MINUTES OF THE
ARIZONA GEOGRAPHIC INFORMATION COUNCIL
PUBLIC SAFETY COMMITTEE

A Public meeting of the Arizona Geographic Information Council (AGIC) was convened on Thursday, October 6 at 10am WebEx only due to COVID-19 health precautions. Present at the meeting were the following members or designees of the AGIC Public Safety Committee

Table1: Committee Voting Members (16)

Member	Agency/Company	In Attendance
Eric Shreve, Co-chair	State 911 Office - ADOA	Yes, phone
Brian Bond, Co-chair	Yavapai County	Yes, phone
Bo Guo	GisTic	Yes, phone
Greg Denton	State 911 Office - ADOA	Yes, phone
Howard Ward	TerraSystems Southwest, Inc	Yes, phone
Jenna Leveille	State Land	Yes, phone
Laura Herrera	Pinal County	No, with notice
Sandy Dyre	Michael Baker	No, without notice
Sarah Hess	Pinal County	No, with notice
Steven Engle	Mohave County	Yes, phone
Steven Whitney	Pima County	Yes, phone
Tom Homan	Gila County	Yes, phone
Brooke Serpa	Yavapai County	Yes, phone

Table 2: Public at Large

Name	Agency/Company	In Attendance
Brandon Barnett	AZ State Land Department	Yes
Shawna English	Graham County	Yes
Marie Carpenter	Cottonwood Police Department	Yes
Madyson Bradford	MakePath	Yes
Rob Speer	City of Flagstaff	Yes
Tiffany Finke	City of Flagstaff	Yes
Jody Schanaman	Mohave County Sherriff's Office	Yes
Jackie Lyons	Page Police Department	Yes
Dave Eaton	Maricopa Regional 911	Yes
Cheryl Thurman	TerraSystems Southwest, Inc	Yes
Catherine Salazar	Showlow Police Department	Yes
Thara Salamone	AZ Dept of Economic Opportunity	Yes
Morgana Laurie	AZDEMA	Yes

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Nicole Eiden	ADHS	Yes
Sage Donaldson	ADOT	Yes
Chad Barnett	TerraSystems Southwest, Inc	Yes
Dave Roby	AZDEMA	Yes
Cal Droke	ASU	Yes
Aaron Seifert	NA Health	Yes
Alex Kiene	DDTi	Yes
Brian Brady	GisTic	Yes

The Committee discussed and acted on the following items.

I. Call to Order and Introductions

Meeting was called to order at 10:01 AM. Introductions were made, and quorum was established.

II. Approval of Meeting Minutes from July 28, 2022

Approval was motioned by Eric Shreve and seconded by Tom Homan. No additional discussion on meeting minutes and they were passed unanimously.

III. Review 2022 Committee Work Plan Goals and Activities

Brian Bond reviewed the Work Plan Goals and Activities through screen share. The goals set before the name change from the 9-1-1 Committee to the Public Safety Committee included three action items. The first was to get 15 9-1-1 systems integrated with the Next Generation Core Service Geospatial workflow. The second was to transition at least 50% of Arizona Public Safety Answering Points (PSAPs) with the ability to geospatially route calls. The last was to complete Statewide GIS County-Level Gap Assessments for all 9-1-1 systems to help identify areas for success and improvement. It was noted that the AGIC hub page that is representative of this committee is being revamped to include the details of the Public Safety Committee rather than exclusively the 9-1-1 Committee, and any volunteers that are interested in assisting in the rebrand are welcome to email either Brian or Eric.

The hub page can be accessed for reference at:
https://publicsafetycommittee.azgeo.az.gov/

The current phases of NG911 include four (4) counties that have

ongoing maintenance, seven (7) counties that have geospatial data starting to undergo continuous QA, and three (3) counties that are migrating to NG911 service. These three (3) phases are to ensure that 9-1-1 systems are utilizing the 1Spatial and DDTi workflow for data validation and aggregation at the county level, as well as providing documentation to local data providers on established workflows and ways to remediate data validation errors. The project these phases are involved in is 17.5% percent complete, with 7.21 of the population on NG911, and 42.75% of Arizona being served by NG911. This completion level coincides with the plan to strategize resources for education and scopes of work for data cleanup and aggregations into the statewide system while providing a metric that reports the data quality and quantity to counties and local government.

The Next Generation Core Service updates can be accessed at: https://az911.gov/next-generation-core-service

The Gap Assessment from 2021, provided by Mission Critical Partners, LLC (MCP), was reviewed, and Brian asked if agency heads would like to see their change in scores over time through this Gap Assessment. Another aspect of Gap Assessment utilization would be through singular agency analysis in comparison to the others throughout the state. This was proposed to be answered by a single person per agency through a Survey123 later. This survey would indicate a 1-10 rating in different fields (Addressing, Data Readiness, etc.) followed with an explanation of why that agency feels that rating is accurate. Eric chimed in that the idea of performing these assessments are to get a holistic view of complete operations and revisit them rather than those operation assessments sit on a shelf. The goal of the Committee in this aspect is to support the idea of showing progression in the overall assessment per agency. The progression that is happening in these counties and the deficiencies can show how the 9-1-1 office and the AGIC Public Safety Committee can help influence the scores to close the gaps and remediate those deficiencies. The collective approach and communication between the counties and their scores can help achieve this as a group. Eric also added that including a mechanism, such as a Survey123, can help the 9-1-1 systems across the state see their impressions of their rankings actually are in context of the entire assessment.

The Public Safety Committee's 2023 goals will be evaluated in January,

with the submission of those goals due to the AGIC Council in May of 2023.

IV. Arizona 911 Office NG911 Project Update

- Phase 1 Completion
- Transitioning to Phase 2-3

Greg Denton led the NG911 Project Update with the project completion touched on by Brian previously. Phase 1 of the Migration Project has been completed. The PSAPs were provisioned with three (3) different circuits: an NPLS circuit, a broadband circuit, and an LTE FirstNet dedicated circuit. Those circuits are all dedicated and not shared. There were nine (9) PSAPs that were serviced by Frontier and were not being monitored 24/7 as well as being a single thread feed. Those have been addressed or are in a better position than previously recorded. The more rural or remote areas has infrastructure that is not readily available and would have only one (1) or two (2) providers in terms of last-mile infrastructure. This created a challenge for the vendors of the state to make sure that those redundant paths that are differentiating from each other to become connected and monitored, which was decided to be staged in different phases.

Currently, phase two is underway, and those under the first two (2) phases are now mostly under different circuits basis and are monitored 24/7. The second phase is scheduled to be finished in the first week of November, which will begin phase MR9-1-1. This phase will be taking the Next Gen Core Services (NGCS) that GIS is an important part of and switched over to using NGCS for all of Maricopa County PSAPs. This will not include new equipment, but just a transfer over to using the i3 components that NENA has identified as necessary for compliance of NextGen 9-1-1. The third phase will start in February or 2023 and end in July of 2023. The last phase is made up of DPS, Coconino County, and Yavapai County and is scheduled to start is September of 2023.

Multi-vendors have brought to light a challenge to be identified. The state 911 program has selected two (2) different call handling as a service (CHaaS) providers AT&T and Comtech. Comtech has a subsidiary Solacom Guardian, used for the five (5) PSAPs in the Northern Arizona Users Association (NAUA), found in Navajo and Apache counties. This was convenient since they have interoperability established between the NGCS and CHaaS. The rest of the state is utilizing Motorola Vesta through AT&T, and there is a challenge in getting all of them in the exact alignment for every step of the process. Based on this issue, it was decided that extra steps needed to be added to the pre-migration testing to ensure all instances that may happen can

be captured. Additional measures were added to the migration steps to double-check that these instances were captured. The first initial cutover was from 6-12 hours, but now we are down to around 2-4 hours, with no rollbacks in the schedule. As of now, there have not been any lost 9-1-1 calls, just some misdirected calls that are being worked out. As of the night before the meeting, all systems have been up 100%.

An issue brought to the 911 office's attention is the accuracy of routing with Verizon for wireless 911 calls with the NAUA PSAPs. Verizon has been provided an uncertainty range of over 1,600 Meters for their location based routing (LBR), which has caused misroutes to incorrect PSAPs. The 911 office is working with Verizon and the FCC to have the wireless carrier provide more precise location data to ensure misroutes do not occur.

The project update has created some lessons learned within the overall project and was discussed with Eric. Aggregation with 1Spatial is going well, as is the workflow in place with DDTi. Leveraging DATAMARK's VEP solution for Navajo, Apache, and Mohave counties proved to be a good strategy since they were the first phase PSAPs deployed across the state. Also, working with the original service providers (OSPs) has been a good practice since the 911 office can help research and provide input on misroutes for wireline/VoIP 911 calls.

V. ALI/MSAG Update through DDTi Location Database Process

- GIS Based MSAG focusing on Frontier Regions (Apache, La Paz, Mohave, and Navajo County)
- LDB Workflow

Alex Kiene, representing DDTi, spoke on how the first phase has been to get the data into their system to see what the fallout is between different datasets. An assessment was provided from DDTi where a priority was shown with the different counties and areas that need to be fixed first, specifically the Frontier region. There were user accounts setup that with the cutover for the location database, called the LDB, which allows for the users to login and view any discrepancies for their specific jurisdiction. If any of those discrepancies have been identified as GIS issues, the user can fix it in their source data and, through the aggregate process with 1Spatial and the SI, the issue will be resolved. Another option would be to assign the discrepancy with the OSP if it has been determined to be a service provider issue. The last option would be to push it back to the discrepancy arbitrator, which is Eric and DDTi currently, and they can assess on whether it needed to be further investigated or is an

interim fix. A short-term goal is that the Frontier region will have a produced MSAG from GIS by the end of the year. The Phase 1 cutovers will have a more aggressive timeline, and will have Mohave, La Paz, Navajo, and Apache completed by the end of the year.

VI. 1Spatial Updates and White Page User Guide About Updates

There was an extensive list of enhancements implemented by 1Spatial last week, along with their solutions. Migration of their infrastructure was the first to be discussed, where Microsoft Azure now hosts their environment. This means that the processing time on larger dataset validation and analyses has decreased significantly. The second is the error discrepancies regarding what that looks like in validations. If any pieces of geometry are being flagged as invalid in the NENA i3 system but it is valid, the ability to flag that as an error exception handling is now present. When the process is run through 1Spatial, it will now be shown to meet the level of conformance. The overall workflow experience for the user has been updated as well. A field has been added where an explanation of exception can be added as well, which can explain why certain invalidities are valid from an archiving perspective. Eric will release a walk-through video of going through the workflow and what all it entails at a future date. A dashboard portion has also been added to help documentation and presentation to users that might not be as GIS-inclined. The whole state will be featured within the Public Safety Committee Hub on AZGeo.

VII. RapidDeploy Radius Eclipse Overview

- Provide Details about Rapid Deploy Map
- Use Case for 2023 Super Bowl (Glendale to leverage indoor mapping through CRG Mapping

RapidDeploy is a SaaS-based tool that the State of Arizona and the 9-1-1 office utilize for call mapping and analytics. They are getting more involved with call mapping and implementation across their customer base. The approach is to leverage web services that can be updated automatically so 1Spatial can publish aggregate datasets. Once published, a statewide repository is synchronized. This allowed for integrating web maps directly into the user interface and leveraging vector tiles. Dynamic information draws quickly, in addition to multiple basemap renditions. This can assist in intercounty communication where the user may not know the neighboring county's information and can reference it quickly using RapidDeploy's solution. Brian Bond asked where to access or hold this data if there was unexpected downtime with the server, which Eric assured would be a future

conversation, given the importance, but it has not happened yet.

Indoor mapping is becoming a popular subject within 9-1-1 since wireless carriers have been able to output Z-axis. One use case is with Glendale and Scottsdale PD is leveraging indoor mapping for the Super Bowl and waste management. A DHS grant funded program called the Critical Response Group (CRG) is being leveraged to help generate and incorporate a lot of premise drawings that are generally either in CAD or EWG. Often these aren't consistent in showing emergency information, or information pertinent to first responders. To solve this, CRG will be utilizing those drawings, along with walking the facilities, to incorporate it into a subset of information that is interoperable in the case that multiple units need to respond. This will utilize the same field of information in symbols and attribute information to leverage consistency with what would be seen in an instant command structure. Based on the success of this event, it will be incorporated into school safety across the state.

VIII. AGIC Evacuation Zone Work Group Status

Morgana Laurie spoke on the status of the AGIC Evacuation Zone Work Group, sharing that there have been two meetings so far, with all meetings taking place on the third Thursday of every month at 10:00 AM. There have been between 12-14 regular attendees so far, which is great in the group's infancy. The group has been comparing workflow between different counties for current evacuation processes. Yavapai and Coconino counties have served as the two test pilot counties, with which both emergency managers of those counties are members of the group. They discussed how the boundaries within the counties are determined, which is from the Sherriff currently. Although there is a difference between the two as far as when GIS comes in, there is discussion on how to easily integrate the two. The group members have researched different schemas and utilized existing datasets from Florida for ideas on structure and use. Some current fields that are being investigated to be placed within the schema are County, Jurisdiction, Incident Name, Zone Name, Zone ID, and Status. To go along with this schema creation, there has also been work in creating a data dictionary. Requirements are being narrowed down to simplify the fields to not have excess. This would be to balance simplicity and usability of other types of data to layer with it. The group connected with the International Association of Fire Chiefs (IAFC) to compare the challenges that may coincide, with a couple of the Evacuation Zone Woke Group

representatives being present in their group. The IAFC has requested for the members of this group to fill out their survey on wildland fire evacuation planning for jurisdictions across the country to help develop their tool.

The IAFC Survey123 can be accessed here: https://survey123.arcgis.com/share/a810128f39dd423a881737601f3f9684?portalUrl=https://IAFC.maps.arcgis.com

There are some challenges that the Evacuation Zone Work Group is facing right now. One of these challenges would be gaining the buy-in from the Sherriff's and law enforcement since there is not as much initial coordination. Another is how to plan those evacuation zones if the authority on that order is not involved from the beginning. A technical challenge is looking at where and how to host the FME process. This will be decided on the 2023 workflow. Any input on this or anyone interested in joining the workgroup is encouraged to reach out to Morgana, or to just join the next meeting.

IX. Call to the Public

Brian mentioned the AGIC Public Safety Committee Google Group and encouraged those interested to join in on the group. No further comments were made.

X. Discussion for Topics of Future Committee Meetings

Eric recommended for there to be a Super Bowl brief to be put out. The Super Bowl working group is meeting twice a month and is getting GIS liaison coordination from every jurisdiction to create a web app that will represent any type of data that will need to be viewed or accessed. The liaisons are being assigned now, but for the Q1 2023 meeting will see web applications with related data.

XI. Adjourn

Meeting adjourned at 11:14 AM

No Upcoming 2022 Meeting Dates (Quarterly):

- January 13

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- April 7
- July 28
- October 6