Transportation in the DHS Regional Technology Integration (RTI) Initiative

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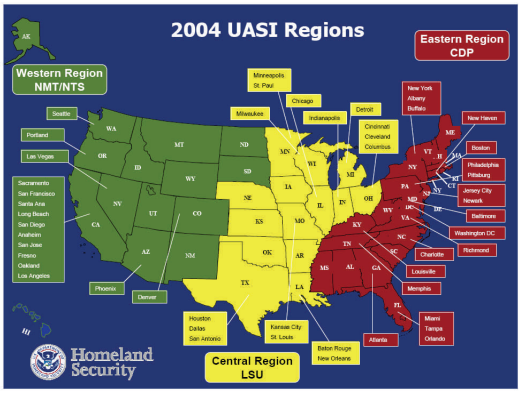
In 2004, the Science and Technology Directorate of the Department of Homeland Security (DHS) started a new initiative called the Regional Technology Integration (RTI, previously known as Safe Cities) to facilitate the transition of innovative technologies and organizational concepts to regional, state, and local jurisdictions. Four urban areas across the country –Memphis, TN; Cincinnati, OH; Seattle, WA; and Anaheim, CA– already participating in the DHS Urban Area

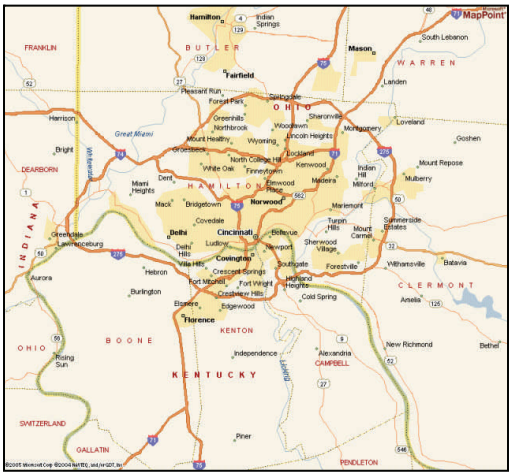


Security Initiative (UASI) were selected to be the initial pilot locations for this program. Another important criterion in selecting these four original locations was that their unique characteristics could be treated as prototypes for "sister cities" with similar attributes.

Objectives

The main objective of the RTI initiative is to make the cities in our nation more secure. To achieve this goal it is necessary to successfully transfer and integrate existing and advanced homeland security technology systems to local governments to help improve their preparedness and response. Difficulties include the facts that each area has its own government structures, decision-making procedures, service delivery systems, and idiosyncrasies regarding the adoption of new technologies,

as well as threats, vulnerabilities, and hazards that can potentially affect these areas. In two of the regions, Memphis and Cincinnati, this was even more accentuated since both of them included counties and urban areas in three states (Tennessee, Arkansas, and Mississippi for the Memphis area, and Ohio, Kentucky, and Indiana for the Cincinnati region).



Current Research and Development

The first phase of the project consisted of the identification of the four pilot sites. Four teams were assembled (one for each site)

and asked, during the second stage of this multiyear project, to observe and report on the preparedness to prevent, react, respond, and recover from a weapon of mass destruction (WMD) event. The RTI teams consisted of principal investigators who were experts in: transportation, hazardous materials, firefighting, law enforcement, incident command, communications and information technology, emergency management, information management, community and regional infrastructure, resource support, mass care, public health and medical services, and urban search and rescue. The teams also included subject matter experts in the areas of chemical agents, biological threats, radiological/nuclear threats, and conventional explosives.

The Center for Transportation Analysis participated as the Transportation Expert in two of the four projects: Memphis (PI: Oak Ridge National Laboratory) and Cincinnati (PI: Pacific Northwest National Laboratory). To collect the necessary information, the team met with many elected and appointed officials as well as with representatives of the emergency management, public works, critical infrastructure, and transportation sectors in both the Memphis and Cincinnati areas. In these meetings, interviews, drills, and exercises, the team experts identified, within their discipline, areas in which the homeland security of the region could be strengthened.

Both the Memphis and Cincinnati regions reports for the first stage of the RTI project have been completed. Interagency communications, interoperability, coordination; and the deployment of technology for traffic information gathering and distribution, as well as the utilization of modeling and simulation tools for planning, operations, and training, were some of the recommendations made in the transportation area.

Future Research and Development

The RTI initiative concentrated initially on four geographic locations with unique characteristics. Those urban areas were treated as prototypes for "sister cities" with similar characteristics. It was planned that at some point in the next stages of this project, these initial four UASI areas will work with a select group of "sister cities" to enable a more effective and efficient dissemination of lessons learned and best practices. Recently, the Under Secretary of DHS' Science and Technology Directorate announced that DHS will extend the program to include several state and local jurisdictions (i.e., sister cities), to bring new technologies and organizational procedures to those jurisdictions.

In Summary

As summarized by DHS S&T:

"*Homeland Security's Regional Technology Integration initiative will serve as a principal mechanism for aligning Science & Technology's assessments and expertise with the real needs of first responders. The program recognizes the real and important variables of the environment of individual communities, including population, leadership structure, geography and physical layout, level of threat, and available resources. The program presents an important opportunity to work directly with urban areas in understanding needs and new requirements while at the same time improving our nation's readiness.*"

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