

## HEALTHY COMMUNITIES

### User

Loma Linda University Health

### Partner

HERE

### Challenge

Eliminate weeks of manual data validation and build a robust community asset database to support key community health initiatives

### Solution

ArcGIS® for Desktop  
StreetMap™ Premium for ArcGIS

### Results

Revamped community asset maps that better support needs assessments, hospital readiness reduction programs, and school health interventions

# Taking the Guesswork out of Community Health

The mission of Loma Linda University Health (LLUH) is to strengthen community health so individuals and families can enjoy longer, healthier lives. Like other community health institutions, LLUH uses geographic information system (GIS) technology to support needs assessments. Using GIS, LLUH combines geography with data to help decision makers understand what affects community health and focus resources in the areas with the greatest need.

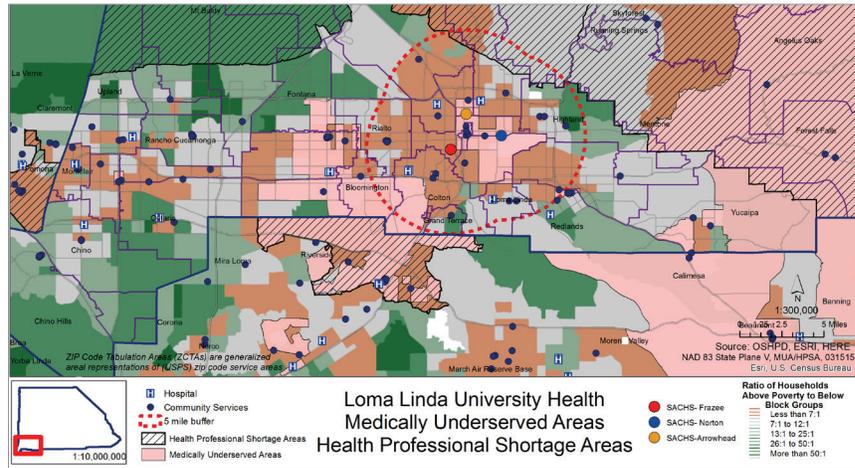
## The Challenge

An essential component of needs assessments is developing mapping applications that identify the location of community assets. These consist primarily of points of interest (POI) such as hospitals, clinics, and pharmacy locations to which health professionals can refer patients.

In the summer of 2014, LLUH's Community Health Mapping Program team embarked on a mission to revamp its community asset data collection and vetting process. The existing asset database was incomplete; not only was the information outdated, but it also only included asset information from nonprofit organizations that had voluntarily shared data.

## The Partner

In need of a more robust database, the Southern California institute turned to Esri® Platinum tier partner HERE Technologies, a leader in global location data. For more than two decades, HERE location data has been powering Esri products such as StreetMap Premium for ArcGIS, Live Traffic in ArcGIS online, among others. HERE data enables Esri's ready-to-use solutions with the most accurate, real-time data.



Loma Linda University Health put StreetMap Premium to work to develop a comprehensive set of POIs that identify community health assets in medically underserved areas.

“Before we implemented StreetMap Premium for ArcGIS, data quality was a major problem. Now we don’t have to worry about validating data and can focus on what matters most—improving the health of our community.”

**James Martinez**  
Population Health and GIS Analyst at  
Loma Linda University Health

## The Solution

With StreetMap Premium for ArcGIS, there was no longer a need to validate or geocode data. Rather than search and scrub websites for weeks in an attempt to locate data, LLUH used readily-available, valid POI data.

The team pulled and plotted the location of community health assets in ArcGIS for Desktop. In addition to mapping the locations of pharmacies, community clinics, schools, and hospitals, the team identified and mapped areas that lack such assets. The team also mapped these resources in areas where there are high concentrations of patients with asthma, diabetes, and heart failure. Further database enhancements included the availability of grocery and specialty food stores, restaurants, retirement facilities, fitness and health clubs, fire departments, and police stations.

## The Results

LLUH’s revamped community asset maps better support community health needs assessments, hospital readiness reduction programs, and school health interventions for preventive care. With improved community asset maps in hand, LLUH was able to position interventions where the need was greatest. The Community Health Mapping Program team identified regions that lack health resources for addressing obesity, diabetes, mental health issues, and respiratory illnesses. The POIs were an essential component to bringing together trusted information on boundaries, roads, and health assets.

The updated mapping applications continue to support leadership in determining grant development by demonstrating the need for more health care professionals in medically underserved areas. Leaders also leverage asset data when working with local clinics to engage underinsured communities. Together, LLUH and partners are better able to target interventions that promote active lifestyles and lower risks of chronic illnesses.



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