Super Bowl® LII: Security Assessment

QUARTERLY SPECIAL EVENTS ANALYSIS

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Super Bowl LII is scheduled to take place on February 4, 2018, at U.S. Bank Stadium, Minneapolis, Minnesota, with over a million attendees expected. Nearly two years of planning has taken place, largely behind the scenes, to make sure that Super Bowl LII – and the 10 days of events leading up to the kickoff – is safe and secure.

Super Bowl LII is categorized by the U.S. Department of Homeland Security (DHS) as being of the highest threat level to public safety, so extreme measures of protection will be in place. Local and federal officials offer assurances that years of preparation will ensure a safe event. At the time of this report, there were no credible threats associated with the Super Bowl, however, attendees need to be aware of possible physical security and cyber-related concerns surrounding the event.
The DHS has assigned the Super Bowl a Level 1 Special Event Assessment Rating (SEAR), meaning it presents the highest level of public safety risk. Unlike many other Super Bowl venues located in sprawled suburbs surrounded by empty space, U.S. Bank Stadium is situated in downtown Minneapolis, making security planning especially challenging.

In order to protect that space, the city of Minneapolis has petitioned Minnesota Governor Mark Dayton to bring in the National Guard to enhance security at the venue and beyond. City leaders, which include Minneapolis Mayor Betsy Hodges and Mayor-elect Jacob Frey, have said the National Guard is needed because existing police “cannot by themselves meet all of the safety and security needs of the 10 days of Super Bowl LII while maintaining public safety operations for the entire city.” If mobilized, the National Guard will be used to secure key venues and protect pedestrians, among other responsibilities. The request is considered standard procedure for cities that have hosted Super Bowls in recent years.

When Houston hosted last year’s Super Bowl LI, the city’s police department had more than 5,000 officers to staff security. The Minneapolis Police Department has about 870 officers, many of which will also need to respond to calls in areas of Minneapolis outside the Super Bowl venue and its surrounds. About 3,000 local, state, and federal officers will be deployed throughout the Twin Cities metro during the 10-day
period. Most will be in standard-issue police uniforms, though there will also be some plainclothes officers and SWAT personnel.

Minneapolis Police Commander Scott Gerlicher announced that his department will utilize police cruisers, as well as 2- and 4-man all-terrain vehicles and helicopters. As has been seen in past Super Bowls, there will be flight restrictions over U.S. Bank Stadium on gameday, and over 2 miles of fencing and concrete barriers will surround the stadium and nearby areas. Additionally, the FBI announced that Super Bowl LII will be the largest deployment of federal assets to any Super Bowl in history.

The Minneapolis Police Department (MPD) also plans to install dozens of security cameras and to bring in more than 100 explosive-detection dogs. They will be deploying a roaming bomb squad, 3D maps of the downtown areas, and implementing new technology that allows leadership to track locations of officers in the field. Representatives from the Minneapolis, Bloomington, and St. Paul police departments; the FBI; and the DHS will be stationed at various command centers throughout the city.

On gameday, indoor security screenings of game attendees will occur at both the METRO Transit Blue Line
station at Mall of America and the Green Line station at Stadium Village. Passengers will then be transported to U.S. Bank Stadium and will be able to enter there without undergoing additional screening. This is designed to limit the number of game attendees that will need to be screened at the stadium itself.

In Bloomington, home to the Mall of America and many hotels for National Football League (NFL) affiliates, residents can expect an increased security presence as well.

Additionally, the MPD began training the estimated 10,000 Super Bowl LII volunteers in January on how to recognize and report suspicious activity during the game’s festivities. An MPD release states the volunteers will undergo public safety training known as the Community Awareness Program, which was developed by the Counterterrorism Education and Learning Lab and is certified by the DHS.
Metro Transit

Metro Transit operates one of the largest public transportation systems in the country, spanning both Minneapolis and St. Paul. The METRO system is a network of transitways with frequent, all-day service between stations with enhanced amenities. Some METRO lines use trains; others use buses. Three METRO lines already exist and are named by color rather than by number. The Blue Line travels between Mall of America and Target Field. The Red Line travels on Cedar Avenue, providing Bus Rapid Transit (BRT) between Apple Valley and Mall of America. The Green Line opened in June 2014 and travels between downtown Minneapolis and downtown St. Paul.

Metro Transit is offering three fare options for fans attending the Super Bowl festivities:

- **Ultimate Fan Pass – $40**
  - Unlimited rides from January 26 to February 5
  - Includes all buses and trains, except light-rail service from Mall of America or Stadium Village on Super Bowl Sunday
  - Purchase available only through the Metro Transit app
• **All-Day Pass – $1 to $5, depending on time of day purchased**
  > Unlimited rides on all buses and rails
  > Valid from time of purchase through 2:00 am the next day
  > Purchase available via the Metro Transit app or at any rail station ticket machine

• **Gameday Fan Express Pass – $30**
  > Purchasable only by those holding an official Super Bowl ticket
  > Will allow passengers to board light rail at either Mall of America (Blue Line) or Stadium Village (Green Line)
  > Pass also valid on all bus, light rail, and Northstar service on gameday and Monday, February 5th
  > Purchase available only through the Metro Transit app

**Special Service**
Both the METRO Blue and Green lines provide access to U.S. Bank Stadium and travel along 5th Street in downtown Minneapolis.

  > Connect at Warehouse District/Hennepin Avenue Station with routes 10, 18, or 59 for free service to Super Bowl Experience at the Minneapolis Convention Center. Look for “Free Ride” above the windshield of these buses.
  > Connect at Nicollet Mall Station for access to Super Bowl LIVE along Nicollet Mall.

• Starting on Friday evening (Feb. 2), METRO light-rail trains will serve all points in downtown Minneapolis, with the exception of U.S. Bank Stadium Station. This includes service to the nearby Government Plaza Station. From Friday evening and into gameday, U.S. Bank Stadium Station will be closed due to security issues. During this time, customers can continue to ride light-rail from end to end.

• On Super Bowl Sunday, official ticket holders will be able to board either the Blue Line at Mall of America or the Green Line at Stadium Village. Passengers and trains will undergo security screening at these stations; passengers will then be transported to U.S. Bank Stadium and enter there without further screening. This is to allow for screening, and queuing for screening, to be done inside, out of the likely-frigid Minnesota weather.
• In addition, Metro Transit will operate weekend buses from Park & Ride lots throughout the metro area. Service will run roughly every 30 minutes starting at 9:30 a.m. from suburban locations; the last bus from downtown leaves at 10 p.m. This service operates on Jan. 27, Jan. 28, and Feb. 3 only.

• Buses will drop off and pick up customers at the Leamington Transit Center at 11th St. S. and 2nd Ave. S. in downtown Minneapolis. The fare is $2.50 each way (exact change required), or riders may use an All-Day Pass or Ultimate Fan Pass.
Parking

Due to the uniqueness and size of the Super Bowl LII events, the City of Minneapolis (the “City”) has worked with the Minnesota Super Bowl Host Committee and the NFL to reasonably accommodate both current parking users and large event parking demands.

There will be no change for monthly contract parking in municipal facilities until gameday. On Super Bowl Sunday, Feb. 4, some municipal parking facilities will require total use for event purposes. As required by the monthly customer contracts, the City posted notices in January of its plan to not allow contract parking at eight facilities on Super Bowl Sunday. Municipal monthly parking contracts will not be revoked.

Residents and visitors will be able to pre-purchase parking for any event in downtown Minneapolis at a guaranteed rate through the NFL Mobile Fan Pass, which is expected to go live soon. Details and parking updates are available on mnsuperbowl.com/transportation.

Meet Minneapolis has also partnered with Parking Panda to allow visitors to purchase guaranteed parking near their destination.

**Contract parking is allowed as usual in these municipal facilities on Super Bowl Sunday, Feb. 4:**

- Hawthorne Transportation Center, 31 N. Ninth St.
- LaSalle at 10th, 915 LaSalle Ave.
- Vineland, 727 Vineland Place
- 11th Street Underground (Hilton), 168 S. 11th St.
- 11th & Marquette (Orchestra Hall), 1111 Marquette Ave.
No contract parking will be allowed in these municipal facilities on Super Bowl Sunday, Feb. 4:

- A Ramp, 101 N. Ninth St.
- B Ramp, 516 Second Ave. N.
- C Ramp, 318 Second Ave. N.
- Jerry Haaf Memorial Ramp, 424 S. Fourth St.
- Leamington, 1001 Second Ave. S.
- Mill Quarter, 711 Second St. S.
- Riverfront, 212 Ninth Ave. S.
- 10th & Hennepin, 935 Hennepin Ave.

Note: The Convention Center Plaza ramp will not be available for any public parking use from Jan. 26 to Feb. 4. These monthly parking contracts will be accommodated at other nearby facilities.

Private parking operators
There are over 40,000 parking spaces in private ramps/ lots available to the public in Minneapolis. Private parking operators are also facilitating requests to accommodate the Super Bowl. Contact each individual ramp operator for its specific details.

Parking meters
The City operates approximately 4,000 downtown metered spaces with varying rates, time limits, and hours of enforcement that will be accessible during the 10-day festival.
The City also operates an interactive meter map that provides up-to-date applicable regular and event rates, time limits, and hours of enforcement. The MPLS Parking App is available for download on mobile devices to help visitors pay for or extend their parking session. Event rates around the Convention Center begin Jan. 27 and continue through Super Bowl Sunday. These rates are in effect continuously during this time. Event rates around U.S. Bank Stadium will only be in effect on gameday.

**Skyway**

The Minneapolis Skyway System is an interlinked collection of enclosed pedestrian footbridges that connect various buildings in 80 full city blocks over 11 miles (18 km) of Downtown Minneapolis, enabling people to walk in climate-controlled comfort year-round. It is the longest continuous system in the world. The skyways are owned by individual buildings in Minneapolis, and, as such, they do not have uniform opening and closing times.

The Minneapolis Skyway connects the second and third floors of various office towers, hotels, banks, corporate and government offices, restaurants, and retail stores to the Nicollet Mall shopping district, the Mayo Clinic Square, and the sports facilities at Target Center, Target Field, and U.S. Bank Stadium. Several condominium and apartment complexes are skyway-connected as well, allowing residents to live, work, and shop downtown without having to leave the Skyway system.
Super Bowl LIVE

Several street closures and restrictions are beginning the second weekend of January to prepare for Super Bowl LIVE, a free, 10-day festival on Nicollet Mall. Starting Saturday, Jan. 13, Nicollet Mall from Sixth Street to 12th Street will be closed until Feb. 9. Nicollet Mall Metro Transit buses will be detoured to Hennepin Avenue during the closure. There will be lane restrictions on the cross streets (6th to 12th Streets) along Nicollet Mall for the event. Pedestrian access and sidewalks along Nicollet and cross streets will remain open during the event, but sidewalk closures will occur during install and removal periods.

Beginning Monday, Jan. 15, Eighth Street from LaSalle to Marquette Avenues will close to install the Super Bowl LIVE stage; they will reopen Friday, Feb. 9. Eleventh Street will be closed one day, Saturday, Feb. 3, for snowmobile stunts.
Super Bowl Experience

Super Bowl Experience is an NFL interactive theme park scheduled for Jan. 26-Feb. 2 and is being held at the Minneapolis Convention Center. During the event, Second Avenue and Grant Street adjacent to the Convention Center will be closed to the general public and accessible to pre-approved permit holders only from Jan. 24-Feb. 7, 2018.

Additionally, the streets around the Convention Center on all sides will have intermittent closures, including First Avenue South, Third Avenue South, and 16th Street East. Event removals will take place Feb. 4-Feb. 7; the streets will reopen as soon as possible thereafter.

U.S. Bank Stadium

Starting Tuesday, January 2 through Sunday, February 11:

- Chicago Ave. S. will be closed between 4th St. S. and 6th St. S.
- 5th St. S. will be closed between 11th Ave. S. and 6th St. S. (access to 511 Building is still available)
- Norm McGrew Place S. will be closed between 3rd St. S. and 4th St. S.
Starting Saturday, January 27 through Monday, February 5:
- 4th St. S. will be closed between Park Ave. S. and I-35W ramp (access to I-35W available via Washington Ave.)

Starting Monday, January 29 through Monday, February 5:
- 6th St. S. will be closed between Chicago Ave. S and 11th Ave. S.
- 11th Ave. S. will be closed between 3rd St. S. and 6th St. S.

Starting Friday, February 2 through Sunday, February 4:
- Several other stadium-area streets will be closed for gameday weekend
Recommended Commuter Routes

Due to the street closures and restrictions, the Super Bowl Committee has offered recommended routes to avoid any issues for commuters into the city. These routes are:

• From the West: Highway 55 to 7th St. N. or I-394 East

• From the East: I-94 West to 7th St. S.

• From the South: I-35W North to 5th Ave. S. or Hiawatha Ave. (Highway 55) to 7th St. S.

• From the North: I-35W South to Washington Ave. S., I-94 East to 4th St., or Highway 65 to 3rd Ave. S.
With the Super Bowl facilities being located within densely populated areas of Minneapolis, the City and the Super Bowl Committee has had to look at ways to mitigate the disruption to several critical facilities that may be impacted by road closures and restrictions.

People Serving People runs the largest family home shelter in the state just blocks from the stadium on the corner of Portland Avenue and Third Street South. Of the roughly 350 people in the shelter every night, 200 are schoolchildren. CEO Daniel Gumnit said up to 40 school buses ferry kids to and from schools every day, so access to the building is imperative. The NFL has been working closely with People Serving People leadership to ensure that the shelter is not affected during the 10-day celebration.

Additionally, Hennepin County Medical Center (HCMC), a Level 1 Trauma Center located across the street from U.S. Bank Stadium, has made plans to deal with any emergency that may occur. Road closures around the stadium will affect routes ambulances take to get to the hospital, but there is a plan to make sure Minneapolis residents and out-of-town guests are taken care of if needed. Usually the ambulances start at HCMC and are dispatched from there to calls for service. However, on gameday, some ambulances will start at different locations around the metro area. Additionally, the hospital is working with police and security personnel to ensure that helicopters will still be able to land and take off from the medical center in the event of an emergency.
After conducting a thorough examination of open and dark web sources, LookingGlass is currently unaware of any specific terrorist threat to Super Bowl LII. However, we assess with HIGH confidence that the Super Bowl, which is a uniquely American experience and a highly visible symbol of American culture, is an attractive target for terrorist groups and lone-wolf attackers. As such, LookingGlass will continue to monitor the terrorist threat landscape and provide any timely updates to this assessment as deemed necessary.

We also judge with MODERATE confidence that the most likely scenario for a terrorist threat or attack at the Super Bowl (and at the events before or after) will involve a “softer” target than the Super Bowl stadium itself in Minneapolis, MN.

We base this assessment on academic research from the Naval Post Graduate School as well as recent testimony from the DHS Acting Secretary Elaine Duke to the House Committee on Homeland Security. The reports and testimony indicate that the increased security, or “hardening,” provided by the U.S. federal government at domestic events such as the Super Bowl has diminished the success rate of terrorist threats attacks on such events. Furthermore, research has shown that the relative success of attacks on “softer” targets, where there was not enhanced security in place prior to the event, has promoted the ease with which groups can still incite terror via an attack that carries less chance of being discovered beforehand.
A recent example of an attack on a “soft” target is the October 2017 shooting at the outdoor Harvest music festival in Las Vegas, NV. Not only did the assailant in this situation successfully wound and kill over 500 people before the attack ended, but his actions made headlines for weeks following the attack – thus gaining the public stage many terrorists desire for their message to be effective.⁹

“Soft” targets of concern at Super Bowl LII include places where many people will gather, such as lines to enter the stadium or get through security checkpoints, the surrounding entertainment districts, public transportation, or popular lodging choices for the game. In January 2015, three men who had pledged support to the Islamic State purportedly planned to attack Super Bowl XLIX by setting off pipe bombs at the stadium, a local mall, and the entertainment area adjacent to the stadium.¹⁰ Though the attack was never executed, it demonstrates that the terrorist threat to “softer” security targets is more likely than the terrorist threat to the Super Bowl stadium itself.

Protests and Disruptive Activities
Large sporting events like the Super Bowl are an attractive platform for resource-poor activists seeking to gain media exposure for various local and national grievances. As of January 23, 2018, several planned protests have been identified that are scheduled to occur during the Super Bowl.

Members of the Superbowl Anti-Racist & Anti-Corporate Coalition group, as well as other supporting organizations, are planning a protest on February 4, 2018, focusing on the City’s effort to clear the homeless population from the downtown area while hosting the Super Bowl and “racist police brutality.”¹¹
Protesters will begin the rally at Peavey Park (730 22nd Street East) at 3:00 PM CST. Afterwards, participants will march to U.S. Bank Stadium (401 Chicago Avenue). Sponsoring organizations include: AFSCME 2822, AFSCME 3800, Anti-War Committee, Communities United Against Police Brutality (CUAPB), Filipinx for Immigrant rights and Racial Justice MN, Freedom Road Socialist Organization-Twin Cities, MIRAC – Minnesota Immigrant Rights Action Committee, Minnesota Neighbors for Justice, Native Lives Matter, Rise Up Times, Students for a Democratic Society UMN, SURJ MN: Showing Up for Racial Justice – Minnesota, Take a Knee Nation, Twin Cities Coalition for Justice 4 Jamar, and Women Against Military Madness (WAMM). Over 2,000 Facebook users have expressed interest in attending this protest.

On February 3, 2018, members of 15 Now Minnesota and CTUL, an organization of workers and for workers committed to securing fair working conditions, will protest at the Hilton Minneapolis in support of workers’ rights and increasing the minimum wage to $15 per hour. The protest will target the Minnesota Super Bowl Host Committee, members of which will be gathered at Hilton Minneapolis for a Super Bowl Breakfast event. Previous protests have been peaceful and are not associated with any arrests or clashes with police.

The Super Bowl attendees should also be aware that protest plans can be announced at the last minute and possible flash protests cannot be ruled out.

Flash Points

Analysis of protest activities in Minneapolis, MN, over the past two years indicates that protest activities have been confined to a few locations:

- City Hall (350 S 5th Street) is a frequent staging ground for local protest groups that speak out for immigrant rights, social justice, and political issues. At times, protesters rally against deputies from the Hennepin County Sheriff’s Office. Protests can be disruptive, and there have been a few previous attempts to block activities at the City Hall. For example, in September 2017, protesters derailed a Minneapolis City Council meeting demanding that leaders do more to support immigrant residents.

- U.S. Courthouse Minneapolis (300 South 4th Street) is a frequent location for political and social justice rallies. The most recent protest took place on December 6, 2017, and involved social justice groups protesting in solidarity with Palestine in light of the United States’ recognition of Jerusalem as the capital of Israel.
According to the FBI's 2015 and 2016 Uniform Crime Reports, Minneapolis is one of the most dangerous cities in the country. In 2016, the city had a violent crime rate of 1,109 reported incidents for every 100,000 residents, nearly three times the corresponding national rate. The rate of violent crime per 100,000 inhabitants increased 4% from 2015 to 2016 in the Minneapolis Metropolitan area. Robbery is especially common in the Midwestern city, with 463 reported incidents per 100,000 residents – the 10th highest rate of any American city. Furthermore, robberies increased by 3.8% from 2015 to 2016. Violent crimes – including murder, rape, robbery, and aggravated assaults – increased 0.9% in 2016 compared to the previous year, according to the Minnesota Bureau of Criminal Apprehension.

Analysis of violent crimes reported by the 1st Precinct of the MPD from January 2017 to December of 2017 determined that 48% of the crimes reported in the same precinct as the U.S. Bank Stadium are robberies. Aggravated assault was the second most commonly-reported crime, accounting for 36% of reported crimes. Although these types of violent crimes will likely decrease during Super Bowl LII due to increased security presence, thousands of people will visit the Minneapolis metropolitan area for Super Bowl LII events, parties, and activities, which increases the opportunity for crime to be conducted.

LookingGlass notes that the Super Bowl has historically been designated as a Level One SEAR event, which is determined by the DHS based on a number of factors, including anticipated attendance by
dignitaries; the size, significance, and duration of the event; availability of state and local resources; and multiplicity of jurisdictions needing coordination.\textsuperscript{17} This designation means that additional federal resources are made available to the host, as well as federal involvement and authority in the public safety planning and response. However, responsibility for management of the actual public safety “boots on the ground” operations still rests primarily with local law enforcement.\textsuperscript{18}

Minneapolis, like all large metro areas, has neighborhoods that are more dangerous with higher crime levels than other areas. According to the MPD, the highest concentration of violent crimes and property crimes are in North Minneapolis, geographically northwest of the city. In addition, Midtown Minneapolis and the Phillips neighborhood also experience increased crime.\textsuperscript{19}
In its 52-year history, the NFL Super Bowl has never experienced a high-profile attack or cyber breach. Even so, the NFL takes significant security measures to plan and secure the Super Bowl and has collaborated with the DHS since 2001 to designate every Super Bowl as a “national-security special event.” The NFL also partners with other organizations at the federal, state, and local level to prepare for the Super Bowl games. Super Bowl LII will take place on February 4th, 2018, at U.S. Bank Stadium in Minneapolis, Minnesota.

LookingGlass Cyber Solutions analyzed the official websites for both U.S. Bank Stadium (usbankstadium.com) and the Minnesota Super Bowl LII Host Committee (mnsuperbowl.com) to identify security vulnerabilities that may affect website visitors. We have identified one cross-site scripting (XSS) vulnerability on both usbankstadium.com and mnsuperbowl.com, as well as one clickjacking vulnerability on each site.

A cross-site scripting vulnerability (XSS) is a type of malicious code injection that allows attackers to inject and execute scripts in otherwise benign and trusted websites. Because an XSS vulnerability has the potential to occur on any web page that allows a user to enter data, XSS vulnerabilities are widespread online. Sites can guard against XSS vulnerabilities by validating and encoding all user input from their...
web forms. If the vulnerability is present, users' browsers are not able to identify malicious code on the site. After executing, these scripts can access users' cookies, session tokens, and other sensitive information.

Clickjacking risks get little coverage; however, clickjacking can be devastating when combined with other vulnerabilities. Clickjacking, also known as a “User Interface (UI) redress attack,” is when an attacker uses multiple transparent or opaque layers on a web page to trick a user into clicking a button or link on another page when they intended to click on the top-level page (i.e., the attacker is “hijacking” clicks meant for their page and routing them to another page, often owned by another application, domain, or both). In the past, official websites associated with previous Super Bowls have seen heavy traffic by fans across the world; a clickjacking vulnerability can allow threat actors to hide malicious code under cover of the content on official websites, possibly affecting hundreds of thousands of visitors. An organization’s best defense against clickjacking is to implement X-Frame-Options on their website, as it virtually guarantees that clickjacking attacks will not work against it.21

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Clickjacking is the malicious practice of manipulating a website user’s activity by concealing hyperlinks beneath legitimate clickable content, thereby causing the user to perform actions of which they are unaware. A clickjacking vulnerability present on the official event site can allow threat actors to hide malicious code under cover of the content on official websites, possibly affecting hundreds of thousands of visitors.

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U.S. Bank Stadium Network Access & Cybersecurity
U.S. Bank Stadium has approximately 1,300 CenturyLink access points installed on-premises. These access points are positioned in small, proprietary “clamshells” that are built into the stadium’s handrails.
The stadium, which can seat 66,200 people, is reportedly designed to provide internet connectivity to all visitors on their mobile devices simultaneously. During regular-season Vikings games, traffic has hovered around 30,000 connected users. However, during well-attended games, cellphone and wireless networks are easily stressed when thousands of fans tweet, post photos, and stream video simultaneously.

The stadium is managed by the venue-management firm SMG, who has partnered and contracted with Parsons Technologies for the installation and commissioning of the stadium’s network infrastructure, Wi-Fi, distributed antenna, audio/visual, public address, broadcast and video production systems, and the on-premises video surveillance and access control systems. In addition, stadium management officials have stated that they actively monitor social media to enhance their security services.²²

**Vikings Mobile App**

The Minnesota Vikings and U.S. Bank Stadium maintain the Minnesota Vikings mobile application powered by the sports, entertainment, and hospitality company VenueNext; the app will be available and advertised to all Super Bowl attendees. The mobile app, also referred to as the “Vikings’ stadium app,” is available for both Android and iOS mobile devices on the Google Play Store and the Apple App Store, respectively.

In addition to allowing users to stay current on team news and game statistics, the Vikings stadium app acts as a point-of-sale (POS) device, allowing stadium visitors to download their tickets and order food and
beverages from their seats. The Vikings stadium app integrates functionality from multiple entertainment, POS, and venue companies, including Ticketmaster, Aramark, Appetize, Experience, Skidata, and Adept.23

Together, Android and iOS devices account for over 90% of the worldwide mobile operating system market.24 Because the Apple App Store is more restrictive on app development and vetting than the Google Play Store, Android devices have historically been infected with and/or affected by malicious mobile apps to a greater degree. Indeed, the Google Play Store routinely experiences influxes of malicious apps that appear in waves.

Visitors to the Super Bowl at U.S. Bank Stadium should avoid open Wi-Fi networks that are not advertised by the official event and should also strongly consider using a virtual private network (VPN) to help keep sensitive information safe.

These malicious apps, which frequently impersonate another app and/or co-opt a known brand, often seek to generate revenue for the malicious developer or steal information from the unsuspecting user. This may be achieved using adware campaigns (loading websites in a hidden browser to make money from advertisement impressions), pushing bogus notifications to the user to install other apps, or even by stealing users' banking and payment information.25,26 Although it is possible for a malicious app impersonating the Vikings stadium app to appear on both the Google Play Store and the Apple App Store before the Super Bowl, Android users should remain particularly vigilant and should verify that they have selected the official, legitimate app before proceeding to download.
Attack Scenarios

Following Super Bowl L in 2016, Barrier1 – a Minnesota cyber security firm that formed part of the event’s Cyber Security Team – said that it had detected over 24 billion attacks coming from 151 different countries.\(^{27}\) The company further noted that they were concerned about threat actors targeting alarm systems, the stadium’s Jumbotron, power systems, and point-of-sale systems – attack avenues yielding multiple threat scenarios that could unfold during Super Bowl LII.

The City government estimates that the Super Bowl will bring more than one million people from 130 countries to the area over a 10-day period, including approximately 5,000 members of the media.\(^{28}\) Undoubtedly, all of these visitors will want and/or need to be connected to the internet, presenting yet another major avenue for attack.

The demographic characteristics of people who generally attend the Super Bowl is a cause for heightened concern as the stadium will likely be packed with corporate executives, sponsors, politicians, and celebrities, many of whom will undoubtedly carry devices brimming with sensitive information. In a potential threat scenario, attackers could set up a public Wi-Fi network – say, near the 8,000 total hotel rooms in Minneapolis or their nearby restaurants – with an innocuous name to entice attendees into connecting. The illegitimate Wi-Fi network could then be used as a starting point to compromise attendees’ devices. This is a popular method in airports and hotels, as travelers often search for free and open Wi-Fi. However, once they’re on the network, man-in-the-middle attacks can intercept unencrypted web traffic or inject malicious code and infect the connected device.

During Super Bowl L, some companies publicized the fact that they supplied Levi’s Stadium with networking equipment and infrastructure. The same has been done, to some extent, for Super Bowl LII (i.e., SMG has stated that its access points use CenturyLink hardware and have been installed by Parsons Technologies). Threat actors can exploit information regarding the stadium’s hardware and software setup to tailor an attack according to the vulnerabilities in a particular product. The over one million visitors projected to visit the area and attend the Super Bowl at U.S. Bank Stadium should avoid open Wi-Fi networks that are not advertised by the official event. Visitors should also strongly consider using a virtual private network (VPN) to help keep sensitive information safe.
Each year since 2003, the U.S. Department of Homeland Security has rated the Super Bowl as a Special Event Assessment Rating Level One (SEAR 1). This rating means that the U.S. Government considers events such as the Super Bowl to be high risk environments for public safety and, as such, devotes a considerable amount of resources to ensure the safety and security at the event.
LookingGlass Cyber Solutions delivers unified threat protection against sophisticated cyber attacks to global enterprises and government agencies by operationalizing threat intelligence across its end-to-end portfolio. Scalable threat intelligence platforms and network-based threat response products consume our machine-readable data feeds to provide comprehensive threat-driven security. Augmenting the solutions portfolio is a worldwide team of security analysts who continuously enrich our data feeds and provide customers unprecedented understanding and response capability into cyber, physical and third party risks. Prioritized, relevant, and timely insights enable customers to take action on threat intelligence across the different stages of the attack life cycle.

Learn more at [https://www.lookingglasscyber.com/](https://www.lookingglasscyber.com/).