

# Rail and the Wellington CBD

The search for solutions

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Greater Wellington is a metropolis of nearly half a million, not much less than the entire state of Tasmania.

It is one of the most geographically-constrained capital cities in the world.

## One corridor ...



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And a very large proportion of greater Wellington's functionality is crammed into its CBD.

This means about 50% of the jobs and most of the entertainment, cultural, tertiary education and tourist facilities.

And most greater Wellingtonians – 75% in fact – will have to travel through the CBD to reach the Regional Hospital or the International Airport.

The other important geographical issue is that there is literally only one significant land transport corridor – from Ngauranga to Thorndon – connecting the CBD with most of the region that it serves.



These factors and others make the region's CBD a 'natural' for light rail – even more than most of the cities which actually have it.

The combination of compactness and geographical constraint suggests fertile ground for rail transit.



World best practice: through the CBD and out the other side .....



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Added to that is the obvious: that it is far more efficient and attractive to passengers to configure a PT spine to travel through a CBD and end up at a less dense destination somewhere out the other side, rather than a stub terminal at the near edge.

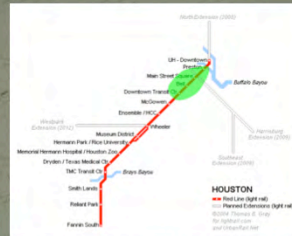
That is accepted world-wide best practice for every transit system from the London Underground to most small-city bus systems – even ours!

Wherever there is a choice, urban transit systems of any mode are configured NOT to terminate at the edge, or even within, the CBD but to run right through.

## 2003 – some new US light rail systems



Dallas



Houston



San Diego



Los Angeles

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Achieving a direct through-CBD operation is the fundamental objective of all the new light rail systems opening up around the world.

Here are just four I visited on my 2003 US study tour.

All have expanded markedly in the 13 years since then.

# Auckland CRL



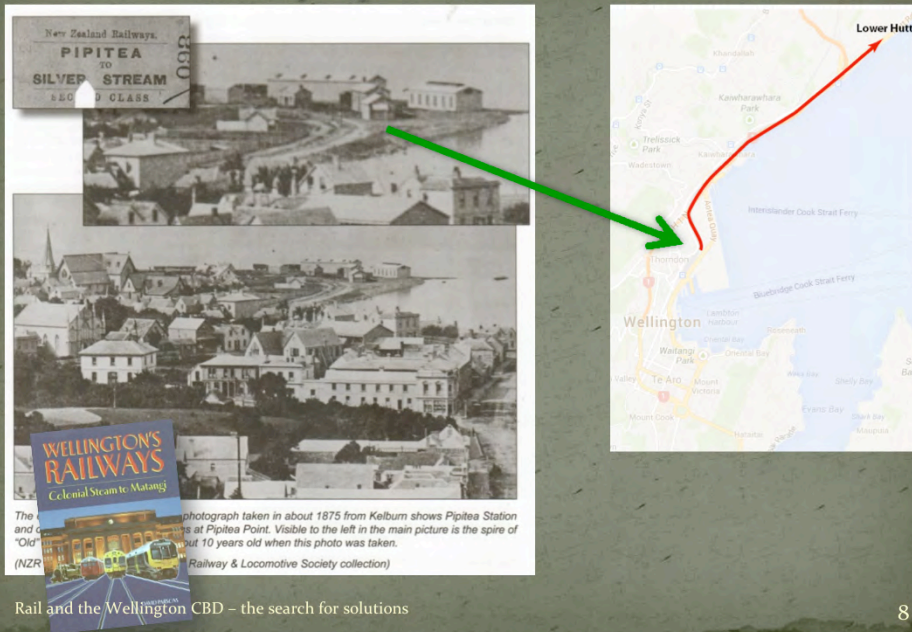
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Achieving through-the-CBD service is the prime reason for building the \$3bn Auckland City Rail Link.

Note how NO services will terminate within the CBD when the underground link is in operation.

## 1874 – railway opened to Lower Hutt



How did Wellington come to suffer such a disabled rail system?

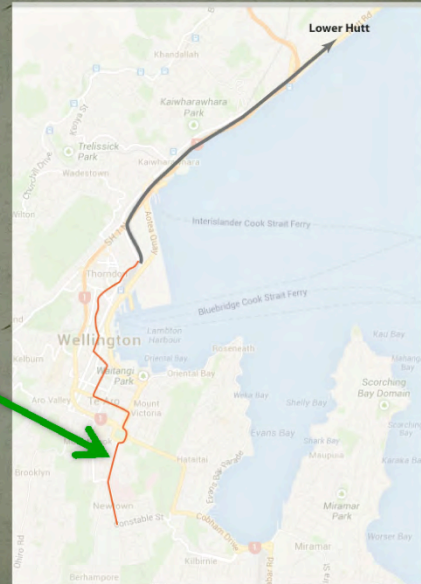
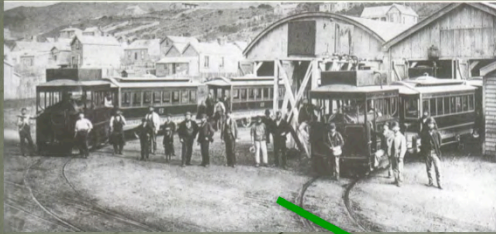
Plans and desires for a Wellington city rail link go back to the first railway and tramway developments.

The first railway line in Wellington opened in 1874. It ran from a makeshift station beside Thorndon Quay, at Pipitea Point, initially to Lower Hutt – but the real objective was the Wairarapa, via the Rimutaka Incline.

There was no intention that this would be a daily commuter line because no Wellington city workers then lived in the Hutt.



## Wellington Tramway Co 1878



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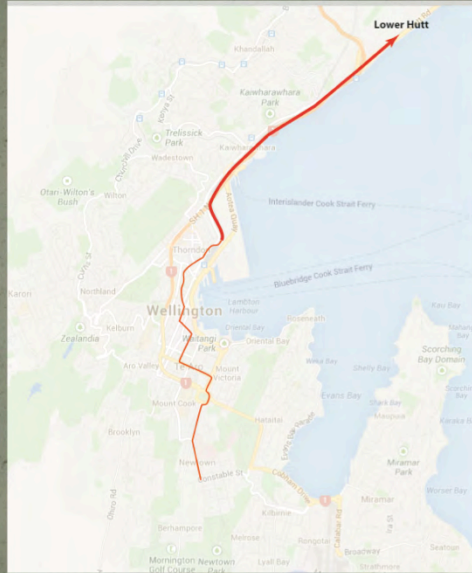
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The first rail line constructed for urban passenger transit was in fact the Wellington Tramway Company's steam tram line from the Pipitea railway station to Newtown.

This line opened not long after the railway – in 1878 – and was constructed to the same 3' 6" gauge.

The opportunity provided by this gauge compatibility was seized by the railway management.

## Mr Lawson's 1878 tram-train plan

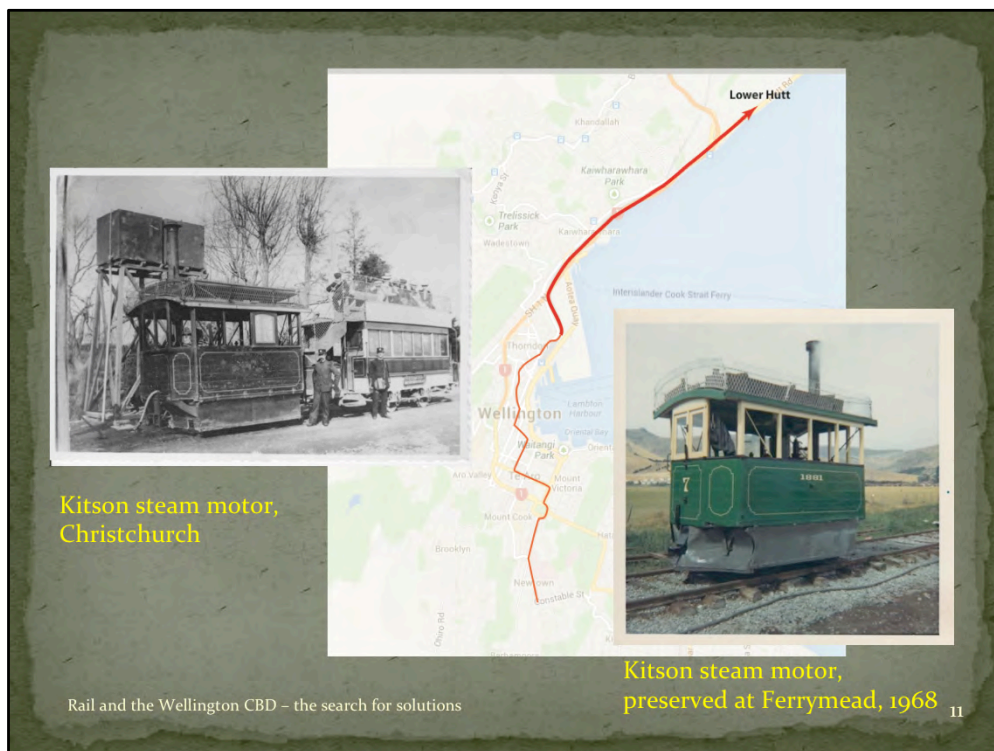


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In 1878, the Commissioner for the North Island railways, Mr Lawson, ordered a steam tram locomotive and two double deck carriages, intended for a direct service between Newtown and Lower Hutt.

Using both the street trackage and the main line railway, it would have been a true steam tram-train.

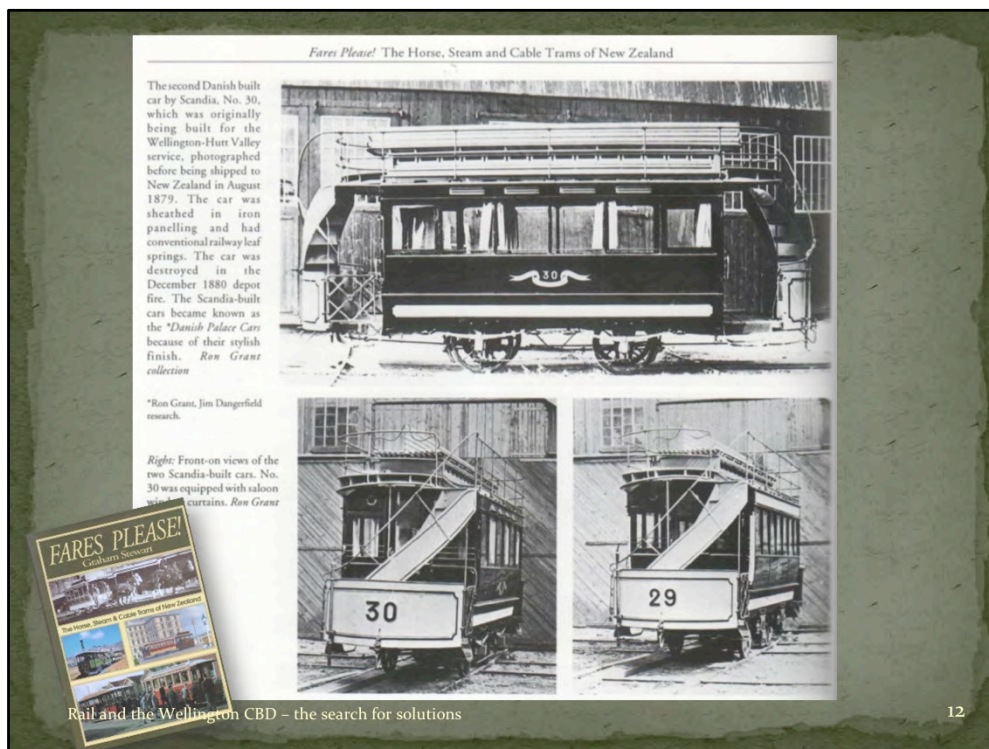


The locomotive was the first steam tram engine produced by Kitson of Leeds, England.

It was the prototype for the steam trams manufactured soon after for the Christchurch tramways. One survives at Ferrymead.

I regularly drove it there in the 1970s and can vouch for its **unsuitability** for travel over any distance. The top speed was only about 13 km/h.

Even by the languid speed standards of the Vogel era, taking almost an hour just to skirt Wellington Harbour would have been quite unacceptable.



Even more bizarre in concept were the two double-deck carriages built in Denmark.

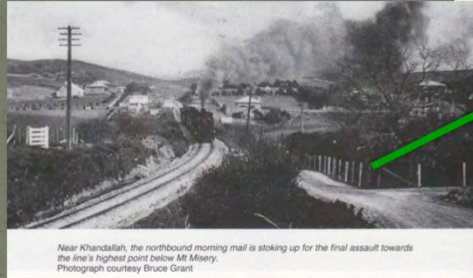
Conceivably it could have been a leisurely and scenic way to view the harbor – on a good day!

For whatever reason, this steam era tram-train service never happened but the very fact that rollingstock was built for it means that it was as close as we have so far come to achieving a tram-train service!

The Kitson steam engine and the double-deck cars ended up in Dunedin to start tram services there.



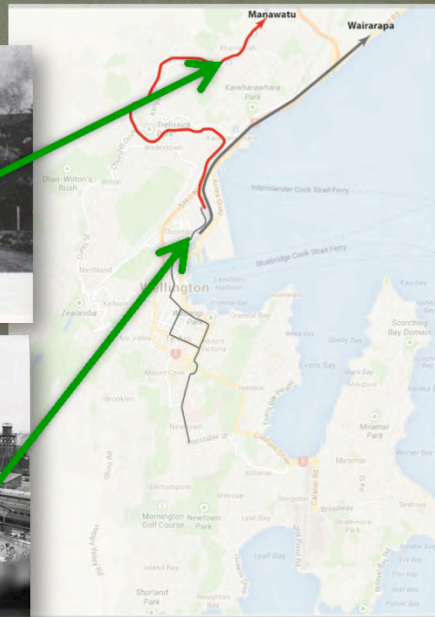
## 1880s – WMR



Lambton  
Station,  
closed  
1937



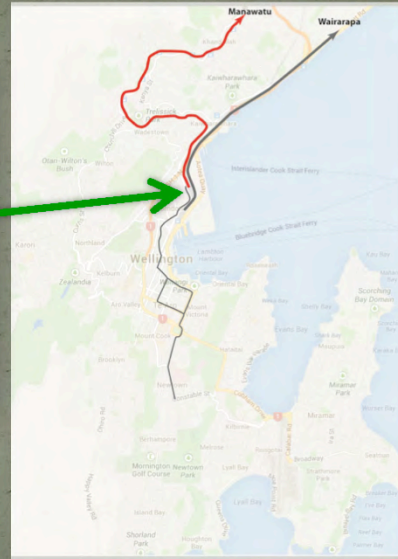
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The big developments of the 1880s were the opening of a second railway to the Manawatu via Johnsonville – the private Wellington and Manawatu Railway – and the relocation of the Government's Hutt line railway station to more or less its current location, still very much at one end of the town.

## WMR Thorndon Station

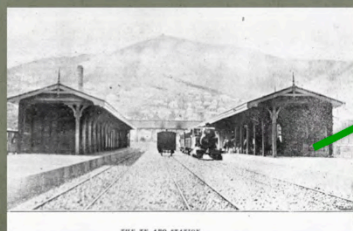


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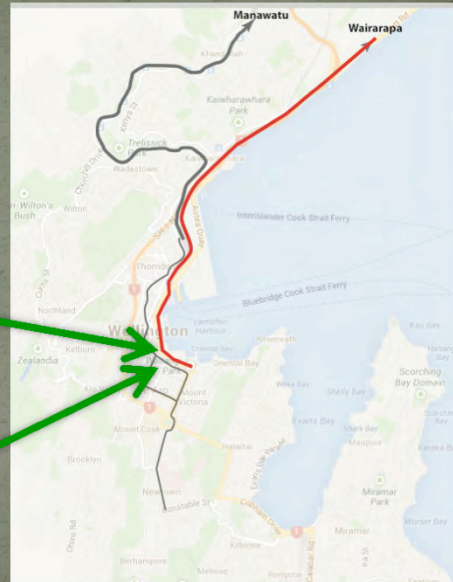
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In fact, the Manawatu Station was even further away than the Government station – off Thorndon Quay where the multiple unit depot is now located. It had its own horse and later electric tram siding.

## Te Aro Branch 1893 – 1917



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Demand that rail services should reach through the centre of Wellington and beyond made sense, given that was where the flat land and growth potential lay.

In fact, such a connection was started, in the form of the Te Aro Branch which opened in 1893.



It was proposed that the line would later be extended to Island Bay, then open country and a racecourse.

The line south would run in or close to the main streets and include sharp curves and steep gradients, requiring tram-type vehicles to operate.

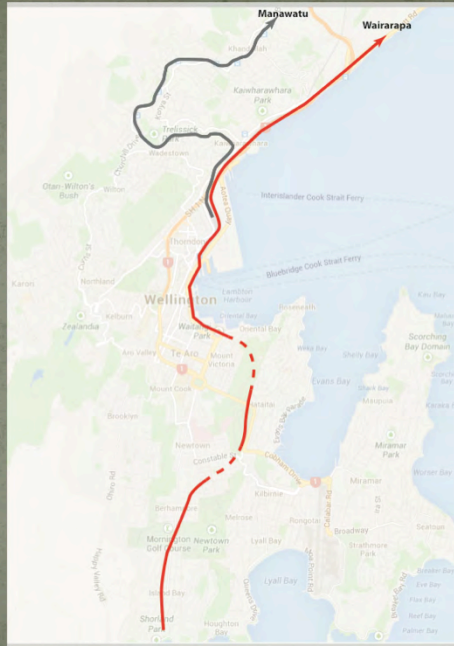
It would, in essence, be a tram-train service via Newtown, rather like the 1878 proposal – and very close to the optimum route for light rail to Newtown today.

But the railways management rejected the proposal, citing the evils of carrying steam rail traffic through the streets.

Had they thought about the new technology of electric traction the result might have been different.



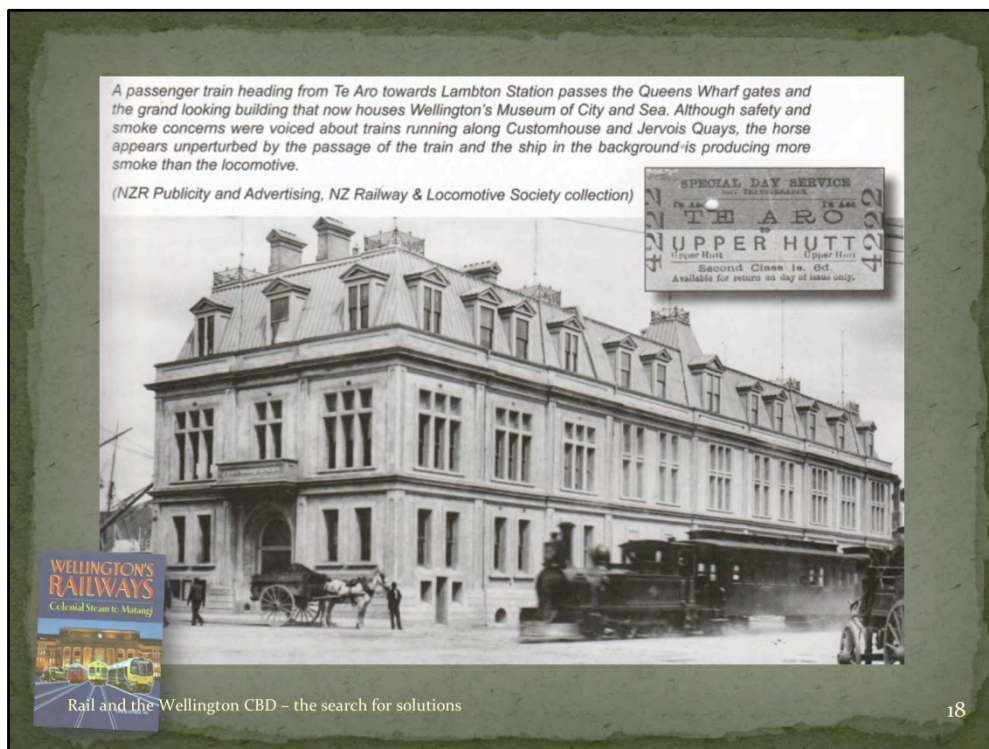
## The Commissioners' proposal ...



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The rail commissioners were seeking a terminus for the main trunk, not local transport, and suggested very much a heavy rail extension involving a curved tunnel under Mt Victoria and another under the Constable St saddle – a very expensive way of getting to Island Bay. It died on the drawing board.

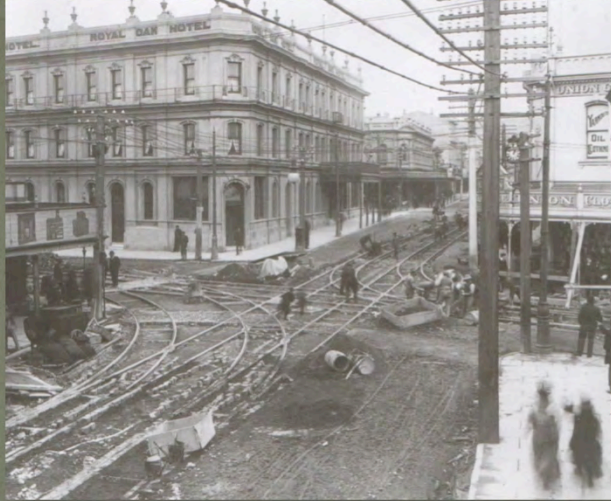


In the event, the Te Aro branch did not carry bulk freight and its passenger traffic was only the slow last mile of long-distance trains from Napier and Masterton.

Even at the end of the 19<sup>th</sup> century there was comparatively little rail commuting from what we now call greater Wellington.

Beset by coal shortages and complaints about smoke and congestion, the line closed in 1917 and was torn up in 1923.

## Feeding the cash cow



Tram track construction, Cuba/Manners intersection, 1904

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What the Te Aro Branch did do, apparently, was put the frighteners on the Wellington City Council regarding a possible takeover of their planned electric tramway by central Government.

At the turn of the 20<sup>th</sup> century, Wellington, like every substantial city, was looking to the electric tram to expand its urban boundaries and provide mobility which was faster, cheaper, cleaner and more modern than the horse.

The City Council purchased the NZR-gauged horse tramway operation in 1900 and set about planning new lines to the open country beyond the Town Belt.

In those pre-motorised days, having an electric tramway was regarded as a rates-reducing income generator.

With the Te Aro Branch poised to push south, the prospect of a Government railway takeover milking the tramway cash cow was potentially very real.

Such fears were common overseas and produced many tramways deliberately constructed to be incompatible with the local railway.

Mr Wright, the City Council engineer designing the electric tramways, obligingly





Original Hobart double-decker, 1893



Maori Hill tram – 3'6" gauge, opened 1900

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All of that was an outright lie, of course, but it provided the council with a seemingly valid technical reason not to stick with the same gauge as the NZR when horse trams were replaced.

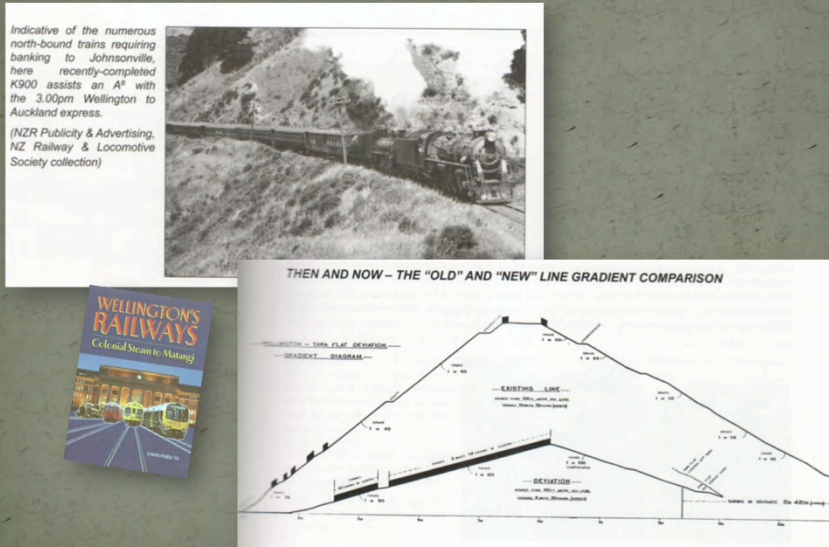
In the real world, the 3'6" gauge was widely used for electric tramways by 1901 – Hobart was the first electric tramway in the southern hemisphere and opened using that gauge in 1893.

In Los Angeles, Denver, Portland, Perth, widely in Japan, in Birmingham and other UK cities, and in many other cities it also prospered.

Even New Zealand's first electric tram line, in Maori Hill above Dunedin, was already in operation on the 3'6", and the same gauge was later used in Napier.



# Tawa Flat deviation



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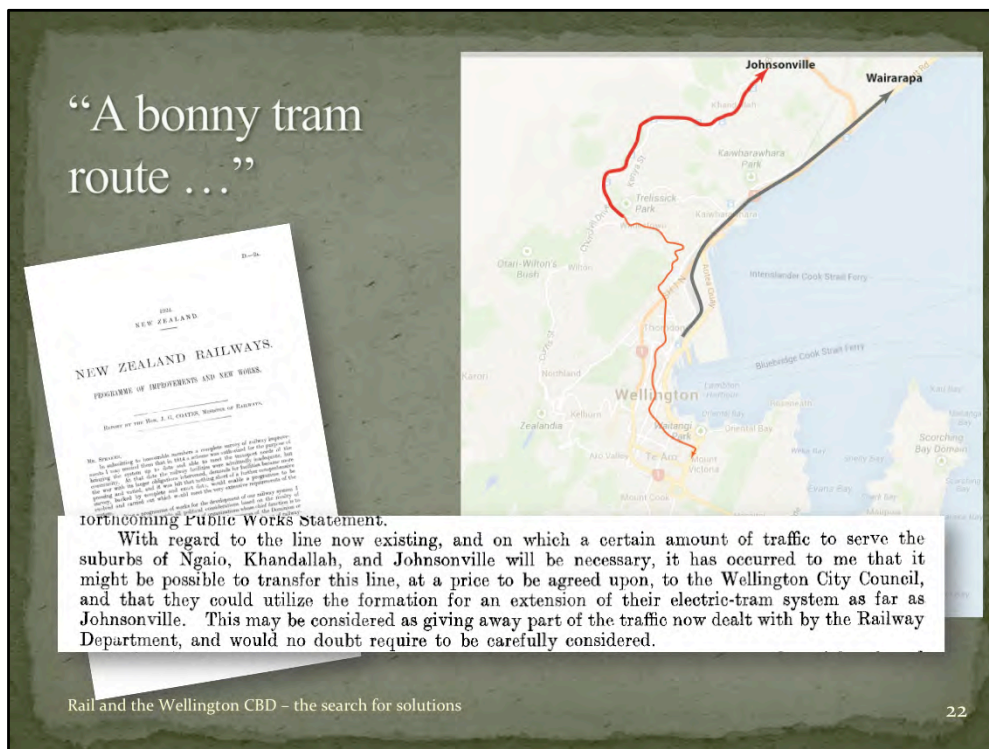
The big downside of the incompatible gauges became apparent two to three decades later.

In 1924 it was decided that the North Island Main Trunk, which then operated over the current motorway route between Johnsonville and Tawa, would be deviated into two long double-track tunnels south of Tawa Flat.

By then substantial settlement of the northern suburbs – Ngaio, Khandallah and Johnsonville – had started.

Public transport access to these suburbs was via the Main Trunk railway.

When the deviation opened, some provision for continued local commuting would have to be made.



When he announced the new deviation, the Minister of Railways endorsed a suggestion by Engineer in Chief FW Furkert that the steep and winding line up to Johnsonville should become part of the Wellington tramway system.

The Evening Post said editorially in 1931 that “... *the rail track, unsatisfactory from a railroad point of view would make a bonny tram route ...*”.

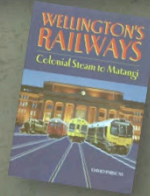
This obvious suggestion had one decisive bugbear: the cost of converting the railway to a different gauge. This was additional to electrification and building new trams of adequate power and speed.

The Depression-era City Council just couldn’t surmount that financial obstacle.

## Johnsonville electrification opening 1938



A southward-looking view of Johnsonville Station on the first day of electric operations.  
(Roland Searle, Bill Prebble collection)



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**Souvenir  
Time-Table**  
Wellington - Ngāro - Khandallah -  
Johnsonville

### Multiple-Unit Electric Train and Road Motor Services

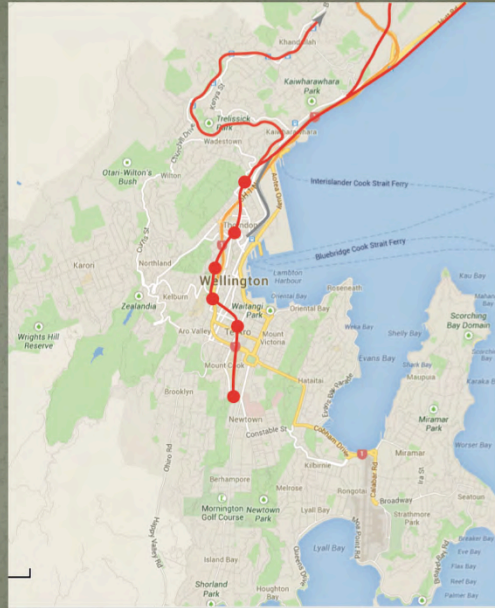
Railway Time-table operating from 4th July, 1938  
Bus Time-table operating from 1st August, 1938

So the railways electrified the Johnsonville Line in 1938, using English Electric multiple units.

It was a side project of the electrification to Paekakariki, which finally opened in 1940.

The new service established the heavy rail technical parameters for the whole of the suburban rail system.

## 1959: MOW & NZR subway proposal



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By the late 1950s the city's CBD was starting to grow upwards.

In 1959, Ministry of Works planners proposed a southwards rail extension, to be built before the motorway.

The proposed rail extension route diverged from the existing railway near the present rail ferry terminal and was thence entirely in tunnel. It passed under the Hutt-Tinakori Rd junction, Parliament, The Terrace, Ghuznee St and Tasman St, terminating near the hospital.

A total of 6 subway stations would have been served. Courtenay Place was not included.



*“In fulfilling our obligations to the NRB, we, the Ministry of Works, had accepted as inevitable the growth in motor vehicle numbers and the necessity to provide for them. At the same time we recognised a need to aim at a **balance** between public and private transport facilities ...*

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Bruce Dallas, the MOW District Civil Engineer of the time, showed a balanced perspective which has not been much in evidence recently:

*“In fulfilling our obligations to the NRB, we, the Ministry of Works, had accepted as inevitable the growth in motor vehicle numbers and the necessity to provide for them. At the same time we recognised a need to aim at a balance between public and private transport facilities*

*...the car, a very convenient mode of transport is, at the same time, very inefficient and it requires an inordinate amount of road space in relation to people transported per hour. ... The cost of the rail subway was assessed at up to 20% below the cost of constructing the Motorway ”.*

D Bruce Dallas 'Wellington Urban Motorway, Concepts and Inception 1958 – 1960s, The Haunting Spectre of the Might-Have-Been' paper presented to the annual conference of the Institution of Professional Engineers, 1992

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*“It was assumed that the availability of this utility, with 6 stations between Thorndon and the terminus, including 2 serving the CBD, would tend to minimise rather than encourage the use of the private car and, apart from other consequential benefits, reduce demand on roading funds....*

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Bruce Dallas framed the proposal in strategic terms, foreseeing the potential of transit-orientated development:

*“It was assumed that the availability of this utility, with 6 stations between Thorndon and the terminus, including 2 serving the CBD, would tend to minimise rather than encourage the use of the private car and, apart from other consequential benefits, reduce demand on roading funds.*

*“One of the 1959/60 reasons for the railway extension preceding Motorway construction related to land use. Much of the area it would serve was ripe for re-development. Shopping centres and office blocks could have been built close to or above railway stations. Leaving an extension decision to the indefinite future meant re-development was likely to follow a different pattern and the ready-made business that NZR would badly need would be dispersed elsewhere.”*

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And his foresight regarding the relationship between transport and land use puts 21<sup>st</sup> century planners to shame.

*“One of the 1959/60 reasons for the railway extension preceding Motorway construction related to land use. Much of the area it would serve was ripe for re-development. Shopping centres and office blocks could have been built close to or above railway stations. Leaving an extension decision to the indefinite future meant re-development was likely to follow a different pattern and the ready-made business that NZR would badly need would be dispersed elsewhere.”*

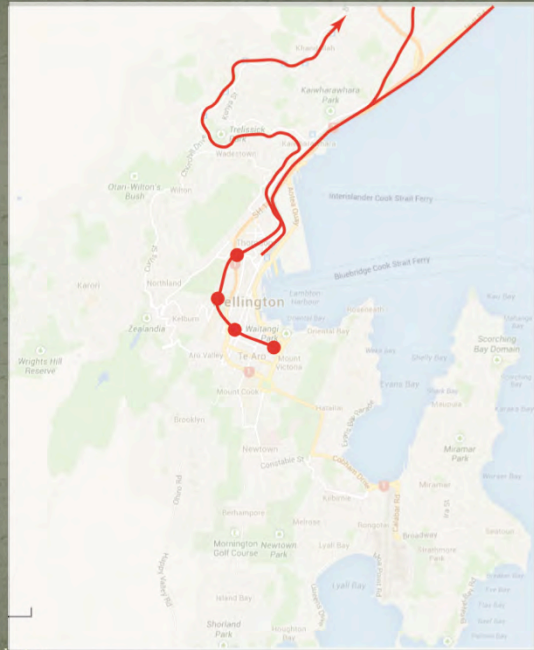
Ibid



## 1963 De Leuw Cather

*"The location of the  
Railway Station on  
the northern edge of  
the CBD is a major  
deterrent to rail use  
in comparison with  
the use of a car,  
particularly for  
shorter distance  
travellers."*

*De Leuw Cather 1963*



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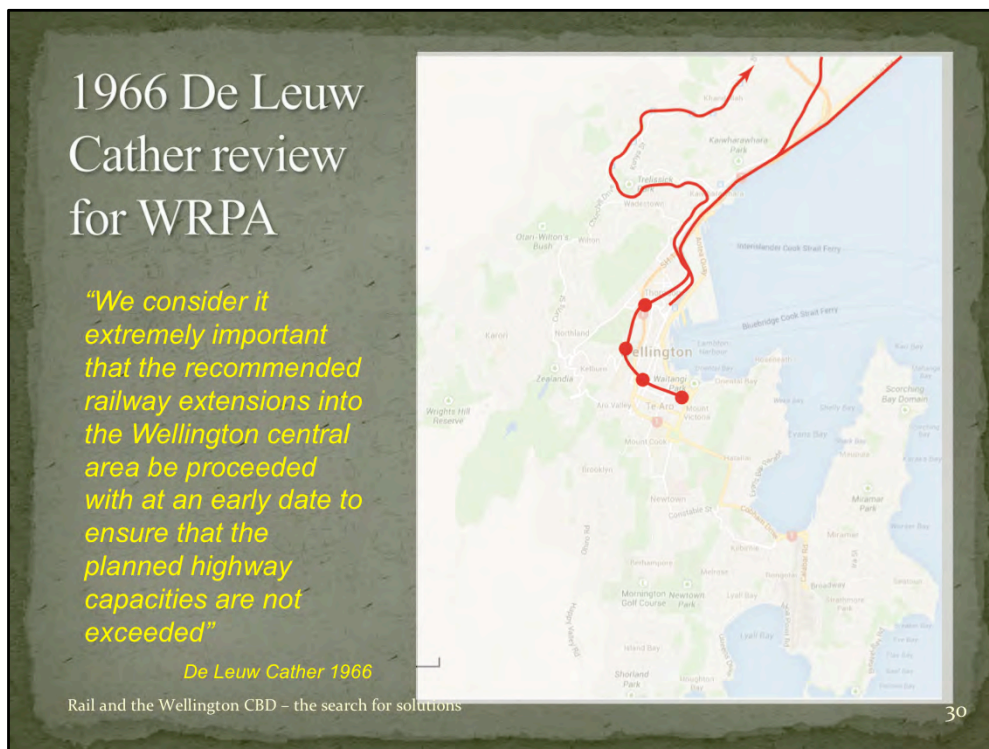
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In 1963 the MOW transport plan was reviewed by San Francisco consultants De Leuw Cather, who were also doing a similar study in Auckland.

The De Leuw Cather report was delivered in August 1963. As regards the motorway, it generally endorsed the 1959 MOW plan.

However, for the rail subway, it suggested a shorter, essentially Golden Mile, route including four stations and terminating at Courtenay Place.

The reason for the shorter route suggestion was partly cost: 11M pounds instead of 16M, but also a factor was the greater potential of Courtenay Place as a hub.



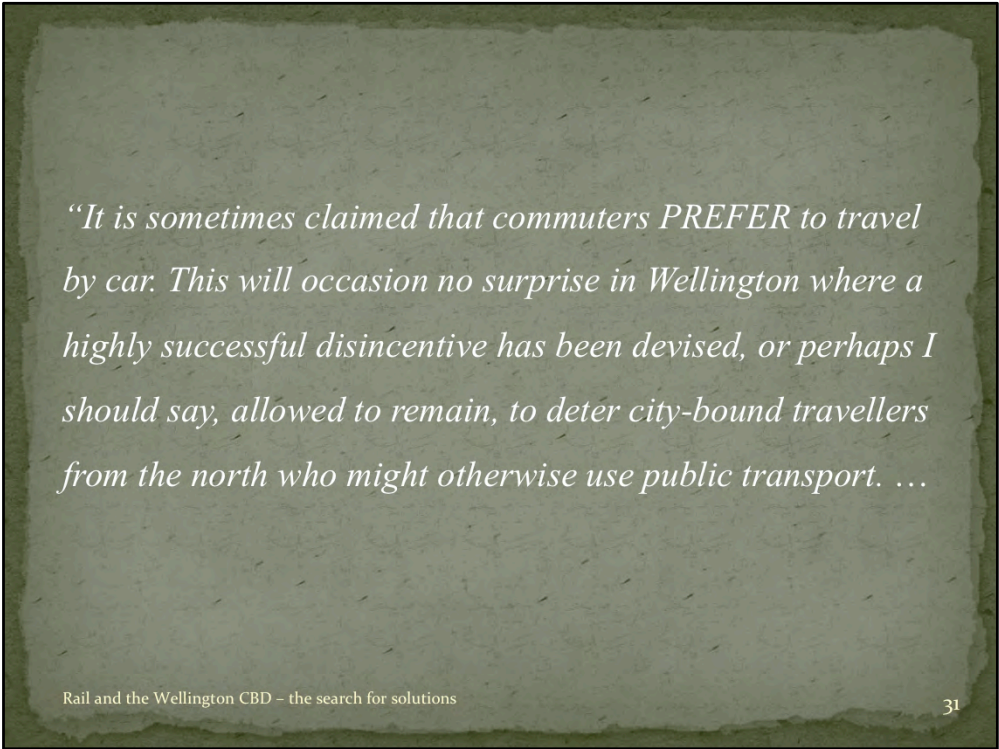
Three years later De Leuw Cather were invited back, this time by the Wellington Regional Planning Authority (forerunners of the GWRC) to submit a 'final' report on what by then had become the Wellington Regional Transport Study.

They had discovered a new urgency for the subway:

*"We consider it extremely important that the recommended railway extension into the Wellington central area be proceeded with at an early date to ensure that the planned highway capacities will not be exceeded."*

The Wellington City Council incorporated protection for the proposed underground route in the 1965 District Plan and followed up with an in-house study of the local effects of the proposed subway stations in 1970.

But that was the last official word on the subway and the motorway proceeded.



*“It is sometimes claimed that commuters PREFER to travel by car. This will occasion no surprise in Wellington where a highly successful disincentive has been devised, or perhaps I should say, allowed to remain, to deter city-bound travellers from the north who might otherwise use public transport. ...*

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The need for a rail link remains, though, for reasons described by Bruce Dallas in 1992:

*“It is sometimes claimed that commuters PREFER to travel by car. This will occasion no surprise in Wellington where a highly successful disincentive has been devised, or perhaps I should say, allowed to remain, to deter city-bound travellers from the north who might otherwise use public transport.*

*“Having collected passengers along three branch lines, NZR dumps them out on the fringe of the CBD. Thence, they have become resigned to trudging off along the Quays in the bracing climate or, via grim and draughty subways and stairways, wait their turn on an open pavement to pay another fare and trundle at 10 km/h to a destination in the City centre or beyond.*

Dallas, IPENZ, 1992

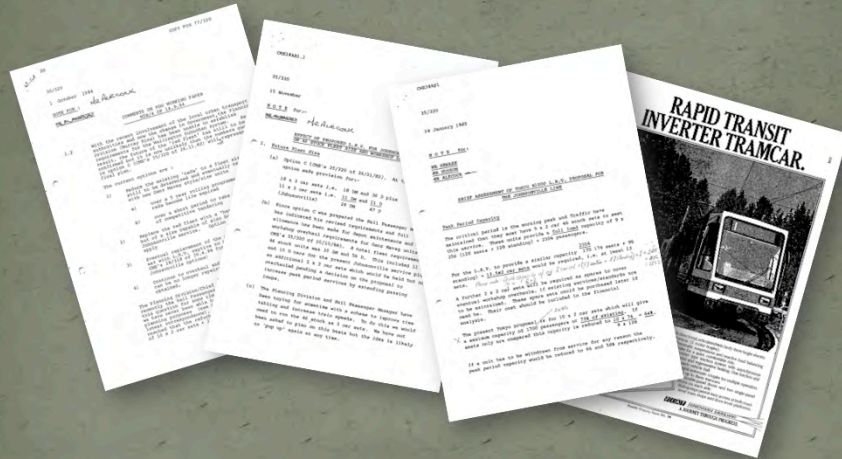
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Mr Dallas' comment to the engineers in 1992 seems pretty self-evident, doesn't it?



## 1980s – NZR tram investigations



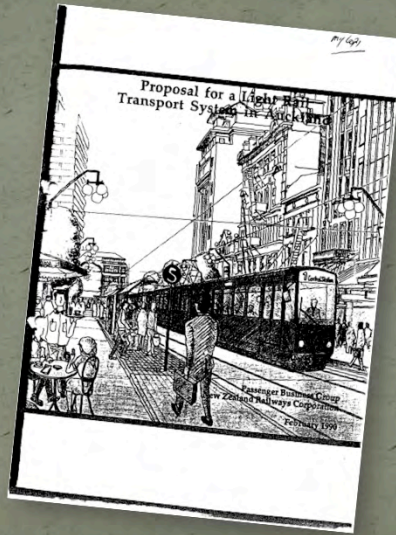
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In the 1980s and early 90s NZ Railways made intensive investigations of the use of modern trams as replacements for the aging English Electric units on the Johnsonville Line.

Dr Francis Small, the CEO of NZ Rail, even went as far as to say that the future of the whole Wellington rail system was light rail.

## 1990 – NZRC Auckland LRT (tram-train) proposal



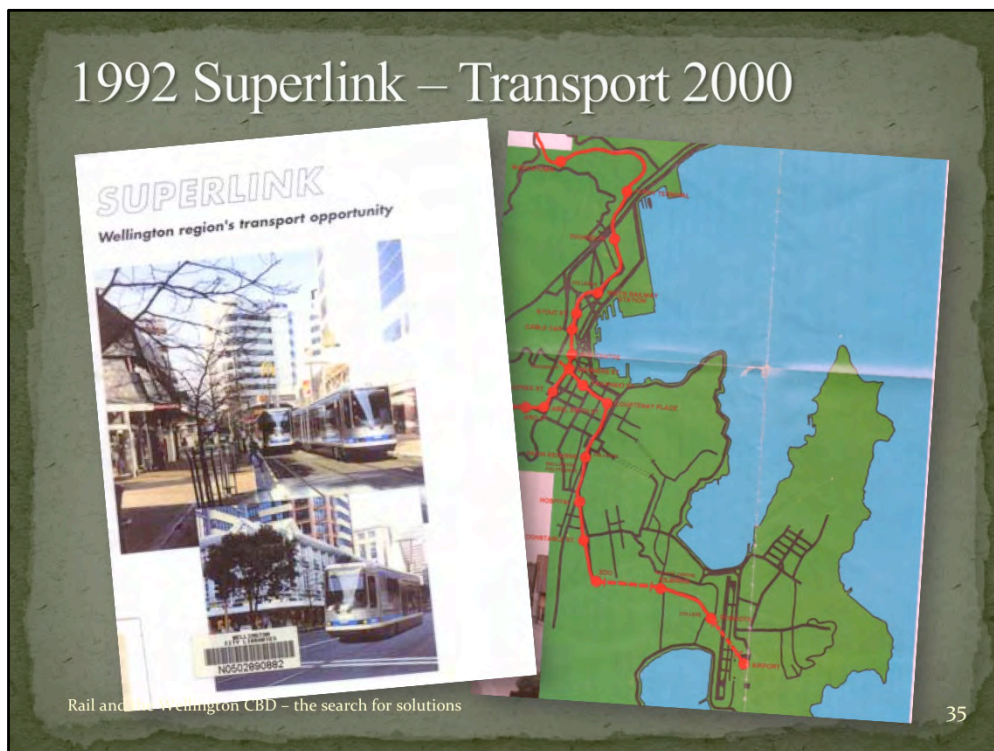
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NZ Rail was also involved in detailed light rail plans for Auckland at the time.

All these plans were actually for what we now call tram-train, because normal rail freight and long-distance passenger trains were still intended to use the same tracks in both Auckland and Wellington.

## 1992 Superlink – Transport 2000



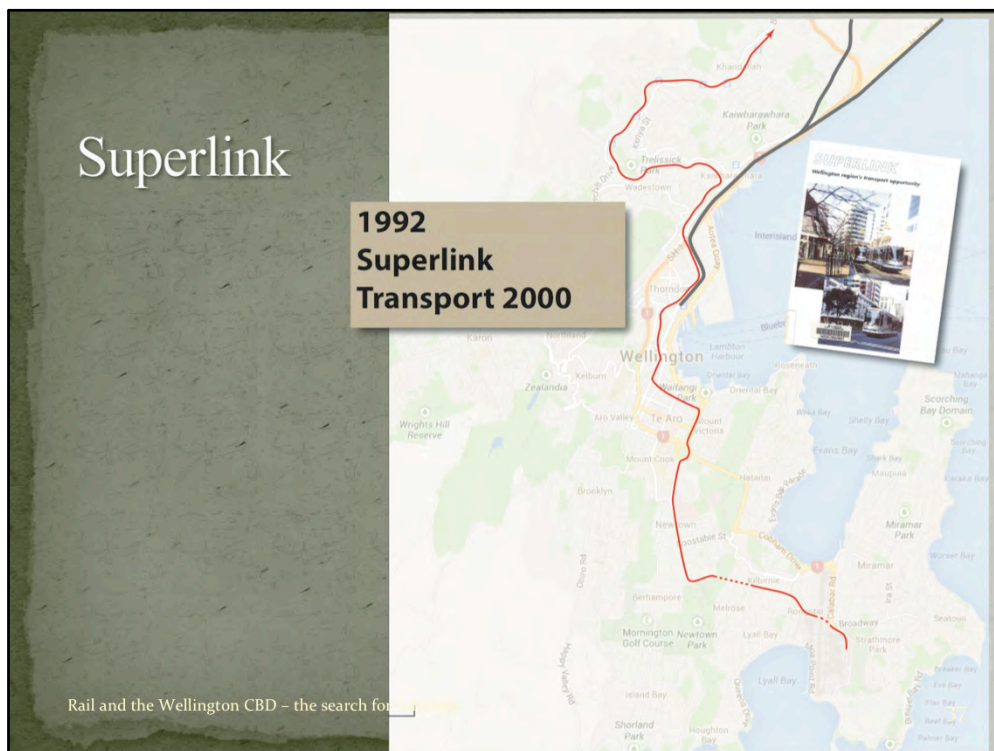
Meanwhile, various individuals and community groups were making suggestions and submissions to the Regional and City Councils stressing the potential of light rail transit (LRT) following its revival in North America and Europe.

The most detailed and publicised of these civil society attempts to advance rail access was Transport 2000's Superlink proposal in 1992 which was promulgated in booklet and pamphlet form ...



... and on the front page of the Evening Post.





It proposed the conversion of the Johnsonville line to light rail and a line along the Golden Mile and a future extension to Wellington International Airport, via Newtown and a new tunnel from the Zoo to Kilbirnie.

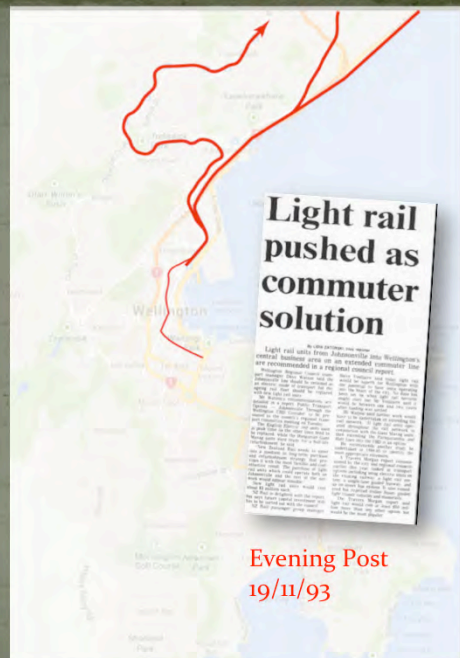
## 1993 – WRC light rail plan ...

"... A visionary expansion of the untidy existing system could see light rail run on from the northern line at the station along Stout St, the Lambton Quay bus lanes to Willis St, and through Manners Mall, with a terminus in Courtenay Place. A long-term expansion to the airport would make real sense.

...

The light rail proposal is a sensible option and needs now to be propelled to the front of the transport agenda."

**Evening Post editorial 23/11/93**

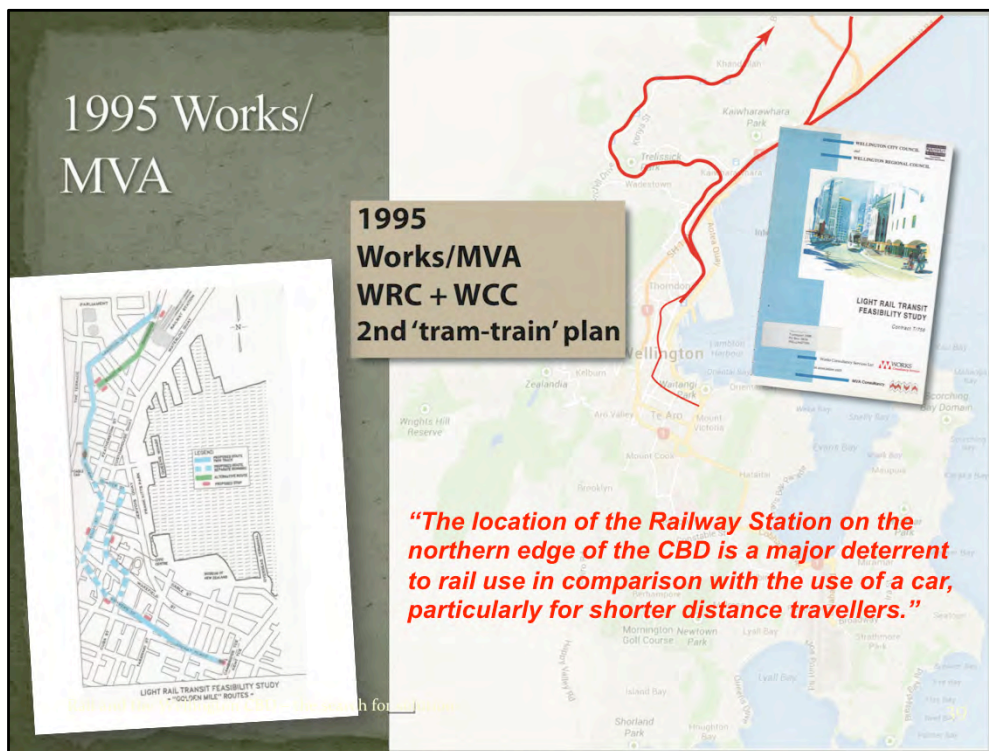


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The Superlink proposal was followed by the November 1993 announcement that the Regional Council and NZ Rail were in positive discussions to convert the Johnsonville Line to light rail and extend it through the city.

The Evening Post greeted this with an enthusiastic editorial.



That was followed by the landmark study which provided the model for light rail in Wellington: the Works/MVA report of 1995, commissioned jointly by the City and Regional councils.

The report proposed a light rail route from WRS along the Golden Mile to Courtenay Place.

It would be an extension of all suburban rail lines, sharing tracks with heavy rail, so was also in effect a tram-train proposal.

Note how, once again, the lack of rail penetration of the CBD was highlighted as the problem.

*"The Wellington proposal to re-equip the Johnsonville line with light rail vehicles and to connect through to the airport was seen to be an excellent plan. The Johnsonville units were very aged, a matter which had to be addressed very soon. NZRL would like to take part in any plan such as light rail developments."*

Summary of a speech by Ed Burkhardt to the Chartered Institute of Transport in Wellington,  
14 February 1995

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Even the new private owners of TranzRail approved:

*"The Wellington proposal to re-equip the Johnsonville line with light rail vehicles and to connect through to the airport was seen to be an excellent plan. The Johnsonville units were very aged, a matter which had to be addressed very soon. NZRL would like to take part in any plan such as light rail developments."*

(Speech by Ed Burkhardt to the Chartered Institute of Transport in Wellington 14 February 1995)



## WCC Waterfront tramway 1993+

from lust and temptation (Mandy overseas. *EP 10/5/14*)

### Trams smart thinking

Plans to have trams trundling along Wellington streets and the waterfront from next year mark a welcome return to the city for a transport system no amount of modernist thinking should have banished in the first place. They were driven from Wellington streets by a perceived need for the city to expand its less labour-intensive bus fleet, by changes in commuter traffic patterns — more people could afford cars — and by the fear modernisation would bring a massive economic burden to the city. Lambton Harbour Management chose an auspicious week in which to announce its \$3 million plan — it was 30 years to the week when the last tram ran in this city.

But LHM's plan to ride the heritage bandwagon makes more sense than that mere indulgence in nostalgia, because abroad trams are making a comeback.

The late Saul Goldsmith would have approved the LHM plan warmly. The former city councillor campaigned with passion for the return of trams and fought mayoralty election campaigns with the slogan Bring Back the Trams. But his was a lonely and futile battle.

Removal of the trams gutted the city of one of its traditions and replaced them with the thunder and fumes of diesel buses. Trams did have shortcomings — older versions were draughty nightmares in winter — but later types, notably the single saloon Fiducias, were the last thing in comfort.

Track extensions to the latest proposal, through Manners and Willis streets to complete a circuit, would provide the kind of tonic retailers in the southern end of the city need urgently. Lambton Harbour is to be commended for its positive thinking. Fez, plez!

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An associated plan by the City Council, which nearly came to fruition was a heritage tramway, a la Christchurch, looping through the developing waterfront area and sharing light rail tracks down the Golden Mile.

on file

By LIDIA ZATORSKI  
Civic reporter

By LIDIA ZATORSKI  
Civic reporter

The first stage of tramline construction, from Lambton Quay to Queens Wharf, could be completed by September 1995 — in time for the opening of the Queens Wharf Retail and Leisure Complex.

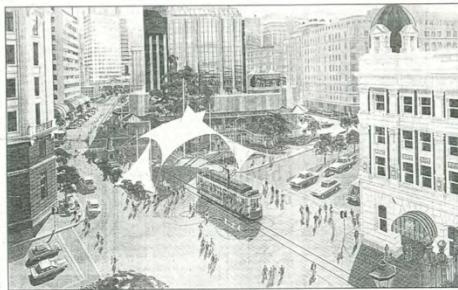
The tramline will eventually be extended to Taranaki Street with stops at the new Events Centre, rowing club buildings, and the new Museum of New Zealand.

Work is now under way on final costs for the project, the units to be used and options for extending the route to the Railway Station in future.

Some of the seven trams kept by the Wellington Tramway Museum may be used for the new service.

Council city promotion and development committee chairman Cr Kerry Prendergast said the

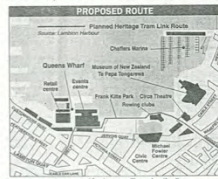
tram was another important step in developing the character of In-



Rex Nicholls - trackless plan.

A trackless tram service through the city to Manners and Cuba malls is also planned. Developer and city councillor Rex Nicholls said last week the project needed special consents before it was granted permission to pass through the malls.

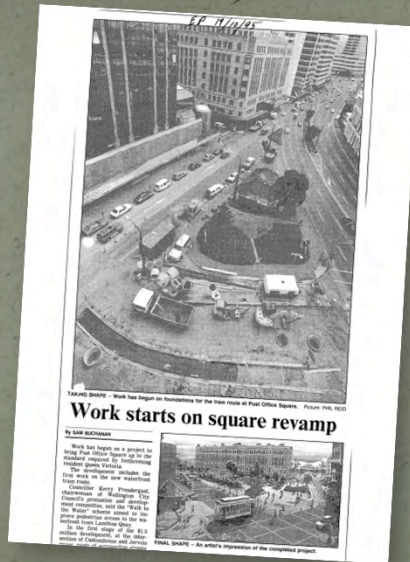
Trucks have been laid in Christchurch for a tram service from Cathedral Square to the old university building, to start later this year.



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## 1995 – tram track foundation laid in PO Square



Rail and the Wellington CBD – the search for solutions

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Some track foundation work was actually done in 1995.

## “It’s elementary”...Dr Watson

“We always came to the same conclusion. Light rail as a stand alone service ( Station to airport ) was not a winner. We needed to extend to Johnsonville or even the Hutt. We looked at operating standard units and light rail on the same tracks and then allowing the light rail to extend into the City. **We saw no problem with this.**”

Dr David Watson, former Transport Manager, Wellington Regional Council,  
email to Dr Neil Douglas 6/3/15

The manager in charge of transport planning in the Wellington Regional Council in the 1990s made this statement about their research at the time.



## 1999 Regional LTS ... “Lack of CBD rail penetration”



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In 2000 the Hutt City Council commissioned a proposal from SKM, for light rail through central Lower Hutt linking the Melling Branch and the Waterloo interchange.

That link was also included in the 1999 Regional Land Transport Strategy which envisaged extensive deployment of tram-train throughout the region in the 2004-19 period.

“Lack of rail penetration of the CBD” was highlighted as a problem to be solved.

It even went as far as proposing light rail lines to Stokes Valley and Whitby.

## 2004 – the ‘Matangi Mistake’



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And then, within a short period, the consciousness of the need for a complete rail system and the long-term proposals contained in the 1999 strategy, vanished from the Regional Council mind.

Political change at the top of the council, and the ousting of Dr Watson as the transport manager, lay behind ‘lack of rail penetration’ as an issue being dropped from the agenda.

## 2006 – Johnsonville bus conversion proposed by B&CA

**YES TO THE BUSWAY**  
*seamless travel*

**Support Scenario 3**

Increasing numbers of North Wellington residents don't have easy access to rail services. They will not benefit from enhanced rail, or light rail on the Johnsonville line.

Public transport is paid for by everyone, used by everyone, so everyone should get the benefit of major improvements.

Only the Busway Scenario ensures better public transport for all North Wellington residents in the future.

**WHY YOU SHOULD SUPPORT THIS SCENARIO**

If you want public transport that delivers you:

- Once on once off
- Closer to home and closer to work
- Greater frequency and reliability
- New levels of comfort
- Bypass traffic congestion
- Access to the CBD

Then you've got to say **Yes to the Busway**. For full details go to [www.govt.nz](http://www.govt.nz)

You can tell them what you think online, or fill out this form and post to NWPTS, PO Box 11 646, Wellington.

**SCENARIO 3 – BUSWAY**

Convert the railway line into a guided busway. Services can start from Grenada Village, Glendowie, Churton Park, Paparangi and Newlands direct to Courtenay Place and beyond via the Busway.

A seamless service with no need to change your transport. Bypass Ngauranga Gorge congestion. Travel directly from home to your CBD destination and return via the Busway. Greater frequency of service and coach comfort. Affordable.

**SCENARIO 3 – LIGHT RAIL**

Replace existing trains with light rail and continue the line to Courtenay Place. You still need to walk/bustime to the railway station. Long and costly construction phase with big impact on general CBD traffic congestion. Very expensive.

**YES** I would like the Greater Wellington Regional Council and Wellington City Council to adopt **Scenario 3 the Busway** as the preferred option for North Wellington Public Transport.

Full Name: \_\_\_\_\_

Address: \_\_\_\_\_

Tel: \_\_\_\_\_

**YES TO THE BUSWAY**  
*seamless travel*

AUTHORISED BY THE  
BUS & COACH ASSOCIATION

Rail and the Wellington CBD – the search for solutions

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The last time the need for extending the rail spine into the CBD received central government support, rather than fatuous denial, was in 2006.

It arose from a crazy plan advanced by the Bus and Coach Association, obviously fronting for NZ Bus, to convert the Johnsonville line to an alternating-direction one-way busway.

This plan was supported by then-mayor Kerry Prendergast.

The promise was 'seamless travel', ignoring the fact that light rail as per the 1990s plans would provide that seamless travel far more effectively, and for all rail lines, not just Johnsonville.

# North Wellington PT Study

*not acceptable!*

**Comments**

Other scenarios considered

Decision making criteria

Stage two scenarios

What kind of public transport do you want to see?

greater WELLINGTON REGIONAL COUNCIL

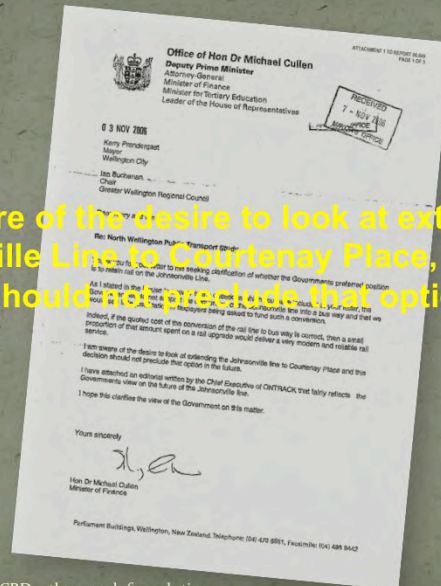
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This triggered a North Wellington Public Transport Study by the regional and city councils.



## The Cullen busway kibosh 3/11/06



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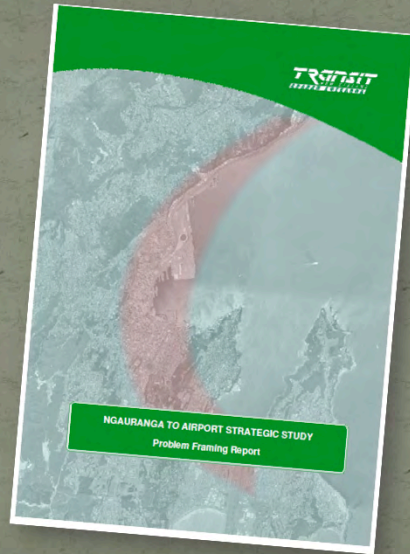
Fortunately, that was in the days when the rail infrastructure owner – ONTRACK – was prepared to advocate for the rail mode and fought back against the designs that the bus lobby had on the line.

Plus the Government of the day supported rail.

The responsible minister, Dr Michael Cullen, wrote to the councils saying that the line was going to remain a railway and that was that.

His hint about the future development of the line was studiously ignored.

## 2007 – Ngauranga – Airport (N2A) study

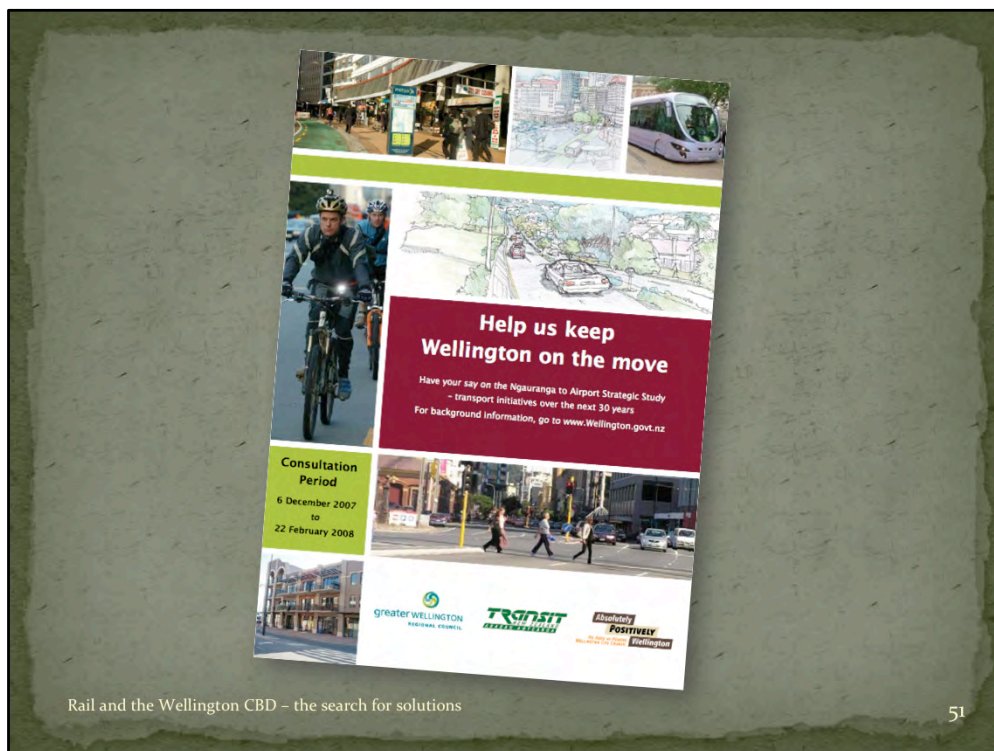


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The following year a study of the transport corridor from the Ngauranga merge to the airport – the Wellington end of SH1, essentially – got underway.

It was led by the highways agency but, thanks to the developing policies of the Government of the day, gave more lip service to sustainability than has been permitted in recent years.



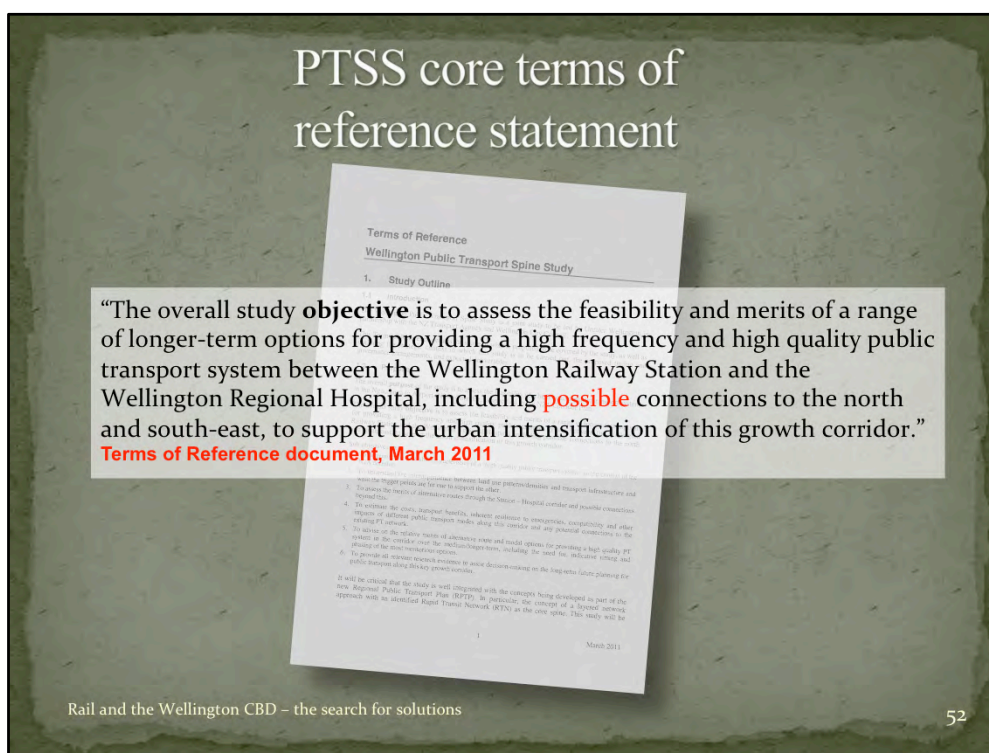
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The graphics on the cover of the consultation document were ominous, though – only rubber-tired vehicles were apparently envisaged to “keep Wellington on the move”!

In the event, when the study finally reported in 2009 it only covered roading issues, splitting the question of public transport off into a separate study promised for the immediate future.

It did, however, note that the probable cost of light rail from the Railway Station to the Hospital would be in the order of \$140M – about right for a line built as an extension and not requiring a new storage and maintenance depot.



By then, of course, the central Government had changed and highway enthusiast Fran Wilde had become the highly dominant chair of the regional council.

Nothing happened for two years, until (perhaps goaded by the election of (then) light rail advocate Celia Wade-Brown as Mayor of Wellington in October 2010) the GWRC issued a scope document for a Public Transport Spine Study in January 2011.

The objective for the study, funded by NZTA and managed by the Greater Wellington Regional Council, distilled down to this:

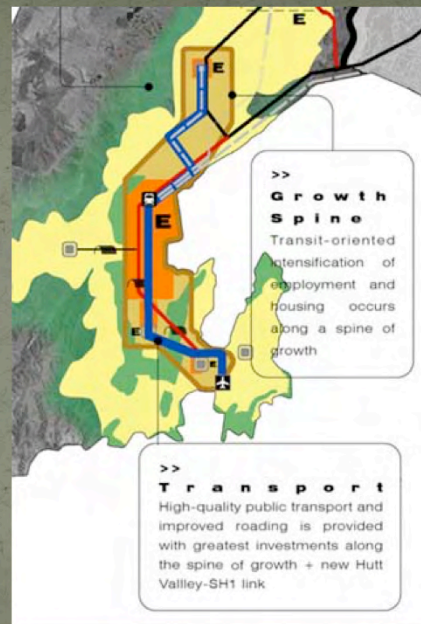
*The overall study objective is to assess the feasibility and merits of a range of longer-term options for providing a high frequency and high quality public transport system between the Wellington Railway Station and the Wellington Regional Hospital, including **possible** connections to the north and south-east, to support the urban intensification of this growth corridor."*

Note how the public transport spine is deemed to extend only from the Railway Station to the Hospital, and that the rail system which is actually greater Wellington's main public transport provider is reduced to an unspecified "possible connection".

Contrast that with the N2A study's coverage of the state highway competitor to public transport, which was continuous throughout the corridor.



## WCC Growth Spine strategy: transit-oriented development corridor



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The PT Spine Study was allegedly meant to support the City Council's long-established Growth Spine planning concept, a visionary city-wide transit-oriented development around a **seamless** high-quality PT spine – almost certainly light rail – between Johnsonville and the Airport. It is the blue line in the drawing.

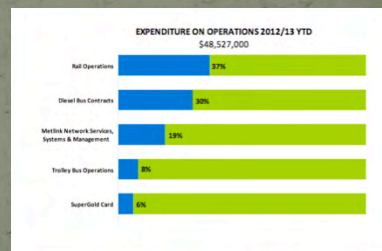
Despite claiming to support the Growth Spine concept, the PT Spine Study has actually munted it.

## The spine is steel

- Rail system is the PT “trunk” for 75% of the metro population
- Carries 70% of the total PT passenger/km
- Covers 92% of the SH1+2 transport corridor



Last available pax/km stats



GWRC PT Opex to 31/12/12

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It is somewhat mind-boggling that rail’s role as the PT spine could be denied.

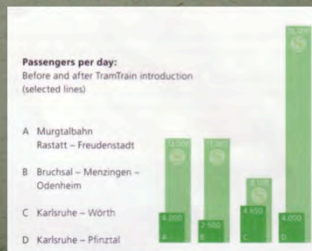
It serves 75% of the greater Wellington population, carries 70% of the total passenger km, for about 37% of the total subsidy cost, and geographically covers 92% of the narrow corridors shared with State Highways 1 and 2.

## Through service is essential



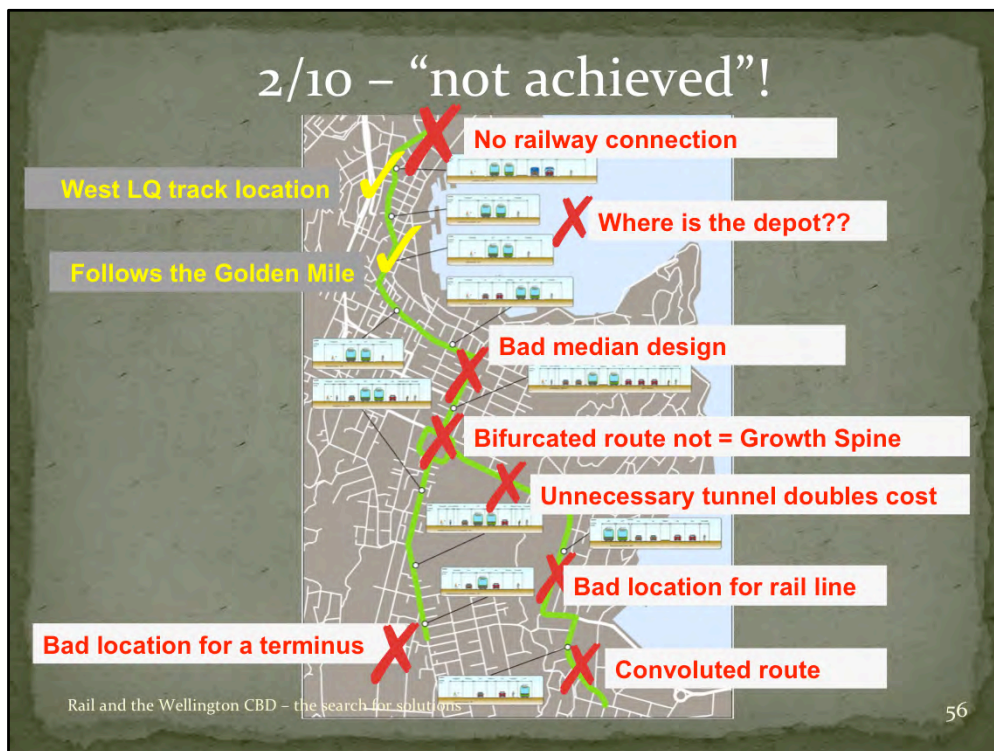
Factoid: introducing through tram-train services in Karlsruhe increased patronage by from 43% to 625%

Rail and the Wellington CBD – the search for solutions



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And it is obvious that a rail system discharging all its customers in a CBD-edge stub terminal is the least efficient and attractive mode of operation, as Bruce Dallas and all the previous studies had pointed out.



Hence the model of light rail they produced, which can only be described as a straw man, set up to be knocked down.

The study team postulated this design for modeling purposes.

The ticks and crosses are my estimation of what the study got right and wrong according to world best practice. It scores a dismal 20%.

Having declared that such an ill-designed and cost-bloated scenario represented ‘light rail’, it was easy to convince mayors and councilors to vote for what was branded as ‘bus rapid transit’.



“ ... the LRT option is very crudely dismissed through excessive costs and few benefits and the BRT option is highly inflated with benefits that cannot be justified from the literature. There is little science behind this study and a lot of politics as it appears to clear the way for motorway spending. I don't think I have seen a study quite so crudely apparent in its anti-rail politics... It should be dismissed.”

Prof Peter Newman, email 19/8/13

Rail and the Wellington CBD – the search for solutions



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There has been considerable adverse comment from environmentalists and transport experts and perhaps the most pertinent came from international sustainable cities guru and rail advocate Professor Peter Newman.

*“The light rail option is crudely dismissed through excessive costs and few benefits, while the BRT option is highly inflated with benefits that cannot be justified ... There is little science behind this study and a lot of politics as it appears to clear the way for motorway spending. I don't think I have seen a study quite so crudely apparent in its anti-rail politics. It should be dismissed.”*

Peter Newman, it should be noted, is the former Freemantle City Councillor whose advocacy in the 1970s reversed the intended closure of the Perth suburban rail system and led to revival and electrification of the Perth system.

## The search continues ...

The Douglas – Cockburn RLR proposal, Track & Signal, Summer 2014



Rail and the Wellington CBD – the search for solutions

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Because Wellington's rail system has not, in 138 years, achieved the basic CBD access feature that for all other systems is a starting point, the demand for light rail has not gone away.

One proposal was produced by Dr Neil Douglas, the author of the 1993 waterfront tramway study, in 2014.

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Rail and the Wellington CBD – the search for solutions

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The current Regional Council is in denial about there even being a problem, and has no plans for any further expansion of the rail system – in contrast to the vast expansion of highway capacity now going on.

My small contribution to combatting this is the publication of a free emailed PDF newsletter called KiwiTram. I am very happy to add new subscribers – just drop me a message from the email account you want to use as described on the screen.

It is now my pleasure to pass the podium on to Dr Neil Douglas, about whom you have heard so much.