C4. Physical Resources

The school has physical resources adequate to fulfill its stated mission and goals and to support instructional schools. Physical resources include faculty and staff office space, classroom space, student shared space and laboratories, as applicable.

1) *Briefly describe, with data as applicable, the following. (Note: square footage is not required unless specifically relevant to the school's narrative.)*

GWSPH occupies space in five buildings across the District of Columbia, Maryland and Virginia. The main GWSPH building is the Milken Institute School of Public Health Building at 950 New Hampshire Avenue NW in DC. Opened on May 15, 2014, this facility houses a variety of spaces for students, faculty and staff. The nine-story building features a number of healthy design features such as a central staircase to promote walking between floors, bike rooms, water bottle filling stations, standing desks and other furniture that meets the needs of employees and staff, and a caregiver suite. The building has a platinum rating under the Leadership in Energy and Environmental Design (LEED) Green Building Rating System of the US Green Building Council (USGBC). Sustainable features in the building include a rain-water collection system, terracotta panels, an HVAC system with chilled beam and mass air displacement technologies, an enhanced stormwater management system to reduce stormwater runoff by more than 25%, a green floor, low-flow plumbing fixtures, energy-saving lighting controls and numerous local, rapidly renewable and recycled content materials. In 2017, it won the COTE (Committee on the Environment) Top Ten award from the American Institute of Architects (see ERF > Criterion C > Criterion C4 > C4.1: Physical resources).

Research labs and the Department of Biostatistics and Bioinformatics are housed on the seventh floor of the Science and Engineering Hall on the Foggy Bottom campus in DC. Located at 800 22nd Street NW, the eight-story building features highly specialized core lab facilities, such as a three-story high bay and a nanofabrication suite. It also includes world-class teaching spaces designed for a more hands-on approach to learning, two levels of program space and ample student lounge and study space. Event spaces include the green wall space and Lehman Auditorium.

Several GWSPH offices and research groups are housed at 2175 K Street NW on the second and fifth floors. Located across Washington Circle from the GWSPH building, 2175 K Street NW is a LEED Gold Certified building that has a state-of-the-art solar system that screens the existing façade and provides passive solar energy. Non-GW offices and organizations, including the US delegation of the European Union, are also located at 2175 K Street NW.

GWSPH operates several research labs and clinics. These include, but are not limited to, the Biostatistics Center in Rockville, Maryland, and the Public Health Research Clinic, run by the Department of Epidemiology, at 2021 L Street NW in Washington, DC.

a) *Faculty office space*

The majority of GWSPH full-time faculty have dedicated office space in one of the GWSPH facilities. For part-time and fully remote faculty, shared faculty offices are provided, along with open cubicles and shared workspaces in most buildings. Each building has security personnel in the lobby, and GWorld cards must be shown and worn at all times. Public spaces are generally unlocked during normal business hours. After-hours access is available

for GWorld card holders, with appropriate permission. Spaces containing research or student confidential information are locked when not occupied.

b) Staff office space

Staff occupy space across all GWSPH buildings, with the majority in the Milken Institute SPH building at 950 New Hampshire Avenue NW and some staff and faculty on the seventh floor of the Science and Engineering Building and at 2175 K Street NW. Physical space allocation depends on a variety of factors such as remote work schedule, job title and job role. Staff occupy a mixture of cubicles and enclosed offices. Shared workspaces (e.g., offices, cubicles, conference rooms and open lounges) are also available.

c) Classrooms

Most classes are held in the GWSPH building's fourteen classrooms and two lecture halls. The ground floor of 950 New Hampshire Avenue NW includes a 227-seat auditorium as well as a separate convening center that allows the school to host a variety of conferences and academic events. The convening center is a multipurpose, flex space that can be used for large events or partitioned into up to four spaces for classes. All classrooms across campus are equipped with a "red button" that locks classroom doors in the event of emergency as well as a phone for calling GW security or DC police.

Classes that require specialized laboratory equipment or are offered by the Department of Biostatistics and Bioinformatics tend to be held in the Science and Engineering Hall. This building offers over 30 research laboratories, collaborative and computer classrooms, and auditoriums.

The few classes each term that cannot be housed at the GWSPH building or the Science and Engineering Hall due to schedule conflicts are offered elsewhere on GW's Foggy Bottom campus.

All academic spaces are outfitted with advanced audiovisual equipment that allows for virtual attendance/participation and lecture recording through GW Lecture Capture. This technology was updated during the COVID-19 pandemic and is periodically refreshed. For example, the convening center underwent audiovisual renovations to improve remote participation in summer 2023. Many spaces feature movable furniture to create a flexible classroom where professors and students can customize the environment that best facilitates learning.

d) Shared student space

Shared spaces for student meetings, studying and collaborating are available in the GWSPH building on all nine floors. During the development of the building, GWSPH focused considerable investment in the availability, and later the decorating, of common areas and study spaces for students. Activity and breakout areas accommodate both undergraduate and graduate students. Congregating spaces contain a mix of comfortable chairs, tables, booths, bars and sofas for lounging, working and eating. Three of the upper floors have kitchens available to students with microwaves, sinks, refrigerators and vending machines dispensing healthy snacks. Electrical outlets are readily available as well as free Wi-Fi. Apple desktops and printers are available for students free of charge on select floors. Over 400 lockers are available on a first-come, first-served basis, and students may bring a lock to protect their belongings. On the seventh floor, an interfaith meditation space is available for students who would like to pray or meditate in seclusion. Showers, a gender-neutral

bathroom, caregiver suite and locker rooms are available in the basement, near the exercise rooms. During final exams week, the convening center on the ground floor is converted into a study hall with fidgets, snacks, water and stress-relieving entertainment.

e) *Laboratories, if applicable to public health degree school offerings*

The two below-ground floors of the main GWSPH building house six academic laboratories for the Department of Exercise and Nutrition Sciences. Additionally, the department offers fee-based research and public testing services for GW and the greater Washington, DC, metro region through the Metabolism and Exercise Testing (MET) Laboratory Service Core. All laboratory facilities offer state-of-the-art exercise and clinical equipment for metabolic, body composition and human performance testing and academic training. The MET Lab Service Core, located in the basement of 950 New Hampshire Street NW serves to cultivate health-related research in physical activity, exercise physiology, nutrition and human performance by providing a readily accessible and professional space for principal investigators to engage in rigorous and reliable data collection.

GWSPH operates a public health research lab on the seventh floor of Science and Engineering Hall on the Foggy Bottom campus. This Biosafety Level 3 laboratory is one of the few facilities in the United States that can safely work with airborne and potentially lethal infectious agents or toxins. During the COVID-19 pandemic, the Antibiotic Resistance Action Center (ARAC), which is housed in this lab, launched a study to surveillance test GW health care workers to see if they had been infected or developed antibodies. They developed a COVID-19 diagnostic test, which was granted emergency use authorization by the US Food and Drug Administration in August 2020. The GWSPH public health research lab was the main COVID-19 test processing site for the GW community. The lab also houses the Genomics Core, which is a full-service next-generation sequencing (NGS) core lab, capable of providing project planning, nucleic acid extraction, library preparation, quality control, Illumina and Oxford Nanopore Technologies sequencing, as well as other lab services upon request. Under the direction of Dr. Keith Crandall, the Genomics Core also offers bioinformatics consultations and analysis services.

2) *Provide narrative and/or data that support the assertion that the physical space is sufficient or not sufficient.*

There is sufficient physical space for all GWSPH instructional, scholarship and service activities. The space at 950 New Hampshire Avenue is sufficient for the majority of GWSPH functions, and whatever functions cannot be held within the GWSPH building can be accommodated by one of the other spaces occupied by GWSPH or in other buildings on GW's Foggy Bottom campus. For example, less than 5% of our residential classes in Fall 2023 had to be held in buildings other than the GWSPH building due to limited classroom space. As expected, office space and classrooms are always in demand, but GWSPH has been able to successfully navigate the growing need through flexible work schedules and expanding online course options.

3) *If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.*

Strengths

- GWSPH has a multitude of student spaces available in the GWSPH building, and students take advantage of using these spaces for studying, eating meals and connecting with other students.
- GWSPH is invested in ensuring our employees and students have access to innovative and quality technology. The school performs technology upgrades in student classrooms and convening classes every 2 to 3 years.
- GWSPH manages the main building at 950 New Hampshire Avenue NW, which allows us to rent out spaces for additional funds, though it does require a dedicated budget for maintenance, technology improvements, facilities and security. GWSPH reconfigured the rental spaces and reallocation of shared spaces to meet in-person needs.

Challenges

- The District of Columbia has strict laws (i.e., "the cap") regarding space and population maximums, which have been prohibitive in increasing the number of admitted residential students and hosting certain events.
- The cost of real estate in the District and overall campus space planning and zoning in Foggy Bottom makes it prohibitive to expand to meet growing needs. Additional barriers to expansion include creating ADA-friendly facilities in older buildings and the high cost of construction.
- It is difficult to navigate the limitations and complexity of using leased spaces and university-owned spaces and managing occupancy levels across all.

Future Plans

- As GWSPH continues to grow, additional space will likely be needed. Some building features like gender-neutral spaces and bathrooms are high on the priority list. Construction is planned regarding the modification of the bathrooms on the second and sixth floors of the GWSPH building to become all-persons' restrooms. We are also looking for additional laboratory space, either on the Foggy Bottom campus or potentially at partner organizations like Walter Reed National Military Medical Center in Maryland.