

Report 15.545
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Committee Council
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Northern Suburbs bus service improvements

1. Purpose

The purpose of this report is to outline proposed reliability and capacity improvements to bus services travelling to and from Wellington's Northern Suburbs and to approve additional ongoing contract spend required to implement these improvements.

2. Consideration by committee

The matters contained this report were considered by the Sustainable Transport Committee on 27 October 2015 – Report 15.525 refers. The recommendations of this report were endorsed by the Committee.

3. Background

The Northern Suburbs of Wellington have a growing population from new subdivisions occurring in Churton Park, Grenada Village and Woodridge. Collectively the Northern Suburbs are expected to deliver 21% of the population growth in Wellington City over the next 20 years.

A growing population creates more demand for public transport and therefore more capacity needs to be provided to meet this demand. The following table (Table 1) details the expected population growth in Wellington City.

| Sector | Base Population - 2013 | Growth in population – 2013 to 2033 | |
|-----------------------------------|---------------------------|-------------------------------------|-----------------|
| | | Absolute | % of WCC growth |
| Northern Suburbs | 30941 | 6061 | 21% |
| Western Suburbs | 21938 | 335 | 1% |
| Southern Suburbs | 35436 | 4256 | 15% |
| Eastern Suburbs | 34071 | 2035 | 7% |
| Tawa / Takapu | 14850 | 1324 | 5% |
| Khandallah/Ngaio/Wadestown | 21599 | 624 | 2% |
| CBD | 18019 | 10652 | 37% |
| CBD Fringe | 23566 | 3178 | 11% |
| Wellington | 200422 | 28465 | 100% |

Table 1: Expected population growth for each sector in Wellington City

The northern suburbs are serviced by a mixture of all day services and peak only services. Table 2 provides an overview of the current routes, an indication of service frequency and where services run i.e. span of services. Maps showing where the northern suburbs routes run are provided in **Attachment 1**.

| Route number ¹ | Morning peak frequency | Daytime frequency | Afternoon peak frequency | Evening frequency | Span of service |
|---|------------------------|-------------------|--------------------------|-------------------|----------------------------|
| 52 (Newlands to Courtenay Place) | - | 30 min | - | 30-60 min | 6:00-11:30pm |
| 56 (Newlands to Courtenay Place) | 15min | - | 15min | - | 7:00-8:30am 4:30-6:00pm |
| 57 (Woodridge to Courtenay Place) | 20min | - | 15min | - | 6:30-9:00am 4:30-6:00pm |
| 58 (Baylands to Courtenay Place) | 15min | - | 15min | - | 6:30-8:30am 4:00-6:00pm |
| 53 (Johnsonville West to Courtenay Place) | 30min | 60min | 20min | - | 6:30-6:00pm |
| 54 (Churton Park to Courtenay Place) | 10min | 30min | 15min | 30-60 min | 5:30-11:00pm |
| 55 (Grenada Village to Courtenay Place) | 15min | 60min | 20min | - | 6:30-8:00pm |

Table 2: Current Northern Suburb bus routes

Analysis of the current Northern Suburb bus timetables show unrealistic travel times during the morning peak. Consequently buses are frequently arriving late at their destination creating customer dissatisfaction. Services are unable

¹ Attachment 1 details route maps for these services

to make up lost time and therefore often start subsequent trips late as detailed in Table 3. The outcome of this is 45% of morning peak trips arrive at their destination more than 10 minutes late. This makes the Northern Suburbs bus services the worst performing group of bus services in the Metlink network for on time reliability at destination stop.

| Run board 310 on 29 June 2015 | | | | | | |
|-------------------------------|------------------|------------|-----------|---------------|-----------|-----------|
| Service | Origin | Start Time | Deviation | Destination | End Time | Deviation |
| 57 | Kentwood Dr | 6:32 a.m. | 0 min | Courtenay Plc | 7:05 a.m. | 0 min |
| 58 | Baylands Dr | 7:25 a.m. | 0 min | Courtenay Plc | 8:00 a.m. | +19 min |
| 52 | Johnsonville Stn | 8:25 a.m. | +13 min | Courtenay Plc | 9:15 a.m. | +13 min |

Table 3: Example of significant late running at destination stop for second trip which means that bus is late to start the third trip.

Patronage on the Northern Suburb Bus routes is healthy, as seen in Table 4. The service operator, Newlands Coach Services, runs some of the largest buses in its fleet on some of these services. These larger buses typically carry around 74 passengers. Despite this, many trips during the morning peak are at or close to capacity especially during the busier months of March and April. Table 4 provides details on the number of passengers carried on the Newlands services during March and April of this year. The table cells highlighted in red show the trips that have maximum patronage close to or above a 74 passenger carrying bus. In reality some of these trips will be run using buses with that have less capacity or with some that can take another few passengers. Meaning there is little spare capacity to accommodate future patronage growth particularly when you also take into account the predicted population growth suggested in Table 1.

| Morning peak services patronage, based on March and April 2015 figures | | | | | | |
|--|------------------------------|----------------------------|----------------------------|--------------------------------------|------------------------------|------------------------------|
| Route | Departure Time from Terminus | Average passengers carried | Maximum passengers carried | Assumed average maximum bus capacity | % full based on avg. loading | % full based on max. loading |
| 57 | 6:32 | 28 | 40 | 74 | 38% | 55% |
| 58 | 6:35 | 22 | 39 | 74 | 30% | 53% |
| 56 | 6:45 | 26 | 38 | 74 | 36% | 52% |
| 57 | 6:52 | 24 | 53 | 74 | 33% | 72% |
| 58 | 6:55 | 33 | 70 | 74 | 45% | 95% |
| 56 | 7:00 | 32 | 72 | 74 | 44% | 98% |
| 57 | 7:07 | 42 | 68 | 74 | 57% | 92% |
| 58 | 7:12 | 49 | 71 | 74 | 67% | 96% |
| 56 | 7:15 | 32 | 50 | 74 | 44% | 68% |
| 57 | 7:22 | 42 | 66 | 74 | 57% | 90% |
| 58 | 7:25 | 52 | 72 | 74 | 71% | 98% |
| 56 | 7:30 | 50 | 68 | 74 | 68% | 92% |
| 57 | 7:37 | 51 | 67 | 74 | 69% | 91% |
| 58 | 7:40 | 55 | 74 | 74 | 75% | 100% |
| 56 | 7:45 | 36 | 51 | 74 | 49% | 69% |
| 57 | 7:52 | 53 | 67 | 74 | 72% | 91% |
| 58 | 7:55 | 42 | 77 | 74 | 57% | 105% |
| 56 | 8:00 | 31 | 57 | 74 | 42% | 78% |
| 57 | 8:07 | 41 | 68 | 74 | 56% | 92% |
| 58 | 8:10 | 43 | 66 | 74 | 59% | 90% |
| 56 | 8:15 | 32 | 59 | 74 | 44% | 80% |
| 57 | 8:35 | 32 | 62 | 74 | 44% | 84% |
| 57 | 9:00 | 20 | 49 | 74 | 28% | 67% |

Table 4: Patronage on Newlands trips

4. Customer experience

Greater Wellington Regional Council frequently receives customer feedback on reliability and capacity issues on the Northern Suburbs bus services. 38% of customer complaints relate to reliability and capacity issues on our Northern Suburb bus services. The Wellington Regional Public Transport Customer Satisfaction survey identified service reliability as being highly important to customer's perception of the service.

The customer experience of the Northern Suburbs bus services will be greatly increased by improving the reliability of these services. The on time reliability of services will be improved as buses will have enough time to complete their trips and then reposition to start their subsequent trips on time. Buses will be less crowded with passenger loadings during the peak being spread more evenly across more trips. With a growing population in the Northern Suburbs the service improvements outlined in this report will provide reliable services to meet expected demand.

Officers propose to implement the service improvements outlined in this report in two phases. Phase 1 will be improvements to the Newlands services and will become operational on November 16th, 2015. Phase 2 of the reliability and capacity improvements which relate to Churton Park services are currently in negotiation with the service operator but at a high level are planned to be operationally implemented in the first quarter of 2016.

5. Reliability improvements

Officers have used real time information to complete a retiming of the current timetables. This will improve reliability as time will be added to the timetable where there is late running and taken out where there is early running. No route changes are proposed as part of these service improvements.

For the current timetables the worst late running occurs for inbound trips between 7:30am and 8:00am where buses routinely arrive 20 minutes late at Courtenay Place, an example of this is shown for the Route 56 in Table 5. To correct this 20 minutes needs to be added to the journey time of these trips so that they now arrive at their destination on time and are still on time starting their next trips. For off-peak and weekend trips, early running is more of an issue and therefore some time can be taken out of the timetable so that buses do not arrive too early.

| Route 56 inbound morning peak | | | |
|-------------------------------|----------------------------------|----------|---------|
| Time departing | Schedule time to Courtenay Place | | |
| | Current | Proposed | Change |
| 6:45 a.m. | 35 min | 40 min | +5 min |
| 7:00 a.m. | 35 min | 45 min | +10 min |
| 7:15 a.m. | 35 min | 50 min | +15 min |
| 7:30 a.m. | 35 min | 58 min | +23 min |
| 7:45 a.m. | 35 min | 58 min | +23 min |
| 8:00 a.m. | 35 min | 53 min | +18 min |
| 8:15 a.m. | 35 min | 48 min | +13 min |

Table 5: Time added to timetable to correct late running

The departure times of peak trips has been adjusted to reduce bus bunching and make better use of the available capacity. For example under the current timetables, two buses from different routes can arrive at Newlands Park or Johnsonville within a few minutes of each other. This can result in the first bus being full and the second bus having spare room as passengers have boarded the first bus to arrive.

The frequency of services during peak times has also been adjusted to move trips to where they are most needed. The current Newlands timetable a runs flat 5 minute frequency along Newlands Road between 6:30am and 8:30am. This results in too much capacity during early morning and late morning and not enough capacity during the mid-morning. The proposed timetable moves to a 6 minute frequency during the early morning building to a 4 minute frequency during the mid-morning.

5.1 Additional contract cost

In order to improve the customer experience by increasing reliability and capacity on the northern suburb bus services there is a need to use additional resource in terms of peak buses and in-service time. The additional peak bus

requirement goes from 15 to 17 buses for the Newlands timetable and from 15 to 16 buses for the Churton Park timetable.

Based on start dates of November 2015 for Newlands service improvements and February 2016 for the other northern suburb service improvements the estimated additional contract payments for 2015/16 would be in the order of \$125,000 - \$130,000. The additional cost, for this financial year, can be absorbed within the existing bus budgets due to diesel inflation costs being less than predicted.

Ongoing funding of these improvements requires an increase to the bus contracting budget of around 0.6% of which 50% of this would be funded by NZTA. This additional cost would mean an ~ 0.1% increase in the Council's rates to enable an improved level of service for an area that makes up 15% of Wellington City's population and an expected population growth of 21% by 2033.

6. Alternative options considered

Officers have identified poorly patronised services in the Northern Suburbs bus network and made savings by discontinuing these services. In June 2014 the Newlands Link service was discontinued due to consistently low patronage and this made a saving of \$57,500 per annum. It was intended that this saving would be reinvested back into the Northern Suburbs to address the late running issue. Due to time committed to other projects, work on the Northern Suburbs timetables was paused until it was picked back up again in June 2015.

Other areas of the Northern Suburbs timetables where possible savings were considered are detailed in Table 7, but these were not progressed as the dis-benefits to customers were considered to great and would have a detrimental effect on patronage.

| Option considered | Impact |
|--|---|
| Reducing the hours of operation | Would not be consistent with the level of service outlined in the Wellington Regional Public Transport Plan |
| Decrease the daytime frequency | Reducing the daytime frequency below the current one bus every half an hour would greatly lower the usefulness of the service for customers |
| Reduce the number of inbound evening trips | These trips are repositioning trips for well used outbound trips and therefore removing them would simply move time from in-service to out-of-service |
| Reduce the number of peak trips | The purpose of the proposed changes is to address the capacity problem during the peak which would not be possible with less trips |

Table 7: Options considered in order to recover costs

In addition to these options consideration was also given to leaving current services as they currently are and implementing the improvements when the new PTOM contracts become operational in early 2018. This option was not progressed as the reliability and capacity issues on the northern suburb services are affecting public transport customers now and a wait of a further 18 months to make improvements would not be acceptable.

7. Progress to date and next steps

Significant progress has been made to date and agreement with the service operator has been gained on the improvements subject to agreement to costs.

The timeline for this project is detailed in the following table (Table 8):

| Phases | Task | Description | Date | Status |
|---------|---|--|--------------------|----------|
| Phase 1 | Initial tasks | Reviewing customer complaints Meeting with the bus operator | June 2015 | Complete |
| | Draft timetables | Collection and analysis of patronage data Analysis of real time information | July – August 2015 | Complete |
| | Operator feedback on Newlands | Minor changes made to timetable New timetable agreed on Implementation date agreed | September 2015 | Complete |
| | Internal Service Change process | Information provided to marketing and systems teams Marketing and Systems plan decided on | October 2015 | Complete |
| | Newlands Implementation | Website, Real Time & On Streets updated Operational implementation | November 2015 | |
| Phase 2 | Operator feedback on remaining northern suburb improvements | Operator to provide feedback Implementation date still to be confirmed | December 2015 | |
| | Internal Service Change process | Information provided to marketing and systems teams Marketing and Systems plan decided on | January 2016 | |
| | Implementation of remaining northern suburb improvements | Website, Real Time & On Streets updated Operational implementation | February 2016 | |

Table 8: Project timeline

8. Communication

A communications plan and marketing plan is being drafted to inform customers of these improvements. Key tasks of the Communications Plan include:

- scrolling messaging on RTI signs detailing the service improvements
- service updates on the Metlink website
- handouts to customers detailing the improvements
- posters highlighting the improvements at key bus stops and on the buses
- briefing on the improvements to the Metlink Contact Centre team.

9. The decision-making process and significance

Officers recognise that the matters referenced in this report may have a high degree of importance to affected or interested parties.

The matters requiring decision in this report has been considered by officers against the requirements of Part 6 of the Local Government Act 2002 (the Act). Part 6 sets out the obligations of local authorities in relation to the making of decisions.

9.1 Significance of the decision

Part 6 requires Greater Wellington Regional Council to consider the significance of the decision. The term ‘significance’ has a statutory definition set out in the Act.

Officers have considered the significance of the matter, taking the Council's significance and engagement policy and decision-making guidelines into account. Officers recommend that the matter be considered to have low significance.

The reliability and capacity improvements outlined in this report will offer improved levels of service to public transport customers, no route changes are proposed. Customers will therefore notice improved reliability of services as well as increased capacity.

Officers do not consider that a formal record outlining consideration of the decision-making process is required in this instance.

9.2 Engagement

Engagement on the matters contained in this report aligns with the level of significance assessed. In accordance with the significance and engagement policy, no engagement on the matters for decision is required.

10. Recommendations

That the Council:

1. ***Receives the report.***
2. ***Notes the content of the report.***
3. ***Notes that the reliability and capacity improvements to the northern suburb bus routes will be undertaken over two phases; November 2015 for Newlands routes and February 2016 for Churton Park routes.***
4. ***Approves the additional contract variation spend for implementation of the service improvements outlined in this report.***

Report prepared by:

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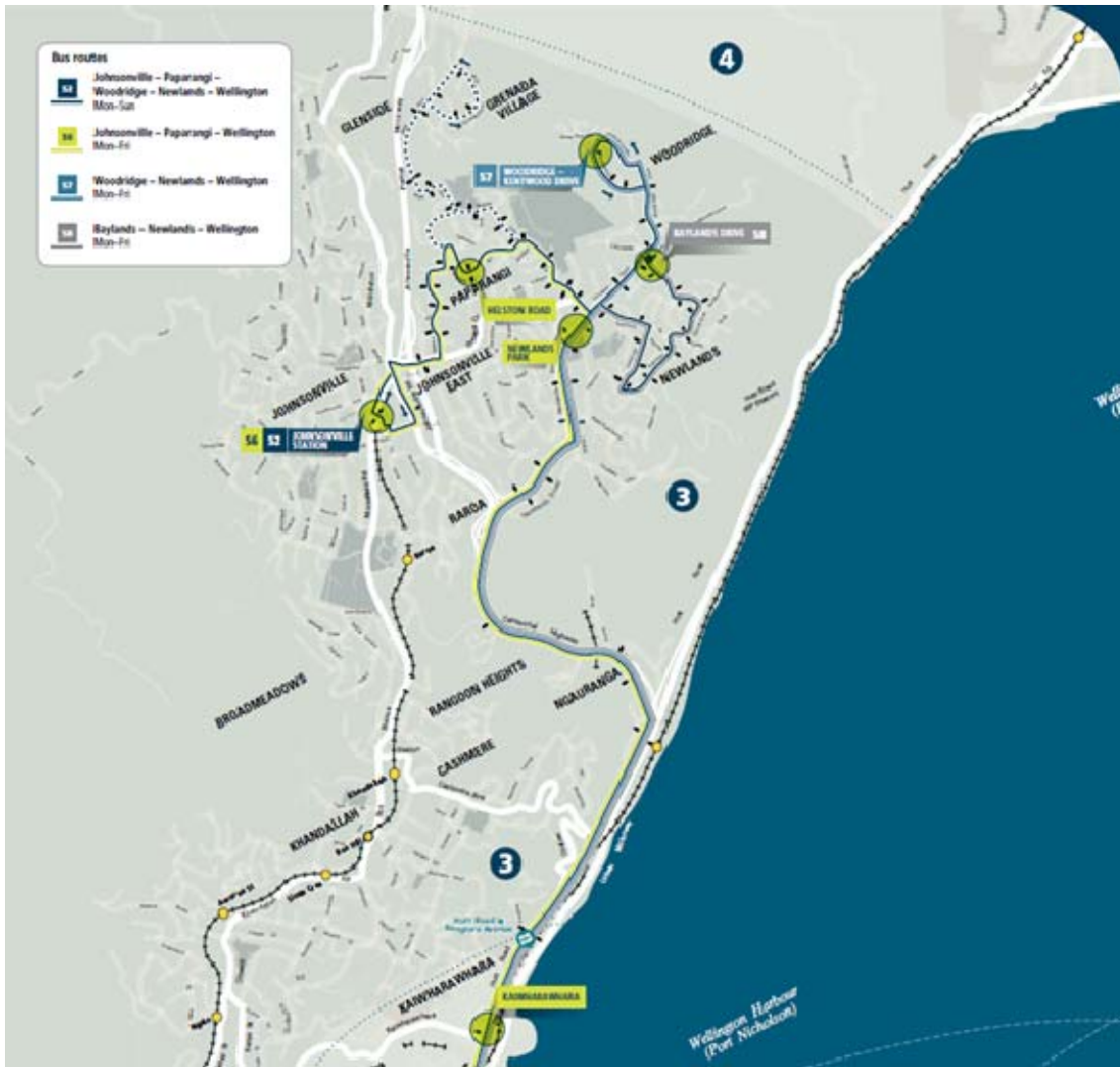
Report approved by:

Rhona Hewitt
Manager, Bus & Ferry
Operations

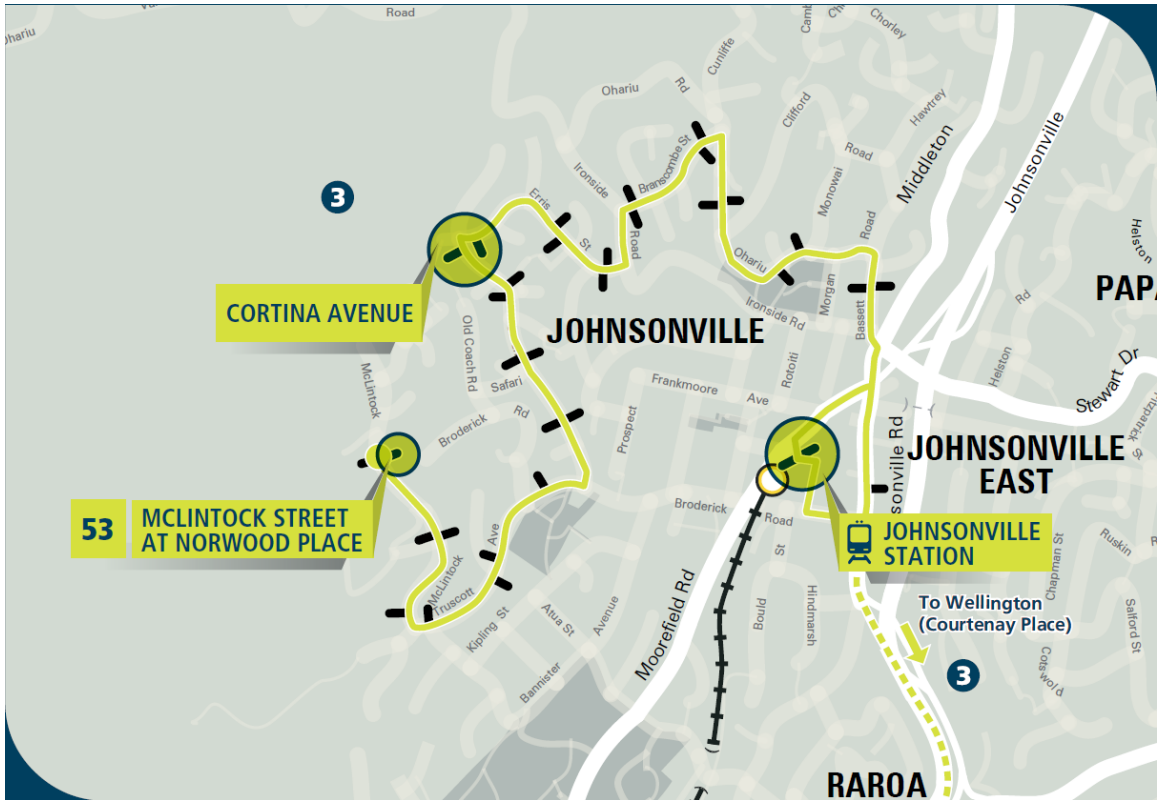
Report approved by:

Wayne Hastie
General Manager, Public
Transport

Attachment 1: Route Maps



Newlands bus routes map



Johnsonville West bus route map



Churton Park bus route



Grenada Village bus route