IndyGo

Maintenance & Storeroom Review Update

Governance & Audit Report No. 2024-08

Report Issued September 23, 2024

EXECUTIVE SUMMARY

Background

During late 2023 the Governance & Audit team, with input from management and its subject matter advisors, compiled a heat map to identify and illustrate the agency's risk universe. Perspectives were sought on agency-wide risks, external risks, and threats to IndyGo's mission and objectives.

The FY2024 Internal Audit Work Plan was approved In January 2024 by the Governance & Audit Committee. Included in this approved work plan was the Maintenance & Storeroom Review Update.

We would like to thank IndyGo staff and all those involved in assisting us in connection with the review. Questions should be addressed to the IndyGo Department of Governance and Audit at: batkinson@indygo.net.

Objective and Scope

Perform a follow-up for the processes and controls surrounding maintenance and storeroom updates to include review of the following:

- Storeroom inventory levels (min-max) compared to purchasing by procurement staff
- Timing of ordering parts and receipt into inventory
- Part distribution timeliness by work order
- Procurement ordering and approval process
- Processing of core inventory items

Overall Summary and Review Highlights

As noted in the FY2022 Maintenance and Storeroom Review, Governance and Audit was contacted by Operations as well as to perform a review of the processes and interaction between the storeroom and maintenance groups since the recent upgrade of the new Dynaway/D365 inventory system. As the storeroom and maintenance groups move toward a multi-site operation, management wants to ensure a full utilization of the inventory/maintenance system and efficiency in processes.

The following observations were noted from that review:

- Dynaway Utilization – Rated Medium Risk
- Work Order Process – Rated High Risk
- Inventory Levels – Rated High Risk
- Training and Staff Development – Rated High Risk
- Core Items – Rated Medium Risk

For FY2024, Governance & Audit performed an update review to ensure the prior audit recommendations were being properly addressed and corrected. This report serves to inform the Committee on what's been done to date to satisfy these recommendations.

We would like to thank IndyGo staff and all those involved in assisting us in connection with the review. Questions should be addressed to Brian Atkinson in the IndyGo Department of Governance & Audit at: batkinson@indygo.net.

SUMMARY OF SELECTED COLLISION CATEGORIES

Objective	Summary Details
1. Dynaway Utilization	**Recommendation:** Management should review inventory to ensure it is accurately stated within the Dynaway system. **Update:** Cycle counts are scheduled to process five days a week to verify actual inventory levels against the levels listed in Dynaway. All inventory items are scheduled to be counted two times each year. Inventory item group codes have been developed to identify each item that needs to be reviewed or if the review is completed. **Recommendation:** It is recommended that Dynaway functionality be communicated and trained to the maintenance and storeroom groups with regards to the tracking of all maintenance costs by bus/mile, forecasting and budgeting and the warehouse management system. **Update:** A maintenance management dashboard has been built in Power BI. This dashboard reports costs per bus per mile including parts, labor, fluids, fuel and miles driven. An additional dashboard is being designed with similar reports for facilities costs. These reports can be used for budgeting and making decisions on buses to retire. **Recommendation:** Management should consider soliciting the help of a Subject Matter Expert (SME) to obtain a standard chart of typical specifications for each vehicle type, fluid types and quantities, wheel torques, etc. so that the mechanics nor storeroom must go searching for these and spend additional time when it could be at their immediate disposal. **Update:** A Product Manager of Enterprise Asset Management Solutions position has been developed and filled within the IndyGo Information Technology Department dedicated to the Dynaway system development.

The individual selected for this role has extensive vehicle maintenance experience and has already received the following credentials related to the Microsoft Dynaway and D365 systems.

- Learn the fundamentals of Microsoft Dynamics 365 Finance
- Set up and work with inbound operations using inventory management in Dynamics 365 Supply Chain Management

Recommendation:

The Dynaway product is owned by the Maintenance Department, but collaboration is needed with the storeroom division for success in achieving full functionality.

Update:
There is a committee including veteran mechanics to identify parts that are low/no traffic and if the item can be used for the current fleet or removed from inventory. Bi-weekly meetings are being held with storeroom and maintenance staff on Fridays.

Recommendation:

Management should consider purchasing company tablets that have the Dynaway mobile app installed to be issued and used by each department for the purposes of generating a work order. Also, the handheld devices for inventory scanning could also be used to update the work orders with parts. It appears management would only need to increase the function on two (2) licenses and utilization of a bar code process.

Update:
At the completion of the Maintenance and Storeroom Audit Review dated January 6, 2023, workstation /laptops were set up and ready for use. Fifteen laptops have been provided to maintenance technicians which is sufficient for the number of technicians on duty at a given time. Maintenance technicians can create the parts list (kit) and add to the work order. Supervisors create the work orders and approve for parts distribution.

2. Work Order Process	**Recommendation:** System access should be reviewed to ensure that maintenance staff has the ability to update parts lists and create kits directly in Dynaway. **Update:** All work orders are now being created in Dynaway which includes creation of the parts list. Kitting is now used for all parts requests. Preventive maintenance kits were the first stage in the kitting implementation. **Recommendation:** Management should retrain maintenance and storeroom staff on the work order process and how the system is meant to work. **Update:** All maintenance staff is currently using the work order process in Dynaway as recommended. Facilities maintenance staff typically creates one work order early in the day for supplies needed that day. Vehicle maintenance staff create multiple work orders throughout a day due to the number of buses in for repair and the various maintenance needed. **Recommendation:** It is recommended that the storeroom cease in using the manual white cards and begin relying on the work order process as it was designed to work. Staff must be willing to change from outdated processes and utilize functionality that has been purchased to streamline operations. **Update:** Use of the manual white cards for parts request was discontinued in April 2024. All parts requests are done electronically through the Dynaway work order process.

Recommendation:

Ensure that maintenance staff members have access to the mobile app, tablets, or convenient computer workstations to create the work order parts list from their workstation and not at the storeroom window.

Update:

Computer workstations with laptops have been set up through the maintenance area.

Recommendation:

A one-day demonstration or overview of the complete system capabilities shared with maintenance and storeroom staff by the IndyGo Operations Performance Manager would be helpful with getting everyone up to speed and on board. It is noted that part of the unwillingness to change is lack of understanding of the big picture.

Update:

Storeroom staff have all been trained on the use of the Dynaway work order system including night and weekend staff.

Recommendation:

Management should develop an automated coding system for the work order numbers or title identifying the work order as an accident repair. This would allow cost for accident costs not to inflate the overall maintenance cost for regular operation of the bus.

Update:

The Maintenance Department has set up a specific work order type for body and specific jobs related to accident repairs. The list can be pulled from different reports in both D365 and Power Bi.

3. Inventory Levels	**Recommendation:** The storeroom should stop using the manual white cards immediately. The work order process in Dynaway has a part list and the mechanic can develop a kit that the storeroom can use to pull parts. As parts are pulled for the work order, the inventory can be updated at the same time using a computer, tablet, or mobile device. This will ensure inventory is always updated real time. **Update:** The use of manual white cards was completely stopped in April 2025. Electronic work orders in Dynaway create a parts list (kit) for the storeroom employees to pull. A large computer monitor is in the storeroom that shows all work orders as they are created. The newest work orders for parts fulfillment are listed at the top of the screen. Work orders roll down the screen as they are completed and remain until the maintenance department closes the work order at the time the work is completed. Storeroom staff can use handheld scanners to scan the bar code on each inventory item as the work order parts request is filled. **Recommendation:** For parts such as tubing and hoses, management could research the cost of procuring hose making equipment. This would eliminate the need for many different sizes to be maintained in stock. The exact size part could be made on site for each purpose. **Update:** It was determined to be more cost effective to use a local vendor that can custom fabricate tubing and hoses in any size needed. **Recommendation:** Management should consider increasing the number of body panels and windows on hand for buses that have interchangeable parts. **Update:** Over six hundred parts have been reviewed regarding inventory levels which included input from maintenance. This is an ongoing process and is being done daily.

Recommendation:

Historical parts usage can help with adjusting the min-max amounts in the system to be updated more accurately. Reports can be pulled to assist with correcting on hand inventory as well as assisting in developing future fiscal year inventory budget. The report availability was demonstrated by the IndyGo Operation Performance Manager.

Update:

Min-max is now regularly reviewed utilizing a usage report along with staff input. A new item code (9000) is applied in the system to show that the min-max has been reviewed and a +/- adjustment has been made if needed. There is a committee along with veteran mechanics to identify parts as low/no traffic and determine if the item can be used for the current fleet. Maintenance staff confirms any items deemed to be obsolete. Storeroom staff clears inventory in the system and removes obsolete items which are then auctioned or scrapped.

Recommendation:

Storeroom management should set up a regular schedule with vendors who supply small part bin inventory (springs, clips, nuts, and bolts). Storeroom management should verify the vendors are meeting expectations. Purchasing could assist with vendor replacement if the vendor is not meeting contractual agreements.

Issuer should be assigned for each corporation or departmental policy.

Update:

Improvement has been made in the supply of springs, clips, nuts and bolts. These small items are not included on the work order as part of the inventory parts requests. The vendor supplying these products checks the stock at IndyGo and makes the necessary additions. These item types are not part of the inventory in Dynaway/D365.

4. Training & Staff Development	**Recommendation:** A review of inventory locations with all storeroom staff members and developing testing for familiarity of parts and locations should be performed. **Update:** Training has been performed for inventory locations with all storeroom staff members to date. This training included all weekend staff as well as first, second, and third shift staff. Additionally, two new positions were created for supervisor coverage overnight and on the weekends. **Recommendation:** It was determined that additional training hours are available with the Crowe implementation consultant. It is recommended that a system refresher training be held with all storeroom employees participating. Training could be completed by Crowe staff or IndyGo Dynaway experts who have been identified by Governance & Audit as well as the IT Project Management Officer. **Update:** The Product Manager of Enterprise Asset Management Solutions personally trained all employees in the storeroom. During the training all staff members were fully engaged and adequately trained. Overall employee engagement was positive. **Recommendation:** Management should ensure that the system is formatted to include work order parts listings to display on video by parts counter including the ability to display standard kits as well as individual work order kits. Governance & Audit verified that kitting is available and was demonstrated on Dynaway system YouTube videos. **Update:** Governance & Audit confirmed that the system has been formatted to include work order parts listings to display on the monitor by the parts counter which does include the ability to display standard along with individual work order kits.

	Recommendation: Management should require cross-training of positions in the storeroom and assign staff to cover vacations. **Update:** Cross training of positions in the storeroom has been conducted to ensure all positions can cover vacations and leaves. There have also, as noted above, been an additional two supervisor positions added to ensure full coverage for weekends, overnights as well as vacations/leaves.
5. Core Process	**Recommendation:** Management should create a formal process to handle all core items. Once created, this should be communicated to the storeroom and maintenance groups to ensure all personnel are well versed on the core processing procedures. **Update:** Management has created new labels that are bright pink to use to place on core items and the buyers identify core items in the system and ensure the core field is marked on the stock code. When parts are received into inventory, the core items are identified and the labels are affixed at that time by the storeroom receiving clerk. This informs the maintenance staff that it is a core item which needs to be returned to the storeroom for core credit. **Recommendation:** A thorough review of all items that are eligible for receipt of core credit should be performed. This should include review of the system to guarantee all items are marked as core in Dynaway. Also, review should include going to core item location in the Storeroom and checking to make sure an item is accurately labeled so that Maintenance and Storeroom know that it needs to be returned for core credit to vendor. **Update:** A marked improvement in what was listed as core in the prior Governance and Audit review of maintenance and storeroom has been noted. Per the system review in the prior audit, there were a total of 18 core items

noted as such. During the current review approximately 60 were listed as core items. There is continual review being performed to ensure all core items are accurately listed in the system as core so that IndyGo will be able to receive all the core credits due.

Recommendation:

The Core/Warranty Administrator, to do their job duties and recover as many core credits as possible that are available to IndyGo, require management's involvement and buy-in to this process. Governance & Audit recommends management's participation in these efforts to communicate the importance financially to the organization for receipt of core credits.

Update:

It was noted that all core credits are received as an invoice credit. Also noted, was the need for a process in place that could report the number of core items issued to the maintenance team that have not been returned for the core return and subsequent refund. There needs to be a tracking component for the items requested by maintenance that have not yet been returned to the storeroom. It was determined that core items not returned to storeroom to be sent to the vendor for core credit have been typically placed in scrap.

Current Recommendation:

Develop a report that would show core items issued on each work order so that the Core Administrator can track what is returned for credit from the vendor.

Management's Response and Action Plan:

There is a report that can be run to see when core items have been issued called "Items where used" This report will give the date, time, bus, and work order the part was issued to so that the Core Administrator can track what is returned for credit from the vendor.

A core team has been convened to develop a comprehensive process for tracking all cores via the current ERP system D365. Members of this team are comprised of staff from the stock room, fleet, preventative maintenance, procurement and IT. As this process evolves, members from the buyer's group and accounts payable will be included. The first meeting is scheduled for September 20, 2024. A complete process is scheduled to be in place by end of year 2024.