Please ensure that this document does not exceed 2 pages and is checked for spelling and grammar

Customer Experience Gate 0 Submission

This form should be completed for work that are expected to be run as a formal project or BAU items that requires a separate budget and therefore needs to be reported on

Initiative Number and Title	Name of submitter	Project Sponsor	Delegated Sponsor	Band 5 representative at SMM
Wi-Fi data insights	[redacted]	[redacted]	[redacted]	[redacted]

Scope Overview/Key Objectives

CEA Operational Research analysed a day's sample of Wi-Fi data to understand its value to TfL. Analysis demonstrated that, route choice and interchange (line and stations) can be identified, in station movements volumes and durations quantified, train assignment/left behind and crowding measured and this can be scaled to network totals based on representation of devices. Having shared the analysis, a number of internal stakeholders, including Commercial Development, Travel Demand Management and Transport Planning support and will fund developing this further as a productionised information source as it offers considerable benefits. Stakeholder sessions have identified 32 use cases with 4 themes;

*1) **Financial** – increasing revenue from our advertising assets and reducing spend through more efficient working practices.*
*2) **Customer** – providing customer information for journey planning, congestion avoidance and identifying customers eligible for a refund.*
*3) **Medium and Long Term Planning** – Ensuring optimal and evidence based decision making for a range of potential investments ranging from the number of new trains, station upgrades, timetabling and event management, superseding current survey based methods.*
*4) **Operational &Safety** – Ensuring we manage disruptions and events, deploy staff to best meet customer needs and ensure a safe environment for all who use the rail network.*

This objectives of this project would be to deliver
-A productionised real time feed of all Wi-Fi device pings and traps into the CEA Data Warehouse Platform;
-Scalable algorithms and data transformations that identify route choice and interchange between origin-destination pairs, in station movements volumes, duration and platform crowding, at a minute by minute level for every day for the whole TfL rail network covered by Wi-Fi. This will be 1 day in arrears.
-Front end visualisation and developments to make this output information accessible and query-able to business users

The project would be delivered in phases based on technical components. The information outputs would be designed to ensure compatibility with ODX (our public transport matrix that includes bus inference) and Customer Segmentation analysis to provide us with a rich and complete data source.

Financial Benefits	Non-Financial Benefits
Advertising Partnership *Enabling TfL to achieve £322m revenue generation over the next 8 years by being able to quantify asset value based on the number of eyeballs/impressions and dynamically trade advertising space.* ***Optimal financial & operational decision making*** *Supporting significant financial decisions (e.g. correct number of trains to meet demand/ station upgrades) and replace surveys (c.£150k p/a)*	***Customer*** *-Providing platform, train and crowding information to staff and customer to enable customers to make decisions to avoid congestion.* *-Identifying and providing refunds where a customer can be associated to a disrupted route or held outside a station*

Any Additional Information

Next Steps – please choose one of the options below	
Commence Project to: **Gate 1&2 (combined), key activities include** If there are no options in the way the project is delivered, you may work directly towards Gate 2. At this gate the scope, costs and schedule must be baselined.	

We will work with Information Governance to inform customers that we are collecting and using Wi-Fi data.

Seed Funding *amount required to progress to next steps indicated above*	
Amount required (£) **40k to support an initial sprint to scope this project and refine Estimated cost below**	**Commercial Development**

Project Estimated Final Costs (EFC) *Please indicate how much you think the project is likely to cost if known*	
Capital [redacted] **(to be revised after initial sprint) to deliver end product**	**Opex** [redacted]
Comments/Source of Funding: Initial estimates forecast a [redacted] spend to deliver a full solution * 3x Operational Analysts for 3 months to develop the algorithms required [redacted] * 1x sprint team (architect, ETL, developers, Product Owner, Analyst) for 3 months [redacted] [redacted] for customer information and station signage [redacted] for IM data feed, storage and architecture It was agreed on the 1st July that Commercial Development would fund this project	

Key Dates		
Milestone	**Date**	**Explanation**
Advertising Partnership Increased Revenue from data	April 2017	Forecasts have been made based on this data being available and usable
Launch of Crossrail	May 2017	Requirement to understand impact this is having on the network and customer behaviours
Ceasing RODS surveys	Nov 2017	Annual surveys take place with associated infrastructure

Outcome					
	Decision	Approved	Approved Submitted to Actions		Rejected
	Status	Project	Programme	Small Works	BAU – SMM have decided this work does not require a PM, but needs reporting on
	Category	Must Have	Should Have		Could Have
	Category Reasoning				