

# Universities & Campus Security

## DUKE UNIVERSITY POLICE ON PATROL

Police Officer on Duke Campus

Like all major universities, Duke University is constantly looking for ways to provide a safer environment for its students and staff. That's no small feat when you consider that nearly 11,000 students and 27,000 employees live, work, study and play in an area covering more than 16 square miles.

However, Chief Clarence Birkhead, director of Duke University Police, has found a valuable new tool for his patrol officers—the Segway® Personal Transporter (PT). The Segway PT is a one-man transportation device that is self-balancing and can cover 8-10 miles on a single 10-cent charge of its batteries.

The Duke University Police began training on the Segway PT last fall, and put five of them into full service in February 2004. According to Chief Birkhead, the devices play a valuable role on campus.



“We are in the process of revamping our campus to try to minimize vehicle traffic,” says Birkhead. “So, with the campus becoming a little more compact we are trying to get ahead of the curve and find better ways to patrol our campus while at the same time making our police officers more accessible and visible. The Segway helps in both areas.”

Duke logo

Birkhead has a total of 59 commissioned police officers and 65 non-commissioned security officers on his staff. Two of his officers were selected to receive training directly from Segway Inc. These two officers then trained another 18 officers on the operational use of the Segway PT. Currently, two community service officers and two uniformed officers use the units, and the reactions of the Duke students have been remarkable.

“When you put an officer in full uniform on a Segway PT he is now elevated 8-10 inches off the ground,” says Birkhead. “It makes him very visible. Students and visitors will come up and talk to the officer about the Segway. They want to know what it is and how to use it. They even have their photos taken next to the officer on the Segway. So, I would say that it has accomplished at least one of our goals which was to make us more accessible.”

The Segway PTs are also valued for their speed and versatility. “We use them for special events because officers can move around much easier in the congestion than they can in a cruiser or on a bike. And the officers are tall enough to see over the crowd and to stand out.”

Lieutenant Tony Shipman is the officer in charge of the Segway PTs and he uses the devices every day.

“The Segway PTs have become just another tool for us, in the same way we use our cruisers and our bike patrols,” says Shipman. “We use them on the main quad of the east and west campuses and around the residential halls because they can get places where our cruisers can't go. I used one this week to test all of the emergency telephones that are spread throughout the campus and it was great. I could ride right up to the phone, test it without stepping off the unit, then move on to the next phone.”

“That's the chief patrol benefit of the Segway -- that it allows you to cover more ground in a specific amount of time. But it also makes the officer more visible among crowds,” adds Shipman. “Much better than sitting in the cruiser or hunched over a bike.”

According to Shipman the novelty of the Segway PT also has its advantages. “We are currently the only police force in North Carolina to use them and the students think they're cool,” says Shipman. “This makes them perfect tools for our community service officers. We plan to use all five units during the graduation events this year, so it should be interesting to see the reactions of all the visitors.”

Drexel University, Loyola University New Orleans, University of Nevada (Reno) and Worcester Polytechnic are among the other universities using Segway PTs for police patrols.

## University of Memphis

The University of Memphis Physical Plant Department recently purchased Segway™ PTs to increase response time and strengthen overall customer service. Various



departments at the university are now utilizing Segway PT. Among them, the Electronic Shop and the Lock Shop have greatly benefited from the use of this new technology.

The Electronic Shop found that the Segway PT increased productivity and maneuverability on campus. For instance, by using a Segway PT to inspect the campus' irrigation lines, the Electronic Shop's technician was able to move quickly from one end of each line to the other. What had always been a two-person job could now be handled by one person.

Members of the Electronic Shop were also able to respond to fire alarms across campus more quickly on the Segway PT, since they were able to take more direct routes to each building. This allowed faster face-to-face meetings with members of the Memphis Fire Department, which meant quicker resolution of each incident. University of Memphis



Perhaps the greatest time savings were realized, appropriately enough, during the monthly rounds to reset the university's clocks. Personnel were able to move from building to building much quicker than walking, and much more efficiently than driving and having to look for parking. What was usually a five hour project took just three hours on the Segway PT, a 40% productivity gain.

The Physical Plant's Lock Shop realized time savings by using the Segway HT. Because 80% of the projects performed by the Lock Shop do not require large pieces of equipment (such as ladders), personnel were able to carry enough tools to complete multiple projects without making return trips to retool. In addition, the traffic and parking benefits of the Segway PT reduced the amount of time it took to get from one project to the next.

The Segway PT has been successful in fulfilling one of the goals of the Physical Plant Department—to use new technology to ensure the efficiency of their department.

# University of Maryland Department of Public Safety

Like many police departments at large universities, the University of Maryland Department of Public Safety faces many challenges in providing a safe and secure environment on a sprawling urban campus. There are 32,000 full-time students at the University, and another 20,000 people who attend classes at night. The campus is the size of a not-so-small town – about 2,000 acres – and it contains both high-density student residence halls and less populated swaths of open park-like land. According to Captain John Brandt, the police department has always been open to new technology that improves campus policing, so when the Segway® Personal Transporter (PT) popped up on their radar screen they immediately took a look at it.

“We’d read about the Segway PT in several police magazines, and then Baltimore-Washington International began using them quite successfully to patrol the airport terminals,” says Brandt. “Our Chief, Ken Krouse, took notice of this, and his belief has always been that we owe it to our community to employ the latest and most effective technology. He made the decision late last year and we purchased six units early in 2006 and began training our officers. The longer we have these machines the more we find that we can do with them.”

## Versatile Transportation for a Variety of Beats

Two of the police department’s six Segway PT Police Package units are assigned to patrol officers in the Operations Bureau who use them during many of the more than 600 special events that the university police patrol each year.

“We plan to work NCAA basketball and football games using Segway PTs, and the units are currently used by our Student Police Aides in moving to and from their traffic posts and in conducting security escorts,” says Brandt. “We also have an alcohol patrol where Segway PT teams may be used to patrol the parking lots looking for large violations of alcohol laws during large athletic events.”

“I’m a bike patrol instructor so I know that bikes have wonderful uses. But one of the drawbacks is that in really heavy pedestrian environments such as events the bikes don’t turn that quickly, can impede pedestrians because of their size and the officer’s head is often too low to get a good view over a standing crowd. With Segway PTs the officers stand a lot higher and they can see over the crowds. They can also turn in place. This makes them ideal for large-scale special events with very dense pedestrian crowds. We’ll use them this year on July 4th when as many as 100,000 people will come onto the campus for fireworks displays.”

Brandt also believes that the Segway PTs will come in handy for tactical medics to use during events. “We host Maryland Day which brought 75,000 people onto the campus to see more than 400 displays on the mall and in other places on the campus,” says Brandt. “We place two EMS ambulances down on one corner, but it is really difficult for the medics to get places quickly with their gear. So we’re looking at using the officers to respond on the Segways PTs.”

## Decrease Response Times, Increase Coverage Zone

The other four Segway PTs are assigned to the Student Police Auxiliary, which is in the department’s Support Services Bureau. This group is run by the police department, but employs students called Student Police Aides – about 75 percent of which are on law enforcement career tracks. “We use the Auxiliary to staff about 20,000 hours of security jobs all over the campus 365 days a year,” says Brandt. “For example, every night our athletic department employs us to make rounds to lock up their facilities, conduct door checks and make sure the field lights aren’t left on.

We will use a Police Aide on a Segway PT for that and it will require that the Police Aide travel a distance of

The Student Police Aides also provide escort services to anyone who calls in and asks for an escort across the campus or to their residence hall. Brandt says that the biggest benefit is that the Segway PTs cut the response time of the escorts. “If it takes the Police Aide a long time to get to the student or faculty member for the escort, then they won’t use the service and they won’t feel as safe. The Segway PTs have cut our response times by a factor of four in some cases, and we are seeing higher use rates. Some Police Aides stay busy most of the evening doing the escorts.”

The response of the university faculty and students to the Segway PTs has been very positive. “We have 29 bikes and 6 motorcycles in our police fleet, so the students see the Segway PTs as just another tool for us,” says Brandt. “The big difference is that when you’re on a Segway PT all eyes turn to you and you’re very visible and approachable. This is a great benefit to our officers and Police Aides.”

# WPI Is First University in World to Use Segway™ Personal Transporters

## WPI Incorporating Segway PTs into Campus Police Patrols and Admissions Tours

Worcester, Mass., December 16, 2002 - Worcester Polytechnic Institute (WPI) is the first university in the world to implement use of the Segway™ Personal Transporter (PT) after acquiring three Segway PTs this fall.

WPI's Campus Police Department has already started using two of the Segway PTs to make patrols around WPI's 80-acre main campus easier. Use of the Segway PTs is expected to open relations between officers and students-acting as an icebreaker to spark conversations and make officers more approachable.

The Admissions Department at WPI plans on using its Segway PT for activities like hosting campus tours, open houses, college nights and other special events.

In preparation for using the Segway HTs, five members of WPI's Campus Police Department and six members of the admissions staff (including WPI student guides) successfully completed the Segway PT two-day training at Segway's Bedford, New Hampshire facility last month.



“This is not a test run. We are past that step and are incorporating Segway PTs into regular, everyday activities on campus,” says said Edward Alton Parrish, WPI president. “They are extremely practical-making many of our everyday tasks much simpler. They also illustrate to our students (the science and technology leaders of tomorrow) that the unimaginable is possible. As such, we were ecstatic to be the first university to use them in day-to-day operations.

Dr. Parrish has had considerable experience riding the Segway HT-having used it to welcome incoming freshman and their families this past August, as well as greeting visitors at several high school open houses on campus.

Dean Kamen, creator of the Segway PT and chairman of Segway Inc., attended WPI. In addition, the university has long collaborated with Kamen in supporting his non-profit organization FIRST (For Inspiration and Recognition of Science and Technology) by hosting tournaments and having faculty and staff coach numerous teams. FIRST was created by Kamen to inspire in young people, their schools and communities an appreciation of science and technology.

The Segway PT is the world's first self-balancing Personal Transporter that allows people to go anywhere a person can walk. Its advanced technology uses gyroscopes and tilt sensors to emulate human balance. When a person leans slightly forward, the Segway PT moves forward. When leaning back, the Segway PT moves back. Riders can comfortably cruise at six to eight miles per hour on sidewalks and paths, which is about two to three times walking speed. The Segway PT can travel a distance that ranges from 11 to 15 miles on a single charge.

## **About Worcester Polytechnic Institute**

Founded in 1865, WPI is a pioneer in technological higher education. WPI was the first university to understand that students learn best when they have the opportunity to apply the knowledge they gain in the classroom to the solution of important problems. Today its students, working in teams at more than 20 project centers around the globe, put their knowledge and skills to work as they complete professional-level work that can have an immediate positive impact on society.

WPI's innovative, globally focused curriculum has been recognized by leaders in industry, government and academia as the model for the technological education of tomorrow. Students emerge from this program as true technological humanists, well rounded, with the confidence, the interpersonal skills and the commitment to innovation they need to make a real difference in their professional and personal lives.

The university awarded its first advanced degree in 1898. Today, its first-rate research laboratories support master's and Ph.D. programs in more than 30 disciplines in engineering, science and the management of technology. Located in the heart of the region's biotechnology and high-technology sectors, WPI has built research programs-including the largest industry/university alliance in North America-that have won it worldwide recognition.

Media note: To schedule a time to view a Segway PT in action on the WPI campus, contact the WPI Media Relations at (508) 831-5706 and [media@wpi.edu](mailto:media@wpi.edu).

## **About Segway**

Segway Inc. develops intelligent motion control technology known as Segway® Smart Motion™ that is embedded in the light electric transportation devices it manufactures, such as the well-known Segway® Personal Transporter (PT). Segway Smart Motion provides intelligent motion control that enables a device to monitor its environment, control its motion and make decisions about how it should move.

Segway markets a full line of zero-emissions Segway PTs for sidewalk and cross-terrain use that deliver impressive energy efficiency – equivalent to 450 miles per gallon/191 kilometers per liter of fuel. The company's line of Segway Robotic Mobility Platforms (RMPs) offers reliable, durable mobility solutions for robotic applications.

Segway Inc., based in Bedford, N.H., U.S.A, has a worldwide distribution network of more than 250 retail points in 61 countries. For additional information about Segway and to find retail locations, please visit [www.segway.com](http://www.segway.com) or call 1-866-4SEGWAY. Media materials and digital images are available at the Segway Press Center at [www.segway.com/about-segway/media-center/](http://www.segway.com/about-segway/media-center/).