

Team 2: Traffic Management Utilizing Drones - for Residents in Seattle, WA

The new information service we are planning to create is intended to help the residents and all the visitors who live in or visit Seattle. For this project, we are planning to create a mobile web map that provides useful information about roads and routes. This map can be used not only to locate a specific building or to estimate the time between location A to location B but also some other features, including current road closure, flooding, traffic, construction, accidents, and current events in the city.

One of the main reasons why we chose Seattle as our setting for this project is because based on the [World Population Review](#) website, Seattle's population has increased by 27.58% since 2010. This high population rate increased the traffic index of 2021 to 191.16 ([Numbeo, 2021](#)). With the information service that we aim to produce, our plan is to help the city to decrease the traffic index. We also aim to work with the [Seattle Government](#) when it comes to the funding of this project and how it will be implemented in Seattle. Another plan that we have in terms of funding this information service is by creating two different map versions. In the first version, there will be no monthly fee but there will be advertising, and in the second version there will be a monthly fee (\$4.99/month) without advertisements with a free 30-day trial.

Our map will be able to keep up with different situations. This includes potential construction projects in areas such as downtown Seattle and also other traffic conditions such as accidents on major highways in the Seattle area. To give the users of our service an edge we will work towards making our product as accurate to real-time as possible, with constant updating and tracking of variables that we plan to identify. We will also aim in making the user interface of our map very user-friendly, that way it won't be distracting for drivers.

By utilizing drones, we can have faster and more accurate updates on the current traffic situation. We will have the ability to do live streaming from the drone which can be viewed on the map so that the user can have real-time updates. We are also planning on saving live streaming videos from the drone to our system for data collection purposes.

Our service will notify residents about traffic conditions around Seattle. For example road closures or areas where there is a lot of construction. The service will also give directions from one part of the city to another part of the city and will reroute when conditions such as accidents occur.

Members/Roles	<ol style="list-style-type: none">1. Project Manager: Nisa Putri2. Collaborators: Alejandro Chacon, Ujwal Gupta3. Researchers: Shwetha Sanjeev, Arush4. Context Analyst: Stephen Payne
Deliverables/Due Dates	<ol style="list-style-type: none">1. Proposal - Oct 8, 20212. PowerPoint - Nov 29, 20213. Video Presentation - Dec 6, 20214. Github Submission - Dec 7, 2021