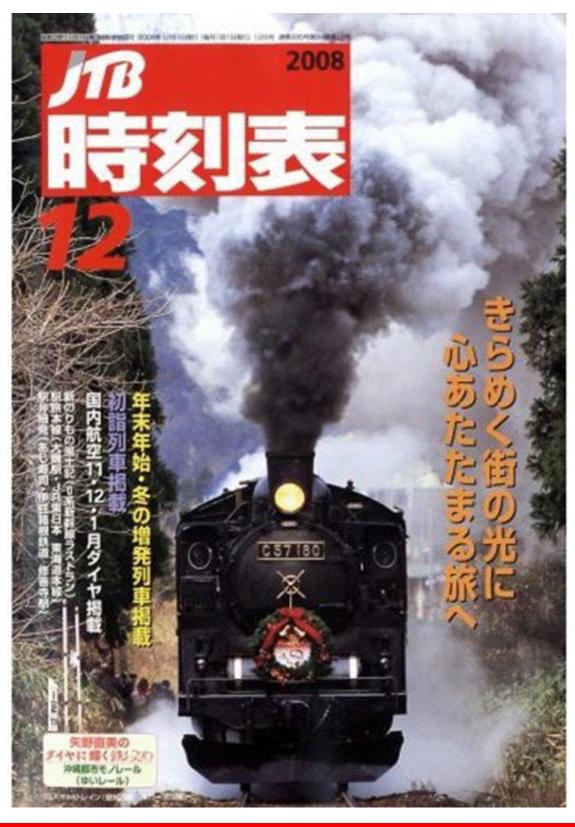


The Times

August 2009

A journal of transport timetable history and analysis



Inside: Travel Guide goes full steam ahead Mooney Mooney Bus Timetable Formatting made easy TramTracker RRP \$2.95 Incl. GST

The Times

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On the front cover

This is a cover from a Japanese railway timetable which continues to buck the world-wide trend away from printed paper timetable books. This is the JTB timetable, which recently issued its 1,000th edition. How long it will hold out is a matter for conjecture. Like the recently abolished national timetables in Germany and the U.K., its popularity has plummeted. This proves, I suppose, that train travelers are pretty hard-nosed and go for the convenience and ease of access of modern electronic versions— unlike the sentimental old softies who collect paper timetable books. Let the market decide!



Contributors
The Times

Ippei Minetoshi, Jim O'Neil, Jim Wells, Graham Duffin, Tris Tottenham

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 300 dpi resolution on disk or via e-mail.

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Travel guide resists free online rivals--for now

By IPPEI MINETOSHI, The Asahi Shimbun

nce considered a bible for domestic travelers, the cumbersome JTB Timetable has plummeted in popularity, thanks largely to the emergence of free rail and plane schedules available on the Internet and mobile phone handsets.

Sales of the timetable, which has over the years inspired train buffs, rovers and even mystery writers, have slumped from 2 million copies in November 1986 to 150,000 copies for recent editions.

However, its publisher, JTB Publishing Inc., says it has no plans to do away with the 84-year-old timetable, which sells for 1,150 yen and is affectionately known as "Tabi no tomo," or literally, "traveler's companion."

Although sales are a fraction of two decades ago, the timetable still sells enough copies to make its continued publication worthwhile.

"I suppose the reason the timetable has continued to be sought after is the Japanese characteristic of being obsessed with punctuality," said Yoshio Kimura, a 53-year-old former editor in chief of the timetable.

In May, the JTB Timetable will mark a milestone with its 1,000th edition.

Its closest comparison in terms of nationwide recognition, the JR Timetable published by Kotsushimbunsha since 1963, marked its 500th issue in December 2004.

Officials at JTB Publishing are still striving to improve the publication. Hoping to differentiate the timetable from free online resources, the editors have added colour to the tables of schedules, carrying photo spreads of trains across the nation and features focusing on women working on the nation's railways, penned by a female photo essayist.

The cover of the 999th edition of the timetable, which goes on sale today, is adorned with the artwork of cartoonist Leiji Matsumoto, best known for the Galaxy Express 999 saga.

The 1,000th edition, to hit bookstores and kiosks on April 20, *will feature a history of railways and timetables*. The publishers will offer commemorative giveaways to buyers of the issue. [italics AATTC]

Today the timetable, with more than 1,100 pages, carries information on domestic train, plane, bus and ship services offered by 850 companies.

Twenty-five staff at the editorial department sort and edit the data sent in from each company every month.

The timetable finds its roots in the 1925

"Train timetable, with attached passenger ship and bus arrivals and departures chart, April edition." The booklet, published by the predecessor of JTB Corp., made its debut around the same time that services started on the Yamanote loop line in Tokyo.

The timetable sold for 50 sen, or half a yen, at a time when 10 kilograms of rice was sold for about 3 yen. Reflecting Japan's expansionist policies at the time, the timetable included schedules for trains on the Korean Peninsula, Taiwan and Sakhalin

During World War II and in preceding years, the frequency at which the timetable was published dropped as paper became scarce. In July 1945, one month before the end of the war, a single-sheet train timetable was issued.

It was only in 1948 that the timetable made its comeback as a monthly. Since then, the timetable rode the wave of Japan's economic growth, and became a must-have for company accounting departments, where employees calculated travel expenses for business trips.

The timetable also found a stable fan base among the masses of people who planned for excursions using the network of train lines across Japan. For an even larger crowd, it served as a medium for fantasizing about such travel.

"Whenever I find a station that is served by only one train run a day, my imagination is stirred and I try to envision what kind of people get on and off at that stop," Kimura said.

The late novelist Seicho Matsumoto (1909-1992) used the timetable to create a central plot in his 1958 mystery "Ten to Sen," translated into English under the title "Points and Lines."

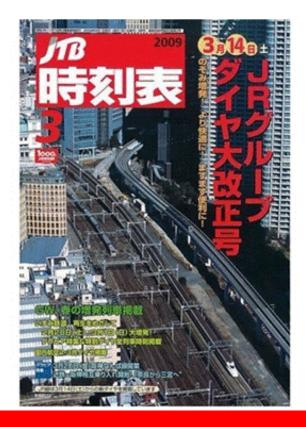
An important part of the plot revolves around a break in train runs at Tokyo Station which lasted four minutes, allowing a person standing on one platform to have an unhindered view of a train two tracks away.

Such an interval at one of Japan's busiest stations actually existed according to the timetables of that era.

JTB Publishing staff acknowledge that a solution to sagging sales may not come as easily as the plot for a novel, but they add that they will keep publishing their flagship product with help from enhanced sales of popular travel magazines.

"The forte of timetables is that one can, at a glance, find train times before and after a particular run. Using that strength, we hope to keep publishing one edition at a time," said Noriyoshi Takayama, 45, the current editor in chief.

IHT/Asahi: March 25,2009).



The Driver's name was Bill

Jim O'Neil

e timetable collectors often have reason to complain that various timetables leave out important details. My first example (below) doesn't say anywhere who owned the bus service, nor where to find their depot. Richard Peck's The Sydney Bus tells us that the Mooney Mooney to Hawkesbury River Bus Service (the route 30 - another detail missing from the timetable) was acquired by the Hornsby Bus Co. in 1978, so they were the owners when this timetable was issued on the 11 September 1988. The Postal Address - P.O. Box 201, Hornsby 2077 - confirms their ownership, as it is found on a number of other Hornsby Bus Co, timetables which I have from the 1970's, which were also printed, or roneoed, on ordinary white paper. The phone number has changed: it was 47.1958 in July 1977 and it's 477 4000 in this timetable, But the timetable

does give us an unusual detail: the driver's name was Bill. The Hornsby postal address shows us that the Hornsby Bus Company's depot was still at 8 Pretoria Parade, just south of Hornsby Station, and it is clear that a single driver, with one bus, was stationed near the operating territory of the route to save dead running between Hornsby and the township of Brooklyn. Bill was thus given credit on the timetable, a detail I can't recall seeing on any other timetable.

The bus ran only in peak hours and in the immediate shoulder period. Fifteen minutes was the normal time allowed between the two termini, although the 2.45 p.m. from Hawkesbury started the return trip after only ten minutes. A few trips ran north of Mooney to Cheero Point, and a minimum of five minutes was allowed for this. There was quite a bit of standing time

Phone: 477 4000

11.09.1988

allowed, except during the early morning peak hour. The patronage did not warrant frequent turn-arounds at other times. On Fridays there was a shopping bus to Hornsby. This left Hawkesbury at 9.15. the time of the last regular morning bus to Mooney, went further north to Cheero Point, from where it left for Hornsby at 9.25, and from Mooney at 9.30, again the same time as the regular bus, but on Fridays only the 9.30 didn't run to Hawkesbury, but went direct to Hornsby once it had crossed the Peat's Ferry Bridge. The Friday Shopping Bus returned from Edgeworth David Avenue at 1.15 p.m., presumably going all the way to Cheero Point, though this is not said anywhere.

My next timetable was issued in the following year, on the 1st November 1989, and is a more professional piece of work, being printed on blue cardboard, about 21cm by 11cm (see page 5). This timetable gives the name of the Hornsby Bus Group, the route number 30, an advertisement for Koala Tours (the Hornsby Bus Group had several buses lettered Koala Tours, with a livery of white with a pale green stripe, in stead of its usual yellow with a blue stripe. These were used on the regular services as well as the tours.) The location of the depot is also given and it's now at 33 Beaumont Rd, Mt. Kuringai. It's not clear whether a bus was still out-stationed in the north. There are a few changes in the timings of the bus. The 7.55 a.m. now left ten minutes earlier at 7.45, the 4.40 p.m. and its return service no longer ran at all and the Friday Shoppers Service ran only from Mooney. This timetable, like the first one, operated only on Weekdays.

By the time of my third timetable, issued on 21 September 1998, by Shorelink, as the Hornsby Bus Co, had become, (see pages 6&7) the bus route had been renumbered 592 and the shoppers service had become operated every day, Monday to Friday, though still running only once in each direction. With this timetable, a Saturday service was introduced. This bus started at Berowra Station at 10.00, ran to Mooney Mooney at 10.20, ran down to Brooklyn and left again without waiting at 10.30, ran back to Mooney at 10.45, finally reaching Hornsby Station at 11.57. In the afternoon, the bus returned from Hornsby at 3.14, going to Mooney via Brooklyn, and then ran back from Mooney at 4.13 to Berowra via Brooklyn, finishing up at 4.33. Clearly this bus operated out of the Beaumont Road depot and picked up and set down passengers on its positioning runs. How many passengers would have wanted to travel from Berowra to Mooney

MOONEY / HAWKESBURY	CHEERO	POINT	BUS	SERVICE

Postal Address:

P.O. Box 201

HORNSBY 2077

DRIVER: Bill

MONDAY TO FRIDAY TIMETABLE

Hawkesbury to Mooney	Mooney to Hawkesbury	Hawkesbury to Cheero Point	Cheero Point to Hawkesbury
A.M.	A.M.	A.M.	A.M.
6.10 6.55 7.55 9.15	5.55 6.25 7.15 8.45 9.30	6.55	7.10
P.M.	P.M.	, P.M.	P.M.
2.45 3.15 4.10 4.40 5.15 6.15	2.55 3.40 4.20 5.00 6.00	4.10	4.30

FRIDAY SHOPPING BUS TO HORNSBY

Departs Hawkesbury 9.15a.m. Departs Mooney 9.30a.m. Departs Cheero Point 9.25a.m.

FRIDAY SHOPPING BUS FROM HORNSBY

Departs Edgeworth David Ave 1.15p.m. Departs Station Street Hornsby 1.30p.m.

9.30a.m. Run Mooney to Hawkesbury does not run on Fridays only.

NO SERVICE ON SATURDAY, SUNDAY OR PUBLIC HOLIDAYS

ROUTE 30 HAWKESBURY STATION - MOONEY - CHEERO POINT BUS SERVICE

* EFFECTIVE 1ST NOVEMBER, 1989

MONDAY TO FRIDAY SERVICE

MORNING SERVICE

AFTERNOON SERVICE

HAWKESBURY STN. DEPART	MOONEY	CHEERO POINT ARR/DEP	MOONEY	HAWKESBURY STN. ARRIVE	HAWKESBURY STN. DEPART	MOONEY	CHEERO POINT ARR/DEP	MOONEY	HAWKESBURY STN. ARRIVE
6.10 6.55 7.45 9.15	6.20 7.15 8.05 9.25	7.10 TERMINATE	5.55 6.25 7.15 8.45	6.05 6.35 7.30 8.55	2.45 3.15 4.10 5.15 6.15	2.55 3.25 4.25 5.30 6.30	4.30 TERMINATE	2.55 3.40 4.25 6.00	3.05 3.55 4.45 6.10
9.15	9.30	TO HORNS		DAY SHOPPERS S	ERVICE TO HORN	ISBY			

NO SERVICE ON SATURDAY SUNDAY OR PUBLIC HOLIDAYS.

THE KOALA TOURS TRAVEL CLUB

We regularly operate one-day tours as well as weekend and extended tours. We cover all parts of Australia and operate tours on a regular basis. By being a member of our Travel Club, you are invited to participate in our special one-day tours for Club members and are also entitled to a discount on all of our extended tour prices.

Our tours range from camping to accommodated in carefully chosen establishments. Some ours are specifically designed for the over "50" age group, other tours are designed for all ages to come along and enjoy. Members receive a quarterly newsletter to keep them informed of forthcoming tours and events. Just call us at Koala Tours on 457 8888 for details.

THE HORNSBY BUS GROUP

BUS DEPOT: 33 Beaumont Rd, Mt. Kuringai 2080 OFFICE HOURS: 8.30 a.m. to 5.00 p.m. weekdays

PHONE: (02) 457 8888

Mooney on a Saturday – or on any day? And who would want to go from Mooney to Brooklyn at 10.20, when the bus came strait back, so there was no time to shop in Brooklyn, and the next bus didn't run until 3.48 p.m.?

There were also some changes in the weekday timetable. Peat Island has been added as a timing point, with a bus going there from Brooklyn at 6.40 a.m. and one returning at 3.45 p.m. Presumably workers at the Hospital whose shifts ran sometime between seven in the morning and half past three in the afternoon would use this service, but only if they were coming from Gosford, as there are no connecting times shown for Sydney trains. There was now no bus before 6.20 in the morning, while an extra service ran at 4.30 in the afternoon (corresponding to the 4.40 bus in my first timetable.) Two services in each peak-hour now ran to and from Cheero Point, with the last service, at 4.30 p.m. being marked R to show it ran that far only if the driver had been advised he had passengers. The afternoon bus from Hornsby now ran at 2.05, instead of 1.15, arriving at 2.40 and leaving again at 2.45 as the first afternoon bus from Brooklyn to Mooney. A look at the map on the reverse side of the timetable, shows us that all of the timing points north of the Hawkesbury River, Peat Island, Mooney Mooney and even Cheero Point, lay off the main Pacific Highway so that the bus did not call at them unless it needed to provide service there. Peat Island and Point Road, Mooney Mooney were by-passed by the bus staying on the Highway.

My final timetable (see page 8) was issued on the 23 March 2009, as part of the recent revision of Sydney bus routes, by Transdev, who have now acquired Shorelink. The route 592 has undergone various, fairly small, changes. There are now three buses in each peak hour to and from Cheero Point, and once again you can go from there to Hornsby on the morning shopping bus. But the afternoon shopping bus is shown as finishing at Brooklyn at 2.40. You could go on to Mooney Mooney at 2.49, probably on the same bus waiting at Brooklyn for nine minutes, but you would have to wait at Brooklyn until 3.15 if you wanted to get back to Cheero Point.

There is still has the same basic pattern of service on Saturday, though it starts nearly an hour earlier at Berowra, at 9.04, and it now waits twelve minutes at Hawkesbury River Station from 9.35 to 9.47, still rather little time to do any shopping in Brooklyn Village, even if the shops are reached some way before the station. The bus only goes to Berowra, not to Hornsby, and I wonder why passengers would prefer to

catch a train from Berowra (or Cowan), when they could have caught one earlier at Hawkesbury River? The return journey leaves Hornsby at the same time, 3.14 p.m., and runs to Brooklyn, to Mooney Mooney and back to Brooklyn, terminating at 4.13 p.m.

The way in which the positioning runs on Saturday have been shown or not shown has varied over the intervening years. The previous timetable, that of 5 September 2005 showed the 9.47 running all the way to Hornsby, and the 4.13 returning to Berowra, while the one before that, 2 April 2001 started Saturday service at 9.20 from Mooney Mooney (not from Berowra), while still running at 4.13 from Brooklyn back to Berowra, even though there had been no morning service north from Berowra in the timetable. I can't understand why these changes were made, but it seems to be the case that the main Saturday service on the 592 carries enough passengers to warrant its continuance. although some parts of it, especially the runs to and from the depot north of Mt Kuringai, have not been seen as necessary. The basic service on the Hawkesbury River to Mooney has remained much the same, operating in the peak hours and the adjacent shoulders only, while the shopping service to Hornsby and runs north of Mooney to Cheero Point have increased

Br	ooklyn - Mooney Mooney -	Broo	klyn	8.								F	loute	592
			M	0 1	N D	A	٧	T 0		FR	I D	A	Y	
			M	ori	nin	g				Att	erno	оп		
	Train from Gosford arrives		6:32	7:03	7:33		8:42	2:41	-	3:54		4:59	5:34	7
	Train from Sydney arrives	2		6:50	7:41	(4)	9:10	2:43	12	3:43	4:24	4:54	5:26	5:55
1	BROOKLYN (Hawkesbury River Str.)	4	6:40	7:20	7:48	(*)	9:12	2:45	3:15	4:00	4:30	5:02	5:37	6:03
2	Peat Island	.+.	6:50	- 51	-		+:		-	+			-	-
3	Cheero Point	-	7:00		7.	8:20		14	3:30	+	4:40R		+	
4	MOONEY MOONEY (Point Rd)	6:20	7:10	7:30	8:00	8:25	9:25	2:55	3:33	4:15	4:50	5:17	5:52	6:18
2	Peat Island	.+:	-	*	- 25	(*)	*	100	3:45	-	+			
1	BROOKLYN (Hawkesbury River Stri)	6:28	7:20	7:40	-	8:33		3:10	3:55	4:25	5:00	5:27	6:02	-
	Train to Sydney departs	6:32	7:33	7:46		8:42		3:54	***	4:59	75	5:34	6:41	
	Train to Gosford departs	6.50	7.41	+:		8.56		3.43	4.24	4.54	5.26	5.55	6.24	-

Br	oaklyn - Mooney Mooney - Harns	by Route 592
		MON FRI.
		Morning
1	BROOKLYN (Hawkesbury River Stn)	9:12
4	MOONEY MOONEY (Point Rd)	9:25
	Cowan	9:37
	BEROWRA	9:41
	HORNSBY STATION	9:57

Ho	rnsby - Brooklyn - Mooney Moone	y Route 592
		MON FRI.
		Afternoon
	HORNSBY STATION	2:05
	BEROWRA STATION	2:21
	Cowan	2:25
1	BROOKLYN (Hawkesbury River Stn)	2:40
4	MOONEY MOONEY (Point Rd)	2:55

Ho	ornsby - Brooklyn - Mooney Moor	Route 592		
		SA	TURI	D A Y
		Mor	ning	Afternoon
	HORNSBY STATION	- 1	10	3:14
	BEROWRA STATION	10:00	*	3:29
	Cowan	10:04	-	3:33
1	BROOKLYN (Hawkesbury River Stn)	4	10:30	3:48
4	MOONEY MOONEY (Point Rd)	10:20	10:45	4:03
1	BROOKLYN (Hawkesbury River Stn)	10:30		4:13
	Cowan	1	10:57	4:28
	BEROWRA STATION	*:	11:01	4:33
	HORNSBY STATION	- 2	11:17	

Save time AND money using the FARESAVER card to pay for your bus travel. Call SHORELINK for more details on (02) 9457 8888.

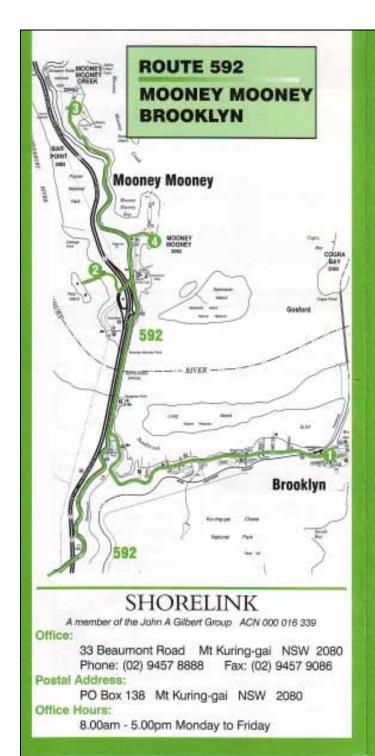
Only 3 510 return and 520 min.
and 520 min.
sredit required.

EXPLANATIONS

R Bus diverts to Cheero Point only if required to set down passengers - please advise your driver. SUNDAYS & PUBLIC HOLIDAYS

There are no services on Easter Saturday, Sundays or Public Holidays: There are no services on Christmas Day.







Bus Timetable

Linking

- Brooklyn
- Mooney Mooney
- Cheero Point

Also includes Shoppers Service to Hornsby via Cowan and Berowra

Effective 21 September, 1998

(02) 9457 8888







Brooklyn - Mooney Mooney - RANSDEVISL Brooklyn (LOOP) via Mooney Mooney

	Monday to Friday									
map ref	Route Number	592	592	592	592	592	592	592	592	592
		am	am	am	am	am	am	pm	pm	pm
A	Hornsby Station (Interchange)							2.05		
3	Berowra Station							2.21		
Θ	Cowan Station							2.25		
O	Brooklyn (Hawkesbury River Stn)		6.45	7.20	7.55		9.05	2.40	2.49	3.15
(3)	Peat Island		6.55							
G	Cheero Point		7.05			8.25	9.20			3.36
Θ	Mooney Mooney (Point Rd)	6.18	7.10	7.30	8.07	8.30	9.25		2.59	3.39
(3)	Peat Island									3.45
O	Brooklyn (Hawkesbury River Stn)	6.28	7.20	7.40		8.41			3.14	3.55
Θ	Cowan Station						9.37			
B	Berowra Station						9.41			
A	Hornsby Station (Interchange)						9.57			

	Monday to Friday Cont.					
map ref	Route Number	592	592	592	592	592
		pm	pm	pm	pm	pm
Δ	Hornsby Station (Interchange)					
3	Berowra Station					
Θ	Cowan Station					
0	Brooklyn (Hawkesbury River Stn)	4.00	4.37	5.08	5.40	6.07
(3)	Peat Island					
(3)	Cheero Point	4.10	4.47			
Θ	Mooney Mooney (Point Rd)	4.15	4.57	5.25	5.55	6.22
3	Peat Island					
0	Brooklyn (Hawkesbury River Stn)	4.25	5.07	5.36	6.05	
Θ	Cowan Station					
3	Berowra Station					
(A)	Hornsby Station (Interchange)					

	Saturday			
map ref	Route Number	592	592	592
		am	am	pm
A	Hornsby Station (Interchange)			3.14
3	Berowra Station	9.04		3.29
Θ	Cowan Station	9.09		3.33
O	Brooklyn (Hawkesbury River Stn)		9.47	3.48
0	Mooney Mooney (Point Rd)	9.25	10.02	4.03
O	Brooklyn (Hawkesbury River Stn)	9.35		4.13
Θ	Cowan Station		10.14	
B	Berowra Station		10.18	
A	Hornsby Station (Interchange)		10.34	



No service on Sunday, Public Holidays, Easter Saturday or Christmas Day.



See other side for → route map

Timetable Formatting

Those who have the computer tools to peek inside public and working time tables in this country will have noted that Microsoft Excel is almost universally used to do the lay-out. There are better ways and it is not surprising that many of these time tables leave something to be desired. Here, **JIM WELLS** shows us how to use Excel to produce a better mousetrap.

his is a discussion about timetable formatting for railways. Many of the principles would also be appropriate for bus / coach services but relevancy would be low for airlines. Airline services nowadays are very much out and back with few intermediate stops. It is also a guide about using Microsoft Excel for this purpose. There are no absolute rights and wrongs in this area. Readers will have different views. Let the debate begin.

We will concern ourselves here only with the tables themselves and not with covers, tables of contents, indices, diagrams, maps, general notes, fare information and all the other things that are necessary to guide the travelling public.

Nor will we discuss such aspects as typefaces (serif v sans serif), colour, paper type and size, booklets v fold out sheets etc.

This writer has great respect for typesetters in the pre computer era. By and large they did a good job in laying out timetables. In the computer era we have let loose 'graphic designers' who focus more on prettiness than usability. A common fault is font weights that are too light or small. NSW CountryLink is an offender here.

Excel is Microsoft's spreadsheet product and allows easy entry and presentation of tabular data for any purpose. No accountant would be without it. Microsoft Word has its advocates but it's inappropriate for anything complicated. Of course, the two can be made to work together, typically by embedding Excel objects in Word.

The version of Excel we will refer to is 2003 and we will assume that readers have a basic understanding of the product. However, if you are simply not into computers don't despair. There is much of general interest here too.

Here is the Excel Format drop down menu (left) and the Cells dialog box (right):





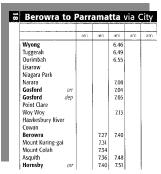
...to guide us on our way.

General Layout

A key decision that must be made at an early stage is whether stations, i.e. timing points, should appear as column headers across the page or as row descriptors down the page. The latter is certainly more common but a strong case can be made for the former if the stations are few and the services many. It's worth now making the distinction between suburban services, i.e. many services generally run in a routine pattern, and country ones. Country timetables may often only deal with one train and are invariably in stations down the page format.

Titles

Above the timetable itself we need a title. Here's an example from NSW CityRail, in this case the North Shore line (May 2006 updated Aug 08).



The problem here is that the title says "Berowra to" but the station list starts at Wyong. The reason for this, as the timetable cover says, is the inclusion of all Wyong (Central Coast) services to the City via the North Shore. Fair enough. So how can the title be improved? Here's a suggestion:

(Wyong) Berowra to ...

We have placed Wyong in brackets and used a smaller font size. This should help Central Coast readers appreciate that this is not their full timetable. More on this later.

This formatting is easy to do in Excel by selecting the cell. In the edit box select that part of the text 'string' that we want to change and then apply the formats.



The To part of the timetable title is also not as clear as it could be. Most North Shore travellers would be focused on the City or intermediate stations, not stations beyond the City. So

To City (Parramatta)

would be better.

Incidentally this timetable is very useful for Parramatta users as it shows the full service to/from the City excluding those trains that terminate at Sydney Terminal, mainly InterCities. It's more readable than the Western one for this purpose particularly in the Up (To City) direction. However, it doesn't show Auburn or Harris Park but it does show Clyde.

Travellers from one major station on the route, Hornsby, have route/service alternatives for getting to the City. These are Inter-City V set services (quite fast) and Main North suburbans both of which run via Epping and Strathfield.

The title does say via City but via Chatswood would be better. If this is required it can be placed in a sub title, immediately below the title and with a smaller typeface size. Titles should always be kept short.

Station Lists

The first issue is what to do about stations that we want to include to provide connection detail or further details about the trains included in the body of the timetable.

Let's refer to our example for Sydney's North Shore line above under titles. It would be an improvement to indent, i.e. add leading spaces before, the station names for all stations north of Berowra. We could also use *italics*. Hence

Wyong Tuggerah Cowan Berowra

The services should be in normal typeface if through running, italics if not, i.e. if we are displaying connections.

In Excel there is no need to enter the extra spaces for indenting by using the space bar – there is an icon on the formatting toolbar.



A similar issue arises with branch lines. It's always debatable whether these should be included at all as they can cause considerable clutter and confusion. In CityRail's case inclusion of the Port Kembla branch in the body of the South Coast timetable is worth while because of the extent of through running.

Here's the timetable (May06)

Bomaderry	(No	wra) or	P
***************************************	рm	pm	рm	pm
Bomaderry (Nowra)		3.16		
Berry		3.26		
Gerringong		3.35		
Kiama arr		3.44		
Kiama dep			3.53	
Bombo			3.56	
Minnamurra			4.01	
Dunmore (Shellharbour)			4.04	
Oak Flats			4.09	
Albion Park			4.12	
Dapto			4.23	
Kembla Grange Racecourse				
Unanderra			4.30	
Port Kembla	4.08			5.0
Port Kembla North	4.11			5.1
Cringila	4.13			5.1
Lysaghts	4.16			5.1
Coniston	4.19		4.36	5.1
Wollongong	4.22		4.40	5.2
North Wollongong	4.24		4.42	5.2

At first glance this provides the impression that we can travel direct from, say, Kiama, to Port Kembla. This could be avoided by laying it out like this:

Bomaderry (Nowra)	
Unanderra	
Port Kembla	
Port Kembla North	
Cringila	
Lysaghts	
Coniston	
Wollongong	

i.e. by indenting the branch line stations and having appropriate lining across the body of the timetable. CityRail do this in their working (employee) timetables.

As an aside is there any real need to show the 3.16pm ex Bomdaderry in a separate column to the train it connects with at Kiama? Probably not although a change of train symbol would be needed.

Should arrival times be shown as well as departure times at intermediate stations? In 'Country' timetables of years ago this was highly desirable as there were often long intermediate stops for refreshments, coaching business or engine requirements at major stations.

In any timetable there seems little point in showing both if the dwell time is only one or two minutes. An example is Gosford in the North Shore example above where the dwell is only one minute. If the occasional train has an extended dwell, the matter can be indicated by symbol / footnote.

An interesting example of where this should have been done is in the South Coast timetable for the 6.59 am ex Port Kembla on Mon-Fri (May 06 Timetable) at Waterfall. This train is overtaken by the following one there. Here are both the public and working timetables (suitably cut and pasted):

Thirroul	7.31	7.42
Austinmer	7.33	
Coledale	7.36	
Wombarra	7.39	
Scarborough	7.41	
Coalcliff	7.47	
Stanwell Park	7.52	
Otford	7.56	
Helensburgh	8.04	8.09
Waterfall	8.21	
Heathcote	8.26	
Engadine	8.29	
Loftus	8.33	
Sutherland	8.37	8.29

Thirroularr dep	07 31	07 42	3
Thirroul Yard	07 32	07 43	
Austinmer	07 33 07 36 07 39	-	8
Scarborough (‡)	07 41x 07 46 07 47	07 49	3
Stanwell Park Otford Helensburgh	07 52 07 56 08 04	08 01 08 09	- 5
Waterfallarr dep	08 14	XUR 08 18 XUM	UM 08 21
Heathcote	10	-	08 26 08 29 08 33
Sutherlandarr dep	¥	08 28 08 29	08 36 08 37

(XUR means cross to Up Relief, XUM cross to Up Main)

The Waterfall time for the stopping train should have a symbol with a footnote saying arrival is at 8.14 am.

Column Headers

This is an aspect of table layout where designers often seem to come to grief. We often sees tables swamped by headers with too much detail and/or an inappropriate typeface size. The data in the columns is often surrounded by too much white space.

For suburban timetables there is little need for anything in the column headers apart from am or pm. Some railways include train numbers, QR CityTrain used to do this, and it can be very convenient for staff who often find the public timetables of more value for certain purpose than the working timetables.

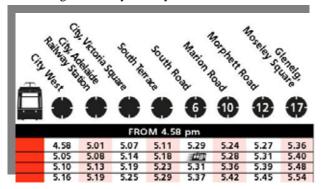
Here is how Perth (May 09) does it for the Fremantle line.

To Fremantle timetable								
Monday	Monday to Friday							
Pattern	Perth	City West	West Leederville	Subiaco				
am	5:23	5:25	5:27	5:29				
	5:38	5:40	5:42	5:44				
	5:57	5:59	6:01	6:03				
	6:12	6:14	6:16	6:18				
	6:27	6:29	6:31	6:33				
	6:41	6:43	6:45	6:47				
	6:57	6:59	7:01	7:03				
В	7:10	7:12	7:14	7:16				
Α	7:20	7:22	-	7:24				
В	7:27	7:29	7:31	7:33				
A	7:38	7:40	-	7:42				

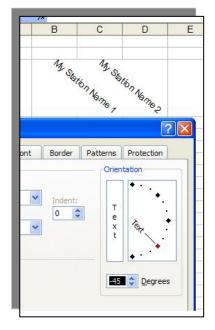
It might be better if West Leederville was shown over three lines and all the columns narrowed.

A useful tip in Excel is to force wrapping where it's needed by entering alt enter (i.e. hold down the alt key, then press enter) where the wrap is to occur while editing the cell.

Sometimes the station names are far too long for this style of layout so Adelaide Tram does it this way (Oct 2007):



To have sloping names in Excel use the format orientation facility:



"Country" timetables raise other issues. We may need to show the days of running, e.g. Mo-Fr, Su, Sa-Su-PubHols etc. Two alpha characters are necessary to avoid the Tuesday/Thursday confusion as well as Saturday/Sunday. An important aspect is to distinguish Tu-Th from Tu, Th; the former includes We, the latter does not.

Thomas Cook uses numbers for days. We need though to be very clear what the numbers mean because it's not uncommon to start weeks on a Sunday, i.e. Sunday is 1. Cook has Monday as 1, and also uses a variety of special characters for 'Daily'

If the days of running don't apply to the whole schedule it's better to have the schedule split over columns. Here's an old example (Victorian Railways Nov 1977):

	Rail car	Bus	"Great North-
	Mon. to Sat.	Sat.	ern Ltd." Mon. to Sat.
MELBOURNE (Spencer St.) Q dep. North Melb. Q Footscray Q Sunshine Q Sydenham Q Diggers Rest Q Sunbury Q Rupertswood Clarkefield Q Riddells Creek Q Gisborne Macedon Garlsruhe KYNETON Malmsbury Elphinstone CASTLE- AMINE dep. Harcourt Kangaroo Flat	8 9f 8 18f 8 26f 8 33 8 43 8 51	p.m.	PuspooM ** * * * * * * * * * * * * * * * * *
Golden Square arr. BENDIGO	::	This service is cancelled on public holidays.	Mon., Sat.
Eaglehawk	::	on p	
Raywood Dingee Prairie Mitiamo Pyramid Sorr.	::	is cancelled	b.m. 15 15 15 15 15 15 15 15 15 15 15 15 15
Macorna dep.		service	12 49 Å
Lake Charm		: : : This s	27 20 1 2 1 2 1 2 1 2 1 2 1 2 2 2 2 2 2 2
HILL dep.		2 15	- jag

At first glance the GN Ltd runs to Swan Hill on Mon to Sat but if we look down the column it appears that the train goes there

only on Mon AND Sat. Better to have two columns – one for Mo, Sa and the other for Tu-Fr even though that means duplicating times for Melbourne to Bendigo.

Space precludes showing the whole timetable but there were eighteen columns of services:

Mo-Sa	2
Mo-Fr	6
Mo-Th	1
Fr	2
Sa	5
Su	2

The Sunday columns were separated out and shown on the right hand side. A strong case exists for doing this for Saturday as well. Consistency across the whole publication is important and it may well be that there was sufficient Mo-Sa timetabling overall to make this not worth while.

The timetable, in addition to having footnotes, also uses the technique of notes displayed in a vertical format right beside the train times. This is not difficult to do in Excel but requires the use of an extra column and the orientation tool mentioned above.

Train Times

We now come to the entry of the times themselves into the body of the time table. The first issue to consider is whether to use 24 hr notation, i.e. 17 04 for 5:04 pm.

The key test here is the Grandma one. Grandma may well have understood 24 hr notation twenty years ago but may get perplexed today. 24hr notation is not something we use in day to day life. Hence am/pm is invariably used for suburban timetables and often for country ones as well.

NSW CountryLink uses 24hr as does V/Line (Victoria). GSR and QR TravelTrain do not.

If am/pm is to be used it's vital that the am/pm be clearly shown. One technique that's often used is to **bolden** the pm times. Column headers though should still show am or pm.

What is not necessary is to show am or pm beside all the times in the timetable as NSW CityRail has done in this possession timetable (North Shore Jun 09):

Route 9: Wyny	ard to Mils	ons Point	and retur	n shuttle
Wollstonecraft Sh Wollstonecraft	uttle 7:00 AM	7:20 AM	7:40 AM	8:00 AM
Waverton	7:05 AM	7:25 AM	7:45 AM	8:05 AM
NorthSydney	7:10 AM	7:30 AM	7:50 AM	8:10 AM
Milsons Point	7:13 AM	7:33 AM	7:53 AM	8:13 AM
Wynyard	7:17 AM	7:37 AM	7:57 AM	8:17 AM

In country timetables it may be desirable to incorporate am/pm in each column where appropriate. If the change is from pm to am (i.e. 12 midnight) it will almost certain to be necessary to show changed days of operation.

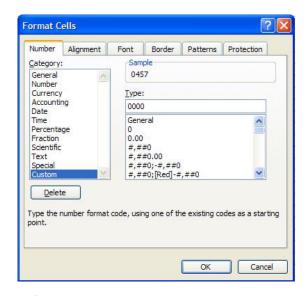
Turning now to the entry of time data into the table, we have a choice between two basic ways of doing it. The first is to enter as text, the second as value.

Text is the default Excel data entry option and will be used automatically if what we enter contains alpha characters (A-Z) or any special characters such as ! or # and spaces.

The great advantage of using text is the ease with which prefixes or suffixes can be included, e.g. 5:05f and if we wish to format these separately, e.g. 5:05f. Care is needed though to ensure times line up correctly vertically; this might require the addition of leading and/or trailing spaces.

If all we are entering is numeric data we need to flag to Excel that we want the data treated as text. This can be done by preceding the data with a single quote mark = '.

Value entry means that the data is stored as a number. We need to look first of all at using this option for 24 hr notation. We can enter 457 but we can't enter 0457 as Excel ignores all leading zeroes for purposes of data storage. But Excel allows us to display 457 as 0457 by specifying a custom format.



We can even insert a space between the first two 00's and the second to get:

without editing the cell. Excel still treats what's there as 457 so if we were to subtract 400 from it we would get 57.

The normal way to enter time data is with a full colon, e.g. 6:30; if it looks like a time Excel will treat it as a time. This can be inconvenient on occasions specially when importing data from text files.

This creates opportunities as well as a critical problem. The opportunities arise from the ability to manipulate data by formulae. The critical problem is that unless we use 24 hr format Excel always includes am/pm or a/p in the display. This is almost certainly what gave rise to the display used by CityRail above. This is not what we want in a multi-column timetable.

Times can entered in 24 hr format or with am / pm suffixes but display is always 24 hr format unless we specify am/pm in the format. The am/pm can be a/p and it can be upper or lower case.

It's not merely of academic interest that Excel stores times on the basis that a day (24 hr) has the value one. Times are fractional, e.g. 0.25 can be formatted as time and can be displayed as 6:00 am, likewise 0.75 is 6:00 pm.

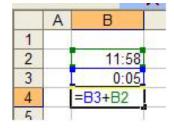
Excel provides only a small number of time formats under Time in the Category list (see Format Cells above) but a much wider number under Custom. The important point though is that we can build our own formats here, just as we did with the 04 57 example above. The basic format that will often be used is

hh:mm

for 24 hr presentation. Be clear that two h's are required to ensure we get leading zeroes. Alternatives are

hh mm, hhmm and hh.mm.

How do we manipulate data by formulae? Here's a simple example of adding five minutes to a time.



Resulting in >>

	A	В
1		
2		11:58
3		0:05
4		12:03

The formula above only referenced cells. If we prefer to use a constant Excel provides a 'function'; the one we need is TIME which can be used this way

=B2 + time(0,5,0)

Note that the 'arguments' are separated by commas and that we must insert a value for hours and seconds as well as minutes.

It's good practice in Excel to separate the data entry area of the file from the report or presentation area. The data entry area can be alongside the report area, on another 'sheet' or embedded within the report area by arranging to hide columns when the report area needs to be printed.

The problem we want to solve is to present a suburban timetable with am/pm headers using the 12 hr format but without am/

pm beside the times. The example below also illustrates the way text can be the subject of formulae.

Here is the data area:

	A 0	C	0		- 1	- 6
2			Run No			
3	Sta	t Int Time	23	25	27	29
4	S	erv Inter	val	1.00	1.00	1.00
\$	A		11:56	12:56	13:56	14:56
6	B	0.02	11:58	12:58	13:58	14:58
7	C	0:03	12:01	13:01	14:01	15:01
8	D	0.02	12:03	13:03	14:03	15:03
	7					

It has been set up so that if we change cell D5 all other train times will change when Calc (F9) is pressed.

The formula in cell F5 is = E5+F\$4 and in cell F6 = F5+\$C6.

Notice that it is 24 hr format.

This is the report area without titles, borders etc.

	Α	В	С	D	E	F	G
1							
12							
13				am	pm	pm	pm
14			Α	11:56	12:56	1:56	2:56
15			В	11:58	12:58	1:58	2:58
16			С	12:01	1:01	2:01	3:01
17			D	12:03	1:03	2:03	3:03
40							

All times are formula driven from the work area with one standard formula:

=IF(E6<TIME(13,0,0),E6,E6-0.5)

The column headers are also formula driven:

=IF(E5<0.5,"am","pm")

The time format used is h:mm, only a single h is needed as we don't want leading zeroes.

There are many ways in which text can be manipulated by formulae. It's possible to take times in text, convert to value for manipulation and then report as text.

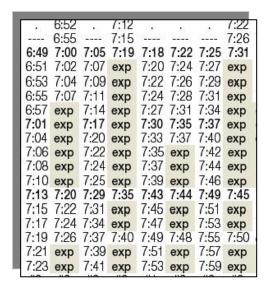
Notice also that pm times are in bold. This is probably best managed by a simple macro. Space precludes a discussion of this subject but any reader interested in macros should contact the author via the editor. Conditional formatting in this case would be tricky.

With numeric display the easiest way to have suffixes for reference marks is to have a narrow column for them to the right of the times column, e.g.

9:23	9:43
9:25 f	9:45

We now need to consider how to show station detail for non stops. For many years now Victoria has used the * symbol. CityRail simply leaves the cell blank but that can be confusing for readers. The writer quite likes vertical lines with arrows but they can make it more difficult for the eye to read across the page if there are many of them.

Queensland CityTrain does this:



which doesn't look wonderful but note the ---- mark above the times for the local services. This is helpful. It's a great pity that CityRail doesn't do this.

One way to handle this is to underline all the times for the last stop of all trains that don't continue to the end of the line. The reader then gets a much better indication of where the train terminates. The difficulty with underlining is that Excel has no 'top' or abovelining for starts; the work around is to use cell borders.

Here's how it can be done:

	AB	C	E	F G	H I
1 2	A	9:45		10:00	10:09
3	В	9:47		10:02	10:11
4	С	9:49	9:58	10:04	
5	D	9:51	10:00	10:06	
6	E	9:53	10:02	10:08	
7	F	9:55	10:04	10:10	10:16
8	G	9:57		10:12	10:18
9	Н	9:59		10:14	
10	1	10:01		10:16	

Note that grid lines have been turned off. The train in column E has cell borders for both the start and end stations; an advantage here is that the 'weight' of the line can be set by varying style and/or colour. This can't be done for underlining as in column I. In that column ... has been used to indicate the express running. Columns D, F etc are spacer columns but could be used for reference marks.

By default grid lines do not appear on printouts. Use of borders varies – CityRail uses vertical ones to separate trains – see above, Queensland CityTrain doesn't. In CityRail's case use of borders probably helps as typically tables run across two pages. If vertical borders are used care is needed to avoid having the times jammed up against the right border. This means using either centre alignment or adding a space to a custom format.

CityRail uses row shading but doesn't necessarily shade the right stations. Row shading in Excel is best done by using the icon provided or by the 'patterns' tab in the format cell dialogue box. Macros can be written to automate the process.

Here's an example (Sydney Ferries – Dec 2008) that works well:

10		am	am	am	am	am
9	Departing Circular Quay					6.55
0	Milsons Point / Luna Park #	1.00		4111		
0	McMahons Point #	10.00	,	****	10.000	8,000
9	Darling Harbour (King St Wharf 3)#	****	P994	****	****	11-7
8	Cockatoo Island	1668				1188
0	Drummoyne			6.18		
9	Huntleys Point	1107	7111	6.22	7411	
0	Chiswick		****	****	4411	
0	Abbotsford			6.26		7.15
Ō	Bayview Park				****	
0	Cabarita	(T.)				
è	Kissing Point		****		****	***
9	Meadowbank			6.35	4411	7.25
Ō	Sydney Olympic Park		200	2021	****	7.30
0	Rydalmere		****	6.50		
	Arriving Parrametta		****			

Major suggestions are to narrow the row descriptor column (too much white space) and to use only for non stops. The first two columns as displayed here are blank because the timetable shows all services with the corresponding inbound one in the same column. This is of limited use to travelers but helpful to staff. The first two columns have inbound services not displayed above.

Foot Notes

These should be used only for the explanation of reference marks and never for the display of general information. Layout should be in tabular form, multiple if necessary to prevent lines becoming too long.

Here are the footnotes for the VR 1977 timetable shown above.

Symbols:

"—Non stop. §—Stops if required to pick up or set down passengers, mails or vangoods. \$—Stops if required to pick up or set down passengers. f—Stops definitely to pick up only. H—Dayles-ford line passengers change to bus. See page 40. P—Stops to pick up school students only. Will not stop during school holiday periods. Q—Suburban ticket holders, except those holding first class tickets to or from Sunbury, Clarkefield, or Riddells Creek are not permitted to travel in first class compartments of country trains. R—Refreshments available at this station. S—Stops Mondays to Fridays to set down school students only. Will not stop during school vacation periods. W—Connects at Woodend with Bendigo train from Spencer Street. —Reservation of seats optional. See page 34. y—Bus runs via Murray Valley Highway from Vinifera. Does not call at Pira or Miralle Railway Stations, but will stop at turn-off.

Not good. Thomas Cook does it well.

The above has been written from the perspective of producing a printed hard copy document. Nowadays much time table reading is on screen, either directly on web sites or by using PDFs. A major irritant for many users, particularly those with small screens is the need to scroll the screen and lose sight of column headers. Nowadays of course a large number of users need to access the information on mobile devices.



25 years of AATTC

GRAHAM DUFFIN and TRIS TOTTENHAM write.



From Graham Duffin:

This morning I received in the post the June 2009 issue of The Times and have just finished reading your good article on the first 25 years of AATTC. At the end of the article you request advice to fill any gaps.

I don't have the precise dates in front of me however here is some information to fill some of the gaps in the history.

- (1) Steven Haby was Public Officer of AATTC for a time as Stephen Ward was going to travel overseas. It was during some of the time when Steven Haby was AATTC Secretary and I was President.
- (2) Re the section on publicity I was also interviewed twice by ABC radio about AATTC. This was done before Geoff volunteered to begin doing it. One interview I did was broadcast in Queensland and the interview concentrated on an article in The Times about the Rockhampton steam trams. Another interview was on Australia wide and was about the hobby of timetable collecting.
- (3) Re the section on Divisions, meetings of the Brisbane Division have been held at other locations beside Brian Webber's home. I was Convenor of the Brisbane Division from its inception for several years before it was passed to Brian. During that time most meetings were held at ven-

ues like the Council library meeting rooms at Garden City and Indooroopilly (as they are free to clubs).

- (4) The Appendix at the end of the article is very good. I was wondering if the following could be added to it:
- (4.1) A list of the Convenors for each Division. This information should be available from the Members Letters. Until incorporation the Convenor of each Division was a member of the AATTC committee.
- (4.2) The locations of the AGM's that have been held each year. This information is also listed in the Members Letters.

Hope the above is of interest.

Thank you for writing up a more comprehensive history of AATTC than previously existed as someone needed to do it before we corporately forget some of the details of our past.

From Tris Tottenham:

Congratulations to Victor Isaacs for penning "Our First 25 Years". It certainly brought back some memories. My interest in timetables probably stems from the mid 1970's when I worked in the Traffic Office of South Yorkshire Passenger Transport Executive in Sheffield, England. My work involved scheduling the rosters [drivers and conductors] to the timetables provided by the timetable section. Bear in mind that

this was in the days before computers. The 2½ years or so that I spent in this section were most enjoyable. Not bad for a 5th generation Aussie?

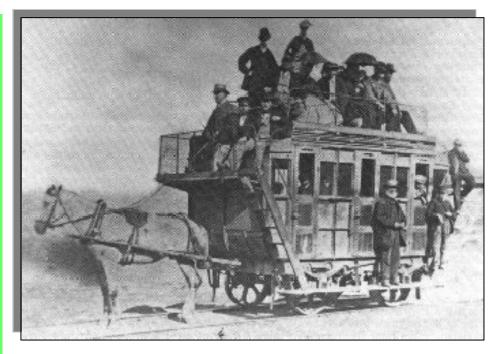
I cannot remember when I first joined the Association but I do recall going to a meeting in Jack's garage. Until I became one of the NSW country members I was a regular attendee at Bob & Katrina's for meetings and later at Roseville. One AGM was held 5km away at Moss Vale Station.

Many members I have met over the years — others are only known through contributions to "Table Talk" and "The Times". This is what keeps the organisation going — the interchange of facts and the factual reporting of what is / has happening / happened.

What of the Future? One notes that most people in Australia that are interested in timetables are already members. To be successful we must reinvigorate ourselves. Many organisations of a like ilk are loosing members as the world changes — we seem to have remained with a steady membership.

One must congratulate the Office Bearers, Editors etc. Quite often it is a thankless task notwithstanding the sacrifices that have to be made. Finally congratulations to the Association on its first 25 years — here's to the next 25 years.

On 25 March 1807, a railroad carriage converted to carry people was conveyed by horse along the perimeter of Swansea Bay, travelling between "the dunes" at Swansea, and destined for Mumbles, an oyster harvesting and fishing village on the west of the bay. The people who undertook this journey were unknowing pioneers - they were the first railway passengers in world history.





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Please note, there is no charge for using tramTRACKER online at yarra-trams.com.au (if you have internet access).



tramtracker" Q&As

- Q. Why do I need a Tracker Stop ID? Can't I just use my existing stop number to obtain information?
- A. **transpaces** does not use existing stop numbers because they are duplicated across various routes and do not indicate the direction in which you are travelling. By using the Tracker Stop ID you will receive the correct information for your route and direction of travel.
- Q. Where do I find my Tracker Stop ID?
- A. The four digit number is clearly displayed at your tram stop, on our website at yarratrams.com.au or call Metlink on 131 638.
- Q. Will **transpaces** tell me exactly when my tram will arrive?
- A. **transpaces** provides you with an estimate based on the location of the tram at the time of your call or SMS. The actual arrival time of the tram at your nominated stop depends on many factors such as traffic conditions. **transpaces** provides greater precision as the tram gets closer to the stop.
- Q. Can I find out when the next low floor tram is due to arrive at my stop?
- A. Yes. Transactor includes an option to check when the next low floor tram is due at your stop.
- Q. What happens if there is a disruption to tram services?
- A. **transpaces** will advise you of any disruption and the routes it affects. In this case, a prediction will not be available as **transpaces** is not able to accurately forecast when services will be restored.
- Q. What are the charges for transacting?
- A. 1300 MY TRAM: IVR call cost \$0.25/higher for STD/Mobiles
 199YARRA: SMS cost \$0.55 inc.GST
 The transmer online service is free (if you have internet access).
- Q. How will my SMS requests appear on my mobile phone bill?
- They will appear as YARRA TRAMS. For any billing issues, please contact your service provider.

- Q. When sending an SMS to transaction, if I enter the wrong Tracker Stop ID, will I be charged more than once?
- A. Each time you send a message to 199YARRA, you are agreeing to the rate charge of 55 cents including GST.
- Q. I sent an SMS but I didn't receive a reply. Why?
- A. The delivery of SMS can be affected by a number of factors including technical disruptions, mobile reception and network failures. For this reason Yarra Trams cannot guarantee that every SMS will receive a response. In most cases you should receive a response within 5-30 seconds.
- Q. When calling 1300 MY TRAM from my mobile phone, what will I be charged?
- A. Calls to 1300 MY TRAM (IVR Service) cost \$0.25 from a land line. Calls made via STD or from a mobile will be higher.
- Q. Can I use transacter on my computer?
- A. Yes. Visit yarratrams.com.au

 If you are using the latest version of a popular web browser
 (eg. Internet Explorer, Safari, Firefox or Opera) you should be
 able to use transmitter on your computer. This service is free
 (if you have internet access.)



varratrams.com.au

YARRA TRAMS