

Quarterly Newsletter



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Disaster readiness gets put to the test First-ever Communications Tabletop Exercise Reveals Needs, Opportunities and Shortcomings

Thursday at 2:35 PM, the National Weather Service issues a Tornado Warning for Montcalm, Isabella and Midland counties in the Lower Peninsula of Michigan. A line of severe storms is moving east from Lake Michigan and a local spotter reports a tornado on the ground just east of Mt. Pleasant. By 3:15 PM, the tornado has passed through Mt. Pleasant and dissipates after crossing Highway 127. A simultaneous micro-burst straight line wind in the Alma – St Louis area causes heavy damage. The heaviest corridor of damage travels northeast down Michigan Avenue, crossing Highway 127 and continuing through the St. Louis Correctional Facility, taking down perimeter fencing.

As the storm moves to the northeast, there is a disruption in the Michigan Public Safety System (MPSCS) microwave connection between sites 3104 and 3102.

On August 27-28, the U.S. Department of Homeland Security presented this fictitious scenario of a tornado and straight-line winds ripping across central Michigan as part of its first-ever emergency response “communications table top exercise” in the state.

Held in Mt. Pleasant, Michigan, “the exercise venue was chosen because it is an area where three different regions (Capital, Grand and Bay Regions) meet and the local emergency services from three different regions, each with regional plans, have a need to work together and communicate with each other across regional boundaries. This will assist in harmonizing the seven regional plans in Michigan,” said Bill Nelson, Chief, Troy Fire.

The two-day workshop provided an assessment of the area’s current communication readiness, specifically spotlighting vulnerabilities and needs should a major disaster or incident occur – valuable stuff for this audience of State and Federal communication specialists and responders from law enforcement, fire, and EMS (supervisors and field command personnel). Doug Wright, Gratiot County Sheriff, said, “We have never dealt solely in the communication area. This exercise opened my eyes to our faults and we need to learn from our faults. It was a good catch all.”

What’s next?

In October, participants from the communications tabletop exercise will reassemble with Homeland Security to review conclusions about the region’s disaster readiness and begin implementation plan assignments and timelines to address the noted gaps. This exercise also was able to show the total scope and possible communications collaboration that would be needed if such a disaster should occur.

From there, the group hopes to move the Mt. Pleasant “model” to a functional exercise in 2014. The overall goal would be to share the model with first response leaders and supervisors across the state for side-by-side comparison of regional approaches and plan modifications. Watch this newsletter for future updates.



Harlan Squire, Operational Specialist, US Department of Homeland Security/Office of Emergency Communications



Calling the plays

When all eyes are on you, lead with passion, integrity and vision

Leadership starts with the drive to do the right thing. If you are lucky, that drive never stops. Though your job may wear on you, and at times you may not be well received by peers, your passion for the team and the mission must never wane.

We like to believe we are appreciated for our efforts and the long days we invest to “keep the lights on” in our shop. In truth, external appreciation doesn’t always come, but at the close of each day it’s the mission that matters. Keep that flame burning and never allow people or tactics to extinguish it.

One day, I plan to share some hard-earned words of wisdom with my replacement. I’d tell him or her to grasp the baton with both hands and understand that long hours will often spill into weekends and into your personal life. But keep in mind that all eyes are on you. Your team will align under the leadership you set forth and fight for the vision you define. If you do it right and do it well, they will stand with you until you relinquish that baton. This is what brings joy to the job.

At its core, leadership is about decision making. Whether you lead the greatest team of public safety communications professionals, or lead a professional sports team, one thing holds true: the “play caller” leads the team.

As a leader you must be comfortable with the decisions you make. Not all decisions are easy nor are they the best. With great decisions, success and appreciation follow and that afterglow is a great boost that should be shared with the team. However, if a decision is poor, the buck stops here. As the “play caller,”



Brad Stoddard, Director
Office of Michigan’s Public Safety Communications System

responsibility lands on your shoulders – the responsibility of ownership and the responsibility to correct the course. Achievement hinges on your ability to recognize when it is time for a different “play to be called.” Success is only garnered by quickly assessing the misstep, and determining a plan of action towards a greater outcome. This is leadership at its best.

Beyond decisions, leading a team relies on respect for every team member and giving thoughtful consideration to where each person fits into the matrix of the team. This is a never-ending process as new technology and skill requirements come into play all the time. Your job is to know your team and know their skill sets and interests. Putting the right people in the right job is critically important.

Sometimes, however, the fit doesn’t work. When someone struggles, resist the urge to write them off. Rather, reexamine their skill set to determine where they are better suited on the team,

then share your vision for that role and get them on board. I bet in most cases your vision has a skill requirement where team members can adapt and excel. Find their value and remember ... if you treat people like dead weight, they’ll be dead weight. Put them in a position where they can succeed and give them a real stake in the mission. If your passion for that mission ignites a passion in them, your team will gel and success will follow.

I know this sounds easy on paper, but leading is anything but easy. All jobs are beset with challenges, both internal and external. Know that some people will never like you just because you’re the boss. And know that the pat on the back for a job well done doesn’t always come. Never give up. Keep your sights on the mission. And remember, if you believe in your team, your team will believe in you. With integrity, vision, decisiveness and passion, you can move people forward.



On the Horizon

Technology Rollout to Revolutionize DNR Dispatch System

New tool boosts communication efforts

GovDelivery is "in," Listserv is "out"

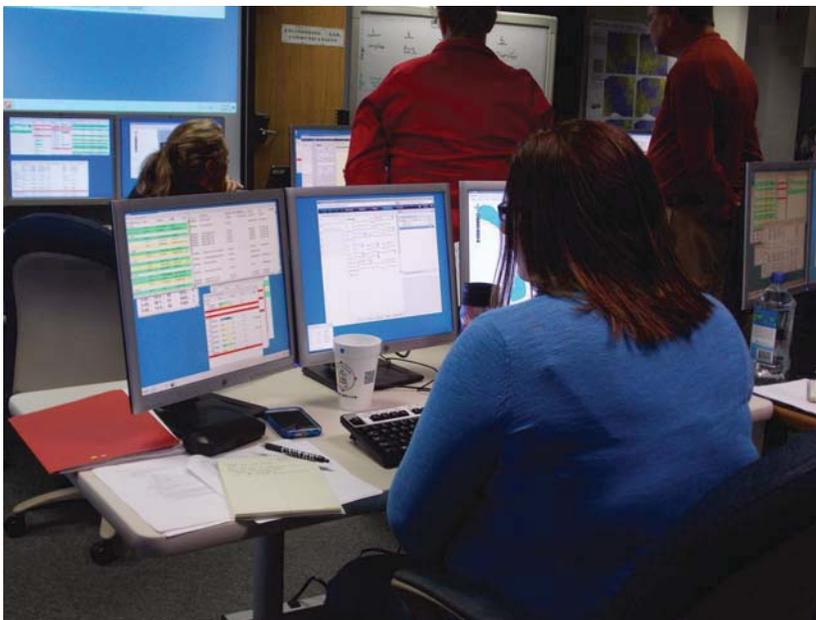
For the past decade, MPSCS along with the rest of state government has relied on the Listserv tool to send mass communications, using it to group emails together for targeted messages. That's all changing with the introduction of a new and more sophisticated tool called GovDelivery. The MPSCS will use GovDelivery in the ongoing effort to communicate important department news and information. Whether it's a message from the director, with interesting department tidbits, invitations to department events, and emergency announcements, GovDelivery is the new messaging tool that will be used.

GovDelivery offers both software and services that can be used to send email, text messaging and other messages with improved functionality, including the ability to incorporate improved graphics and banners into the messages. It also provides communicators with metrics, helping to assess the effectiveness of the message.

The previous listserv group has been compiled and stored on the GovDelivery system. As a recipient of the messages, there is nothing you need to do differently. The messages will arrive in your email box as usual, but you may notice a different look and feel to them. GovDelivery system and can be used to reach targeted groups.

On November 4, we encourage you to visit michigan.gov/mpscs and click on the red envelop to view additional specialized groups that you may be interested in subscribing too.

stay connected



"P1 CAD will streamline our call taking & dispatch procedures while improving officer safety" Kristen Higbee

The time has come to put an old-school system within DNR Law Enforcement out to pasture. For decades, the department's dispatch system has been burdened with manual and slow processes. In 2012 alone, DNR dispatchers captured information manually for 7,600 calls using an antiquated form that was created in-house.

New Technology

To keep up with call volume and provide greater efficiency, DNR Law Enforcement has teamed up with MPSCS to acquire Motorola P1 Computer Aided Dispatch (CAD). The system is a powerful incident management solution that allows dispatchers to enter data accurately, share information easily, and track units visually with a mapping option.

"The CAD system will centralize call taking, complaint generation, and officer dispatching," said Steven Burton, a first lieutenant in the DNR's Law Enforcement Division. "The system will be faster, more

efficient and will be able to help dispatchers capture all the required data we need for operations on a business response."

The centralized system retains all the data for wide customer base, including the judiciary, stakeholders, Legislature and management as well as the public. It is expected to be in place by early 2014.

Training

From Sept. 17 to 19, seven Report all Poaching (RAP) dispatchers attended the CAD user training provided by Motorola with assistance from MPSCS. While in training, the dispatchers were given test scenarios to enter into the CAD system, while Motorola and MPSCS sat in the wings to make adjustments and improvements along the way. The system can be customized and was designed with agency-specific details. The dispatchers who attended the training offered positive responses. The system, they said, will revolutionize the way DNR does business.



across mpscs

New Employees, Retirement, Promotion & Anniversaries

Charles Collier

The MPSCS is pleased to announce that Charles Collier has joined Engineering Services, Public Safety Services as an Information Technology Programmer/Analyst.

In Collier's new role, he will be supporting the Michigan State Police and DNR Law Enforcement. Most recently he has been working in DTMB, Enterprise Architecture working with the design phase of NetMotion and the AVL system.

Collier is a computer hobbyist and enjoys movies, camping, canoeing/kayaking and other outdoor activities. He is married and has a 17 year old daughter.

Jonathan Jaeck

The MPSCS is excited to welcome Jonathan Jaeck to the team. Jaeck joins the Division of Support Services, Region 8 as a Radio Installer.

A Wisconsin native, Jaeck was born and raised in Racine. He received an Airframe and Powerplant certificate from the Milwaukee Area Technical College and worked as an aircraft mechanic in the Milwaukee area for ten years.

Jaeck now resides in a small home on eighty acres in Ishpeming with his wife where he enjoys fishing, kayaking, hiking, bow hunting, trapping, dirt bike riding, and turning wrenches.

Jeff Kelley

After fourteen years of experience in computer networking, Kelley joins the MPSCS as a Radio Communication Technician. He is responsible for monitoring the NCC system.

In his most recent position, Kelley supported the computer systems at Rowe Professional Services Company. He was also a member of the WHRT ABC 12 team supporting their computer system and broadcast operations for six years.

For the last nine years Kelley has been an active firefighter for the Swartz Creek Area Fire Department. His hobbies include amateur radio and computers. Kelley has been married for twelve years and has two daughters ages 10 and 6.

David Earl Peck Jr.

Please join MPSCS in welcoming David Earl Peck Jr. to the Division of Support Services in Region 7 as a Radio Technician. Peck will be providing infrastructure and subscriber services to clients in the Northern regions.

Staff Sergeant Peck joins the MPSCS team with thirteen plus years in the Michigan National Guard, and is currently enlisted to 2020. Peck performs maintenance on communication equipment, thermal and night vision sites, and anything else sent to his platoon for repair.

Most recently, he worked for the U.S. Department of Defense on Michigan National Guard equipment that had returned from deployments. Peck has also served as a wild-land firefighter for three years.

Peck has been married for eight years to Peggy and together they have a son and daughter, Jacob and Kaila. He and his family attend the Mount Hope Church in Gaylord where he is currently heading up the Men's Ministry. Peck holds an amateur radio license and enjoys mountain biking, fishing and working out when he can find the time.

Jennyl Simon

Jennyl Simon has joined the MPSCS team as an analyst in a communications and outreach capacity. The bulk of her career has been with the State of Michigan in communications with a specialty in web and graphic design. She has a Bachelor in Business Administration from Central Michigan University.

Simon will be responsible for the MPSCS and Public Safety Broadband internet site, MPSCS Newsletter, and organizing the MPSCS User Group meetings.

In her free time Simon enjoys teaching swimming lessons, playing volleyball, softball and fishing.



Charles Collier



Jonathan Jaeck



Jeff Kelley



David Earl Peck Jr.



Jennyl Simon



Jim Voss

With over eighteen years of experience in state government and twelve years in information technology, Voss brings a wealth of knowledge to the MPSCS, Engineering Services, Public Safety Services Division.

As an Information Technology Programmer/Analyst, Voss's responsibilities include supporting and managing the PremierOne Mobile Data Client and NetMotion applications. Additionally, Voss is responsible for assisting the Public Services team on CAD and EAM.

Voss enjoys vacationing at Higgins Lake, exercising and driving his 67 Mustang. He is married to his "lovely" wife Jean and has two children, Landon and Amelia.

Dennis Wilde, Jr.

MPSCS is pleased to welcome Dennis Wilde, Jr., Radio Technician for the Southwest Region Service Center.

Wilde comes to the MPSCS with four years of experience as a microwave radio operator in the Marine Corps. Most recently, he was Lead Technical Consultant for Sprint Nextel repairing cellphones for nine years.

Wilde recently moved to Michigan from Long Island, NY. When Wilde is not working he enjoys playing video games, technology/gadgets and computers.

Joel Withun

A 15 year MPSCS veteran, Radio Communications Technician Joel Withun will leave his work responsibilities behind on September 27 "to test his tolerance for boredom".

Withun has enjoyed watching the system grow and takes pride in knowing he was a part of something important and worthwhile. "Over the years we've become responsible for more and more equipment. It seems like we never have enough time for all that has to be done". He will miss his fellow coworkers but looks forwards to finding something that interests him, but not too much.

From all your colleagues at MPSCS, congratulations Joel and good luck!

Rodney Anway

MPSCS is pleased to announce the promotion of Rodney Anway to the position of Site Maintenance Supervisor. Anway joined MPSCS eight years ago as steeplejack.

In his new position Anway will be in charge of the personnel that support the infrastructure of the MPSCS tower sites.

Please join us in congratulating Anway on his promotion and in wishing him continued success at MPSCS.

Milestone anniversaries

Employee service adds up fast. This year ten employees have achieved milestone anniversaries.

Celebrating 15-years anniversary

- Joe Bertram
- David Hayhurst
- Alan Iho
- Steve Jaynes
- Pat Kenealy
- Buzz Leach

Celebrating 20-years anniversary

- Gary Laysell
- Chuck Thomas

Celebrating 25-years anniversary

- Michael Waltz
- Bradley McCoy



Jim Voss



Dennis Wilde, Jr.



Joel Withun



Rodney Anway



Will 800MHz radios be rebanded again in 2017?

The 800MHz radios will NOT be rebanded again in 2017; however, the FCC has mandated the narrowbanding of 700 MHz voice channels by 2017.

What is the difference between narrowband and rebanding?

A simple way to understand narrowbanding is to realize that for every channel that exists today, there will be two after narrowbanding. VHF and UHF channels were narrowbanded last year. All VHF channels are now spaced 7.5 KHz apart, and UHF is spaced 12.5 KHz apart. Before narrowbanding, they were spaced at 15 KHz and 25 KHz, respectively. By "splitting" the channels in the UHF and VHF radio bands the FCC is allowing for more capacity in the same amount of space. This is what will happen for the 700 MHz channels by 2017.

Rebanding is a nationwide project to move the "Public Safety Radio Band" from the existing set of frequencies (at 821-824 MHz & 866-869 MHz) to a new band 15 MHz lower (805-809 & 851-854 MHz). The existing band is subject to distortion, interference and clarity problems resulting from adjacent commercial cell phone operations. The Federal Communication Commission (FCC) in 2004 ordered that all public safety operations must be rebanded to the new Public Safety Radio Band. It will be much further from cellular channels adjacent to it to prevent a recurrence of the transmission and reception problems that were previously present.

What are MIC fees?

MIC fees, Subscriber fees and User fees are all referring to the same thing ...the MPSCS Fee Structure. There are four clearly defined service levels. Each has its own set of parameters that distinguish it from the others, including things such as the number of talkgroups.

Depending on an agency's need and specifications, they fall into one of the four levels. Which exact parameter is used to determine the level? This is where the confusion begins. The MPSCS does charge for the number of additional system talkgroups programmed into each radio. Additional system talkgroups are an agency's private, proprietary talkgroups that they have access to because of an addition to a basic template.

For example, X-fire department has 14 additional system talkgroups in their radio. That fire department is in Level 3, and is billed \$100/year per radio.

If that same fire department has 28 additional system talkgroups in their radios so therefore they are billed \$200/year per radio.

For additional clarification, please see the MPSCS Fee structure on the MPSCS website under Policies or contact Dan Robinson (517-336-6621).

800 MHz Rebanding Where are we in the process?

Over the last fourteen months the MPSCS staff and outside contractors have rebanded 51,389 radios from 1,346 public agencies (Federal, State and Local) as part of the state-wide rebanding effort. Over \$1,000,000 rebanding reward payments have been distributed at \$50 per radio that agencies have brought to the rebanded sites.

Upon completion of the radio rebanding, the radio transmitter on over 240 towers sites will be migrated to the new frequencies. The effort will begin October 22 instantaneously in the Upper Peninsula and the Northern half of the Lower Peninsula and will continue south completing the rebanding of the entire state by February 21, 2014. All radios will then be able to migrate onto the new channels.

Currently, there are 6,467 radios that have not been rebanded. Radios that have not been rebanded and that are operating where radio transmitter towers have been rebanded may not operate in the manner expected. Radios that have not been rebanded may not be able to find an available frequency immediately when they push-to-talk. In a critical situation, this could prove to be dangerous. Radios that have not been rebanded by the project will have to be rebanded at the owner's cost by their local vendor's repair facility.

There is still time

The MPSCS RPU team is still accepting radios for rebanding. Radios can be mailed to:

Michigan Public Safety Communications System
Attn: RPU - Rebanding
4000 Collins Rd.
Lansing, MI 48910

*Please make sure to package the radio safely and securely and include a prepaid shipping label. Once the radio has been rebanded, it will be returned using the prepaid label. Motorola radios rebanded after the August 30, 2013 are not eligible for the \$50 per/radio rebanding reward. Rebanded radios can be identified by the pink paint dot inside the portable battery compartment and on the chassis of mobile radio cases.

Please contact Ms. Missy Matson (517-333-4388) to get the serial numbers of agency radios that have not been rebanded.



Engineering Corner

MPSCS Grade of Service (GOS)

by Mark Sandberg

Grade of Service (GOS) is the probability of a radio call receiving a busy prior to being able to place the call. This basic statistic provides information such as the busiest time of day, if a site has enough capacity, and can even indicate there is a problem with the system. Unfortunately, GOS is often looked at after problems have already started. To assume a more proactive role, a more involved analysis is required.

Some background ...

In 2004, the Michigan Public Safety Communications System (MPSCS) developed a method for tracking GOS system wide on a weekly basis. This method looked at the probability of a call receiving a busy signal before getting through and was analyzed in one hour chunks of time.

Currently, this method also looks at the actual amount of voice traffic produced for each one hour time period and picks out the busiest hour for each site in the system. Those numbers are run through statistical calculations that result in a predicted average GOS for each site.

The MPSCS method combined with GOS provided the ability to analyze a system's current capacity, identify trends, and proactively identify where additional capacity is needed before excessive busies actually occur.

The need for additional capacity can be generated by a new agency joining the system or by a slow addition of radios over time. In either case, many potential GOS problems can be avoided before they affect public safety communications.

Can we meet the need?

Despite all of our proactive efforts, system busies cannot be avoided completely. Due to limited financial and spectral (frequency) resources, it is unrealistic to build a system with enough capacity for all possible public safety scenarios. For example, if there were a disaster that required a very large public safety response, numerous responding agencies would need to communicate with their own agency, as well as interoperate with other agencies. In addition to the radio traffic produced by the disaster response, there would continue to be radio traffic for the day-to-day events (traffic stops, fires, 911 calls, etc.) that are still taking place. Therefore, any site required for coverage in the disaster area would immediately need significantly more capacity than what is normally used on a day-to-day basis. This then poses the question, should a site be designed with enough capacity for day-to-day business or with enough capacity for disaster response?

While the reflex answer would be to provide enough capacity for a disaster scenario, limitations to financial and spectral resources make this impossible. Since the location of most disasters cannot be predicted, every site in the system would need to have enough capacity for any possible scenario thereby making the system unaffordable. Even if money was no issue, there would not be enough frequencies currently available to fill the additional infrastructure.

What is the answer?

The compromise is to build a system that has enough resources to handle day-to-day business at its peak. This approach allows daily operations to go unhindered as well as absorb small spikes in radio traffic. With a well thought-out design, a radio system will have enough capacity to handle the vast majority of public safety operations but will avoid excessive infrastructure and spectrum usage.

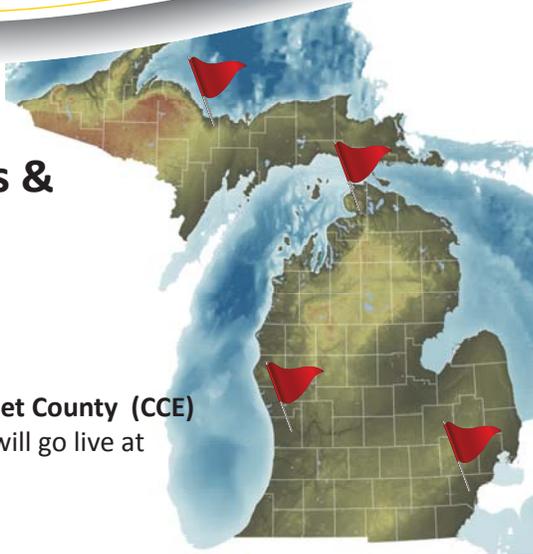
Since it is not feasible to build a system big enough to handle all possible communications scenarios, other methods to minimize loading during public safety events are utilized. There are adjustments that can be done to system settings which can sometimes help during excessively busy times but they must be done with extreme caution to avoid possible adverse side effects. Ultimately, the best solution for managing system loading during a large public safety event is communications planning.

A good communications plan can account for system limitations and minimize unnecessary radio traffic while still allowing business to get done. Here are a few things to consider during your communications planning that will help with managing system loading:

- Limit communications to necessary transmissions. Be aware that every transmission during a public safety event is using a resource that is in high demand.
- Limit the number of talkgroups being used to what's necessary. Fewer talkgroups means fewer simultaneous conversations.
- Avoid having "listeners" on your talkgroup that are not involved in the response. A single radio can pull all of a talk group's traffic to the site that radio is using. If that site happens to be busy, everyone on the talkgroup gets a busy.
- Take advantage of other non-trunked resources such as mutual aid channels.

Support for your community

MPSCS staff member are on hand to provide insight and guidance for communities looking to address capacity concerns and implement communication plans. For assistance, contact a MPSCS representative.



Local Integrations & Project Updates

Marquette/MSP Dispatch
Upgrading to MCC7500's.

Cheboygan-Charlevoix-Emmet County (CCE)
T1's are installed and site will go live at end of October.

Montcalm County
Law enforcement and EMS are using MPSCS as primary communications and are adding console positions.

Wayne County
Replaced leased T1 circuits providing the backhaul of their MPSCS communications with the purchase of a microwave solution, minimizing the risk of outages, and operational costs.

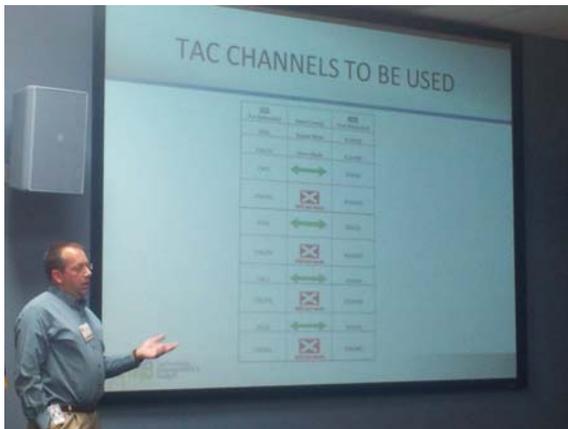
Wayne County Airport Authority
Integration in progress.

Conference of Eastern Wayne (CEW)
Off warranty as of 10/1/13. MPSCS will service tower site and Motorola will service the consoles.

MPSCS User Group Meeting

What are we doing right and what could we improve? Do you have technical or billing questions, how is our customer service, and do we communicate the impact of system upgrades well?

On October 25th, the MPSCS team will be at the OWDT Gaylord Training Center, Alpine Center Complex, 800 Livingston Boulevard, 4th floor, Gaylord from 1:00-3:00 to answer your questions. To reserve your seat, please RSVP to mpscs@michigan.gov by October 24.



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