

*11th Annual George Mason University Conference  
on Atmospheric Transport and Dispersion Modeling*

**OFCM Special Session:  
Benefits to Responders of Joint Urban  
Test Beds**

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# Urban Test Beds: User Perspectives

A “built it and they will come” approach probably won’t work for Test Beds. Typical responders just don’t care.

What they do care about is:

- Getting the answers to the questions they have -
  - Faster
  - More accurate answer

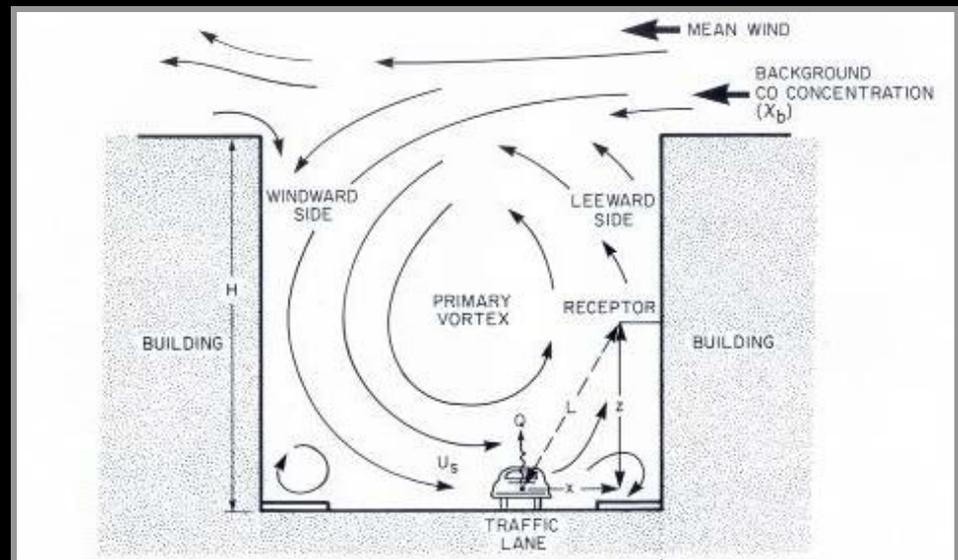
## Who are the users?

- Researchers
- Meteorologists/Forecasters
- Emergency Managers/Planners
- Emergency Responders (includes NOAA HAZMAT)

We'll focus on the last two “new” user groups who have different needs than the traditional user groups.

# Simple Questions, Complex Answers

- Where is the bad stuff going?
- How soon will it get there (evacuation vs shelter-in-place)?
- Where can I send someone to monitor?
- Can I get real-time warnings about hazardous weather?



# What can long term UTBs provide?

- I need the data when I want it → Available 24/7
- I need the data in a format I can use → Graphical/GIS
- I need the data to be accurate → Real-time QA/QC
- I need to understand the data → Familiar terminology
- I may need help interpreting the data → Reachback (?)

*The system has to be operational.*

# Communicate Information Effectively

Response and Planning Users need to understand:

- Differences between Archived, Real-time, and Forecast data (that is, Past vs. Now vs. Later).
- Differences between actual data (point data) and predictions (model data).
  - Is there a correlation or not? (That is, does the model accurately “predict” observed data?)
  - If not, what is uncertainty? Is it communicated to the users in a way that they can incorporate it into their decision making process?

## Final Thoughts

- If we want to win support in today's budgetary environment we need to move beyond traditional uses of urban test beds.
- Urban test beds should be designed to provide operational information from the start.
  - Make high quality information available to wider decision making audience in a form that can be used.