REPUBLIC OF KENYA

BUSINESS PROCESS RE-ENGINEERING REPORT

SEPTEMBER, 2025

ACKNOWLEDGEMENT

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ABBREVIATIONS/ACRONYMS

Abbreviation	Full name
BPR	Business Process Re-engineering
PhD	Doctor of Philosophy
SDPS	State Department of Public Service
SCMS	Supply Chain Management System
EGP	Electronic Government procurement
SA	Secretary Administration
GPS	Global Positioning System
KPIs	Key Performance Indicators
CCTV	Closed-Circuit Television
MMIS	Mechanical Management Information System
HOD	Head of Department
LPO	Local Purchase Order
GVCU	Government Vehicle Check Unit
MDAs	Ministries, Departments and Agencies
NTSA	National Transport and Safety Authority
EPRA	Energy and Petroleum Regulatory Authority
TIMIS	Transport Management Information System
RTGS	Real Time Gross Settlement
FMIS	Fuel Management Information System
HR	Human Resource
BYOD	Bring your own device
VoIP	Voice Over Internet Protocol
EoL	End of Life
EoS	End of Support
DDOS	Distributed Denial of Service
MOICT	Ministry of Information Communication and Technology
ISP	Internet Service Provider
UPS	Uninterruptable Power Supplies
API	Application Programming Interfaces
ICT	Information communication and technology

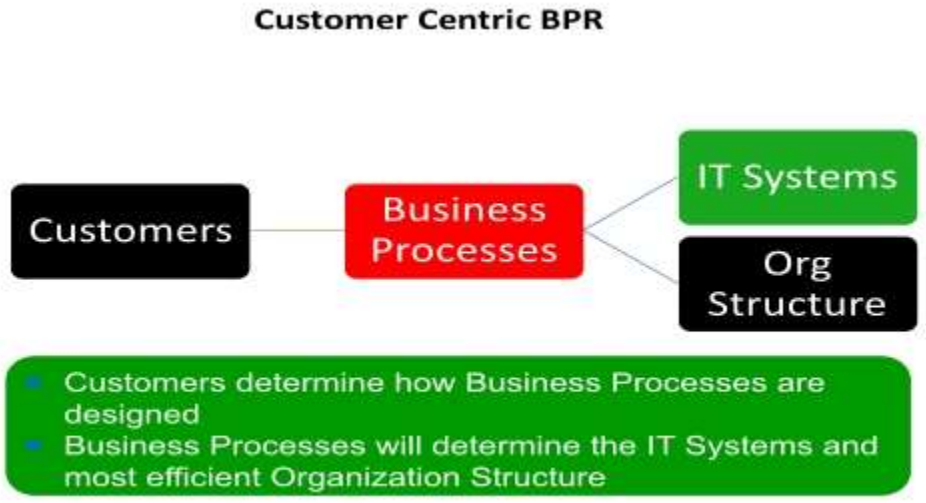
BUSINESS PROCESS RE-ENGINEERING (BPR) FOR STATE HOUSE

2.0 Background

In its quest to provide efficient services to fulfill its mandate and in compliance with the Performance Contracting Guidelines, State House set up a Digitalization of Government services committee (Appendix "A') which is responsible for, among other tasks, undertaking Business Process Re-engineering (BPR) for services selected for digitalization. State House requested the Ministry of Public Service and Human capital development for technical support in Re-engineering the selected business processes.

2.1 Introduction to Business Process Re-Engineering

BPR is the fundamental rethinking, systemic and radical re-design of organizational processes to achieve dramatic improvements (45%) of performance in cost, speed and quality of service. (Michael Hammer, 1993). The process involves mapping of current (AS-IS) service delivery processes established by an organization; interrogation of those processes in relation to customer needs and organizational objectives; re-design of new/improved processes and implementation of the new processes. It is important to emphasize that BPR must be informed by customer needs as illustrated in the following diagram:



2.2 Sensitization of Senior Management

The State House team was sensitized on Business Process Re-engineering.

The objectives of the sensitization were: -

(i) To sensitize management in the concept of Business Process Re-engineering to gain understanding;

(ii) To enable management to identify priority service processes to be subjected to actual Business Process Re-engineering;

(iii) To provide guidance in formation of BPR project teams for each service process selected for re-engineering; and

(iv) To support the BPR project teams as they proceed to an out-of-station workshop to undertake actual re-engineering of identified processes.

2.3 Identification of Service Processes for Re-Engineering

At the end of the sensitization exercise, the participants identified two service processes as a priority to be subjected to re-engineering. The services which were identified are from:

1. Mechanical Department; and
2. Transport Department.

2.4 Re-Engineering of Selected Services

Members of the Digitalization Committee from XXX who had been drawn from different departments proceeded for a seven-days' workshop at XXX, from **14th to 21st September, 2025** to undertake the actual re-engineering of the selected services with technical support from Public Service and Human Capital Development. Members of the committee were once again taken through the BPR concept and guided through the process of re-engineering of the services which had been selected by management. Consequently, these processes were mapped, interrogated, and re-designed to improve efficiency and to be responsive to customer needs as detailed below.

2.0 MECHANICAL DEPARTMENT

The mechanical department has the mandate to facilitate maintenance and repair of motor vehicles, plant and equipment in all State Houses and State Lodges.

In execution of our mandate, we undertake the following activities; Receive defect form from transport department, opening of Job cards, conducting inspections, acquisition of spare parts and services, undertake repairs, and vehicle testing.

For purposes of this workflow, we will handle only the motor vehicle repair and maintenance process.

2.1 As-Is Mechanical Process

Table 1…….Mechanical Process flow

Steps	Activities	No. of Days	Actors
Request for Internal repairs/service			
1.	Identify vehicle defect(s)	1 Day	Requesting Driver

Steps	Activities	No. of Days	Actors
2.	Pick up Defect Form from transport office		Requesting Driver
3.	Request for repairs/service by filing in the Defect Form		Requesting Driver
4.	Forward request to transport office for recommendation		Requesting Driver
5.	Recommend request for repairs/service in the Defect Form and forward to SA's office	30 Mins	Transport officer
6.	Receive Defect Form and forward to SA for approval		Office Admin (SA Office)
7.	Approve request for repairs/service and forward to Office Admin for dispatch to Mechanical	1 Day	SA
8.	Make a copy of the approved Defect Form for filing and deliver to Mechanical Department		Office Admin (SA's Office)
9.	Receive approved Defect Form for service/repairs and deliver to Mechanical Engineer	20 Mins	Office Admin (Mechanical Dept)
10.	Authorize opening of job order for inspection and assign to Engineer/ Senior Inspector		Mechanical Engineer
11.	Open job order, print inspection form, Assign the vehicle for inspection		Engineer/ Senior Inspector
12.	Inspect vehicle and verify defect	1 Hour	Inspector
13.	Report findings back to Engineer/ Senior Inspector		Inspector
14.	Review findings and scope of repairs	20 Mins	Engineer/ Senior Inspector
	Total - Request for internal repairs/service	**2 Days 2 Hours 10 Mins**	**8 Actors**
Internal Repairs/Service (unavailable spares)			
1.	Identify vehicle defect(s)	1 Day	Requesting Driver
2.	Pick up Defect Form from transport office		Requesting Driver
3.	Request for repairs/service by filling the Defect Form		Requesting Driver
4.	Forward request to transport office for recommendation		Requesting Driver
5.	Fill a requisition form requesting for spares from stores for internal repairs in the system and print	10 Mins	Engineer/ Senior Inspector

Steps	Activities	No. of Days	Actors
6.	Sign requisition form and forward to Inventory Manager	5 Mins	Requesting Inspector
7.	Confirm availability of spares, sign requisition form and forward to Mechanical Engineer	30 Mins	Inventory Manager
8.	Raise requisition to SCMS if spares are unavailable	30 Mins	Engineer/ Senior Inspector
9.	Receive and process requisition for spares	14 Days	SCMS
10.	Approve repairs and forward to Senior Mechanic for the available spares	10 Mins	Mechanical Engineer
11.	Assign vehicle to mechanic for repairs		Senior Mechanic
12.	Collect spares from stores	20 Mins	Mechanic
13.	Undertake repairs	1 Day	Mechanic
14.	Sign job card and handover vehicle to inspector	10 Mins	Mechanic
15.	Re-inspect the vehicle, write remarks on job card and handover vehicle to Senior Mechanic for testing	30 Mins	Inspector
16.	Conduct road test and handover vehicle to Engineer/ Senior Inspector	20 Mins	Senior Mechanic
17.	Close job card and handover vehicle to Requesting Driver	10 Mins	Engineer/ Senior Inspector
18.	Receive vehicle		Requesting Driver
	Total - Internal Repairs/ Services (unavailable spares)	**15 Days 2 Hours 50 Mins**	**9 Actors**
External Repairs (Dealers and garages)			
19.	List defect(s) on job order and forward to Mechanical Engineer for approval	10 Mins	Engineer/ Senior Inspector
20.	Approve job order, authorize dispatch of vehicle for repairs and Call Engineer/ Senior Inspector to organize delivery of vehicle to the respective dealer	20 Mins	Mechanical Engineer
21.	Deliver vehicle to dealer/approved garages	2 Hours	Driver
22.	Receive job order, inspect vehicle and give scope of repair and associated costs to Mechanical Engineer for approval	14 Days	Dealer/ Approved garages
23.	Approve repairs	1 Hour	Mechanical Engineer
24.	Raise requisition as per dealers agreed estimates and send to SCMS	30 Mins	Engineer/ Senior Inspector
25.	Receive requisition and process	14 Days	SCMS

Steps	Activities	No. of Days	Actors
26.	Undertake repair, sign job order and notify completion to Engineer		Dealer/ Approved garages
27.	Write and sign release letter and call the driver to pick the vehicle. The release letter contains: a) Approved amount b) Registration of vehicle c) Job order number d) Name of driver	20 Mins	Engineer
28.	Pick up vehicle, take back to Garage and inform Engineer/ Senior Inspector of the arrival of the vehicle	1 Hour	Driver
29.	Inspect vehicle, close job card and Handover vehicle to the requesting driver	30 Mins	Engineer/ Senior Inspector
30.	Receive vehicle		Requesting Driver
	Sub-total **External Repairs**	**28 Days** **5 Hours** **50 Mins**	**8 Actors**
	Sub-total **Request for repairs/service**	**2 Days** **2 Hours** **10 Mins**	

2.2 Challenges of the Current As-Is Mechanical Process

A. Customer perspective: Challenges of Dealers, Approved garage

(i) Delay in payment;

(ii) Interference by the users e.g. drivers;

(iii) Adding unapproved repairs from drivers; and

(iv) Delay in approval e.g. the customer giving high estimates takes longer to approve or amend.

B. Internal Perspective: Challenges with Dealers, Approved garage

(i) Poor communication from the dealers/ approved garage;

(ii) Delay in completion of works;

(iii) Over quoting;

(iv) Variation in estimate and invoice;

(v) Poor workmanship from approved garages;

(vi) No permit to road test government vehicles

(vii) Not providing required documentation e.g. original invoice; and

(viii) Poor storage and handling of motor vehicles.

C. Internal customers: Organizational perspective (State House)

(i) Heavy reliance manual process e.g. paper-based forms, increases risk of loss or damage and costly;

(ii) Spare parts shortages delay repair completion;

(iii) Difficult to track turnaround times for repairs;

(iv) Manual approval processes cause delays in workflow;

(v) Inadequate workshop space;

(vi) Driver interference during repairs; and

(vii) Outdated management system.

2.3 Recommendations for Improvement of As-Is Mechanical Process

S/No.	Challenges	Recommendation for Improvement
1.	Delay in payment due to austerity measures; increase cost of repairs	• Adopt EGP
2.	Interference by the users e.g. drivers	Conduct induction for drivers
3.	Adding unapproved repairs from drivers	Develop a mechanical management information system
4.	Delay in approval e.g. the customer giving high estimates takes longer to approve or amend	Negotiate with the dealers
5.	Over quoting	
6.	Variation in estimate and invoice without consultation	Develop a mechanical management information system
7.	Poor communication from the dealers/ approved garage	
8.	Delay in completion of works	
9.	Not providing required documentation e.g. original invoice	
10.	Poor workmanship from approved garages	Continuous monitoring
11.	Misuse of vehicles • that are due for service • overloading • unauthorized trips	• Develop a mechanical management information system • Install GPS tracking to monitor vehicle usage
12.	Poor storage and handling of motor vehicles	• Thorough inspection of approved garages to ascertain capacity and good storage

S/No.	Challenges	Recommendation for Improvement
		• Conduct impromptu visits to the contracted garages • Include storage standards in the contracts
13.	Substandard repairs and services by approved garages	Continuous monitoring and inspections of repairs
14.	Heavy reliance on paper-based forms increases risk of loss or damage and costly	Develop a mechanical management information system
15.	Spare parts shortages delay repair completion.	Adopt EGP
16.	Difficult to track turnaround times for repairs.	• Develop a mechanical management information system (Implement a computerized tracking system) • Introduce key performance indicators (KPIs)
17.	Manual approval processes cause delays in workflow.	Develop a mechanical management information system
18.	Inadequate workshop space	• Optimize space through scheduling and layout redesign • Book and schedule vehicles for repair • Write a request for additional space
19.	Driver interference during repairs	• Limit access of drivers in the garage area • Sensitize drivers on policies • Develop a State House Mechanical Work Regulation • Install CCTV Surveillance system
20.	Outdated management system	Develop a mechanical management information system
21.	Limited budget for mechanical department	Prioritize preventive maintenance over corrective repairs Seek alternative financing models (e.g., leasing)
22.	No permit to road test government vehicles	Issue driving permit to senior mechanic and engineers for Government Vehicles

2.4 To-Be Mechanical Process

Based on the challenges above and recommendations made, the team has proposed a new/reengineered Mechanical process as indicated below.

Assumptions

(i) EGP fully adopted;

(ii) A Mechanical Management Information System developed;

(iii) GPS tracking system installed;

(iv) Spacious, well laid-out and modernized garage in place;

(v) CCTV installed in the garage area; and

(vi) Adequate budget allocation.

Table 2…….To-Be Process flow for Mechanical Process

Steps	Activities	No. of Days	Actors
	Request for repairs/service		
1.	Report vehicle defect(s) in the MMIS	10 mins	Requesting Driver
2.	Analyze and recommend request in the MMIS and send to Mechanical Department	10 mins	Transport Officer
3.	Issue order number and assign inspection officer	20 mins	Mechanical Department
4.	Inspect Vehicle, update the system and send to the HOD Mechanical	1 hour	Inspection officer
5.	Analyze inspection report and send to SA	30 mins	HOD Mechanical
6.	Approve repairs/service and send to HOD Mechanical and Supply Chain	1 hour	SA
7.	Assign vehicle to mechanic for repairs	10 mins	Senior Inspector/Engineer
8.	Issue Spare-parts to Mechanic	20 mins	Supply Chain
9.	Undertake repairs and update MMIS and send to Inspector	1 day	Mechanic
10.	Reinspect the vehicle and update MMIS	30 min	Inspector
11.	Carry-out road test, update MMIS and send to Senior Inspector/Engineer	30 min	Senior Mechanic
12.	Release vehicle to the Transport Officer and update MMIS	10 min	Senior Inspector/ Engineer
	Total Internal Repairs/ Services	**1 Day 4Hrs 50 Mins**	**10 Actors**
	External Repairs		

Steps	Activities	No. of Days	Actors
1.	Report vehicle defect(s) in the MMIS	10 mins	Requesting Driver
2.	Analyse and recommend request in the MMIS and send to Mechanical Department	10 mins	Transport Officer
3.	Issue order number and assign inspection officer	20 mins	Mechanical Department
4.	Inspect Vehicle, update the system and send to the HOD Mechanical	1 hour	Inspection officer
5.	Approve repairs/service and send to HOD Mechanical and Supply Chain	1 hour	SA
6.	Authorize dispatch of vehicle to respective dealer for estimates and repairs through MMIS	10 mins	HOD Mechanical
7.	Inspect vehicle and give scope of repair and associated costs to Mechanical Engineer for approval	7 days	Dealer
8.	Approve repairs and the costs and raise requisition as per dealers agreed estimates and send to SCMS	1 hour	Mechanical Engineer
9.	Process requisition	14 days	SCMS
10.	Undertake repair, update MMIS, submit work order and invoice on completion to Mechanical		Dealer/ Approved garages
11.	Pick up vehicle back to Garage	2 hours	Mechanic/Driver
12.	Re-inspect vehicle, update MMIS and Handover vehicle to the Transport Officer	30 mins	Engineer/ Senior Inspector
	Total External Repairs	**21 Days 6 Hours 50 Mins**	**11 Actors**

2.5 Summary of Mechanical Re-engineered Process

Table 3 …..Summary of Mechanical Performance

S/No	Mechanical Process	As-Is	To-Be	% Improvement
1.	Internal Repairs	17 Days 5 Hours	1 Day 4Hrs 50 Mins	**91.04%**
2.	External Repairs	30 Days 8 Hours	21 Days 6 Hours 50 Mins	**29.5%**

2.6 Benefits of the Re-engineered Mechanical Process

(i) Reduced turnaround time for repairs/service i.e. Internal Repairs, As-Is was 17 days 5 hours, this has deduced to 1 day, 4 hours 50 mins **(91.04% improvement)** and External Repairs As-is was 30 days 8 hours, this has reduced to 21 days, 6 hours and 50 mins **(29.5% improvement)**;

(ii) Ease in tracking of process and progress of repairs due to automation;

(iii) Ease of obtaining cost analysis of individual vehicle repair, up to date value of vehicles and consolidated vehicle history because of the MMIS;

(iv) Enhanced customer satisfaction due to efficiency and effectiveness of the MMIS;

(v) Easy approvals since they can be done remotely in the system;

(vi) Defects are reported remotely therefore no time is wasted;

(vii) Real time inventory updates on MMIS;

(viii) MMIS will support budget projection and planning;

(ix) Make informed decision due to availability of data in the MMIS;

(x) Cost reduction due to automation;

(xi) Improved work environment due to reduction of paper work;

(xii) Enhanced integrity and transparency due to elimination of manual process; and

(xiii) Empowering drivers to use MMIS.

2.5 TRANSPORT PROCESS

The State House Transport Department plays a critical role in ensuring the smooth operation and management of motor vehicles. Its responsibilities extend beyond simply providing vehicles for official use; it also involves maintaining accurate records, optimizing resource utilization, and ensuring safety and compliance. The department manages key processes such as motor vehicle inventory to track and account for all vehicles, allocation of vehicles to officers to undertake official duties, fuel management to monitor consumption and control costs, incident reporting to record & address driver-related events and motor vehicle insurance. By streamlining these processes, the transport department enhances access mobility and accountability, reduces operational risks, and supports the efficient delivery of services.

For the purposes of this workflow, we have selected the following for re-engineering

(i) Motor vehicle inventory management;

(ii) Receiving request for vehicles from departments, allocation of vehicles to officers; purchase of motor vehicles; Facilitating field visits; Facilitating day to day local running;

(iii) Manage fuel, fuel requisition, issuing of fuel cards to drivers, fueling of vehicles; and

(iv) Allocation of vehicles and drivers to departments within the State House e.g. Pool or specific officers.

2.6 As-Is Transport Process

Table 4……As-Is Transport Process flow

Steps	Activities	No. of Days	Actors
	Allocation of Motor Vehicle		
1.	Receive updated list of available vehicles from Mechanical department • Registration number • Make • Model • Chassis and engine number	1 hour	Transport officer
2.	Allocate vehicles to departments on need basis and pool	1 day	Transport officer
3.	Assign drivers to vehicles	30 mins	Transport officer
	Sub Total	**1 day 1 hour 30 minutes**	
	Request for transport for day to day running		
1.	Make phone call/visit to transport officer to request for vehicle	10 minutes	Requesting officer
2.	Call available driver to undertake the assignment	10 minutes	Transport officer
3.	Call requesting officer and inform them of available vehicle and driver	5 minutes	Transport officer
4.	Avail work ticket for authorization by the transport officer	20 minutes	Driver
5.	Authorize trip by signing the work ticket	5 minutes	Transport officer
6.	Undertake the trip	7 hours	Driver
7.	Report back to Transport Office after the trip through a phone call or physically		Driver
	(closing of work ticket after every trip)		
	Total	**1 day**	
	Request for transport for field visit		
1.	Receive authorized memo for the activity from the SA • Activity • Number of participants • Dates of the activity • Location/ venue	10 minutes	Transport Officer
2.	Make calls to check availability of appropriate vehicle	30 minutes	Transport Officer

Steps	Activities	No. of Days	Actors
3.	Call driver and assign vehicle for the journey	5 mins	Transport Officer
4.	Confirm condition of the vehicle, fuel level, service and insurance	10 mins	Driver
5.	Revert back to transport officer with the information • Fuel level • Service • Insurance	5 mins	Driver
6.	Avail work ticket for authorization by the transport officer	5 mins	Driver
7.	Authorize the trip by signing the work ticket	5 mins	Transport officer
8.	Fuel vehicle with fuel card • if the fuel card has enough limit • request transport officer for fuel if the fuel card is exhausted	20 mins	Driver
9.	Undertake the trip	Continuous	Driver
10.	Report back to Transport Office after the trip through a phone call or physically	20 mins	Driver
	Total	**1 hour 50 mins**	**2 Actors**
	Fuel Management		
1.	Print requisition form for fuel to transport officer and forward to him for recommendation	5 mins	Transport Assistant
2.	Recommend requisition and forward to finance for funds allocation	2 mins	Transport Officer
3.	Allocate funds for requisition of fuel	1 hour	Finance Officer
4.	Record requisition in movement register and forward to SCMS	5 mins	OA (Finance)
5.	Sign requisition form	5 mins	Head SCMS
6.	Record requisition in movement register and forward to SA for approval	5 mins	OA (SCMS)
7.	Approve expenditure	1 hour	SA
8.	Record requisition in movement register and forward to SCMS for processing	5 mins	OA (SA)
9.	Process requisition	5 days	SCMS
10.	Forward LPO and invoice to accounts for payment		SCMS
11.	Process payment	30 days	Accounts
12.	Inform transport officer on availability of fuel	5 mins	SCMS

Steps	Activities	No. of Days	Actors
13.	Apply for fuel cards through prescribed forms from the dealer Motor vehicle fuel cards • Details of vehicle (Registration number, tank capacity, Model) • Specify the type of fuel (petrol, diesel) • Card limit (individual vehicle card, master card) • Operation area Master card • Card limit • Purpose of the master card (fuel, service, oil, battery) • Operation area • Number of master cards	5 mins	Transport officer
14.	Print forms, Fill and forward to SA for approval	10 mins	Transport Officer
15.	Approve forms and send back to Transport Officer	1 day	SA
16.	Send approved request by mail to the dealer	10 mins	Transport officer
17.	Process fuel cards	5 days	Dealer
18.	Receive communication from dealer to collect fuel cards	5 mins	Transport officer
19.	Send a clerical officer from transport office to collect the fuel cards from dealer	5 mins	Transport officer
20.	Collect fuel cards with the list and deliver to transport office.	1 hour	Clerical officer
21.	Receive the fuel cards and register in excel sheet	1 day	Transport officer
22.	Call drivers to pick fuel cards	5 mins	Transport officer
23.	Issue fuel cards to respective drivers and record the following details • Driver's details • card number • vehicle number • card limit • date of issue • date of return	5 days	Transport officer
24.	Receive fuel card and sign		Driver

Steps	Activities	No. of Days	Actors
25.	Fuel vehicle and record the following details in the work ticket • Fuel quantity • Mileage • Receipt number	20 mins	Driver
26.	Obtain a receipt from the fuelling agent showing • Vehicle number • Date of fuelling • Petrol station name and location • Fuel type • Quantity and cost • Mileage • Card balance		Driver
27.	Monitor fuel consumption on the dealer's platform.	Continuous	Transport officer
28.	Obtain fuel receipts on regular basis and update fuel ledger.	Continuous	Transport assistant
	Total	**47 days 4 hours 32 mins**	**11 Actors**

2.7 Challenges of As-Is Transport Process

A. Customer challenges

Fuel dealers, insurance providers, external garage, GVCU, traffic police, general public, MDAs, training institutions, NTSA

(i) Delayed payment;

(ii) Non-compliance of traffic regulations by drivers;

(iii) Reckless driving;

(iv) Interference with external garages;

(v) Misuse of vehicles;

(vi) Driver's misconduct; and

(vii) Obstruction.

B. Organizational challenges

(i) Abrupt Stoppage of fuel supply;

(ii) Price fluctuation;

(iii) Delay in processing fuel cards, errors in fuel cards;

(iv) Blockage of fuel cards;

(v) Wrong pin/drivers code;

(vi) Misuse of fuel card;

(vii) Damage to the card;

(viii) Delayed repair services by dealers and approved garages;

(ix) Limited coverage of fuel dealer stations across the country;

(x) Inadequate number of vehicles;

(xi) Inadequate budget allocation for fuel;

(xii) Inadequate budget for training for Drivers;

(xiii) Aged fleet;

(xiv) Poor etiquette by some drivers;

(xv) Careless driving and misuse of vehicles;

(xvi) Transport process not fully automated;

(xvii) Transport policy not fully implemented; and

(xviii) Lack of integrity and transparency by some drivers.

2.8 Recommendations for improvement of the current As-Is Transport Process

Table 5……Recommendation for improvement of the Transport Process

S/No	Challenges of AS-IS Transport process	Recommendations for improvement
	Customer challenges- *Fuel dealers, insurance providers, external garage, GVCU, traffic police, general public, MDAs, training institutions, NTSA*	
1.	Delayed payments	Increase budgetary allocation
2.	Non-compliance of traffic regulations by drivers	• Continuous Training and sensitization of drivers • Punitive measures for those who flout traffic rules.
3.	Reckless driving	Discipline and counselling
4.	Interference with external garages	Adherence to prequalified garages for maintenance unless advised otherwise
5.	Misuse of vehicles	Adherence to the driver's code of conduct (NTSA rules and Traffic rules)
6.	Driver's misconduct	Adherence to work ethics
7.	Obstruction	Liaison with traffic officers for vehicles that require right of way, follow traffic rules
	Organizational challenges	

S/No	Challenges of AS-IS Transport process	Recommendations for improvement
1.	Abrupt Stoppage of fuel supply	Increase daily allocation, Management support, Develop a Fuel Management System
2.	Price fluctuation	• Conduct an analysis to assist with proper projections • Periodic review of fuel price estimates and other fuel products to conform to the market prices
3.	Delay in processing fuel cards, errors in fuel cards	• Set timeframes, check the correctness of cards before picking • Implement fuel management system
4.	a. Blockage of fuel cards b. Wrong pin/drivers code c. Misuse of fuel card d. Damage to the card	• Training and retraining of the drivers on the use of cards, • Transport officer to liaise with the dealers for unblocking of the cards • Implement fuel management system
5.	Delayed repair services by dealers and approved garages	Develop a Mechanical Management Information System
6.	Limited coverage of fuel dealer stations across the country	• Bring in a new dealership, Consult with EPRA • liaise with other MDAS • consider purchase of fuel barrels
7.	Inadequate number of vehicles	Acquire additional vehicles, car pooling
8.	Inadequate budget allocation for fuel	Request additional budget allocation
9.	Inadequate budget for training for Drivers	• Request additional training budget • Organize in-house training
10.	Aged fleet	• Routine maintenance • Replacement of old vehicles
11.	Poor etiquette by some drivers	Training on customer excellence
12.	Careless driving and misuse of vehicles	Discipline and counselling
13.	Transport process not fully automated	Develop Transport Management System
14.	Transport policy not fully implemented	Finalize on the draft policy and implement
15.	Lack of integrity and transparency by some drivers	Sensitization on integrity and transparency issues

2.9 To-Be Transport Process

Based on the challenges above and recommendations made, the team has proposed a new/re-engineered transport process. The new process is based on the following assumptions.

Assumptions

(i) Transport Management System (TMIS) Developed;

(ii) Fuel Management Module Developed in TMIS;

(iii) Carpooling module developed in the TMIS;

(iv) Adequate budget allocation in place;

(v) Fuel Analysis to assist with proper projections done;

(vi) Fuel barrels acquired;

(vii) State House Transport policy finalized and implemented;

(viii) Additional car dealers on-boarded; and

(ix) The Transport Management Information System (TMIS) and Mechanical Management Information System (MMIS) integrated.

(x) Fuel Management Information System (a module under TMIS) developed

Table 6…….To-Be transport process flow

Steps	Activities	No. of Days	Actors
	Allocation of Motor Vehicle		
1.	Access updated list of available vehicles from TMIS	30 Minutes	Transport officer
2.	Allocate vehicles to departments on need basis and pool		
3.	Assign drivers to vehicles		
	Sub Total	**30 Minutes**	**1 Actor**
	Request for transport for day to day running		
1.	Make request through the TMIS for vehicle	1 Day	Requesting officer
2.	Allocate available vehicle, notify driver to undertake the assignment and notify requesting officer of available vehicle and driver		Transport officer
3.	Avail work ticket for authorization by the transport officer		Driver
4.	Authorization of the trip by signing the work ticket and releasing the vehicle		Transport officer
5.	Undertake the trip		Driver
6.	Notify transport Office after the trip through TMIS		Driver
	Total	**1 day**	**3 Actors**
	Request for transport for field visit		

Steps	Activities	No. of Days	Actors
1.	Make request through TMIS for vehicle and attach approved memo from the SA	5 minutes	Requesting Officer
2.	Allocate available vehicle, notify driver to undertake the assignment and notify requesting officer of available vehicle and driver	5 minutes	Transport Officer
3.	Avail work ticket for authorization by the transport officer	5 mins	Driver
4.	Authorize the trip by signing the work ticket	5 mins	Transport officer
5.	Fuel vehicle with fuel card	20 mins	Driver
6.	Receive fuelling notification from TMIS		Transport Officer
7.	Undertake the trip	Continuous	Driver
8.	End trip and notify Transport Office through TMIS	2 mins	Driver
	Total	**42 mins**	**3 Actors**
	Fuel Management		
1.	Obtain RTGS from Accounts and notify vendor on payment of fuel	2 mins	Transport Officer
2.	Receive notification from vendor on fuel availability on FMIS	1 min	Transport officer
3.	Receive communication from dealer to collect fuel cards on TMIS	5 mins	Transport officer
4.	Send a clerical officer from transport office to collect the fuel cards from dealer	5 mins	Transport officer
5.	Collect fuel cards with the list and deliver to transport office.	1 hour	Clerical officer
6.	Receive the fuel cards	1 day	Transport officer
7.	Send notification to drivers to pick fuel cards	1 min	TMIS
8.	Issue fuel cards to respective drivers in the TMIS	1 min	Transport Officer
9.	Notify driver to collect fuel card		TMIS
10.	Collect fuel cards and sign	Continuous	Driver
11.	Monitor fuel consumption on the TMIS	Continuous	Transport officer
12.	Obtain fuel receipts on regular basis and update fuel ledger.	Continuous	Transport assistant
	Total	**1 days 1 hour 15 mins**	**5 Actors**

2.10 Summary of Transport As-Is and To-Be Re-engineered Process

Table 7…….Summary of Transport performance

S/No	Transport Process	As-Is	To-Be	% Improvement
1.	Allocation of Motor Vehicle	1 day 1 hour 30 minutes	30 minutes	**96%**
2.	Request for transport for day to day running	1 Day	1 Day	**0%** This is a daily affair and therefore timelines may not vary
3.	Request for transport for field visit	1 hour 50 mins	42 mins	**38%**
4.	Fuel Management	47 days 4 hours 32 mins	1 days 1 hour 15 mins	**97%**

2.11 Benefits of Reengineered Transport Process

(i) Cost reduction;

(ii) Timely allocation of vehicles because of TMIS;

(iii) Quality service;

(iv) Customer satisfaction;

(v) Increased integrity and transparency;

(vi) Optimization of transport resources;

(vii) Real time monitoring of motor vehicles;

(viii) Easy planning;

(ix) Reduced paper work due to elimination of manual process;

(x) Informed decision making;

(xi) Improved communication;

(xii) Efficient fleet/ fuel management;

(xiii) Discipline of vehicle users/driver;

(xiv) Conflict reduction; and

(xv) Better working environment.

3.0 ROLE OF HUMAN RESOURCE MANAGEMENT IN SUPPORTING IMPLEMENTATION OF BUSINESS PROCESS RE-ENGINEERING

HR plays a critical role in analyzing and advancing practices, identifying current, pending and potential problems that affect the employees and also enable successful transition to new workflows. Below are contributions of HR in the BPR process:-

(i) Workforce alignment and Change management

To facilitate change HR should communicate change and provide clarity on what is changing, why it is changing and how it will impact individuals and teams and ensure they are prepared for change in their roles, responsibilities and workflows.

HR should also address resistance through counselling, feedback and providing reassurance to employees.

(ii) Training and Development

Organize continuous training/ sensitization - Capacity building for drivers/Mechanics/System Users on: Customer excellence; traffic rules; Road safety; First Aid; Integrity & Transparency; Basic Mechanics; TMIS; Government Transport Policy; MMIS and Use of fuel cards

(iii) Redefine job description

Human resource has the role of aligning employee roles and responsibilities with the new process and clarifying new reporting structures and ensuring that employees understand their revised roles within the new process.

(iv) Workforce planning

Forecast the talent needs of the organization by determining if there is need for new skills, additional workers and if need be, request for the acquisition of the skill e.g system developers.

(v) Performance management

HR should update performance management system to reflect new business process by redefining key performance indicators (KPIs) that align with the redesigned process and ensure that employee's performance is measured appropriately.

(vi) Staff Discipline and Motivation

Discipline and organize for counselling for reckless drivers. Also provide incentives and recognition to best performing drivers.

(vii) Benchmarking

Organize for benchmarking visits and networking with institutions that have successfully implemented the MMIS and TMIS systems.

(viii) Legal and Ethical Compliance

HR to ensure that the reengineered processes comply with labour laws, health and safety regulations and other existing HR laws. Take responsibility of handling any potential disputes, grievances or labour related issues that may arise during the process.

4.0 INFORMATION COMMUNICATION AND TECHNOLOGY SYSTEMS TO SUPPORT THE RE-ENGINEERED SERVICE ON MECHANICAL & TRANSPORT DEPARTMENTS

A. Current ICT infrastructure in place

The ICT department currently provides access to ICT infrastructure to all staff based on their needs. These include:

(i) **Desktops, Laptops, tablets, printers and photocopiers** – Used by staff for daily operations

(ii) **VoIP Phones & Video Conferencing Equipment** – For unified communications and collaboration.

(iii) **Networking infrastructure** – Fibre backbone, routers, switches and wireless access points for internet connectivity.

(iv) **ICT security**: Firewalls, endpoint security and BOYD policy.

(v) **Email and live streaming facilitation**: administering official e-mails and live streaming platforms.

(vi) **CCTV and access control**: Surveillance and physical security integrated into ICT.

(vii) **Applications and storage:** development of applications and provision for hosting the applications.

B. Key Challenges in the Current ICT Environment

(i) **Aging Hardware & Obsolescence**: Devices that reach end-of-life (EoL) or end-of-support (EoS).

- **Solution**: efficient management of devices such that their replacement can be done before EoL/S.

(ii) **Outdated Software**: outdated software such as operating systems can introduce security challenges as well as non-compatibility issues with modern hardware.

- **Solution**: most software vendors give ample warning in good time to prevent missing updates. The ICT department shall be alert to these notifications.

(iii) **Security threats**: Evolving cyberattacks such as ransomware, phishing, DDoS, zero-day exploits.

- **Solution**: ensure firewalls and antiviruses stay monitored, licensed and updated.

(iv) **Skills gap**: IT staff or users may not be trained to manage evolving tech.

- **Solution**: work with HRM&D to provide training and sensitization to staff. Seek for training of ICT Staff from MOICT.

(v) **Downtime due to ISP or power interruption**: Network downtime due to external influences such as the internet service provider (ISP) or a power blackout.

- **Solution**: ensure redundant measures are active such as uninterruptable power supplies (UPS) and multiple internet providers for redundancy.

C. Recommended ICT Enhancements to support re-engineered processes

(i) Development and implementation of a mechanical management information system (MMIS) with the following features:

- Reporting module for defects;
- Vehicle tracking status from when it enters the garage until when it is ready for pick up;
- Mechanism for producing vehicle reports on demand;
- Inventory of cars with current status and other detail;
- Repository component for Mechanical Records;
- Scalability for increasing processing power as the organization grows;
- In-built security features to prevent unauthorised access;
- Data backup and business continuity measures undertaken on the system in order to eliminate or minimize downtime; and
- Integrate MMIS and TMIS.

(ii) Development and implementation of a Transport Management Information System (TMIS) with the following features:

- Fuel management module;
- Carpooling component;
- Integration with Mechanical Management Information System (MMIS) to view and download vehicle inventory and live status;
- Repository component for transport records;
- In-built security features to prevent unauthorised access;
- Data backup and business continuity measures undertaken on the system in order to eliminate or minimize downtime; and

- TMIS integrated with vendor APIs.

5.0 ANALYSIS OF POLICIES, LAWS, PROCEDURES, RULES AND REGULATIONS TO SUPPORT RE-ENGINEERED MECHANICAL AND TRANSPORT PROCESSES

Table 8……Analysis of Legal Issues

	ITEM	CHALLENGES	RECOMMENDATION
	MECHANICAL		
1.	Workplace Safety and Health regulations	• Non compliance by the staff on safety gear • Lack of regular training on safety protocols	• Enforcement • Continuous Training and retraining
2.	Occupational Safety and Health Act (OSHA), 2007	Complexity & rapid changes of regulations, rapid technological changes	Continuous sensitization and awareness of new laws/regulations
3.	Sustainable Waste Management Act, 2022	Lack of awareness of proper disposal methods, Mechanics not understanding environmental laws and proper disposal practices	Continuous Sensitization, Capacity building to ensure adherence
	TRANSPORT		
1.	Traffic Act, 2024	No challenge as it supports the system	Ensures adherence
2.	National Transport and Safety Authority Act, 2012	No challenge as it supports the system	Ensures adherence
3.	Insurance (Motor Vehicles Third Party Risks) Act, 2022	No challenge as it supports the system	Ensures adherence
4.	Data Protection Act, 2019	Data privacy concerns	Compliance with the Act
5.	Government Transport Policy	No challenge as it supports	Sensitize staff and Ensure adherence
6.	Integrated National Transport Policy, updated 2024	No challenge as it supports the system	Ensures adherence
7.	Draft State House Transport Policy	Not yet implemented	Finalize and adopt the policy
	HUMAN RESOURCE		
8.	Public Service Code of Conduct and Ethics, 2016	No challenge	Sensitize staff and Ensure adherence

	ITEM	CHALLENGES	RECOMMENDATION
9.	Occupational Safety and Health Act, 2007	No challenge	Sensitize staff and Ensure adherence
10.	Disciplinary and Grievances Policies	No challenge	Sensitize staff and Ensure adherence
11.	HR Policy and Procedure Manual, 2016	No challenge	Sensitize staff and Ensure adherence
12.	Human Resource and Development Policy for the Public Service, 2015	No challenge	Sensitize staff and Ensure adherence
	ICT		
1.	National ICT Policy 2019	No challenge as the policy supports digitalization	• Adherence to the policy • Need to sensitize staff on the policy
2.	Kenya Cyber security Strategy 2022	No challenge	• Adherence to the policy • the strategy supports building a safe and secure cyber space
3.	Computer Misuse and cybercrime Act, 2024	No challenge	• Need for sensitization to staff • Adherence to the policy
4.	Data Protection Act of 2019	No challenge	The act supports protection of the users' data
5.	Kenya AI Strategy 2025-2030	No challenge	The strategy supports the utilization of AI tools in system development
6.	Kenya Cloud Policy - 2024	No challenge	The policy supports cloud storage, accessibility and business continuity
7.	MICDE - Guidelines on management of ICT Resources in MDACs [2024]	No challenge as effective service delivery	• Ensure Adherence to the policy • The guidelines supports digitalization in the public sector for

6.0 BPR PROJECT IMPLEMENTATION WORK PLAN

Table 9…..State House BPR Implementation Work Plan

S/N	Milestone	Key Activities	Q1	Q2	Q3	Q4
Digitalization Committee						
1.	Presentation of the BPR report to the Comptroller and HODs	Share BPR report with the Comptroller				
		Draft a memo to HODs for presentation of the BPR report				
		Present BPR Report and receive feed back				
		Incorporate HODs feedback in the report				
		Print a final BPR report for implementation				
ICT						
2.	Develop a Mechanical Management Information System	Draft a proposal to the Comptroller for approval				
		Develop the TOR				
		Design the System based on the BPR recommendations				
		Conduct a prototype presentation to the users				
		Develop the system				
		Conduct a system test and pilot				
		Organize and hold presentation to stakeholders				
		Incorporate stakeholder views and finalize				
		Develop user training manual and conduct training				
		Roll Out				
3.	Develop a Transport Management	Draft a proposal to the Comptroller for approval				
		Develop the TORs				

S/N	Milestone	Key Activities	Q1	Q2	Q3	Q4
	Information System (TMIS)	Design the System based on the BPR recommendations				
		Conduct a prototype presentation to the users				
		Develop the system				
		Conduct a system test and pilot				
		Organize and hold presentation to stakeholders				
		Incorporate stakeholder views and finalize				
		Develop user training manual and conduct training				
		Roll out the TMIS				
4.	Finalization of the Work Place Policy on Transport and Road Safety	Conduct stakeholder validation				
		Incorporate Stakeholder comments				
		Finalize and approve Policy				
		Sensitize staff				
		Publish the approved policy				
	HUMAN RESOURCE					
5.	Training on customer excellence	Draft a proposal to the comptroller for approval				
		Draft letter requesting for resource persons for the comptroller's signature				
		Draft memo to HOD's to request for nomination of participants				
		Hold training				

S/N	Milestone	Key Activities	Q1	Q2	Q3	Q4
		Write training report and submit to the Comptroller				
6.	Organize for benchmarking with Institutions that have successfully implemented Mechanical and Transport systems	Identify institutions for benchmarking				
		Draft proposal for the Comptroller's approval				
		Write letter to the institutions to request for benchmarking				
		Draft a memo to the concerned departments to nominate officers for benchmarking				
		Conduct actual visit				
		Prepare benchmarking report and submit to the comptroller				
MECHANICAL						
7.	Develop a State House Mechanical Work Place Regulation	Draft proposal and forward to comptroller for approval				
		Develop TORs for the committee				
		Develop draft mechanical work regulations				
		Present to stakeholders				
		Incorporate stakeholder views				
		Finalize draft and submit to the Comptroller				
		Roll out the State House Mechanical Work Regulation				
8.	Installation of CCTV surveillance	Draft proposal to the Comptroller for approval				

S/N	Milestone	Key Activities	Q1	Q2	Q3	Q4
	in Mechanical garage	Conduct ground survey and draft a report				
		Design CCTV Topology				
		Develop TOR – bill of quantities				
		Raise requisition to supply chain for process				
		Installation and configuration				

APPENDIX 'A' STATE HOUSE DIGITALIZATION TEAM

Table 10……List of Participants of the BPR workshop

HEADS OF DEPARTMENT		
S/No	**NAME**	**DEPARTMENT**
1.	David Ole Shege	Administration
2.	Dido J.G.	HRM & D
3.	Joel Lang'at	Accounts
4.	Eric Kirui	Finance
5.	Charles Ndiritu	ICT
6.	Doris Mukura	CPPMD
7.	Eng. Julius Gikonyo	Mechanical
8.	Richard Yator	SCMS
DIGITALIZATION COMMITTEE		
1.	Harrison Mathenge	Administration
2.	Paul Kirembu	Administration
3.	Victor Sirma	Transport
4.	Jaldesa Wako	Finance
5.	Patrick Ndongu	SCMS
6.	Francis Waweru	PL&M
7.	Jeniffer Barmosho	PCS
8.	Kendi Mugure	Accounts
9.	Lucy Kamau	CPPMD
10.	Caroline Sang	HRM&D
11.	Jane Cheptum	Mechanical
12.	Amos Mutuku	Cabinet Office
13.	Joyce Iminza	Records Mgnt
14.	Elijah Tonui	PETS
15.	Bernard Chumo	Hospitality
16.	Rael Rutto	ICT
17.	Raymond Mwaniki	ICT
18.	Serah Kirui	ICT
ICT SUPPORT		
1.	Lilian Kililo	ICT
2.	Evelyn Mbuvi	ICT
3.	Alfred Ng'eny	ICT
4.	Samwel Kasera	ICT
5.	Geoffrey Chirchir	ICT
6.	Esther Kariuki	ICT
FACILITATORS		
1.	Marion Gisiora	Facilitator – SDPS
2.	Priscilla Otuoma	Facilitator - SDPS