Campus Wide Wi-Fi – Pilot Test

High Density Campus Wide new Wi-Fi system is now available in NSU open spaces. The new system is capable of handling thousands of connections simultaneously. This is expected to ensure maximum signal **strength** and readily available **connections** in those designated open spaces only. At this point, the last requirement for a world class Wi-Fi experience is the necessary internet **bandwidth** which is still unknown. We are looking for your active participation to find out the optimum bandwidth needed to run the campus with ease.

1. Finding out the Optimum Campus Bandwidth
   ➢ Bandwidth will be maintained open (maximum) by the ISP vendor during the Pilot test.
   ➢ All students, faculty members, and officers are expected to connect to Wi-Fi and browse.
   ➢ NSU technical team will monitor the bandwidth usage pattern to identify the maximum consumption rate throughout the day before settling on a number.
   ➢ Expected to record 15,000 simultaneous device connections or more at the pick (multiple devices smart phones, laptop, etc. per user). Anything less than 10,000 connections could be inadequate to make a decision impacting all.
   ➢ High connection volume will also validate many subsystems of the new Wi-Fi implementation.

2. NSU Student, Faculty Member, and Officers
   ➢ Use **NSU-WiFi-6** SSID to connect to the new Wi-Fi system. It is available only in the open spaces.
   ➢ Authentication requirement is deliberately turned off. No password/pin is needed to connect.
   ➢ A user should observe maximum signal strength and a rapid connection establishment
   ➢ A user is encouraged to connect all available devices he/she has at the time in the campus.
   ➢ The user is now ready to browse, talk, download, etc. without any interruption (expected).
   ➢ NSU technical team will be in the ground (open spaces) to take notes and to fix issues.
   ➢ Send email to helpdesk@northsouth.edu if there is any issue.

3. Pilot Testing Dates
   ➢ From April 16, 2022 to April 21,2022 inclusive
   ➢ From April 22, 2022, it will revert back to the existing minimum bandwidth status.
   ➢ Pilot testing is expected to resume when Summer 2022 class begins
   ➢ Many months of effort is needed before settling on a bandwidth acceptable to all.

4. New Wi-Fi Covered Area
   1. Study Hall
   2. Cafeteria 1 & 2 and its vicinity
   3. Boys Lounge and Girls Lounge
   4. Faculty Lounge and Admin Building Front Hallways
   5. Plaza Area and its Vicinity
   6. Upper Deck and Gallery Area
   7. Auditorium and Audi 801
   8. All classroom Corridors
   9. Exhibition Hall
   10. Gym area and its vicinity

5. Area NOT Covered

1. All back office areas in all buildings
2. **All** faculty alleyways in all buildings
3. **Conference** Rooms in all buildings
4. **Office** rooms including faculty office rooms
5. **Classrooms** and Labs.

These areas will continue to use **old** Wi-Fi and are expected to come under new Wi-Fi coverage in phase 2. It's possible that Wi-Fi 6 signals may still reach those uncovered areas but it was not intentional and not supported.

6. Few Observation

➤ This is Wi-Fi 6 supporting IEEE 802.11 ax and it is comparable to 5G cellular technology.
➤ NSU is the first to introduce Wi-Fi 6 in Bangladesh considering the scale and investment.
➤ User cell phone model and capacity will dictate the ultimate efficiency of the browsing.
➤ Relatively new laptop and smartphones supporting 5 GHz should experience topnotch service.
➤ Old laptops and relatively obscure smartphones may still work but the efficiency may suffer.
➤ <u>Until the optimum bandwidth is found and institutionalized, experience will be still very poor</u>.
➤ The new Wi-Fi system could take months before it gets stabilized.