

GWRC Bus and Rail Patronage, Revenue and Costing Analysis

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Rail Data

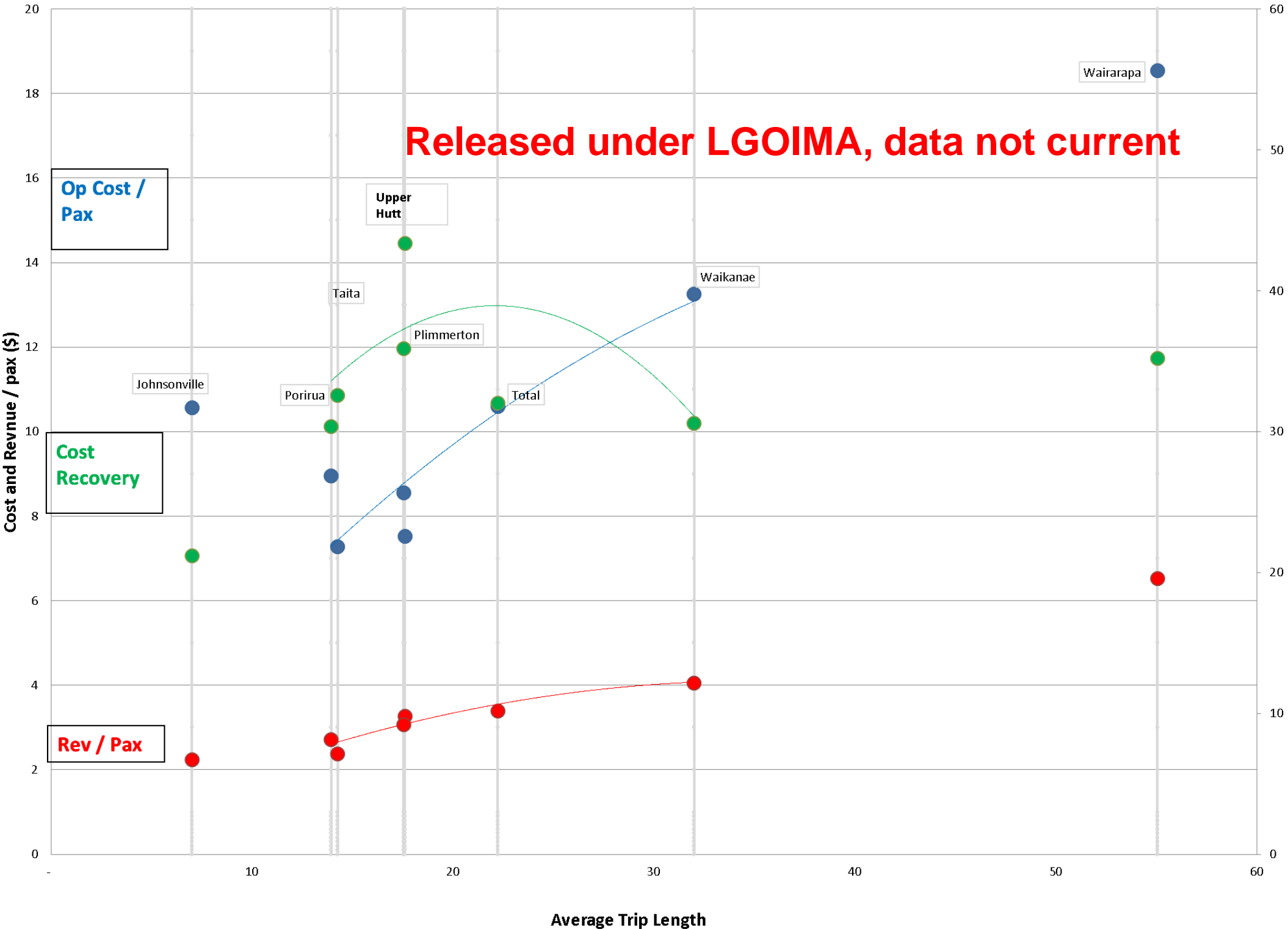
- Survey data from WPTM model build & WPTM demand matrices
- Estimates of patronage, revenue and pax km by:
 - Time period (AM, IP), Service & Segment;
 - Passenger (Adult / Child / Supergold) and Fare (Cash, 10-trip, monthly); and
 - Annualized to obtain yearly estimates
- Controlled at a line level to GWRC patronage and revenue - 12/13 totals
- Costings obtained from GWRC
 - Operating costs - allocated by service / line
 - Capital costs – allocated proportionately
- Outputs → Op Costs, Revenue, Subsidy, Cost Recovery by Service & Segment

Bus Data

- ETM data used for WPTM model build
- Estimates of patronage / revenue and pax km by:
 - Time period & Line
 - Passenger (Adult / Child / Supergold) and Fare (Purse, Cash, Other)
 - Across whole region, inc school buses
- Controlled to GWRC patronage and revenue 12/13 totals and used as input to BPM
- Costings obtained from GWRC
 - Allocated to line / area
 - Input into BPM
 - Validated against GWRC costings
- Outputs from BPM → Op Costs, Revenue, Subsidy, Cost Recovery by Area

Rail All Day, Service, Pax v Avg TL

Rail, All Day, By Service: Cost / Pax, Revenue / Pax and Cost Recovery



Rev / Pax

Linear relationship with Avg TL

Op Cost / Pax

WRL = High

Por / Tai / Plim = Low

Linear

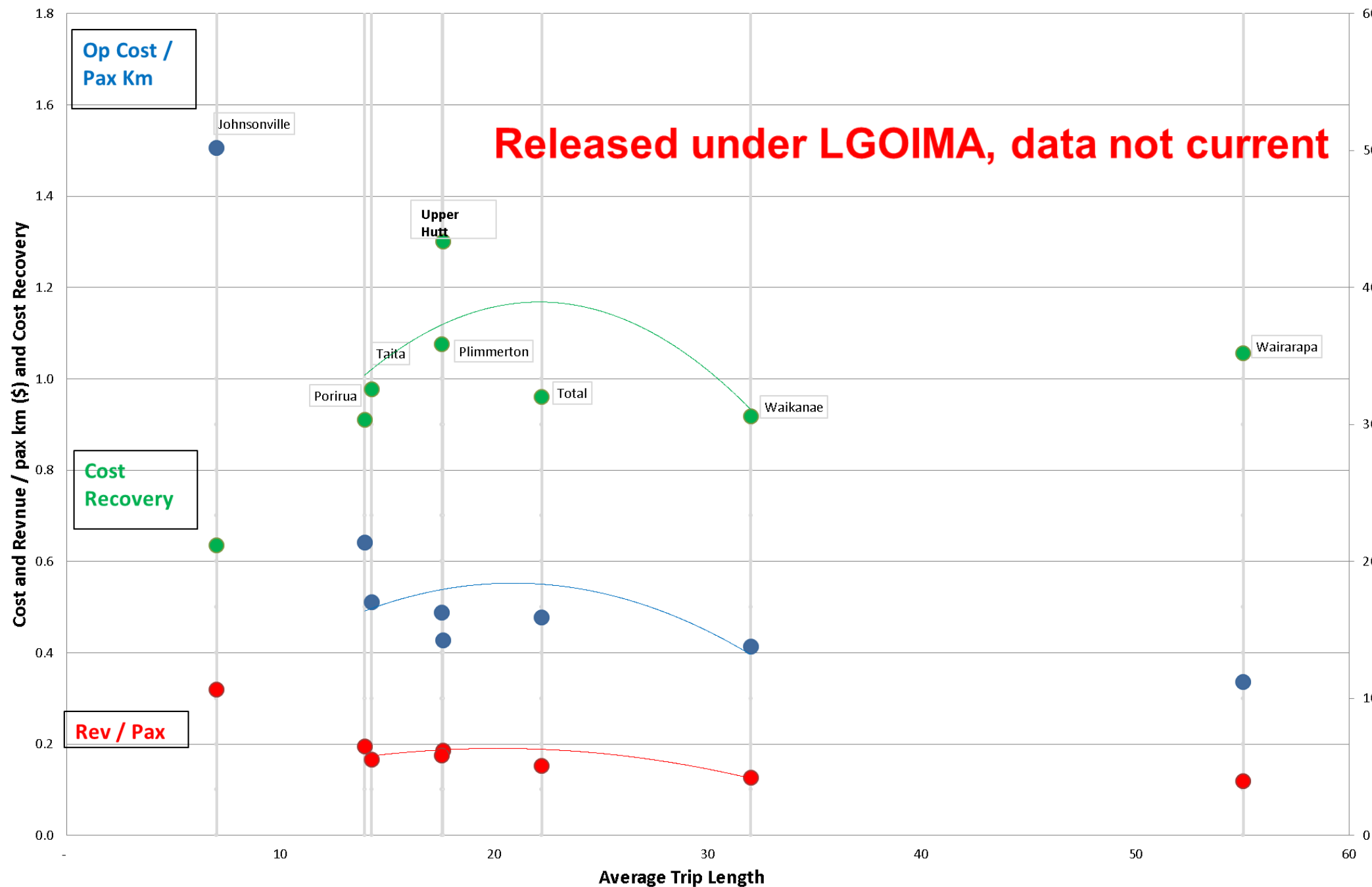
Diverging from Rev / Pax

Cost Recovery

Between 30% to 43%, Avg = 32%

Rail All Day, Service, Pax Km v Avg TL

Rail, All Day, By Service: Cost / Pax Km, Revenue / Pax Km and Cost Recovery



Rev / Pax Km
 Decrease with Avg TL

Op Cost / Pax Km
 Decrease with Avg TL.

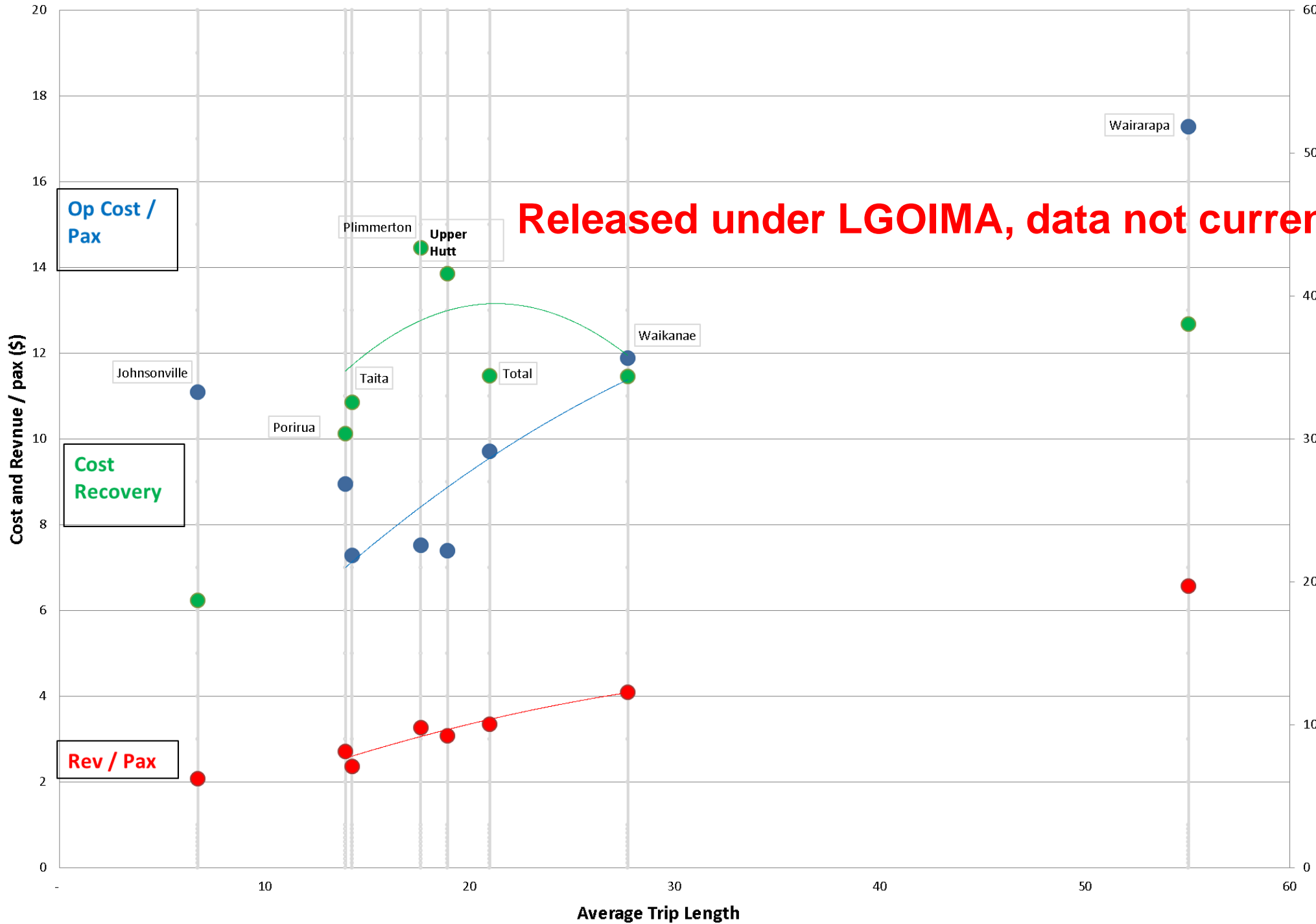
Higher than Rev / Pax Km

Cost Recovery
 As per previous slide



Rail Peak, Service, Pax v Avg TL

Rail, Peak, By Service: Cost / Pax, Revenue / Pax and Cost Recovery



Rev / Pax
 Linear Relationship with Avg TL

Op Cost / Pax
 Linear Relationship with Avg TL

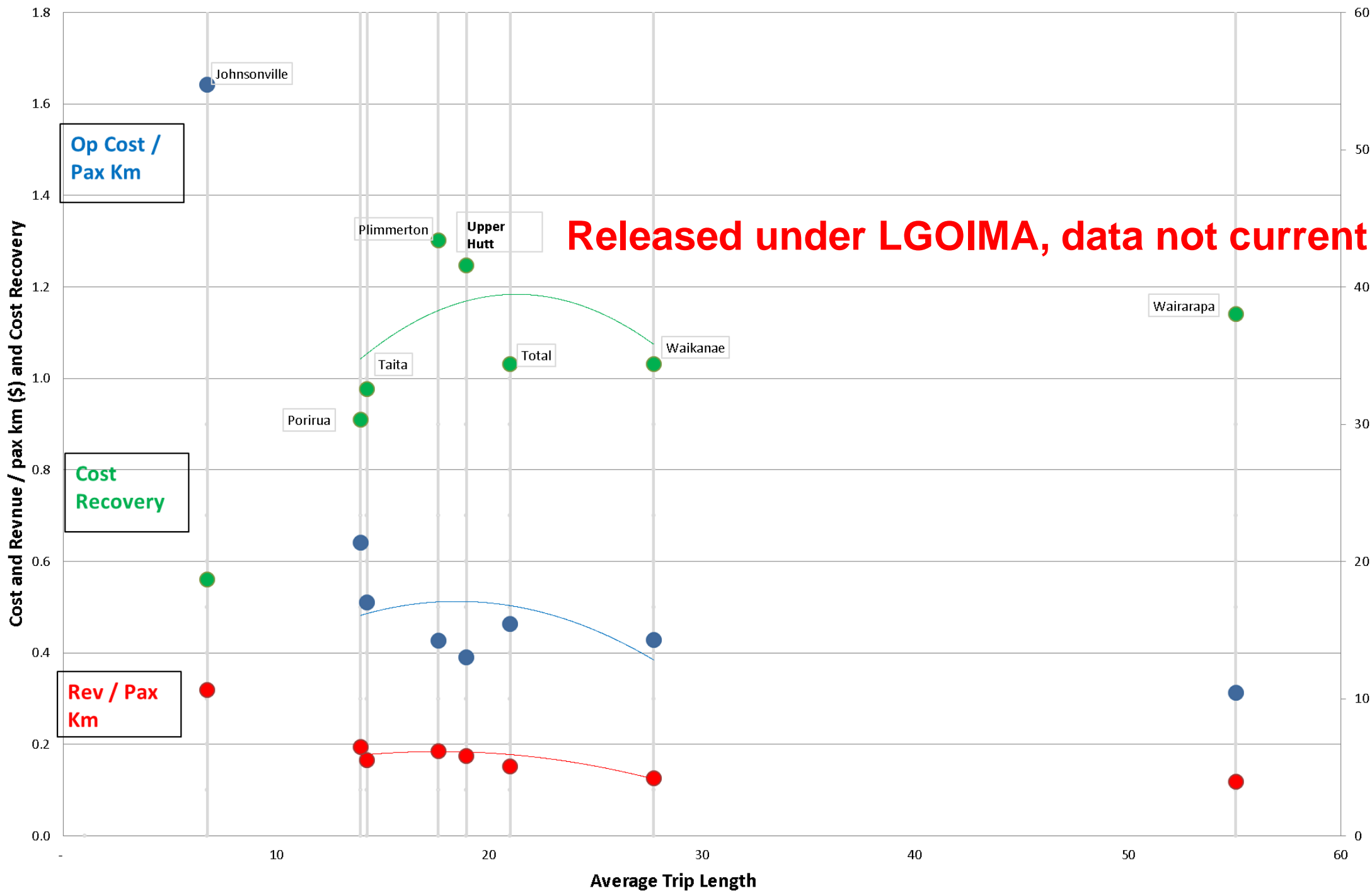
Cost Recovery
 Marginally higher than all day

JVL = Low

Medium distance lines (UH, Plim) = Best

Rail Peak, Service, Pax Km v Avg TL

Rail, Peak, By Service: Cost / Pax Km, Revenue / Pax Km and Cost Recovery



Rev / Pax Km

Decrease as TL increase

Op Cost / Pax Km

Avg TL Increases, Op Cost / Km Decreases

JVL = High Op Cost / Pax Km

Cost Recovery

As per previous slide



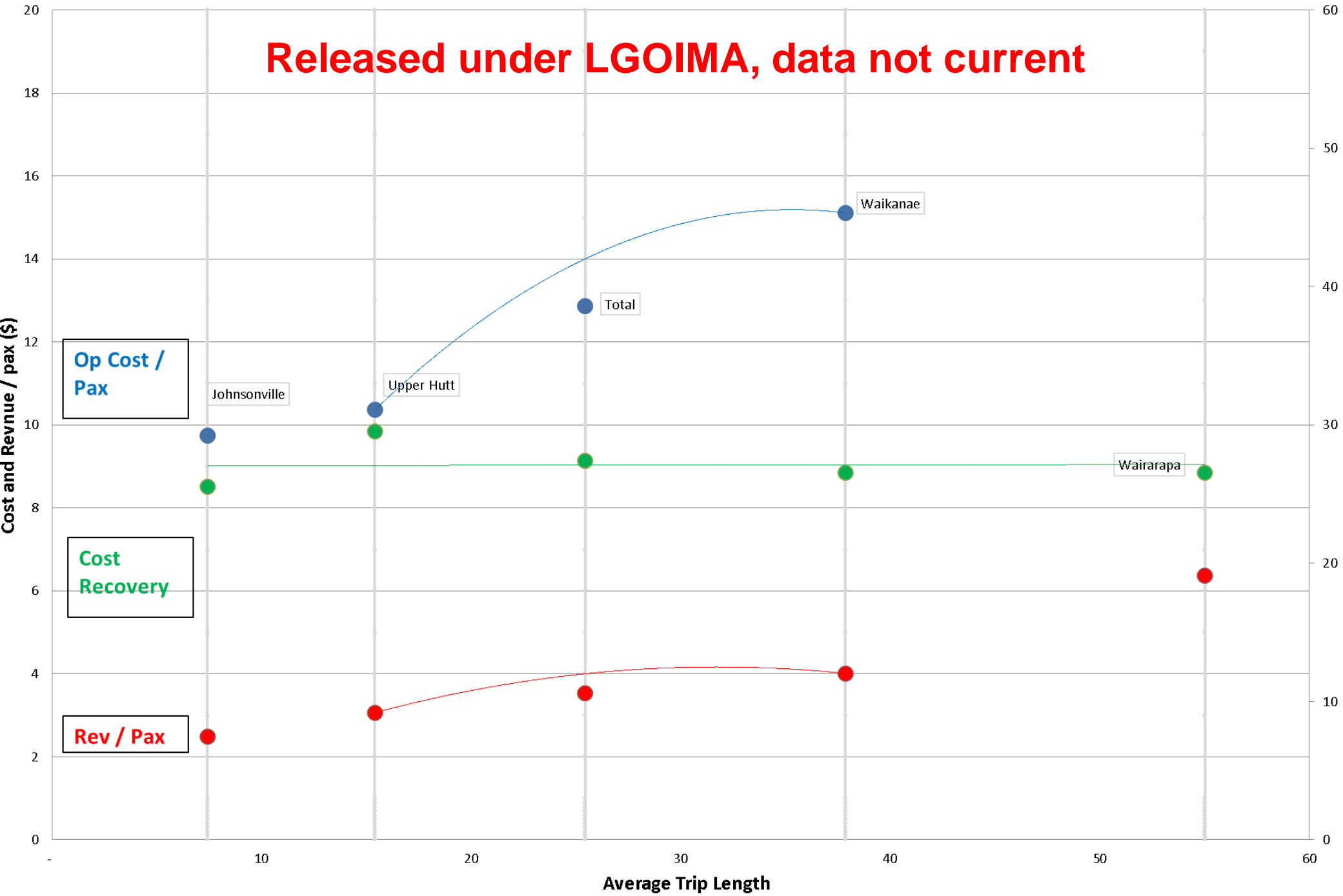
greater WELLINGTON

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Rail Off Peak, Service, Pax Km v Avg TL

Rail, Off-Peak, By Service: Cost / Pax, Revenue / Pax and Cost Recovery



Rev / Pax
 Increases with Avg TL

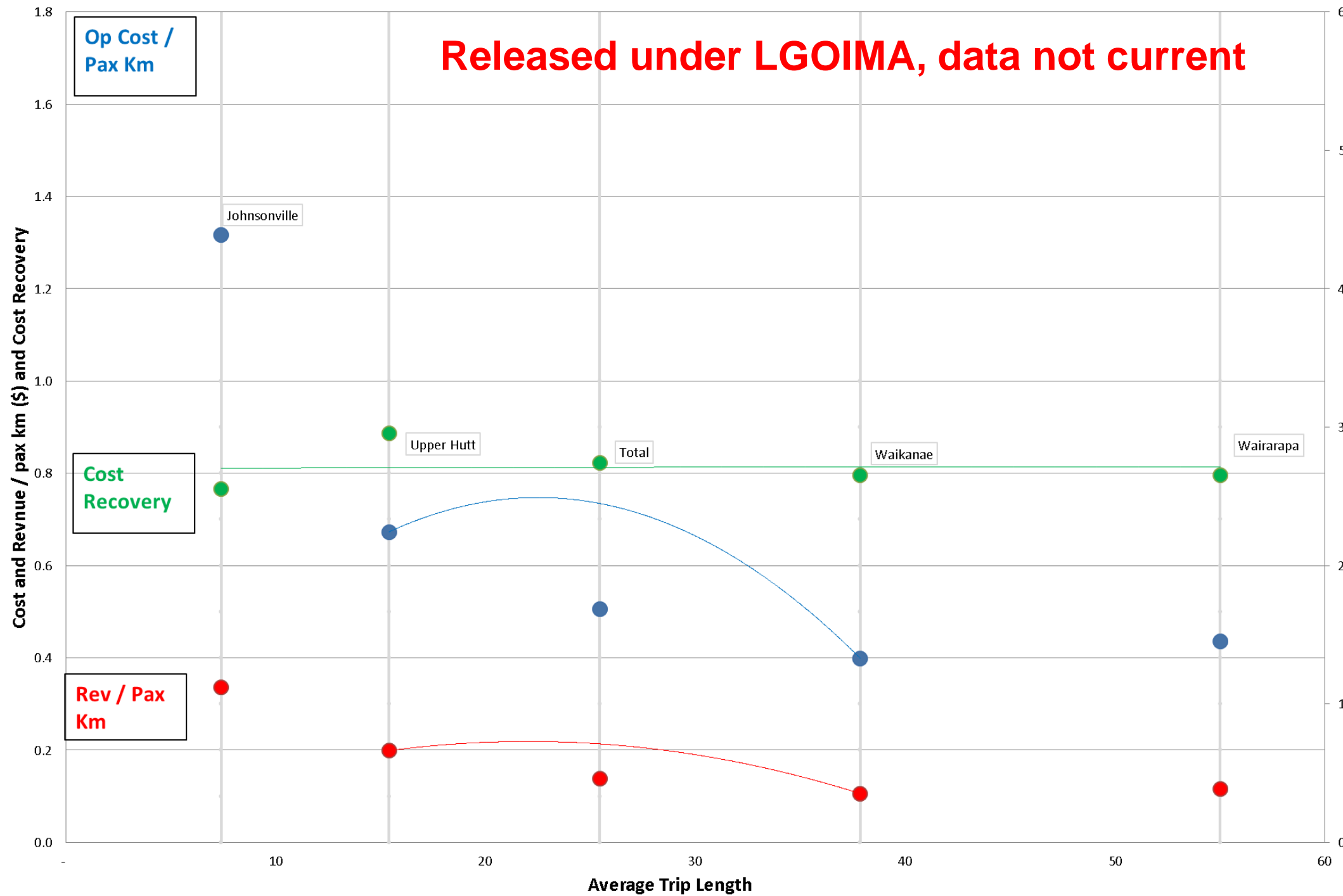
Op Cost / Pax
 Increases with Avg TL
 Faster rate of increase than Rev / Pax

Cost Recovery
 27 to 29% across all lines
 Flat
 Less than Peak



Rail Off Peak, Service, Pax Km v Avg TL

Rail, Off-Peak, By Service: Cost / Pax Km, Revenue / Pax Km and Cost Recovery



Rev / Pax Km
 Decreases with Avg TL

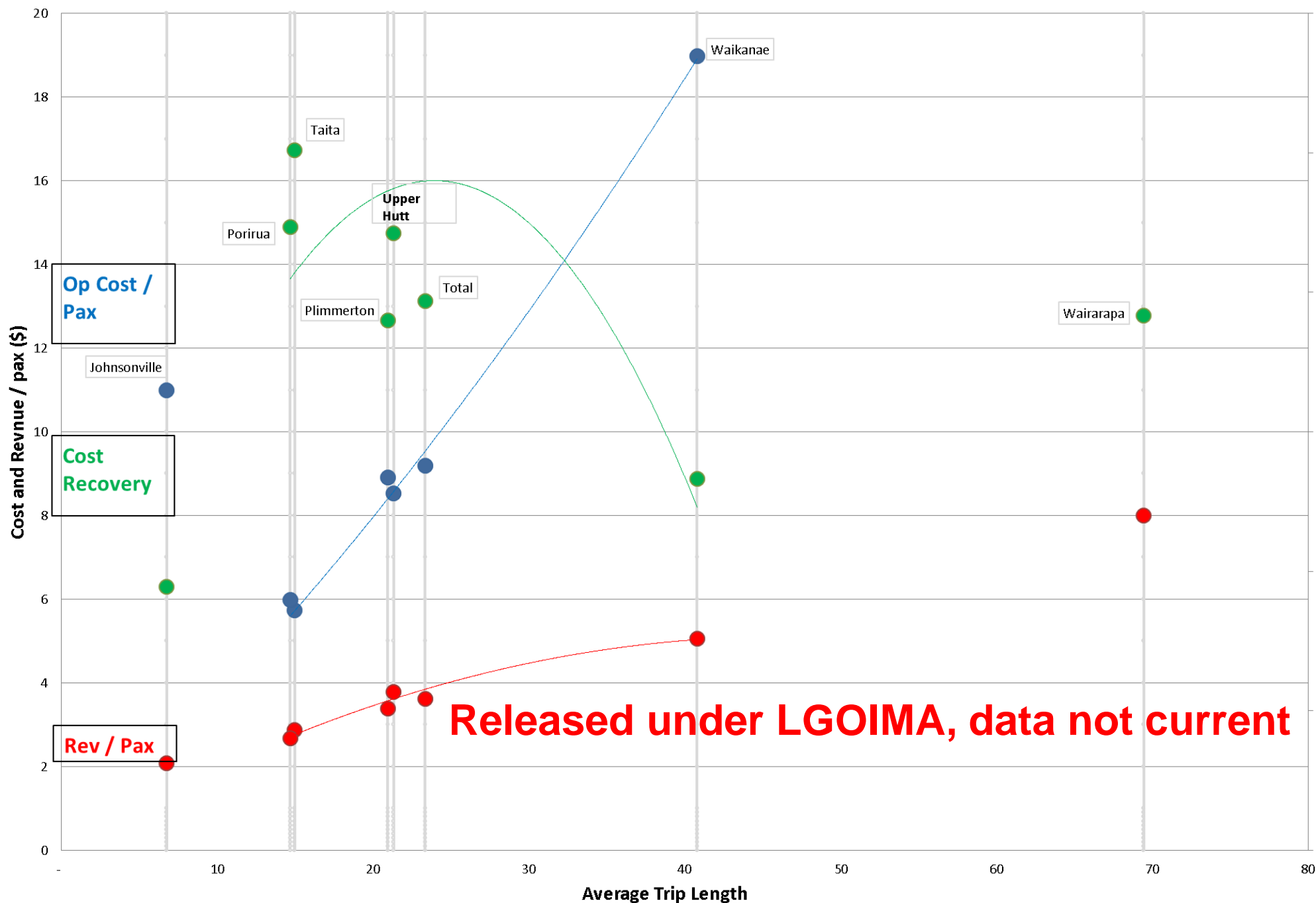
Op Cost / Pax Km
 Decreases with Avg TL

Cost Recovery
 As per previous slide
 Flat
 Less than Peak



Rail Peak, Segment, Pax v Avg TL

Rail, Peak, By Segment: Cost / Pax, Revenue / Pax and Cost Recovery



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Rev / Pax

Increases with Avg TL

Op Cost / Pax

Increases with Avg TL

Faster rate of increase than Rev / pax

JVL = Outlier

Cost Recovery

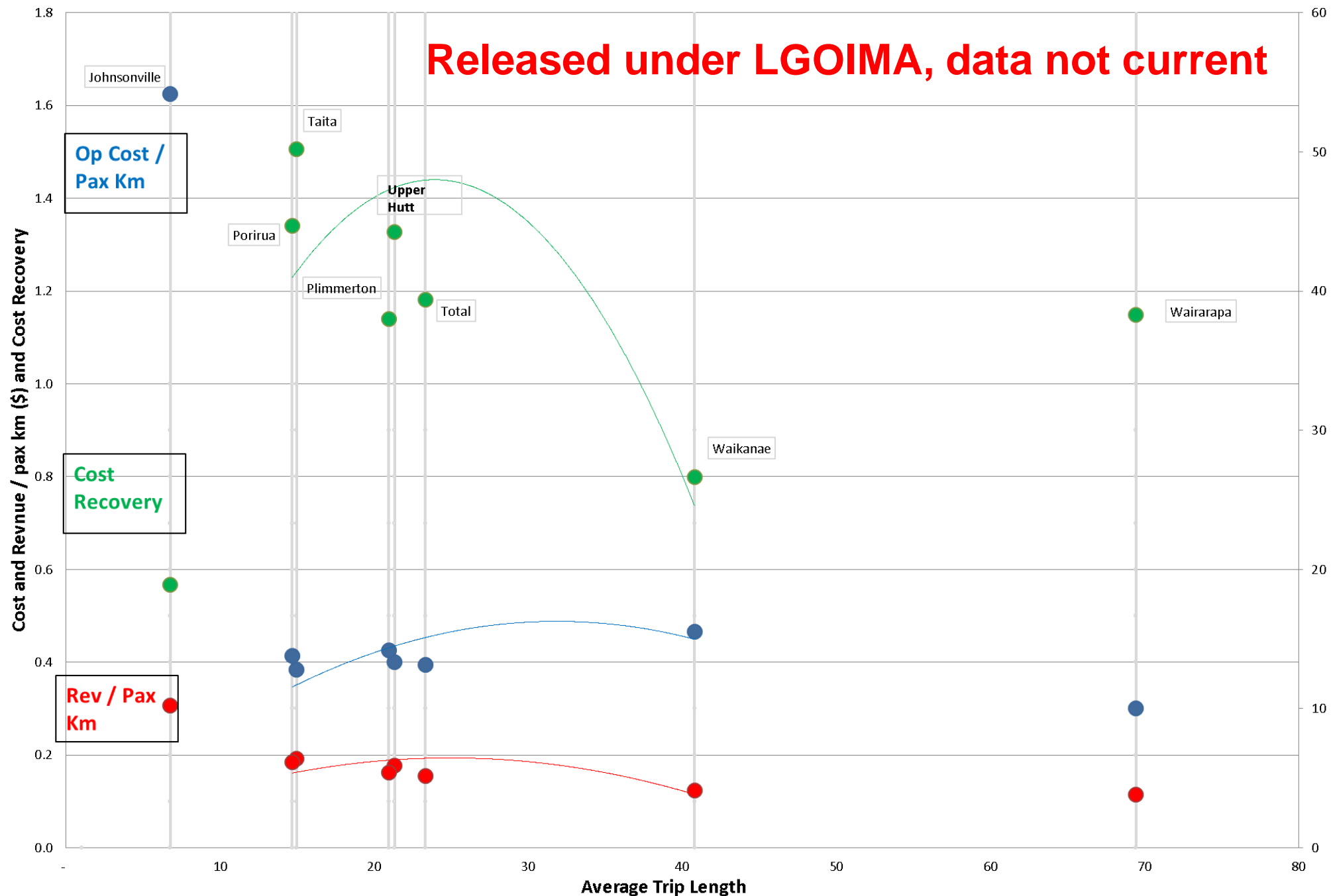
Lower Avg TL = Higher Avg Load Factors

CR = Higher for shorter segments



Rail Peak, Segment, Pax Km v Avg TL

Rail, Peak, By Segment: Cost / Pax Km, Revenue / Pax Km and Cost Recovery



Rev / Pax Km
Decreases with Avg TL

Op Cost / Pax Km
Decreases with Avg TL

Cost Recovery
Shorter segments = higher CR
Apart from JVL
Waikanae = Lowest CR

Waikanae Segment = High cost / pax km



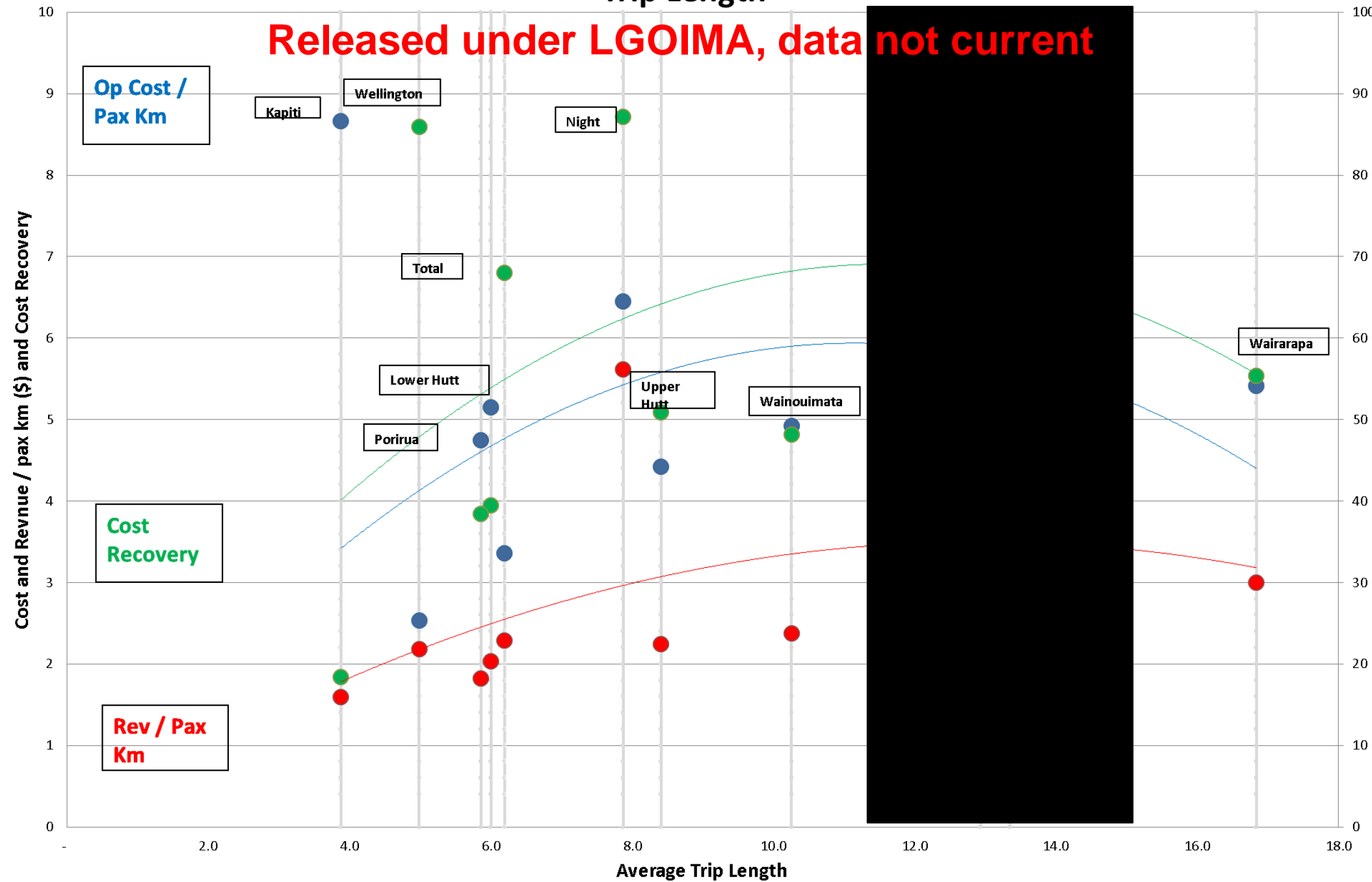
Summary Rail

- Rail CR = ~35%
- Service analysis:
 - Rev / pax and Op Cost / Pax increase as Avg TL increase
 - Diverging trends: Difference between Rev / pax and Op Cost / pax increases as Avg TL increases
 - Subsidy required increases as Avg TL increases
 - Little variation in CR (apart from JVL)
 - Peak CR → Higher than Off-peak CR (not by much)
- Segment analysis:
 - Shorter segments (Por-WLG, Waterloo-WLG) → Higher CR
 - Higher Load Factors on shorter segments, therefore costs go down
 - Waikanae / Wairarapa → High costs, Fewer boardings, lower load factor relative to shorter segments
 - Lower CR

Bus Data – All Day, Pax v Avg TL

s7(2)(b)(ii) – commercial position and s7(2)(c)(i) - confidentiality

Bus, All Day, By Area: Cost / Pax, Revenue / Pax and Cost Recovery vs Average Trip Length



Rev / Pax

Other areas, rev / pax proportional to Avg TL

Op Cost / Pax

Kap / Night = High

WLG / LH / Por = Low

Cost Recovery

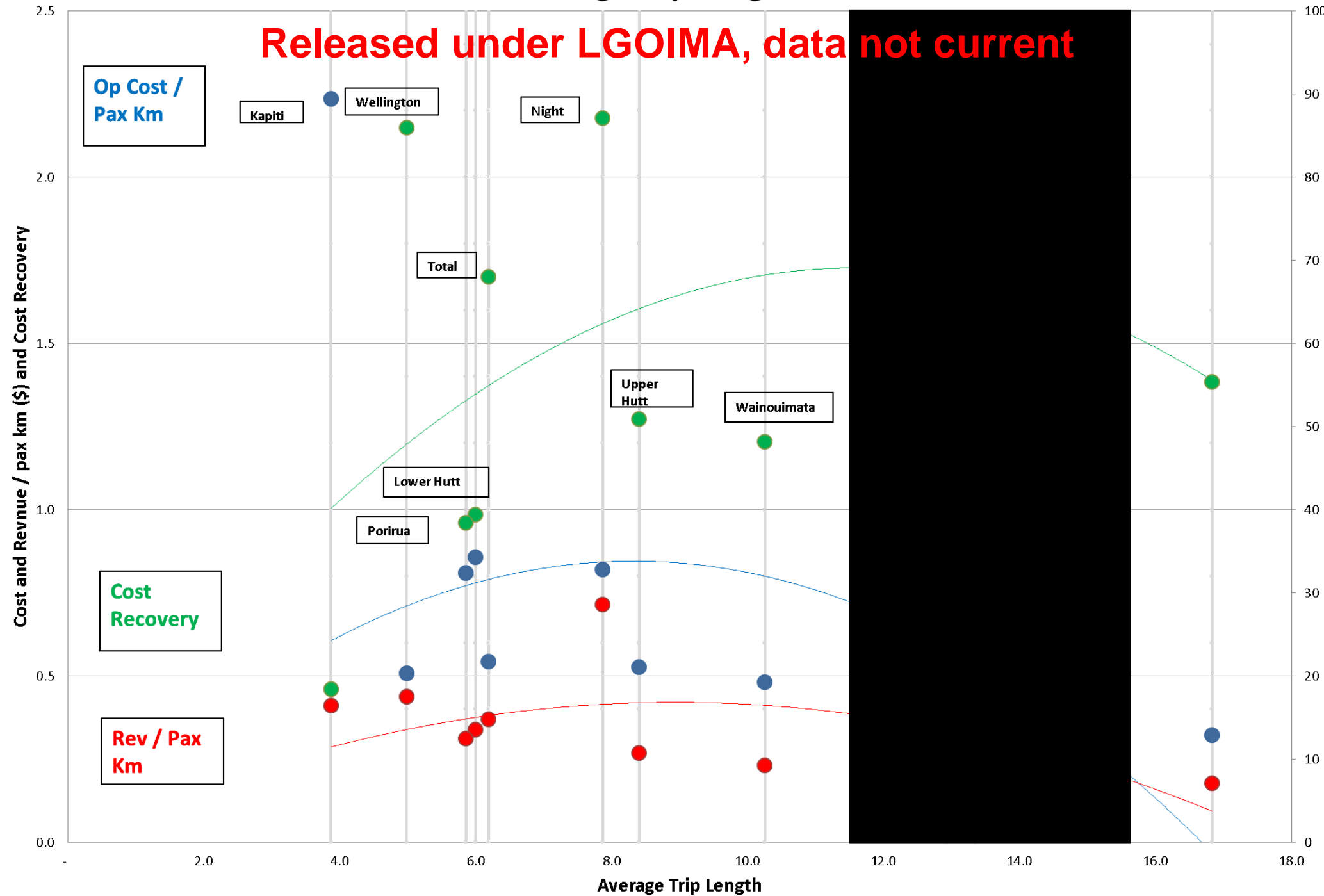
WLG / Night = Highest

Kap / Por = Low

Bus Data – All Day, Pax Km v Avg TL

s7(2)(b)(ii) – commercial position and s7(2)(c)(i) - confidentiality

Bus, All Day, By Area: Cost / Pax Km, Revenue / Pax Km and Cost Recovery vs Average Trip Length

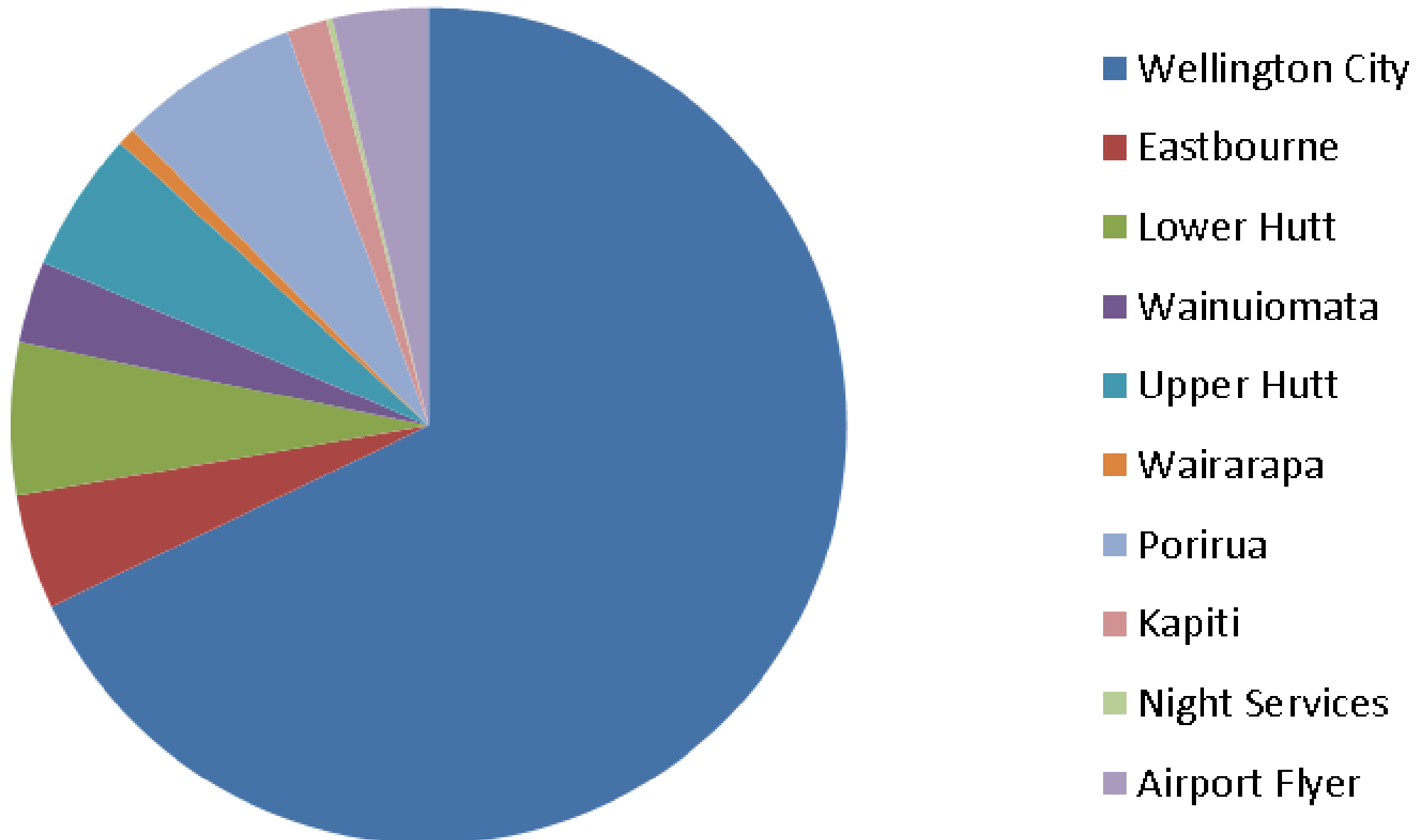


- **Rev / Pax Km**
Decrease as pax km increases
- **Op Cost / Pax Km**
Decreases as pax km increases
Rate of decrease greater than rev / pax km
- **Cost Recovery**
As per previous slide
WLG & Long Distance trips = best CR

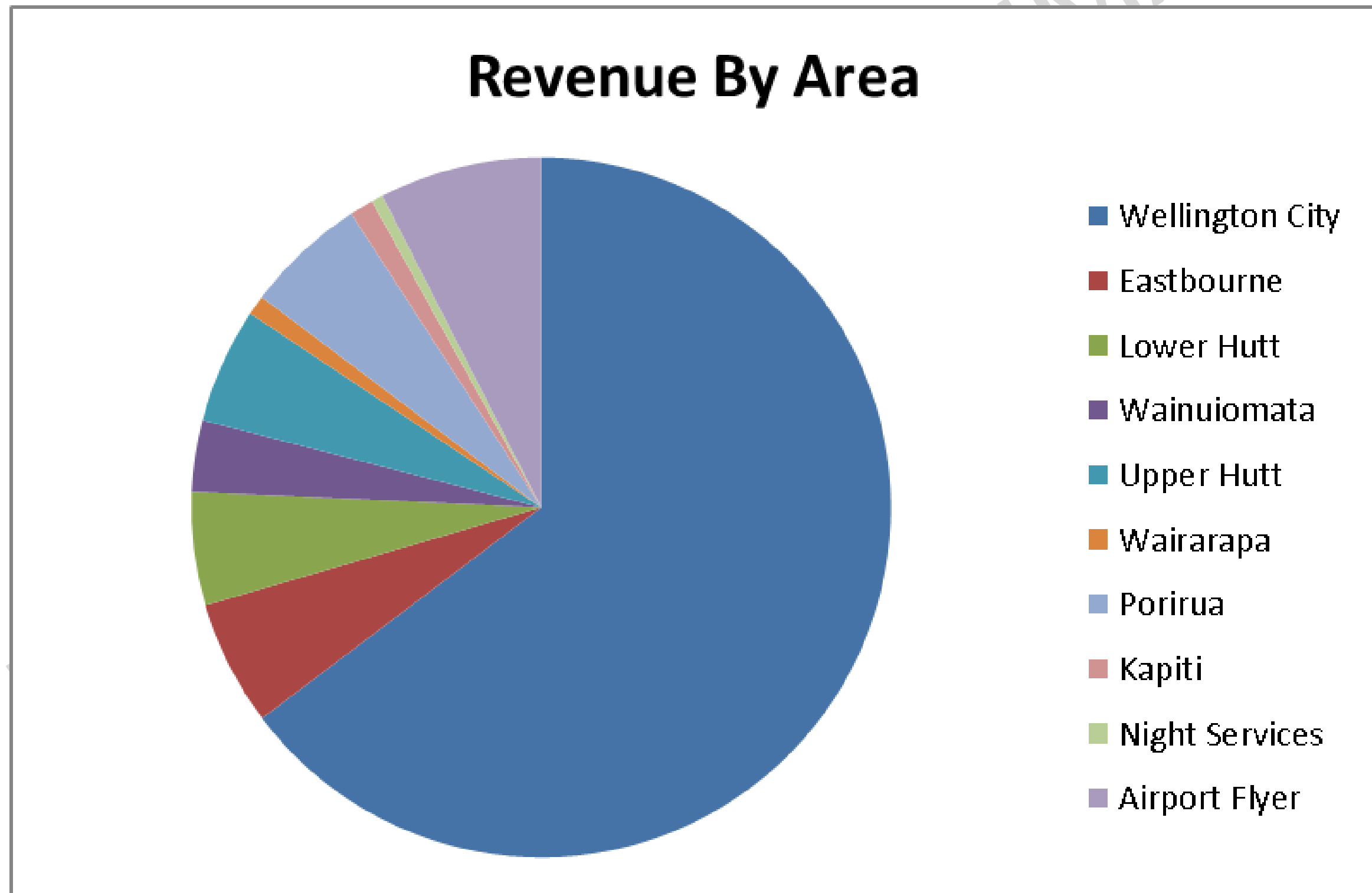
Bus Data – Pax By Area

MAA,

Bus Pax By Area

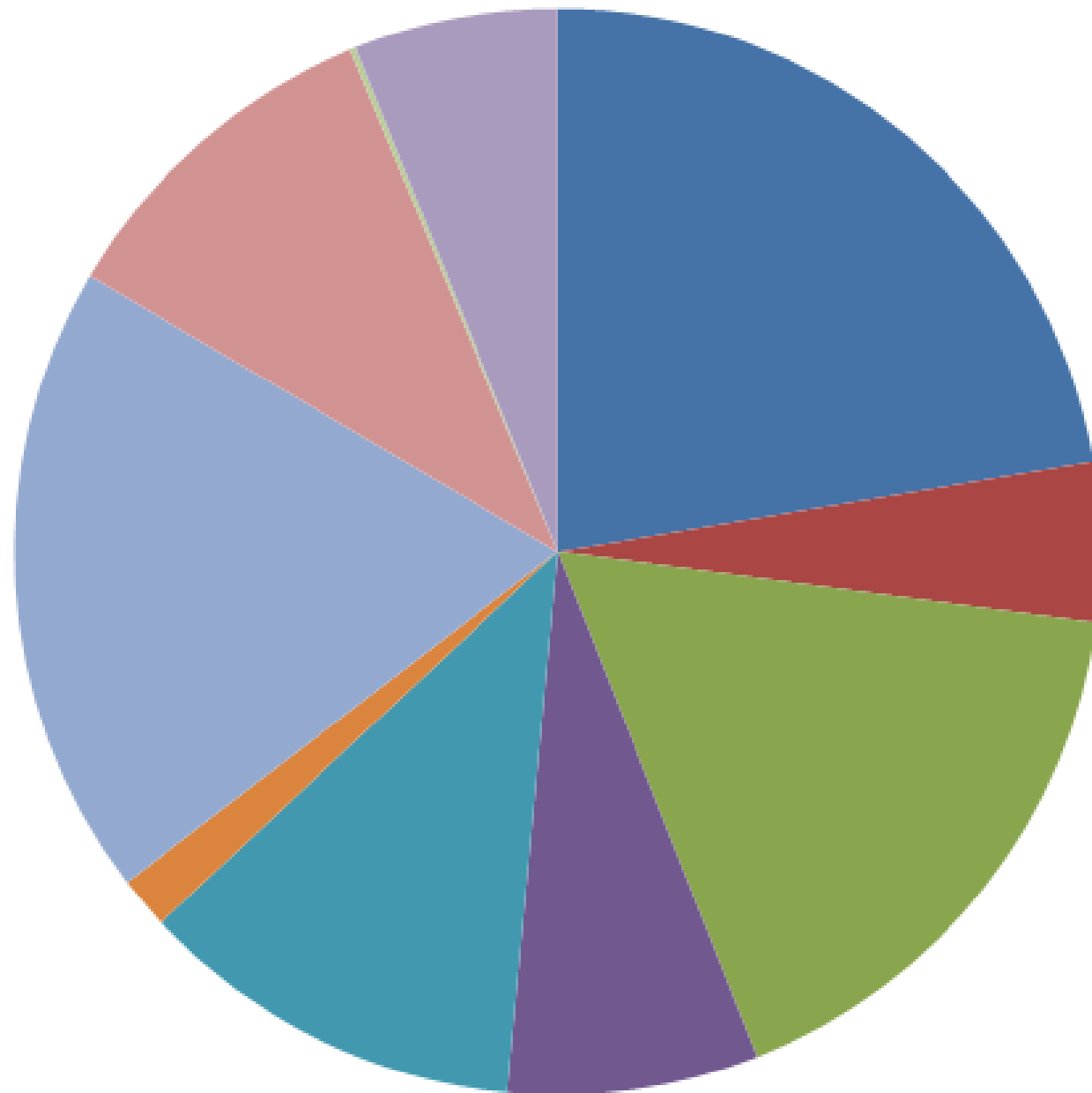


Bus Data – Revenue By Area



Bus Data – Funding By Area

Funding By Area

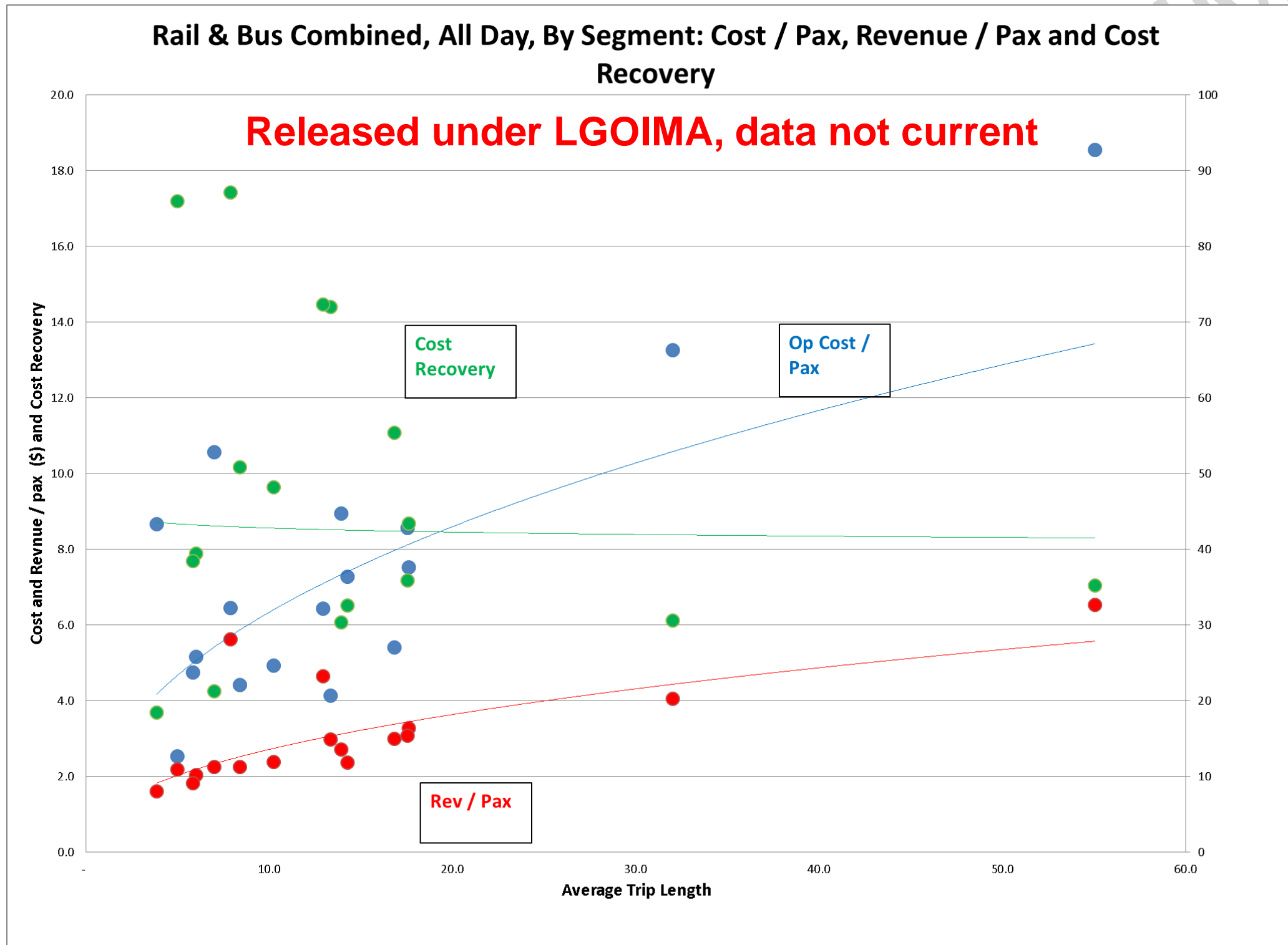


- Wellington City
- Eastbourne
- Lower Hutt
- Wainuiomata
- Upper Hutt
- Wairarapa
- Porirua
- Kapiti
- Night Services
- Airport Flyer

Summary Bus

- Bus CR = ~68%
 - WLG and longer distance services → Highest CR
 - Short distance (Kap, Por, LH) services → Lowest CR
- [REDACTED]
- Urban centers – WLG = high CR, Por / Kap = Low CR
- [REDACTED]
- Wellington
 - 70% pax, 65% rev, 25% funding
- Rest of region
 - 30% pax, 35% rev, 75% funding

Rail & Bus– All Day, Pax v Avg TL



Rev / Km

Noticeable trend

Avg TL inc; Rev / KM inc

Op Cost / Pax Km

Weak trend

Op Cost / Km and Rev / Km diverge

Avg TL increases, diff between Op Cost / Km and Rev / Km increases

Cost Recovery

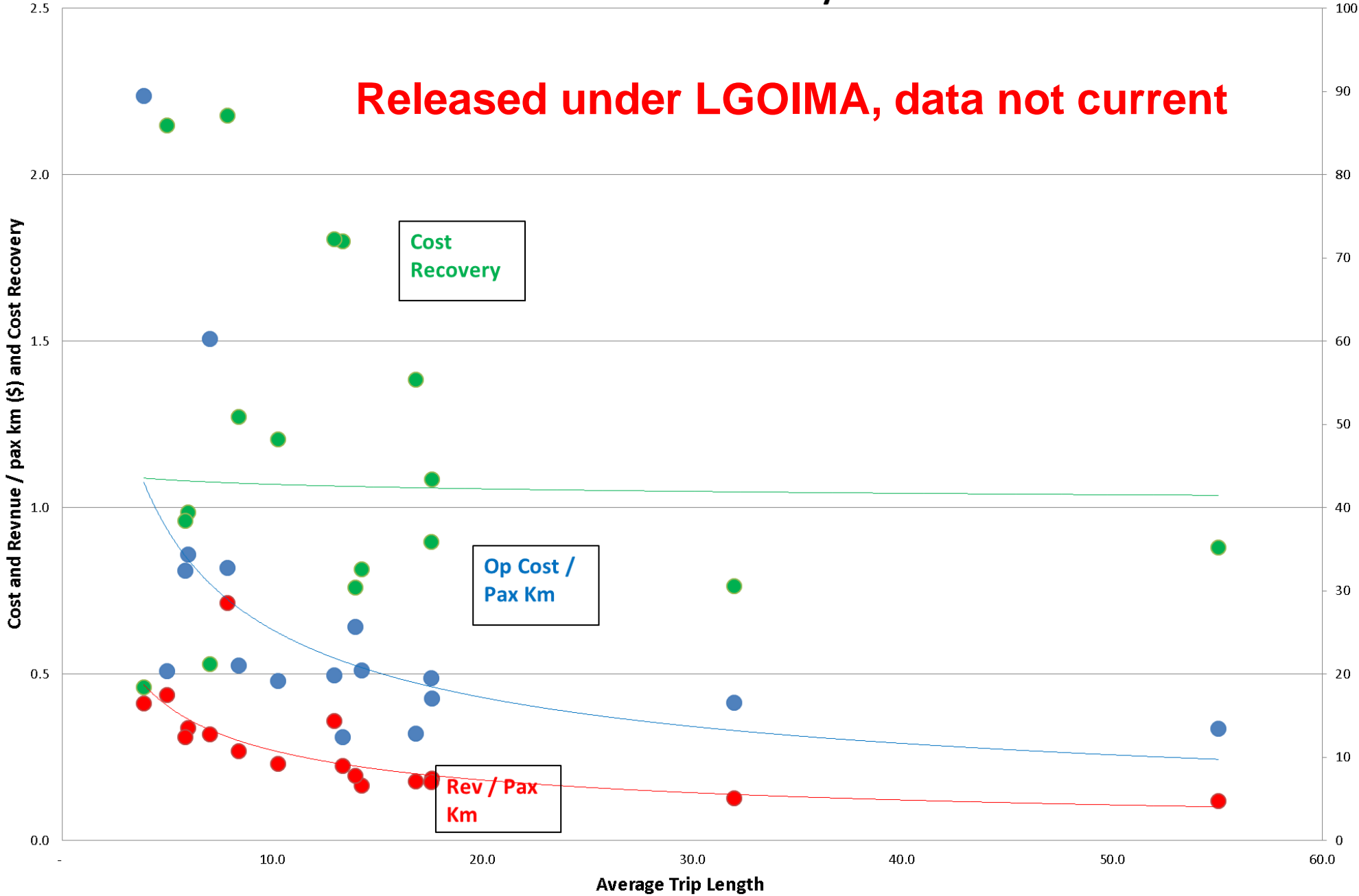
No real trend

Short TL = Higher CR

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Rail & Bus– All Day, Pax Km v Avg TL

Rail & Bus Combined, All Day, By Segment: Cost / Pax Km, Revenue / Pax Km and Cost Recovery



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Rev / Pax Km

Noticeable trend

Op Cost / Pax Km

Weak trend

Avg TL increases, Rev / Pax Km and Op Cost / Pax Km decreases

Cost Recovery

No real trend

Shorter TL = Higher CR



Overall Summary

- Network wide CR = ~60%
- Rail = lower CR than bus
 - Rail = 35%
 - Bus = 67%
- JVL line = lowest CR for rail
- Shorter rail segments (Por, Taita to WLG) = highest CR
- [REDACTED]
- Bus – rest of region → 35% pax, 70% subsidy

Thank you for listening. Any Questions?

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