

Project Plan

Smart Infrastructure Project – Stage 2 (version 31 May 2023)

1. Project Background

- 1.1. Western Sydney Planning Partnership (WSPP) has been working with local councils and the Smart Places Acceleration Team TfNSW to develop uniform Smart Infrastructure (SI) technological design specifications to embed technology in new local infrastructure.
- 1.2. Stage 1 was completion of a ‘manual’ for SI technology specifications for local government infrastructure in Western Sydney. This describes the technical “how” for implementation of SI policy for local government. The analysis leading into the manual also included consideration of organisational capabilities (the survey of maturity levels) and some initial discussion of the problems to be addressed that would be drivers of local council investment prioritisation.
- 1.3. Stage 2 of the project will focus on a policy framework that could be adopted by local councils for implementation of SI as part of local government infrastructure across Western Sydney.

2. Project Purpose

- 2.1. The purpose of this project is to develop a policy framework that could be adopted by local councils to implement SI in local government infrastructure across Western Sydney.

3. Project Objectives

- 3.1. The project objectives are:
 - 3.1.1. Confirm the strategic context and outcomes to be achieved in Smart Places and describe how this relates to SI requirements.
 - 3.1.2. Identify the problems and opportunities to be addressed in a policy framework for SI and review the current business case for investment in SI (may require state government business case Deloitte).
 - 3.1.3. Develop a range of technical options to address the problems and identify the areas which would best be addressed by SI solutions.
 - 3.1.4. Consider the political/stakeholder (investment drivers for local government) factors as well as capability factors for local government in considering a preferred option. This will also consider individual local council intentions regarding capability development and investment in SI relative to other priorities.
 - 3.1.5. Evaluate alternate approaches and the preferred role for local government infrastructure of SI.
 - 3.1.6. Develop a policy document for local government SI adopting an engagement approach that develops and refines the draft policy with local councils, including technical input regarding technology and asset management.
 - 3.1.7. Use pilot and supporting projects to develop a roadmap for implementation of the SI policy (at a local level and regional level), to accompany the final policy document and for further consideration by councils.
 - 3.1.8. Seek endorsement from councils formally prior to finalisation.

4. Project Context

- 4.1. This project relates to the NSW Government Smart Infrastructure Policy (SIP) (<https://www.digital.nsw.gov.au/sites/default/files/2022-09/smart-infrastructure-policy.pdf>) which sets the minimum requirements for smart technology to be embedded in all new and upgraded infrastructure from 2020 onwards. In addition it is consistent with advice in the State Infrastructure Strategy (section 9.3) and is an element of the Foundations Stream of the SmartNSW Roadmap 2022-27 (page 16) delivering policy and guidance to facilitate consistent planning and delivery of connected infrastructure and services across the State.
- 4.2. The SIP relates to NSW Government departments and agencies and does not directly apply to local government. The policy framework for local government Smart Infrastructure needs to be further developed.

4.3. Western Sydney

- 4.3.1. The context in Western Sydney has been set by work completed under the City Deal - the Smart Western Sydney Program (Aug 2021) and the Digital Western Sydney Action Plan. The Smart Western Sydney program identifies four key outcomes for Smart Cities: productivity and economic competitiveness; liveability; environmental sustainability; and social inclusion.
- 4.3.2. Resulting actions are presented in targeting several themes: smart monitoring; data sharing; smart planning and management; smart public spaces; smart transport; community engagement; local jobs and working from home. These deal more widely with Smart Cities, of which SI is a foundational requirement.
- 4.3.3. A key issue for local government in Western Sydney is the growth of the region, particularly the expansion of the existing urban footprint. The financial sustainability of local councils while managing this new infrastructure over time is a long-term challenge.
- 4.3.4. Implementation of SI for local government infrastructure is a key innovation addressing the long-term financial sustainability for local councils, particularly for new infrastructure to support growth.
- 4.3.5. Each Western Sydney council is incorporating SI into their business as usual, although this is generally in an early stage of maturity levels and has fragmented approaches and pilots that reflect this early stage, with limited delivery at scale of in an efficient manner.
- 4.3.6. The current high level strategy work provides a basis for understanding “why” and the vision for delivery of Smart Places more broadly, but there is a need for specific policy development on SI regarding ‘what’ SI means for local government considering the infrastructure and assets managed by local government and ‘how’ it will be implemented. There is also not necessarily a clear pathway for all Western Sydney local councils to transition to SI as business as usual, although there are some councils that are more advanced in this area.
- 4.3.7. There is also a need for development of accompanying tools for the “with what” regarding tools and or support that can be jointly delivered to support implementation, as councils target increased maturity levels in SI.

4.4. Policy problem to be addressed through an SI policy.

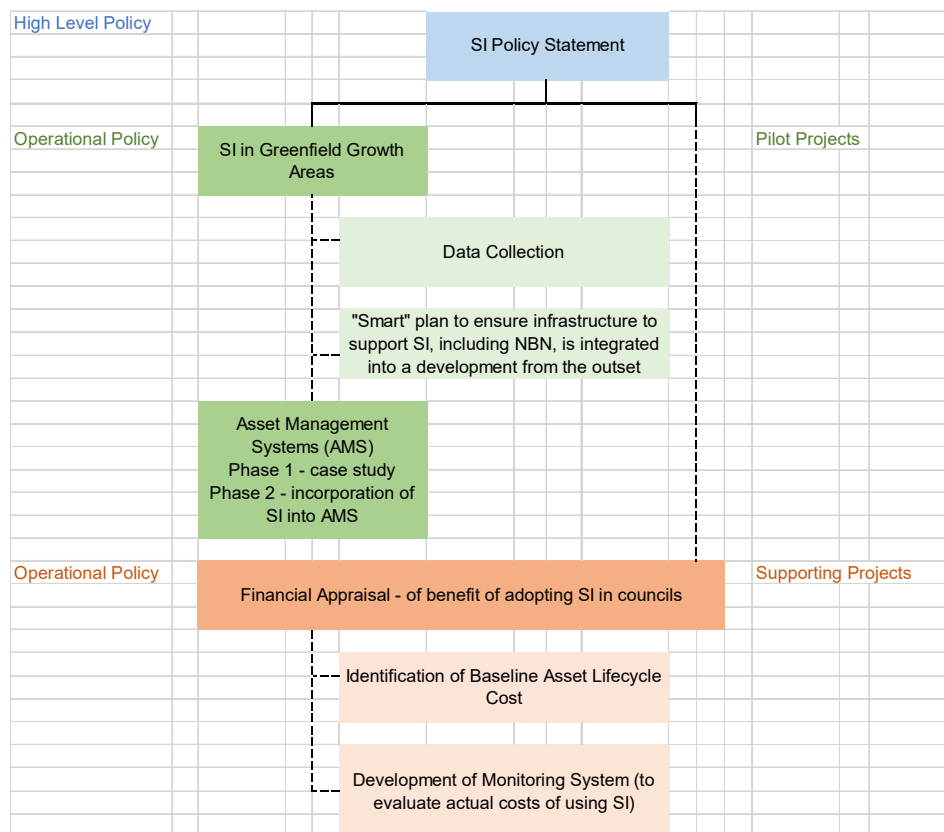
- 4.4.1. The policy problem to be addressed by SI is broadly to deliver the foundational infrastructure to support the development of a “Smart City or Places.”
- 4.4.2. However, in regard to SI for local government, the policy problems to be addressed are often more relevant for effective local government asset management and use. Therefore, the priority list below was developed with local councils as a guide to understand potential policy problems that local councils are seeking SI to address. These form a provisional list, to be refined as part of this project:
 - Priority 1 - Improve efficiency and reduce cost of council service delivery.
 - Priority 2 - Improve data for council asset planning & management.
 - Priority 3 - Improve resident and user experience and digital access.
 - Priority 4 - Assist with transformation, particularly resilience & sustainability, and
 - Priority 5 - Collecting data for improved strategic planning & decision-making.
- 4.4.3. There are several fundamental problems that are evident through these priorities which are common across councils. The first is the need to reduce the lifecycle costs of local government infrastructure and service delivery in a region that is growing in population and visitation and where local councils have constrained growth of income - through use of technology. The second is the opportunity to achieve more equitable access for residents/businesses (and visitors) in Western Sydney to services and information through use of technology. The third is the need to adapt business as usual practices to be more sustainable and resilient, in the context of climate related hazards and change.
- 4.4.4. There are several non-local government actors that will be critical for the adoption of an effective local government SI policy. This includes energy and water utility providers, who manage for example light poles. The agreement to a policy from these generally state government related entities will be a critical part of the policy development process.

5. Project Framework and Scope

- 5.1. The project framework will comprise a high-level SI policy statement. In parallel to the development of the SI policy statement, the project will progress implementation of the SI policy at scale across the nine WSPP local councils. This will be done through design and testing a series of pilot projects working with one to three councils. These pilot projects are consistent with Enabler action EN5 of the SmartNSW Roadmap 2022-27 (page 21).
- 5.2. The first incorporates SI into the planning and infrastructure delivery framework (i.e. DCP, CP and other planning documents) for greenfield growth areas with sub-projects of data collection and investigating how infrastructure to support SI, including the NBN, can be included at an early stage of development. Another pilot will use a case study approach to consider how a council has adopted SI practically, followed by how SI is incorporated into the asset management systems of local councils.
- 5.3. In addition, there will be supporting projects of a generic nature. The NSW Government State Infrastructure Strategy suggests that 5-10% of lifecycle costs can be saved through the analysis of SI data in maintenance and operation of an asset. It is therefore planned that the first supporting project will be a financial appraisal of the benefit of adopting SI in local councils

comprising sub-projects to identify baseline asset lifecycle costs and to establish monitoring systems to evaluate actual costs of using SI.

5.4. SI Policy Framework



6. Project Deliverables

6.1. The key high level project deliverables are:

Deliverable	Due date
High level policy document	October 2023
Agreement on pilot projects to inform subordinate policies/processes	June 2023
Operational policy/guidance on incorporating SI into the planning and infrastructure delivery framework for greenfield growth areas.	June 2024
Operational policy/guidance on incorporation of SI into local councils' Asset Management Systems.	June 2024
Supporting policy/guidance on the financial appraisal of the benefit of adopting SI in local councils.	June 2024

7. Project Budget

7.1. The estimated cost of the different elements of the project is in the table below. The cost of implementing the package is estimated to be \$300,000. WSPP can cover \$150,000 using a mix

of WSPP in-house labour and council in-kind support. However, there is a shortfall of resourcing for the project of \$150,000.

- 7.2. The funding shortfall of \$150,000 represents the estimated cost of the external expertise (as an expert team available to assist each pilot) which WSPP has identified that it needs to progress the project. Transport for NSW has been asked to commission this external expertise (or provide this expertise by another means acceptable to TfNSW) on behalf of WSPP, for joint management by WSPP/TfNSW.

Project component	Comment	Estimated cost	WSPP contribution	Funding shortfall
Policy document	Prepared by WSPP in-house.	\$20,000	\$20,000 (in-house labour)	\$0
Project management	Project managed by WSPP in-house.	\$20,000	\$20,000 (in-house labour)	\$0
Pilot project – SI in Greenfield Growth Area	Joint project with Wollondilly Council and developers. WSPP funding will be a combination of in-kind from Wollondilly Council and WSPP in-house project management. External expertise will be needed.	\$80,000	\$10,000 (in-house labour) \$20,000 (Council in kind support)	\$50,000
Pilot project – case study and identification of Council asset classes suitable for SI	Joint project with a council (still to be confirmed). WSPP funding will be a combination of in-kind from the council and WSPP in-house project management.	\$50,000	\$10,000 (in-house labour) \$40,000 (Council in kind support)	\$0
Supporting project - financial appraisal of benefit of adopting SI in councils	WSPP will provide in-house project management. External expertise will be needed.	\$60,000	\$10,000 (in-house labour)	\$50,000
Supporting project – development of a centralised approach to data collection and reporting	Joint project with Camden Council and developers. WSPP funding will be a combination of in-kind from Camden Council and WSPP in-house project management. External expertise will be needed.	\$70,000	\$10,000 (in-house labour) \$10,000 (Council in kind support)	\$50,000
Estimated costs		\$300,000	\$150,000	\$150,000

8. Project Roles and Responsibilities

8.1. Project roles and responsibilities are:

Role	Who	Responsibility
Project Director	Luke Nicholls (WSPP)	Leads and directs the project. Manages upwards to facilitate effective governance from WSPP PCG.
Project Manager	Tony Middleton (WSPP)	Manages the project on a daily basis.
Project Sponsors	Paul Belz (Blacktown)	Champions the project and addresses obstacles or any conflict in conjunction with the Project Director.
	Martin Cooper (Wollondilly)	
	Nicole Magurren (Camden)	
Project Working Group	Representative from each council member of WSPP	Supports the Project Manager by providing expert advice and practical support on tasks.
Pilot Project Working Groups	Representatives from each council who are relevant to the specific project	Supports the Project Manager by providing expert advice and practical support on tasks.
Senior Project Officer	To be engaged by WSPP	Assists Project Manager in managing the pilot projects
Project Officer	Nadia Rad (WSPP)	Provides project support.
External expertise procurement and management	Transport for NSW	Procures external expertise for project. Jointly manages the external expertise with WSPP.
Stakeholders	WSPP Local Council Members	People/organisations impacted by the project or who have a direct interest in the project
	WSPP NSW Government Members	
	External organisations involved in the project	

9. Project Risk Assessment and Management

9.1. Project high level risks and mitigation are:

Risk	Mitigation
Project outcomes not achieved	WSPP PCG agrees project plan
Business as usual prevents WSPP members from participating	Project Manager actively engages with project sponsors and PWG members
External expertise cannot be commissioned	Available funds are targeted to best value outcomes
Data from the greenfield growth areas may not need to be initially used as most of the assets have a long-life span.	Stakeholders understand that this is a potential issue from the outset.

10. Project Stakeholder Engagement

10.1. Stakeholder engagement will be ongoing throughout the project and will include:

- Fortnightly updates to project sponsors
- Regular PWG meetings, frequency to be determined.
- Two-monthly updates to WSPP PCG.
- Regular updates to Transport for NSW, frequency to be determined.

11. Project Evaluation

11.1. An overall project evaluation report will be completed at the end of the project.

11.2. Evaluation reports will be completed after the pilot projects.