The Times

A journal of transport timetable history and analysis

394 km of track closed for 3 days! 430 trains cancelled! 77 schedules amended!

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Inside: When the XPTs went to sleep Buses to The Entrance

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Hilton—the station that ne

How to fix the Big Apple's Subways

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Carble

The Times

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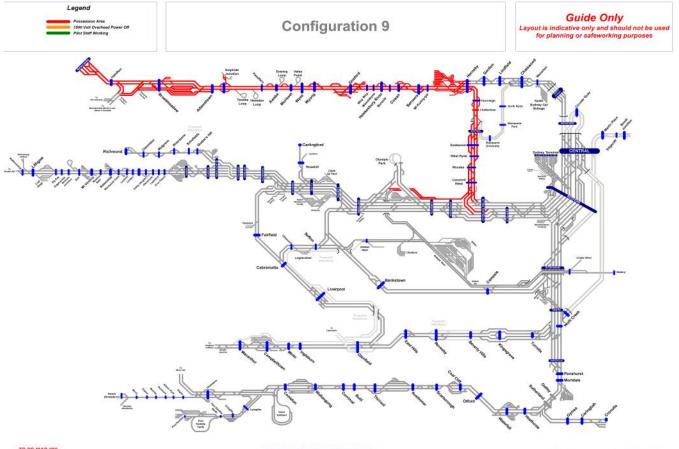
July 2018

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This is "Configuration 9", a particular type of <u>closedown</u> for the Sydney Trains system. The closed lines are shown in red. Config. 9 often occurs over the June long weekend and did so in 2018. It is common for ARTC to conduct its own close-down on its North Coast line over these three days– and this also happened in 2018. On page 14, we have the story behind these close-downs and about close-downs in general.

Wyong to The Entrance HILAIRE FRASER

he New South Wales Central Coast has a population of 310,000 and is the third largest urban area in New South Wales and the ninth largest in Australia. This article details the Wyong to The Entrance routes 15, 16, 19, 24, 25, 26, 30 and 47 timetable, effective 26 November 2017, operated by Red Bus. This article is prepared from the pdf file available on the Red Bus website.

From the Monday to Friday timetable effective in the middle of the day, one can see the three routes which serve the The Entrance to Wyong corridor, each operating at a sixty minute frequency:-

- 19 Gosford-Bateau Bay Square-Killarney Vale-Chittaway Bay-Tuggerah-Woodbury Park-Wyong
- 25 The Entrance-Toowoon Bay-Bateau Bay Square-Glenning Valley-Chittaway Bay-Tuggerah-Pacific Highway-Wyong
- 26 The Entrance-Long Jetty-Bateau Bay Square-Killarney Vale-Chittaway Bay-Tuggerah-Woodbury Park-Wyong-Wyong Hospital

Of interest is that, although these routes interweave along the corridor, they all service Bateau Bay Square Shopping Centre, Chittaway Shops, Tuggerah Station, Tuggerah Westfield Shopping Centre and Wyong Station. Routes 19 and 26 share a common route between Bateau Bay Square and Wyong and combine to provide an average thirty-minute frequency on this section. This operation of routes 19, 25 and 26 continues on weekends. Route 24, The Entrance-Wyong is the combined evening service serving Toowoon Bay, Killarney Vale, Glenning Valley and Woodbury Park. Route 15 is an early morning version of 25, which omits the diversion to Albatross Rd. Route 16 is an early morning version of 26 which omits diversions to Bateau Bay Square, Berkeley Vale Medical Centre and Reliance Drive.



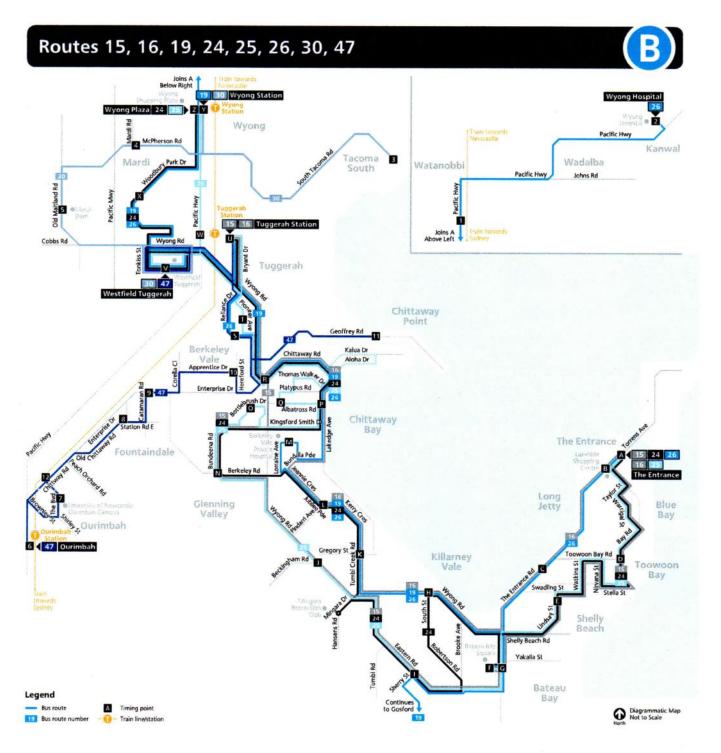
Wyong to The Entrance

servicing Bateau Bay Square, Berkeley Vale, Chittaway Bay, Tuggerah, Tacoma South & Ourimbah





In addition to The Entrance to Wyong corridor, this timetable features route 47 Ourimbah-Fountaindale-Tuggerah and operates every 60 minutes Monday to Friday with a 120 minute service diverting to Chittaway Point and also route 30 Wyong-Tacoma South-Mardi-Tuggerah with services leaving Wyong at 0900, 1215 and 1540, Tuggerah 0759, 1145 and 1425. Prior to the 26 November timetable, route 47 operated Bateau Bay Square-Glenning Valley-Fountaindale-Ourimbah-Tuggerah-Mardi-Wyong, with only 3 services each way Monday to Friday and 30 services operated as Wyong-South Tacoma, with two outward and two inward journeys Monday to Friday. Route 47 was previously in the Bateau Bay Square timetable booklet. Prior to 26 November 2017, route 27 Wyong-Chittaway Point also operated with three services each way Monday to



Friday with three services each way during weekends as a diversion of route 25. In the new 26 November timetable, the weekend service to Chittaway Point has been discontinued. **In summary,** The Entrance to Wyong service comprises trunk routes 19, 25 and 26, a combined 24 evening service and early morning direct services 15 and 16. In addition, routes 30 and 47 operate to outlying areas. Comment on this article –<u>Letter to</u> Editor, Facebook

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	Monday to Friday (continued)	5	ė	ė.	6	.0	ė	·	ė.	·ð	ó	ė.
map ref	Route Number	25	19	25	26	19	25	26	26	19	25	25
A	Torrens Ave after Coral St	-	-	11:35	11:48	-	12:35	12:48	13:05		13:15	13:45
В	Lakeside Shopping Centre, The Entrance Rd	-	-	11:37	11:50	-	12:37	12:50	13:07	-	13:17	13:47
C	CC Hwy before Elsiemer St		-	-	11:56	-	-	12:56	13:13	-	-	-
D	Bay Rd at Toowoon Bay Rd	-	-	11:43	<u>-</u> 22	-	12:43	-	-	_	13:23	13:53
Е	Lindsay St before Oaks Ave	-	-	11:50	-	-	12:50	-	-	-	13:30	14:00
F	Bateau Bay Square Bay Village	11:23	11:37	11:57	12:03	12:37	12:57	13:03	13:20	13:37	13:37	14:07
G	CC Hwy before Bay Village Rd	-	-	-	-	-	-	-	-	-	-	-
Н	Wyong Rd before South St	-	11:42	-	12:09	12:42	-	13:08	13:25	13:42	-	-
1	Eastern Rd before Sherry St	11:28	-	12:02	-	-	13:02	-	-	-	13:42	14:12
J	Wyong Rd after Beckingham Rd	11:33	-	12:07	-	-	13:07	-	-	-	13:47	14:17
к	Tumbi Ck Rd before Gregory St	-	11:47	-	12:14	12:47	-	13:14	13:30	13:47	-	-
L	Jubilee Pde after Pindarri Pde	-	11:50	-	12:17	12:50	-	13:17	13:33	13:50	-	-
М	Berkeley Vale Retirement Village, Lorraine Av	-	11:54	-	12:21	12:54	-	13:21	13:37	13:54	-	-
Ν	Bundeena Rd after Berkeley Rd	11:37	-	12:11	-	-	13:11	-	-	-	13:51	14:22
0	Bottlebrush Dr after Torrellia Way	11:40	-	12:14	-	-	13:14	-	-	-	13:54	14:25
Ρ	Lakedge Ave at Albatross Rd	11:44	11:58	12:18	12:25	12:58	13:18	13:25	13:41	13:58	13:58	14:29
Q	Platypus Rd after Albatross Rd	11:45	-	L12:19	-	-	13:19	-	-	-	13:59	L14:30
R	Chittaway Rd opp, Chittaway Shops	11:50	12:01	12:27	12:28	13:01	13:24	13:28	13:44	14:01	14:04	J14:38
S	Tuggerah, 20 Reliance Drive	-	-	-	12:31	-	-	13:31	13:47	-	-	-
Т	Tuggerah, 5 PIONEER Ave	11:54	-	12:30	-	-	13:27	-	-	-	14:07	14:49
U	Tuggerah Station East	11:57	12:06	12:34	12:36	13:06	13:31	13:36	13:52	14:06	14:11	14:54
0	Tuggerah Station train to Sydney departs	-	12:22	12:42	12:42	-	13:42	13:42	-	-	14:22	-
0	Tuggerah Station train to Newcastle departs	-	12:29	12:48	12:48	-	13:48	13:48	-	-	14:29	-
V	Tuggerah WESTFIELD, Red Bus Stand	12:03	12:12	12:40	12:42	13:12	13:37	13:42	13:58	14:12	14:17	15:00
W	Pacific Hwy opp Tuggerah Station	12:06	-	12:43		-	13:40	-	-	-	14:20	15:03
х	Woodbury Park Dr after Woolmers Cr	-	12:17	-	12:47	13:17	-	13:47	14:03	14:18	-	-
Y	WYONG STATION - Stand B	12:11	12:23	12:48	12:53	13:23	13:45	13:53	14:09	14:24	14:25	15:08
Z	Margaret St before Alison Rd	-	-	-	12:55	-	-	13:55	-	-	-	-
	Wyong TAFE Porter St	-	-	-	-	-	-	-		-	-	-
1	,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	-	-	-	13:00	-	-	14:00	-	-	-	-
2	Wyong Hospital at Henry Moore Dr	-	-	-	13:08	-	-	14:08	-	-	-	-

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	Monday to Friday	é.	5.	E.
map ref	Route Number	30	30	30
Υ	WYONG STATION - Stand B	09:00	12:15	15:40
3	Sth Tacoma Rd, opp No 7	09:08	12:23	15:50
4	McPherson Rd opp Mardi Rd	09:16	12:31	15:58
5	Opp Mardi Dam, Old Maitland Rd	09:18	12:38	16:00
V	Tuggerah WESTFIELD, Red Bus Stand	09:23	12:43	16:05

Tuggerah to Wyong (Route 30)

	Monday to Friday	ė.	6	6.
map ref	Route Number	30	30	30
V	Tuggerah WESTFIELD, Red Bus Stand	07:59	11:45	14:25
5	Mardi Dam, Old Maitland Rd	08:04	11:50	14:30
4	McPherson Rd after Mardi Rd	08:07	11:53	14:33
3	Sth Tacoma Rd, opp No 7	08:15	12:01	14:41
Y	WYONG STATION - Stand B	08:32	12:11	14:51

	Monday to Friday (continued)	ė.	6	5	ė
map ref	Route Number	47	47	47	47
6	Pacific Hwy at Ourimbah Station WEST	H15:10	16:10	16:55	17:40
7	University of Newcastle Ourimbah	H15:13	16:13	16:58	17:43
	Fountaindale, End of Liza Cl	-	-	-	-
8	Fountaindale, 185 Old Chittaway Rd	H15:18	16:20	17:05	17:50
9	Enterprise Dr opp Catamaran Dr	H15:20	16:22	17:07	17:52
10	Hereford St after Apprentice Dr	H15:24	16:26	17:11	17:56
R	Wyong Rd after Enterprise Dr	H15:25	16:27	17:12	17:57
11	Geoffrey Rd opposite Henry St	-	-	-	-
5	Tuggerah, 20 Reliance Drive	H15:26	16:28	17:13	17:58
U	Tuggerah Station East	H15:30	16:32	17:17	18:02
V	Tuggerah WESTFIELD, Red Bus Stand	H15:35	16:37	17:22	18:07

Ourimbah to Tuggerah (Route 47)

The Mystery of Hilton GEOFF LAMBERT

N MY MANY DAILY OR WEEKLY commuting journeys from Bacchus Marsh to Sunshine (high school) or Melbourne (university) between 1963 and 1973, I was always intrigued by the VR property fenceline at Robinson's Rd between Rockbank and Deer Park. It widened— the property boundary, I mean. I deduced that this signified the former location of some long-gone railway station. Not only was this one long-gone, it appeared to be longforgotten.

Then, many years later, I came across some entries in the monumental lists of every railway station on the planet, by ATA member Jim Fergusson (extract below). There it was -astation named Hilton at the correct mileage, not far from the first location of RMSP 64. Jim later told me that his information on Hilton came from David Langley, but I had already spoken to David (in the 1980s) about this and David was unable to recall any details of how he came by that information. Ted Cody, the driver of my school train must have had ancestral memories of it, because one day he pulled up the train at this exact spot. If anybody descended from the train that day, they must have been the

Ghosts of Hilton Past, for they were not visible to us (<u>The Times</u> <u>September 2017</u>).

Hilton was in the land of the *Kurung jang balug*, the "red ground people", who first came into contact and inevitably—conflict with, white folk in the 1830s. These things were neither spoken of, nor taught, in my schooldays Recently a schoolmate, Peter Carey, was inspired to write of them in his "*A Long Way From Home*". Peter's book, started me off on a renewed quest to find out about Hilton.

Early descriptions of the area by Europeans (commencing with one by Matthew Flinders and continued by John Batman) give a somewhat mixed description. Everybody agreed that the land was pretty flat, except around Mt Cottrell, an eminence given the name "Mountain", despite it barely rising above the plain. The region is near the eastern-most extension of the world's third-largest lava plain, the source of which lay in volcanoes in the Western District. The lava was laid down in human times and probably formed part of the lore of the *Kurung jang balug* clan. Being young, it still showed its origin and was pock-marked with

23. 1	MELBOURNE - WOLSELEY
Arara	t/Wolseley 4' 8½" gauge ex 5' 3"
	Southern Cruss
0	Melbourne (Spencer Street) (see 1)
7素	Sunshine (see 1)
9法	Ardeer (2nd) f
10	Ardeer (1st) cd
11	Deer Park z-f [Kororoit Creek #1889
155	R.M. Stopping Place No. 64 (1st) #1949
151	Hilton #1897
17 1	R.M. Stopping Place No. 64 (2nd) de
185	Rockbank z-f
	[Mount Atkinson 1888TT]
21½	R.M. Stopping Place No. 65 e
234	Melton z-f
26 1/2	Staughton's Siding cd
29%	Parwan z-e
31 3	Bacchus Marsh z-f
The Times	July 2018



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the Sca. Milcs.	diles.		STATIO	NS.	1 Mixed	Z Mixed		Height above the Sea.	Miles.	- 1	STATIO2	κs.	1 Mixed.	2 Mixed.
eet 32 18 50 24 84 1 65 1 93 2 2	13472	MELBOU North Mel Footscray BRAYBROO Kororolt Mount At Melton † Staughton PARWAI	bourne k Junci kinson	сюм † t	a.m. 7.35 7.39 7.40 7.55 8.6 8.26 8.38 8.53	p.m. 4-5 4-9 4-16 4-25 4-36 4-56 5-8 5-23		feet 464 393 365 184 124 50 18 32	361 1031 184 2132 28 201	Mount Kororo BRAYB	VAN † tton's Siding + Atkinson † bit ROOK JUNCTIO TAY Melbourne SOURNE W	 t ма	a.m. 9.25 10.8 °. 10.28 °. 10.28 °. 10.39 °. 10.494 10.494 10.50	p.m. 5.50 6.15 9 6.49 % 6.58 7.7 7.14 7.18
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						CCH	US M	ARSI	H J	LINE	ē.		1997 - 1. 1930 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 19	
Dow	vn.	•.		N	BA	, 	US M	ARSI	waaa		E. ARSH.		1	
Dow	wn.	Height above Sea.	Miles.	M	BA IELB	, 	US M	ARSI	сн1		an a	2 Goods. ‡	3 Mixed.	

cavities, down which rain disappeared, thus rendering it dry. This rain ended up in a few creeks, upon which the clan had built fish traps. Being derived from lava, however, it was fertile.

The early European writers probably wrote from (literally) different perspectives. Some said the area was grassy, others said it was wooded. A few were of the opinion that the locals had lived well off of it and that Europeans ought to be able to do so too. Thus it became sheep grazing country. In the late nineteenth and early twentieth century, a vast swathe of it, "The Rockbank Estate" came to be owned by Australia's richest man, Sir W.J. ("Big") Clarke. Clarke acquired land through the 1890s by snapping up smaller parcels held by others One of these was William Pratt, who had obtained several blocks south of the Ballarat Road. east of Troup's

Road. naming his property "Hilton Farm". William Pratt is recorded as having sold up and left the district in 1888 and it can be no coincidence that this was the year that the Hilton Estate went on the market.

The name "Hilton" never seems to have appeared in any official railway documents (paper or electronic) to which I have access- not even "Weekly Notice Extracts, 1894-1994" by Jungworth and Lambert (not me). This latter was surprising, given that the opening date of the station appeared to be 1897. However, the digitised version of the fabled Bacchus Marsh Express newspaper for 22-Sep-1888 (about 4 years after the line to Melton had been opened) turned up the advertisement on page 7 (right). Similar ads appeared on the same day in the *Argus* and the *Herald*. This seemed like hitting the jackpot - it

explained why the station appeared neither in the surveyors' plans, nor the Weekly Notice Extracts.

The ads appeared in the era of "Fabulous Melbourne", with its great post-goldfield land boom. One expects a certain degree of hyperbole in such advertisements, but the ads appear to be completely "over the top", with their "mineral springs" and "Limestone" (in a lava field?), the "Beauty Spot of the District", "Invigorating sea breezes", the "Best Views in the Colony" and "an hour's beautiful drive". At no stage in the Quaternary Period could it have looked like that and it certainly does not look like that today. On our long dawdling trip through it on the DERMs, we regarded it as paralysingly boring.

One has to surmise that the Victorian

	j	Down.	1	Jown.		MEL	BOURNE
F Beight	Miles	STATIONS.	1 Mile	s STATIONS	15 Empty Cars Mon.	23 Diesel Rail Car (153 h.p.) and	7 "MIL- DURA SUN- LIGHT"
30 18	-	NELBOSRNE W (Spencer- Street) dep. North Melbourne	L C			Trailer Sat. Exc.	TUE., WED., THUR.
$\frac{22}{23}$	$\frac{21}{23}$	South Konsington Maribyrnong Sdg. Jn.	D01				-
53	31	Footscray	DOJ	MELBOURNE WG	A.M. 5 15	A.M.	A.M.
60	4	Middle Footscray	ī	(Spencer-street) dep. North Melbourne	\$ 10		7 50
- 80 101	44 54	West Footscray Tottenham			*		*
101	6	White City NC	Flin 34	Footscray	*		7 59*
		larr.	4	Middle Footscray O	*		
125	72	Sunshine E.S.	Sun 41		*		
	10	Ardeer N C	53		*		
151	10	Ardeer Siding N C	Ard 6 Dee 72	White City NC	*		
184	11	Deer Park () (See note page 163)	Dee 74		5 32*		
-	15ई	Rail Motor Stop, Place N C	- n	ES Deer Park $\bigcirc ES$ (See note	32*		10
366	181	Rockbank ES	4P.	page 11)			92
		(dep.	171	Rail Mtr. Stop. Pl. No. 64 NC			2
376	194	Cockbill's S'ding N C		arr.			: : Dares
	21	Rail Motor Stop. Place N C	181		+		4
394	231	Melton	Dee 214	dep.	5 48*	•••	
	1	ES dep.	Ard	(arr			2
403	261	Staughton's Siding N C	231	Melton E S { dep.	5 56*		Geelong
464	29‡	Parwan	Sun	Carr	0.00		10
404	za≴	ES dep	291	Parwan O ES dep.	6 3*		
		(arr.	Flie	arr.	6 10		4
343	$31\frac{3}{4}$	Bacchus Marsh W	313	Bacchus Marsh ESW	-8	8	Sorth
526	347	Rowsley (See note page 163)	401	dep.			2
1082	401		401	Bank Box			<u>e</u>

Railways were induced to do SOMETHING to facilitate the running of trains to this fabulous place- at the very least widen the land for a platform and perhaps even provide a platform. There are other places on the Ballarat railway where this happened during the Speight era-for instance, at the Bacchus Marsh Racecourse (see "The Times" of December 2010). One would expect some sort of timetable for the train perhaps, but S-Notices had yet to come into existence on the VR [ves?/no?]

... and then what happened? Nothing.

It seems as though the whole thing was postponed for a week, because a similar advertisement appeared in The Herald of 28th September for the sale to occur at 3PM the next day. This ad. gushed that "THE SPECIAL TRAINS start from Spencer St at 1.15PM" and gave the travelling time as "30 minutes." In 1888, there were two regular passenger trains which left Melbourne at 7:35AM and 4:05PM, with a travelling time to Rockbank (2 miles past Hilton) 51 minutes (page 8, upper).

... and what happened this time? Nothing again, apparently. The Bacchus Marsh Express of 13th October reported: "The Hilton Estate land sale on Saturday week was very successful, but we have not heard any

On November 17, another

particulars."

advertisement appeared in the Herald. for a "SECOND GRAND SUBDIVISION SALE", to take place on Saturday December 1st. This ad. was part of a large campaign in the Melbourne papers in which Stratford Strettle foreshadowed other sales of land and farms in the Rockbank area in December – each with one or two "SPECIAL TRAINS". On the appointed day, 1st December 1888, the Express reported: "The sale of the Hilton Estate, on the Bacchus Marsh line, below Melton; announced to take place to-day, has been postponed for the present."

After that-nothing-not a sausageever again. I suspect that the Hilton Estate auction sale was pre-empted by Clarke purchasing the land.



It remains unknown to me whether "Hilton" ever appeared in a Working Time Table. It could not have appeared before 1888, it MAY have appeared in the 1st October 1888 WTT, but it certainly did not appear in the 1st March 1889 WTT (page 8, middle). The location appeared as a Rail Motor Stopping Place in the WTT of June 1938 (left panel this page) and may have been in earlier editions. This RMSP was also in the next full WTT of 1948, but had been moved about one mile westwards by the time of the subsequent full W&SW WTT in 1958 and given a number (#64) (right panel this page). Apart from Ted Cody's misdemeanour, I never knew a train to stop at either, although the school train regularly stopped at RMSP No. 65 between Rockbank and Melton.

In 2017, land at Hilton was again being offered for sale (below). This is an interesting photo because it appears to show the area at $15^{3}/_{4}$ miles (i.e. the RMSP) as a "lead-out" which, with the eve of faith, could be construed as the path for a proposed siding at Hiltonwhich would have been over the other side of Robinson's Rd

When the Russian Space Agency (Sovinformsputnik) began to release its world-wide reconnaissance photos in the early 1990s, the site of Hilton was still visible. There was never any indication from these photos that either a siding or a platform ever had existed, nor could such evidence be seen from passing trains. This contrasts with other stations equally long-vanished such as Bacchus Marsh Racecourse siding. By the time Google Earth came along, the road. arrangements around the site of Hilton had been altered and the site now appears to be some sort of works depot.

> Comment on this article -Letter to Editor. Facebook

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Odd Spot – <u>Longer Metro</u> / Suburban Trains

RECENT IDEA OUT OF NEW YORK [see next story] is to have three-section, longer, trains—i.e. longer than platforms. The idea is that all stations would be categorized as A or B, perhaps both if they have platforms long enough to accommodate the long trains.

The trains would have three sections – an A section at the front that would serve only A stations, a middle section that would serve all stations and a rear B section that would have doors opening only at B stations. At an A station, the B section would be off platform and it would be essential that the 'system' prevents external doors from being opened.

Obviously the middle section would

be very attractive to those passengers

who don't want to be bothered with A's and B's. It may be that this section should have minimal seating partly to encourage passengers to use the A or B sections and partly to facilitate the movement of passengers through the train. Someone joining an A section but travelling to a B station would move to the middle section at some stage of the journey. Having wide always open inter car gangways would be essential. This is now the modern fashion.

The idea is not without merit but would require major changes to signalling, terminals, stabling yards etc. Almost certainly it would help if the trains were driverless.

Always, an issue with this sort of idea, is customer acceptance. Would it be worthwhile imposing this complication upon them? Think of the LOL – the little old lady.

It's probably too late now but should NSW Transport have considered this for the NW Metro? Could Victoria use it for their Metro?



The Full Story—Six Ideas for a Better New York Subway BENJAMIN SCHNEIDER, CityLab 16-March-2018

he Metropolitan Transit Authority (MTA) wanted to know if anyone, anywhere, can figure out how to fix New York City's beleaguered subway.

With the hopes of solving problems such as persistent overcrowding, train delays, and crumbling physical infrastructure, the MTA launched a *Genius Transit Challenge* in June 2017. Offering as much as \$1 million for the best idea, nearly 500 groups hailing from 23 different countries sent in submissions. Now, the final results are in.

Last week, an expert panel selected six winners, awarding them a total of nearly \$2.5 million in prize money. They present new ideas for train control signals, subway car design, data management, and tunnel maintenance. Below, each proposal is explained in words, with the title containing a hyperlink to the relevant video from each team explaining their proposal.

Longer trains

Craig Avedisian, a New York City

lawyer and one of the Genius Challenge winners, proposes increasing capacity by adding more cars to trains, without having to build longer platforms. MTA

This would be done by creating "A" and "B" sections of trains, corresponding to A and B stations. At an A station, only the A section car doors would open, and vice versa. The intervention could theoretically increase train capacity by 42 percent.

Train Control Signals

The subway's current signalling system is woefully out of date and a major cause of delays and overcrowding. Currently, all lines except the L employ a fixed block signalling system. This system divides lines into "blocks," preventing two trains from being on the same one at once. While effective for maintaining safety, the fixed block system prevents trains from running as close to one another as more modern systems. The MTA plans to install more efficient signalling systems known as Communications-Based Train Control (CBTC) on many of its lines, and is nearly finished upgrading the 7.

But the process is time consuming and expensive. Two MTA Genius Transit Challenge winners propose cheaper and faster methods for installing state of the art train control systems.

Wireless Comms

Robert James and Metrom Rail propose installing wireless communications devices along the track that require much less hardware and installation labor than current methods for installing CBTC technology. Ansaldo STS and Thales' proposal also cuts down on hardware and labor by implementing CBTC technology with cameras and sensors on the front of each train.

New Cars

The Chinese train builder CRRC MA plans to invest \$50 million to develop

New York City's subway car of the future. Its key features would be lighter materials, greater energy efficiency, and a modular design that would make it easy to upgrade as new technologies become available.

Data Management

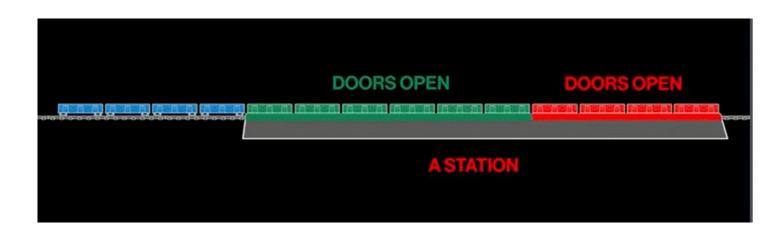
CSinTRANS (or CSiT) proposes to centralize the data coming to and from transit vehicles, allowing for MTA staff and passengers to be aware of problems in real time. The system is also intended to help reduce maintenance costs by spotting breakdowns before they become severe.

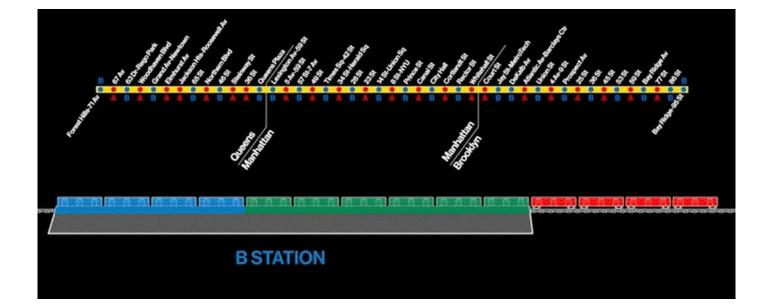
Tunnel Maintenance

As one of the world's few 24-hour systems, New York's subway has very little time to make repairs. Bechtel Innovation's proposal hopes to make that process more efficient by providing the system with a tunnel maintenance robot that can perform routine repairs. The robot, similar to those already in operation in the U.K., could help lower costs and improve worker safety. Whether these "genius" ideas will be implemented remains unclear. If they are, the MTA's notoriously glacial pace of progress means it'll still be a while before riders would experience their benefits. Still, after last summer's countless delays and hellish hiccups, any effort to think outside the box should be a sign of encouragement.

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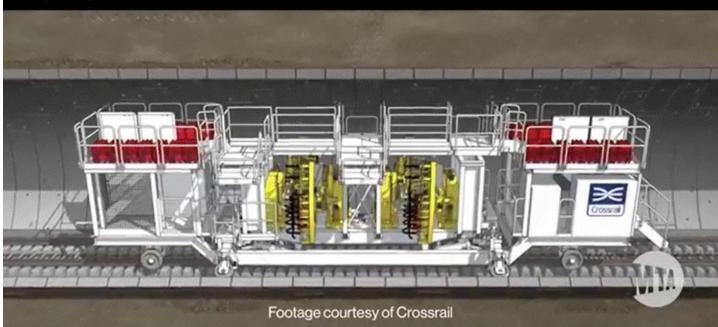






THE IDEA

"The Big B" - A robotic system that can perform repetitive tasks quickly to maximize small windows of available work time.



How did it come to this?

GEOFF LAMBERT

HEN I DID MY DAILY CHECK, via Tripview and Anyt.rip (see *The Times* for <u>April</u> 2018), for the ever-erratic progress of the Brisbane-Sydney XPT on the Saturday of the June 2018 long weekend, I was surprised to find it missing. Looking further south, I discovered that there were no trains on the Strathfield-Newcastle line either.

What happened?

I should not have been surprised, of course, because a major shut-down of the North Coast line had been foreshadowed in TAA (Train Alteration Advice) #0118 as long ago as April, although I failed to notice it. An amended version was issued during the Friday before the closedown and the analysis which follows is based on this Amendment.

The ARTC possession coincided with a "Configuration 9" close-down on the Sydney Trains/NSW Trains networks (essentially Strathfield-Newcastle-Maitland—see page 2). This three-day combined possession over the June long weekend has become an annual event. The NSW Trains possession had the effect of preventing ARTC north-bound trains from advancing past Enfield and of cancelling NSW Trains services to the Northwest as well as to the North Coast. The amended TAA contained 14 pages of train timing alterations affecting 77 trains and 19 pages of cancellations affecting some 430 trains over the Friday to Monday period. The closedown affected three sections of ARTC track, which were detailed at the head of the TAA (right, upper).

Of course, it WAS a long weekend and quite a few trains would have been cancelled in any event, especially on the Monday, but also some on Saturday and Sunday.

There was a time, not so long ago, that a thing such as a "total closedown" was unthinkable. Those were the days of alternative routings, nimbleness of thinking and a prioritising of service over management. A time, for instance, when ATA founder Jack MacLean could wax lyrical over the re-routing of The Overland from Horsham, via East Natimuk, Balmoral, Hamilton, Maroona, Cressy and Geelong ("Where did the Expresses cross that night?", *The Times* <u>May 2002</u>, pp 3-6; illustration right, bottom).

Similar "weird" re-routings designed to "keep things rolling" used to occur in NSW—such as sending the Sydney -Melbourne trains via Wollongong, or even Cowra.

Why do they do it?

The sale and management of train paths on the ARTC network is set out in the ARTC *Access Undertaking*, registered with the ACCC. As part of its cost-recovery program, ARTC charges users ("Access Seekers") for

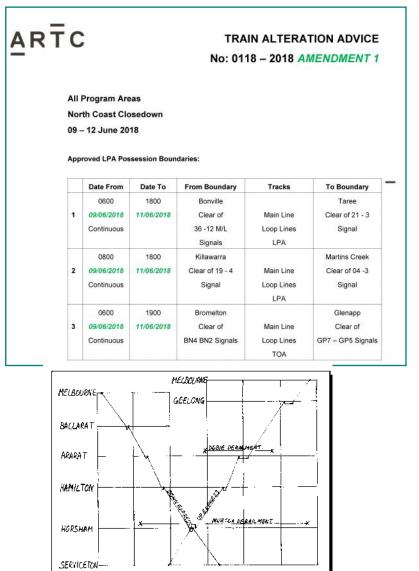


"Major Periodic

Maintenance" (MPM) on its network. MPM refers to activities which restore the infrastructure facilities to retain functional condition. MPM is completed on segments on a cyclical basis with intervals of generally greater than one year. MPM can be categorised into two types:

Variable MPM: programs mainly driven by volume usage. Includes such activities as re-railing, rail grinding and re-surfacing.

Fixed MPM: depends more on time than usage and includes re-signaling,



communications upgrades, renovating structures, ballast cleaning and resleepering. The latter seems to be the category under which a Possession would fall.

It is up to the Access Seekers to decide what to do, but ARTC has argued that they might like to do their own rolling stock maintenance during closedowns.

This is a matter of some contention on other networks. For instance, Aurizon— which is both a track owner and train operator—is reported to have reduced maintenance costs on its Queensland coal networks by imposing longer close-down times. This has angered the ultimate users, the coal companies (*Table Talk* June 2018, *Railway Digest*, June 2018 and <u>Australian Financial Review 5th</u> <u>March 2018</u>.)

The ARTC Access Undertaking is rather vague about how possessions are handled, saying only the following in its Schedule C: ARTC having the ability to vary (temporarily or permanently), remove and review contracted Train Paths in appropriate circumstances and to take possession of the Network for repairs, maintenance, new works and upgrades.

Greater detail is contained in a separate document, "Schedule D", as follows

Repairs, Maintenance and Upgrading of the Network

ARTC may, without notice to the Operator, perform repairs, maintenance or upgrading of the Network, carry out any new work on the Network, or take possession of any part of the Network, at any time. If repairs, maintenance or upgrading of the Network, the carrying out any new work on the Network, or taking possession of the Network, are reasonably likely to materially affect the Scheduled Train Paths, ARTC will, prior to commencement of the works:

•take all reasonable steps to minimise any disruption to the Scheduled Train Paths;

•notify the Operator of the works as soon as reasonably practicable; and

•use its best endeavours to provide an alternative Train Path, but need not obtain the Operator's

consent to such repairs, maintenance or upgrading, or possession of the Network. ARTC will consult with the Operator a reasonable time before taking possession of the Network (except in the case of an emergency) with a view to efficient possession planning and with a view to minimising disruption to Services.

Queensland Rail has much more Possession documentation than does ARTC. In Britain, Network Rail devotes 130 pages of its Network Statement to these things. Each Region has a 30pp "*Rules of the Route*" (aka "*Network Management Access*") document with more specific information. The whole process begins two years before a possession and involves informal discussion, a formal proposal, feedback from users and, if necessary, a dispute resolution process. A 900-page document results.

The ARTC documentation is pretty much just a "nod and a wink" compared to the above, but a number of (unwritten?) techniques put flesh on these bare bones are in operation. Below is some information I have gained from asking questions of "those with skin in the game".

Pre-close-down dickering

Representatives of track owners convey all details to rail operators on a regular basis. They meet every two months to determine the next five months proposals and any connecting data.

Who makes the decisions on train alterations?

Sydney Trains (ST) dictate on what they "need" and freight operators usually get the dregs. The freight operators have to put their path "wishes" into ST about 12 weeks in advance for planned weekends and overnight possessions. It is like drawing a ball out of a lottery barrel. Of course, each operator puts in for all their mandatory trains-ad-hoc is not tolerated. Many planners have previous experience in train working and planning. Most are honest in their approach to which trains they want to run during a week-end possession. A typical operator might cancel one service out of three (to be fair) and give preference to their most critical

train arrivals.

What do users think about all this

With around three to four month's notice, the shippers work around the possession and negotiate with their customers for altered services and they also have to take into account the ever-exploding Ports windows. Shippers have to organise early or late receipt of containers, at a cost, to satisfy the Stevedores.

Do major disruptions result in shippers changing their minds about using rail?

Not really, because they have plenty of warning they are mostly able to redo their plans. Passengers are another matter (see later).

This particular possession did not appear in the "Events Calendar" on the Access Seekers web-site- why not?

The possession is in the planning calendar about five months out and ARTC work closely with Mines, Shippers, Stevedores and Rail Operators and there are designated long close-downs like this each year at the same time. A lot of maintenance is planned for these for or five time a year at Mines, Ports and on track, hit is hard over the various close-downs.

How were crew rosters affected?

Not much damage, because operators basically run "blank line working", meaning rosters are re-arranged every day.

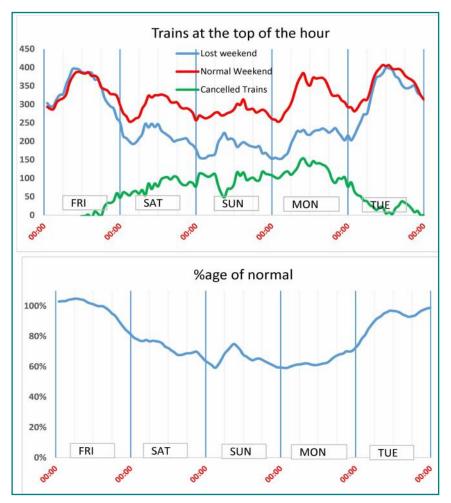
Is the parking of Brisbane-bound trains in Sydney unusual?

The MB/BM trains would probably be segregated with Melb-Syd-Mel loading and the Brisbane would be held back to depart each city on Sunday night.

Are there particular problems or bugbears?

Management is second nature for all the knowledgeable "old blokes", who just work around the whole thing. One thing that upsets the apple cart is lastminute changes by rail owners who make late decisions on work projects.

With *Vivid* and Special Events in Sydney, more particularly events at Olympic Park, where Sydney Trains



insist on restricting passage of freight during bump-in & bump-out periods there can be all sorts of delays. This improved after NSW Govt. Events Planning copped a huge amount of suggestions when they visited the "users meetings" a while ago. Even people from Olympic Park and Moore Park areas came to a meeting once to see the way things were done. NSWGEP now insist that event organisers speak with them before they sign up the venues.

Many operators and shippers can get upset when some much loved boy band gets an idea that a visit to Sydney must go ahead over summer while they are on a world tour and book a venue without consultation The operators then have to bend to their wishes because organisers may argue that they expect a crowd of 90,000, especially when the Wallabies are playing at the same location.

Why do they do it this way?

In his article "Where did the Expresses cross that night", Jack wrote: In 1933, when the main line between Murtoa and Jung was blocked (as it turned out until 1 pm the following day), the expression **bussing round the obstruction** had not been added to the railway lexicon. The big problem would have been where in 1933 would the buses have come from?

Today we have buses and, of course, they were used to replace the trains over both the closed and unclosed section of the North Coast lines, even though the two stranded XPT sets at Grafton and Taree could have been utilised. The latter, of course, doesn't make a lot of sense.

On a double-tracked railway, it would have been possible to close only a single track and work the trains by "Single-line Working During Obstruction" rules. This used to be the standard practice in the UK—where it evolved—and on double-tracked railways in Australia. It did not, of course, happen on any of the double-tracked sections involved in this close-down. It no longer happens in the U.K. either.

The principal reason for the culture change has been the change from double -line block working on tracks with frequent signal-boxes, each with crossover roads and goods sidings, to uninterrupted CTC-controlled tracks. As the old conditions disappeared, alternative methods of handling major works programs evolved. One alternative, often practised in the past, was to do the work at night. That was OK in the U.K or even in an Australian metropolitan region, when access was easy, lighting was easily obtainable and work-practice laws about overtime were more favourable to employers than they are now.

Then, too, railways of those days were far more important than now. Cancelling the XPT trains to Brisbane these days would affect but a tiny proportion of the passenger traffic offering between those two places. The long established ethos of "Neither snow nor rain nor heat nor gloom of night stays these couriers from the swift completion of their appointed rounds" just had to give.

Thus, railways were caught in both a bind of their own making and in a societal cultural shift. Complete closedowns have become part of the culture and passengers shrug and accept it mostly as a part of life– they consult their apps and catch the replacement bus. It is a moot point whether this affects their long-term view of rail and any consequent preferences for rail over other modes.

Impact on the customers

In a vertically disaggregated railway system, there may be up to four "agents" in the chain between the customer and the track owner who wishes to close the line. Passengers usually have no knowledge of this, those involved in freight transport sure do.

Passengers value reliability above all else, but seem willing to accept the occasional lapse. It is not clear where they draw their lines in the sand. In north-east Victoria, to take an extreme example, the daily occurrence of poor running, cancellations and close-downs has resulted in Melbourne-bound commuters abandoning rail. Such things can—and this one has—become the subject of hotly-fought election campaigns.

Perhaps the NSW North Coast is another matter? There wouldn't be commuter traffic on this line– most would be *ad-hoc* day trips to and from Sydney, Taree, Grafton, Casino and Brisbane. Passengers travelling to Casino (the busiest station on the route) complete their journeys to Queensland by bus in any event, so "bus all the way" may be neither here nor there.

Close-downs are, however, a concern of NSW ATA members who wish to attend a Division or Annual General Meeting of the Association—there has scarcely been a meeting in the last 15 years that has NOT been disrupted by a Sydney Trains close-down. The Sydney Morning Herald's Column 8 was vastly amused by this, calling it a "fascinating irony", when first I drew its attention to the situation.

Who pays?

MPM charges are folded into the standard haulage rates. It would be logical that, when a Path is cancelled for a Possession, no charge against the above-rail operator for the cancelled train would be levied. To not do so would seem to be double-charging. That is, at least the hope, but the aforementioned Appendix D of the Access Arrangement cautions: *ARTC may at its discretion waive the flag-fall charge applicable to any Services affected* [by a close-down].

Observations

There were a number of interesting features of the June 2018 long weekend North Coast close-down.

- •The Friday Down Brisbane XPT (NT31) was returned to Grafton Yard from Casino, as NT38/NT39 at 0300 Saturday and remained there until Monday evening, whence it returned to Casino as NT24/NT25 and took up the normal running of the Up Casino XPT (NT34) at 1930 that night.
- •The Friday evening Up Casino service (NT34) ran only as far as

Taree, where it terminated. On Monday evening, this car set took up the running of the Down Brisbane XPT (NT31) at 2011 and ran through to Brisbane Roma St.

These conniptions were necessary to store sleeping XPTs at a yard that could hold them and still be available to take up normal running upon the end of the possession.

There were peculiarities on the South, in consequence of having XPTs "trapped" beyond Sydney for 3 days, thus disrupting the round-robin rostering of XPTs between the North Coast, Main South and Main West lines. This mainly involved delaying Monday morning departures a little. There were consequential pathing impacts on the Sydney-Canberra departures.

- •Brisbane-Melbourne freight service 6BM2 had an astonishing routing, which proved that the old practices are not yet dead. Leaving Brisbane at its normal time of 2030 on Friday, it managed to just squeeze in ahead of the close-down and got to Telarah at 0817, where it took the triangle onto the Main North and ran through to Melbourne via (wait for this!) Singleton, Sandy Hollow, Ulan, Gulgong, Merrygoen, Dubbo, Narromine, Goobang Jct, Parkes Jct, Forbes, Stockinbingal, Cootamundra and Albury. The scheduled arrival time via the direct route would have been 0416, but on this day it was scheduled to arrive at 0941.
- Brisbane-Adelaide freight 6BA6 followed a similar routing to Parkes, thence ran via Broken Hill and Crystal Brook. Normally, it would have got to Broken Hill via Cootamundra.



- The Sunday afternoon Whyalla-Newcastle steel train (1YN2) was also diverted north at Parkes and did not arrive at Morandoo until 0400 on Tuesday.
- Adelaide-Brisbane train (6AB6) was terminated at Leightonfield/SOY. It appears to have left there on Monday evening as 3SB3 [the final 3 does not make sense].
- Some trains, nominally Melbourne-Brisbane, but which also cater for Melbourne-Sydney and Sydney-Brisbane traffic ran only as far as Sydney and the Brisbane portions were held over.
- •All passenger services between Hornsby and Newcastle and between Newcastle interchange and Dungog were, of course, totally cancelled. The upshot of this is shown in the charts on page 15. These show:
- (upper) the number of trains running on the hour, every hour, over the 5 days encompassing the long weekend, over all ARTC lines, compared with the traffic of a normal weekend, together with the number of cancelled trains and;
- (lower) the long weekend traffic expressed as a percentage of a normal weekend.

Normally the peak time for ARTC is about 10 AM, on both weekdays and weekends. The busiest day is Thursday, when some 420 trains are in action across Australia. At this hour on a normal Monday, about 385 trains are running. On the Monday of the long weekend, the number was 231. A good deal of the drop by 154 trains was due to the North Coast and Short North close-downs.

We can see that, from late Friday afternoon, trains that weren't going to make it through the "black area" were already being cancelled. In a similar manner, things began to pick up again from mid-afternoon on Monday when trains began to head off to the beckoning "open window". Normality returned by about midday on the Tuesday.

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