



Express Memo

Analysis of GWP Call Center Productivity Before and During COVID-19



#2021-10

Report Date: 06/03/2021

Introduction

This analysis was performed by Internal Audit per the City Manager’s request to compare the Glendale Water and Power (GWP) Call Center productivity before and during the COVID-19 pandemic. The purpose of this report is to inform management of the result of this analysis. The detailed Objectives, Scope and Methodology for this analysis are shown in Appendix B.

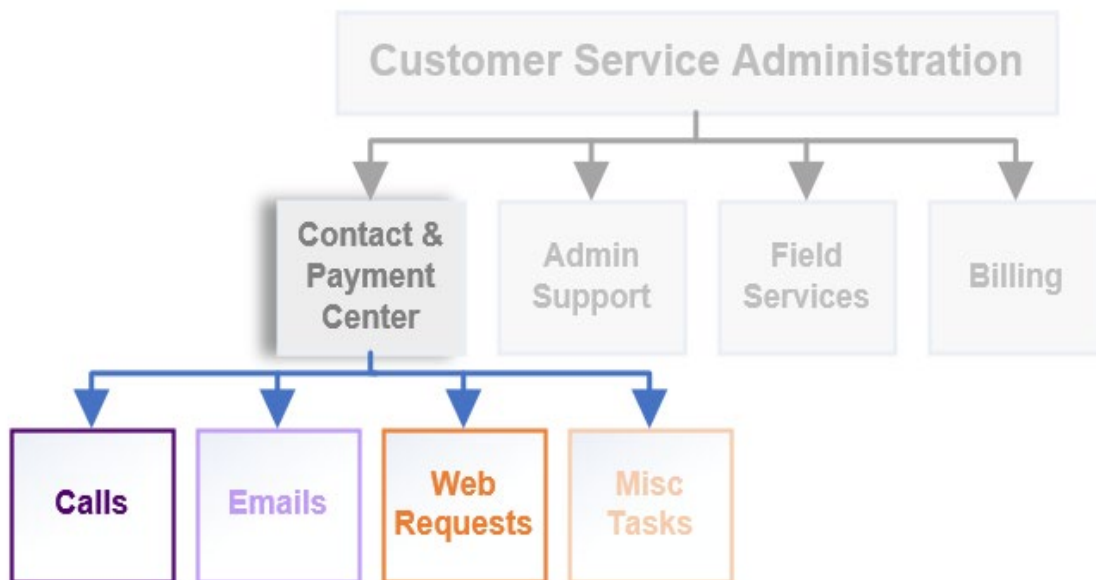
The productivity analysis for the GWP Call Center does not necessarily assume that the level of productivity achieved during the remote work period is, or can be, applicable to other areas within the City. The GWP Call Center operation lent itself to a comparative productivity analysis as the work output was already being tracked through system reports as well as manually. Performance metrics for the operation were already in place prior to the analysis and productivity metrics were developed and calculated by Internal Audit using readily available data.

Background

1. GWP Call Center

The Glendale Water and Power (GWP) Contact and Payment Center (CPC) is one of four sections of the Customer Service Administration. It houses the Call Center where Customer Service Utility Representatives (CSUR) answer customer phone calls related to City utilities. Aside from answering phone calls, Call Center staff are also responsible for answering customer portal service requests, emails, providing live customer service at the counter and a host of other duties as shown in Exhibit 1.

Exhibit 1: Organizational Chart of Customer Service Division of GWP¹



¹ Miscellaneous tasks include front counter service, lockbox, aging review, bankruptcy processing, landlord service agreements, etc.

2. Call Center Remote Work Timeline

Due to the COVID-19 pandemic, the Call Center staff started Remote work beginning March 16, 2020. Staff were on a Hybrid schedule between June 22, 2020 and November 17, 2020.² From November 18, 2020 to March 15, 2021, staff were back to Remote work. This analysis focuses on analytical comparisons on Call Center workload, productivity and performance between the Pre-Remote (March 15, 2019 through March 15, 2020), Remote and Hybrid periods as shown in Exhibit 2 below.

Exhibit 2: Analysis Timeline

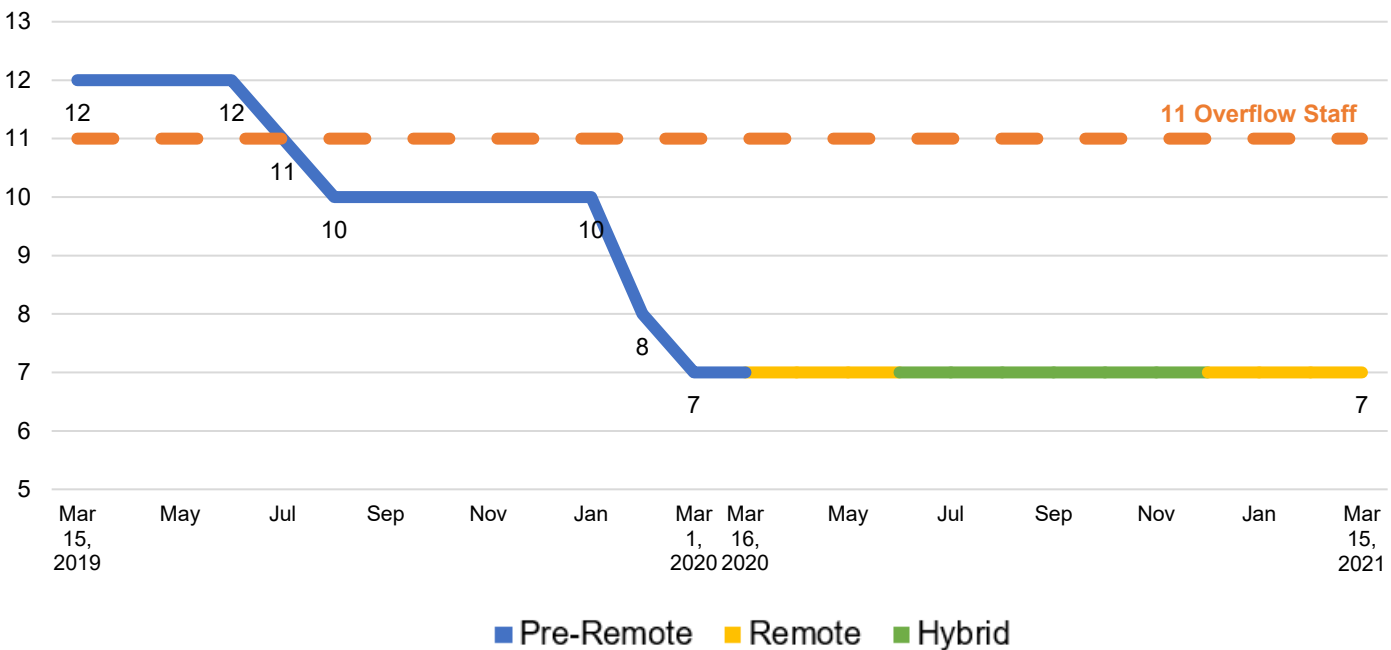


3. Call Center Staffing

As shown in Exhibit 3 below, the Call Center has had a high turnover rate in the past two years. Beginning on March 15, 2019, the Call Center had 12 dedicated staff; however, by March 15, 2021, the staffing level dropped to seven. Because these seven staff have been full-time employees throughout the Pre-Remote, Remote and Hybrid periods, Analyses #1-4 focus on these employees to make an “apples-to-apples” comparison between the different periods.

Aside from the dedicated seven staff, there were 11 overflow staff present throughout all periods. The overflow staff contribution have been noted in Analysis #1 and #4.³ Overflow staff are automatically called upon to the Call Center based on a pre-determined call queue time set by the system to supplement the dedicated Call Center staff.

Exhibit 3: Call Center Dedicated Staffing Level



² In-office staffing capacity was up to 25% during the Hybrid period and was based on alternating between in-office and at home.

³ For Analysis #4, one more overflow staff that was hired in December 2020 was also included.

4. Call Center Productivity Metrics

Currently, the GWP Customer Service Division does not collect metrics on Call Center productivity. To analyze the impact on Call Center productivity during the Pre-Remote, Remote and Hybrid periods, Internal audit used two methodologies, a per hour productivity analysis in Analysis #3 as well as calls per staff analysis in Analysis #4.

The methodologies for analyzing staff productivity are shown with the examples below:

Analysis #3	Analysis #4
$\frac{20 \text{ Customer Calls Answered}}{4 \text{ Available Work Hours}} = 5 \text{ Calls per Hour}$	$\frac{20 \text{ Customer Calls Answered}}{4 \text{ Staff Available}} = 5 \text{ Calls per Staff}$

5. Call Center Performance Metrics

The GWP Customer Service Division currently reports on Call Center performance metrics related to measuring the average time a customer call is in queue (Analysis #5), the average talk time of a CSUR on a call (Analysis #6), the percentage of customer calls that are abandoned (Analysis #7), and the total emails answered within given hours (Analysis #8). These metrics have followed industry best practices to measure Call Center performance. Although not the focus of this analysis, performance metrics inform the quality of the Call Center customer experience and have been included in this report along with productivity metrics.

Conclusion

Compared to the Pre-Remote period, our analysis shows that GWP Call Center productivity has improved with increased total workload per hour and higher number of average calls answered by staff during the Remote and Hybrid periods combined. In terms of performance, although the calls stayed in queue longer and more calls were abandoned compared to Pre-Remote levels, more emails were answered in less than 48 hours and the overall workload increased while staffing decreased from 12 to seven dedicated Call Center employees.

Other positive impact resulting from transitioning to remote work included reduced overall leave usage and cost savings in office supplies and utilities.

Additionally, we surveyed the Call Center staff about their remote work experience and the results are mostly positive (summarized on Pages 16-17 and details are shown in Appendix B). We have also begun surveying benchmark cities about their remote work policies and preliminary results are summarized on Page 18.

The table on the next page provides a summary of the 11 analyses comparing Call Center's workload, productivity, performance, employee leave time usage and operational costs during Remote and Hybrid periods compared to the Pre-Remote period.

Summary of Analysis

● positive impact ● neutral impact ● negative impact

Analysis	Metric Type	Description	Remote	Hybrid	Remote & Hybrid
1	Workload	Total Workload by Task	NA	NA	●
2		Total Workload by Dedicated Staff	NA	NA	●
3	Productivity	Total Workload per Hour	●	●	●
4		Average Calls per Staff	●	●	●
5	Performance	Average Queue Time	●	●	●
6		Average Talk Time ⁴	●	●	●
7		Average Calls Abandoned	●	●	●
8		Emails Answered in less than 48 Hours	●	●	●
9	Leave Usage	Overall Leave and Sick Leave Usage	●	●	●
10	Costs	Office Supply Expenses	●	●	●
11		Water Costs at Perkins Building	●	●	●
		Electricity Costs at Perkins Building	●	●	●

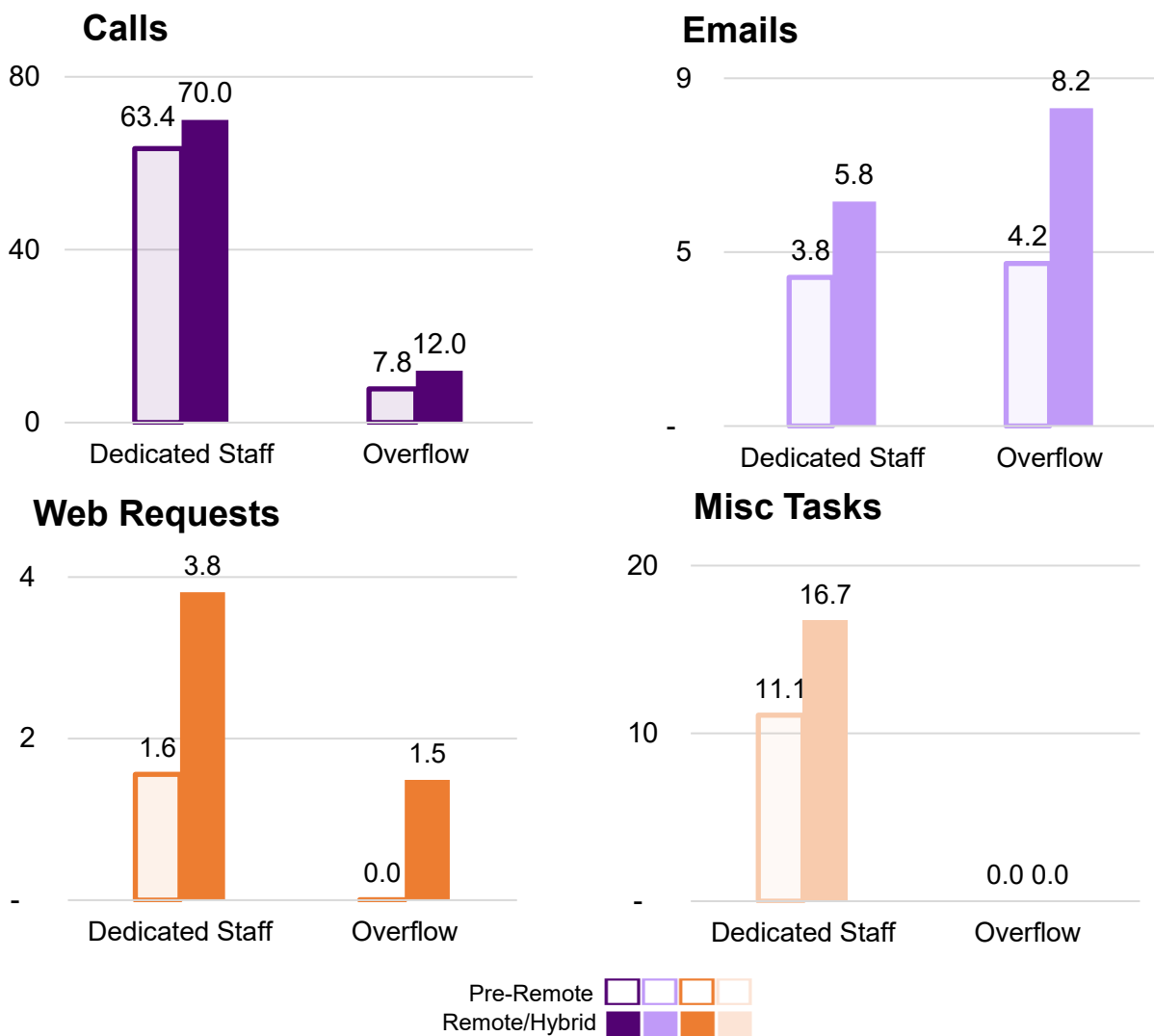
⁴ Although the Average Talk Time was above the GWP target during the Remote and Hybrid periods, GWP management considers this to be an improvement, since staff had to introduce several new programs and field customer questions related to the pandemic situation – this resulted in more talk time for Call Center staff.

Detailed Analyses

Analysis 1 Total Workload Increased during Remote and Hybrid Periods Compared to the Pre-Remote Period

- Overall, Call Center staff produced more units of work during the Remote and Hybrid periods combined compared to the Pre-Remote period.
- During the Remote and Hybrid periods combined, Call Center dedicated staff answered 10% more calls, 53% more emails, responded to 138% more web portal requests and completed 50% more units of miscellaneous tasks.

Chart 1: Total Workload by Task Category (in thousands)⁵

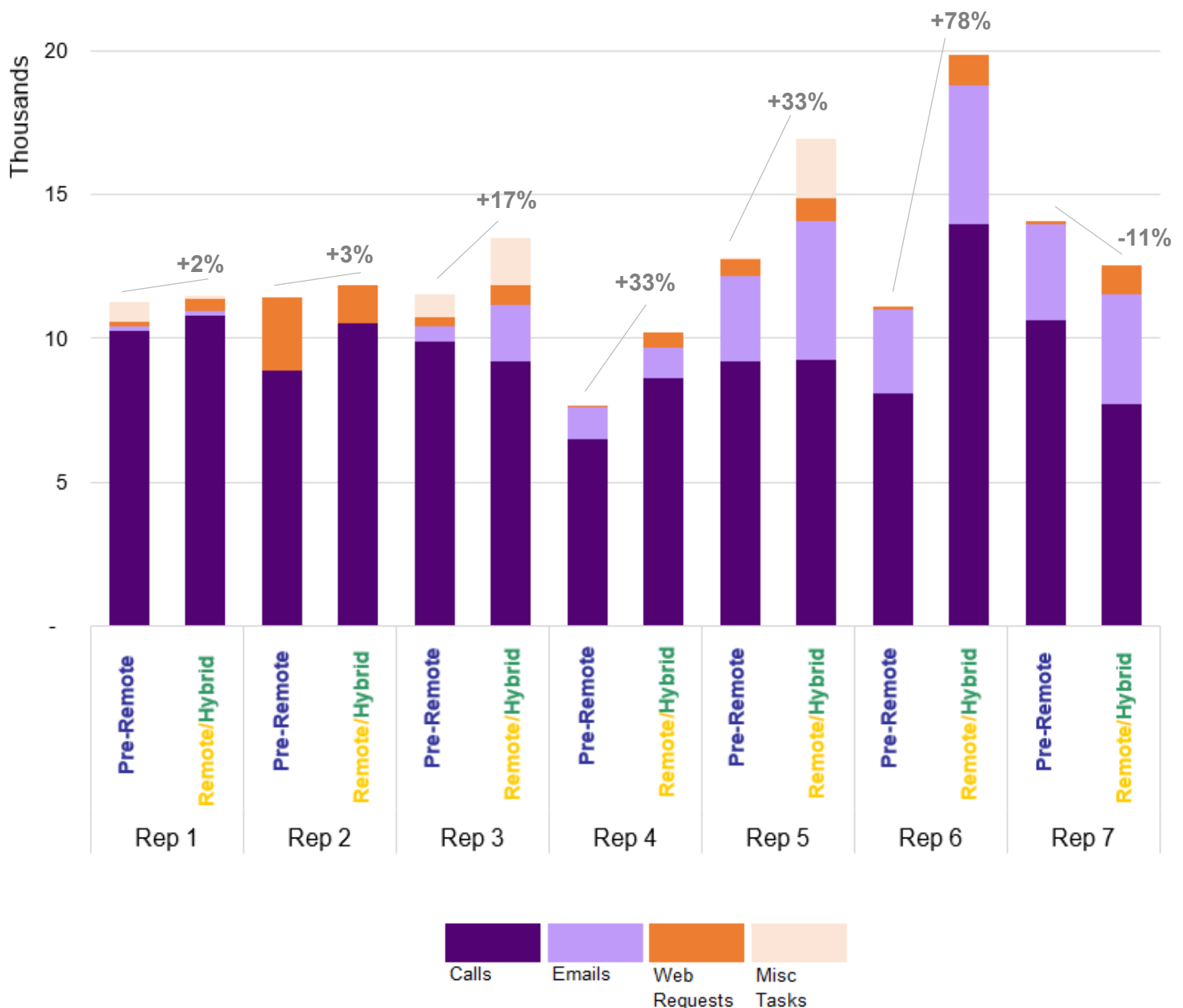


⁵Total Incoming Calls includes customer voicemails answered during the Remote period by Call Center staff. This analysis is based on a total of seven Call Center staff that were employed full-time during the Pre-Remote period and during the Remote period, and Hybrid periods.

Analysis 2 Total Staff Output Increased on Average by 22% during the Remote and Hybrid Periods Combined

- Six out of the seven Call Center staff had an increased workload in terms of number of units of work completed during the Remote and Hybrid periods combined.
- The combined Remote and Hybrid period has had a varying impact on employee workload, one staff member completed 78% more work during the period, compared to other staff having 2% to 33% more work during the combined Remote and Hybrid period.

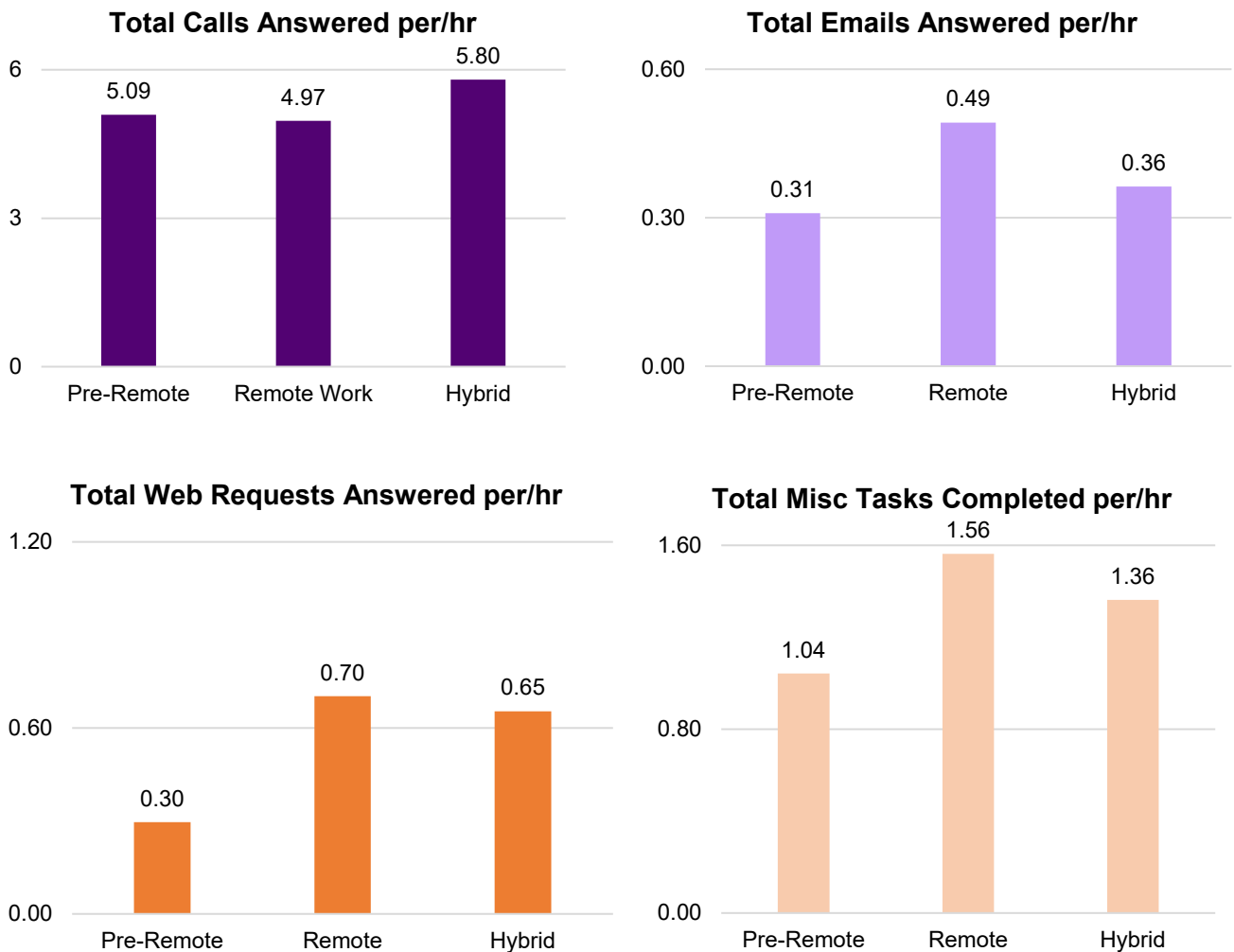
Chart 2: Total Workload by Dedicated Call Center Staff



Analysis 3 Total Workload per Hour Increased during the Remote and Hybrid Periods Combined

- Overall, Call Center staff produced more work per hour during the Remote and Hybrid periods compared to the Pre-Remote period.
- During the Remote and Hybrid periods combined, on a per hour basis - Call Center dedicated staff answered 4% more calls, 42% more emails, responded to 131% more web portal requests and completed 42% more units of miscellaneous tasks.

Chart 3: Total Workload per Hour by Task⁶

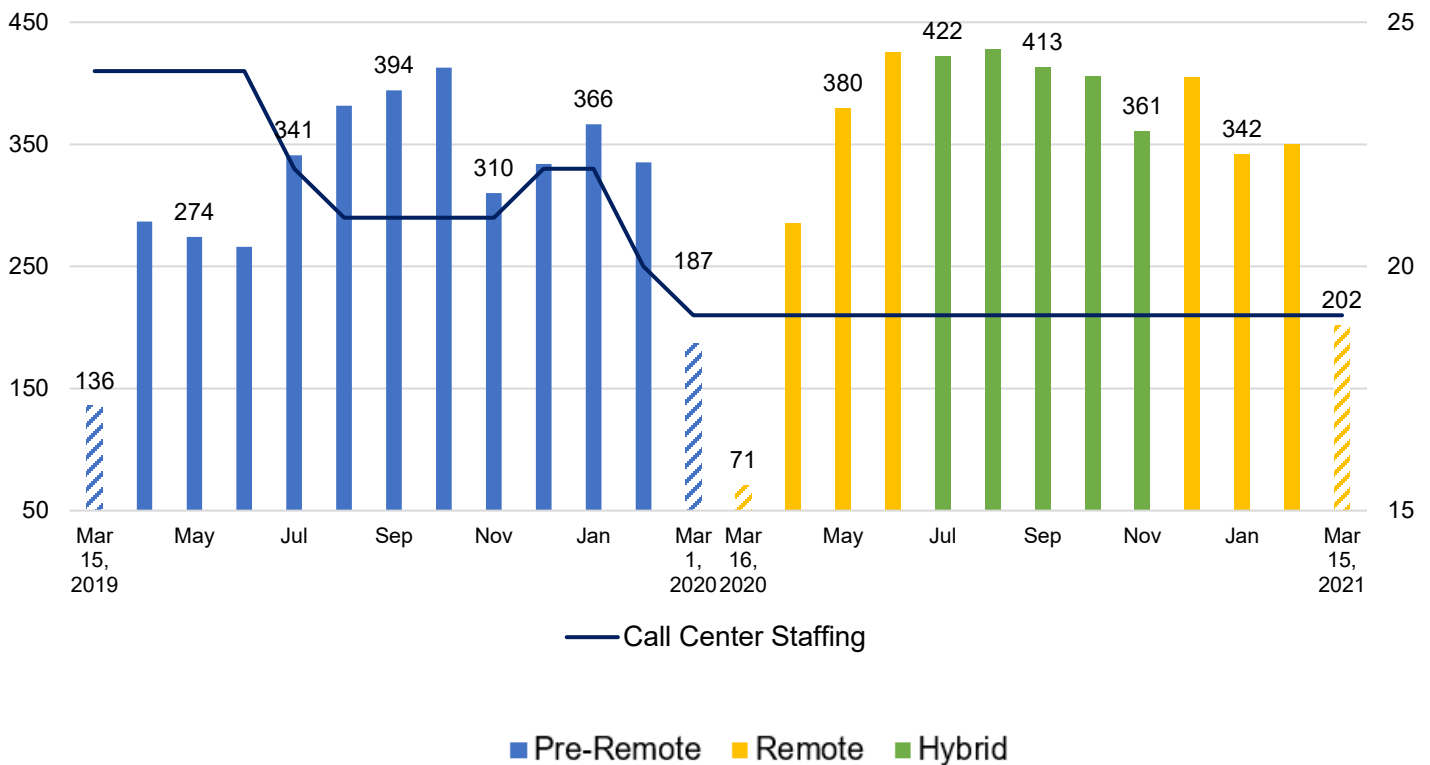


⁶ The total call productivity charts for the Remote period includes customer voicemails answered by staff. This analysis is based on a total of seven Call Center staff that were employed full-time during the Pre-Remote period and during the Remote and Hybrid periods. Productivity for each task is measured as Task Total divided by Total Available Staff Time, which excludes regular leaves as well as overtime worked and comp time. Total Calls Answered is based on the Agent Activity Report from the GNAV Pro phone system; Total Emails Answered is based on total emails answered exported data from Outlook and Total Web Requests Responded to is based on the eCare and CC6 portal custom request datasets.

Analysis 4 Average Calls Answered per Staff Have Increased during the Remote and Hybrid Periods Combined

- Call Center dedicated and overflow staff answered, on average, nearly the same number of calls during the Remote period compared to the Pre-Remote period, despite dedicated Call Center staffing declines. During the Hybrid period, staff answered 31% more calls compared to the Pre-Remote period.
- The sharp decline in March 2020 occurred due to the pandemic, as Call Center staff transitioned to answering calls by working remotely, and it took time to adequately equip staff with necessary gear to service customers using the phone system.

Chart 4: Average Calls Answered per Call Center Staff (based on historical staffing levels)⁷



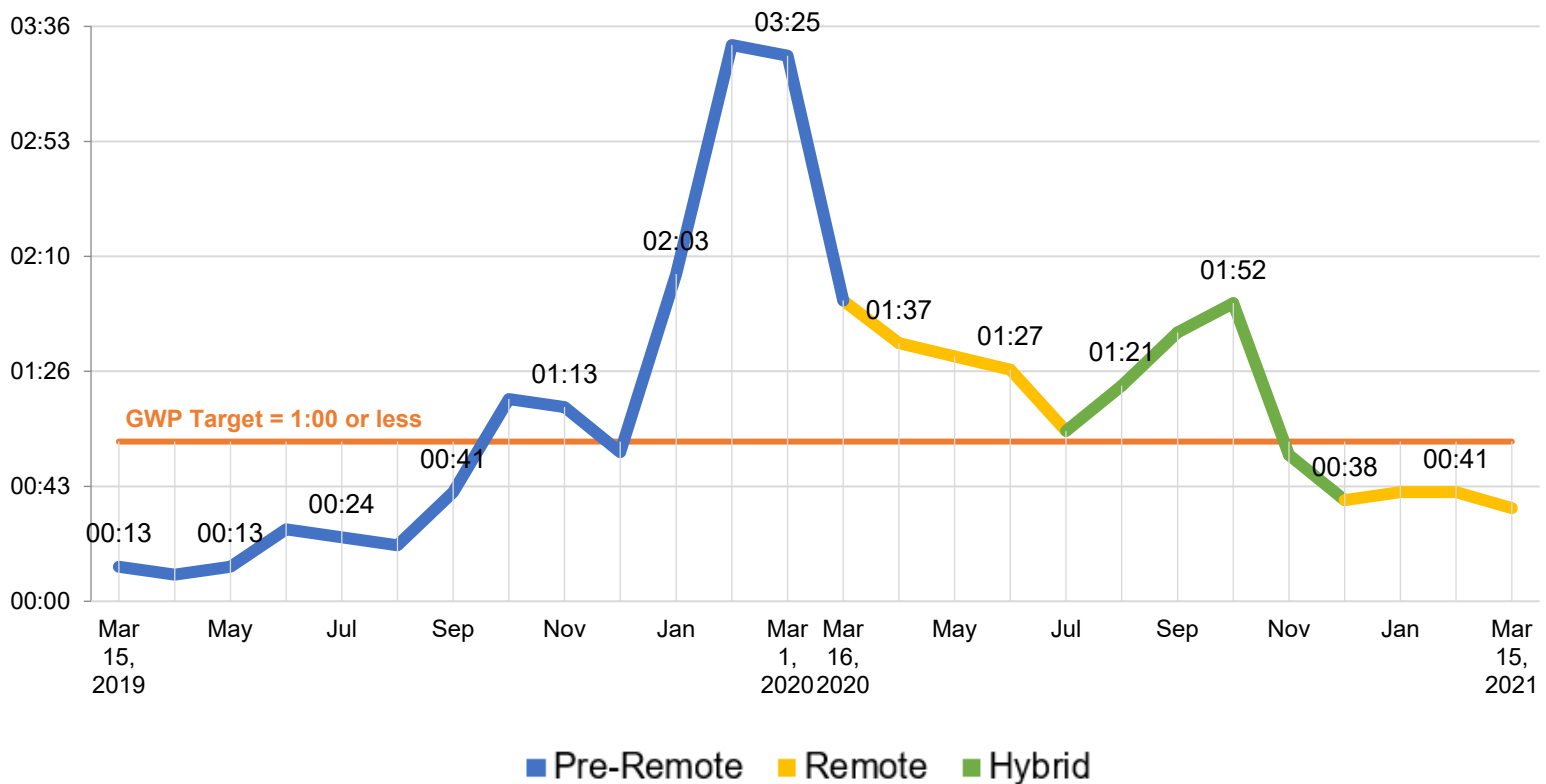
**Note, all the months of March are half-months.*

⁷ The Average Calls per Call Center staff analysis is based on the total calls from the Call Activity report from the GNAV Pro phone system, which includes all calls answered by all staff including the seven dedicated Call Center staff and 12 overflow staff. The call volume for this analysis includes 1% of total calls that were answered by other Customer Service staff. For purposes of Average Calls per Center Staff analysis, the month of June was considered Remote period and the month of November, Hybrid period.

Analysis 5 Average Queue Time Nearly Stayed the Same during the Remote Period but Increased during the Hybrid Period

- The GWP target for Average Queue Time for a Call is 1 minute or less; Average Queue Time during the Remote period was 1 minute 8 seconds compared to 1 minute 9 seconds during the Pre-Remote period.
- During the Hybrid period, the Average Queue Time for a call was 1 minute and 23 seconds.

Chart 5: Average Queue Time for a Call (in minutes)⁸

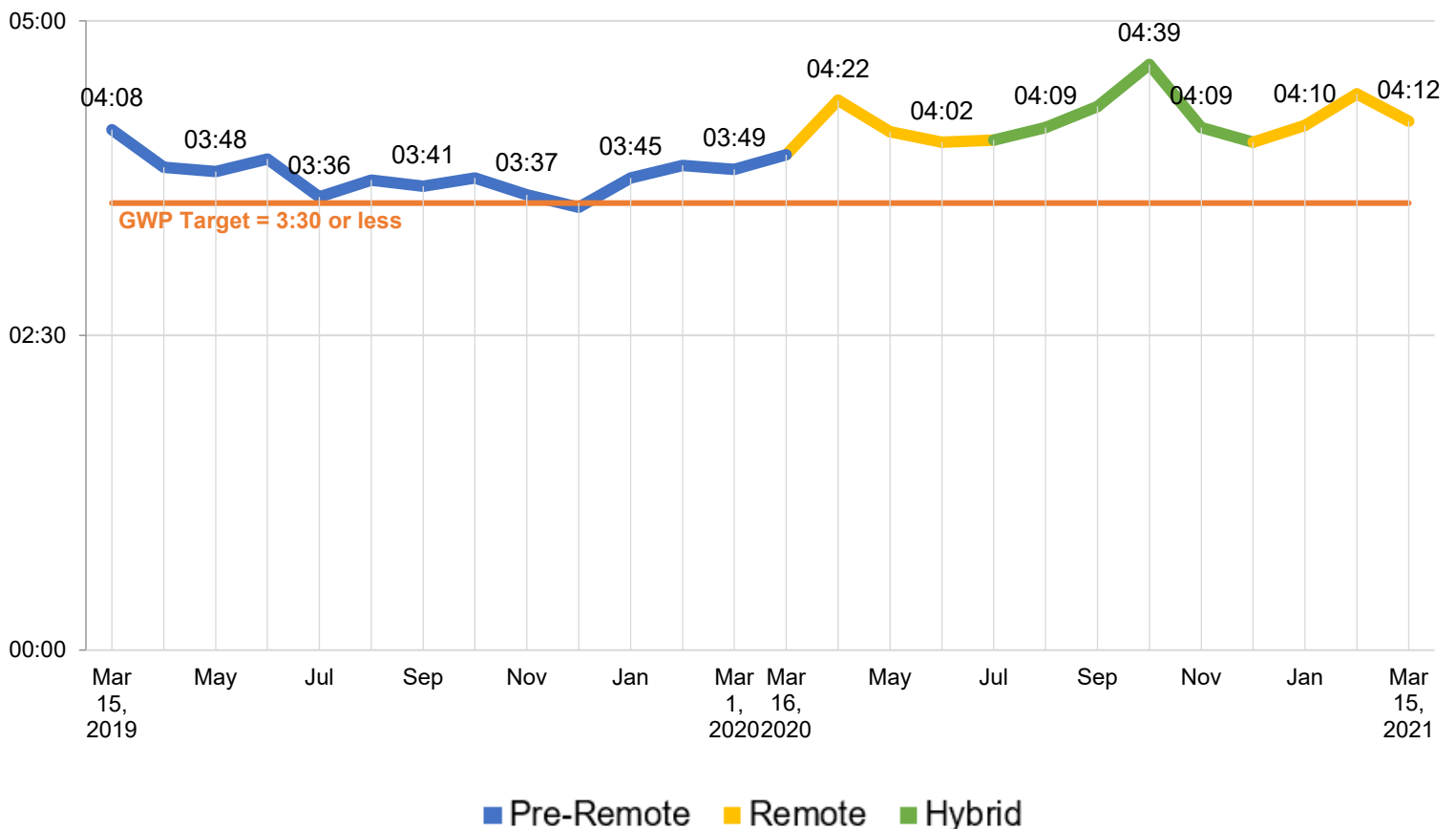


⁸ The Average Queue Time analysis is based on the total calls from the Call Activity report from the GNAV Pro phone system, which includes all calls answered by all staff including the seven dedicated Call Center staff and any overflow or other Customer Service Division staff. For purposes of Average Queue Time analysis, the month of June was considered Remote period and the month of November, Hybrid period.

Analysis 6 Average Talk Time Increased during both the Remote and Hybrid Periods Compared to the Pre-Remote Period

- The GWP target for Average Talk Time for representatives is 3 minutes 30 seconds or less.
- During the Remote period, the Average Talk Time was 4 minutes 10 seconds, and during Hybrid it was 4 minutes 16 seconds, while the Pre-Remote period was 3 minutes 46 seconds.

Chart 6: Average Talk Time (in minutes)⁹

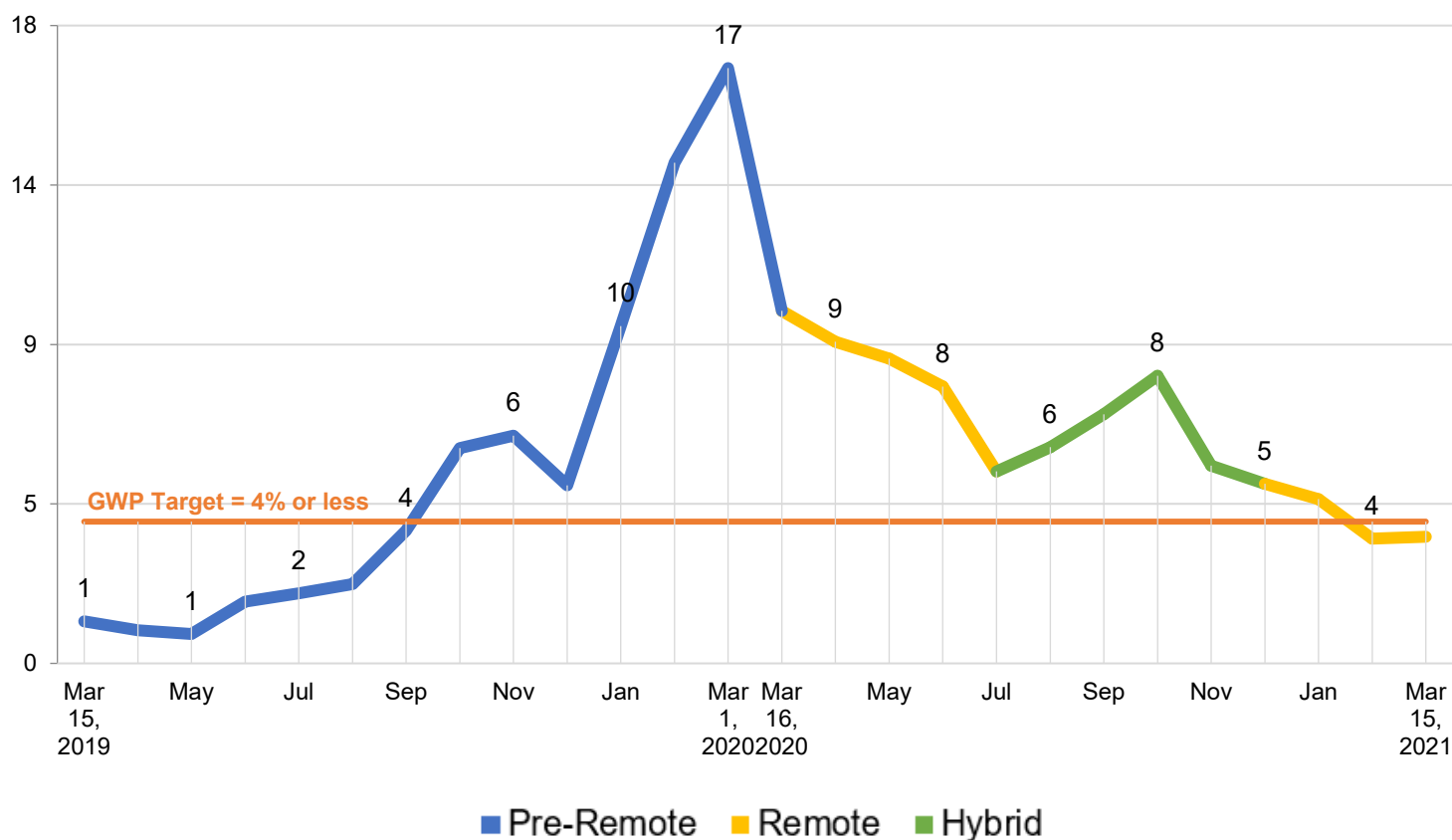


⁹The Average Talk Time analysis is based on the total calls from the Call Activity report from the GNAV Pro phone system, which includes all calls answered by all staff including the seven Call Center staff and any overflow or other Customer Service Division staff. For purposes of Average Queue Time analysis, the month of June was considered Remote period and the month of November, Hybrid period.

Analysis 7 Average Percentages of Calls that were Abandoned was 6.5% during the Remote Period as Opposed to 5.4% during the Pre-Remote Period

- The GWP target for the percent of abandoned calls from total calls answered is 4% or less.
- During the Remote period, 6.5% of calls were abandoned compared to 5.4% during the Pre-Remote, and 6.4% during the Hybrid period.

Chart 7: Percentage of Abandoned Calls¹⁰

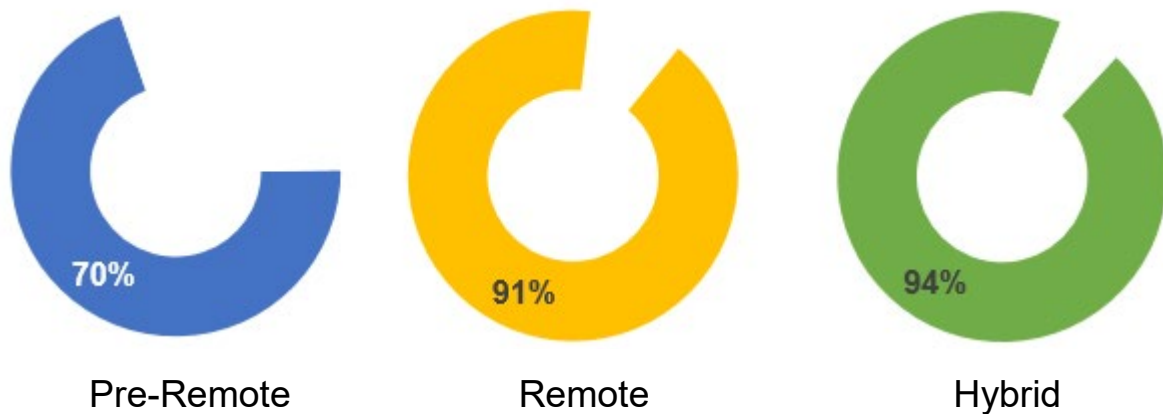


¹⁰The Average Percentage of Calls Abandoned analysis is based on the total calls from the Call Activity report from the GNAV Pro phone system, which includes all calls answered by all staff including the seven dedicated Call Center staff and any overflow or other Customer Service Division staff. For purposes of Average Queue Time analysis, the month of June was considered Remote period and the month of November, Hybrid period. The percentages are rounded to the nearest whole number.

Analysis 8 Over 90% of Emails Were Answered in Less than 48 hours during the Remote and Hybrid Periods

- The GWP Service Level target is to answer 80% of customer emails in less than 48 hours.
- During the Remote and Hybrid periods combined, GWP Customer Service received nearly 9,000 (or 174%) more emails compared to the Pre-Remote period.

Chart 8: Percentage of Emails Answered in Less than 48 Hours¹¹

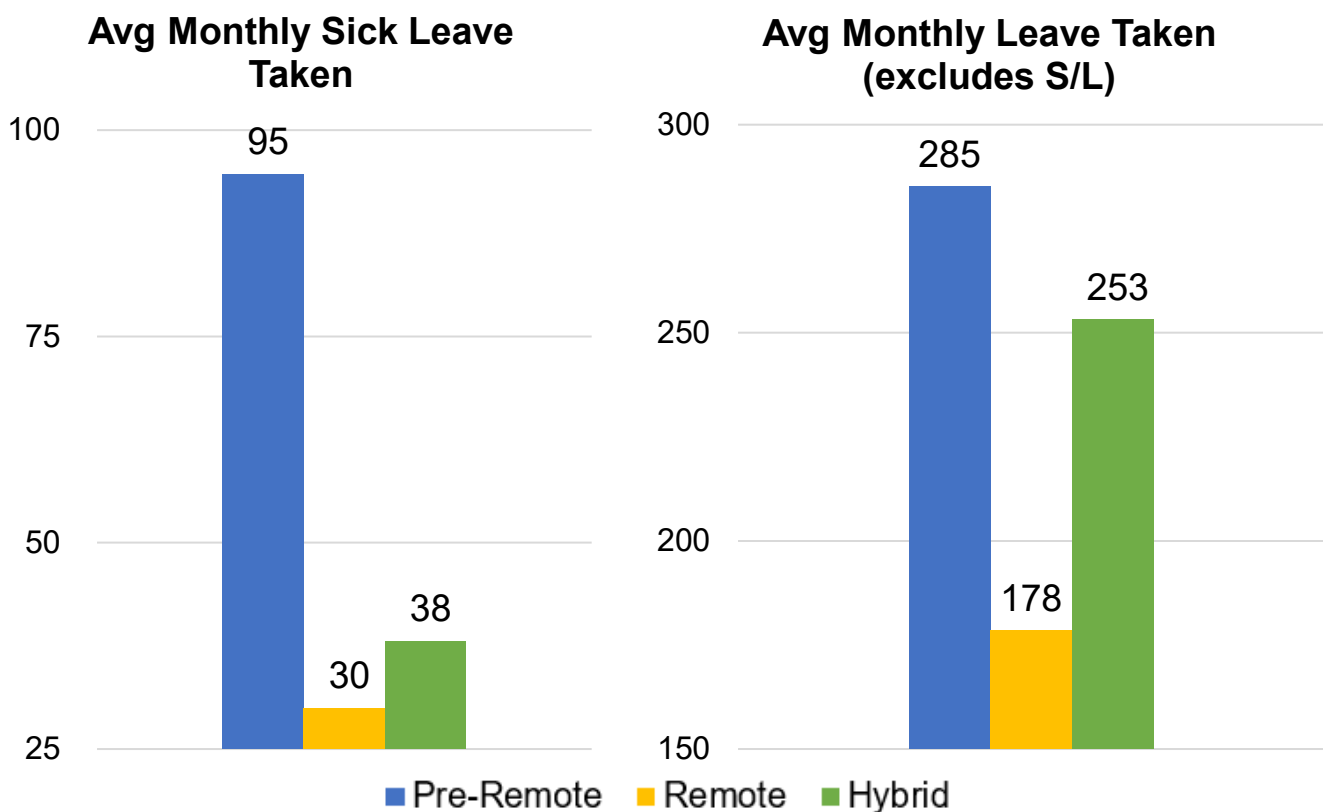


¹¹ Note: this chart is based on all emails answered by Customer Service Division staff including the seven dedicated Call Center staff.

Analysis 9 Overall Leave Usage Decreased both during the Remote and Hybrid Periods Compared to Pre-Remote Levels

- On a monthly basis, sick leave usage decreased by 68% during the Remote period and by 60% during the Hybrid period compared to Pre-Remote levels.
- Total leave usage decreased by 37% during the Remote period compared to the Pre-Remote levels, and by 11% during the Hybrid period.
- Staff took more hours of overall leave and sick leave during the Hybrid period compared to the Remote period.

Chart 9: Staff Sick and All Other Types of Leave Usage (in hours)¹²

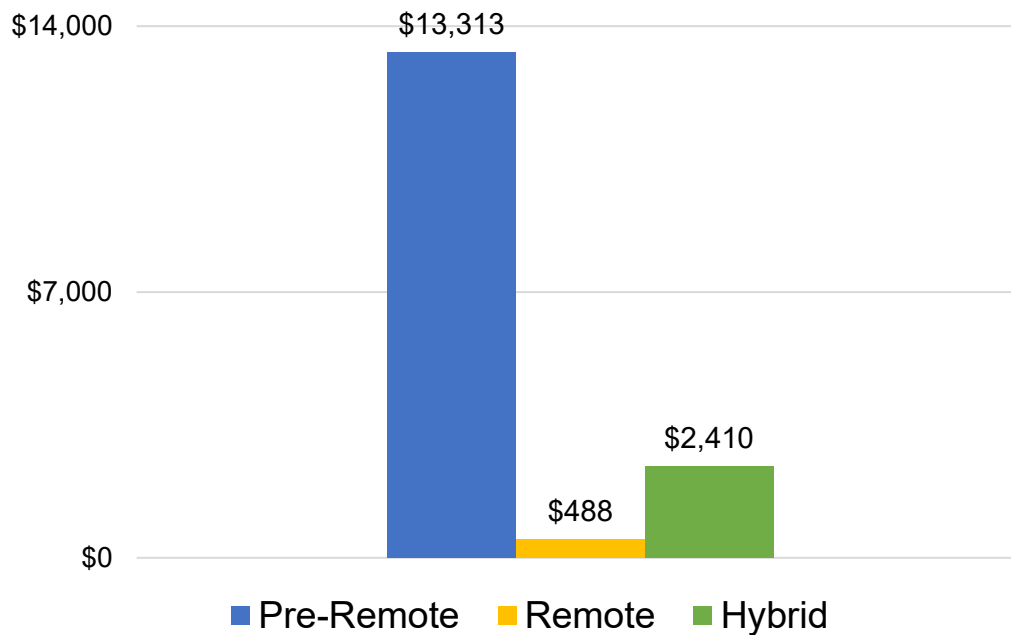


¹² The analysis above includes the seven dedicated Call Center staff and overflow staff. Excludes a total of 72 hours of Emergency Paid Sick Leave taken from All Other Leave Types and Sick Leave.

Analysis 10 Office Supply Expenses Decreased by 96% during the Remote Period

- The total office supplies costs for the Customer Service section during the Pre-Remote period was \$13,313 compared to \$488 during the Remote period, resulting in 96% reduction. The Hybrid period resulted in an 82% decrease in office supply costs.
- The top office supplies in terms of cost were toner cartridges and copy paper.

Chart 10: Total Customer Service Section Office Supplies Costs¹³

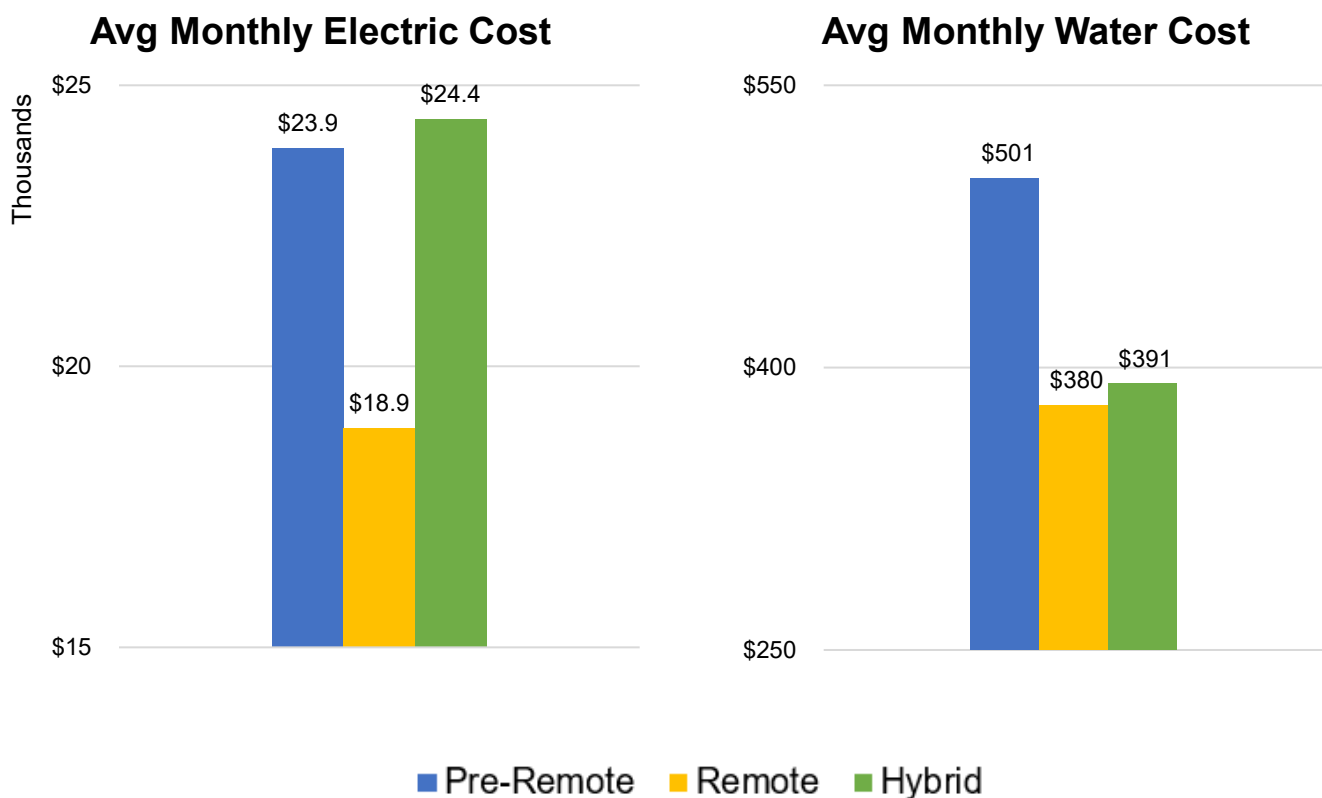


¹³ The Office Supplies Analysis is based on office supply expenses for the Customer Services Division.

Analysis 11 Electricity Costs Decreased only During Remote Period, but Water Costs Decreased during Remote and Hybrid Periods at the Perkins Building

- Average monthly electricity costs at the Perkins Building decreased by 21% during Remote period, but increased by 2% during the Hybrid period, compared to the Pre-Remote levels.
- Average monthly water charges decreased by 24% during the Remote period compared to the Pre-Remote period, and 22% during the Hybrid period.

Chart 11: Electric and Water Charges at the Perkins Building¹⁴



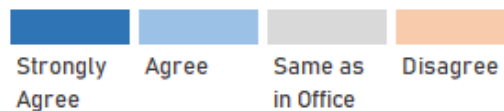
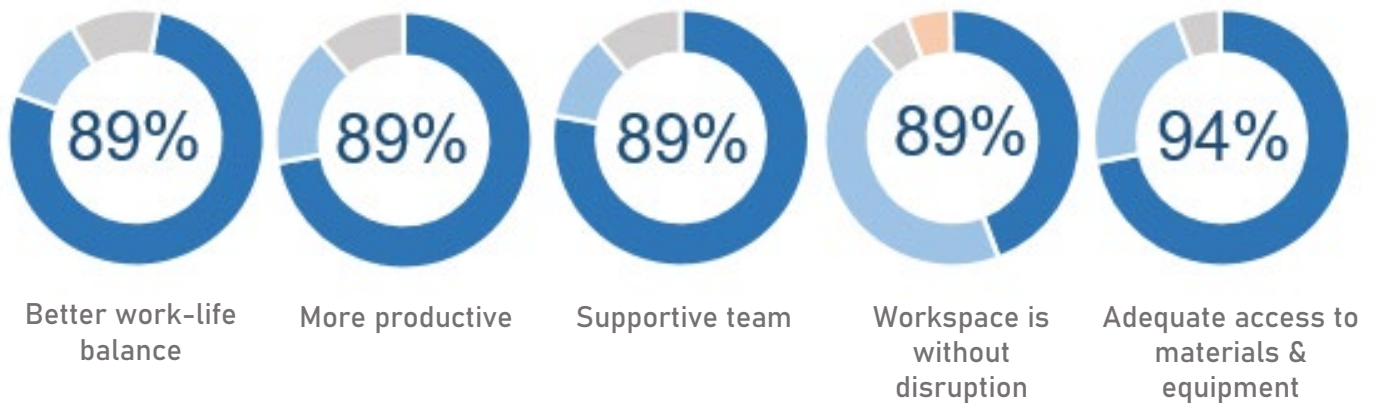
¹⁴ The three time periods were determined not based on actual dates coinciding with Pre-Remote, Hybrid and Remote, but on the closest available electric and water meter read dates. The total Electric and Water charges exclude Public Benefit Charges and State Surcharges. For purposes of this analysis, the month of June was considered Remote period and the month of November, Hybrid period.

Survey

Most Call Center Staff Have Positive Impressions of Remote Work

- Internal Audit surveyed the 18 dedicated and overflow Call Center staff to identify perspectives on the impact of remote work on employee work-life balance through a 10-question survey.
- The survey had, overall, positive responses on questions related to employee work-life balance, productivity, team collaboration and quality of work space when working remotely from home.
- Detailed responses from survey questions are available in Appendix B.

89-94% of staff **strongly agree** or **agree** that during remote work:



What difficulties/challenges are you facing when working remotely from home?

No Challenges

Better equipment

Internet Connectivity

Lack of socialization

Overwork

More time consuming to check work

What additional resources would help you be more productive during remote work?

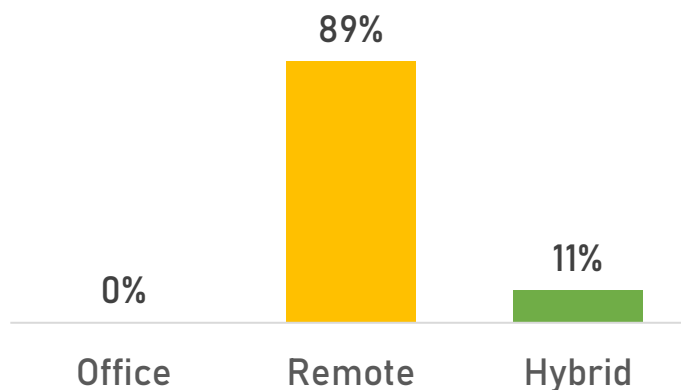
Resources are Adequate

Office supplies

Better equipment

Better communication

Which work location would you prefer?



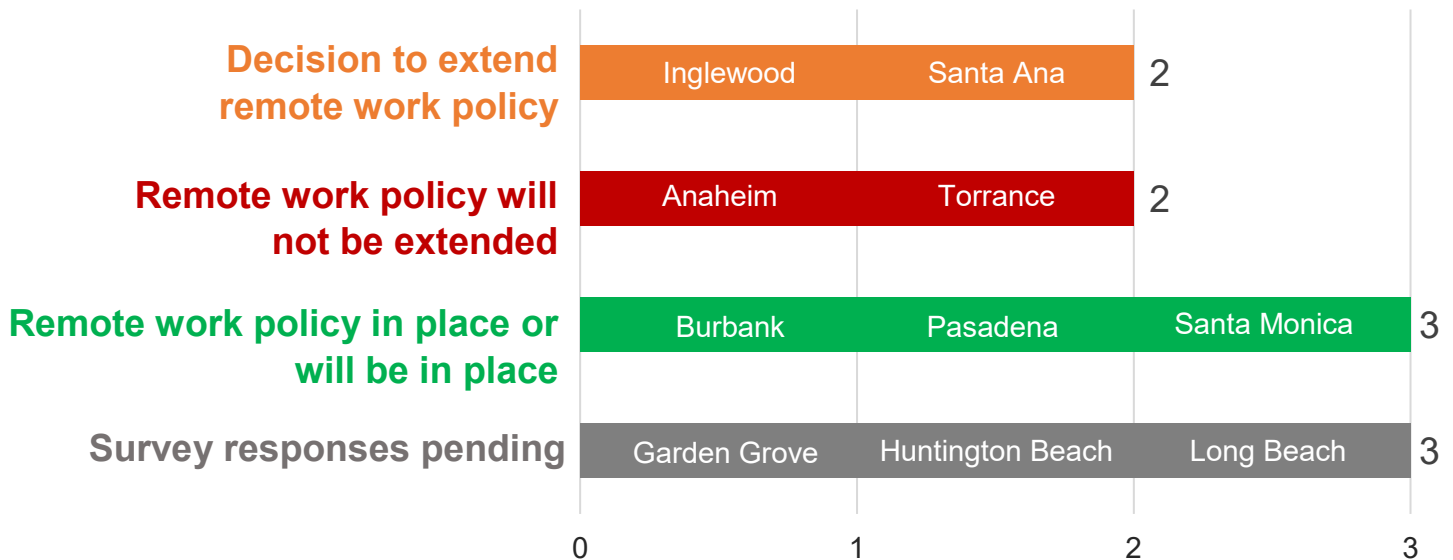
¹⁵ Higher frequency of response to survey question is depicted in bigger font.

Benchmark

While Some Jurisdictions are Waiting for the June Governor's Update, Others have Already Extended Remote Work Policies and Some have Terminated Them

- We reached out to the 10 neighboring jurisdictions commonly used for benchmarking at the City and received responses from seven.
- Three cities either have a remote work policy in place, or are working on a permanent policy; two cities will not be extending a remote work option to employees and two are waiting for the June Governor's update to decide.

Remote Work Policy Trends in Benchmark Jurisdictions¹⁶



¹⁶ The benchmark survey results presented are based on information obtained at the time of the survey.

Distribution List

For Information

- Roubik Golanian, City Manager
- John Takhtalian, Acting General Manager of Glendale Water & Power
- Craig Kuennen, Assistant General Manager of Glendale Water & Power
- Stephen Nersesyan, Utility Manager of Glendale Water & Power
- Tami Vallier, Customer Services Administrator of Glendale Water & Power
- Elena Bolbolian, Director of Innovation, Performance, & Audit
- Matthew Doyle, Director of Human Resources
- Michele Flynn, Director of Finance
- Michael Garcia, City Attorney
- Audit Committee
- City Council

For questions regarding the contents of this report, please contact the lead auditor, Ani Antanesyan, Internal Auditor, or Jessie Zhang, Internal Audit Manager.

Appendix A: Objective, Scope, & Methodology

The objective of this analysis is to determine whether there have been any productivity changes at the GWP Call Center during the Remote period compared to the Pre-Remote period including any changes noted during the Hybrid period.

The scope of the analysis covers the one-year Pre-Remote period starting from March 15, 2019 to March 15, 2020 and the one-year Remote period starting from March 16, 2020 to March 15, 2021. The Hybrid period is defined as the period between June 22, 2020 to November 17, 2020.

It was not within the scope of this analysis to validate the integrity of the system generated and manually tracked data that was provided by GWP.

Internal Audit performed the following:

- Researched best practices to identify benchmark metrics as well as metric targets for measuring call center workload, productivity and performance.
- Analyzed the following reports to identify potential impact to productivity before and during remote work:
 - Employee leave usage reports;
 - Office supply expense reports;
 - Utility cost and usage reports;
 - Call Center call activity reports that detail average talk time, average queue time, calls abandoned and total customer calls answered by month;
 - Call Center agent activity summary reports that detail total calls answered by representative;
 - Email workload reports;
 - Web request workload reports;
 - Miscellaneous task totals performed by Call Center staff.
- Surveyed Call Center employees about the impact of remote work.
- Surveyed benchmark jurisdictions to identify their remote work plans post the COVID-19 pandemic.

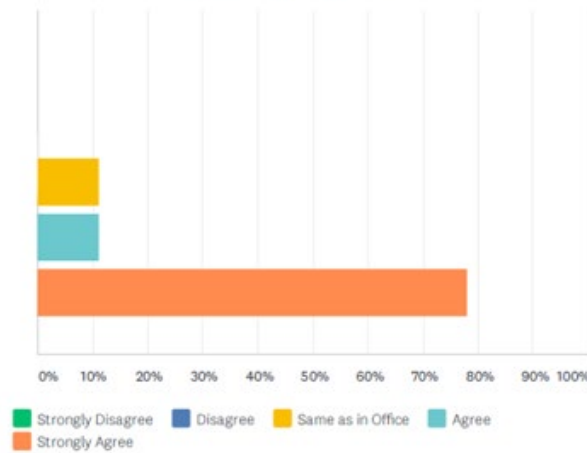
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Appendix B: Call Center Employee Work from Home Survey Results

Internal Audit surveyed the 18 Call Center dedicated and overflow staff through 10-questions, out of which, seven are presented below with their detailed responses. Question 6, 7 and 10 were free-form responses and are available for review upon request.¹⁷

1. I have a better work-life balance when working remotely from home.

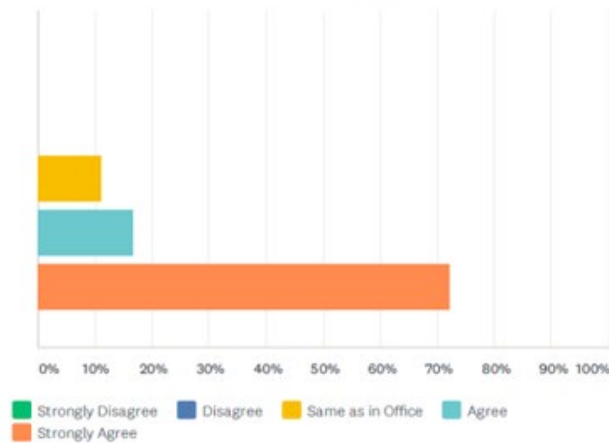
Answered: 18 Skipped: 0



STRONGLY DISAGREE	DISAGREE	SAME AS IN OFFICE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
0.00%	0.00%	11.11%	11.11%	77.78%	18	4.67
0	0	2	2	14		

2. I am more productive when working remotely from home.

Answered: 18 Skipped: 0

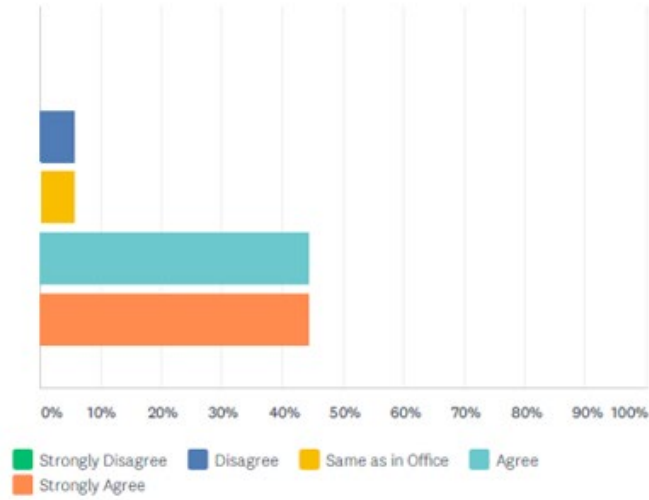


STRONGLY DISAGREE	DISAGREE	SAME AS IN OFFICE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
0.00%	0.00%	11.11%	16.67%	72.22%	18	4.61
0	0	2	3	13		

¹⁷ Question 6: What difficulties/challenges are you facing when working remotely from home?
 Question 7: What additional resources would help you be more productive when working remotely from home?
 Question 10: Please provide any other comments or suggestions.

3. I have access to the materials and equipment needed to do my work when working remotely from home.

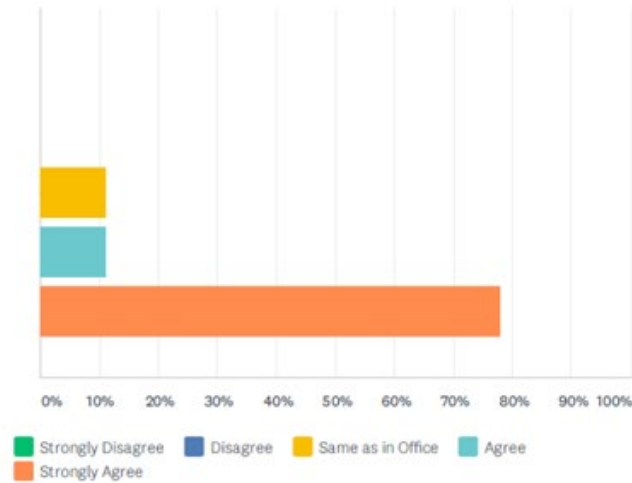
Answered: 18 Skipped: 0



STRONGLY DISAGREE	DISAGREE	SAME AS IN OFFICE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
0.00%	5.56%	5.56%	44.44%	44.44%	18	4.28
0	1	1	8	8		

4. My team is working well together to support each other when working remotely from home.

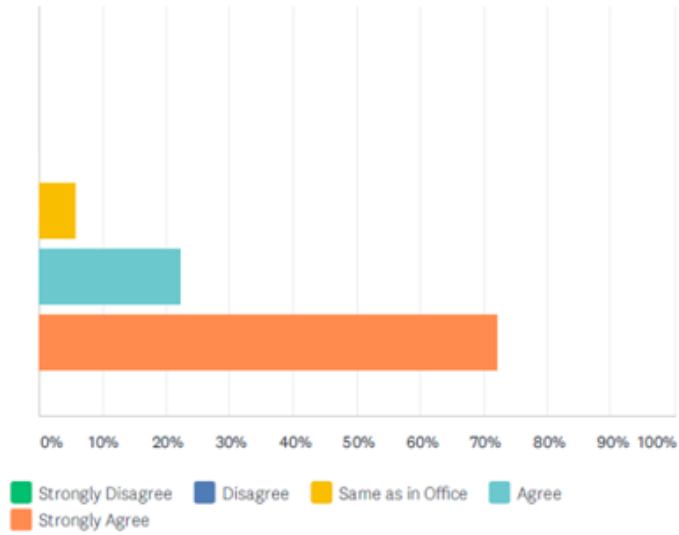
Answered: 18 Skipped: 0



STRONGLY DISAGREE	DISAGREE	SAME AS IN OFFICE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
0.00%	0.00%	11.11%	11.11%	77.78%	18	4.67
0	0	2	2	14		

5. I have a space where I can focus on work without unnecessary interruptions and disruptions when working remotely from home.

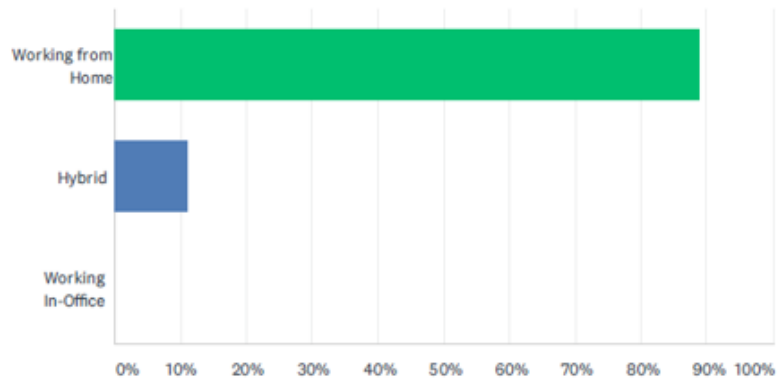
Answered: 18 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	SAME AS IN OFFICE	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
	0.00%	0.00%	5.56%	22.22%	72.22%	18	4.67
	0	0	1	4	13		

8. If you were given an option to work remotely from home or physically in office, what would you choose?

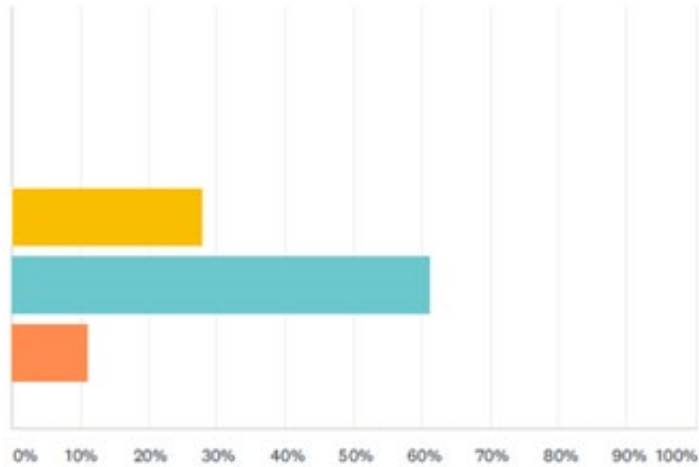
Answered: 18 Skipped: 0



ANSWER CHOICES	RESPONSES	
Working from Home	88.89%	16
Hybrid	11.11%	2
Working In-Office	0.00%	0
TOTAL		18

9. What best describes your workload?

Answered: 18 Skipped: 0



- Below Capacity (Not Enough Work)
- Slightly Below Capacity (Available for More Work)
- At Capacity (Enough Work to Do)
- Slightly Above Capacity (Lots of Work to Do)
- Well Above Capacity (Too Much Work)

BELOW CAPACITY (NOT ENOUGH WORK)	SLIGHTLY BELOW CAPACITY (AVAILABLE FOR MORE WORK)	AT CAPACITY (ENOUGH WORK TO DO)	SLIGHTLY ABOVE CAPACITY (LOTS OF WORK TO DO)	WELL ABOVE CAPACITY (TOO MUCH WORK)	TOTAL	WEIGHTED AVERAGE
0.00%	0.00%	27.78%	61.11%	11.11%	18	3.83
0	0	5	11	2		