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Foot Traffic Recovery in Downtown Ottawa

An Analysis of Cellphone Data in Ottawa's Core and Within Its Office Complexes

Executive Summary

The following analysis measures foot traffic in Ottawa's downtown through the use of cellphone data. A dataset was provided for the month of January from 2020 to 2024, which indicates when a cellphone gets pinged and provides its exact geographic coordinates. This analysis primarily distinguishes between cellphones detected during and outside business hours to isolate the return of workers to the office.

#1

There has been a strong increase in number of cellphones detected downtown, due in part to an influx of downtown residents as well as a return-to-office (RTO).

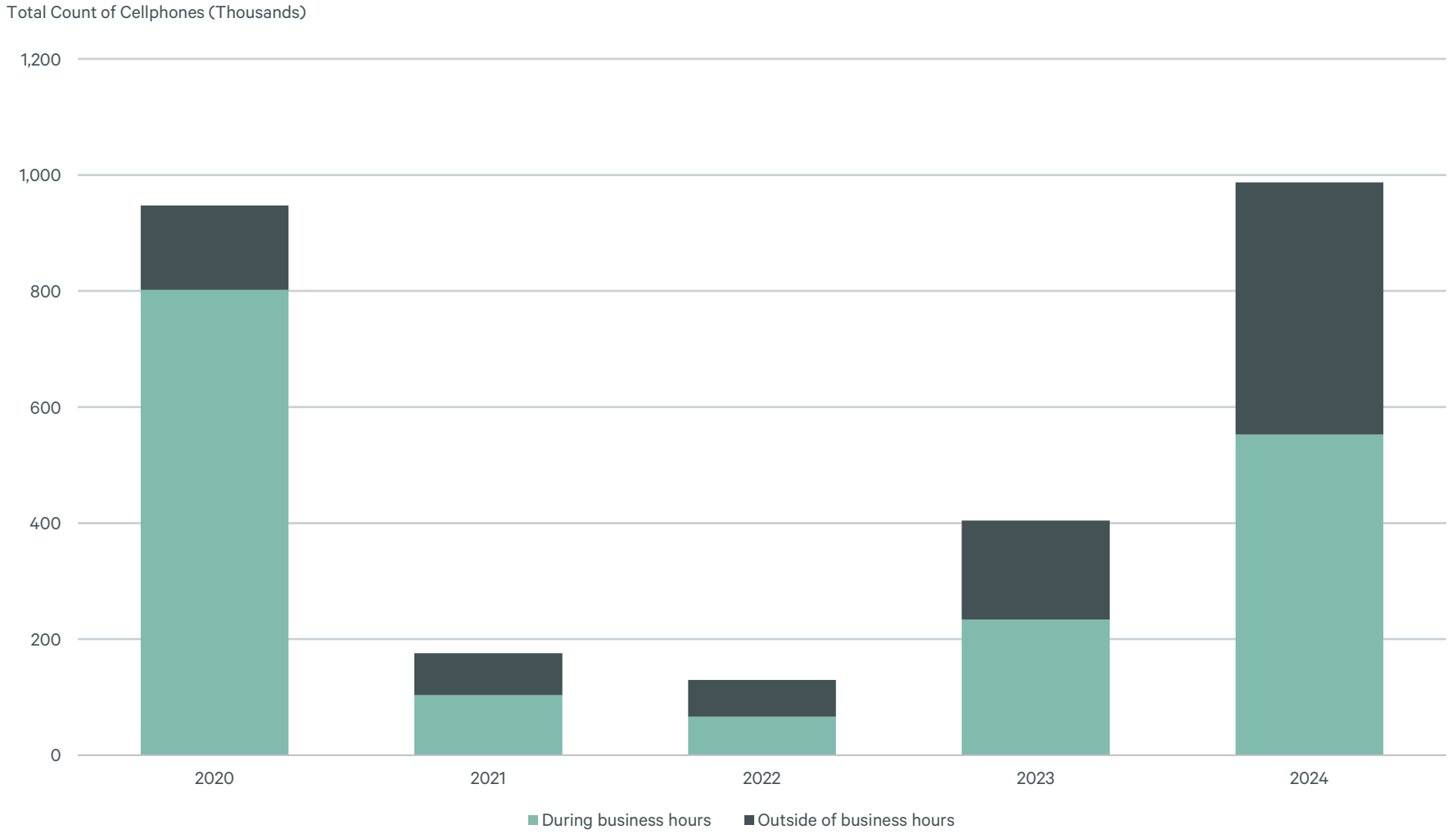
#2

This uptick in foot traffic in office buildings can be attributed to a mix of return-to-office mandates and increased in-office occupancy.

#3

On average, these buildings are observing about a 70% recovery in foot traffic compared to pre-pandemic figures.

FIGURE 1: Total Count of Cellphones Recorded in Ottawa's Downtown

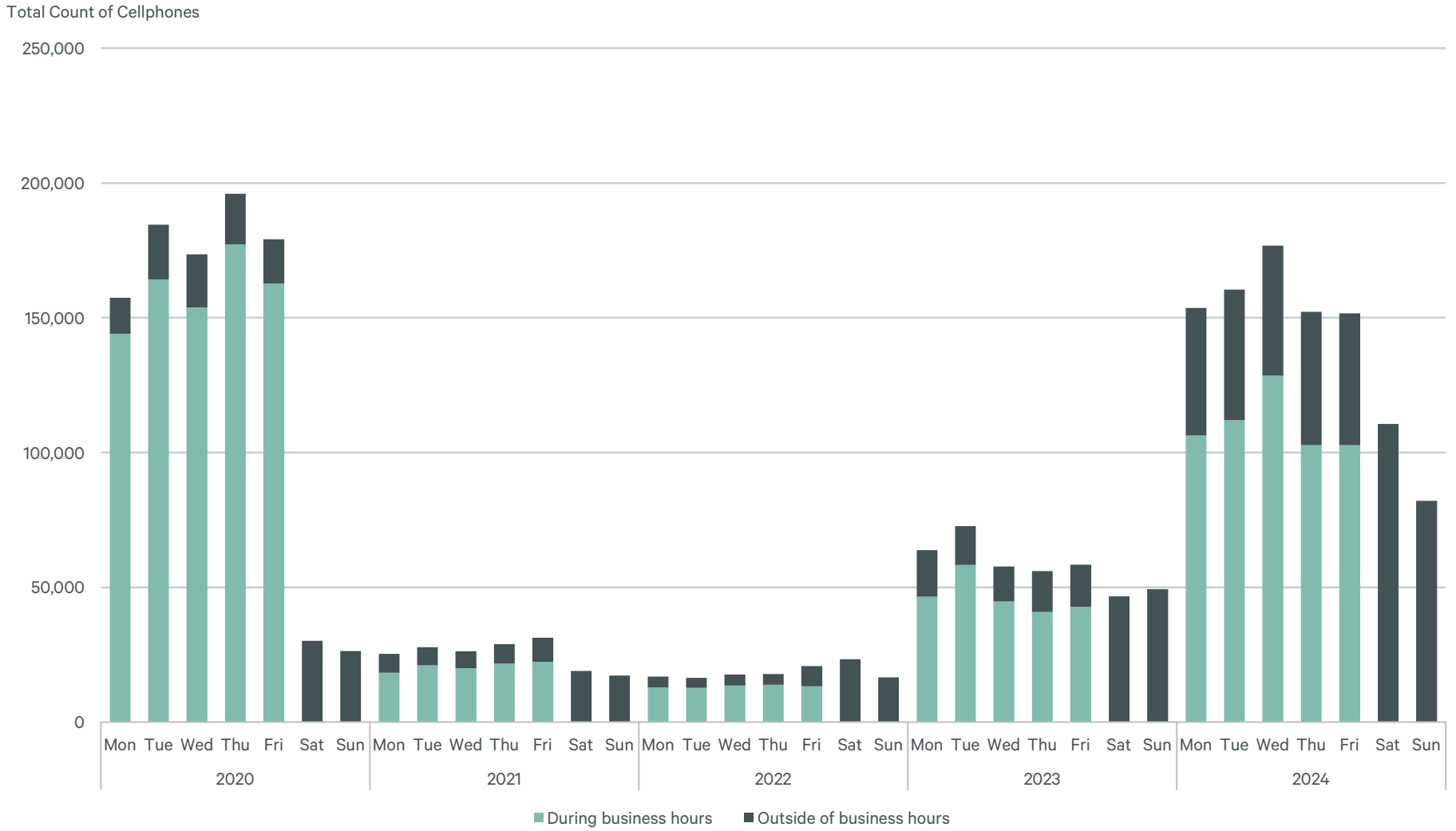


Source: CBRE Research, May 2024

Figure 1 on the left illustrates the count of cellphones recorded in total in Ottawa's Central Business District (CBD) during the month of January. A period of 6:30 AM to 6:30 PM is utilized as a loose definition of business hours to capture any early or late office utilization.

Utilizing January 2020 as a baseline, the data has shown that the total presence of people downtown has recovered and even surpassed pre-pandemic figures. In 2024, approximately 990,000 cellphones were recorded in the core, equating to a 104% recovery in foot traffic. However, this recovery is mostly dominated by individuals who are within the core outside of business hours. While only 15.3% of the foot traffic in 2020 was from outside business hours, this figure rose to 44.1% in 2024.

FIGURE 2: Total Count of Cellphones Recorded Downtown Across Different Days



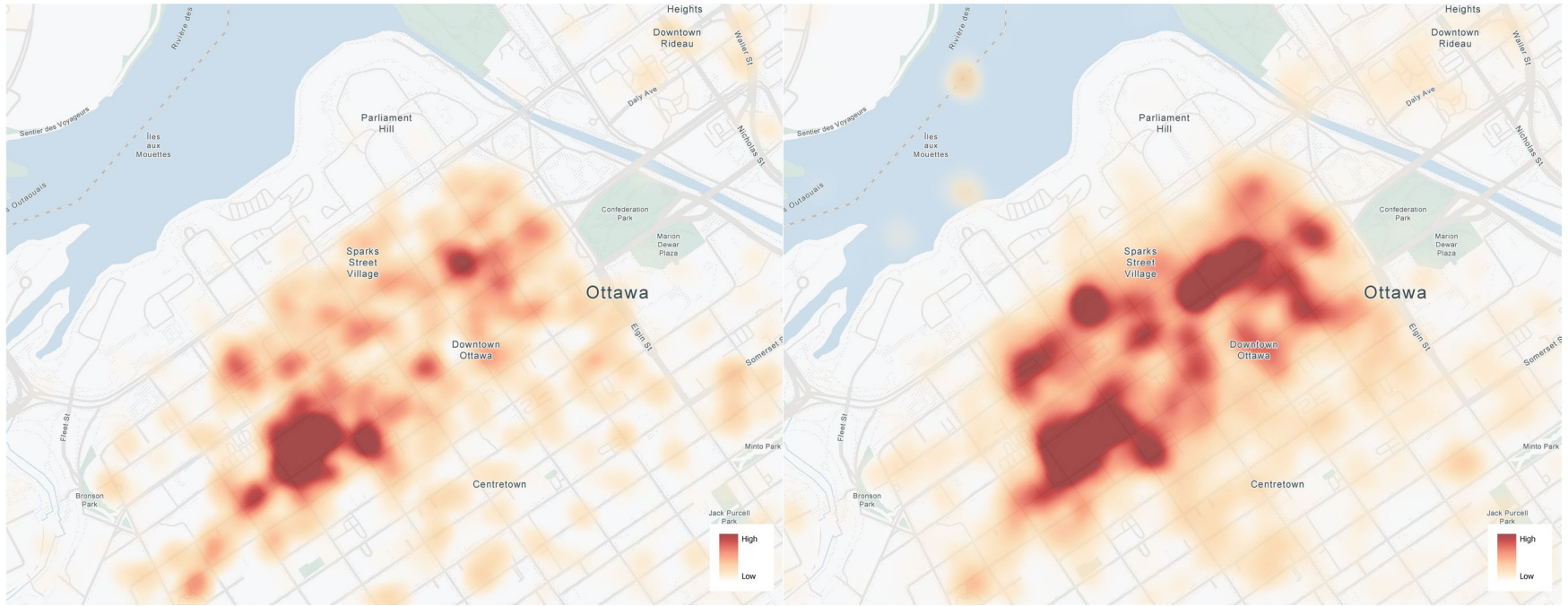
Source: CBRE Research, May 2024

Figure 2 on the left visualizes the distribution of cellphones recorded during the month of January in the CBD across different days of the week, depending on whether they were during or outside of business hours.

On the whole, foot traffic during a weekday has shown definite signs of improvement. A total of 790,000 cellphones were recorded within the period of January 2024. Compared to 2020 which saw a cumulative of 890,000 cellphones, this figure has recovered to 89.0% of pre-pandemic figures.

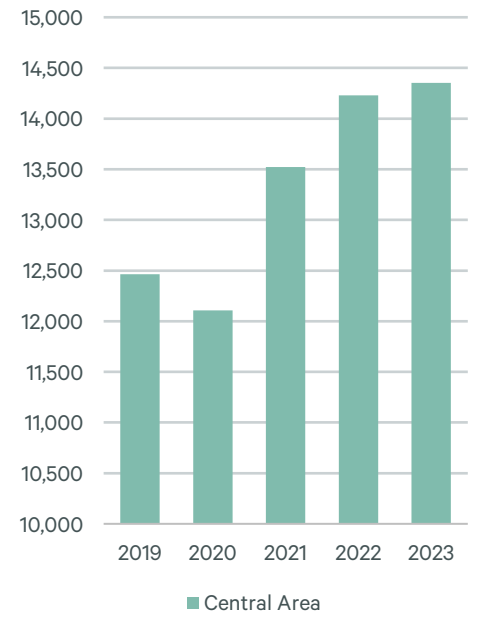
By taking into account the total number of working days, weekends, and statutory holidays within the month, 2020 saw an average of 40,000 cellphones on a given workday and 6,000 cellphones on any given non-workday. For comparison, 2024 observed an average of 36,000 cellphones on a workday and 21,000 cellphones on a non-workday.

FIGURE 3: Cellphone Density Map of the CBD for 2020 (left) and 2024 (right)



Source: CBRE GIS, Near, May 2024

FIGURE 4: Year- End Population Count for the Central Sub-Area

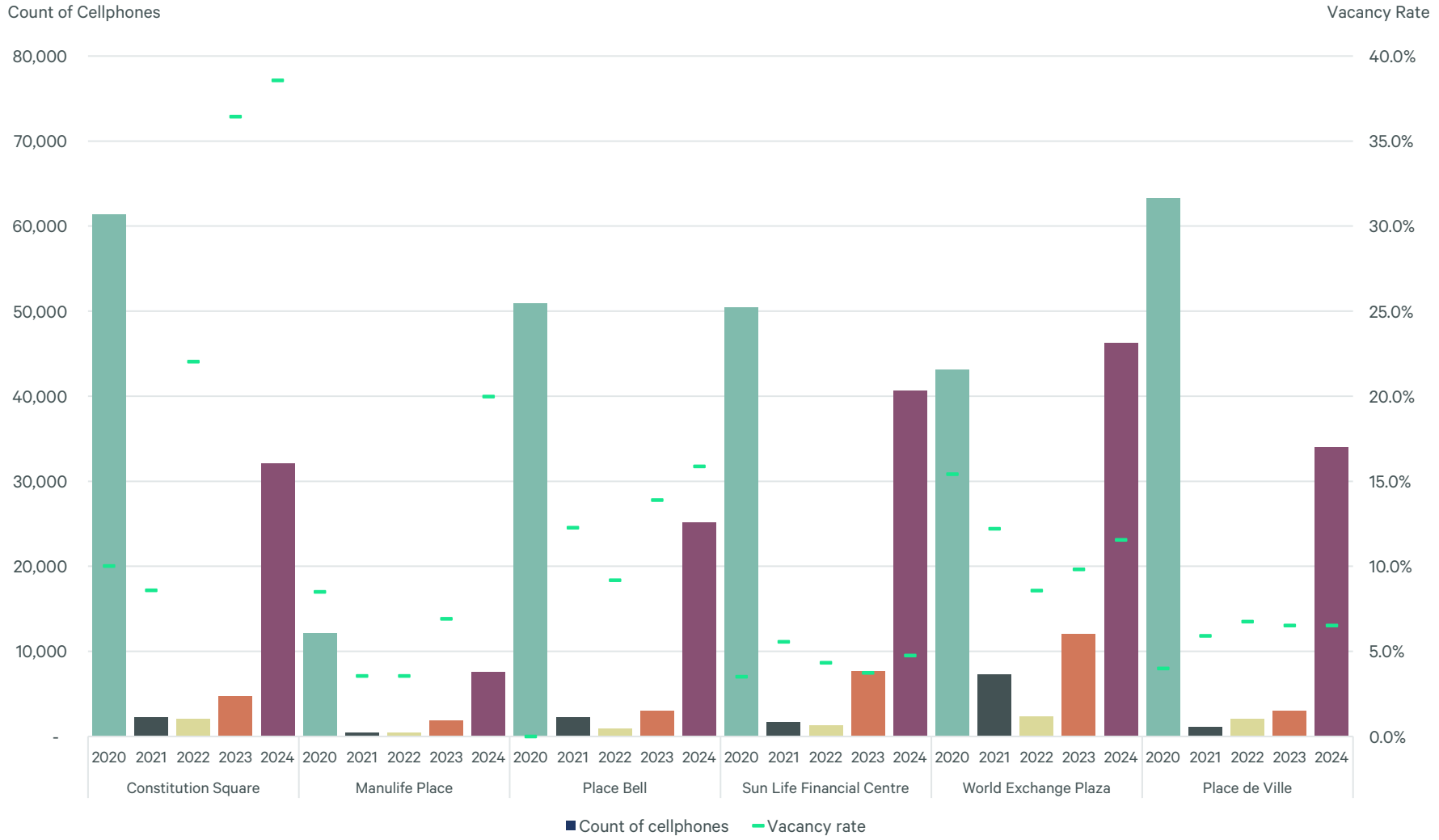


Source: City of Ottawa, CBRE Research, May 2024

Figure 3 on the left illustrates the cellphone density map for the core comparing the differences between the pre-pandemic baseline and January 2024. Figure 4 on the right shows the year-end population of the central area of Ottawa.

While the number of cellphones downtown has essentially returned to 2020 levels, the majority of the presence is due to cellphones detected outside of business hours. This can be attributed to the in-migration of residents moving into Ottawa's core. While some residents had moved away from downtown during the pandemic lockdowns in 2020, there has been a significant increase in the number of citizens now residing downtown. Between 2020 and 2023, the population climbed from 12,100 residents to 14,400 residents, translating to an 18.9% increase in the number of people living downtown. This can be coupled with the rise in number of multiresidential buildings downtown. According to CMHC, the number of rental units in downtown between 2019 and 2023 has risen from 8,665 to 9,684.

FIGURE 5: Count of Cellphones and Office Vacancy Rate at Each Office Complex

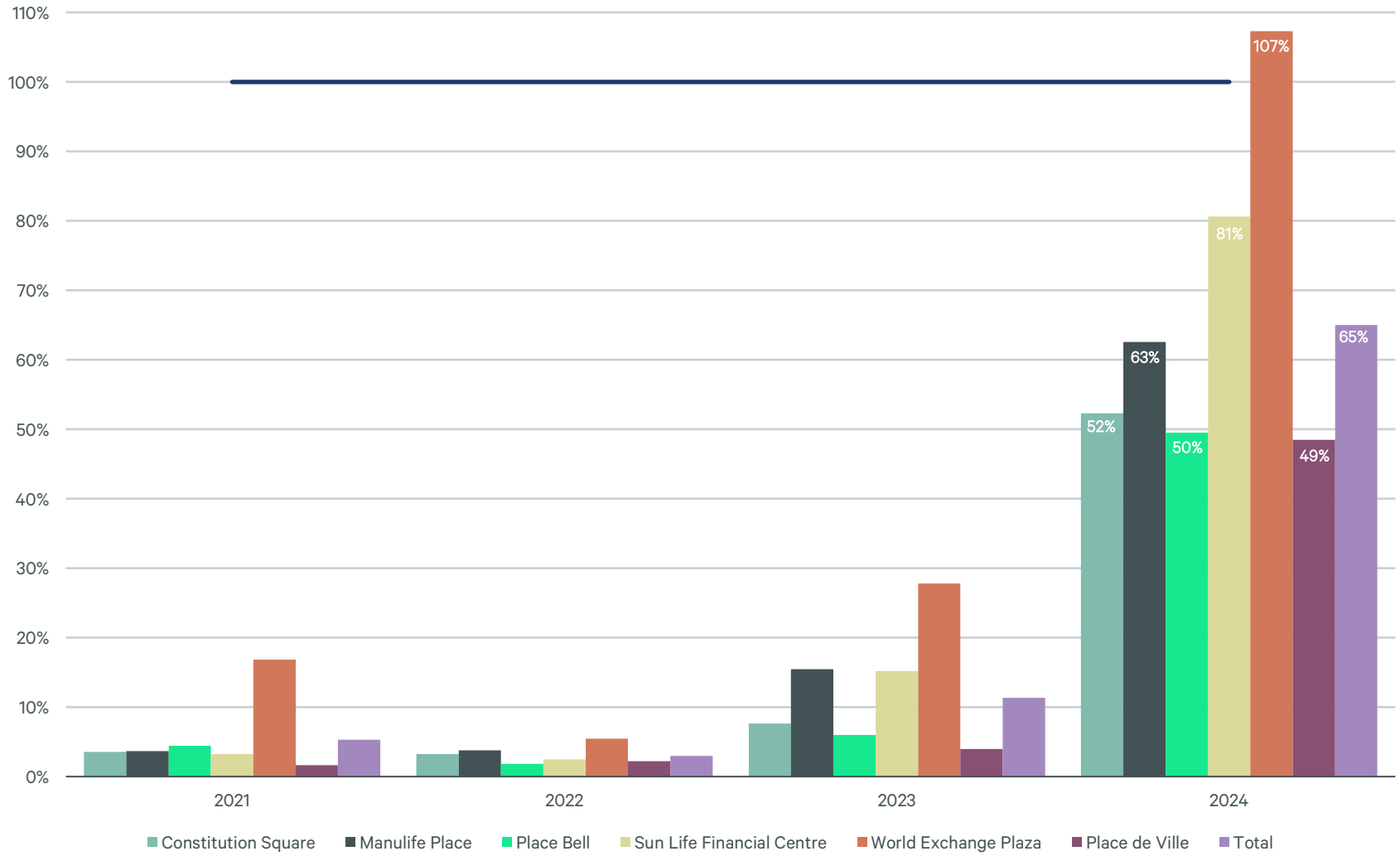


Source: CBRE Research, May 2024

Figure 5 on the left illustrates the count of cellphones as well as the recorded office vacancy rate at each complex. The data has shown that there is a clear **upwards trajectory** in the number of cellphones recorded from 2021 to 2024 across all complexes, indicating a strong recovery in foot traffic. At its trough in January 2022, the total count of cellphones recorded across all complexes was 9,000 cellphones. However, this figure has **dramatically increased** with 186,000 cellphones being recorded in January 2024.

Two mechanisms can be identified as for why foot traffic has increased at each of these buildings. For one, as concerns for COVID-19 have started to dwindle amidst higher vaccination rates, private and public mandates have been issued for workers to begin returning to the office. Most notably, the Treasury Board of Canada had mandated its federal employees to return to the office at least two to three days a week - with this taking full effect on April 1, 2023. Furthermore, the amount of occupied square footage also affected foot traffic. In the case of World Exchange Plaza, the number of cellphones detected has resumed to pre-pandemic norms as the complex has seen a decrease in vacancy rate when comparing January 2020 and January 2024.

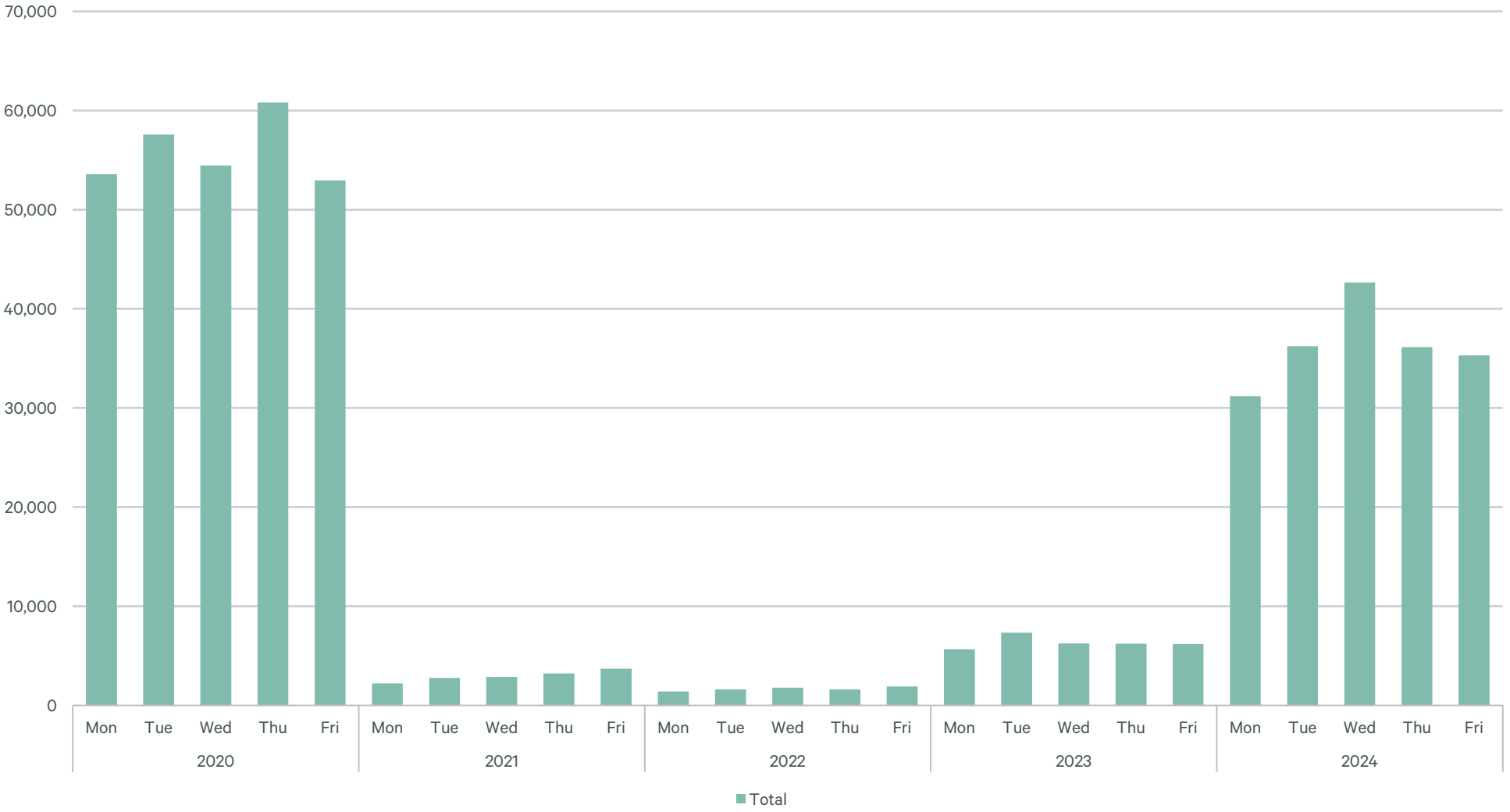
FIGURE 6: Foot Traffic Recovery Relative to Pre-Pandemic Norms



Source: CBRE Research, May 2024

Figure 6 on the left illustrates the relative count of cellphones per given year in comparison to pre-pandemic rates. The analysis employs January 2020 as the base year for a foot traffic comparison. The cellphone data has demonstrated that there has been **at least a 50% recovery in foot traffic** across all major office complexes. On average, these buildings have seen a **65% recovery** in foot traffic compared to its pre-pandemic figures. World Exchange Plaza has been the exception to this, surpassing its pre-pandemic foot traffic and recording a recovery of over 100%. As mentioned for the previous figure, World Exchange Plaza has seen its office vacancy rate decrease, with a higher occupied footprint contributing to the increase in number of people. It is also possible that the current revitalization of their retail concourse has influenced the current uptick in foot traffic.

FIGURE 7: Total Count of Cellphones Recorded Within the Office Complexes Across Different Days

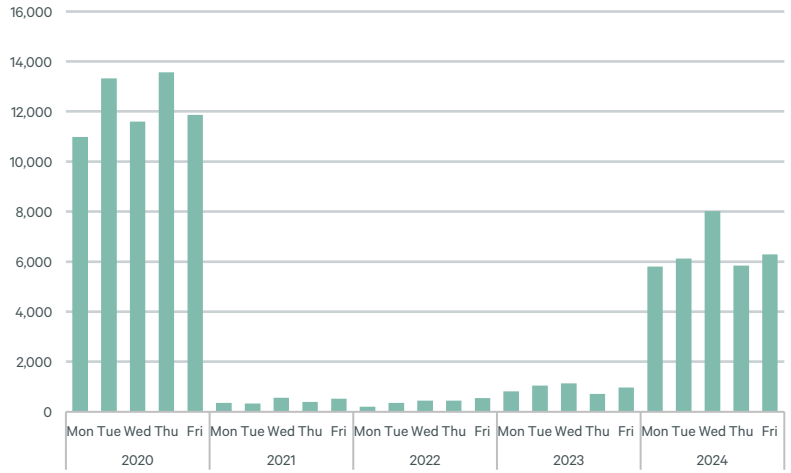


Source: CBRE Research, May 2024

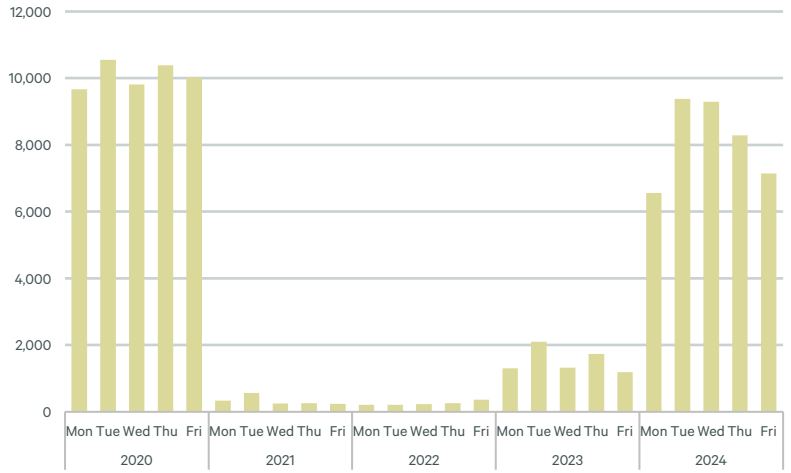
Figure 7 on the left illustrates the summation of cellphone data within the aforementioned office complexes, showing the distribution of foot traffic across different days of the week. While Tuesdays and Thursdays tended to be the busiest days before the COVID-19 pandemic, office workers are now starting to favor Wednesdays as their primary day to be in the office.

By using Wednesday as a baseline, the data shows that about 54,000 cellphones were recorded in 2020 while 43,000 cellphones were pinged in 2024. This means that across all buildings, the foot traffic has recovered to **almost 80% of the pre-pandemic numbers** in 2024.

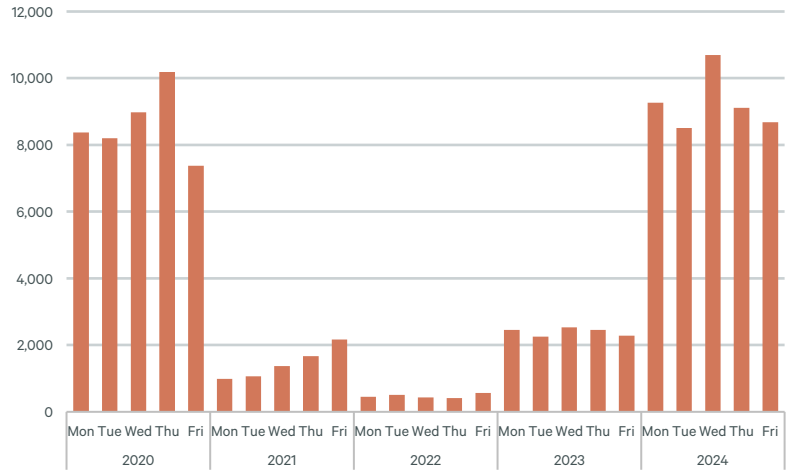
APPENDIX A – DISTRIBUTION OF CELLPHONE COUNT FOR EACH OFFICE COMPLEX



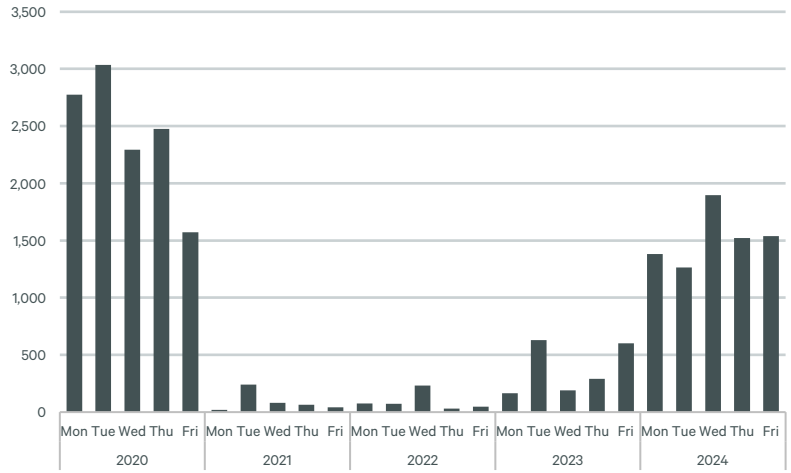
Constitution Square



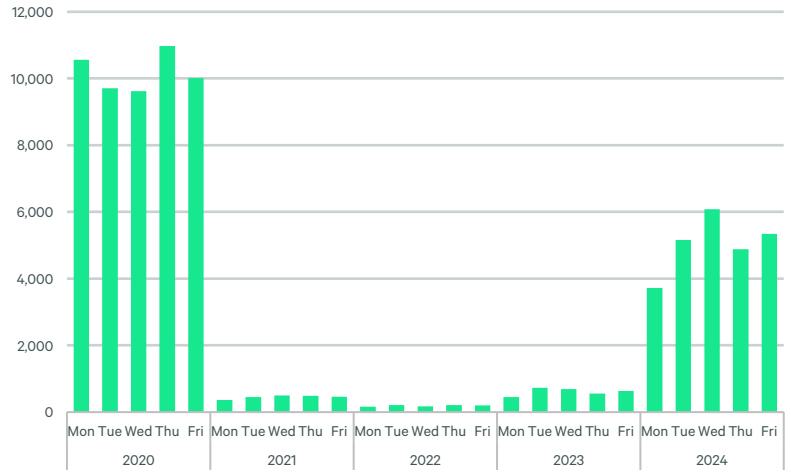
Sun Life Financial Centre



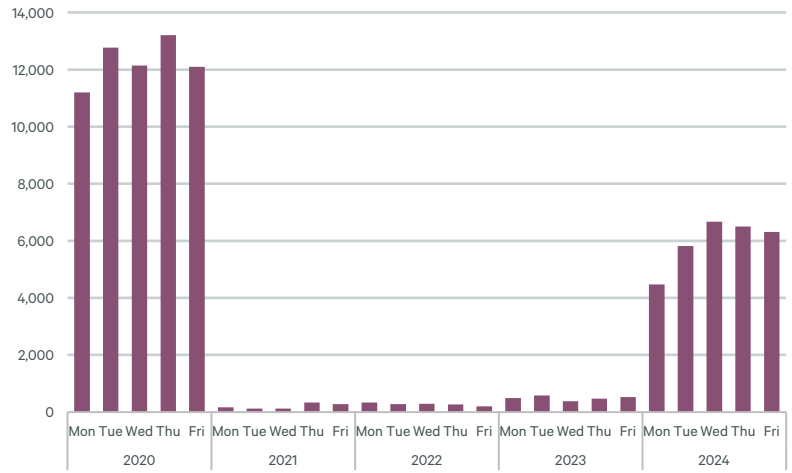
World Exchange Plaza



Manulife Place



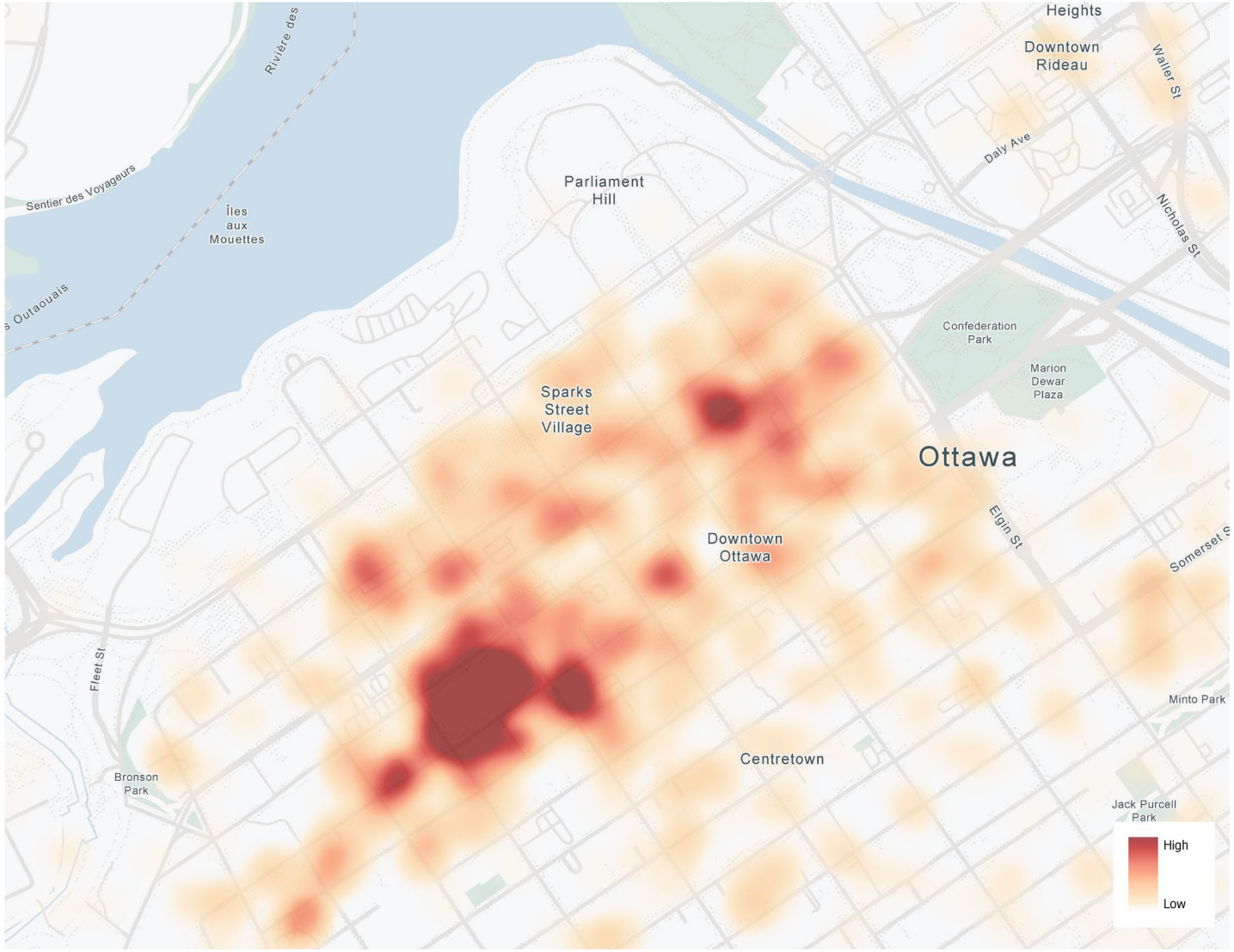
Place Bell



Place de Ville

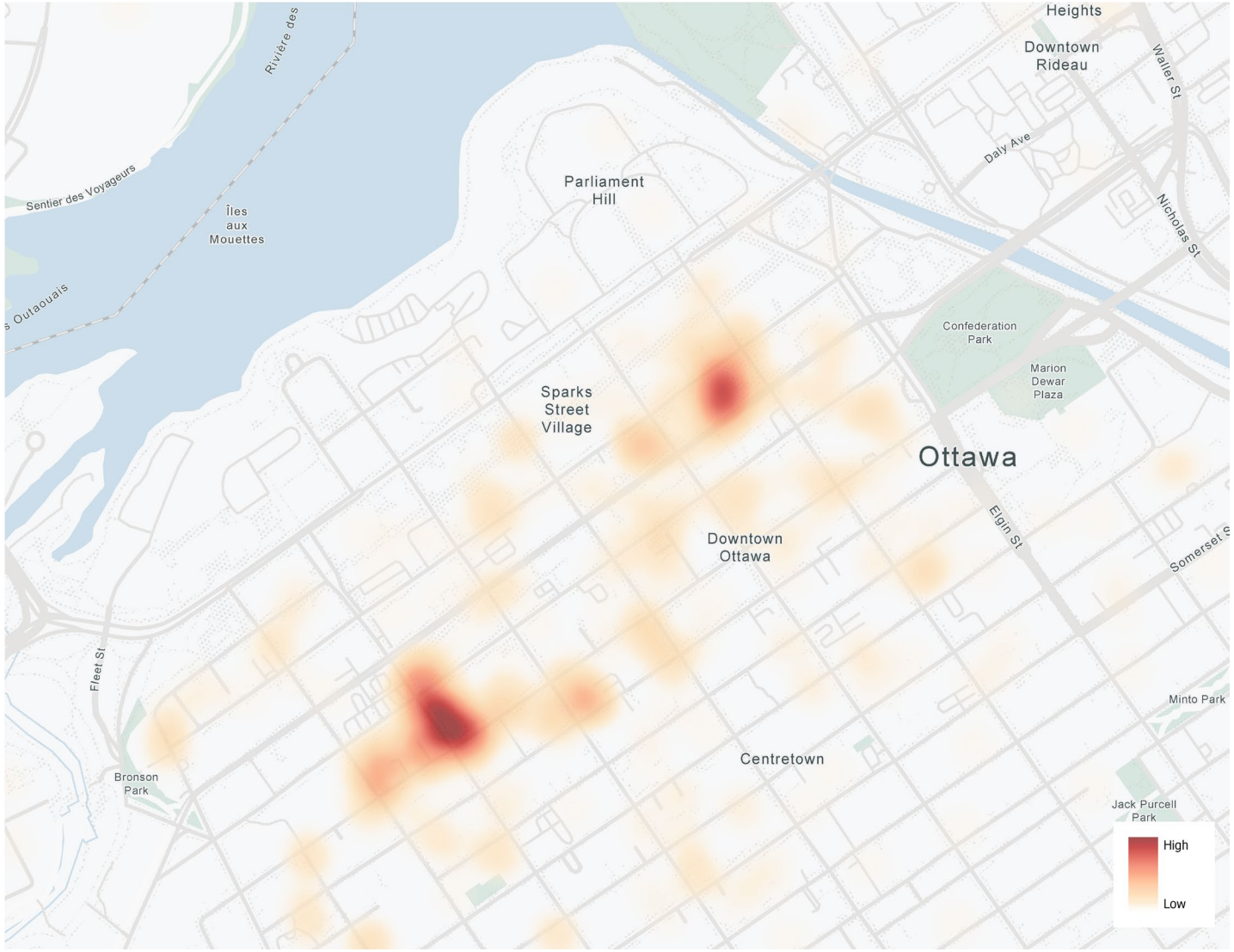
Source: CBRE Research, May 2024

APPENDIX B1 – CELLPHONE DENSITY MAP FOR DOWNTOWN OTTAWA – JANUARY 2020



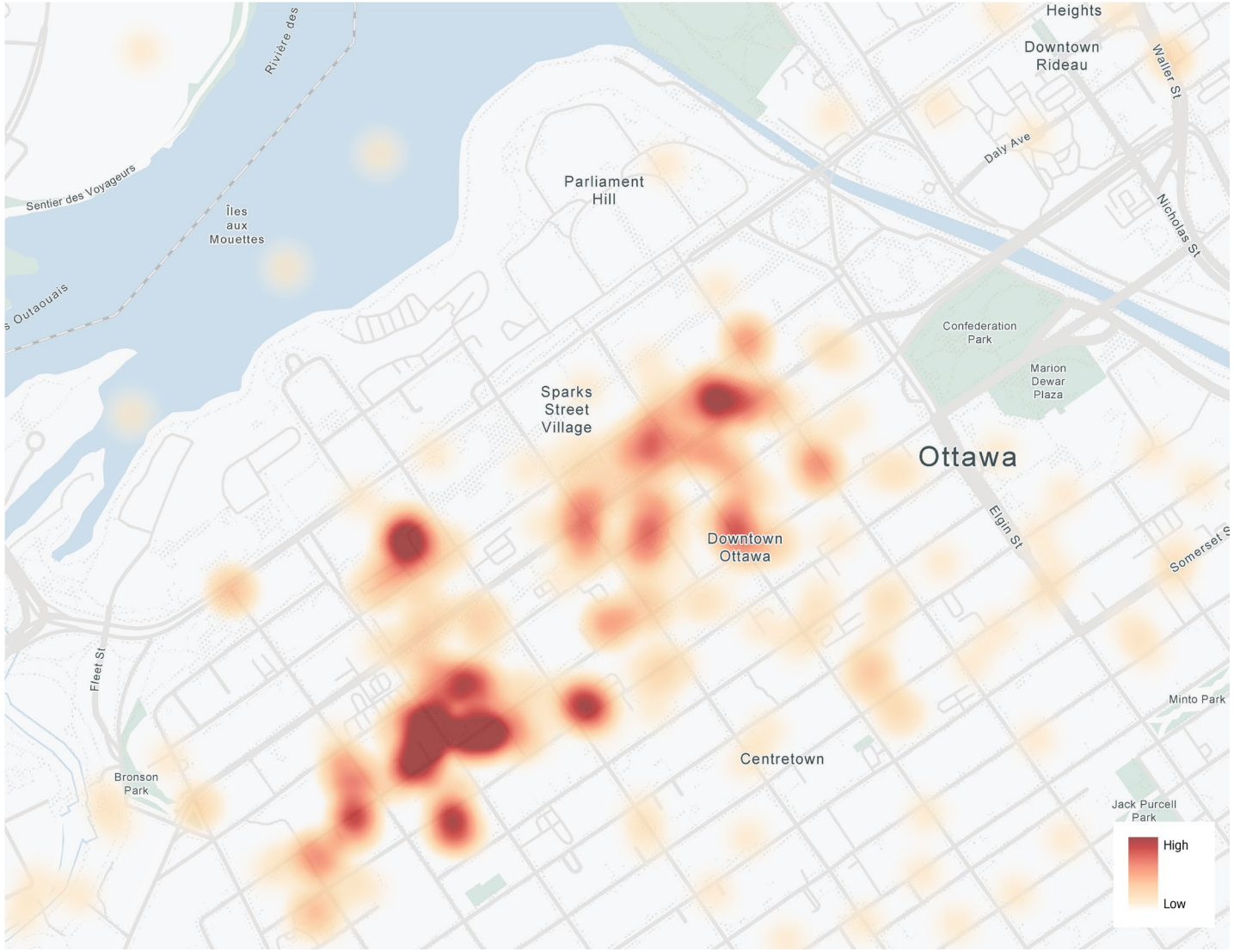
Source: CBRE GIS, May 2024

APPENDIX B2 – CELLPHONE DENSITY MAP FOR DOWNTOWN OTTAWA – JANUARY 2021



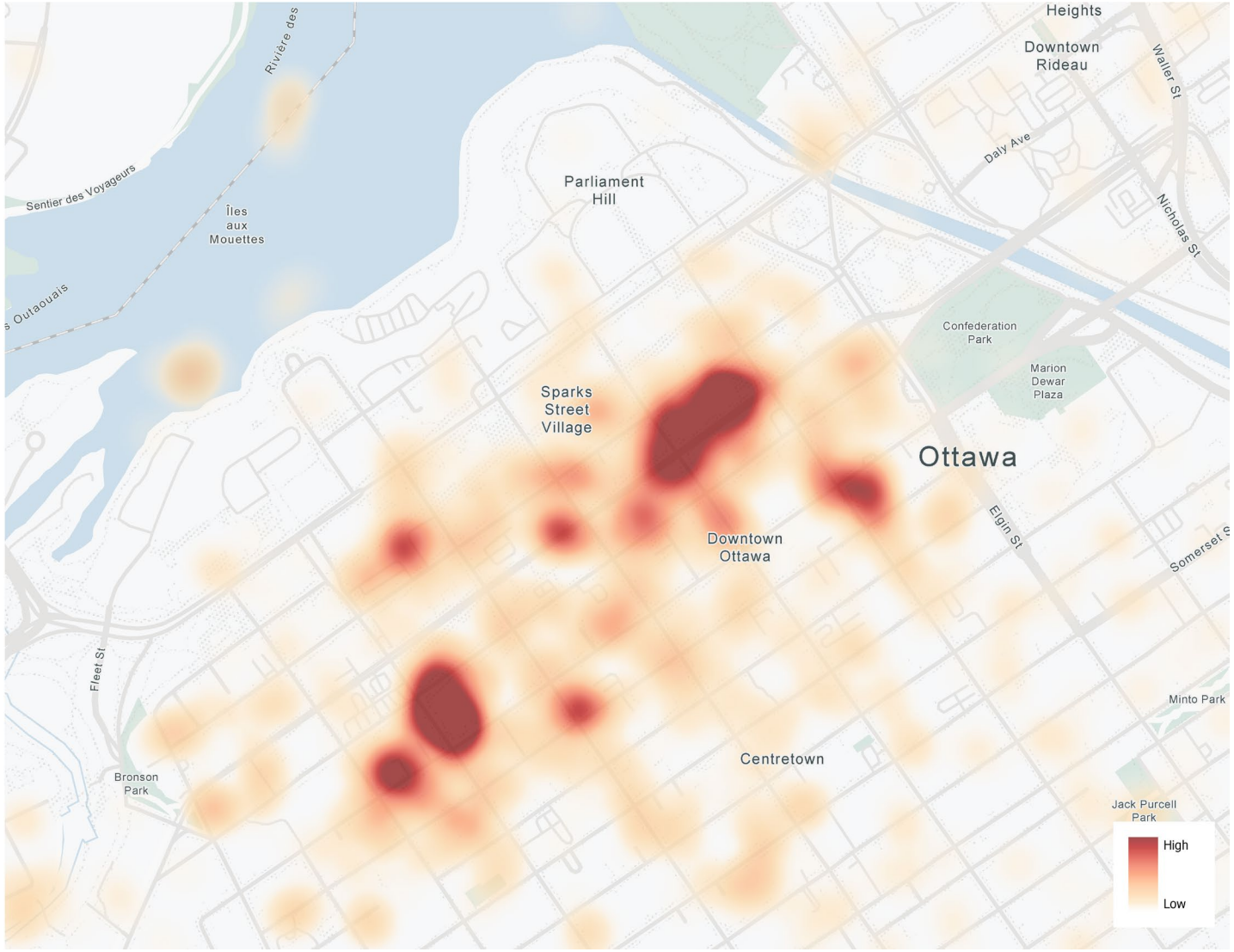
Source: CBRE GIS, May 2024

APPENDIX B3 – CELLPHONE DENSITY MAP FOR DOWNTOWN OTTAWA – JANUARY 2022



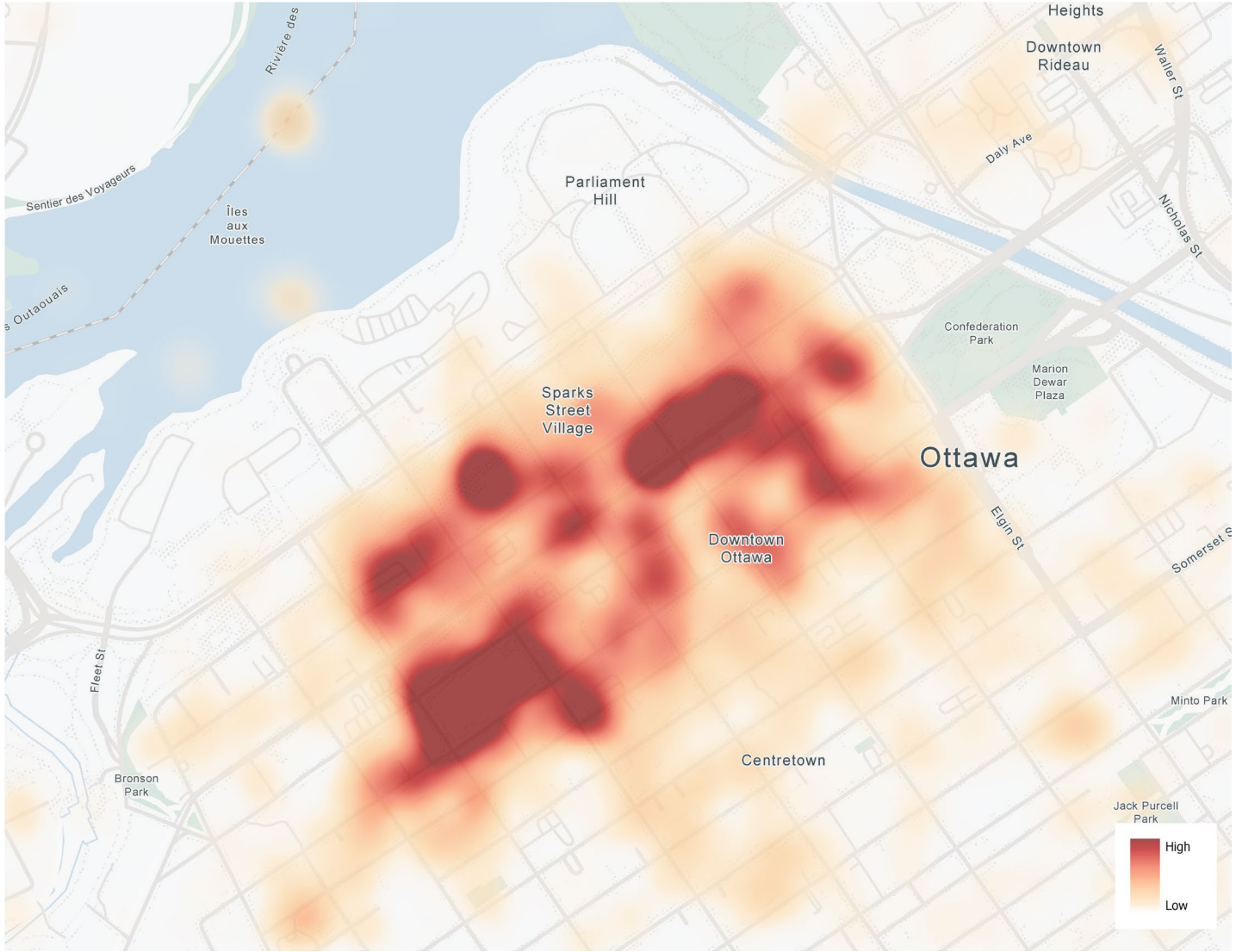
Source: CBRE GIS, May 2024

APPENDIX B4 – CELLPHONE DENSITY MAP FOR DOWNTOWN OTTAWA – JANUARY 2023



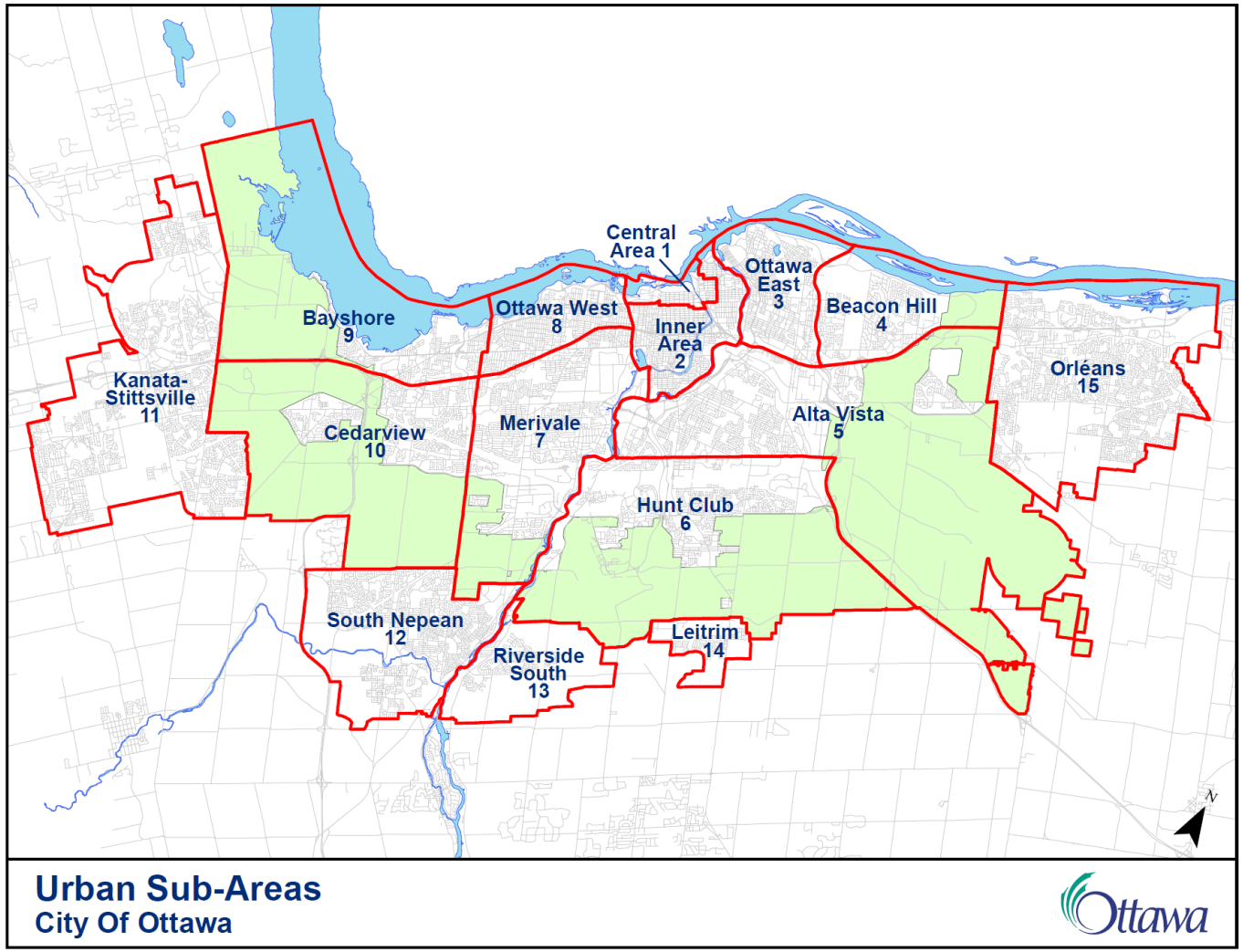
Source: CBRE GIS, May 2024

APPENDIX B5 – CELLPHONE DENSITY MAP FOR DOWNTOWN OTTAWA – JANUARY 2024



Source: CBRE GIS, May 2024

APPENDIX C – CITY OF OTTAWA URBAN SUB-AREA BOUNDARIES



Source: City of Ottawa, May 2024