Information for Decision Making
The Chicago Transit Authority

- Second largest transit in the country
- 1.6 million weekday rides
- 83% of the rides in the 6 county metro area.
- Operates:
  - 1200 Rail Cars over Eight Routes
  - Serving 145 Stations
  - Making over 2,145 Trips Per Day
  - 1781 buses over 129 Routes
  - Serving 11,500 Bus Stops
  - Making 19,700 Trips Per Day
The Chicago Transit Authority Rail System

- Red Line Subway
- Blue Line Dearborn Subway
- Blue Line Kimball Subway
- O'Hare Subway
- Toll way Tunnel

[Map of the Chicago Transit Authority Rail System]
The Chicago BAC has created its own indoor Response Plan for the based on these assumptions:

- A detection in the subway system may result in the cessation of operations for a sustained period. This will result in the need for CTA to provide alternate forms of transportation, as available.
- A detection in the subway system could potentially expose CTA employees and patrons to a biological agent.
- At the time of notification of a BAR, there could be a significant number of patrons and employees in the CTA.
- Exposure to a biological agent in the subway system may result in the need for prophylaxis.
- A detection in the subway system will require additional environmental sample collection.
- A detection in the subway system may necessitate the decontamination of parts of the system including platforms, ancillary rooms/structures, and trains.
- A detection in the pedway system may affect portions of the subway.
- A detection in the subway will become a rapidly evolving media event.
The Response

- COMMUNICATION
- DECISION
- MANAGEMENT OF PATRONS
- MANAGEMENT OF EMPLOYEES
- MANAGEMENT OF TRANSPORTATION
- MANAGEMENT OF FACILITY
- RISK COMMUNICATION
Response Actions

• CTA maintains Control of the Subways to and through evacuation and closure
• CTA looks to the Chicago Department of Public Health (CDPH) as the Subject Matter Expert
• CTA will follow the advice of CDPH regarding keeping the rail system running
• Final Authority rests with the Chief Elected Official of the City – the Mayor.
How would Autonomous detection affect this response?
Comparisons of Detection Timelines

Event-to-Detection and Confirmation

Current: Real-Time

12-36 hours from exposure to confirmation

Future

4-6 hours from exposure to confirmation
Comparisons of Detection Timelines
Within the Framework of CTA Rail Operations

- Collection during or before AM Rush
- Notification End of PM Rush
- 12-36 hours from exposure to confirmation

- Up to 4 Hours
  - Filter Recovery
  - Full Agent-Specific Test Panel
- 6 Hrs
  - Primary Screening
- 2 Hrs
  - BAR Declaration

- 2-3 Hrs
  - Aerosol Collection Cycle
  - Full Agent-Specific Test Panel
- 4-6 hours from exposure to confirmation

Autonomous detection based upon Prior Testing
RESULTS

• LOW PROBABILITY vs. HIGH REGRET

• TRAVEL DISRUPTION
• ECONOMIC DISRUPTION
• CONFIDENCE

STATION CLOSURE
PARTIAL SERVICE SUSPENSION
SYSTEM SHUTDOWN
THE NEW NORMAL

• INFORMATION AVAILABLE MORE QUICKLY
• TIME TO RESPOND MAY BE SHORTENED
• TIME TO COMPLETE RESPONSE ACTIONS WILL REMAIN THE SAME
• RISK COMMUNICATION REMAINS CRITICAL
FAST ACCURATE INFORMATION

• WHAT IS IT?
• HOW BAD IS IT?
• WHAT SHOULD I TELL
  • CUSTOMERS
  • EMPLOYEES
• WHAT CAN I, OR CAN’T I RUN?
• WILL A FACILITY EVACUATION BE NECESSARY?
• WHEN AND HOW DO I GET IT BACK?