

# **Marathons** – *A Tale of Two Cities and the Running of a Planned Mass Casualty Event*

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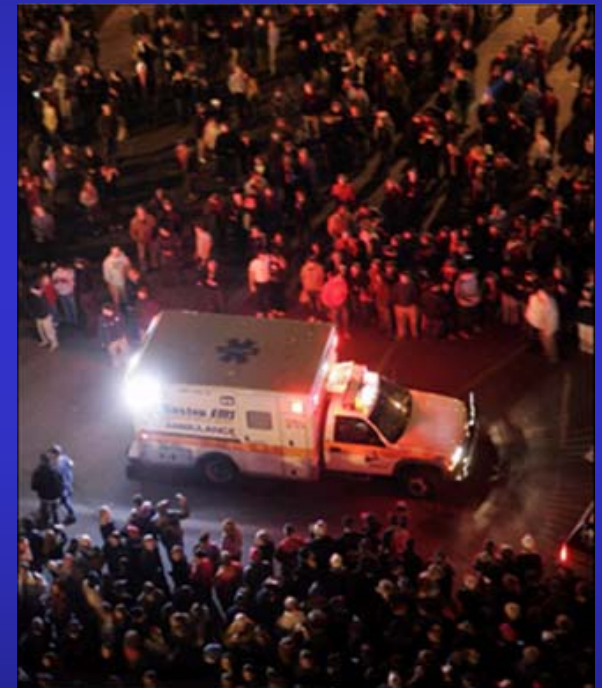






# Presentation Overview

- Planned Disaster Concept
- Groundwork
- Collaboration
- Planning
- Execution
- Evaluation and Analysis





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# Special Events as Planned Disasters

## CONCEPT





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# Concept

## *Special Events: Sharing the Characteristics of a Major Incident*

- Special Events (“High Threat Incidents”)
  - Draw large crowds
  - Require above normal resource commitments by emergency responders
  - Special circumstances, such as heat, cold, exertion, substance abuse, and others present responders with real (not simulated) opportunities to perform interventions on a large number of patients
  - Frequently result in a high number of casualties
  - Excellent opportunities to exercise disaster, large-scale, and mass-casualty incident plans





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# Special Events as Planned Disasters

## *GROUNDWORK*



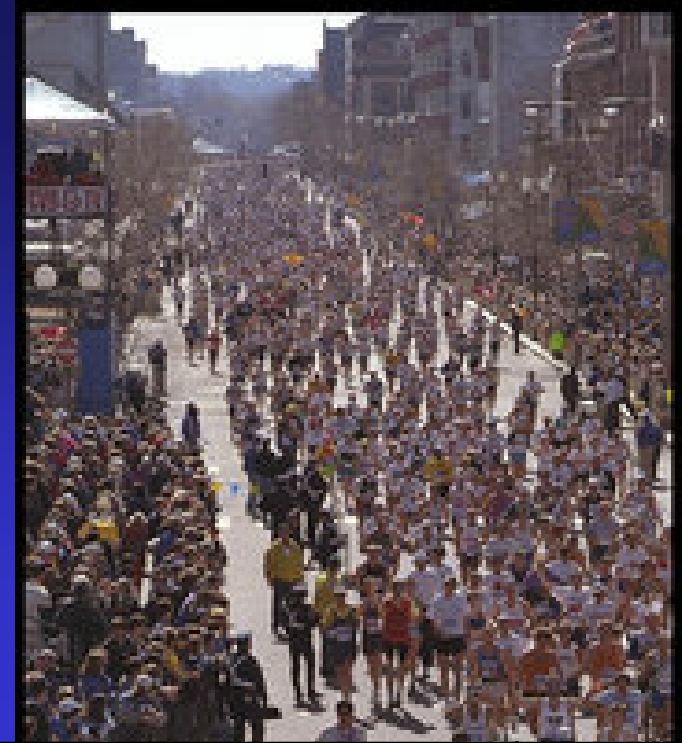




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# Groundwork

- Plans must be in place
  - Communications
  - Notifications
  - Operations
    - Mass-casualty
    - Mass-evacuation
    - Pharmaceuticals/  
Prophylaxis Distribution
    - Fire suppression
    - Other consequence  
management
- Partnerships need to be developed





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# Special Events as Planned Disasters

## *COLLABORATION*





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# Collaboration



- During an actual major incident, no one agency works alone
- Agencies have unique responsibilities
- Agencies must know how cooperating agencies will respond







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# Collaboration

## *Working Together*

Utilize special events and drills as opportunities to plan & train together so that you may **institutionalize 'working together'**.

People and agencies will fall back on what they know during emergencies. Through building necessary actions and protocols into regular operations, we become better prepared.



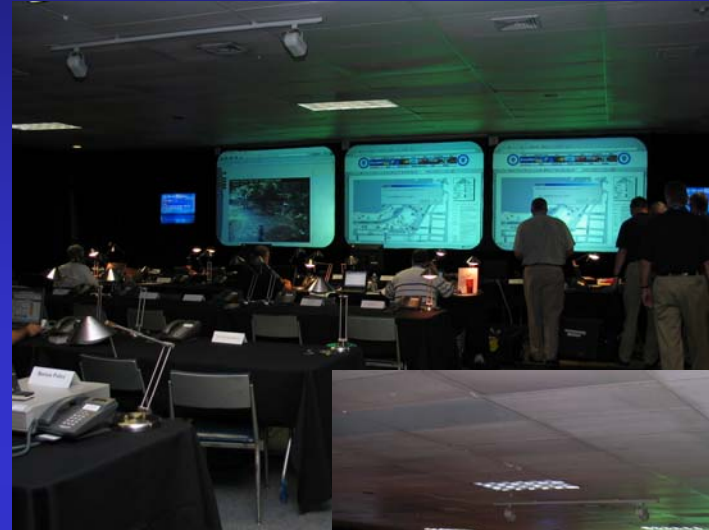


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# Collaboration

## *Unified Command*

- Jurisdictions talk about unified command often
- Plan to implement a unified command structure for your planned disaster
- Consider opening a unified command center







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# Collaboration

## *Working with the Media*

Their mission is to get a story. Building a longstanding relationship with journalists and reporters ensures that they get the right story and that they serve as a resource when needed.





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# Special Events as Planned Disasters

## *PLANNING*







# Planning

- Interface and integrate with the event organizers
- Bring the right people to the table
- Develop a mission
- Develop specific and measurable objectives
- Decide the elements of your plan you want to focus on exercising
- Determine what partners you want to include in your exercise
- Be ambitious, but be realistic





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# Planning

## *Assess Potential Threats*

- Determine what could go wrong and what would be done to minimize risk, injury, and/or damage.
- Ex: How would you shelter marathon runners if there was a hurricane?







# Planning *Special Operations*







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# Boston EMS - Tango Trucks (3)

- Tyvek Suits
- Backboards
- Stretchers
- Defibrillator
- Ladder
- Blocks
- O2 Tanks
- Multitators
- Mark 1
- etc....





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# Boston EMS - Gators & Golf Carts





# Boston EMS - Bicycles







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# Planning

## *Incident Command*

### Incident Command System (ICS)

- Incident Commander
- Command staff
- General staff
- Appropriate branches
- Pre-designated task forces
- De-escalation
- Call sign usage

### Unified Command

- Develop structure in advance
- Explain the concept
- Build relationships with cooperating agencies





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# Planning

## *Communications*

- Interoperable communication across agencies & jurisdictions
- Consider a tactical frequency
- Dedicate a dispatcher for large events
- Utilize earpieces







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# Planning

## *Access and Egress*

- Cordon-off evacuation routes around congested areas
- Make use of aerial views for planning
- Escalate resource commitments around busy event periods





# Planning

## *Event Escalation*

- Assign personnel to busy areas but bear access and egress in mind
- De-mobilize resources as the event de-escalates
- If there is a mass exodus, consider impact units around heavy exodus zones
- Delicate balance: maintaining citywide coverage during major events
- “Life goes on...” while “everyone” is at the event







# *EXECUTION*

## Special Events as Planned Disasters









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# Execution

- Proactive action (for heat or cold)
  - Mount a coordinated risk communication campaign using media outlets before and during the event
  - Encourage runners & revelers to wear sunscreen, stay hydrated, etc.
  - Develop hot-weather safety tips pocket cards and magnets



	<h2>Boston EMS</h2> <p>Thomas M. Menino, Mayor of Boston</p> <h3>Hot Weather Safety Tips</h3>	
<p style="text-align: center;"><b>DO</b></p> <ul style="list-style-type: none"> <li>• <b>DO</b> Drink lots of water and sports drinks</li> <li>• <b>DO</b> Wear loose fitting, light weight, light colored clothing</li> <li>• <b>DO</b> Check on elderly persons</li> <li>• <b>DO</b> Use SPF 15 or higher sunblock and wear a hat</li> <li>• <b>DO</b> Rest often in shady areas</li> <li>• <b>DO</b> Go to an air conditioned place such as a shopping mall during severe heat</li> <li>• <b>DO</b> Listen to the news and public announcements for heat advisories</li> </ul>		<p style="text-align: center;"><b>DON'T</b></p> <ul style="list-style-type: none"> <li>• <b>DON'T</b> Underestimate the seriousness of heat-related emergencies!</li> <li>• <b>DON'T</b> Leave children or pets unattended in a vehicle</li> <li>• <b>DON'T</b> Drink alcoholic or caffeinated beverages</li> <li>• <b>DON'T</b> Stay in the hot weather if you feel sick</li> <li>• <b>DON'T</b> Overexert yourself or work outside without taking frequent breaks</li> <li>• <b>DON'T</b> Hesitate to call EMS and seek medical attention!</li> </ul>
<p><b>EMERGENCY - EMS, Fire, Police</b> Dial 9-1-1</p>		





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# Execution

- Incident Action Plan developed in advance
- Mobilization details, demobilization details
- Coverage assignments
- ICS call signs, grid map locations, contingency plans, pertinent appendices
- BEMA and BFoJ or BAA coordinate inter-agency planning

CALLSIGN	POST	DAY	DAY	DAY	EVE	EVE	EVE	CLASS	COMMENTS
	LOCATION	PERSONNEL	PERSONNEL	SHIFT	PERSONNEL	PERSONNEL	SHIFT		
1 / C		Serno						C-1	
EVENT OPS		Hooley						C-4	
Z1 / OPS	Hatch Shell Perimeter	Lawlor						C-18	
Z2 / OPS	Fiedler Footbridge / West	G. Murphy						C-20	
Z3 / OPS	Charles River Island	Scarna						C-22	
ADMIN		Acres						T584	
LOGOFF		Haley						TC411	
COMOFF		Kearney						C-19	
RESOURCE		O'Connor		0900 - 0000				C-21	
UCC	118 BEACON	Neebe	McClelland	0800 - 0000				1 E-1 LT	
ALPHA MD	Map Grid / [ J - 12 ]	Dr. Dyer		0900 - 0000				MD-11	
A STAT	Map Grid / [ J - 12 ]	J. Thomas	J. Stratton	0800 - 0000	J. Doyle		0800 - 0000	2 E-1 P	
A TEAM	Map Grid / [ J - 12 ]	Locke	S. O'Brien	0800 - 0000				2 E	
BRAVO MD	Map Grid / [ I - 6 ]	Dr. Jones		0900 - 0000				MD-18	
B TEAM	Map Grid / [ I - 6 ]	Tynes	Finn	0800 - 0000	Anderson		0800 - 0000	2 E-1 P	
B TEAM	Map Grid / [ I - 6 ]	Class	Salvia	0800 - 0000				2 E	
CHARLIE MD	Map Grid / [ G - 18 ]	Dr. Lugo		0900 - 0000				MD-16	
C STAT	Map Grid / [ G - 18 ]	DeYoung	Wiley	0800 - 0000	Rappaport		0800 - 0000	2 E-1 P	
C TEAM	Map Grid / [ G - 18 ]	Dear	D. Efsthathiou	0800 - 0000				2 E	
D STAT	Map Grid / [ P - 18 ]					P. Sullivan	1600 - 0000	1 E-1 P	
FIEDLER MD	Map Grid / [ K - 16 ]	Dr. Moyer		0900 - 0000				MD-1	
F STAT	Map Grid / [ K - 16 ]	Arcovio	Lessard	0800 - 0000	Hassan		0800 - 0000	2 E-1 P	
F TEAM	Map Grid / [ K - 16 ]	Rimas	John Ahern	0800 - 0000				1 E-1 P	
H TEAM	Map Grid / [ G - 17 ]				L. Lee	M. Sullivan	1500 - 0000	1 E-1 P	
J TEAM1	Alpha Station - West					Morley	1500 - 0000	1 E-1 P	
J TEAM2	Charlie Station - East						1500 - 0000	1 E-1 P	
ROMEO MD	Map Grid / [ O / P - 26 ]	Dr. Brinfield		0900 - 0000				MD-2	
R STAT	Map Grid / [ O / P - 26 ]	Cioffi	Durfee	0500 - 2100	Cavalieri		0800 - 0000	2 E-1 P	
R TEAM	Secure Zone 1	Kanavich	S. Murphy	0800 - 0000				2 E	outside perimeter
RIVER RES1	Charles River	A. O'Brien	Hickey	0800 - 0000				1 E-1 P	
TANGO 10	Event Wide						1200 - 0000	1 E - 2 E	
AMB 30		Canavan	McCormack	0800 - 0000				2 E	
AMB 31		Dance	Taylor	0800 - 0000				2 E	
AMB 50		Harding	Lima	0800 - 0000				2 E	
AMB 51		George	Ring	0800 - 1600	Perez	Alfieri	1500 - 0000	2 E	
AMB 52		Salfity	McGarry	0700 - 1500			1500 - 0000	2 E	
AMB 53		Hartford	Mentele	1000 - 1600			1500 - 0000	2 E	
P-57 / A-54	ALS / BLS	Saffler	McHugh	0800 - 1600			1500 - 0000	2 E	
PMED 16		O'Hare	Gill	0900 - 0100	City Service	1700 - 0100		2 P	
PMED 55		Zemina	Covino	0800 - 0000				2 P	
PMED 56		Dayr	Mitchell	0800 - 0000				2 P	
DIV 3	Event Wide	Promotions		0730 - 2330				1 I T	
TANGO 1	Event Wide	Spellman		0800 - 0000				1 E	
VIC 1	Event Wide								
VIC 2	Event Wide								
VIC 3	Event Wide								
X-RAY1	Unit Supervisor	Grau		0800 - 0					
X-RAY2		Hernandez		0800 - 0					
X-RAY3		Beyer		0800 - 0					
X-RAY4		S. Efsthathiou		0800 - 0					
X-RAY5		D. Williams		0800 - 0					
X-RAY6				0800 - 0					
X-RAY7		Nichols		0800 - 0					
X-RAY8		Aiello		0800 - 0					
7/03 TC411 / T584									



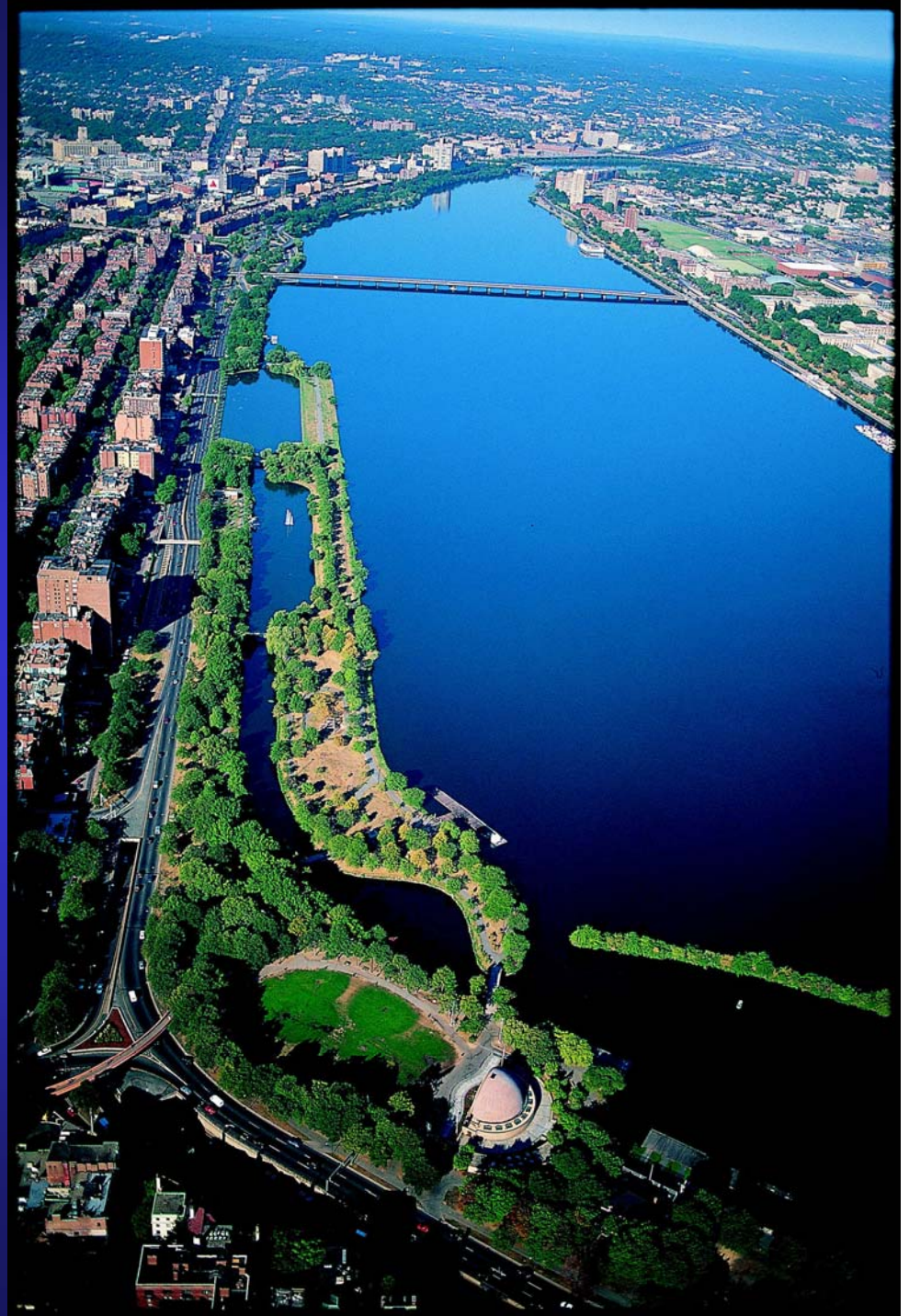




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# Mapping

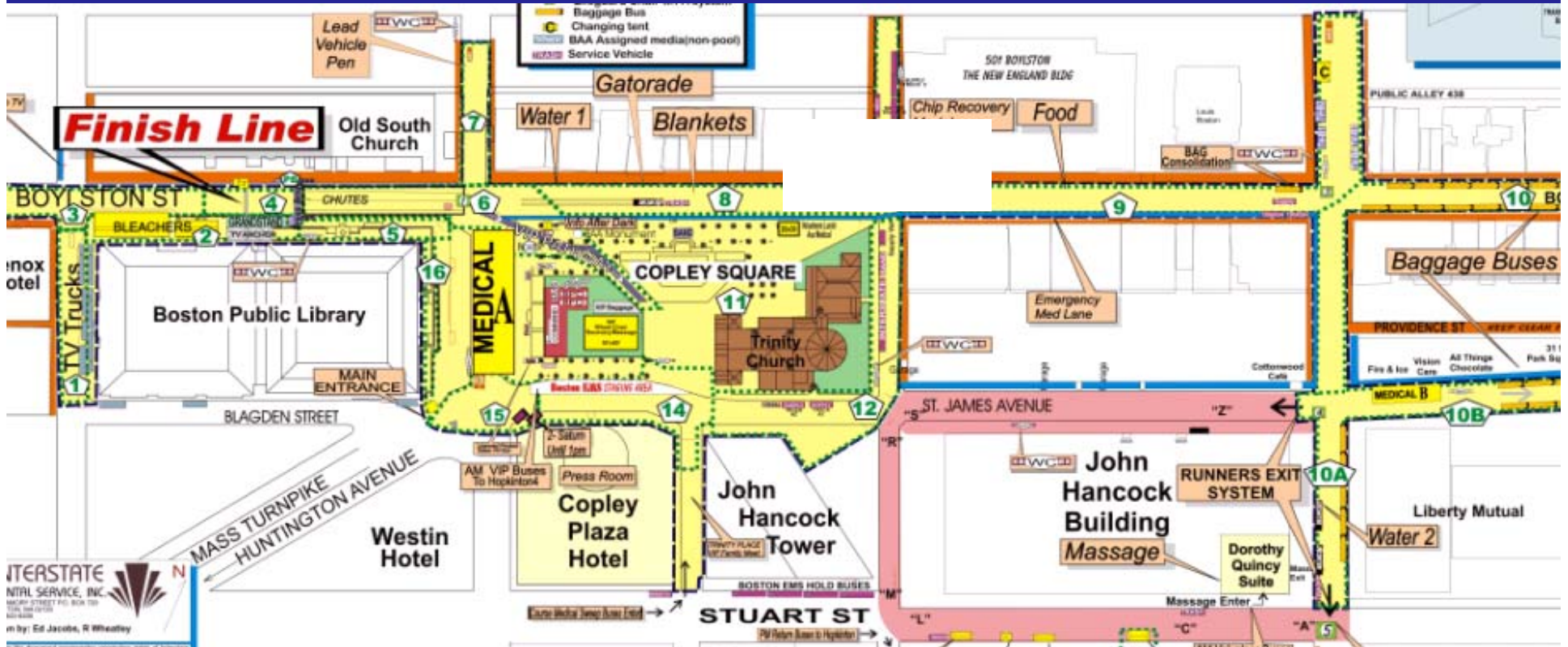
- Scaled maps for the event, specialized for a specific purpose
  - Improved upon each year
- All maps are based on consistent grid coordinates
  - Makes dispatching simple and efficient
  - Zone designations for incident reporting





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# Mapping Boston Marathon



INTERSTATE  
NITAL SERVICE, INC.  
NEARBY STREET PHOTOGRAPHY  
BY: Ed Jacobs, R. Wheatley



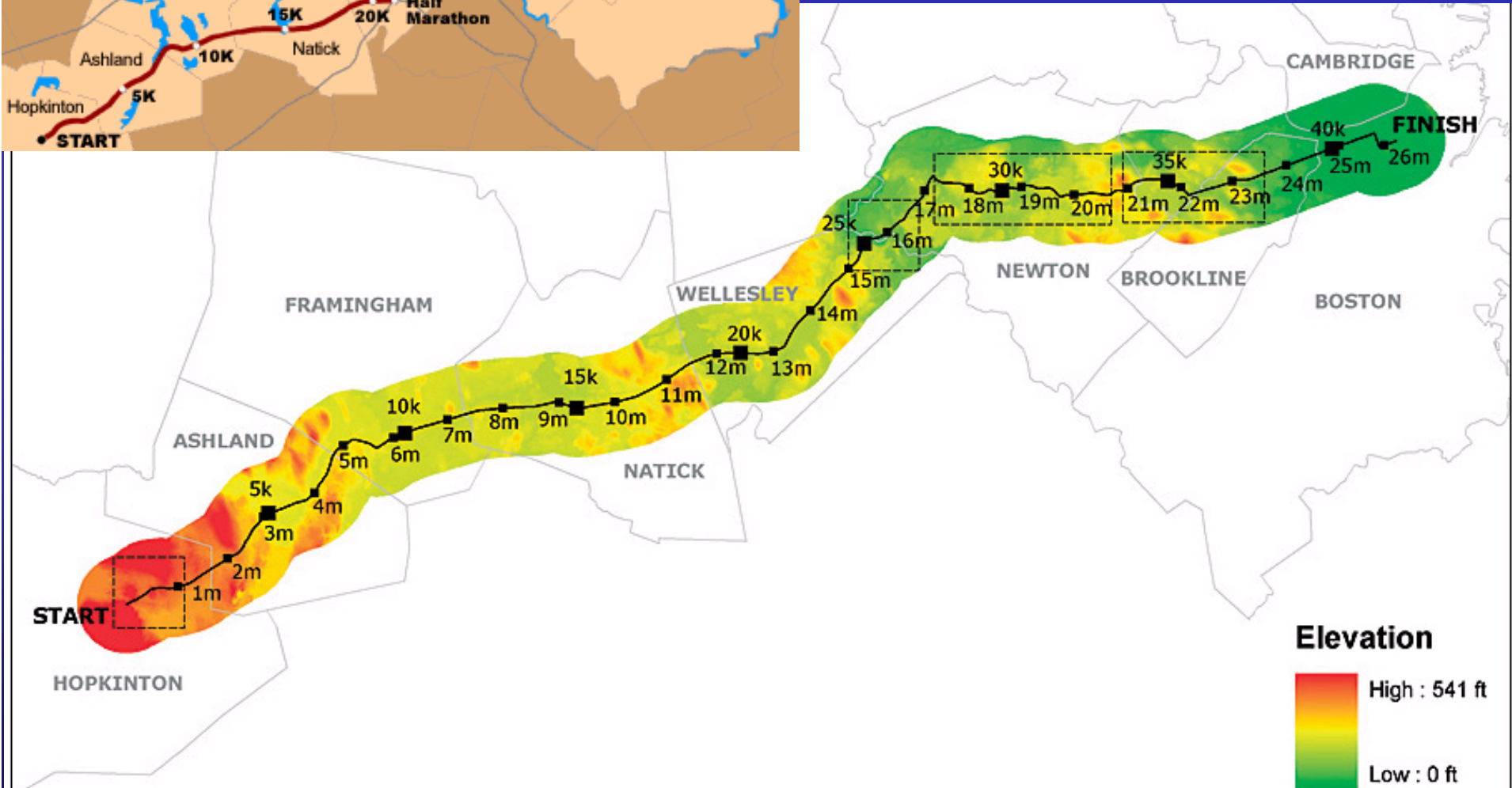




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# Mapping Boston Marathon

## Boston Marathon course





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# Medical Response

- Much of the care rendered is the result of patients self-delivering to medical tents
- Large crowds present access issues for rapid responses for patients that cannot self-deliver
- Solution: Proceed Out and Rapid Response Teams
  - Gators
  - Bicycles
  - Fully staffed and equipped medical tents







# Medical Response

- All tents can function near the capacity of an emergency room
  - Assorted medical supplies
  - Pharmaceuticals
  - Defibrillators
  - Re-hydration solution
  - Disaster supplies
- Physicians present at medical tents for close medical oversight and critical patients
- WMD CST and BFD partnered with for HazMat/MCI decontamination





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# Medical Response *Patient Tracking*

- Using MMRS & UASI funding, Boston EMS has developed a Patient Tracking System for the Metro Boston Region.
- Patients tracked with unique barcodes on a web based system.
  - Location , status & unique ID are required fields.
  - Registered runners are preloaded in the system
- Special Events have been utilized to trial and evaluate the system.







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# Credentialing

## *For all Exercises & Special Events*

- All personnel pre-screened
- All personnel must go through credentialing process
- All personnel (even uniformed) must display credential at all times





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# Transferable Lessons

- Boston Marathon officials observe Boston Fourth of July operations (vice-versa)
- Over the years, lessons have been learned on both sides as to how to enhance operations safety

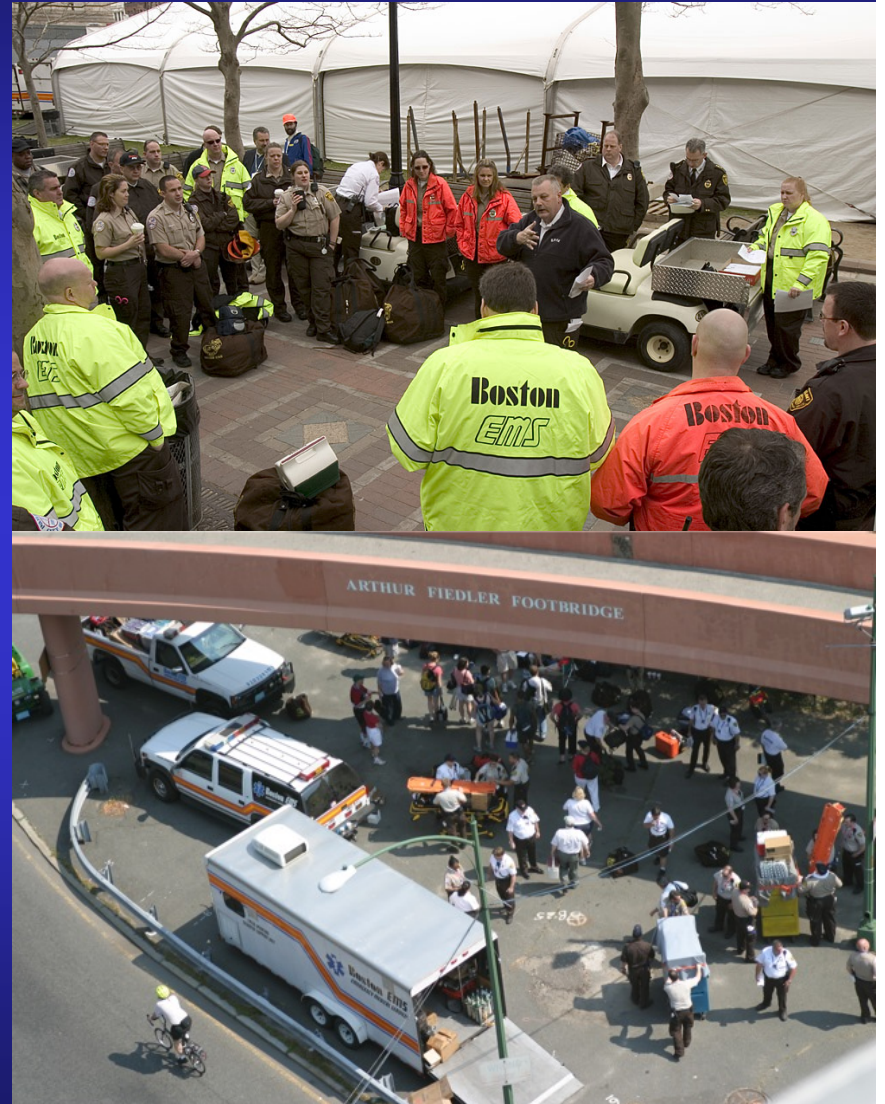






# Logistics Needs

- Food, ice, and water will all be needed during a major incident – special events are no different
- Distribution can be tricky, given all of the personnel to feed
- EMS cordons off our own logistics center





# Special Events as Planned Disasters

## *EVALUATION AND ANALYSIS*







# Evaluation and Analysis

After every major special event or incident, there are formal and informal discussions evaluating the response, what went well and areas for improvement.





# Evaluation and Analysis

- Each year is a learning experience
- Essential to take lessons learned from the planned disaster and integrate them into operational planning
- Analysis should be ongoing
- After-action reports are essential to effectively capture the successes and failures
- Develop action items







# Evaluation and Analysis

Due to the inherent similarity between the medical response for special events and disasters, we have seen a continual improvement in our emergency response capabilities as we prepare for and execute plans for special events.

For that reason, we consider any weakness in our response to a special event to be a weakness in our emergency preparedness capabilities, taking the utmost care to address such issues as soon as possible.





# Thank You

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