

BOSTON CITY HALL

# Boston EMS

*Richard Serino*  
*Chief of Department*



# Boston EMS



*Where Public Health...*

*...Meets Public Safety*

*Boston EMS is a community based public health and public safety service that provides and manages the integrated pre-hospital care system for the City of Boston to improve the health of the community*



# Mayoral Support



2007 Boston EMS EMT Graduation Ceremony

EMT receives badge from  
Mayor Thomas M. Menino

*The success of  
Boston EMS  
is only  
possible  
through the  
ongoing  
support of our  
Mayor*

# The City We Serve

- City of Boston resident population is 589,141
- City of Boston workday population is more than 1,000,000 -- 20% of state's population is in Boston during workweek
- Home to state and federal offices, centers of finance, health care, and higher education
- Home to many of the State's and region's top identified terrorist targets
- Hub of the state's mass transit system and a major port



# Boston vs. Washington DC

Boston and DC have Comparable:

- EMS Call Volumes
- Geographic Sizes
- Resident Populations



# Boston EMS History



- **1864** - Boston City Hospital was opened to cater to the needs of the 'less fortunate classes'
- **1892** - known as the 'City Hospital Ambulance Service' transported first patient.
  - The service comprised of 11 horses, 2 carriages, and 12 men (who served as horse keepers, chore men & porters)
- **1900** - First ambulance satellite station
- **1971** - EMTs were first trained – had one aide and one driver respond to all calls
- **1976** - Entire service was required to be EMT certified, agency was known as the 'Boston Health and Hospitals Ambulances'.
- **1978** - agency expanded and 16 veteran EMTs entered in-house paramedic program.

# Boston EMS History

- **1978** - COBTH Disaster Committee Formed
- **1979** - First Boston Paramedic unit.
- **1996** – Boston Health and Hospitals split into Boston Medical Center and Boston Public Health Commission (BPHC). Boston EMS became a bureau within the Commission.
- **1997** – Boston Metropolitan Medical Response System (MMRS) program created
- **1999** – Biological Terrorism TTX
- **2001** – Pandemic Flu Bio TTX & Symposium
- **2002** – Creation of DeValle Institute for Emergency Preparedness



# Boston EMS (*more recent*) History

- 2003 – DNC planning & Medical Subcommittee
- 2003 – Secret Service Award
- 2004 – Creation of UASI Committees
- 2003 – 2007 Surge Capacity Exercises
- 2005 – CDC Model Community Award
- 2005 & 2006 – Large Scale Multi-Agency/Multi-Regional Drills Conducted
- 2007 – Boston EMS Chief Invited to Mayor's Cabinet
- 2007 – Boston EMS Chief given title of Assistant Director of BPHC
- 2007 – Boston EMS Chief given oversight of BPHC Public Health Preparedness Department





# Boston *EMS Today*

- Largest Municipal EMS Provider in New England
  - Employs over 350 uniformed field and administrative staff
  - Over 140,000 responses to approximately 100,000 calls per year
  - 69,000+ patient transports per year
  - Incident responses per tour: ~ 6.4 (unit utilization exceeds AAA standards by 12%)
  - Service Area: 45.7 square mi
- units assigned to each neighborhood  
10 COBTH Hospitals



# Boston EMS System

- Operates 16 Basic Life Support (BLS) ambulances per shift and 5 Advanced Life Support (ALS) ambulances per shift

*If only we had as many units as DC*



- Operates “C-MED” system for ambulance-to-hospital communication for 62 communities in Metro-Boston

# Boston *EMS* *Medical Direction*

**Boston EMS employs three full time  
board certified emergency physicians**

**Peter Moyer, MD, MPH, FACEP**

Medical Director Boston EMS, Police, & Fire

**Kathryn Brinsfield, MD, MPH, FACEP**

Associate Medical Director

Medical Director for Emergency Preparedness

**Sophia Dyer, MD, FACEP**

Assistant Medical Director

Medical Toxicologist for Boston EMS, Police, &  
Fire

**As well as up to three part time fellows**



# Boston *EMS* In the Field



## Highly Skilled

- Nationally recognized as one of the best EMS systems in the nation.
- Busy Paramedics make skilled paramedics.
- 86.7% save rate for gunshot wounds

## Highly Trained

- Routine skills refreshers
- Hazmat
- Mass Casualty
- Homeland Security Courses



# Boston *EMS*

## Hiring

- Competitive hiring and recruitment process
  - Draw from pool of state certified EMTs
  - Hired as EMT recruits
  - Given additional class room and practical training
- Opportunities for promotion
  - All Paramedics are promoted from within
  - Professional and committed workforce



# Boston *EMS*

## Required Training

- **Emergency Medical Technicians**
  - 12 weeks of academy training
  - 9 weeks of a field internship where they are paired with a Field Training Officer and an EMT
  - 6 weeks paired with another Recruit and a Field Training Officer
- **Paramedics**
  - 40 hours of classroom training covering State protocols, Department policies, 12-lead EKGs, medication assisted intubation, and EZ-IO.
  - 40 hours of in-hospital clinical rotations in the operating room, coronary care unit, coronary catheterization lab, and emergency department.
  - Intern for 3 weeks riding as a third with veteran Paramedics, one of which is a preceptor
  - 9 weeks paired with another Paramedic intern and 1 Paramedic preceptor

# Boston *EMS*

## By the Numbers

# Boston EMS Response Times

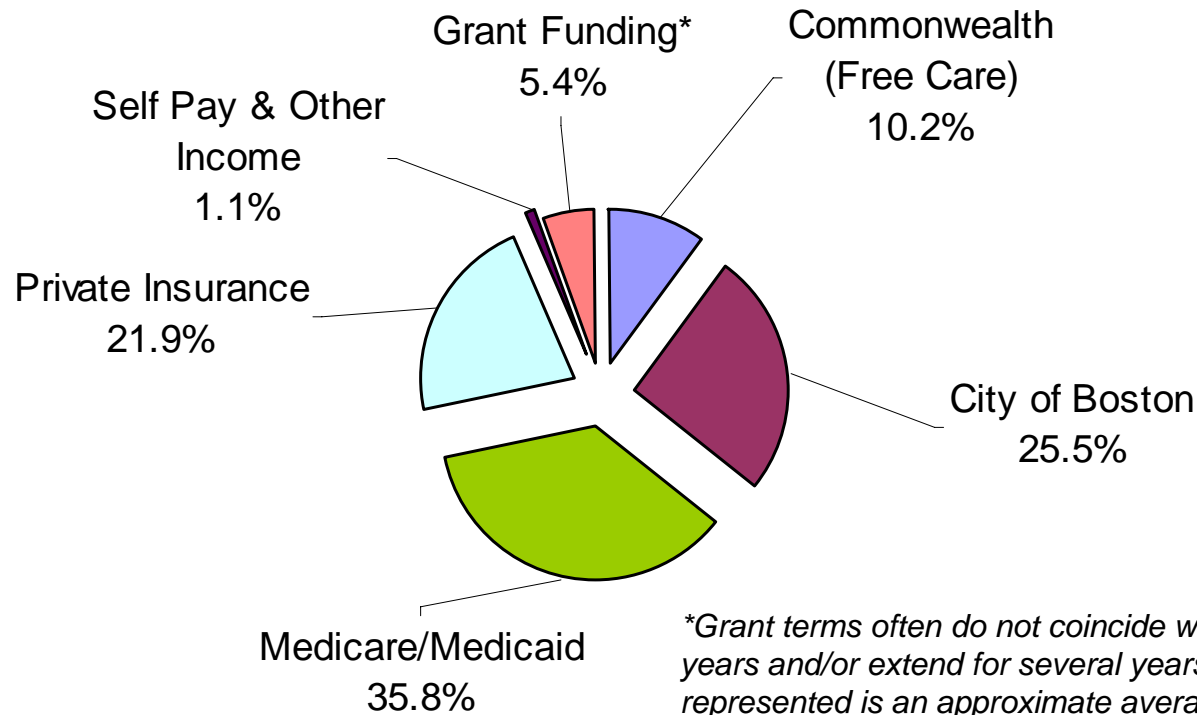
	CY 05	CY06
Shootings	3.8 min	3.7 min
Stabbings	4.6min	4.2min
Priority 1	6.2min	6.1min
Priority 1-3	7.6min	7.4min



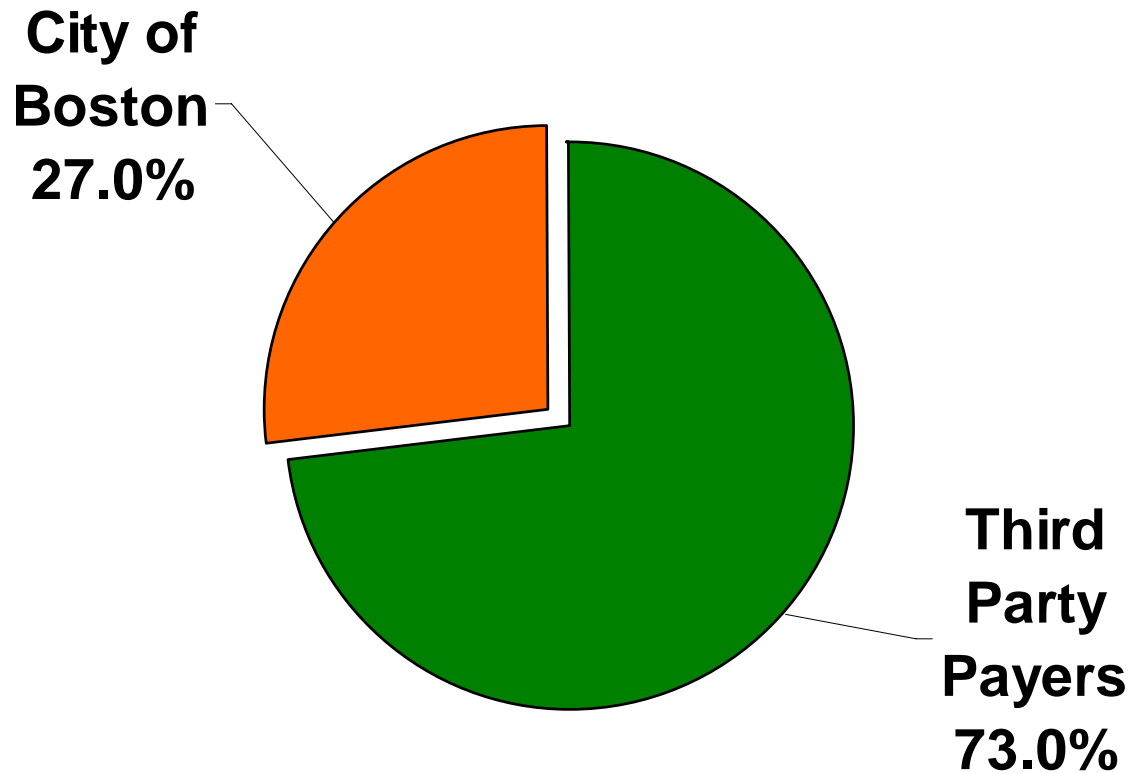


# Boston EMS Revenue

## Boston EMS Revenues

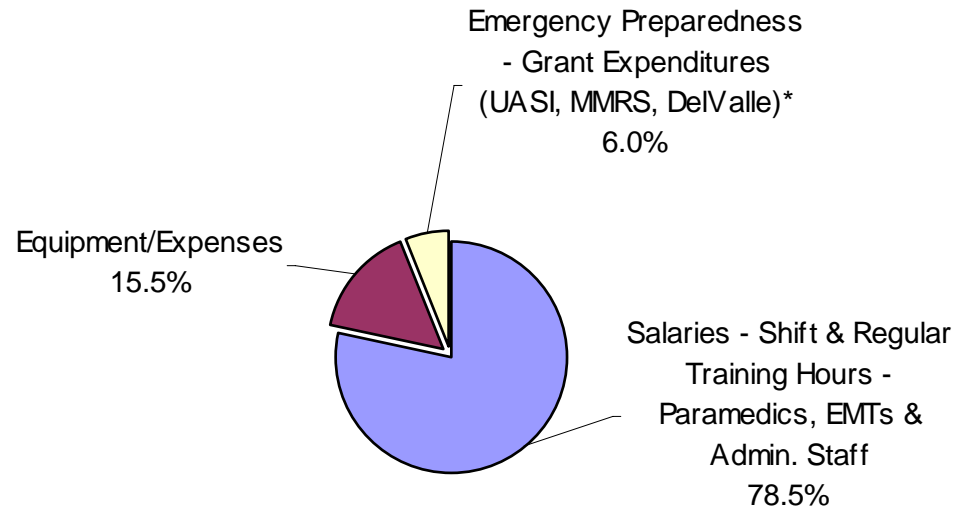


# Boston EMS Revenue



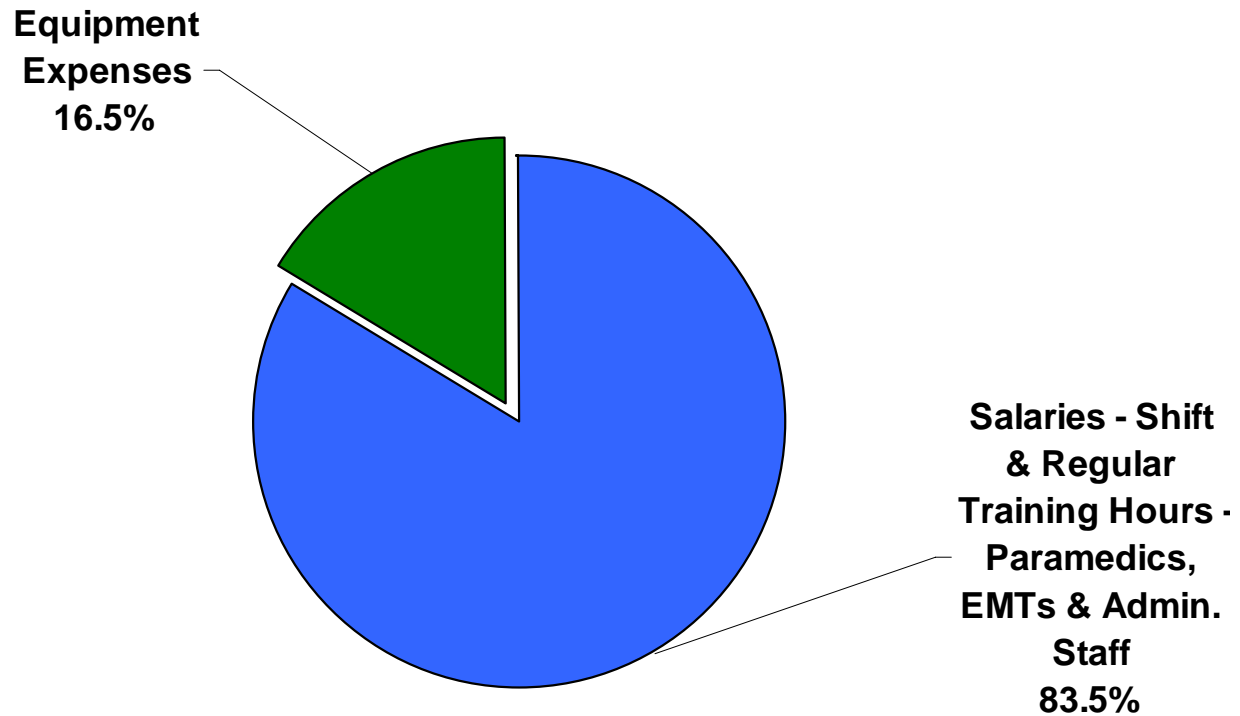
# Expenditures

## Expenditures



*\*Grant terms often do not coincide with fiscal years and/or extend for several years.  
% represented is an approximate average.*

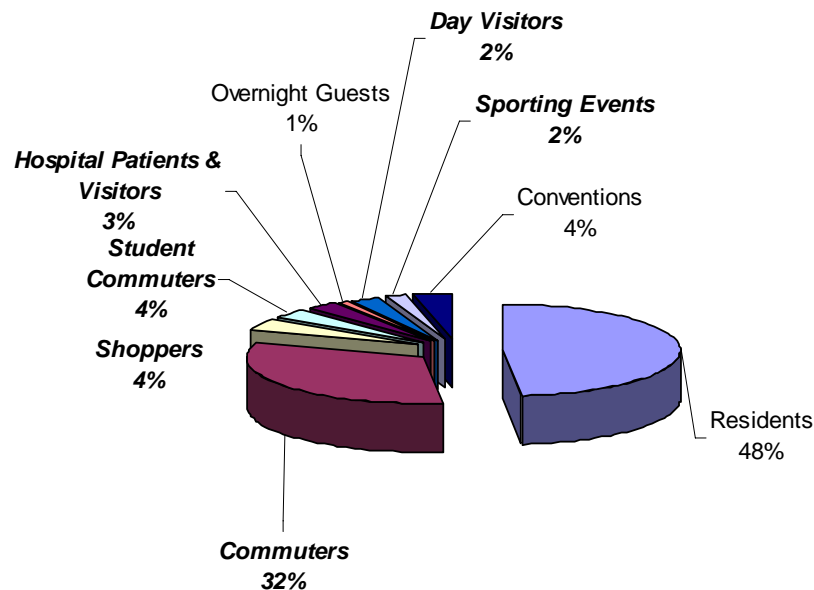
# Expenditures



# Who is Boston?

*Doubles in size daily*

## Boston's "Day-Long" Population



Less than half of Boston's day time population are residents

Boston *EMS*  
Collaboration



# Boston EMS as an *Integrator*

Boston EMS has a history of valuing collaboration and can be credited with utilizing its unique public health/public safety role to help bring together agencies such as Fire, Police, EMS (private, municipal & fire based), public health (state and local), hospitals, community health centers and emergency management.



# Partnerships

- Emergency Medical Services (Municipal & Private)
- Boston Police Department
- Boston Fire Department
- Mayor's Office of Emergency Preparedness
- Boston Emergency Management
- Massachusetts Emergency Management
- MassPort
- Boston Public Health Commission
- Massachusetts Department of Public Health
- Conference of Boston Teach Hospitals
- Community Health Centers
- Private Businesses (i.e. Fidelity, John Hancock)
- Metro Boston Transit Authority



# Boston EMS

## Working With the Boston Fire Department

- Breaking down the walls has taken time and the following elements:
  - **Mayoral intervention** – clarified that no jobs would be lost
  - **Working together**
  - **Training together** – trench rescue, anthrax, and AED training
  - **Joint drills, table tops, and planning**
  - **Command staff collaboration**
  - **Joint Medical Director**
  - **Respect on both sides**



# Boston *EMS*

## Public Safety

- Highly Integrated
- Scene management
- Crime scene practices
- Use of personal protective equipment
- Tactical medical support for Entry Team and Bomb Squad
- Rapid transport
  - Calms the scene
  - Secures victim



# Boston *EMS*

## Beyond Ambulance Services

# More than An Ambulance Service

## Additional Areas of Responsibility

- Boston MMRS
- Special Events and Special Operations
- Surge Planning
- Disaster Planning
- DeValle Institute for Emergency Preparedness



# Special Operations

## *Planned Disasters*

- July 4<sup>th</sup>
- Marathon
- Pats and Sox



Boston EMS  
Special  
Operations  
supports over  
400 special  
events within  
Boston per  
year.



# Service at Major Events

- Innovative approach – “planned disasters”
- Use every event as an opportunity to prepare
- Use to practice procedures and train
- Requires cooperation with other Public Safety Agencies



# Multi-Agency & Multi-Jurisdictional Drills

**Regional Drills** have included police departments, fire departments, EMS agencies (municipal & private), city and state emergency management, the Mayors Office of Emergency Preparedness, public health (city & state), hospitals, Coast Guard, Massport, media, and hundreds of volunteers who served as victims across two cities.



# Special Operations

## *Unplanned Disasters*

- Mass Dispensing Sites (Measles clinics)*
- Mass Casualty Incident management (Charlestown)*





# UASI Investments

- Mass Casualty Response Vehicle
- Prime Mover (regional asset)
- Radios (Interoperability)
- Generators (for continuity of operations)
- SCBA – equipment & software to provide regional training
- PAPRs
- N95 Masks
- Tyvek Suits





# MMRS Grant

**Patient Tracking System** – a web based system that allows for incident management and accountability of patients throughout the pandemic.

**Stockpiles** – pharmaceuticals, patient care supplies, and PPE

**Coordination and Planning** with Hospitals, Public Health, Emergency Management, Volunteers, First Responders, and Businesses

**Uses Special Events as Planned Disasters** for trialing emergency response equipment, plans & protocols

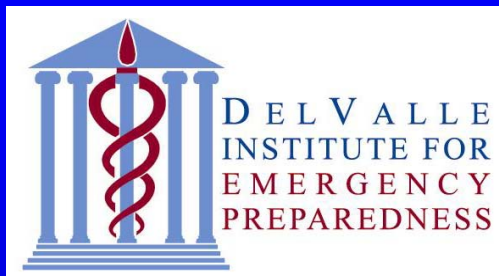
**Staff Sharing Agreement with Hospitals**

Hospitals cover workers comp insurance when staff volunteer during medical emergencies



# Boston EMS

## DelValle Institute



### For:

- Public and Private EMS
- Public Safety Personnel
- Public Health Personnel
- Hospital Staff
- Health Center Staff
- Community Center Staff
- Medical students
- Nursing Students
- Pharmacology Students

- 24-hour Hospital Provider Hazardous Materials Course
- HazMat Detection Instruments
- Incident Command System
- Smallpox Vaccinator Training
- Health Center Awareness Program
- EMS Awareness Program
- More in development...





## WMD / HAZMAT TRAININGS

- Advanced WMD/Hazmat Technician (40 hours)
  - Boston EMS trained pre-DNC
    - highest standard of training for an EMS service
  - Meets OSHA standards
  - Offered to 9-city Metro Boston Area
  - Audience includes:
    - Public health
    - Inspectional services
    - Police supervisors, Special Operations

***428 trained, to date***



# Boston EMS Proactive Programs

Team up with BPD to work with  
Court involved youth

- It is harder to take a life when  
you can save a life



## **Community Programs**

- EMT classes, for kids and adults
- High School BAHEC kids
- Community CPR
- File of Life Program
- Kids Can't Fly

# Programs

Boston EMS has a history of instituting programs targeting:

- Underserved populations
- At-risk communities
- Underlying causes of calls for service



# Public Education and Prevention Programs

- Safe Kids Program
- Buckle Up Bear
- Car Seat Safety
- Kids Can't Fly
- Father Friendly
- Gang Peace
- MVA/Head Injuries

*Common thread:*

*All of these programs seek to decrease the likelihood that EMS will be required*



# File of Life Program



The File of Life is a red plastic magnetic file folder that attaches to the refrigerator. The file contains a person's vital information so that emergency medical professionals have quick access to basic medical information in times of emergency. This program is offered free to all residents of the City of Boston.



# CPR Courses



Boston EMS offers Cardio Pulmonary Resuscitation (CPR), Automatic External Defibrillation, and Foreign Body Airway Obstruction training

Instruction in English and Spanish

**CPR Anywhere** –  
take-home kit; easy  
and cost effective.



# Awards

- **Center for Disease Control, Recipient of US Model Cities Award**
- **Mark E. Weinstein, MD Award, Metropolitan Boston Region IV EMS Council**
- **Regional Director Commendation Award, MREMSC Region**
- **Presidents Award, EMS Region IV**
- **United States Secret Service, Directors Award**
- **Conference of Boston Teaching Hospitals, Leadership Award**
- **City of Boston, City Excellence Award, Managing for a Healthier City**
- **Certificate of Appreciation from the Mayor**
- **United States Coast Guard Commandant's commendation for Operation Sail**
- **Charlestown Parents of Murdered Children Program Award**
- **Henry L. Shattuck Public Service Award, Boston Municipal Research Bureau**
- **The City of Boston's Highest Public Service Award**
- **Commonwealth of Massachusetts, Citation for Exceptional Public Service**
- **Boston City Council, Citation for Exceptional Public Service**

# Keys to Success

- Mayoral Support
- Coordination with other first response, public health, health care and emergency management agencies, including:
  - Planning, drilling, training, and responding together
- Police, Fire and EMS – recognition as equal partner

# Recommendations

This is your opportunity to re-engineer your service into one of the premier EMS agencies in the Country, bringing together the medical and public safety communities.

The chance to raise EMS to the status of Police and Fire doesn't come along often, take advantage of the situation!

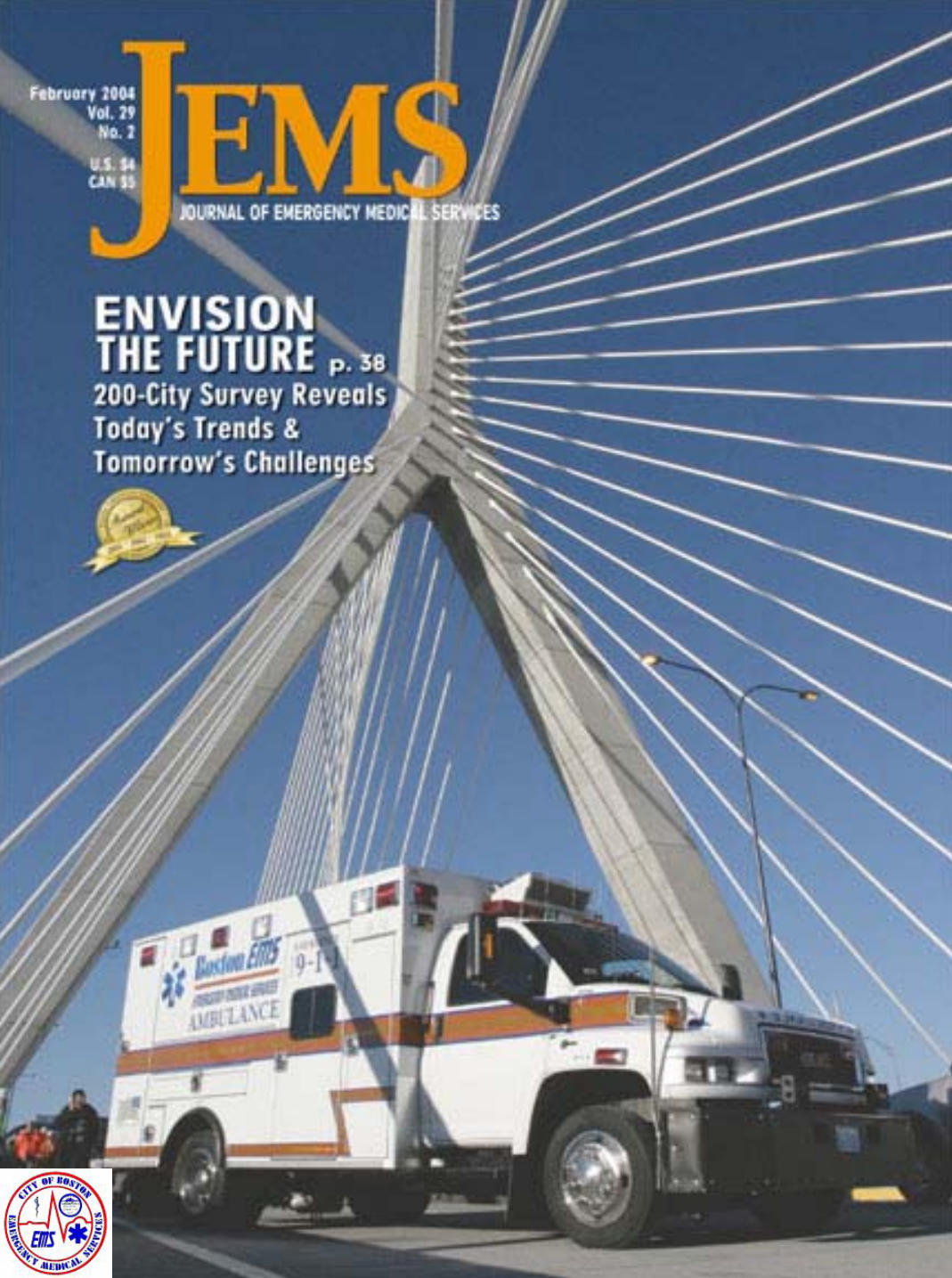
Make EMS one of your Mayor's legacies

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# JEMS

JOURNAL OF EMERGENCY MEDICAL SERVICES

**ENVISION  
THE FUTURE** p. 38  
200-City Survey Reveals  
Today's Trends &  
Tomorrow's Challenges



# Questions?

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BOSTON