

# Space Data Glossary

All space optimization metrics are a starting point for understanding space use at Carolina and we hope that they can serve as a catalyst for conversation about space optimization.

## General Terms

- **Percent On-site:** the percentage of time in an average month that an employee is working on campus. Percent off-site is reported by the employee's manager and collected through OHR in the [flexible work](#) form in ConnectCarolina. The percentage is then flipped to reflect percent on-site for reporting purposes. Any employee (including student employees) without a flexible work form default to 100% on-site.
- **Workstation:** a workstation is generally defined as an office, cubicle or desk. Workstations are tracked through the Space Planning and Occupancy Tracking System ([SPOTS](#)) and employees are assigned to workstations by each [department's space coordinator](#).
- **Major Campus Unit (MCU):** a general term, typically used for budgeting, that refers to the schools and central units. It is the highest level of a division.

## Report Categories

There are four main categories in the space optimization reports (1) **total workstations allocated** (2) **percent assigned** (3) **percent reported utilization** (4) **percent measured utilization**. We will define each category and use example metrics from the third floor of South Building to help contextualize the metrics.

1. **Total Workstations Allocated:** the total number of workstations allocated to an MCU in a specific building on a specific floor. The allocation of workstations is tracked through [SPOTS](#).  
*Example: There are 15 workstations allocated to Finance and Operations on the third floor of South Building, out of a total of 25 workstations on the floor.*
2. **Percent Assigned:** the percentage of workstations assigned to employees (staff, faculty, and students) and hoteling out of the total allocated to the MCU for that specific building and floor. It is important to note that if a position is vacant the space will become unassigned. The percent assigned data is a calculation based on the workstations assigned in [SPOTS](#) by each [department's space coordinator](#). The formula for this measure is (number of workstations assigned/total workstations allocated) \*100.  
*Example: There are 13 workstations are assigned. The calculation is: (13 assigned workstations /15 total workstations allocated)\*100 = 86%.*
3. **Percent Reported Utilization:** the calculation of the sum of the reported on-site percentage for all employees assigned to a workstation, divided by the total number of workstations allocated. The percent off-site data is pulled from ConnectCarolina and inverted to percent on-site. It's important to note that percent reported utilization is based off the number of workstations assigned, not number of employees. Therefore, a lower percent assigned will correspond to a lower percent reported utilization. In the formula for this measure, "n" equals the number of employees with an assigned workstation on that floor in that category of percent on-site.  
$$(((n*0)+(n*0.1)+(n*0.2)+(n*0.3)+(n*0.4)+(n*0.5)+(n*0.6)+(n*0.7)+(n*0.8)+(n*0.9)+(n*1)) /total workstations allocated)*100.$$
*Example: There is one employee working 40% on-site, two employees working 60% on-site, three employees working 80% on-site, and seven employees working 100% on-site. The calculation is: 
$$(((1*0.4)+(2*0.6)+(3*0.8)+(7*1))/15)*100 = (11/15)*100 = 73%$$*

4. **Percent Measured Utilization:** the average number of devices connected to wireless, associated with employees, on the floor over a nine-month or 12-month period, from 9 a.m. 4 p.m., Monday-Friday, compared to number of workstations. Academic units will receive both nine and 12-month reports, whereas administrative units will receive 12-month reports only. During the pilot reporting phase, we will use a 1.2 devices-per-person ratio (DPPR) to account for employees that connect laptops, tablets, and cell phones. More information on the data collection can be found in the [FAQ section](#). Devices that are always on (such as printers) will be subtracted from the total count. The DPPR will be refined over time as we learn more about space use. This metric will be collected floor by floor. If your MCU shares a floor with another MCU it will be included in your measured score. As we refine the process, we expect to be able to better segment the data. The formula for this measure is  $((\text{average total devices from 9 a.m.-4 p.m. over nine or 12 months}) - \text{always-on devices}) / 1.2 / \text{total workstations on the floor}$ .

**Example:** *There are 23 total devices on average on the network between 9 a.m. -4 p.m., 3 devices appear to be always on, and there are 25 workstations on the floor.  $((23 \text{ total devices} - 3 \text{ always on devices}) / 1.2 \text{ DPPR} / 25 \text{ workstations on the floor}) * 100 = 67\%$*

## Density Thresholds

Each category is scored using the density thresholds below. Optimal space use is defined as medium to high space use. The density scores will be considered as a factor when evaluating a MCU's request additional space. The total score is calculated by adding the scores for % assigned, % reported utilization, and % measured utilization.

Density Category	Range	Score	Total Score
Low	0-59%	1	3-4
Medium	60-79%	2	5-7
High	80-89%	3	8-10
Extremely High	90-100%	4	11-12

### Example Report

Building	Floor	Total Workstations Allocated	% Assigned	% Reported Utilization	% Measured Utilization	Total Score	
South	3	15	86% (High)	73% (Medium)	67% (Medium)	3+2+2=7	Medium

### Example Narrative

These space metrics are a starting point for beginning to understand space use. Facilities understands that there are many unique operational conditions that may contribute to space metrics looking low or high. In our example of the third floor of South, a narrative understanding could tell us that, many of the tenants of the third floor have meetings on the first floor or in other buildings. These employees do not work at their desks all day and that is why measured utilization is lower than reported utilization.

## Frequently Asked Questions

### **Q: How will this data be used?**

A: The data will be used as a directional starting point to understand space use. The data may lead to conversations about opportunities to better optimize space by collocating with other groups.

### **Q: Am I being tracked?**

A: No. All data will be aggregated, and no individual data will be accessible by the facilities team or leadership.

### **Q: Are wired connections included in measured utilization?**

A: Yes and no.

- Yes: If your laptop has a standard configuration and is plugged into a docking station, your laptop will still register on the wireless access points even though you are using the internet through your ethernet connection. A good way to test this is by unplugging your laptop from your docking station and seeing if you automatically connect to Wi-Fi or if you need to manually select Wi-Fi to switch over. If you automatically connect to Wi-Fi when you disconnect, your device will show up in the total count when it is connected to the docking station.
- No: If you are using a desktop computer, your computer will not show up on the total count. It is important to note that wireless access points pick up tablets, phones and any other devices you have connected to the wireless network.

### **Q: Will devices on the guest network show up in measured utilization?**

A: Yes, all UNC-managed wireless networks will show up in the measured utilization.

### **Q: Are students or visitors included in the count?**

A: In most cases, removing classroom wireless traffic will effectively remove students from the data, but there is no way to tell if a device is connected to a student or a visitor.

### **Q: Faculty are not required to report percent off-site. How do they show up in the data?**

A: All faculty are assigned 100% on-site.