

## Case Study:

### V100 GPS Compass Helps Revolutionize Parking Enforcement



For more than 70 years, parking regulation has challenged city operations and planning. The traditional solution to parking regulation was for enforcement officers to manually mark vehicle tires with a line of chalk and later handwrite a ticket to unmoved vehicles in violation of parking regulations.

“The existing process of enforcing time-limited parking zones is inefficient and we are unable to respond to the volume of citizen complaints,” says Dale Fraser, General Manager of Calgary Parking Authority.<sup>1</sup>

By partnering Hemisphere GPS’ V100 GPS Compass with Tannery Creek Systems Inc’s patented autoChalk™ software, parking enforcement can now ticket offenders in real-time as they drive past in their patrol car. The partnered technology has revolutionized parking enforcement and is proven to save significant amounts of time and money. In fact, the AutoChalk system increases productivity over manual chalking by 500 percent and has a return on investment rate well below one year.<sup>1</sup>

#### How It Works

The backbone of autoChalk™ software is Hemisphere GPS’ highly accurate V100 GPS Compass which provides heading and positioning data to determine the exact time, location and parking enforcement area of an offending vehicle. Digital cameras mounted on the side of the patrol vehicle automatically take a before and after picture of the vehicle to be analyzed for infractions. All of this is done while patrolling at 40 km/h and scanning at a rate of two vehicles per second, from up to eight feet away.

The V100 GPS compass’ two multipath-resistant antennas ensure that the signal is not misinterpreted when false signals are being deflected off downtown skyscrapers. However, if terrain causes a loss of signal, data from the vehicle’s transmission is paired with input from the integrated gyro and tilt sensor of the compass to keep carrying a position for up to 10 minutes. Additionally, the rugged enclosure of the compass makes it ideal for areas that experience extreme weather conditions.

The AutoChalk technology is quickly catching on with parking enforcement and is already used in more than 10 international cities.



#### V100 GPS Compass Quick Facts

- Simple installation and portability
- Integrated gyro and tilt sensor
- Rugged enclosure
- Two multipath-resistant antennas
- Fast heading and positioning

autoChalk™ is a registered trademark of Tannery Systems Inc.

Reference Note:

<sup>1</sup> Parking Today – written by Bill Franklin

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