
ORDINARY MEETING

OF

TRANSPORT AND URBAN DEVELOPMENT COMMITTEE

MINUTE ITEM ATTACHMENTS

Time: 9:15 am
Date: Thursday, 19 May 2016
Venue: Committee Room 1
Ground Floor, Council Offices
101 Wakefield Street
Wellington

Business

Page No.

1.4.2 Jeff Owens, Khandallah Residents Group

1. Jeff Owens | Khandallah Residents Group 2

**2.1 Oral Presentation | NZ Bus | Introduction of the Wrightspeed
Electric Vehicle Technology**

1. Introduction of Electric Vehicles of NZ Bus 7

Khandallah Residents Group
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Hutt Road cycle and traffic proposals

This document on behalf of the Khandallah Residents Group briefly responds to and comments on a Wellington City Council press release dated 13 May and associated report by council staff published [16 May] for the TUD meeting 19 May 2016 and recommends a path forward.

We wish to speak to this document at the TUD meeting on 19 May 2016

Summary

We consider that the consultation process and the resulting analysis and recommendations are very poorly developed and do not support the proposed changes.

Council analysis clearly shows that of the 5 or so documented cycle accidents per year, most involve northbound cyclists on the shared footpath, and most involve motor vehicles existing business premises.

In our view the proposed changes do very little to resolve the actual cause of accidents, and in many respects will exacerbate those issues.

Many respondents are against the changes to the roadway itself (T2 lane excluding southbound driver only vehicles from 7am to 9am weekdays and northbound in the evenings) and also parking vehicles in the roadway. These issues will impact particularly badly on all motorists using Onslow Road and on the safety of commuter cyclists.

Both the owners and users of businesses along the Hutt Road object to removal of parking.

Our conclusions are as follows;

1. We accept a modest amount of funds spent on relocating poles and lights, and on improving the surface of the footpath may improve conditions for cyclists who choose to use the footpath, but that other aspects of the changes will decrease and not increase safety of cyclists and all other road users.
2. We consider a better use of funds would be to narrow the footpath, retain parking, and use the space released to allow for a one way southbound cycle lane to the left of and not separated from southbound roadway, and a similar northbound cycle lane on the other side of the road.
3. We recommend that the Ngaio gorge/spotlight intersection be converted to a proper four way controlled intersection.
4. We recommend that all other aspects of the proposals (T2 lane and removal of parking for workers) be removed entirely from this project and that a completely fresh consultation process be initiated should these matters wished to be progressed further in the future, including our conclusions in point 2 and 3 above.

5. Finally, Council representatives need to acknowledge and accept that they did not appropriately engage and consult with all affected parties to their proposals. Failure to do so, will not enable 'lessons learned' to be applied in future engagement and consultations

Further comment is set out in the attached appendix



Jeff Owens

Khandallah Residents Group

17 May 2016 | 11:51:14 AM NZST

Appendix

Lack of Council engagement

Some Cycle groups were contacted and made aware of the proposals prior to any formal consultation by Council Officers. However a large group of residents who are significantly affected live in Khandallah and Ngaio, and commute by bicycle, car or bus down Onslow Road, Bridle path or Ngaio Gorge. Cyclists and residents groups in these affected areas were not specifically contacted. Neither were they contacted at the beginning of the consultation process either by the council officers OR by their elected council representatives. We have had minimal contact from our own councillors (Onslow Western Ward).

Limited Formal consultation

Council offered an opportunity to comment on proposals during a short window from 16 March to 13 April, and at the last minute extended to 16 April.

Many residents affected were unaware of the proposals and were thus denied the opportunity to participate.

The consultation document allowed respondents to say 'yes' they agree with proposals, agree but with comments, disagree, or don't know. The document explicitly denied the opportunity to disagree but comment, apart from a general comment at the end.

That constraint is reflected in the latest report to the TUD meeting 19 May which only reports on comments from those who support the proposal but **not** from others who don't agree with the various proposals, as the 'general comments' section was the only place that those who disagree were able to comment (and it is this section that is not reported back on).

Result of consultation

Submissions and comments have been contributed behind the scenes before official consultation, during the official consultation period, and also afterwards.

As documented previously, we and many other Wellington ratepayers consider that the consultation process and subsequent analysis of responses was woefully inadequate:

- The consultation period was poorly advertised and very short
- Both the process and the results were skewed heavily in favour of a category of cyclists who don't typically use motor vehicles (43% identify themselves as using bicycles as their main mode of transport)
- Of the 990 responses received, around 40% should be discarded as being anonymous
- Of the balance, less than half are from respondents who identify themselves as being from those areas who will typically use the Hutt Road – Khandallah, Ngaio, Petone and north, Johnsonville and north
- On that basis the valid responses are so few as to be statistically meaningless
- Council analysis of comments clearly only includes comments from those who voted in favour of the proposals, including all the anonymous responses

Despite our drawing this to Council attention, staff continue to tout the survey as overwhelmingly supporting their proposals.

“Staged” approach

The press release www.scoop.co.nz/stories/AK1605/S00393/staged-approach-recommended-for-building-hutt-road-cycleway.htm states:

In response to feedback received during the public consultation and from the NZ Transport Agency, Council officers are recommending that most of the work goes ahead as planned. However the relocation of parking spaces onto Hutt Road and the T2 transit lane proposals would be potentially implemented at a later date, to allow further investigation.

We cautiously welcome the council proposal to take a staged approach to the proposals and allow for further analysis (subject to the analysis being unbiased and of sound analytical quality).

The poor quality consultation, and analysis of submissions and data to date, has left us gravely concerned that the proposals still remain based on faulty data and faulty interpretation of that data. This is compounded by the lack of genuine engagement with all affected stakeholders and a very skewed consultation process, and that Council may intend proceeding anyway on the original proposal (albeit in a staged approach).

In our view there are other options that still need to be examined and debated such as allowing for a cycle lane on both sides of the road (see summary above).

However such a major decision needs to be based on proper proactive engagement and not just driven by a strident few, and following on a full investigation, which in our view has NOT taken place to date.

Other observations

1. Location of route

The summary at page 1 states: Numerous studies have confirmed that the best location at this time for a route [for cycling between Ngauranga and Bunny Street] is along the existing Hutt Road corridor from Ngauranga to Aotea Quay, at which point there are options available for the route. We comment: this is the ONLY route!

Other related plans were only mentioned briefly and then discarded without being put to the public

2. Phased approach

The summary at page 1 recommends taking a ‘phased approach’ to the rollout subject to approval from the NZ Transport Agency’s planning and investment team. We are concerned that this simply means some delays but still carrying on with the existing proposals including a T2 lane southbound from 7am to 9am Monday to Friday and otherwise parking after 9am parking on the same lane.

3. Safety audit

The summary states construction will be subject to a safety audit and officers being able to demonstrate how safety concerns have been addressed. We note that the Island Bay safety audit still hasn’t been completed (perhaps even commenced) which leaves no opportunity for lessons learned to be applied to the Hutt corridor.

4. Specific implementation

The summary at agenda page 55 recommends the TUD agrees to the phased implementation of transport improvements to the Hutt Road as described in this report as specifically referred to in paragraphs 24(a) and 24(q). We assume this refers to phased implementation items 28(a) Remove and relocate the light poles and other infrastructure from the current shared path and 28(q) [Implement improved bus priority]. We are concerned that these remain simply first steps in a predetermined intention of implementing the rest

5. History of cycle accidents

Background information at page 57 notes 26 cycle accidents on the Hutt road between 2009 and 2013 (5 per year) and notes that most happen at intersections with streets and driveways and also northbound 'wrong way' cyclists, i.e., cyclists who approach motorists exiting businesses from their right. There is no comparison against other cycle routes and if this is indeed a priority area. In our view the proposals do little to address those issues.

6. Expected growth in demand

Discussion notes at page 58 show that the growth in demand for cycling on this route is strongly linked to the completion of the Melling to CBD cycle route and it is likely to be 4-5 years before completion. In our view the bulk of expenditure on Ngauranga to Aotea should be delayed as well

7. Statistical

analysis

Council officers claim at page 65 and elsewhere that 43% (432) of the 990 respondents approved the changes.

When broken down by suburb, staff only analysed 694 responses. Even eliminating all the anonymous responses (210) leaves the count well short

The 'yes' responses by suburb add up to 277, again short of the 432 that council claim were positive.

It is apparent that Council have chosen to take into account the 210 responses from 'other' suburbs, many of which were anonymous, but not take into account named respondents from suburbs not listed in the summary, eg 12 Crofton downs, 18 Tawa, 18 Wadestown etc

This breakdown is casts further doubt on council analysis

Other Options to consider

In our view the needs of all road users including cyclists and motorists may be better met by **narrowing** the footpath to allow for cycle lanes on BOTH sides of the road, eliminating the need to remove parking, block one southbound lane for much of the day, and have a dangerous two way cycle lane. By Council own statistics 73% of accidents involving cyclists being hit by vehicles entering the Hutt Road from driveways or roads to the south side involved cyclists heading north. Our proposal would mean that motorists exiting businesses would need to check for cyclists in a similar place to where they also check for vehicles. We strongly recommend that this option be investigated.



Introduction of Electric Vehicles by NZ Bus

Zane Fulljames Chief Executive Officer





NZ Bus



NZ Bus

A partnering business with scale, commitment and innovation

NZ Bus primary operations are in Auckland and Wellington

- 60m pax trips, \$230m revenue, \$40m EBITDAF
- **Auckland** 695 buses ~ 62% market share; **Wellington** 373 buses ~ 75% market share;
- 2,000 staff, including ~1,650 operators,
- Operating from 17 strategically placed sites in Auckland and Wellington

NZ Bus has demonstrated its commitment to the industry and its partnerships through a substantial programme of capital investment and innovation.





Market Trends

PT Megatrends

Growth drivers continue while technology development are becoming the dominant decision influencers

Modes and Technology

- Light Rail 
- Social Transport 
- Electric Vehicles 
- Driverless Vehicles 



Strength of bus incumbency is weakened by govt focus on broader options

Environmental

- Global warming 
- Carbon pricing 
- Emissions standards 



Increased demand, but with tighter emissions standards

Demand

- Rise of mobility 
- Congestion 

Continued growth in public transport demand

Regulatory

- Contracting models 
- Privatisation 

Evolving contracting models in mature markets

Consolidation

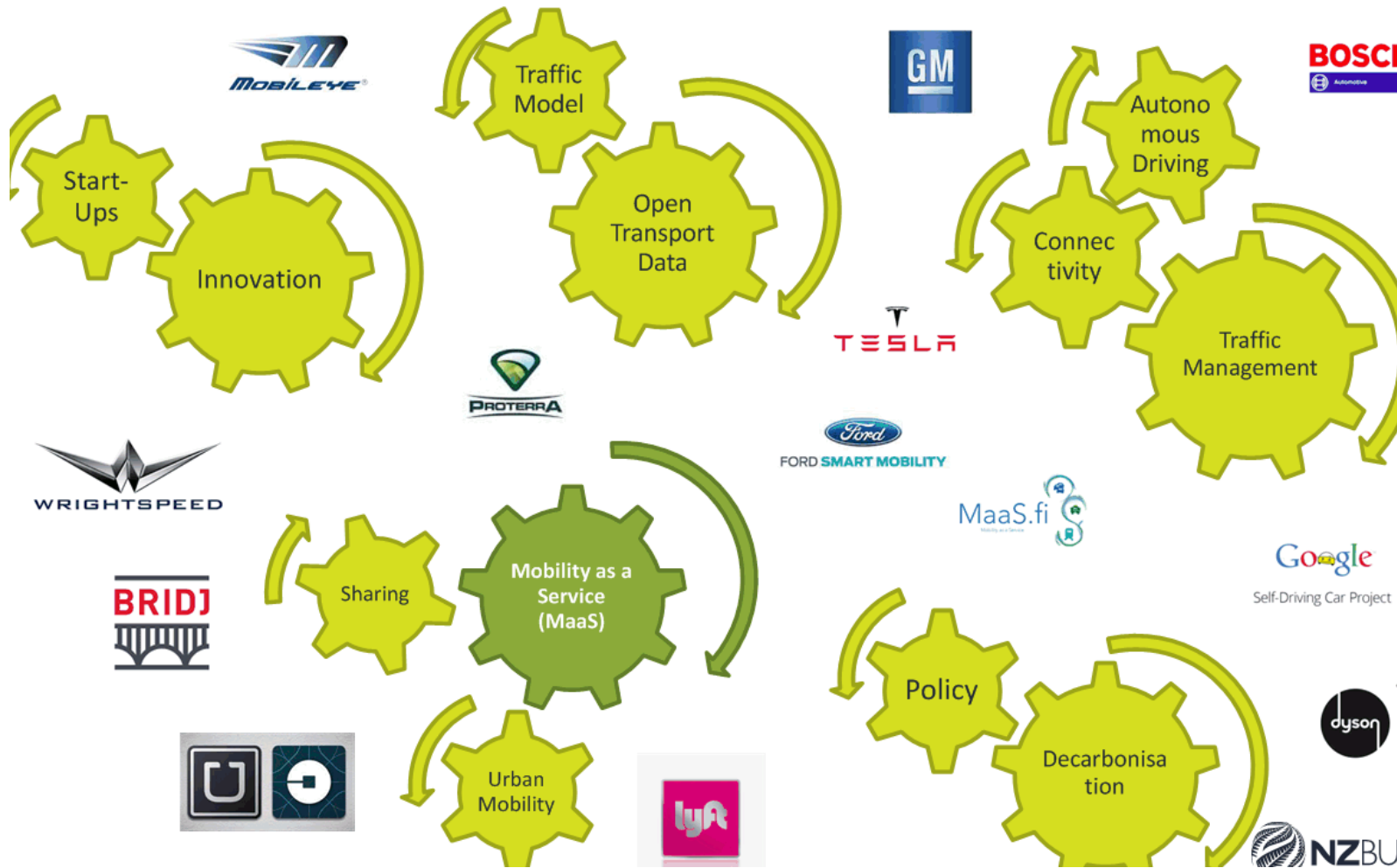
- Global expansion 
- Regional consolidation 

Big players get bigger, smaller players get acquired



Future Market Elements

Market forces on a number of fronts will lead to Mobility as a Service





Urban Diesel Bus Fleet

Introduction – Diesel Fleet in NZ



Councils and Auckland Transport set sustainability objectives and target emission reductions.

Road transportation makes up a significant % of **emissions** and while buses make up a small % of vehicle km travelled relative to private cars, converting buses to electric will contribute to emission reductions directly and through mode shift by making public transport more attractive relative to cars.

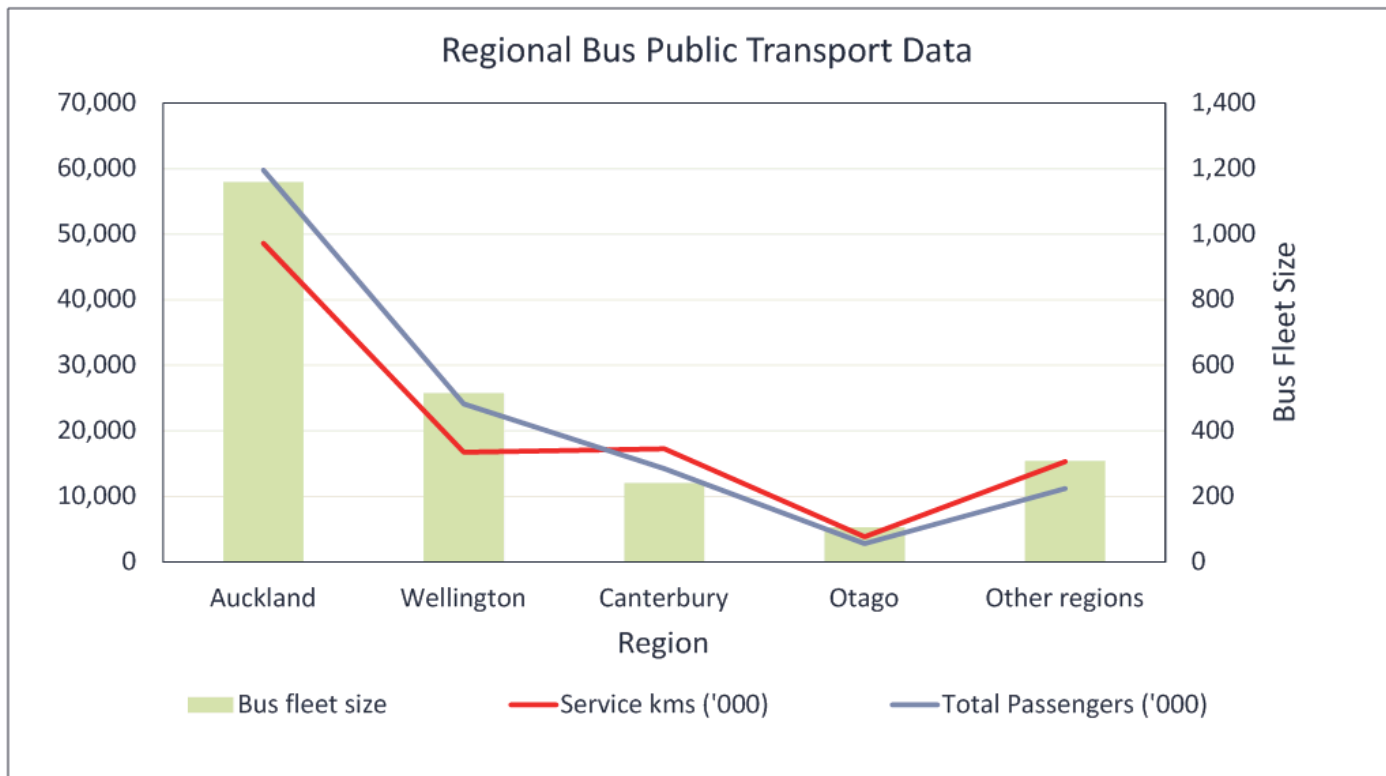
Nationally, 9,500 buses burn 104m litres of diesel, while in Auckland and Wellington the urban fleet currently burns around 28 million litres, emitting approximately 117,000 tonnes of carbon dioxide.

Full electric buses are not far away from being mainstream technology, but procurement of bus services is happening now. Without innovation, all players will be locking the industry into 20 more years of diesel buses. In fact, \$450 million will be spent on diesel buses across 2016 and 2017 .

NZ Bus wants to break the cycle and has identified a technology to provide a perfect transition to electric vehicles and prevent further locking in of “dirty diesels”.

Background Data from NZTA

Public transport buses in NZ annually carry 112M passengers, travel 102M kms, burn 41M litres of diesel producing 110,000 Tonnes of CO₂.



Source: <http://www.nzta.govt.nz/planning-and-investment/planning/transport-data/statistics-on-mode-of-transport/>





Fleet Pathways





Wrightspeed Inc. is the leading manufacturer of range-extended electric vehicle powertrains. Built on a tradition of quality systems engineering, Wrightspeed's powertrains are the next step in the evolution of vehicle propulsion.

Its flagship product, the Route™ was designed to transcend commercial truck efficiency and performance, providing unlimited range and dramatically reduced fuel costs.

Located in Silicon Valley, Wrightspeed was founded by Ian Wright, co-founder of Tesla Motors.



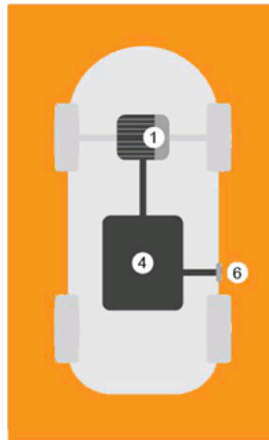
Wrightspeed Video



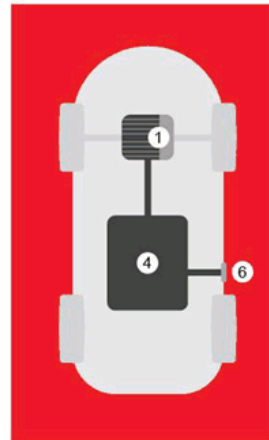
Wrightspeed

EVs are the answer and Wrightspeed offers an early transition to EV

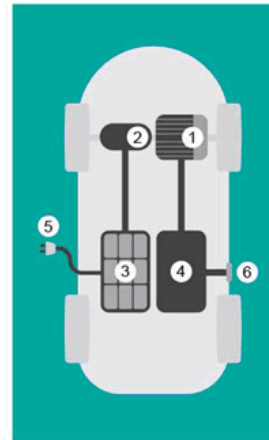
Conventional Petrol Engine Vehicle



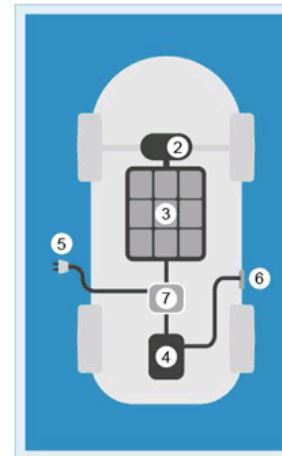
Conventional Diesel Engine Vehicle



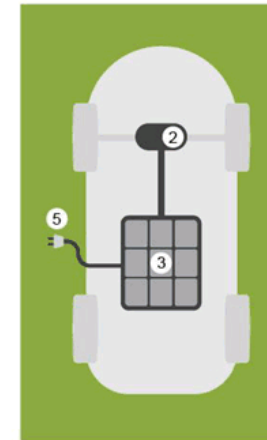
Plug-in Hybrid Electric Vehicle (PHEV)



WRIGHTSPEED
Plug-In Hybrid Electric Vehicle, Range Extended



Battery Electric Vehicle (BEV)



1 Piston combustion engine

2 Electric motor

3 Battery pack

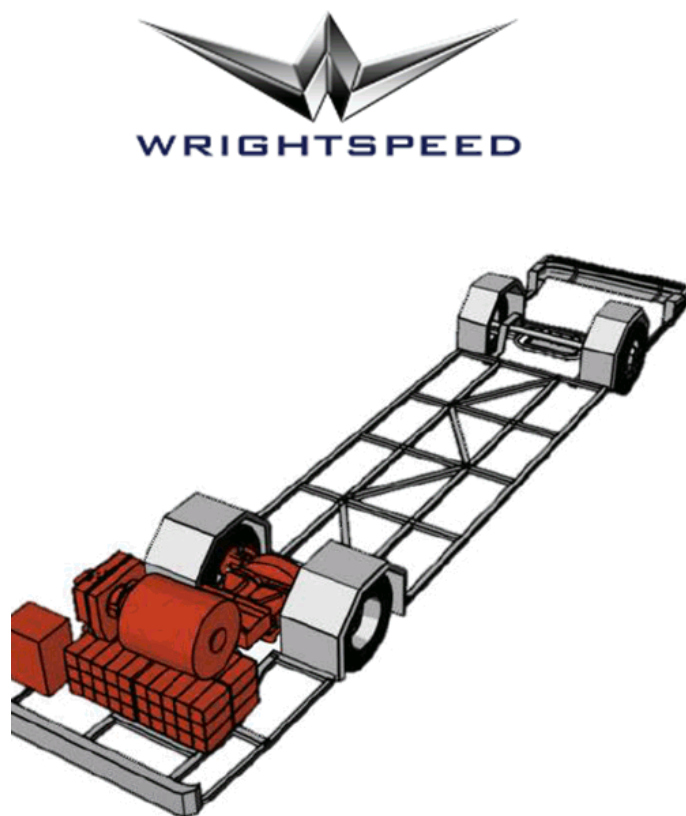
4 Fuel tank

5 Electric plug

6 Fuel pump

7 Gas turbine

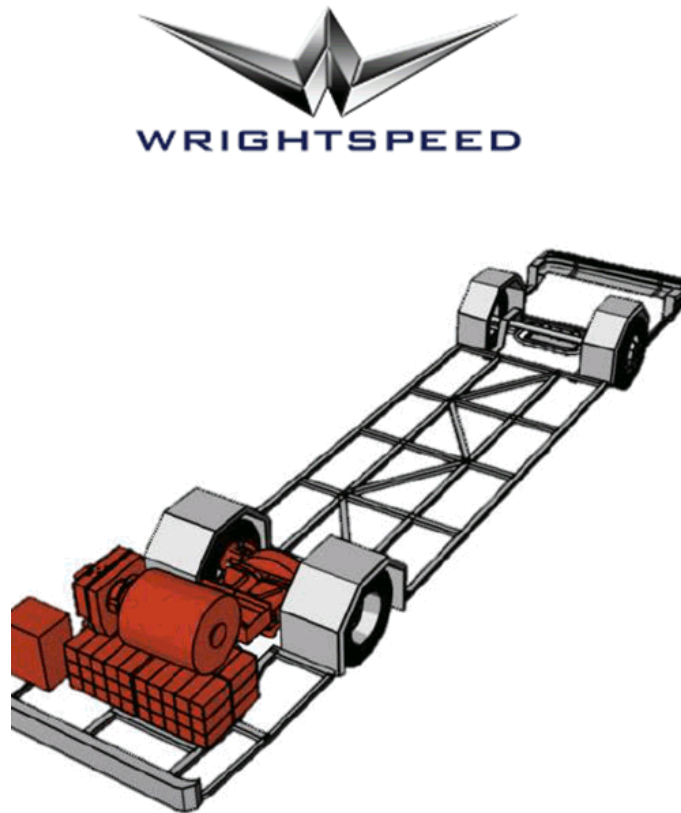
Wrightspeed



EVs are the answer and Wrightspeed offers an early transition to EV

- A range extended electric power train – not a hybrid. The drive system is electric.
- Turbine generator to recharge batteries, not a piston engine
- Aggressive regenerative braking to charge battery
- NZ Bus's due diligence included site-visits to Wrightspeed in California to inspect premises, set-up, capability and to test-drive Wrightspeed vehicles
- A procurement contract has been signed
- A power train has been designed to fit the buses and a prototype is in production

Wrightspeed

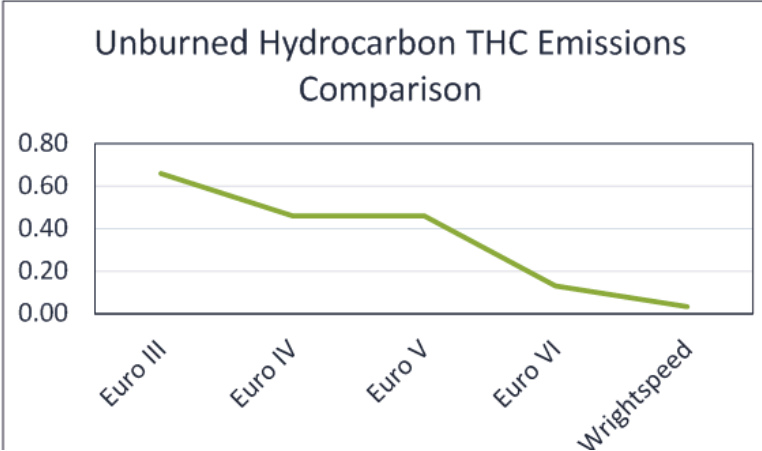
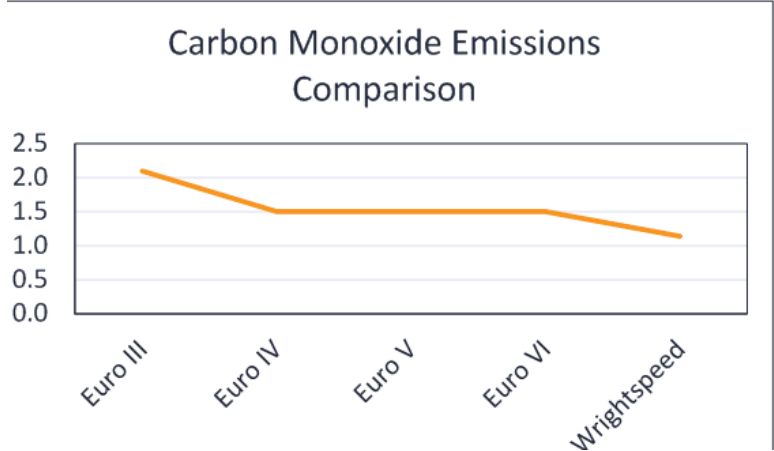
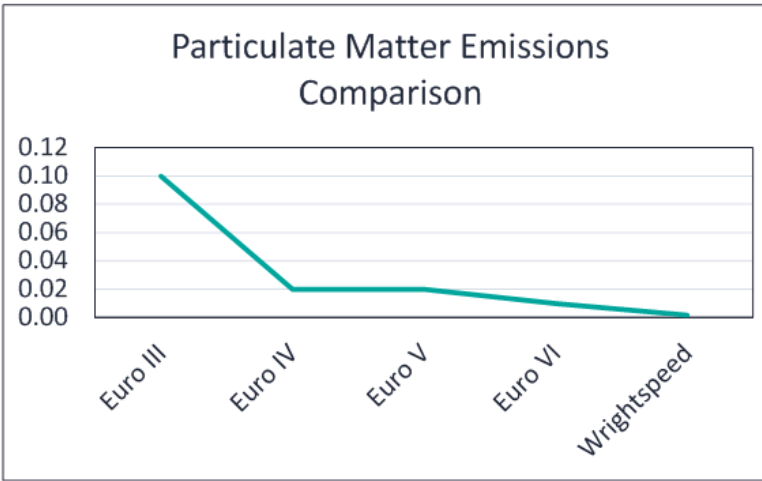
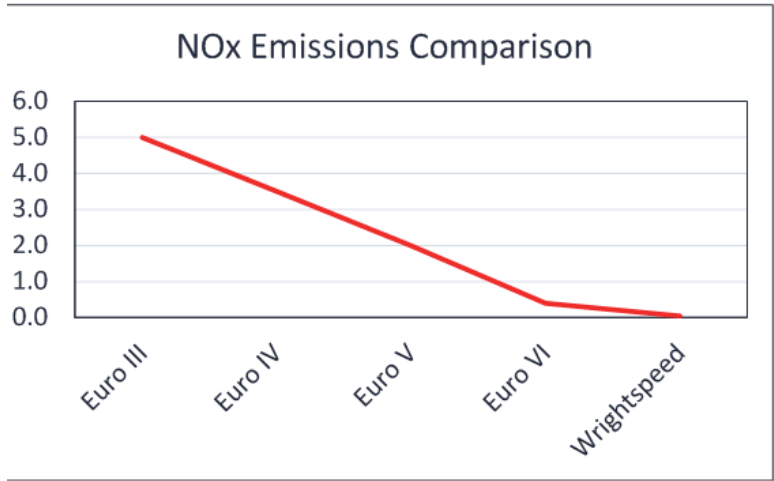


Investment in Wrightspeed by NZ Bus market leading

- Circa \$43 million dollar investment
- First of it's kind implementation will occur in Wellington
- Environmental benefits sector leading
 - Noise and Emissions reduced significantly
- Attracts world leading capability in the technology space to Wellington
- By the end of 2017 aim is to have the largest EV fleet in Southern Hemisphere , perhaps in the world
- Positive support for transition to EV by key partners GWRC

Emissions Comparison

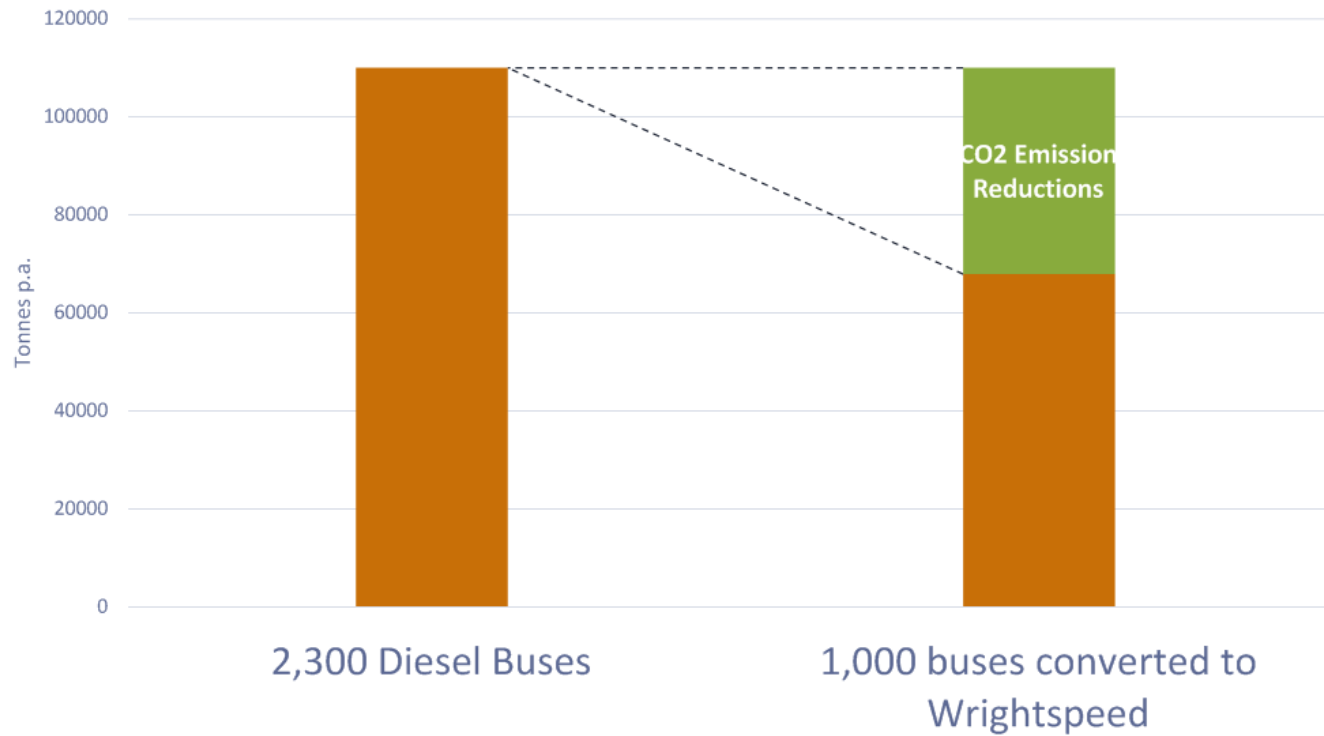
Wrightspeed powertrain designed for significantly lower emissions



Annual CO2 Reduction

Converting 1000 diesel buses to use the Wrightspeed electric powertrain would reduce CO2 emissions from the urban bus fleet in NZ by 38%

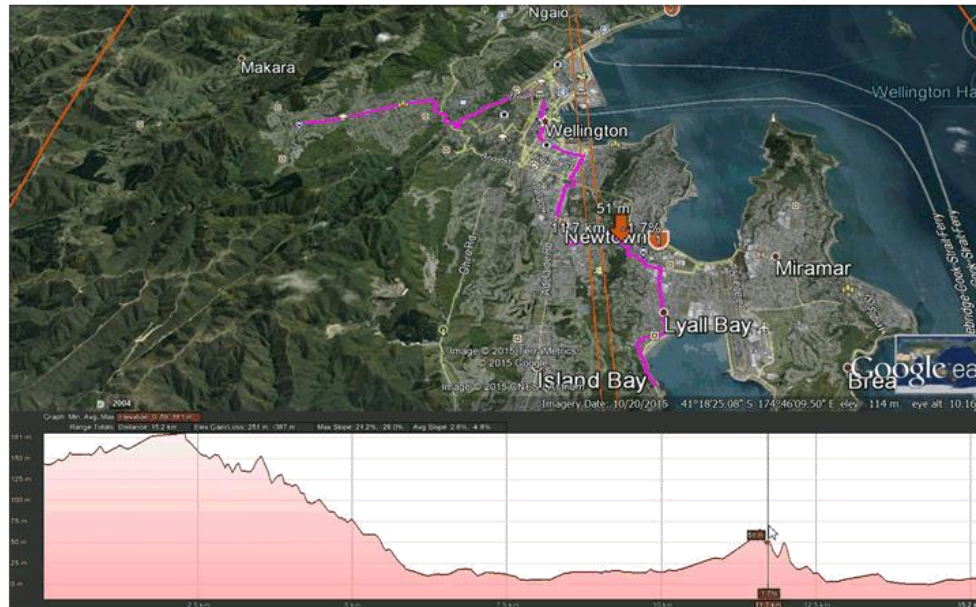
Urban Bus CO2 Emissions



Gradient challenges

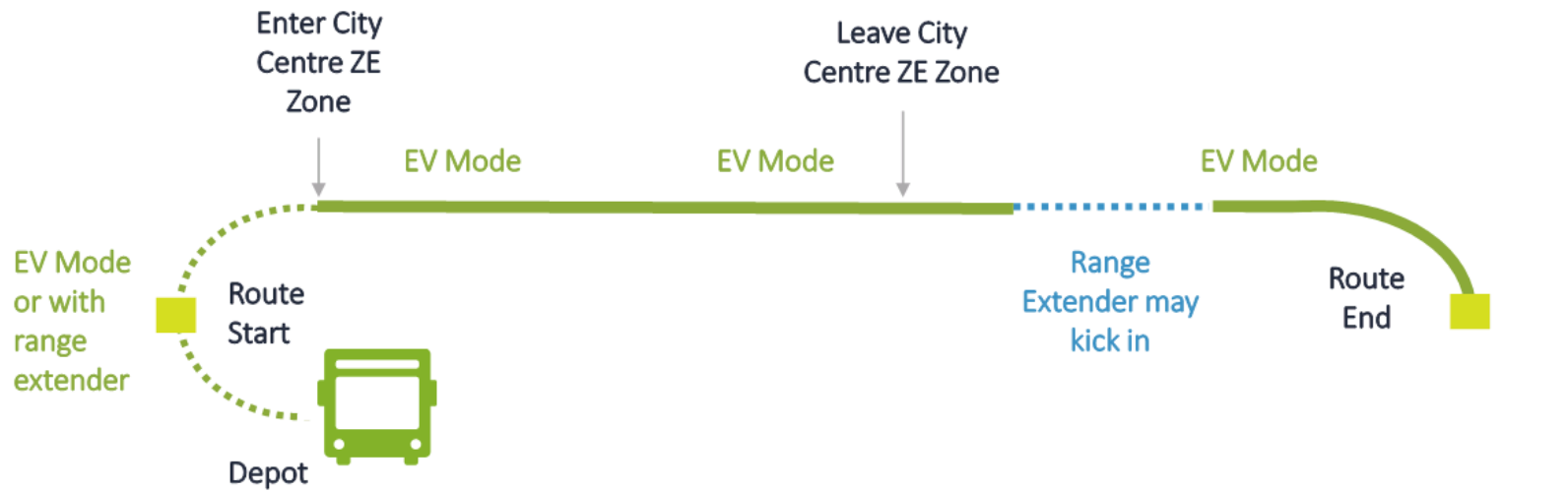
Wrightspeed's 40% gradient capability is more than a match for Wellington roads

To give an indication as to the suitability of the new power train analysis has been performed using a Geographic Information System to investigate one of the most challenging Wellington routes, route 3 - Lyall Bay to Karori. The profile highlights the maximum gradient of the route at 30.9%, whereas Wrightspeed is capable of at least 40%.



Wrightspeed geo-fencing

New technology prevents emissions in highly populated urban areas. Emissions are route dependent



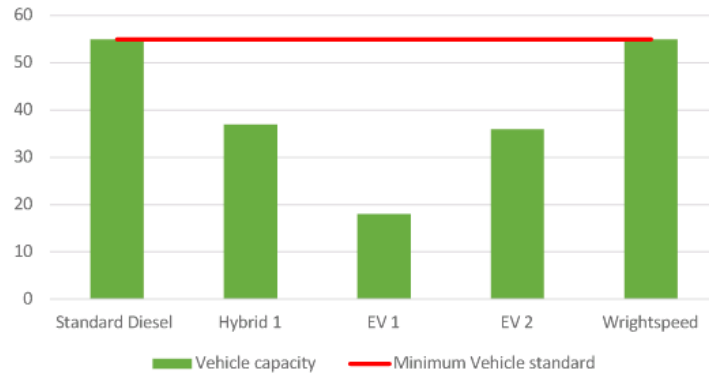
Questions?

Appendices

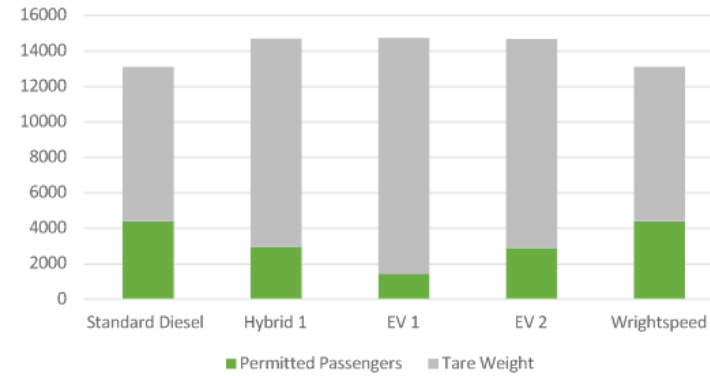
Comparisons – Medium Buses

Less weight, more passengers, better range and value for money

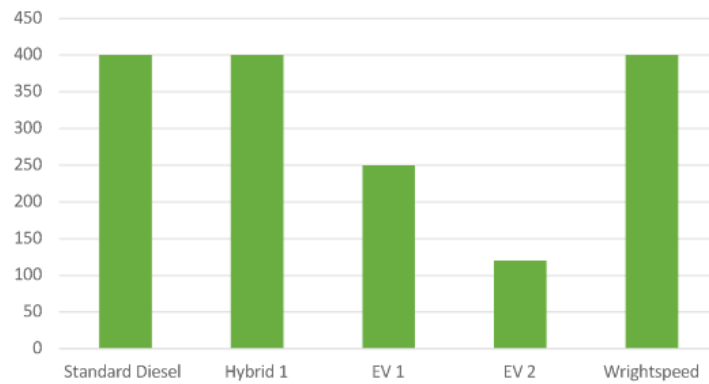
Medium Bus - Passenger Capacity



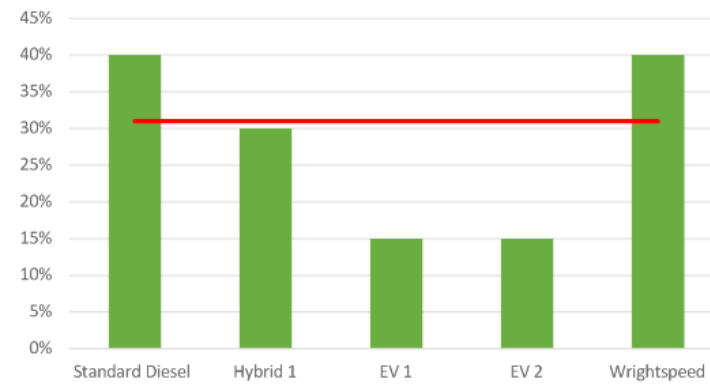
Medium Bus - Weights



Medium Bus - Range (km)



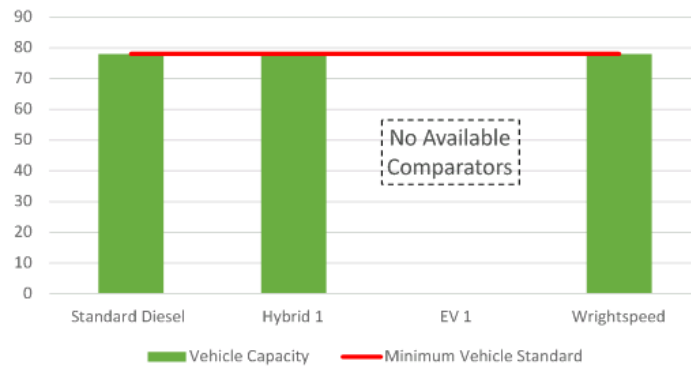
Medium Bus - Gradeability



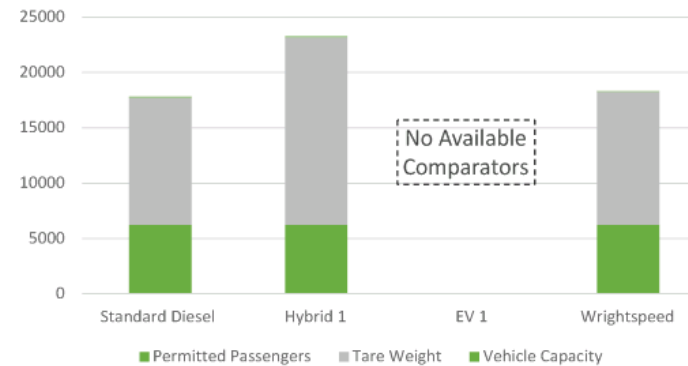
Comparisons – Extra Large Buses

Less weight, more passengers, better range and value for money

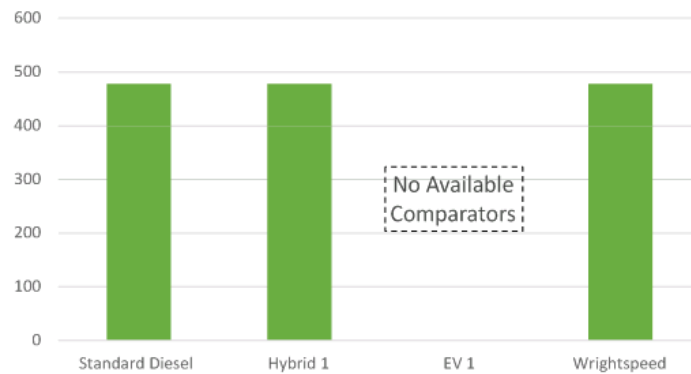
Extra Large Bus - Passenger Capacity



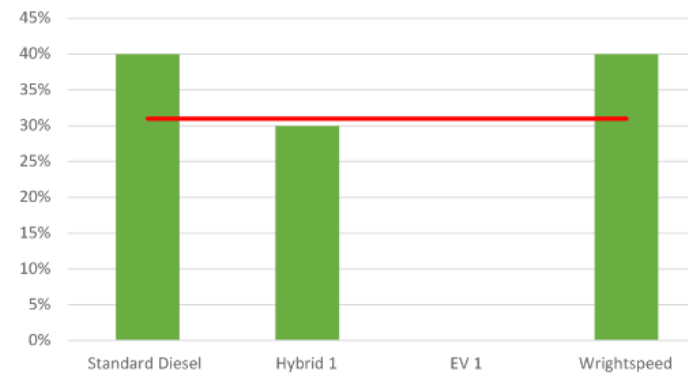
Extra Large Bus - Passenger Capacity



Extra Large Bus - Range



Extra Large Bus - Gradeability



Comparisons – Double Deck Buses

Less weight, more passengers, better range and value for money

