

## Just how many fire stations do you need anyway?

Seems like in some places, you can't toss a rock with your eyes closed without hitting a fire station. OK, that's a bit of an exaggeration and the multitudes of fire stations within an urban environment can be justified given the risk of structures and population. But what about the 'burbs or "the sticks" as my mid-western father calls a rural area.

In many areas, fire departments justify stations based upon "insurance requirements". Actually, the Insurance Services Office (ISO) evaluates fire protection for property and casualty insurers. Itself a private entity, the ISO does not mandate a certain number of stations, apparatus or staffing. Rather, it measures these aspects and many others in creating a rating that insurers may or may not utilize when setting rates. There is no mandate for political entities or insurers alike. While it is true that a better ISO rating may translate into lower insurance rates for businesses and homeowners, this is just one of many factors that determine the attractiveness of an area for development and commerce. So, how many fire stations does your area really need??

ISO ratings for fire stations and apparatus are, in part, developed by evaluating the road mile distances around the stations and its apparatus compared to the developed area. Distances are a great, unarguable, static measure; but then again, maybe not. Shouldn't we compare the types of buildings at risk in the area? Isn't a consideration also the amount of population within areas, after all they do account for the generation of most calls?? And hey- not all fire stations are located on congested city streets. Some are positioned on highways or arterial roadways with all sorts of travel speed capability.

Doesn't it make sense then, to take these factors into consideration?? Since we want the first engine to arrive at the scene of within a certain amount of minutes<sup>1</sup>, a travel time study utilizing GIS would be helpful. While you're at it, unless it is a medical call or some other lower priority assignment, multiple apparatus from several stations are probably dispatched as a matter of protocol. Wouldn't it be nice to know where all these apparatus and staffing can reach within a certain time frame? Isn't that just as or more important than planting fire stations every several miles??

With the tax payer funds that go into building, maintaining, equipping, and staffing a fire station, isn't it prudent to look at all angles, not just an ISO rating? And don't forget that you don't live in a bubble, so let's not forget the neighboring resources available and often called upon during a crisis.

Contact us at [info@BeaconGIS.net](mailto:info@BeaconGIS.net). We can objectively analyze your situation before you make a very important decision.

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<sup>1</sup> See the recommended response times put forth by the National Fire Protection Association Sections 1710 and 1720 or see my discussion on them at [www.BeaconGIS.net](http://www.BeaconGIS.net)