NATIONAL STATES GEOGRAPHIC INFORMATION COUNCIL

NSGIC

2105 Laurel Bush Rd.
Bel Air, MD 21015
443-640-1075 www.nsgic.org

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NextGen9-1-1
Issues for State GIS Representatives

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NSGIC NG9-1-1 Working Group

- New Working Group
- Formed after Mid-year NSGIS Meeting
- Meet Monthly – 2nd Thursday at 12:00 pm EDT
- (Annual NSGIC – Wednesday 28th 9-10 pm

  River Fork Ballroom, 3rd Floor, Grove Hotel)

NSGIC NG9-1-1 Working Group Charter

Work Group Mission: To stay abreast of NG 911 issues and work with member states, federal agencies and other organizations to effect positive change in all mapping activities of the Public Safety Answering Points (PSAPs) to integrate their work with the broad geospatial community.

NSGIC NG9-1-1 Working Group Work Group Objectives

1. Reach out to other national organizations to help develop cohesive national policies for NG 911 implementation.
2. Through surveys or mining of existing information, determine the status of 911 operations and plans for NG 911 implementation in each state to support and inform our membership and help them determine which states are similarly situated.
3. Define how the NSGIC State Coordinators can assist the 911 Boards and PSAPs to effectively implement open and interoperable NG 911 systems to promote data sharing.
4. Embed NSGIC recommendations in future NG911 law and regulation.
5. Help the NSGIC State Coordinators, 911 Boards, PSAP Directors and other partners in transitioning from current geospatial data development practices to better coordinated and interoperable geospatial data development programs following the principles of the *For the Nation* initiatives.

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NSGIC NG9-1-1 Working Group Products

Next Generation 9-1-1

Working Smarter Together

Solutions for a New Economy

Deploying Next Generation 9-1-1 in this fiscal climate presents many challenges, but also offers opportunities for collaborating to enhance public safety nationwide. When budgets are tight, government agencies must learn to trust one another and work effectively together to accomplish their missions. The National Emergency Number Association (NENA), National Alliance for Public Safety GIS Foundation (NAPSG) and National States Geographic Information Council (NSGIC) have joined forces to help 9-1-1 authorities and public safety agencies at all levels of government to begin *"working smarter together"* to improve systems and data while reducing costs. Working smarter together will free up money for other mission-critical activities and help to equip first responders with the information they need to prevent, prepare for and respond to emergencies of any scale. You can help enhance public safety through coordinated work on GIS systems and data.

"In recent years, Maryland's Emergency Number Systems Board has experienced significant cost savings when acquiring aerial imagery on a statewide basis as opposed to the county-by-county method. The savings is estimated to be approximately 25-30%. This statewide approach also provides the benefits of common flight and processing specifications, consistent quality, seamless coverage and one single project to manage which ultimately improves public safety."

Kenny Miller
Deputy State GIO
Maryland 9-1-1 Board Member

What's Changing

Successful deployment of NG 9-1-1 will require close cooperation between those responsible for wide-area networks, local public safety officials and GIS professionals at all levels of government. NG 9-1-1 systems use GIS data to pre-validate caller locations by address and geographic coordinates, and to route calls based on caller location. This moves GIS to the front end of the process, eventually supplanting Automatic Number Identification, Automatic Location Identification and Master Street Addressing Guides.

To effectively implement NG 9-1-1, many local governments need to develop or expand GIS capabilities and create or modify GIS data. Data will need to be kept current to reflect annexations, new developments and road closures. This level of data maintenance is essential to public safety and first responders, because it directly impacts response time. GIS professionals must understand the needs of NG 9-1-1 in order to support the Common Operating Pictures that provide situational awareness to firefighters, police officers and emergency managers.

Improved Outcomes and Lower Costs

Today's 9-1-1 systems were designed in the 1960's and enhanced to meet growing requirements. Many systems were deployed before interoperability was a widespread consideration. As a result, many Public Safety Answering Points (PSAPs or 9-1-1 Call Centers) cannot communicate efficiently with one another or share critical data.

More than ever, response agencies rely on mutual aid from neighboring jurisdictions to support emergency operations in daily incidents and major disasters alike. Geospatial data like orthoimagery, addresses and road centerlines provide first responders with mission critical information for improved decision-making and situational awareness. These data provide firefighters, police officers and paramedics with basic capabilities required to serve and protect. The cost of producing these data in each individual jurisdiction is large when compared to the cost of producing it for larger regions or states.

Next Generation 9-1-1 offers new opportunities to work smarter in the future. Producing data products to consistent national standards and taking advantage of the efficiencies offered by large area contracting techniques can help to ensure interoperability. Throughout the IT and GIS communities there are many examples of partnerships that reduce data costs and improve product quality for each of the partners. As a result, first responders are better equipped with the mission critical information they need to prepare for and respond to emergencies in our communities.

Collaboration, planning and effective coordination are essential activities that can build trust among agencies. Those most involved with the operation of the PSAPs are spending many thousands of hours planning for improvements that will usher in Next Generation 9-1-1 services and they are doing an outstanding job. The concepts introduced in this document compliment these efforts. None of the organizations involved in this effort have plans to try and force new behaviors on the 9-1-1 community. We owe a great debt of gratitude for their service and we simply want to inform them about significant cost savings that can be realized as Next Generation 9-1-1 is implemented.

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NSGIC NG9-1-1 Working Group Products Cont.

NSGIC·-·The·National·States·Geographic·Information·Council·(NSGIC)·is·a·nonpartisan·501(c)(6)·organization·committed·to·efficient·and·effective·government·through·the·prudent·adoption·of·geospatial·technologies.· NSGIC·voting·members·include·senior·state·geographic·information·officers,·coordinators,·managers·and·statewide·GIS·Councils.¶

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NENA THE 9·1·1 ASSOCIATION

National·Emergency·Number·Association
1700·Diagonal·Road·-·Suite·500
Alexandria,·VA·22314
800.332.3911·|·Fax:·703.812.4675·
http://www.nena.org¶

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NAPSG Foundation

NAPSG·Foundation
1250·24th·Street·NW
Washington,·DC·20037
202.895.1711·|·Fax:·202.318.0339·
http://www.napsgfoundation.org¶

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August·12,·2011¶

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GIS·Interoperability·&·NG·9-1-1¶

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Some·new·features·of·NG·9-1-1·are:¶

- → Conducting·real-time·two-way·voice,·text·and·video·emergency·calls·via¶ IP-based·networks;¶
- → Accessing·personal·sensor·notifications·including·collision·detection·systems·and·medical·alert·systems;¶
- → Transferring·emergency·calls·and·associated·data·to·other·PSAPs;¶
- → Issuing·area-specific·multimedia·emergency·alerts·to·wireline·and·wireless·devices.¶

¶

To·use·these·features·PSAPs·will·need·to·use·standardized,·interoperable·geographic·information,·including:¶

- → Location-specific·data·that·is·received·and·integrated,·in·real·time,·into·a·common·operating·picture;¶
- → Common·data·standards·&·models·that·allow·for·interoperability·between¶ PSAP·locations·and·first·responders·in·the·field;¶
- → Building·address/entry·point·files·for·structures·and·properties.¶

¶

Working·Smarter·Together¶

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NSGIC NG9-1-1 Working Group Products Cont.

Smoother Sailing to NG 9-1-1

NSGIC's Top 10 List for State GIS Coordinators

National States Geographic Information Council
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http://www.nsgic.org

August 24, 2011

NSGIC's NG 9-1-1 Work Group developed this list of actions that you can use to effectively engage your 9-1-1 community.

New features of NG 9-1-1 are:

- Conducting real-time two-way voice, text and video emergency calls via IP-based networks;
- Accessing personal sensor notifications including collision detection systems and medical alert systems;
- Transferring emergency calls and associated data to other PSAPs;
- Issuing area-specific multimedia emergency alerts to wireline and wireless devices.

To use these features PSAPs will need to use standardized, interoperable geographic information, including:

- Location-specific data that is received and integrated, in real time, into a common operating picture;
- Common data standards & models that allow for interoperability between PSAP locations and first responders in the field;
- Building address/entry point files for structures and properties.

Improving Relations with Your 9-1-1 Board and Public Safety Answering Points (PSAPs)

1. Reach out to your state 9-1-1 organization. You can find it at the following web site http://www.nena.org/state-local-chapters .
2. Attend meetings of your State 9-1-1 Board, and the state chapters of the National Emergency Number Association (http://www.nena.org/state-local-chapters) and Association of Public-Safety Communications Officials (http://www.apco911.org/new/membership/chapters.php) to better understand their issues and their unique 'politics.'
3. Find out where their dollars are being spent. Are they supporting duplicate or inefficient data collection, or do they have costly MSAG license fees (per record fee)? Determine where you can help reduce their costs and improve quality of service.
4. Understand their unique GIS data issues. Do they have system limitations, non-standard data types, ingestion problems, lack of standards, or antiquated software?
5. Visit a PSAP to take a tour. Ask questions. See how their maps and data are being used. Learn what else the Center wishes it could do from a geospatial perspective.
6. Work with the PSAPs to improve the accuracy of jurisdictional boundaries and emergency service zones (e.g. fire box districts, EMS and police boundaries).
7. Develop a sound business plan using the NSGIC/FGDC guidelines to show them the Return on Investment (for their operation and the entirety of government operations) by working on data collection at a regional/statewide basis as opposed to funding individual EOC's or PSAPs to collect their own data.
8. Give presentations, instead of just handing out fact sheets, when you attend 9-1-1 Board, APCO and NENA meetings. Get in front of them to get name recognition.
9. Get your county organization (NACo affiliate http://www.naco.org/about/partners/Pages/StateAssociations.aspx) more involved in NG 9-1-1.
10. Invite the state NENA Chapter to become a voting member of your GIS Council.

NSGIC's Top 10 List for State GIS Coordinators

Improving Relations with Your 9-1-1 Board and Public Safety Answering Points (PSAP's)

1. Reach out to your state 9-1-1 organization. You can find it at the following web site.

   http://www.nena.org/state-local-chapters

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Improving Relations with Your 9-1-1 Board and Public Safety Answering Points (PSAP's)

2. Attend meetings of your State 9-1-1 Board, and the state chapters of the National Emergency Number Association and Association of Public-Safety Communications Officials to better understand their issues and their unique 'politics.'

http://www.nena.org/state-local-chapters

http://www.apco911.org/new/membership/chapters.php

NSGIC's Top 10 List for State GIS Coordinators

Improving Relations with Your 9-1-1 Board and Public Safety Answering Points (PSAP's)

3. Find out where their dollars are being spent.

   Are they supporting duplicate or inefficient data collection, or do they have costly MSAG license fees (per record fee)?

   Determine where you can help reduce their costs and improve quality of service.

NSGIC's Top 10 List for State GIS Coordinators

Improving Relations with Your 9-1-1 Board and Public Safety Answering Points (PSAP's)

4. Understand their unique GIS data issues.

   Do they have system limitations?

   non-standard data types?

   ingestion problems?

   lack of standards?

   or antiquated software?

NSGIC's Top 10 List for State GIS Coordinators

Improving Relations with Your 9-1-1 Board and Public Safety Answering Points (PSAP's)

5. Visit a PSAP to take a tour. Ask questions.

   See how their maps and data are being used.

   Learn what else the Center wishes it could do from a geospatial perspective.

Visit a PSAP

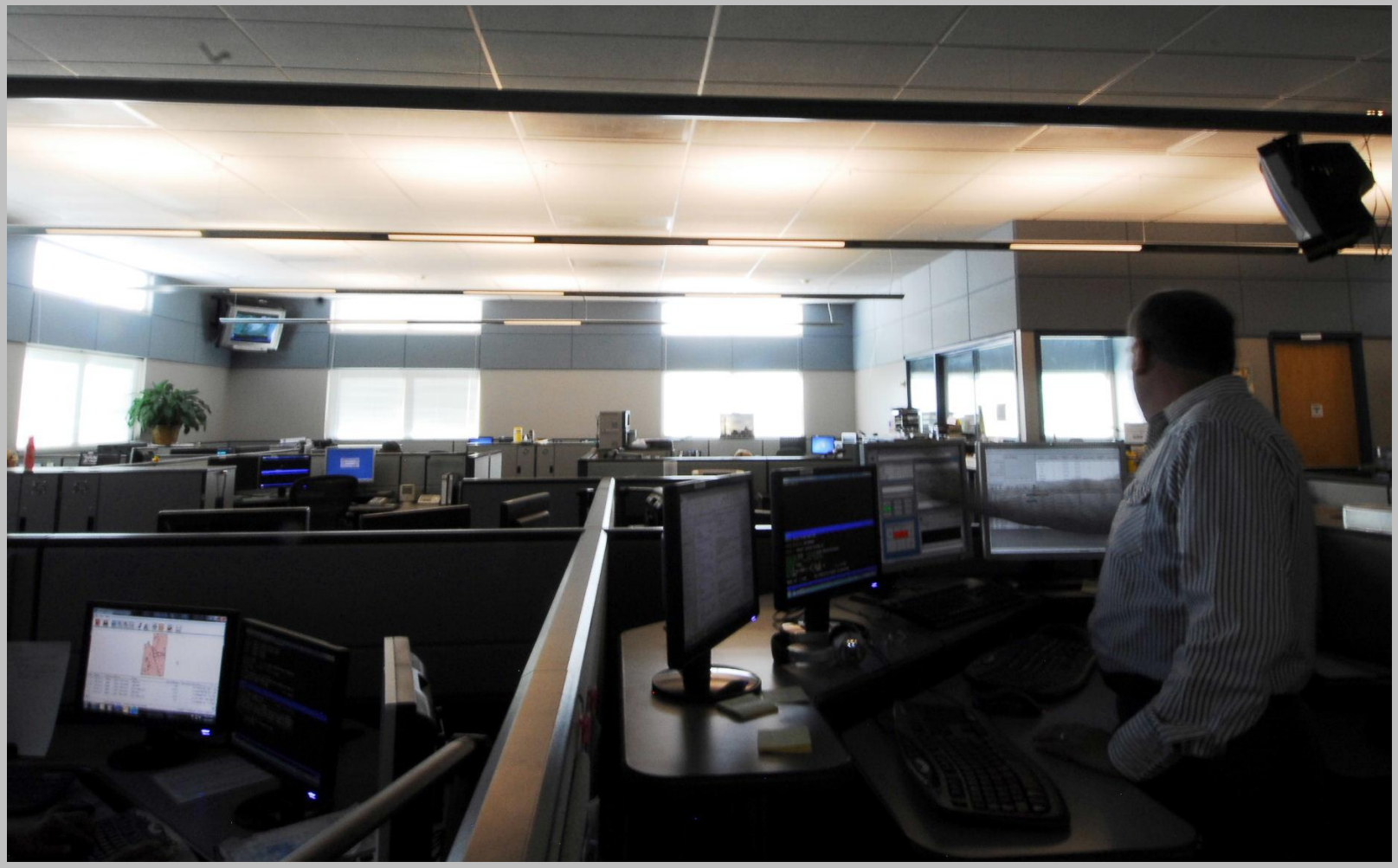
Spokane County
Combined Communications Center

Spokane County
Emergency Operations Center

911 Dispatch

Fire Dispatch

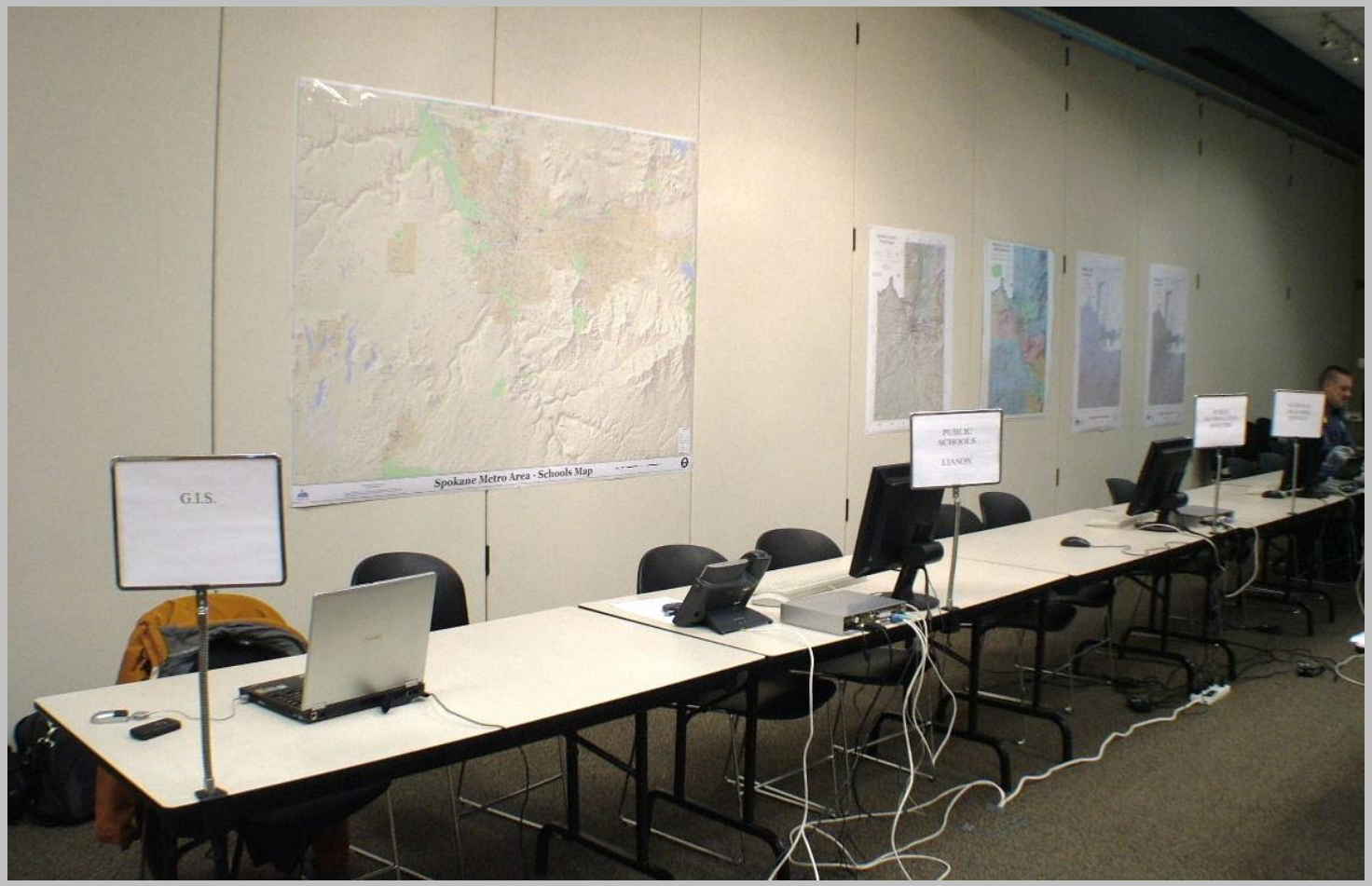
Law Dispatch



Spokane County 911 Dispatch Center

NSGIC

Visit an EOC



Improving Relations with Your 9-1-1 Board and Public Safety Answering Points (PSAP's)

6. Work with the PSAPs to improve the accuracy of jurisdictional boundaries and emergency service zones (e.g. fire box districts, EMS and police boundaries).

Emergency Service Number (ESN) Boundary

Subject: ESN Layer

Ariane, Sony, and Ian,

I spoke w/ Doug at Fire Dispatch. He say that their Run Cards for the City are now based on the first four due outs vs the first six. I think we should base our ESN layer on 4 vs 6. Also Doug gave me the grid maps for Districts 1 and 4. ESN's in those 2 districts are based on station response so I think we should leave those as they are. Any Thoughts? Mike

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Improving Relations with Your 9-1-1 Board and Public Safety Answering Points (PSAP's)

7. Develop a sound business plan using the NSGIC/FGDC guidelines to show them the Return on Investment (for their operation and the entirety of government operations) by working on data collection at a regional/statewide basis as opposed to funding individual EOC's or PSAPs to collect their own data.

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Improving Relations with Your 9-1-1 Board and Public Safety Answering Points (PSAP's)

8. Give presentations, instead of just handing out fact sheets, when you attend 9-1-1 Board, APCO and NENA meetings. Get in front of them to get name recognition.

NSGIC's Top 10 List for State GIS Coordinators

Improving Relations with Your 9-1-1 Board and Public Safety Answering Points (PSAP's)

9. Get your county organization more involved in NG 9-1-1

NACo affiliate
http://www.naco.org/about/partners/Pages/StateAssociations.aspx

NSGIC's Top 10 List for State GIS Coordinators

Improving Relations with Your 9-1-1 Board and Public Safety Answering Points (PSAP's)

10. Invite the state NENA Chapter to become a voting member of your GIS Council.

NSGIC NG9-1-1 Working Group

- Tomorrow's Meeting

  Wednesday 28th 9-10 pm

  River Fork Ballroom, 3rd Floor, Grove Hotel