

SHRINKAGE



Project Team



- Tresa Moses – Project manager
- Michael Radoff – Green Belt and Project Owner
- Dianna Phillips – Black Belt, subject matter expert and data analyst
- Penny Macias – Black Belt and Six Sigma expert
- Ed Lydens – Subject matter expert
- Customer Care Leadership – Focus Group determining Pilot test.
- Customer Care Agents – Pilot participants and Focus Group after Pilot test.

DEFINE - Problem Statement



- Customer Care Center doesn't have adequate bench strength due to lack of manpower which is impacting productivity levels increasing the wait time for customers.
 - Shrinkage is anything that affects the ability for agents to take calls.
 - Customer Care's Service Level Agreement (SLA) goal is answering calls in less than 45 seconds, 85% of the time. 2018 YTD only reached 49.82%.

DEFINE - Types of Shrinkage



- Leave Time
- Meetings
- Technical Issues
- Training
- Admin Tasks
- Schedule Adherence
- Breaks
- Unscheduled Breaks

DEFINE – Six Sigma Tools Used



- Utilized department resources to analyze call center data
 - Call Details: Number and length of calls to determine productivity needed for Demand
 - Sigma Calculator used to determine SLA scores
 - <https://www.isixsigma.com/process-sigma-calculator/>
 - Leave time analyzed to determine available productivity for Supply
 - Aux Code data defines shrinkage of productivity during Work hours.

SIGMA CALCULATOR

Enter your process opportunities and defects and press the "Calculate" button.

Switch To:

Opportunities

Defects

Results

DPMO	<input type="text" value="150000"/>
Defects (%)	<input type="text" value="15"/>
Yield (%)	<input type="text" value="85"/>
Process Sigma	<input type="text" value="2.54"/>

[Report A Problem / Make A Suggestion](#)

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DEFINE - Tools Used



- Used Pareto chart to show Leave Type Categories from largest to smallest.
- Held focus group with leadership team
 - Affinity Diagram used to determine improvement opportunities
 - With leadership team completed Risk and Feasibility Assessment to choose an opportunity of improvement.
 - Leadership chose a Pilot test on Unscheduled Breaks/Breaks
- Voice of the Customer techniques used to help determine Pilot success in focus group with agents upon completion.

MEASURE – Call Details



	FY2015	FY2016	FY2017	FY2018
Offered	559317	567467	456301	361845
Service Level	57.48%	52.03%	46.74%	49.82%
Percent of Errors	42.52%	47.97%	53.26%	50.18%
Six Sigma Score	1.69	1.55	1.42	1.5
Handle Time Avg	4:19	4:16	5:00	5:43
Sched Adherence	98.46%	98.76%	98.90%	98.92%
Available %	87.40%	89.52%	88.17%	86.40%
Occupancy	80.17%	81.19%	79.76%	82.42%

- New Systems reduce number of calls 35%
 - IVR started June 2016 – It is handling simpler calls through self service leaving the more complex calls for agents which increases agent Handle Time
 - KANA CRM started October, 2016 – Provides more avenues of self service, Web and Mobile

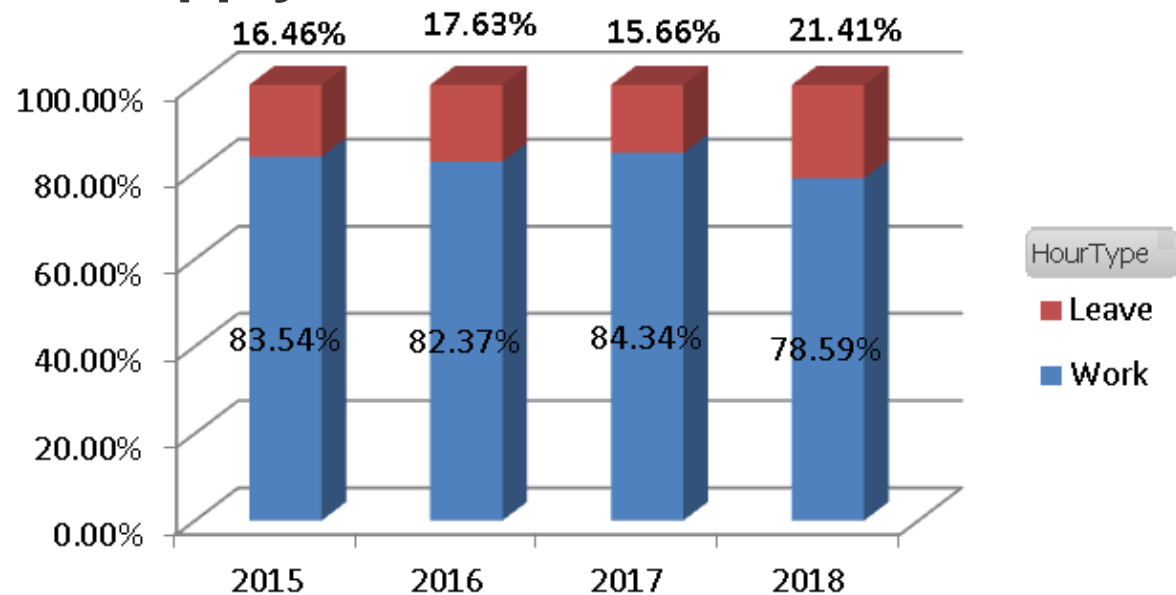
MEASURE – Supply and Demand



Demand

Handle Time * Offered =	FY2015	FY2016	FY2017	FY2018
Offered	559,317	567,467	456,301	361,845
Handle Time	4:19	4:16	5:00	5:43
Total Handle Time Hours	40309.32	40414.59	38044.07	34471.61

Supply



Hours Worked by City Agents

	Work	Leave
2015	53721.35	10582.21
2016	45335.40	9701.63
2017	46128.96	8562.61
2018	44379.85	12062.92

Drops in 2016 and 2017 in the Work/Leave Hours are due to the Budget Hiring Freeze.

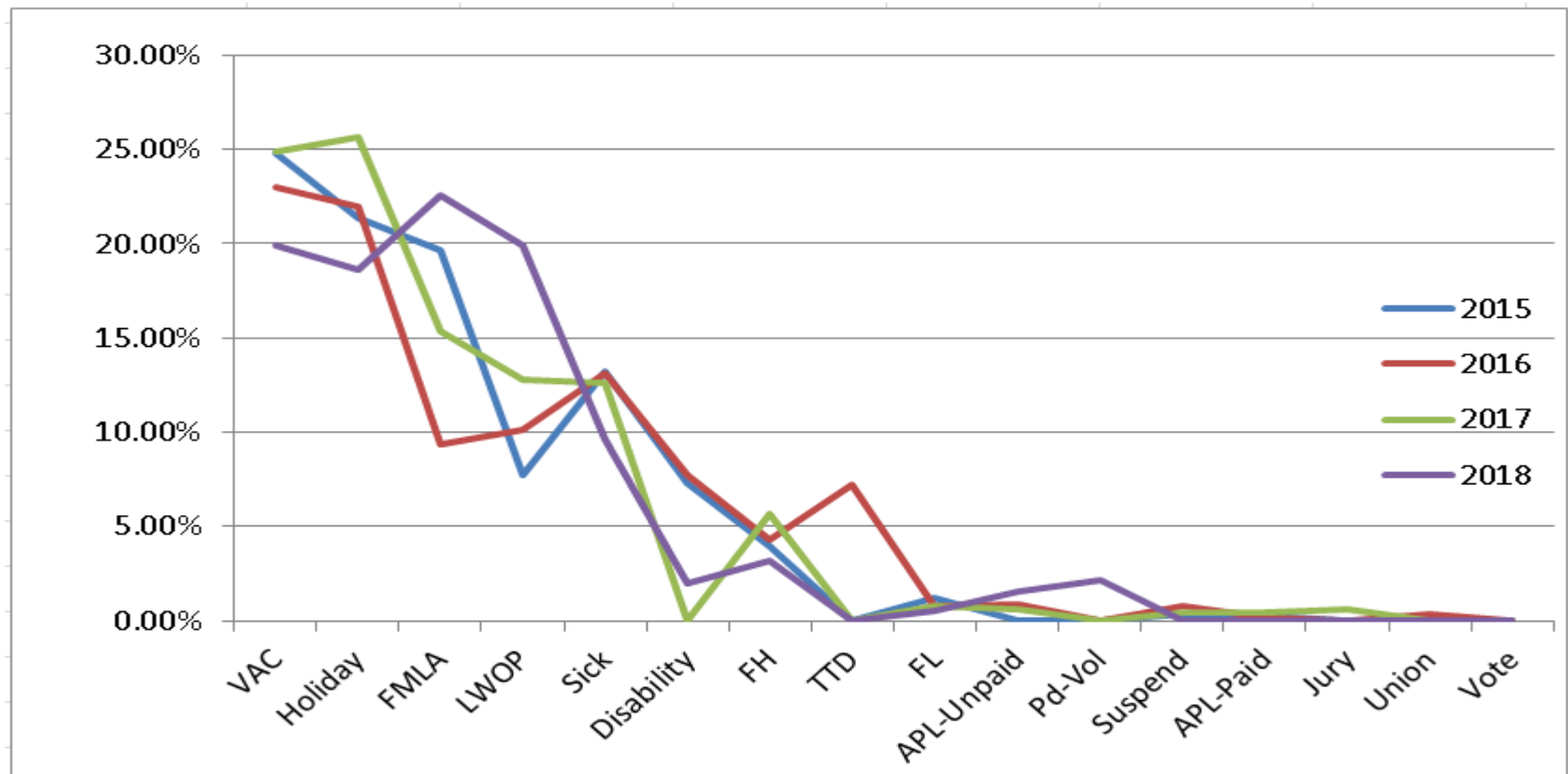
MEASURE – Leave Details



	2015	2016	2017	2018	Grand Total
VAC	2632.97	2234.17	2129.38	2403.50	9400.02
Holiday	2264.98	2131.80	2199.76	2243.03	8839.57
FMLA	2072.27	906.45	1314.12	2721.31	7014.15
LWOP	818.86	983.07	1096.33	2403.44	5301.71
Sick	1398.99	1277.36	1081.68	1164.04	4922.07
Disability	768.00	752.00		240.00	1760.00
FH	421.00	420.50	482.60	381.00	1705.10
TTD		697.45	5.00		702.45
FL	128.92	77.00	64.00	64.00	333.92
APL-Unpaid	4.00	87.33	54.00	184.00	329.33
Pd-Vol				258.60	258.60
Suspend	39.00	80.00	40.00		159.00
APL-Paid	28.00	21.67	36.40		86.07
Jury			56.00		56.00
Union	5.22	32.00			37.22
Vote		0.83	3.34		4.17
Grand Total	10582.21	9701.63	8562.61	12062.92	40909.38

Top Five Categories equal 86.71% of all Leave Time. LWOP has increased over time with a large increase in 2018 somewhat caused by lengthy medical leaves which exhausted 480 hours of FMLA and then moved into LWOP.

MEASURE – Leave Details Pareto Chart



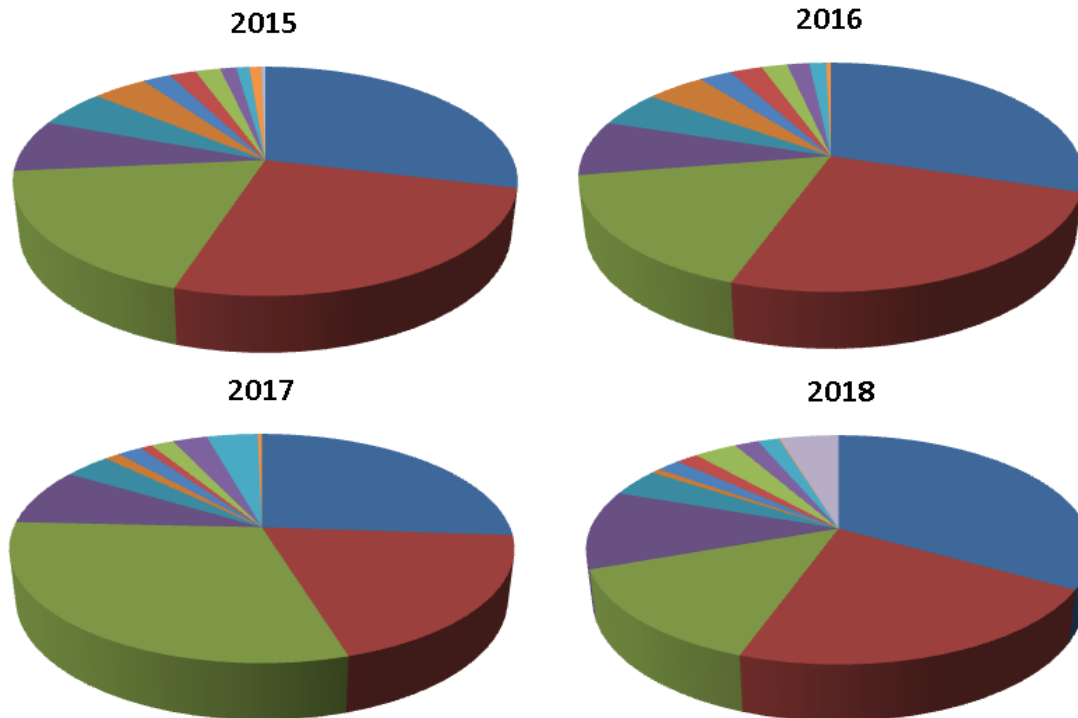
Based on data from previous slide.

Beside Paid-Volunteer leave (which wasn't used before 2018), all categories of leave are lower in 2018 except FMLA and LWOP.

MEASURE – Aux Code Hours Analysis



Aux Codes Show Shrinkage of Work hours



Top Five Categories

- ACW-Default (Working on call after end of call)
- Break Time
- Training
- Admin Tasks (Special projects performed by lead agents.)
- Unscheduled Breaks (Agents need break or have a personal emergency to handle.)

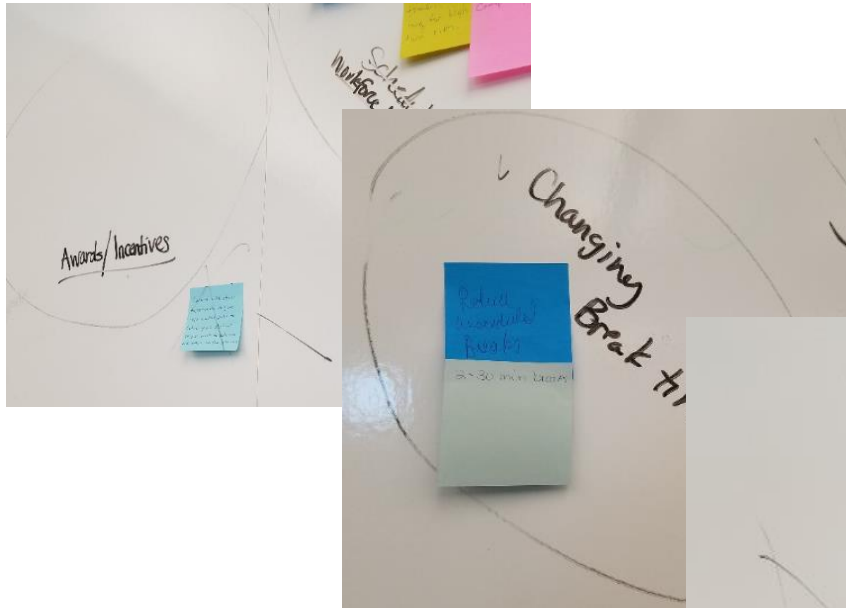


Analyze – Black Belt Data Discussion

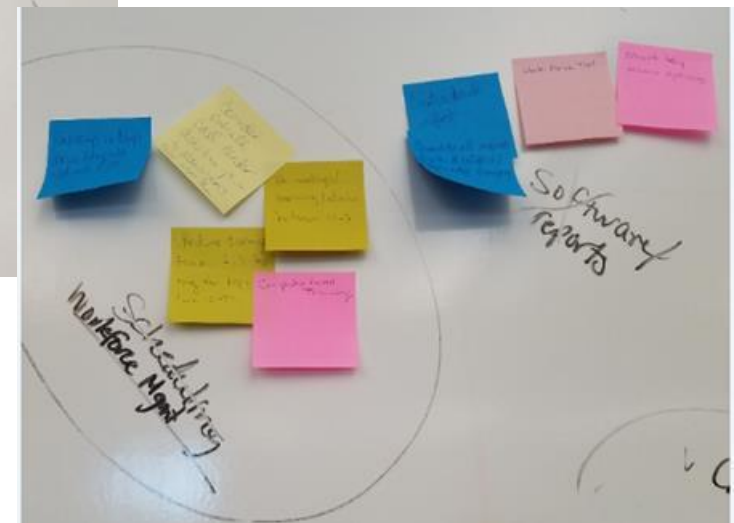
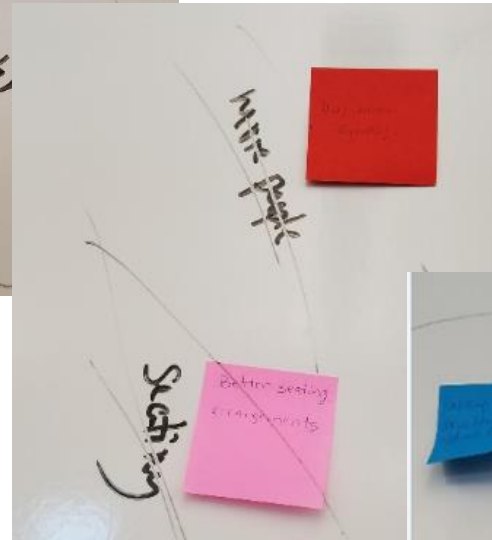


- Discussion with Black Belts – Penny Macias and Dianna Phillips
 - Shrinkage Analysis for Leave Time and Aux Codes show lots of areas for improvement.
 - Strategized to have leadership choose what to improve using Affinity Diagram and Risk/Feasibility Analysis.
 - Based on their choice create pilot plan to test improvement.

Analyze – Leadership Focus group with Affinity Diagram



Customer Care Leadership share ideas for Shrinkage improvement using Affinity Diagram they shared ideas.



Ideas were grouped into categories

Analyze – Ideas Categorized



There were several ideas in each category that were voted on to determine where to focus improvement.

- Award/Incentives
- Career path
- Scheduling/Workforce Management
- Managing Sick/Leave abuse
- Changing break times
- Consolidate Offline Tasks (i.e. reduce 1-on-1 time, meetings, and coaching)
- Software/Reports
- Daycare
- Better seating arrangements

Analyze – Pilot Test Selected

30 Minute Break as Needed



CITY OF
Tulsa
A New Kind of Energy.



Workforce Mgmt:

- ① Identify top 3 causes of offphone time
- ② reduce → by 50% for pilot week
- ③ 30 minutes to take as needed
- ④ awards 3
- ⑤ Winner



Hire more
Agents!

Improve – Pilot Test



Leadership voted for changing Break Aux from a structured scheduled time to allowing Agents to decide their breaks based on following guidelines:



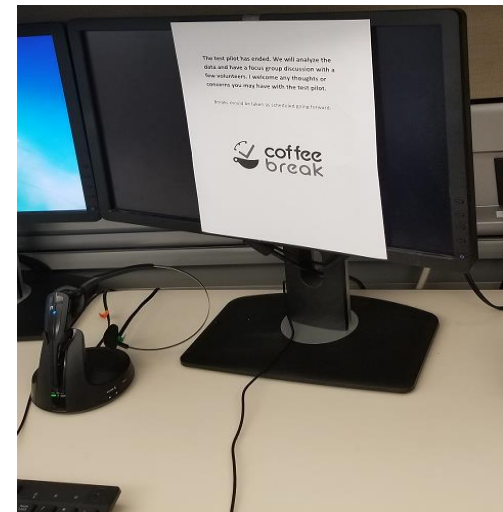
- ① There are no scheduled breaks during this week
- ① Breaks are taken as you need and as often up to 30 minutes for each day utilizing the Break aux, 100.
- ① Be mindful of the queue by watching the Avaya toolbox.
- ① Breaks cannot be taken at the beginning of a scheduled shift or at the end of a shift.
- ① Breaks cannot be taken between 11:00am and 1:00pm

Improve – Test Pilot Description



- Total break average was observed for the week of June 25th and will be compared to the prior week and the same week in 2017.
- Agents were given the opportunity to manage and adjust their break time as they needed. This was the first time that agents were empowered to manage their own break times.
- The pilot test was presented to the agents through 1-on-1 discussions, emails, and reminder flyers on the monitors at the beginning and end.
- Breaks were added to their personal daily scorecards to help them self-manage their time.
- Other Aux codes were also closely watched by supervisor in case being used instead of the Unscheduled Break Aux codes.

Total of Breaks	Avg. per Break	Unscheduled Breaks
34:16	8:34	
Goal <=30:00	Break/# of breaks	Goal = 0:00



Improve – Focus Group After Pilot Test



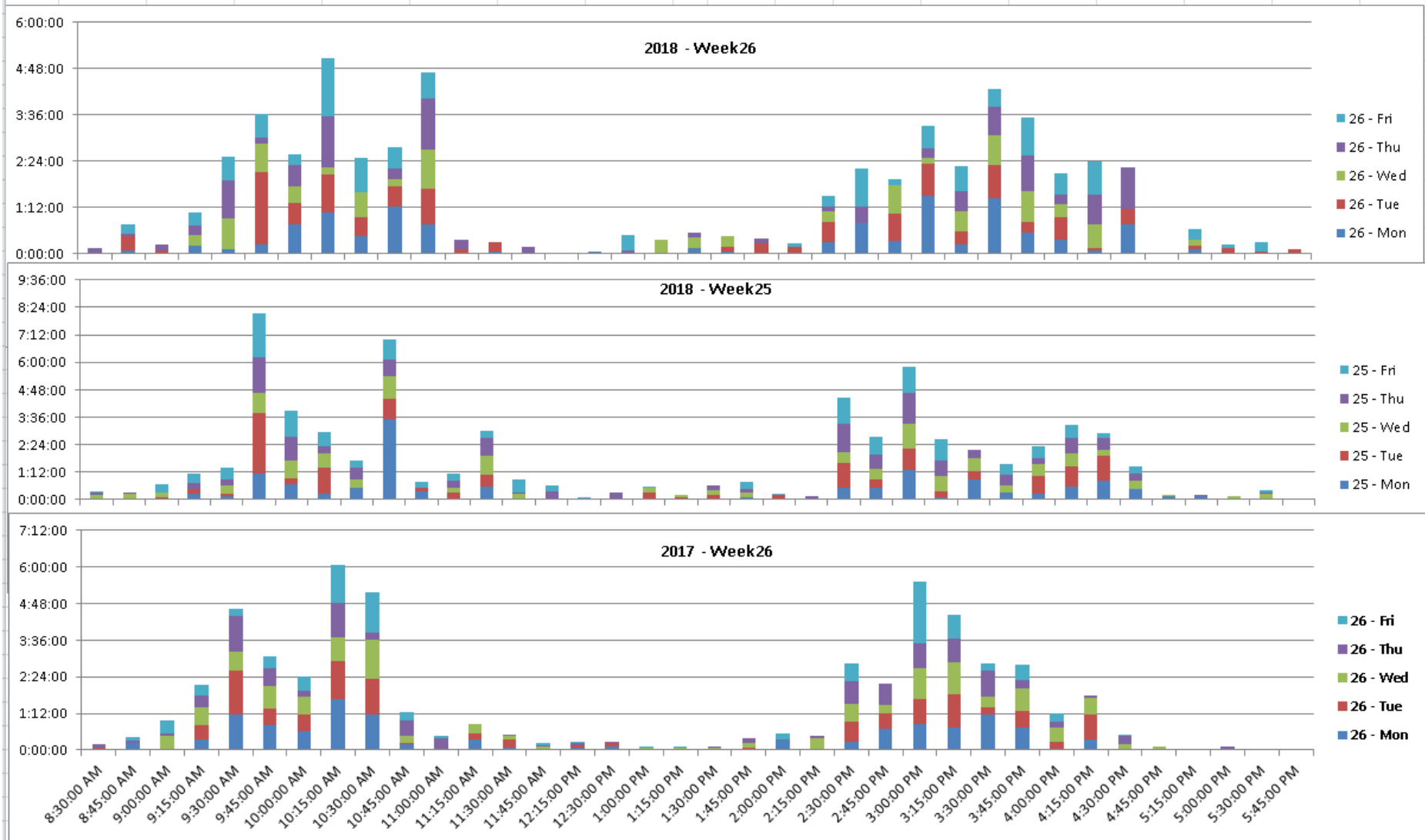
- Several agents liked having the option to chose their break time(s) as needed.
- The agents did not like having the Unscheduled Break Aux removed. It was felt that they could not go to the restroom when needed in case they had use up their 30 minute break time.
- Some preferred a structured schedule for breaks.
- During the pilot some agents thought that it was not clear that they could go over the 30 minutes if needed for the restroom.
- It was suggested if the decision was to keep flexible breaks that it should also include being able to use Unscheduled Break Aux when needed.
- Agents understood the importance of not taking breaks between hours of 11am-1pm due to high call volume

Control - Project Outcomes



- Leadership liked the idea of empowering the agents to self manage their Break time as needed
- Clearer explanation is needed between the difference in Break and Unscheduled Break time
- Leadership is discussing performing a second pilot test
- The next graph shows that the agents did better dispersing their breaks during the pilot than the previous week or the same week of 2017. Notice that Y axis scale for the pilot week 26 of 2018 is not as high a number as the other two weeks.

Control – Break Analysis



Control – Service Level Comparison



Week 26 - 2018	Mon	Tue	Wed	Thu	Fri	Grand Total
	6/25	6/26	6/27	6/28	6/29	
Total Service Level	28.60%	62.32%	37.68%	52.58%	69.15%	49.48%

Week 25- 2018	Mon	Tue	Wed	Thu	Fri	Grand Total
	6/18	6/19	6/20	6/21	6/22	
Total Service Level	10.94%	17.68%	24.97%	46.23%	49.69%	28.50%

Week 26 - 2017	Mon	Tue	Wed	Thu	Fri	Grand Total
	6/26	6/27	6/28	6/29	6/30	
Total Service Level	16.27%	20.97%	19.17%	47.44%	21.13%	23.96%

- Based on the above results it would seem that Flexible Break times helped improve Service Levels to Citizen
- Note: Service Level for pilot week could be skewed because new agents graduated from training causing a brief over staffing.
- It is my recommendation to repeat the pilot test to see if results stay consistent while agents have a better understanding of Breaks and Unscheduled Breaks.