

MetroGIS: Performance Measures Case Study

TIES

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Organizational Profile: TIES—Technology Information and Education Services—is a cooperative of 36 Minnesota school districts, the vast majority of which are in the seven-county Twin Cities area. TIES offer products, services and training in five major areas: technical services, student information and administration, systems software support, transportation, and learning and technology.

Uses of GIS: TIES provides GIS consulting and services to its member districts for a variety of purposes, among them: planning future facility needs, including siting new schools; establishing or altering school attendance boundaries; demographic analysis; and transportation mapping. For TIES member school districts, GIS is an integral tool for both making good decisions and communicating with the public during and after the decision-making process.

Recent Successes: A) During the 2001-02 school year, the Anoka-Hennepin School District decided to change its school busing policy to help address a \$10 million district budget deficit. The previous policy was that all students outside an area within one mile of each school would be provided free bus service. The new policy changed the distance to two miles, but left open the option for students from one to two miles from school to pay for bus service.

District staff met with law enforcement and transportation officials to identify safe walking routes and locations for crossing guards. The district then asked TIES staff to use GIS to develop, for each school in the district, a map of the school attendance area showing safe walking routes and crossing guard locations. Streets, parks and lakes, and parcel lines were included so families could pinpoint their house. These maps (see attached sample) were posted on the school district Web site. District officials report overwhelmingly positive comments from parents.

Helping parents choose appropriate routes for their children would have been a Herculean task without data mapping and the Internet, according to Chuck Holden, the district's director of operations. "A majority of parents in the district have access to the Internet," he said. "With this technology, we can easily provide a large amount of detailed route and crossing guard information very effectively."

B) The St. Louis Park School District was changing demographically and wanted to investigate the perception that many more low-income students were attending one elementary school in the district than the other. Using a combination of district-gathered demographic information and GIS parcel data, TIES was able to create for the district a map showing the distribution of students by income. The district is now revising its school boundaries to achieve a better socioeconomic balance in its schools. Putting the data into picture form helped school officials and school board members come to agreement and change the boundaries more easily.

Impact of MetroGIS: According to Dick Carlstrom, GIS consultant with TIES, neither of these—nor any of the GIS projects that TIES does for its member districts—would be possible without MetroGIS. What MetroGIS has done, Carlstrom says, is provide free access to critical data (e.g., street centerlines, parcels) which the districts could not, on their own, afford to acquire and/or manipulate for their purposes.

The unique public/private sector collaboration between MetroGIS, the Minnesota Department of Transportation and The Lawrence Group (TLG) provides TIES (and other metro area government entities) with free access to street centerline data. In contrast, if TIES were to acquire the street centerline data for all its constituent school districts, the current cost would be at least \$35,000, as estimated by TLG principal Larry Charboneau. TIES would also pay an annual cost of \$1,500 to keep the data updated. Most districts cannot afford to pay for the data, especially those facing tight budgets or even deficits, as many are today.

The data-sharing agreements negotiated by MetroGIS with counties also give school districts free access to county parcel data. Previously, in the St. Louis Park example above, TIES or the district would have paid the county to extract the school district portion of the county parcel data and send it to TIES. Now, with the new regional parcel dataset created through MetroGIS and available via the MetroGIS DataFinder Web site, TIES will no longer have to acquire parcel data from each county separately and manipulate it. Acquiring up-to-date, accurate data will be a quick, one-stop process. Without the data-sharing agreements, TIES and its constituent members would have gone without the data—it is simply not within the budgets of most school districts.

The ability to do detailed demographic analysis is a result of having the parcel data, according to Carlstrom. No one would spend the time necessary to put the analysis in picture form by hand—it would be extremely painstaking and time-consuming.

Beyond the unparalleled access to data provided by MetroGIS, Carlstrom said that one of the biggest benefits for him has been the collegiality and support of the MetroGIS community. Getting together at meetings provides people with an opportunity to find out what other GIS professionals in a variety of organizations are doing, what challenges they are facing and how they are overcoming them. He said the assistance he received from these colleagues as TIES set up its GIS shop was very important.

Interview Quotes:

“TIES probably would not have even developed a GIS capability if it hadn’t been for MetroGIS. What MetroGIS did was provide an inexpensive street file, which you have to have for mapping. And MetroGIS was the leader in negotiating with counties to provide other governmental units with the parcel lines.”

“GIS mapping is a huge communication tool. With it what you get is not only a good decision, but you get a level of comfort and an acceptance of that decision—it’s the whole idea of data-driven decisions.”

“With the new DataFinder data distribution tool, I don’t know what more MetroGIS can do. As far as I’m concerned it’s Christmas time and MetroGIS is Santa Claus.”

