

Spatial Data Research

GIS & 9-1-1 Database Synchronization A first step toward GIS-based MSAGs for NG9-1-1

ROAD-TO-MSAG COMPARISON RESULTS BY PSAP	of MSAG records in comparison (name match)						Total # of RCL records in comparison		
	Records eligible for comparison (name match)	Records with perfect matches (name, community and range)	Records with only name and community matches (not range)	Records with only name and community, range not checked (not range)	Records with no matches (not name and range not checked)	Records with name and range matches (community not checked)	Records eligible for comparison	Records	Records
PSAP Name	Street Address Guide (MSAG) records compared with Road Centerline (RCL) GIS records						Road Centerline (RCL) Master Street Address		
Anderson County 9-1-1	84%	76%	7%	1%	16%	77%	2505	41%	35%
	84%	77%	6%	1%	16%	78%	2509	41%	35%
Clarksville P.D. 0-1-1	51%	0%	51%	0%	49%	0%	774	46%	1%
	53%	1%							
Edwardsville 9-1-1	74%	39%							
	75%	39%							
Harrison County 9-1-1	88%	41%							
	86%	41%							

A. MSAG records compared with RCL records		
A1. Total MSAG records:	#	%
A2. Records with no RCL matches:	1868	n/a
A3. Records with road name matches in the RCL:	650	35%
A4. Records with perfect RCL matches:	1218	65%
A5. Records with RCL range mismatches only:	0	0%
A6. Records with name matches only in the RCL:	1218	65%
A7. Records with RCL name and range matches:	1063	57%

WHY IS IT IMPORTANT TO SYNCHRONIZE MY GIS AND 9-1-1 DATA?

You've implemented **Wireless 9-1-1** and equipped your **PSAP** with **mapping software**. So why don't all your calls map? GIS data not properly synchronized with your MSAG is the usual culprit. Calls that don't map can result in delayed response time and loss of life and property. While this risk alone makes synchronization critical, synchronizing data also helps prepare your county or PSAP for the geospatial possibilities of Next Generation 9-1-1. GIS is the routing engine in Next Generation 9-1-1 solutions, with today's stand-alone MSAG replaced by layersGIS working in tandem to route calls, determine responders and plot call locations.

While many MSAGs were created from coded GIS data, counties that implemented E9-1-1 early often did so without geospatial data. MSAGs were created and maintained on paper and GIS was developed later, often in projects not specifically for 9-1-1 or addressing. As different users—the Assessor, Utilities, Road Department—have different requirements, the GIS data used at your PSAP may have been retrofitted for 9-1-1. A recent alignment project for a city with a population of 25,000 resulted in 100+ spelling, street type and directional errors between the city's GIS road data—which was created for utilities management—and the MSAG. Each error represented many potential 9-1-1 calls that would not map.

SDR is an industry expert in GIS for E9-1-1 and Public Safety. With our suite of custom analysis tools, SDR can quickly produce synchronization metrics, code each record with match results and produce add/change/delete reports. SDR's team of 9-1-1 and GIS experts will guide you through this critical process so that your data works for you and for the residents whose lives may depend on seamless call location and quick emergency response.



SDR. Using GIS to Map Your World

For More Information Call 1-800-238-1911