



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

Part 5 – Running Times Analysis

Date: Thursday, February 4th, 2021



Avail Team



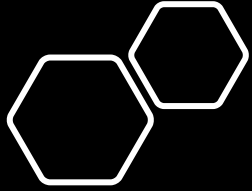
Gregory Kilbride

F.A.S.T.™ Professional Services



Todd Beaumont

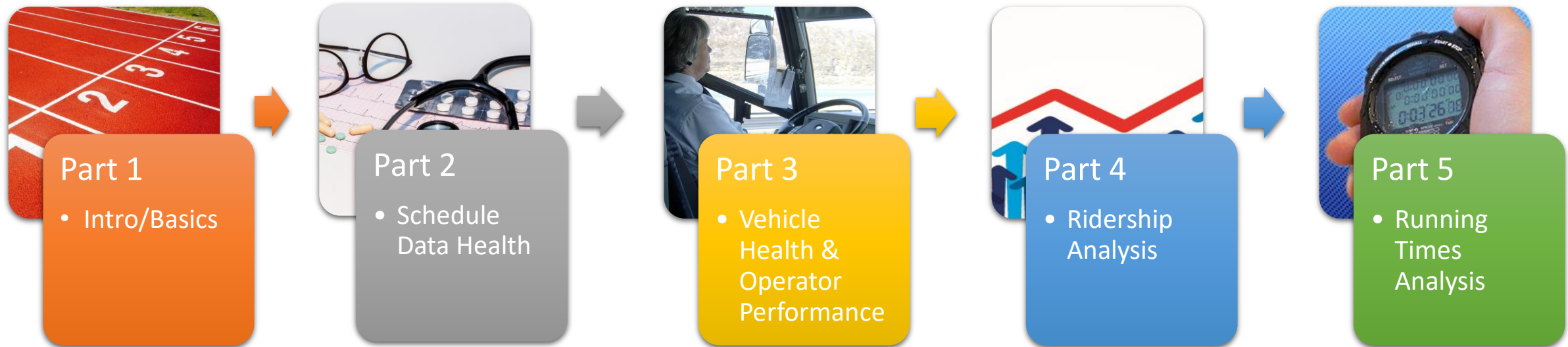
F.A.S.T.™ Professional Services Manager



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



Recap – Ridership Analysis

Ridership Source

- Within the Avail system the ridership source needs to be defined
- What's your ridership source set to?
 - Farebox data or APC Boards

Published

Will take effect on next publish

Ridership Source  Farebox

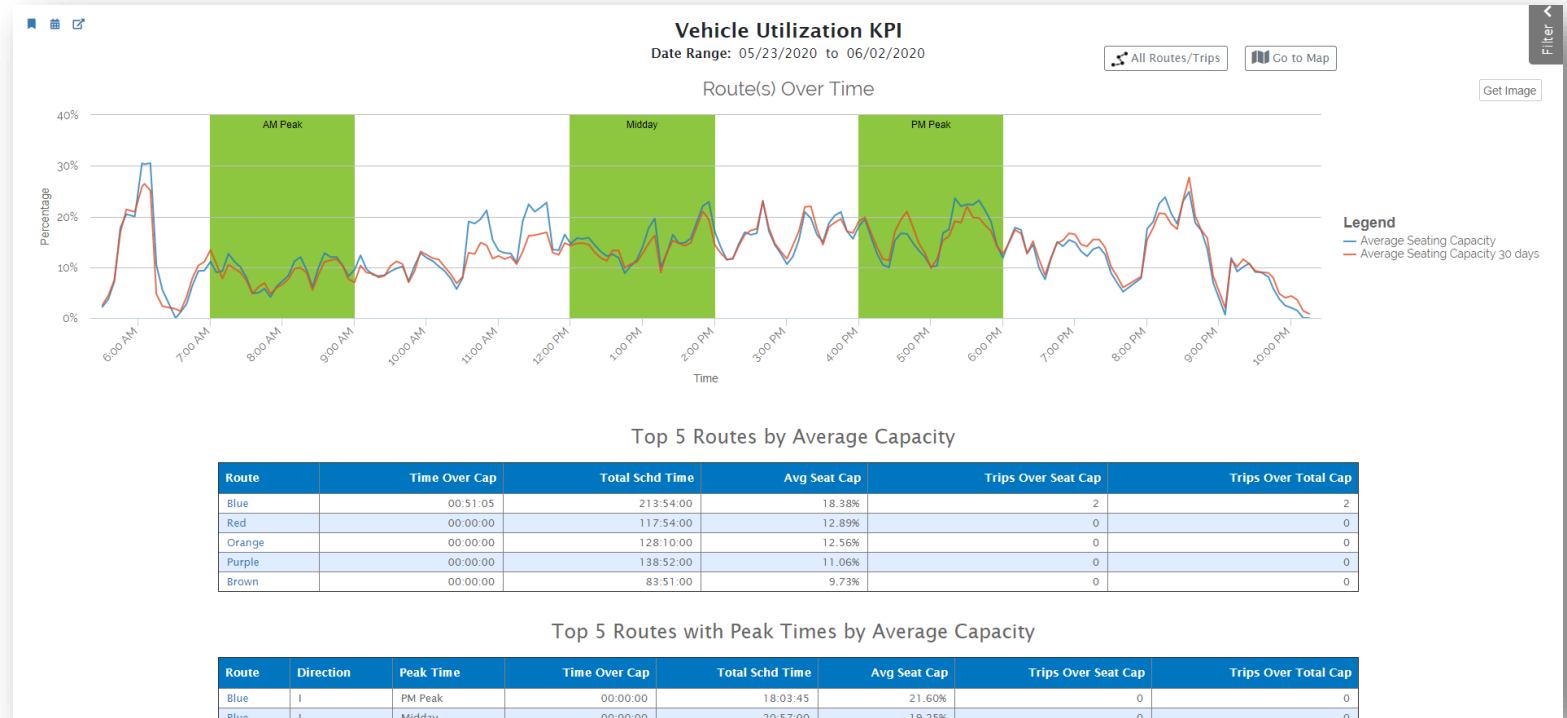
Fareset Fareset 1

Visible on Dispatch Yes

Monitor for Headway No

Business Intelligence: Vehicle Utilization

- Analyze data by vehicle capacity percentages
- Find the average capacity and number of times over capacity by Route, Trips, or Peak Times



Homework

- Run your Ridership Reports
 - Confirm your “ridership” source
 - Identify where your data comes from
 - Look through the reports

Next Step – Running Times Analysis

Transit Data Building Blocks



Reporting & KPIs



Operational Behavior



Vehicle Equipment



Trigger Box Data



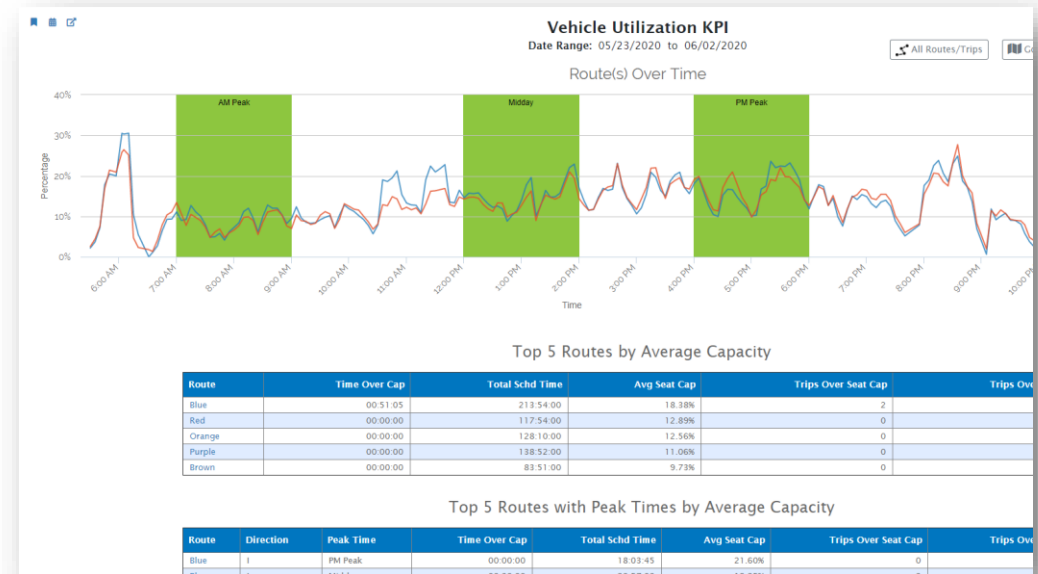
Schedule Data

Running Times Analysis

- The measurement of the scheduled service vs. how it was performed on the street
- Business Intelligence allows us to monitor drive time, layover time, and on time performance

Business Intelligence
Providing Answers Not Data

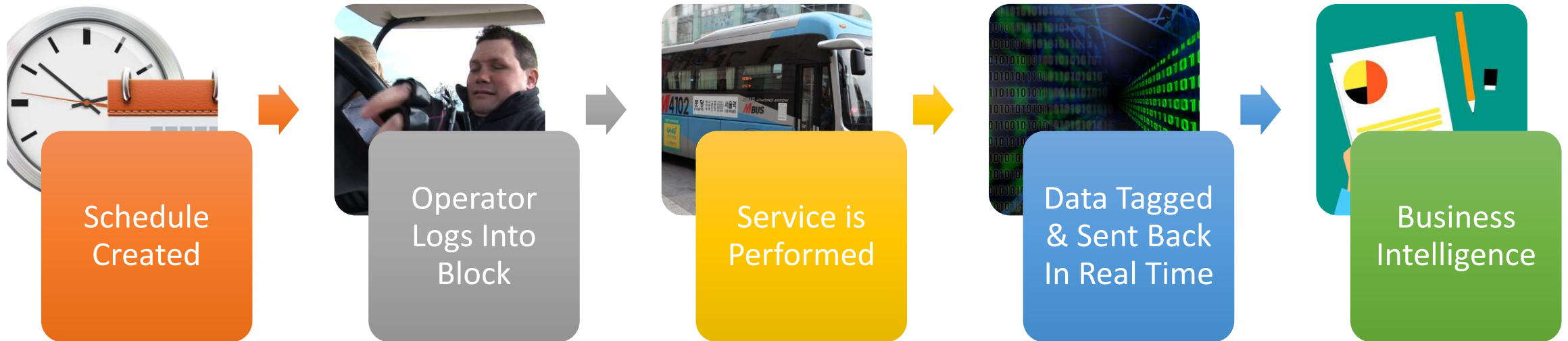
myDash®	KPIs	Operations	Maintenance	Planning	Statistics	Self Service
View and Manage your Dashboard	Find answers to your questions: <i>How is our agency performing?</i>	Find answers to your questions: <i>What is my on-time status today?</i>	Find answers to your questions: <i>What new pre-trip issues have been reported?</i>	Find answers to your questions: <i>What is our agency's on-time performance?</i>	Find answers to your questions: <i>What are our agency's latest stats?</i>	Create your own custom reports
View and Manage your Scheduled Reports	PPRM	<i>How many vehicles are very late/early?</i>	<i>Which vehicles are reporting the most issues?</i>	<i>What are the worst performing routes?</i>	Scheduled Miles	Create your own custom dashboards
View and Manage your Bookmarked Reports	PPRH	<i>How many open incidents are there today?</i>	<i>Which vehicles have potential APC issues?</i>	<i>What route segments have the worst drive times?</i>	Scheduled Hours	View and Manage your Bookmarked Reports
	Farebox Recovery				Actual Miles	
	Cost per Passenger				Actual Hours	
	Cost per mile				Unlinked Passenger Trips	



What Affects Running Times?

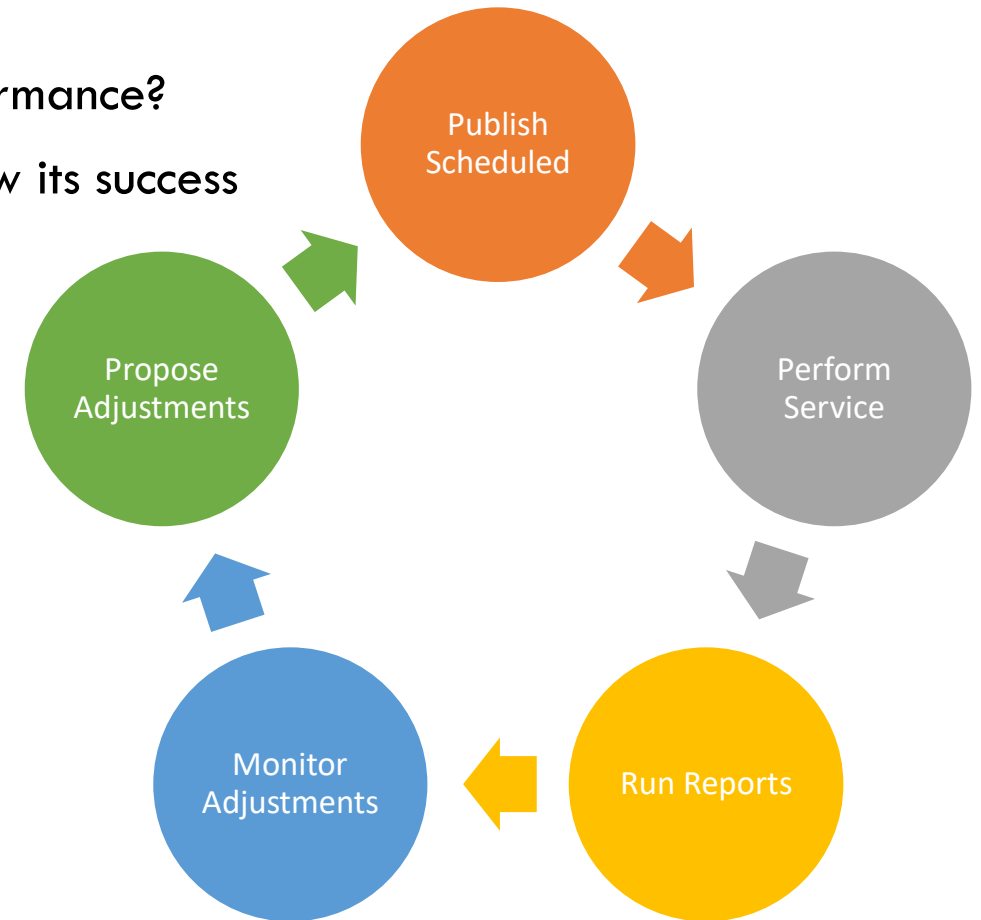
- Factors that can affect running times:
 - Time of day
 - Traffic
 - Passenger Load
 - Detours
 - Operator experience
 - In Season vs. Out of Season
 - Etc.

How are Running Times Captured?



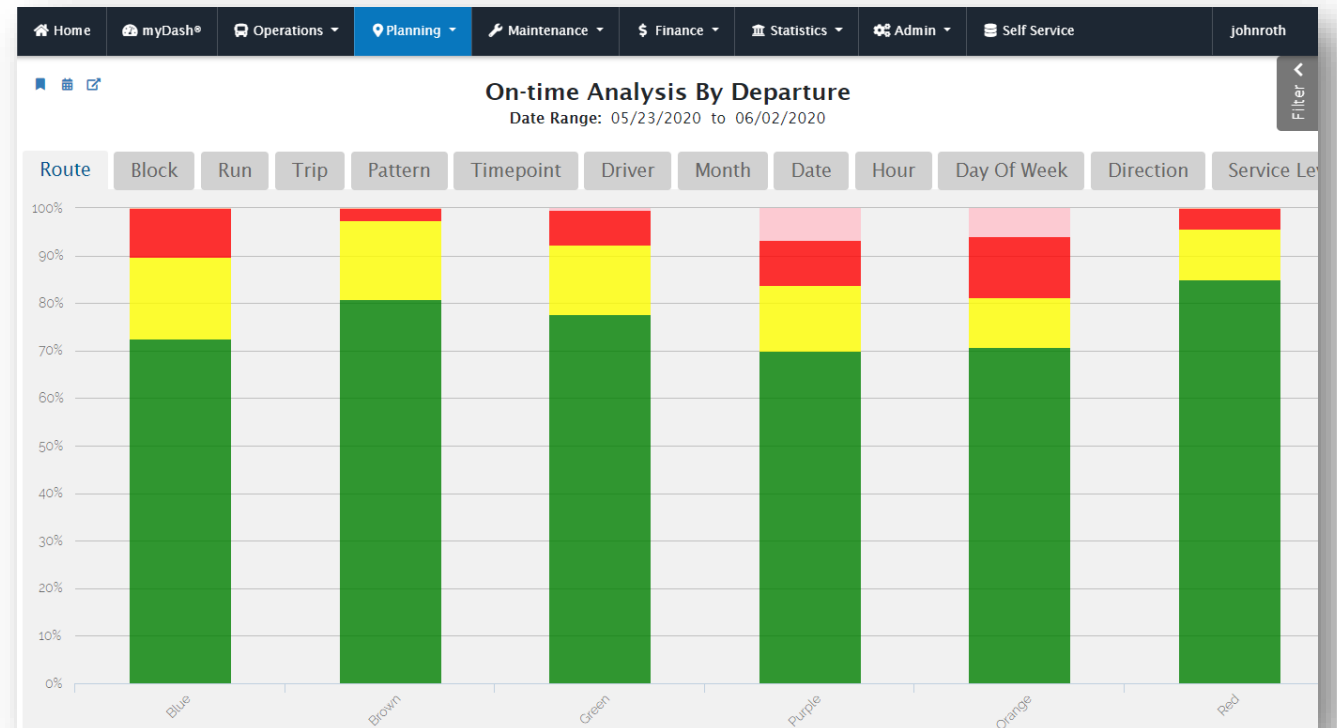
Review your Agency's Processes

- How often are you analyzing running times and on time performance?
- Do you have a process in place to make an update and review its success afterwards?
- Are you gathering driver and rider feedback?



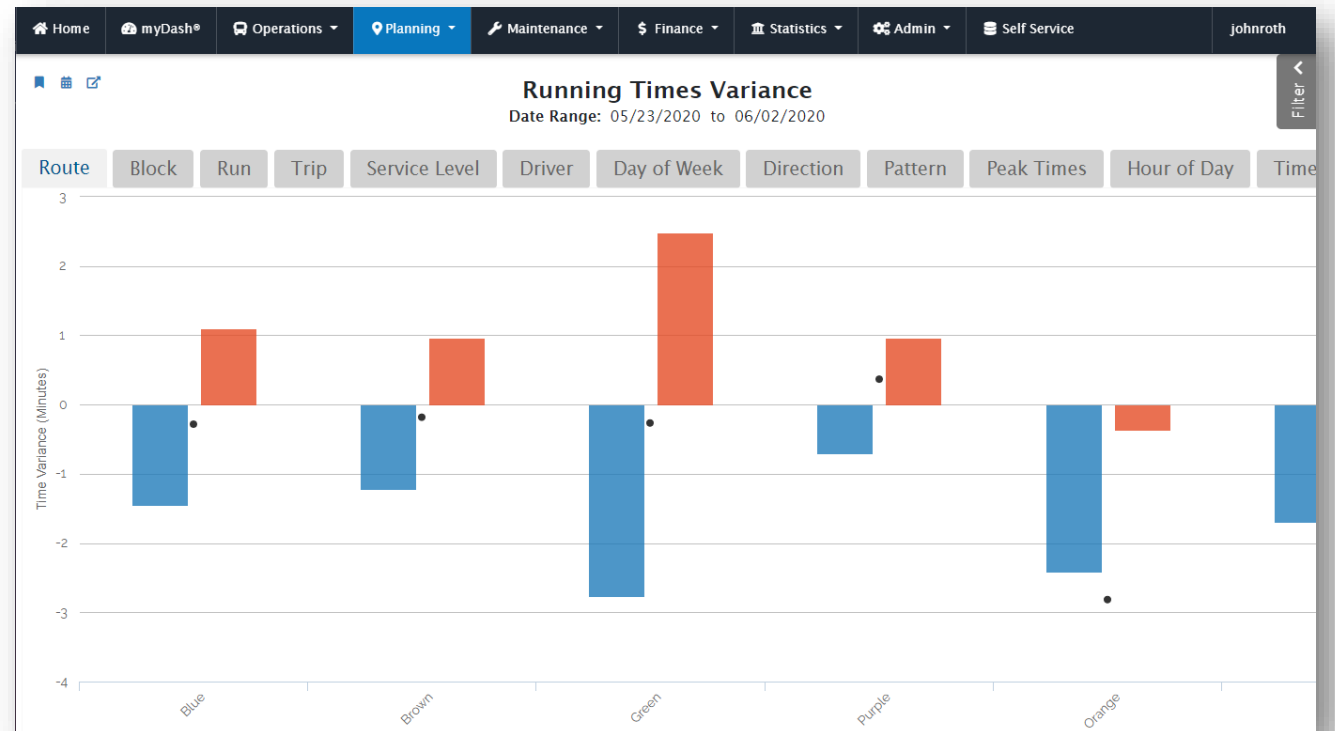
Business Intelligence: Ontime Analysis By Departure

- OTP is good place to start
- Is there a route, block, or service level you'd like to investigate first?
- Can you identify an area that's under performing?



Business Intelligence: Running Times Variance

- Observed variance between the schedule and actual
 - Drive Time
 - Dwell Time
 - Total Time
- See in your schedule where extra time is being taken or where there isn't enough time



Business Intelligence: Running Times Overview

- Route and Trip level information
- Visual representation of scheduled drive time and dwell time vs. actuals
- Are trips always starting late? Can you rebalance the drive time between timepoints?



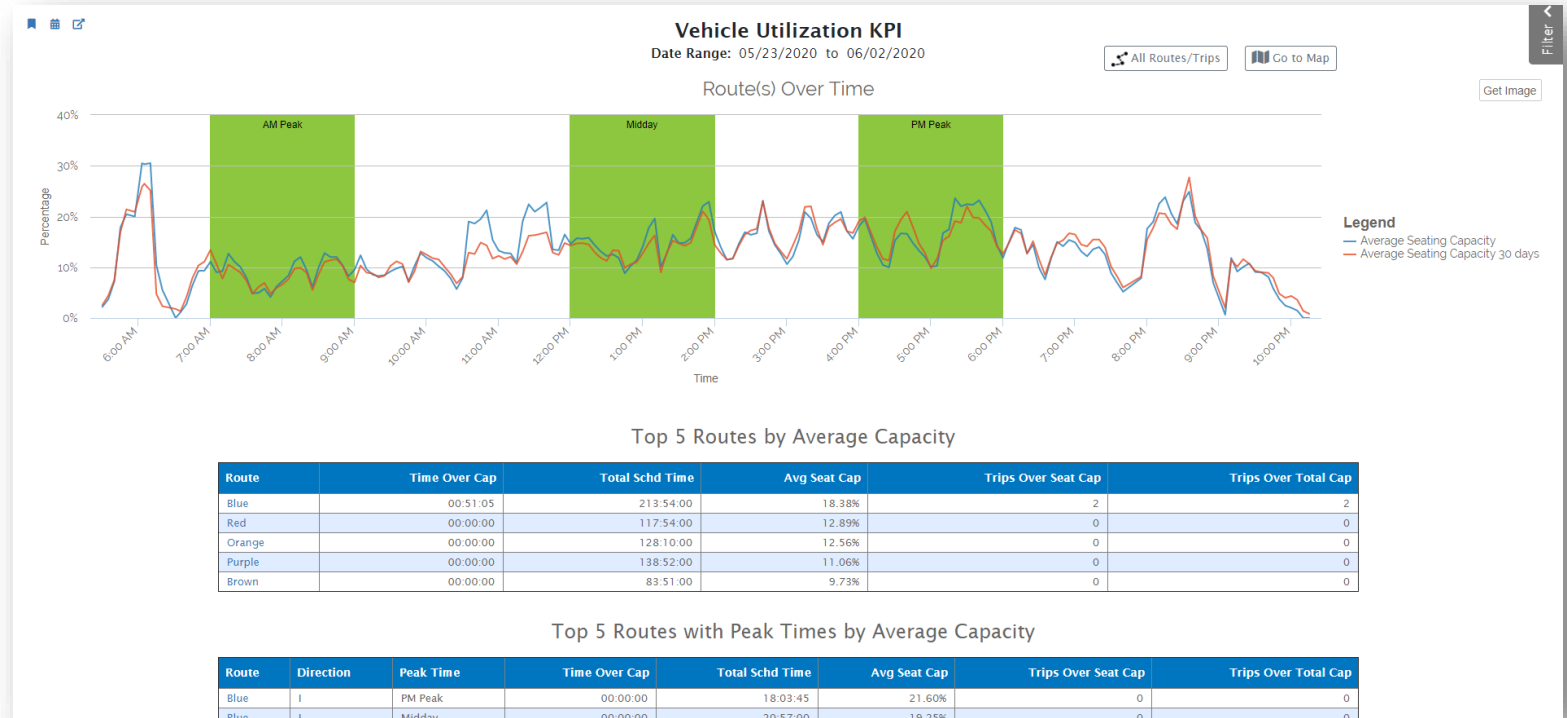
Business Intelligence: Trip Running Times

- Trip, Timepoint, or Stop segment level drive and layover time:
 - Scheduled Times
 - Average
 - Minimum
 - Maximum
 - Speed

										Scheduled Time (mm:ss)				Average Time (mm:ss)				Minimum Time (mm:ss)		
	Block	Trip	OTP	Pattern	Service Level	First Stop	ID	Last Stop	ID	Drive	Layover	Total	Speed	Drive	Layover	Total	Speed	Drive	Layover	Total
+	001	1704-I		2IE,2	Monday	INTERST TURN	222	RKP TRANSIT CEN	1	36:00	00:00	36:00	15.12	32:39↑	07:43↑	40:22↑	16.55 ↑	32:39	07:43	40:22
+	001	900-O		2OC,7	Saturday	RKP TRANSIT CEN	1	INTERST TURN	222	27:00	27:00	54:00	21.29	N/A	25:18↓	N/A	N/A	N/A	19:36	N/A
+	001	1956-I		2IE,5	Thursday	INTERST TURN	222	RKP TRANSIT CEN	1	34:00	00:00	34:00	16.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A
+	001	1333-I		2IE,3	Tuesday	INTERST TURN	222	RKP TRANSIT CEN	1	35:00	00:00	35:00	15.55	35:05↑	03:34↑	38:39↑	29.11 ↑	35:05	03:34	38:39
+	001	1600-O		2OC,4	Wednesday	RKP TRANSIT CEN	1	INTERST TURN	222	32:00	32:00	64:00	17.96	N/A	30:46↓	N/A	N/A	N/A	30:46	N/A
+	001	600-O		2OC,7	Saturday	RKP TRANSIT CEN	1	INTERST TURN	222	25:00	10:00	35:00	22.99	N/A	N/A	N/A	N/A	N/A	N/A	N/A
+	001	900-O		2OC,2	Monday	RKP TRANSIT CEN	1	INTERST TURN	222	27:00	27:00	54:00	21.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A
+	001	954-I		2IE,2	Monday	INTERST	222	RKP TRANSIT	1	36:00	00:00	36:00	15.12	N/A	06:59↑	N/A	N/A	N/A	06:59	N/A

Business Intelligence: Vehicle Utilization

- Analyze data by vehicle capacity percentages
- Find the average capacity and number of times over capacity by Route, Trips, or Peak Times



Homework

- Run your Running Times Reports
 - What's your On Time performance? That's your baseline, document it, let's improve from there
 - Does your agency have a process of adjusting schedules and validating them after the fact?
 - Reach out to your FAST member if you need assistance!

You did it!

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

- Upcoming

- Feb 10th: Data Flow: System-Wide Training Webinar



“ Thank
you! ”

