

## **THE TRANSPORT NEEDS OF SYDNEY'S NORTH-WEST SECTOR**

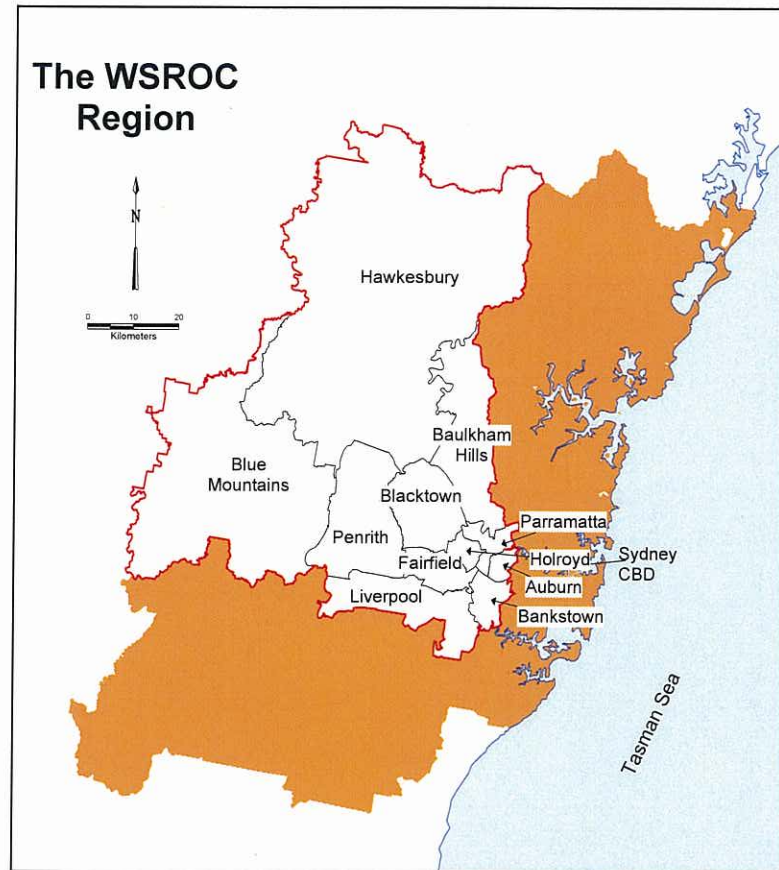
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# Transport Needs of Sydney's North–West Sector

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Western Sydney Regional Organisation of Councils Ltd



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# Transport Needs of Sydney's North-West Sector

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## WSROC in brief

WSROC – the Western Sydney Regional Organisation of Councils Ltd – is one of Australia's oldest and most respected Local Government lobbying organisations and a key advocate for Western Sydney.

Member councils are:

- ◆ Auburn Council
- ◆ Bankstown City Council
- ◆ Baulkham Hills Shire Council
- ◆ Blacktown City Council
- ◆ Blue Mountains City Council
- ◆ Fairfield City Council
- ◆ Hawkesbury City Council
- ◆ Holroyd City Council
- ◆ Liverpool City Council
- ◆ Parramatta City Council
- ◆ Penrith City Council.

WSROC was formed in November 1973 and became a company limited in 1991. All member councils make an equal annual contribution to the operating costs of WSROC and have equal voting rights.

The decision-making body of WSROC is the Board, consisting of two voting Directors from each member council. The Board's role in managing the organisation is supported by the Executive Management Committee (EMC). The organisation is resourced by a small regional secretariat, with professional and support staff.

A number of professional committees and working groups of staff from member Councils also meet regularly to assist in implementing the work program and to discuss major regional issues. These staff groups, member councils, the secretariat, the EMC and the Directors themselves all provide advice and recommendations to the Board for consideration.

WSROC has a reputation for considered research, policy analysis and advocacy on a wide range of issues affecting the residents of Western Sydney. These include urban planning and management, infrastructure and public transport, economic development and employment, environment and sustainability, social equity, cultural development and community services, health, housing and a range of Local Government issues. WSROC is responsible for improvements in many of these areas and has helped to create many of the region's institutions and agencies.

### WSROC's mission

To secure – through research, lobbying, and the fostering of cooperation between councils – a sustainable lifestyle for the people of Western Sydney and the provision of infrastructure such that no one should have to leave the region to have access to the sorts of amenities, services and opportunities others in urban Australia take for granted.



# Transport Needs of Sydney's North-West Sector

## 1. Introduction

On 29 August 2008 the General Purpose Standing Committee No. 4 released the terms of reference for an inquiry into and report on the Integrated Transport Needs of Sydney's North-West Sector and, in particular:

1. The requirements and plans for an integrated transport system in the North-West Sector, including road, rail and bus links;
2. The proposed funding of an integrated transport system for the North-West Sector, including the distribution of developer and State infrastructure levies;
3. The plans and funding for the North-West Metro and the NSW Government's decision not to proceed with the North-West Rail Link; and
4. Any other related matters.

This submission draws upon a number of research projects highlighting the issues associated with the growing mobility and decreasing accessibility of Greater Western Sydney (GWS) as a whole, and in particular the North-West Sydney subregion and considers the distributional effects that rising fuel costs will have on the region. These research projects have shown how 'liveability' is being endangered by threats to the environmental quality, social well-being and economic viability of the region.

It discusses the population growth proposed for the sub-region over the next 20 years and highlights existing areas of transport infrastructure disadvantage. It looks at the way Federal and State Government transport policies have often resulted in unintended consequences from a regional perspective.

WSROC has been lobbying on regional transport issues for many years. Successive State and Federal governments have failed to adequately address the public transport needs of Western Sydney's growing population. Yet at this time no other area of investment has the same potential to benefit so many different aspects of urban living as public transport.

This submission examines policy options and proposes recommendations to minimise energy consumption and the adverse environmental, economic, social and health impacts of motorised travel and the need to reduce the reliance on the motor car in the region.

Finally this submission presents the considered regional response of WSROC. It should be noted that whilst the submission draws upon and attempts to complement the views of individual WSROC Councils, their submissions should be read in their own right.



## 2. Background

The north west sector is contained within the North-West Sydney Sub-region, which comprises the local government areas (LGAs) of Baulkham Hills, Blacktown, Blue Mountains, Hawkesbury and Penrith, it covers an area of 5,252 sq km. The north-West contains the Strategic centres of Penrith, Blacktown, Castle Hill and Rouse Hill.

The sub-region is comprised of two reasonably distinct districts. The western corridor runs from Blacktown through Penrith to the lower Blue Mountains. It is criss-crossed by the M4 and M7 motorways and includes the Western Sydney Employment Hub and the Western Sydney Employment Lands Investigation Area. Penrith, which lies on this corridor, has been designated as the "regional city" for the North-West Sydney Sub-region.

The north-west sector stretches from the northern areas of Blacktown and Baulkham Hills to Hawkesbury and includes the North-West Growth Centre targeted as the location of 60,000 new dwellings. This area has expanded as a commuter belt for white collar workers, including higher proportions of professional workers than is typical for Western Sydney as a whole. This district also contains the Norwest Business Park, the site of considerable higher-order growth over the last decade.

The North-West sub-region was the most populous of the Sydney metropolitan area in 2006. The population of North-West Sydney at the time of the Census in 2006 was 737,801 which represented 41.2% of the Greater Western Sydney (GWS) population, 17.9% of all persons in the Sydney Statistical Division (SD) area and 11.3% of all persons in NSW. Blacktown had the largest population of all the LGAs in the North-West sub-region with 271,709 persons at that time. The smallest LGA population was in Hawkesbury (60,561) which represented a 1.3% drop in population for the LGA between 2001 and 2006.

The North-West sub-region showed a 55.2% increase in growth between 1981 and 2006 which was larger than the WSROC region (40.4%), GWS (47.0%) and substantially more than the growth of Sydney SD (28.5%) during the same period of time. Between 1996 and 2001 there was a 9.0% population change and the sub-region had an annual growth rate of 1.8%. Between 2001 and 2006 the population change slowed to 5.4% and the growth rate dropped to 1.1%. The North-West sub-region during this time therefore experienced the greatest growth of the three Western Sydney sub-regions

Baulkham Hills LGA experienced the third largest population growth in NSW at 2.6% (exceeded only by Auburn 3.0% and Sydney City 4.9%) and the largest proportion of population increase in the sub-region between 2001 and 2006 (14.0%), followed by Blacktown (6.0%), while the other three LGAs experienced a slight population loss during that period of time.

It is estimated (DIPNR 2004) there will be close to one million people (980,390) in North-West Sydney in 2019. This represents a 32.9% increase on the 2006 population or another 242,521 people. It is forecast there will be some 2.4 million people in the Greater Western Sydney area as a whole at that time.

Under the Metropolitan and sub-regional strategies the Department of Planning is forecasting that the region will have the greatest share of Sydney's future housing growth (23%) and future jobs (24%) over the next 25 years. The Metropolitan Strategy anticipates the development of 60,000 in the north-West Growth Centre, 60,000 new dwellings in existing areas and a further 20,000 in Greenfield sites away from the N-W Growth Centre itself.

Like many parts of the GWS region as a whole the North-West sub-region is experiencing continued growth pressures whilst still dealing with backlogs and continued under-investment in infrastructure provision, particularly in relation to public transport.

The North-West has currently about 275,000 jobs and is forecast to grow the highest rate of jobs (24%) for all metropolitan sub-regions over the next 25 years. Achieving this level of growth will however require considerable intervention and policy support from all levels of Government.

The sub-region is also Sydney's major producer of agricultural commodities and has an increasingly important role as host to transport and logistics industries.

### **3. Strategic Context**

#### *3.1 Rising Oil Prices*

Over the last three years many commentators have been noting the strong and rapid rise in the international price of oil. The ABS in 2005 reported the cost of 'automotive fuel' rose approximately 10% during the year to June 2005 and the monthly average cost for Sydney petrol rose 40% during the 21 months to September 2005. There are currently no indications that there will be a corresponding decline in fuel prices in the short term.

The NSW Greenhouse Plan (2005) has noted that in the last 30 years the total number of Australian cars has grown three times faster than the population. In the last decade in Sydney the average vehicle kilometres travelled (VKT) per vehicle has grown more than twice as fast as the population. It was also reported that there has been little improvement in the last decade in the average fuel efficiency of vehicles and the limited gains that have been achieved are being undermined by the increasing demand for more cars.



Between 1991 and 2004 travel in North-West Sydney increased at the same rate as population growth, with average annual growth of 1.6%, above the Sydney average growth rate of 1.4%.

Although opinions vary, a number of analysts suggest that global oil production will peak within the next 20 years (Sprott and Solunac 2005). Others predict that 2005 may have been the peak year for global oil production, highlighting declining production coupled with increasing demand from China (with an increase of car sales of 15% in 2005) and India (where car sales increased by 20% in the same period).

Over the last decade some commentators have highlighted the potential adverse scenarios that the growing gap between peak oil demand and supply will have on cities that are dependent on roads and private vehicles for urban mobility (Newman 1991). They argue that the impacts will be much greater than simply increased fuel costs but could extend into every aspect of urban economic and social life.

Newman and Kenworthy (1999) have also pointed to the low density nature of Australian cities contributing to poor public transport services. Others such as Mees (2000) have argued that high quality, integrated services would increase public transport patronage. The *Metropolitan Strategy* (Department of Planning 2005) is proposing to develop substantial release areas as well as significantly increasing densities. WSROC has consistently argued that both urban expansion and increased densities must be coupled with the provision of high quality integrated services.

### *3.2 Transport Disadvantage in Western Sydney*

Community consultations undertaken in the Western Sydney region for many years have pointed to poor accessibility and transport difficulties being experienced by residents. There is a need to increase the accessibility for all residents of the region to facilities, opportunities and services located both within and outside its boundaries. Upgrading of infrastructure is urgently required for commercial, private and public transport at an equitable cost to the established community and to ensure the adequate provision of services for new development.

The *Western Sydney Regional State of the Environment Report* (WSROC 2000 section 3.2.4) noted that;

Transport was recognised in the community workshops as a major pressure on social and environmental sustainability. Exhaust gasses add to pollution and increase global warming levels. Costs of transport are regarded as high in time and money.

Many urban areas in Western Sydney are hampered by inadequate arterial road systems which result in traffic intrusion into existing residential areas, coupled with grossly deficient public transport provision. A "Catch 22" situation also exists whereby public transport has not been *increased* as a result of high car ownership and car ownership has not *decreased* because public transport has not been improved.

### *3.3 Travel Patterns*

Over many years urban release has been taking place on a massive scale in Western Sydney. The land was relatively cheap, due in part to its poor accessibility and a lack of services and facilities. Families moving into the area had no choice but to rely on the car as there were few public transport services and even basic facilities were either dispersed or available only in distant centres. The need for a second car (or a third) is now firmly entrenched in the minds of the population, with the result that high levels of car ownership are exacerbating income deprivation in many areas. To bring about any change will require a massive alteration to a lifestyle that has developed out of necessity.

In summary, Australian cities and in particular the fringes of these cities are highly car and oil dependent. In Western Sydney the private motor car is used for the vast majority of trips, 76% for work and 71% for all trip purposes. While Sydney's annual total vehicle VKT increased on average 2.3% each year from 1991 onwards, the patterns were geographically uneven – with a 23% increase in outer and South-West Sydney compared with a 10% decline in inner and eastern Sydney.

The North-West subregion has the lowest proportion of trips by public transport of any sub-region. In 2006 there were 39,693 people who caught public transport to work (train, bus tram or ferry) in North-West Sydney, compared to 243,093 who drove in private vehicles (car-as-driver, car-as-passenger, motorbike or truck). This represented 11.4% of the sub-region's population using public transport while 69.9% used a private vehicle compared with 13.6% and 68.6% in the WSROC region and 18.0% and 60.6% respectively in Sydney SD.

Overall, in North-West Sydney 5.5% of residents travelled to work by train, 1.4% by bus and 66.7% by car (either as a driver or passenger). There are, however, considerable variations within the sub-region, for example, in Blacktown LGA a much higher proportion travelled by train (8.1%) compared to Baulkham Hills (1.7%). Bus patronage was lowest in Hawkesbury (0.3%) and highest in Baulkham Hills (3.0%).

North-West residents spend on average 41 minutes driving per person per day, which is higher than the Sydney average of 37 minutes. Average distance travelled per person per day (44 km) and average VKT per person per day (27 km) by North-West residents are both markedly higher than the Sydney averages of 38 km and 20 VKT respectively.



Car commuting trips in the morning peak are up to 17 minutes longer in many areas. Travel times by public transport for non-work purposes varied across the region with times of up to 10 and 20 minutes greater than the Sydney average (in areas such as Baulkham Hills, Blacktown, Campbelltown and Hawkesbury).

In addition, a large proportion (54%) of the schoolchildren in the North-West travel to school by private vehicle.

Some 19,625 households in North-West Sydney did not have a car (representing 8.5% of households). Just over one third (33.7%) had 1 vehicle, (40.0%) had 2 and 17.9% had 3 or more vehicles. This compares with 13.7% with no vehicles, 33.7% with 1 vehicle and 12.8% with 3 or more vehicles in the Sydney metropolitan area as a whole. The highest proportion of households with three or more vehicles was in Baulkham Hills LGA (24.1%) – a reflection of the inadequate provision of public transport in that LGA at that time.

Vehicle ownership per head of population in the sub-region increased greater than the population growth. Between 2001 and 2006 there was a 6.0% increase in the number of vehicles in the North-West compared with a population increase of 4.8%.

The high volume of traffic within the region, with a mix of private and public passenger, freight and commercial vehicle travel, places pressure on the sparse arterial road network. During the morning peak (7am to 9am), more than 1,800 vehicles per hour travel on many arterial roads throughout Greater Western Sydney. Many other roads also experience traffic volumes of 800 to 1,800 vehicles, even though they were not originally designed for such levels. The problem of high volumes on roads built for lower capacities is exacerbated by poor connectivity with other local roads and, prior to the opening of the Westlink M7, a lack of north-south regional links.

### *3.4 Poor Public Transport*

Western Sydney has always suffered from poor access to public transport which has had a long history of operational and patronage problems. Sydney's public transport is split between State Rail, Sydney Transit which operates buses in the central and eastern suburbs and a number of loosely co-ordinated private operators throughout the western region.

The rail network in Western Sydney has not been significantly expanded since the 1930s when the region's population was less than a fifth of what it is today. The result is that urban expansion is pushing residential growth further and further away from the existing rail network, increasing dependence on private cars and buses. However there has been little integration between the rail and private bus networks; the use of local buses as feeders to the higher capacity rail systems has been underdeveloped and, in

many instances is no longer relevant to people's transport needs. Travel between outer suburbs is very difficult and results in high car dependence for cross-suburban trips.

Western Sydney's economy and the welfare of the community stand to lose if new approaches to deal with Sydney's transport problems are not adopted. The State Government has initiated a number of transport reforms, including consolidation of private bus contract areas, harmonisation of private and public transport services, development of an integrated network of bus corridors and announcement of major new rail proposals, but these will require substantially increased funding and a high level of ongoing government commitment.

### *3.5 Road Dominance*

As Western Sydney's population had grown dramatically the provision of hospitals, universities, social services and public transport infrastructure to support the families pouring in has been inconsistent, with backlogs in many areas.

However, roads were provided much more consistently as the region's population increased. Over 120 kms of motorway have been constructed since the 1970s, much of it financed by the private sector and funded through tolls, while only 14 km of rail line has been provided. Although the construction of a motorway network was appropriate to support freight and commercial traffic, the failure to provide a complementary public transport network means that traffic on these motorways will reach capacity much more quickly and they will then play a much less effective role in supporting the regional economy.

### *3.6 Long Distance Freight and Passenger Transport Issues*

Greater Western Sydney is a major destination region for freight and a major source region for freight destined for both internal markets, for the rest of Sydney, for destinations around Australia and for export. There is currently a conflict between managing road-based freight transport and the increasing use of the private car.

WSROC is of the view that opportunities to improve long distance country rail services should be factored into rail freight infrastructure improvements and that the importance of long distance passenger rail journeys should not be overlooked. The provision of rail freight infrastructure should not however be at the expense of the amenity of local communities along the affected corridors

Also all Governments should be encouraged to follow the example of Victoria and use strategic investment in the country rail network to reduce the demand for air travel for medium distances such as Sydney to Goulburn and Canberra etc. as a means of reducing car and air travel and thereby transport fuel demand.



### *3.7 Oil Vulnerability*

The National Housing Strategy (1992, page 76) noted the issue of locational disadvantage as follows:

People without private transport, especially where public transport is not readily available are likely to be disadvantaged. In particular older people, young people and members of a car-owning household who cannot use the car, are more likely to have problems and/or longer travel times to services and jobs.

In 1997 Ian Burnley argued:

To the extent that people move to outer suburbia to obtain affordable housing, such pricing trends may be socially inequitable unless strong policies to relocate employment and to develop public transport are pursued in tandem.

A research paper issued by the Urban Research Program, Griffith University entitled *Oil Vulnerability in the Australian City* (Jago Dodson and Neil Sipe) December 2005, has assessed the resilience or vulnerability of urban communities to increased fuel prices and how the socio-economic impacts will spread across different localities. Their research highlighted the fact that localities situated in the middle and outer suburbs of Western Sydney are most vulnerable to the socio-economic impact of oil price rises. The authors called for new policies emphasising the need for public transport services to address the impacts of oil price rises.

### *3.8 Community and Transport Stress*

Western Sydney is often considered to be an area of relatively affordable housing, at least compared to the rest of Sydney. However, this does not mean that the housing is necessarily cheap for the people who live there.

Housing affordability is a key economic consideration and must be viewed in the context of reasonable housing costs in relation to the income of those living and seeking to move there. Hidden inequalities stemming from differences in the physical and social infrastructure provided also affect affordability. Poor public transport provision, limited employment opportunities and scarce community services and facilities are all factors that erode even further the 'real' affordability of housing.

Over-reliance on cars has separated functions and established single interest precincts, changing social patterns and the way neighbourhoods and town centres operate. Active

and engaging meeting places are lacking (WSROC, 2005). There is increasing evidence of 'community stress' (transport stress due to commuting times, costs and lack of public transport options coupled with housing stress).

The risk of greater socio-economic polarisation is increasing and in 2001 it was estimated that 68,000 of the population of the GWS region were in housing stress (39,000 were in private rental accommodation and 29,000 mortgagees. This situation is likely to have been exacerbated by the recent financial crisis and the downturn in property values in many parts of the region.

An ABS Household Expenditure Survey in 2003–2004 highlighted that transport costs are the third largest items in household budgets after housing and food, consuming on average 14.8% of the proportion of household income in Sydney. In Western Sydney the high levels of car ownership, necessitated by poor public transport provision, coupled with the dispersion of employment opportunities and facilities and services could well contribute further to transport stress.

In addition, car-dependent commuters in the north west sector are required to pay a significantly higher level of tolls to use motorways in the region. This is in large part because the two motorways which directly service the area, the M2 and the M7 (as well as other motorways used by many north-west commuters such as the Lane Cove Tunnel and the Harbour Bridge) are not covered by the State Government's toll cashback scheme which residents of central western and south western Sydney can utilise when travelling on the M5 and M4.

### *3.9 Infrastructure Provision and Employment Development*

The costs of mobility have a direct impact on the ability of households to earn an income. The problems will only escalate as Sydney's population is expected to increase by an average of almost 42,000 people per year until 2020.

Although there has been increasing recognition of transport issues and the projected level of growth in the Metropolitan Strategy, critical infrastructure provision is now under question. The State Government had previously committed to a major rail projects such as the North West Metro, the South West Rail Link and the Western Metro, as well as the provision of other infrastructure including the further development of strategic bus corridors, but many of these projects are now under question because of the State Government's budget review.

The provision of economically efficient urban systems, where the time and energy required to move people and goods is minimised, contributes to the development of a more productive region. In contrast an urban form that produces congestion pressures, delays, capacity constraints, higher energy costs and other inefficiencies can



substantially erode the economic advantages of undertaking business activities. European and American examples have shown that the land use changes associated with the development of rapid transit systems can increase economic capacity, while at the same time lessening the environmental impact in the transport sector.

Unemployment remains an issue in Western Sydney, and the region still has a relatively traditional employment profile. For example, employment in information-based services, such as finance, insurance, property and business services is significantly underdeveloped compared to the rest of Sydney. By 2001, there were below average proportions of these jobs in 12 out of 13 LGAs in Greater Western Sydney. Sydney's fastest-growing employment is now occurring in the banking, finance and business service (BFBS) sectors but these remain very highly concentrated in Sydney's extended CBD and lower north shore (51% of BFBS jobs by 2001).

Only 17% of BFBS jobs are located in Greater Western Sydney (compared with its 51% of Sydney's total manufacturing employment). The region thus lags well behind inner parts of Sydney in one of the most dynamic components of the metropolitan labour market. Parramatta LGA contains the principal concentration of employment in BFBS sectors and still stands out as Sydney's second CBD. Baulkham Hills LGA hosts the only other significant locations of BFBS jobs in Greater Western Sydney.

Regional growth of employment opportunities alone does not address the problems of labour market access experienced by many residents in particular localities of the region. What is required is an intra-regional public transport network of corridors and services to provide intra-regional access and movement. Establishment of this network would provide greater access to facilities and services in the region, reduce reliance on motor vehicles, increase use of public transport, improve air quality, reduce motor vehicle accidents, promote an efficient and balanced transport system and provide the backbone for concentration of employment and population growth.

### *3.10 Ageing of the Population*

The debate about the impact of the ageing population has begun. Currently the spotlight has been on the economic impacts of a large retired workforce, the provision of health and social services to an older population and the spatial impacts of substantial immigration of retirees. Yet the policy implications of decreased mobility and increased social isolation, coupled with increased housing and transport stress, still need to be addressed by all spheres of government.

Mobility is especially critical to the well-being of an older population. Affordable, adequate transport options are essential for accessing community services, especially medical services, shopping and maintaining social linkages. However in parts of Western Sydney the current urban form and service provision means that the ageing

population are completely car dependent and may be left stranded when they can no longer drive.

A number of local councils have established initiatives to respond to the particular needs of their communities and the Australian Local Government Association (ALGA 2005) has recently released a paper outlining six strategies for designing age-friendly built environments including the provision of improved mobility options. Unless these measures are adopted, governments will face the economic consequences as older people are forced prematurely into aged care facilities as a result of their inability to access basic services because they have lost their licences or cannot afford to drive.

### *3.11 Transport improvements and proposals to date*

As previously indicated, the north west sector suffers from severe deficiencies in public transport provision. Projects completed since the early 1990s to date include:

- M2 Motorway
- M2 bus lanes
- Bus Transitways from Rouse Hill to Parramatta and Blacktown to Parklea
- Windsor/Old Windsor Road upgrade
- Electrification of the Richmond Line
- Duplication of sections of the Richmond Line (underway)
- M7 Motorway
- Bus priority measures

However, there are several critical infrastructure projects which have previously been identified and/or committed to by the State Government but not yet commenced. These include:

- North West Rail Link (later NW Metro) to Rouse Hill with a potential extension to the Richmond Line at Vineyard
- Bus Transitway from Parklea to Castle Hill. This section was dropped from the final section of the proposed transitway that was to have run from Blacktown to Castle Hill via Parklea
- Strategic bus corridors and cross-regional bus services
- West-facing ramps on the M2 at Windsor Road and widening parts of the M2 to three lanes.

Of these the North West Rail Link and/or North West Metro is by far the most significant and will be discussed in a later section.



#### **4. Options to Address the North-West Sector's Transport Issues**

The previous section outlines the importance of addressing car dependence in Greater Western Sydney and particularly in the north west sector. In responding to these issues, the following objectives are proposed as a basis for assessing priorities in transport infrastructure and service provision:-

- Providing a safe, sustainable, affordable, efficient and equitable transport system at the metropolitan, regional, sub-regional and local levels that improves access to employment, education, health, recreation and other services and facilities whilst significantly reducing car dependency;
- Supporting the role of major employment, commercial and service centres within the north west, particularly through the provision of public transport infrastructure and services, to increase employment and economic development and to reduce the need to travel;
- Providing public transport infrastructure for those who still need to leave the north west sector and the region to access employment and other opportunities;
- Improving accessibility for people with special needs and reducing social isolation;
- Providing strategic improvements to the road network, especially to support freight movement.

The following infrastructure proposals are based on consideration of these principles as well as a review of the following:

- WSROC's previous analysis of regional infrastructure needs, based on its detailed assessment of regional issues, for example WSROC's 2005 FutureWest Regional Planning and Management Framework;
- WSROC's submissions to various Federal and State Government inquiries and the priorities identified in WSROC's Federal and State Election Issues Papers;
- Research commissioned by WSROC on the region's needs, including the Sub-regional Employment Strategies being completed for WSROC and relevant Councils by the Urban Research Centre at the University of Western Sydney;
- Analysis of the State Government's previous policy announcements and strategic documents, including the Metropolitan Strategy, the Urban Transport Statement and the launch of the North West Metro.

On this basis WSROC is proposing the following public transport infrastructure projects for the north west sector. Whilst the first two projects should proceed as a matter of urgent priority, the other public transport and the following road infrastructure projects should be incorporated in the development of a Western Sydney Integrated Strategic Transport Plan. An integrated and preferably bipartisan long-term plan with a heavy emphasis on public transport is essential to guide future infrastructure investment priorities for Federal, State and Local Governments

***Public Transport Priorities:***

- **Construction of the North West Metro or Rail Link.** This project is critically important for the future of the north west sector and indeed the whole GWS region. WSROC strongly supports this proposal as well as its extension to the Richmond Line at Vineyard.

The link would provide major intra-regional links between existing employment centres in the north west such as Castle Hill, Norwest Business park and the recently-opened Rouse Hill Town Centre, as well as inter-regional links to employment centres such as Macquarie Park and Northern Sydney. It will also service the North West Growth Centre which will be home to over 175,000 people. (see next section for further discussion).

- **Completion of the bus transitway from Parklea to Castle Hill.** This would complete a key "missing link" in the public transport network.
- **Provision of the already-planned additional strategic bus corridors and cross-regional bus services.**
- **Provision of a public transport corridor on the M7.** This would be integrated with the bus transitways and the existing M2 bus lanes and would provide direct access between the north west and south west growth centres as well as intervening employment lands.
- **Parramatta to Epping Rail Link.** Whilst not directly linking to the north west sector, this would provide an important link between the NW Metro/Rail Link and the Western Line at Parramatta
- **Provision of commuter carparking at major transport nodes.** These include castle Hill and Baulkham Hills CBDs as well as key stops on the M2 bus lanes and bus transitways.

***Road Infrastructure Priorities:***

- **West-facing ramps on the M2 at Windsor Road**



- **Arterial Roads Improvement Package.** WSROC has proposed this as a regional transport initiative. In the north west sector this could incorporate a number of projects already identified by BAULKHAM Hills Shire Council including upgrades/widening to Burns Road, memorial Avenue, Showground Road and selected intersection upgrades.
- **Construction of the National Highway link from the M2/M7 to the F3.** This would complete a key “missing link” in the National Highway network but should only be seen as part of an integrated transport solution for this corridor. To this end WSROC supports Council’s request for consideration of the option for this corridor to run between Dean Park and Kariong. This would allow for the corridor to incorporate planning for a future rail corridor.

## **5. North West Rail Proposals**

In March the State Government announced the proposed North West Metro (NW Metro) as a replacement for the previously-planned North West Rail Link (NWRL). WSROC’s response to the proposal raised a number of issues which are summarised below.

### *5.1 Potential Advantages of the NW metro*

WSROC noted the potential advantages of the proposal, including:

- It incorporates the NWRL section from Rouse Hill to Epping preserves and reinforces the State Government commitment to provide a rail link in this corridor as well as its overall commitment to reduce car dependence and road congestion and to improve air quality.
- The Rouse Hill to Epping section follows and largely preserves the NWRL alignment which reduces the need for new planning work and the Government has committed to building the Epping to Hills Centre section first rather than last.
- Following the NWRL alignment also means at least that there will be an interchange at Epping providing a connection to Macquarie Uni and Macquarie Park employment hub.
- It preserves potential for a link to the Richmond line and (subject to planning of the links to the proposed Epping interchange) to construct the Parramatta to Epping link, either as a metro or CityRail line.
- The Epping to CBD section of the route will provide a new corridor to the city and a public transport alternative to Victoria Road, as well as new links between intermediate centres (for example, Castle Hill to Top Ryde).

- There will be faster travel times than the previous NWRL proposal (partly due to the shorter dwell times) with a seven-minute saving on comparable journeys from Rouse Hill to the CBD.
- The system will operate at very high frequencies (20 to 30 trains per hour) dispensing with the need for timetables and higher capacity due to this frequency (but higher proportion of standing passengers).
- The proposed metro will have lower operational costs due to automation, driverless trains and unstaffed stations.
- Construction of the NW metro as a stand-alone line removes the potential for disruptions on the CityRail network to impact on the metro's operation (and vice versa) and also provides potential for a separate operator from City Rail which would introduce competition.
- The fact that this is an innovative project provides a basis for a new network of metros based on state of the art technology.

### *5.2 Potential issues with the NW Metro*

WSROC also noted the following issues which would need to be addressed:

**Viability:** Overall concerns regarding the Government's ability to deliver the project have been exacerbated by concern over the complexity of the NW Metro proposal, which combines significant use of new technologies – driverless trains, fast travel times and long-distance underground lines, etc.

The project's complexity along with its extension from Epping to the CBD mean that it is a much more expensive project than the previous NWRL proposal, which has also led some experts to question its financial viability. This also has implications for fare levels on the metro, especially if private sector investment is involved.

**These concerns have naturally been heightened by the Government's recent indication that the NW metro was "under review" in the development of a mini-budget to cut costs.**

**Construction:** Whilst much of the planning has been completed for the Rouse Hill to Epping section, the same cannot be said for the Epping to CBD corridor where extensive geotechnical work and planning of stations etc will have to be conducted. This means that whilst the 2015 deadline for completion of the Hills Centre to Epping section is viable, considerable effort will be required to meet the commitment to meet a completion date of 2017 for the Epping to CBD section.

WSROC's preferred position is that the line should be extended from Rouse Hill to an interchange on the Richmond Line. WSROC has already raised the issue of train stabling



and supports Baulkham Hills Shire Council's position that this should be located towards Vineyard rather than in Bella Vista. It is also important that the option to construct the Parramatta to Epping link, either as a metro or CityRail line be preserved.

**Operation:** Some transport experts have questioned the proposed travel times for the metro, claiming that they did not include station dwell times. The Minister for Transport has however reaffirmed that dwell times were included in the extensive modelling of the proposed travel times.

As indicated above, the combination of driverless trains, fast travel times and long-distance underground lines will raise a number of operational complexities. For example, the length of the tunnel will require extensive evacuation facilities and the ability to operate the system in sections whilst maintenance work is carried out on other parts of the line. Driverless operation and potential private sector management will require extensive reviews of existing safety and regulatory regimes, a point that WSROC made in its recent submission to the review of the CityRail regulatory framework.

It is also essential that both an integrated fare and ticketing system are in place covering both the metro and the existing CityRail, bus and ferry networks by the time the metro opens.

**Interchanges:** The decision to construct the NW Metro as a stand-alone line has a number of advantages as outlined above but it also raises a number of significant issues. In the short term at least it may lead to under-utilisation of the CityRail Epping to Chatswood link which was going to be fed by the previous NWRL proposal as well as the existing Main North line.

By far the biggest planning issue however is likely to be the design of the Epping interchange. There are likely to be significant numbers of commuters changing trains at Epping from the NW Metro to the CityRail Epping to Chatswood link to access Macquarie University as well as jobs at Macquarie Park, Chatswood and the lower North Shore. Macquarie Park in particular is likely to continue growing as a significant employment destination for commuters from the North West.

A related issue which needs more attention is the potential for interchanges *from* the CityRail lines (particularly the Main North line) *to* the NW Metro to take advantage of the latter's faster travelling times to the CBD. In other words, Epping Station may have to cater for a large volume of commuter interchanges in both directions in both the morning and evening peaks. The volume of interchanges may be further increased in future if the Epping to Parramatta link is constructed.

All these interchanges will be complicated by the differing frequencies of service on the NW Metro and the CityRail lines. The former will operate at frequencies of 20 to 30 trains an hour – the latter about four to eight trains an hour.

**Parking and bus integration:** Parking capacities at stations between Epping and Rouse Hill were already a concern to WSROC under the previous NWRL proposal and obviously will have to be reviewed in light of the shorter travel times and much higher frequency – and therefore potentially much higher popularity – of the NW Metro.

It is understood that the Government does not plan at this stage to provide parking at stations from Epping to the CBD. Parking has not been provided at stations on many metro systems overseas, but, as previously stated, this was because most of these metros were built as tram replacements with “walk-up” catchments to stations with 800 to 1,000 metre spacing.

By contrast the average station spacing on the NW Metro line will be over two kilometres, even in the Epping to CBD section. This will require provision of feeder bus services to these stations to avoid “feral” parking on streets surrounding the stations. This problem may be further exacerbated by car commuters from further out who may seek to park at these stations to avoid congestion within five kilometres of the CBD.

**Implications for the existing CityRail network:** The NW metro and the proposal to construct additional metros have interesting implications for the existing CityRail network. One of the objectives of the Government’s previous Metropolitan Rail Expansion Program (MREP) which has largely been superseded by the metro proposals was to relieve existing congestion on the existing CityRail network, particularly on the western line and across the Harbour Bridge.

The NW Metro alone will not achieve the same level of direct benefit, though it will have some positive outcomes. The NW Metro is likely to provide some relief by reducing the number of commuters travelling from the north west to Parramatta and Blacktown to use western line CityRail services; similarly, the link from Epping may take some commuters of the Main North and Epping to Chatswood links.

More substantial relief will only come with construction of the proposed western metro from the CBD to Parramatta and ultimately its extension across the harbour. The proposed south east metro and suggestions that the northern extension of the western metro be linked to the northern beaches would obviously extend the system’s coverage but not relieve the existing CityRail network.

### *5.3 Metro or Heavy Rail?*

Notwithstanding some of the concerns that have been raised regarding the proposal, WSROC's submission concluded at the time that the advantages of the NW Metro appear to significantly outweigh the disadvantages, provided the above issues are adequately addressed.

The submission did make one important caveat to this recommendation, however. Once the NW Metro is built, the State Government will have to construct the rest of the proposed metro system to overcome the worsening congestion problems on the existing CityRail network, not to mention the roads of Western Sydney. In other words, there could be no turning back.

**In light of the recent comments about the mini-budget, WSROC therefore has urged the State Government to preserve the North West Metro from any budget cuts. If however the total \$12.5 billion cost cannot be guaranteed, the original North West Rail Link should be reinstated as an alternative project. WSROC has also prepared a submission to the national Infrastructure Audit identifying either of these projects as one of the highest priority projects for the region for Federal government funding.**