RealOpt-Regional®

RealOpt-Regional® is an interactive, online software tool to aid in apportioning and dispensing medical countermeasures. This software can be used during the planning or response phase of a large-scale emergency. It features interactive tools to assist with:

- Visualizing important landmarks in the region
- Assessing population densities
- Providing the demographic makeup of the region
- Identifying potential facility locations

RealOpt-Regional® can be used by both emergency preparedness personnel and the general public to obtain dispensing site information. Multiple levels of authorization can be granted so that users get information specific to them.

Emergency preparedness personnel are able to:

- Determine a network of optimal dispensing locations and the optimal combination of dispensing modalities (e.g., combinations of drive-through and walk-through points of dispensing, or PODs) for regional preparedness
- Review demographics at each dispensing site and identify the appropriate personnel (e.g., translators, pediatric assistants) needed for effective dispensing
- Perform economic analysis on using multiple modalities (e.g., cost-effectiveness of combinations of drive-through and walk-through PODs) Identify region-wide budget and labor needs to accommodate an emergency situation and determine recruitment needs of healthcare workers and volunteers
- Determine in real-time a resupply schedule for medical countermeasures across the network of dispensing sites through real-time feeds of product usage
- Determine the closest and feasible traffic routes to transport sick individuals from PODs to respective hospitals for treatment

RealOpt-Regional® allows public users:

- Obtain driving directions to primary and backup PODs
- Review relevant information related to the specific medical countermeasures dispensed

RealOpt-Regional® features:

- Backend mathematical models for large-scale facility location problems
- A backend novel and rapid solution engine that allows strategic and operational planning
- Real-time dynamic optimization
- A multi-level end-user secure login web portal
- Users are requested to install Mozilla Firefox for accessing this site

RealOpt-Regional® is designed and developed by Dr. Lee at Georgia Institute of Technology