PROJECT DESCRIPTION – PINGELLY VIRTUAL VILLAGE

Pingelly Somerset Alliance (PSA) aims to ensure that people will no longer need to worry about being lonely, becoming frail and dependent on care and support, having a disability, or becoming isolated if they choose to live at home in Pingelly and surrounding districts until the end of life. PSA will create a Pingelly Virtual Village to enable residents to ‘Age-in-Place’. Pingelly's Virtual Village will become a demonstration model for ageing-in-place in rural and regional Australia.

This project will build on existing infrastructure and services to better utilise these and the existing networks and informal connections within the community. It will build community capacity and put the technology and framework in place for Pingelly Virtual Village to support all members of the community to remain in Pingelly and to be connected, cared for and involved. The project will enable elderly residents and residents with disability living in Pingelly and surrounding districts to enjoy an enriched quality of life and remain in their own homes until end of life.

The Pingelly Virtual Village will create a concierge service, which will strongly advocate for members, promote healthy ageing and enriched quality of life across the ages and be a hub of information for aged and disabled people in the area. This concierge service will act like the centre manager for a lifestyle village; it will promote and support village activities, introduce intra-village support systems, contain the knowledge about the various services available and help to connect people to the services, infrastructure or people that they need to be connected to in order to support them. People will pay a membership fee to be part of the ‘village’ and this will provide them with one central place that will assist them to stay healthy and connected to events and people in the community.

The Pingelly Virtual Village will place a significant emphasis on the social requirements to support people to live well. It will ensure that isolation and loneliness amongst the elderly in Pingelly is significantly reduced, with the resultant increase in health and wellbeing. It will be a strong advocate for its members to ensure they retain control over their own decision making in respect to life choices, including through Advanced Health Directives (AHD). An AHD is a legal document that enables people to make decisions now about the treatment they would or would not want if they become unable to communicate their wishes. The village concierge will help people to prepare AHDs and will then ensure that all services they receive comply with the AHD, if the person becomes unable to verbalise their wishes.

The proposed Pingelly Virtual Village has some variances to the Village Hubs that have been developed in the USA, Sydney and Perth (See Section 2.3 Background), including that it will operate across a sparsely populated large rural area centred around the Pingelly area. The area to be serviced by the project is defined by those within the postcodes 6308 (Pingelly and Wandering), 6370 (Wickepin), 6309 (Popanyinning) and 6311 (Cuballing). For the purposes of this business case, this area will be referred to as either ‘Pingelly’ or ‘Pingelly and surrounds’. The PSA chose the areas around Pingelly as these are the postcode areas of the neighbouring communities that have no hospital or health service and look to Pingelly for services, such as grocery shopping and social activities.

The Pingelly Virtual Village will seek a broad membership of people of that will involve the whole community – men, women and children in various forms of membership, in
keeping with the concept of needing a whole village to keep people safe and secure in their own homes if they become frail or dependent on support.

The village will be funded through membership fees, member contributions and is also seeking funding from government, as it will actually save the government money, as demonstrated in the Cost Benefit Analysis for this project. It is intended that the project will demonstrate that a small amount of ongoing government funding for concierge services in regional areas will save them the need to fund infrastructure and other services that are far more costly. The project is a pilot project to implement the service and evaluate it to enable government to assess whether funding the service ongoing is best value-for-money for government.

Fees will be kept to a minimum to ensure all forms of membership are encouraged, not onerous and reflect the various forms of participation of individuals and family groups in the village services. The Pingelly Virtual Village will operate under the auspice of the PSA, with a paid concierge service to provide proactive, enthusiastic and well-informed services to members.

The Pingelly Virtual Village will collaborate with partners and agencies, local businesses, service providers and existing interest groups at the local level and provide a central role in advocating for and ensuring the supply, continuity, quality, and ease of access to essential support and services required to enable members to age well and continue to live a good life at home.

The Pingelly Virtual Village involves a number of components;

1. Concierge Service
2. Accommodation
3. Village Technology
4. Community
5. Regional Demonstration Model

The project will be governed by a Project Reference Committee, which will include representation from the University of WA (UWA) Social Care and Social Ageing Living Laboratory. The UWA Living Lab is the first WA member of the Australian Living Labs Network. Living Labs feature person-centred, co-design, and social innovation methodologies that bring together academics, industry partners and end-users (in this case older adults) to respond to critical issues. The UWA Living Lab has particular expertise in social ageing and diversity issues, including migration, cultural and linguistic diversity, and LGBTQI status, as well as formal, informal, professional, local, distant and virtual support networks.

The Committee will assist the PSA and guide them to ensure the project is implemented using a co-design methodology to ensure people are brought along, that the village is user-centred, innovative and systematically evaluates all the aspects of the Virtual Village model, including all the technology used, the models for home-based palliative care, the community workforce model and other aspects.

The Committee will ensure risks are mitigated and will work together to problem solve any issues that arise with enabling people to live quality lives at home until end of life in a rural community. This will ensure ongoing evaluation and evolving learning processes throughout the project. All of which will be documented to enable the lessons to be captured and built upon in the development of the Regional Virtual Village blueprint documentation, which will be used to expand the model into other areas of WA and Australia.
The Committee will be run by PSA but with the assistance of the UWA Social Care and Social Ageing Living Laboratory, due to their experience in managing Living Labs and undertaking evidence-based evaluation. The PSA (including the concierge staff member), WACHS, Silver Chain, government and other key stakeholders, will form the Committee and will be able to be drawn upon to make sure the project succeeds by being flexible enough to address any problems that arise. By forming a Living Lab, UWA provides the project with access to Living Labs around the world and their knowledge and research into cutting edge technology and best-practice methods for community building and ageing-in-place. UWA also brings their expertise in law and technology to ensure that all aspects of the project are implemented in a considerate, ethical manner which respects an individual’s right to self-determination.

1.1.1. Concierge Service

One of the key issues facing elderly and disabled people, especially in regional areas where there are very few service providers, is a lack of knowledge and awareness about what is available and how to access services. Whilst the funding and services that a person needs to be able to live at home might be available, if people are not aware of them then they are unable to advocate for or utilise the services and this can lead to poor health and wellbeing outcomes, which result in the person deteriorating earlier than if they had benefitted from the services.

The community survey completed in 2017 as part of the Shire of Pingelly’s Age Friendly Community Plan found that 98% of people wanted to retire in Pingelly and that “care at home is a clear consumer preference as age related needs increase”, it also found that there is a lack of community awareness of options to assist people to stay at home\(^1\). This is supported by the findings of the interim report of the Royal Commission into Aged Care Quality and Standards.

The Central East Wheatbelt Aged Care Regional Solution report was commissioned to develop clear direction to develop and implement infrastructure and service level solutions to address the urgent need for aged care accommodation, services and facilities in the region. The needs study in this report found that “there is a low level of awareness in the community about the community aged care options and in particular, the higher levels of care that might be available”\(^2\).

So, whilst there are significant government-funded initiatives to help Australians to age-in-place and to support disabled people to be included in their community, the information and understanding about these initiatives is not filtering into small regional communities. The Pingelly Virtual Village will act as a one-stop-shop for healthy ageing and service information and needs for the people of Pingelly.

To do so, the Pingelly Virtual Village will start with two paid, part-time staff members: one to run the concierge service, which is intended to be an ongoing role that will grow to full time and the other will be a short-term role for a period of 24 months. The short-term position will be a Project Officer position and this person will be responsible for setting-up the village and managing the initial connection to service providers and

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1. Shire of Pingelly Age friendly Community Plan, March 2017
2. Central East Wheatbelt Aged Support & Care Regional Solutions, Page 13
government, advocating for services to become available locally, obtaining the required approvals and establishing various models of accommodation options. This position is further explained in below sections 2.2.2 Accommodation and 2.2.3 Village Technology.

The concierge service will commence with one paid, part-time staff member located in a host organisation – initially the Pingelly Community Resource Centre, which is where most of the community currently come for information and assistance. It is intended that, as the village grows, the concierge would be established in its own office space and would be a rostered, on-call position to cover standard working hours in the office and on-call monitoring for village members and of the village’s technologies 24-7.

The concierge staff member will be trained in the intricacies of the NDIS, WACHS and the various Commonwealth aged care services, as well as all the services offered by local and regional service-providers. They will develop a network of service providers and government agencies to enable them to be a hub of information about the aged care and NDIS system and also a conduit; a linkage between the person with the need and the people who can provide for that need. The concierge staff will assist village members to access programs like the Australian Government’s National Aged Care Advocacy Program (NACAP). NACAP provide free, confidential, and independent advocacy support to older people (or their families or representatives) receiving or looking to access government-funded aged care services. Whilst NACAP is an excellent service, with representatives in each state of Australia, they cannot be represented in every small, regional town. As such, knowledge of their services and how to access them is limited and the concierge staff would rectify that in the Pingelly area. The concierge staff is not intended to duplicate services such as NACAP, which already exist, but it is intended to increase the knowledge and use of those existing services.

The UWA Living Lab will collaborate with the Pingelly Virtual Village to pilot an integrated set of technology resources to support the concierge staff to perform this role. This will include utilising digital platforms GENIE (Social Network Analysis Tool) and SPARK (digital connector/marketplace). Further information on these technologies and their role in this project are provided in Section 2.2.3 Village Technology.

The concierge staff will also have an in-depth knowledge of local organisations, volunteer groups and interest groups, supported by the GENIE tool, and will operate an intra-village volunteering service supported by the SPARK app. They will facilitate a village buddy system and intra-village support system where people can exchange services with other members; it will be ‘ask a member first’. This will enable members the satisfaction of helping their fellow members and, at the same time, deliver services to members without them (or government) needing to pay for that service.

For example, Janet loves gardening but has moved into a home with only a small garden due to her husband, Greg, being frail and needing a home with less maintenance. Janet can offer her services to other village members. In exchange, she may ask for the member to come to her house and visit with Greg while she gardens and then runs her own errands. This provides Janet with some respite time and the other member with their gardening, all without the need to use government funded CHSP services or requiring the member to pay.
The concierge staff would facilitate this intra-village support service by knowing the needs of the members and connecting them with someone who could meet their needs, or by using SPARK app technology to put out a “call” for that service to the members. The concierge will also help the members to create their own activities and events. For example, a book club, walking club, day trip to Perth for Christmas shopping. The members will take the responsibility and will run/manage the activity, but the concierge will support them to find the resources they need, plan the event and/or market it to other members. Some of these activities will be cost neutral, whereas others will require members to pay to participate.

The concierge will also ensure that the Village activities will, wherever appropriate, link into current services and not duplicate existing activities in the district, which the GENIE tool will assist with. It is expected that the activities and events run by members, with the support of the concierge will include:

- Physical activities – such as walks, exercise classes (strength, balance, stretch and tone), sporting activities, yoga etc.
- Cultural – such as talks, theatre outings, Tai Chi, cultural learning e.g. learning a language, food preparation etc.
- Lifelong learning – such as computing, art classes, photography, share investment group, gardening groups, Book Club, cooking, music and singing, travel and sight-seeing
- Social – such as men’s dinners, wine tasting, coffee mornings, new members orientation cocktails, Christmas street parties, cinema and theatre parties, BBQs for a cause i.e. to raise funds for a worthwhile project, Happy Hours, Quiz nights

The concierge will also be an intergenerational social connector; making people aware of events that are occurring so that all people can be included in the events and also feeding back to event organisers and community organisations what kinds of events the more frail or disabled community members would like to attend and what could be done to make the events more inclusive.

The concierge service is not a service provider but acts more like a cruise director or centre manager of a retirement village; they connect and advise. They also monitor and check-in on those members of the village who need that support. When a person initially signs up to the village, the concierge staff will complete an ‘audit’ with the member using the GENIE tool. This audit will map all the member’s current social connections to determine if they need further support. It will also ensure that the member is accessing all the services they need and are entitled to. If they are missing services, the concierge will assist them with the process to access or connect with the services they require. The staff will also get to know the person (if they do not already know them) and what their interests and activities are. As part of the initial sign up process, the concierge staff will talk with the member about the level of support they are seeking. This may include the implementation of an agreed system with the member that would trigger an alert for the concierge to contact their support person in the case of any concerns. This could involve a referral for a clinical assessment.

The concierge will also be a central point for support people to feedback any concerns about a person, such as a disruption to their normal routine, a change in their demeanour and so on. For example, village members may notice that another member ceases coming to book club, a member who visits that person may notice that their normally tidy house is very messy or the food in their fridge is out-of-date. The
concierge staff will collate these reports and, if there are a number of them or they are particularly concerning, can contact the member to check that they are alright and if there is anything they need. SPARK app technology will support this service.

If a person has agreed, the concierge staff will also monitor any smart home or other technology that is implemented to enable that person to live at home and will contact them or raise an alarm if certain, pre-agreed triggers occur.

1.1.2. Accommodation

A key component to enabling people to age-in-place is the provision of suitable infrastructure along the ageing journey; from being able to remain in their own home with limited assistance, through to palliative care at home or elsewhere in the community.

The PSA already owns or manages various community accommodation options. These are an eclectic group of units or homes to meet many different needs with a range of 1, 2 and 2.5 bedrooms, and features that make them age, disability and dementia friendly. Most are in a precinct close to the Pingelly Health Centre, Pingelly Recreation and Cultural Centre (PRACC), swimming pool, gym and oval. Almost all available accommodation is currently utilised with a waiting list of people with expressions of interest to move into a PSA managed home. See Section 2.3 Background for more information on PSA's accommodation options.

Additional shire-owned land is available for a further 21 units, as part of the existing Pingelly Aged Appropriate Accommodation development. This development currently includes 5 units, which were funded through the WA Country Health Service (WACHS) with Royalties for Regions funding. It includes a dementia friendly garden and land around the garden for a further 21 units to be constructed. PSA has current plans investigating funding options to construct these units. However, the 5 existing units are all full, which indicates that there may be the need for further units to be constructed in the future.

Although accommodation infrastructure for the aged or disabled already exists, there are four areas under accommodation that are not provided for in Pingelly and require innovative ways to be addressed. Whilst these areas of need are catered for in the metropolitan area, the smaller population numbers and economies of scale mean that regional areas need to look at alternative ways of providing for a person’s needs. The four areas of need are:

- Respite options
- Dementia friendly accommodation
- Palliative care
- Culturally appropriate accommodation

The Pingelly Virtual Village proposes community-led solutions to address these areas of accommodation need.

Respite options

The quality of a person’s life is greatly assisted by the physical and emotional capacity of their carers. Due to the smaller population size of towns like Pingelly,
there are no respite service providers who will take care of a person without the need to be taken out of town, which can be hours away to Perth. This can be emotionally traumatic for the person and physically draining for the carer needing to travel so far. In many cases, the carer is elderly and may not be comfortable travelling such long distances in order to have respite.

A place-based solution is needed so that people needing respite can still remain connected to their community and go to the men’s shed or their craft group, continuing with their normal activities while their carer is having a break. This both ensures the person’s continued connection and social inclusion and removes the guilt felt by the carer who knows that while they take a break the person they care for is not isolated and away from friends and home. Without the option for respite in the area, Pingelly carers rarely receive the break they need, leading to burn-out and declining mental health and wellbeing. This results in the person they care for being institutionalised earlier than may have been necessary.

Given the population size, it would not be economically viable for any service provider to establish a respite facility in Pingelly. As such, an innovative solution is required to provide the services needed by carers in the area. The Pingelly Virtual Village concierge staff, with the assistance of the Virtual Village Project Officer, will, through their engagement with all Virtual Village members, work with the member and their carer to create individual solutions.

The concierge staff will work with the member to understand what they want and what services and supports they would need to enable that to happen. In the first 24 months of the village, many of these supports will be new to the Pingelly area and will need to be established. They will require approvals, training and liaison with service providers and government agencies to put them in place. The Project Officer will undertake this role. They will coordinate different models and the various approvals needed to utilise those models and will trial them with the individuals.

An example of a proposed model includes using the spare bedroom of a house owned by a community member and turning it into a respite room. Police checks and other necessary approvals would be coordinated and organised by the Project Officer and the homeowner to enable them to offer respite accommodation services in their home to Pingelly Virtual Village members. Arrangements will also be coordinated to ensure the appropriate provision of respite care, either by the homeowner or by other community members or a service provider like Silver Chain. During the first 24 months the Project Officer will both undertake the work and document the processes and procedures to enable them to be more efficiently completed the next time, and to be included in the Regional Demonstration Model documentation.

One other option is for PSA to work with service providers, such as Silver Chain, to source a small amount of funding to turn one of the current units the PSA owns into a respite unit. PSA would continue to own and manage the unit and Silver Chain would be able to offer respite services in Pingelly.

Example Scenario

Helen needs respite from caring for her husband and he does not wish to leave town. Helen is also elderly and is not comfortable driving long distances; she just needs a day each week to catch up on errands, rest and spend some time alone or with friends. Helen is a member of Pingelly Virtual Village so she contacts the village staff member. The staff member then contacts Silver Chain,
as the package provider for Helen’s husband. Silver Chain advise they cannot offer the respite as they do not have a place in Pingelly to do so. Helen rejects Silver Chain’s offer for Perth-based respite. The staff member searches the village membership database, supported by the GENIE tool, and identifies that Joy has a private house with a spare room and is willing to take Helen’s husband for a night. The staff member will then investigate what Joy would need to do to get herself and her house up to standard to be able to offer the respite service. The staff member would assist Joy through this process. Joy would then be listed on the membership database as an option for respite in Pingelly.

Through the project, the staff member would investigate a number of different models to ascertain what is involved in these innovative solutions, the cost and any barriers to delivery. This knowledge would be captured, and all models would be evaluated to enable them to be replicated or improved for other regional Virtual Villages. As a demonstration model, Pingelly Virtual Village will provide a wealth of knowledge to help government to address any barriers to delivering these kinds of innovative solutions in small, isolated rural communities that reduce the cost of an ageing population and take the pressure off a system that isn’t coping with the increased demand. Through the Demonstration Model component of the project, these lessons and evaluations will be captured and able to be used by government and service providers in the future.

**Dementia friendly accommodation**

Alzheimer’s WA have agreed to assist the PSA to determine an array of assistive strategies to enable a person with dementia to remain living in the district. These will include house and garden design features, smart technology in the home, and considerations for personal monitoring.

The concierge staff will work with people in the very early stages of dementia to ensure an Advanced Health Directive is put in place to govern the support options that are used for them if their dementia develops. Community awareness and understanding of people impacted by dementia and staff training will also be addressed through this project, as detailed in *Section 2.2.4 Community.*

At the members request, the concierge staff will also coordinate the introduction of technology such as wristwatches. The watch would include a GPS tracking system to enable family or emergency services to locate the person if they get lost. It would also include a call button so the wearer can press the button for help and their family, the concierge or other village members will receive the call for help and the location.

Other technology that may be implemented if a person deteriorates and in consultation with the person, their AHD and their carer would include:

- Installing sensors in the home for the carer to know if a door or gate has been opened or if the person has gone into the kitchen.
- GPS alerts on clothing that will send a message if the person travels more than a specified distance away from the home base. An alert would go to the concierge service or family and it could also notify the village members, who have been trained under the Community component of the project to know what to do if they find the person and how to talk to them to help them.
• Altering existing accommodation to make it more dementia suitable for late stage dementia sufferers. For example, the PSA managed accommodation could have an electronic field installed around a certain unit to alert carers and the concierge staff when someone leaves the unit.

Whilst the technology utilised will depend on the stage of dementia and the number of people with dementia in Pingelly, the concierge staff would work with Alzheimer’s WA, the person and their family to ensure that the person can remain in their home, if that is their choice. When a person is first diagnosed, the village staff would have conversations with them about what solutions they would be happy with when they reach certain points in their dementia.

The inclusion of UWA as a project partner will ensure all solutions are ethical and passed through the UWA law and ethics area.

In addition to providing solutions to ensure there are suitable facilities for dementia sufferers and their carers, people suffering dementia will be supported through this project by the Community component, which ensures the community develops an awareness and understanding on how best to support a person with dementia, and provides a ‘workforce’ to meet the specific individual needs of each person diagnosed with dementia and ensure the primary carer receives frequent respite.

**Palliative Care**

The accommodation options available or planned for Pingelly will either be in-home accommodation or, if people prefer not to end their life in their home, in a dedicated unit provided by the PSA.

Support will be provided by the Wheatbelt Palliative Care Service to allow people to remain in their own, potentially modified, homes. The Wheatbelt Palliative Care Service is an existing, mobile service operated by WA Country Health Service (WACHS), across the Wheatbelt region. The Wheatbelt Palliative Care Service provides comprehensive nursing and allied health care in collaboration with the local medical practitioner based on the unique needs of the patients, their carer and family when facing a life limiting prognosis, including:

- assistance with care coordination
- symptom assessment and management
- addressing emotional and social concerns
- providing quality care for those approaching the end of life
- assistance with clinical decision making
- providing equipment
- bereavement support

This aligns with the Commonwealth’s policy shift over recent years to ‘ageing-in-place’ and the recognition of the need to keep “people out of health and residential facilities for as long as possible”.

This project will help to coordinate palliative care in Pingelly, with the intention being to enable people to remain in their own home until end of life through the

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3https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/Publications_Archive/archive/agedcare
modification of the home, provision of specialized equipment and the coordination of existing service providers and/or training of family members/carers to attend the person.

However, whilst most people will opt for staying at home with in-home support for end of life, some members of the community have indicated that this is not always appropriate for cultural or personal reasons. Conversely, their home may not be suitable as it may be multi-level, have young children in the home or various other reasons. It is important that a person is able to choose where they end their life. Whilst they may not want to die at home, most people would still prefer to be able to die in their community, surrounded by family and friends who are easily able to visit them.

Taking a person out of Pingelly for palliative care means that the person can be hours by car from their community and loved ones. They are usually only visited by immediate family members, who are limited in the time they can visit due to work and other family/life commitments. Visiting is a large commitment when the round trip takes hours, rather than minutes. In addition to significantly restricting the number and frequency of family and friends' visits, the person is also not able to be taken to places from their childhood; the farm they spent their lives working for, the main street of town that they know and love. When a person has committed their whole life to a place, it is where they want to spend their final days.

This project will work with people going into palliative care and their families to provide for their accommodation needs in Pingelly. If this means modifications to their home, then the Pingelly Virtual Village concierge staff will assist the person to arrange the modifications and the necessary visits from the Wheatbelt Palliative Care Service or training of their family to provide the care needed.

Where a person would prefer not to end their life at home but does not want to leave Pingelly, the PSA would consider options, such as modifying existing units managed by PSA to be repurposed for palliative care, or using a dedicated area at Somerset House for both the person and the carer to stay. This would not be turning PSA units into a palliative care facility but would be about creating a home-away-from-home where family and carers can come to look after a person as they die.

PSA has mobile beds that can be set up in the person's home or in a PSA unit to enable palliative care to be provided. Currently, Pingelly is not able to have some necessary services delivered at home, such as IV treatment and this means that community members are forced to leave town at a time when they need to be surrounded by loved ones and in the place they have always lived. Despite the fact that there is a Wheatbelt Palliative Care service, Silver Chain are able to administer home-based IV and the Pingelly GP has indicated a willingness to conduct home visits, the government approvals for this to occur have not yet been established in the Pingelly area.

The coordination of these services needs to occur to enable people to remain at home in the end stages of their lives. The Project Officer hired under this project will undertake that coordination and ensure the approvals are in place. An independent facilitator is needed to undertake this work as families are too emotionally involved, too busy and do not know the system enough to undertake the coordination and arrangements to enable home-based palliative care to occur. The Pingelly Virtual Village Project Officer would undertake this work on their behalf; they will advocate
for the person and their family to determine what the person/family want and to organise to have it delivered to the person.

The village staff member is not providing the clinical or support services, and in most cases these services would currently be available if the coordination, knowledge of what services are available and the connection between services and the person were provided. However, families are not aware of what is available and how to arrange services. As such, when they are told their loved one needs to go to Perth, they accept that advice. With the creation of the Pingelly Virtual Village, the family would be able to use the village staff to help them to navigate the system and services to be able to keep their family member in Pingelly until the end of their life. The staff member would arrange for the person’s home, or another home-away-from-home in Pingelly to be set-up so the person does not need to leave town.

**Culturally Appropriate Housing**

Pingelly, as with many Wheatbelt towns, has a large Aboriginal population. The population of Aboriginal and/or Torres Strait Islander people in the Shire of Pingelly at the 2016 Census was 12.4% of the population compared with 2.8% across Australia.

Consultation with Pingelly Aboriginal families has indicated that, when a loved one is dying, they like to gather their extended family and have everyone together. However, many have stated they would feel uncomfortable with their children running around and extended family constantly moving in and out of the house if they are near other PSA aged care housing, or indeed too close to any other homes. They would feel restricted and inhibited by respect for the neighbours.

Currently PSA does not have any units that would enable large extended families to gather with a dying relative without disrupting other tenants/-neighbours. Whilst this project does not propose to purchase or build any additional accommodation, the staff member hired through this project will conduct further consultation with the Aboriginal community to determine what is needed, identify potential funding sources if additional accommodation on the fringe of town is seen as necessary and work to making that project a reality by preparing a project plan and applying for funding.

1.1.3. Village Technology

In order to enable the Virtual Village to function effectively and at low cost, technology will be implemented as a part of this project. Technology solutions will be used to assist as we wrap our community around our people who need support to stay in place. All technology component parts must be able to seamlessly interact for ease of operation.

The project will develop and maintain community digital capability and literacy, use technology to enhance social interaction, and build and maintain the technology requirements for the operation of the Virtual Village.

This component of the project includes two sub-projects to:

1. enhance the digital capability of older people in Pingelly to reduce their isolation and enable them to engage better with the Virtual Village and
2. provide the technological platform for the Virtual Village to operate

The sub-projects will be delivered in partnership with the University of Western Australia, who have been involved in the planning of the Pingelly Virtual Village.

Digital Literacy

Age Discrimination Commissioner, Susan Ryan, has characterised the social and economic consequences of the relative disadvantage experienced by older Australians in using the internet as a form of age discrimination. The Australian Human Rights Commission has identified that older people’s lack of digital citizenship limits their ‘full inclusion’ in accessing information and in making independent decisions about their lives. Digital citizenship is particularly important to sustaining support networks in remote communities like Pingelly, which are critical to wellbeing.

This sub-project aims to support digital literacy learning among Pingelly residents by:

- Delivering a minimum of two 6-week programs per year. These programs will form intergenerational ‘buddy’ partnerships between younger Pingelly residents with competencies in computing and older residents who would like to increase their abilities with computers. The concierge staff will communicate and market the program to recruit participants. They will also approach people they know who may be struggling to use digital technology in their lives and those people who have indicated they are competent and may be willing to assist. The program will be tailored to the skill level of the learner and will help them to participate in social media, videoconferencing/Face Time calls, gaming and accessing the knowledge available on the internet, as well as the social side.
- Running at least 4 workshops in the first year and 2 per year thereafter, as well as individual training sessions to upskill all virtual village members in the use of the SPARK mobile application (see below Virtual Village Technology for more information on the app). This will ensure all members are able to utilise the app to its full potential.
- The PSA will also partner with the University of WA (UWA) to run a digital literacy program in Pingelly. This program will deliver digital literacy learning to help overcome older people’s resistance to new technology by implementing a learning through practice approach with older people engaged in co-designing technology and improving their digital literacy simultaneously. The digital literacy programs have been trialled successfully in Perth by the UWA Social Care and Social Ageing Living Lab. The PSA has prepared an application to Lotterywest for funding to run this program with UWA. If successful, the digital literacy program will enhance the programs run through this project, but if the Lotterywest funding is not successful, it will not impact on the ability of this proposed project to deliver its outcomes.

The concierge staff will also run additional digital training and workshops, as identified as necessary by Virtual Village members. For example, if a number of members identify that they would like to learn how to use Pinterest or Facebook, the concierge staff would contact any person who identified themselves as computer-savvy and

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willing to help village members through the skills audit (See Section 2.2.4 Community), or put out a call on SPARK and request they run a session at the Community Resource Centre. Conversely, if there is no-one available to assist, the concierge staff may run a session themselves or apply for grant funding or sponsorship from a local business.

Virtual Village Technology

The technology to be implemented to enable the village to function includes a membership database, the GENIE tool, the village website and the SPARK mobile app, as well as individual smart home and dementia friendly technologies that will be client specific. PSA will be trialling leading-edge technology in the home for people and families willing to use technology for enhanced peace of mind and quality of life.

One of the first tasks of the project will be to purchase Client Relationship Management (CRM) software to be installed on the concierge staff members' computer. This software will:

- enable membership details to be securely stored, including any directions from members, such as their Advanced Health Directives, instructions on who to contact in an emergency and the members' preferred method of contact
- store details of service providers, government agencies, funding & subsidies available and registered local support businesses
- ensure regular contact is made with each member through a client relationship reminder system
- track the preferences and participation of members so the concierge can recommend an activity the person may like
- manage the payment of membership fees and participation fees for activities
- record any concerns raised about a member, feedback or complaints about a business/service provider

The computing system purchased for the village staff will also enable them to be set-up as recipients of smart home monitoring data, if the member chooses for this to occur. The concierge will then be able to monitor that technology to ensure the safety and wellbeing of those members.

In the early stages of the project, the Project Officer will project manage the establishment of a Virtual Village website, which enables the village services to be delivered. Once established, the website will be maintained and updated by the concierge staff member on an ongoing basis. The website will market and communicate upcoming events and activities for members to join, provide information about the intra-village support services that are available or being sought and enable people to make a booking with the concierge staff. The website will also contain information about services and vetted businesses and suppliers, as further detailed in Section 2.2.4 Community.

The GENIE tool is an online tool that has been developed to help people visualise and think about the important relationships around them (family members, friends, acquaintances, healthcare professionals, local groups, pets). It has been designed by social workers and health implementation workers to provide information about all
the support services and interest groups in the area, as well as mapping out each member’s demographics, interests and social connections.

Upon signing up to the village, the concierge will walk each member through the tool, with data being saved in the GENIE system and also exported to the Village CRM. First users are guided through a process to map and reflect on their social network, then GENIE uses a short questionnaire to identify enjoyable activities. The GENIE tool generates a visual representation of the member’s support network. The concierge can then discuss with the member if they would like to, or need to, increase their network and how this might be achieved given their interests and those of others in the village, as well as groups in the area. The tool will generate recommendations, such as joining a particular group, or connecting with a particular person who has the same medical issues or interests, depending on the permissions that member has given to being contacted. The GENIE tool is already in circulation and will be tailored to Pingelly. During this pilot program, UWA has arranged for the PSA to use the existing South Hampton server and license. If the village is to continue and be expanded to other regional areas, a new server will be required.

Key to the functionality of the village is the SPARK mobile application. SPARK was developed by UWA’s Dr Lukasz Krzyzowski through users’ requirement research and co-design to support the digital platform creation required for the Pingelly Virtual Village. SPARK takes into consideration all the relationships in an individual’s social support network and facilitates intergenerational connectivity. The app sparks new social relations and consolidates existing support networks through mutual help, learning and understanding. SPARK activates ‘hidden’ local support networks through ‘little favours’, such as delivering groceries or sending a letter. It is a digital marketplace where a member can request assistance, such as needing someone to change a light globe or pick up a parcel, and other members can respond with an offer to complete the requested task. It also enables social connections with people being able to invite other members over for a coffee or suggest a meeting at the local café with any other members who are not busy.

The user-centered and co-design approach incorporates individual (specific) requirements and builds a model of social technology: where technological innovations do not replace ‘offline’ interactions but spark new social relations and strengthen collaborative communities.

The app can be used to send a message to all other members, or it can send targeted messages to a few people or just one person. It can also be used to message the concierge staff. The app will also be marketed as being able to be used by people to provide feedback to the concierge if someone has concerns about a fellow member. For example, someone who is regularly asked to pick up a members’ medicine may be concerned that they haven’t been asked to do so in a while; a member who visits with a friend may notice that they weren’t eating and did not appear to have much food in the house. These reports will be collated in the CRM system and can be followed up by the concierge informally or the concierge may contact a family member or service provider, depending on what the member has previously agreed should occur in that situation.

The SPARK app can also be used by members to send feedback about a business’s service, if it was particularly good or if they had a complaint. The concierge will receive
all these reports and can provide advice to members about which business has been recommended by other members.

All village members will be assisted to download the app onto their phone or computer or will be assisted to obtain a smartphone if they do not have one. They will be trained in its use as part of the Digital Literacy component of the project and the on-boarding to the village. The concierge staff member will act as a helpdesk for any issues with using the app.

The SPARK app is currently used in other locations, including its origin, Poland, but all other locations are cities. As such, UWA has tailored the app for a rural community with a smaller, more dispersed population. UWA will support PSA in the roll-out and updates of the app, including any changes that may need to be made based on feedback from users.

1.1.4. Community

"Pingelly is recognised as a welcoming, close-knit community...our people do and always will reflect our cooperative community spirit and the mateship that binds us"6.

The Pingelly Virtual Village is dependent on the community of Pingelly and surrounds embracing a new awareness, understanding and willingness to participate in strategies to assist people who require support to age-in-place in their local community. Previous surveys conducted by both the Shire and the Pingelly Community Resource Centre, as well as the high level of volunteerism in the community and the communities past actions demonstrates that Pingelly, and indeed most small, regional towns, can rely on the community to help deliver this village. The co-design methodology that has and will continue to be employed by PSA, with the assistance of the UWA Living Lab, will ensure that the community is brought along and feels a part of the project.

This project will ensure the wider community is engaged and part of the Virtual Village through a number of activities detailed below.

Build Awareness

The whole community needs to become aware of how they can assist older residents, or residents who may have advancing dementia to enjoy a quality life and stay safe in the Pingelly area. The community also needs to better understand a fellow community member’s disability, such as knowing how best to support a person with an acquired brain injury to stay living at home, be involved in purposeful activity and enjoy a quality of life, despite occasional unusual behaviour.

The community will also need to understand the concept of “ageism” and how it impacts on people. To achieve an example of world’s best practice in an Age Friendly Community, the community needs to be educated to counter ageist attitudes and beliefs, behavioural discrimination and formalised policy and practices.

The PSA has applied to EveryAGE Counts and the Age-friendly and Dementia-friendly Grants Program 2018 for funding to run an awareness campaign, which

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would be a pre-cursor to this project and will help to build awareness before the project commences. The campaign will:

- Engage Pingelly older residents, people living with dementia and their carers, service providers, local business, partner organisations (Silver Chain UWA etc) and other local organisation representatives in participating a series of co-design workshops to inform and create together the development, coordination, and evaluation of the campaign.
- Broadcasting positive ageing stories, posters, photos and videos developed together in a series of co-design community workshops. These outputs will be shared in local media outlets (e.g. local newspaper) including broadcast via social media and a dedicated webpage targeting increased views from the local community.
- Acknowledging and promoting outstanding contributions to the campaign by local people and organisations.
- Establishing an ongoing memory café for people with dementia, their families and carers in Pingelly and surrounding districts.
- Initiating and developing an annual program of a wide range of intergenerational community events through a whole of community consultative process.

Whilst the awareness component of this project is not dependent on funding be secured to run that campaign, the project will be boosted and more people will be engaged if the campaign is undertaken.

This component of the project will work to improve community awareness of how to support their older community members by:

- Using the initial Virtual Village marketing campaign to attract members and start an awareness campaign about ageism and the ways people can assist people to live in Pingelly to end of life
- Workshops offered to all new village members to educate them on how to support someone with dementia or someone who is becoming frail, as well as how to identify and counter ageism
- Information published in the Pingelly Times, on the village website and in an information pack for new members about supporting someone with dementia
- Concierge staff will meet with businesses in town to discuss how they could better assist older people or people with dementia
- Concierge staff to complete presentations at schools and other organisations, such as sporting club meetings, Men’s Shed and other community groups
- For individual people with dementia, the concierge staff will provide tailored training and support to neighbours, family and the person’s support team to help them understand how they can best support that person

The Western Australia Disability Services Act requires all Local Governments to develop and implement a Disability Access and Inclusion Plan (DAIP). The last plan by the Shire of Pingelly, which is applicable from 2015 – 2019 includes an ongoing requirement to improve community awareness about disability and access issues.7

In recent years, the Shire of Pingelly has focussed its efforts on the physical aspects of the community, such as accessibility and pathways. They have not had the

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resources to undertake more community awareness but have acknowledged its importance to creating an Age Friendly Community. The Shire of Pingelly Draft Strategic Community Plan 2020 - 2030 was adopted in July 2019. It states the Shire is,

"working to make sure Pingelly is an attractive place for older residents, by providing an age friendly community, with access to the services and accommodation they need. We are exploring innovative models for ageing in place, which will also provide benefits to the local economy, particularly through employment and increased demand for local goods and services."^8

Community Workforce

In discussions with Baptistcare, PSA were advised that the most common reason given by service providers as to why current services are non-existent, patchy or unreliable is due to the current intermittent work demand and thus the inability to guarantee a suitably reliable and permanent workforce. Without the workforce and therefore the services available, people need to go to other towns for services. This then reduces the perceived need in Pingelly and the amount of ongoing work required in the area to warrant a permanent, reliable service. However, the need is clear and there are large numbers of community members, in the towns or on the farms, who are unemployed or under-employed and could contribute to build a community-wide capability.

This project will enable the whole community to develop a capability to become a new concept of workforce. Some will be paid staff, others will be volunteers, neighbours and family. This workforce will be intergenerational, with adolescent residents and children also being encouraged to help. For example, by assisting with digital literacy as detailed in Section 2.2.3 Village Technology.

Skills and assets audit

In order to build a community-wide capability, this component of the project will commence with a skills and assets audit throughout the district. This audit will identify a baseline capability and also those residents who are willing to upskill their knowledge and capabilities. It will collate information about available skilled people across the profile of work needed, those interested in training to take on paid work in the project, those with knowledge, skills and interests they would like to offer to the virtual village on a volunteer basis and those willing to undertake tasks for individuals as volunteers, neighbours and family members.

ANECTO, an aged care services provider, undertook a similar community upskilling project in 2010 in Murrayville, Victoria. Like Pingelly, Murrayville had problems with being unable to source a reliable workforce and decided to upskill people already located in the town. They then completed similar projects in Dubbo, Broken Hill and other locations. Jason Minter, then National Manager of ANECTO, advised the PSA that the community upskilling "was very successful and led to partnerships with RTOs that then went on to provide the ongoing online and in person support to people getting cert 3 and cert 4 qualifications. These people evolved from volunteers

who subsequently sought qualifications and became paid workers." Mr Minter advised that the upskilling was able to be completed in around 18 months.

Residents will be made aware of the audit at the launch of the Virtual Village in Pingelly and through an initial marketing campaign, which will utilise local newspapers and social media. The PSA will conduct a survey of the community, in both online and paper format, which will be made available at the launch, in the local newspapers and social media, at events such as the Pingelly markets, at the Community Resource Centre and local Shire offices. The survey will also obtain baseline data to be used in the evaluation of the project. The survey will take place over a longer period of 2 months to obtain as many responses as possible. The survey will not be anonymous, and people will be advised that they may be contacted to be offered training or asked to provide assistance if they indicate they are willing to do so.

The survey will identify people interested in completing a Certificate 3 or 4 in Aged Care. Narrogin TAFE have indicated that they will deliver the course in Pingelly if more than 10 participants are enrolled. The PSA will use their contacts and the survey methodology to ensure that the local Aboriginal population are also encouraged to consider completing the course, if they would be interested in paid work supporting older residents in Pingelly. This is particularly important to enabling Pingelly Aboriginal people to remain in their homes and be supported to live healthy, quality lives until their end of life, as it will provide a cultural and likely a family connection to their paid carers.

Having a number of local residents with the qualifications required by service providers will enable the service providers to draw on them when individuals in the Pingelly area require care. The PSA has already been contacted by Baptistcare enquiring whether this part of the project has been completed yet as they were seeking staff to care for a local resident. However, the amount of work in the area was not sufficient to warrant relocating a staff member to Pingelly. This will also help to grow the economy of Pingelly and counter the high unemployment/underemployment rate of the area and the low socio-economic status by providing more employment opportunities for locals. Additionally, it can be expected that the workforce will be caring for their family, neighbours and people they may have known all their lives. As such, the issues with neglect and abuse seen through the Royal Commission would be greatly reduced. Through this village, Pingelly will be demonstrating a new approach to boosting a reliable local care workforce and a new approach to local care workforce development.

In addition to a paid workforce, the survey will also identify people willing to be part of the village to volunteer occasional or regular services. These people would be offered initial training sessions to build awareness of how they can best support people. For example, many people have told PSA they would be willing to visit someone for a coffee once a week to help counter isolation and loneliness but they don’t know how to offer that to someone they don’t have a strong relationship with. The information and training sessions would cover how to offer assistance and what kinds of assistance people find most valuable. Additionally, for people in town who may need special understanding, due to dementia or a brain injury, individualised training would be provided to volunteers.
Data from the survey will also be added to the village CRM database and GENIE tool to be used as needed. For example, members may identify that a cooking class once a month would be an activity they would like to start. The concierge would search the database and find that, on the survey, 3 people indicated they would be willing to teach cooking or help people with cooking meals. The concierge would contact these 3 people and seek their approval to provide their details to the members who were planning the cooking classes.

Our intention is to wrap our whole community around an individual who needs a level of support to remain in the community; through paid support, clinical care, volunteer support, neighbours looking out for one another and family support. The SPARK mobile app will allow those needing assistance or connection to put a call out via the technology and it can be seen by all village members or it can be restricted to only be seen by people selected by the person seeking assistance. For example, a person who needs groceries or medicine and is not feeling well enough to travel might put out a call for anyone who is in town that day to pick something up for them and drop it off to their home. Likewise, if someone needs a lift to Men’s Shed or wants to know if anyone is free to drop in for a cup of tea, they can use the app to put that request out to the village.

Through participation in the Pingelly Virtual Village, the community will all help to build the social support network and facilitate and maintain residents’ sense of belonging, social connectivity and meaningful engagement within Pingelly and surrounding districts. The benefits will not just be for the person needing assistance; the whole community will benefit from the intergenerational connections, deeper relationships with their neighbours and through being part of an even closer-knit community than they currently are.

Using the SPARK app, members of the village will provide a volunteer community workforce to support older residents to remain in their homes. This will provide social inclusion and connection for all village members, from young children to people at the end of their life. Members may assist with neighbourhood drop-ins and a cuppa or by participating in ensuring the sustainability of essential activities such as the Men’s Shed. It may be as small as making a phone call once a week to a local resident to ask how they are, or residents may be interested in volunteering on a more regular basis. This information will be collected in the audit and will be maintained and updated through the village CRM database and used by the GENIE tool to help people to increase their support networks.

Local government, businesses and service providers will also be encouraged and supported to be part of the village. For example, the local Pingelly café, Memory Lane Diner, has indicated support to ensure that a time is set aside for residents with dementia and their families to visit the café and enjoy a trip down memory lane. The IGA has indicated support to make it easier for older people or people with a disability to order online or to receive home deliveries. The local pharmacy has indicated more support with chronic disease management. The GPs have committed to undertake home visits if necessary and the Pingelly Hotel would like to commence a weekly BINGO session.

Additionally, businesses will be encouraged to undertake the awareness training to help them understand the needs of the elderly and disabled people in Pingelly. This will allow them to better meet the needs of these customers. Businesses that are part of the village and complete the training will be listed with the concierge as
preferred suppliers for goods and services needed by village members. Members can also provide feedback about the service they receive from businesses, which ensures that the concierge has up-to-date information about preferred businesses for its members. The concierge may also create strategic alliances with local businesses to offer their services at a discounted price for village members.

The Wheatbelt ACAT team, at a meeting in Pingelly in December 2018, confirmed that local people are still being admitted to nursing homes because they have not been remembering to take their medication. If they are at home alone or with an elderly partner, they may have no one to prompt them to take their medication, resulting in their health deteriorating and them needing to be placed in an institution. In a village such as we are proposing, this would not happen. Multiple options to ensure a person remembers to take their medication would be available and the member themselves would be involved in deciding how this would occur. For example, a neighbour may drop in or phone the person to remind them to take their medicine, the concierge can help the person to improve their digital literacy to enable them to set technological reminders. The concierge can also coordinate smart home technologies for the person’s home which have a reminder system in-built.

Relatives and friends outside of Pingelly can also be part of the village to provide support to their family member/friend through the SPARK app and the concierge staff. Digital literacy training for the Pingelly-based person will help them to stay connected with their children, grandchildren or other loved ones outside the community. These distant loved ones can also be involved in supporting the person through the village. For example, they can be the one to remind the person to take their medication. They can also contact the concierge staff to raise concerns if, as an example, Mum is not answering her phone even though she knows I call at this time every day. The family member can contact the concierge staff or put a call out on the SPARK app for someone to check on their mum.

1.1.5 Regional Demonstration Model

The PSA believes that the Pingelly Virtual Village will attract interest in how to replicate the component parts in isolated rural communities within WA and across Australia and is keen to share the knowledge as it evolves.

Already more than 30 communities in Australia have sought to replicate the Waverton Hub model, which has been in operation for more than 4 years9. The Sydney-based Waverton Hub was provided a grant of $42,000 to develop a manual on how to set up such an organisation and the PSA have used this information when designing the Pingelly Virtual Village.

It is proposed that the PSA, with the assistance of UWA, become an advocate and knowledge base for the Regional Ageing-in-Place Virtual Village model, which is essentially a rural community’s version of the Village Hub model. PSA will become a clearing house of best practice knowledge with innovation in new technologies to build person-centred, relationship-focussed collaborative communities of care in rural Australia.

PSA will partner with the UWA Living Lab and UWA Centre for Social Impact to evaluate the project, as detailed below. UWA will guide the evaluation and the PSA

will develop a blueprint for establishing a Regional Virtual Village based on the lessons learned throughout this project, the results of the evaluation and the outcomes/evidence provided by the Pingelly Virtual Village. The blueprint or manual will highlight differences between the metropolitan villages and a rural one and provide guidance on how Pingelly successfully addressed these differences or the lessons learned. This blueprint will be made publicly available to be distributed in softcopy to anyone who requests it. It will also be marketed and communicated through the PSA’s access to the Community Resource Centre (CRC) network, which is integral to rural communities in WA and through all levels of government.

The PSA will also deliver workshops/talks about the model, from the second year of establishing the village. Up to 10 talks will be provided per year, upon request, and will detail the process of establishing the model, its aims and objectives, how it functions and any lessons learned or evaluation completed to date. These sessions will share information, showcase developments and promote best practice knowledge and leading-edge technology to help regional people to remain in their homes.

In addition, the PSA will create short videos to be shared via social media and provided to partner networks, such as WACHS and the CRCs. Pingelly residents who have participated in the village and used the GENIE tool and SPARK app to receive help from the community, as well as people volunteering their help, will be invited to participate in video interviews. These interviews will help to tell the success stories, attract more people to the Pingelly Virtual Village and encourage other rural locations to consider establishing their own village. They will also help to identify any issues with the way the village functions and enable these to be addressed.

**Evaluation**

As part of being a demonstration model, the Pingelly Virtual Village project will ensure a systematic and on-going evaluation of all aspects of the project through evolving learning processes.

Whilst this project will use the experiences of other Virtual Villages as a base to build upon, it will be the first rural village in Australia and, as such, there will be an element of trial and error needed. The project will trial new technology to assist people to age-in-place, it will implement a new concept of a combination of paid, upskilled and volunteer workforce to address uniquely regional issues and will provide person-centred solutions.

The evaluation strategy will consist of three steps: pre-, mid-term, and post-project. Pre-project evaluation will be carried out at the beginning of the project and will include semi-structured interviews with participants to specify their needs and expectations and to measure initial attitudes towards technology as well as digital literacy along with social network analysis. It will also include the initial survey to obtain baseline data. Mid-term evaluation with the usage of informal interviews and participant observation will help in identifying challenging situations encountered during the first stage of the project. The post-project evaluation will be conducted at the end of the project with the repeat of instruments from pre-project stage to evaluate and measure the project’s impact on participants’ digital literacy and on social network composition.

The key evaluation components and aims will be:
1. Program documentation – involves describing the context, stakeholders, and emergent activities

2. Formative evaluation – following and capturing the activities that occurred in the community in response to the program, as they evolved. This will involve capturing important metrics (e.g., recruitment, participation levels, engagement, participant feedback), as well as instruments to help understand participant and community perceptions of the strategies and any experiences of impact – immediate and long term. Learnings and implementation challenges will also be captured.

3. Strategy evaluation – mapping all activities to the strategy goal (using an outcomes hierarchy)

4. Outcome evaluation – measuring the outcome of reduced prejudicial and discriminatory behaviour based on age through pre- and post-survey utilising established and validated scales (e.g., discrimination, community attitudes and/or stigma scales).

UWA will use the GENIE tool and SPARK app usage data to measure the number of contributions and impact on social networks that the project is having, as well as the changes over time. The combined use of these evaluation tools with the video interviews will allow UWA to document the project progress, measure complex social outcomes and use evaluation methods that are engaging, accessible and useful for participants.

A final evaluation report will be produced toward the end of the project that can be used to determine the Return on Investment for government, as well as providing lessons learned and information about the benefits and impacts of the project.