Area 15

Ad-hoc Hybrid Meeting Committee

Final Report

Contents

Introduction

The Ad-hoc Hybrid Meeting Committee was formed as the result of a motion **"…to review options to enable Area 15 Business Meetings, Conference Agenda Review assemblies and Area 15 Delegate and Officer election assemblies, to include a virtual conferencing technology component in conjunction with the in-person attendance."** The Committee has met monthly using virtual conferencing technology to

- Investigate whether other Areas are using virtual conferencing technology for their Area Assemblies and /or Business Meetings and, if so, what capabilities are required and how did they acquire them.
- Define the options for enabling virtual conferencing technology and the costs associated with each.
- Evaluate the non-tangible requirements of AA's Second and Third Legacies of Service and Unity

Committee Composition and Responsibilities

The committee is composed of:

1	A District Chair who is the Committee Chair	Tom S.
2	The Area Quarterly Coordinator	Ray S.
3	A District Committee Member	Jeannie S., District 4
4	Two General Service Representatives	Virginia B., District 1; Kim C., District 9
6	Ex Officio member	Karen V., Area 15 Recording Secretary

In addition, the following guests have attended meetings and frequently contributed to the discussion:
- Lisa D., Area 15 Chair
- Shelby B.
- Carol H.
- Alan T.
- Ric B.
- Shawn M.
- Jorge L.

Hybrid Meeting Requirements

"Hybrid" is a type of virtual conference where attendees can choose to either travel to the Business Meeting location or log into an application (such as Zoom or WebEx) to participate. There are various options for hosting a hybrid meeting and the requirements vary accordingly. The options are:

1. Acquire the technical components needed and assume responsibility for storing them; transporting them to meeting locations and setting them up; monitoring performance and addressing issues; and taking them apart, packing them up, and bringing them back to the storage location.
2. Contract with the Meeting venues to provide the equipment and services
3. Contract with a Third Party to provide the equipment and services

The pros and cons of each option will be summarized after consideration of all the details associated with each.

Option 1 – Area Ownership of Components and Service Delivery

If the Area owns the infrastructure, it also must own the responsibility to store the components between Area Business Meetings, transport them to each venue, assemble them, operate them, and then disassemble them and bring them back to a secure storage location.

Technical Requirements

"Infrastructure" refers to the technical elements of the solution: hardware, software, and network components.

Hardware

Area 15 is large; there are over xxx voting members present at a given Assembly. In order to have a high-quality experience the committee recommends that hardware be configured in the Business Meeting room as shown in the diagram below.
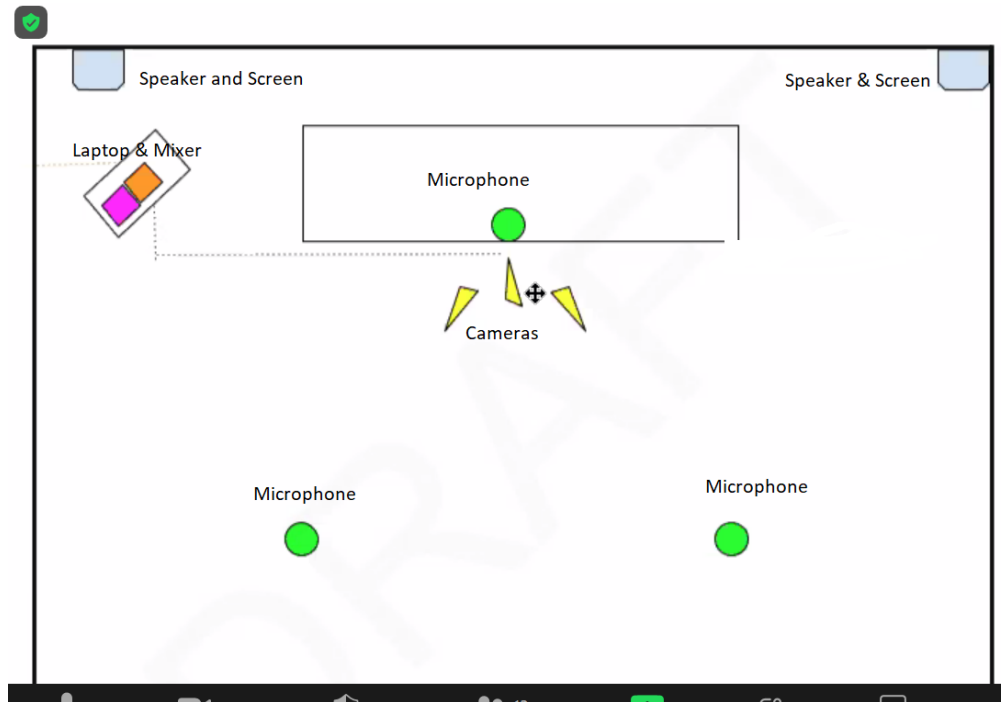

Figure 1 – Equipment Configuration for the Business Meeting

The specific components and their functions are listed in the table below.

Component	Function
Laptop / Mixer	Supply and integrate the feeds to and from the Speakers, Screens, Cameras, Microphones, and Zoom.
Cameras	Provide the virtual attendees a view of the room and speakers
Microphones	Enable voting members to provide vote counts, read and discuss motions Enable the chair to conduct the meeting and Area Officers to deliver their reports
Speakers	Enable in-person attendees to hear what is said in the room and what is said via Zoom
Screens / Monitors	Enable Zoom attendees who turn on video to be seen Enable display of documents via sharing to all
Network related items	Cables, adaptors, switches needed for connectivity to the internet and within the system
Miscellaneous	Cases, stands, power cords, chargers; items needed to store and/or run the equipment

The following table identifies recommended specific components and cost at time of investigation.

Item	Manufacturer	
1 audio mixer	Mackie ProFX10v3 (needed to connect sound to speakers/house) Features: High Resolution recording via USB to computer - built in compression (yes) - sound quality	 $300
3 Assembly wireless mics	Shure SM58-LC (wired) Features: designed to highlight vocals - LC=no cable provided - interchangeable parts - Shure SLXD2/SM58 (wireless) Features: interchangeable parts - 300' range - AA batteries or monitor status with Shure SB903 pack	 $350 / $900
Wireless mic receiver	Shure SLXD4 (3 mics) (receives sound from mics and connects to mixer - seamlessly changes frequency without interruption)	 $1500
mic batteries	Shure SB903 (3 mics + 1 extra) (8 hrs use, rechargeable, monitor battery health and status)	 $250
mic battery charger	Shure SBC203 (charge microphone batteries)	 $300
2 Microphone stand	Pyle 31.5" to 60" Inch (on the floor)	 $100
1 microphone desk stand	Pyle 4.7'' to 8.7'' (on the dais)	 $50

Item	Manufacturer	
3 webcams	Logitech Mevo Start (two on the floor + one on the deus) **Features:** Mevo multicam app, wired or wireless, PoE and up to 6 hours battery, latency adjustments, creative audio microphone uses, overlay graphics (png), excellent customer service, NDI, OBS, Melon	$1200
3 ethernet power adapter	Mevo ethernet power adapter (not to rely on battery, PoE from Cat6 cable instead of extension cords)	$600
3 cam floor stands	Mevo floor stand (two facing crowd + one facing deus)	$300
1 network switch	TP-Link TL-SG1005P V2, 4 PoE, @65W, (power and uninterrupted connection for the cameras)	$100
(3) 200' ethernet + (1) 10' ethernet CAT6 cable	Cat6/7/8 (used to power and connect the cameras + one cable to connect to the laptop to the network switch)	$300
Laptop	HP 17 - Business Laptop Computer 17.3" FHD IPS Display (100% sRGB, 300 nits) 11th Gen Intel Core i3-1115G4 - 16GB RAM 512GB SSD HDMI, bluetooth, 3Ghz Webcam, **Zoom suggest:** ≥ 2Ghz (3Ghz) link	$700
Sennheiser Consumer Audio SC 660 USB ML (504553)	Ultra noise canceling, USB, volume Headset for Zoom tech	$200
power cables, sound cords (XLR, etc.)	Power cords, XLR cables, XLR adapters, USB charging station.	$500

Item	Manufacturer		
Protective hard cases	microphones, mixer, laptop,		$500

Software

The only software needed is Zoom. However, the laptop requires on operating system such as Windows, and the appropriate drivers and applications relating to running the hardware components.

Network

The Bandwidth requirements published by Zoom for meetings and webinars are:

- For 1:1 video calling:

> For high-quality video: 600kbps (up/down)
> For 720p HD video: 1.2Mbps (up/down)
> For 1080p HD video: 3.8Mbps/3.0Mbps (up/down)

- For group video calling:

> For high-quality video: 1.0 Mbps/600kbps (up/down)
> For 720p HD video: 2.6Mbps/1.8Mbps (up/down)
> For 1080p HD video: 3.8Mbps/3.0Mbps (up/down)
> For gallery view receiving: 2.0Mbps (25 views), 4.0Mbps (49 views)

- For screen sharing only (no video thumbnail): 50-75kbps
- For screen sharing with video thumbnail: 50-150kbps
- For audio VoiP: 60-80kbps

The internet options at 3 of the common venues are shown to provide an idea of the bandwidth required.

Hotel	Internet	AV connection
Boca Raton Marriott	5Mbps / $220++	150++
	10Mbps / $500++	
Sanibel	3Mbps / $180++	170++
	5Mbps / $215++	
	10Mbps / $2605++	
Hyatt Regency Sarasota	3Mbps / $125++	170++
	5Mbps / $190++	
	10Mbps / $2605++	

Figure 2 - Hotel Bandwidths and related Costs
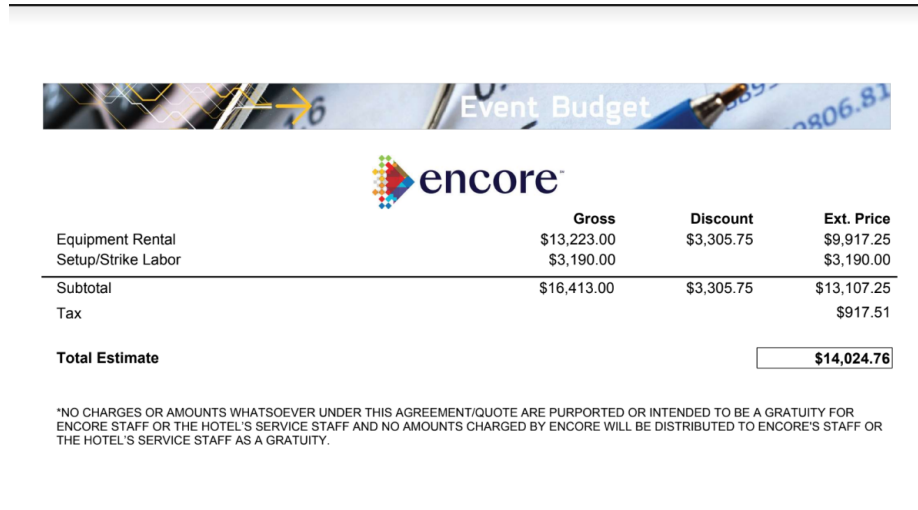
Logistics

If the Area chooses Option 1, there are Logistics to consider.

- Equipment Custodian - One or more trusted servants are needed to take charge of the equipment and to oversee set up and break down at each venue for each Quarterly. The Custodian should manage transportation and storage.
- Transportation – The equipment must be transported from its storage location to the venue and back again,
- Storage – The equipment must be safely stored in a secured location that is protected from severe weather and other risks.

Option 2 – Contract with the Venue / Hotel for Support

A sample quote was obtained and is shown below. This quote is for enabling hybrid attendance at all the Area Assembly workshops as well as the Business Meeting. We include it as a representation, however, in lieu of multiple quotes.

	Gross	Discount	Ext. Price
Equipment Rental	$13,223.00	$3,305.75	$9,917.25
Setup/Strike Labor	$3,190.00		$3,190.00
Subtotal	$16,413.00	$3,305.75	$13,107.25
Tax			$917.51
Total Estimate			**$14,024.76**

*NO CHARGES OR AMOUNTS WHATSOEVER UNDER THIS AGREEMENT/QUOTE ARE PURPORTED OR INTENDED TO BE A GRATUITY FOR ENCORE STAFF OR THE HOTEL'S SERVICE STAFF AND NO AMOUNTS CHARGED BY ENCORE WILL BE DISTRIBUTED TO ENCORE'S STAFF OR THE HOTEL'S SERVICE STAFF AS A GRATUITY.

Figure 3 – Sample Hotel Equipment and Service Quote

Option 3 – Contract with a Third-Party for Support

Karen working with Tech 12

Summary and Comparison of Options

The costs related to each of the Options is shown in the diagram below.

Initial & Annual Expenses

Option 3

$45,000.00

$40,000.00

Option 2

$35,000.00

$30,000.00

Option 1

$25,000.00

Approx.
Annual
Professional
Services for
labor and
equipment not
including...

Approx
Annual Hotel
AV
$30,000.00

$20,000.00

$15,000.00

Initial (one time
only) Costs
$13,290.00

Approx Annual
Committee
expenses, $6,600.00

$10,000.00

$5,000.00

$-
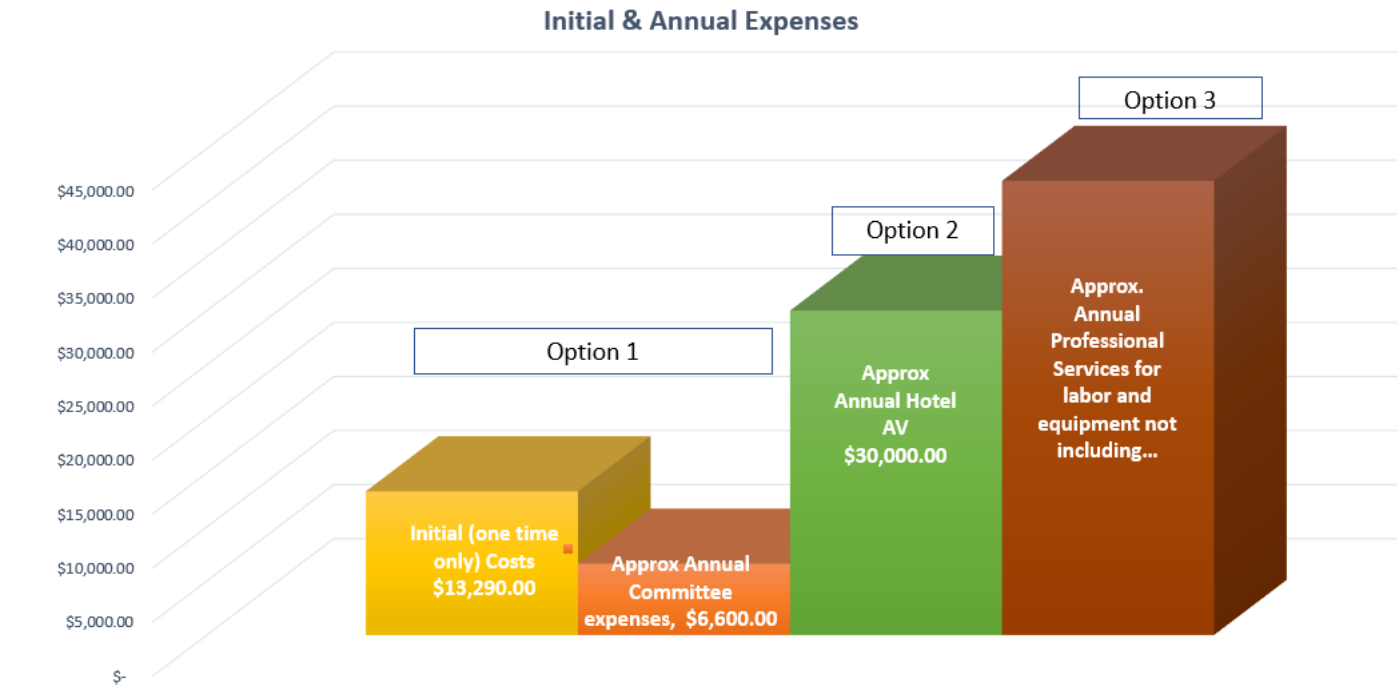
The committee also considered possible penalties the Area may incur if a.) there are insufficient in-person attendees to meet the minimum for a discounted rate (attrition), and b.) cancellation of a meeting. These are shown below.

Possible Hotel Penalties

$300,000

$250,000

$200,000

Approximate Annual
Maximum Hotel
Penalties for
Cancellation
$251,000

$150,000

$100,000

Approx Annual Hotel
Penalties for Not
Meeting Attrition
$60,000

$50,000

$0
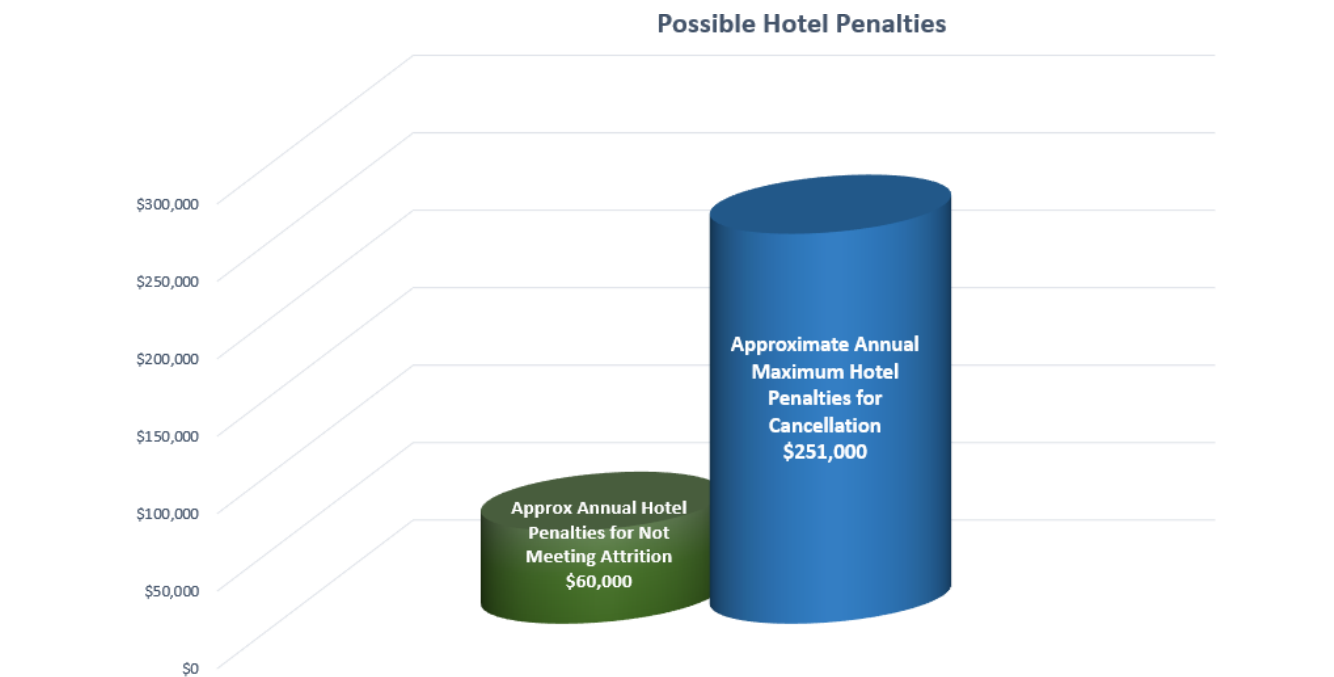
The table below summarizes the costs per option.

Option	Estimated Costs	Comments
Option 1	$13,290.00 initial cost $6,600 annually thereafter	Storage and travel expenses for trusted servants who set up and break down will add to these estimates

| Option 2 | $30,000 annually | |
| Option 3 | $42,000.00 annually | Vendor travel expenses will add to these estimates |

The estimates are based on details available in *Appendix A.   Cost Estimates*

Experience of other Areas

The committee contacted Areas within the United States that have implemented hybrid assemblies over the last two years. The following AA Areas are the areas that responded:

- California - Area 6 (Northern Coastal)
- Colorado - Area 39
- Missouri - Area 40
- Montana
- Albany, New York - Area 48

On two separate occasions, a member from Missouri and a member from New York joined our committee meetings and answered any questions from members and guests who attended.

Each Area had conducted extensive research and was open about what worked and what could be improved. It was difficult to find an Area with as many in-person attendees as Area 15. The General Service Office informed us that Area 6 had the most Districts within its Area, which is more in line with our Area.

The costs varied and the number of attendees, both in-person and virtual, varied. The complexities of each report differ as well. One common thread throughout is that prior to 2020, AA had no template/reference for navigating the times that we have all experienced in the last two years. The Committees that are referenced above, are dedicated to preserving the importance of Area assemblies and disseminating information to AA members in their community.

The questionnaires and each Area's answers can be found in *Appendix B. Questionnaires sent to other Areas.*
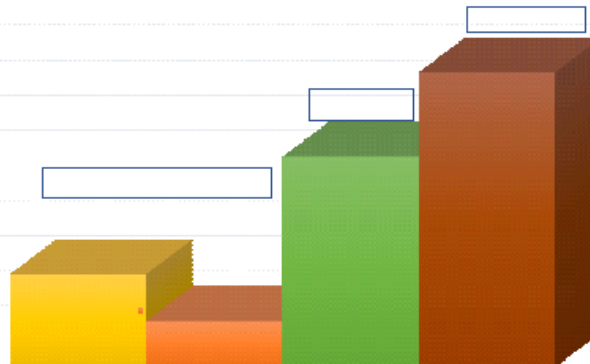
Recommendations

It is the committee's recommendation that if Area 15 decides to move forward with implementing a hybrid format for business meetings that the options presented be considered.

Three possible options for implementation have been researched and are included in this report for the body's consideration.

Appendix A.   Cost Estimates

12/1/22

Initial (one time only) Costs

mixer	$	300.00
microphones	$	900.00
mic recievers	$	1,500.00
batteries	$	250.00
Battery charger	$	300.00
Mic Stands	$	100.00
Desk stand	$	50.00
webcams	$	1,200.00
ethernet power adapter	$	600.00
cam floor stands	$	300.00
network switch	$	100.00
ethernet cable	$	300.00
laptop	$	700.00
headset	$	200.00
cables	$	500.00
Hard cases	$	500.00
zoom webinar	$	690.00
Projector	$	1,600.00
projector stand	$	200.00
projector screen	$	200.00
cables	$	300.00
cable ramp	$	300.00
speakers	$	1,100.00
speaker stands	$	200.00
cables	$	300.00
cable ramp	$	600.00
Total Initial Cost	$	13,290.00

Approx Annual Committee expenses

More expenses	Quarter	Annual
internet- quarterly	$ 1,500.00	$ 6,000.00
Monthly rent for storage	50.00	$ 600.00
Total Annual		6,600.00

Approx Annual Hotel AV

Hotel AV expenses	Quarter	Annual
internet quarterly	$ 1,500.00	$ 6,000.00
Hotel	$ 6,000.00	$ 24,000.00
Hotel Labor	$ -	$ -
Total Annual		$ 30,000.00

Approximate Annual Tech 12

Tech 12	Quarter	Annual
Tech 12 labor	$6,000.00	$ 24,000.00
Tech 12 Equipment	$4,500.00	$ 18,000.00
Total Annual		$ 42,000.00

DATE/LOCATION	Minimum Penalty to Cancel	Maximum Penalty to Cancel	Annual Minimum Penalty to Cancel	Annual Maximum Penalty to Cancel	Penalty if attrition is not met	Annual penalties
January 2023/Sarasota	$30,000	$30,000	$120,000	$120,000	Not listed on Contract	
April 2023/Boca Raton	$31,134	$62,268	$124,536	$249,072	$15,000	$60,000
July 2023/Tampa	$51,600	$51,600	$206,400	$206,400	Not listed on Contract	
October 2023/Boca Raton	$27,438	$54,876	$109,752	$219,504	$15,000	
January 2024/Sarasota	$10,000	$30,000	$40,000	$120,000	Not listed on Contract	
April 2024/Boca Raton	$18,882	$62,940	$75,528	$251,760	$15,000	
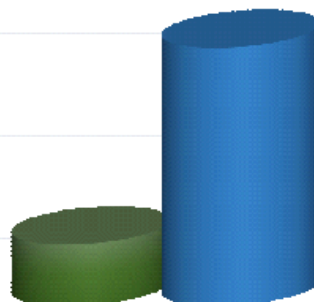
Appendix B. Questionnaires sent to other Areas

Question	Type
What is the percentage of remote attendees on average post-Covid?	Capacity
What is the percentage of remote attendees on average during Covid?	Capacity
What is the percentage of in person attendees on average during Covid?	Capacity
What is the percentage of in person attendees on average pre-Covid?	Capacity
Do you enable workshop and committee meetings as hybrid as well as the Area Business Meeting	Capacity
How many Districts are in your Area?	Capacity
What hardware is required to enable hybrid?	Hardware
What was the cost?	Hardware
How is the equipment stored between Assemblies?	Hardware
How is the equipment set up before and taken down after the Assembly? Are there designated service positions for this?	Hardware
What software are you using?	Software
What was the cost?	Software
Where is the software installed?	Software
How many voting members attend the Assembly on average?	Vote
How do you ensure that votes are ONLY cast by voting members?	Vote
How are votes conducted ?	Vote
Have you actually implemented hybrid meetings? If so, how was the experience?	User Experience

Answers to Committee Questions

Area 48 – Upstate New York

My name is Matt and I am the technology chair for Area 48. Below, in red, are the answers to your survey. If you have any other questions - please feel free to ask!

	What is the percentage of remote attendees on average post-Covid?
1	50% - since moving to hybrid
	What is the percentage of remote attendees on average during Covid?
2	100% - we were virtual only
	What is the percentage of in person attendees on average during Covid?
3	0%
	What is the percentage of in person attendees on average pre-Covid?
4	100%
	Do you enable workshop and committee meetings as hybrid as well as the Area Business Meeting
	We offer Area 48's hybrid equipment to be used, if available, for events within Area 48 via an approval process (which is fairly easy). All of our service committees meet virtually since Area 48 is
5	geographically very large.
	How many Districts are in your Area?
6	19, including one virtual district

7	**Does the Area own the equipment used?** **Yes**
a	What hardware is required to enable hybrid? See attached breakdown of equipment
b	What was the cost? See attached breakdown of equipment
c	How is the equipment stored between Assemblies? By the tech committee in a lockable weatherproof tote
d	How is the equipment set up before and taken down after the Assembly? Are there designated service positions for this? Equipment is handled by the tech committee. Set up for an event is usually coordinated with the host of the event.
e	What software are you using? Zoom
f	What was the cost? Approx $150/year
g	Where is the software installed? On the laptop owned by Area 48
8	How many voting members attend the Assembly on average? 50
9	How do you ensure that votes are ONLY cast by voting members? Honor system
10	How are votes conducted ? Virtually via a Zoom poll. In Person either hand raising or casting a vote on a piece of paper to be tallied anonymously. If Hybrid, the numbers from these two methods are added together.
11	Have you actually implemented hybrid meetings? If so, how was the experience? Yes. It has gone very well.

Area 6 – Northern California

Ad Hoc.pdf

Area 39 - Missouri

how your Area came together through a Committee to offer in-person attendance as well as Zoom attendance

The decisions to do a virtual only assembly in June 2020 and our first hybrid assembly in September 2020 came about in Area Officers meetings –

In 2020 Area 39 had a website sub-committee of PI – our technology committee has come out of the last 2 years of additional technology needed in the area but is still a sub-committee of Public Information.

To allow in-person attendance in September 2020 (our election assembly) several things were discussed and agreed on

- Maximum number of people that the large meeting room could hold following Covid protocols for social distancing.

- Because of the restricted number of in-person attendees – only voting members would be allowed to attend in person

- Pre-registration would be required to make sure we didn't go over the maximum number of attendees – first come first serve (we did not exceed the room capacity with voting members requesting to attend in person)

- That the hybrid assembly would only be for 1 day for the purpose of electing area officers and approving elected committee chairs – the committee were to meet before the assembly virtually to elect their respective committee chairs

- To open a zoom account on a month to month basis until we had more information about Covid

Over the last year those conditions have been removed and now everyone – voting or not – to attend in person or virtually as they feel is best for them

Also last year the assembly as a whole – for a variety of reasons – decided to continue with hybrid assemblies on a permanent basis or at least until the assembly makes a different decision. We have now changed from a month to month to a yearly account and are looking for the area to buy the computers etc. for hybrid assemblies instead of using a collection of members' equipment.

it looked like your Area ran "2 tracks" at your January 15 2022 Assembly

We have been running 2 meetings at the same time on Saturdays since January 2021 – we were using 2 separate zoom accounts – we had one account exclusively for each physical meeting room and people had to log out and back in if they wanted to attend a different committee.

With Zoom improvements, we have moved to using one Zoom account with breakout rooms so that people can attend different committee meetings without having to do the logout and back in. Using tracks is a term that our Area Secretary came up with – not sure where it came from – just means we are running 2 hybrid meetings at the same time – nothing special

what a committee to handle the set-up of the equipment would look like

Our on-site hardware committee is basically 2 people – our assembly is typically 2 days – the same as yours – our "hardware" team arrives at the hotel on Friday afternoon/evening to set up equipment – we also have 2 or 3 tech team members who join online to verify that sound and video are working correctly

Our physical space includes one large meeting room and 3 smaller rooms – at the current time we are using the large upstairs meeting room and 1 smaller meeting room for in-person attendance and hybrid sessions – the larger room and the smaller room(s) are used for committee meetings on Saturday during the day. The large meeting room is used solo for the Saturday evening workshops and for Sunday business.

We are using the hotel supplied WiFi. One of the things we have found is that the internet needs to be synchronous – it used to be that everyone wanted an asynchronous connection – but with 2-way video streaming in today's world a synchronous connection is preferred – pretty much required – or the transmission from the in-person meetings rooms drags and interrupts for those attending online.

Some equipment needs depend also on what equipment the meeting location provides – the hotel that our assembly meets in has TV/monitors in the meeting rooms that we can hook the computers into. There is also a sound system in the large meeting room.

The equipment in the larger meeting room includes 2 computers (laptops) – 1 microphone – 2 cameras 2 computers

1 camera – 1 microphone – connected to a separate computer is for the podium – the other computer/camera is for the floor microphone and as much of the room as possible

The podium computer is hooked into the hotel equipment for video – we are still fine tuning the configuration for audio – we have hooked into the hotel sound system – we have also hung a microphone in front of one of the speakers to pick up both the floor and podium microphones –

For the smaller room(s) we use 1 computer – 1 camera and a speakerphone placed in the center of the room to pick up voices without people having to get up and walk to a microphone. The camera is placed off to the side so those online can view as much of the room as possible.

The 2 people on the hardware team work together to set up equipment - it usually takes about an hour per room to set up the equipment and run all the cables – do the initial testing – and then we usually spend another hour with the virtual testing – the hotel has been upgrading their interface with the monitors and sound equipment and internet – so each time we change things up a bit to

improve the sound quality – if we had more people we could probably cut that time in half. If/when we add more breakout rooms in the future it will add about an hour per room just to set up the equipment

 If your assembly is in a different location each time it's probably going to take a little extra time to figure out the interface with the hotel equipment

 Our last assembly was the first time we have used 1 zoom account with breakout rooms –

For the setup in the large main meeting room we record everything to the zoom account online

Breakout rooms have to be recorded locally on the computers in the rooms

 In addition to the hardware team we also have a "hybrid" team – the hardware team is part of the hybrid team – 1 tech person in each room – either in-person or virtually

For the Sunday business meetings, we have several techs involved besides the hardware team –

1 person to sit next to the area chair to monitor people wanting to comment online so that they are intermixed with the people in person that are part of the discussion of any agenda item

1 person handles the polling – we have found that it is much easier for that person to have a computer set up with at least 2 monitors

1 person does screen shares – such as motions or topics for discussion -

 or an equipment list –

I would suggest a minimum of 8GB RAM for whatever computer you choose – 16GB would be preferable looking forward.

Any 1080p HD Webcam will work

We use the Jabra Speak 510 MS Wireless Bluetooth Speaker for Softphone and Mobile Phone – there are newer more expensive models available but we couldn't see that there was any function difference for the increased price – this is used in the smaller meeting room

The microphone is a Fifine USB Podcast Condenser Microphone -K669 – this is used at the podium

Area 40 – Montana

Report of Ad Hoc Committee - Area 40.pdf

Area 10 - Colorado

Area 10 Colorado.pdf