High-tech parking enforcement proved effective

FACED WITH THE intractable problem of how to enforce downtown parking restrictions cost effectively without riling residents and irking visitors, Fredericksburg implemented a high-tech solution 14 months ago. Make that a *really* high-tech solution, one replete with a computer, global positioning system and digital cameras mounted in a hybrid car.

Fredericksburg parking enforcement officers have everything they need at their fingertips to deter scofflaws.

The downtown parking problem had been a stubborn one for Fredericksburg. Despite construction of a new parking garage in 2005 and plenty of free city-owned parking lots, merchants, residents and visitors complained continually about the scant availability of short-term parking in the historic district.

Following a study by a consultant that recommended a substantial investment in personnel and equipment, the city explored alternative solutions, which led to the discovery of a new technology developed by Tannery Creek Systems in Ontario called autoChalk©. The technology makes use of the vehicle-mounted cameras, laptop and GPS unit to track the turnover of vehicles in time-restricted parking. With autoChalk, a parking enforcement officer drives through downtown at the posted speed limit while the system records parked vehicles with the help of digital photography and specialized software.

When the officer drives through the enforcement area again after the time limit expires, autoChalk alerts the officer to any violations. The officer then compares the before-and-after images to confirm the infraction and autoChalk generates a ticket that is sent by mail to the vehicle's owner, using information from the license plate registration.

Using money it receives as a member of the Virginia Railway Express from surplus motor fuels tax receipts earmarked for transportation uses, Fredericksburg launched autoChalk at a five-year projected cost of $150,000. The start-up cost included the price of a hybrid vehicle to carry the equipment, and a maintenance and replacement contract with technical support. It did not require additional personnel. Had the city followed the recommendation of the consulting firm, the cost would have been twice that of the autoChalk technology over five years.

After some initial criticism, the autoChalk system has proven to be a friendly option. Complaints and contested tickets have dwindled to virtually zero; the availability of parking spaces has increased markedly; and repeat offenders have moved off the street.

The digital photographic images generated by the system provide essentially incontrovertible documentation of parking violations. The initial ticket sent to an offender, however, is a friendly warning notice. The warning citation also includes a map detailing the location of free municipal parking lots and the city parking garage. The autoChalk software targets repeat offenders by automatically issuing them escalating fines of up to $45. Importantly, it allows parking enforcement officers to patrol other areas of the city more thoroughly. An officer can cover an area downtown in roughly 20 minutes using autoChalk, while the same area would require an hour-and-a-half using the old "walk and chalk" method.

10,001 - 35,000 Population

Fredericksburg

What the judges said: "Fredericksburg's program addresses a nearly universal problem – limited downtown parking. It has potential applicability to many localities across the Commonwealth. The city appears to have successfully met the multiple, and sometimes competing goals of expanding parking enforcement while simultaneously decreasing long-term costs; meeting the desires of merchants for more effective turnover of on-street parking spots; and implementing a fee system that penalizes repeat offenders while also providing information on parking alternatives to citizens and visitors."