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# **Executive Summary**

The LA Pride Festival (LAPride) sponsored by Christopher Street West is one of three large-scale annual events held in the City of West Hollywood (WeHo). The Festival and related activities draw tens of thousands of visitors to the city which require substantially more public safety and other resources to maintain safe operations for attendees and the surrounding community.

Having participated in the Mobility Acceleration Coalition (MAC) <u>2019 Los Angeles Marathon mobility deployment</u> and realizing the improved operational communications these technologies enabled, West Hollywood and LA County leaders requested the use of the tools for LAPride and related activities. Mobility 4 Public Safety (M4PS), lead contractor for the MAC, worked with city and county command personnel to understand the operational environment and communications challenges to customize a mobility deployment to support LAPride operations. Similar to LAM, M4PS coordinated the technology deployment with the Homeland Security Advisory Council at Pepperdine University's School of Public Policy (HSAC@SPP). The requirements identified for the mobility deployment included:

- 1. Automate Tracking of Patient Contacts
- 2. Improve Collaboration & Information Sharing
- 3. Maintain Accurate Festival Occupancy Counts
- 4. Report Bed Availability in the Med Tent
- 5. Track Mobile Resources to Improve Efficiency of Dispatching

The technologies utilized were largely the same as LAM including Sonim XP8 ruggedized smartphones with public safety cellular service provided by FirstNet built with AT&T. The devices were managed with MobileIron Go, a Unified Endpoint Manager (UEM) to automate provisioning and provide remote monitoring. The MobileIron kiosk mode was utilized to enhance security and simplify end-user experience. HSAC@SPP provided the SALUS 2019 Aid App built in Survey123 which fed the SALUS 2019 LA Pride Dashboard. Moxtra is a mobile app used for real-time collaboration and information sharing.

While the technologies used were the same as LAM, each platform was configured based on the unique operational requirements of LAPride. Participating agencies included the City of West Hollywood, Los Angeles County Fire Department (LACoFD), and Los Angeles County Sheriff's Department (LASD).

Due to the short timeline between LAM and LAPride, mobility planning was introduced late in the planning process. Despite the short planning window, local champions Kristin Cook, WeHo Public Safety Director, and Battalion Chief Brian Kane of LACoFD, worked with M4PS and HSAC@SPP to develop a plan for incorporating mobile technologies into communications and operations planning.

Despite the short planning timeline, the mobility deployment was highly successful with several key success factors worth noting for future events.

 The deployment would not have been as successful without the strong partnership between event organizers and public safety leaders.



- Clearly defining operational requirements helped 1) build consensus across stakeholder groups, 2) maintain consistent communications and mission focus, and 3) support rapid decision-making.
- It was important to **set clear expectations** that all requirements may not be achievable based on time and complexity. This enabled creative problem solving to modify operational procedures when "ideal" technical solutions were not feasible.
- Technology providers are sometimes competitive, even when their particular solutions
  have little or no functional overlap. All technology providers involved worked together
  with creativity, flexibility, and diligence in providing the resources necessary to support
  public safety operations.
- Public safety leaders balanced the willingness to take calculated risks with the judgement to accept technology shortfalls. This combination was important to optimize resources to achieve the greatest incremental success.
- The use of messaging apps for public safety operations is increasing rapidly as mobile broadband networks become more available and reliable. The utilization of **public** safety collaboration tools can significantly improve the effectiveness of information sharing and interoperability over consumer-grade messaging apps.

2019 LAPride was highlighted as the most successful event to-date by city officials and event organizers. Although not all identified mobility requirements were fully achieved, the mobile technology deployment had a significant impact on public safety communications and was considered an important element of the overall event success.

# LA Pride Operations

During early mobility planning, M4PS and HSAC@SPP personnel worked with WeHo and county leaders to understand event operations, public safety operational environment, operational and communications challenges, and define requirements for the mobility deployment.

## **Event Overview**

The LA Pride Festival and Parade sponsored by Christopher Street West (CSW) took place from Friday, June 7<sup>th</sup> – Sunday, June 9<sup>th</sup>, 2019. It was the most successful Pride weekend to date due to the strong partnership among public safety agencies, the City of West Hollywood (WeHo), the event producer JJ-LA, and the Christopher Street West Board. The City of West Hollywood Public Safety Department collaborated with the Los Angeles County Sheriff's Department (LASD), the Los Angeles County Fire Department (LACoFD), and multiple other contracted agencies to provide public safety staffing for the weekend's events and surrounding neighborhood. The Pride celebration included the following festivities:

Friday, June 7
 LA Pride Opening Ceremony in West Hollywood

Saturday, June 8
 LA Pride Festival in West Hollywood

Pride on the Boulevard in West Hollywood

• Sunday, June 9 LA Pride Parade in West Hollywood

LA Pride Festival in West Hollywood



Pride on the Boulevard in West Hollywood

**LA Pride Opening Ceremony in West Hollywood** - The Opening Ceremony was a free event held at West Hollywood Park to kick-off the weekend celebration with a variety of entertainment, programming, and festivities including a one-hour concert by Paula Abdul.

**LA Pride Festival in West Hollywood (LAPride)** - LAPride is a paid festival located at West Hollywood Park which had live performers and DJs at three stages, including GRAMMY® Awardwinning global superstar Meghan Trainor. The venue holds > 10,000 attendees with a total of nearly 40,000 scanned entries over the two days (wristbands allow in-and-out access so total attendee count was < 40,000).



Figure 1 LA Pride Site Map

**Pride on the Boulevard in West Hollywood (Block Party)** - The City of West Hollywood teamed up with LAPride to host the first-ever Pride on the Boulevard in West Hollywood, a free "block party" along Santa Monica Boulevard.

**LA Pride Parade in West Hollywood** - This annual parade is a highlight of the weekend which runs down Santa Monica Boulevard. It draws thousands of spectators and is broadcast by ABC. Spectators are encouraged to use transit and rideshare due to traffic issues related to the large volume of attendees, limited parking, and road closures.



# **Public Safety Operations**

WeHo is a contract city within Los Angeles County meaning that they contract LACoFD and LASD to provide fire/EMS and law enforcement services within the city.

#### Fire/EMS

The West Hollywood Division of LACoFD operates independent of normal county operations during Pride weekend. On-duty staffing increases approximately 8x normal staffing levels to support event activities in addition to ordinary response throughout the city. Daily calls surge roughly 400% over normal daily operations. In addition to apparatus used for daily operations such as engines, trucks, and ambulances; road closures and crowds require mobile assets including Quick Response Vehicles (QRVs) and Bike Teams within the event footprint.

A Medical Tent is setup at the southeast corner of the Festival footprint and accessible for non-festival patients. LACoFD experienced a record-high number of calls on Sunday, June 9.

#### Law Enforcement

LASD utilizes the Emergency Operations Bureau (EOB) to augment West Hollywood Station personnel to assist in planning, coordination with WeHo and other public safety agencies, and deployment of advanced technology to support event operations.

#### Command

A Command Post was set-up with WeHo Public Safety Department, LACoFD, LASD, and other supporting agencies including transit and public works.

# **Public Safety Challenges**

#### **Patient Counts**

A significant challenge in most events of this nature is maintaining accurate counts of patient contacts. LACoFD apparatus are assigned mobile tablets for their Electronic Patient Care Reporting tool (ePCR) to capture medical contact information countywide; however, ePCR information is not available to local Incident Commanders during special events.

# Information Sharing

While WeHo, their county counterparts, and event organizers have good relationships; the ability to seamlessly share information across these stakeholder groups has been challenging in the past. Each group has their own operational responsibilities, and multi-organizational communications have historically relied heavily on email, texting, and phone calls - particularly for personnel not located in the joint CP. Specific areas for improved information sharing included:

Better sharing of criminal intelligence from LASD about possible threats



- Sharing of video for improved situational awareness
- Bed Availability in the Med Tent
- Ability to quickly and accurately disseminate information about occupancy counts, patient counts, medical and criminal incidents, and other pertinent event information to elected officials

#### Occupancy

**Festival** - As the event has gained popularity, it has become more challenging to monitor occupancy counts inside the festival footprint. Events that exceed occupancy limits create significant hazards for attendees as well as first responders needing to operate inside the footprint responding to security or medical incidents. The event producer contracts SeeTickets to manage ticket sales and occupant scanning.

In prior years, attendees were scanned when entering the venue but not exiting, so it was not possible to maintain accurate real-time occupancy counts. To mitigate this issue in 2019, JJ-LA and SeeTickets implemented exit scanning to provide accurate occupancy counts throughout the two-day event.

In prior years, SeeTickets has emailed an hourly count with the number of scanned entries each hour to JJ-LA who then forwards the email to WeHo leaders. WeHo and LACoFD requested the frequency be increased to every 30 minutes, but early plans for disseminating occupancy information still fell short of public safety expectations.

**Block Party** - Being the first year for Pride on the Boulevard, public safety leaders had no mechanism for attendee counts inside the Block Party as the event footprint does not have designated entry/exit points or ticket sales to track. Preliminary plans were to augment fixed video surveillance infrastructure with temporary cameras at strategic locations to provide a more comprehensive view of the operational area to estimate crowd size.

#### Dispatching

**Mobile Resources** - With thousands of people congregating in a several block radius, tracking mobile resources is vital to providing efficient incident response. As with many Computer Aided Dispatch (CAD) systems, the county's CAD provides tracking and dispatching on vehicles but not mobile devices. Traditionally, dispatching mobile resources during special events is done by utilizing color-coded magnets on a printed map affixed to a magnetic board with communications between CP and field personnel being done exclusively via radio.

**Road Closures** - The City of West Hollywood is 1.89 square miles and split nearly in half north to south by Santa Monica Boulevard. The various road closures and location of LAPride and the Block Party created concerns for maintaining service to neighborhoods on the southside of WeHo separated from LACoFD Stations 7 & 8 which are both located north of Santa Monica Boulevard.





Figure 2 City of West Hollywood Map

# Mobility Requirements

Based on the operational challenges identified, the group defined the following use cases/requirements for the mobility deployment:

- Tracking Patient Contacts LACoFD wanted an accurate log of the number of medical calls, locations of the calls, and type of incident (i.e. injury, drug-related, alcohol-related, heat-related, etc.).
- **Collaboration & Information Sharing** public safety leaders wanted a streamlined means of sharing pertinent information quickly and accurately across organizations such as patient counts, occupancy counts, arrests, photos, and other event information.
- Automated Occupancy Count Reporting WeHo and county leaders hoped to have direct access to the SeeTickets portal to maintain a real-time occupancy count within the festival footprint.
- Automated Bed Availability Reporting LACoFD wanted to automatically monitor the number of beds occupied versus available in the Med Tent.
- Mobile Resource Location Tracking LACoFD wanted the ability to track mobile resources to expedite dispatching.



# **Mobility Overview**

The mobility deployment consisted of several technologies to best address the communications and information sharing requirements identified above.

#### Hardware

CP personnel used a combination of laptop computers and personal or department issued cell phones.

Mobile LACoFD resources were assigned **Sonim XP8** ruggedized smartphones. The Sonim XP8 has a long-lasting battery, so phones were charged each night and able to support daily operations without the need for recharging mid-shift.

The cellular service provided by **FirstNet built with AT&T** offered priority and preemption so that first responders were not competing with thousands of commercial users for the bandwidth necessary to successfully utilize the mobile apps.

# Mobile Apps







The phones were managed through **MobileIron Go**, Universal Endpoint Manager (UEM), which allowed for rapid provisioning, remote management, and a variety of security features including kiosk mode, device tracking, and remote wipe capabilities. Not only did the use of the kiosk mode prevent users from accessing unauthorized resources or installing non-operational apps, it provided a simplified end user experience by only showing the apps necessary for the operation on the home screen.

ESRIs Survey123 was utilized the deploy the **SALUS Pride 2019 Aid App** to track and analyze patient contacts.

**Moxtra - Team Collaboration** was used for real-time collaboration and information sharing.



# **Operational Overview**

# **REQUIREMENT #1: Tracking Patient Contacts**

The SALUS Pride 2019 Aid App was developed by HSAC@SPP in conjunction with LACoFD personnel to track patient contacts. The geolocation feature in the app would show exactly where the patient contact was made. Medics would answer simple survey questions which were developed using dropdown menus to 1) reduce time, 2) accurately categorize data, and 3) mitigate data entry errors from manual typing.



Figure 3 SALUS LA Pride 2019 Aid App

# REQUIREMENT #2: Collaboration & Information Sharing

Two tools were utilized to satisfy this requirement. SALUS was used for structured information sharing while Moxtra was used for dynamic, real-time collaboration. These tools served complementary functions. SALUS offers powerful analytics, reporting, visualization, and geospatial tools to aggregate various sources of data for simplified information consumption and decision-making. Moxtra provides secure messaging, file sharing, and user/group management capabilities to streamline real-time communications and information sharing in highly dynamic operational environments.

#### DASHBOARD FOR STRUCTURED DATA

SALUS is a GIS-based event and incident management platform provided by HSAC@SPP which aggregates a variety of information into a common dashboard. Users can customize their personal dashboard view to see the information pertinent to their operational function. The SALUS LA Pride 2019 Dashboard aggregated patient contact, bed availability, and festival occupancy counts.

As shown below, patient data was aggregated and displayed by Block Party vs Venue, Severity, Chief Complaint, and Disposition. Individual submissions were also displayed with additional information such as date/time stamp, age, and which resource/team submitted the report. Contacts were also visually displayed on the map embedded in the dashboard. Information



submitted through the SALUS Pride 2019 Aid App was updated on the dashboard in real-time for all users.

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#### SALUS LA PRIDE 2019 DASHBOARD - FINAL

HSAC SALUS (I) THE CRISIS HUB

Figure 4 SALUS LA Pride 2019 Dashboard

#### MOBILE COLLABORATION & INFORMATION SHARING

Moxtra is a mobile collaboration app utilized for real-time information sharing across organizations and between field and command post personnel. M4PS worked with department leaders to 1) identify users, 2) define use cases, 3) develop an information architecture, and 4) configure the app to meet operational requirements.

Messaging and collaboration apps have been gaining adoption in recent years for a variety of public safety operational environments. Many users rely on free, commercial apps in lieu of a multi-agency, enterprise platform. Unlike consumer-grade apps, enterprise collaboration apps offer a variety of benefits for large-scale public safety operations including:

- Administration capabilities to pre-establish groups based on Event Action Plans (EAP)
- Ability to <u>create "resource" accounts</u> which can be assigned based on the role or resource rather than the individual person assigned (i.e. Engine 7 or QRV 8)
- Ability to create <u>accounts not connected to a cell phone number</u> for shared device deployments and users on computers in fixed facilities like command posts
- <u>Directory of users</u> which eliminates the need to know individual contact information to add users to operational groups



The following threads were created with the associated use case and users:

- Pride All A broadcast channel which included all WeHo, LACoFD, and LASD personnel identified as mobile app users for LAPride. Designated leaders were allowed to publish content while all other members were in a "Read Only"
- LA Pride Command Staff A channel where WeHo, LACoFD, and LASD command personnel were able to share information across agencies.
- **WeHo City Staff** A channel for city leaders to share information. The Public Safety Director was able to quickly disseminate Occupancy Counts, Bed Availability, Arrest Stats, and general event info from LACoFD and LASD with other executives and elected officials.
- LACoFD Pride A channel for all identified LACoFD app users to collaborate on matters specific to fire and medical operations.
- LASD Pride A channel for LASD app users to collaborate on law enforcement operations.
- Arrest Counts This channel was used as a designated place for posting arrest counts. Members could mute this channel to reduce app notifications and maintain a
- Bed Availability This channel was used as a designated place for posting bed availability at the Med Tent. Members could mute this channel to reduce app notifications and quickly reference the latest reported availability without having to scroll through a variety of messages.
- Occupancy Counts This channel was used for SeeTickets to publish occupancy reports.

consolidated, time stamped list of arrest counts throughout the operational period.

WeHo city staff reported unprecedented information sharing. The ability to receive pertinent updates in near real-time from multiple organizations was viewed as a "game changer". Rapid dissemination of pictures and videos improved situational awareness and supported smooth communications with event organizers and the community.

LASD indicated that they were not clear that the arrest counts were expected to be posted at designated frequencies. Future deployments should include specific instructions for each channel along with user roles and expectations.

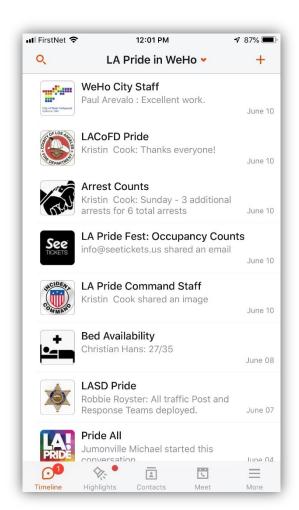


Figure 5 Collaboration Groups



# REQUIREMENT #3: Automated Occupancy Count Reporting

One of the biggest concerns of public safety leaders, particularly LACoFD, was the ability to monitor occupancy inside LAPride Fest. SeeTickets does not offer an end user portal to be able to monitor scan information in real time. Tickets are issued as wristbands with RFID chips. Automated scanners at entry and exit points calculate the number of wristbands passing through those points. The data is then uploaded automatically at designated intervals by each machine. The SeeTickets system sends an email to the conference organizer with the data. In prior years, JJ-LA would forward the hourly scan report email to WeHo and county leaders.

Public safety leaders requested that the information be uploaded this year directly into the SALUS LA Pride 2019 Dashboard with real-time counts. Due to the nature of the SeeTickets system, real-time information was not available. It was also requested that SeeTickets utilize an Application Protocol Interface (API) to automate the publication of the hourly counts into the SALUS dashboard. Due to the short planning timeline, it was not feasible to develop an interface between the systems to automatically populate occupancy counts. In order to improve the accuracy of counts, SeeTickets accommodated the request to update the reporting frequency from hourly to every 30 minutes. SeeTickets, M4PS, and HSAC@SPP then worked together on a suitable alternative to streamline the dissemination and visualization of festival occupancy counts.

Since this was the first year for scanning exits, SeeTickets advised they would have to email two separate reports: Scan Ins and Scan Outs. M4PS and SeeTickets worked with HSAC@SPP to develop a workflow model to streamline populating the SeeTickets information into the SALUS LA Pride 2019 Dashboard.

- M4PS created a dedicated Moxtra thread for Occupancy Counts which has a unique email address. This email address was added to the SeeTickets email distribution list and served as a dedicated place for all occupancy reports.
- 2. HSAC@SPP built a reporting application to mimic the format of the Scan In and Scan Out reports. The reporting application was carefully designed to avoid data entry errors. It required the user to enter the hour, scan in count, and scan out count. The system them performed the calculation before displaying Scan Ins, Scan Outs and Total

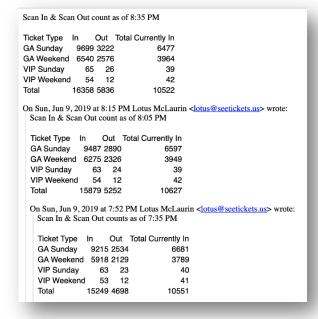


Figure 6 SeeTickets Consolidated Scan Report

Occupancy on the SALUS LA Pride 2019 Dashboard.



3. SeeTickets was able to develop a report prior to the event date which displayed the Ticket Type, Scan In, Scan Out, and Total Occupancy Count by reporting period. This report was emailed every 30 minutes along with a more detailed scan report. LACoFD and HSAC personnel would then enter this information into the SALUS Festival Occupancy Count template which would update the counts on the SALUS Dashboard.

# REQUIREMENT #4: Automated Bed Availability Reporting

The Med Tent is operated by a third-party medical provider. Due to the limited time for coordination, automating bed availability was deemed a "nice to have" but not a critical requirement. Event organizers and public safety leaders had significantly increased the bed counts over prior years in the Med Tent to accommodate increasing crowd sizes and the addition of the Block Party patrons. Command post personnel monitor bed counts to make operational decisions for treating patients locally or utilizing limited resources to transport patients to local hospitals to manage the full volume of medical care. Engaging another organization and working to integrate existing technologies would have diverted resources from higher priority requirements.

As a work-around, M4PS and HSAC@SPP worked with LACoFD to develop a manual process for reporting bed availability. LACoFD had personnel posted at the Med Tent, so the following process was developed to utilize the mobile collaboration app to provide dedicated bed availability reporting with personnel assigned to manually input the data into SALUS for display on the common event dashboard.

- M4PS created a dedicated Moxtra thread for Bed Availability.
- 2. LACoFD personnel staffed in the Med Tent posted periodic status updates of available beds in the "Bed Availability" Moxtra thread.
- 3. LACoFD and HSAC@SPP personnel entered the updated numbers into a reporting application to populate the SALUS LA Pride 2019 Dashboard.

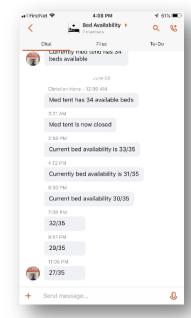


Figure 7 Bed Availability Reporting

Plans for future event planning are to engage third-party providers earlier in the planning process and assign devices for participation in the mobile technology deployment.



# REQUIREMENT #5: Mobile Resource Location Tracking

Two apps were evaluated to provide this capability:

- A resource location tracking app used in prior events did not support ESRI integration to be able to be displayed on the SALUS LA Pride 2019 Dashboard. Due to concerns about the complexity of having to keep up with information in various places (patient contacts in SALUS, resource tracking on a different monitor, and the magnetic dispatch board), this was not deemed a feasible solution.
- 2. ESRI had an app in beta, but it was not yet available for deployment.

Due to the short timeline and other technical challenges being addressed with multiorganizational information sharing, occupancy count reporting, and bed availability, it was not feasible to provide this capability. LACoFD leadership had concerns about introducing too much complexity this year and decided to postpone testing this capability until the various stakeholders had more experience with the other mobile technologies being deployed.

### Lessons Learned

Innovation is often difficult, especially when it involves multiple organizations. Public safety leaders in WeHo and LA County have enthusiastically embraced the adoption of mobility technologies for improving operational communications since their introduction during LAM. Despite the short timeline for incorporating mobility technologies into the event planning process, the deployment was a tremendous success. Below is a list of observations and lessons learned which contributed to the successful outcomes despite the various challenges which had to be overcome.

- Strong Partnership Between Event Organizers & Public Safety Orgs the strong
  relationship between event organizers and public safety leaders was certainly a key to
  the success of the mobility deployment. JJ-LA supported the requests being made and
  facilitated the necessary introductions to their vendor, SeeTickets. They provided
  support throughout the process, and all parties maintained open communications.
- 2. Clearly Define Requirements It was important to sit down with key stakeholders and understand their operational environment to clearly define requirements for a mobility deployment. Having Command Staff define the vision and assign staff to work with M4PS and HSAC@SPP on planning and deployment activities was critical. Command staff also made themselves available throughout the process when compromises needed to be made and/or alternate solutions needed to be developed. These requirements also assisted in communicating the purpose and vision to obtain buy-in from stakeholders including event organizers, 3rd-party vendors, and end-users.
- 3. **Set Realistic Expectations** It is always important to set appropriate expectations about what may or may not be able to be accomplished for any new, innovative projects. This is especially true when combining multiple technology components presents so many unknown variables. Availability of time, funding, and other resources should also be



taken into account. By defining the ideal end-state and having stakeholders willing to accept incremental improvements over current-state, our teams were able to successfully deploy new technologies and work together to develop operational procedures to overcome technical limitations.

- 4. **Technology providers working together** a variety of technologies were provided by different entities. HSAC@SPP, SeeTickets, and M4PS were able to work together to help all participating organizations improve operations to achieve the most successful event to-date. Each organization was creative in finding solutions, flexible in modifying expectations, and diligent in providing resources to support event stakeholders within a very short timeline.
- 5. **Know when to draw the line** while the mobility deployment was a tremendous success, it fell short of meeting all the desired requirements. Setting appropriate expectations with stakeholders helped ensure flexibility and creativity towards finding alternate solutions as the various obstacles were faced. By maintaining strong communications across all participating organizations, the team was able to have open dialogues regarding the cost/benefit and risks/rewards of various decisions.
- 6. Public Safety Collaboration many public safety personnel are utilizing consumer apps to fill a much-needed void for messaging/file sharing to support dynamic mobile communications. Utilizing tools with administrative capabilities allows greater control and improved security. They also allow for advanced planning and configuration which can improve the organization and dissemination of information across operational groups, particularly during special events which utilize temporary staffing models.
- 7. **Resource accounts** the ability to create resource accounts allows planning teams to pre-configure phones and groups regardless of the actual personnel assigned. This is not only advantageous for events where staff assignments may not be known until shortly before the event, but it supports unforeseen staffing changes without having to update user groups during the operation. This is particularly beneficial for events such as LAPride which cross multiple operational periods where numerous multiple individuals will staff the same apparatus.
- 8. **User account creation** since the use of mobile apps in public safety operations is still in its infancy, most apps rely on independent username and password databases. Account credentials for these apps typically follow one of two models: 1) accounts are created and users must activate their account and set a private password, or 2) accounts are created with generic passwords. The single biggest obstacle for adoption and scalability was the requirement for end users to activate their accounts. The requirement of many apps to have an active email address and/or phone number limits scalability for public safety deployments which utilize shared devices, have dynamic staffing models, and support users across multiple organizations.



# Conclusion

LAPride was an outstanding example of the benefits which can be realized through the adoption of mobile broadband technologies to improve communications during large, multiagency operations. It was especially successful in demonstrating the ability to realize these benefits within an accelerated planning window. The success of LAM provided valuable experience for public safety leaders to recognize the value that the technologies could provide for this operation.

Managing the safety and security of thousands of visitors on top of the "routine" operational responsibilities for protecting the city is a complex undertaking. Public safety leaders must develop operational plans based on previous experience and anticipated risks, usually with limited resources. WeHo and LA County leaders, particularly Kristin Cook and Chief Kane, recognized the potential value mobile technologies could offer. They understood that first responders would continue to have their radios for mission critical communications, so the risk of introducing new tools late in the planning process was low with potentially high benefit.

These technologies have demonstrated operational value in a variety of events across the country with the expanding availability of public safety broadband. The most successful deployments, including LAPride, have shared a few common components:

- Leadership who see the vision, commit the time and resources to achieve it, and lead by example. Phones and apps alone would not have yielded the operational results achieved without the leadership of WeHo, LA County and their private partners.
- 2. **Utilize mobile technologies to solve operational problems**. Technology deployments are often driven by particular products. By identifying operational challenges and defining the desired end state, the team was able to select appropriate tools and optimize the configuration for LAPride. Innovation and technology adoption should not be a "solution looking for a problem". The more value a new tool, resource, or process adds or the bigger problem it solves, the greater it will be accepted and utilized.
- 3. Focus on the Big Picture while tackling specific problems. Approaching mobility adoption strategically allows for creativity in product selection, configuration, deployment models, and operational procedures. The planning process focused on solving operational problems through technology. While the deployment did not fully achieve the desired end-state, the technology elements alone would not have produced the same results without the modification of procedures and staffing to optimize the tools that were available and mitigate shortfalls.

The 2019 LAPride Festival was a significant step forward for the City of West Hollywood, Los Angeles County, and the greater Los Angeles region for the adoption of interoperable mobility technologies. The lessons learned will serve as a strong baseline for incorporating these technologies into future events and other public safety operations. M4PS appreciates the leadership and support of Kristin Cook, Chief Brian Kane, WeHo, LACoFD, LASD, CSW, JJ-LA, HSAC@SPP, the various technology providers, and all the first responders who contributed to this success.