Road Corridor Access

CCG

June 17, 2015

Auckland Transport

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Poacher Turned Gamekeeper?
Going from Downer to AT

1. The two organisations have more in common than Downer would probably care to admit. I believe most big organisations have similar issues.

2. The AT Road Corridor Access team had been without a manager for nearly a year. The team is very passionate and had done relatively well but were desperate for leadership.

3. With challenges similar to prior experience, temptation is high to jump right into ‘solution mode.’ I have held back. Instead, opting to implement a structured Continuous Improvement / Lean approach wherein ownership amongst the team can be driven.

4. The team know what their issues are. They needed the empowerment to own and solve their own problems.

5. After 6 months, we’re not there yet but we’re making good progress…

AT Road Corridor Access Team

Facts & Figures

- The Road Corridor Access Team (RCA) was created by the Supercity amalgamation, combining the road corridor of seven different council areas into one.

- AT now manages 7,320 kilometres of roading network.

- The Local Government (Auckland Council) Amendment Act of 2010 empowered Auckland Transport to coordinate activities on the roading network.

- On a monthly basis, there is a flow of nearly 1,700 Corridor Access Requests (CARs) per month to Auckland Transport for utilities, roading, private works and events. On average, 1,300 are approved to proceed.

- The RCA team consists primarily of 12 CAR managers, five temporary traffic management advisors and four structural engineers (for overweight/HPMV permits).

This is an opportunity for lean implementation, RIGHT?

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Many Lean Names, But Which Tool Fits?

Toyota Production System

Pull Manufacturing

Just-In-Time

World Class Manufacturing

Lean Manufacturing

JIT/TQC/EI/TPM

Short Cycle Manufacturing

One-Piece-Flow

Cellular Manufacturing

Demand Flow

Stockless Production

Focused Flow Manufacturing

Value Adding Manufacturing

Agility

Lean construction

Group Technology

Time Based Management

Synchronous Flow Manufacturing

End-Lining Operations

Continuous Flow Manufacturing

Introducing TIM WOOD…

When we review a process we look for waste. The 7 forms of waste are:

1. Waste of Transportation
2. Waste of Inventory
3. Waste of Motion
4. Waste of Waiting
5. Waste of Over Processing
6. Waste of Overproduction
7. Waste of making Defects

Which of these wastes are present in our processes?

Other key items to look for when reviewing a process are:

- Bottlenecks, constraints and long lead times
- Duplication, gaps or processes simply not working
- Processes not wanted by the customer
- Processes needed for compliance

Continuous Improvement: D M A I C Roadmap

Define

Create Project Definition → Capture customer requirements → Map the process → Gate review

Measure

Validate Measurement System → Establish Baseline Capability → Collect data → Identify potential sources of variation and Waste

Analyze

Analyse root causes → Prioritise key X's - process inputs → Establish potential process improvements → Gate review

Improve

Identify Solution → Validate Solution → Plan Improvements → Implement Improvements

Control

Implement control plan → Document Process. Implement Controls → Determine Final Process Capability → Monitor Project Performance Over Time → Gate review

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Use of Lean tools in a DMAIC project

Define

- Project contract & form team
- Identify metric(s)

Measure

- Value stream mapping
- Identify waste
- Spaghetti chart
- Develop and/or validate measurement systems
- Establish baseline capabilities and improvement targets (ie. Lead Time, WIP, etc.)

Analyze

- Takt time analysis
- Product Process Flow Analysis
- Multi-cycle analysis
- Load chart
- Constraint analysis
- Safety analysis
- Ergonomic analysis
- Activity of the operator
- Activity of the machine

Improve

- Implement flow
- Implement pull
- Implement layout design
- Material presentation (POU, etc.)
- Standard work
- Balanced work
- SMED
- Kaizen
- Simulation
- Jidoka (Autonomation)
- TPM
- Production smoothing
- Heijunka
- 5S
- FMEA

Control

- Visual control
- Mistake Proofing (Poka-yoke)
- Standard work
- FMEA
- Launch follow-on BB/GB projects
- Schedule post-closeout audit
- Transfer ownership to process owner
- Project Closeout

CI Projects' Collaboration

Road Corridor Access > CI Project

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NAME	PROJECT LEADER	PROJECT STATUS	COMMENTS
5S Project - EM	Evelyn Mackenzie (AT)	Control	Project in control phase. Periodic audits to be done. In 15-16 year, this approach to workspace organisation will be taken into the IT space: Onedrive, Sharepoint & CAR Manager will all come into consideration.
Applicatin Quality Project (external) - VJ	Vikus Joubert (AT)	Improve	Good analysis done - Team, what needs to be done to improve these stats: 84% of AT CARs are "Start Notification Overdue, TMP outstanding" or "On Hold." 75% of Watercare CARs & 72% of Vector CARs are "Start Notification Overdue" or "TMP outstanding." 86% of Vodafone CARs are "Start Notification Overdue." 61% of Chorus CARs are "Start Notification Overdue, TMP outstanding" or "On Hold."
CAR Manager Speed Project - CG	Christopher Glanfield (AT)	Control	The primary speed issue identified in this project was the attachment of documents. This is an RSL issue, which is still being addressed. The remaining "day to day" issues should be captured in the issues register being created in Willi's CI Project.
Car Mgr Alt Project - AC	Al Christ (AT)	Control	Procurement documents in progress. Simultaneously, conversations with RSL, Entek and B4UDig have commenced. Target date for RFT documents to be sent out is end of July.
CAR Quality Education Plan (external focus) - AB	Ani Bell (AT)	Improve	This project is well into the 'Improve' stage with good work going on in I-Know and collaboration with other projects. This, however, is my observation from discussions. Documentation is needed for forward work. This may draw from other projects and/or implementation of Submitica. Please talk to me and we'll upload to enter 'Control' status.
CAR Quality Improvement Plan (external focus) - LJ	Laurence Jones (AT)	Improve	This project has become a collaborative version of the other externally focussed CAR improvement projects. Abhi and Ani have updated iknow and website so that information is consistent on both. Vikus has identified trends. To wrap up improvement stage, we need to take action on Vikus' and Deepan's findings.
CAR Quality Project (external focus) - DA - Editable	Deepan Kumar (AT)	Improve	This project remains in Improve status. To enter Control, the list of frequent issues must be reviewed (may already have been done) and uploaded to project folder. Chris P will use for team checklist and Laurence to consider for his project.
Collaboration Project - BC	Bruce Claypole (AT)	Analyse	Review with Tom / Al required to take this into 'Improve' status. Good work.
Consolidation Project	Michael Kuhn (AT)	Measure	Project has entered measure phase. Please provide an update for the meeting.
Events Process Project - CD	Clive Dale (AT)	Measure	Initial meeting with Logan Christian and Jeremy Dawson to agree priciple. Met with Abhi Shivcar to see the field options in CAR manager and Submitica. Summarised past 2 years events into single excel sheet. Next meeting with Jeremy to progress how to enter all repeat events into CAR as proformas.
Extensions Project - JH.xlsx	Jane Harris (AT)	Analyse	Met with Al and Barry, 4 options were considered with invoicing for extensions. Just waiting now to hear the outcome of the Billing Module Developement meeting with regard to fee's in general. Will then proceed with the next step. Until now this is on hold pending further information

The AT Road Corridor Access team currently have 21 of 23 CI Projects in the Analyze to Control stages. With only two projects stopped, this is a better result than was anticipated.

All projects are kept on Sharepoint for full transparency and collaboration.

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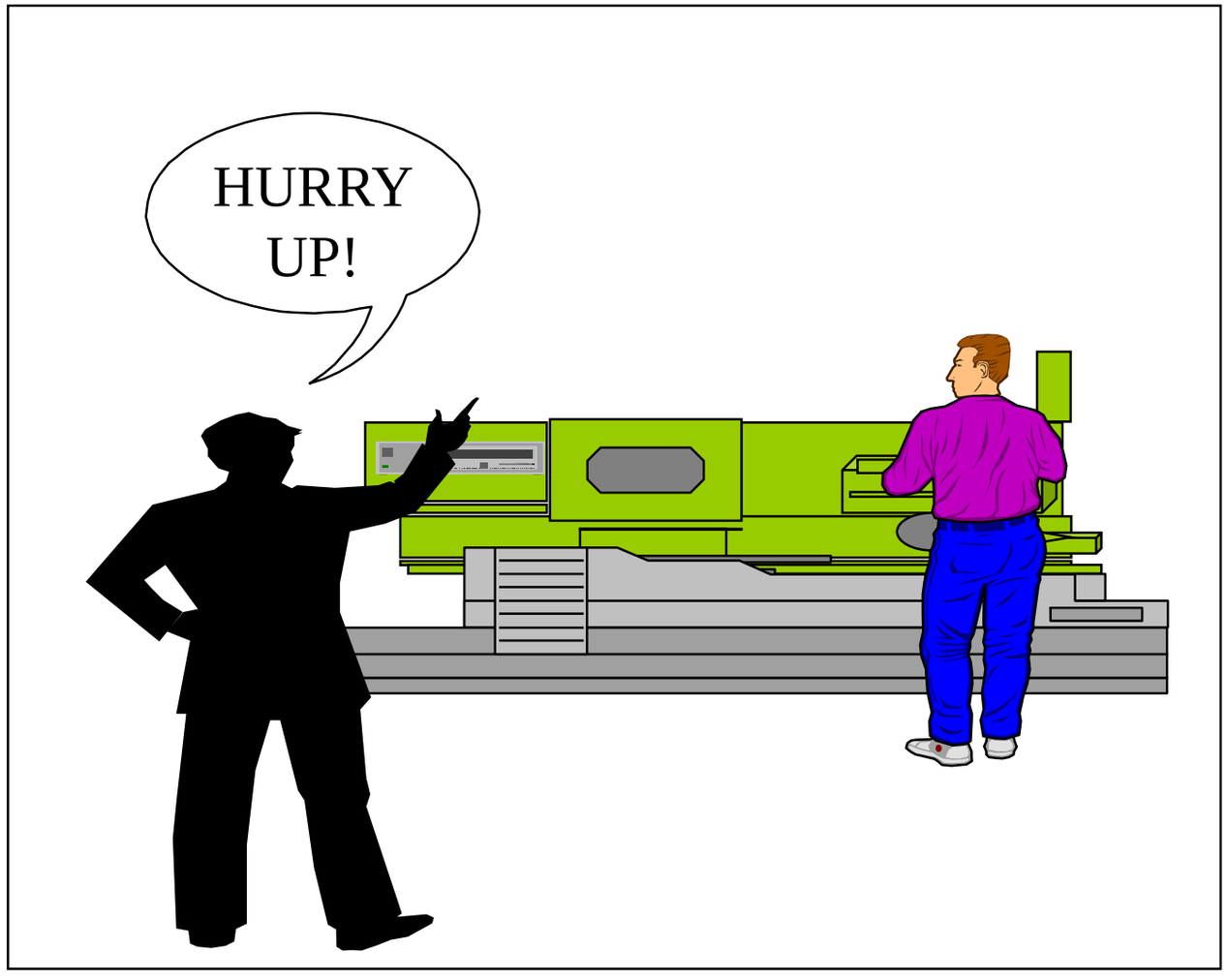
Road Corridor Access Vision Statement

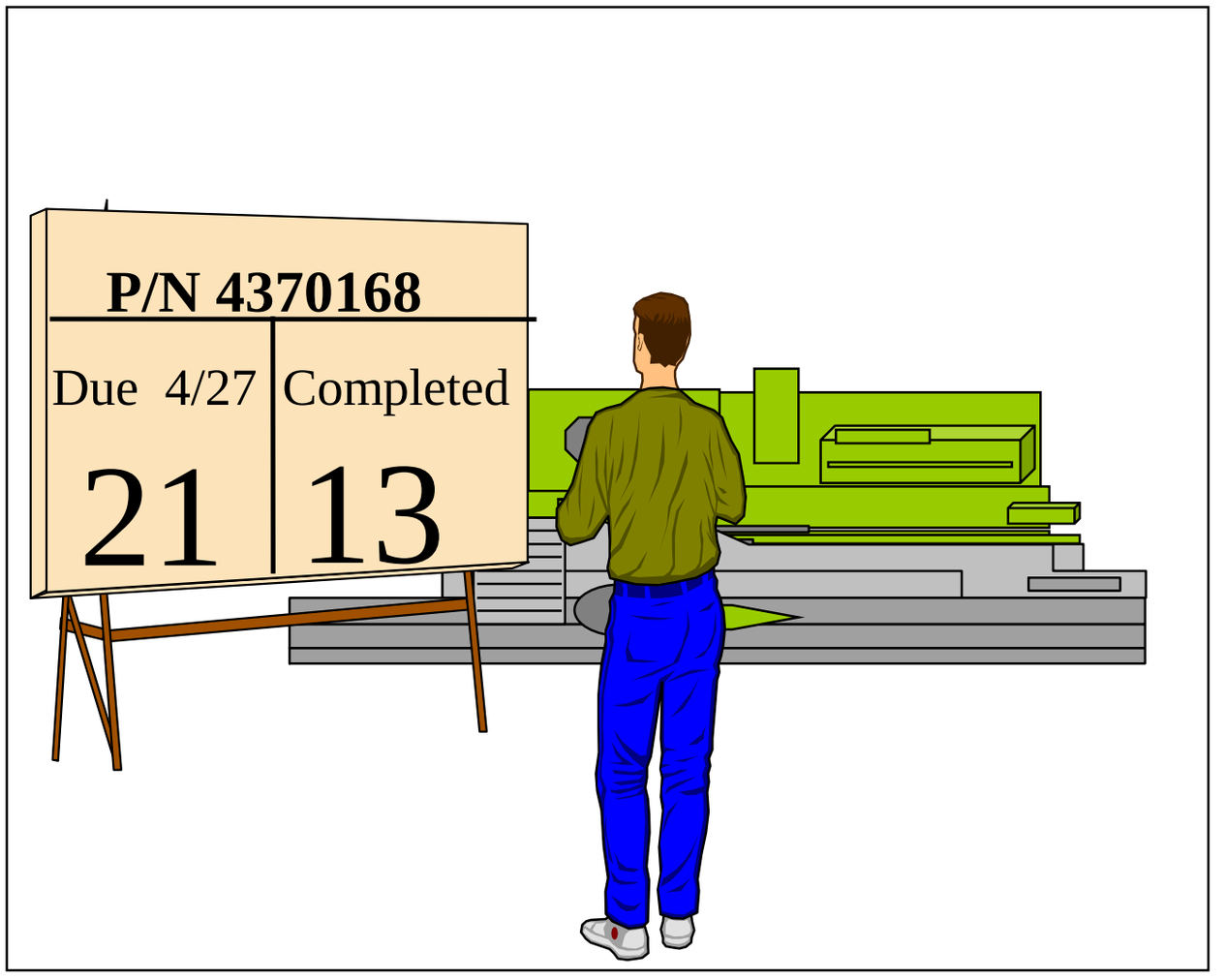
The RCA Team take pride in managing and monitoring activities in the Road Corridor to maximise safety, network efficiency and asset protection.

The team works collaboratively to produce accurate and timely outcomes that meet customer expectations.

Why will we be posting our measures/progress on the wall?

Same Workplaces, Two Ways of Communicating





HIDDEN WORKPLACE

VISUAL WORKPLACE

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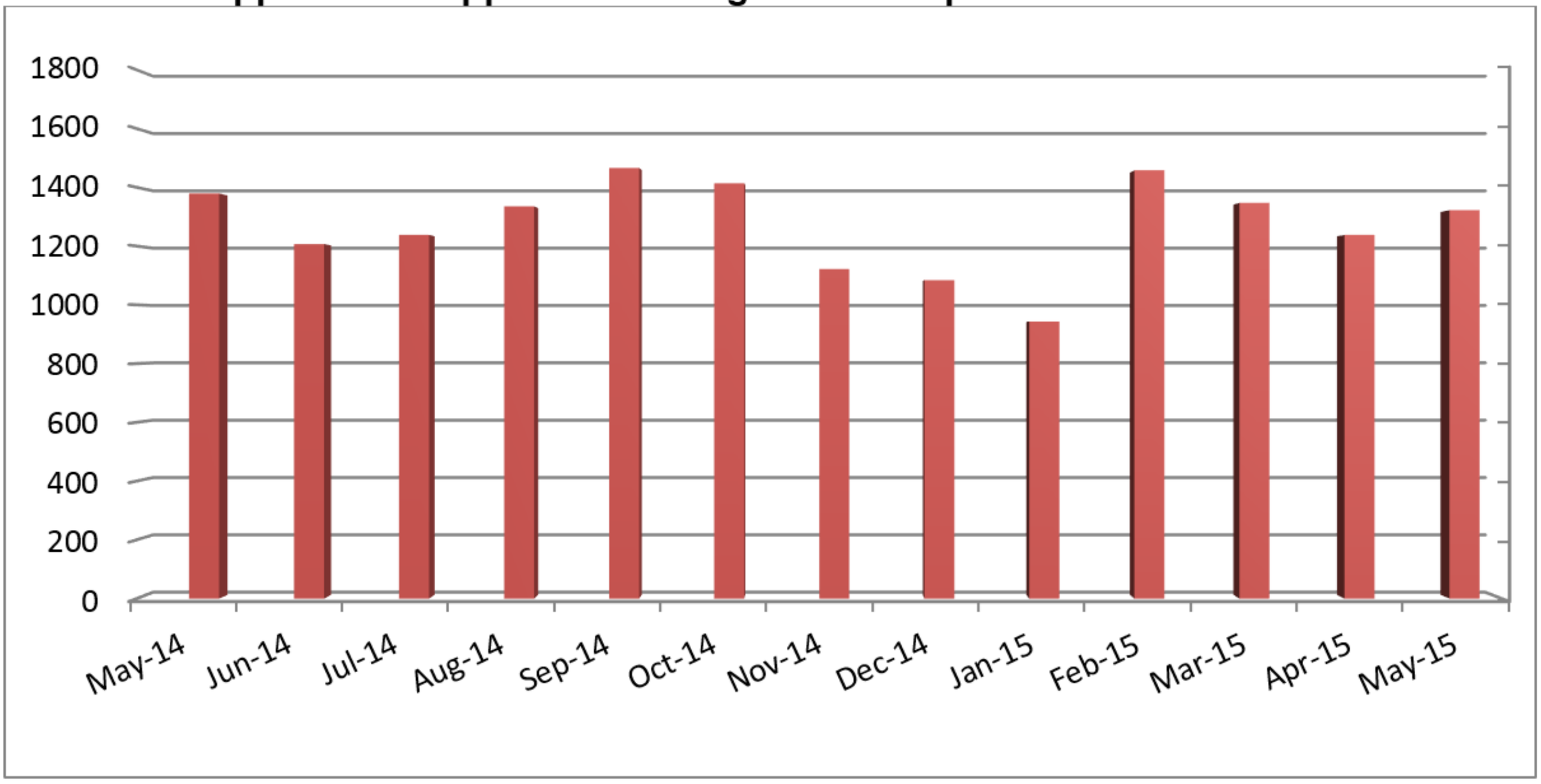
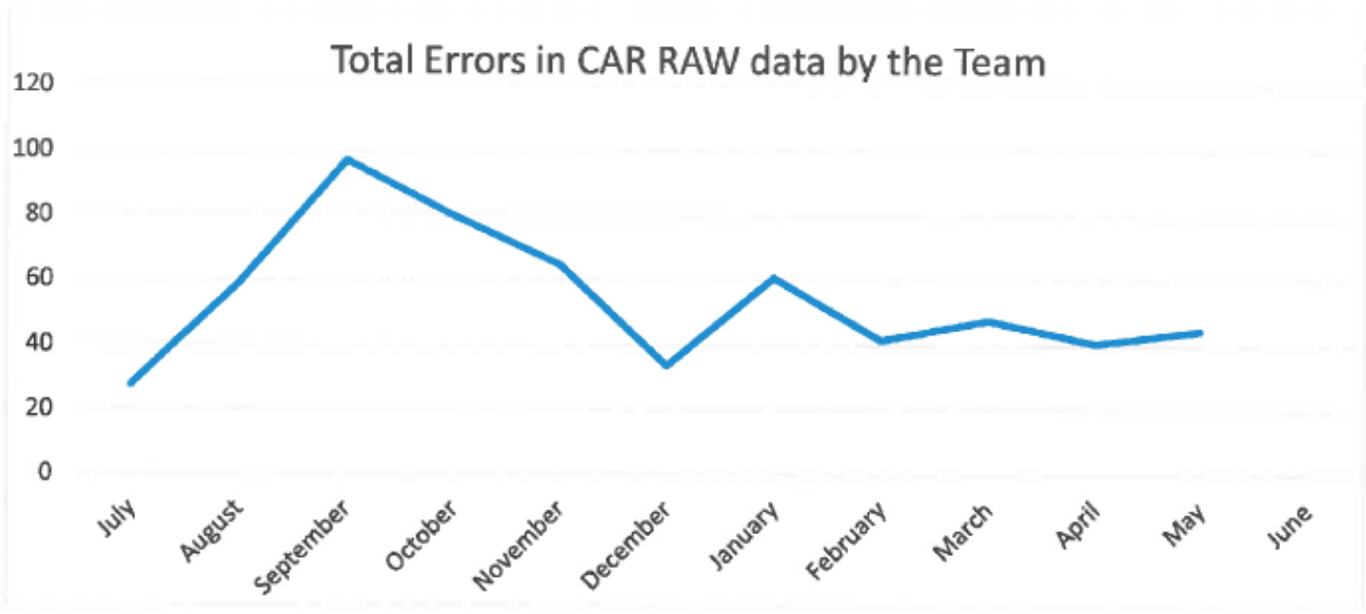
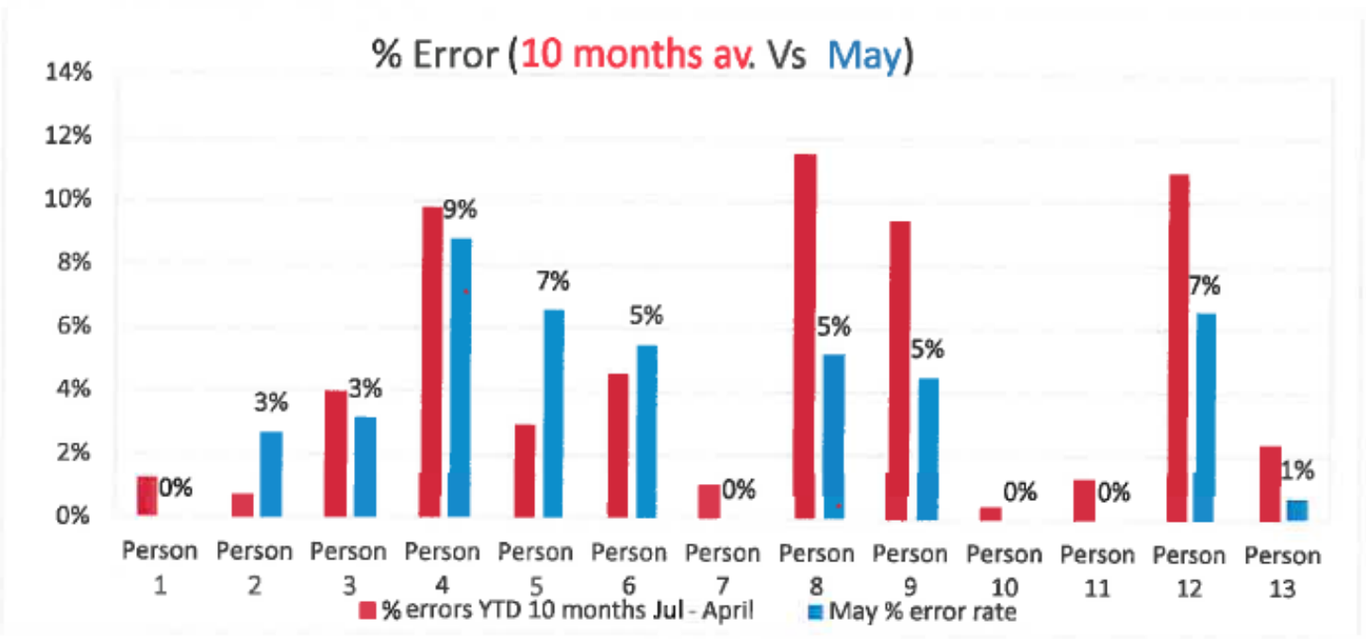
No. of CAR applications approved Moving Annual Report

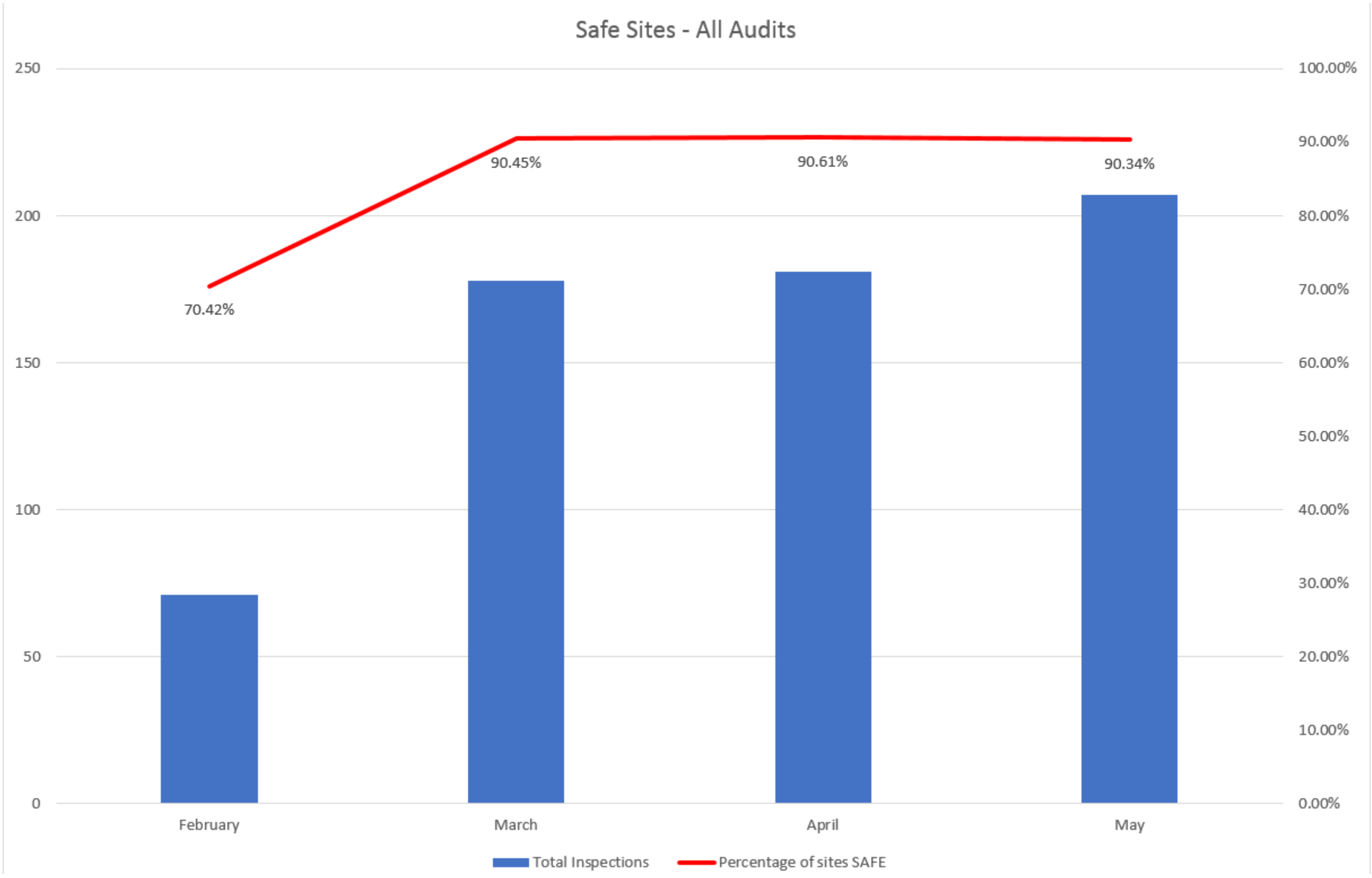


CAR Processing Mistakes

(These result only measure compliance with Document 22 the Pre-CAR Approval Check List)






Safe Sites - All Audits
250
200
150
100
50
0
100.00%
90.00%
80.00%
70.00%
60.00%
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
70.42%
90.45%
90.61%
90.34%
February
March
April
May
Total Inspections
Percentage of sites SAFE

Questions?

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