LOCAL TRANSPORT NETWORK FUND (LTNF) FY 2017-18 CAPITAL SCHEME APPLICATION

Local Authorities shall complete one form per scheme. A scheme may comprise a single project or package of associated projects

Local Authority	City & County of Swansea					
Scheme Name	Strategic Bus Corridors & Public Transport Hubs					
Date of Scheme	Start: August 2017	Estimated Completion: March 2018				
LTNF Funding required for 2017-18	£1,000,000					
Total funding required to complete scheme from 2018-19 onwards	£1,000,000					
Project Manager Contact Name	Ben George					
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Authorised by (e.g. Head of Finance or Transport Services)	Name: Stuart Davies Job Title: Head of Service, Highways & Transportation Signature:					

SCHEME DESCRIPTION

Please provide a brief description of the scheme. If your application is for a scheme that will take longer than a financial year to complete, we require a description of the whole scheme and the elements to be delivered in each financial year.

Attach A4 location maps, project(s) drawing(s) and any other supporting information separately.

The scheme will deliver a series of enhancements to improve highway network efficiency for areas that are often congested by peak hour traffic. These measures will serve to improve journey time reliability for bus public transport journeys and support the bus hubs concept. The hubs will promote improved integration between modes, and signifies the first steps in drawing together a network of transport options to begin formulating and realising an integrated transport system for Swansea and South West Wales; as established by the First Minister in plenary in December 2016. The work to draw together the policies, strategies and programmes will be developed in the coming months, but the improvement to bus corridors will, in part, form the first element of this concept.

The scheme will therefore deliver improvements to satellite bus interchanges, to relieve pressure on the Swansea City Bus Station as the bus network expands and demand increases, reduce journey times and strengthen interchange of services across the network; ease of transfer on the public transport network will be key to its success. The bus corridors benefiting from this funding will be of particular importance in the context of City Centre redevelopment scheduled to begin in 2018 and the population and development growth set out in the emerging Local Development Plan.

The improvements are summarised below and also in the plans attached to this bid:

BUS HUB INTERCHANGES:

Further to the conclusions of Prof. Cole's report, the City & County of Swansea will begin to establish strategic bus hubs around Swansea. These hubs will be centres promote for the interchange of strategic bus services:

• Swansea High Street: This centre, located a short distance north of the Swansea City Bus Station, will be used to promote integration with the rail services at Swansea High Street Station. The works will change one of the pick-up &

drop off zones to create a larger waiting area for pedestrians at the busy southbound bus stop, which is used by high frequency services travelling to the city centre and retail core. In addition to the improvement of the bus interchange at this point with improved waiting and information provision, the scheme will also deliver an improved provision for walking and cycling through this area. This will link cycle provision, which currently terminates immediately north of this area, to the provision planned to be installed on Orchard Street (as part of a separate LTF bid awarded in March 2017) and the other City Centre routes and NCN beyond.

- Singleton: This site is already an important centre for bus interchange, particularly for those wishing to avoid the busy
 Swansea City Centre Bus Station. This improvement would provide new waiting facilities for those travelling by bus along
 with electronic passenger information. The scheme would also deliver a new mechanism to allow bus-only access
 between Singleton Hospital and the adjacent University Campus; this would reduce journey times and support the
 reliability of bus services.
- Gower College Tycoch Campus: This busy and growing campus is currently served by poor interchange provisions for bus transport. This improvement would provide a new formal interchange on Cockett Road, improving the waiting and information facilities for those travelling by bus. This will also intercept services which converge from two important corridors at this location.
- Gorseinon: This important satellite bus station was subject to a major refurbishment around ten years ago. Whilst the
 waiting facilities and the layout of the bus station are now of good quality, the information provision remains poor. It is
 therefore proposed that electronic passenger information be installed at this interchange for the benefit of current and
 future users.
- *Pontarddulais*: The provision at Pontarddulais is similar to that at Gorseinon, albeit that the waiting facilities are in a much poorer condition. This scheme would therefore install new bus shelters and electronic information provision at this point of interchange, which is also around 250 metres from Pontarddulais Railway Station.
- Morriston Hospital: An electronic information screen would be installed in the main concourse waiting area to promote the
 use of public transport for access to the hospital's facilities. The bus services to Morriston Hospital are already very well
 used, and this demand is compounded by the increasing strain on car park capacity, which is encouraging further growth
 in the use of public transport. This provision would to ensure that this important centre of interchange is consolidated and
 further promoted.

- Llansamlet: This site is already home to a park and rail facility for the Llansamlet Railway Station. The park & ride provision is however largely anonymous and would benefit from improved signage, electronic information to promote transfer to bus services, and sheltered bicycle storage to promote integration with an adjacent shared use path with is subject to a separate LTF bid.
- Landore: This is an important interchange, where public transport bus services, will integrate with park & ride services as
 well as the adjacent National Cycle Network Route 43. Electronic passenger information will be provided along with
 covered cycle storage to promote improved interchange. A new ticketing system will also be installed to enable
 integration with non-park and ride bus services and provide journey opportunities that are currently not available. This will
 be of particular importance to large employers who are not currently served by park and ride such as, the Swansea
 University Singleton Campus, Singleton and Morriston Hospital.
- Fabian Way: This is an important interchange where public transport bus services will integrate with park & ride services as well as the adjacent National Cycle Network Route 4. Electronic passenger information will be provided along with covered cycle storage to promote improved interchange. A new ticketing system will also be installed to enable integration with non-park and ride bus services and provide journey opportunities that are currently not available.
- Gowerton Rail Interchange: Patronage at Gowerton Railway Station has risen significantly since the redoubling of the
 railway line between Swansea and Loughor Viaduct. Many of its users now use the station on a park and rail basis and
 there are regular complaints from Local Councillors and members of the public, that the parking provision is inadequate.
 The City & County of Swansea will therefore undertake a feasibility assessment to examine whether the existing Councilowned car park could be decked to increase the parking provision. Subject to the outcome of this study, the City & County
 of Swansea may seek mid-year funding from the Welsh Government to secure the delivery of this much-needed parking
 resource.

[Estimated cost: £625,000]

The scheme elements described above will not only deliver significant benefits to congestion on the road network and journey reliability for public transport services, but also benefit from being able to be delivered in a relatively short amount of time. The project does not require changes to hard infrastructure and utilises equipment that can largely be procured and installed in a short amount of time.

There is a clear and definite ability to expand the scope of the bus hubs concept to areas wider areas with the City & County of

Swansea and beyond to neighbouring Local Authorities, such as Neath Port Talbot County Borough Council area where similar improvements could be made to telematics infrastructure. The improvements to each of these locations will also make the waiting and interchange facilities easier and more attractive for users, with a particular emphasis to the connectivity between public transport (bus & rail), walking and cycling.

BUS CORRIDOR ENHANCEMENTS:

In addition to these specific investments, the project will also seek to improve network wide telematics, increasing the efficiency of bus transport in particular. These general investments will include the rollout of the UTrack software in conjunction with the roll out of upgraded electronic ticket machines on buses. This will allow bus movements to be monitored and will improve reliability within the City & County of Swansea providing the following benefits:

- MESH & MOVA Upgrades: The junctions that would benefit from these improvements are summarised in the attached plan. These two systems will allow for physical monitoring and demand responsive traffic signalling at the identified junctions. MESH provides a wireless link between the traffic signals to allow their synchronisation, whilst also communicating back to the central control room that has already been established in Swansea Civic Centre. MOVA is a demand responsive traffic controller to allow signal patterns to dynamically adapt to changes in traffic volume, providing benefits to both public transport and general traffic movements. The combination of MESH & MOVA at junctions that are relatively close to each other will mean that they can operate in tandem, cognisant of the individual demand on each junction, but ensuring the greatest efficiency of traffic management across both junctions as a single system.
- Real-time bus information: an improvement which will not only allow its users to have an accurate prediction of the service arrival time, but also allow the user to see, by means of a smart app, the bus's exact location on the route and how it is progressing. This will integrate with both an app, which will be accessible by smartphone, and also with the electronic passenger information screens at sites across the City and County. Additional passenger information screens will be installed at the bus hub interchanges by this bid. Any services that do not operate the UTrack system would be incorporated to the information systems, albeit that it would be scheduled timetable information that would be shown rather than real-time.
- Monitoring Network Performance: This new information resource will allow for detailed monitoring of the public transport
 network to improve reliability, increase customer confidence and identify congestion hotspots. This data would
 supplement the mobile phone data recently used to construct the multimodal transport model which the City & County of

- Swansea already operates to identify where transport infrastructure interventions are required.
- Tag Master: The City & County of Swansea has operated a transponder system to enable bus priority measures across its network. The system is however now aging and there is need to upgrade the hardware to allow it to continue to operate to the latest standards. The Council will commit to providing the tags for the public transport vehicles, but the funds from this grant application would be used to update the infrastructure in place at each of the bus gates and/or priority signals.
- Journey Time Variable Message Signing: The project will also deliver a series of variable message signs for the Carmarthen Road Bus Corridor. These signs will be used to convey messages encouraging motorists to switch to public transport, as well as giving advice on journey times for those travelling on the corridor.
- Late Bus Technology: A by-product of the UTrack technology is that its data can be relayed to the Urban Traffic Control (UTC) which is used to inform and operate the County's traffic light systems to moderate and manage demand across the highway network. Adding intelligence about bus movements to the UTC allows bus priority to be given at junctions, where the system can see that particular bus services are running behind their scheduled times. Conversely, this approach allows for general traffic to be afforded usual levels of priority when the bus services are running to time, leading to a much more equitable and efficient approach to bus priority. This means that bus priority can be given at junctions which are otherwise devoid of the conventional means of bus priority and facilitates a better use of road space. The funding would be used to provide wireless communication links at the signalised junctions identified in the attached plan, allowing them to respond to the information provided by the Late Bus Technology. An adapter is required in order to make the connection to the UTrack System, the cost of this and the associated license fee will be borne by the City & County of Swansea.

[Estimated Cost: £375,000]

The UTrack system is being trialled in the City & County of Swansea by First Cymru Buses; one of only two cities in the United Kingdom that have been chosen to participate. The main functions of the system are currently due to launch in early 2018, and if successful, is likely to herald a new and important information and traffic management tool for public transport operators and supporting agencies across Wales and the United Kingdom. First Cymru has invested a significant sum to develop and install the UTrack system to its services in conjunction with the replacement of its on-bus ticket machines, which will also allow for contactless payment on its services. The principal of the operation of Late Bus technology can be rolled out to all public transport operators who install the required equipment to their vehicles, but in this first instance, the application of these

improvements to First Cymru Bus Services would constitute an improvement to over 90% of bus services in Swansea.

The improvements proposed as part of this project would provide not only an immediate benefit to the public transport corridors within Swansea, but would also provide a test case for the effectiveness of these interventions both regionally and nationally. The successful use of these technologies may present an approach that could be replicated more widely within the Swansea Bay City Region, and particularly in the urban areas where the use of telematics is more common.

Sustainable Development Principle

The Well-Being of Future Generations (Wales) Act 2015, places a duty on public bodies to apply the sustainable development principle in everything they do, through the five ways of working. Please describe how you have followed the five ways of working in the development and appraisal of your proposal.

The Five Ways of Working

Long Term – please describe how you have considered long term needs. What are the impacts of your proposal on future generations? It is essential that the population of the City & County of Swansea moves to and embraces sustainable transport modes if it is to realise its development and population growth targets over the coming decades. It is acknowledged that the current road network is constrained by peak hour congestion, and this problem is certain to worsen unless there is a decided switch to active travel and mass transit options.

The development of the Swansea Strategic Transport Model over the past two years has provided an invaluable tool to provide a step-change in the understanding of traffic movements within the City & County of Swansea. The model has been used to not only assess the baseline traffic trends, but also to consider the forecasted growth and changes in traffic over the coming decades. The model similarly includes a multi-modal matrix which is used to assess public transport provision within the Swansea Bay area. The model has been used to target the improvements proposed in this bid and the Council is therefore confident that these measures will provide not only an improvement to current traffic and public transport movements, but also for the growth in the coming years.

The improvement to these bus corridors will therefore be the first step in realising the necessary transportation capacity to cater for the growth that the city aspires to.

Prevention – please describe how you considered options to prevent the problem from getting worse or occurring in the first

The City & County of Swansea has delivered many schemes in recent decades which provided capacity for the private motor vehicle on a 'predict and provide' basis. It is widely recognised that this is an unsustainable policy and the use of public transport and active travel modes are essential to alleviate the negative consequences of peak hour congestion and realise capacity within the constrained road network.

place.	A shift to sustainable transport modes is considered to be essential in ensuring sustainable development and ensuring sufficient levels of network capacity.
Integration – please describe how you have considered the wider impacts of your	The project is seeking to integrate a number of modes to create the initial phases of an Integrated Transport System for the Swansea Bay City Region. The hubs identified in this bid will all integrate two or more of the following modes: walking, cycling, bus, rail, park and ride.
proposal.	The integration of these modes is essential to ensure a coherent network, which is able to cater for the complex journey demands of the local population; particularly when considered in the context of the substantial population growth projected in the Local Development Plan. A diversity of modes and journey opportunities is essential if the Metro concept is to be successful in displacing private motor vehicle traffic from the highway network.
Collaboration – please describe who you collaborated with and how, in the development and appraisal your proposal.	 The scheme will be the product of collaboration with a wide range of stakeholders and service providers including: The four regional Councils – City & County of Swansea, Carmarthenshire County Council, Neath Port Talbot County Borough Council and Pembrokeshire County Council; Local Bus Public Transport Operators; Arriva Trains Wales; Great Western Railway; Abertawe Bro Morgannwg University Health Board; Sustrans; Wheelrights (a local cycling campaign group). Swansea University
Involvement – please describe who you have involved and how, in the development and appraisal of your proposal	 Prof. Stuart Cole - in the preparation of the initial report; First Cymru - in the initial preparations for UTrack; Bus Operators – in the further roll-out of the system; UTrack Arriva Trains Wales - in respect of the information improvements needed at High Street Station; Abertawe Bro Morgannwg University Health Board - to discuss and agree the feasibility of improved information provision at Morriston Hospital and access control for the bus only route at the Singleton

site;

- Sustrans & Wheelrights in respect of the cycle enhancements planned for some of the sites;
- Regeneration & Planning colleagues.
- Swansea University in respect of access control for the bus only route between the University and the Hospital at the Singleton site.

SCHEME BUSINESS CASE

1. STRATEGIC CASE

The case for change, fit with policies and objectives.

The Case for Change

The City & County of Swansea experiences peak hour congestion across the highway network. This constraint is continually increasing, and whilst the current peak hour issues are problematic and require ongoing traffic management, the projected traffic growth, particularly in the context of the Local Development Plan, is such that the network is expected to experience increasing levels of delay in the coming decades.

Current Situation and Issues

What are the local and wider issues that this scheme will address? Include baseline data where available. What will happen if no action is taken?

The Council commissioned Arup during 2015/16 to undertake the development of the Swansea Strategic Transport Model (SSTM). This was a comprehensive assessment which used the pioneering techniques of mobile phone data to collect large amounts of information regarding the movements of the Swansea residential and working populations. The SSTM led to several recommendations to ensure that the population and associated transport projections could be accommodated over the medium to long term. The most significant of these was the need to realise a major and particular shift to public transport.

Traffic congestion on the road network has been shown to damage the attractiveness of public transport to potential patrons. Recent research presented to the Wales Bus Summit 2017 concluded that if a bus journey were slowed by 10% as a result of traffic congestion, this would equate to an equivalent 10% reduction in public transport patronage.

The City & County of Swansea recently completed a commission to develop a Swansea Strategic Transport Model, with oversight from Welsh Government Officers. This exercise is being used to support the ongoing development of the emerging Local Development Plan. Amongst its many conclusions was the finding that travel in Swansea does not presently

operate with a typical radial pattern of movement, but rather there is a significant degree of cross-city movements. It was therefore concluded that a bus hubs approach at various outlying points would be highly useful in intercepting cross-city travel rather than requiring public transport users to travel in and out of the city centre to make connections to other services and modes.

The investments, which are proposed in this bid, will form the first part of important developments and expansion to address these issues for the City & County of Swansea.

The Late Bus technology is able to communicate with the telematics equipment by means of a wireless MESH. This is something that the City & County of Swansea has been using for a number of years to improve the resilience and management of traffic signals. The use of wireless communications eliminates the reliance upon third party wired connections, which are prone to failure and also allows traffic signals, which would otherwise be considered too remote, to be incorporated to the UTC. The traffic signals are therefore able to dynamically respond to increased and complex demands on the network. This scheme would increase the MESH network to allow Late Bus technology to be used expansively along bus corridors.

The UTrack system is being trialled in Swansea as one of two pilot locations within the United Kingdom; the other being Belfast. If the system is shown to be successful, the late bus technology, which allows traffic signals to respond to late running bus services, is likely to have a significant impact upon the way in which bus priority is managed across Wales and the United Kingdom. This is primarily because the costs of installation are markedly less than the costs associated with bus lanes and gates. Whilst it will not be able to completely replace the need for hard infrastructure in certain locations, the new technology represents a significant new tool for the management of traffic demand on ever increasingly congested road networks. The intervention is particularly invaluable in the Swansea context, where the road network is often constrained in its width and as such conventional

bus lanes and gates are often not feasible because of this. The use of late bus to modify the traffic signals provides an important means of provision for public transport priority where other measures are not feasible.

The schemes are all being constructed on land owned by the Council. Where schemes are planned for third party land, such as at Morriston Hospital, the Council has consulted with the appropriate landowners to ensure that they are supportive of these works being undertaken.

The deliverability of this project has been a key consideration in the preparation of this bid due to the shorter timescales available. The project greatly benefits from largely not requiring changes to hard infrastructure or civil engineering, and utilises equipment that can largely be procured and installed in a short amount of time.

The scheme will deliver a range of physical and digital assets as improvements to these important bus corridors.

Scheme outputs

What are the specific outputs that the scheme will deliver? (objectives and outcomes should be set out in the next section)

DIGITAL ASSETS:

- UTrack System: to deliver the real time bus tracking for reliability improvements and public transport information;
- UTC Adaptor to allow the use of the UTrack information to provide Late Bus priority at junctions across the highway network.
- MOVA will be installed at seven junctions to improve the dynamic management of traffic at these locations.

PHYSICAL ASSETS:

- Wireless MESH expansion at 20 junctions
- 9 Bus Interchange Hubs:
 - o 7 Bus Shelters

	 11 Electronic Passenger Information Screens 3 Sheltered Cycle Parking Units Information boards and wayfinding
Local Transport Plan Please indicate where this scheme sits in the Local Transport Plan and any other related policies and plans.	The scheme is listed within the Local Transport Plan for South West Wales. Within the programme of schemes for the City & County of Swansea, the scheme is listed as a 12 th priority. This ranking (from 2015) is more reflective of the state to which the scheme had been developed at the time, rather than of the importance ascribed to this investment. The concepts for the bid are products of: • 'The Regional Network Strategy for South West Wales' (2014) • 'Swansea Strategic Transport Model' report (2016) • 'Swansea Public Transport Hubs – bus hubs, bus passenger generators – Ministerial Scoping Study' (2016).

The Well-Being of Future Generations (Wales) Act 2015, places a duty on public bodies to seek to achieve the well-being goals and objectives in everything they do. With reference to the Well-Being of Future Generation goals and objectives, outline below how your scheme meets the Local Transport Network Fund objectives:

http://gov.wales/docs/dsjlg/publications/150623-guide-to-the-fg-act-en.pdf

Well-being objective	Local Transport Network Fund	Objectives	Scheme objectives/outcomes			
h sustainable and icture	A prosperous Wales • Investment that will improve public transport journey time reliability	The improvement of bus corridors around Swansea will not only improve the access to the economic centres, but will pave the way for a greater level of integration, not only of different transport modes but also between existing per transport services – allowing greater interconnectivity and accessibility to key destinations within the Swansea Bay area. These investments will serve to improve affordable access for those most disadvantaged by lack of access to services and employment opportunities.				
Connect communities through sus resilient infrastructure	A healthier Wales Investment that will Improve air quality	The scheme will work to integrate sustainable transport modes with mass public transport. This will serve to encourage greater levels of active travel for utility journeys, which will not only meet the aims of the Active Travel (Wales) Act (2014), but also result in healthier lifestyles for those living and working within the City & County of Swansea. The integration of modes to include walking and cycling and improve opportunities for walking and cycling will also serve to normalise the use of these modes.				
Connect	A more equal Wales	surround Swans networks are es	es are a key component in connecting the communities which ea to its economic heart. The public transport and active travel sential in promoting equality of access to key jobs and services; nose who are economically disadvantaged.			

A Wales of cohesive communities

 Investment that will help connect communities and enable access to employment, education and key services The bus hubs will promote improved integration between modes, and together with bus priority on key corridors, signifies the first steps in drawing together a network of transport options to begin formulating and realising an Integrated Transport System for the Swansea Bay City Region.

2. TRANSPORT CASE

Describe the social and cultural, environmental, and economic impacts of the scheme including a value for money assessment. Please include any other relevant impacts.

Social and Cultural Impacts

Summary of the social and cultural impacts of the scheme, who is affected, how, and key qualitative/ quantitative supporting evidence. Please consider the following impacts: physical activity, journey quality, number and severity of accidents, security, access to employment, access to services, affordability, severance, option and non-use values.

The Swansea Strategic Transport Model (SSTM) projects that journey times on the main transport corridors into and out of Swansea are likely to increase by up to 4 minutes in the peak hours over the coming years. This burden will be borne by the many thousands of vehicles on the highway network, causing a significant economic penalty to the City.

The SSTM therefore recommends that greater use of public transport, walking and cycling is required in order to offset this negative impact.

Environmental Impacts

Summary of the environmental impacts of the scheme, who/ what is affected, how, and key qualitative/ quantitative supporting evidence. Please consider the following impacts: noise, air quality, greenhouse gases, landscape, townscape, historic environment, biodiversity, water environment.

The outcomes from this project will be to displace users from single occupancy private motor vehicles and into mass transit or active travel alternatives. This shift will serve to bring about a number of environmental benefits including reductions in noise and air pollution, greenhouse gases and reducing the negative impact of congested traffic on the landscape and townscape.

Economic Impacts

Summary of the economic impacts of the scheme, who/ what is affected, how, and key qualitative/ quantitative supporting evidence. Please consider the following impacts: journey time, journey time reliability, transport costs, accident costs, productivity, local economy, land, capital costs, and revenue costs. Include evidence on Transport

The bus hub and network enhancements will improve access to local services and employment opportunities.

Affordable access to employment can be expected to have a profound impact upon those who are currently affected by transport poverty, and are therefore unable to access key services and employment opportunities. The establishment of transport hubs, will not only improve the provision for customers using public transport, but

economic benefits e.g. BCRs and on wider economic benefits including jobs created. Explain what steps have been taken to ensure costs have been kept as low as possible and to quantify how the funding requested will represent value for money in terms of the Local Transport Network Fund Outcomes.

also promote the increased investment into the public transport system by the private transport operators.

The improvements will also serve to:

- Improve access to health services at the City's two main Hospitals, Singleton and Morriston and the City's two Universities.
- Improve public transport journey time and reliability.

3. DELIVERY CASE

Can the scheme be delivered?

A project plan identifying timelines for activities and key milestones must be provided for each scheme appropriate to the scale, complexity and risks associated with the scheme. Where key stages / milestones have been reached / completed, give date when reached where applicable. As a minimum, information should be provided on design; timing of statutory processes/planning consent, land acquisition, procurement, construction, scheme opening and completion where these apply to the scheme.

Information on risks to delivery and mitigation measures in place or proposed must be included.

The deliverability of these schemes has been a foremost consideration in the preparation of these bids given the shorter timescales. The project greatly benefits from largely not requiring changes to hard infrastructure or civil engineering, and utilises equipment that can largely be procured and installed in a short amount of time.

See attached programme plan.

4. FINANCIAL CASE

Financial expenditure profile

£000s, Outturn prices (gross of grant / contributions shown separately below)

	Pre 2016/17	2017/18 projected	2018/19	2019/20	2020/21	Later	Total
Surveys							
Design		50					50
Land Purchase							
Accommodation Works							
Construction		915					915
Project Management		30					30
Monitoring and Evaluation		5					5
GROSS TOTAL		1000					1000
Match funding amount, percentage contribution and funding source(s) (insert name of organisation)							
NET TOTAL		1000					1000

Quarterly Expenditure Profile

(Expenditure should be planned as early as possible in the financial year to ensure confidence in a full spend. Expenditure planned for Quarter 4 should be limited to minimise the risk of underspend)

	Forecast FY2017-18 Expenditure (in £000s)					
	Quarter 1	Quarter 2	Quarter 3	Quarter 4		
Surveys						
Design		40	10			
Land Purchase						
Accommodation Works						
Construction		20	380	515		
Project Management		10	10	10		
Monitoring and Evaluation				5		
GROSS TOTAL		70	400	530		
Match funding amount, percentage contribution and source(s) (insert name of organisation)						
NET TOTAL		70	400	530		

5. COMMERCIAL CASE

How will the scheme be procured? What is the number and experience of the likely suppliers? What are the key contractual arrangements, what is the contract length?

The provision and installation of the bus shelters will be undertaken by Clear Channel as the Council is currently contracted with them for bus shelter provision and maintenance within the City & County of Swansea.

The works to install the electronic passenger information screens will be awarded to 21st Century Technology PLC as they are currently contracted to service and maintain existing infrastructure of this nature within the City & County of Swansea and Neath Port Talbot County Borough Council.

All other items will be procured by open tender using the Sell2Wales portal.

The City & County of Swansea will work with First Cymru via its Quality Bus Partnership Agreement to obtain and share the data required in order to allow the operation of the systems described in this bid.

MONITORING AND EVALUATION

How and when will you measure if the scheme has been successful? Post delivery monitoring plan, data collection, and relevant targets?

Monitoring and evaluation of the project will be supported by a number of survey methods these will include:

- Qualitative bus surveys
- Bus network analysis and review of service coverage
- Measurements of 'total delay' on the network for public transport and other vehicles can be ascertained by the Swansea Strategic Transport Model.
- Automatic Traffic Counters to determine changes in traffic volume and class trends.