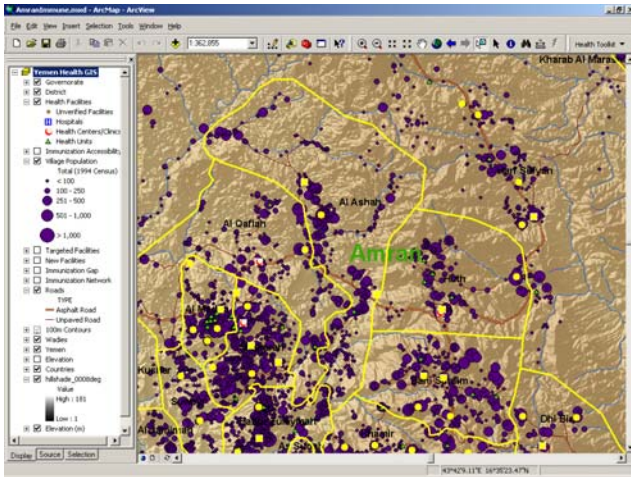
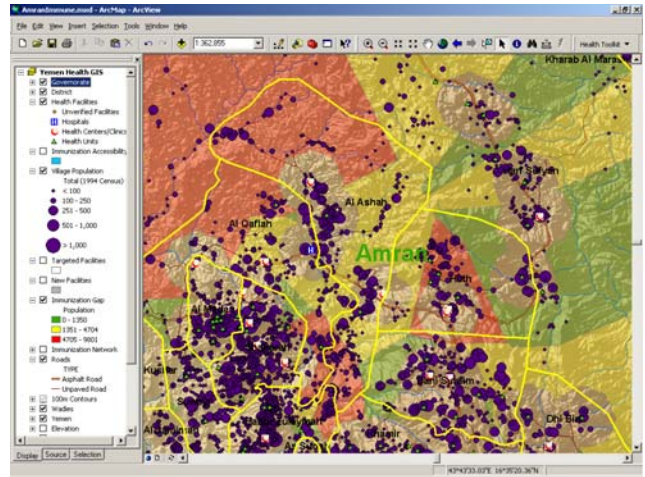


Yemen Health Information System: Using Data for Decisions

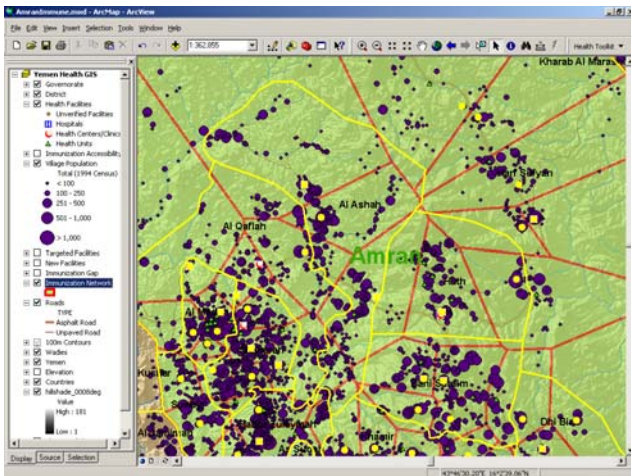
Health GIS Sample Analyses: Immunization Services Availability, Accessibility, and Gaps in the Amran Governorate



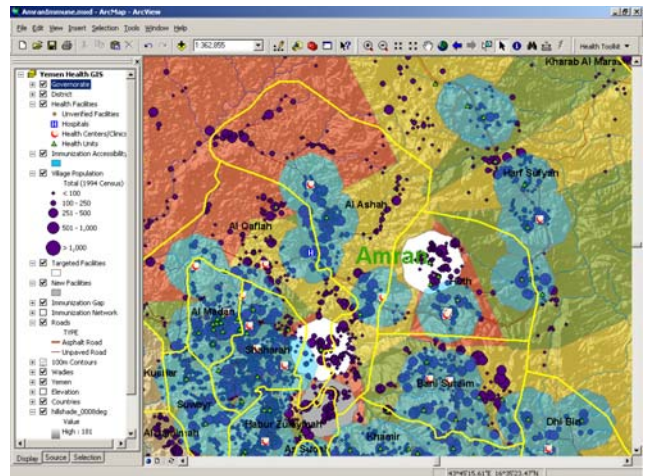
Step 1: Plot settlement populations by size (PURPLE points) and identify health facilities with immunization services and vaccine refrigerator with *Facility Survey Analyzer* (YELLOW points)



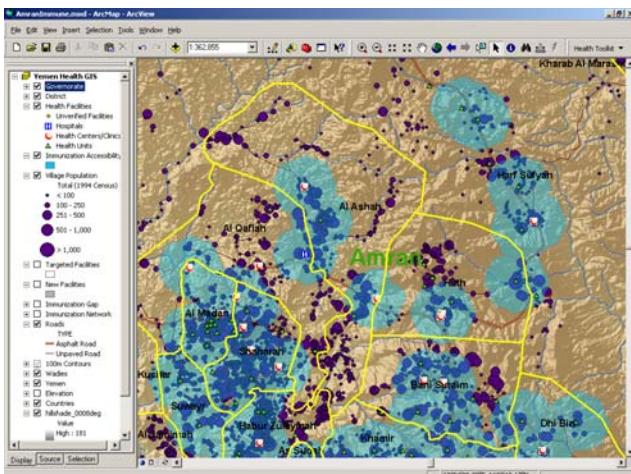
Step 4: Analyze population-weighted gaps in immunization coverage and target prioritized areas or health facilities for intervention (RED vs. YELLOW OR GREEN areas) using the *Healthcare Gap Analyzer*.



Step 2: Analyze the immunization services network by dividing area according to closest proximity to service provider (LT GREEN area) using *Service Network Provider* tool.



Step 5: Evaluate immunization gaps compared to an analysis of 60-minute accessibility area for immunization services added to user-selected existing facilities (WHITE area) and/or initiated at a new facility (GRAY area).



Step 3: Analyze 60-minute walking accessibility/coverage area (BLUE) using the *Facility Accessibility Mapper*.

Results: Adding immunization services to the two health facilities highlighted (WHITE area) appears worthwhile for rapid enhancement of the immunization coverage area. Additionally, evidence-based justification for construction of a new health facility based on immunization coverage needs can be visualized by identifying a new location and mapping its 60-min accessibility area (GRAY area).

As a result, Governorate Health Office officials can more efficiently target limited resources to provide new immunization services at select existing facilities (WHITE area). In addition, duplication in adequate immunization services coverage area (overlapping LT BLUE areas) may be revealed and could warrant reallocation of a vaccine refrigerators combined with training of health care providers in facilities adopting new immunization service capacity. Tracking immunization resources and eliminating duplication in coverage could result in significant health care cost savings while at the same time increasing accessibility to vaccines. In addition, potential health facility site locations or areas that would greatly benefit from mobile vaccination campaigns can be identified also (GRAY area).