What is an Environmental Impact Statement (EIS)?

An Environmental Impact Statement (EIS) is a collection of individual detailed studies examining specific areas potentially impacted by the project. Areas of study include:

- traffic modelling and forecasting
- water quality and hydrology
- flora
- landscaping and urban design
- social impacts
- geotechnical

The EIS is guided by Terms of Reference, which define the scope of the studies. The EIS Terms of Reference were developed with feedback from other government agencies, special interest groups and the public received from January to March 2004.

The first stage of the EIS looked in detail at the existing environment local to the Gateway Motorway corridor. The next step was to look at all possible impacts the Gateway Upgrade Project may have on the local environment and consider ways these impacts can be reduced or eliminated.

EIS Key Findings

- The construction phase of the project will have significant positive direct and flow-on effects for the region and state in terms of increases in Gross Regional Product and new jobs.
- Approximately 29 property owners will be directly affected by the project in the form of partial and whole land requirements. Properties include residential, industrial, Royal Queensland Golf Club, Brisbane City Council (old Airport site and Bulimba Creek and Kedron Brook floodplains) and Brisbane Airport Corporation (BAC) land.
- The project is consistent with the key state and local government land use and transport planning policies, strategies and guidelines.
- The project is not significantly constrained from a geotechnical aspect. Extensive embankments on weak soils are required north of the Brisbane River, and these will need to be designed in accordance with good engineering practice in terms of stability and settlement characteristics.
- Erosion of soils within the project corridor can be adequately mitigated by implementing best practice erosion and sediment control measures during construction.
- Potential Acid Sulphate Soils (ASS) occur within Bulimba Creek floodplains and north of the Brisbane River. Potential impacts from disturbing these soils will be mitigated by minimising disturbance in high risk areas and by implementing an ASS Management Plan during construction.
- Potential contaminated soil may occur on industrial properties, the old Airport site and BAC land. Potential impacts from disturbing these soils will be mitigated by minimising disturbance in high risk areas, undertaking further contaminated land investigations and implementing Site Remediation Plans approved by the Environmental Protection Agency during construction.
- The potential impacts of the proposed upgrade works upon flood levels within the Bulimba Creek and Kedron Brook floodplains have been assessed using detailed two-dimensional hydraulic modelling. While the predicted increases in flood levels are minor, there are many properties already adversely affected by flooding in these areas and as such mitigation of the impacts is essential.
- A range of mitigation options have been investigated for both waterways using the detailed hydraulic model. The solution at both crossing locations involves localised earthworks in the immediate vicinity of the Bulimba Creek crossing and downstream of the Kedron Brook crossing. The introduction of these solutions fully mitigates against the impacts of the proposed upgrade works.
- Potential impacts on surface water quality will be minimal due to the implementation of appropriate construction erosion and sediment control measures and the implementation of a “treatment train” approach to operational stormwater management.
- Based on existing data, the groundwater resource potential within the project corridor is low and there is generally poor groundwater quality. Groundwater monitoring will occur on BAC and Council land during construction to ensure the project does not impact on the groundwater resource.
- The overall impact of the project will result in a slight increase in air quality impacts for receptors close to the motorway, however all predicted concentrations are below the relevant guidelines.
- Compliance with operational noise criteria can be achieved through the upgrade of noise barriers along the corridor. Construction noise and vibration can be adequately mitigated by implementing a Construction Noise and Vibration Control Plan.
- No significant flora and fauna species are located within the project corridor. Koalas and wallabies occur in the adjacent bushland areas associated with the Koala Coast Area (east of motorway) and Belmont Hills Bushland (west of motorway) and move between the two areas. Fauna exclusion fencing and fauna underpasses will be installed where needed to improve road safety for fauna and road users.
- The potential impact on a small area of Lewin's Rail habitat on BAC land will be mitigated by minimising construction activities in this area and rehabilitating the area early in the construction process.
- A relatively small number of mangroves and other marine plants in the Bulimba Creek and Kedron Brook areas will be affected. The affected areas are small in comparison with the extent of similar marine plant communities associated with each of these waterways and other communities present within the region.
- Minor aquatic habitat loss will occur as a result of the project. The potential impact on aquatic flora and fauna in the vicinity of watercourse crossings and downstream are manageable.
- No Indigenous and European cultural heritage sites are directly affected by the project. A Cultural Heritage Management Plan will be implemented during construction to minimise the potential impact on cultural heritage items being disturbed during earthworks activities.
- The social impacts of the proposal on residents will be relatively small due to the containment of much of the physical property impacts within or close to the existing alignment of the motorway. Some minor recreation facilities will be affected, as will access to these areas. There will be disruption effects to a number of businesses due to their relocation.
- Visual impacts are expected to be low given the proposed planting of native species endemic to local conditions and integration of urban design and ornamental lighting strategies to improve the aesthetics of interchanges and bridge structures.
- A shared pedestrian and cycle pathway that forms part of the bridge structure has been investigated. It would improve connectivity on both sides of the river by linking into existing bikeways or nearby local street networks. The feasibility of the facility is to be considered further as part of the project business case.