



SAFE CITIES

WHERE SMART BECOMES SAFE

UNISYS | Securing Your
Tomorrow®

Introduction

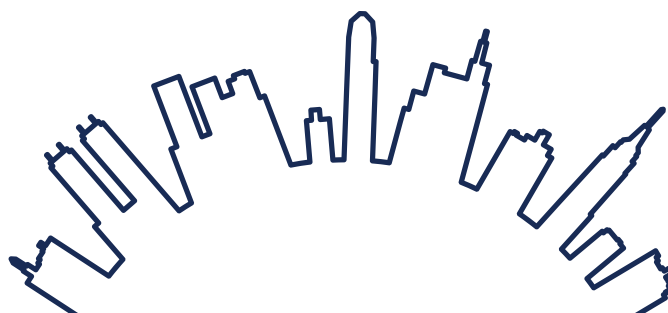
Cities around the world are embracing the concept of Smart Cities and are using technology, interconnectivity, and the Internet of Things to improve their citizens' lives. Public Safety is a crucial element for improving the quality of life in a Smart City. Smart Cities become Safe Cities when they use technology as means of investigating and preventing crime, interacting with citizens, and ensuring the safety of the citizens that governments are pledged to protect.¹

Today's rapidly changing urban environments are not as safe as they could be, with threats ranging from terrorist attacks to natural disasters to violent crime. While many Smart Cities initiatives focus on using sensors for monitoring and improving service delivery, we believe that those cities need to leverage their citizens' digital technologies in order to improve public safety. In order for Smart Cities to become Safe Cities, citizens must become full partners

in Public Safety initiatives, and this involves having a high degree of trust in local authorities. But there is little authoritative data on citizens' desires and expectations of their government. Unisys recently commissioned a global study of the citizens from ten cities to investigate their thoughts and opinions on this subject. This white paper presents a summary of the global findings of this research.²

¹ <http://www.unisys.com/safecities>

² The ten cities were: Chicago, Dallas, Philadelphia, Los Angeles, Rome, Amsterdam, São Paulo, Mexico City, Singapore, and Sydney. The research was conducted by YouGov, and involved surveys with nearly 4000 citizens from these ten cities.



1

Citizens want communication with police to be easier, faster, and more convenient



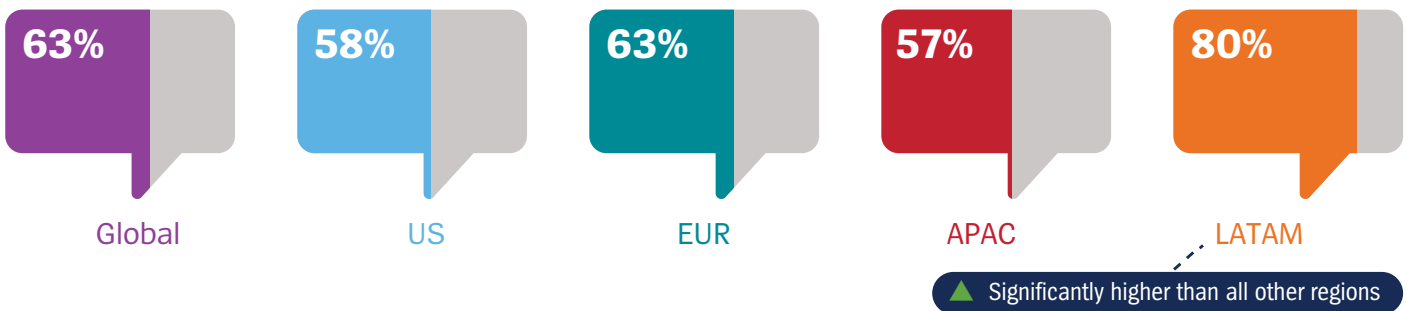
Key Findings

We found that citizens of all regions believe that communication with the police through digital media should be easier, faster, and more convenient than it currently is. Specifically, Unisys found that 63% of citizens from all ten

surveyed cities strongly agreed that **“It should be a lot easier for people to contact the police through digital media in this day and age.”** Agreement was especially strong in the two LATAM cities, Mexico City and São Paulo.

It should be a lot easier for people to contact the police through digital media

Percent high agreement with statement



SEVERAL BENEFITS ARE SEEN FROM EMPLOYING DIGITAL MEDIA AS AN ADDITIONAL COMMUNICATION CHANNEL. CITIZENS FEEL THAT:



Crimes would be reported faster



It is more convenient



Pics and videos can be uploaded

The benefits of social media for citizen-police communication is a two-way street – police obtain key information and insights as well informing the public using apps such as Twitter, Facebook, WhatsApp, etc.

During the recent tragic shooting incident in Las Vegas, the Las Vegas Police Department communicated via both Twitter and Facebook to get news and information out to the public. Citizens gain the ease of engaging police how and when they want, whether one-on-one direct or via social media.

Interestingly, social media can also be used to discourage use of social media that could harm public safety, as has been seen in these tweets from Las Vegas police department.

However, a key finding is that citizens’ use of social media may be nuanced – used for some concerns, but more critical issues may well be reported by phone or in-person. Our data



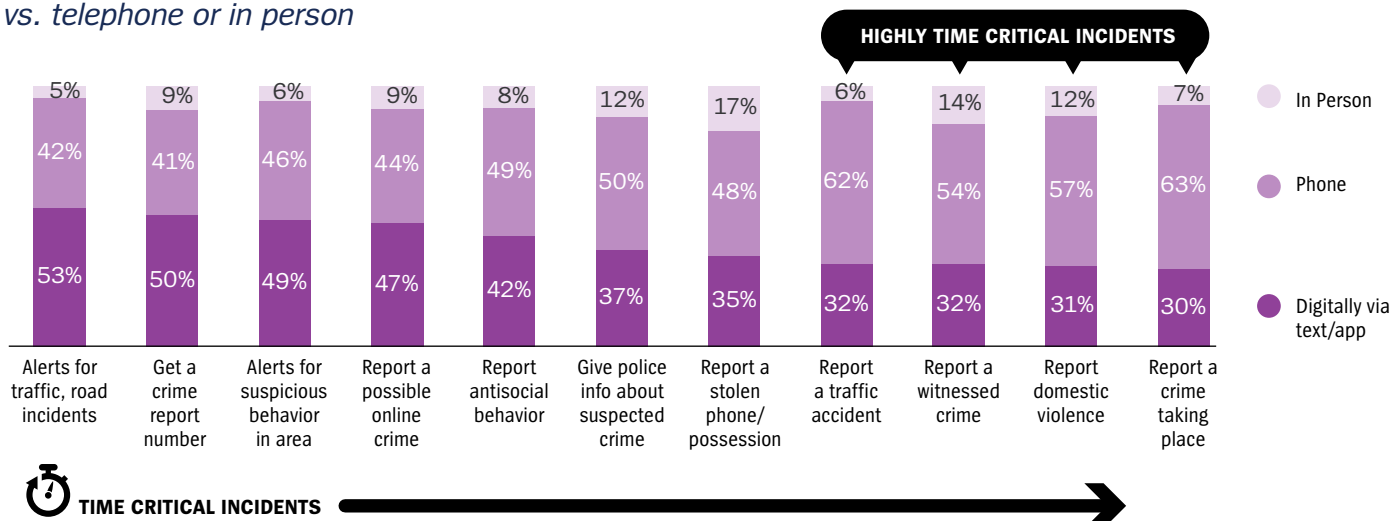
Source: Twitter, Las Vegas Metropolitan Police Department



Source: Twitter, Las Vegas Metropolitan Police Department

shows that an average of 45% of citizens would prefer to use social media for communicating on less-pressing issues, but for critical incidents such as reporting a crime in progress, 30% would prefer using social media.

Willingness to report crimes via digitally vs. telephone or in person

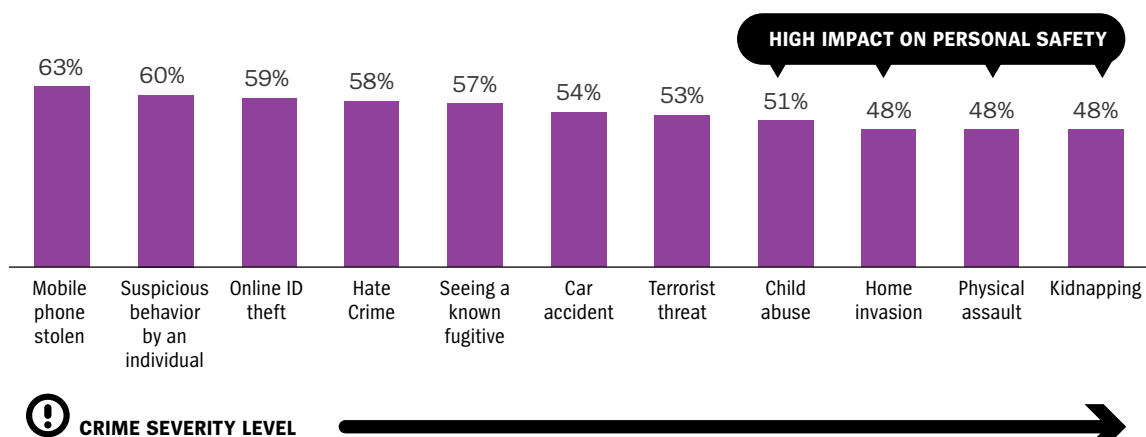


When it comes to reporting observed or experienced crimes, many citizens would be comfortable if communication with the police was entirely online. On average, nearly 60% would be

comfortable using social media for reporting less serious crimes to the police, e.g., reporting a stolen mobile phone. For more serious crimes, such as physical assault or kidnapping,

less than half of citizens would be comfortable using social media to report these more severe crimes.

Willingness to handle communicating with police completely via digital channels



Note that there are still many people who would report serious crimes via digital means, and the recent introduction of text-to-911 and similar services around the world provides them a digital avenue to do so. Adoption at this time is not universal, with many cities not offering this service, despite encouragement from such government agencies as the U.S. Federal Communication Commission³.



...she texted 911 about 2:30 a.m. to say that she and her two kids had been abducted..." I'm so thankful these people had this 911 text," she told KDFW. "I'm so glad..."

³ <https://www.fcc.gov/consumers/guides/what-you-need-know-about-text-911>

Source: <https://www.dallasnews.com/news/crime/2017/06/01/god-spared-says-texas-woman-shot-ex-jumped-speeding-rv>

2 Majority of citizens are willing and find it easier to report crime if they could do so via digital social media

A major finding of our research is that many citizens are indeed willing to communicate with the police through digital media. Globally, 57% of citizens believe “People would be more willing to report crime if they could do so via social media” and / or “It should be a lot easier for people to contact the police through digital media in this day and age.”

This trend was particularly strong in the two LATAM cities, where 74% agreed with these statements. This again points up the need for police and other authorities to both offer and engage in a variety of types of communications.



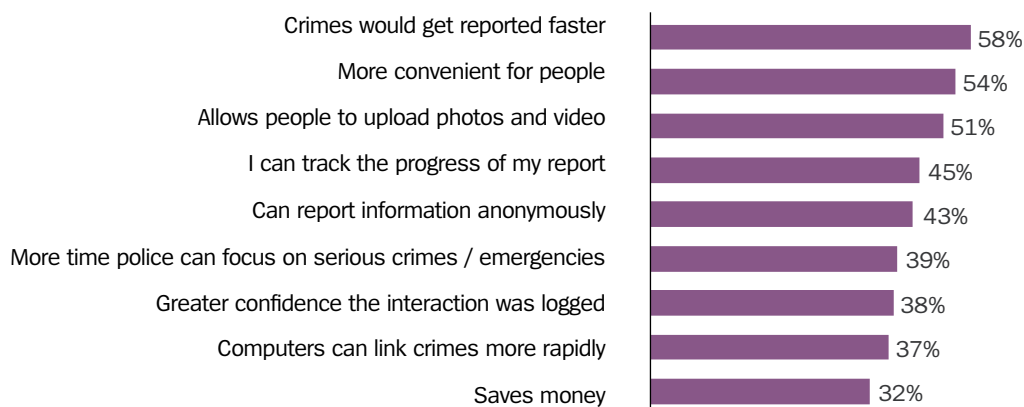
Receptivity of crime reporting to police via digital social media



There are several benefits that citizens find for communicating with the police via digital channels, chief among them being faster crime reporting, convenience, and uploading evidence. Other benefits include, for example, ability to track the progress of a crime report, and being able to report crimes anonymously. Note that “saves money” is the least often cited benefit by citizens (and tax payers) – saving money as a reason for using digital communication may not gain much traction.



Barriers to interacting with police via digital media

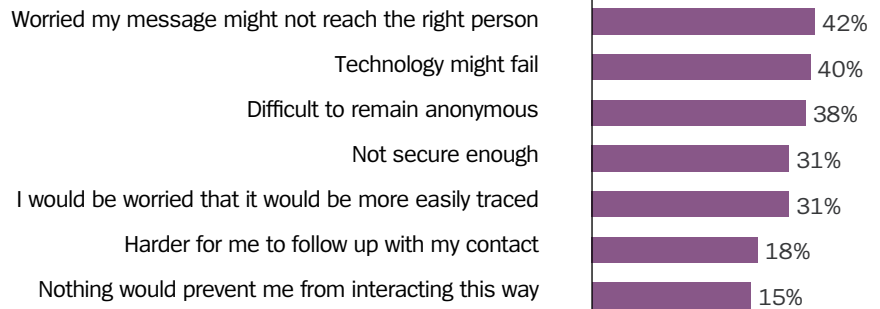


Barriers of interacting with police via digital media

Compared to benefits, fewer citizens cite barriers that might hinder communicating with police via digital means. The chief barrier is a fear the message delivery would fail, either due to technology or being misdirected. Interestingly, two barriers cited are that it is more difficult to remain anonymous (cited by 38%) and that crime reports could be traced back to the reporting citizen (31%). These percentages are higher in LATAM, at 47% and 48% respectively, indicating that for Mexico City and São Paulo care must be taken to have clearly stated policies regarding anonymity.

Citizens are also very willing to submit evidence online, with 92% globally willing to submit a variety of evidence types. This includes submitting photos, videos, texts, and audio files. Citizens are most willing to submit texts (81%) and videos (71%).

The value of citizen tips, and especially via digital media, cannot be overstated. Consider the London public transit bombings in 2005. Because of the extensive video surveillance system in place, London police were able to zero in on a suspect within a few days. Most cities around the world may not be equipped with so vast a video network, meaning that citizen engagement can fill the gap. After the Boston Marathon Bombing in 2013, the FBI put out call for any images or video taken at the site of the explosions and, within hours was overwhelmed with the response. The media was analyzed and cross referenced and again, within days, pictures of the suspects, whom we later came to know as the Tsarnaev brothers, were released, leading to their positive identification. Without the images provided by the public, best that the FBI could have hoped for was descriptions which, given



the circumstances, would have been questionable and most likely contradictory in nature.

An example of successful two-way communication with police are the popular online tool programs such as the one used by the London Met Police. These programs provide convenience, speed, and importantly, anonymity for people reporting crimes and uploading evidence.

Millennials, in particular, are the most open to communication with police and other authorities through digital means. Both Millennials and Gen Xers, when compared to Boomers, are significantly more likely to feel that:

- citizens are open to contacting the police through digital means, and that
- it should be easier to do so, and that
- citizens would actually be more willing to report crimes if they could use digital media to do so

Citizens around the globe use a variety of social media apps; Millennials regularly use an average of five social media apps, while Boomers use an average of three. The most frequently used apps across all regions are Facebook, YouTube, WhatsApp, Instagram, and Twitter. However, there are important and well-known regional differences, e.g., Snapchat is used



Source: www.met.police.uk/report/antisocial-behaviour

more in the US than in any of the other regions, and WhatsApp use is very low in the US (17%) compared to the other three regions (78%).

Our data also shows important generational differences, with Millennials much more likely to use Instagram (65%) and Snapchat (38%) than are Boomers (15% and 3% respectively) or even Gen Xers (39% and 14% respectively).

Interestingly, Millennials are the least resistant to allowing police access to their PC if needed to investigate an online hate crime or online bullying etc. Allowing this access is still viewed unfavorably by a majority of all generations, but 43% of Millennials would allow this compared to only 35% of Boomers.

3

Policing techniques have achieved an acceptable balance between tracking measures and privacy

Our new research demonstrates that citizens are indeed willing to accept monitoring and surveillance to protect public safety.

During our research, we asked about five specific types of monitoring and surveillance.

Three of these were sensors that:

- Detect emergency vehicles and alter traffic flow in response
- Detect harmful chemicals or radiation, set off alarms, direct people away from the scene
- Detect when and where a gun was fired and alert police

Over three-quarters (79%) of our global sample feel comfortable with these three types of monitoring that are not directly monitoring citizens.

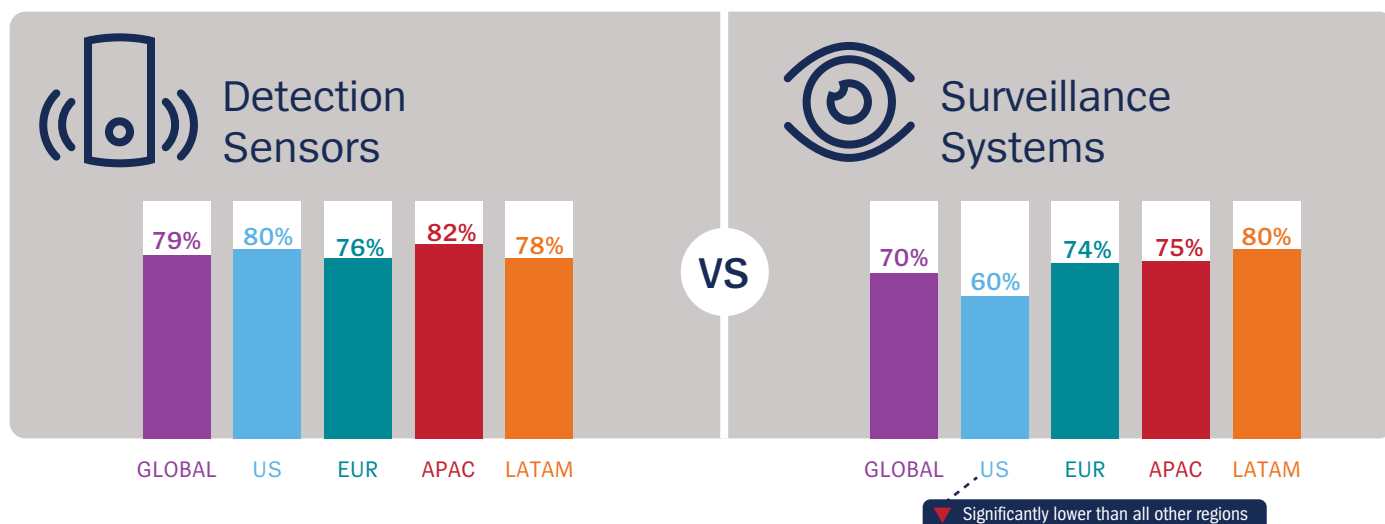
We also asked about two more intrusive measures:

- Equipping police with facial recognition systems that enable them to identify and apprehend criminals
- Video surveillance systems that automatically determine when there is suspicious activity, notify police, and enable police to send a unit in response if needed

Importantly, a majority were still accepting of these types of surveillance despite the fact they directly monitor citizens. However, there was a small drop globally of comfort levels compared to sensor monitors (from 79% to 70%). This effect is particularly strong in the United States, where active surveillance measures are favored by only 60%, a 20% drop from the 80% who are favorable to sensors.



Accepting of different kinds of monitoring and surveillance



A similar pattern was seen when we asked about agreement with statements pertaining to:

- Standard government safety expectations
- An active government role in insuring safety
- Expectations of high personal privacy

We found relatively high agreement with the statements on “standard government expectations” (global: 63%), but much lower agreement with the government playing a more active role (global 43%). This general pattern persists across all four regions.

Almost half (global 46%), however, believe that some government policies regarding data collection have gone too

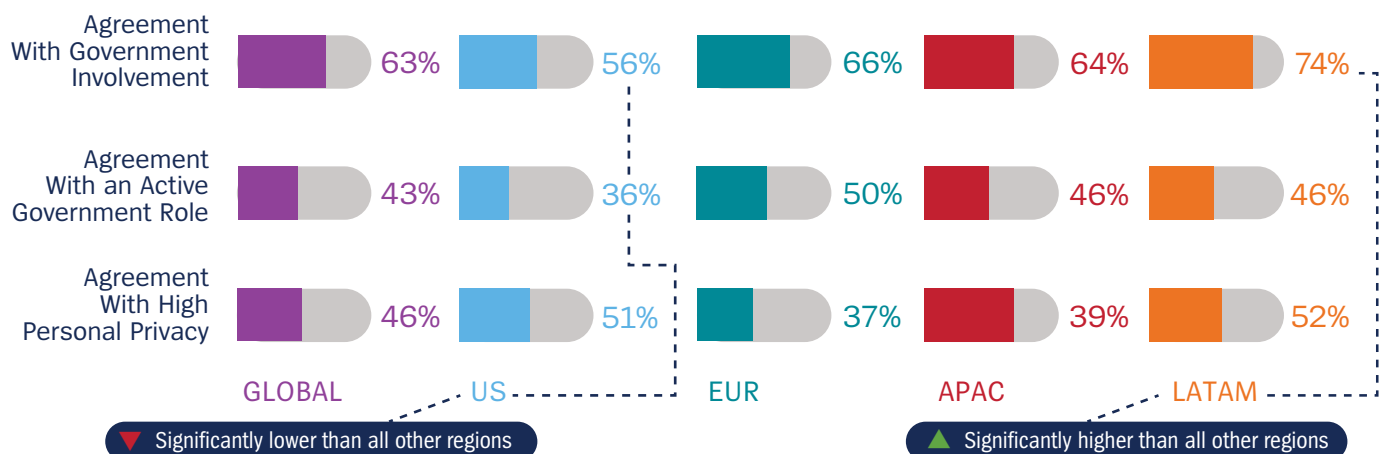


far in threatening personal privacy. This is especially so in the United States (51%) and LATAM (52%).



Government should be involved in monitoring and surveillance

Percent high agreement with statement



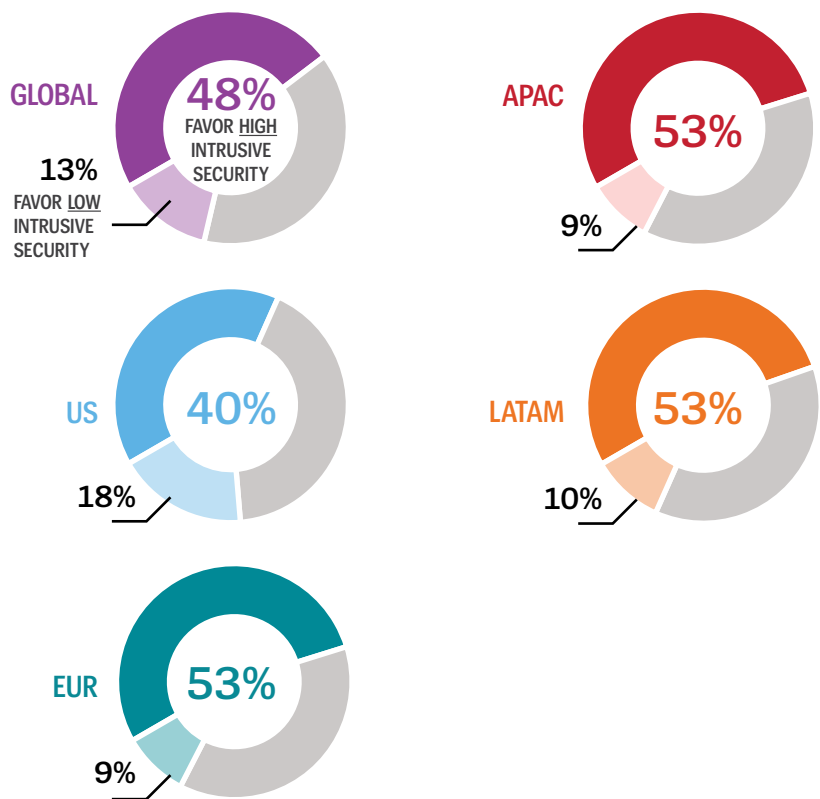
We also computed an “Intrusiveness Index” by asking respondents to rate their level of agreement and disagreement with seven pairs of diametrically opposed statements. **Here are the seven pairs of statements.**

LOW INTRUSIVE SECURITY STATEMENTS		HIGH INTRUSIVE SECURITY STATEMENTS	
1	I would NOT be willing to accept more physical surveillance and monitoring in order to achieve greater personal security	I WOULD be willing to accept more physical surveillance and monitoring in order to achieve greater personal security	
2	I would NOT be willing to accept more active online surveillance and monitoring in order to achieve greater personal security	I WOULD be willing to accept more active online surveillance and monitoring in order to achieve greater personal security	
3	The LEAST important job of government is to secure the general welfare of its citizens.	The MOST important job of government is to secure the general welfare of its citizens.	
4	Surveillance and monitoring tools ARE NOT vital for tracking the actions of terrorists when they are planning attacks. The government should stand by and wait until criminal acts are carried out.	Surveillance and monitoring tools ARE vital for tracking the actions of terrorists when they are planning attacks. The government cannot stand by and wait until criminal acts are carried out.	
5	Tighter security controls at airports and borders WILL NOT help prevent attacks and loss of life.	Tighter security controls at airports and borders WILL help prevent attacks and loss of life.	
6	Security tools SHOULD NOT be used to target particular ethnic and religious groups in a way that is unfair and biased.	Security tools SHOULD be used to target particular ethnic and religious groups in a way that is unfair and biased.	
7	The government SHOULD NOT be able collect and share information about its citizens for the purposes of securing the general welfare of its citizens	The government SHOULD be able collect and share information about its citizens for the purposes of securing the general welfare of its citizens	

Each statement was individually scored on high vs. low intrusiveness, and then consolidated to form the Intrusiveness Index, indicating if citizens are accepting of more intrusive measures or are opposed to such measures.

A critical finding is that only a small minority, 13% globally, fall firmly on the “low intrusiveness” side of the scale, with the rest being either neutral or accepting of a high level of intrusiveness to ensure security and safety. This indicates a broad acceptance of a level of monitoring and surveillance that is needed to enhance personal and public safety. As seen elsewhere in our research, the United States shows more of a leaning towards “high privacy,” particularly in regards to the statements on physical surveillance, online surveillance, and border/airport security. Nonetheless, three-fifths in the US still are neutral or accepting of high intrusiveness.

Summary of Intrusiveness Index.



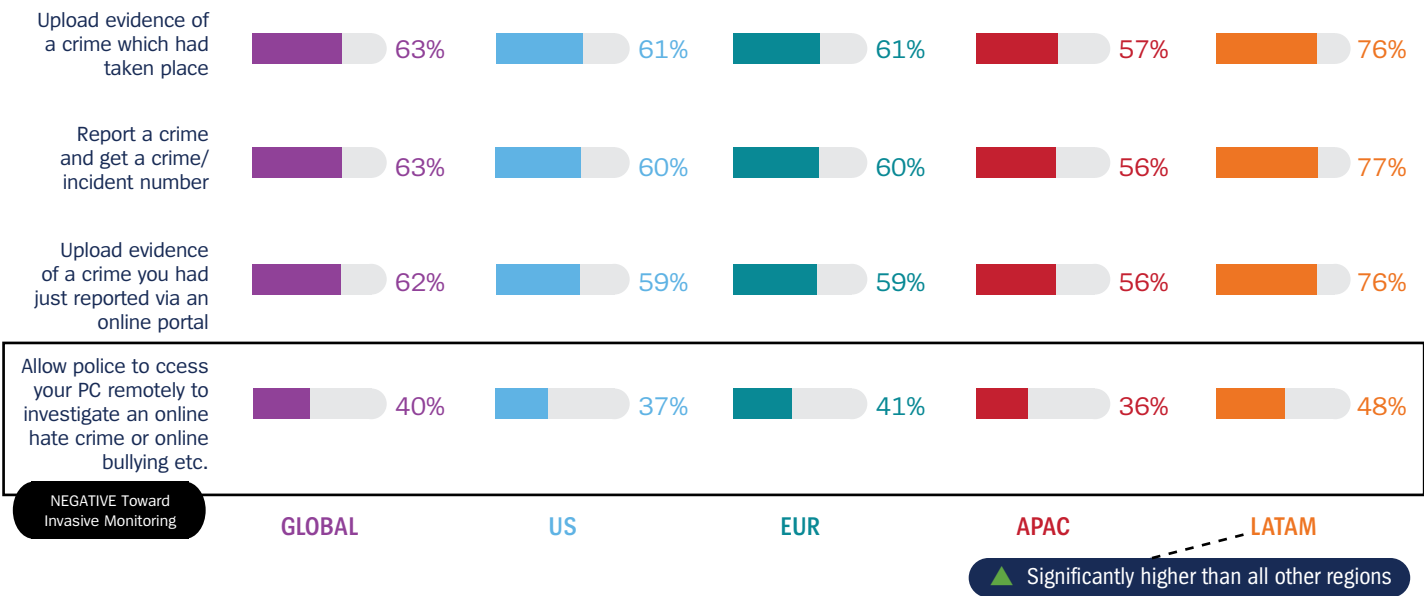
Types of Evidence Citizens Willing to Supply Police

Citizens are accepting of 24-hour surveillance and monitoring at a variety of locations if these measures enhance their personal safety. We asked citizens what areas are most important for having 24-hour surveillance; airports, public streets, public transportation, and entertainment/sporting events

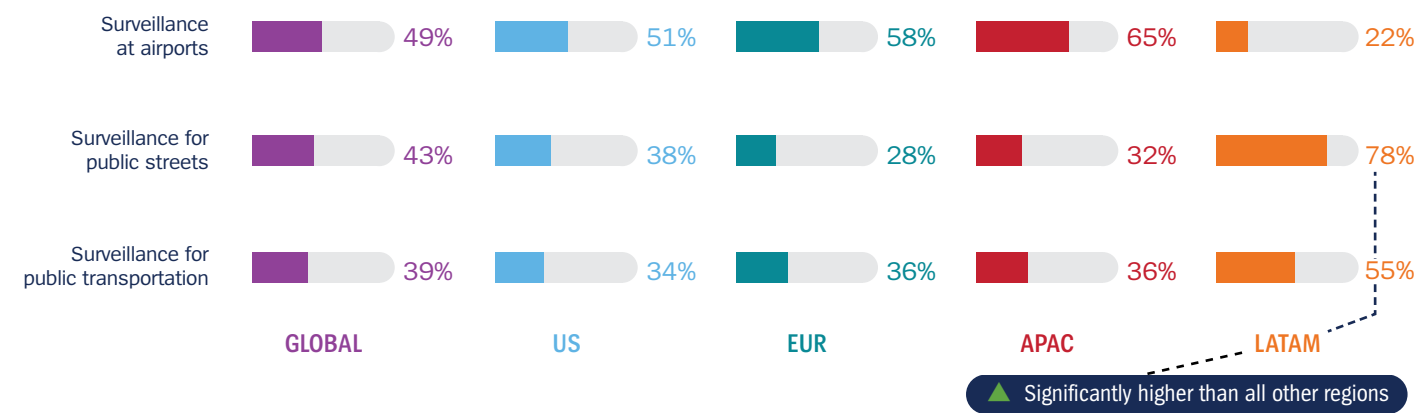
were deemed the most important on a global basis. Interestingly, in LATAM, as seen below, surveillance at airports was seen as much less important, while monitoring public streets was seen as the top priority. Similarly, when citizens are asked types of personal data are most in need of

monitoring for crime investigation and prevention, over half chose social media over computers, smartphones/landlines, and financial data. Again, citizens acknowledge the need for enhanced data collection and analysis as a path to enhanced levels of safety.

Types of evidence citizens are willing to supply to the police



Top locations for 24-hour surveillance



City and jurisdictional managers who have made the decision to invest in Smart City technology need a partner who understands that the benefits can extend to a Smarter City without added expenses. For example, technologies that provide citizens with information that makes their lives more convenient can also be used to make their lives Safer, drive down criminal activity and improve crime clearance rates. Cities can take advantage of citizen willingness and, moreover, their desire to assist

public safety officials in improving their quality of lives by providing critical and time sensitive information via digital means. Officials can improve their situational awareness and, therefore, be better positioned to provide information to citizens via digital means so that they can likewise take appropriate actions for their own safety. Quite simply, cities need a partner that understands and knows how to help them to make “Smarter” “Safer”.

What are our recommendations?

1 Government and authorities should embrace and enable two-way communications through digital means—city managers and leaders need to recognize and utilize the advantages of interacting with citizens via all communication channels to include social media, SMS, and digital file transfer. Two-way communications, as enabled through digital and social channels, help foster positive community relationships and, in essence, can be another form of community policing.

2 Authorities should actively engage citizens to solve and prevent crimes through digital means—digital and social media tools are powerful and can be extremely effective. By embracing a “digital policing” culture, law enforcement and citizens can collaborate effectively to achieve shared goals of creating safe communities and Safe Cities.

3 Government should drive change and communicate value of balance with the use of surveillance to protect citizens while maintaining privacy. Surveillance methods are needed to prevent and deter crime. While citizens are willing to accept a certain amount of surveillance in public locations, they become less trusting when they believe they have been deceived or that the information may be misused. It is critical that city leaders ensure the public is advised of the uses, value, and security of collected information.

4 Continuous collaboration is critical—creating a Safe City requires extensive collaboration among government, citizens, and industry. Governments should continue to foster and ambassador collaboration wherever possible for continued engagement, awareness, and improvements while ensuring Smart City technologies are properly employed and integrated. City and public safety officials should create a program that uses social and other digital media to facilitate both formal and informal two-way discussions with citizens, such as an online town hall, online neighborhood watch teams, or online neighborhood representative meetings.



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