

# Students' Concept for Mobility App for the Blind Wins National Challenge from Toyota and Net Impact

May 25, 2016



Plano, Texas (May 25, 2016) — Imagine an average commute. Perhaps you wait for a bus, walk through crowded streets and ride an elevator up to your office. Now, imagine doing it without being able to see clearly or even at all.

A team of students did just that and came up with an idea for a solution that won first prize in the [Next Generation Mobility Challenge](#), a new competition to inspire millennials to address critical mobility needs from Net Impact, Toyota and the Toyota Mobility Foundation. The students' winning concept, StreetSmart, is an app that would help people who are blind or visually impaired navigate their surroundings with greater confidence. The winning students are: Esther Kim (Rhode Island School of Design), John Mathai (Olin College), Ayush Singhal (Babson College) and Niklaus Sugiri (Babson College).

Activated by voice command, the StreetSmart app would provide users with audio alerts about upcoming hazards or changes to their commute, such as broken escalators, bus service changes and construction sites. It

would rely on existing GPS location services, crowd-sourcing traffic technologies and real-time updates from users on routes' conditions.

The team envisions that the app would work in tandem with Project BLAID, a wearable device in development by Toyota that also works to improve the mobility of people who are blind and visually impaired. For a preview of Project BLAID, visit [TheToyotaEffect.com](http://TheToyotaEffect.com) to access a short video of an early-stage version of the device.

“Toyota launched the Next Generation Mobility Challenge with Net Impact because we want to inspire millennials to join us in solving the most critical mobility issues facing us all,” said Latondra Newton, Chief Program Officer, Toyota Mobility Foundation. “We loved the StreetSmart concept because it builds on our work to help communities with limited mobility do more so they can go more places and live better lives. We congratulate the winners and thank them for their creativity, smarts and hard work!”

“We are thrilled that Toyota is leveraging the talents and passions of young people through this challenge,” says Liz Maw, CEO, Net Impact. “We applaud the StreetSmart team for designing a solution with an eye towards scaling for social impact.”

Nearly 670 students from 60 colleges and universities across the country participated in fifteen campus events during the Challenge, pitching 154 ideas. A panel of judges from Toyota and Net Impact selected StreetSmart's winning concept from three finalist teams, based on the clarity of goal, project design, social impact, feasibility, creativity and the results of a public vote. StreetSmart's video pitch garnered 63.6% of the public vote.

The winning team has been offered internships to delve into a deeper understanding of the mobility needs of the blind community, build the business case for the StreetSmart app and support Toyota's Partner Robotics work to advance the freedom of mobility for all. Kim, Mathai, Singhal and Sugiri – along with two finalist teams – will have the opportunity to attend the 2016 Net Impact Conference in Philadelphia this November on behalf of Toyota.

In addition to local faculty and experts, more than 50 Toyota team members engaged with the Challenge, including Kristen Tabar, vice president of the Technical Strategy Planning Office at Toyota Technical Center (TTC). In addition to being on-the-ground at the chapter events to help students develop their solutions, Toyota team members served as judges, selecting the chapter winners, the three finalists and the ultimate winner. The three finalists had the opportunity to meet with Toyota mentors to refine their proposals.

The other finalist teams were:

- University of Oregon and Oregon State students Carolyn Taclas, Keala Verigan, Sydney Quinton-Cox and James Greisen, who conceived a mobile community center to offer a range of pop-up services to meet community needs; and
- Northwestern University and University of Illinois students Maria McKiever, Szymon Gluc and Shangyanyan Li, who devised a system that would allow drivers to offer their car trunks to others for hire as mobile mailboxes.