



Senate Bill No.: 2012-13-01
Date: August 27, 2012
Authored by: Max Aram, Chair of Environmental Affairs Committee
Sponsored by: Sydni Powell, Associated Students President
Referred to: Committee of the Whole
Action Taken: Senate approved on 08-31-12 (votes: 18-0-3)
Subject: **Resolution Encouraging University President and Vice Presidents to approve the Smart Parking project.**

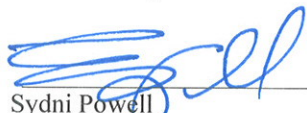
1. WHEREAS: The Associated Students is the primary advocate for students at California State University, Northridge; and
2. WHEREAS: Seventy-four per cent of the students are driving their own cars to campus; and
3. WHEREAS: The majority of CSUN students are undergraduate and full-time with an average of 3.4 days per week on campus¹; and
4. WHEREAS: Around 30,000 parking permits are sold each semester; and
5. WHEREAS: The limited number of parking spots (approximately 5000 in the three main structures, B3, B5 and G3) would not be able to serve the large population of the students who utilize the structures unless the traffic between the parking structures is properly managed; and
6. WHEREAS: There is no technology-based parking management system installed in any of the parking structures and managing the traffic by CSUN Department of Police Services (DPS) staff imposes a substantial amount of labor costs to them, especially in the first weeks of each semester; and
7. WHEREAS: Students circle around and between parking structures looking for a vacant spot which causes frustration, is a waste of time, increases the carbon footprint of the campus, and pollutes the campus area; and
8. WHEREAS: A survey of mobile users reveals that, the majority of those under the age of 44 now have smartphones. *In fact, 62 percent of mobile adults aged 25-34 report owning smartphones. And among those 18-24 and 35-44 years old the smartphone penetration rate is hovering near 54 percent.*²; and all indications are that smartphone use is only to increase the CSUN community; therefore, let it be

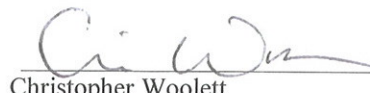
¹ Commuting Report 2010, Institute for Sustainability

² NielsenWire Survey, 2011

1. RESOLVED: That the Associated Students supports developing a smartphone application which manages the traffic properly among the parking structures and help students find parking easier; and let it be further
2. RESOLVED: That the Associated Students urges the engineering team who has designed the Smart Parking smartphone application to cooperate with the Department of Police Services (DPS) to incorporate all the required safety features such as hands-free (voice command) in order to avoid drivers' distraction; and let it be further
3. RESOLVED: That the Associated Students urges the engineering team to recruit CSUN students for developing the system in order to provide them the opportunity to gain the experience of developing such a cutting edge technology in-house; and let it be further
4. RESOLVED: That the Associated Students encourages the Division of Information Technology Department; DPS, and Office of Facilities Planning, Design and Construction to support the engineering team to fulfill their goal; and let it be further
5. RESOLVED: That the Associated Students encourages the university Vice Presidents to approve the Smart Parking project for funding through Campus Quality Fee which was proposed by the Environmental Affairs Committee last semester and was initially endorsed by the Student Fee Advisory Committee; and let it be further
6. RESOLVED: That, if the project is recommended for funding by the Vice Presidents, the Associated Students encourages the University President to approve the Smart Parking project; and let it be finally
7. RESOLVED: That copies of this resolution be sent to:

Dr. Dianne F. Harrison, President, CSUN
 Ms. Hilary Baker, Vice President for Information Technology, CSUN
 Dr. William Watkins, Vice President for Student Affairs and Student Life, CSUN
 Mr. Tom McCarron, Vice President for Administration and Finance, CSUN
 Mr. Colin Donahue, Associate Vice President, Facilities Planning, CSUN
 Ms. Anne P. Glavin, Chief of Police Services, CSUN
 Mr. Mazyar Aram, Project Manager of SmartParking Engineering team
 Daily Sundial


 Sydni Powell
 President, 2012–2013
 Associated Students


 Christopher Woollett
 Vice President, 2012–2013
 Associated Students

Executive summary

A group of engineering students have developed the technology, *SmartParking*[®] or (the “Project”) to operate by creating automated parking structures through the process of putting sensors around each parking structure in order to keep track of vacant parking spots. The Project is leading the development of a smart-phone application to retrieve the data of vacant parking spots from a database for the purpose of leading students to the closest parking structure with the most available vacant parking spots. The safety of students is the Company’s first priority, so the application will be designed as a simple user friendly interface with an auto speaking feature and color codes to avoid users’ distraction while driving and tapping the screen. A website will be developed for the same purpose to help students, faculty, staff and guests to check the status of the structures before leaving their home. Also, in order to help the police department increase the safety of the campus, the system will inform the police department if there is an unexpected movement in the structure. The output of the system can also be used by the campus radio station to lead the listeners during busy periods of each semester. Other features that can be added to the Project application in the future would be, floor level or spot level detection ability, getting connected to GPS services and online daily parking permit purchase.

Having this Project implemented in parking structures will reduce the long lines of cars in a parking structure, it will reduce student frustration, and it will reduce the carbon footprint of college students. The Project will also help the police department handle the traffic easier in the beginning of each semester and it will help them save in personnel costs. The Project will benefit many campus departments including the Police Department, the radio station, and it can be implemented into the campus dynamic map, developed by the Institute for Sustainability.

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