

After Action Report and Improvement Plan

April 19, 2017

Jason T. Garnar County Executive

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Winter Storm 2017

Prepared by:
Broome County
Office of Emergency Services

Broome County Winter Storm 2017

After Action Report and Improvement Plan

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Special thanks to all those who participated in the Broome County After Action Review and Improvement Planning process.

Handling Instructions

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Questions or concerns related to this After Action Report and Improvement Plan (AAR/IP) should be directed to:

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Executive Summary

On March 14 and 15, 2017, Broome County experienced a snowfall event that broke records and left much of the County under 30 inches or more of snow. This event would test all facets of disaster preparedness including coordination of information to the public, media and municipalities, response capabilities during the snowfall event and dealing with human services needs after the event. This event once again showed the great resiliency and community wide support of Broome County residents.

Strong collaboration with all entities involved started days before the storm and allowed for planning and coordination to take place between New York State, Broome County and local municipalities to prepare and respond to the storm.

This storm was the first major incident for the County Executive staff, occurring within the first 100 days of Executive Staff taking office. County Executive Jason Garnar, Deputy County Executive Kevin McManus and Chief of Staff Benjamin Lainhart were actively involved in the decision making process and were extremely supportive of all operations throughout the process. All three spent countless hours in the EOC and visiting field operations.

This document seeks to paint an accurate picture of the County's response to this storm. It discusses several strengths and reviews the lessons learned during the event. It also suggests ways to improve upon these lessons in responding to future emergency and disaster situations.

Introduction

The mission of the Broome County Office of Emergency Services is: "to provide planning, training, resources, response, warning, coordination and information through communications to the public, elected officials, and public safety agencies to assist them in preparing for, responding to and mitigating emergencies and disasters which affect the residents of Broome County."¹

This After Action Report and Improvement Plan (AAR/IP) seeks to capture the county's response to Winter Storm Stella. It also seeks to accurately portray the successes in the county's response and show areas where improvement can be made.

Background

Between March 14 and 15, 2017, Broome County was inundated with snowfall. This snowfall broke a 24 hour snowfall record that dated back to February of 1961, dropping 31.3 inches at the Broome County Airport between 0300 on March 14 and 0100 March 15.² Endwell received a record amount of snowfall, measuring 36.2 inches by the time was storm done. At one point, snow was falling at more than 4 inches an hour, taxing the ability to successfully remove snow and necessitating a complete travel ban, including Interstates, within Broome County. A listing of snowfall totals can be found as Appendix B at the end of this document.

² National Weather Service. Retrieved from http://w2.weather.gov/climate/index.php?wfo=bgm

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¹ Broome County Government. (2012, August). Emergency Services. Retrieved from http://www.gobroomecounty.com/e911

Time Line of Events

This timeline is a re-creation done after the event.

Saturday, March 11

| Ī | 1639 | NWS briefing indicating possibility of large Winter Storm |
|---|------|-----------------------------------------------------------|
| | | 1 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - |

Sunday, March 12

| 1509 | Brief scheduled for Monday, Mar 13 at 1000 |
|------|-----------------------------------------------------------------------------|
| 1619 | NWS Weather briefing indicating 14-15" of snow around Broome County. |
| | Potential 2-5" up to 21-25" |
| 1624 | Winter Storm Warning issued. Storm totals 10-15" indicated, possibly 18", 1 |
| | inch an hour. |
| 1640 | Director Ponticiello notifies Deputy County Executive of storm potential. |

Monday, March 13

| Wionday, Water 15 | |
|-------------------|--------------------------------------------------------------------------|
| 1000 | NWS Weather Webinar |
| 1030 | OES/County Executive staff briefing – recommended |
| | Open EOC at 0600 3/14 at Level 1 |
| | Conduct municipal conference call |
| | Press conference with OES, Sheriff, County Executive |
| | Travel advisory be issued |
| 1230 | Conference call with Municipalities |
| 1402 | Director email to Municipalities advising EOC open 0600 3/14, with other |
| | info |
| 1415 | Press Conference conducted – County Executive, Sheriff, OES Director |
| 1438 | Travel Advisory issued by Sheriff Harder, effective 3/14 at 0600 |
| 1500 | NWS Webinar Briefing with OES, BCSO, NYSP, BC Highway, BC |
| | Executive |
| 1735 | Governor Cuomo issues State of Emergency across NYS – in effect 0000 |
| | 3/14 |
| 1928 | Broome County Government closed for Tuesday 3/14 |
| 2020 | SUNY Broome closes Tuesday 3/14 |
| 2046 | Binghamton University closes, essential employees report |
| 2139 | City of Binghamton closes non-critical City Government |

Tuesday, March 14

| 0000 | NYS State of Emergency in effect |
|------|----------------------------------------------------------------------|
| 0000 | NYSDOT Region 9 Regional Operations Center opens |
| 0448 | NWS Briefing – accumulations upped to 18-24" |
| 0600 | Broome EOC opens – OES, BCSO, NYSP, NYSDOT, BC Highway, |
| | Executive |
| | Already receiving requests from municipalities |
| 0600 | NYSDOT, BC Highway indicate to OES Director they will not be able to |
| | keep up at these snowfall rates |
| 0630 | OES Director updates County Executive, recommends State of Emergency |

| | and road closure. County Executive verbally agrees. |
|------|----------------------------------------------------------------------------|
| 0635 | NWS advises snow shifted over Broome and is going to be worse than |
| | predicted |
| 0700 | OES Director notifies C/Binghamton Mayor of road closure |
| | OES Director notified by State OEM RD to hold off on State of Emergency |
| | until language can be coordinated with NYS and also close Interstates |
| 0800 | Broome County State of Emergency declared "due to near blizzard |
| | conditions and poor road conditions." |
| | Broome County issues Emergency Order ordering "all roads closed in |
| | Broome County and a complete travel ban for all non-essential personnel". |
| 0800 | V/Windsor enact State of Emergency |
| 0845 | V/Deposit enacts State of Emergency |
| 0900 | NWS Briefing |
| 0900 | Governor Cuomo issues temporary tractor trailer ban I81/84/86/88/90, Route |
| | 17 |
| | Also issues full travel ban for Broome County |
| 0930 | Binghamton Regional Airport closed |
| 0950 | 211 is staffed with 7 people |
| 1000 | Transportation requests for essential employees begin coming into the EOC |
| 1000 | County Executive receives phone calls from Governor's Office/staff |
| 1020 | Red Cross requested to EOC (1315 rep enroute) (1330 rep arrives) |
| 1100 | Conference call with Municipalities |
| 1210 | NYS OFPC advises EOC they sent 1 high axle vehicle, 2 tracked vehicles |
| | Brian Stimak notified for use of Soil & Water building for staging |
| 1230 | Village of Johnson City request assistance – request filled by EOC |
| 1430 | Village of Johnson City issues State of Emergency and travel ban |
| 1430 | Concern for the Arena roof from concerned citizen – Engineering contacted. |
| | There is a plan in place to snowblower over 24". Events cancelled for 2 |
| | days. No staff in building. |
| 1500 | NWS Weather briefing |
| 1530 | Request for National Guard Humvees – Can fit 2 people, need helmets for |
| | riders. |
| 1630 | Conference call with schools/BOCES, decision on 3/15 after 1800 briefing |
| 1635 | T/Kirkwood request assistance – Request filled by EOC |
| 1800 | EOC transitions to night shift |
| 1925 | Binghamton University no classes 3/15, staff report |
| 2111 | SUNY Broome closed 3/15 |
| 2125 | C/Binghamton requests 4 large plow trucks for 3/15 |
| | (0350 3/15 order reconfirmed with Kevin Normile C/Bing DPW) |
| | Request filled by EOC |
| 2142 | NYS Courts closed 3/15 |
| 2223 | C/Binghamton Mayor requests coordinate with him before NYS resources |
| | deployed |

Wednesday, March 15

| | , ividicii 13 |
|------|----------------------------------------------------------------------------|
| 0500 | Conference call with night shift EOC staff, Executive staff, OES – status |
| | Decision to keep travel ban and reevaluate at 1100 |
| 0510 | C/Binghamton Mayor advised of the travel ban. He advises he is lifting the |
| | C/Binghamton travel ban. |
| 0516 | Broome County Government closed 3/15 |
| 0600 | EOC transitions to day shift |
| 0640 | Email to Municipalities advising the County-wide road closure and travel |
| | ban remain in place |
| 0805 | SUNY Broome request assistance – tasked to BC Corrections (inmates) |
| 1000 | Conference call with Municipalities |
| 1110 | V/Endicott request assistance – Request filled by EOC |
| 1115 | Town of Union requests NYSDOT - Request Filled by EOC |
| 1125 | V/Johnson City request assistance for 0000 3/16 – Request filled by EOC |
| 1140 | C/Binghamton requests 2 motor graders, 6 front end loaders |
| | All snow emergency routes and most primary and secondary routes cleared. |
| | Side streets and dead ends are problems. – Request filled by EOC |
| 1200 | Broome County travel ban lifted |
| 1200 | Director notified by EOC that human needs requests were becoming an |
| | issue. |
| | EOC opens Human Services Branch – EOC to call in DSS, 211, COAD |
| 1300 | EOC develops human services screening form for 211 |
| | COAD will be tasked with shoveling |
| | National Guard tasked with life safety shoveling |
| 1300 | Village of Johnson City State of Emergency lifted |
| 1330 | Press Conference – outlining now a Community recovery effort |
| 1650 | Tractor Trailer ban lifted |
| 1730 | Director advised by V/Deposit Mayor that they are having trouble |
| | coordinating resources OES Director responded to V/Deposit and assisted |
| | with resource coordination. |
| | Director also assisted V/Whitney Point with resource coordination while |
| | there. |
| 1830 | Tri-Cities Airport request assistance with snow removal. Request approved |
| | by EOC. |
| | |

Thursday, March 16

| 0300 | Broome EOC closes for night |
|------|----------------------------------------------------------------------------------------------------------------------------------------|
| 0800 | Broome EOC reopens (until 1700) |
| 0900 | Conference call with Municipalities |
| 0943 | C/Bing requests |
| | • 5 Single-Axle Plow Trucks (Suitable for maneuvering our tight City streets) |
| | 8 Front-End Loaders to open up these unplowed streets |
| | 8 Larger Backhoes for intersection cleanup at the entrances to each unplowed street and to provide assistance with each loader as they |

| | open the streets. |
|------|-------------------------------------------------------------------|
| 1112 | Guidance received from NYS DEC on snow disposal – disseminated to |
| | municipalities |

Friday, March 17

| 0800 | Village of Windsor lifts State of Emergency |
|------|---------------------------------------------|
| 0800 | Broome EOC opens (until 1700) |
| 1700 | NYSDOT ROC closes |
| 1800 | Broome County rescinds State of Emergency |

Saturday, March 18

| 1730 | Director received request for plowing of UE Middle School. On-call |
|------|------------------------------------------------------------------------|
| | Emergency Manager tasked. |
| | Contact made with School District-they have resources. Request denied. |

Sunday, March 19

| 1100 | Village of Endicott request assistance with snow removal. Request fulfilled |
|------|-----------------------------------------------------------------------------|
| | by EOC – NYR ticket entered |

Strengths and Lessons Learned

Strengths

- National Weather Service updates and communication before and during storm –
 Indications on the severity of this storm started on Saturday, March 11. Updated briefings continued throughout the event and contained updated information.
- 2. Emergency Operations Center operating with all agency presence and cooperation Agencies involved in the EOC operation included Broome County Office of Emergency Services, Broome County Executive Office, Broome County Sheriff's Office, New York State Police, New York State Department of Transportation and American Red Cross. All agencies worked together and across disciplines to achieve the common mission.
- 3. Separation of Policy Group and Operation levels within the Emergency Operations Center. In past events, the Policy Group and the Operations group were housed very close together within the EOC, sometimes at the same table. This often made operation level decisions difficult, as policy makers often became involved in these decisions. For this event, the Policy Group was separated from the Operations level, and this worked very well for both groups, as they were able to clearly communicate what was going on yet make independent decisions within their respective roles.
- 4. Increased road patrols by New York State Police and Broome County Sheriff's Office allowed for better coverage and transport capabilities New York State Police patrols were increased and they were able to saturate the highways with extra patrols. NYSP also created new "mini zones" for the incident which allowed better resource allocation. These decisions allowed the Broome County Sheriff's Office to place their increased road patrol staffing on the County and Town roads instead of the highways. These decisions allowed for broader coverage of all roadways in Broome County. It also allowed both agencies the ability to assist with transport of essential personnel.
- 5. Communications between Broome County with New York State, municipalities, residents and media with regular updates before and during storm –

- a. Communication with municipalities Broome County began communicating with municipalities very early on in this event. The first conference call with municipalities was held on Monday, March 13 at 1230, shortly after the first National Weather Service briefing of the day occurred. Several conference calls were held with municipalities for the next few days, with the final call being held on Thursday, March 16 at 0900. This allowed all municipalities within the County to receive the same information from the County at the same time and allowed all municipalities to begin planning based on the most current and updated information. It also allowed municipalities to relay any concerns they had back to the County.
- b. Communication with the public and media Once the potential magnitude of the storm became clear, Broome County began formulating a plan to disseminate information to the public. A press conference was held on Monday, March 13 at 1430 to let residents know about the storm and also to put a travel advisory into place starting Tuesday the 14th. This allowed news media outlets to get a common message to the public early on and allowed the public enough notice to properly prepare for the storm.
- c. Communication between 911 Center and the EOC Communication between the 911 Center and the EOC is always a needed but often overlooked point in these circumstances. It was noted that during this incident, the communication from the EOC to the 911 Center and the 911 Center to the EOC was good, with timely, updated information that could then be disseminated to the public.
- 6. NY Responds requests were all processed and filled. The NY Responds system was used to process requests for assistance. This system proved easy to use and allowed quicker vetting of requests through State agencies, often without having to wait through an extensive approval process.
- 7. NYSDOT, County Highway, and many municipalities worked together to clear roads quickly and efficiency Highway departments from local municipalities, Broome County and New York State DOT worked together to clear roadways

- during the storm. Agencies assisted with plowing and snow removal on roadways that are not typically within their jurisdiction, allowing for more timely clearing of sometime critical roadways. Additionally, Broome County and NYSDOT provided extra snow removal assistance to several municipalities throughout the event.
- 8. The transition from a snow event to human services event and the relationship between Broome County, 211 and COAD. This event quickly transitioned from a snowstorm event to a human services event, like residents needing to be shoveled out or residents needing medication/food. The EOC staff quickly recognized this need and formulated a plan to deal with the requests. Staff from 211, Broome County DSS and the EOC came together and created a plan for 211 to screen these calls (211 fielded 500-600 requests). COAD was then engaged to bring resources together to assist with fulfilling the missions (about 160), which included shoveling out of residents or simply making contact with homebound residents who were looking for someone to talk to.

Lessons Learned

- New York State Police wanted more 4-wheel drive vehicles on road during storm

 Although the New York State police had many "all-wheel drive" vehicles
 available, it quickly became apparent that this storm would require "four wheel drive" vehicles, which were available locally only in limited quantities.
- 2. Organizations with essential workers not prepared to transport workers during weather extenuating circumstances There were several organizations that had limited or no plans to get "essential" personnel to and from work during a storm event. These organizations included hospitals, health care facilities and group homes. Although the EOC was able to coordinate the transportation of some essential employees, they were not able to provide transportation to everyone, nor were they able to provide transportation home due to the number of requests. This caused some facilities to house off-shift employees in nearby hotels.
- 3. Resource request from Binghamton University received twice and caused confusion There were requests for resources for Binghamton University that were received twice through different methods. This created confusion in the actual requests and required extra time and effort to clarify.
- 4. Better education of public about who is considered "essential" There was initial and ongoing confusion as to whom is considered "essential" personnel during a travel ban. This includes both the private sector and the public sector.
- 5. City of Binghamton lifted their local travel ban while the County's remained in effect (which included the City of Binghamton) causing major public confusion Although the County travel ban was effect until Noon on March 15, the City of Binghamton lifted their local travel ban for the City at 0600 on March 15. This created confusion and sent mixed messages to the public as to whether they should be on the roads or not.
- 6. Road Closures This event included the County-wide closure of roadways. It is noted, however, that if this was not the case and only select roads were closed, there is no real method to track road closures within the EOC. It is noted that "511" monitors and tracks state road closures, but not local level road closures.

- 7. EOC space constraints As has been noted it past events, space within the EOC is an issue. Luckily, this incident did not necessitate as large an EOC operation as in the past, but space was still at a premium. Weather briefings were held in the room that would have been utilized by the Planning Section. This room also doubled as the break room/cafeteria for the event.
- 8. EOC paperwork and record-keeping The County is still using paper methods its EOC record keeping and paperwork. In these technological times, there are far more efficient means to handle these processes, such as software/web based products specifically made for EOC use. A system that would tie directly into the NY Responds system would make the operation that much more efficient.

Improvement Plan

This section will analyze the "Lessons Learned" identified above and present an improvement plan.

1. New York State Police want more 4-wheel drive vehicles on road during storm – Agencies should identify where and how resources with certain capabilities can be obtained. This should include how long it will take the resources to arrive, as this will assist in the planning process. Agencies, especially when spread across large areas, should have assets mapped out and this mapping should be easily accessible for agency logistics personnel to access during time of disaster.

FEMA Core Capability: On -Scene Security, Protection and Law Enforcement

2. Organizations with essential workers not prepared to transport workers during weather extenuating circumstances – Organizations with "essential" personnel, such as Government, hospitals and health care facilities should create a plan for both the transportation and housing for employees during times of disaster. There should be no reliance on Emergency Services organizations or resources for these duties, as they will not always be available during time of disaster.

FEMA Core Capability: Critical Transportation

3. Resource request for Binghamton University assets requested twice and caused confusion – All resource requests from municipalities as well as other entities should be made from a single point of contact, whether that is a single person within an entity or a single point of contact at an Emergency Operation Center. This will ensure consistency in requests and minimize unneeded redundancy and waste in resource utilization.

FEMA Core Capability: Operational Coordination

4. Better education of public about who is considered "essential" – Governmental entities as well as private organizations should firmly spell out who is considered "essential" personnel within their agency. These are people who would be

expected to report for duty during events in which the general public is told not to be out.

FEMA Core Capability: Planning

5. Municipality attempted to lift travel ban before the county causing major public confusion – Re-education of municipal leaders should be undertaken underscoring the importance of coordination of public messages with all entities involved.

FEMA Core Capability: Public Information and Warning

6. Road Closures – Broome County should work with NYS DOT to expand the use of the statewide 511 Traffic, Travel and Transit Information system. This is an existing state-wide system that provides state road closures to the public. By partnering with NYS, and expanding the system to include local roads, Broome County can refer both first responders and the public from the dispatch center to 511 for this information. Collaboration with Broome County GIS should also be explored for these events, but these maps will take time and manpower to produce, on top of other maps that are produced for these events.

FEMA Core Capability: Public Information and Warning

7. EOC space constraints – An additional use study for EOC space is needed. A long term permanent solution is needed to build additional EOC space. This space must be large enough to support a fully activated EOC. Space for a fully functional backup EOC should be identified as well.

FEMA Core Capability: Operational Coordination

8. EOC paperwork and record-keeping – Broome County should look into acquiring an EOC based software/web based product for its documentation processes. This would help streamline paperwork processes. Also, acquiring a package that interfaces into the NY Responds system would allow EOC personnel to only have to enter resource requests once, saving valuable time and maximizing efficiency.

FEMA Core Capability: Operational Coordination

Review of After Action Feedback

This section will broadly list the strengths of the incident as reported through the After Action review conducted on March 31, 2017. This is a comprehensive list not edited for applicability.

National Weather Service:

- NWS relationship with locals is great. NWS display of information, including outliers was extremely helpful.
- Strategizing beforehand with NWS
- NWS likes feedback from what agencies need for information. NWS uses feedback to improve
- NWS "Chat" to communicate is helpful.
- Early info of 20 inches was enough to put some things into motion.
- NWS slide of 40" potential validated the need for preparation
- Early consideration for travel ban based on early NWS info.

Law Enforcement

- NYSP Increased road & Supervisor patrols.
 - Placed people on notice they might be needed
- NYSP created new, different posts on Interstate
 - Saturated Interstates with patrol
- BCSO/NYSP coordinating critical transports of nursing/hospital staff
- BCSO able to focus on municipalities and not on Interstates
- BCSO added people as well
- Law presence in EOC is good resource

EOC Operations

- EOC cooperation all disciplines work very well together here.
- Knowing people in advance from training, LEPC, incidents helps
- Separating Policy folks from Operations in EOC helped
- Information flow from 911 center was good
- 57 NYResponds requests processed and fulfilled pretty easily
 - No waiting for Albany approval
- Tom McCartney and Albany were easily reachable when NY Responds issues arose

 Recognizing that the human services needs were going to magnify quickly, exceeding the National Guard capabilities

Highway Departments/DOT

- NYSDOT helped smaller towns everyone kept "their plows down"
 - o A declared emergency definitely helps
- NYSDOT new climate "help each other out" helped
- NYSDOT Regional Operation Center staffed pre-storm and worked with EOC.

Executive Level

- EOC calling municipalities avoids "were in this alone" thoughts
- Broome County EOC process
 - o Briefings
 - Executive briefings
 - Calls to municipalities
 - Conference calls with municipalities
- Support from Executive Office was great
- Chief of Staff created text group for Director, Chief of Staff, Executive, Deputy Executive
- People sustained 24/7 operations Tues/Wed/Thurs (Depth of staff)
- Using COOG to determine who's essential

Collaborating Agencies

- 211 assistance with human needs
 - o Fielded 400-500 calls/requests
 - Screening tool was developed to filter calls (BCOEM,211,BC Social Services)
- 211 staff expanded hours
- 211 staff is well trained in their questioning
- Excellent collaboration between 211& EOC
- Positive feedback to agencies from Seniors
- COAD 160 calls
 - o Available as a contact for homebound people
 - o BU/CAP/churches able to help shovel out
 - o MAPS from GIS showing churches/requests were extremely helpful
 - o Good relationship with BU Center for Civic Engagement
 - Council of churches fronted money for shovels
 - This money was in reserve for emergency purchases
- Red Cross on notice for shelters and represented in the EOC

Appendix A: Improvement Plan Matrix

| Core Capability | Issues | Recommendations | Responsibility |
|-------------------------|--------------------------|---------------------------------------|-----------------------------------|
| Public Information and | Municipalities sending | Re-educate municipal leaders on | Broome County OES and local |
| Warning | mixed messages | importance of coordinated messages | municipalities |
| | Unable to track road | Develop and exercise a plan to | Broome County OES, DPW, and |
| | closures | identify closed roadways using 511 | NYS DOT |
| | | and Broome GIS | |
| Operational | Multiple requests were | Re-educate EOC staff to ensure that | Broome County OES |
| Coordinator | made for the same | requests for resources are only being | |
| | resources through | made once | |
| | different channels | | |
| | EOC paperwork and | Evaluate and acquire EOC based | Broome County OES |
| | recordkeeping process is | software to streamline processes and | |
| | antiquated and done on | maximize efficiency of EOC. | |
| | paper. | · | |
| | Space constraints at the | Need to identify expanded EOC | Broome County |
| | EOC were noted event | space and develop new use plan. | |
| | with revised use plan. | | |
| On –Scene Security, | New York State Police | A map of assets available to each | New York State Police, other |
| Protection and Law | needed more 4 wheel | agency should be developed and | applicable entities |
| Enforcement | drive units | available during time of disaster. | |
| Critical Transportation | Organizations relied on | All entities (Government and private) | All Governmental/private entities |
| | emergency services | with "essential" personnel should | with "essential" personnel |
| | resources for transport | develop a plan to transport and house | _ |
| | of "essential" personnel | these employees during time of | |
| | _ | crisis/disaster. | |
| Planning | Confusion within | Government and private entities | All Governmental/private entities |
| | entities on what | should spell out exactly who is | with "essential" personnel |
| | personnel was | considered "essential" and educate | _ |
| | considered "essential" | employees as such. | |

Appendix B: Snowfall Totals

PUBLIC INFORMATION STATEMENT SPOTTER REPORTS NATIONAL WEATHER SERVICE BINGHAMTON NY 1122 PM EDT WED MAR 15 2017

THE FOLLOWING ARE OFFICIAL AND UNOFFICIAL OBSERVATIONS TAKEN DURING THE PAST 20 HOURS. APPRECIATION IS EXTENDED TO HIGHWAY DEPARTMENTS... COOPERATIVE OBSERVERS...SKYWARN SPOTTERS AND MEDIA FOR THESE REPORTS. THIS SUMMARY IS ALSO AVAILABLE ON OUR HOME PAGE AT WEATHER.GOV/BGM.

| LOCATION | STORM TOTAL SNOWFALL /INCHES/ | TIME MEASUR | /DATE OF EMENT | COMMENTS |
|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------------------|------------------------------|-----------------------------------------------------------------------------------------------------|
| NEW YORK | | | | |
| BROOME COUNTY ENDWELL WEST CORNERS BINGHAMTON REG 2 SSE WHITNEY P 1 S BINGHAMTON BROOKVALE NW JOHNSON CITY | 36.2 35.0 ARPT 34.9 POINT 32.4 31.0 29.2 | 715 AM 815 AM 800 PM 816 AM 730 AM 836 AM 948 AM | 3/15 3/15 3/15 3/15 | TRAINED SPOTTER AMATEUR RADIO NWS OFFICE STORM TOTAL NEAR ROSS PARK ZOO STORM TOTAL TRAINED SPOTTER |