



Health



GREATER WESTERN SYDNEY HEALTH PARTNERSHIP TRAVEL CENSUS

May 2021

A survey of staff travel to and from work in Nepean Blue Mountains, South Western Sydney and Western Sydney Local Health Districts

Evaluation Report

An initiative of:



Transport
for NSW

Contents

1	Forward.....	3
2	Executive Summary	4
3	Introduction	6
3.1	Formative work.....	6
3.2	Context.....	6
3.2.1	The health context.....	6
3.2.2	The planning context.....	7
3.3	Census Aims and Objectives.....	8
3.4	The Travel Census – conduct.....	8
3.4.1	Introduction	8
3.4.2	Engaging the Greater Western Sydney Health Partnerships partners	8
3.5	Census preparation and promotion	8
3.6	Post census.....	9
3.7	Survey methods	9
3.8	Results.....	9
3.8.1	Response rate.....	9
3.9	Respondent age and place of work	10
3.10	Respondent occupational group.....	11
3.11	Journey to work and main mode of travel	12
3.12	Mode of travel and parking options.....	13
3.13	Travel across multiple work sites.....	14
3.14	Alternative and active modes of travel	14
3.15	Walking to work and walking support facilities	14
3.16	Cycling to work and cycling support facilities	15
3.17	Barriers to alternative/active transport	16
3.17.1	Barriers to walking.....	16
3.17.2	Barriers to cycling.....	17
3.17.3	Barriers to public transport	17
3.17.4	Switching to public transport.....	18
3.18	Working from home	19
4	Discussion.....	21
5	Conclusions, recommendations, next steps.....	24
6	Bibliography	26
7	Appendices	27

1 Forward

The greater western Sydney region has a current population of about 2.4 million in 2018 and is expected to grow to about 3.4 million by 2036. Our region is undergoing rapid development with the building of Sydney's second airport with associated infrastructure and many housing developments (SWSLHD 2019).

Greater Western Sydney has a higher prevalence of chronic health conditions than the NSW average, and a higher prevalence of some of the important risk factors for chronic conditions including obesity and inadequate physical activity.

The Greater Western Sydney Health Partnership (the 'Partnership') involves three Local Health Districts based in Greater Western Sydney – Nepean Blue Mountains (NBMLHD), South Western Sydney (SWSLHD) and Western Sydney (WSLHD).

The Partnership aims to collaborate, promote, and advocate for better health outcomes for communities in greater western Sydney through six Action Areas:

1. Establishment of a Greater Western Sydney Taskforce;
2. Support healthy greenfield and built environment development;
3. Coordinated health infrastructure;
4. Health service planning;
5. Big data and research; and,
6. Smart workforce planning.

With the development of the new Western Sydney Aerotropolis there is an opportunity over the next 15 years to promote best practice in healthy and sustainable building and transport infrastructure.

Our staff are our most important resource and travel to work is an important part of their health and amenity. The three LHDs in the Partnership are important employers in Western Sydney with approximately 35,000 employees. Without careful consideration of transport solutions there will be greater congestion on the roads for our staff and communities who already spend more time in their cars than commuters in other parts of the state

Some of our staff will always travel by car by choice or necessity. We are not aiming to change that. However, we want to maximise and capitalise on the development of new infrastructure so that our staff, patients, and visitors can transit to our facilities with as much choice as people in other parts of Sydney.

We are not there right now and the census shows that the great majority of staff drive to work - in some of our facilities more than 80% of staff. This Census provides an important baseline from which we can build our understanding of staff travel choices and preferences, enable us to advocate for better solutions and monitor progress into the future.

Greater Western Sydney Health Partnership

2 Executive Summary

In May 2021, the Greater Western Sydney (GWS) Health Partnership conducted a web-based travel census for all staff across the three Local Health Districts (LHDs) - Nepean Blue Mountains (NBM), South Western Sydney (SWS) and Western Sydney (WS) as a key tangible objective for Action Area 2 – Support Healthy Greenfield and Built Environmental Development - of the Greater Western Sydney Health Partnership Position Paper.

The Census asked staff of the three LHDs what their experience is like travelling to work in the previous week, with the intention of developing strategies to improve transport outcomes for staff.

The aim and objectives of the Census were to:

- Determine how staff currently travel to work, what factors influence their travel choice and behaviors, and how staff may travel in the future.
- Identify staff preferences for developing new initiatives to encourage sustainable transport outcomes.
- Provide data to support the development of improved transport connectivity, car park planning and alternative transport options across the GWS region (including active travel plans for your workplace).
- Leverage the findings to support other stakeholders and established partners to make the case to improve coordination and effectiveness of transport access to health services across the region to promote healthier neighborhoods and health workforce.
- Identify changes in staff travel due to COVID-19.

There was strong participation in the survey with 5,133 usable results across all LHDs. The most important finding overall is that most staff drive to work in their own private vehicle (72.8%) most parking on-site. Only 16.9% travelled by public transport and a very small proportion (3.4%) got to work by walking or cycling. Although around 40% of staff described a typical journey to work of less than 30 minutes, the majority had a journey to work of more than 30 minutes with around 5% commuting over an hour. Notably public transport patronage was greater in those sites (e.g. Westmead and Liverpool) serviced by a major rail line.

The changes that would encourage staff to switch to public transport include more public transport options and financial incentives. However, a quarter of staff responded that nothing would encourage them to switch to public transport. The main barriers to walking and cycling were that the commute was too long or would take too much time; for cycling there were also road safety concerns. The key barriers for public transport use were time and lack of options, too many changes and unreliability.

When asked about whether they thought they could walk all or most of the way to work, of the 5,133 survey respondents, 8.2% said this was feasible. When asked about whether they thought they could cycle all or most of the way to work, of the 5,133 survey respondents, 12.3% or 633 said this was possible. These high-level findings show that for an important minority of staff there are strong prospects to improve public transport participation and active transport participation if barriers are removed and options are improved. Naturally, these will take time, be incremental and will vary site by site. However, providing a baseline shines a light on this very real aspect of staff amenity that is affected by infrastructure provision in greater western Sydney. Over and above these small positive findings there are important negative findings, particularly the small proportion reporting a commute of over one hour to work. This is an important drag on the amenity and productivity and family life of these staff. Although for some it may be the consequence of a choice to live in rural or city locations, it is a factor that needs to be watched.

This report recommends that:

Local Health Districts

- Leverage the findings of the GWS Travel Census to support other stakeholders and established partners to make the case to improve planning, design, coordination and effectiveness of transport access to health services across the LHD.
- Promote and renew hospital and other campus travel plans.
- Explore flexible working and telehealth options

Greater Western Sydney – Health Partnership

- Explore and facilitate collaboration opportunities with Transport for New South Wales (TfNSW) to:
 - Identify strategic or funding opportunities for stakeholders (such as TfNSW, LHDs or Councils) to undertake initiatives that support a mode shift for Health Workers from Private Vehicle, to public and active transport
 - Explore public transport service adjustment opportunities
 - Consider behavioural science interventions
- Share the findings of the GWS Travel Census to key strategic stakeholders, such as Health Infrastructure, Greater Cities Commission, and Health & Education Precincts to improve planning, design, coordination and effectiveness of transport access (with a focus on integration of active transport options) across the region.
- Share precinct level data with each LHD to support them to promote and renew hospital and other campus travel plans.
- Repeat the travel census regularly to measure changes in travel behavior and the effect of active travel strategies.

3 Introduction

3.1 Formative work

Within the overall framework of the GWS - Health Partnership and the six action areas, Action Area Two provided a broad scope and a challenge to the partnership to identify concrete projects that would deliver on the agenda.

Action Area Two includes creating community profiles, promoting social connectivity to combat isolation, emphasising active transport networks, and advocating for strategies to reduce car dependency.

As a baseline project that builds on the strengths of the GWS Health Partnership, a staff travel survey was put forward as a candidate project in early workshops conducted by the GWS - Health Partnership Working Party Committee in February 2020. Early workshop scope to include patient and/or visitor transport was also discussed. The scope of the project was later limited to staff to ensure feasibility in the first stage.

The Partnership aims to work alongside existing agencies committed to improving the lives of the Greater Western Sydney community. In early working group discussions, the use of the Household Travel Survey data and the associated questionnaire instruments was discussed, and this led to formal contact with Transport for New South Wales (TfNSW). Through this contact it was identified that to conduct a large-scale survey, a strategic collaboration was beneficial given TfNSW had established interest and expertise in conducting workplace travel surveys through their Travel Choices program.

3.2 Context

3.2.1 The health context

Car travel is the dominant form of travel to get to and from places. In the Sydney greater metropolitan region in 2018-19, about 60% of all trips were by car either as driver or as a passenger (Transport for NSW 2020). In the Sydney region, using Census data, Zander et al. (2014) showed that active transport (walking and cycling) constituted only about 3% of all journeys to work. A survey of staff at Liverpool Hospital in 2012 found that 83% of respondents drove to work by car on the majority of days they travelled to work, 11% used public transport and 4% either walked or cycled to work (Petrunoff et al. 2013).

Car dependency has substantial costs that are borne by society. Car dependency is associated with traffic injuries, physical inactivity, increased congestion on the roads and increased traffic-related air pollution (BMA 2012). All these factors impact on health, the environment (noise, air pollution) and the economy (cost of congestion). Physical activity is associated with a range of positive health outcomes, including lower mortality, and lower risks for non-communicable diseases such as cardiovascular disease, diabetes and certain cancers (Lee 2012). Active travel (walking, cycling, public transport) has benefits over and above exposure to air pollution and traffic related injuries (Rojas-Rueda et al. 2016). Workplace and environmental interventions can increase active travel to work (Petrunoff et al. 2016; Aittasalo et al. 2019). Further, Chapman et al. (2018) demonstrated that investment in active travel in a city can return a positive health dividend.

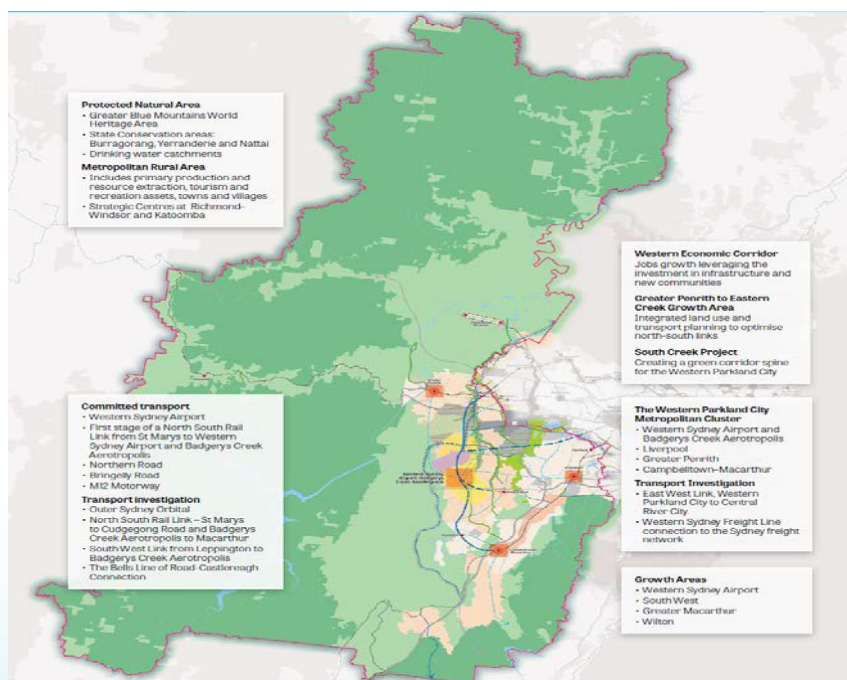
Commutes can be long in Western Sydney and small shifts to active commuting can bring major health benefits. The three LHDs in the Partnership are important employers with approximately 35,000 employees collectively. This includes 15,690 employees in SWSLHD (SWSLHD 2020); 13,491 in WSLHD (WSLHD 2021) and 6,935 staff in NBMLHD (NMLHD 2021). The LHDs can potentially become better employers through advocating for additional services to support their staff and communities to facilitate active travel. A detailed and well-conducted travel survey will form an important baseline and a rich source of data to explore ways in which additional services may allow staff to safely switch to active travel modes and reduce dependence on motor vehicles. This will also have important climate (Neves and Brand 2019) and air quality co-benefits (Transport for NSW 2020b).

The COVID-19 pandemic has had major impacts on personal transport modes with a decrease in the use of public transport and increases in motor vehicle use and cycling (IEA 2020). Whether such changes persist in the post-COVID-19 period will depend on the public's perception of risk.

3.2.2 The Planning Context

The recognised area of Western Sydney encompasses 11 LGAs from the urban LGAs of Canterbury Bankstown, Cumberland, and City of Parramatta west to the semi-rural Shires of Wollondilly to the south and Hawkesbury to the north and the Blue Mountains. The three Local Health Districts of Western Sydney, South Western Sydney and Nepean Blue Mountains superimpose reasonably onto this geographic entity but do not include the Canterbury part of Canterbury-Bankstown and include the further semi-rural areas of Wingecaribee Shire and Lithgow City Council.

Although not the only plan of relevance, The Greater Sydney Commission in its Western City District Plan outlines an ambitious vision to transform the Western Sydney District over the next 20 to 40 years by building on natural and community assets and developing a more contained Western Sydney District with greater choices of jobs, transport and services aligned with growth. Planned infrastructure includes housing, rail-lines, roads and other connections linking the urban centres with each other and the Western Sydney (Nancy-Bird Walton) Airport.



3.3 Census Aims and Objectives

The Partnership, in collaboration with TfNSW, aimed to identify staff travel patterns, journey habits to and from work, opportunities to improve staff wellbeing, plan for parking and alternate transport options, and to understand how current work and travel to work patterns might change in the post-COVID19 era.

Objectives:

- Determine how staff currently travel to work, what factors influence their travel choice and behaviours, and how staff may travel in the future.
- Identify staff preferences for developing new initiatives to encourage sustainable transport outcomes.
- Provide data to support the development of improved transport connectivity, car park planning and alternative transport options across the GWS region (including active travel plans for your workplace).
- Leverage the findings to support other stakeholders and established partners to make the case to improve coordination and effectiveness of transport access to health services across the region to promote healthier neighbourhoods and health workforce.
- Identify changes in staff travel due to COVID-19.

3.4 The Travel Census – conduct

3.4.1 Introduction

The census was opened on 10 May and asked staff to reflect on the previous week's travel, i.e., Monday 3 to Friday 9 May 2021. The census was originally open for one week, but was extended to remain open until 30 May 2021. All travel related questions were related to the staff travel journey to their worksite.

3.4.2 Engaging the Greater Western Sydney Health Partnerships partners

The Travel Census was conducted across three LHDs: NBM, SWS and WS spanning all hospitals, community health centres (CHC), and other health services within each LHD.

The Travel Census Working Group identified different ways to approach data collection from staff without email/internet access, those with English as their second language and those with unusual shift patterns. Data collection approaches and a communication plan was developed for each LHD.

Key stakeholders groups included:

- GWS Health Partnership Steering Committee
- GWS Health Partnership Working Party
- All NBMLHD Hospitals and CHCs staff and volunteers
- All SWSLHD Hospitals and CHCs staff and volunteers, including:
- All WSLHD Hospitals and CHCs staff and volunteers, including:
- Transport for NSW
- Media and Communications teams in each LHD

3.5 Census preparation and promotion

Key working party members developed the Census questionnaire with input from the GWS Health Partnership Working Party and TfNSW. Each LHD Working Party member acted as a key contact with their LHD and assisted in coordinating the census at their LHD utilising

resource leads such as Corporate Communications and Service Directors. The Census was uploaded on Survey Monkey by TfNSW.

Each member of the GWS Health Partnership Travel Census Working Group then liaised with their local Media and Communications Unit and invited a representative to assist the working group in developing a communication plan, including identifying resource requirements and communication collateral.

3.6 Post census

Following the Census, a thank you email was sent out to all staff. In addition, prize winners were notified via email by TfNSW.

A working group was formed consisting of Population Health in SWSLHD and TfNSW to collaboratively analyse the Census data.

3.7 Survey methods

A questionnaire (census) using existing travel survey tools was designed to be comparable with previous travel surveys that have been conducted in a Sydney health facility (Petrunoff 2013). The census sought information about demographic details, travel to work, attitude to different travel choices, current work patterns (e.g. working from home) and changes to work and travel patterns as a result of COVID-19.

There was no sampling strategy and no formal calculation of power or precision. The aim was to maximize participation and reduce participation bias through strong promotion. As described in the section above, all staff were invited to participate in the Census. In addition, staff were sent an email from the Chief Executive of each LHD to participate in the Census. The invitation provided the context for the Census, highlighted its anonymous nature and stressed the importance of the Census for the LHD and the benefits to staff.

The Census was web-based (using Survey Monkey) and took about five to ten minutes to complete. The census remained open for a week. Daily reminders were sent to all staff until the Census closed. Incentives (e.g. Opal cards with \$20 credit) were provided to increase participation rates. Managers at all levels were encouraged to speak with their staff at team meetings about the importance of the travel census. Manager support for the Census was crucial to achieve a high participation rate.

Initial statistical analysis consisted of a comprehensive descriptive analysis including frequency tables and cross-tabulations. Key questions were tabulated by the major classes of staff and for all major facilities.

All survey responses were stored electronically on SWSLHD and TfNSW password-protected computers and only accessible to a small number of investigators.

3.8 Results

3.8.1 Response rate

Initially 5,273 respondents started answering the survey, however 23 respondents stopped answering after the first question on LHD of employment, and another 117 stopped answering after the first few questions. The survey was effectively answered by 5,133 respondents. The 117 respondents who stopped answering were across all LHDs: 49 from WSLHD, 40 from SWSLHD, 28 from NBMLHD. Methods comprised of tabulating the number of respondents and calculating percentages as and when required. Missing responses were not imputed and

are published along with other responses. Information that is directly relevant to this report is provided in the main text, with other information available by request.

3.9 Respondent age and place of work

Of the 5,133 respondents, about 41% of the respondents were less than 44 years of age, 21% between 45 and 54 years of age, 16.4% between 55 and 64 years of age, with 17.8% choosing not to provide their age.

Respondents were from WSLHD (42%), followed by SWSLHD (38.5%), and NBMLHD (19%) (Figure 1). Top workplaces were Westmead Hospital (23.3%) followed by Liverpool Hospital (20%) (Figure 2). A total of 71 unique workplaces were reported.

Figure 1: Local Health Districts of respondents

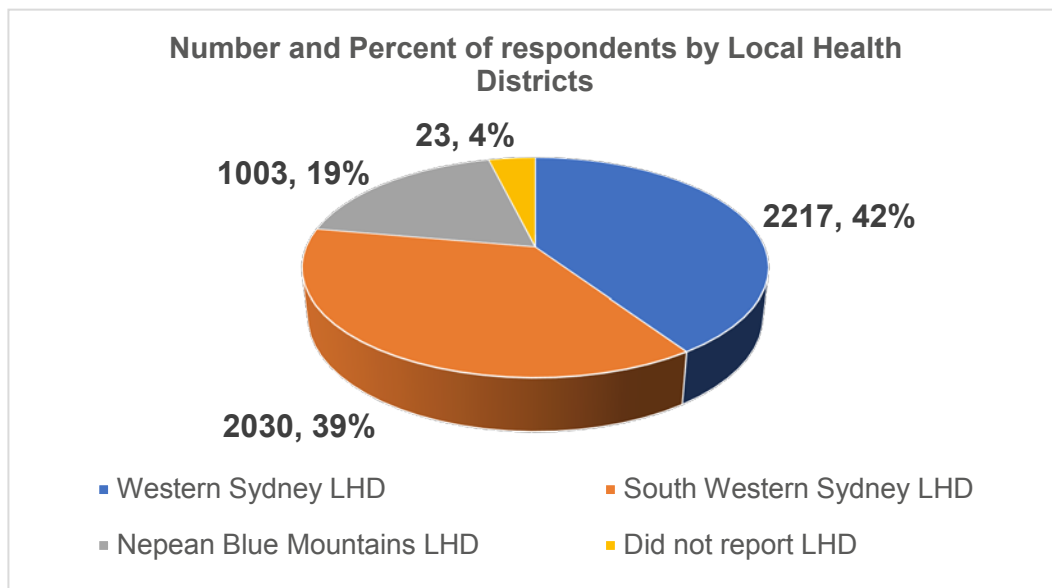


Table 1: Top 10 main workplaces of respondents

Main Workplace	N	Percent
Westmead Hospital*	1223	23.3
Liverpool Hospital	1070	20.4
Nepean Hospital	640	12.2
Blacktown Hospital	349	6.6
Campbelltown Hospital	290	5.5
Cumberland Hospital and Campus	239	4.6
Bankstown-Lidcombe Hospital	211	4
Other	181	3.4
Fairfield District Hospital	117	2.2
Auburn Hospital	88	1.7
Total	4408	83.9

*Includes Oral Health Services, Institute of Clinical Pathology and Medical Research, Redbank House

3.10 Respondent occupational group

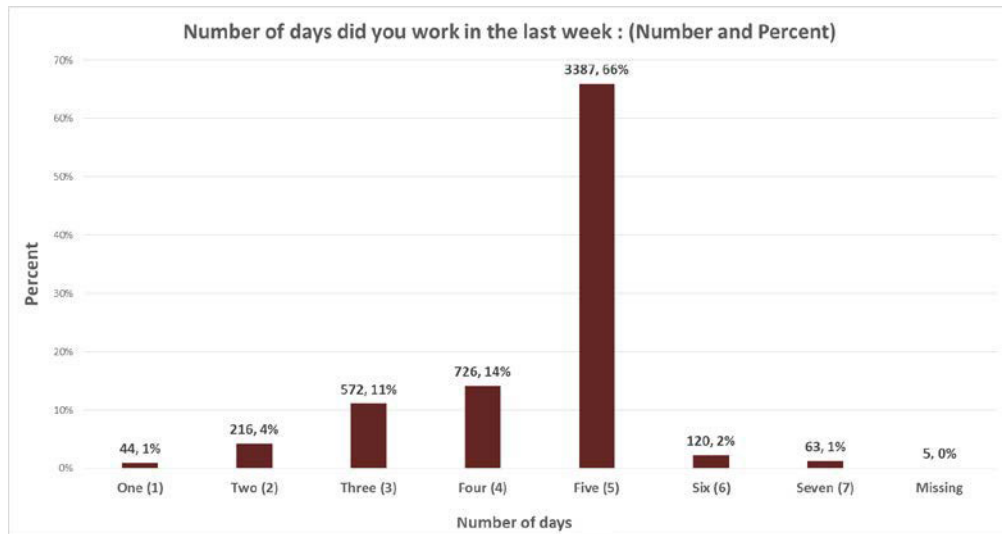
Of the 5,133 respondents, nursing was the most common occupation of the respondents (20.5%), followed by allied health (18%) and administration (16.1%) (Table 2). There were 35 unique occupational groups.

Table 2: Top 10 main occupation groups of respondents

Main Occupation Group	N	Percent
Nursing	1074	20.5
Allied Health	944	18
Administration & Health Records	846	16.1
Medical Officers	405	7.7
Nursing & Midwifery	376	7.2
Other	181	3.4
Management	177	3.4
Mental Health, Drug & Alcohol	124	2.4
Information and Communication Technology	106	2
Population Health	89	1.7
Total	4322	82.4

Most respondents (66%) worked five days a week, with 14.1% reporting working four days a week and 11.1% reporting working three days a week (Figure 2).

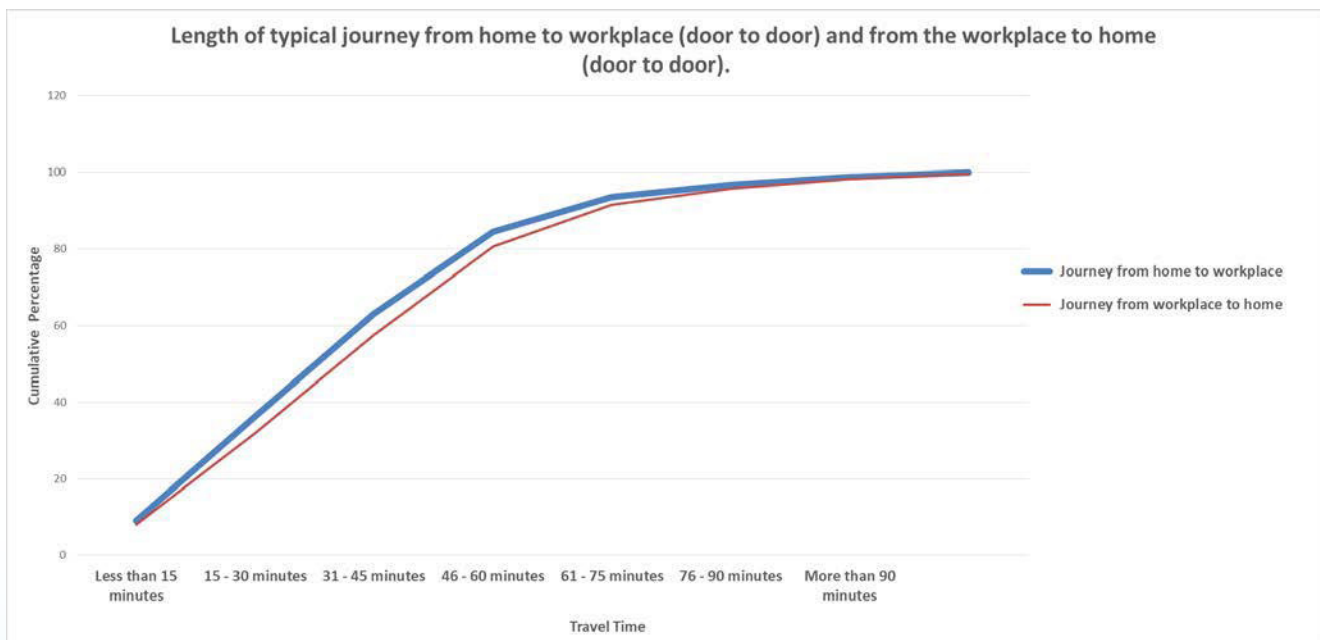
Figure 2: Number of days worked in the last week



3.11 Journey to work and main mode of travel

Of the 5,133 respondents, the vast majority (66%) reported working for five days. Most respondents reported a journey to work time of between 15 minutes to 60 minutes (72.5%). Similar percentages of respondents (20-25%) reported journey to work times (and back) of 15 - 30 minutes, 31 - 45 minutes and 46-60 minutes (Figure 3). Only around 2% reported a journey to work time of more than 90 minutes.

Figure 3: Length of typical journey from home to workplace (door to door) and from the workplace to home (door to door).



3.12 Mode of travel and parking options

A majority of 5,133 respondents (74.7%) reported using a single model of travel, while 19.7% reported using two modes of travel. The most common single mode of travel to work was private vehicle, driving alone (72.8%) followed by train/metro used by 12.8% (Table 3). For respondents using two modes of travel to work, the most common combination of travel was train and private vehicle (130 respondents).

Table 3: Top 10 main modes of travel to workplace

Mode of Transport	N	Percent
Private Vehicle – drove alone	3735	72.8
Train/Metro	657	12.8
Bus	213	4.1
Walk	139	2.7
Private vehicle, as a passenger, (informal carpool, not a rideshare)	138	2.7
Inconsistent Answers*	113	2.2
Other Modes	72	1.3
Cycling	35	0.7
None/Not Applicable	16	0.3
Formal Carpool, as driver or passenger	15	0.3
Total	5133	99.9

*These respondents provided inconsistent answers about their use of different modes across multiple questions.

For those driving to work using private vehicles as their single, longest mode of travel to work (N=3357), 61.7 % reported parking their vehicle on-site, and 27.4% reported parking off-site. The most common on-site parking was at Westmead P1 - Multistorey Car Park (11.3%) followed by Liverpool Hospital P4- Multistorey over railway (8.3%) (Table 4).

Table 4: Top 10 On-Site Parking Locations of Private Vehicles

Location	N	Percentage
Westmead P1 - Multistorey Car Park	231	11.3
Liverpool Hospital P4 (Multistorey over railway)	171	8.3
Blacktown hospital P1 - Multideck Car Park	158	7.7
Cumberland hospital and WSLHD support services	154	7.5
Nepean Hospital - P1 - Parker Street/Barber Avenue multi-storey car park	116	5.7
Nepean Hospital - P5 - Somerset Street multi-storey car park	101	4.9
Westmead P12 - Dragonfly Dr/Institute Rd	88	4.3
Campbelltown Hospital P4 - Staff Parking	86	4.2
Other (please specify)	72	3.5
Liverpool Hospital P5 (Open air over railway & Riverside)	64	3.1
Total	1241	60.5

3.13 Travel across multiple work sites

Some respondents worked across multiple workplaces and had to travel from one workplace to another. Of the 1282 respondents who reported working across multiple workplaces, most (76.4%) reported using either private vehicles, fleet vehicles, or some combination of private and fleet vehicles (Appendix 1).

3.14 Alternative and active modes of travel

Of 5,133 respondents, a very small percentage of respondents reported walking (2.7%) or cycling (0.7%) to work. Public transport was relatively more common with 12.8% reporting using the train and 4.1% reporting using the bus to travel to work (Table 5).

Table 5: Main mode of travel to work

Mode	N	Percentage
Private vehicle, drove alone	3735	72.8
Train / Metro	657	12.8
Bus	213	4.1
Walk	139	2.7
Private vehicle, as passenger (informal carpool, not a rideshare)	138	2.7
Inconsistent Answers	113	2.2
Cycling	35	0.7
Other (please specify)	30	0.6
None / not applicable	16	0.3
Formal Carpool, as driver or passenger	15	0.3
Total	5091	99.2

More respondents reported using the train in combination with other modes of travel (N=359) than as a single mode of travel to work (N=154) (Appendix 2). For instance, 130 respondents reported using the train or metro in conjunction with a private vehicle. Buses were used as a single mode (N=89) or in combination with other modes (N=88).

3.15 Walking to work and walking support facilities

When asked about whether they thought they could walk all or most of the way to work, of the 5,133 survey respondents, 8.2% said this was feasible while 86.6% did not think so. Nevertheless, only 141 respondents reported walking to work. Of the 141 respondents who reported walking to work, 127 responded to questions about facilities to support walking. Of these 127 respondents, 56% disagreed or totally disagreed that showers are easily accessible at the workplace. In contrast, 81% agreed or totally agreed that personal safety was good on the walking route they used, 77% agreed or totally agreed that pedestrian safety was good on the walking route they used, and 63% agreed or totally agreed that lockers were easily accessible in the workplace (Table 6).

Table 6: Facilities supporting walking to work (N=127)

Reason	Missing %	Totally	Agree %	Disagree %	Agree %	Totally Disagree %	Total %
Showers are easily accessible at my workplace	1	12	31	29	27	100	
Lockers are easily accessible at my workplace	1	20	43	21	15	100	
Pedestrian safety is good on the walking paths I use	0	18	59	15	8	100	
My personal safety is good on the walking route I use	0	17	65	16	3	100	

3.16 Cycling to work and cycling support facilities

When asked about whether they thought they could cycle all or most of the way to work, of the 5,133 survey respondents, 12.3% or 633 said this was possible. Of these 633 respondents, 64.9% were currently driving a vehicle to work and 15.4% were walking to work. Only 36 respondents actually reported cycling to work, and of them, 33 respondents answered the questions about cycling facilities. Of these 33 respondents, most (69%) disagreed or totally disagreed that there were places to hang/dry their cycling gear at their workplace (Table 7). Fifty four percent of respondents agreed or totally agreed that showers were easily accessible, 54% agreed or totally agreed that lockers were easily accessible, 60% agreed or totally agreed that cycling paths, 63% agreed or totally agreed that personal safety was good on the cycling route, and 51% agreed or totally agreed that there was a secure place to lock the bicycle.

Table 7: Facilities supporting cycling to work (N=33)

Reason	Missing	Totally	Agree	Disagree	Totally Disagree	Total
Showers are easily accessible at my workplace	0	30	24	27	18	100
Lockers are easily accessible at my workplace	0	27	27	21	24	100
The cycling paths I use are safe	0	12	48	33	6	100
My personal safety is good on the cycling route I use	0	15	48	27	9	100
There is a secure place to lock my bicycle at my workplace	3	21	30	27	18	100
There is somewhere to hang/dry my cycling gear at my workplace	0	21	9	36	33	100
Total	1	21	31	29	18	100

3.17 Barriers to alternative/active transport

3.17.1 Barriers to walking

Among all respondents who chose to answer the question regarding barriers to walking to work (N=4,686), the most frequently stated reasons for not walking to the workplace were related to time and distance with 83.2% stating that it was too far to walk and 37.7% stating that it took too long to walk to the workplace (Table 8). Responses related to security and safety were also common including poor personal security on routes after dark (21.4%), and unsafe roads (16.6%). Safety concerns were also common among those respondents who were already walking to work with 21.7% stating poor personal security on routes after dark.

Table 8: Key barriers to walking to the workplace (multiple response allowed, N=4686)

Reason	Counts	Percentage*
Too far to walk	3899	83.2
Takes too long	1766	37.7
Poor personal security on routes after dark	1004	21.4
Need to carry bag/equipment to /from workplace	830	17.7
Roads are unsafe, e.g. lack of pedestrian crossings	777	16.6
Lack of end of trip facilities at the workplace (showers/lockers, etc.)	569	12.1
Lack of shelter/shade on walking routes	554	11.8
Lack of walking paths/footpaths	527	11.2
Uneven walking path/footpaths	511	10.9
Too hilly	450	9.6
Uneven path / road surfaces	424	9
No financial incentive to walk to work	278	5.9
Lack of places to rest/linger on route	231	4.9
I already walk to work	208	4.4
My mobility impairment/disability	123	2.6
I have to pick up and drop off children	1	0

3.17.2 Barriers to cycling

Of the 4,444 respondents who chose to answer the question regarding barriers to cycling to work (Table 9), responses followed a similar pattern as with walking, with 64.9% stating that it was too far to cycle and 38.6% stating that it took too long to cycle to work. Road safety concerns prevented 39.5% of respondents from cycling to work. An added barrier for prospective cyclists was the lack of appropriate infrastructure for cycling (28%) and the need to carry a bag to the workplace (19.4%). Barriers reported by current cyclists (N=33) included the need to carry a bag (42.4%), lack of shelter/shade on cycling routes (39.4%) and road safety concerns (30.3%).

Table 9: Key barriers to cycling to the workplace (multiple response allowed, N=4444)

Reason	N	Percent
Too far to ride a bicycle	2882	64.9
Road safety concerns	1755	39.5
Takes too long	1271	28.6
Lack of appropriate infrastructure to ride a bike on	1243	28
Need to carry bag/equipment to /from workplace	860	19.4
Lack of end of trip facilities at my workplace (showers/lockers, etc.)	845	19
Poor personal security on routes after dark	841	18.9
No storage facilities for bicycles at the workplace	753	16.9
No user-friendly bicycle/pedestrian path system in and around the workplace	741	16.7
My lack of physical skills/abilities	638	14.4
Too hilly	543	12.2
Uneven path / road surfaces	499	11.2
Unsafe neighbourhood/environment	488	11
Lack of shelter/shade on cycling routes	458	10.3
No financial incentive to cycle to work	372	8.4
No active transport information readily available	142	3.2
My mobility impairment/disability	115	2.6
I already ride to work	77	1.7

3.17.3 Barriers to public transport

A total of 4,082 respondents answered the question about barriers to using public transport to work. Many barriers were identified for public transport, though cost was not the main concern (Table 10). The most frequently stated barriers were time constraints (47.3%), lack of public transport options (35.4%), too many interchanges between public transport services (33%), and unreliability of public transport (30.5%). Cost, however, was most frequently identified as a barrier by those already using public transport (36.4%), followed by unreliability of public transport (35%), health concerns, i.e. lack of social distancing (28.9%) and time constraints (28.9%).

Table 10: Key barriers to taking public transport to the workplace (multiple response allowed, N=4082).

Key barriers	N	Percent
Time constraints	1927	47.3
Lack of public transport options	1442	35.4
Too many interchanges between services	1343	33
Unreliability of public transport	1243	30.5
I already catch public transport to work	850	20.9
Health concerns - people not social distancing	794	19.5
Cost of public transport	772	19
Childcare / family commitments	727	17.9
Health concerns - people not wearing masks	712	17.5
Overcrowding	586	14.4
Safety concerns	582	14.3
Not pleasant	568	14
Too difficult to organise	396	9.7
Health concerns (general)	368	9
Other trips to make	366	9
Need to use a car during work hours (site visits, etc.)	332	8.2
Habit	268	6.6
Other	99	2.4

3.17.4 Switching to public transport

For those driving to work, and who chose to answer the question regarding what would encourage them to switch to public transport from driving (N=3,503), the most frequently identified facilitator for a possible switch to public transport was increase in public transport options/services (43.4%) (Table 11). Other facilitators for a possible switch to public transport related to financial incentives - 33% wanting further Opal card discounts for staff, 26.5% wanting financial incentives to use public transport, and 21.6% saying that reduced/discounted Opal card fees would encourage them to use public transport. Further, 24.2% reported that staff shuttle buses to transport hubs would encourage them to use public transport. Nevertheless, 25.4% said that nothing would encourage them to switch to public transport. Of those driving to work, most (46.6%) said that nothing would encourage them to car-pool, while 27.5% reported that no parking fees for carpooling vehicles would encourage them to carpool.

Table 11: Factors that would encourage respondents to use public transport instead of driving a car to work.

Factors that would encourage switch to public transport	N	Percent
Increase in public transport options / services	1522	43.4
Further Opal card discounts for staff	1156	33
Financial incentives to use public transport	927	26.5
Nothing would encourage me to switch to public transport	890	25.4
Staff shuttle bus to transport hubs	848	24.2
Reduced/discounted Opal fees	758	21.6
Incentives for reducing car travel	703	20.1
Improved Stops and Stations, including shelter	524	15
More off-peak services	495	14.1
Development of Staff Travel Plan	465	13.3
High vaccination rates against COVID-19	445	12.7
Minibus service between LHD work sites	423	12.1
More / all occupants wearing masks	318	9.1
More seats / less passengers on services	312	8.9
More / all occupants physically distancing	297	8.5
Internet access on public transport	212	6.1
Parking pricing increases	146	4.2
More trip planning tools	133	3.8
Information about on-board capacity	88	2.5
I already catch public transport to work	63	1.8
Better wayfinding / signage	56	1.6
Lifting physical distancing restrictions on public transport	53	1.5
Other	1	0

3.18 Working from home

Working from home was not common, though there was an increase during the Covid-19 pandemic. Of the 5,133 respondents, only 1.3% said that they worked from home routinely before the COVID-19 pandemic, while 6.4% (329 respondents) reported working from home routinely during the COVID-19 pandemic (Table 12). Of the 329 respondents who reported working from home routinely during the COVID-19 pandemic, 59.4% of respondents reported working from home one to two days a week before the COVID-19 pandemic compared to 80.6% during the COVID-19 pandemic. However, when asked if they worked from home during the last week, only six respondents reported that they worked from home. This may indicate occasionally working from home rather than regularly working from home. About 30% reported that their kind of work did not allow them to work from home before the COVID-19 pandemic, this percentage increased to 40.7% during the COVID-19 pandemic (Table 13).

Table 12: Average number of days routinely worked from home before and during the Covid-19 pandemic	Before		After	

Days worked from home	N	Percent	N	Percent
1 Day	30	43.5	118	35.9
2 Days	11	15.9	147	44.7
3 Days	9	13	40	12.2
4 Days	8	11.6	18	5.5
5 Days	10	14.5	5	1.5
Missing	1	1.4	1	0.3
Total	69	99.9	329	100.1

* 329 respondents who reported working from home routinely

Table 13: Working from home before and during the Covid-19 pandemic

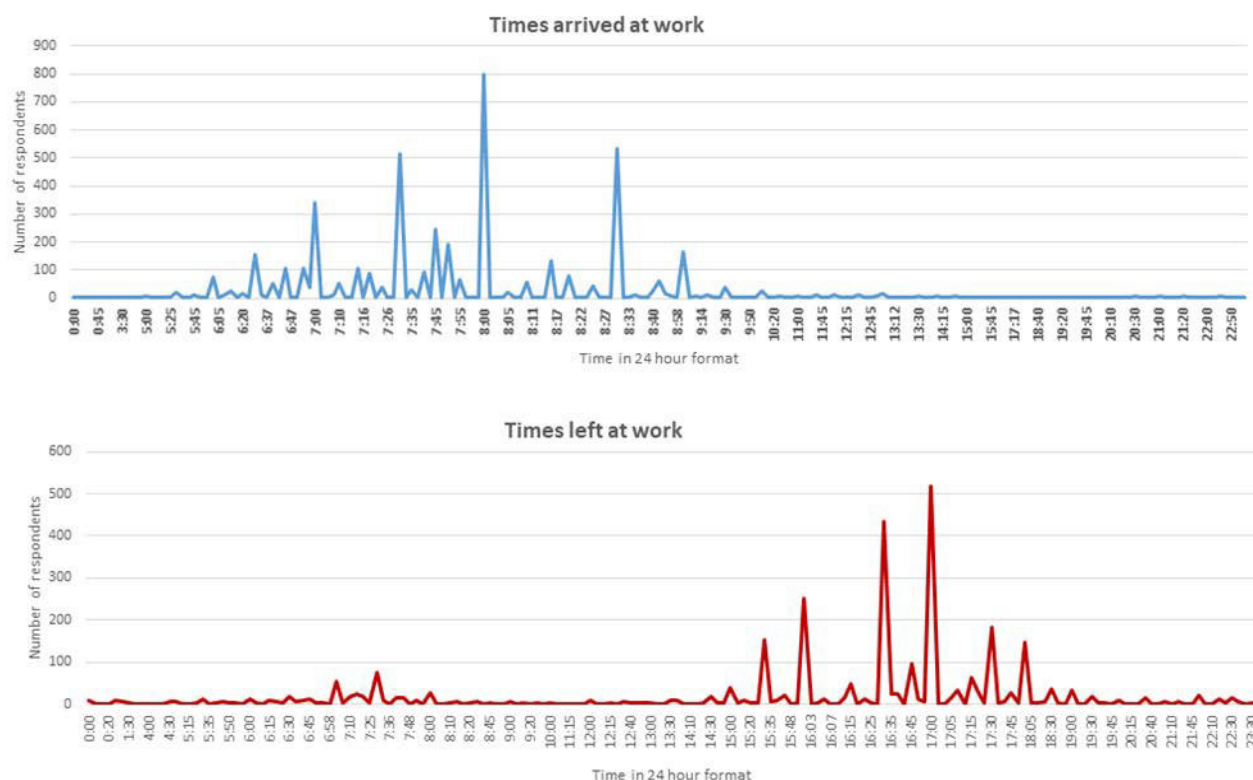
Working from home options	Did you work from home before the COVID-19 pandemic?	Percentage	In the present COVID-19 situation, do you now work from home?	Percentage
No, never	3036	59.1	1997	38.9
My kind of work did not allow me to work from home	1525	29.7	2089	40.7
Yes, only occasionally	374	7.3	580	11.3
Missing	129	2.5	138	2.7
Yes, routinely	69	1.3	329	6.4
Total	5133	99.9	5133	100

3.18.1 Staff arrival and departure times

The question on shift work was answered by the larger sample of 5,250 respondents (before 117 stopped answering). The majority of these 5,250 respondents (78.6%) were not involved in shift work. However, of those that did report doing shift work, afternoon shifts were most frequently reported (40%), followed by night shifts (32.1%).

Time of reporting to work was answered by 5,133 respondents. The most common hour of reporting to work was 8:00am (n=800) with 59% of respondents arriving between 7:30am and 8:30am. The most common hour of departing from work was 5:00 pm (n=500) with 41% of all respondents leaving between 4:30pm and 5:30pm. Figure 5 shows a time series of counts of arrivals and departures, showing a peak of arrival at 8:00am and departure at 5:00pm. Other important small peaks are early start at or before 7.00 am and finish at or before 4 pm.

Figure 5: Time of usual arrival at the workplace on most days. Times of leaving workplace on most days



4 Discussion

This was the first travel survey of NSW Health staff conducted across an entire sub-metropolitan region. The GWS Travel Census provided a baseline understanding of staff's experiences travelling to work, factors influencing their travel choice and behaviours, and how staff might travel in the future. This will provide us with a starting point to develop strategies to improve their health, amenity, and possibly future work travel choices.

As has been described, the geographic area is large and the movement of people into and out of Western Sydney serviced by multiple routes. A characteristic feature of Western Sydney is that a high proportion (46%) of residents travel outside Western Sydney to access jobs. However, characteristically most people who have jobs in Western Sydney also reside in Western Sydney.

There was strong participation in the survey with 5,133 usable results across all LHDs: 1003 from NBMLHD (19%), 2030 from SWSLHD (38.5%) and 2212 from WSLHD (42%). Respondents was mostly less than 44 years (41%) and between 45 and 54 years of age (21%).

The most important finding overall is that most staff drive to work in their own private vehicle (72.8%), with most parking on-site. Only 16.9% travelled by public transport (12.8% by train; 4.1% by bus) and a very small proportion (3.4%) got to work by walking or cycling.

Prospects for improving public transport use

The key barriers for public transport use were time and lack of options, too many changes and unreliability. Notably public transport patronage was greater in those sites (such as Westmead and Liverpool) serviced by a major rail line. More public transport options and financial incentives were the options offered by survey respondents that may encourage staff to switch to public transport. However, a quarter of staff responded that nothing would encourage them to switch to public transport.

The prospects for improving public transport should be better given the location of a number of facilities near transport hubs. A complementary approach to understanding public transport opportunity is provided by Public Transport Accessibility Level (PTAL). PTAL is a measure of connectivity by public transport for a small geographic area considering walking distances to nearest stops, waiting times, service frequency and major transport hubs in the surrounding area. The 2020 December PTAL analysis shows, that Cumberland, Blacktown and Bankstown hospitals score “Very high” and “High”. These scores were observed in the morning and afternoon peaks.

Public Transport Access Level - South Western Sydney Health District Hospital precincts

	7-8 AM	8-9AM	4-5PM	5-6PM
Cumberland hospital	Very high	Very high	Very high	Very high
Nepean Hospital	Medium-High	Medium	Medium	Medium
Blacktown Hospital	Very high	Very high	Very high	Very high
Westmead and Westmead Children	Medium-High	Medium-High	Medium-High	Medium-High
Bankstown Hospital	Very high	High	Very high	Very high
Campbelltown	Medium	Medium	Medium	Medium-High
Liverpool	Very high	Very high	Very high	Very high

Source: PTAL December 2022 for corresponding Hospital precinct Travel Zones

We can also compare transport mode captured through the survey with journey to work data (JTW - ABS Census 2016) to understand the characteristics and trends of the mode share over time. The travel mode categories captured through the survey were adjusted to the JTW categories for this comparison with six major hospital sites.

The comparison with the 2021 travel survey suggests a significant mode shift trend from private vehicle to public transport over these 5 years at Westmead (Car, as driver declining from 72% to 56% and Public Transport mode improved from 18% to 35%) and Liverpool Hospitals (Car, as driver declined from 76% to 69% and Public Transport mode improved from 13% to 23%). This trend is likely an impact of the service improvement programs, resulting in higher service frequency and wider service span occurring in the comparison period in the Greater Metropolitan Sydney Area.

The 2016 Journey to Work data in the hospital precinct Destination Zone shows that majority of the workers drove to work in each precinct, Blacktown and Campbelltown Hospital showing the highest level (85%) of car as a driver mode, followed by Bankstown-Lidcombe and Nepean Hospitals with 84% (Figure 4).

So while public transport as a mode share shows a positive trend in the majority of hospital sites, there might be further opportunity to shift customer journeys onto the public transport network to ease road congestion and to reduce environmental impact.

Many respondents (43.4%) identified an increase in public transport options /services and further opal card discounts for staff (33%), backed up by financial incentives to use public transport (26.5%) would encourage a switch to public transport. The Future Transport Strategy 2056, identifies TfNSW have an integral role to encourage a travel mode shift from private car use to walking, cycling and public transport. Strengthening partnerships and a strategic,

planned and time framed approach may be indicated in realising an integrated sustainable transport vision.

Prospects for walking and cycling

Respondent feedback on the barriers to support walking to work and cycling to work were predominately related to, too far to ride (64.9%) or walk (83.2%). Road safety concerns for cycling were significant (39.5%) and lack of appropriate infrastructure to ride a bike on (28%) which may benefit from purpose-built cycle networks.

When asked about whether they thought they could walk all or most of the way to work, of the 5,133 survey respondents, 8.2% said this was feasible. When asked about whether they thought they could cycle all or most of the way to work, of the 5,133 survey respondents, 12.3% said this was possible.

These findings indicate that for an important minority of staff there are strong prospects to improve active transport participation if barriers are removed and options are improved. Naturally, these will take time, be incremental and will vary site by site.

The time it took to walk (37.7%) and cycle (28.6%) to work featured highly with respondents. This also suggests the need for specific planning and design share mode transports that are convenient and timesaving for commuters may be indicated. A significant percentage of respondents (69%) disagreed or totally disagreed that there were places to hang/dry their cycling gear at their workplace. This has implications for specific planning and design of purpose built facilities. Momentum with the recent launch of the National Obesity Prevention Strategy, may be an enabler for change. It aims to “develop prevention strategies to improve the environments and conditions around us, and support and empower people to live healthier lives”. It identifies ‘wider determinants of health and sustainability, such as transport systems and urban design’ are key to this.

Over and above small positive findings there are important negative findings particularly the significant proportion reporting a commute of over one hour to work either in the morning (fewer) or in the afternoon. Although around 30% of staff described a typical journey to work of less than 30 minutes, the majority had a journey to work of more than 30 minutes with around 15% commuting over an hour. This is an important drag on the amenity and productivity and family life of these staff. Although for some it may be the consequence of a choice to live in rural or city locations, it is a factor that needs to be watched.

The TfNSW Roads Customer Satisfaction Index (May 2021) assesses current satisfaction levels across all public transport, roads and ‘point to point’ transport services. The report identifies the overall customer rating for Bicycle satisfaction is 87% (for the top 9 service priorities). The customer dissatisfaction priorities highlight areas for improvement for integrated planning and design that may promote cycling. These include, adequacy of road safety infrastructure for cyclists (15%), Ability to share footpaths with others safely and Safe and courteous driving by others (both rate 14%), followed by Being able to cross/turn in traffic safely (13%).

The overall customer satisfaction for walking is 85%. Similarly the dissatisfaction levels gives some insight into areas for improvement that may encourage walking. This includes Lighting on roads and footpaths (15%), Condition and quality of streets/footpaths (11%), Adequacy of structures to support pedestrian safety and Ability to share footpath with others safely (both at 10%).

The impact of COVID

The UK study, Changes in commuting behaviours in response to the COVID-19 pandemic by (Harrington and Hadjiconstantinou, 2022) discussed the ‘unprecedented opportunity’ for a shift towards cycling and walking and acknowledged this ‘is time - limited’, despite a propensity for

commuters to favour car travel. Their results revealed there were many barriers and enablers for car and public transport commuters, with '20.5% of those who commuted by public transport and 10.1% of those who commuted by car pre-pandemic may switch to walking or cycling once restrictions lift'. The active travel findings may be an opportunity to promote active transport, with potential to capitalize on the small percentage of respondents (8.2%) stating it was feasible to walk to work.

Pre COVID-19 saw 1.3% respondents identifying as routinely working from home. This, increased to 6.4% staff (329) during the pandemic, with 59.4% working from home 1-2 days per week before the pandemic to 80.6% during the pandemic. COVID-19 significantly impacted staff work practices with some LHDs developing fair work principles for consideration of flexible work practices. This heralds a shift from the traditional working hours that may impact on staff travel. However, within a health setting there will remain a majority who will be required to be on site at most times.

5 Conclusions, recommendations, next steps

The GWS Partnership Travel Census demonstrated that delivering a coordinated joint project across the three LHDs at the same time was feasible. The project required the collaboration and coordination of many staff and teams across the respective LHDs – particularly staff from Population Health and Health Promotion Departments, the Greater Western Sydney Partnership Working Party and Media and Communications departments across the LHDs. Lessons learnt through this Travel census exercise are attached to this report (Appendix 3).

Recommendations and next steps identified within the findings of the GWS Travel Census are as follows:

Local Health Districts

- Leverage the findings of the GWS Travel Census to support other stakeholders and established partners to make the case to improve planning, design, coordination and effectiveness of transport access to health services across the LHD.
- Promote and renew hospital and other campus travel plans.
- Explore flexible working and telehealth options

Greater Western Sydney – Health Partnership

- Explore and facilitate collaboration opportunities with Transport for New South Wales (TfNSW) to:
 - Identify strategic or funding opportunities for stakeholders (such as TfNSW, LHDs or Councils) to undertake initiatives that support a mode shift for health workers from Private Vehicle, to public and active transport
 - Explore Public transport service adjustments opportunities
 - Consider behavioural science interventions
- Share the findings of the GWS Travel Census to key strategic stakeholders, such as Health Infrastructure, Greater Cities Commission, Health & Education Precincts etc., to improve planning, design, coordination and effectiveness of transport access (with a focus on integration of active transport options) across the region.
- Share precinct level data with each LHD to support them to promote and renew hospital and other campus travel plans.
- Consider repeating the Travel Census in the near future to measure changes in travel behavior and the effect of active travel strategies.

Acknowledgements

- GWS Health Partnership Steering Committee
- GWS Health Partnership Working Party
- GWS Health Partnership Travel Survey Working Group
- Transport for New South Wales (TfNSW)
- NBMLHD, SWSLHD and WSLHD Ethics Committee
- NBMLHD, SWSLHD and WSLHD Media and Communication Units

6 Bibliography

1. British Medical Association 2012. Healthy transport = healthy lives. ISBN-10 1-9055445-63-0.
2. Chapman R, Keall M, Howden-Chapman P et al. (2018). A cost benefit analysis of an active travel intervention with health and carbon emission reduction benefits. *International Journal of Environmental Research and Public Health* 15, 962. doi: 10.3390/ijerph15050962.
3. Harrington DM, Hadjiconstantinou M 2022. Changes in commuting behaviours in response to the COVID-19 pandemic in the UK. *Journal of Transportation and Health* <https://doi.org/10.1016/j.jth.2021.101313>.
4. International Energy Agency 2020. Changes in transport behaviour during the Covid-19 crisis. Accessed 4 December 2020. <https://www.iea.org/articles/changes-in-transport-behaviour-during-the-covid-19-crisis>.
5. Lee IM, Shiroma EJ, Lobelo F, Puska P, et al. (2012) Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy. *Lancet* 380, 219-29.
6. Nepean Blue Mountains Local Health District 2020-2021 Year in Review (2021). Available from: <https://www.nbmlhd.health.nsw.gov.au/about-us/nbmlhd-strategic-plans-and-reports>
7. Neves A, Brand C. 2019. Assessing the potential for carbon emissions savings from replacing short car trips with walking and cycling using a mixed GPS-travel diary approach. *Transportation research*, 123, 130-146. <https://doi.org/10.1016/j.tra.2018.08.022>
8. Petrunoff N, Rissel C, Ming Wen L, et al. (2013). Developing a hospital travel plan: process and baseline findings from a western Sydney hospital. *Australian Health Review* 37, 5, 579-584.
9. Petrunoff N, Wen LM, Rissel C. (2016). Effects of a workplace travel plan intervention encouraging active travel to work: outcomes from a three-year time series study. *Public Health* 135: 38-47. <https://doi.org/10.1016/j.puhe.2016.02.012>
10. Rojas-Rueda D, de Nazelle, A, Andersen, Z et al. (2016). Health impacts of active transportation in Europe. *Plos One*. <https://doi.org/10.1371/journal.pone.0149990>
11. SWSLHD (2020). South Western Sydney Local Health District Strategic Plan 2020 midpoint review. <https://www.swslhd.health.nsw.gov.au/pdfs/2018-StratPlan.pdf>
12. Transport for NSW (2020). Household Travel Survey (HTS) - Data by Region (2009/10-2019/20), accessed 4 March 2020. <https://www.transport.nsw.gov.au/data-and-research/passenger-travel/surveys/household-travel-survey-hts/household-travel-survey-0>.
13. Transport for NSW (2020). Reducing emissions when we drive. Accessed 5 March 2020. <https://www.rms.nsw.gov.au/about/environment/air/vehicle-emissions/index.html>
14. Western Sydney Local Health District Year in Review 2020-21 (2021). Available from: <https://www.wslhd.health.nsw.gov.au/Education-Portal/Research/Research-Categories/Centre-for-Infectious-Diseases-and-Microbiology-Public-Health/Publications/wslhd-year-in-review>.
15. Zander A, Rissel C, Rogers K, Bauman A (2014). Active travel to work in NSW: trends over time and the effect of social advantage. *Health Promotion Journal of Australia* 25, 167-173.

7 Appendices

Appendix 1 – TRAVEL BETWEEN WORKPLACES

On the days that you have to travel between workplaces, what is your main usual mode of travel to the first workplace of the day? (Tick one box only) What is your main mode of travel between your first workplace and subsequent workplaces?

1st Workplace	Cycling	Fleet vehicle	Missing	Other (please specify)	Own vehicle	Public Transport	Taxi/ Rideshare	Walking	Total
Bus	0	9	1	3	3	15	1	5	37
Cycling	2	6	0	0	0	0	0	0	8
Ferry	0	0	0	0	1	0	0	0	1
Formal Carpool	0	37	0	0	1	0	0	0	38
LHD fleet vehicle, as passenger	0	22	0	0	2	0	0	0	24
LHD fleet vehicle, drove alone	0	254	0	0	8	0	0	0	262
Light Rail	0	0	0	0	1	0	0	0	1
Missing	0	0	31	0	0	0	0	0	31
Other (please specify)	0	2	0	4	2	0	0	0	8
Private vehicle, as passenger (informal carpool, not a rideshare)	0	4	0	2	10	1	0	0	17
Private vehicle, drove alone	0	163	4	4	555	5	0	14	745
Rideshare (e.g. Uber)	0	0	0	0	0	0	1	0	1
Train / Metro	0	13	0	0	2	50	1	7	73
Walk	0	10	0	1	3	3	0	19	36
Total	2	520	36	14	588	74	3	45	1282

Appendix 2 – MULTIPLE MODES OF TRAVEL

Mode of Transport	Mode 2 to Work														Total					
	Bus	Cycling	E Bike	Ferry	Formal Carpool, as driver or passenger	Formal Carpool, as driver or passenger of transport	Inconsistent Answers	LHD fleet vehicle as passenger	Light Rail	Micro mobility e.g scooter	Motorbike or Moped	On Demand service eg BRIDJ	Other please specify	Private passenger informal carpool not a rideshare		Private vehicle drove alone	Rideshare e.g Uber	Taxi	Train Metro	Walk
Bus	0	0	0	0	0	3	0	0	0	0	0	0	4	16	17	0	0	28	21	89
Cycling	0	0	0	0	0	0	0	0	0	0	0	1	1	1	6	0	0	4	1	13
E-Bike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	5
Ferry	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Formal Carpool, as driver or passenger	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Inconsistent Answers	0	0	0	0	0	0	112	0	0	0	0	0	0	0	0	0	0	0	0	112
LHD fleet vehicle, drove alone	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
Light Rail	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
Other (please specify)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	4
Private vehicle, as passenger (informal carpool, not a rideshare)	10	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	10	8	31
Private vehicle, drove alone	30	17	3	0	0	11	0	1	0	2	0	1	11	0	0	2	1	72	188	340
Rideshare (e.g. Uber)	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
Taxi	2	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	5
Train / Metro	84	7	0	1	2	5	0	1	2	0	1	6	27	130	4	0	0	0	90	361
Walk	5	0	0	0	0	3	0	0	0	0	0	0	4	26	3	0	0	8	0	49
Total	133	25	3	1	2	23	112	2	2	1	3	12	60	188	10	1	125	314	1018	

APPENDIX 3: PRACTICAL LESSONS

Practical lessons

Timing

Avoid a pandemic if you can. The advent of the COVID-19 global pandemic and the gearing up of the Health System to pandemic management response, delayed the development and implementation of the Travel Census, which was supported as a key priority for the Greater Western Sydney – Health Partnership Working Party in February 2020. The pandemic impacted on the opportunity/ability of the Travel Census Working Group to promote the survey across the LHDs, engage with stakeholders and also led to staff not utilising usual travel options, staff working from home that normally would commute, reducing the visibility and participation of some staff and potentially biasing the results of the survey.

Collateral and artwork

There was positive feedback about the collateral material. The Travel Survey Working Group initially drafted the promotional material in-house, which limited the design character. Engaging a professional designer from the initial phase of the project could be beneficial in planning and identifying the requirements for the collateral and artwork. Additionally, collaborating with each LHD Media and Communications Unit from the initial project phase for expert guidance in planning material and marketing strategies to promote a Census would be valuable. Some promotional materials could be reused in the future to minimise cost and time. Additionally, creating a 'brand name' for the Travel Census, making it easily recognisable across the Districts.

Communications

Communication was effective, and promotional material assisted with awareness of the Travel Census within each LHD.

Email banner – worked well

Intranet banner (coming soon, open now) – worked well, utilised in all LHDs to promote the census and various communication portals.

Posters – eye-catching and appealing. Posters were placed throughout the LHD hospitals to promote and encourage staff participation in the census. Posters were also emailed to units for promotion.

Communication Portals – emails were sent occasionally to increase uptake and messages sent through communication programs such as Yammer, etc.

Face-to-face communication – this proved to be challenging due to the public health order. As a result, participation uptake could have been affected as some staff may not have been aware of the census took place.

The Travel Survey Working Group worked well as a team to ensure the travel census correlated with the objectives of the Greater Western Sydney – Health Partnership action area two: support healthy greenfield and built environment development. In addition, the group worked together to ensure all partnerships interests were met and that the strategic focus of the Greater Western Sydney – Health Partnership was the primary focus of this initiative.

Incentives

An incentive of 500 x \$20 opal cards co-contributed by Transport for NSW (125 cards) and South Western Sydney Local Health District (375 cards). As part of the Census, there was provision for the participant to add their email address to enter the draw. The draw was conducted and notified by Transport for NSW, with winners emailing a generic email address of the Clinical Innovation and Business Unit for allocation and distribution.

Issues that arose were:

Firstly due to the travel restrictions/lockdown Public Health Order, the draw did not commence as planned July 2021 date, instead was delayed until 4 November 2021.

Three draws had to be conducted as not all claimants who were emailed claimed their prize. (Draw 1 – 4 November 2021, draw 2 – 1 December 2021 and draw 3 – 4 February 2022).

Initially, after Draw 1, it was identified that a number of the claimants may not have received the email from Transport for NSW as it was brought to attention that it was coming up in claimants junk box, and/or identified as 'suspicious email' or was prevented within the NSW Health phishing filters, thus reducing their opportunity to claim their prize.

Subsequently, a reminder email was sent out via the SWSLHD CIBU generic email box to the claimants after each draw. However, still, some claimants did not respond and subsequently, after the cut off date for their claim, the opal card was reissued into the next draw.

Potentially participation may have been larger if the value of the opal card was bigger and the number available to win smaller creating a more competitive environment. Additionally, other incentives rather than just a public transport focus prize may have widened the scope of participation.

IT systems and survey access

The survey had a QR code linked to survey monkey; this created ease of access from any device, either personal or work. The internet link and the QR code was advertised on all marketing collateral for the Travel Census.

However, unfortunately, due to the set-up of the QR code and internet link/ there is no way of knowing whether the 'hits' to the Census were created from a QR code or the internet link via the marketing collateral circulated via emails or via the individual LHD Media and Communication Teams via their respective bulletin boards. These statistics if able to be collected in future censuses, would enable greater insight into what particular marketing collateral/communications targets the market effectively and what other methods could potentially be used in the future.

Additionally, there is no way to gauge whether the staff who participated accessed the survey via their private device or work device and how they found out about the travel census. For future censuses, it would be beneficial if this information could be collected as this would ensure that marketing materials, access to devices to participate, etc., are targeted appropriately to increase response uptake.

Maximising response

Several initiatives were included to maximise engagement and response. In future, the following could be considered:

Incentives: include other incentives that maximise health and wellbeing and target the audience to participate in the Census. For, e.g. movie tickets, coffee from cafes etc

Engaging Media and Communications Units: to assist with developing the Communication Strategy Plan from the commencement of the project to outline a clear plan on marketing and promotion.

Promotion: Lead up promotion to the survey, a bit more 'out there',... engaging facility GMs, NUMs, Directors, Managers, etc., and certain District teams to promote future Censuses.

Conducting the Census when business is as usual rather than in the midst of a public health crisis.

Census staff moving through staff areas with iPads enabling staff to complete the census'.

Questionnaire design

Post census, it was identified that there was significant data cleaning and cross-checking conducted. Perhaps the Travel Census was not as straightforward as intended as the analysis and evaluation team noticed participants would often answer 'no' to a question and then continued to answer questions in which they were not required to or vice-versa. Whilst there was much branching, some were removed before the live date. For future censuses, ensure the branching and questions are very clear and simple for participants to answer all relevant questions.

Feedback to staff

An infographic is planned to be developed in consultation with the 3 LHD Media and Communications Teams to highlight key outcomes and recommendations from the Travel Census as well as congratulating the winners of the Opal Cards. This will occur post- approval of the results etc., of the evaluation report by the Steering Committee.