RE-PLAN Evidence-Based Response Planning

Data-Driven response planning is finally accessible to planners without the need for GIS or computer programming expertise!



ESTIMATE SNS AND RESOURCE ALLOCATIONS TO PODS TO COMPLETE DISPENSING WITHIN TIME LIMITS

ANALYZE TRAFFIC AND VULNERABLE POPULATIONS TO MINIMIZE ACCESS DISPARITIES



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DETERMINE THE BEST

I OCATIONS FOR PODS

BASED ON GEOGRAPHIC

POPULATION DISTRIBUTIONS

For more information, visit http://re-plan.unt.edu/ or email re-plan@unt.edu

CENTER FOR COMPUTATIONAL EPIDEMIOLOGY & RESPONSE ANALYSIS



Examples of Equal Population and Minimized Distance Catchment Areas are contrasted in the map (above) and the chart (below).





Examining a POD facility using RE-PLAN's Google Earth tool (above).

0 — 44

348+

45 — 99

100 — 180 181 — 347

RE-PLAN Features and Examples

The choice of POD locations must be based on population data. Where people live in dense clusters, multiple PODs should be

positioned in a small geographic area. Centers for Disease Control and Prevention. Receiving, Distributing, and Dispensing

Strategic National Stockpile Assets: A Guide to Preparedness Version 11.

POD Locations

Equal Population Catchment Areas

Minimized Distance Catchment Areas

RE-PLAN uses population data at the individual or household level to make it easy to:

- Determine the number of PODs needed for a region.
- **Choose POD locations from a list of available facilities.** \rightarrow
- \Rightarrow Allocate SNS and personnel across chosen PODs to complete dispensing within time limits.
- \Rightarrow Assign an equal population to each POD location.
- Minimize the distance the population must travel. \rightarrow
- \Rightarrow Examine POD facilities without leaving the office by automatically linking to Google Earth's 3D imagery.
- \Rightarrow Identify vulnerable and at-risk populations to minimize access disparities including:
 - \Rightarrow Lack of access to transportation.
 - \Rightarrow Inability to communicate in English.
 - \Rightarrow Special needs related to age.
- \Rightarrow Analyze traffic resulting from plan activation.

RE-PLAN was created at the Center for Computational **Epidemiology and Response Analysis (CeCERA).**





Quantifying individuals who speak Korean but who cannot communicate in English.

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