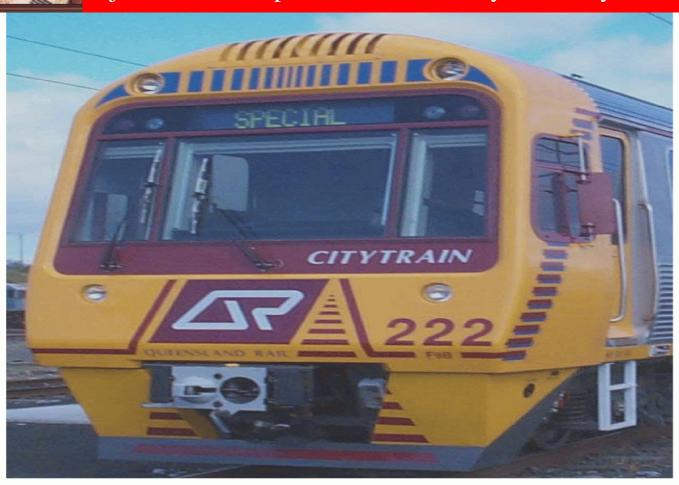


The Times

May 2004

A journal of transport timetable history and analysis





WORKING TIMETABLES EFFECTIVE JUNE 2nd 2003

Inside: On a Toorak Tram on a Friday Night The next train stops at ... eh? RRP \$2.95 Incl. GST

The Times

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On the front cover	
In June 2003, Queensland Rail did something bold- it issued Working Time Tables for both its Trave	lTrain
and CityTrain services with a full-colour photograph on the front cover. Although becoming comm	ion on
the covers of North American ETTs (Employee Time Tables), this was probably the first appearance of	
a thing in this country. It seems, though, that QR has distorted its train's image to give it a "standard	0 0
feel"! Flash colour cover graphics is even being used these days for academic research into timetable	ing, as
our story on timetable-ology on page 13 shows.	

AATTC Secretary STEVEN HABY was most surprised to find in the April issue, that he was the author of a review of an AATTC Auction item, a 1937 Brisbane transport timetable. **STEPHEN WARD**, on the other hand, was most surprised to find that he was **not**! The editor, having boasted in this message box in the very same issue about his ability to juggle with knives and flaming torches, is most embarrassed at having dropped both the knives and the torches. He apologises to both gentlemen for his confusion.

The AATTC web-site version should carry the correct attributions when it appears... There is usually a delay between its appearance in your letterbox and its appearance at www.aattc.org.au. Partly this is deliberate, so that members may enjoy an 'exclusive' before the journal appears on a 'free-to-air' version. Partly, though, it's due to The Times 'running late and out of timetable order'. The web version does, however, enjoy the advantage of colour reproduction, something that should enhance your appreciation of many items in the current issue.

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The Times welcomes articles and letters. Send paper manuscripts or word-processor files on disk or via e-mail to the editor at the address below. Illustrations should be submitted as clean sharp photocopies on white paper or scanned GIF or TIF format images with at least 300dpi resolution on disk or via e-mail.

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On a Toorak Tram on a Friday night

BERNARD BOLAN and GEOFF LAMBERT look at the route 8, its history and the peculiarities of its customers

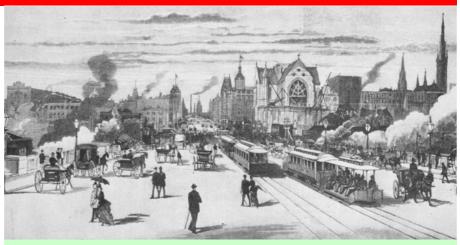
It's half past five
In Flinders St
There's tension in the air
Girls with curls
And cultured pearls
Are tearing out their hair.
While men with charm and outward calm
Begin to cuss and damn
Then with a roar
They push and pour
Onto the Toorak tram

Then, it's "Right down the middle please"
"Hold on tight"
"Get out your money" and
"Stop that fight"
It's kick and kill
And bash and bite
On a Toorak tram on a Friday night

The Toorak Tram, for its first fifty years from its opening on 15th February 1889, was a cable-driven affair. On that date, the pre-existing Prahran service was added to by a branch along Toorak Rd from Chapel St to the new terminus.

The 4.95 mile service was an immediate success, and threaded its way down Swanston St with other trams to and from St Kilda Rd. It is said that, in the peak hour of the day, some 400 trams per hour clanged their way through the Swanston St intersections, a tram every 9 seconds.

Girls with curls and cultured pearls



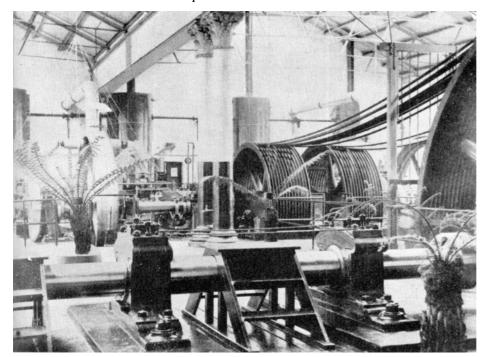
<u>Above:</u> Tension in the air: half-past five, near Flinders St in 1889. Those of nimble feet have already scored their seats on the brand new dummy as it glides away with swan-like motion to Toorak. <u>Below left:</u> At Toorak itself was the Victorian splendour of the cable winding engine house—potted ferns and gleaming surfaces amidst the steam, coal and oil.

and men with calm and outward calm were always features of the Toorak Tram, the suburb was and still is the favoured abode of the upper classes. It is said that the Toorak service was the favoured tram for early State Governors wishing to make an incognito journey from Government House.

Once aboard
The points are scored
By those of nimble feet
A 3-yard dash
And in a flash
You've won yourself a seat.
Now quickly take your paper out
And study every word
Don't lift your face,
You've lost your place
To an ancient wrinkled turd.

Then, it's "Right down the middle please"
"Hold on tight"
"Get out your money" and
"Stop that fight"
It's maim and murder,
Slash and spite
On a Toorak tram on a Friday night

Wholesale conversion of Melbourne's cable trams (arguably the most extensive in the world) to electric traction began in 1924; but as part of the "conversion", a 300 yard extension was **added** to the Toorak line in the City to re-route it down Lonsdale St to Elizabeth St. This was probably the last cable tram route constructed anywhere in the world. The Toorak cable tram was ultimately converted to electricity in 1926.



1, 1897 TRAMS & BUSES (continued).

Belly OND-via Spencer and Flinders Sts., Wellington-parade, Bridge road, to Hawthorn Bridge. Fares-from Spencer St. to Swanston St., 1d; Spencer St. to Hawthorn Bridge, 3d. Bridge. Fares—from Spencer St. to Swanton St., at Bridge; through fare, 4d.

WITH MELBOURNE-From Spring Street, via Collins and Market Streets, Queen's Bridge, MOTH MELISUURNE—From Spring Street, via Collins and Market Streets, Queen's Bridge, yoray Street, City Road, Clarendon, Park, and Bridport Streets, and Victoria Avenue, to Be-consfield Parade. Through fare, 3d.; from corner of Park and Clarendon Streets to Parade Terminus, 1d. Green.

PARA, PRAHRAN, WINDSOR AND BALACLAVA—From corner Lonsdale-st., via Swanston-st., and St. Kilda, Domain, and Toorak-rds., and Chapel-st., to corner of Carlisle-steeparts and Red. This tram runs through to Carlton and Abbotsford at separate fare.

The street of th

Transfers are allowed to and from Balaclava and Sponcer-st at Swanston-st.

TILDA—From corner of Lonsdale Street, via Swanston Street and St. Kilda Road, High Street and Brighton Road, to Grosvenor Street. Fare 3d. Green. This train runs through to North Carlton at separate face. Transfers are allowed to and from St. Kilda and Sponcer-st. at swanston-st.

RILDA ESPLANADE.—From corner of Chapel Street, Windsor, via Wellington and Fitzroy Broots, Esplanado, and Acland Street, to Barkly Street, St. Kilda. Fare Sd. White. Passen proces, and the City or Suburban Terminus of either the Balaclava or St. Kilds for the one fare. trams for the one fare.

TORAK AND SOUTH CARLTON—From Queensberry-st., via Madeline and Swanston-sts., TORAK AND SOUTH CARLTON—From Queensberry-st., via Madeline and Swanston-sts., TORAK AND SOUTH CARLTON—From Queensberry-st., via Madeline and Swanston-sts., By Kilds, Domain, and Toorak Roads, to Irving Road, allowed to and from Toorak and Spencer-st. at Swanston-st.

allowed to and from Louisa and Spencer-st. at Swanston-st.

11 TORTA STREET—From Spencer St., via Collins and Gi-borne Sts., to Victoria St. Bridge
12 TORTA STREET—From Spencer St., via Collins and Gi-borne Sts., to Victoria St. Bridge
13 Tare 3d. Red. This tram connects with the Kew tram at Victoria Bridge. Through fare 4d.

13 MELBOURNE—From Flinders-st., via Elizabeth, Lonsdale, Spencer, and Abbotsford
14 Streets, transferring thence via North Melbourne tram to Flemington Bridge. Through
15 Streets, Brown, white light at night. are \$d. Brown, white light at night.

FIRST AND LAST CARS

The second secon		7	Veek	Day	J.		Sund	lays.	
and the state of t		Suburb	an End	Сітч	END.	Suburi	AN END	CITY	END.
Carton Melbourne	::	FIRST a m *5 37 5 39 5 40 5 45 6 50 6 42 5 45 5 30 6 548 5 47 7 30 6 39 6 18	LAST PM 10 599 11 14 11 7 11 7 11 7 11 10 11 8 11 7 11 10 11 49 11 10 52 11 18 11 13	First a m 6 5 5 58 6 10 6 11 6 13 5 56 6 6 1 6 13 6 13 6 12 7 30 4 6 4 6 35	LAST p in 11 80 11 35 11 33 11 35 11 32 11 34 11 30 11 35 11 30 11 35	FIRST pm 1 23 1 30 1 30 1 36 1 38 1 41 1 30 1 23 1 30 1 20 1 37 1 30 1 30 1 30 1 48	LAST pm 10 4 10 14 10 3 10 7 10 9 10 11 10 7 10 10 10 4 10 7 10 15 10 40 9 52 10 8 10 18	FIRST P m 1 64 1 51 2 2 1 58 2 1 1 53 2 5 1 48 1 57 1 47 2 2 1 45 8 2 5 5	LAST pm 10 35 10 35 10 35 10 34 10 34 10 35 10 40 10 30 10 34 10 40
Helous		K 90		, .	Gumma-	·	·····		

* Saturdays 5.30 a.m.

1 Summer 6 a.m.

BATURDAY NIGHTS Cars leave Suburban and City ends 30 minutes later on all lines.

When the Cable Guy, or Gripman, was the envy of every Melbourne youngster. This is a page from the 1897 edition of Bradshaw, when the Toorak cable tram was barely 9 years old. No full time-table, frequency of service or time of travel are given. All that appears are the times of the first and last trams of the day. Well, it was the heyday of Marvellous Melbourne and the times of the last trams from the city were probably important to those Toorakians making their way home from the Club after a hard day at the Stock Exchange— and perhaps the first trams the next morning equally so, after an equally hard night in Collins St. Last departures from the city were at a rather early hour- no later than was necessary to collect the audience from the latest vaudeville show at Her Majesty's theatre- if Toorak deigned to go, that is. This, and the illustration on page 5, are from the Victor Isaacs collection.

It seems to be It's always me Whose fate it is to meet Someone whose behind requires Three-quarters of the seat. With muscles clenched, I hop aboard Determined not to fall My time will come I'll twitch my bum And knock him through the wall.

Then, it's "Right down the middle please" "Hold on tight" "Get out your money" and "Stop that fight" It's a 4-mile ride, And a 10-mile fight On a Toorak tram on a Friday night

For most of the period of both cable and electric service full Toorak Tram timetables were hard to find,

even information about travel times was sparse. The first and last timetables shown in these pages were the best one could hope for- these are taken from various issues of Bradshaw. Occasionally, as upon the introduction of Sunday morning services, a "full" timetable would grudgingly appear.

For those who
Cannot get a seat
And have to stand instead
We'll stop the tram at Chapel
Street
And carry out the dead.
Here is an announcement,
please
Be careful where you stand
Last time we stopped
The diver dropped
His artificial hand.

Then, it's "Right down the middle please"
"Hold on tight"
"Get out your money" and "Stop that fight"
It's Abide with me
Lead kindly light
On a Toorak tram on a Friday night

Chapel St could be said to be the nerve centre of the Toorak service, for it was here that the winding house for 3 cables associated with the Toorak Road trams was situated. It's very yuppified these days and one of Melbourne's centres for the Café Society. Most, it seems, don't come by tram anymore.

One more bend
And that's the end.
A merciful release.
Time to rearrange your clothes
And try to find your teeth.
Don't forget your brolly
And be sure to wink your eye
When pushing past
That little lass who works at
ACI.

Sunday morning trams were introduced to Melbourne from 1936. Prior to that year, such trams did not run, in deference to Christian religious sensibilities. Illustrated to the right is the Sunday morning timetable for the Toorak line (listed in alphabetical order with a number of other lines) for March 1942.

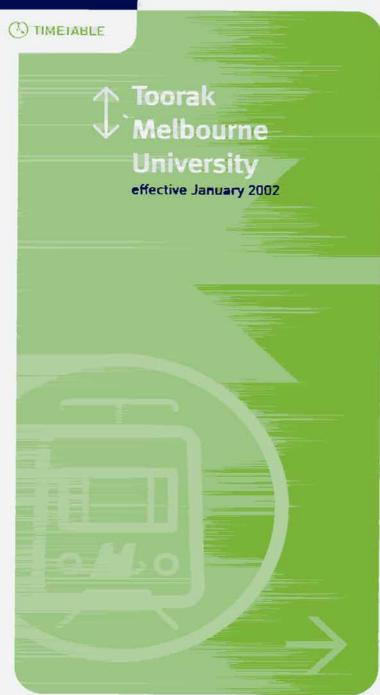
190 BRADSHAW'S GUI	
Leave St. Kilds Beach— Last Car	Leave Franklin Street—
to Hanna First Car. Last Car. St. Dep. Week Days . 5.47 a.m. 11.49 p.m. 12.38 a.m. Saturdays . 5.47 a.m. 12.28 a.m. 12.38 a.m. Sundays . S.1 a.m. 10.49 p.m. 11.49 p.m. Then 11.19 and 11.40 p.m. to City, and 12.17 a.m. to Hanna Street.	First Car. Last Car. Week Days 6.7 a.m. 12.9 a.m. Saturdays 6.7 a.m. 12.18 a.m. Sundays 8.24 a.m. 11.9 p.m. Then 11.50 p.m.
ST. KILDA BEACH AND MELB.	TRAMWAYS: Via South Melb
Leave St. Kilda Beach	Leave Franklin St. Junction
	AND MELBOURNE TRAMWAYS.
Toorak to Franklin Street, City-	Chapel Street to Franklin Street, City-
First	Last Car to St. First Car. Last Car. Kilda-rd. Week Days . 5.41 a.m. 11.41 p.m. 12.46 a.m. Saturdays . 5.41 a.m. 12.46 a.m. 12.46 a.m. Sundays . 8.20 a.m. 10.42 p.m. 11.46 p.m. Franklin Street, City, to Chapel Street— First Car. Last Car. Week Days and Sats. 6.4 a.m. 12.4 a.m. Sundays 8.41 a.m. 11.4 p.m.
SANDRINGHAM 8	•
11.37 p.m.; Sundays, 10.49 p.m.	lers street—Week Days, 11.40; Saturdays,
SOUTH MELB. TO CITY ROUTE	(via Spencer and Collins Sts.
Week Days and Saturdays	City (Gisborne St.) to South Melbourne—First Car. Last Car. Week Days and Saturdays

By the time that this edition of Bradshaw was published—August 1940—the last cable tram was but two months from closure (in secrecy on a Saturday evening, while people were at the theatre). The Toorak line had been cut back in several stages and had been fully electric since 1926, as had most lines on this page of Bradshaw. Service was probably provided by one of the ubiquitous W class bogie cars.

SOUTH	MELB.	SOUTH I	MELB. & A BEACH	ST.KILD	A BEACH	TOO	RAK
Sth Melb. Beach	Grey & Gisborne	Fitzroy Street	Franklin St. City	St. Kilda Bench	Franklin 8t. City	Toorsk	Franklin St. City
8.14 44 9.14 44 10.14 44 11.14 44 1.14 39 44 Summ	8.46 9.10 45 10.16 40 11.10 40 12.10 40 1.16 31	8.11 36 9.1 41 10.1 21 41 11.1 21 41 12.1 21 41 12.1 23 41 12.3 23	8.36 54 8.14 34 54 10.14 34 54 11.14 34 54 12.14 34 54 1.14 34	7.56F 8.1 26 51 9.11 31 51 10.11 31 51 11.11 31 51 12.11 31 51 1.8	8.24 44 9.4 44 10.4 24 44 11.4 24 44 12.4 24 44 1.4 1.4	8.10 40 9.10 40 10.10 40 11.10 40 12.10 40 1.10 23 31	8.41 0.11 41 10.11 41 11.11 41 12.11 41 1.10 36 40

ROUTE 8



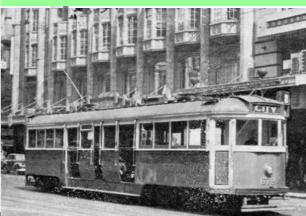


Today's world sometimes is better than the 'good old days'at least in the world of the tram timetable. Today you can have a tram timetable booklet for any route in Melbourne, showing all services, each tabled with a rich assortment of stopping place times. To the left we show the cover of M>Tram's Toorak service timetable. Perhaps we can thank Geoff Kennet for the far-reaching changes that lead, via a roundabout route, to the appearance of the modern tram timetable?

'Cause, it's "Right down the middle please"
"Hold on tight"
"Get out your money" and
"Stop that fight"
For it's winking and thinking
That perhaps she might
On a Toorak Tram on a Friday
night.
Winking and thinking
that perhaps she might
On a Toorak Tram on a Friday
night.

I wonder whether it is still thus on a Toorak Tram on a Friday nightor ever was? Bolan's song was not written from first-hand experience, but in response to disgruntled Melburnians asking for a Melbourne equivalent to his well known Sydney commuter ditty 'Rose Bay Ferry', which The Times might also feature one day.

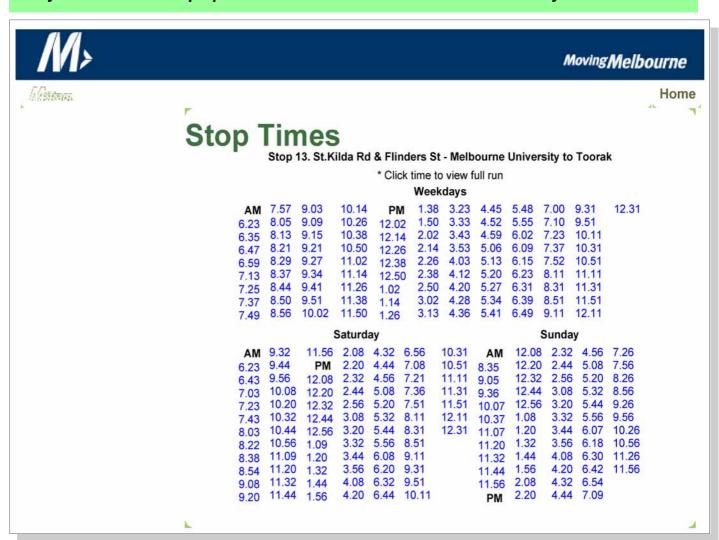
Before the 5:30 rush, an inbound No.8 at a quiet time in Swanston St in the early 1950s. W. John Webster photo.



8	Monday to Friday												Route 8 Melbourne University										
Stop	pm	pm	pm	pm	pm	pm	pm.	pm	pm	pm	pm	pm	pm	pm.	pm.	pm	pm	pm	pm	pm			
1 Melbourne University	12:48	1:00	1:12	1:24	1:36	1:48	2:00	2:12	2:24	2:36	2:48	2:58	3:08	3:18	3:28	3:38	3:48	3:57	4:05	4:13			
8 LaTrobe Street	12:55	1:07	1:19	1:31	1:43	1:55	2:07	2:19	2:31	2:43	2:55	3:06	3:16	3:26	3:36	3:46	3:56	4:05	4:13	4:21			
12 Flinders Street	1:02	1:14	1:26	1:38	1:50	2:02	2:14	2:26	2:38	2:50	3:02	3:13	3:23	3:33	3:43	3:53	4:03	4:12	4:20	4:28			
20 Domain Road	1:09	1:21	1:33	1:45	1:57	2:09	2:21	2:33	2:45	2:57	3:10	3:21	3:31	3:41	3:51	4:01	4:11	4:20	4:28	4:35			
31 Chapet Street	1:21	1:33	1:45	1:57	2:09	2:21	2:33	2:45	2:57	3:11	3:24	3:35	3:45	3:55	4:05	4:15	4:25	4:34	4:41	4:48			
37 Orrong Road	1:28	1:40	1:52	2:04	2:16	2:28	2:40	2:52	3:06	3:20	3:33	3:44	3:54	4:04	4:14	4:24	4:34	4:42	4:49	4:56			
43 Toorak	1:32	1:44	1:56	2:08	2:20	2:32	2:44	2:56	3:11	3:25	3:38	3:49	3:59	4:09	4:19	4:29	4:38	4:46	4:53	5:00			
Stop	pm	pm	pm	pm	pm	pm	pm	pm	pm	pm	pm	pm	pm.	pm									
1 Melbourne University	4:21	4:28	4:35	4:42	4:49	4:56	5:03	5:10	5:17	5:24	5:31	5:38	5:45	5:53	6:01	6:09	6:17	6:25	6:35	6:46			
8 LaTrobe Street	4:29	4:38	4:45	4:52	4:59	5:06	5:13	5:20	5:27	5:34	5:41	5:48	5:55	6:02	6:08	6:16	6:24	6:32	6:42	6:53			
12 Flinders Street	4:36	4:45	4:52	4:59	5:08	5:13	5:20	5:27	5:34	5:41	5:48	5:55	6:02	6:09	6:15	6:23	6:31	6:39	6:49	7:00			
20 Domain Road	4:43	4:52	4:59	5:06	5:13	5:20	5:27	5:34	5:41	5:48	5:55	6:02	6:09	6:16	6:22	6:30	6:38	6:46	6:56	7:07			
31 Chapel Street	4:56	5:05	5:12	5:19	5:26	5:33	5:40	5:47	5:54	6:01	6:08	6:15	6:22	6:29	6:35	6:43	6:51	6:59	7:07	7:17			
37 Dryong Road	5:04	5:13	5:20	5:27	5:34	5:41	5:48	5:55	6:02	6:08	6:15	6:22	6:29	6:36	6:42	6:50	6;58	7:06	7:14	7:24			
43 Toorak	5:08	5:17	5:24	5:31	5:38	5:45	5:52	5:59	8:08	6:12	6:19	6:26	6:33	6:40	6:46	6:54	7:01	7:09	7:17	7:27			

Half past five in Flinders St— and tension in the air. From the January 2002 M>Tram Route 8 timetable booklet, showing afternoon peak hour services. The route 8 has had its 'City' terminus at Melbourne University for many years now.

Below: Would the girls with cultured pearls be tearing out their hair when presented with today's timetable— stop-specific and on-line? For Flinders St— naturally!



The Times May 2004 7

Graphic Insight #82: Across Australia by ARTC

There are few true transcontinental railways in the world. Perhaps Australia's come closest, especially since ARTC gained control of much of the network in NSW. Now one can follow a train all the way from Kalgoorlie to Brisbane, via Broken Hill or Melbourne. **Geoff Lambert** takes a look at the ARTC's timetable web-site for a nation-wide view.

he Working Time Tables of the Australian Railway Track Corporation have been available in the web for two or three years and can be found at: www.artc.com.au/Access_2.5.html.

The timetables are presented as Excel files with only a limited amount of identification as to what trains are represented, reportedly for 'commercial reasons'. Chris Gordon has put a similar set of these train timetables onto the web and these can be found at: http://www.vicsig.net/index.php? page=interstate§ion=timetable s. Chris' timetables have the advantage over the ARTC WTT in that, where possible, the train number and the train operator have been identified.

Along with the actual tables, the ARTC site has an additional 'Customer Commitment Chart'. This is a train graph of the entire ARTC system and a version dated 21st September 2003 is shown on the page opposite. The ARTC has recently committed itself to updating this graph on a monthly basis, although its practice has fallen short of its rhetoric—the most recent chart at the time when The Times went to press was that of early February 2004.

The chart is an extremely clever use of Excel as a drawing program, those who download it will find that it has almost no 'data' at all. On the opposite page, I have added some supplementary information showing the weekly train frequency (Freight+Passenger+non-contracted) on the various legs of the system, in the extreme right column. There are some interesting features of this chart:

First, the chart horizontal (time) axis is plotted for the local time for the particular vertical axis (station) position. Thus, at Cook and at Wolsley, where the time zone changes, a train passing through the places from west to west will be shown as going backward in time. This amounts to an hour at Cook and

half an hour at Wolsley. Not all trains suffer this fate. A few, the Indian Pacific mainly it seems, don't seem to change their timebase as they pass through Cook. Of course, in the eastwards direction trains jump forward in time and this gives the graph the appearance where every eastbound train makes a 1-hour stop at Cook.

Second, the density of trains on some sections is rather high. The Crystal Brook—Port Augusta section is a case in point. This section carries trains between Adelaide and Sydney on the one hand and Port Augusta, Whyalla, Alice Springs and Kalgoorlie on the other. There are more trains here than there are between Adelaide and Melbourne for instance.

Third, note the large number of 'non-contracted' services (dashed lines) between Albury and Melbourne. This term is used to describe what the NSW Rail Infrastructure Corporation refers to as 'Spare'. In some sense they are what used to be called 'conditional' trains, although the latter term is still used by some operators to refer to contracted services that run only as required. But the proportion of non-contracted services on the Victorian Northeast standard gauge is, at over one-third, the highest anywhere on the ARTC system. This track is in the rather schizoid position of being at once both 'busy' and deserted most of the time... Mostly the noncontracted services just don't run, but were they to do so, there would be a capacity problem on the track. This is one reason why ARTC is lengthening and expanding the number of crossing loops here.

Fourth, quite a number of trains on this graph just seem to disappear at junctions, particularly at Crystal Brook. Note what happens around Sunday lunchtime, when 4 trains are shown as coming and going off the Broken Hill line here, but only 2 of them seem to appear on the main Adelaide—Port Augusta line, which carries two

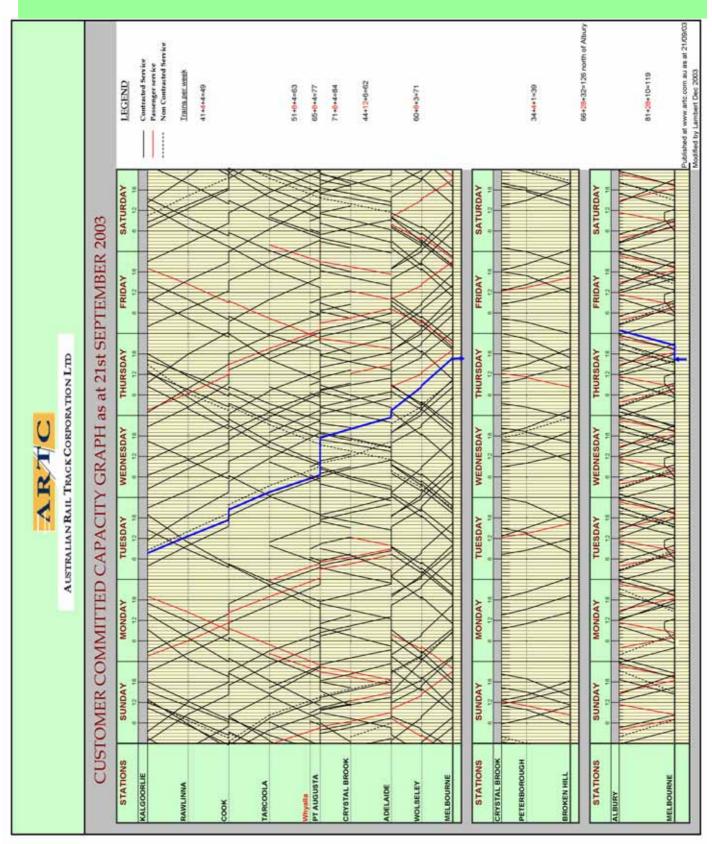
through trains of its own at this time. A total of 6 trains are shown to be in the vicinity of Crystal Brook, which would make it quite a busy and interesting place, especially with two trains apparently going down a black hole. The explanation lies in the fact that the station *Crystal Brook* encompasses also *Coonamia*, which is the junction for the short stub branch to Port Pirie, not shown on the chart. Like Alice's rabbit, the trains went down there.

Fifth, in the Excel tables, there are trains that appear to wait at crossing loops for opposing trains that do not themselves appear in the tables or the graph. Do these waits indicate other trains not tabulated or are they meaningless?

These peculiarities aside, it is possible to track a train on the ARTC network all the way from Kalgoorlie to the New South Wales border, a 4-day journey. I have shown what I think is train 1PW4, an NRC steel train, wending its way across the system in a heavy line (blue on The Times web version). The tables and charts are not perfect. It is not possible to chart a particular train with certainty—is the apparent long wait at Port Augusta real, or my mistake?

In September 2003, NSW was 'dark territory' for ARTC, but I have shown the numbers of trains heading into and out of that state at the two border crossings. For Albury in particular, this shows far more trains on the NSW side of the border than appear on ARTC tracks on the other side. RIC appeared to run a large number of trains, about 3 per day, that terminated in Albury without having any return 'balancing' services originating there. What the illustration cannot graphically reveal is that many of the trains shown have rather different times between the RIC and the ARTC tables at the hand-over points. The XPT, in particular, a train with a defined public timetable, is shown having different times at Albury in the two WTTs.

The ARTC Customer Commitment Chart for 21 September 2003, the date on which new Working Time Tables were issued for Westrail, ARTC and NSW RIC. The chart has been enhanced by The Times editor to show passenger trains in red (you'll have to look at The Times on the web to see this), train 1WP4, a Perth-Wollongong NRC steel train in heavy blue, and a tabulation of the number of trains on each segment in the Legend column on the right.



The next train leaves at "a" Eh?

David Cranney has been reading the fine print in the NSWGR timetable. Like those described in our February issue, it was replete with arcane symbology—but of **times**, there were none—or next-to-none. The railway staff, it seems, were no better off. Here he reports on his findings.

n the rural settlement of Wave Hill, Bill and Beth are examining a copy of the New South Wales Government Railways Country Time-Table dated May 5, 1968. "Let's see, since we're on the Brewarrina branch line, we should find Wave Hill in Table number 40 on page 69. Um...here we are...there's a diesel [i.e. two car diesel multiple unit train] leaving Brewarrina on Wednesdays and a mixed train on Tuesdays and Saturdays."

"What time does the train leave Wave Hill?" "Do you want the mixed or the diesel?" "Well, I'd rather go on the diesel, even though it only runs on Wednesdays. I don't fancy travelling on the same train as a load of smelly sheep or cattle."

OK, the diesel leaves Brewarrina at 1 57 p.m. Now looking down to Wave Hill...um...it leaves Wave Hill at...er...a" "It leaves at a?" "That's right, it also leaves Tarrion, Charlton, Compton Downs and Wyuna Downs at a." But it does leave Tarcoon at 2 33 and arrives in Byrock at 3 30 and connects with the 'Aircond Far West Exp' to Dubbo and then the Mail to Sydney."

"That's amazing. I wonder what time *a* is suppose to mean. Surely the New South Wales Railways don't expect us to solve some sort of algebraic problem to obtain the value of *a*."

"Eureka! At the bottom of the page it says 'For notes a and \mathbf{R} , see page

1'. Back to page one...(flipping pages)...here we are...'EXPLANATORY NOTES...The following letters and signs are regularly used in this timetable...a Trains stop to pick up and set down passengers when required; passengers wishing to alight should give notice to the Guard at the previous stopping station. At platforms where no Railway Officer is in charge, intending passengers should exhibit the signal provided'".

"Truly amazing. But what time is a?" "I think we'll have to do a bit of arithmetic. Let's see, the diesel leaves Tarcoon at 2 33 and arrives Byrock at 3 30, that's 57 minutes; Tarcoon is 499 miles from Sydney and Byrock is 464½, that's 34½

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Figure 1. Extract from the New South Wales Government Railways Country Timetable - from May 5, 1968. This table shows the Wednesdays only diesel multiple unit service from Brewarrina to Byrock with no times for conditional stopping places

miles. Let's say, that's close enough to 35 miles an hour. Now, Wave Hill is 479½ miles from Sydney, so that means it's 19½ miles from Tarcoon. At 35 miles an hour, the diesel will take...oh, I wish we had one of those newfangled electronic calculators but they're so expensive (remember it's 1968!)...let's get out the log tables...the diesel should take about 33 minutes, so that means it should leave Wave Hill station at about five past three."

"I always knew that your high school maths would come in handy. Now, how do I go about buying a ticket to Sydney?". "I wonder if the price of the ticket is *x* and we have to calculate the value of *x*?"

In case the reader is confused by this imaginary conversation, the illustration of table 40 (Byrock - Brewarrina) from the *New South Wales Government Railways Country Time-Table* dated 5 May 1968 should provide some clues. **(My figure 1)** Wave Hill was one of many destinations served by rail for which no times are provided in the public timetable.

For that matter, the equivalent working timetable of 5 May 1968 for this particular two car diesel

service showed no more information on times than did the public timetable. (**figure 2**) So it seems that Bill and Beth would have had no luck if they had telephoned the nearest attended railway station to enquire when the diesel passed Wave Hill (except perhaps to receive some unofficial advice based on the experience of the train crew).

The lack of any official information on train times at so many rail stopping places in rural Australia must have been a source of frustration for potential passengers. On the other hand, the number of passengers arriving at, and departing

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Figure 2. Extract from the Department of Railways, New South Wales, Western Division Working Time Table of 5 May 1968. Like the public timetable, this information for employees provides no information on train times at conditional stopping places such as our Wave Hill.

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Figure 3. Extract from the New South Wales Government Railways Country Timetable - from May 5, 1968. This table shows the mixed service on the Galong to Boorowa branch where a time is given for one conditional stop but not for the other three conditional stops.

from, these locations would have been small. So many of the places were only small towns or mere hamlets, if in fact there was any population in the vicinity at all. Their continued inclusion as rail stopping places in the 1968 timetable would have reflected a certain historical inertia and doubtless some measure of political pressure. What is not clear is why railway administrators chose not to publish times for these conditional stopping places. (There were some exceptions to this practice, for example, the Mixed on the Galong to Harden branch made only conditional stops at the line's four intermediate stations but a time is provided for one of these stations, Gooramma.) (My figure 3) Per-

haps the level of expected traffic determined whether or not a time was published. However this does not explain why the working timetable also omitted times, as these would presumably have been calculated during the process of compiling the timetable. Or were these stations ignored completely? Perhaps a reader has an explanation.

Timetable Quiz revisited

Letter

John Evans makes a late entry into David Hennell's Timetable Quiz from the February issue.

BOOROWAar

brief added comment to
David Hennell's Timetable
Quiz Answers in the March
issue of The Times:

SAR Radium Hill Branch

David mentioned that the "engine and crew probably went to Cockburn" between shifts. In fact the crew stayed in Radium Hill. The Mine authorities offered comfortable accommodation for crews during layover in Radium Hill. A three-bedroom house was provided for SAR train staff, so there was no thought of running back up the branch to Cutana and then head-

ing for Cockburn.

Incidentally trains to Radium Hill were worked direct from Peterborough. There was a select group of Peterborough-based enginemen and guards who had "learnt the road" to Radium Hill, and formed a sort of "Radium Hill link". It was this group that worked in rotation to Radium Hill, had their time off, and returned to Peterborough.

A similar grouping of crews known as the "Sedan Link" - was based at Mile End up to the late 1950's/early 1960's. These men were familiar with the branchline from Monarto South to Sedan, and worked the two goods trains per week that left from Mile End. With the coming of the 830 class diesels, the operating pattern changed and the line was worked using crews based at Tailem Bend who travelled light engine and brakevan from Tailem Bend to Monarto South, worked a train to Sedan (later Cambrai) and back to the Junction, and then return to Tailem Bend.

Cheers

John Evans

A Ph.D. in Timetable-ology

That's what MICHAEL COSTA thinks you need to run the CityRail system. Erasmus University has obliged, awarding just such a degree to its LEON PEETERS.

Network underfunded and approaching capacity, says Christie

The 2001 Christie report found Sydney's rail network was quickly reaching capacity and needed a massive injection of funds if it was to keep functioning.

to keep functioning.
Ordered by former transport
minister Carl Scully after the
Olympics, it was a long-term look
into the NSW rail network by the
state's top rail bureaucrat, then

co-ordinator general of rail,

Ron Christie.

Mr Christie called for an urgent increase in spending on maintenance - totalling about \$20 billion by the end of the decade - as well as \$30 billion by 2020 in new rail lines and \$32 billion in processing the state of \$32 billion in \$32 billion i

\$30 billion by 2020 in new rail lines and \$2.2 billion in new carriages. "The system is rapidly approaching gridlock," he wrote. "The system is not capable of consistently attaining public expectations because key infrastructure has not been adequately maintained."

been adequately maintained."
Kept secret for more than a
year, the report was revealed
through a series of *Herald* reports
in February last year, before being
released generally months later.
Joseph Kerr

Once the CityRail network habeen divided into five sectors over

the next decade, Mr Costa wants to introduce a new timetable, a job that his predecessor Carl Scully attempted but could not finish.

He refused to reveal specific targets for the period of time between trains. "You need a degree in

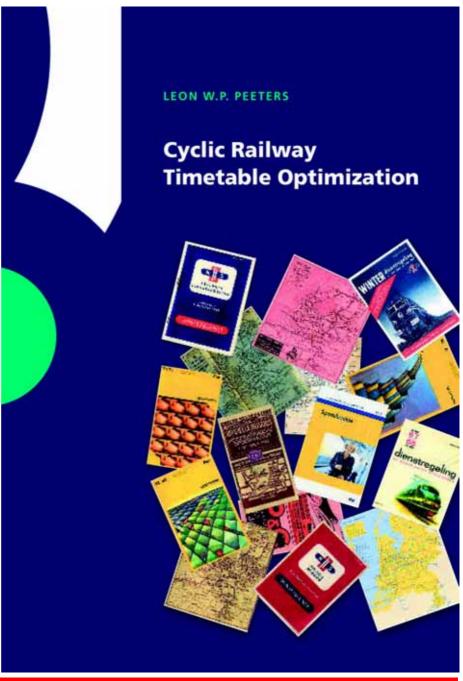
timetable-ology to get around the system [at the momend,"Mr Costa said. Under the new timetables, "you [would] know that you will be able to walk down to the station and there will be a train every [say] 15 minutes".

SMH Thu 22-Aug-2003

n September last year, The Times published NSW Transport Minister Michael Costa's assessment that commuters needed a degree in 'timetable-ology' to get around the Sydney system. Now, Erasmus University in Rotterdam has obliged by awarding a degree in just this subject to Leon Peeters. Such degrees are actually neither rare nor new, particularly in Europe, where the first such were probably awarded in the 1960s (another Dr Peters!). They have been awarded also in Australia, and The Times reported on the work of Andrew Higgins at the Queensland Institute of Technology in our July 2000 issue devoted to computer methods in timetable compilation.

Dr Peeter's work was for a mathematical analysis of the compilation of cyclic timetables- ones which, in his words, 'train connections are operated regularly with respect to a cycle time. So, a train for a certain destination leaves a certain station at the same time every cycle time. say every half an hour, every hour, or every two hours. Cyclic timetables are mainly used for passenger railways, though cargo rail schedules are sometimes also cyclic to some extent. This thesis therefore focuses on passenger railway timetables. 'They're the ones Mr. Costa wants too (above)- he might like to hire the new graduate.

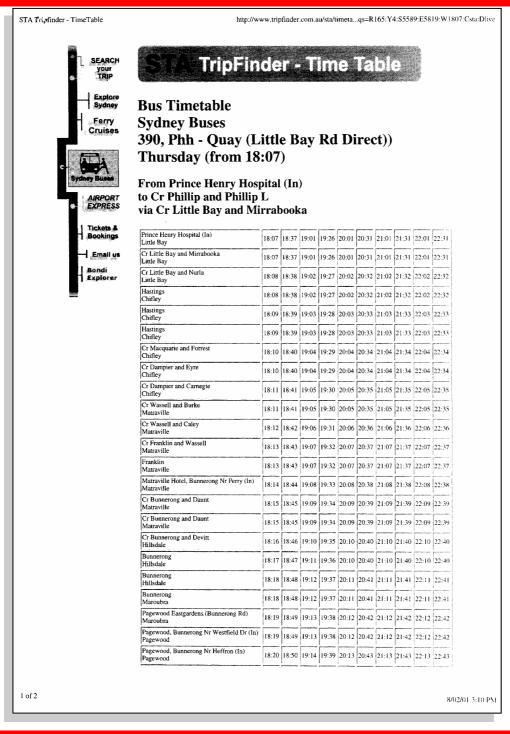
One place where Dr Peeter's thesis stands out is in its spectacular cover (right)- which contains a full colour rendition of 80 years of Netherlands Railways Public Timetable covers. In my days, a Ph.D. would never have been allowed to be so flashy. Dr Peeters thesis introduces itself with the words: 'As sometimes happens to trains as well, this thesis on railway timetabling has arrived a bit later than



The Times May 2004 13

A bad case of over-kill?

For a few months in 2001, Sydney Buses web-site carried an extraordinary facility, in which it was possible to ascertain the departure times of every bus service at every bus stop in Sydney. Below is a single page from the #390 service to Prince Henry Hospital, covering just 3 km of route in the late evening peak. Because of the closeness of the stops to one another, many show identiacal departure times—perhaps the times should have been given to the nearest second!



Annandale Ferry 1886

DUNCAN MACAUSLAN has been rootling about in the NSW State Archives again and has unearthed another timetable treasure.

et again this wasn't what I was looking for but...

Whilst researching about a cable tram proposal in Balmain in 1886 I came across this timetable in the *Balmain Observer* of 27 November 1886. Many people including several books have mentioned Ferry Road in Glebe as having been served by ferries but so far I have never seen documented

proof. This timetable doesn't mention it but does refer to a wharf at Kennedy Street which is not mentioned on maps today. Was this Ferry Road?

A look at Gibbs Shallard's map of 1885 show it was not. Kennedy Street is now known as Leichhardt Street and is some 400m north of Ferry Road. So now I've found a wharf that's not mentioned in the reference books and is not shown on the later 1892 Gibbs Shallard map.

The timetable mentions Gordon Street as being in Balmain which is stretching it a bit even if Rozelle was known as Balmain West in those days. One has to assume that the Saturday evening service continued hourly but were there services on a Sunday?

Annandale, Balmain, & Glebe Point Steam Ferry.

STEAMERS leave ANNANDALE & LIME-STREET WHARF, foot of Brakine-et.,

as follows :-

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Calling at Gordon-st., Balmain, Glebe Point and Kennedy-st. Late trips on Saturday night, until 11:30 p.m. from Sydney.

Fare a 3d. each way.

M. BYRNES,

Proprietor.

My Mum's timetable- Timetable Oddity #6

This is a personalised timetable, prepared for a specific passenger, as a result of a personal request. **GEOFF LAMBERT** reports on how it came about and some of its features.

wo or three years ago, when buying a ticket at the Bacchus Marsh railway station, my mother asked,

'Have you a timetable you can give me?'

'Yes', says the man, 'Try one of these.'

'These are no good, the print is too small', says my mother who had deteriorating eyesight. 'Why can't I have one of those like you've got stuck to the wall there?'

'You can! Call in on your way home and I'll have one for you.'

So she did, and he did.

The result is reproduced below, save for the fact that it is reproduced at about quarter-size, the original being laid out in A3 land-scape format.

This interesting timetable raises questions and calls for comment.

First—how common is it for a transport authority to make a special print-run of a timetable for one favoured customer? Is this just a copy of some kind of staff timetable?

Second- what sort of software and hardware was used to produce this timetable? At first glance, it seems to be an output of an Excel spreadsheet. But is it something supplied to the station by V/Line or is its production the result of a Bacchus Marsh station staff initiative? And did they use an A3 printer? What other uses would they have for that?

Some of the interesting features of this timetable are:

 It is station-specific: in lieu of the mandated 'ruled red line' line, this custom version uses Excel's formatting facilities to highlight the Bacchus Marsh line in bordered bold and with a background. In addition, trains that run express through Bacchus Marsh, or arrive and terminate short, at Melton, do not appear.

- All times are in the 12-hour clock format, without any indication of a.m. or p.m.
- If it really is an Excel spreadsheet, then the times have not been formatted as times, they have been formatted as numbers. And, because the compiler was probably unaware of Excel's capabilities in this regard, all '3digit' times appear without the customary leading zero. But otherwise this is a very competent use of Excel.
- The train numbers appear, and they could easily be thought of as something of significance to the passenger, as there is no explanation of what they are.

Are bouquets or brickbats due from the AATTC?

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FLINDERS ST SPENCER ST NTH. MELB FOOTSCRAY SUNSHINE	8103	8105	935 949	1016 1024 1030	1108	1228	208 217 223	335 339 344 352	8119 413 416	425 429 434 442	512 516 522 529	524 528 534 541	549 553 558 605	612 616 621	648 652	748 756	855	935 944		813	907	111	7 107 116 1 122	8119 349 403	8129	653	837	925	1100	107	8119	528	713
FLINDERS ST	8103	830 837	935 949	1016	1108	1228	208	335 339 344 352	8119 413 416	425 429 434 442	512 516 522	524 528 534 541	549 553 558 605	612 616 621 627	648 652 656	748 756	855	935 944		813	907	111	8115 7 107 116	8119 349 403	8129	653 700	837	925	1100	107	8119 317	528	713
FLINDERS ST SPENCER ST NTH. MELB FOOTSCRAY SUNSHINE	8103	830 837 843	935	1016 1024 1030	1108	1228	208 217 223	335 339 344 352 355	8119 413 416	425 429 434 442 445	512 516 522 529	524 528 534 541 544	549 553 558 605	612 616 621 627	648 652 656 702 705	748 756	855	935 944 950		813	907 915 922	1113	7 107 116 1 122	8119 349 . 403	8129	653 700	837	925	1100	107	8119 317	528	713
FLINDERS ST SPENCER ST NTH. MELB FOOTSCRAY SUNSHINE ARDEER DEER PARK ROCKBANK	8103	830 837 843 846 850 905	935	1016 1024 1030 1033 1036 1045	1108	1228	208 217 223 226 229	335 339 344 352 355 359 410	8119 413 416	425 429 434 442 445 449	512 516 522 529 532 536 546	524 528 534 541 544 548 559	549 553 558 605	612 616 621 627 630 634 644	648 652 656 702 705 709 717	748 756 802	855	935 944 950 953		813	907 915 922 925 928 936	1113	8115 7 107 116 1 122 125 129 138	8119 349 403	547	700 706 717	837	925	1100	8115 107 122	317 330	528 543	713
FLINDERS ST SPENCER ST NTH. MELB FOOTSCRAY SUNSHINE ARDEER DEER PARK ROCKBANK	8103	830 837 843 846 850	935	1016 1024 1030 1033 1036 1045	1108	1228	208 217 223 226 229	335 339 344 352 355 359 410	8119 413 416	425 429 434 442 445 449	512 516 522 529 532 536	524 528 534 541 544 548 559	549 553 558 605	612 616 621 627 630 634 644	648 652 656 702 705 709	748 756 802	908	935 944 950 953 957		813	907 915 922 925 928 936	1113	8115 7 107 116 1 122 125 129	8119 349 403	547	700 706 717	837	925	1100	8115 107 122	8119 317	528 543	713
FLINDERS ST SPENCER ST NTH. MELB FOOTSCRAY SUNSHINE ARDEER DEER PARK ROCKBANK MELTON	8103 806 820 836	830 837 843 846 850 905	935	1016 1024 1030 1033 1036 1045 1054	1108	1228	208 217 223 226 229	335 339 344 352 355 359 410 418	8119 413 416 427	425 429 434 442 445 449 459 507	512 516 522 529 532 536 546 554	524 528 534 541 544 548 559 606	549 553 558 605	612 616 621 627 630 634 644 652	648 652 656 702 705 709 717	748 756 802	908	935 944 950 953 957 1006 1013		813 826	907 915 922 925 928 936 942	1113	8115 7 107 116 1 122 125 129 138	8119 349 403	547 547 617	700 706 717	837 851 905	925	1113	8115 107 122	317 330	528 543 558	713
FLINDERS ST SPENCER ST NTH. MELB FOOTSCRAY SUNSHINE ARDEER DEER PARK	8103 806 820 836	830 837 843 846 850 905 912 925	935	1016 1024 1030 1033 1036 1045 1054 1114	1108	1228 1243 1258 113	208 217 223 226 229 242 253	335 339 344 352 355 359 410 418	8119 413 416 427	425 429 434 442 445 449 459 507	512 516 522 529 532 536 546 554	524 528 534 541 544 548 559 606	549 553 558 605	612 616 621 627 630 634 644 652	648 652 656 702 705 709 717 722	748 756 802	908	935 944 950 953 957 1006 1013		813 826	907 915 922 925 928 936 942 955	1113°	7 107 116 1 122 125 129 138 3 145 7 156	8119 349 403 420 431	547 547 617 628	700 706 717 723	837 851 905 915	925 939 954 1005	1113 1113 1127 1138	8115 107 122 137 148	317 330 346	528 543 558 610	713 727 743 756