**A bicycle with a red handlebar

Description automatically generated with medium confidence**

**Cycling: How to Beat Collision Statistics**

Prepared for

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February 6, 2023

# **Project Summary**

Our team values the importance and promotion of health in every individual. We recognize that cycling is beneficial both physically and mentally. We also recognize the risks involved with cycling and how cyclists’ safety is often at risk when travelling from one location to another. Therefore, by analyzing collision data, our aim of this project is to ascertain the following questions:

“Where are the top 10 locations with cyclist collisions?”

“How many of the popup cycleways, implemented and suggested, address these locations?

“What other solutions are available to minimize cyclist collisions?”

# **About Us and Our Project**

Our team is comprised of three upcoming data analysts who have worked in unification to analyze any barriers and/or conditions that impact cycling safety. We are seeking to identify potential relationships within cycling collisions and to utilize these relationships in promoting initiatives to better inform at-risk populations. Lastly, we are ultimately looking for ways to support cycling safety for all cyclists, both current and new.

# **Scope of Work Tasks**

### Breakdown of Tasks

As the data analysts, we will complete the following tasks:

* Gather data through APIs and CSV files
* Clean the data
* Process and merge the data
* Prepare the data for plotting
* Plot the data
* Evaluate and analyze the data
* Draw conclusions and determine potential correlational relationships

### Correlational Points of Consideration

* Collision characteristics (i.e., severity, day of week, junction, light conditions, weather conditions, area)
* Casualty characteristics (i.e., age and sex of casualty)
* Vehicle characteristics (i.e., age and sex of driver, vehicle type, vehicle manoeuvre)

# **References**

### Datasets that will be used:

* API: <https://www.cyclestreets.net/api/>
* Websites containing multiple CSV files for reference:
  + <https://www.data.gov.uk/dataset/cb7ae6f0-4be6-4935-9277-47e5ce24a11f/road-safety-data>
  + <https://cran.r-project.org/web/packages/stats19/index.html>