Environmental & Health Impact

Ultrafine particles (UFPs, < 100 nm) are produced in large quantities by vehicular combustion and can cause severe health impacts (Knibbs, et al., 2011). Vehicular fossil fuel combustion has been shown to be the dominant source of UFPs in urban areas (Knibbs, et al., 2011). Because of their content of reactive oxygen species and large surface area, UFPs can damage pulmonary cells, leading to cardiovascular and respiratory disease (Knibbs, et al., 2011). The more cars commuting on a daily basis, the greater risk for UFPs to be released into the atmosphere. While ridesharing does not eliminate the presence of UFPs, it reduces the vehicles on the road daily, which will decrease the presence of UFPs, making vanpooling a healthier option than personal car usage.

Successful Vanpooling Initiatives

Santa Clara University is located in a suburb of San Jose, California, similar to Boston College’s proximity to downtown Boston. Santa Clara University encourages ridesharing by offering free parking passes for carpools that arrive on campus with two or more participants. (Transportation at SCU, n.d.) Princeton University in New Jersey is another university that has successfully initiated a ridesharing program by offering incentives to employees, which can include carpooling, subway passes, and purchase of hybrid cars or carpool-by-the-hour. (EZ Ride, n.d.) Both colleges offer a variety of incentives to carpooling employees and have shown success in promoting carpooling.

Finally, we looked at the arrival and departure times for commuters that arrived between 7:00 AM and 10:00 AM and left between 3:30 PM and 8:00 PM. 85% were interested in using a vanpooling service, and 85% were not interested (Graph 5). Among the 47% of respondents who were aware of the partnership, 56% were interested in using a vanpooling service, and 85% were not interested. Among the 47% of respondents who were aware of the partnership, 56% were interested in using a vanpooling service. 85% were not interested. Approximately 53% of respondents were not aware of the BC partnership with MassRIDES. Among those who were unaware of the partnership, 56% were interested in using a vanpooling service, and 68% were not interested. Among the 47% of respondents who were aware of the partnership, 56% were interested in using a vanpooling service, and 85% were not interested. Approximately 53% of respondents were not aware of the BC partnership with MassRIDES. Among those who were unaware of the partnership, 56% were interested in using a vanpooling service, and 68% were not interested. Approximately 47% of respondents who were aware of the partnership, 56% were interested in using a vanpooling service, and 85% were not interested. Approximately 53% of respondents were not aware of the BC partnership with MassRIDES. Among those who were not aware of the partnership, 56% were interested in using a vanpooling service, and 68% were not interested. Approximately 47% of respondents who were aware of the partnership, 56% were interested in using a vanpooling service, and 85% were not interested.