Business Intelligence F.A.S.T. Webinar Series

Part 3 – Operations and Vehicle Health

Date: Thursday, December 17, 2020

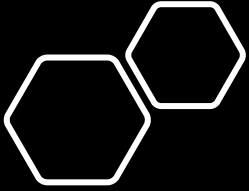# Avail Team

Gregory Kilbride

F.A.S.T.™ Professional Services
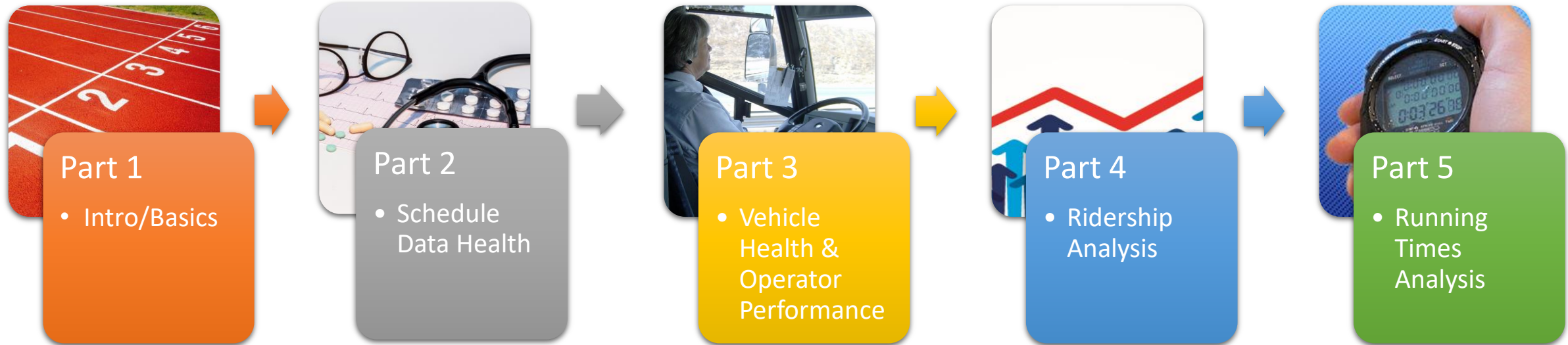

Todd Beaumont

F.A.S.T.™ Professional Services Manager

Purpose

- Embark on the Journey to Better Data
- We've fine tuned a process with a few agencies, and we'd like to share it with everyone
- If you do your homework and follow through, we promise you'll have:
    - Quality Data
    - Eliminate Information Silos
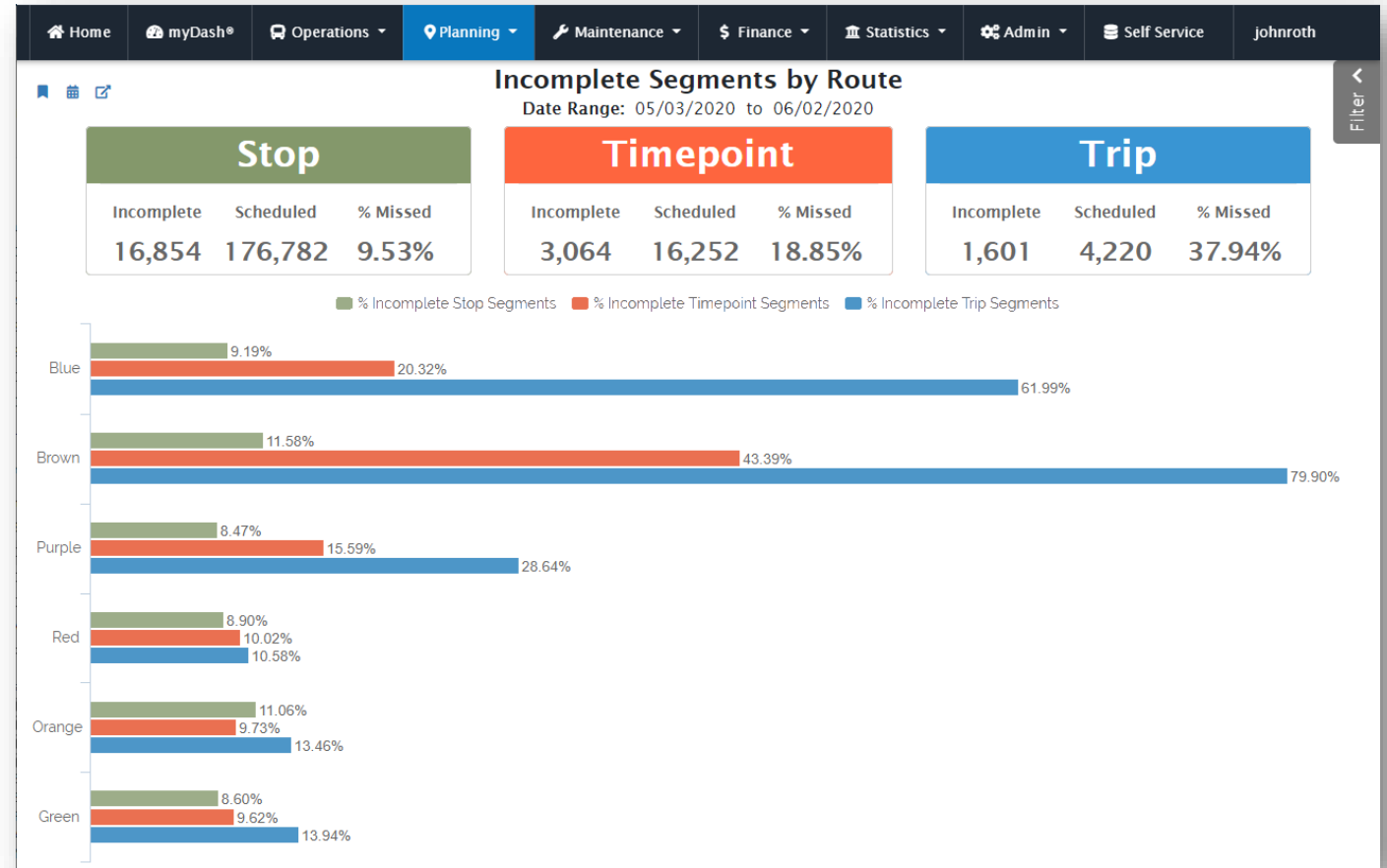   - Reduce Manual Processes

Five Part Series Line Up

Part 1
- Intro/Basics

Part 2
- Schedule Data Health

Part 3
- Vehicle Health & Operator Performance
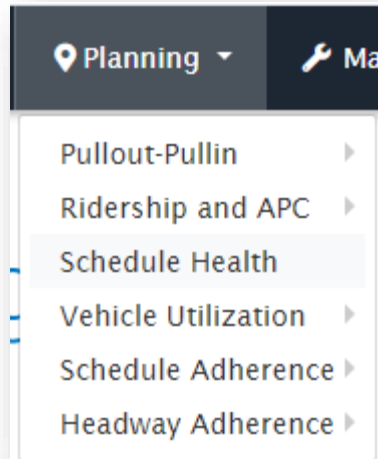
Part 4
- Ridership Analysis

Part 5
- Running Times Analysis

Recap – Schedule Data Health

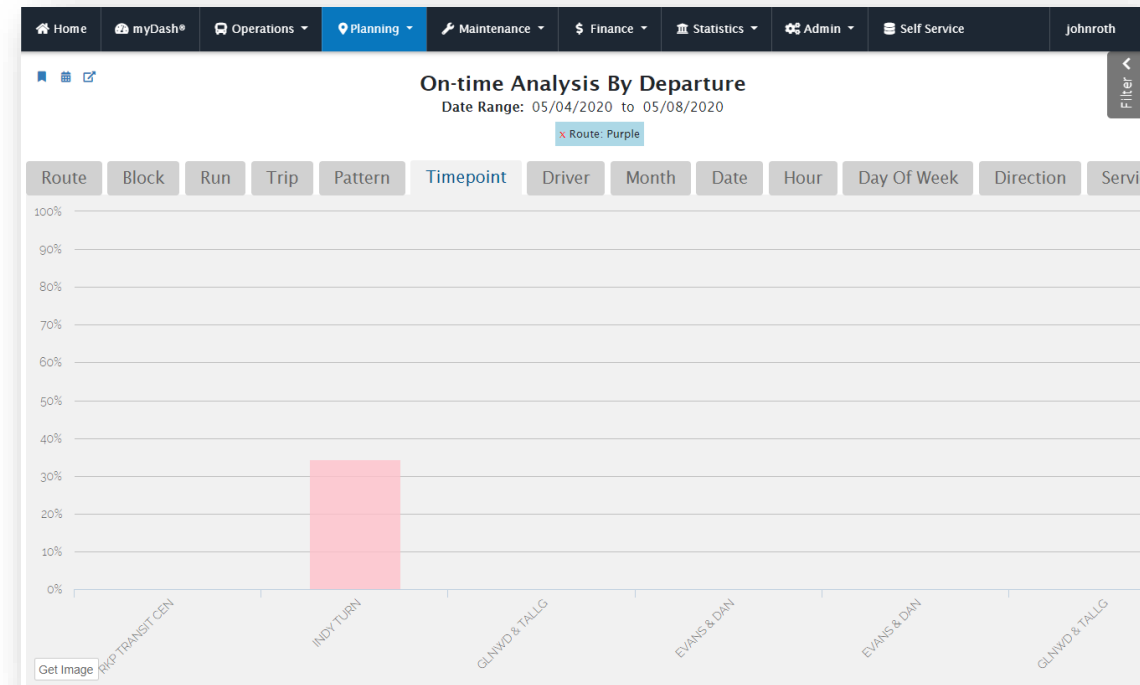# Business Intelligence – Schedule Data Health Reports

- Planning → Schedule Health

Business Intelligence – Early Outliers

- Early outliers can sometimes be caused by a trigger box at a layover point that is the wrong size

- Review time points that have been flagged as early outliers

- Schedule Adherence → On-time By Departure →

    On-time Analysis By Departure

Homework

- Run your Schedule Health Reports
  - Write down your percentages – This is your baseline
  - Start working through the data
- Run your Schedule Adherence Report
  - Check for Early Outliers
- Plan for a future Publish

Next Step – Operations and Vehicle Health

Transit Data Building Blocks

Reporting & KPIs

Operational Behavior

Vehicle Equipment

Trigger Box Data

Schedule Data

Daily Operation

- The operations team's performance can affect the quality of the data collected

- Data points throughout the service day:
  - Operator Checks In
  - Pre-Trip Vehicle
  - Login to Block
  - Pullout of Garage
  - Perform Service (Schedule Adherence / Running Times / APCs)
  - Report Service Issues (Detours / Delays)
  - Pull in or Relief
  - Log out

Are you tracking your performance?

- Operational performance is monitoring and coaching to improve behaviors

- Business Intelligence has reports to assist and provide coaching opportunities to improve your agency

- Operator error can negative effect your data:
    - Log ins are missed or late
    - Pullouts don't occur on time
    - Schedule adherence prompts aren't followed
    - Detours aren't reported or followed
    - Log out are missed

Business Intelligence:
System Events Dashboard

- High level performance summary
  - Decision Support
  - Service Deviation
  - Service Monitoring
  - Pull out / Pull In

System Events Dashboard
Date: 12/16/2020

Decision Support

Event	Occurrences
Cancel Service	0
Discharge Only	0
Helper Vehicle	1
Platoon Trip	2
Replace Vehicle	0

Voice Communications

Event	Occurrences	Avg time to take	Avg time to log
Dispatch VoiceCall 1Way	0	00:00:00	00:00:00
Dispatch VoiceCall 2Way	0	00:00:00	00:00:00
PRTT	0	00:00:00	00:00:00
RTT	0	00:00:00	00:00:00
Silent Alarm	1	00:00:15	00:00:59

Service Deviation

Event	Occurrences
Public Messages	0
Detour	1
Off-route over threshold	0
Stationary Vehicle	626

Maintenance Events

Event	Occurrences
Comms Statistics	0
Equipment Failures	189

Incidents

Event	Occurrences
Incidents with Revenue Service Adjustment	0
Other Incidents	4

Pull Out / Pull In

Event	Occurrences
Expired Pullin	0
Expired Pullout	10
Late Check In	3
Late Login	27
Late PreTrip	5
Late Pullin	0
Late Pullout	13
Late Relief	4
Missed Check In	24
Missed Login	60
Missed PreTrip	18

Service Monitoring

Event	Occurrences
Bus Bunching	0
Detour Message Failed	2
Early over threshold	0
Expired Dispatch Message	0

Text Communications

| Event	Occurrences	Avg time to take	Avg time to log
Canned Message From Vehicle	0	00:00:00	00:00:00
Dispatch Message	44	00:00:00	00:00:00
Emergency Canned Message	0	00:00:00	00:00:00

Filter

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Business Intelligence: Revenue Pullout Performance

- This is the first revenue stop after deadhead
  - Late
  - Missed On Route
 - Missed Not On Route
  - Early

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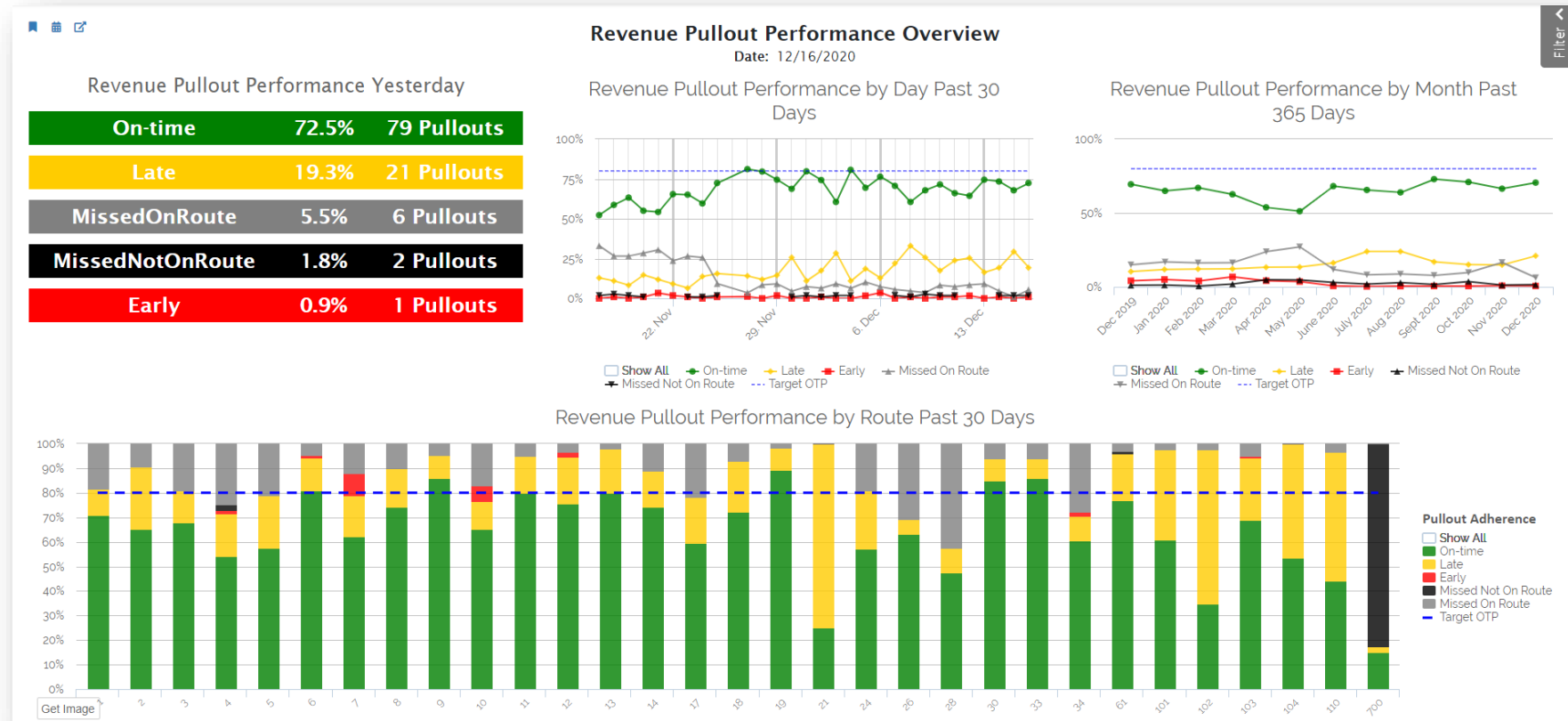
Business Intelligence: Schedule Adherence by Driver

- This is the first revenue stop after deadhead
  - Late
  - Missed On Route
  - Missed Not On Route
  - Early

On-time Analysis By Departure
Date Range: 05/23/2020 to 06/02/2020

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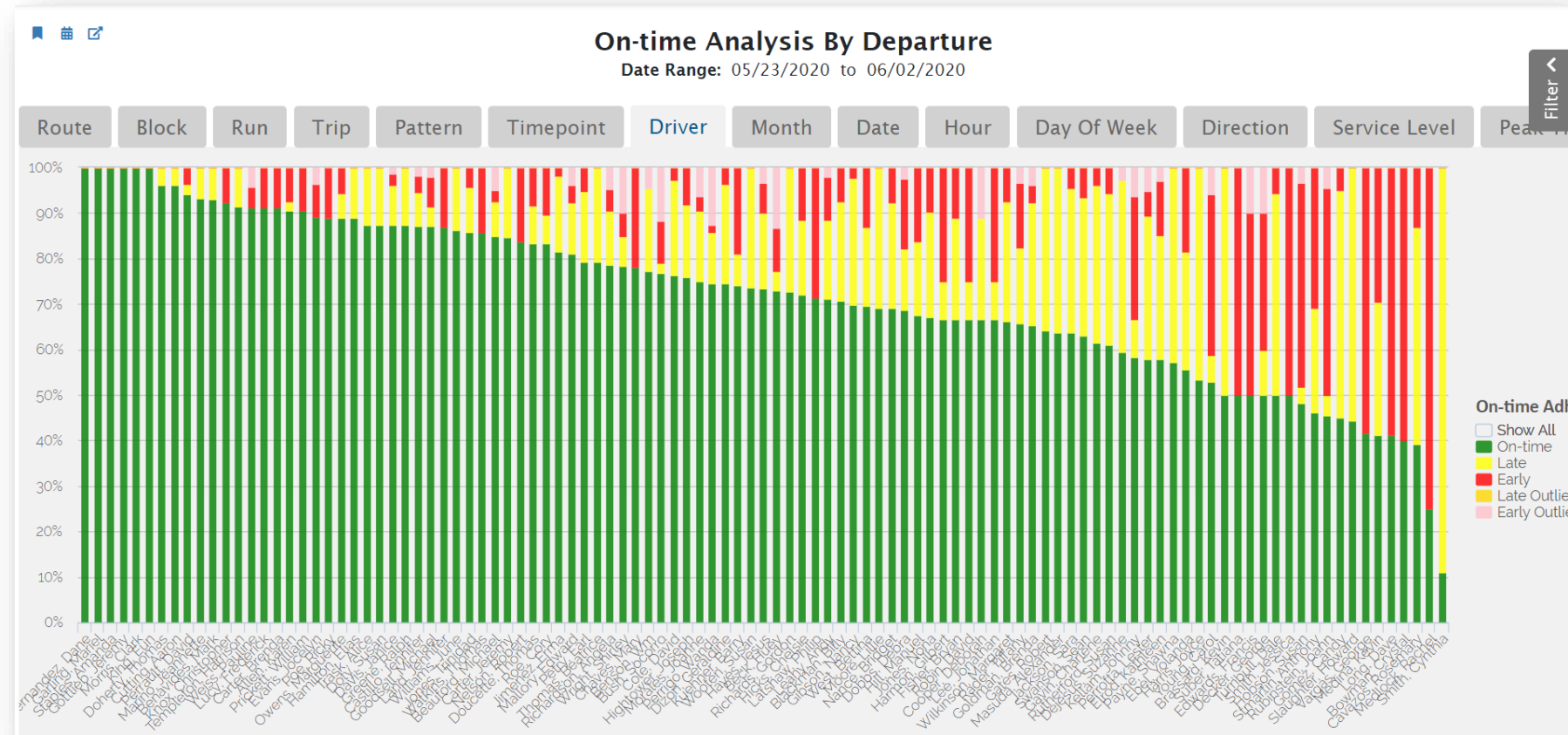
Business Intelligence:
Logon / Logoff Dashboard

- Operations side
  - Total Logons without logoffs
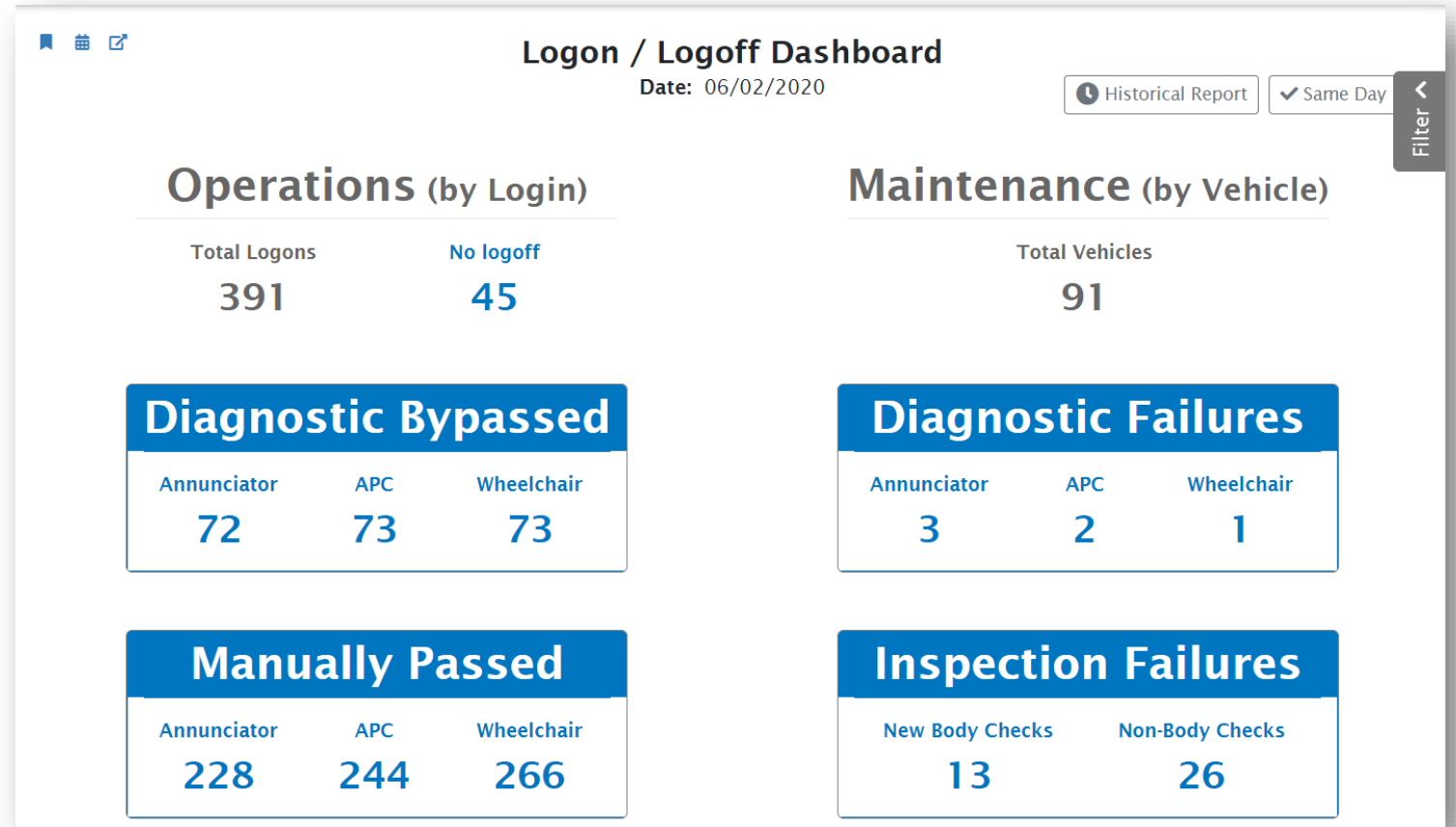 - Diagnostics bypassed
  - Diagnostics manually passed
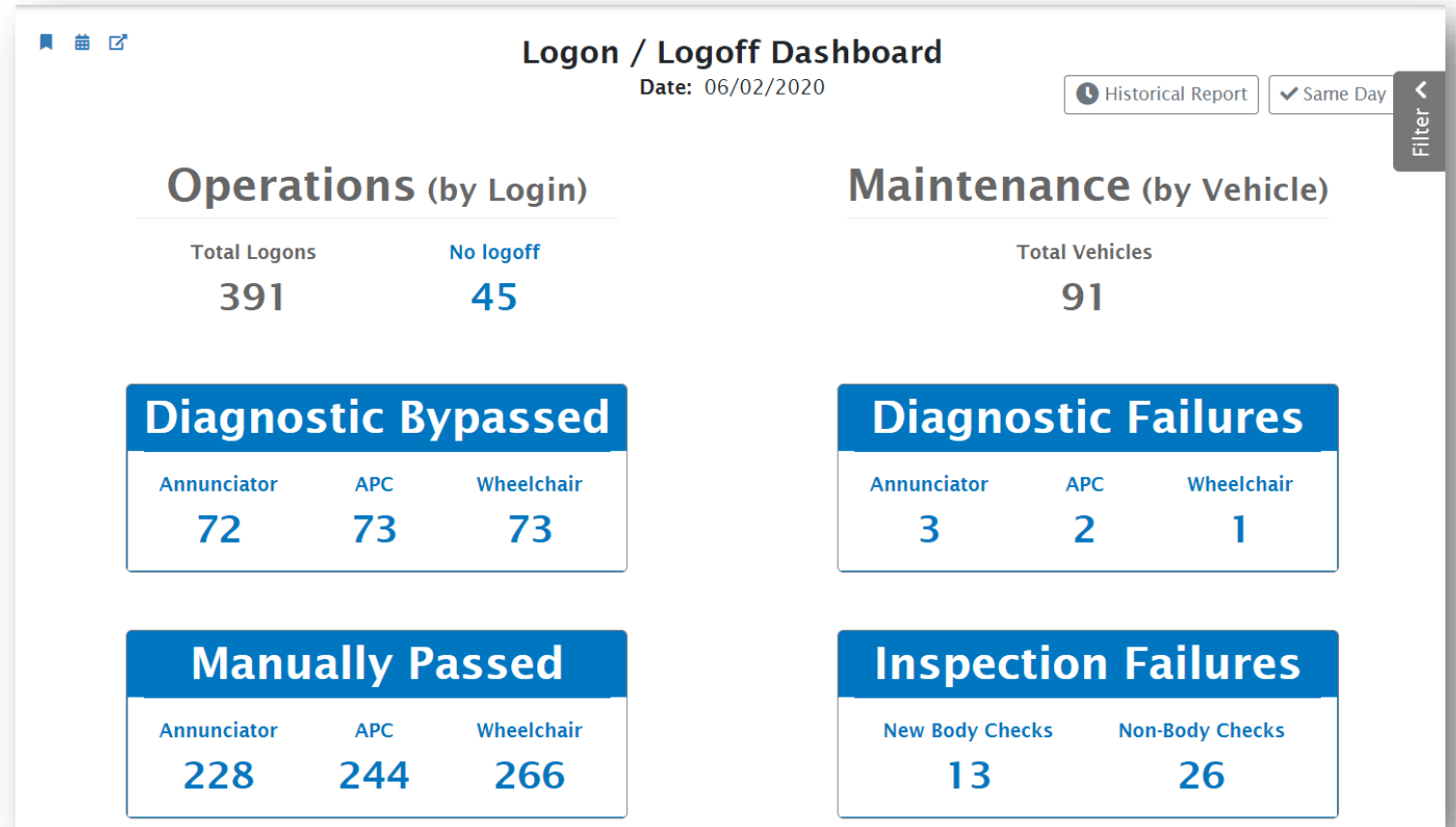
Vehicle Health

What is Vehicle Health?

- Just like Schedule Data Health, it's important to monitor the vehicle equipment health

- If ITS equipment is not 100%, it's going to negatively impact your data and your operations team's ability to perform service

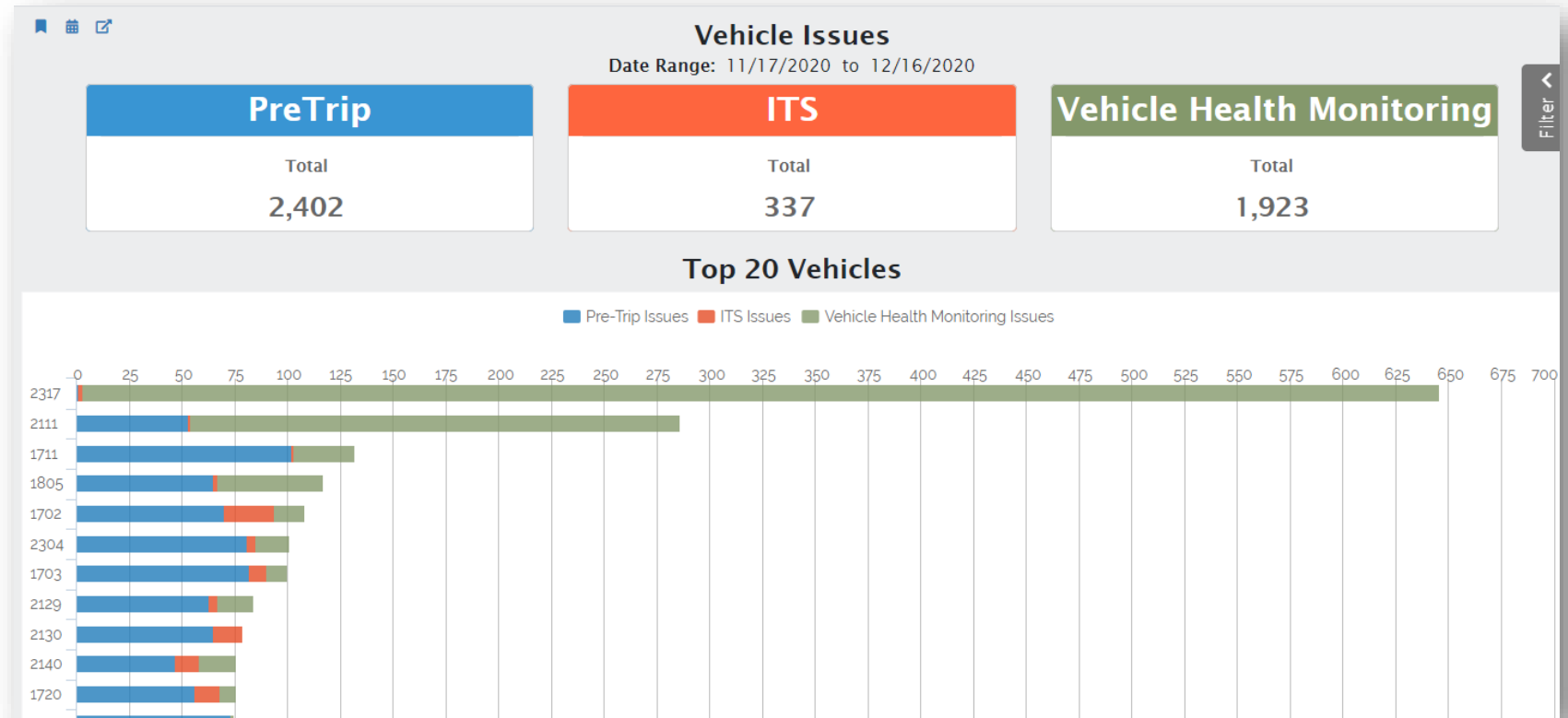- Goal: No vehicle leaves the yard with an ITS equipment issue

Business Intelligence:
Logon / Logoff Dashboard

- Maintenance side
  - Total Vehicles
  - Diagnostic Failures
  - Inspection Failures

Logon / Logoff Dashboard
Date: 06/02/2020

🕐 Historical Report | ✔ Same Day

Operations (by Login)

Total Logons	No logoff
391	45

Maintenance (by Vehicle)

Total Vehicles
91

Diagnostic Bypassed

Annunciator	APC	Wheelchair
72	73	73

Diagnostic Failures

Annunciator	APC	Wheelchair
3	2	1

Manually Passed

Annunciator	APC	Wheelchair
228	244	266

Inspection Failures

New Body Checks	Non-Body Checks
13	26

Business Intelligence:
Vehicle Issues

- PreTrip
- ITS Diagnostics
- Vehicle Health Monitoring

Business Intelligence:
APC Balance & Fareboxes

Next Steps

Homework

- Run your Operational Behavior Reports
    - Write down your percentages – This is your baseline
    - Start figuring out how you're going to setup Coaching Sessions

- Run your Vehicle Health Reports
    - Plan to process for monitoring and improvement

Timeline

- Completed
  - Part 1 Nov 12th: Intro and Basics
  - Part 2 Dec 3rd: Schedule Data Health
  - Part 3 Dec 17th: Operator Performance and Vehicle Health

- Upcoming
  - Part 4 Jan 7th: Ridership Analysis
  - Part 5 Jan 21st: Running Times Analysis

"Thank you!"

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