JoeyTracker launches

By

Published: Tuesday, January 22, 2008
Updated: Sunday, August 17, 2008 12:08

After nearly three years of work, the Joey GPS project is a reality.

Students can now track the movement of the Davis Square shuttle, affectionately dubbed the Joey, by visiting the Web site joey.tufts.edu.

After a successful test run in December, the JoeyTracker Web site went live on Monday evening.

David Cohen/Tufts Daily
Students are now able to track the Joey's movement on a Web site, thanks to a new GPS system.

"I'm excited this project [came] to fruition and people can actually use it, rather than just talk about it," said junior Matt Shapanka, the Tufts Community Union (TCU) senator who has overseen the project for the past two years.

But only one of the buses that perform the shuttle run has been equipped with the technology. Shapanka admitted that having the tracker in only one bus could be a short-term problem, but he hopes that as students popularize the JoeyTracker, the administration will agree to buy more trackers.

"If people are using this and want to see it expanded to include all the [Joey buses], that's something we can look into and hopefully that will happen," Shapanka said. "The university wants to make sure students are going to use it and see if it's reliable before we invest in another one."

Former TCU Senator Ed Kalafarski (LA '06), who worked toward implementing a Joey GPS system while he was at Tufts, said that integrating new buses into the system will be relatively simple and the site will be easy to expand as new trackers are purchased and installed on the other Joey buses.

"All we [have] to do is convince Public Safety to buy another device, put it on another bus and that's it," Kalafarski said.

The Dallas-based company UBlip, Inc. produced the GPS device and donated it to Tufts. The bus company, Joseph's Transportation, installed the mechanism into the main bus and Kalafarski implemented the technology into the Web site.

Shapanka offered praise for the former senator. "More than anybody else, this would not be a reality if he didn't work on it," Shapanka said.

Kalafarski, who is now studying at Brown University, said he was happy to help make the project a reality. "The Joey's just always been one of those things that Tufts students like to complain about," he said.

"I seemed to have a soft spot in my heart for dead projects," Kalafarski said. "I got interested in it and [Shapanka] came on board and he got into it. You just like to finish the stuff that you start."

The GPS device emits a signal that UBlip transmits to the Web site as part of its GeoRSS feed. The feed records latitudinal and longitudinal coordinates every 10 seconds and the Web site then displays those points on the site's map, according to Dennis Baldwin, who works in product development for UBlip.

UBlip became involved thanks to senior Dan Gross, who put the company and Shapanka in touch with each other. Baldwin said that UBlip was happy to assist Tufts, since many companies that have licensed tracking systems in the past have charged exorbitant prices for the technology.

"We're a company about making this technology accessible," Baldwin said. "We want to make it more open."

UBlip allowed Kalafarski to design the JoeyTracker Web site to receive the signal from UBlip and create a customized map and site.

"We have a foundation that will allow developers to build applications on top of our infrastructure," Baldwin said. "There were a lot of pieces that kind of just came together." Baldwin said the company understood that bureaucratic problems had slowed down previous GPS solutions.

UBlip agreed to donate the GPS device, along with $250, the licensing agreement ,and $150 per year, to help get the system in operation. Tufts agreed to use UBlip as the university adds more GPS systems.

"Let's send Tufts the device under the agreement that, should other buses be tracked, you guys will pay for it," Baldwin said, explaining the company's reasoning. "We wanted to really expedite the process."

The one GPS device that is currently in use is installed in Joseph's Transportation's largest bus. Once Public Safety agrees to purchase more trackers, other buses will receive GPS JoeyTrackers. Public Safety must agree to pay the annual UBlip licensing fee, which will take effect in 2009, in order to receive more trackers.

Shapanka would like to expand the GPS technology to include a text-messaging service to allow students to access information about the Joey's position while they are in Davis Square. He also hopes to get the LCD television screens in the campus center to flash JoeyTracker updates. Another idea is to put LCD screens in Davis Square that would flash JoeyTracker updates, among other things.

Monday's activation of GPS technology in one of the buses "isn't the end of the project, obviously," Shapanka said.

Shapanka said the GPS project was running at the end of the spring semester last year with different technology. It consisted of pre-paid wireless phones with the capacity to run Java software. But this system proved unreliable, Shapanka said. The phones were adequate, but had to be charged daily and often ran out of batteries by the end of the day. Shapanka often had to charge the phones himself at night.

Kalafarski said that the TCU Senate could not get cooperation from Public Safety and Joseph's Transportation to make this system viable.

"It was adequate and it was working and it was tracking the buses, but we couldn't get Public Safety or Joseph's Transportation to agree to plug the device into the cigarette lighter," which would have provided the necessary power source, Kalafarski said. "We just couldn't get them on board."

Kalafarski said that students have long had to deal with the Davis Square shuttle running behind schedule and consequently being difficult to track. He is happy that the TCU Senate has taken a definite step in combating the problem.

"Nobody's under any illusion about it. The problem is a nuisance at worst, and it's a needless nuisance." Kalafarski said. "The fact that we were able to come up with a simple solution ... and

that we could do it for free was pretty cool."