

PREPLAN IMPROVEMENTS USING DRCOG PLANIMETRIC DATA

Article submitted by Greg Hericks, GIS specialist at South Metro Fire Rescue. Greg can be reached at 720-989-2658 or greg.hericks@southmetro.org.

This article originally appeared in the fourth quarter 2019 Denver Regional Data Consortium newsletter.

Fire and emergency medical services personnel are faced with a wide variety of emergency scenarios, and many tools and applications are used to ensure public safety and quicken response times. One of the applications used at many fire departments is known as the preplan. With an area of 285 square miles, where 29 fire stations serve over half a million residents of the south Denver metro area, South Metro Fire Rescue maintains over 6,000 preplans—one for each commercial or public building within its vast boundaries. DRCOG’s planimetric data has been instrumental in improving the overall preplan process and has resulted in a more accurate and usable product for South Metro Fire Rescue’s fire and emergency medical services personnel.

As the name implies, the preplan is a digital document that is reviewed prior to arriving on scene—often en route—and familiarizes first responders with building location and layout. The first page of the building preplan is an overhead drawing or site plan that serves as a map of the property. The site plan is where significant improvements have been made using planimetric data that provides a true representation of the built environment. Basic information, such as building footprints, parking lots and curb lines, is valuable to first responders in determining their quickest and best approach to the building and how it can be accessed from the street. In addition to the site plan, a floor plan (usually the second page) gives greater detail of the building interior.

South Metro Fire Rescue’s preplans have evolved significantly over past years. In 2009, a typical preplan was a rudimentary digital rendering consisting of lines, symbols and text that was often distorted, not to scale

and limited by the perception and imagination of the artist. Today, preplans are detailed, comprehensive, accurate and to-scale geographic information systems drawings that are far more reliable and useful in emergency situations. Thanks to the availability of DRCOG’s planimetric data, South Metro Fire Rescue has saved countless hours in producing a better product. More importantly, South Metro Fire Rescue is equipping its emergency responders with a more accurate preplan that can help shave seconds off response times and contribute to more favorable outcomes in 911 emergency calls.

Sample preplan:

