


**Review of Parking Management
(In Period to end January 2019)**

Brunswick Heads

Prepared by

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| Issue Doc.No. | Prepared By | Issue Date | Signature |
|---------------|-------------------------------|---------------------------|---------------------------------------------------------------------------------------|
| BrunswickRep1 | Glen R Holdsworth (RPEQ 4152) | 27 th Mar 2019 |  |

1. Background

This is one of three reports aimed at providing an assessment of parking demands, supply, infringement and enforcement for Bangalow, Brunswick Heads and Mullumbimby.

The attached analysis of parking demands, durations and infringements is based on sample data provided to TPS by Council.

The sample data for Brunswick Heads was generally drawn from

- April 2018 through to end of August 2018 (*LOW demand period*)
- September 2018 to October 2018 period (inc) (*AVERAGE demand period*)
- The 4 days Fri, Sat, Sun and Mon of the 2019 Australia Day weekend in Jan 2019 (*HIGH demand period*)

As shown above, the above periods have been defined as, and referred to in this report as the “Low”, “Average” and “High” demand periods respectively.

Where cells for a particular day in the occupancy tables are shown blank, this represents that data was not available for that particular day. Where a zone has been excluded from a table (eg. Zone 15 in the parking occupancy tables) this represents that data was not available for that zone in respect to the particular table.

The area to the east of the South Arm Bridge currently lies outside the Brunswick Heads Parking Scheme. However, recommendations associated with that area may be affected by recommendations made in this report. Consequently, the discussions and recommendations contained in Section 3 should be considered in the context of a potential for recommendations to cause parking demands which currently occur in the CBD to be displaced to the area across the bridge. This could particularly occur in the cases of average and long term parking demands which may be affected by the recommendations.

In view of the above matter, it is important that the recommendations in this report are investigated and tested through a survey of parking demands and durations etc. in the area to the east of the South Arm Bridge. Further, all future surveys should extend into all streets in the area to the east of the bridge.

In the case of Brunswick Heads, the zone system was changed at the commencement of September 2018. Consequently, care should be exercised in comparing parking capacity and occupancy figures shown in the Low demand period (ie. the “Pre-September” Zone period) with capacity and occupancy figures shown for the Average and High periods (ie. the “post September” Zone period. However, in the discussion and recommendations contained in Section 3, all zone numbers refer to “Post September” zone numbers used since the commencement of September 2018.

2. Parking Space Inventory

An inventory of parking supply and associated description of the number of spaces in each zone and the allowable duration limit is attached to this report.

The inventory was prepared by Council officers.

3. Conclusions Drawn from the Attached Tabulated Analyses.

Note : To assist the reading and understanding of the following conclusions see the page immediately following “Conclusions and Recommendations” for zone number definitions and locations.

Supply

Parking supply in all periods appears to be adequate when considered in aggregate, although there is evidence that demands will soon approach capacity say in the next 5 years.

When looked at from a zone by zone basis, the majority of zones are operating at or near capacity for a large part of the year. The only zones where there are regularly parking opportunities available to any significant degree are zones 7, 8 and 12.

Demands by Persons Holding Permits

During Average periods motorists holding permits which relieve them of the need to pay at meters in Byron Bay, represent approximately 20%-25% of all demands. There appears to be tendency for this rate to decrease to approximately 15%-20% in weekend periods such as Sunday. This is probably due to the higher proportion of demand made up by visitors from outside the Shire.

Durations

The average length of stay in the Low, Average and High demand periods was 34, 24 and 33 minutes respectively.

The overall level of parking duration infringement for the Low, Average and High demand periods was 8%, 3% and 6%. This is a “no less than” estimate and grossly underestimates the actual level of infringement, particularly in the 1 hour limit zones. The underestimation arises from the extent to which the time between ANPR runs exceed the posted parking limit duration. Whilst TPS has no basis for estimating the degree to which the underestimate is occurring, it is reasonable to expect that the surveyed rates of infringement represent between 30% and 50% of the actual rate.

Having regard to the above, there is considerable duration infringement occurring in zones no. 1, 6, 7 and 13. Apart from zone 1, these zones are posted for duration limits of between 2 and 4 hours, suggesting that long term parking demands are intruding into the Centre short and average term system.

Infringement Notices

The rate at which duration infringements are detected at times when officers visit the Township varies from approximately 5%, 1 %, and 8% of demand during Low, Average and High demand periods respectively. The Low and Average period detection rates are lower than the rate of infringement usually expected in unmetered environments. Whilst the 8% High period detection rate is higher than for other periods, it is at the lower end of the 10% and 15% infringement range usually expected for unmetered parking areas.

Zones 1, 3, 9 and 12 have a particularly high rate of detection in the Low demand period, whereas zones 1, 3, 9, and 11 appear to have a relatively high detection rates during High demand periods. Zones 1, 9 and 11 are posted as 1 hour zones, whilst zones 3 and 12 are 2 hour zones.

When the above finding is considered in the context of the rate of infringement detection in the above-mentioned zones, it is probable that average and long term intrusion into 2, 3 and 4 hour zones is forcing longer stay in the 1 hour zone sector. If so, then there is a need to more strongly enforce the 2, 3 and 4 hour zones, or alternatively expand the 1 hour and 2 hour duration sectors.

Management Options

It is apparent from the survey and other data that there is a need for Council to address the following management options in order to achieve a more efficient operation and use of on-street parking in the Centre. The primary options are :

- a. Substantially more intensive and extensive enforcement of parking duration limits.
- b. The installation of parking sensors in each on-street bay in order to detect space occupancy and parking durations. This would facilitate more efficient “real time” data collection and better informed review of parking management whilst substantially improving the efficient use of enforcement resources.

4. Conclusions & Recommendations

When considered in the aggregate there appears to be adequate parking supply in the Town Centre to satisfy demands at all times of the year, although there is strong evidence that demands will approach or reach capacity of the Centre within the next few years.

Note : To assist the reading and understanding of the following conclusions and recommendations see the following page for zone number definitions and locations.

When looked at from a zone by zone basis, the majority of zones are operating at or near capacity for a large part of the year. The only zones where there are regularly parking opportunities available to any significant degree are zones 7, 8 and 12.

There is considerable duration infringement occurring in zones no. 1, 6, 7 and 13. Apart from zone 1, these zones are posted for duration limits of between 2 and 4 hours, suggesting that long term parking demands are intruding into the Centre short and average term system.

Zones 1, 3, 9 and 12 have a particularly high rate of detection in the Low demand period, whereas zones 1, 3, 9, and 11 appear to have a relatively high detection rates during High demand periods. Zones 1, 9 and 11 are posted as 1 hour zones, whilst zones 3 and 12 are 2 hour zones.

When the above findings are considered in combination, it is probable that average and long term intrusion into 2, 3 and 4 hour zones is forcing longer stay in the 1 hour zone sector. If so, then there is a need to more strongly enforce the 2, 3 and 4 hour zones, or alternatively expand the 1 hour and 2 hour duration sectors.

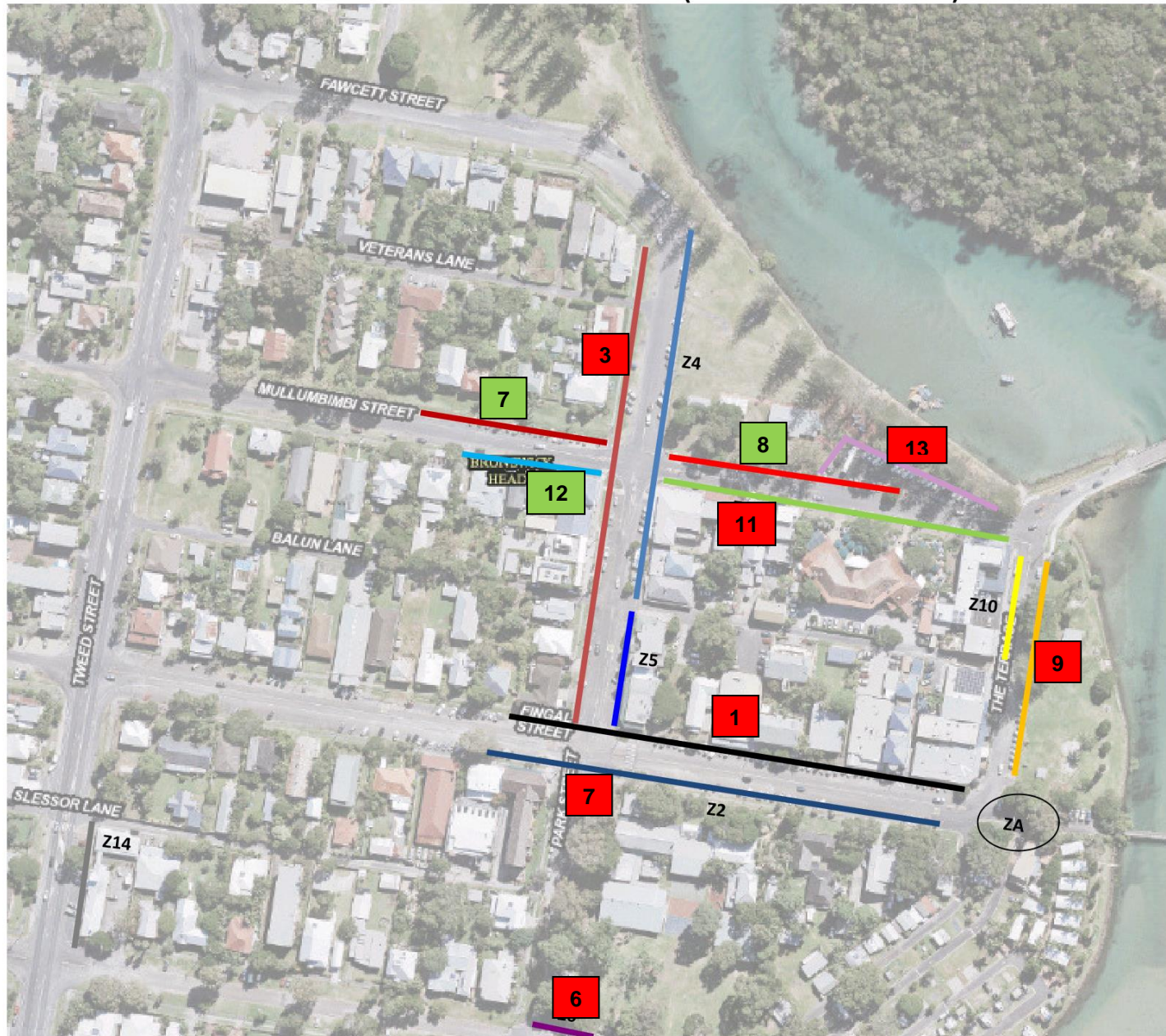
- a. It is recommended that the frequency and effectiveness of enforcement be increased substantially, particularly in the 2, 3 and 4 hour parking duration sector in order to encourage motorists to comply with duration limits. In our view the current availability of parking across the Centre provides the capacity for parking demands which are affected by more effective enforcement to be diverted to other locations in which the demand will be compliant with posted duration limits.

There is also some evidence from the survey data and analyses supporting the need to convert some 2 hour parking in the Centre to 1 hour parking. Nominally, a 20% increase in the 1 hour duration sector may be appropriate at the expense of the 2 hour sector, in combination with more intensive enforcement across the Centre.

- b. Having regard to the potential for recommendations in this report to affect parking demands and durations to the east of the bridge, and after having regard to the above matter, we recommend that demand and duration surveys should continue to be conducted in order to better establish the nature and extent of demands to the east of the bridge and the nature of competing demands and durations in 1 and 2 hour zones. An appropriate data collection and review plan is described in a "Notes re Review Process" prepared by TPS, dated 27th March 2019.



LPR ZONES (POST SEPTEMBER 2018)



| ZONE | TIME LIMIT | # SPACES | ANGLE |
|-------------|-------------------------------------------------------------------------------------|-------------|-------|
| 1 | 1/4 P | 3 | 60' |
| | 1P | 42 | 60' |
| | L.Z. | 1 SRV | - |
| | D.P. | 1 | 60' |
| 2 | D.P. | 2 | 60' |
| | 2P | 36 | 60' |
| 3 | 2P | 24 (note 1) | 60' |
| | 2P | 4 | PP |
| | 1/4 P | 1 | PP |
| | L.Z. | 1 | - |
| 4 | 2P | 28 | 60' |
| 5 | BZ | 1 | - |
| | 1/4 P | 1 | 60' |
| | 1P | 4 | 60' |
| 6 | 4P | | 90' |
| 7 | 3P | 31 (note 1) | 60' |
| 8 | 2P | 7 | PP |
| | 2P | 7 | 90 |
| 9 | DP | 2 | PP |
| | 1P | 6 | PP |
| | 1P | 13 | 60' |
| 10 | LZ | 1 | - |
| | 2P | 4 | PP |
| 11 | 1P | 16 | PP |
| | 1/4 P | 2 | PP |
| 12 | 2P | 7 | PP |
| 13 | 2P | 23 | 60' |
| | DP | 2 | 60' |
| 14 | | 11 (note 1) | 60' |
| ZA (note 2) | 2P | 12 | 90' |
| NOTE 1: | Car spaces not formalised. Number of spaces estimated based on AS2890.5 dimensions. | | |
| | Given spaces are not formalised parking is less efficient and less cars can fit. | | |
| NOTE 2: | ZA not check by LPR. ZA always busy and to be considered 90-100% full | | |

Surveyed Parking Zone Occupancy in Samples from indicated Period As % of Demand

| | | Percent Demand Relative to Supply | | | | | | | | | | | | | | | |
|-----------|---------|-----------------------------------|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|-----|-----|-----|----------|
| APRIL-AUG | Zone | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | Tot | % Permit |
| All Days | Spaces | 3 | 39 | 36 | 27 | 28 | 4 | 24 | 31 | 14 | 16 | 7 | 19 | 4 | 23 | 275 | |
| | Demand | 157% | 80% | 93% | 56% | 74% | 94% | 47% | 67% | 71% | 73% | 85% | 88% | 84% | 85% | 76% | |
| | Permits | 35% | 19% | 24% | 10% | 17% | 30% | 11% | 10% | 13% | 15% | 16% | 19% | 17% | 16% | 16% | 22% |
| Saturday | Spaces | 3 | 39 | 36 | 27 | 28 | 4 | 24 | 31 | 14 | 16 | 7 | 19 | 4 | 23 | 275 | |
| | Demand | 117% | 85% | 82% | 59% | 57% | 100% | 40% | 68% | 96% | 75% | 100% | 84% | 63% | 87% | 74% | |
| | Permits | 17% | 23% | 17% | 11% | 9% | 63% | 8% | 2% | 25% | 13% | 14% | 26% | 38% | 7% | 15% | |
| Sunday | Spaces | | | | | | | | | | | | | | | | |
| | Demand | | | | | | | | | | | | | | | | |
| | Permits | | | | | | | | | | | | | | | | |

| | | Percent Demand Relative to Supply | | | | | | | | | | | | | | | |
|----------|---------|-----------------------------------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------|
| SEPT/OCT | Zone | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | Tot | % Permits |
| All Days | Spaces | 42 | 36 | 27 | 28 | 4 | 24 | 31 | 14 | 19 | 4 | 16 | 19 | 23 | 23 | 310 | |
| | Demand | 66% | 69% | 51% | 75% | 100% | 40% | 37% | 65% | 92% | 79% | 64% | 26% | 85% | 24% | 59% | |
| | Permits | 15% | 20% | 12% | 13% | 29% | 10% | 5% | 11% | 18% | 6% | 13% | 5% | 15% | 9% | 13% | 22% |
| Saturday | Spaces | | | | | | | | | | | | | | | | |
| | Demand | | | | | | | | | | | | | | | | |
| | Permits | | | | | | | | | | | | | | | | |
| Sunday | Spaces | | | | | | | | | | | | | | | | |
| | Demand | | | | | | | | | | | | | | | | |
| | Permits | | | | | | | | | | | | | | | | |

Note : Where occupancy is indicated as exceeding 100% this is due to vehicles recorded by the ANPR system exceeding the nominated capacity of the zone.

**Surveyed Parking Zone Occupancy in Samples from indicated Period
As % of Demand**

| | | Percent Demand Relative to Supply - Fri, Sat, Sun, Mon of Aust Day W/end 2019 | | | | | | | | | | | | | | | | |
|----------|---------|-------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|----------|-----|
| JAN | Zone | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | Tot | % Permit | |
| All Days | Spaces | 42 | 36 | 27 | 28 | 28 | 24 | 24 | 14 | 19 | 4 | 16 | 19 | 23 | 23 | 327 | | |
| | Demand | 83% | 75% | 74% | 83% | 15% | 51% | 66% | 78% | 102% | 91% | 88% | 27% | 94% | 28% | 67% | | |
| | Permits | 17% | 13% | 15% | 13% | 3% | 9% | 13% | 13% | 23% | 26% | 18% | 7% | 19% | 6% | 13% | | 19% |
| Saturday | Spaces | | | | | | | | | | | | | | | | | |
| | Demand | | | | | | | | | | | | | | | | | |
| | Permits | | | | | | | | | | | | | | | | | |
| Sunday | Spaces | 42 | 36 | 27 | 28 | 28 | 24 | 24 | 14 | 19 | 4 | 16 | 19 | 23 | 23 | 327 | | |
| | Demand | 87% | 80% | 76% | 76% | 19% | 46% | 66% | 86% | 97% | 92% | 86% | 31% | 97% | 23% | 67% | | |
| | Permits | 14% | 12% | 15% | 10% | 4% | 11% | 3% | 13% | 16% | 17% | 17% | 4% | 20% | 2% | 11% | | 16% |

Note : Where occupancy is indicated as exceeding 100% this is due to vehicles recorded by the ANPR system exceeding the nominated capacity of the zone.

**Surveyed Parking Durations in Sample Periods from April 2018 to August 2018 (inc)
As % of Demand**

| Zone | Limit (hr) | Duration (Less than or equal to MINUTES duration) | | | | | | | | | | | | | | | TOTAL | % Exceeding Limit |
|------|------------|---------------------------------------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------------------|
| | | 0 | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 | | |
| 1 | 2 | 95% | 0% | 3% | 0% | 1% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 2% |
| 2 | 1 | 95% | 1% | 3% | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 5% |
| 3 | 2 | 87% | 0% | 7% | 1% | 3% | 1% | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 6% |
| 4 | 2 | 93% | 0% | 4% | 2% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 3% |
| 5 | 2 | 92% | 0% | 4% | 2% | 0% | 1% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 4% |
| 6 | 1 | 96% | 0% | 2% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 4% |
| 7 | 4 | 58% | 1% | 13% | 2% | 4% | 7% | 4% | 6% | 1% | 3% | 2% | 0% | 0% | 0% | 0% | 100% | 23% |
| 8 | 3 | 43% | 0% | 13% | 2% | 5% | 6% | 5% | 1% | 4% | 6% | 4% | 1% | 6% | 0% | 3% | 100% | 43% |
| 9 | 2 | 95% | 0% | 4% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 0% |
| 10 | 1 | 97% | 0% | 2% | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 3% |
| 11 | 2 | 88% | 0% | 7% | 3% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 5% |
| 12 | 1 | 94% | 0% | 5% | 1% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 6% |
| 13 | 2 | 93% | 0% | 5% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 1% |
| 14 | 2 | 88% | 0% | 7% | 3% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 5% |
| 15 | 2 | 92% | 0% | 0% | 2% | 0% | 3% | 0% | 3% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 8% |

| Surveyed Parking Durations | | | | | |
|----------------------------|------------|-----------|------|-------|-------------------|
| Zone | Limit (hr) | AVG (min) | <=60 | <=120 | % Exceeding Limit |
| 1 | 2 | 22 | 95% | 98% | 2% |
| 2 | 1 | 21 | 95% | 99% | 5% |
| 3 | 2 | 33 | 87% | 94% | 6% |
| 4 | 2 | 23 | 93% | 97% | 3% |
| 5 | 2 | 26 | 92% | 96% | 4% |
| 6 | 1 | 20 | 96% | 98% | 4% |
| 7 | 4 | 83 | 59% | 71% | 23% |
| 8 | 3 | 135 | 43% | 55% | 43% |
| 9 | 2 | 19 | 95% | 100% | 0% |
| 10 | 1 | 20 | 97% | 99% | 3% |
| 11 | 2 | 28 | 88% | 95% | 5% |
| 12 | 1 | 20 | 94% | 99% | 6% |
| 13 | 2 | 21 | 93% | 99% | 1% |
| 14 | 2 | 28 | 88% | 95% | 5% |
| 15 | 2 | 37 | 92% | 92% | 8% |
| TOTAL | | 34 | 88% | 93% | 8% |

Note : Average parking durations are estimated from demands and associated durations observed via ANPR in each zone.

**Surveyed Parking Durations in Sample Periods for Sept and Oct 2018 (inc)
As % of Demand**

| Zone | Limit (hr) | Duration (Less than or equal to MINUTES duration) | | | | | | | | | | | | | | | TOTAL | % Exceeding Limit |
|------|------------|---------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------------------|
| | | 0 | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 | | |
| 1 | 1 | 96% | 0% | 1% | 1% | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 4% |
| 2 | 2 | 89% | 0% | 6% | 1% | 1% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 1% | 100% | 4% |
| 3 | 2 | 92% | 0% | 3% | 2% | 0% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 5% |
| 4 | 2 | 90% | 0% | 6% | 1% | 0% | 3% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 4% |
| 5 | 1 | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 0% |
| 6 | 4 | 86% | 0% | 6% | 6% | 0% | 3% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 0% |
| 7 | 3 | 82% | 0% | 8% | 3% | 2% | 3% | 0% | 0% | 0% | 2% | 0% | 0% | 0% | 0% | 0% | 100% | 0% |
| 8 | 2 | 96% | 0% | 4% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 0% |
| 9 | 1 | 98% | 0% | 1% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 2% |
| 10 | 2 | 95% | 0% | 5% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 0% |
| 11 | 1 | 100% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 0% |
| 12 | 2 | 98% | 0% | 0% | 0% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 2% |
| 13 | 2 | 94% | 0% | 4% | 1% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 2% |
| 14 | 2 | 86% | 14% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 0% |
| 15 | 2 | | | | | | | | | | | | | | | | | |

| Surveyed Parking Durations | | | | | |
|----------------------------|------------|-----------|------|-------|-------------------|
| Zone | Limit (hr) | AVG (min) | <=60 | <=120 | % Exceeding Limit |
| 1 | 1 | 21 | 96% | 97% | 4% |
| 2 | 2 | 36 | 89% | 96% | 4% |
| 3 | 2 | 26 | 92% | 95% | 5% |
| 4 | 2 | 28 | 90% | 96% | 4% |
| 5 | 1 | 15 | 100% | 100% | 0% |
| 6 | 4 | 34 | 86% | 91% | 0% |
| 7 | 3 | 29 | 82% | 90% | 0% |
| 8 | 2 | 18 | 96% | 100% | 0% |
| 9 | 1 | 18 | 98% | 99% | 2% |
| 10 | 2 | 19 | 95% | 100% | 0% |
| 11 | 1 | 15 | 100% | 100% | 0% |
| 12 | 2 | 19 | 98% | 98% | 2% |
| 13 | 2 | 22 | 94% | 98% | 2% |
| 14 | 2 | 17 | 100% | 100% | 0% |
| 15 | 2 | | | | |
| TOTAL | | 24 | 94% | 97% | 3% |

Note : Average parking durations are estimated from demands and associated durations observed via ANPR in each zone.

**Surveyed Parking Durations on FRI, Sat, Sun and Mon of Australia Day 2019
As % of Demand**

| Zone | Limit (hr) | Duration (Less than or equal to MINUTES duration) | | | | | | | | | | | | | | | TOTAL | % Exceeding Limit |
|------|------------|---------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------------------|
| | | 0 | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 | | |
| 1 | 1 | 86% | 2% | 9% | 2% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 11% |
| 2 | 2 | 79% | 4% | 14% | 1% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 3% |
| 3 | 2 | 77% | 6% | 10% | 2% | 3% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 6% |
| 4 | 2 | 73% | 8% | 14% | 2% | 1% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 5% |
| 5 | 1 | 91% | 3% | 5% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 6% |
| 6 | 4 | 60% | 5% | 17% | 8% | 6% | 3% | 1% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 0% |
| 7 | 3 | 64% | 12% | 17% | 4% | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 1% | 0% | 0% | 0% | 100% | 0% |
| 8 | 2 | 76% | 9% | 7% | 2% | 1% | 2% | 1% | 3% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 7% |
| 9 | 1 | 85% | 7% | 4% | 1% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 7% |
| 10 | 2 | 76% | 3% | 16% | 5% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 5% |
| 11 | 1 | 88% | 5% | 5% | 0% | 0% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 7% |
| 12 | 2 | 76% | 8% | 12% | 3% | 0% | 0% | 0% | 3% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 5% |
| 13 | 2 | 73% | 8% | 8% | 6% | 3% | 1% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 11% |
| 14 | 2 | 97% | 2% | 1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 100% | 0% |
| 15 | 2 | | | | | | | | | | | | | | | | | |

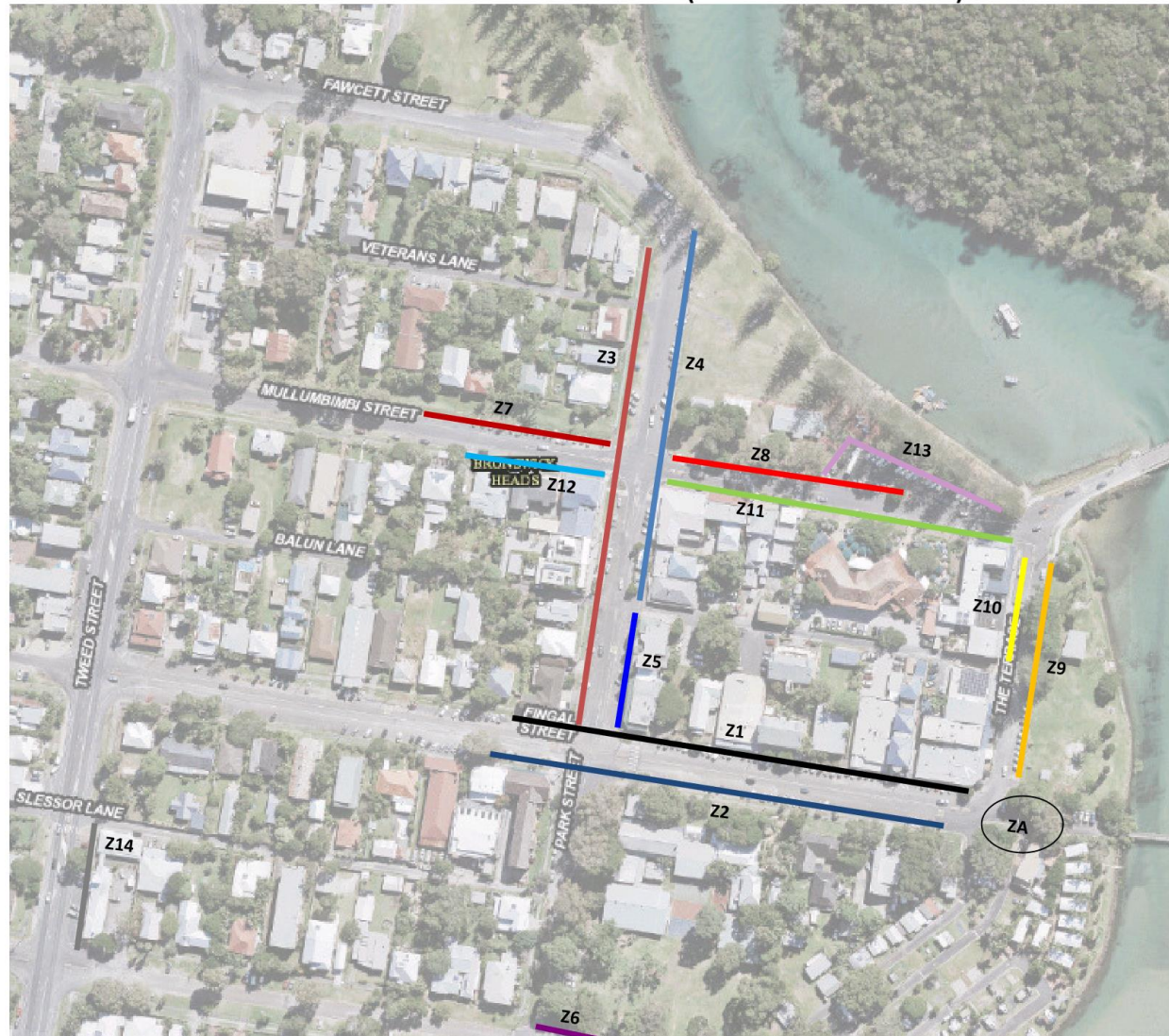
| Surveyed Parking Durations | | | | | |
|----------------------------|------------|-----------|------|-------|-------------------|
| Zone | Limit (hr) | AVG (min) | <=60 | <=120 | % Exceeding Limit |
| 1 | 1 | 27 | 89% | 97% | 11% |
| 2 | 2 | 30 | 83% | 97% | 3% |
| 3 | 2 | 36 | 83% | 94% | 6% |
| 4 | 2 | 35 | 81% | 95% | 5% |
| 5 | 1 | 20 | 94% | 99% | 6% |
| 6 | 4 | 64 | 65% | 81% | 0% |
| 7 | 3 | 46 | 76% | 94% | 0% |
| 8 | 2 | 42 | 85% | 93% | 7% |
| 9 | 1 | 24 | 93% | 97% | 7% |
| 10 | 2 | 34 | 79% | 95% | 5% |
| 11 | 1 | 23 | 93% | 99% | 7% |
| 12 | 2 | 38 | 83% | 95% | 5% |
| 13 | 2 | 41 | 81% | 89% | 11% |
| 14 | 2 | 16 | 99% | 100% | 0% |
| 15 | 2 | | | | |
| TOTAL | | 33 | 85% | 95% | 6% |

Note : Average parking durations are estimated from demands and associated durations observed via ANPR in each zone.

Infringements Issued by Zone Per Day as % of Average Demand in Period

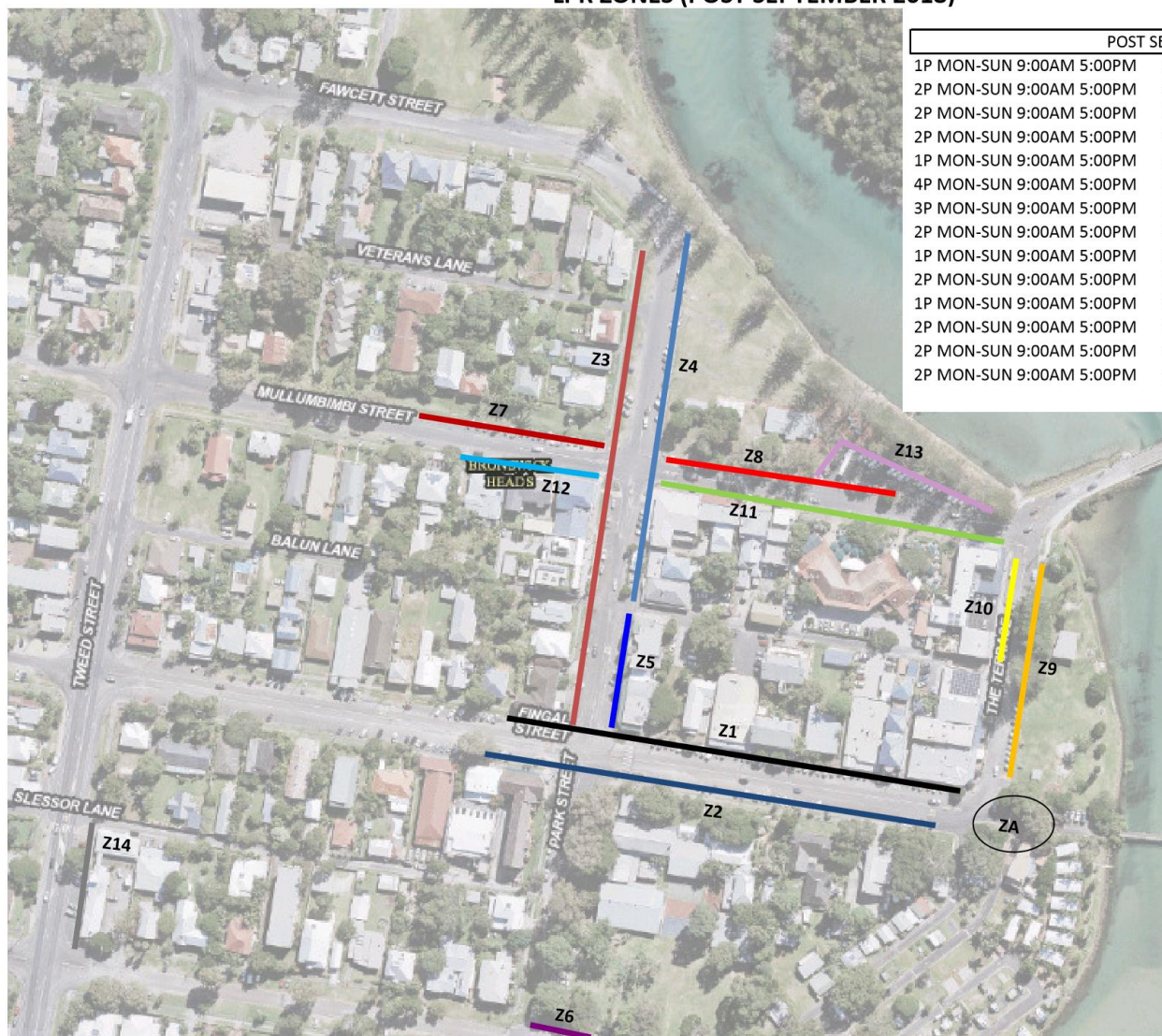
| BRUNSWICK HEADS | | Infringements Issued x Zone | | | | | | | | | | | | | | | | |
|-------------------------|---------------|-----------------------------|------|-------|------|------|------|------|------|-------|------|------|-------|------|------|----|-----|------|
| Dates | Days Attended | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | U/K | All |
| Aug 4, May 9, 11 and 12 | 4 | 8.3% | 9.6% | 8.3% | 0.9% | 2.7% | 0.0% | 0.0% | 0.8% | 0.0% | 4.7% | 7.1% | 11.8% | 0.0% | 1.1% | | | 4.4% |
| Sept 10, 26 | 2 | 2.4% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.6% | 0.0% | 0.0% | 0.0% | 0.0% | 2.6% | 0.0% | 0.0% | | | 1.0% |
| Jan 25, 26, 27, 28 | 4 | 16.1% | 0.7% | 11.1% | 6.3% | 0.0% | 0.0% | 1.6% | 7.1% | 14.5% | 6.3% | 9.4% | 0.0% | 3.3% | 1.1% | | | 7.6% |

LPR ZONES (POST SEPTEMBER 2018)



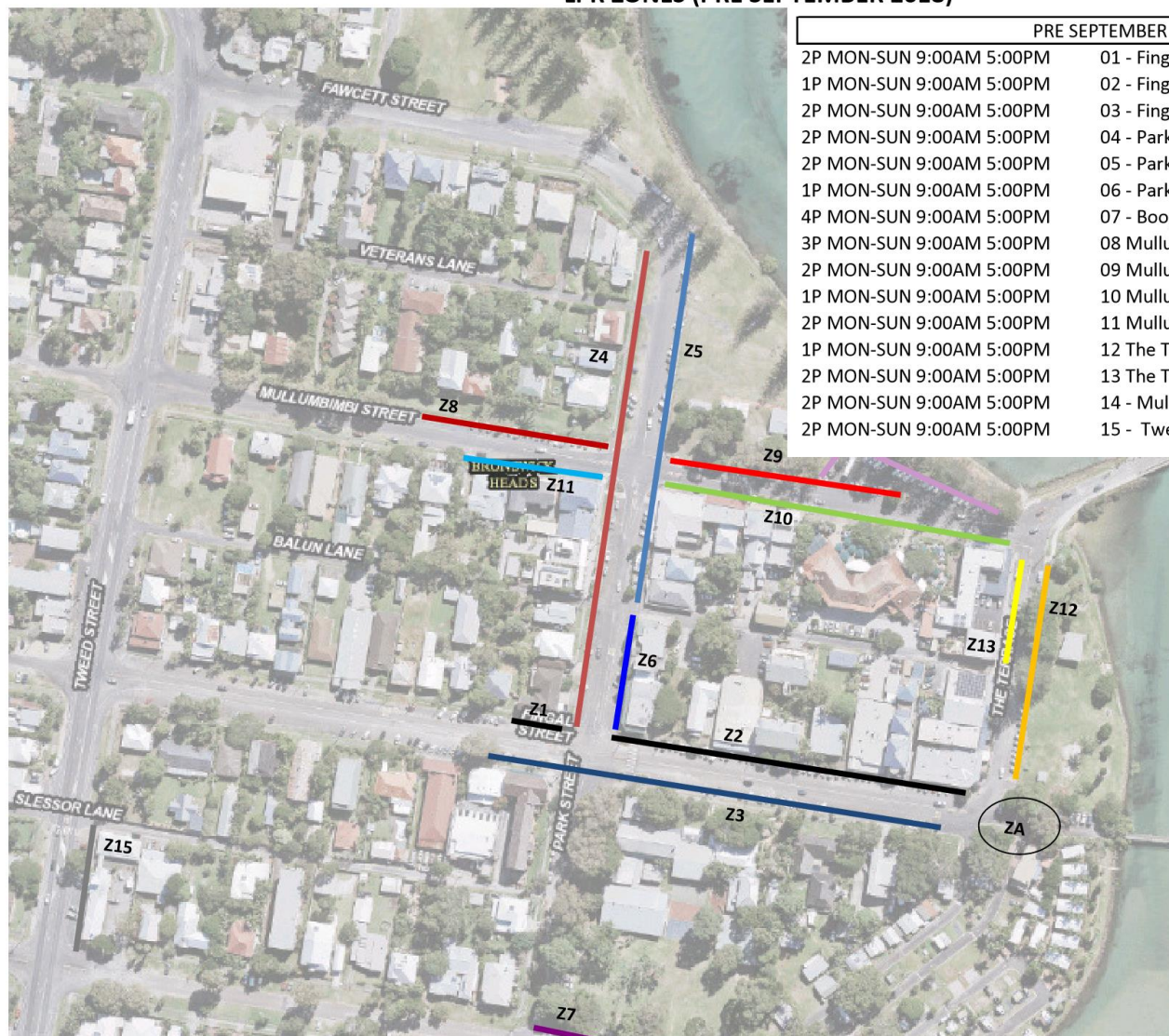
| ZONE | TIME LIMIT | # SPACES | ANGLE |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------|
| 1 | 1/4 P | 3 | 60' |
| | 1P | 42 | 60' |
| | L.Z. | 1 SRV | - |
| | D.P. | 1 | 60' |
| 2 | D.P. | 2 | 60' |
| | 2P | 36 | 60' |
| 3 | 2P | 24 (note 1) | 60' |
| | 2P | 4 | PP |
| | 1/4 P | 1 | PP |
| | L.Z. | 1 | - |
| 4 | 2P | 28 | 60' |
| 5 | BZ | 1 | - |
| | 1/4 P | 1 | 60' |
| | 1P | 4 | 60' |
| 6 | 4P | | 90' |
| 7 | 3P | 31 (note 1) | 60' |
| 8 | 2P | 7 | PP |
| | 2P | 7 | 90 |
| 9 | DP | 2 | PP |
| | 1P | 6 | PP |
| | 1P | 13 | 60' |
| 10 | LZ | 1 | - |
| | 2P | 4 | PP |
| 11 | 1P | 16 | PP |
| | 1/4 P | 2 | PP |
| 12 | 2P | 7 | PP |
| | 2P | 23 | 60' |
| 13 | DP | 2 | 60' |
| | | | |
| 14 | | 11 (note 1) | 60' |
| ZA (note 2) | 2P | 12 | 90' |
| NOTE 1: | Car spaces not formalised. Number of spaces estimated based on AS2890.5 dimensions. Given spaces are not formalised parking is less efficient and less cars can fit. | | |
| NOTE 2: | ZA not check by LPR. ZA always busy and to be considered 90-100% full | | |

LPR ZONES (POST SEPTEMBER 2018)



| POST SEPTEMBER 2018 ZONES | |
|---------------------------|---------------------------------------------|
| 1P MON-SUN 9:00AM 5:00PM | 01 - Fingal St (Tweed St - The Terrace) |
| 2P MON-SUN 9:00AM 5:00PM | 02 - Fingal St (The Terrace - Tweed St) |
| 2P MON-SUN 9:00AM 5:00PM | 03 - Park St (Fingal St - Fawcett St) |
| 2P MON-SUN 9:00AM 5:00PM | 04 - Park St (Fawcett St - Balun Ln) |
| 1P MON-SUN 9:00AM 5:00PM | 05 - Park St (Balun Ln - Fingal St) |
| 4P MON-SUN 9:00AM 5:00PM | 06 - Booyun St (Park St - Dead End) |
| 3P MON-SUN 9:00AM 5:00PM | 07 Mullumbimbi St (Tweed St - Park St) |
| 2P MON-SUN 9:00AM 5:00PM | 08 Mullumbimbi St (Park St - The Terrace) |
| 1P MON-SUN 9:00AM 5:00PM | 09 The Terrace (Mullumbimbi St - Fingal St) |
| 2P MON-SUN 9:00AM 5:00PM | 10 The Terrace (Fingal St - Mullumbimbi St) |
| 1P MON-SUN 9:00AM 5:00PM | 11 Mullumbimbi St (The Terrace - Park St) |
| 2P MON-SUN 9:00AM 5:00PM | 12 Mullumbimbi St (Park St - Tweed St) |
| 2P MON-SUN 9:00AM 5:00PM | 13 - Mullumbimbi St (Car Park) |
| 2P MON-SUN 9:00AM 5:00PM | 14 - Tweed St (Fingal Ln - Booyun St) |

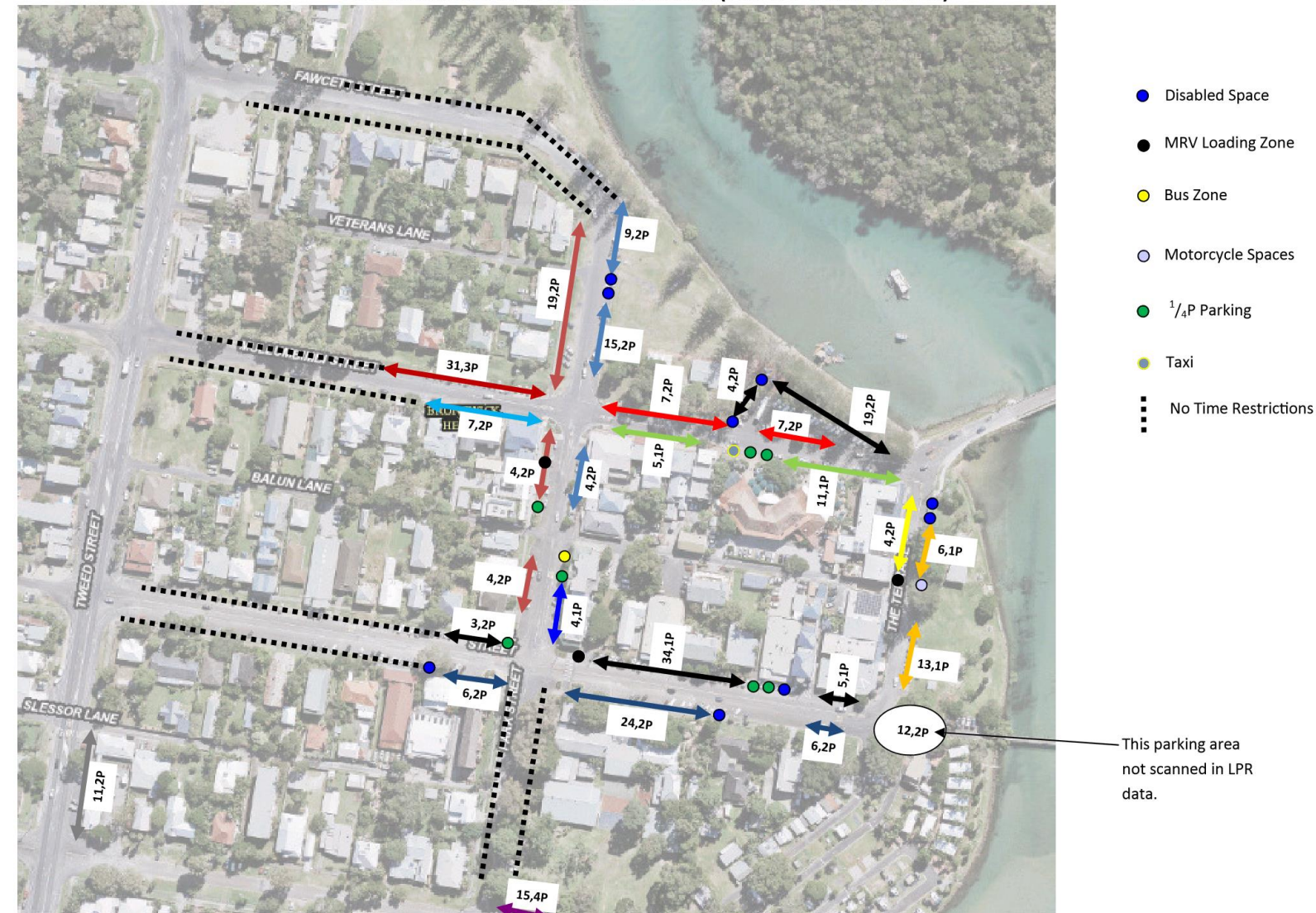
LPR ZONES (PRE SEPTEMBER 2018)



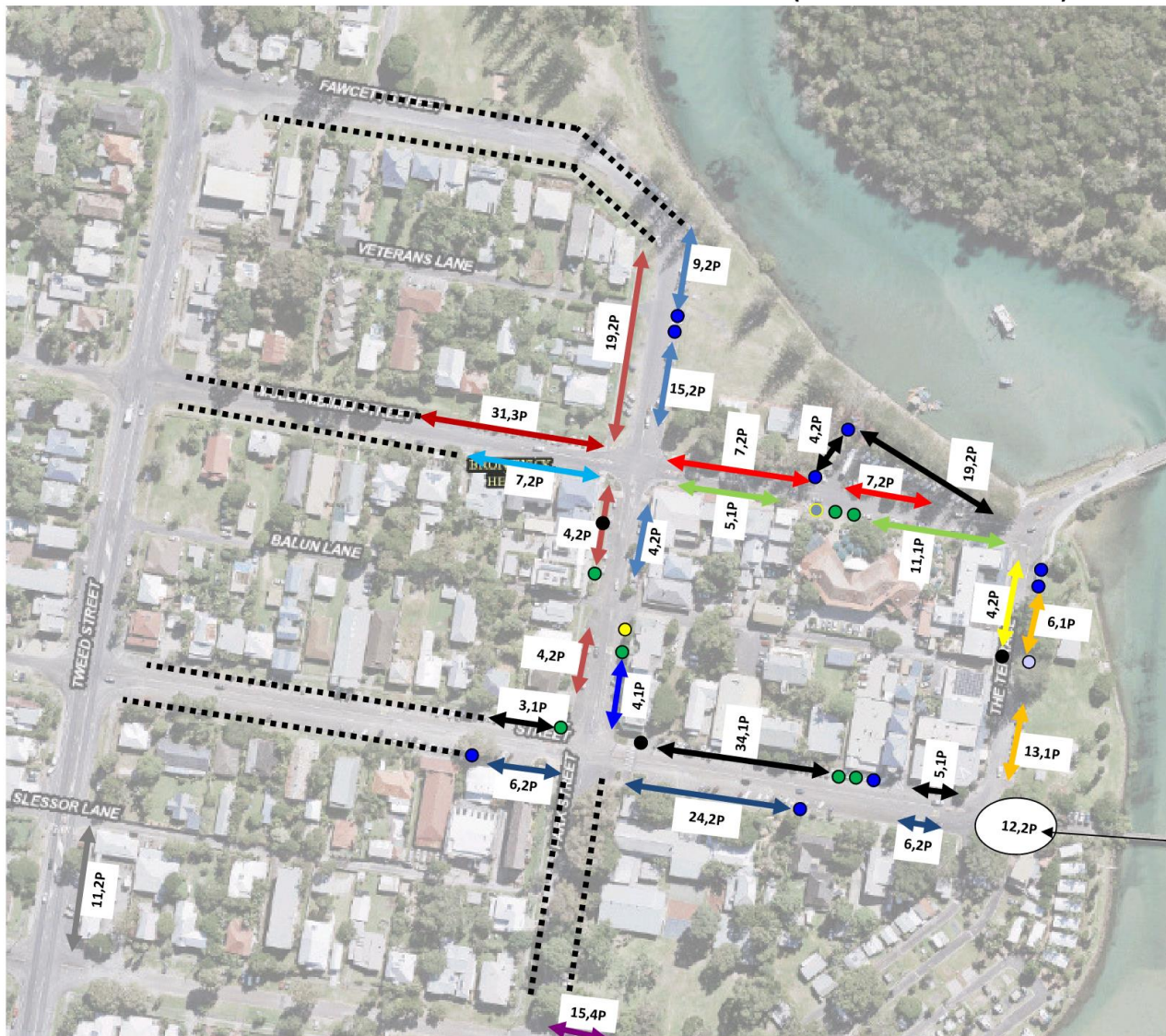
PRE SEPTEMBER 2018 ZONES

| | |
|--------------------------|---------------------------------------------|
| 2P MON-SUN 9:00AM 5:00PM | 01 - Fingal St (Tweed St - Park St) |
| 1P MON-SUN 9:00AM 5:00PM | 02 - Fingal St (Park St - The Terrace) |
| 2P MON-SUN 9:00AM 5:00PM | 03 - Fingal St (The Terrace - Tweed St) |
| 2P MON-SUN 9:00AM 5:00PM | 04 - Park St (Fingal St - Fawcett St) |
| 2P MON-SUN 9:00AM 5:00PM | 05 - Park St (Fawcett St - Balun Ln) |
| 1P MON-SUN 9:00AM 5:00PM | 06 - Park St (Balun Ln - Fingal St) |
| 4P MON-SUN 9:00AM 5:00PM | 07 - Booyun St (Park St - Dead End) |
| 3P MON-SUN 9:00AM 5:00PM | 08 Mullumbimbi St (Tweed St - Park St) |
| 2P MON-SUN 9:00AM 5:00PM | 09 Mullumbimbi St (Park St - The Terrace) |
| 1P MON-SUN 9:00AM 5:00PM | 10 Mullumbimbi St (The Terrace - Park St) |
| 2P MON-SUN 9:00AM 5:00PM | 11 Mullumbimbi St (Park St - Tweed St) |
| 1P MON-SUN 9:00AM 5:00PM | 12 The Terrace (Mullumbimbi St - Fingal St) |
| 2P MON-SUN 9:00AM 5:00PM | 13 The Terrace (Fingal St - Mullumbimbi St) |
| 2P MON-SUN 9:00AM 5:00PM | 14 - Mullumbimbi St (Car Park) |
| 2P MON-SUN 9:00AM 5:00PM | 15 - Tweed St (Fingal Ln - Booyun St) |

BRUNSWICK HEADS PARKING SPACES (PRE SEPTEMBER 2018)



BRUNSWICK HEADS PARKING SPACES (POST SEPTEMBER 2018)



- Disabled Space
- MRV Loading Zone
- Bus Zone
- Motorcycle Spaces
- 1/4P Parking
- Taxi
- No Time Restrictions

This parking area
not scanned in LPR
data.