

GROUP EXERCISE

Evacuation Scenario based on the
Miamisburg Trail Derailment

Exercise Instructions

- ▣ Working as a team, review the scenario and scenario map.
- ▣ Answer the questions assigned to your group within the allotted time.
- ▣ Record your answers on chart paper.
- ▣ Choose a spokesperson and be ready to briefly present your answers.
- ▣ There will be three segments to this exercise.

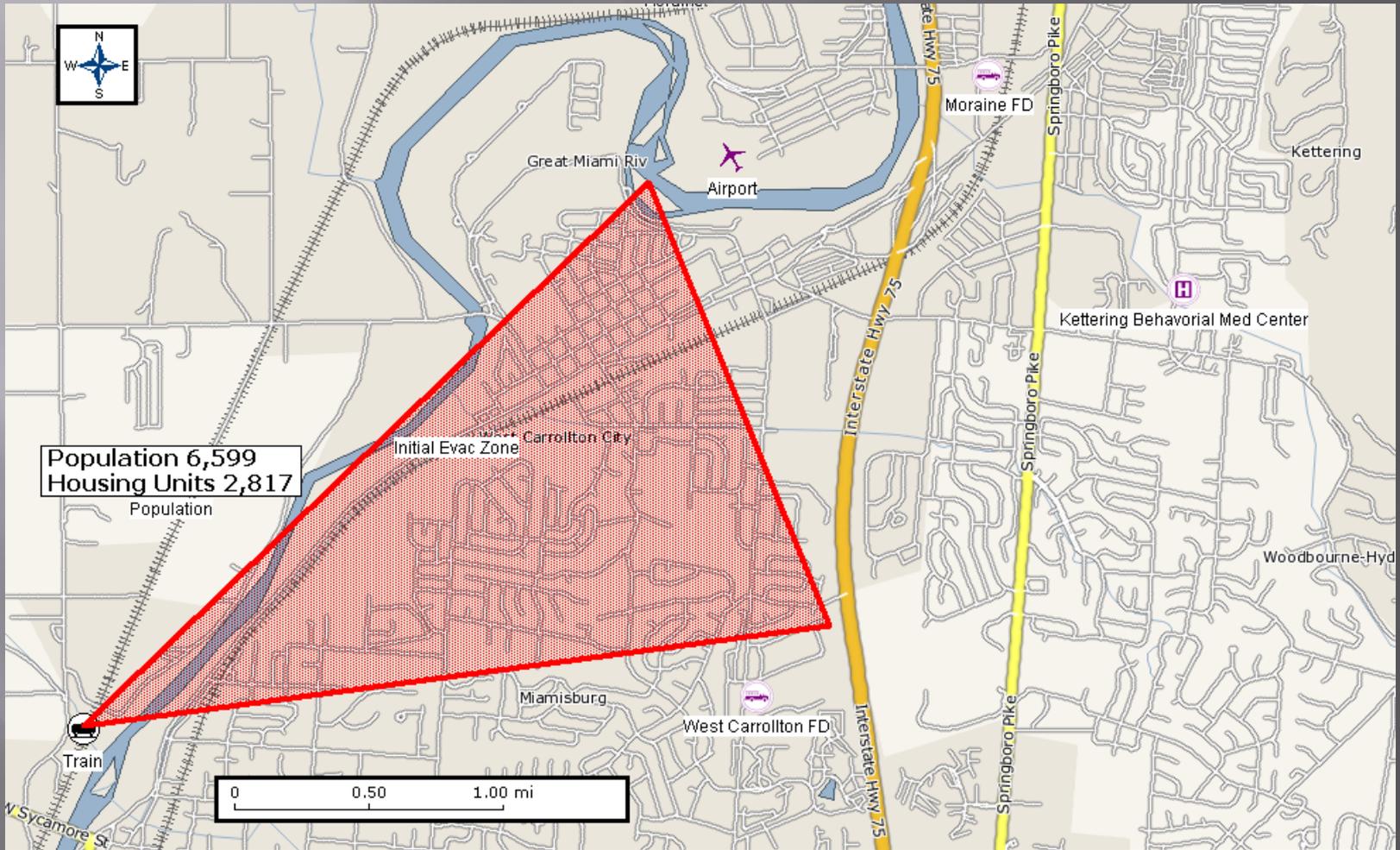
Scenario

- ▣ July 8th at 4:25 P.M. 15 cars of a southbound freight train have derailed on the outskirts of Miamisburg.
- ▣ Derailing on a bridge, several cars were extensively damaged, lost product, and resulted in a fire;
 - Newsprint
 - Molten sulfur (13,000 gallons)
 - Yellow phosphorus (12,000 gallons)
 - Tallow

Scenario

- ▣ Product has been released into the Bear Creek.
- ▣ Unified Incident Command has been established and determined that the intense phosphorus fire could only be controlled by large volumes of water – this will take several hours to implement.
- ▣ It has been recommended that select areas of Miamisburg, West Carrollton, and Moraine be evacuated.

Estimated Path of Toxic Cloud



Summary

- ▣ Based upon the vulnerability zone identified:
 - Groups 1&2: What sort of resources and tools would you use to define the population at risk?
 - Groups 3&4: What factors might influence where evacuees go?
 - Groups 5&6: What traffic/transportation components would you put into affect to ensure a controlled and rational evacuation?

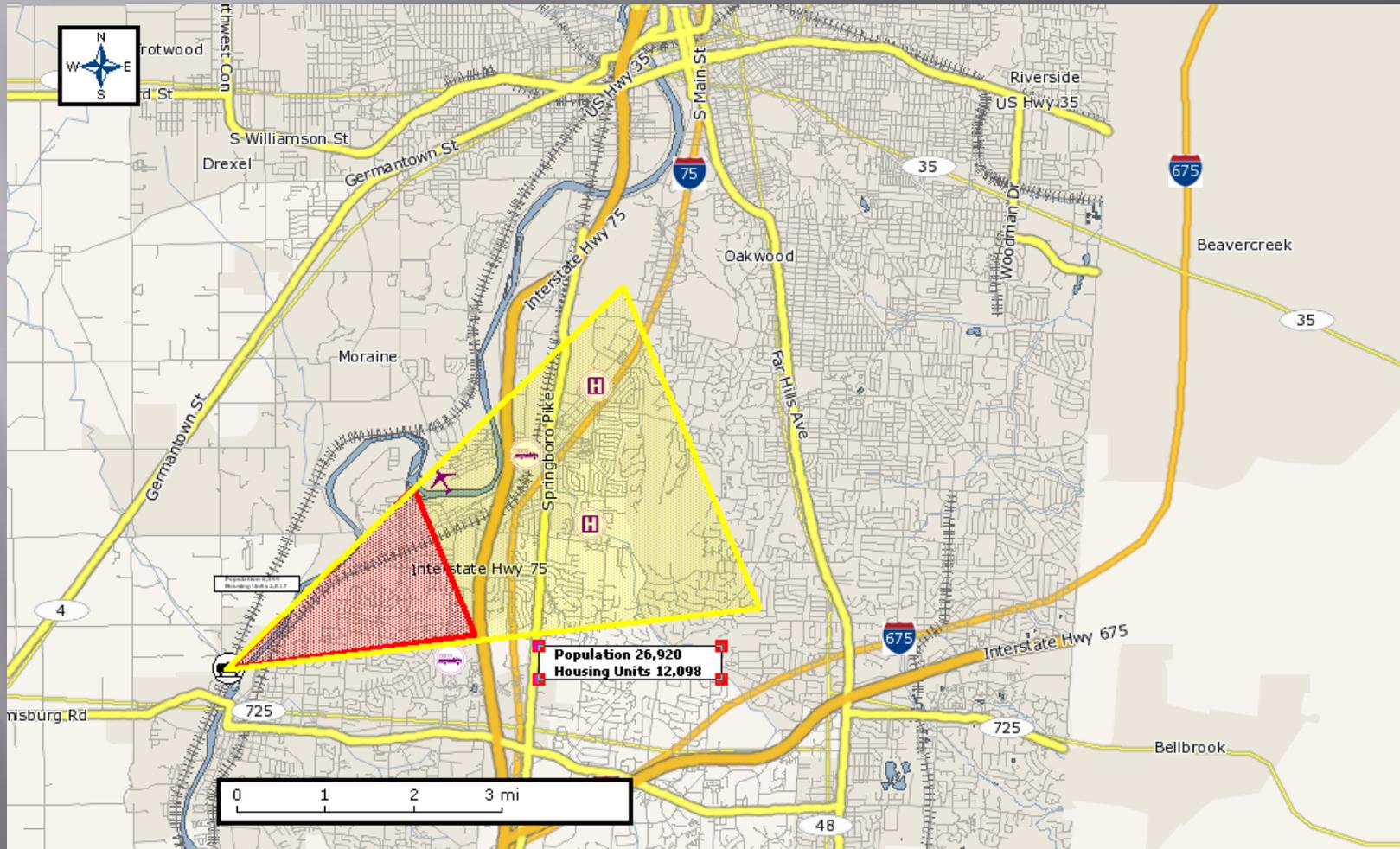
Scenario

- ▣ Water suppression has been effective and by 8:30 P.M. smoke is no longer visible from the phosphorus tank car.
- ▣ Shortly after midnight an evaluation team assesses the tank car and determines that approximately 4,000 gallons of the product remain inside the vessel.
- ▣ July 9th, at approximately 6:00 P.M. a structure supporting the phosphorus tank car shifts causing product to escape and the fire intensifies.

Scenario

- ▣ A large smoke plume has been carried east at 6 mph over Miamisburg.
- ▣ A temperature inversion has developed causing the cloud to remain close to the ground.
- ▣ A second evacuation has been initiated with shelters being established as far as Dayton.

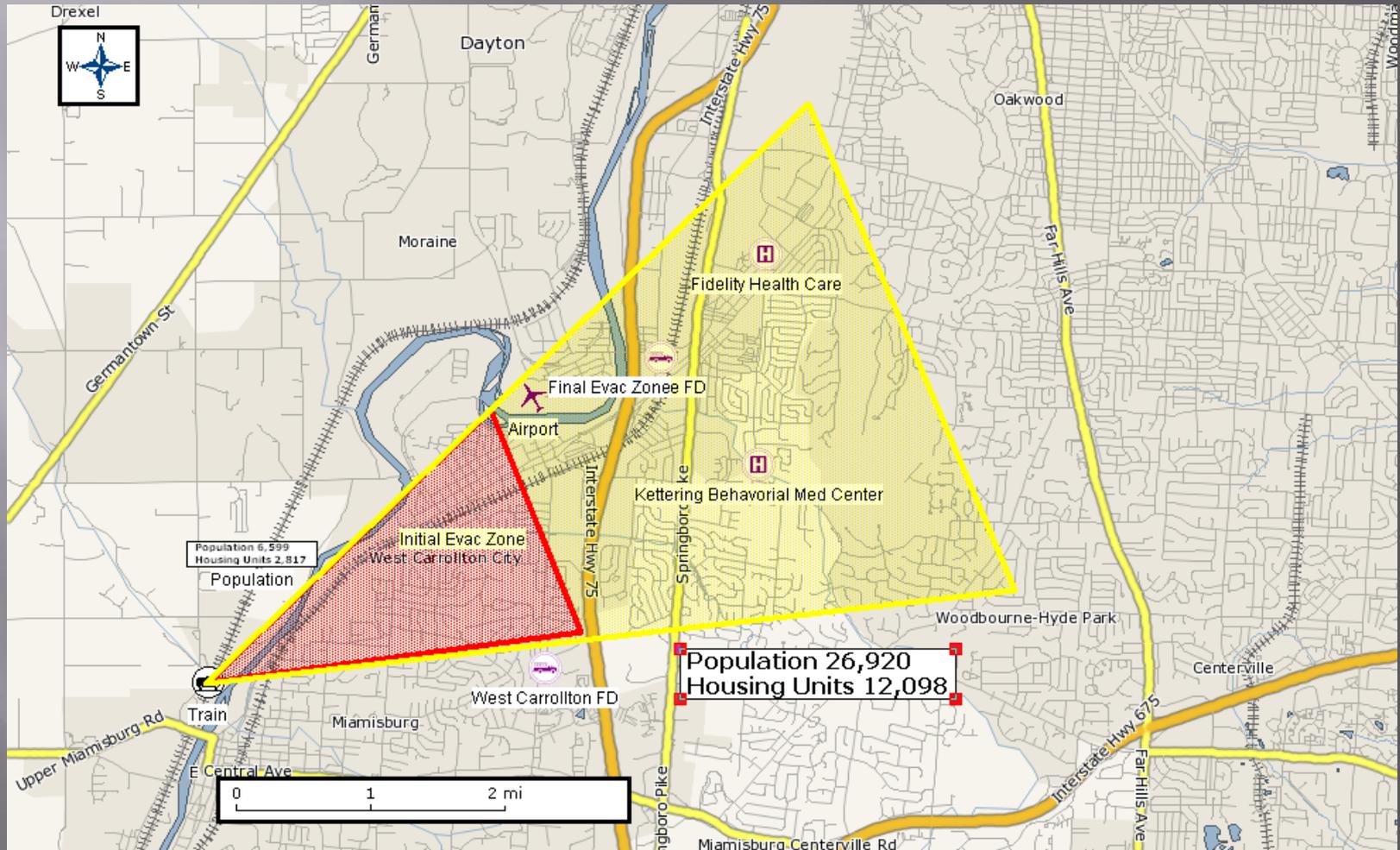
Estimated Path of Toxic Cloud



Summary

- ▣ Based upon the vulnerability zone identified:
 - Groups 1&2: What information is to be conveyed to the public about the evacuation?
 - Groups 3&4: With whom will evacuation information be coordinated and released to the public?
 - Groups 5&6: What factors will be tracked as evacuation operations are monitored?

Estimated Path of Toxic Cloud



Summary

- ▣ Based upon the information obtained so far:
 - Groups 1&2: Identify resource requirements (by agency and job description) to provide effective perimeter control measures.
 - Groups 3&4: What are alternatives to public sheltering and how might these alternatives be implemented?
 - Groups 5&6: 62% of U.S. households report owning a pet. What factors should be considered for an evacuation of this size?