# Funding for Innovation: Cooperative Intelligent Transport Systems



# **Application Form**

The level of information provided should be proportionate to the size and complexity of the scheme proposed. As a guide, we would suggest around 10 to 15 pages including annexes would be appropriate.

A separate application form should be completed for each scheme.

Applicant Information	
Local authority name:	Essex County Council
Bid Manager Name and position:	Chris Stevenson Head of Commissioning, Connected Essex, Integrated Transport
Contact telephone number:	01245 437287
Email address:	chris.stevenson2@essex.gov.uk
Postal address:	ECC (Essex County Council) County Hall Market Road Chelmsford Essex CM1 1QH
Date:	September 30, 2016

When authorities submit a bid for funding to the Department for Transport, as part of the Government's commitment to greater openness in the public sector under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004, they must also publish a version excluding any commercially sensitive information on their own website within two working days of submitting the final bid to the Department for Transport. The Department for Transport reserves the right to deem the business case as non-compliant if this is not adhered to.

Please specify the web link where this bid will be published: http://www.essexhighways.org/Transport-and-Roads/Getting-Around/

# **SECTION A - Scheme description and funding profile**

#### **A1. Scheme name:** Everyday Travel App: Next stage Development

#### A2. Headline description:

Essex has launched a first generation TravelApp which uniquely allows users to view travel conditions across all modes of travel for their typical journeys. The app is being piloted and shows great promise. The next stage includes enhancements enabling users to avoid incidents/delays to consider alternative travel choices, whilst delivering safety features.

Data is readily available via many platforms, but no single service provides hyper-local coverage for multi-modal journeys. This proposal expands the app to include all modes and combines trusted and innovative uses of filtered data providing pre-travel and in-travel information, based on commuting profiles augmented with 'real-time' data.

#### A3. Geographical area:

The ambition is to increase the number of users beyond Essex; to collaborate with neighbouring authorities, such as Kent. To provide localised information which enhances the reach of the app, with a longer term aspiration to achieve broader coverage across the south-east economic geography and eventually at a national level.



# A4. Type of bid (please tick relevant box):

C-ITS: Connected Vehicle

# C-ITS: Real Time Information (See below)

C-ITS: Smart Parking

C-ITS: Vulnerable Road Users

Other (please specify)

The bid will improve travel reliability, help travellers avoid congestion and provide real-time multi-route choices. (The free to use app is available through Android and iOS operating systems.)

# A5. Equality Analysis

Equality Analysis has been undertaken in line with the Equality Duty. An impact assessment is included at Appendix A.

# **SECTION B – The Business Case**

# B1. The Scheme – Summary / History

Essex and its partners have an app which already has scheduled and real time information relating to rail and bus. Disruption on these networks and information relating to delay has been captured and because the number of vehicles/trains is finite it is relatively easy to alert users to incidents and delays. For traffic the situation is more complex due to the hundreds of thousands of drivers and vehicles on the network each making separate decisions about when to travel and route choice. For this reason the next stage of the TravelApp's development is concentrating up the development of the traffic side of the application. We need to improve a number of aspects the key ones are highlighted below and are the focus of this project and bid.



https://www.everydaytravelapp.com

This proposal is for funding to deliver an improved application:

- To better enable the App to collate and **make intelligent sense of single traffic incidents which** have been reported by multiple users, and to aggregate the data to provide a more accurate assessment of the incident without duplicating information.
- To harness and utilise information on **parking availability** to provide users of the TravelApp with personalised parking information tailored to their regular needs.
- To enable users, through a single a push button process, to **request assistance**, provide information to traffic centres and engage the appropriate response agencies e.g. blue light services or AA.
- To alert road users that an **emergency vehicle is in the vicinity** so that users can make way or take appropriate action to allow the blue light vehicle to pass safely.
- To enable the use of the growing database of historic traffic and incident information to improve the dissemination of information to users to improve the performance of the app and give users more opportunities to avoid disruption.

#### **B2. The Strategic Case**

#### Strategy for Essex

Essex is a significant driver of the UK economy, generating £28bn GVA and supporting over 700,000 jobs. Essex has a strong labour market relationship with London and surrounding areas, including international links through Stansted, Southend, London Gateway and Harwich. Traffic on the priority route network is forecast to grow 25% by 2030, double the rate of increase over the previous 15 years. Furthermore, between 2016 and 2036, Essex's population is forecast to increase from 1.4 to 1.7 million. Traffic growth is putting the network under pressure, as a way of managing demand, there is a pressing need for pre-trip and in-trip information to allow people to make informed travel choices. Better modal information should be offered, particularly when road networks experience delays or incidents.

#### **Strategy for New Technologies**

New technologies, which are coming to market over the next 10 years, are expected to change a number of factors which will have an impact on the network. Increasingly, vehicles will be connected to the internet, to street furniture and to each other, this provides opportunities to improve navigation, direct and manage traffic more efficiently, and improve road safety. The use of apps, in combination with 'the cloud', provides new opportunities to help encourage behaviour change by providing more information on bus and rail alternatives.

For the user, the app has been developed to provide accurate traffic updates throughout the county. It takes trusted sources of information and informs smart devices, providing relevant data for every individual journey and ensures information is provided to make every trip as timely as possible. Information gathered from users will provide an unrivalled view of travel data which will be beneficial to road network managers. Input from users will be used to complement validated sources of data to give a complete picture of the travel network, interaction with the app enables the data to be consistently updated. This project is to further enhance the app and thereby make it attractive for an even greater number of users and thus improve data and understanding to inform the research and development potential for connected vehicles.

# **B3. The Financial Case – Project Costs**

# Table A: Funding profile (Nominal terms)

	2016-17	2017-18	Total
Dft Funding	£75,414	£150,828	£226,243
ECC Contribution	£5,954		£5,954
Visteon	£5,954		£5,954
Total	£87,322	£150,828	£238,150

# B4. The Financial Case - Local Contribution / Third Party Funding

Please provide information on the following points (where applicable):

- a) The non-DfT contribution may include funding from organisations other than the scheme promoter. Please provide details of all non-DfT funding contributions to the scheme costs. This should include evidence to show how any third party contributions are being secured, the level of commitment and when they will become available.
- b) Where the contribution is from external sources, please provide a letter confirming the body's commitment to contribute to the cost of the scheme. The Department for Transport is unlikely to fund any scheme where significant financial contributions from other sources have not been secured, or appear to be at risk.

Have you appended a letter(s) to support this case? Yes

c) Please list any other funding applications you have made for this scheme or variants thereof and the outcome of these applications, including any reasons for rejection.

**B5. The Financial Case – Affordability and Financial Risk** (maximum 300 words)

Please provide evidence on the following points (where applicable):

a) What risk allowance has been applied to the project cost? 10% for risk and inflation.

Financial risks to this project are limited due to the opportunity costs being related to developer capability, the expertise brought to bear on the project by Visteon, combined with the experience of working with the University of Essex, to develop the Everydaytravelapp thus far, provides a good level of confidence that further development can be achieved within the quality, time and cost parameters identified in this bid.

b) *How will cost overruns be dealt with?* In the event of any cost overruns, beyond the 10% risk and inflation tolerance set within this bid, cost overruns would be funded by ECC and Visteon.

What are the main risks to project delivery timescales and what impact this will have on cost?

Longer development times for each additional feature leading to incremental cost increases. However this will be mitigated by controlling the product development through regular reviews of progress including quality reviews, and examining issues in relation to potential slippage and identification of mitigation strategies.

# B6. The Economic Case – Value for Money

A robust economic appraisal of improved information to the travelling public is undoubtedly very

complex. For the purposes outlined an estimate is made, which can only be viewed as indicative but it is trusted that it provides some perspective on the economic value of the application. To partly compensate for the uncertainty, it is presented based on a range of outcome scenarios. The assessment is aimed to benefit commuters driving to work in Greater Essex by providing information to avoid incidents on the major road network and reducing journey time that would have been incurred without a switch to an alternative route or even alternative mode.

# Background

For a number of years Essex County Council (ECC) has collected and analysed journey times on their network using Trafficmaster GPS journey time data obtained annually from the DfT. Over the last two years attention has turned to using the data to assess reliability on the network. The methodology basically comprises of:

 Weekday journey times are extracted for each hour between 07:00 and 19:00 through the year, excluding bank holidays and the Christmas period, for each link in the Integrated Transport Network (ITN) on major roads in the network as shown on the diagram below.



- Only journey times of passenger cars and light goods vehicles are extracted, and processed in principle following the procedure set out in National Indicator 167: Congestion, DfT Guidance document for variant 2.
- Flow data is obtained from 116 continuous traffic counters operated by ECC, 12-hour counts by the DfT and supplemented with available data from short term automatic counts and manual counts where required.
- An average journey time is calculated for the links in the ITN comprising of the 315 road sections for each hour in the day and distinguishing between school days and non-school days.
- The premise of the reliability indicator is that trips in hours where the journey times are greater than the average plus 20% are classified as "late" or "not on time" and reliability is expressed as the proportion of vehicle kilometres travelled during hours classified as having 'on-time' journeys to the total vehicle kilometres travelled. Vehicle hours in different time periods are also calculated. The overall result is that interurban roads in Essex are on average approximately 95% reliable and urban roads 90%.
- Free-flow journey times are also estimated from night time trips, which are cleaned from incidents, such as road works. Delay is expressed as the difference between actual journey time and free flow journey time.

For the hours assessed the results show that for the 2014/15 data set, 23.2 million vehicle-hours can be

attributed to delay, of which 6.9 million vehicle-hours are due to unreliability.

Monetisation of the results is also attempted using best available vehicle types from survey data and TAG Spring 2016 databook journey type splits and TAG Values of Time. More detail of the methodology and results can be found in a paper: Kruger, Stevenson, Carroll and Pawlowski; Quantifying Journey Time Reliability and Delay in Essex, PTRC 14th Annual Transport Practitioners' Meeting, June 2016.

#### Application

For the purposes of the assessment in this case, the methodology was adjusted to, as best possible, capture commuting time only and capture the potential for avoiding incidents.

This was done by taking only the proportions of passenger cars from flow data, for each route section and the proportion of commuters travelling by car from the TAG databook.

The maximum potential to avoid incidents was obtained by the difference of journey time during hours where journeys were 'late', as defined above, and the average journey time for that specific hour and day type (schooldays or non-schooldays). This indicated that if those late journeys could hypothetically be reduced to the average journey times, 0.893 million vehicle-hours for commuters could be saved.

The everydaytravelapp mobile phone application is, at least initially, aimed at commuters in Essex. To estimate the total number of commuters, the 2010 census data was used to find journeys by car starting and/or ending in Essex, including Southend-on-Sea and Thurrock. This indicated a total of 478,760 daily commuting trips by car. This figure was roughly adjusted to a 2017 ('opening year') number by the 2010-2016 traffic growth of 1.47% per year observed in Essex, from DfT AADF data as shown below. This resulted in 522,569 daily commuter trips by car. The target first year users of the mobile phone application of 15,000 would therefore constitute 2.83% of car commuters having an origin or destination in Essex. Growth predictions are an increase of 15,000 each year for the following two years of the appraisal.



The reliability figures quoted above also include car commuter trips through Essex, and the data was further adjusted by an estimate of through-traffic on selected roads, namely M25: 100%, M11, 80%, A12: 20% and A120: 10%. All other trips were taken as corresponding to the Census data.

An estimate of journey time saved is also required but uncertain. It is highly unlikely that journey times can be returned to the original average as, among others, rerouting will take time and likely have a longer route, extraordinary congestion can be wider than one specific route, thus affecting alternative routes as well. The cost was taking as the first year implementation cost of £238,150, which includes 10% allowance for risk and inflation and discounted to 2010, gives a PVC of £202,199.

With income, it was assumed that the product maintenance and further development will be cost neutral after the implementation year. The assessment was only undertaken over a 3 year estimated life of the product before major revamp is required.2010 Values of time savings and discounted to 2010 from the June 2016 TAG databook, yielded a PVB of £328,571 for the core case of 2.83% of car commuters using the application and 20% of the additional driving time due to events avoided by using the product, yielding a NPV of £126,371 and BCR of 1.62. With the sensitivity analyses, the range of BCRs is shown below:

BCR		Proportion of users			
		2.5%	2.83%	5.0%	7.5%
Percentage of	10%	0.72	0.81	1.43	2.15
journey time	20%	1.43	1.62	2.86	4.29
saved in event	30%	2.15	2.43	4.29	6.44
of an incident	50%	3.58	4.05	7.16	10.73

This analysis does not include:

- Other purposes than commuting and modes other than car benefitting
- Decongestion benefits or shift in congestion due to rerouting or shifting time
- Health, environmental and decongestion benefits of mode shift to walking or cycling.

However, 2010 Census data showed that there were 56,095 (14% of all trips to work by drivers) driving to work trips originating in Essex within 2kms, i.e. within reasonably walking distance and a further 81,857 (20%) driving trips within 5km or reasonable cycling distance.

# **B7. The Commercial Case**

This bid is based on extending and expanding the everydaytravelapp. The intention is to continue the joint partnership working with Visteon and the University of Essex, who have collaborated with ECC to develop and produce the app to date. Furthermore, Highways England are an active participant and will continue to provide resources as the project develops (see figure 3 below).

The opportunity is to make the app useful and attractive to as many users as possible, thus producing a representative sample of road users across the county. Once a critical mass of users has been established, the opportunity to gather data and build up a valuable knowledge centre based upon users actual habits (real data), will provide a valuable source of intelligence. Moreover, the app will improve its utility commensurate with increased users and better intelligence gathering and therefore as uptake increases, so does the value of the product.



# B8. Management Case - Delivery

Delivery of this project within the budget and timescale constraints can be assured as the project structure has already been established, functions well and therefore builds upon existing infrastructure and capability.

# Background

The joint venture business between Visteon and Essex County Council manage current and future 'internet of moving things' data projects. The business builds on the collaborative development achieved to date, to provide a commercial structure for revenue and growth, with the facility to enter into further data related product developments. The structure also provides the necessary dynamic environment in which to operate that is not currently provided by either ECC or Visteon and a repository for any associated IP jointly owned by ECC/Visteon.

#### Next Stage Development

As a direct result of this innovative partnership the EverydayTravelApp has been successfully developed and is about to be launched. It is supported by a marketing strategy to attract users and promote the benefits. The Essex County Council (ECC)/Visteon joint venture has therefore been an excellent collaboration and includes work with the University of Essex. Given the experience of developing the first version of the app, ECC are confident that developing additional features, such as those proposed in this bid, will be delivered within the timescales and budget proposed.

Furthermore, a robust project management structure including joint governance has been established to develop the product from concept to launch, ECC and Visteon have every confidence that the production of the additional features will be delivered as per the competition requirements. A delivery schedule is attached at Annex B, which provides a robust demonstration of the timescales and key milestones.



Work-stream - Common Language Framework – Led by University of Essex.	For focussing on getting different input sources from social media to ANPR cameras into a common language data format so that data streams can be integrated and analysed.	
. Work-stream - Business Development and Funding	To develop the business plan and identify funding opportunities for further research and development	

#### B10. Management Case - Risk Management

A proactive risk management procedure is in operation, including a quantified risk assessment approach, which ensures that risks are continuously identified, owners assigned and mitigation measures put in place. Regular reviews check the status of each risk and regulate their control and mitigation. Project procedures also require that, should the likelihood or severity of risks be identified as increasing by this process, responsibility for its mitigation is escalated upwards through the project management chain to ensure that this is achieved.

All risks are owned by the partner authorities. In addition, Essex County Council uses a proprietary online Risk Register to assess levels of risk and to track the progress of the risk management strategy for the scheme. The §151 Officer also has access to this system. Risks are categorised into five main areas, i.e:

- Project and programme risks related to delivery
- Consultation and stakeholder acceptance
- Reputational risks to the project partner authorities and service providers
- Statutory Processes
- Financial and funding risks.

# **Risk Allocation**

ECC will bear all risk for the scheme as part of its role as the Local Authority.

A log of the potential risks is shown below:-

Risk	Likelihood	Impact	Mitigation
Data Protection	Medium	Medium	Critical to ensure app works within data protection
			laws
Technical / Programming Issues	Medium	Medium	Work with key partners to ensure issues are
			resolved or alternative solutions developed
Longer development times	Medium	Medium	Work with key partners to ensure timing goals are
			met or alternative solutions developed
Lack of participants	Medium	Medium	After soft launch, take every opportunity to advertise
			availability
Accurate information	Low	Low	Ensure data is checked before releasing through app
Copyright protection	Low	Low	Ensure data used does not infringe copyright
			protection laws
Scheme does not deliver projected outcome	Medium	Medium	Ensure outcomes are well defined early on and
			communicate projected outcomes to all parties and
Scheme costs exceed budget	Medium	Medium	Constantly monitor costs and adapt as necessary
Safe use of devices	Medium	Medium	Ensure marketing does not encourage unsafe or
			illegal use of phones whilst driving
Ineffective marketing campaign	Low	Low	Ensure marketing programme is appropriate and well
			supported and modify, if necessary



# SECTION C – Monitoring, Evaluation and Benefits Realisation

#### Monitoring and Evaluation

By submitting this bid, ECC agrees to work with the Department to provide a reasonable level of monitoring to enable effective measurement of outputs and, where appropriate, evaluation of outcomes.

ECC is mindful of the need to review performance at various stages of the Programme delivery to maximise benefits realised and to manage and minimise any potential negative scheme impacts. This will be achieved by:

- A Benefits Realisation Plan will be developed to confirm the principal benefits of the programme. Lessons learned from prior projects are automatically fed through to new projects on inception.
- An Evaluation Plan will be produced prior to final approval, independently reviewed, and monitored in accordance with this plan.
- A monitoring and evaluation plan for the scheme will be developed which will be informed by the quantitative and qualitative analysis undertaken for key performance metrics and wider benefits anticipated.
- A process of monitoring and evaluation will be implemented to support and inform ongoing wider monitoring activities that are in place.
- The process evaluation will be ongoing throughout the life of the project.
- Process Evaluation Monitoring reports will be produced regularly as will Impact Evaluation Reports.

# **SECTION D: Declarations**

#### **D1. Senior Responsible Owner Declaration**

As Senior Responsible Owner for the Essex Everyday Travel App, I hereby submit this request for approval to the DfT, on behalf of Essex County Council, and confirm that I have the necessary authority to do so.

I confirm that Essex County Council will have all the necessary powers in place to ensure the planned timescales in the application can be realised.

Name: Chris Stevenson

Position: Head of Commissioning, Connected Essex, Integrated Transport

Signed:		
C.	> de	

#### D2. Section 151 Officer Declaration

As Section 151 Officer for Essex County Council, I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that Essex County Council:

- has allocated sufficient budget to deliver this scheme on the basis of its proposed funding contribution
- will allocate sufficient staff and other necessary resources to deliver this scheme on time and on budget
- accepts responsibility for meeting any costs over and above the DfT contribution requested, including potential cost overruns, and the underwriting of any funding contributions expected from third parties
- accepts responsibility for meeting any ongoing revenue requirements in relation to the schemestic
- accepts that no further increase in DfT funding will be considered beyond the maximum contribution

requested

- has the necessary governance / assurance arrangements in place
- has identified a procurement strategy that is legally compliant and is likely to achieve the best value for money outcome
- will ensure that a robust and effective stakeholder and communications plan is put in place.

Name: Nicole Wood

		0
Signed:	-	Cic/2l

# Submission of bids:

The deadline for bid submission is 5pm, 30 September 2016.

An electronic copy only of the bid including any supporting material should be submitted to: <u>TRAFFIC.COMP@dft.gsi.gov.uk</u>

# Appendices

#### Appendix A – Equality Impact Assessment Appendix B – Project Schedule Appendix C – Letter of Support – Highways England

# Appendix A

# **Equality Impact Assessment**

# Context

- 1. under s.149 of the Equality Act 2010, when making decisions, Essex County Council must have regard to the Public Sector Equality Duty, i.e. have due regard to:
  - eliminating unlawful discrimination, harassment and victimisation, and other conduct prohibited by the Act,
  - advancing equality of opportunity between people who share a protected characteristic and those who do not,
  - Fostering good relations between people who share a protected characteristic and those who do not, including tackling prejudice and promoting understanding.
- 2. The characteristics protected by the Equality Act are:
  - age
  - disability
  - gender reassignment
  - marriage/civil partnership
  - pregnancy/maternity
  - race
  - religion/belief
  - sex/gender
  - Sexual orientation.
- 3. In addition to the above protected characteristics you should consider the cross-cutting elements of the proposed policy, namely the social, economic and environmental impact (including rurality) as part of this assessment. These cross-cutting



elements are not a characteristic protected by law but are regarded as good practice to include.

- 4. The Equality Impact Assessment (EqIA) document should be used as a tool to test and analyse the nature and impact of either what we do or are planning to do in the future. It can be used flexibly for reviewing existing arrangements but in particular should enable identification where further consultation, engagement and data is required.
- 5. Use the questions in this document to record your findings. This should include the nature and extent of the impact on those likely to be affected by the proposed policy.
- 6. Where this EqIA relates to a continuing project, it must be reviewed and updated at each stage of the decision.
- 7. The EqIA will be published <u>online</u>:
- 8. All Cabinet Member Actions, Chief Officer Actions, Key Decisions and Cabinet Reports <u>must be</u> accompanied by an EqIA.
- 9. For further information, refer to the EqIA guidance for staff.
- 10. For advice, contact:
  Shammi Jalota <u>shammi.jalota@essex.gov.uk</u> Head of Equality and Diversity Corporate Law & Assurance Tel 0330 134592 or 07740 901114

#### Section 1: Identifying details

Your function, service area and team: Integrated Transport

If you are submitting this EqIA on behalf of another function, service area or team, specify the originating function, service area or team: No

Title of policy or decision: Submission for the Funding for Innovation: Cooperative Intelligent Transport Systems competition.

Officer completing the EqIA: Tel: Email: julian.sanchez@essex.gov.uk

Date of completing the assessment: 27 September 2016

Section 2:	Section 2: Policy to be analysed				
2.1	Is this a new policy (or decision) or a change to an existing policy, practice or project? This is a bid to government for funding for the next stage of development of the EverydayTravelApp.				
2.2	Describe the main aims, objectives and purpose of the policy (or decision): The project provides a multi-modal travel application (app), the functionality of the app would be enhanced beyond those apps which are provided by others such as Google, as it would provide much more localised information to enable users to make informed travel choices, particularly into regards to occasions when incidents cause disruption on the net- work and thus militate against reliable journeys. <i>What outcome(s) are you hoping to achieve (i.e. decommissioning or commissioning a ser-</i>				

	<i>vice)?</i> To help improve the efficiency of the highways network by improving information available to the public to enable informed decisions which may affect route, mode and time choices.
2.3	<ul> <li>Does or will the policy or decision affect: <ul> <li>service users</li> <li>employees</li> <li>the wider community or groups of people, particularly where there are areas of known inequalities?</li> </ul> </li> <li>The app has the potential to affect road users by influencing their behaviour.</li> <li>Will the policy or decision influence how organisations operate? Not directly, but indirectly, if sufficient data is collected, it will be analysed and may contribute towards the evidence base for further interventions to promote sustainable travel</li> </ul>
2.4	Will the policy or decision involve substantial changes in resources? No
2.5	<ul> <li>Is this policy or decision associated with any of the Council's other policies and how, if applicable, does the proposed policy support corporate outcomes?</li> <li>Sustainable economic growth for Essex communities and businesses</li> <li>People in Essex experience a high quality and sustainable environment</li> </ul>



Section 3: Evidence/data about the user population and consultation <sup>1</sup>				
As a minir support yc surveys, s sources).	As a minimum you must consider what is known about the population likely to be affected which will support your understanding of the impact of the policy, eg service uptake/usage, customer satisfaction surveys, staffing data, performance data, research information (national, regional and local data sources).			
3.1	What does the informa	tion tell you about those groups identified?		
	The app is being made desktop and so has the gy similar to other app	e available on Android and IOS platforms includi e functionality built in to enable disabled users to s.	ng handheld and o utilise the technolo-	
3.2	Have you consulted or decision you want to in fluenced your decision	involved those groups that are likely to be affect nplement? If so, what were their views and how ?	eted by the policy or have their views in-	
	The app is being pilote ticular features which s	d to learn more about how it is being used and some groups may find hard to use will be adapte	received and that par- ed as a result.	
3.3	3.3 If you have not consulted or engaged with communities that are likely to be affected by the policy or decision, give details about when you intend to carry out consultation or provide reasons for why you feel this is not necessary. Please include any reasonable adjustments, e.g. accessible formats, you will provide as part of the consultation process for disabled people:			
Section 4	: Impact of policy or de	ecision		
Use this s	ection to assess any pot	ential impact on equality groups based on what	you now know.	
Description of impactNature of impactExtent of impactPositive, neutral, adverse (explain why)Low, medium, (use L, M or H)		Extent of impact Low, medium, high (use L, M or H)		
Age		Neutral	L	
Disability – learning disability		Neutral – any usability issues for the app was considered at the time of creation of the app.	L	
Disability -	Disability – mental health issuesNeutral - any usability issues for the app was considered at the time of creation of the app.L			
Disability – physical impairmentNeutral – Positive, Mobility impaired users may benefit by avoiding delays which could disproportionately negatively impact their journeys compared to other users. Any usa- bility issues for the app was considered at the time of creation of the app.		L		
Disability – sensory impairment (visual, hearing and deafblind)		Neutral - any usability issues for the app was considered at the time of creation of the app.	L	
Gender/Se	Gender/Sex       Neutral- Positive, the SoS push button fea- ture would mean that more vulnerable users       L         would not have to leave their vehicles, in the       L			



<sup>1</sup> Data sources within EEC. Refer to Essex Insight: <u>http://www.essexinsight.org.uk/mainmenu.aspx?cookieCheck=true</u> with links to JSNA and 2011 Census.

	event of an incident, particularly at night.		
Gender reassignment	Neutral	L	
Marriage/civil partnership	Neutral	L	
Pregnancy/maternity	Neutral	L	
Race	Neutral	L	
Religion/belief	Neutral	L	
Sexual orientation	Neutral	L	
Cross-cutting themes			
Description of impact	<b>Nature of impact</b> Positive, neutral, adverse (explain why)	Extent of impact Low, medium, high (use L, M or H)	
Socio-economic	Positive – will contribute towards more efficient journeys with less time wasted in delays.	L-M	
Environmental, eg housing, transport links/rural isolation	Positive – by encouraging more efficient jour- neys which will help manage congestion by en- couraging users towards less congested routes or to use public transport.		

Section 5: Conclusion					
		Tick Yes/No as appropri- ate			
5.1		No x			
	Does the EqIA in Section 4 indicate that the policy or decision would have a medium or high adverse impact on one or more equality groups?	Yes 🗌	If ' <b>YES</b> ', use the action plan at <b>Section 6</b> to describe the adverse impacts and what mitigating actions you could put in place.		



Section 6: Action plan to address and monitor adverse impacts										
What are the potential adverse impacts?	What are the mitigating actions?	Date they will be achieved.								
In order to identify potential ad- verse impacts, a pilot is being undertaken	As a result of user testing, improvements will be identified, if there are any features which impact disproportionately on equali- ties groups, action will be taken to mitigate these.	Subject to pilot, but will be carried out with each improvement in functionality.								



Section 7: Sign off I confirm that this initial analysis has been completed appropriately. (A typed signature is sufficient.)

Signature of person completing the EgIA: Julian Sanchez	Signature of Head of Service: Chris Stevenson	Date: 30 September 2016
Signature of person completing the EqIA. Julian Sanchez Date: 30 September 2016	Signature of person completing the EqIA: Julian Sanchez	Date: 30 September 2016

# Advice

Keep your director informed of all equality & diversity issues. We recommend that you forward a copy of every EqIA you undertake to the director responsible for the service area. Retain a copy of this EqIA for your records. If this EqIA relates to a continuing project, ensure this document is kept under review and updated, eg after a consultation has been undertaken.



ID	0	Task Name	Duration	Start	Finish	Predecessors	L6 Oct '16 Nov	'16 Dec '16	Jan '17 Feb '17	Mar '17 Apr '17
1		Project Start	1 day?	Thu 01/12/16	Thu 01/12/16					10,27,00,20,20,27,00,20,27,27
2		<b>Cluster of Incidents</b>	103 days	Fri 02/12/16	Tue 25/04/17	1				
3		Define USE CASE	4 days	Fri 02/12/16	Wed 07/12/16	1				
4		Issue software	4 days	Thu 08/12/16	Tue 13/12/16	3				
5		Software developm	nent 80 days	Wed 14/12/16	Tue 04/04/17			<b>P</b>		
6		Define system	10 days	Wed 14/12/16	Tue 27/12/16	4			ן	
7		iOS	70 days	Wed 28/12/16	Tue 04/04/17	6		i		
8		Android	70 days	Wed 28/12/16	Tue 04/04/17	6		i i		
9		Machine test	5 days	Wed 05/04/17	Tue 11/04/17	7,8				<b>1</b>
10		Trusted user test	10 days	Wed 12/04/17	Tue 25/04/17	9				
11		Public release	0 days	Tue 25/04/17	Tue 25/04/17	10				
12		Parking Data	119 days	Thu 08/12/16	Tue 23/05/17	1				
13		Define USE CASE	4 days	Thu 08/12/16	Tue 13/12/16	1,3				
14		Issue software	4 days	Wed 14/12/16	Mon 19/12/16	13,4		Ĩ I I I I I I I I I I I I I I I I I I I		
15		Software developn	nent 95 days	Wed 28/12/16	Tue 09/05/17					
16		Define system	4 days	Wed 28/12/16	Mon 02/01/17	14,6				
17		iOS	20 days	Wed 12/04/17	Tue 09/05/17	16,9				
18		Android	20 days	Wed 12/04/17	Tue 09/05/17	16,9				
19		Machine test	5 days	Wed 10/05/17	Tue 16/05/17	17,18				
20		Trusted user test	5 days	Wed 17/05/17	Tue 23/05/17	19				
21		Public release	0 days	Tue 23/05/17	Tue 23/05/17	20				
22		Recover Me/SoS	134 days	Wed 14/12/16	Mon 19/06/17					
23		Define USE CASE	4 days	Wed 14/12/16	Mon 19/12/16	13				
24		Issue software spe	cifica 4 days	Tue 20/12/16	Fri 23/12/16	14				
25		Software develop	ment 111 days	Tue 03/01/17	Tue 06/06/17					
26		Define system in	nterfa 10 days	Tue 03/01/17	Mon 16/01/17	16				
27		iOS	20 days	Wed 10/05/17	Tue 06/06/17	26,17				
28		Android	20 days	Wed 10/05/17	Tue 06/06/17	26,18				
29		Machine test	4 days	Wed 07/06/17	Mon 12/06/17	27,28				
30		Trusted user test	5 days	Tue 13/06/17	Mon 19/06/17	29				
31		Public release	0 days	Mon 19/06/17	Mon 19/06/17	30				
32		EV/TO in Vicinity	186 days	Tue 20/12/16	Tue 05/09/17					
33		Define USE CASE	4 days	Tue 20/12/16	Fri 23/12/16	23				
34		Issue software spe	ecific: 4 days	Mon 26/12/16	Thu 29/12/16	24				
35		Software develop	men <sup>-</sup> 151 days	Tue 17/01/17	Tue 15/08/17					
36		Define system i	nterf 10 days	Tue 17/01/17	Mon 30/01/17	26				
37		iOS	50 days	Wed 07/06/17	Tue 15/08/17	36,27				
38		Android	50 days	Wed 07/06/17	Tue 15/08/17	36,28				
39		Machine test	5 days	Wed 16/08/17	Tue 22/08/17	37,38				
40		Trusted user test	10 days	Wed 23/08/17	Tue 05/09/17	39				
		Т	ask	Proj	ect Summary	00	Manual Task		Start-only	E D
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29 September 2016

ECC (Essex County Council) County Hall Market Road Chelmsford Essex CM1 1QH

Dear Chris Stevenson

#### EVERY DAY TRAVEL APP

Thank you for speaking with us regarding DfT's Funding for Innovation, Cooperative Intelligent Transport Systems call. Highways England is committed through the Road Investment Strategy to undertake research and development of connected vehicles and their potential future impact on the strategic road network.

We see working in partnership with industry specialists, and your partners offer us an opportunity to learn and develop our response to the growing connected mobility market.

I am pleased to confirm that Highways England support this next exciting development stage of the new EverydayTravelApp which includes additional features enabling users to avoid incidents and delays and consider alternative travel choices, whilst delivering safety features identified through discussions with Highways England and Local Authorities.

We will commit to engaging with your project as an active participant, and will be providing resource to support the delivery of the project and will continue to make data available for the project duration.

We are delighted to be able to contribute to the success of the project should this proposal be selected.

Yours sincerely

Dr Joanna White Intelligent Transport Systems Group Leader

ID	Task Name	Duration	Start	Finish	Predecessors	'16 Oct '16 12 19 26 03 10 17 24	Nov '16 D	Dec '16 Jai	n '17 Feb '17 09 16 23 30 06 13	Mar '17 20 27 06 13 20	Apr '17
41	Public release	0 days	Tue 05/09/2	17 Tue 05/09/	17 40						
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	May '17 Ju			Jun '17				Jul '17				Aug '17				Sep '17					
24	01	08	15	22	29	05	12	19	26	03	10	17	24	31	07	14	21	28	04	11	18
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Deadline Progress Manual Progress