakani and Athi-River weighbridges. Athi- River weighbride recorded the highest traffic almost doubling traffic of Mariakani. The high traffic at Athi-River included traffic originating from the Port of Mombasa both local and transist cargo as well as traffic originating from Namanga Border Point.

Figure 14: Monthly average daily weighbridge traffic in 2018



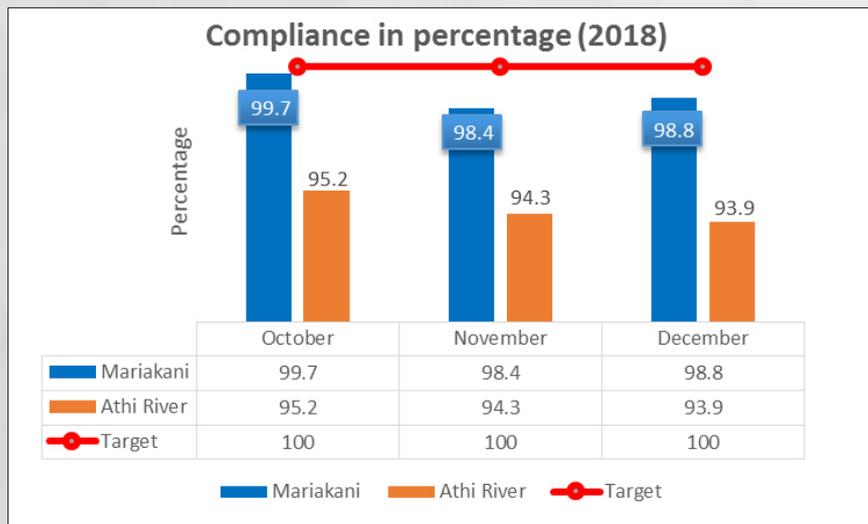
Source: KeNHA, October to December 2018

5.5 Weight Compliance at the Weighbridge

Weight compliance measures the percentage of trucks that comply with the vehicle load limits before and after re-distribution of the weights.

From figure 13 below, Mariakani and Athi-River weighbridges recorded a steady performance in terms of compliance levels of over 90 percent performance. Mariakani and Athi river weighbridges have both installed new High Speed Weigh-In-Motion for both Mombasa and Nairobi bound trucks.

Figure 15: Weighbridge Compliance for Mariakani and Athi-River weighbridges



Source: KeNHA, October to December 2018



Weights re-distribution Yard at Mariakani Weighbridge

