Keiraville - Gwynneville Access and Movement Study

Overview

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Background

Keiraville and Gwynneville will experience significant growth in the coming decades as a result of expansion of the education and health precinct in Wollongong. This future expansion will increase the number jobs and students in the region, therefore increasing demand for housing, infrastructure and transport.

In 2014 and 2015, Neighbourhood Forum 5, with input from the community, University of Wollongong and Council developed the "Keiraville – Gwynneville Community Planning Project Report", and the subsequent "Keiraville – Gwynneville Implementation Plan" comprised of a number of key actions including the completion of an access and movement study for the area.

Wollongong City Council commissioned the Keiraville–Gwynneville Access and Movement Study to improve understanding of existing and future access and transport demand in the area, and to mitigate the impacts of more growth through traffic and transport strategies to encourage sustainable travel behaviour and ease pressure on the transport network. Improvements for pedestrians, cycling, public transport, motor vehicles and car parking are recommended by this study.

Study Objectives

The University of Wollongong, Neighbourhood Forum 5 and Transport for NSW are partners in the study. These partners with Council jointly agreed to the objectives of the study that are to:

- Examine and document the existing and future potential operation of the traffic and transport system within the suburbs of Keiraville and Gwynneville; and
- Develop strategies to improve the transport system, reduce impacts on surrounding suburbs, promote the use of sustainable travel modes and ensure that the transport network can adequately accommodate future development.



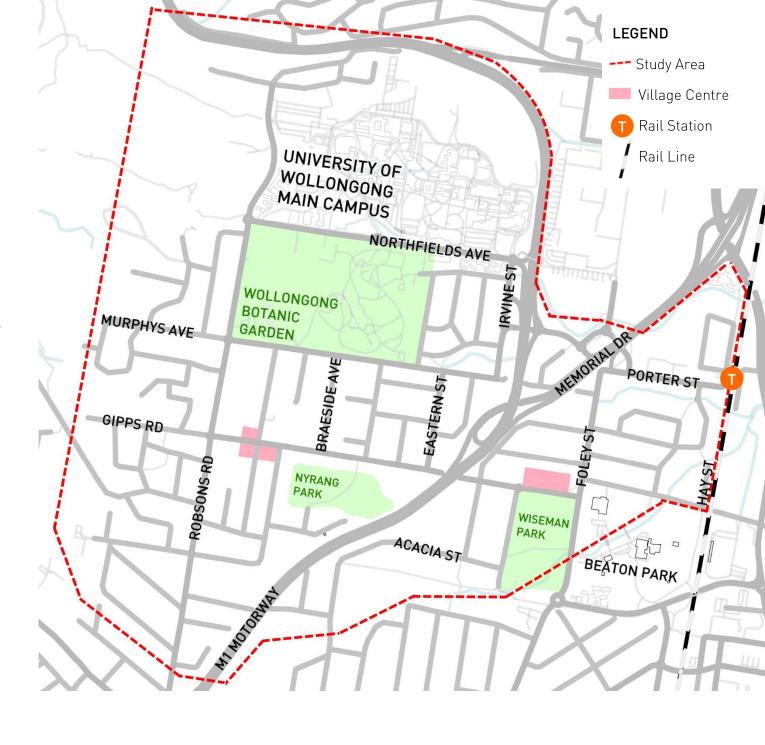
Keiraville Village Centre

Study Area

Keiraville and Gwynneville are located within the City of Wollongong, in the Illawarra region of NSW. The two suburbs lie between the Princes Motorway (M1) to the north and east, the Illawarra Escarpment State Conservation Area to the west, and extend south towards Mount Keira Road.

There are many important land uses that generate a high number of trips each day and influence access, movement demand and behaviour in the study area including:

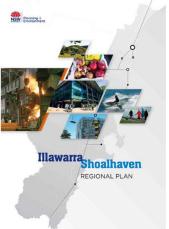
- Keiraville and Gwynneville village centres
- The University of Wollongong (UOW)
- Wollongong CBD
- Wollongong Hospital
- Wollongong Botanic Garden
- North Wollongong Railway Station
- TAFE Illawarra Wollongong Campus
- Mount Ousley residential area
- Local schools
- Sports and recreation facilities



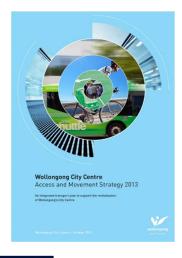
Strategic Context

The Keiraville and Gwynneville Access and Movement study was carried out in the context of planning work done for the surrounding metro Wollongong area in order to recommend effective strategies to improve the overall transport network. Various Council and external plans, strategies and projects informed the study including:

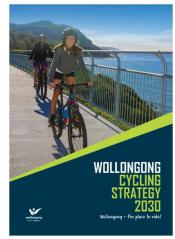
- Keiraville Gwynneville Implementation Plan
- Illawarra Shoalhaven Regional Plan
- Our Wollongong 2028 Community Strategic Plan
- Wollongong Cycling Strategy 2030
- City of Wollongong Pedestrian Plan 2017–2021
- University of Wollongong 2016–2036 Wollongong Campus Master Plan
- Mount Ousley Interchange Project
- Beaton Park Regional Precinct Masterplan
- Fairy Creek Corridor Masterplan
- Wollongong City Centre Access and Movement Strategy 2013











Beaton Park Regional Precinct Masterplan









Existing Transport Network and Demand

The range of significant land uses both within and surrounding the study area are serviced by a transport network that includes walking, cycling, public transport and motor vehicle components. The network serves a range of trip purposes and has varying levels of demand.

Pedestrian Network

The footpath network in Keiraville-Gwynneville is limited, particularly away from UOW. The only roads that have footpaths on both sides of the road are Irvine Street, Paulsgrove Street, Foley Street, Northfields Avenue and Gipps Road. Most local streets have either a footpath on one side or no footpath at all.

On approach to Gwynneville village centre, footpaths are present on the north side of Gipps Road only. Keiraville village centre has footpaths provided on both sides of Gipps Road.

Pedestrian crossing facilities in the study area include a mixture of pedestrian refuges, zebra crossings, school crossings and signalised crossings. Pedestrian refuges are provided throughout the study area, particularly along Northfields Avenue, Robsons Avenue and Gipps Road. The majority of pedestrian refuges are located at roundabouts within splitter islands.

There are six zebra crossings, three school crossings, and six signalised pedestrian crossings located within the study area, four of which are located within the UOW campus.



Vickery Street
Pedestrian
Provisions

Public Transport Network

Bus routes servicing Keiraville and Gwynneville include three free shuttle buses and locally run services that provide connections throughout the study area and to nearby suburbs in the Illawarra and as far as Campbelltown and Port Kembla.

The free GK Shuttle bus service is operated by UOW and connects the campus with North Wollongong Station, the Wollongong CBD, Keiraville and Gwynneville. UOW also runs the free North Gong shuttle service which directly connects the UOW Northfields Avenue Bus Interchange with North Wollongong Station. This is the only bus route to service the bus stops on the UOW campus Ring Road; it connects passengers with trains arriving at North Wollongong Station.

The Gong Shuttle bus service is run by Transport for New South Wales, and connects the UOW campus with the Wollongong CBD, the Innovation campus and Fairy Meadow. This service is currently free, however a longer term decision on whether the service will remain free has yet to be made.

Local bus services connecting to Austinmer, Bulli, Campbelltown, Dapto and Shellharbour are provided by the following operators:

- Busabout, providing the 887 service to Campbelltown;
- Dion's Bus Service, providing services to Austinmer and Bulli;
- Premier Illawarra, providing services to the Wollongong CBD,
 Dapto, and Shellharbour.



Foley Street Gong Shuttle Stop

Road Network

The road network within and surrounding the study area consists of both major arterial and local roads. Local roads provide east—west access, while the Princes Motorway bisects the study area constraining connectivity. Access to the motorway is provided via on/off ramps located to the south east of the University, and to the north of North Wollongong station.

The traffic assessment of existing conditions identified congestion at:

- Mount Ousley Road / Princes Motorway
- Irvine Street / University Avenue
- Princes Motorway / University Avenue

The impact of future traffic growth and the Mount Ousley Interchange upgrade roughly 10 years in the future was assessed using the AIMSUN computer simulation model. The Mount Ousley Interchange upgrade is predicted to remove congestion at Mount Ousley Road / Princes Motorway while providing a new access to the UOW campus. The modelling also predicts some reduction in traffic in the roads surrounding the University such as Robsons Road and Northfields Avenue. However, the results also indicate there could still be congestion issues at the Princes Motorway / University Avenue and nearby intersections, in future (2027) year with the Mount Ousley Interchange upgrade in place.

The modelling assessment also indicated that additional capacity is required at the Pacific Motorway / University Avenue and University Avenue / Porter Street intersections. Further investigations are recommended to investigate options to relieve congestion in this area.

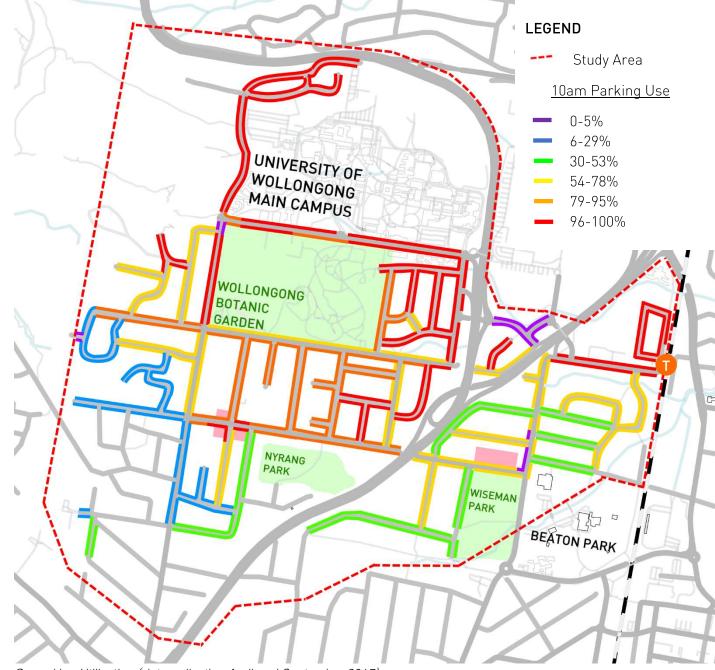


University Avenue

Car Parking

High parking generating land uses within the study area include the UOW, Keiraville and Gwynneville village centres. A mixture of on and off-street options are available throughout the study area. Within the Keiraville village centre, one hour parking is available along Grey Street and Gipps Road. The parking situation is similar close to Gwynneville village centre, with one hour parking available along Gipps Road. Unrestricted parking is available further away from both village centres. Within the UOW campus, there are many parking options with varied capacities and parking types.

Surveys completed by UOW found that on average, both the carpool and ticketed car parks reached or exceeded capacity on all days. Reserved parking was found to have an average of 54% usage throughout the day.



Carparking Utilisation (data collection April and September 2017)

Stakeholder Engagement

Council engaged with a range of stakeholders including residents, businesses and several organisations throughout the completion of this study via:

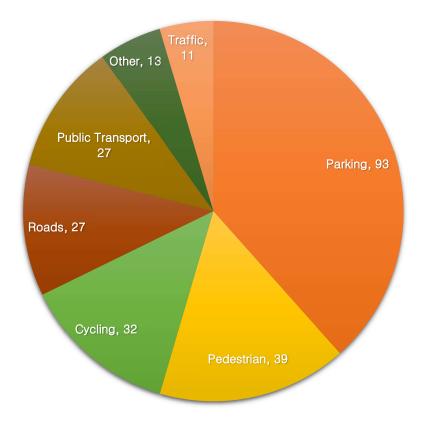
- Letters to tenants, owners and other stakeholders
- · Visits to all businesses in the study area
- Workshops and face-to-face meetings
- The Have Your Say web page which included a mapping tool,
 FAQ page, feedback form and document library.

Overall, there were 242 issues raised by members of the community, the majority of which concerned car parking.

Council, UOW, Transport for NSW, NF5 and other community members have worked together to draft up actions to address the issues identified during the study.

Key Transport Network Issues

In addition to issues raised by the community as part of the stakeholder engagement described above, data collected from a range of sources was used to identify key issues affecting the network including on site surveys of traffic and parking, site inspections, computer traffic simulations and reviews of other plans and strategies. The following sections of this document provide key issues identified.



Types of issues raised by stakeholders

Key Pedestrian Issues

- Lack of footpaths in various streets
- Uneven and cracked footpaths in several locations
- Pedestrian signage and wayfinding are limited
- Lack of safe pedestrian crossings
- Existing crossing facilities that don't meet current standards
- Limited connections exist to the east of the UOW campus.
- Difficult to access Mount Ousley Area from UOW
- Street lighting is limited in some areas



Gap in traffic island is too small to accommodate wheelchairs, prams or bicycles



Some cyclists ride on the footpath in lieu of a dedicated path or lane

Key Cycling Issues

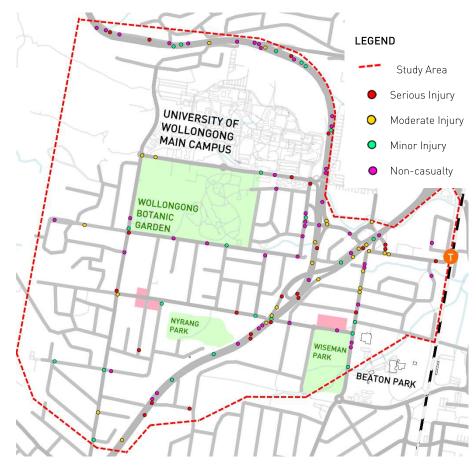
- Missing paths in a number of routes between key destinations
- Missing connection between Mount Ousley and UOW
- Missing connections between east and west of the rail line
- Lack of secure bike parking at key destinations
- Lack of end of trip facilities at UOW
- Wayfinding signs missing on some routes
- Existing roundabouts can be difficult for cyclists to use safely due to topography and vehicle speeds

Key Public Transport Issues

- Infrequent route bus services
- Bus services during peak periods are overcrowded
- Poor integration of bus services with train timetables
- Shuttle services are limited outside of peak and session
- Lack of shelter and accessible infrastructure at bus stops
- Poor connectivity of bus services with surrounding suburbs
- Poor frequency of train services in both directions
- Poor alignment of train services with UOW schedule



Few bus stops provide a boarding area or path that is accessible, the majority lack bus shelters



Crash data 2014 to 2018

Key Vehicle Network Issues

- There is congestion in various streets within the study area including:
 - o Various University Avenue intersections
 - o Queuing along Mount Ousley Road in the peak hours
 - The UOW Ring Road
 - o Foley Street
- Some drivers use minor streets to avoid congestion
- Vehicles speeds are of concern to community members

Key Car Parking Issues

- Parking utilisation is very high in the streets south of the UOW campus, including Keiraville village
- Two-hour parking spaces are not long enough for students attending lectures
- Accessible parking is not provided in the village centres
- Lack of enough pick up/drop off zones at key destinations such as schools, UOW, and Beaton Park
- Parking close to key destinations is often heavily utilised by employees
- Vehicles are often parked over driveways
- High amount of unrestricted parking provided in residential areas near the University
- Poor sightlines at some intersections within the precinct due to vehicles parking too close
- Multi occupancy dwellings and student accommodation generate street parking demand
- Significant numbers of vehicles parking illegally throughout the study area
- Number of residential streets throughout the study area which have been reduced to one lane in each direction due to parking on both sides of the road.

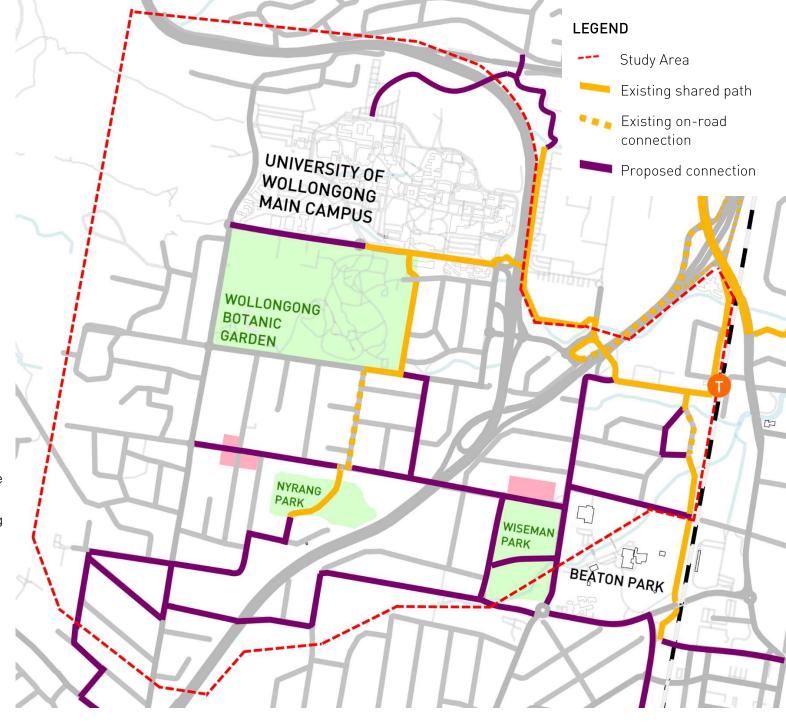


High street parking use associated with key destinations



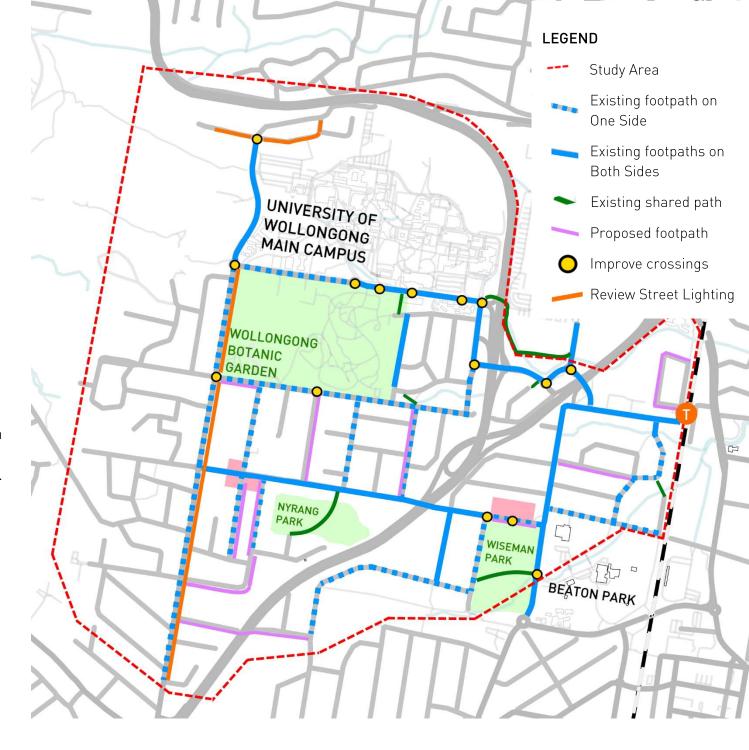
Cycling Actions

- Include suggested shared path locations in future programs.
- Provide active transport connection across train line close to Beaton Park.
- Provide improved cycling wayfinding on the key existing and future cycle routes.
- Provide a widened shared path through Wiseman Park in line with the Fairy Creek Corridor Master Plan.
- Provide increased number of secure and undercover bicycle parking at key land uses such as the UOW, Keiraville and Gwynneville village centres, Beaton Park, the local schools and off-street parking locations.



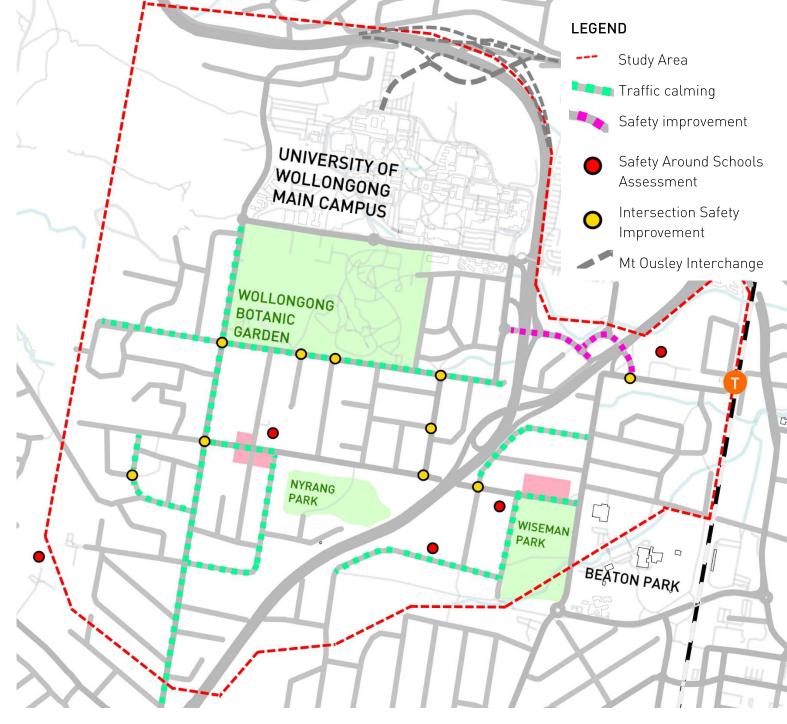
Pedestrian Actions

- Provide compliant pedestrian refuge island at roundabouts.
- Ensure that all crossing facilities comply with Australian Standards (upgrade where needed).
- Provide a direct pedestrian connection towards the north and east of UOW.
- Provide wayfinding to key destinations including train stations, UOW, key centres and recreation facilities.
- Provide increased pedestrian priority within the village centres.
- Provide increased marketing especially in schools, workplaces and town centres to show the benefits of walking and cycling.
- Review street lighting with respect to pedestrian needs
- Undertake audit of pedestrian kerb ramps
- Include suggested footpath locations in future programs.



Vehicle Movement Actions

- Realignment of roundabout at Murphys Avenue and Robsons Road.
- Undertake safety around schools assessments.
- Advocate for implementation of the Mount Ousley Interchange project.
- Investigate traffic calming measures on Robsons Road to manage vehicle speeds, particularly on the north and south downhill sections to the Gipps Rd intersection.
- Investigate intersection improvements (refer to map).
- Investigate traffic calming improvements (refer to map).
- Investigate traffic calming device at Braeside Avenue – Murphys Avenue to reduce vehicle speed.
- Investigate safety improvements on University Avenue.



Car Parking Actions

- Investigate the provision of marked parking bays to increase the efficiency of parking spaces within the precinct.
- Review timed parking, pick up and drop off and special parking restrictions surrounding key destinations.
- Review ranger patrols to ensure all vehicles abide by the corresponding parking restrictions.
- Investigate introduction of parking restrictions in close vicinity of the University.
- Develop a special event parking and traffic management plan for significant events at Beaton Park.
- Monitor school kiss and ride zones to prevent parking and expand as required to support demand.
- Investigate parking wayfinding opportunities to parking at attractors such as Beaton Park and the Botanic Garden.
- Work with schools to manage parking and safe drop off/pick up.

