

## Mobile GIS in the City of Santa Monica

Many Santa Monica employees have been working with geographic information and other data using the City's Geographic Information System (GIS). For some time now the City staff has been using ArcView on their PCs and the ArcIMS tools on the City's intranet and internet. GIS is a powerful tool used in our daily tasks to analyze and find spatial relationships between many layers of geographic data.

One of the most important output types that we use everyday from GIS is the map. We use the map to communicate our findings from our analysis of geographic data. Many of us print maps and carry them out into the field to verify findings. While in the field, we also use the maps to locate real world objects. Anything we find that needs to be updated in our GIS is recorded on the map and taken back to the office to update the GIS database. Wouldn't it be nice if we could update our GIS information while out in the field? With new PC technology we can do this.

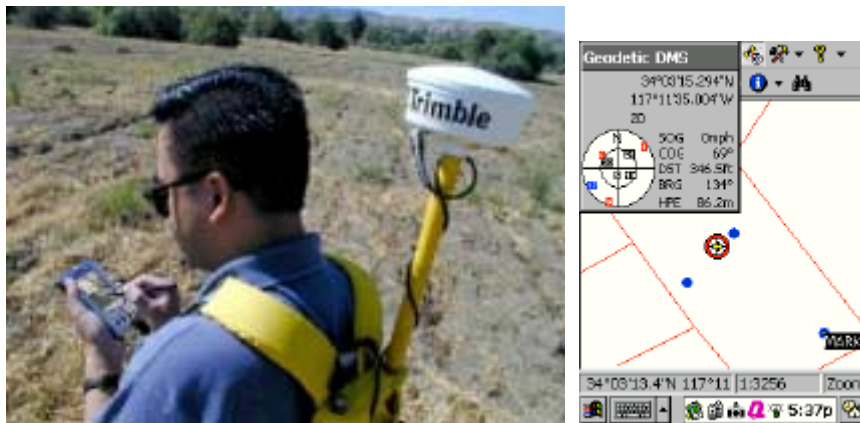
Many of you are familiar with the PDA (Personal Digital Assistant), also called the Palm or Pocket PC. The PDA is a small sized computer that fits in the palm of your hand. Most people use a PDA to keep track of their calendar and email. GIS software has recently caught up with the PDA and now can run on what is called Pocket PCs. The GIS software we use on the Pocket PC is called ArcPAD and runs on the Compaq iPAQ Pocket PC running Windows CE.



Using mobile GIS, we can now call up any layer of GIS information while out in the field. For example, we can display parcels, buildings, curbs, and even color orthophotography as a backdrop in the GIS while editing data and/or creating new data.



We can also connect a GPS (Global Positioning System) to the PDA and record precise locations of objects in the real world and position them in the GIS.



The GIS team in ISD has been using mobile GIS to update the City's core geographic information layers that all departments and divisions use. The GIS team is also working with EPWM and Solid Waste to develop custom applications for GIS software on their pocket PCs.

EPWM will be using mobile GIS to record the information and locations of news racks and match them up with those in our permit system. This will help them discover which news racks do not have permits.

Solid Waste will be using mobile GIS to record the information and locations of private trash bins, and to audit the reported totals of waste removed.

Other Divisions will soon use mobile GIS to update and create their own GIS data. For more information on mobile GIS, contact the City of Santa Monica GIS team in the Information Systems Division.