

URaP – T T W



Consulting Engineers

North Sydney Council
Public Domain Strategy - North Sydney Centre

Traffic Management Plan



URaP – TTW Pty Ltd

L3, 48 Chandos Street
St Leonards NSW 2065
Phone: (02) 9439 7288
Fax: (02) 9439 3146
Email: urap@ttw.net.au
ABN 24 101 643 010
ACN 101 643 010



PUBLIC DOMAIN STRATEGY – NORTH SYDNEY CENTRE

TRAFFIC MANAGEMENT PLAN

© URaP – TTW Pty Ltd
48 Chandos Street • St Leonards 2065
Phone +61 2 9439.7288 • Fax +61 2 9439.3146

June 2005

Table of Contents

1.0	INTRODUCTION	2
1.1	Background	2
1.2	Study Process	3
1.3	Scope of the Report	4
1.4	Study Area	4
2.0	PUBLIC DOMAIN STRATEGY	6
2.1	Vision	6
2.2	Strategies	6
2.3	Workshop	9
2.4	Summary	10
3.0	SITE ANALYSIS	11
3.1	Urban Character	11
3.2	Centre Precincts	18
3.3	Street Network	20
3.4	Pedestrian Network	27
3.5	Bike Routes	29
3.6	Vehicular Traffic	30
3.7	Public Transport	38
3.8	Summary	38
4.0	ROUTE NETWORK STRATEGY	39
4.1	Design Principles and Method	39
4.2	Route Network Scenarios	41
4.3	Assessments	44
4.4	Points of Consideration	60
4.5	Summary	63

5.0	PAMP	64
5.1	Objectives	64
5.2	Elements of Design Strategy	64
5.3	Route Selection	66
5.4	Pedestrian Accidents	67
5.5	Pedestrian Facilities	71
5.6	Opportunities and Constraints	78
6.0	MANAGEMENT PLAN	80
6.1	Concept Plan	80
6.2	Blue Street	81
6.3	Walker Street	89
6.4	Miller Street	90
6.5	Berry Street	90
6.6	McLaren Street	91
6.7	Ridge Street	91
6.8	Arthur Street	91
6.9	Other Streets	92
6.10	Pacific Highway	92
6.11	Parking within the Centre	93
7.0	POLICY and ACTIONS	94

1.0 INTRODUCTION

1.1 Background

“North Sydney Local Environmental Plan 2001 (Amendment No 9) allows for an additional 250,000m² of commercial floor space to be developed within the core, and about 200 additional dwellings to be developed in the remainder of the Centre. When completed this development will accommodate 12,500 additional workers and 374 additional residents. Council wants growth of the Centre to be public transport led and has secured a commitment, from the State Government, that the upgrade of the North Sydney Station will occur in tandem with the release of additional floor space.”

Accordingly, in October 2004, Council commissioned a traffic and pedestrian study for North Sydney Centre (NSC) in order to *“establish the capacity of the traffic system to accommodate the expected population growth and the proposed public domain improvements. The Management Plan will identify relevant traffic management and pedestrian issues and establish actions to implement the strategy and accommodate growth. The Management Plan is to be in accordance with the North Sydney Centre Public Domain Strategy recommendations.”*

This study has been undertaken in response to the Council’s commitment and the findings of the North Sydney Centre Public Domain Strategy (PDS).

This study provides information and measures on:

1. The current and future traffic situation throughout the Study Area and the identification of deficiencies of the road network and traffic

system. It also includes measures to improve and overcome these deficiencies.

2. The future traffic management plan is to provide an effective and practical road network system that would resolve vehicular and pedestrian conflicts in the North Sydney CBD catering for future traffic growth during the next 10 - 20 years.
3. Development of a Pedestrian Access and Mobility Plan (PAMP) in accordance with RTA's guidelines highlighting the pedestrian desire lines and the necessary pedestrian facilities to cater for the existing and future demands.

1.2 Study Process

The study process has included the following activities:

STAGE 1

- ⇒ investigation and review of overall traffic management options and public domain strategy
- ⇒ site analysis of the area including vehicular and pedestrian route network and urban design elements
- ⇒ Workshop/consultation to ensure that the affected stakeholders are informed and that they have an important role in the decision making of options and trade-offs.

STAGE 2

- ⇒ Evaluation of comments from the workshop.
- ⇒ Assessment of the existing and future traffic situation within the study area
- ⇒ Development of a traffic model for the study area

- ⇒ Assessment of traffic situation for the area with respect to the future growth (traffic modelling)
- ⇒ Analysis of options and preparation of a traffic management scheme.

STAGE 3

- ⇒ Development of a traffic management plan for the area with consideration to PDS
- ⇒ Development of Pedestrian Access and Mobility Plan for the area
- ⇒ Development of traffic models for the year 2006 and 2021 for a “do nothing” scenario and a “proposed” scenario
- ⇒ An overview urban design strategy with respect to PDS
- ⇒ Development of policy and action program for the study area with consideration to traffic and transport elements and PDS

1.3 Scope of the Report

This report is divided into seven sections:

Section 1: covers the introduction.

Section 2: provides an overview on PDS.

Section 3: details the study area and the existing situation

Section 4: analyses the road network and proposed measures

Section 5: develops a Pedestrian Access and Mobility Plan

Section 6: includes Plan of Management

Section 7: recommends policy and actions

1.4 Study Area

The study area extends the statutory boundary of the North Sydney Centre and includes the area as described by PDS for North Sydney Centre.

The study area is bounded by Ridge Street to the north, Arthur Street to the east and Blue Street to the south. William Street (between Blue and Mount Streets), Mount Street, Edward Street (between Mount and Berry Streets), Berry Street and Pacific Highway and West Street (between Pacific Highway and Ridge Street) form the western boundary of the study area.

The Study Area is shown in **Figure 1.1**.

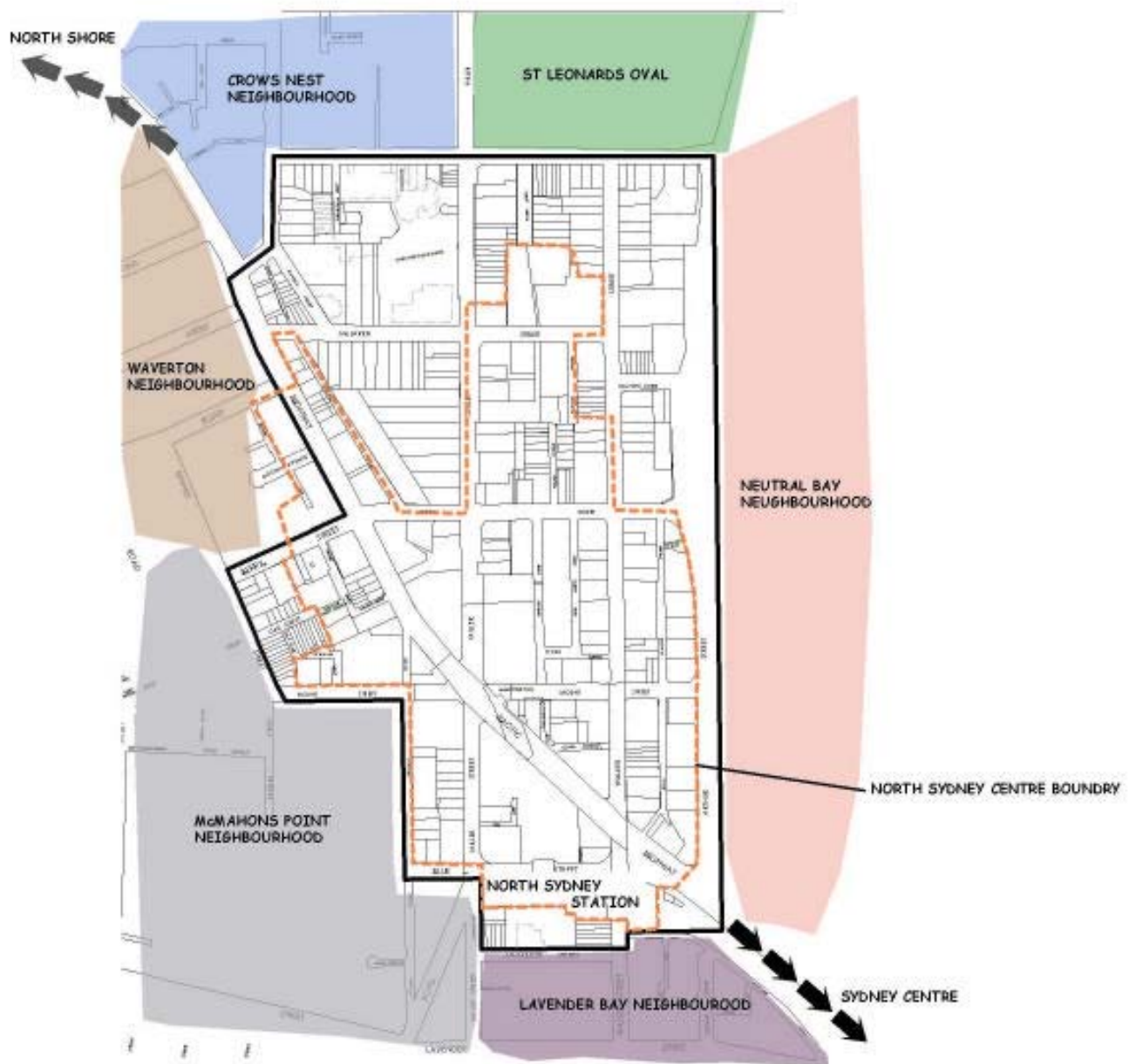


Fig 1.1: Study Area and Surroundings
Source: PDS

2.0 PUBLIC DOMAIN STRATEGY

2.1 Vision

The Public Domain Strategy (PDS) sets standards and provides for continuity in the development of the public domain throughout the Centre. The Strategy ensures that the quality, diversity and capacity of the public domain will be enhanced, in tandem with the anticipated growth and regeneration of the Centre, to:

- Contribute to the Centre's status as a major CBD within Australia;
- Reduce the impacts of growth and change;
- Absorb increased pressures from an expanded workforce, additional residents, business and recreational users, on the public domain infrastructure;
- Facilitate the use of public transport;
- Encourage greater dependence on public transport;
- Discourage use of private motor vehicles; and
- Encourage walking and cycling to, and through the Centre.

2.2 Strategies

PDS document puts forward seven main strategies for North Sydney Centre as part of its improvement approach for the Centre.

The main strategies related to this study associated with accessibility, traffic and transport are summarised below:

UNITING THE CENTRE

To reduce the divisive effects of the Pacific Highway and Berry Street through:

- Downgrading the design speed to 40 kilometres per hour by reducing lane widths;
- Widening footpath on southern side of Berry Street,
- Widening median strip on Pacific Highway;
- Re-engineering intersections to increase pedestrian space; and reduce distance and therefore time required for pedestrians and cyclists to negotiate these intersections;
- Provide bicycle lanes and implement bicycle design principles at intersections;
- Creating a visual continuity of north-south streets (Miller and Walker) and east-west streets (Berry and Mount) so that local streets are continuous across the Pacific Highway and Berry Street, rather than truncated by these major roads;
- Emphasising the civic nature of Miller and Mount Streets where they traverse the Pacific Highway - through landscape and lighting interventions, these "main" civic streets are to look and be continuous across the intersection;
- Reducing street clutter by amalgamating signage and lighting structures, and undergrounding any remaining overhead power lines;
- Using infrastructure (poles, signage) that establishes consistency and is appropriately scaled;
- Using landscape elements along the streets that belong to the landscape framework of the Centre thereby disclosing the Centre's identity to those in transit;

BALANCING PEDESTRIAN, CYCLIST AND VEHICLE DEMANDS

Realign the public domain towards pedestrians and cyclists and improve accessibility throughout the Centre by:

- Redesigning intersections and changing light phasing to favour pedestrian and cyclist access
- Developing laneways primarily for pedestrian access Integrating cycle routes into the laneway and park network, as well as on the major streets
- Directing through traffic onto the arterial streets (Pacific Highway, Berry and Arthur Streets)
- Restricting and calming traffic on the main streets (Miller and Mount Streets) and local streets (Walker and McLaren Streets)
- Widen footpaths at strategic points to slow traffic, narrow crossings and provide additional pedestrian space

Improve pedestrian access to and from North Sydney Station, and enhance pedestrian flows, through the most concentrated area, by:

- Widening the pedestrian standing area at intersections where people cross the Pacific Highway and downgrading the performance of intersections (enabled by reducing the design speed of the Pacific Highway to 60km/h and the reciprocal claiming of road reserve for footpaths)
- Designing station entrances including satellite entrances to the station (many of which are currently hidden as doorways to Greenwood Plaza) to have greater visibility (in association with the upgrade of North Sydney Station) and identify opportunities for new satellite entrances
- Calming traffic on Blue Street, for example by removing westbound, private through traffic from Blue Street, and developing the street into a bus/rail/taxi interchange

- Relocating the “Kiss and Ride” westbound from Blue Street to Pacific Highway adjacent to the existing satellite entrance to the Station on the south side of the Pacific Highway
- Developing of Mount Street (already part mall) as a plaza that pedestrians cross-over freely to connect with Miller Street, Walker Street and the laneways
- Installing Centre maps on footpaths to orientate pedestrians (to be included in a signage package for North Sydney)

2.3 Workshop

As part of this PDS - traffic study, a workshop was organised at Council, on 4 November, 2004 from 9.30 am to 2.00 pm. The participants to the workshop included Councils staff from various sections and representatives from Roads and Traffic Authority and State Transit Authority.

As part of the workshop, the following activities were included:

- a. A presentation of the proposed options, their features and the overall objectives of the study.
- b. A question and answer exercise where the audience was encouraged to discuss and explore various issues and solutions.
- c. Conclusions.

The summary of points that were raised in the workshop is provided below:

- Recognition of Walker Street with a “High Street” function instead of “Local Street” as classified in PDS.
- Need for 3.2 m width per lane carriageway for bus routes as 2.8 m width as identified in PDS would not be satisfactory.
- Concerns about pedestrian amenity and crossing facilities along Pacific Highway, Berry, Miller and Blue Streets.
- Concerns on Miller Street congestions and its impact on bus services.
- Reduce traffic on Miller and Walker Streets but keep it moving.
- Promote designs for new developments and required infrastructures
- Need for transport interchange and bus priority lanes
- Promote opening of Greenwood shopping area during nights, to encourage higher activity of the Centre at night times
- Promote weekend usage of NSC
- Better Directional Signs

2.4 Summary

The proposed measures as part of the PDS aim to provide better amenity and safety for pedestrians while improving the accessibility to and from the Centre by public transport.

The strategy also intends to reduce the level of vehicular traffic within the Centre and maximizing opportunities for urban amenity.

It is anticipated that by the opening of the Gore Hill extension to the Warringah Freeway, and the proposed Lane Cove Tunnel, and associated works, the level of through traffic within the Centre would be reduced. This provides an opportunity to realign the public domain towards pedestrians and cyclists and improve accessibility throughout the Centre.