# Personalised transport planner

## BACKGROUND AND MOTIVATION

Improving the usage of public transport is a key part of combating congestion and climate change.

Access to live transport updates and the ability to personalise information helps travellers use public transport efficiently and will encourage them to choose this method of travel.

To improve access to information and to allow innovation, Transport for London provide live updates and journey planning information free of cost and in standardised machine-readable formats (an ‘API’) so that developers can make their own transport applications.

The TFL API can be accessed here:

<https://api-portal.tfl.gov.uk/api-details>

## PROBLEM STATEMENT

London must constantly improve the uptake of public transport to combat congestion and climate change. Quality of life for all Londoners is improved if the use of public transport is made easy and efficient. There are many transport planning applications such as TFL’s own Transport Planner or other services such as City Mapper. However, live transport and journey planning data is also available via a machine readable ‘API’. How can this API be leveraged to provide more specific and personalised transport information for Londoners?

## AIMS AND OBJECTIVES

### Aims

To explore the possibilities offered by the TFL transport API

To design and specify a personalised transport application based on user research

To develop and test a prototype leveraging the TFL API, using an Agile methodology

### Objectives

Research the background of the TFL transport API and its role for London

Discover the legal, ethical and professional limitations and possibilities

Conduct user research to discover and design a personalised service for public transport users

Use an agile methodology to learn how to access and process TFL API data using Python.

Use the Flask framework to create a web application prototype

Evaluate the prototype and make recommendations for further work

## TECHNOLOGIES & RESOURCES (INDICATIVE)

* Python, jupyter notebook, Flask

## NEXT STEPS

* Confirm that you would like to work on this project by emailing Lisa
* Organise a meeting with Lisa