# COMCAST BUSINESS HELPS THE PITTSBURGH MARATHON RUN SEAMLESS EVENT, FROM THE STARTING LINE THROUGH TO THE LAST MILE

## COMCAST **BUSINESS**

ANNUAL FOOT RACE ENSURES SAFETY, SECURITY AND SUCCESS WITH ETHERNET DEDICATED INTERNET FROM COMCAST BUSINESS

### Yearly Marathon Brings Athletes and Fans to Pittsburgh, Pennsylvania

The Pittsburgh Marathon is an annual race held on the first Sunday in May in Pittsburgh, Pennsylvania. Originally founded in 1985, the marathon was revived in 2009 after a several year hiatus due to city finances. Today, the marathon serves as the finale to a weekend of activities that includes a kid's race, a 5K race, a pet walk, a toddler trot, a marathon, half marathon and a marathon relay. All told, the festivities draw more than 40,000 participants to the downtown Pittsburgh area throughout the weekend.

## Extensive Bandwidth Required to Fuel Marathon Safety and Security Services

Executing a successful marathon requires immense preparation, coordination and connectivity. Organizers have to arrange for closed roadways, an influx of spectators in a small area and the safety of both viewers and runners. The Pittsburgh Marathon has a staff of close to 100 volunteers and employees that work to put on the weekend-long event. The entire group stays connected via a pop-up operations headquarters that houses event staff, the City of Pittsburgh's emergency management teams and Allegheny County's emergency management 911 center. Co-housing of the three organizations in one operations space allows for tighter, more aligned management of the entire event, as well as quick response time in the case of an emergency.

Both marathon organizers and local response teams depend on a robust, reliable Internet connection to power WiFi-enabled services during the festivities. For example, marathon organizers deploy 30 GPS tracking devices on vehicles and bike teams throughout the course to monitor events and ensure that aid is always close by. The GPS devices update every minute and are pulling in data constantly, which requires significant bandwidth. Organizers also set access cameras along the race course, and if any issues arise they can zoom into the area in question and view it directly from the operations base - an important safety precaution, but another significant drain on event bandwidth. Additionally, the City's emergency response team and the county's 911 center must be able to field any 911 calls associated with the marathon, all of which come through the operations center.

#### **SITUATION**

- · Annual marathon in Pittsburgh, Pennsylvania
- Weekend-long event attracts 40,000+ participants

#### **CHALLENGE**

- Marathon has extensive safety and tracking services in place, which carry high bandwidth demands
- Non-traditional connectivity contract due to short term needs

#### **SOLUTION**

· Comcast Business Ethernet Dedicated Internet (EDI)

#### **RESULTS**

- Five EDI lines ranging from 80 Mpbs-500 Mbps
- Marathon's tracking and security systems functioned seamlessly
- City and county services were connected 24/7 and able to respond to any issues quickly

The operations center also houses an accuweather system that provides real-time tracking of storms or related weather that could impact the race. The system updates every few seconds and also depends on a robust Internet connection to deliver timely, accurate forecasts. The marathon's runner tracking system is yet another toll on bandwidth; all participants wear tracking numbers that relay their whereabouts as they run over connected mats throughout the course. These tracking devices allow organizers to know where runners are, how many runners are out on the course and how many have finished. Finally, the medical tents along the marathon route also require a strong Internet connection – aid stations along the course and at the finish line check every runner coming in for medical assistance using WiFi fueled tablets.

"The Pittsburgh Marathon is an extraordinary event that brings together tens of thousands of athletes and fans, not only from the Pittsburgh area, but from across the country and overseas," said Dee Stathis, Chief Operating Officer and Director of Operations and Marketing, The Pittsburgh Marathon. "Ensuring the safety of runners and spectators throughout the event is paramount, and a robust Internet connection is critical to make that possible. This is the fifth year we've managed the marathon from a set operations center, which serves as a hub for marathon organizers and emergency response teams to monitor events throughout the weekend and respond quickly when needed. The bandwidth demands of the operations center increase every year, so we need high-performance Internet service to keep us connected."

#### Comcast Business Delivers Robust Ethernet Connection to Facilitate Event Monitoring and Emergency Response

The requirements of the race providers differ from a typical contract, as service needs are very short term, but bandwidth demands are high. These specifications can make it difficult to find a provider who is willing and able to support the marathon from a connectivity standpoint. In 2017, marathon organizers turned to Comcast Business to power the annual race. Comcast Business was a preferred option from both a quality and services standpoint, and following its recent fiber build-out in downtown Pittsburgh, the provider had the resources required to meet the event's high-bandwidth needs.

Comcast Business installed five Ethernet Dedicated Internet (EDI) lines across two locations. The medical tent at the finish line had a 200 megabit per second (Mbps) connection so organizers could track runners that checked in along the course or at the finish line. The marathon's operations headquarters had four EDIs in place, ranging from 80 Mbps to 500 Mbps. Together, the five EDI lines delivered the high-performance connectivity and system redundancy required to meet the marathon's immense bandwidth needs and the high service standards required to help keep runners safe and the event functioning seamlessly.

The GPS devices distributed throughout the course operated smoothly thanks to a strong EDI-powered WiFi connection and were able to transmit runner location information effectively throughout the event. Similarly, the security cameras throughout the course functioned seamlessly, and staff in the operations headquarters were able to view footage and stay abreast of events happening out on the course. Other important systems – like the accuweather station, race bib tracking and medical tent monitoring – also benefited from the powerful network and functioned seamlessly throughout the event.

"Comcast Business provided the dependable, high performance Internet services necessary for event organizers and city and county emergency services to work together in one room to oversee the race, which facilitated invaluable coordination and helped us ensure the safety and security of all involved in the weekend's festivities."

- Dee Stathis Chief Operating Officer and Director of Operations and Marketing The Pittsburgh Marathon

Perhaps most importantly, the City of Pittsburgh's emergency management team and Allegheny County's emergency management 911 center both had the bandwidth required to be online 24/7 and respond quickly to any event related incident. Having adequate connectivity for these emergency response systems is a top priority for event organizers, and with the robust bandwidth provided by Comcast Business, their connectivity was never in question.

"Technology is the core of what fuels the Pittsburgh Marathon, and in order for that technology to work, a reliable, robust connection is critical," added Stathis. "Comcast Business provided the dependable, high performance Internet services necessary for event organizers and city and county emergency services to work together in one room to oversee the race, which facilitated invaluable coordination and helped us ensure the safety and security of all involved in the weekend's festivities. Comcast Business' superior service levels were critical to support a successful and safe event that made the City of Pittsburgh proud."