



Digital Transformation in Education

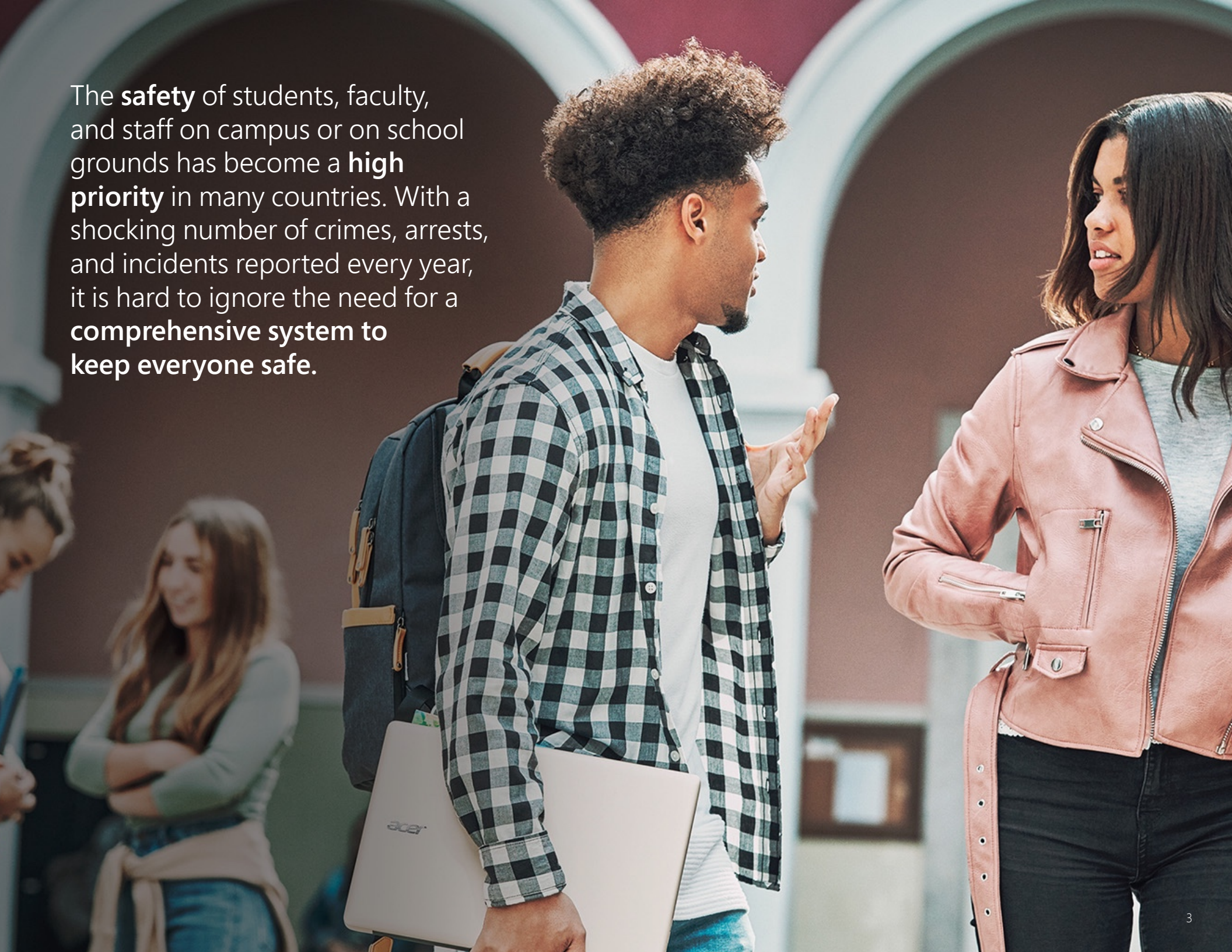
# Physical Safety and Security

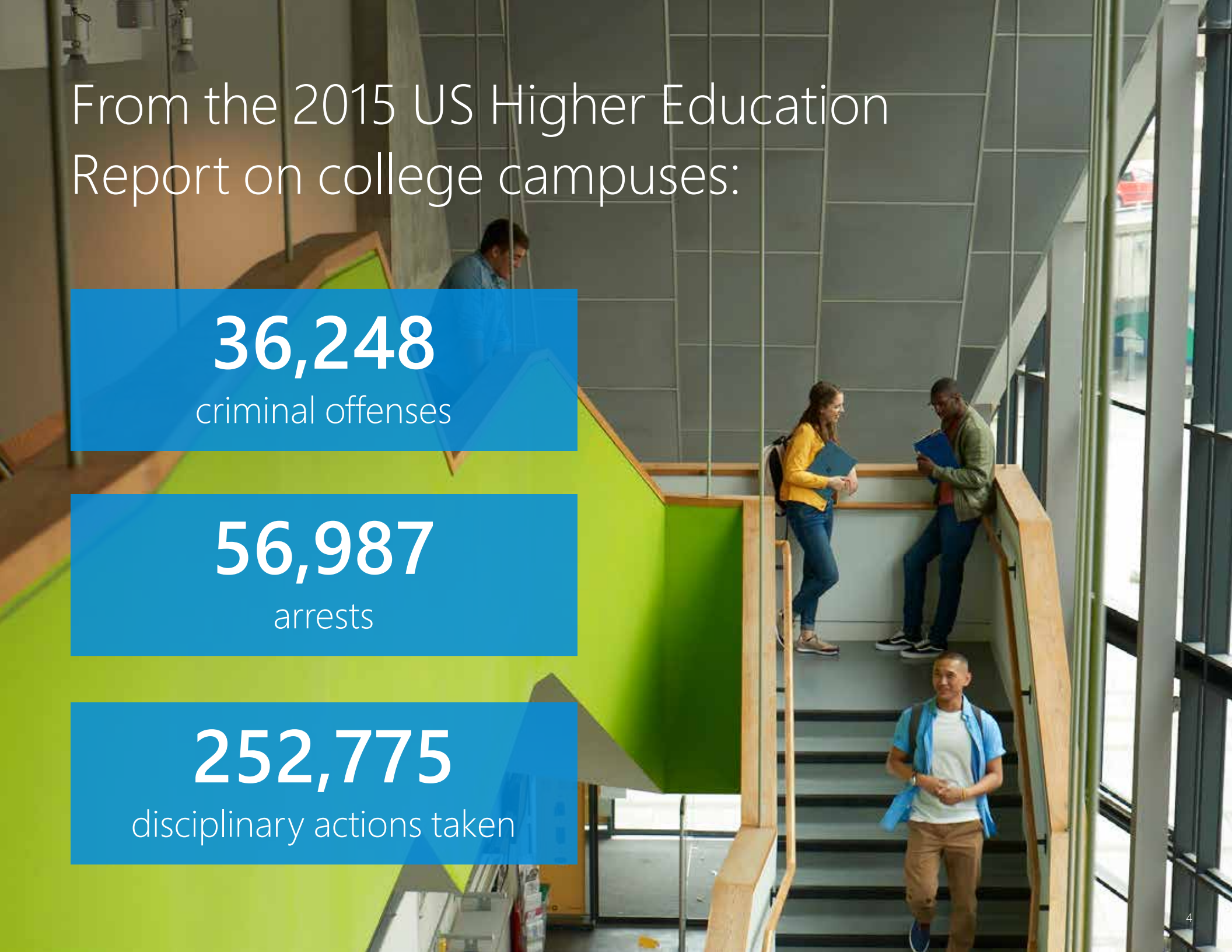


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The **safety** of students, faculty, and staff on campus or on school grounds has become a **high priority** in many countries. With a shocking number of crimes, arrests, and incidents reported every year, it is hard to ignore the need for a **comprehensive system to keep everyone safe.**



A photograph of a modern university building interior. The scene features a wide staircase with wooden railings and a bright green wall. Several students are visible: one man is looking at a screen on the upper level, a woman and a man are talking on the middle level, and another man is walking down the stairs in the foreground. Large windows on the right side offer a view of the outdoors.

From the 2015 US Higher Education Report on college campuses:

**36,248**  
criminal offenses

**56,987**  
arrests

**252,775**  
disciplinary actions taken

# Victims are found at all levels of the educational system.

According to the US National Center for Educational Statistics, K-12 reported the following:

**22%**

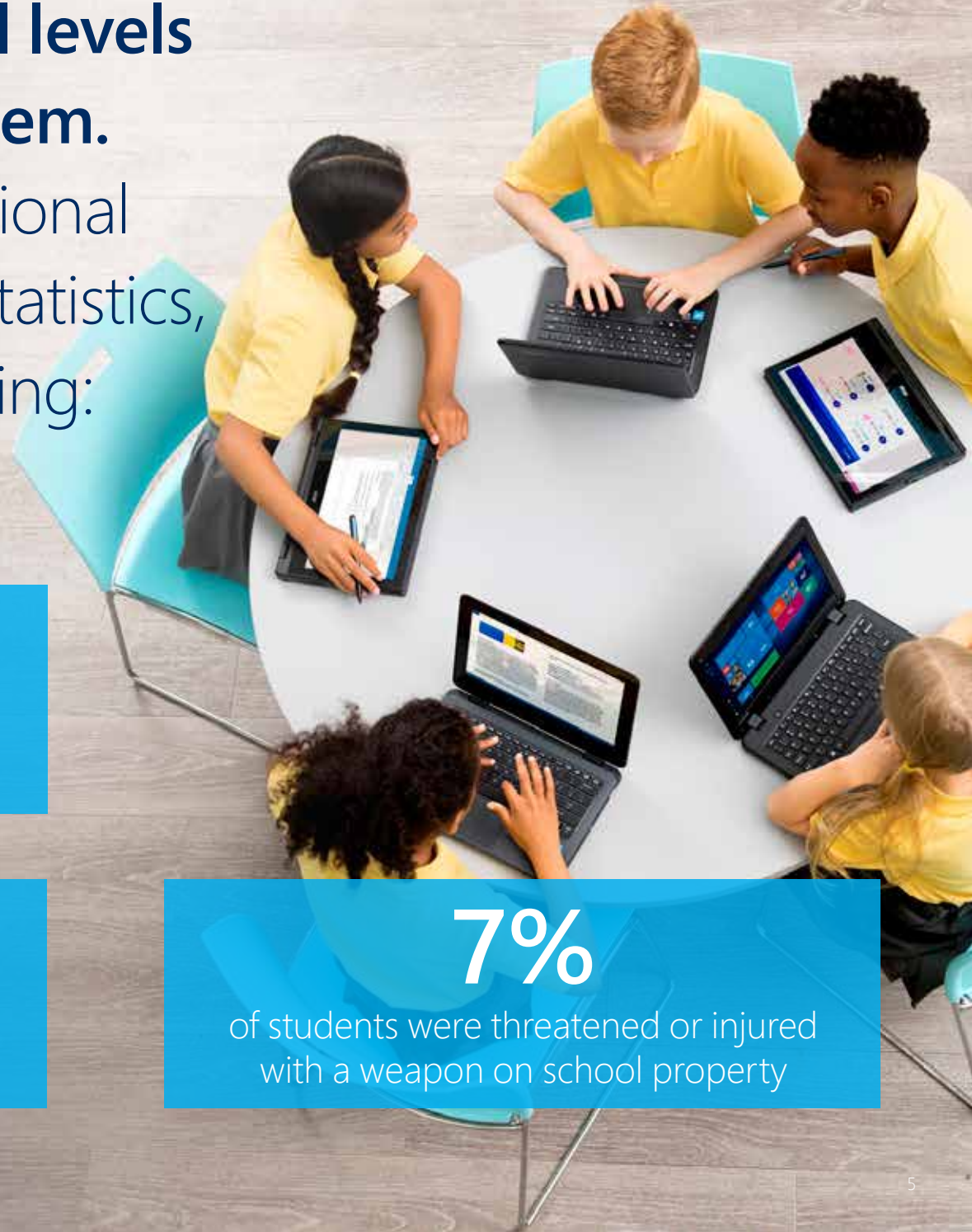
of students ages 12-18 reported being bullied at school

**1,420,900**

nonfatal victimizations at school in 2013

**7%**

of students were threatened or injured with a weapon on school property



# The effects

Our schools should be a place to teach and learn, free from crime and violence. But unfortunately, when incidents occur, it can have a lasting and sometimes permanent impact far beyond the shock of the initial moment. Not only are the individuals directly involved forever changed, but the effects can be felt by the bystanders, the teachers, and the school itself long after everyone else has moved on.

The lasting effects of victimization vary. They can range from feelings of loneliness and depression, to an increase in truancy and a decrease in academic performance. Some students become violent or drop out of school altogether. Teachers can be deeply impacted by an incident, even if it didn't directly happen to them. They can become professionally disenchanted with their jobs and some may leave the profession altogether.

Like you, safety is one of Microsoft's main concerns when it comes to education institutions. A well executed plan that helps mitigate violence and the affects of violence is the first and best place to focus.

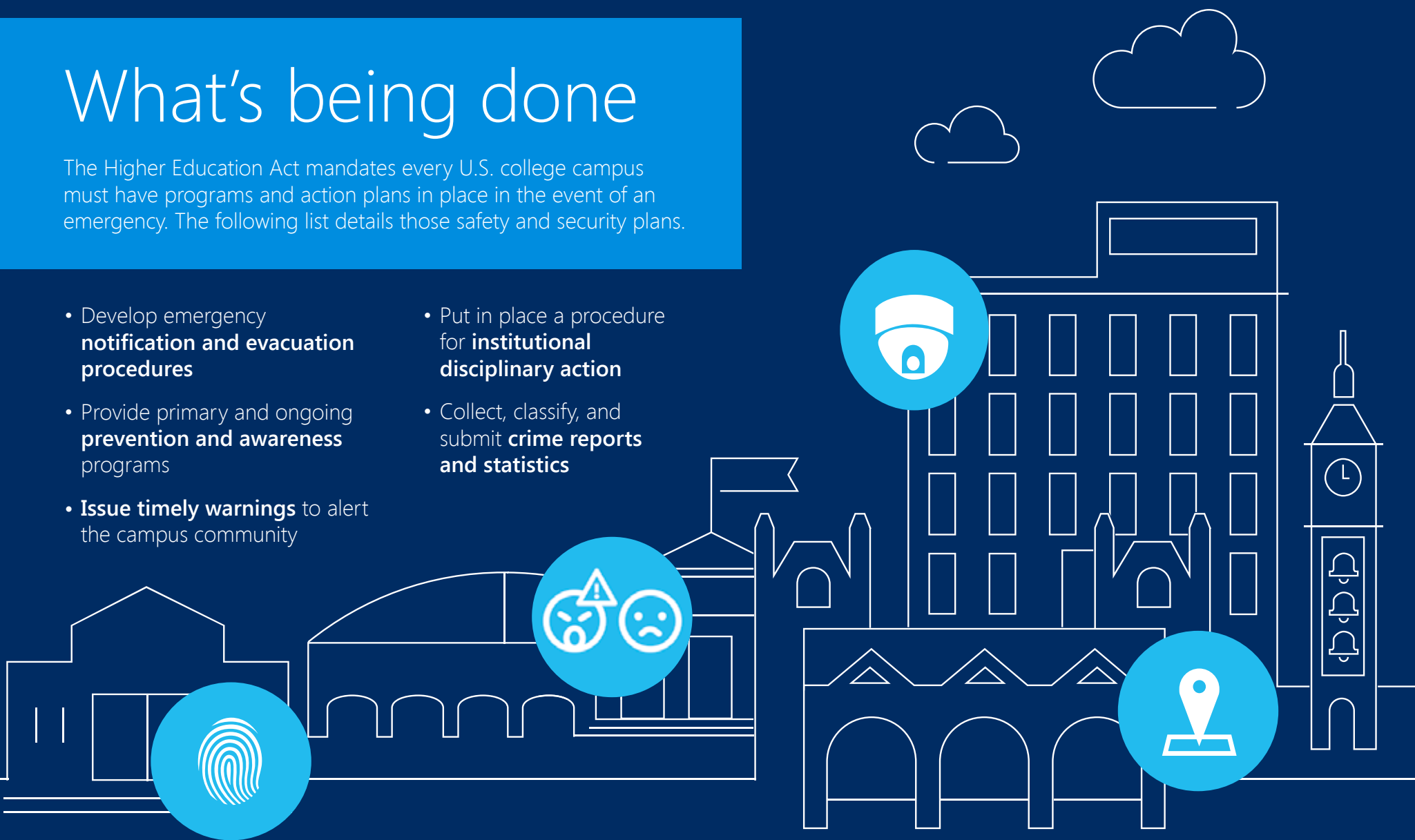
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# What's being done

The Higher Education Act mandates every U.S. college campus must have programs and action plans in place in the event of an emergency. The following list details those safety and security plans.

- Develop emergency **notification and evacuation procedures**
- Provide primary and ongoing **prevention and awareness** programs
- **Issue timely warnings** to alert the campus community
- Put in place a procedure for **institutional disciplinary action**
- Collect, classify, and submit **crime reports and statistics**



These minimum requirements do not fully protect a school, campus, or university from an incident occurring, but coupled with the right technology you can detect threats sooner, decrease response times, and prevent a situation completely.

# Microsoft Partner Solutions support campus safety





# Smart cameras








# Smart cameras

Smart cameras do more than just watch people or places. Using real-time video analytics, it is now possible to pinpoint specific faces, key in on unwanted or suspicious behavior, and pay closer attention to relevant areas at relevant times, while ignoring the immaterial data.

## Smart cameras can:

-  Mix local intelligence with centralized data storage and analysis to deduce usage patterns.
-  Use facial, emotion, gender, age, individual, and object recognition to track attendance.
-  Automatically recognize concerning behavior like fighting or a person lying on the ground using machine intelligence.

A close-up photograph of a person's hand holding a blue access card. The hand is positioned to insert the card into a door lock mechanism. The background is blurred, showing an indoor setting with a door and some office equipment. A blue rectangular overlay is present in the lower-left quadrant of the image, containing the text "Access control".

# Access control



# Access control

It has become more important than ever to be able to control and protect specific locations on campus. By integrating advanced security technologies with smart networking capabilities, you can now limit and monitor who has access to what, when. This ensures the right people have access to the right spaces at the right times.

## Access control can:



Control access to buildings, dorms, labs, offices, and more without changing lock cores.



Seamlessly integrate identity and credentials without major upgrades.



Institute visitor management systems to help monitor and protect everyone on campus.

# Emergencies









# Emergencies

The ability to respond quickly and efficiently to an incident is much greater when security personnel receive all the information they need to act. When seconds matter, this system was built to offer quick response times and easy-to-deploy emergency and evacuation notifications.

## Emergency systems can:

-  Create alerts for a number of emergency and non-emergency situations that can be delivered rapidly to students, staff, faculty, and parents.
-  Use geolocation to enable community members to check in, confirm they are safe, and pinpoint the exact location of a problem.
-  Summon help just by tapping with GPS-connected panic buttons apps.
-  Find the closest, most qualified person to respond to an incident with quick dispatch.





# Anti-bullying



# Anti-bullying

Bullying takes many forms. Non-physical forms of bullying are some of the toughest to identify. Bullying, no matter the form, has the power to leave a victim feeling powerless. With the right programs, students, parents, teachers, and staff can address or even prevent bullying in their school.

## Anti-bullying programs can:

-  Monitoring student emails and other forms of communication by filtering for keywords related to bullying.
-  Implement Digital Citizenship in Action toolkits in the classroom and make yourself more aware by reading the online bullying study commissioned by Microsoft.



# Real-world success





# University of Puerto Rico Humacao

## Keeping students safe, meeting federal mandates

Economic pressure in Puerto Rico has contributed to high local crime rates in Humacao. During the 2013–2014 school year, University of Puerto Rico Humacao saw a 64 percent increase in campus crime.

### **Situation:**

With a staff of 600 and student body numbering 3,500, UPRH urgently needed to overhaul its security policies to find a better way for people to signal for help on their sprawling 62-acre campus and to improve their compliance with new security requirements under the federal Jeanne Clery Act.

### **Solution:**

To help meet these goals, the school deployed the UPRH Alert mobile app created by INVID. Students and staff can press a button on their personal devices and send out an alert that is routed through a web server hosted on the Microsoft Azure cloud platform. The alert uses GPS to pinpoint the user's location, enabling the school's security team to dispatch an officer quickly to investigate.

# GEMMA

## Atos global emergency management for rapid and effective response

The job of a first responder is to protect citizens and keep society safe. Emergency services that aid these first responders receive many calls each day, and lives depend on the speed and effectiveness of their response.

### **Situation:**

Summa 112, the organization responsible for coordinating medical emergency services in the Madrid region, handle 1.2m calls each year. Around 60,000 fall into the emergency category, and the SUMMA staff knows that lives may depend on how quickly and effectively they respond to these calls.

### **Solution:**

In Madrid, Spain, the Microsoft partner Atos developed a system that helped reduce response times and enable first responders to better prioritize life-threatening emergencies.





# New York Police Department

## Crime prevention, counterterrorism technology solutions

In the post 9/11 era, no one understands the need for constant vigilance like the fine men and women of the New York Police Department. Looking to stay ahead of shifting crime patterns and to thwart another attack on the city before it happens, the NYPD turned to Microsoft for help.

### **Situation:**

New York was looking for a new way to continue to drive down crime while still being able to devote a considerable amount of resources to counterterrorism efforts. The system had to be able to cross reference dozens of information sources saving the department time and resources.

### **Solution:**

The NYPD teamed with Microsoft to develop the Domain Awareness System (DAS), a sophisticated law enforcement technology solution that aggregates and analyzes public safety data in real time, providing NYPD investigators and analysts with a comprehensive view of potential threats and criminal activity.

# Get started

A safer, more secure, and responsive school and campus is just three steps away.

1

Identify your priorities for a safe and connected school

2

Choose solutions that best fit your needs

3

Talk with your Microsoft rep who can connect you with the right partners

# Sources and References

U.S. Department of Education, Office of Postsecondary Education, Campus Safety and Security (CSS) survey. The crime data reported by the institutions have not been subjected to independent verification by the U.S. Department of Education. Therefore, the Department cannot vouch for the accuracy of the data reported here.

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