Attachment 5

Safety Studies

The following excerpts from published journals and studies supports the City's assertion that the design plan for bicycle lanes on King Street will make the roadway safer for all users.

1. The Evidence on Why Bike-Friendly Cities Are Safer for All Road Users study shows that aside from the environmental advantages, there is now growing evidence to suggest that cities with higher bicycling rates also have better road safety records. Overall, cities with a high bicycling rate among the population generally show a much lower risk of fatal crashes for all road users. (http://files.meetup.com/1468133/Evidence%20on%20Why%20Bike-Friendly.pdf)
2. According to the study Evaluation of On-Street Bicycle Facilities Added to Existing Roadways, a bicycle lane was not present on the cyclist's side of the roadway in 97.2 percent of all accidents. This study also showed that:
    - A cyclist was in a bicycle lane when the accident occurred in only 2.2 percent of all accidents
    - A cyclist was in the through lane when the accident occurred in 68.2 percent of all accidents
    - A cyclist involved in an accident while using a sidewalk composed 15.9 percent of all accidents (http://www.utexas.edu/research/ctr/pdf_reports/0_5157_1.pdf)
3. The study Evaluating the safety effects of bicycle lanes in New York City shows that installation of bicycle lanes did not lead to an increase in crashes, despite the probable increase in the number of bicyclists. The most likely explanations for the lack of increase in crashes are reduced vehicular speeds and fewer conflicts between vehicles and bicyclists after the installation of bicycle lanes. (http://www.ncbi.nlm.nih.gov/pubmed/22095351)
4. In The Impact of Transportation Infrastructure on Bicycling Injuries and Crashes: A Review of the Literature, evidence from the 23 papers reviewed (eight that examined intersections and 15 that examined straightaways) suggests that infrastructure influences injury and crash risk. The presence of bicycle facilities was associated with the lowest risk. (http://www.ehjournal.net/content/8/1/47)
5. The Green Lane Project reports that 60% of Americans say they would bike more often if they had a safe place, such as a green bicycle lane, to ride. This was validated by a recent study in Washington, DC, that revealed bicycling increased 200% on Pennsylvania Avenue after green lanes were installed. (www.greenlaneproject.org)
6. In the study Safety in numbers: more walkers and bicyclists, safer walking and bicycling, it was found that the likelihood that a given person walking or bicycling will be struck by a motorist varies inversely with the amount of walking or bicycling. This result is unexpected. Since it is unlikely that the people walking and bicycling become more cautious if their numbers are larger, it indicates that the behavior of motorists controls the likelihood of collisions with people walking and bicycling. It appears that motorists adjust their behavior in the presence of people walking and bicycling. (http://injuryprevention.bmj.com/content/9/3/205)

7. An analysis of newly collected data in Cycling to work in 90 large American cities: new evidence on the role of bike paths and lanes shows that cities with a greater supply of bike paths and bicycle lanes have higher bike commute levels—even after controlling for other factors that may affect cycling levels. That result is consistent with other studies that confirm the important role of separate facilities. (http://policy.rutgers.edu/faculty/pucher/bikepaths.pdf)
8. The study: Route infrastructure and the risk of injuries to bicyclists: a case-crossover study showed that crash risks on major streets were lower without parked cars and with bike lanes. (http://www.ncbi.nlm.nih.gov/pubmed/23078480)