

Project refinements to address social impacts

This practice note is a supporting resource for social impact assessment (SIA) practitioners. It covers how to achieve better social outcomes by refining state-significant projects early on.

A key benefit of starting SIA early in project development is that it allows you to refine and revise the project in response to predicted social impacts. By starting early, you can identify likely issues of concern as well as social benefits, and you can make meaningful project changes and/or consider alternative options early in the design phase. This can help to minimise project costs and risks. Outcomes of research and engagement can be a useful starting point for identifying possible project revisions.

Project refinements happen throughout planning and design. Refinements may be relatively small (for example, changed operating hours) or more substantial (for example, changes to project layout), depending upon the nature of impacts and scale of the project. Project teams should share details about these refinements with stakeholders, along with feedback on how their input has informed project planning and design. Keeping a record of these refinements can be useful for informing and incorporating into an SIA.

There are a range of approaches to manage predicted social impacts and there is a hierarchy of controls or mitigation measures that apply. Applicants should seek first to avoid, then to minimise, and finally to mitigate adverse impacts. In some cases, mitigation measures for social impacts may be the same as for environmental impacts. One measure might mitigate both the social and environmental dimension of an impact (for example, noise attenuation), in which case the SIA should cross-reference the relevant section of the environmental impact statement.

Adopting project refinements early may avoid or mitigate several social and environmental impacts. It is also important to consider opportunities to improve or maximise community benefit from the project. Table 1 gives examples of possible project refinements that could be documented in an SIA.

Table 1. Examples of possible project refinements

Possible project refinements	Potential impacts addressed/benefits created
<p>Reduced/changed hours of project operation</p>	<ul style="list-style-type: none"> • Minimise impacts on accessibility, surroundings and way of life (for example, lighting, noise, air quality and access) • Improve health and wellbeing by minimising disturbance to sleeping patterns and recreation times, etc.
<p>Reconfiguration/reduction in the proposed project footprint</p>	<ul style="list-style-type: none"> • Reduced property acquisition and impact on neighbouring residents' social amenity, health and wellbeing • Maintain sense of community and keep residents in the area • Lessened impact on environmental values because of reduced land clearing • Increased suitability and use of the site by Aboriginal stakeholders
<p>Relocation of onsite project infrastructure within the project boundary to increase distance from nearby residents</p>	<p>Reduced impacts on surroundings and way of life through reduced noise, better air quality and fewer visual impacts for close residents</p>
<p>Changes to project layout to increase distance to residents, significant environmental and heritage sites and aesthetic values</p>	<ul style="list-style-type: none"> • Reduced impacts on environmental values • Reduced impacts on heritage values by minimising ground disturbance • Reduced need to acquire properties and displace residents, maintaining sense of community and culture • Reduced impacts on people's access to services • More attractive surroundings for people
<p>Relocation of construction access roads (whether for vehicles, active transport and/or pedestrian access) and/or development of alternative access routes for community during construction</p>	<ul style="list-style-type: none"> • Improved surroundings and safety – less traffic and noise • Minimised impacts on existing access routes • Minimised disruption to residents and road users
<ul style="list-style-type: none"> • Installation of barriers to mitigate noise and visual impacts • Implementation of public art programs on project barriers 	<ul style="list-style-type: none"> • Reduced disruption to near residents' way of life and health because of operational noise • Reduced and improved visual impacts • Community involvement in public art programs

Possible project refinements	Potential impacts addressed/benefits created
<p>Development of dedicated accommodation facility/housing close to the project to accommodate the influx of a construction workforce</p>	<ul style="list-style-type: none"> • Reduced impact on sense of community because of temporary population influx • Reduced pressure on local and regional short-term housing market
<p>Development or provision of housing and/or subsidies for community service workers required across key community sectors to support population increases</p>	<ul style="list-style-type: none"> • Reduced pressure on local community services because of workforce influx • Continued access to community services for residents
<ul style="list-style-type: none"> • Development of road bypasses in high local traffic areas to reduce disruption for road users • Restrictions on heavy vehicle movements to increase road safety • New and upgraded intersections to increase road safety 	<ul style="list-style-type: none"> • Improved surroundings through reduced and improved traffic impacts • Improved road safety
<p>Development of and/or support for key community services and programs (for example, childcare) in response to population change associated with workforce influx</p>	<ul style="list-style-type: none"> • Reduced pressure on existing key community services • Improvement of local community services and programs
<p>Construction of bus shelters and traffic crossings on key traffic routes (in consultation with relevant government agencies) to address safety concerns</p>	<ul style="list-style-type: none"> • Improved child safety along dedicated school bus routes • Improved public safety
<p>Provision of medical officers on site for workforce access in response to population change associated with workforce influx</p>	<p>Reduced pressure on local GP and health services</p>
<ul style="list-style-type: none"> • Development of additional infrastructure to address resource access and availability issues (for example, development of a water pipeline to afford water reuse) • Provision of resources (for example, water to help communities in times of drought) 	<ul style="list-style-type: none"> • Reduced pressure on access to local water resources for existing residents and businesses • Positive effects on livelihood

Possible project refinements	Potential impacts addressed/benefits created
<p>Construction of viewing platforms and/or visitor centres to contribute to tourism and visitation</p>	<ul style="list-style-type: none"> • Better local surroundings • Increased regional tourism activity • Improved sense of community • Positive effects on livelihood
<ul style="list-style-type: none"> • Changed ratio of development to open space to reduce impact on green space • Development of pocket parks, community gardens and green allotments on available project areas or nearby project land 	<ul style="list-style-type: none"> • Improved open space to support recreational opportunities • Increased health and wellbeing • Enhanced sense of community and cohesion
<p>Provision for multiple uses of facilities and project area (for example, swimming pools and meeting rooms)</p>	<ul style="list-style-type: none"> • Provision of multi-use options for community use • Improved sense of community • Increased health and wellbeing
<p>More infrastructure and redesign of project facilities to allow for multiple uses and improve community and key stakeholders' access (for example, swimming pools and meeting rooms for community use)</p>	<ul style="list-style-type: none"> • Better local community facilities • Improved access for vulnerable groups
<p>Establishment of community reference and advisory groups to guide project arrangements (for example, development of construction respite plans to compensate the community for the inconvenience and disruption of construction)</p>	<ul style="list-style-type: none"> • Improved procedural fairness • Accommodation of existing and/or implementation of local community events (for example, art exhibitions, community festivals, etc.)
<p>Development of areas within the site that can be accessed by the community for events or activities during construction to improve community cohesion</p>	<p>Increased access and social interaction supporting sense of community</p>
<p>Provision of additional infrastructure or improvement of existing facilities for community use</p>	<ul style="list-style-type: none"> • Better experience following upgrade of community facilities. Reduced adverse health and wellbeing impacts, or adverse gendered impacts • Help the community maintain cohesion and attachment to their area

Case studies

These case studies are hypothetical examples to demonstrate how a proponent may describe refinements that have been made to a project in response to social impact research and engagement. These are indicative rather than comprehensive considerations.

Case study 1 – Renewable energy project

A renewable energy production company proposes to develop a wind farm in a rural area, 30 km west of a small town and south of a national park. The company expects the development will create 8 full-time jobs once operational and up to 120 full-time jobs in the construction phase.

Community engagement identified key impacts, including:

- noise and visual impacts on surroundings from construction and operational works
- potential for impacts on local ecosystems (for example, birds, caused by potential bird collision)
- impacts on human health caused by construction noise disrupting people’s sleep and quality of life
- insufficient barrier for noise and visual amenity for nearby residents
- potential traffic impacts during the construction phase
- benefits of a new renewable energy source and decreased energy costs, which would have positive effects on livelihood
- reduced visitation to the nearby national park
- economic benefits associated with employment opportunities, which would have positive effects on livelihood.

Project revisions were considered to reduce the social impacts raised by the community. Table 2 below outlines the key changes to the project in response to community feedback.

Table 2. Key project refinements/additions – renewable energy

Key project feature	Original project	Project refinements	Social and project benefits from refinement
Construction hours	<ul style="list-style-type: none"> • 7.00 am to 6.00 pm, Monday to Friday • 8.00 am to 5.00 pm, Saturday 	<ul style="list-style-type: none"> • 8.00 am to 6.00 pm, Monday to Friday • 8.00 am to 1.00 pm, Saturday • Scheduling 2 days of respite a month (as well as Sunday) where no construction is done, in liaison with close residents. 	<ul style="list-style-type: none"> • Reduced construction noise impacts on surroundings through decreased construction hours • Improved health and wellbeing of residents

Key project feature	Original project	Project refinements	Social and project benefits from refinement
Wind turbine design	<ul style="list-style-type: none"> • Maximum tip height of 250 m • 27 turbines • Maximum capacity 148 MW 	<ul style="list-style-type: none"> • Maximum tip height of 250 m • 22 turbines • Maximum capacity 121 MW 	<ul style="list-style-type: none"> • Reduced impacts on local ecosystems and loss of environmental values (through potential bird strikes) by decreasing blade tip height and using reflective coating • Reduced impacts on visual amenity through decreased blade tip height • Increased positive effects on climate change through development of a clean energy source •
Project footprint	<ul style="list-style-type: none"> • Wind turbines located in the north-west of the site border • Total disturbance area 124 ha 	<ul style="list-style-type: none"> • Wind turbines located in the southern area of the site border (subject to similar wind conditions) • Revision to the development corridor • Reduced disturbance area – down to 78 ha 	<ul style="list-style-type: none"> • Reduced impacts on surroundings and on way of life by moving turbines further from residents • Reduced disturbance to local animals and plants from construction activities • Maintenance of community character and sense of place
Presence of the project	n/a	<ul style="list-style-type: none"> • Development of relevant educational signage to give the community information on the wind farm for reference and educational purposes • Proponent commitment to give schools, the national park and interested stakeholder groups educational material on the farm 	Better community and visitor education on renewable energy
Construction workforce	Original access	<ul style="list-style-type: none"> • Change to construction workforce access • Upgrade of access roads, in consultation with private landowners and council 	<ul style="list-style-type: none"> • Lessened impacts on community resident mobility and livelihood activities (for example, farming) • Enhancement of local infrastructure – improved road condition • Increased public safety

Case study 2 – Major highway development

The proponent proposes a major highway to link 2 major coastal urban centres and replace the existing highway, which is notoriously dangerous. The proposed highway would be a 4-lane road and include a bypass of an existing town centre.

Engagement with the communities in the 2 coastal centres and along the alignment was supplemented by secondary research. The key impacts identified included:

- public safety benefits through the introduction of safety measures in road design
- improved access between the regional cities, supporting employment and recreation opportunities
- disruption to the way of life from increased traffic associated with construction works
- effects on the way of life and wellbeing because of construction's noise and visual impacts on surroundings
- livelihood impacts such as increased employment opportunities and decreased business during the construction phase because of reduced access for businesses on the proposed highway route.

The community proposed several mitigation and improvement measures during the engagement process. The proponent made several refinements to the project based on community feedback, as outlined in Table 3.

Table 3. Key project refinements/additions – major highway

Key project feature	Original project	Project refinements	Social and project benefits from refinement
Road corridors or intersections	5 m to 6 m buffer zone between residences and road	<ul style="list-style-type: none"> • Revised plans will now ensure an 8 m to 9 m buffer from residences, created by installing a grassed median and cycleway • Redesign of exit intersection to increase road safety 	<ul style="list-style-type: none"> • Greater distance from households resulting in decreased noise impacts • Less disruption to way of life from construction works • Increased public safety from intersection upgrades
Road overpasses/link roads	Roundabout upgrade at the bypass intersection	Overpass at the bypass intersection for continuing south-bound motorists	<ul style="list-style-type: none"> • Increased access between cities facilitating way of life (work, recreation) and livelihoods • Less disruption to way of life through reduced traffic congestion and delays associated with existing route

Key project feature	Original project	Project refinements	Social and project benefits from refinement
Bus stops	Removal of 2 bus stops	Relocation rather than removal of 2 bus stops	Improved public safety and health and wellbeing of local school students
Cycle or walkways	Extension of an existing cycle path – 5 km north of the southern centre	Extended cycle path to connect the 2 centres	Increased cycleway access between cities supporting employment, livelihood and recreational opportunities
Construction hours	<ul style="list-style-type: none"> 7.00 am to 7.00 pm, Monday to Friday 8.00 am to 7.00 pm, Saturday 9.00 am to 5.00 pm, Sunday 	<ul style="list-style-type: none"> 8.00 am to 6.00 pm, Monday to Saturday Out-of-hours works to be programmed to minimise the number of consecutive nights' work affecting the same receivers Scheduling 2 days a month of respite (in addition to Sunday) where no construction work is done, in liaison with the nearby community 	Reduced construction noise impacts on way of life and surroundings through reduced construction hours and days and implementation of the respite plan developed in consultation with residents and key community groups
Road corridor buffer	n/a	<ul style="list-style-type: none"> More parking spots developed in shopping precinct along the proposed route to facilitate customer access to local businesses during and after construction Compensation package developed in consultation with local business owners to recompense for disruption during the construction period 	<ul style="list-style-type: none"> Increased public safety through avoiding parking on or crossing of main roads Maintain livelihood for local business owners by supporting access to their businesses
Old highway route	n/a	Development of community gardens/allotments/parks along the old highway route, close to key residential areas	<ul style="list-style-type: none"> Better sense of community and cohesion Enhanced surroundings, addressing key local environmental and social value along the proposed route Increased health and wellbeing