The Hoboken Hop Reliability Dashboard Executive Summary

The Hoboken Hop, formerly a senior citizen transportation service, has since expanded to include a three-route transit service as of 2010. There are currently three buses (Red, Green, and Blue) operating four different routes. (The Red Hop changes its schedule during the day to accommodate senior citizens now.) These routes are intended to run within a block of all Hoboken residences. The transit service is now known as the “The Hop” in order to portray the convenience of hopping on and off the bus. The goal of The Hop is to ultimately reduce traffic and increase parking availability by providing Hoboken residents a cheap and reliable transit service.

The overall objective of Hop management is to continuously improve their daily operations in order to better serve existing Hop customers, and to make it appealing to a larger customer base. In 2010 The Hop began its partnership with FivePM Technology a company specializing in producing innovative technology solutions for real-world transportation problems. This partnership has resulted in massive upgrades to the Hop's service from a customer standpoint. FivePM Technology worked with Hoboken to outfit their entire fleet with Treadmarks, a tracking system which would allow customers to view the current location of The Hop through its online website or call to receive a location. However, even with these upgrades management was still unable to view driver performance unless they monitored the website throughout the day. Therefore, it was important to harness GPS information made available by FivePM Technology, into a useful tool which could be used to analyze the system not only on a daily basis but over a larger period of time as well.

Through research it became clear that one of the largest obstacles for the Hop to increase its customer base was to improve reliability. Utilizing The Hop's website, time studies were performed helping to conclude that buses would arrive and depart from their designated stops before the scheduled time. As a result customers would wait for a bus that had already passed by up to thirty minutes, until the next arrived. This in turn upset many customers who lost confidence in The Hop transit service.

Therefore, the team has designed a dashboard interface, defined by a list of stakeholder requirements which will allow Hop management to increase their visibility of the overall system. This project is a high priority to Hoboken in their objective to making quick, cheap, and effective intra-city travel possible for all of its residents. By providing a reliable transit service, the city hopes to greatly increase its current ridership, effectively reducing traffic congestion and improving overall parking availability.