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GEOFILE SOURCE MATERIALS AND STANDARDS: A PROCEDURAL APPROACH

Abstract: An intrinsic component of all Computer Assisted Dispatching (CAD) systems is the geofile. The geofile is a tabular database of street names, address ranges, and cross streets which is associated with a variety of district information. The effectiveness of the CAD system is limited by the data it accesses. In the past, public safety agencies have not used accurate sources of data or the appropriate standards when building a geofile. The purpose of this paper is to present a procedural framework for the collection of accurate geofile source material. Also discussed are basic data standards that should be used in every geofile.

INTRODUCTION

There are severe consequences associated with using a geofile which is constructed from inaccurate source materials or with inappropriate data; the cost can be human life. Precious dispatch time will be wasted if a street name and address are associated with the wrong jurisdiction or dispatch district. The publicity associated with emergency response failures will severely damage the relationship between the public safety agency and the community. An inadequate and inaccurate database will severely impede the overall effectiveness of the CAD system. The following options are available to a public safety agency in this position: build a new geofile, modify the existing geofile with the CAD software, or live with an ineffective CAD system.

The optimal solution is to build a new geofile according to basic data standards and from accurate source material. Unfortunately, agencies may not choose this option due to the associated time and expense. An attempt is usually made to modify the geofile with the CAD software. This is a time consuming process which yields, at best, limited improvement. For these reasons, the geofile should be constructed correctly from the beginning.

The purpose of this paper is to present a procedural framework for the collection of accurate geofile source material. The geofile is comprised of two distinct data elements: the street network and the district boundaries.