

Montgomery County Emergency Response:

CountyStat Discussion

17 June 2008



CountyStat Principles

- Require Data-Driven Performance
- Promote Strategic Governance
- Increase Government Transparency
- Foster a Culture of Accountability



Agenda (Issue Focus)

- Welcome and Introductions

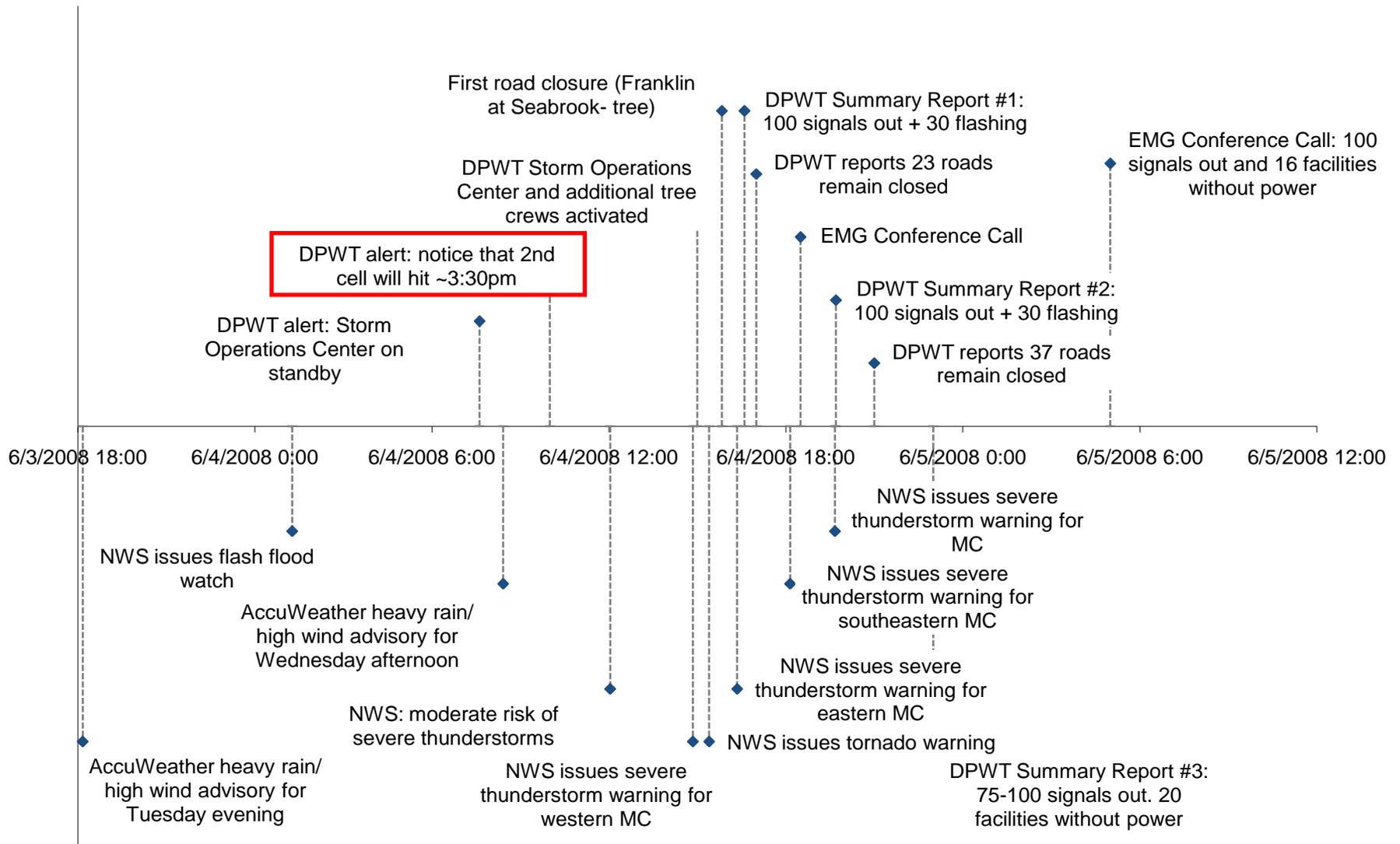
- Review of Storm Incident
 - Timeline of Major Events
 - Departments Involved in Response

- Cross Cutting Issues
 - Signal Outages and Intersection Prioritization
 - Information Dissemination
 - Emergency Coordination

- Wrap-up and Follow-Up Items



Timeline of Initial Response and Assessment



Impact of Severe Weather

▪ **Public Safety Communications – ECC**

- June 4: Had 80 to 100% increase in call volume over normal day (handled over 2800 calls; normal – 1500 daily calls)
- During 3 to 6 PM: over 1300 calls received; 400 transferred to Fire/Rescue
- MCFRS: reported over 30 responses to houses for storm related damage; some house fires associated with lightning strikes

▪ **PEPCo**

- Over 120,000 customers in service area without power (about 78,000-100,000 in MC)
- Loss of six distribution substations and 105 primary feeders
- Thunderstorm impacts to some transmission towers

▪ **Hospitals – Three facilities without power**

- Montgomery General (on diversion for a short period)
- Washington Adventist
- Suburban

▪ **MCPS**

- About 78 schools reported without power. Schools closed on June 5

▪ **Montgomery College**

- Rockville campus without power

▪ **Transportation**

- Widespread damage over County; downed trees reported throughout the County
- About 78 roads reported closed; over 30 involving downed wires; coordinating with PEPCo
- Over 200 signal lights are without power; Police maintaining traffic control at key intersections in accordance with traffic control plans
- Ride On reporting service disruptions and detours because of closed roads and congestion

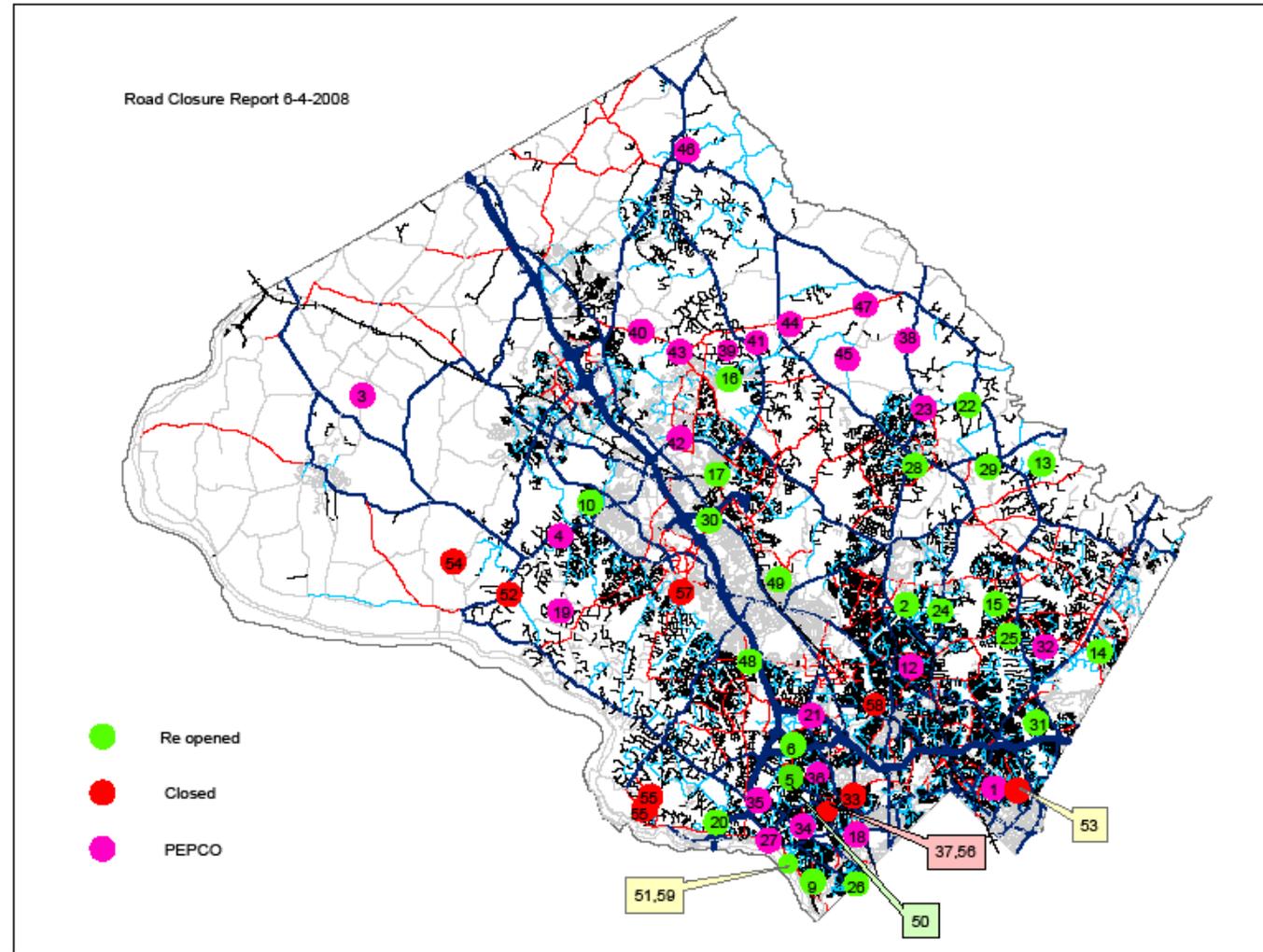
▪ **County Facilities**

- Over 24 facilities reported without power, including portion of Corrections-MC Detention Center; Police HQ; major transportation support facilities; UpCounty Center; recreation centers; libraries, etc.



Impact of Severe Weather: DPWT Road Closures

DPWT on June 8th reported that 71 of 76 Road Closures caused by downed trees or limbs



Police ECC Call Volume June 4th

15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	17:30	17:45		TOTAL
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Total # of Calls Received

Jun 4 - 2008	30	119	160	169	142	119	98	100	73	73	90	97		1270
Per Hour	478				459				333					

Avg Answer Time for 9-1-1 Calls (Seconds)

														Average
Jun 3-2008	3	4	3	8	3	3	3	3	3	3	3	5		3.7
Per Hour	4.5				3				3.5					

Jun 4-2008	23	99	64	5	4	7	3	3	6	4	16	24		21.5
Per Hour	47.75				4.25				12.5					

HELD EVENTS

						16:00		17:00				18:00	TOTAL
Jun 3-2008													
Total CAD Events						112		101				90	303
Held Events						4		7				1	
% Held						3%		4.80%				1%	

Jun 4-2008													
Total CAD Events						543		307				244	1094
Held Events						15		21				28	
% Held						2.70%		6.80%				11.40%	



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Traffic Signal Outage During Storm

DPWT estimates approximately 200 outages during height of storm

- As of 4:30 pm on June 3rd
 - 100 Out of Power
 - 30 in “flash” with blinking yellow and red lights in opposing directions

Crossing Guard Support

- Crossing Guard support by location was very fluid. Signals would go up for ½ an hour and then back down
- Montgomery County spent 161 hours of Crossing Guard time (approx \$2,740)

Mobile Power Generators

- DPWT began to place mobile power generators at high-priority locations at 10:00 am on June 5th with coordination with MCPD
 - 1) Georgia & Norbeck
 - 2) Conn & East-West
 - 3) RT 270 & Falls Rd
 - 4) Veirs Mill & University
 - 5) Georgia & Seminary
 - 6) East West & Jones Bridge
 - 7) Georgia Ave & Forest Glen
 - 8) East West & 16th Street



MCPD: Intersection Prioritization on June 6th

1st District

Seven Locks Rd @ Montrose Rd.
Falls Rd. @ I-270 (planned generator site)
Shady Grove Rd. @ Key West

2nd District

East West & Ross Rd
Connecticut Ave & East West
Jones Bridge & East West (planned generator site)

3rd District

Georgia & Forest Glen (planned generator site)
Georgia & 16th
16th and East West (planned generator site)
Route 29 & Dale Dr

4th District

Georgia & Bordly
Georgia Bel Pre
Muncaster Mill & Rt 28
Veirs Mill & University (planned generator site)

5th District

Rt. 28 at Rt. 118
Rt. 28 at Seneca Road (Rt. 112)
Rt. 28 at Bondy Lane
Brink Rd & Route 108

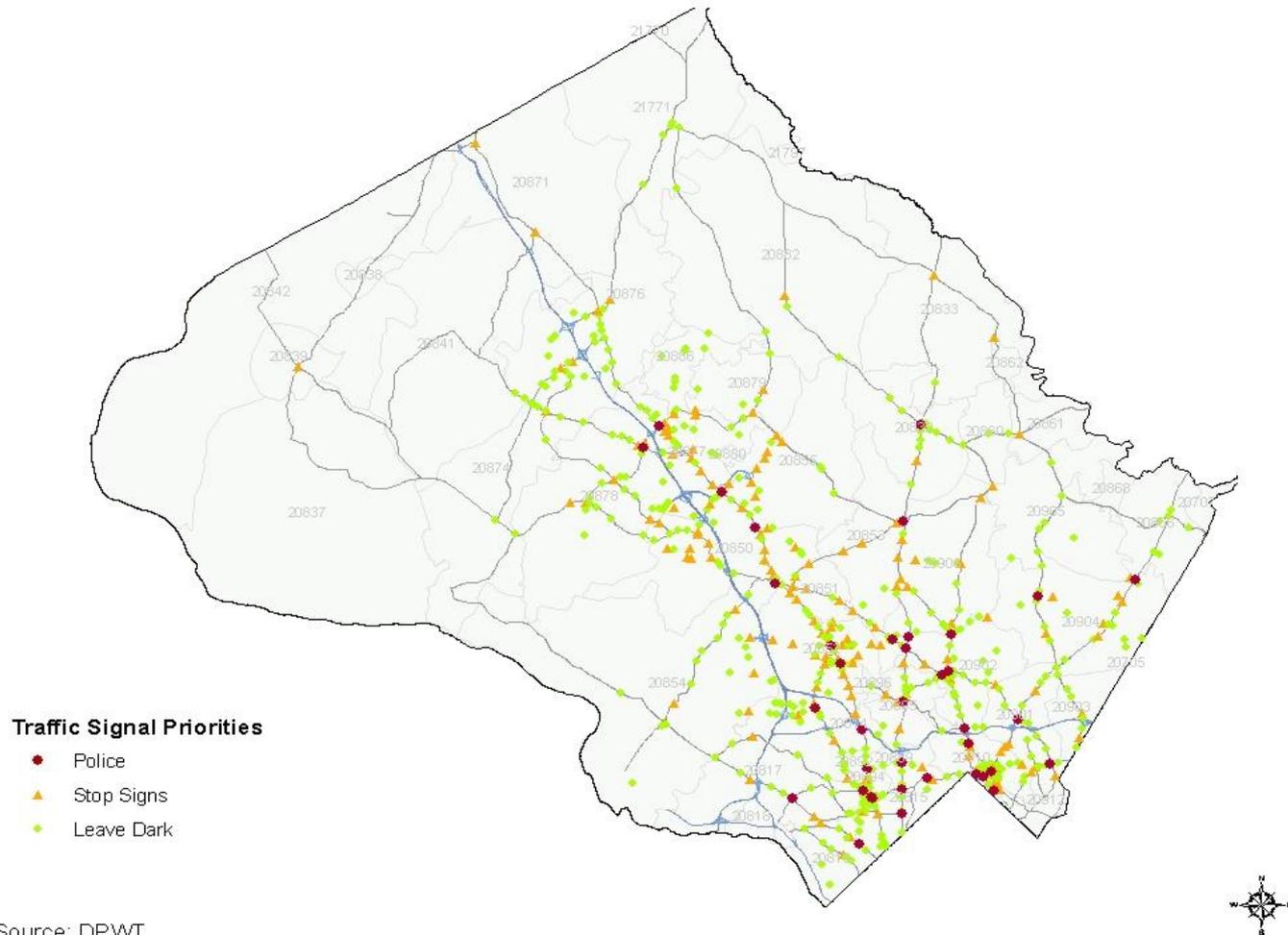
6th District

Sam Eig & Great Seneca
Sam Eig & Fields
Great Seneca & Muddy Branch

Intersections were prioritized at the District level. It was not until the day after the initial event where increased resources were required and the assessment of varying levels of impact were determined that SOD became involved and an Area Command was established.



Traffic Signal Prioritization by Location



DPWT: Intersection Prioritization

Of the 50 highest priority intersections, only 2 are County-owned

- Developed in coordination with MCPD after 1999 ice storms and further refined after Hurricane Isabella and subsequent storms
- Prioritization list is formed at the County level not at the Police District level

Methodology

- Combination of overall amount of traffic at the intersection, distribution of traffic around the intersection (i.e., split between main road and side roads)
- Size of intersection, complexity of operation (e.g., # of signal phases, closely spaced intersections that must operate together, etc)
- Other unique operational features (e.g., sight distance issues due to curves, pre-empt, etc)



Increasing Capacity: Signal Modernization/Back-up

Traffic Signal System Modernization -- CIP project No. 500704

- Includes approved funding for UPS/battery back-up capabilities with 8 hour run time at all 250 County-owned traffic signals
 - Accounts for, but does not guarantee supporting state funding for UPS/battery back-up at the state's 550 signals in the County
 - The programmed unit cost is \$7,500 per location, regardless of state- or County-owned
-
- There are approximately 800 signalized intersections in the County - about 250 are County owned and about 550 owned by the state
 - Montgomery County maintains the signals for the state, but the standard practice is that each agency is solely responsible for any upgrades
 - The project was compiled based on the County paying for UPS at County-owned signals, and the state funding their signals
 - Project documentation references a total project cost of \$44 million, but the expenditures displayed only show \$31.5 million. The difference in the amounts is for items that the state will fund and spend on their own, and includes items such as LED's and UPS/battery back-up at their intersections



Increasing Capacity: Additional Crossing Guard/ Traffic Management Support

- Montgomery County code Sec. 31-4. Authority of school crossing guards.
 - (a) School crossing guards, appointed under the regulations of the county personnel board and appropriately uniformed so as to be identified as officers and guards of the county, are authorized to be assigned traffic control devices which will include directing traffic at school and church crossings and such other traffic control duties as may be designated by the county executive or director of the department of police or his or her designee.
 - (b) School crossing guards shall have the power to control vehicular traffic as necessary and consistent with the safety of such school children and pedestrians, including the power to signal, stop or otherwise direct vehicular traffic so as to permit the safe crossing of persons using the school or church crossing area. Crossing guards may be assigned additional traffic control duties by the county executive or director of the department of police or his or her designee; and in emergencies, school crossing guards may assist a police officer in traffic control at the officer's request.
 - (c) It shall be unlawful for any person to fail to obey or comply with the lawful signal or order of a school crossing guard. (1978 L.M.C., ch. 7, § 2.)
- MCFRS personnel are currently qualified to stop traffic but not conduct traffic
- Examples of using personnel outside of the police force are found in the region such as the Washington, D.C. Emergency Volunteer Traffic Corps (E-VTC)
 - Require training
 - Dedicated to individual intersections



Increasing Capacity: Refine Intersection Prioritization List

- **Step 1: Identify points of contact between all traffic management stakeholders**
- **Step 2: Rectify any separate lists and methodologies each department has for identifying priority intersections. Develop a formula that considers different priorities of each Department (i.e. traffic movement, emergency response, etc)**
- **Step 3: Use GIS to chart all locations by priority on maps with unique identifiers**
- **Step 4: Conduct cost-benefit analysis of including redundant/ backup systems and procedures at key locations**



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 - Emergency Coordination

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Public Information Dissemination

- Accurately relaying to public laws pertaining to signal outages
 - There is nothing in the Maryland statute that specifically references what to do when a signal is out, however, in the Transportation article, there are four references to right of way (21-401, 21-401.1, 21-402, 21-403)
 - Traffic volitions due to signal outages are assessed at the discretion of the officer on location
- Providing updated information to the public
 - Montgomery Alerts
 - News Media
 - DPWT hotline stops at 8 pm, callers are then directed to leave a message or call non emergency police line

County needs unified direction for the public despite the lack of Maryland State law



Public Reporting Mechanisms

- Prior to implementation of 311 system, County residents must identify appropriate location for reporting outages
- Contact information for reporting signal outages is found on the Homeland Security Website (listing DPWT phone number)
- PIO information updates refer residents to the DPWT hotline

Homeland Security Website

ess for the Disabled
4mb)
s)
ess for Pets
tion Procedures for the
b)
edness Checklist
ope with Disaster
gency Evacuation

- Flood or Flash Flooding
- Hurricane Watch and Warnings
- Severe Storms
- Summer Weather Terminology
- Tornado Warnings
- Winter Storms
- Winter Weather Terminology
- Winter Weather Tips

gencies: A Checklist for
Problems (pdf - 125kb)
e of A Chemical
cal Emergency Planning
us Materials)
er Plan (pdf - 350kb)
er Supplies Kit (pdf -

Safety Reminders

- [Traffic Light Out?](#)
Treat It As A Stop Sign!
- [Power Out?](#)
Use Flashlights Not Candles

mation

Useful Links

- AMERICAN RED CROSS
- READY KIDS
- U.S. Department of Homeland Security
- Be Ready - Make a Plan
- FEMA
- National Weather Service
- MEMA

Information Sign-up
Information Use Permit Executive

Applications
Safety and Risk


Skywarn Class Registration

Signal Outage Guidance



Developing and Updating COOP Documents for Departments

- Departmental notification of employees and continuity of operations if access to a facility is denied (e.g. loss of power, loss of HVAC, loss of water, other technological or WMD event, etc.)
 - County Employee Emails (Postmaster Messages)
 - Use of MCEN for updates by departments
 - Departmental Hotline for internal communications and rumor control
 - Department based COOP planning; need for updating or establishment of plans and communications with employees



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Inter-Departmental Emergency Coordination

During the event, no Departments identified themselves as being overcapacity to handle the situation

- Montgomery County Emergency Management Group (EMG) Conference Calls
- Emergency Operations Center (EOC) Activation Threshold
- DPWT Transportation “Storm Center”
 - NIMS-like structure for storm response
 - Centralized information coordination for roads, traffic, transit and facilities
 - Frequent status reports – verbally and email reports
 - Support and cooperation to other departments
- Coordination among HHS, PH, MCFRS Code Enforcement and property owner regarding sustaining medically fragile populations in place when power is lost and generators are not operational



Emergency Management (EMG) Group Activities

- **June 4, Wednesday**
 - Alert Montgomery: 6 notices
 - 5:30 PM EMG conference call: situational awareness and initial damage assessment; 24 hour planning horizon
 - 9:00 PM EMG conference call: conditions, coordination, response, and planning; closures and service continuity. Power and transportation event. Emergency declaration not warranted

- **June 5, Thursday**
 - 5:00 AM EMG conference call: conditions report, coordination, status of restoration activities and planning for next operational phase – heat advisories
 - 10:00 AM EMG conference call: status monitoring; heat advisory planning; Shelter Task Force contingency planning for cooling centers, if needed
 - 2:00 PM – County Executive Press Conference – Storm Response
 - 3:00 PM EMG conference calls: status monitoring; use of County facilities and commercial establishments for cooling; Shelter Task Force identifies 4 locations for cooling centers if needed

- **June 6, Friday**
 - 3:30 PM conference call: status report of restoration activities, heat advisory monitoring; Shelter Task Force emergency planning; coordination of information for PIO press release (including Libraries, Recreation, etc)

- **June 7, Saturday**
 - Alert Montgomery: 2 notices
 - Waverly House contact and coordination; Ride On bus provided for cooling

- **June 8, Sunday**
 - Waverly House monitoring and Ride On bus shuttle



EMG Conference Call Representation

- Office of Emergency Management Homeland Security
- Fire and Rescue
- Police
- Corrections
- Municipalities: Rockville, Gaithersburg, Takoma Park; Chevy Chase Village
- Department of Public Works and Transportation: Highway, Facilities, Traffic and Transit
- Public Health
- Permitting Services
- Health and Human Services
- Recreation
- Regional Services Center
- MCPS
- Montgomery College
- Volunteer Center
- CUPF
- Red Cross
- Procurement
- Public Information
- Finance
- Assistant CAO Office
- Utilities – PEPCo
- Other: RACES



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Montgomery County Emergency Response:

Departmental Information Appendix

17 June 2008

Severe Summer Storm Events June 4-7, 2008

Emergency Management Group

June 11, 2008

“Hot Wash” – After Action Review

Summary, June 12, 2008

Severe Summer Storm Events

▪ June 4, Wednesday

- Severe thunderstorm warning: high winds, possible tornadic activities, heavy rainfall, large hail
- Around 3 PM: major storm system of four cells impacts NCR and moves through Montgomery County; major impact areas are reported to be in Germantown, Gaithersburg, Darnestown. High winds; rains falling in sheets; reported as horizontal rain falling sheets; strong lightning and thunder activity; reports of tornado-like activity
- Around 7-8:30 PM: large complex system begins erupting and moves through NCR. Reported to be as intense as first wave. Reports of affecting Rockville, Wheaton and East County. High winds; severe thunderstorms
- Around 11 PM to 1 AM: another large complex system to impact the area, including Montgomery County. Severe thunderstorm warning remains in effect



Severe Summer Storm Events

- **June 5, Thursday**
 - Assessment and operations to restore power, transportation, facilities, services
 - MCPS schools closed; County facilities open with continuity of services planned for facilities without power
 - PEPCo reports steady progress and mutual aid support and contractors
- **June 6, Friday**
 - Steady progress in restoration of services and power; road clearing and traffic signals
 - Heat emergency planning – monitoring of medically fragile populations; cooling facilities at existing County facilities
 - Press conference by CE: report County’s summer storm response
 - Weather: temperatures in the 90’s with predicted heat warnings
- **June 7, Saturday**
 - Continued restoration activities and monitoring
 - Weather: temperatures in upper 90’s
 - Severe storm warning late Saturday night: high winds, strong rain. Impacts reported to be in Takoma Park area
 - Assistance and support provided to Waverly House; HOC provides 100 window units
- **June 8 to 11**
 - Heat advisories
 - Continued monitoring of medically fragile populations



EMG Activities: 5 Conference Calls

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Alert Montgomery Notices: 15,000 subscribers

▪ June 4, Wednesday

- 7:24 am: Flooding warning of approaching storm
- 12:59 pm: Approaching thunderstorm warning
- 2:55 pm: Severe thunderstorm warning in MC; area specific warnings
- 3:23 pm: Severe thunderstorm warning for MC specific areas; immediate impact
- 7:33 pm: Severe thunderstorm warning for MC specific area
- 8:48 pm: Severe thunderstorm warning for MC specific areas; immediate impact

▪ June 7, Saturday

- 7:05 pm: Severe thunderstorm warning for MC specific areas
- 8:09 pm: Severe thunderstorm warning for MC areas; immediate impact.



EMG Conference Call Representation

- **Office of Emergency Management Homeland Security**
- **Fire and Rescue**
- **Police**
- **Corrections**
- **Municipalities: Rockville, Gaithersburg, Takoma Park; Chevy Chase Village**
- **Department of Public Works and Transportation: Highway Opns, Facilities, Traffic and Transit**
- **Public Health**
- **Permitting Services**
- **Health and Human Services**
- **Recreation**
- **Regional Services Center**
- **MCPS**
- **Montgomery College**
- **Volunteer Center**
- **CUPF**
- **Red Cross**
- **Procurement**
- **Public Information**
- **Finance**
- **Assistant CAO Office**
- **Utilities – PEPCo**
- **Other: RACES**



Major Impacts Immediately After Storms – June 4

- **Potential tornadic activity – four areas**
 - Springfield Road and Seneca
 - Brinks Road
 - MD 124 and Warfield
 - Chevy Chase Village: Cedar and Magnolia Parkway
- **Public Safety Communications – ECC**
 - June 4: Had 80 to 100% increase in call volume over normal day (handled over 2800 calls; normal – 1500 daily calls)
 - During 3 to 6 PM: over 1300 calls received; 400 transferred to Fire/Rescue
 - MCFRS: reports over 30 responses to houses for storm related damage; some house fires associated with lightening strikes



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- **PEPCo**
 - Over 120,000 customers in service area without power (about 78,000-100,000 in MC)
 - Loss of six distribution substation and 105 primary feeders
 - Thunderstorm impacts to some transmission towers
- **Hospitals – three without power**
 - Montgomery General (on diversion for a short period)
 - Washington Adventist
 - Suburban
- **MCPS**
 - About 78 schools reported without power. Schools closed on June 5
- **Montgomery College**
 - Rockville campus without power



Major Impacts Immediately After Storms – June 4

■ **Transportation**

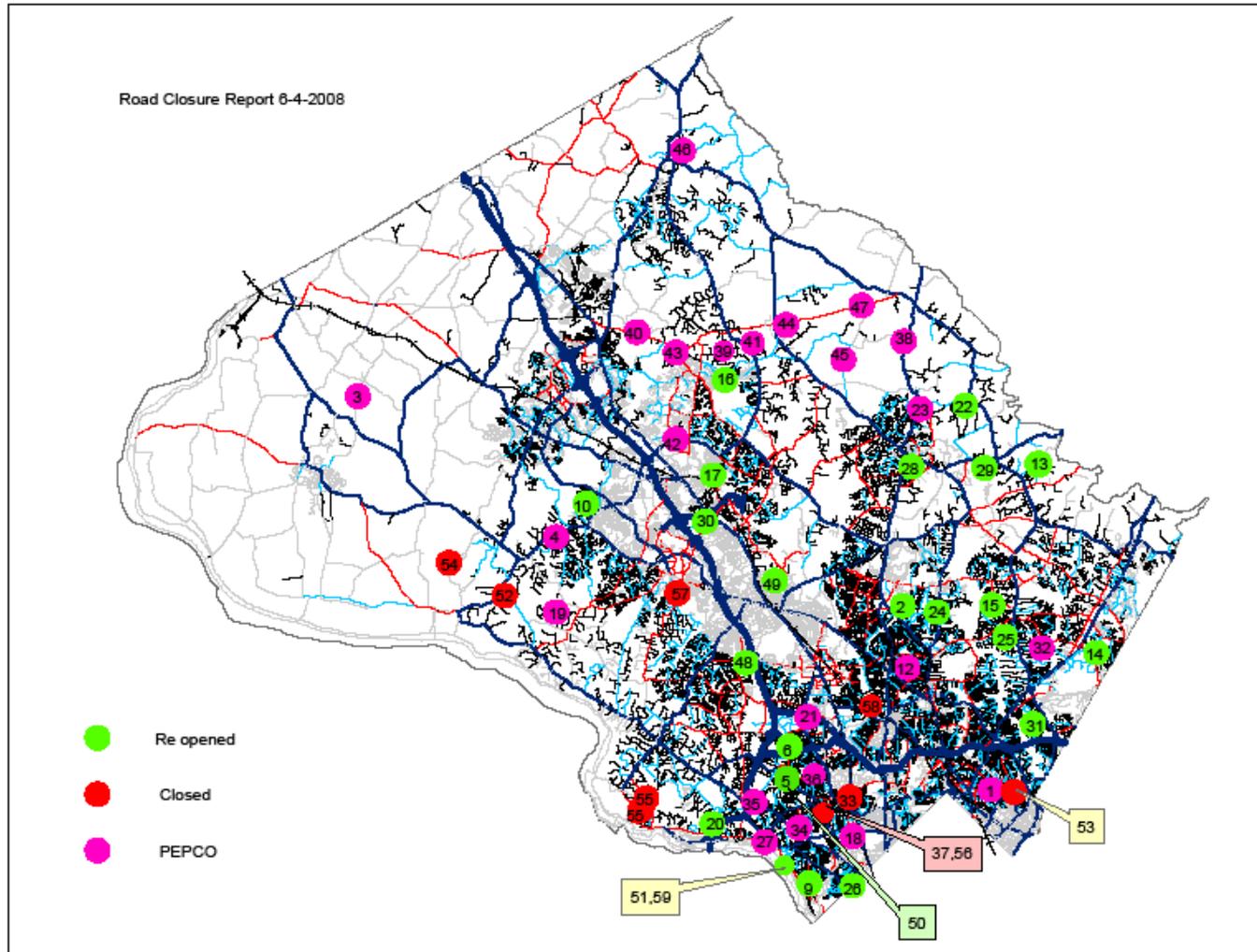
- Widespread damage over County; trees downed reported throughout the County
- About 78 roads reported closed; over 30 involving downed wires; coordinating with PEPCo
- Over 200 signal lights are without power; Police maintaining traffic control at key intersections in accordance with traffic control plans
- Ride On reporting service disruptions and detours because of closed roads and congestion

■ **County Facilities**

- Over 24 facilities reported without power, including portion of Corrections-MC Detention Center; Police HQ; major transportation support facilities; UpCounty Center; recreation centers; libraries, etc.



DPWT Road Closures



Major Impacts Immediately After Storms – June 4

- **Nursing and assisted living facilities**
 - 32 Nursing Homes contacted; 9 on generator power
 - 28 large assisted living facilities contacted; 5 on generators
 - Over 50 small group homes being contacted
- **Senior low income housing high rises**
 - 5 contacted; 4 okay
 - Waverly House has power but has problems with obsolete air conditioning system
- **High hazard dams – no level 2 reported**
- **IT systems, communications, PSCS towers – no problems reported**



Power Restoration Progress

Date/Time	Customers Without Power	Roads Closed	Traffic Lights Out	Hospitals	Key Facilities
June 4, 9:00 pm	120,000 ±	28	200	3 on gen	Damage to GT Police Station
June 5, 5:00 AM	48,000	61 closed; 29 opened; 32 closed	100	3 on gen	24 County facilities
June 5, 10 AM	39,000	32	70	No rept	24-County; 12 – Other
June 5, 3 PM	25,000	28	60	All opn	24-County; 12 other
June 6, 3:30 PM	10,000	21	8	All opn	8 - County



Major Actions Initiated

▪ Public Information

- Announcements and press releases: severe weather; traffic cautions; hot weather; food handling
- Press conference by CE on June 5

▪ Transportation

- Clearing of closed roads and coordination with PEPCo
- Traffic management: traffic controls with Police; passive sign control installation at some intersections; generator installation at key locations

▪ MCPS

- School closure on June 5
- Schools and graduation activities open; employee and student management on June 6

▪ County Facilities

- Continuity of service plans implemented for facilities without power
- HHS: closure of 1301 and 1334 Piccard on June 5

▪ EMG establishment of priorities for PEPCo restoration

- DPWT provided POC for facility information
- OEM/PH staff development of facility priorities: 1-high; 2-moderate; 3-regular



Major Actions Initiated

- **PEPCo**
 - Participation in conference calls; coordination on intersection and facility restoration priorities
 - Power crews from other areas provide mutual aid for restoration
 - Website information on power restoration status
 - Automated phone reporting and notice system
- **Monitoring of medically fragile populations**
 - Shelter Task Force: coordination with nursing homes, assisted living facilities; group homes
- **Public Health**
 - Hospital communications and coordination
 - Syndromic surveillance of heat related injuries, June 6 to 11: 39 cases among elderly presented to hospitals; of which 1 treated for heat stroke and 1 for severe dehydration
 - Movement of temperature controlled medications to Dennis Avenue Clinic for generator powered refrigeration
 - Licensing and Regulatory staff – follow up on food handling
- **Shelter Task Force: Heat Emergency Planning**
 - 4 Cooling centers identified for operations, if needed
 - Monitoring and coordination with medically fragile populations
 - Crises management center – intake and response



What Worked Well?

- **DPWT Transportation “Storm Center”**
 - NIMS-like structure for storm response
 - Centralized information coordination for roads, traffic, transit and facilities
 - Frequent status reports – verbally and email reports
 - Support and cooperation to other departments
- **Emergency Management Conference Calls**
 - 6 conference calls held
 - Participation and availability was excellent; including municipalities and agencies (MCPS, MC)
 - Situational awareness among County agencies/departments was coordinated and shared effectively
 - Information sharing and problem solving was good
 - PIO coordination for media and public
- **Public Health coordination with Hospitals**
 - Contact maintained and situation monitored to support, if needed



What Worked Well?

- **Medically fragile population monitoring**
 - Lead by Shelter Task Force with HHS support
 - Information from PH: Nursing homes and Assisted Living Facilities
 - HHS information: group homes, concentrations in hi-rises, HOC
 - Communications and support to facility operators
- **DPWT Facilities - County Facility Monitoring**
 - Single POC for status of County facilities; synthesized list including other
 - Coordination between Facilities, OEM and PH regarding establishment of restoration priorities (Priority 1, 2, 3)
 - Monitored generator operations, including fueling
- **Shelter Task Force – heat emergency planning and coordination**
 - Built upon vulnerable population monitoring
 - Cooling strategy: use existing County facilities and services; commercial facilities
 - Department of Recreation: Extending week-end hours for swimming pools
 - Contingency plans to operate cooling centers if needed
 - Support by Ride On to provide air condition buses at Waverly House
- **Alert Montgomery**
 - Messages were timely and accurate



Areas for Improvement

- **Use of GIS Work Group for synthesis of information, particularly for more rapid damage assessment**
 - Could have used to synthesize: PEPCo zip code information; ECC CAD dispatch and call type; road closures and downed wires locations; facility outages and damages, etc.
 - Information may have provided better sense of “area of impact” to be used for damage assessment
 - R911 provides some capability to contact residents by phone for assessment – needs more work
 - If we had activated EMG, would we have tasked the GIS work group for compiling this information?
 - Future use of WebEOC as central point of information reporting and display
- **Pre-plans, pre deployment strategies, coordination for use of generators and passive traffic management devices to manage key intersections when power is lost**
 - More pre-planning and consideration for pre-deployment to maintain operation for selected “critical and resource intensive intersections”
 - DPWT has traffic management plan for traffic lights loss; need for regular updating with personnel changes at District station
 - Use of other resources to supplement Police traffic management: Traffic guards, others?
 - Inform public frequent and often of traffic laws when traffic lights are out



Areas for Improvement

- **Damage Assessment Process**
 - Improve synthesis and compilation of information for assessment
 - Need for additional wind shield damage assessment training by DPS to operating agencies
 - Deployment of CERT for wind shield damage assessment
 - DPS lead – need for POC and NIMS structure for implementation of damage assessment process; identification and mapping of structural damage; possible use of WebEOC
 - Trigger mechanism for implementation of wind shield assessment when event is not considered an “emergency”, but still requires damage assessment
 - Who should be engaged in damage assessment – ie wind shield surveys when there is not a declared emergency? Fire, Police, DPWT, Permitting, DHCA inspectors; Public Health inspectors; Ride On; others? Best and most effective use of resources?
 - How to coordinate? How to report? How to synthesize in total County damage report? – Possible use of WebEOC, but requires GIS capabilities in OEMHS.
 - Should we have implemented a “Hotline” for community to report damage?
 - Coordination with other County agencies (municipalities, WSSC, MC, MCPS, MNCPCC, etc) to collect “total” storm damage estimates
 - Need for rapid damage assessment for emergency declaration and resource requests
- **Departmental notification of employees and continuity of operations if access to a facility is denied (e.g. loss of power, loss of HVAC, loss of water, other technological or WMD event, etc.)**
 - Use of MCEN for updates by departments
 - Departmental Hotline for internal communications and rumor control
 - Department based COOP planning; need for updating or establishment of plans and communications with employees.



Areas for Improvement

- **Coordination of County priorities for power restoration**
 - Synthesized mapping of impacts would help in determining priorities
 - Need for pre-planning: improve address information of County facilities, demographics of clientele served, County services provided, power supplier, point of contacts for departments/divisions, etc. for County facilities and medically fragile populations
 - Should intersection and facility priorities be separate?
 - Need to improve timeliness of providing information to power companies
 - Improve lines of communication with BG&E and Alleghany Power
- **Coordination among HHS, PH, MCFRS Code Enforcement and property owner regarding sustaining medically fragile populations in place when power is lost and generators are not operational**



Areas for Improvement

- **Disaster Preparedness by individuals and businesses**
 - Opportunity to keep message of preparedness to residents
 - Lots of anecdotes about people not being able to help themselves for basic needs
- **Communications**
 - Were any EMG communications problems encountered?
 - Need to improve internal departmental communications?
- **Should we have activated whole or part of EMG?**
- **Other**



Follow Up Actions

- **Damage Assessment Work Group**

- Led by OEM in coordination with ECC, DPS, DPWT, DEP
- Collect information about this event
- Establish process for data collection and cost estimation
- Provide information gathered on this storm for policy considerations below

- **Policy Considerations**

- Level of support, if any, to property owners with significant tree damage, not covered by property insurance?
- Require property owners to bring debris to right of way or provide assistance on private property?
- Nexus to “health and safety”



Summary

- Classic example of emerging event; level of damage did not rise to level of “declared emergency”
- Event was essentially a power and transportation system restoration event, including a major element for debris management. All managed within County resources
- EMG framework provided information sharing and coordinated response.
- Great response by County! MC Alert, PIO, EMG Conference calls used frequently during event
- Great support and response from PEPCon in MC: coordination, communications, mutual aid support, response and restoration
- County Departmental operational response and storm damage management was excellent
- Could improve damage assessment and provide hotline or phone number for reporting by residents
- Transition to planning for heat emergency was excellent
- Shelter Task Force maintained contact with medically fragile populations; developed effective plans for storm as well as heat response
- Shows need for constant attention to individual and family preparedness
- Thanks to everyone!!



Montgomery County Severe Storm Event Department of Public Works and Transportation

DPWT: Guidelines for Addressing Power Outages at Signalized Intersections (1 of 3)

Onset of Incident

- This is the period of initial instability associated with the incident. This period is generally characterized by power blips and communication related "receive errors" in the traffic signal system
- During this period, the TMC supervisor or Engineer On Duty (EOD), with input from the Technical Center Supervisor and/or others as needed, will be responsible for determining if current weather conditions are such that field personnel cannot be safely dispatched to begin addressing signal malfunctions

Organization/Triage

- This is generally the time period in which the incident has progressed to the point where the number of traffic signal malfunctions and outages have stopped rapidly increasing. At this time, TMC can begin to obtain system reports, organize for initial manpower and equipment response, and dispatch technicians for repairs and verification of loss of power
- Field technicians will visit each reported malfunction as dispatched by the TMC or by assigned geographic area
- Priority consideration shall be given to restoring color operation to those traffic signals in flash
- For traffic signals that are dark, field technicians shall verify the loss of utility company supplied power and shall also perform a continuity test in the disconnect switch to check the condition of the fuse
- As field technicians verify loss of power, TMC shall aggregate and log the information, and shall notify the appropriate utility companies of specific outages
- TMC shall notify the County's Police Emergency Communication Center (ECC) of specific outages, so that Police can assess the need to provide interim manual traffic control (i.e., direct traffic)



DPWT: Guidelines for Addressing Power Outages at Signalized Intersections (2 of 3)

Situation Assessment

- This is the period in which TMC staff coordinates with utility companies to gather information on the severity and extent of service disruptions from the utility companies. From this information, decisions can be made as to what further action, if any, is needed
- TMC shall coordinate with utility companies and others (EOC, County Public Information Office, etc.) to obtain available information on the magnitude of outages, and anticipated duration/time to restore
- Based on the information available, the Chief, Traffic Engineering and Operations, or his designee, shall determine if alternate traffic control measures should be deployed. For all but extreme situations, this decision shall be delegated to the Manager – TMC. The decision to deploy alternate traffic control measures shall be generally guided as follows:
 - Variables to consider include: power company information relating to scope and anticipated duration of outage, number of outages, severity of equipment damage, time of day / week, impact to overall traffic operations, etc
 - If overall determination is that the power outages are minor / short-term, alternate traffic control measures will not be deployed
 - If overall determination is that the power outages are major / long-term, varying forms of alternate traffic control measures will be considered for deployment. In such circumstances, deployment efforts will be coordinated with County Police



DPWT: Guidelines for Addressing Power Outages at Signalized Intersections (3 of 3)

Deployment

- This is the period consisting of activities to deploy alternate traffic control measures
- For response to localized outages that are beyond the scope of deployment for on-duty staff, the TMC shall contact the on-call sign person from the Sign & Marking Shop
- For response to widespread outages, the TMC shall contact the Manager III responsible for the Sign & Marking Shop for further coordination of deployment activities



Montgomery County Severe Storm Event Public Information Office Response

Public Information Office: Storm Emergency Response

Friday, May 30

- Issued press release: “Hurricane Season Starts in June: County Offers Hurricane Safety Tips” which cautioned residents about high winds and power outages with advice on staying safe

Wednesday, June 4

- Participated in Emergency Management Group (EMG) Conference Calls at 6:30 p.m. and 9 p.m.
- Put out press release immediately after storm hit: “County Officials Offer Update Following This Afternoon's Storm” providing information on dealing with intersection power outages, closed facilities, reporting downed trees and utility lines and power outage and food safety tips



Public Information Office: Storm Emergency Response

Thursday, June 5

- Participated in EMG Conference Calls at 5 a.m., 11 a.m., and 3 p.m.
- Following 11 a.m. call, sent out press release based on EMG request: “County Officials Offer Update Following Yesterday’s Storm” providing information on number of residents and intersections without power, reporting downed trees and utility lines, power outage, hot weather precautions, and food safety tips, symptoms of heat stroke, and availability of fans for senior citizens
- Posted information on County home page concerning closed facilities and roads, and intersections with traffic signal outages
- Organized media briefing on storm response with County Executive at 2 p.m.

Friday, June 6

- Participated in EMG Conference Call at 3:30 p.m.
- Issued press release based on EMG request: “County Extends Outdoor Pool Hours for Weekend; Officials Offer Hot Weather Tips to Cope with Upcoming Heat Wave” providing information on number of residents and intersections without power, reporting downed trees and utility lines, power outage, extension of pool hours over the weekend, encouraging those without power to keep cool at public facilities and retailers, hot weather precautions, and food safety tips, symptoms of heat stroke, requests to check on elderly relatives and neighbors, and availability of fans for senior citizens

Wednesday, June 11

- Attended EMG “Hot Wash” after action review



Montgomery County, Maryland Severe Storm Event After Action Discussion

Fire Chief Thomas W. Carr, Jr.

MCFRS Severe Storm After Action Discussion

- **Severe Storm Event – Wednesday, June 4th 2008**
- **Event Time Period Measurement**
 - June 4, 2008, 1500 hours
 - 1500 hours June 6, 2008
 - 48 hours total time period for the severe storm event



MCFRS Severe Storm After Action Discussion

▪ MCFRS Severe Storm Pre-planning

- Severe weather monitoring, notice and warning @ ECC
- ECC provides system notification/alert
- Duty Operations Chief conference call with on duty senior staff officers
- Station activities suspended
- Stations secured
- Resources readied
 - Swift Water Rescue Team deployed
 - Equipment caches readied (chain saws, USAR equip Cache)
 - Reserve apparatus readied
 - Additional communications equipment readied (NCR Cache)
 - Windshield survey information sheets made available for apparatus



MCFRS Severe Storm After Action Discussion

▪ Operational staffing

- ECC
 - Normal personnel staffing on duty during storm
- Stations/apparatus
- Career: 240 daily personnel on duty
- Volunteer: supplemental personnel reported to various stations



MCFRS Severe Storm After Action Discussion

▪ MCFRS Incident Volume

- Daily incident volume# _____??
- Storm event (48 hours) # _____??
- Incident response types
 - Structure Fires
 - Lightening strikes
 - Electric wires down
 - Personal injury collisions
 - Trees down
 - Power outages
 - Fire Alarms activated
 - Power transformers disabled/struck



MCFRS Severe Storm After Action Discussion

- **Critical Issues**

EOC

Issue: EOC not stood up/activated during storm

Corrective Action: Establish severe storm/event thresholds for EOC activations

ECC staffing:

Issue: surge staffing capacity during storm events and/or high incident volume dispatch

Corrective Action: Increase personnel staffing at ECC during storm events/high incident volume dispatch, Community Resource Unit

Cell Phone Communications:

Issue: cell sites saturated and locked out

Corrective Action: Ruthless pre-emption for public safety

Issue: Grid lock due to loss of power

Corrective Action: Central communication and coordination with all entities



MCFRS Severe Storm After Action Discussion

- **Critical Issues continued**

Vehicle Traffic

Issue: Grid lock due to loss of power w/traffic lights

Corrective Action: Central communication and coordination with all entities

Road Closures

Issue: Lack of information/coordination regarding road closures

Corrective Action: Central collection point and road closure information distribution to critical agencies



MCFRS Severe Storm After Action Discussion

- **Fire Station Electrical Power**

Station Power

Issue: Periodic outages

Corrective Action: Install and maintain station power generator capabilities

Station Phone Tele-communications

Issue: Several of the stations did not have Telecommunications during and after the storm

Corrective Action: Ensure station generators power telecommunications equipment



MCFRS Severe Storm After Action Discussion

■ Lessons Learned

- Severe Storm Warning: Advance warnings and notifications of severe storms are critical to public safety and personnel
- Staffing: surge capacity is critical at ECC, stations and apparatus during severe storm events
- EOC: activation needed for central information point collection and distribution to public safety
 - Road closures
 - Power outages @ life safety target hazards



MCFRS Severe Storm After Action Discussion

▪ Lessons Learned continued

- Communications: ensure communications interoperability between county agencies during severe storm events
- Back-up Generator Power: all critical public safety agencies must have a back-up generator power capacity

