ID. Series Audience Targeting

RAPP x

Brief recap

Phase one

Objective

Develop a point of view on whether there are one or more environments (either physical or digital) in which those predisposed to purchase both electric vehicles and Volkswagen overlap

Tasks

1. Analysis of latest EV council data
2. Refresh VW data extracts from SFMC
3. ETL into existing proof of concept underlying data cube
4. Update the dashboards and creation of visualisation for each state capital
5. Preparation of PDF outputs

Outputs

PDF outputs of the Tableau dashboard including:

1. Visualisation of each state capital at the post code level for each metric contributing to the propensity metric
2. The propensity metric
3. A list of the top suburbs and their propensity scores in excel
4. Annotated commentary and recommendations by strategy

Set up

What do we mean by propensity?

Throughout this work we use the term propensity to denote 'the modelled "likelihood" of a customer to purchase a vehicle from the ID series' [1]

EV pen. [2] x Past VW ownership [2] x ID.4 and ID.5 RYIs [3] x Total vehicles in postcode = ID. Series propensity

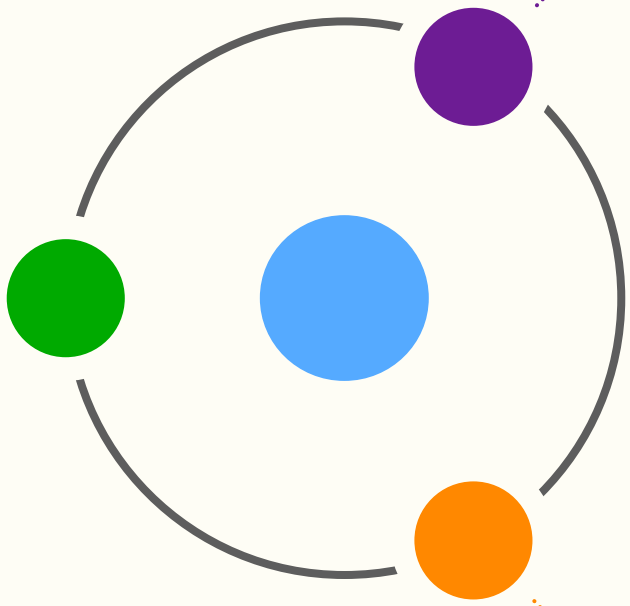
Propensity is calculated at the postcode level – the lowest level of granularity available to us (to maximise the value of targeting) whilst leveraging free, publicly available datasets, and ensuring coverage beyond Volkswagen's known audience.

(1) No consideration has been made to distinguish buyers of these two EPVs
(2) Expressed as a % of total light vehicles on the road
(3) Expressed per 100,000 light vehicles

Data sources

VW Ownership

- 578,000 past and present owners
- VGA Salesforce
- % of total light vehicle owners



Electric vehicle registrations

- Tesla and BYD sales in 2023
- EV Council (publicly available)
- % of total light vehicle owners

ID Series RYIs

- 5,600 ID.4 and ID.5 RYIs
- VGA Salesforce (via form on website)

What's changed since our PoC?

All valid EV registrations as of Jan 2023	Tesla and BYD sales in 2023
All past and present VW owners	All past and present VW owners since the start of 2017
Total Light Vehicle registrations as of Jan 2023	No change [1]
Propensity is based purely on postcode's "likelihood"	Propensity is based on "likelihood" and size

(1) Assumed negligible change in the Total Light Vehicles in each post code

Analysis

Which cities should we focus on for launch?

ID. Series propensity hotspots are focussed in Australia's largest metro areas

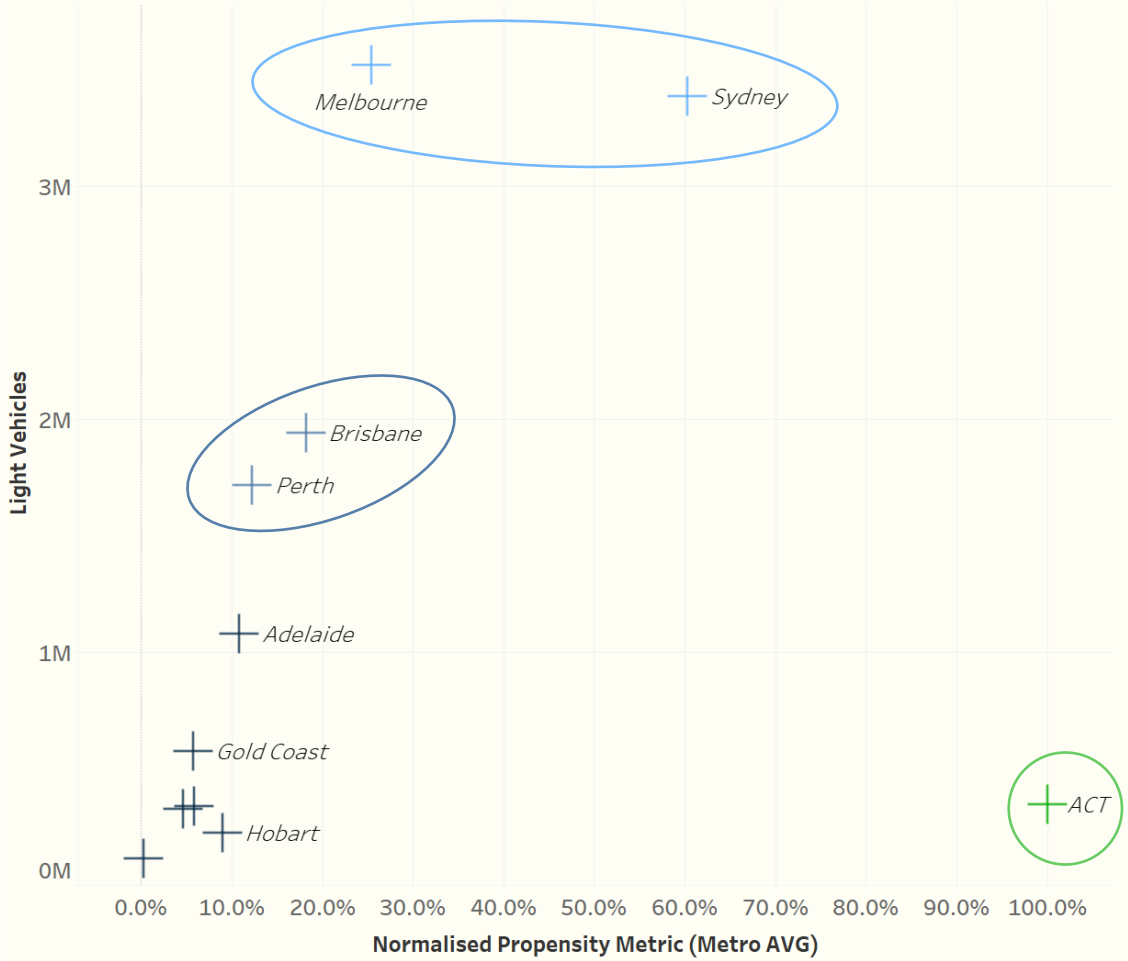
Whilst all components of the propensity metric followed this urban centricity, it was the EV% that was most skewed towards urban areas

Sydney, Melbourne and Canberra represent the markets with the most significant opportunity

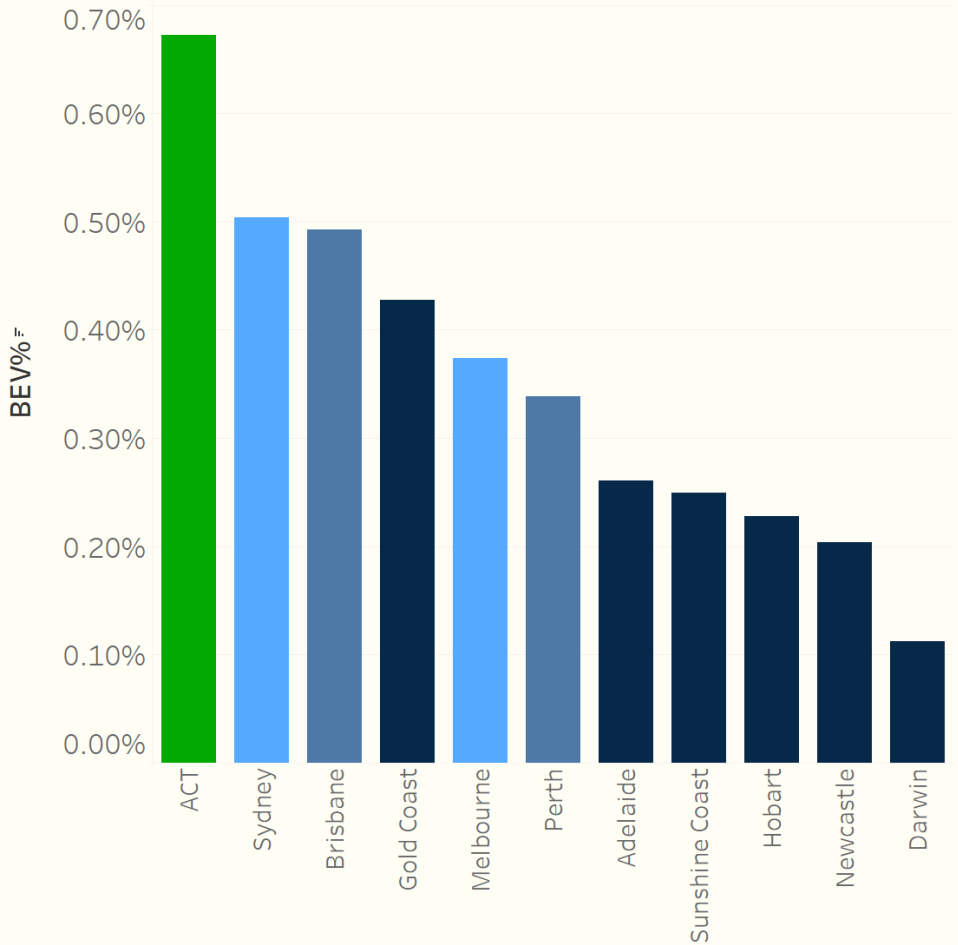
Canberra has by far the largest very high EV affinity though opportunity is constrained by market size.

Sydney and Melbourne are the largest urban centres, and Sydney had the second highest average propensity towards the ID. Series.

Brisbane and Perth would be the 'next best' cities in terms of both propensity and addressable audience.



EV penetration: Most of the smaller cities lag behind in terms of their pace of electrification

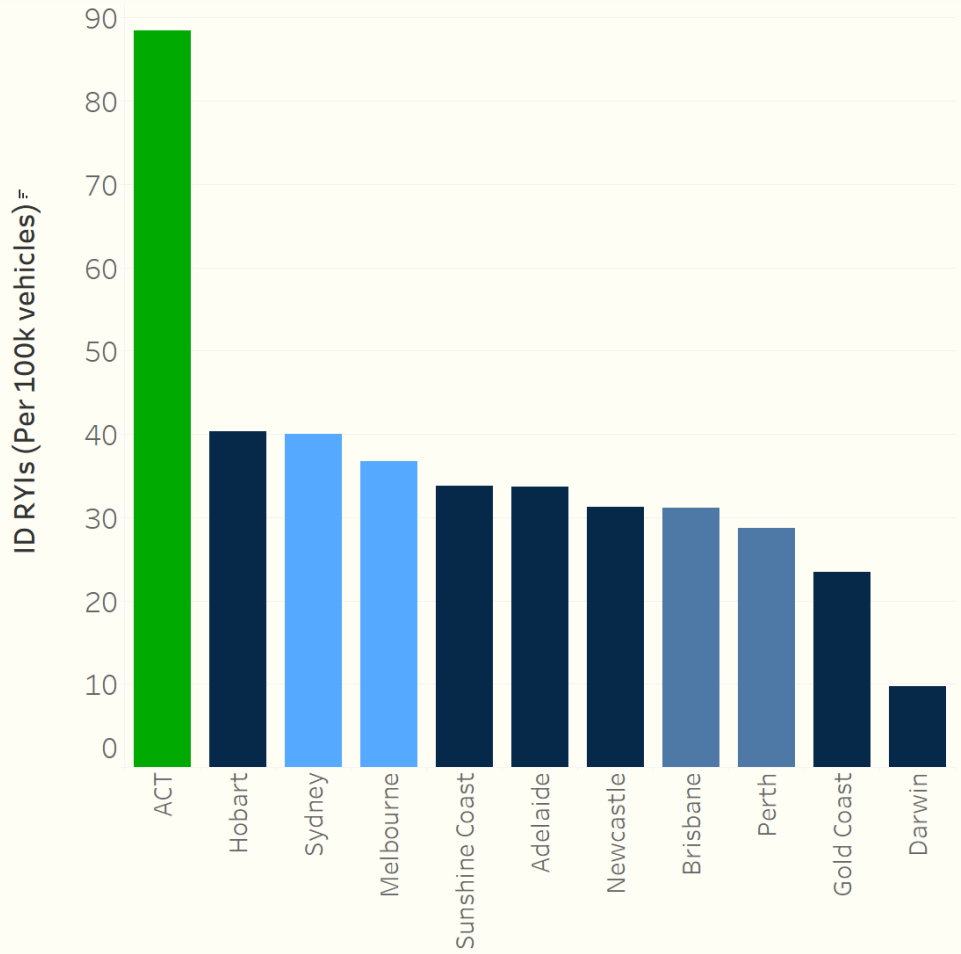


Canberra led the way in terms of EV uptake in 2023, with Sydney and Brisbane leading the larger cities

Melbourne and Perth demonstrated a slower pace of electrification, but outperformed smaller cities like Hobart and Darwin

Human Driven

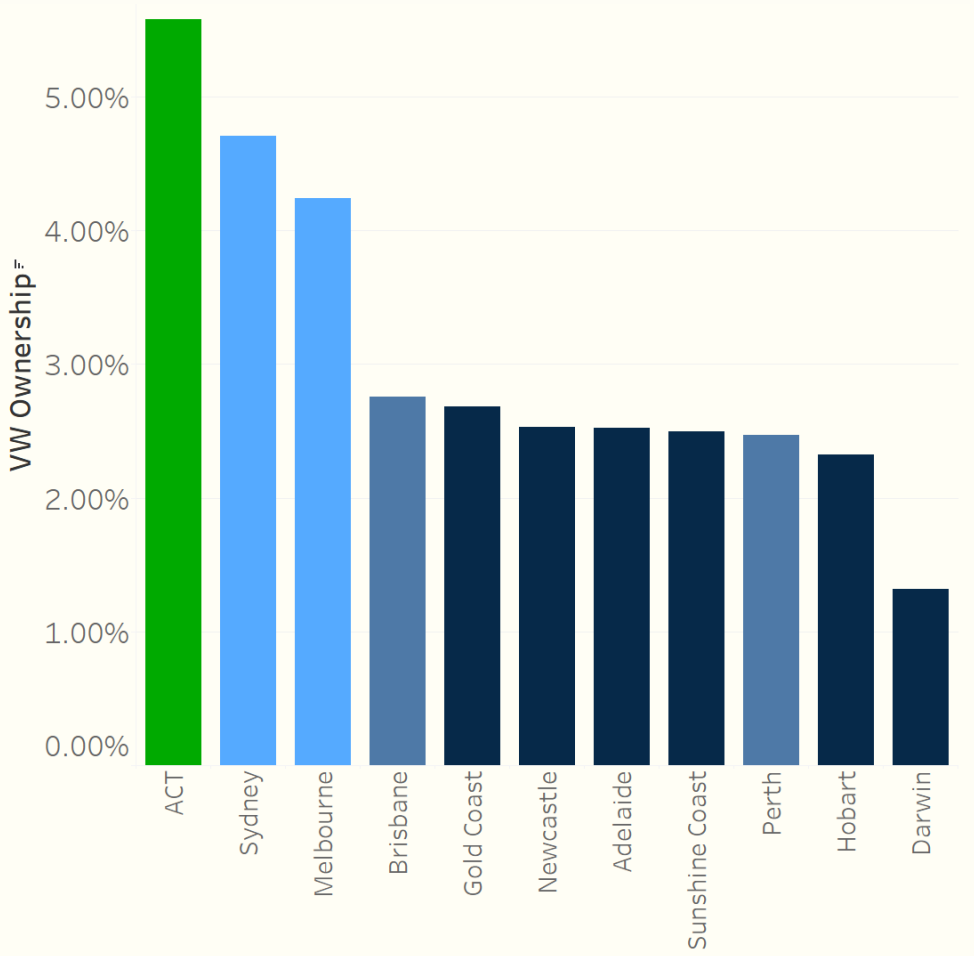
RYIs: ID. series RYI density in Canberra was more than twice that of the next city



Brisbane, Perth and the Gold Coast had relatively lower interest in the ID. series

High interest density in Hobart might be explained by the sensitivity of the metric in the case of the smaller cities

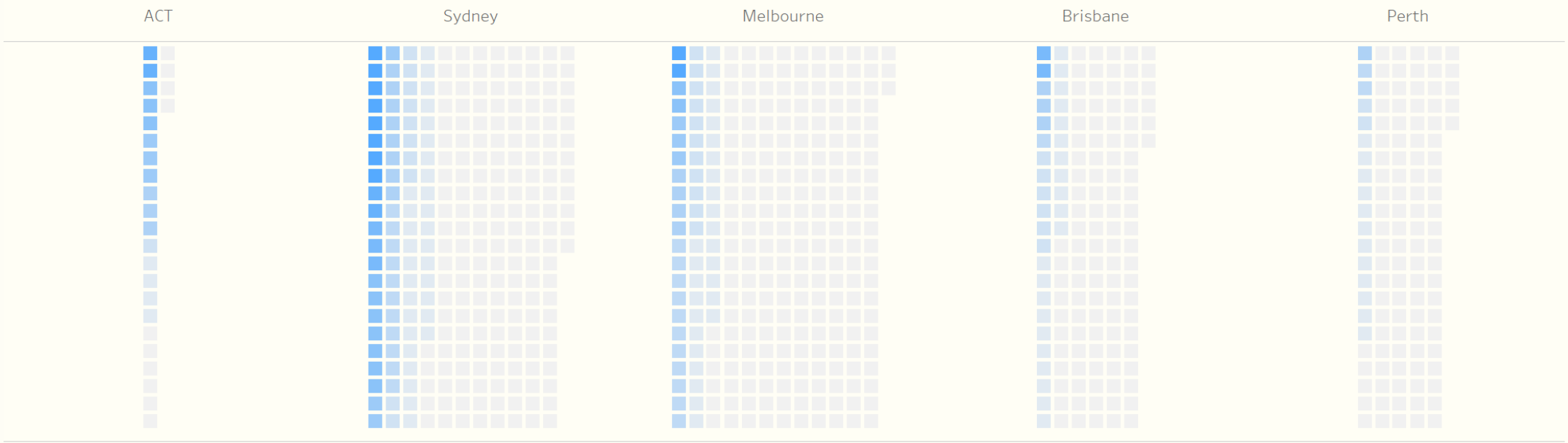
VW Owners: Canberra, Sydney and Melbourne showed much higher density of past/present VW ownership



Again Canberra has a higher rate of VW ownership vs the other

Melbourne and Perth demonstrated a slower pace of electrification, but outperformed smaller cities like Hobart and Darwin

Propensity scoring at postcode level demonstrates the benefits of a targeted approach, particularly in Sydney and Melbourne



Analysis

Within each city, where are the pockets of high propensity?

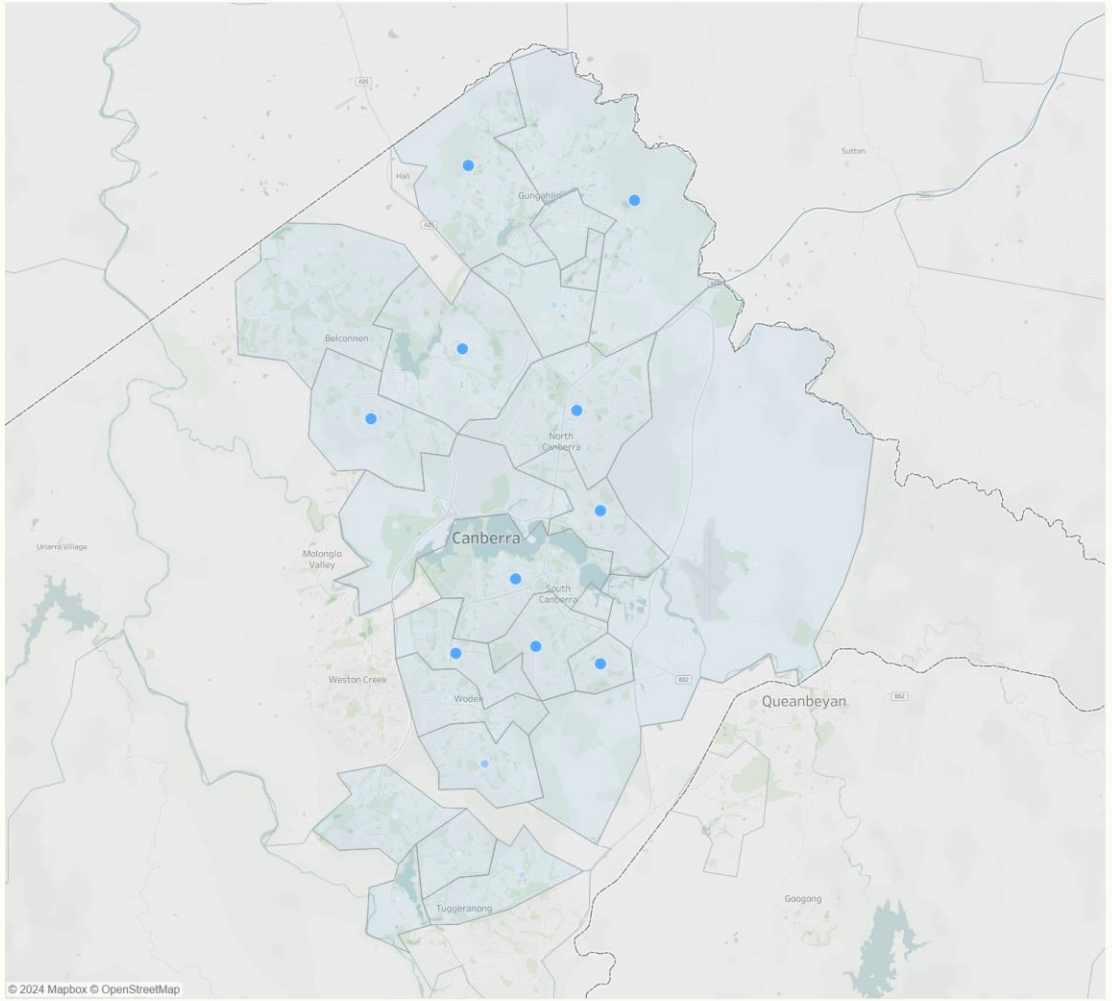
Human Driven

ACT >

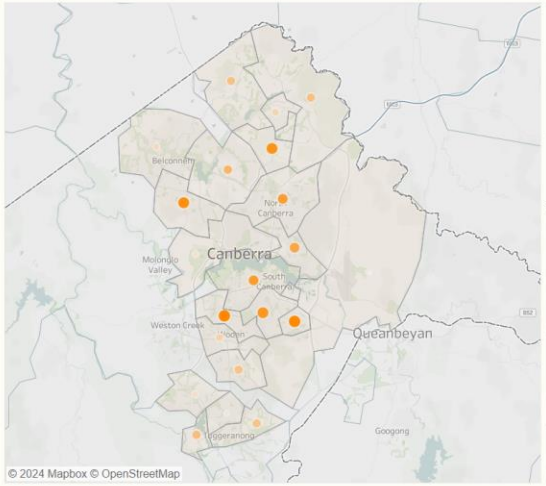
ID.Series Propensity: **ACT**

Square KMs: 1702 sqkm | Format: 16:9 | Metro Area: ACT

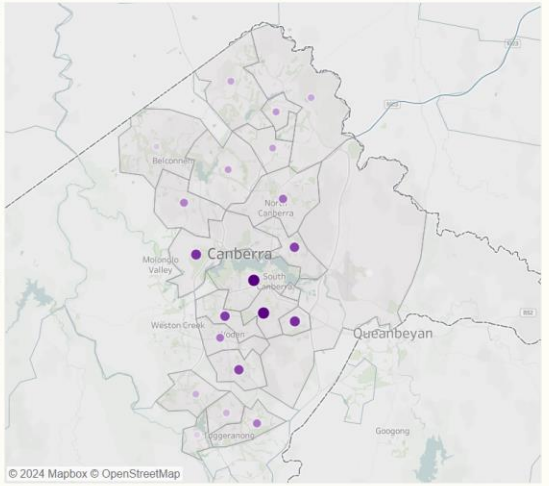
ID.Series Propensity



ID.Series RYIs



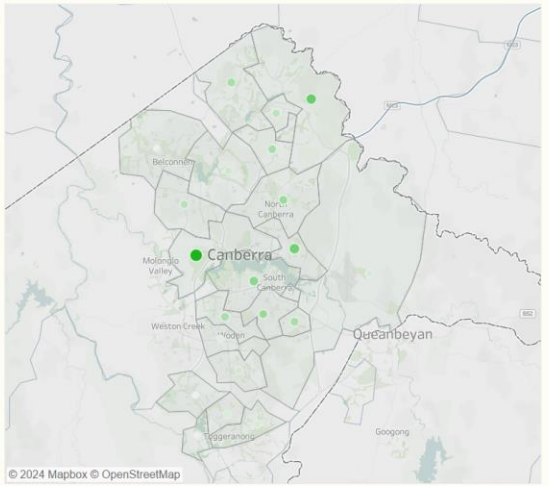
VW Owner Share



Top ACT Suburbs by Propensity

Suburb (Proxy)
North Canberra
Belconnen
Gungahlin
South Canberra
Woden Valley
Canberra East
Tuggeranong

BEV % Share



ACT: Key Takeaways

- Drivers of propensity show different distributions across the ACT:
    - EV penetration highest in Gunaghlin, East Canberra
    - VW ownership highest in South Canberra
- Results in an even, high propensity distributed right across ACT, and given fewer than 500k vehicles on the road, Canberra represents a cost-effective opportunity market for VW EVs

Human Driven

Sydney >

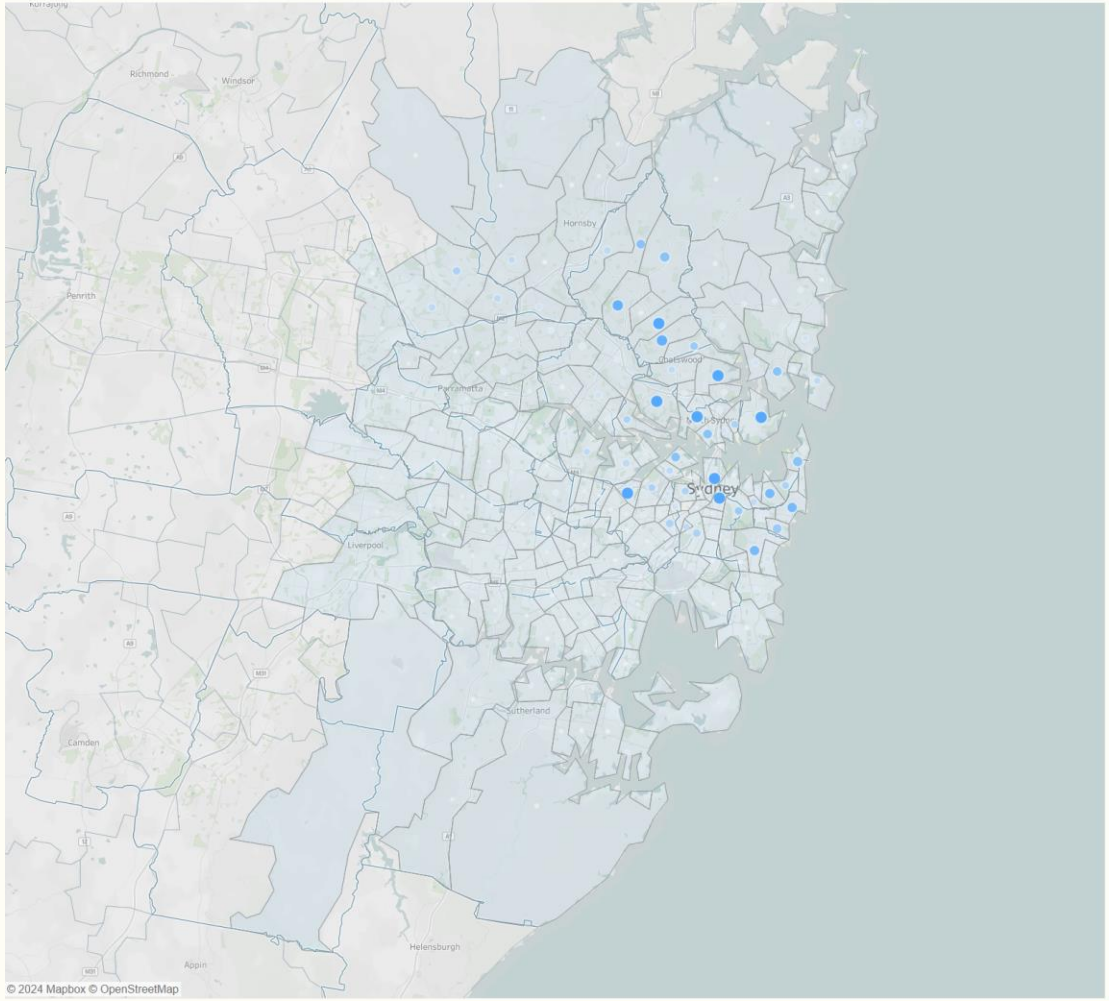
ID.Series Propensity: **Sydney**

Square KMs: 5404 sqkm

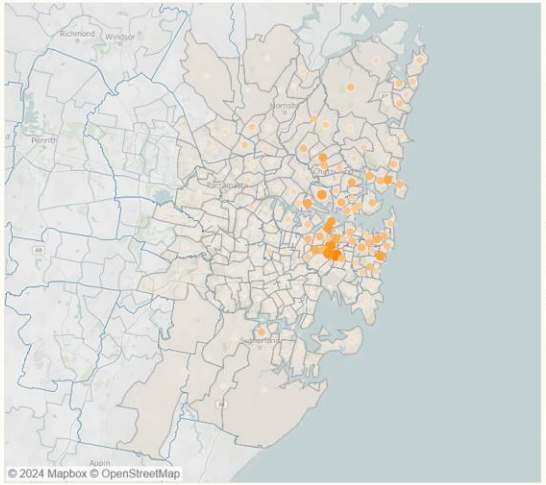
Format: 16:9

Metro Area: Sydney

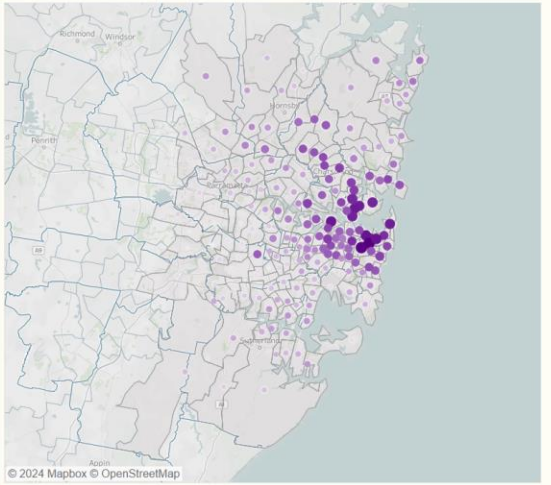
ID.Series Propensity



ID.Series RYIs



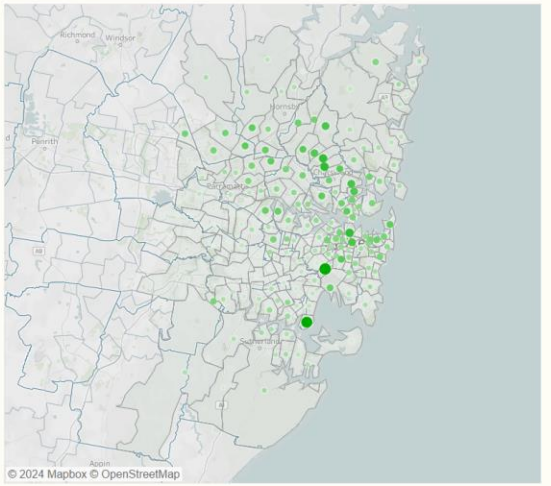
VW Owner Share



Top Sydney Suburbs by Propensity

Suburb (Proxy)
Chatswood - Lane Cove
Sydney Inner City
Eastern Suburbs - North
Ku-ring-gai
North Sydney - Mosman
Baulkham Hills
Manly
Marrickville - Sydenham - P..
Canada Bay
Leichhardt
Eastern Suburbs - South
Ryde - Hunters Hill
Warringah
Strathfield - Burwood - Ash..
Carlingford
Pittwater
Cronulla - Miranda - Caringb..
Botany
Hornsby
Hurstville
Blacktown - North
Sutherland - Menai - Heathc..
Kogarah - Rockdale
Rouse Hill - McGraths Hill
Blue Mountains

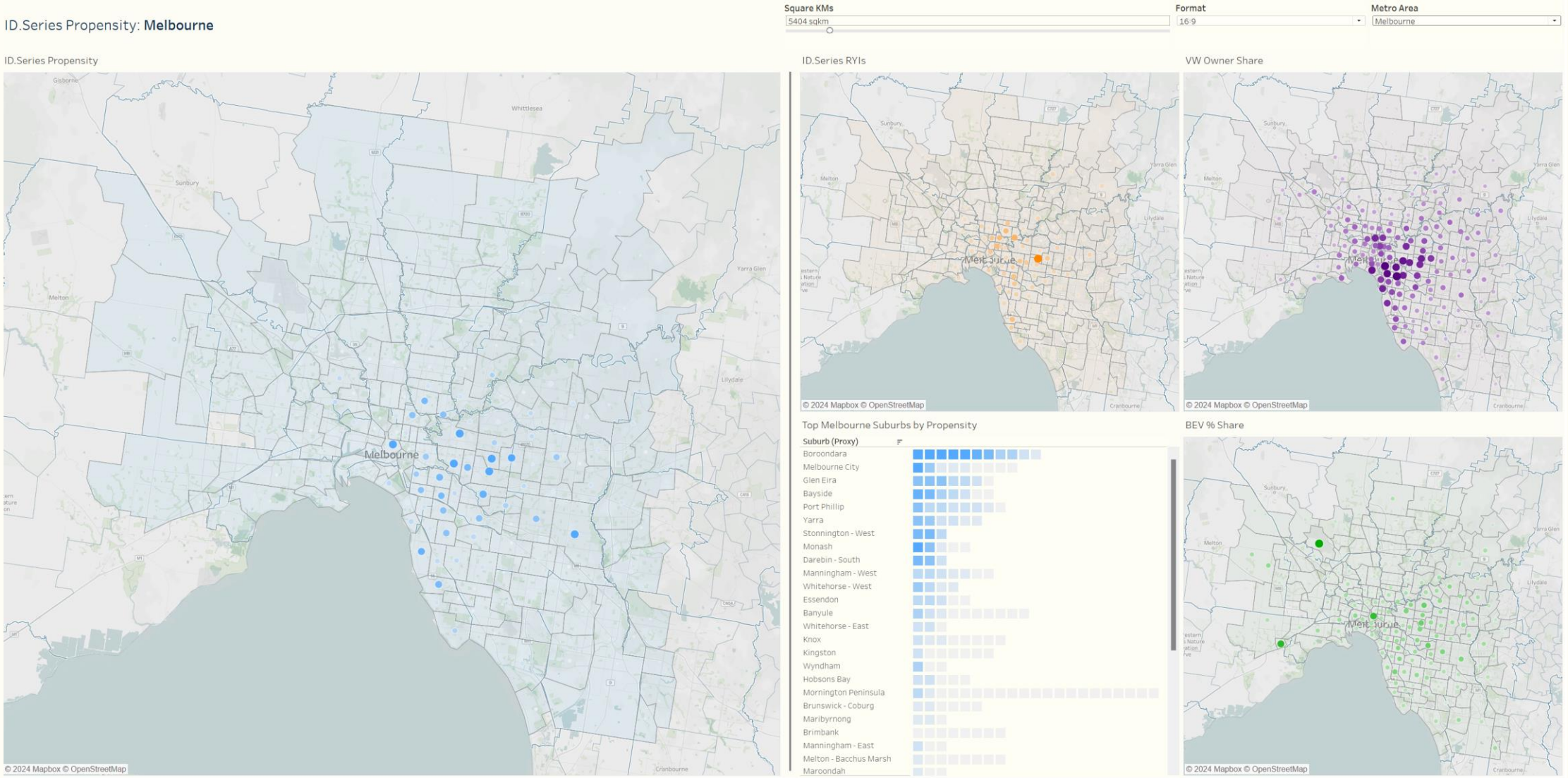
BEV % Share



Sydney: Key Takeaways

- Highest propensity post codes found in the (North) Eastern Suburbs, the North Shore and the near Inner West
- Some suburbs in The Hills and Hornsby had high EV uptake and might also be worth targeting given their relative state of EV readiness
- Suggests Northern Beaches, and the Southern and Western regions of Sydney might not be ideal targets for the ID. series.

Melbourne >


ID.Series Propensity: Melbourne
Square KMs
5404 sqkm
Format
16:9
Metro Area
Melbourne
ID.Series Propensity
ID.Series RYIs
VW Owner Share
Top Melbourne Suburbs by Propensity
Suburb (Proxy)
Boroondara
Melbourne City
Glen Eira
Bayside
Port Phillip
Yarra
Stonnington - West
Monash
Darebin - South
Manningham - West
Whitehorse - West
Essendon
Banyule
Whitehorse - East
Knox
Kingston
Wyndham
Hobsons Bay
Mornington Peninsula
Brunswick - Coburg
Maribyrnong
Brimbank
Manningham - East
Melton - Bacchus Marsh
Maroondah
BEV % Share
Melbourne
© 2024 Mapbox © OpenStreetMap

Melbourne: Key Takeaways

- Whilst Melbourne's average propensity for the ID. series was fairly low, there were hotspots of high propensity worth investing in
- Principally, these could be found in the wealthy Eastern suburbs – such as Kew, Hawthorn, Camberwell, Toorak and Brighton
- Interestingly the distribution of VW owners and RYIs was very tight within these regions, but EV ownership sprawls more broadly (though still skewing east of the CBD)

Outputs and Next steps

Tier 1 target postcodes (50%+)

Postcode	City	Suburb	Relative propensity
Tier 1			
2066	Sydney	Lane Cove	100%
2088	Sydney	Mosman	95%
2065	Sydney	St Leonards/Greenwich	76%
2000	Sydney	CBD/Haymarket	69%
2023	Sydney	Bellevue Hill	67%
2030	Sydney	Vaucluse	65%
3126	Melbourne	Canterbury	64%
2071	Sydney	Killara	58%
2045	Sydney	Haberfield	57%
2068	Sydney	N. Willoughby	57%
2602	Canberra	Downer	57%
2010	Sydney	Surry Hills	51%
2041	Sydney	Balmain	50%

Large volume of RYIs

High rate of VW ownership

Possibly an outlier on EV penetration (3.5%)

Tier 2 target postcodes

Postcode	City	Suburb	Relative propensity
Tier 2			
3142	Melbourne	Toorak	48%
2021	Sydney	Paddington	48%
2026	Sydney	Bondi	48%
3101	Melbourne	Kew	46%
3122	Melbourne	Hawthorn	46%
2603	ACT	Griffith	45%
2073	Sydney	West Pymble	44%
2611	ACT	Weston Creek	42%
2031	Sydney	Randwick	42%
2605	ACT	Woden	42%
2024	Sydney	Bronte	42%
2600	ACT	Barton/Deakin	42%
4065	Brisbane	Bardon	41%
2110	Sydney	Hunters Hill	41%
4069	Brisbane	Kenmore	40%

Postcode	City	Suburb	Relative propensity
Tier 2 cont.			
2070	Sydney	Lindfield	40%
3000	Melbourne	CBD	38%
3186	Melbourne	Brighton	38%
2025	Sydney	Woollahra	36%
3124	Melbourne	Camberwell	36%
2060	Sydney	North Sydney	35%
2612	ACT	Turner/Campbell	35%
2074	Sydney	Turramurra	34%
2093	Sydney	Balgowlah	34%
2075	Sydney	St Ives	34%
2604	ACT	Kingston	33%
3121	Melbourne	Richmond	32%
2015	Sydney	Alexandria	31%
3143	Melbourne	Armadale	31%
2614	ACT	Belconnen	30%

Top postcodes to target beyond top 3 cities (if the strategic opportunity arose)

Postcode	Suburb	Relative propensity
Adelaide		
5061	Unley	19%
5000	Inner City	18%
5062	Mitcham	14%
5152	Stirling	13%
Perth		
6010	Claremont	29%
6009	Nedlands	20%
6008	Subiaco	19%
6153	Applecross	17%
Hobart		
7004	Battery Point	11%
7005	Sandy Bay	11%

Postcode	Suburb	Relative propensity
Brisbane		
4065	Bardon	41%
4069	Kenmore	40%
4068	Indooroopilly	25%
4152	Camp Hill	19%
4000	Inner City	18%

We will share the full list of propensity scores by postcode in an Excel

Evolving Phase 1

- Consistent, consolidated data on EV ownership (and growth over time)
- Mapping VW dealerships to highlight those in suburbs with higher EV propensity
- Sensitivity analysis and evolution of propensity score
- Leverage EV Sales data within the group (Audi e-tron, CUPRA Born)

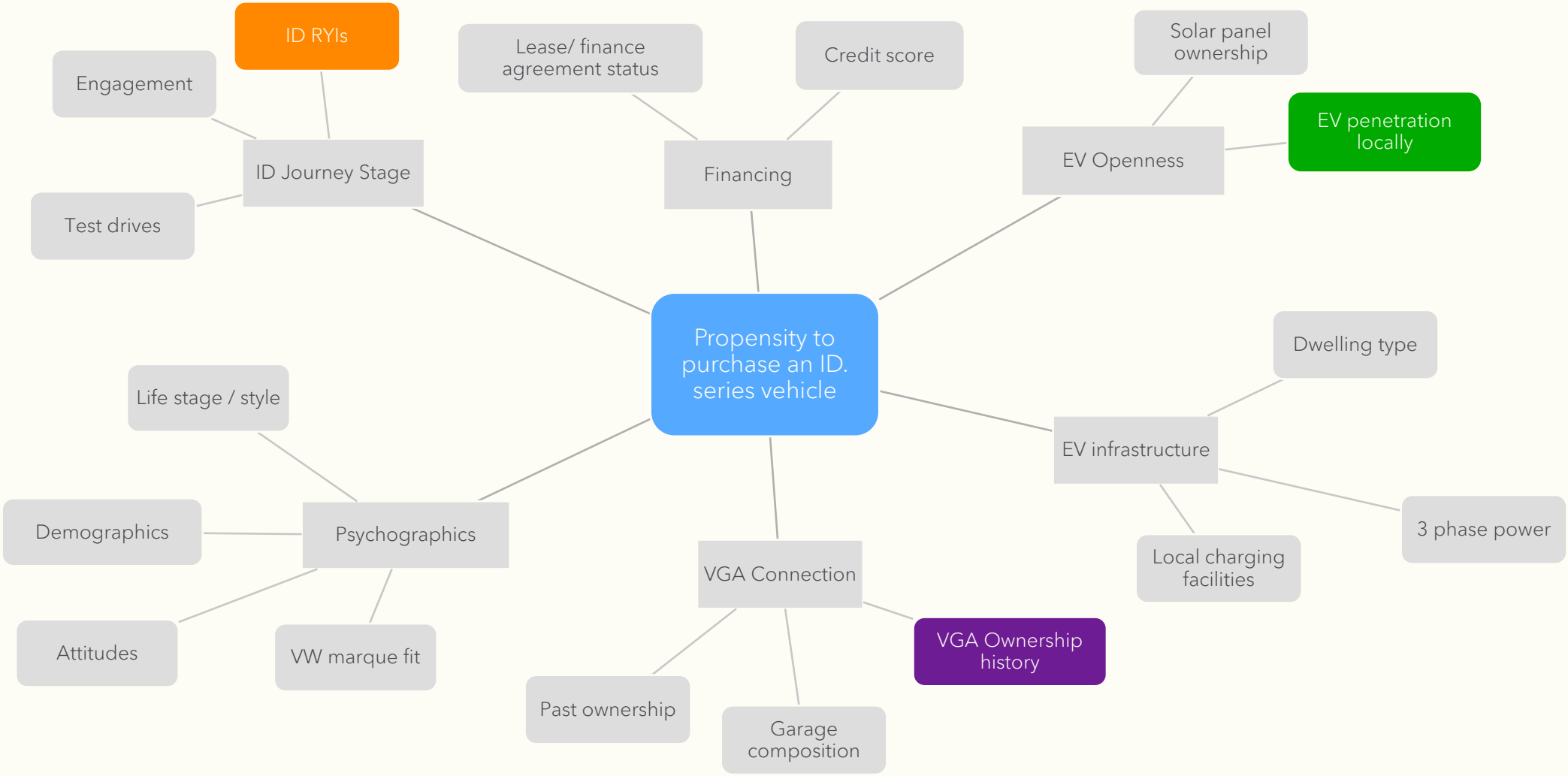
Recommendations

- Target media spending by propensity tier
- Media spending – driving RYIs,
- Targeting CRM campaigns
- Inform local area dealer marketing
- Overlay to EV signal retargeting

Next steps

- Collaboration session with Phd
- Phase 2 approval and schedule workshop

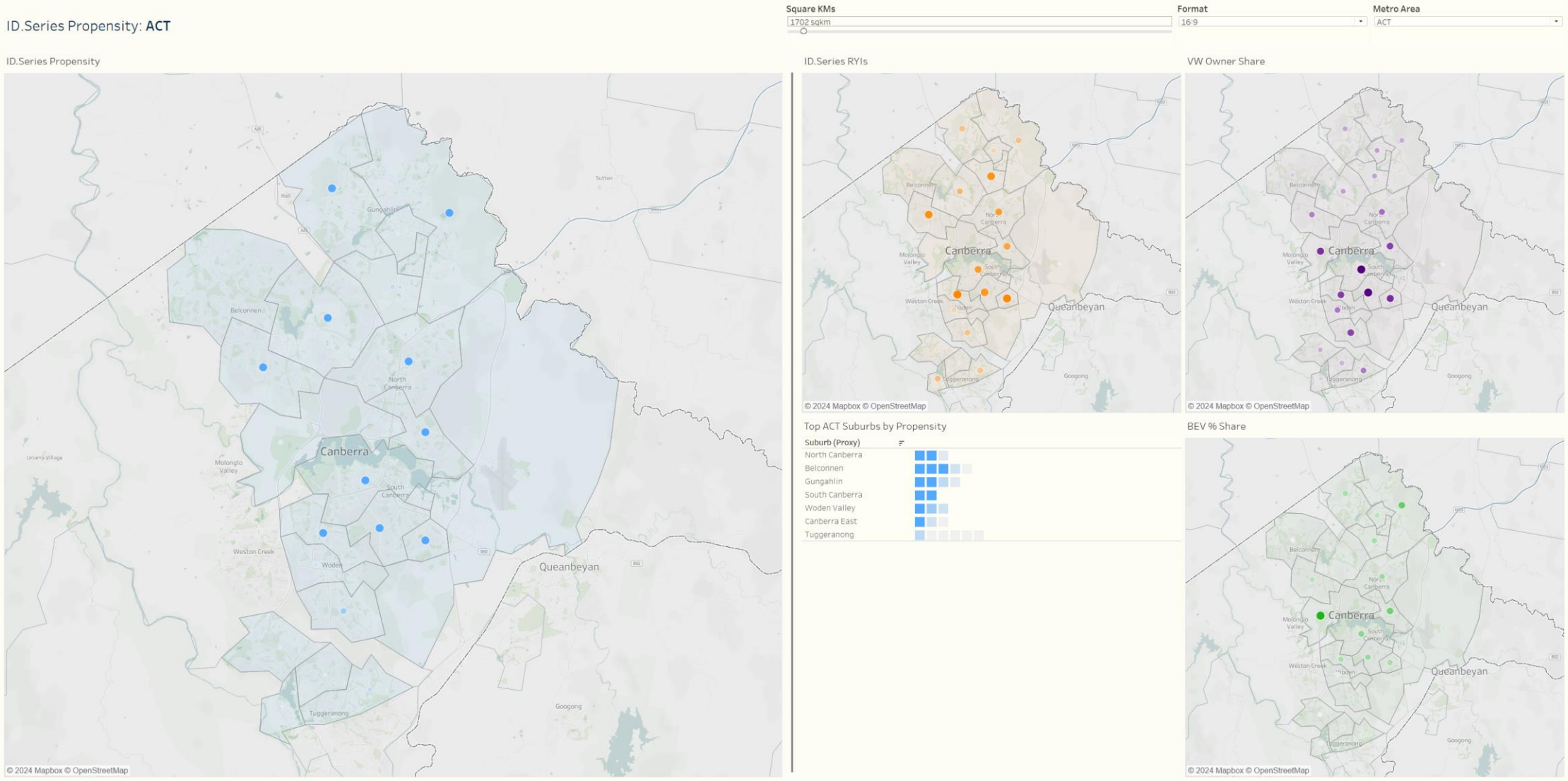
Opportunities to level up in Phase 2



Appendices

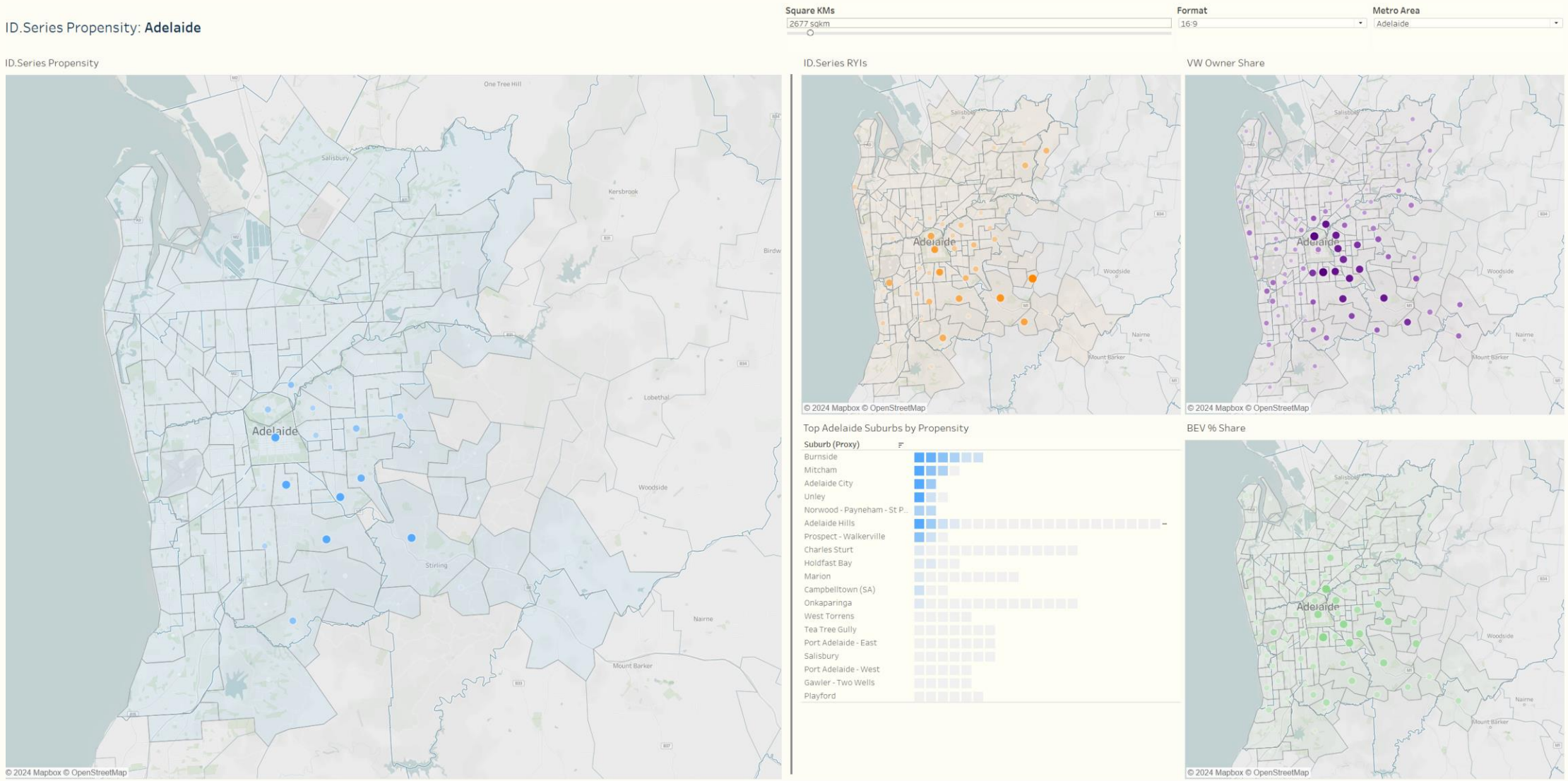
METRO AREA DASHBOARDS

ACT



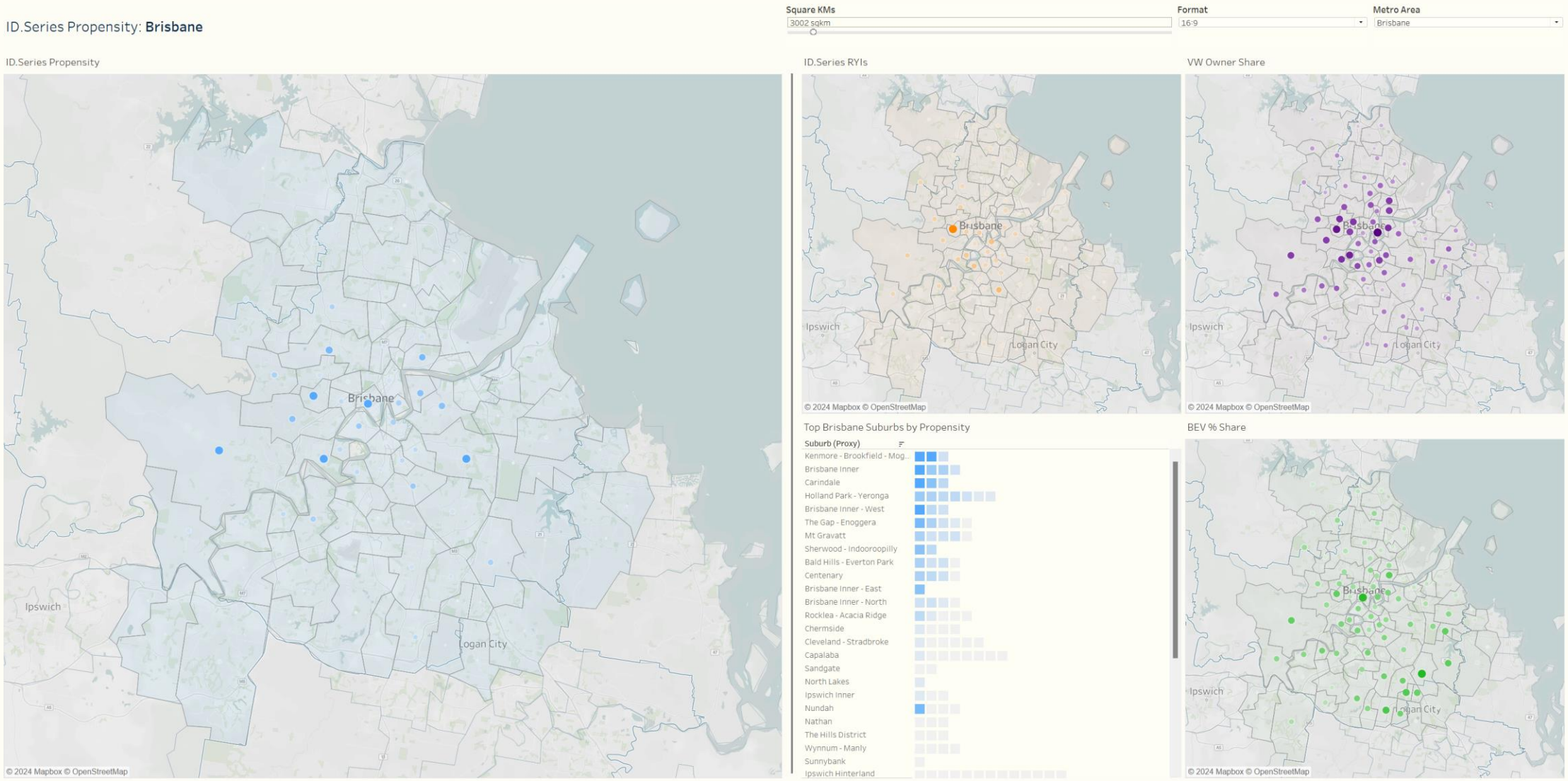
N.B. All scales represent positive relationship between size/color intensity and metric. For individual metro areas, scales are relative to other suburbs in the same metro area only

Adelaide



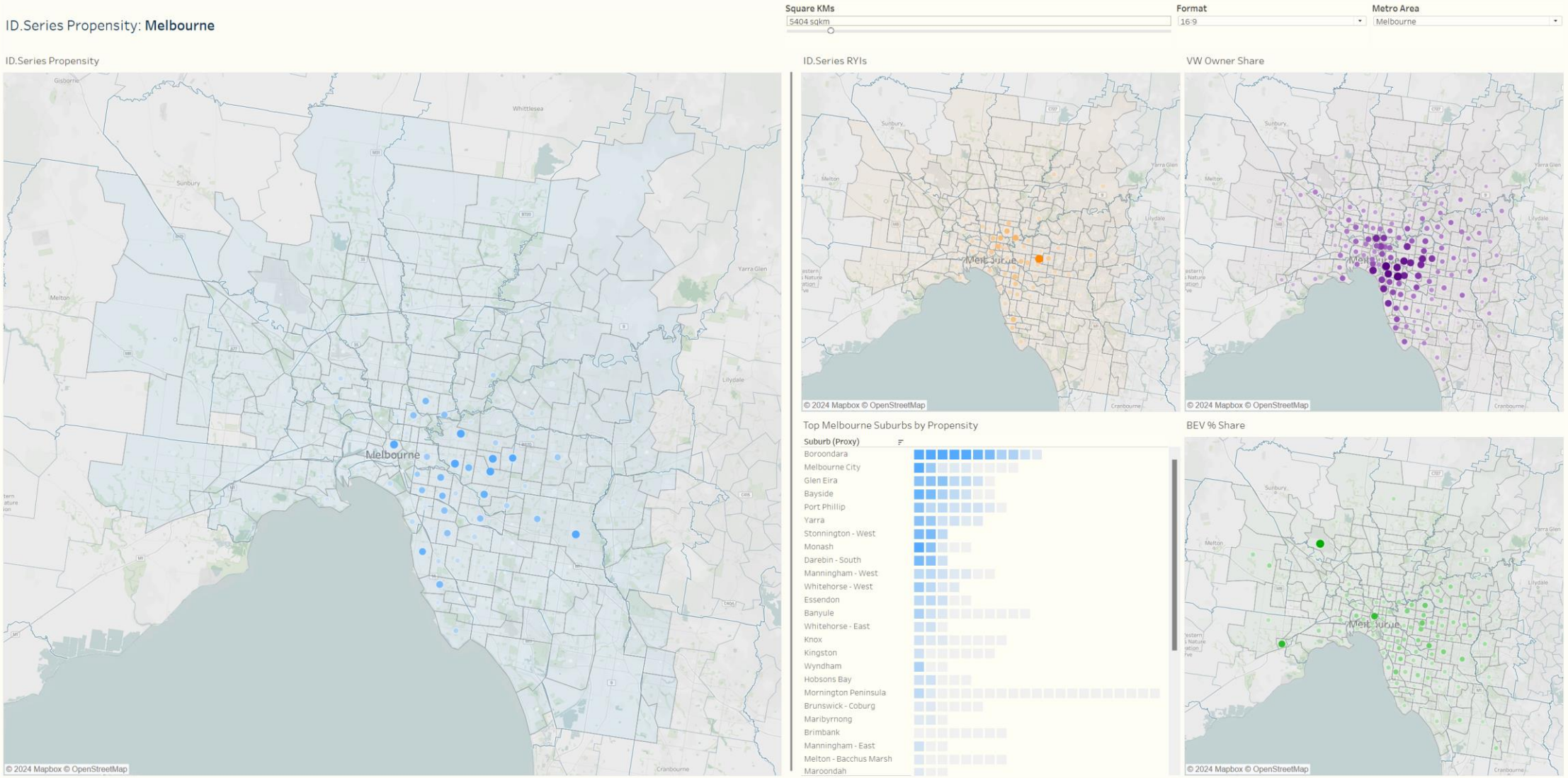
N.B. All scales represent positive relationship between size/color intensity and metric. For individual metro areas, scales are relative to other suburbs in the same metro area only

Brisbane



N.B. All scales represent positive relationship between size/color intensity and metric. For individual metro areas, scales are relative to other suburbs in the same metro area only

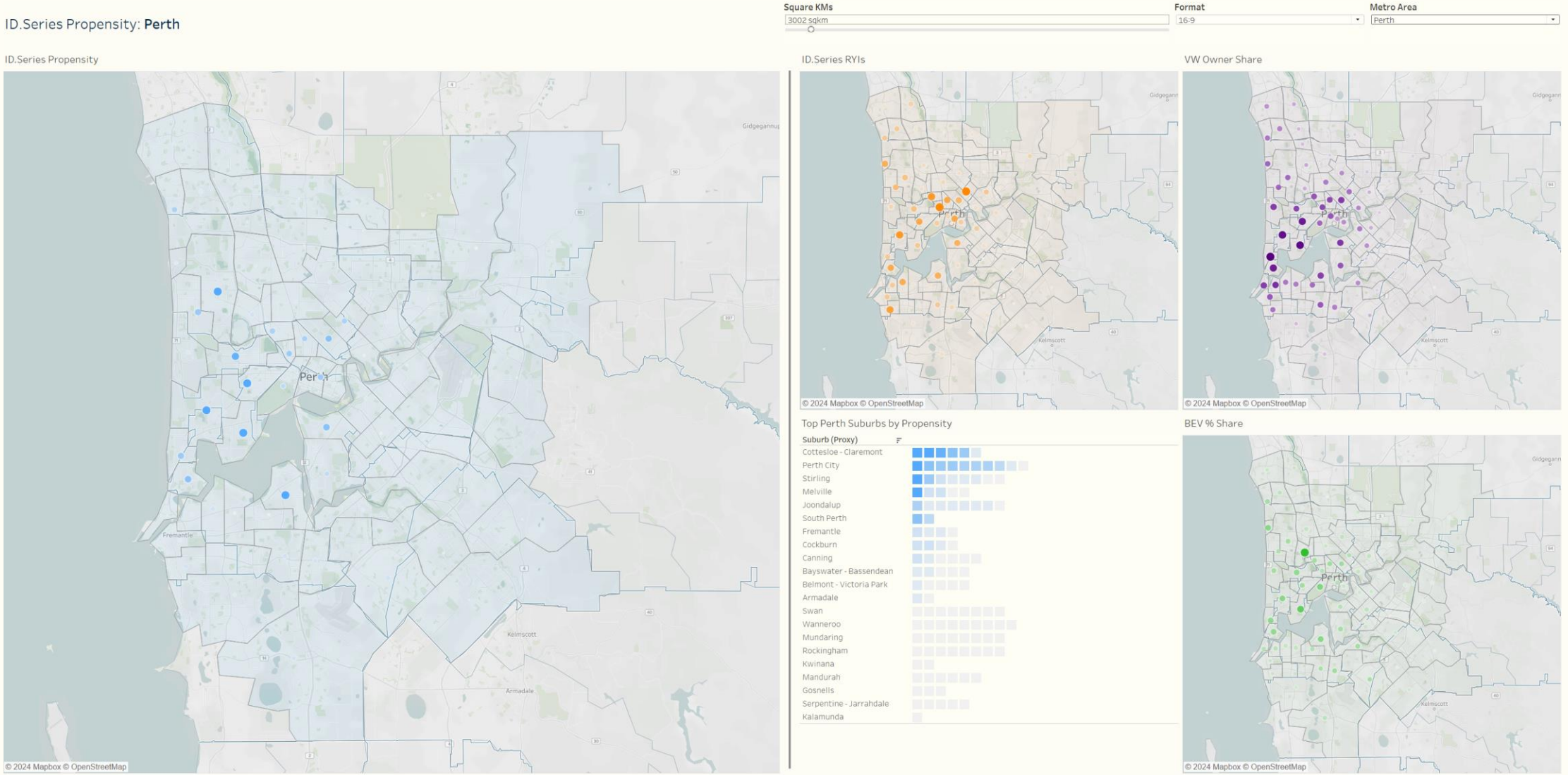
Melbourne



N.B. All scales represent positive relationship between size/color intensity and metric. For individual metro areas, scales are relative to other suburbs in the same metro area only

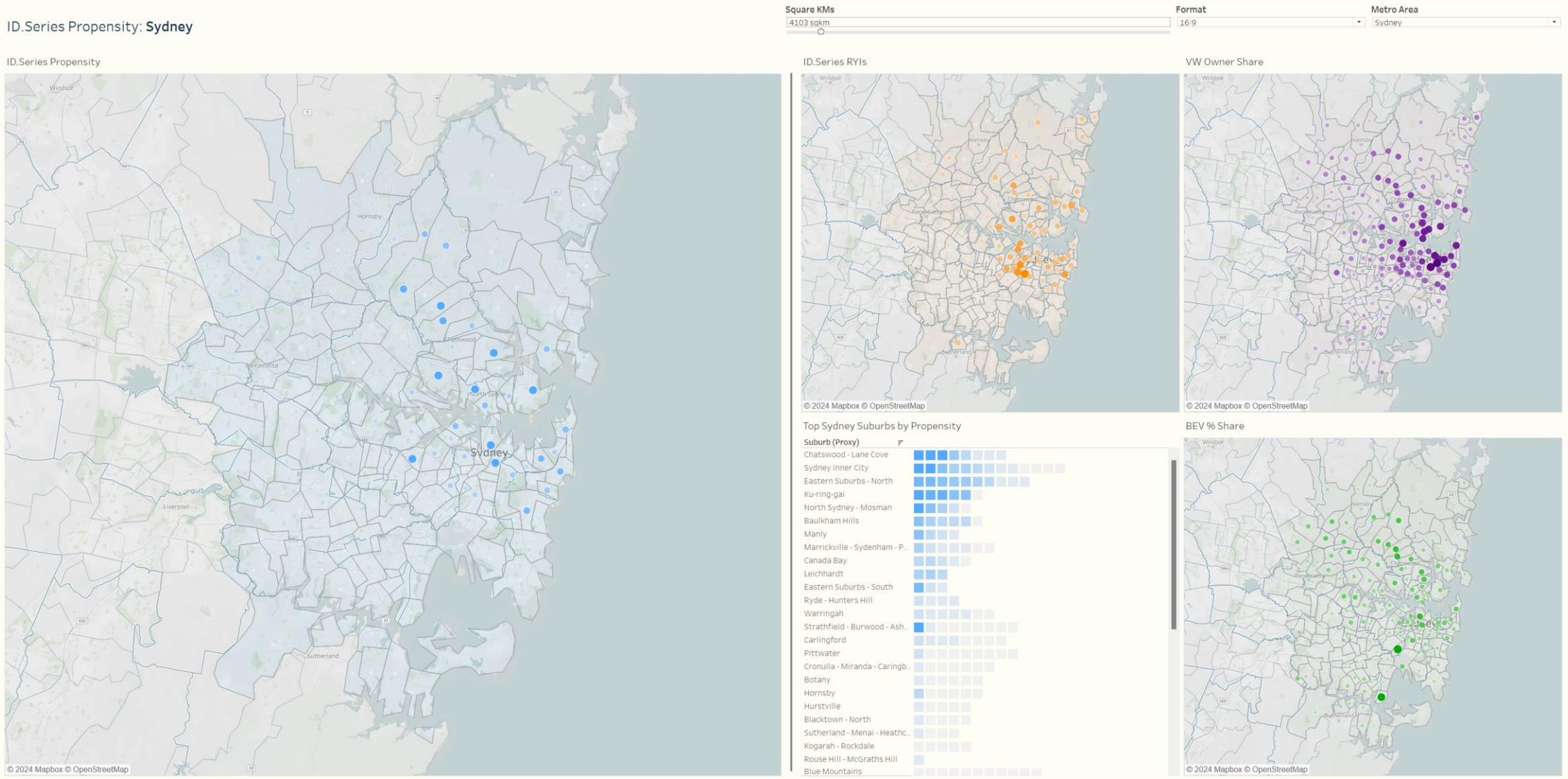
Perth

ID.Series Propensity: **Perth**



N.B. All scales represent positive relationship between size/color intensity and metric. For individual metro areas, scales are relative to other suburbs in the same metro area only

Sydney



N.B. All scales represent positive relationship between size/color intensity and metric. For individual metro areas, scales are relative to other suburbs in the same metro area only

Appendices

DOCUMENTATION

Our Data Structure

The final data structure in Tableau consists of three files:

TABLE	DETAIL
Primary data cube	At postcode, fueltype, year level: - Light vehicles (LVs) - VW ownerships - ID.4 and ID.5 RYIs Note that only LVs data exists at fueltype and year level
Geography lookup	Helps us match postcodes to suburbs (note the cardinality of this relationship is many to many – a postcode can intersect multiple suburbs, and vice-versa)
City of interest lookup	Used for identifying centroids of different metropolitan areas