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# Public Transport Capacity

## Recommendation

That the Board:

- i. Notes the plan to manage capacity needs to support 'March Madness' and the challenges associated with short-term capacity increase. It includes a summary of analysis of the expected increase in demand, as well as the areas of risk where service capacity increase is constrained.

## Executive summary

1. There will be limited additional capacity provided for March 2019 following significant capacity increases from the rollout of the bus New Network. The limited budget for capacity management in 2019 will enable addressing the most pressing capacity issues, in particular on Onewa Road.
2. Other capacity issues will be addressed through a combination of better utilisation of extra-large (XLB) and double-decker (DD) buses. These will be funded through savings on Northern Express 1 (NX1) 'short runner' PM trips to Constellation and a portion of value-for-money (VFM) changes to optimise capacity expected to go live on 28 April 2019. The introduction of new DD fleet to the Dominion Road, Mt Eden Road and Remuera Road corridors will address issues on the key central corridors.
3. The remaining capacity risk routes/areas are expected to be, Ti Rakau Drive, Grey Lynn, Howick to Panmure, Sandringham Rd, New North Rd, Tamaki Drive, Takapuna to Massey University via Browns Bay (83) and route 120 from Greenhithe. These services will be supplemented by utilisation of banker buses.

## Background

4. Late February and March see an annual peak transport demand as commuters take an annual low of leave that coincides with school and tertiary students also resuming the academic year. This is commonly termed in the media as 'March Madness'.
5. The implementation of New Network was expected to address the majority of the capacity issues previously experienced annually during March. However, the growth in patronage on some corridors has exceeded anticipated demand provided for in the service designs for New Network tenders and negotiations, and while we have agreed some additional services through contract variations prior to implementation, capacity issues on some corridors are anticipated.

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6. The New Network South and vast majority of the West have sufficient capacity to meet increased demand during March. However, the New Network East, Central and North have been very successful and there is some early evidence of capacity constraints on key routes.

## Issues and options

### Challenges

7. The FY 18/19 bus budget has a small provision for \$180,000 to support capacity management during 'March Madness' (mid-Feb to mid-April). To supplement this budget, some of the service capacity optimisation as part of the value-for-money review to balance the FY 18/19 opex budget will be re-purposed to address known capacity and service performance issues.
8. All bus operators have completed their fleet implementations for new PTOM contracts and limited fleet is available to provide additional capacity. Any spare available fleet in Auckland will require exemption from AT Vehicle Quality Standards (VQS) in order to be operated during March Madness. Three operators (NZ Bus, Birkenhead and Ritchies) already operate under agreed fleet transition plans until their new fleet arrive in Auckland.
9. These three operators have the ability to add fleet to manage capacity during March Madness and can utilise bankers where appropriate. This method (bankers) was successfully utilised during March of 2018 where daily capacity monitoring, including review of daily statistics and operator feedback was undertaken, and banker buses deployed. Deployment of bankers is a noted budget risk with cost estimates of up to \$350k and hence, a conscientious approach will be taken to ensure that utilisation is kept to the areas where expressly needed.

## Next steps

### Capacity Analysis and Plan (Bus)

10. The following services have been identified as having serious capacity issues at peak times during March 2019. This table also summarises the solution to address capacity and highlights peak capacity requirements which will be supported by bankers where no imminent Peak Vehicle Requirement (PVR) enhancement or bus size solution is available.



Capacity increases have been formalised and will be in place by March

Capacity demands will be supported by 'banker buses' during March. No budget allocation for Peak Vehicle Requirement enhancement until FY20.

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Analysis						Plan		
Priority rank	Main Operator Name	Route Group Name	Intensity of capacity issue in-bound	Intensity of capacity issue out-bound	Patronage level	Capacity issues will be addressed for March?	Extra trips potentially required	Plan / Comment
							Split AM/PM	
1	Birkenhead Transport	Unit 39 Birkenhead to the city	07:00 to 08:30 50-86%	17:00 to 17:30 50 to 60%	High	Y	5/0	12 extra trips with 11 extra PVR for this unit based on 2 months (half of Feb, March & half of April). Cost \$196,531.51 from new services budget for capacity management and savings from NX1 contract variation due to suspended 'short runners'
3	NZ BUS	Unit 37 Hillcrest (923,924)	07:20 to 08:00 50 – 100%	15:00 to 18:10 50 to 83%	Low to Medium	Y	6/0	NZ Bus to allocate XLB fleet instead of contracted LBs. Cost to be covered from savings achieved from VFM review (go-live 28 April)
5	NZ BUS	Unit 09 Mt Eden Road (27T)	07:20 to 08:20 60%	16:30 to 17:30 50%	High	Y	4/0	4 double decker trips added from 24 February
11	NZ BUS	Unit 12 Remuera (75, 751)	07:15 to 09:00 Above 50% Peaking at 85%	15:00 to 17:40 Averaging approx. 50%	Medium	Y	0/0	Sufficient capacity will be provided with the implementation of double decker fleet on 24 Feb
2	Howick & Eastern	Unit 50 - Ti Rakau Drive	06:40 to 13:00 50-90%	15:20 to 18:45, 50-59%	High	N	7 x DDs	4 buses approved and funded from AMETI project. Further 3 buses to be funded, tbc. Buses will be delivered for 16 June implementation. Operator to provide banker fleet to support capacity in the interim, this is funded by AMETI.
4	NZ BUS	3 Grey Lynn (105, 106)	105: 07:30 to 08:30, 50-80%	105:17:00 to 17:20 50%	low (20 min freq)	N	7/0	Interim options are being worked with Operator to provide banker fleet to support capacity
6	GO BUS	Unit 52 - Howick to Panmure	07:00 to 09:30, 50-90%	nil issue of significance	Low	N	6 /0	Interim options are being worked with Operator to provide banker fleet to support capacity
7	NZ BUS	Unit 07 - Sandringham Rd	07:45 to 08:15, 50-60%	nil issue of significance	High	N	5/0	Interim options are being worked with Operator to provide banker fleet to support capacity
9	NZ BUS	Unit 16 - Tamaki	07:15 to 08:00 50-60%.	nil issue of significance	Medium	N	3/0	Interim options are being worked with Operator to provide banker fleet to support capacity

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10	NZ BUS	Unit 06 - New North Rd	07:10 to 08:10, 50-60%	nil issue of significance	Medium	N	4/0	Interim options are being worked with Operator to provide banker fleet to support capacity
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11. Northern Express Services:

- The Northern Busway has performed well since the changes at Constellation Station immediately following the introduction of the New North network. NX2 service changes to convert the PM peak “short-runners” to Constellation to “long-runners” to Albany provide the required capacity and are expected to cope during March 2019.
- The NX1 “short-runners” in the PM peak are still suspended following the congestion difficulties at Constellation Station. Ritchies are unable to reschedule their operation to change them to “long runners” for a 24 February 2019 implementation but will work towards implementation by 28 April 2019. Despite the delayed implementation the NX1 has sufficient capacity at present. Should capacity issues on NX1 start in March the PM peak “short runners” will be reinstated at short notice (those resources are available at Ritchies and within current contract costs).

12. Summary of Bus service changes to go live on 24 February 2019 include:

- Twelve additional trips for Onewa Road to address capacity issues
- A change to Extra Large Buses for school routes S016 departing at 07:55, S052A at 07:40, and S053E at 15:20
- Addition of four DD trips to the Mt Eden 27T service
- Double deckers introduced on Remuera Road with bankers redeployed to other routes
- Route 923/924 service change to extra large buses (TBC by NZ Bus)
- Adding extra- large buses to the Route 83 (TBC by Ritchies)
- Rodney Local Board – introduction of new Wellsford to Warkworth service
- Rodney Local Board – introduction of new Helensville to Hibiscus Coast Station service
- Adding route 191 back to the network (change to route 107)
- Additional seven minutes of run time for school route S087 at 07:45
- Sacred Heart School departure time changes to align with school’s finish times

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- Changes to route 512 description.

**Ferry capacity for March**

13. The below services frequently operate during peaks at above 80% of available vessel capacity:

- Hobsonville is our fastest growing ferry service, with year on year patronage increase of approximately 40%. Vessel size was upgraded during 2018 to provide an additional 47 seats per sailing. Capacity is expected to be constrained, with potential for some customers to be left behind post scheduled sailings.
- West Harbour has experienced year on year growth of approximately 7%. No provision for additional sailings at present, however there is a smaller 'stand-by' vessel available to support during March if patronage outweighs vessel capacity.
- Pine Harbour, vessel is near capacity. No projected increase in demand.

14. Current ability to provide additional capacity is limited, this being predominantly due to lack of vessel availability and reliability of the aged fleet. Future capacity options will be included within the ferry contract extensions, however these will not be enacted until April 2019 for Hobsonville, and August 2019 for Pine Harbour and West Harbour.

**Train capacity for March**

15. Our current Train timetable and available fleet are sufficient to meet March patronage projections. Scheduling of EMU's will be undertaken to maximise utilisation of 6-car sets during morning and afternoon peaks.

**Service agility and short term deployment**

16. Daily monitoring and analysis will be elevated from late February. This will be led by the Metro Service Delivery Optimisation team in collaboration with our Public Transport Operators. While bus bankers will be available to support capacity restricted routes; a conscientious approach will be taken to ensure that utilisation is kept to the areas where expressly needed due to manage cost. Daily reports will be issued to internal stakeholders which will encompass customer feedback, service wait times, emerging issues and any actions taken for service improvement.

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## Document ownership

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## Glossary

Acronym	Description
DD	Double decker
XLB	Extra-large buses
PVR	Peak Vehicle Requirement
VFM	Value-for-money
VQS	Vehicle Quality Standards