

The pattern of Production in Cities
and
Its Implications for Transport Funding

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Value Capture for Transport Financing

Recognising that *location, location, location* drives residential and commercial investment, and that *location* is shaped in part by the provision of public transport infrastructure.

A. The Aim

To develop a mechanism to collect income from capital value or change in capital value on sites within a metropolitan area.

Well established thinking

(1) Individual sites

(2) After zoning changes

Can we create a system wide approach?

- Hong Kong

The end position:

Match a transport levy on “value” at a location

to

the scale, frequency and “quality” of the transport supply at that location.

B. A First Attempt

The Target

The annual cost of provision of the public transport service in Melbourne

\$M

<i>Major Outputs/Deliverables</i> Performance Measures	Unit of Measure	2007-08 Target	2006-07 Expected Outcome	2006-07 Target	2005-06 Actual
Payments made for ^(e) :					
• train services	\$ million	412	403	404	352
• tram services	\$ million	146	144	145	128
• bus services	\$ million	379 ^(f)	335	335	304

Total: 937

Victorian Government Budget Paper 3:
Service Delivery

The Approach

1. Get data on the value of residential and commercial (non-Public) building in municipalities in the metropolitan area

(2) Allocate municipalities to zones by transport services:

High: tram train bus, multiple lines/overlapping services

Medium-High: Tram and train

Medium: Train and bus

Low: large areas away from train network. Limited bus

3. Set a levy on the value of construction

Transport Service Zone	High Rate Levy	Low Rate Levy
High	20	10
Medium- High	10	5
Medium0	5	2
Low	0	0

4. (A) Collect the Value: High Levy

Transport Zone	Levy (%)	Domestic Value	Tax \$M	Commercial value	Tax \$M	Total Levy \$m
High	20	656.40	131	1711.30	342.26	
Medium	10	2124.00	212	499.76	49.9758	
Medium-Low	5	2588.00	129	1733.10	87	
Low	0	0	0		0	
Totals			473		478.890	951.890

4 (b) Collect the levy: Low Value

Transport Zone	Levy (%)	Domestic Value	Tax \$M	Commercial Value	Tax \$M	Total Tax \$M
High	10	656.40	66	1711.30	171.13	
Medium	5	2124.00	106	499.76	24.98	
Medium-Low	2	2588.00	52	1733.10	35	
Total			224		231	454.6

C. A Series of Questions

1. What will we value?

- What influences the transport system most?
 - Jobs
 - Housing
 - Commercial Activity
- Same levy for all?

2. Stocks or Flows?

Stock: The current value of an activity

- The current urban context

Flows: Changes in value or changes in activity

- Urban Growth

Stocks:

House Prices

Jobs

Buildings

Current rate base residential and
commercial

Flows:

Change in House prices

Change in jobs

Change in Buildings residential and
commercial

3. Data Availability?

- Spatial Units: Fine as possible
- Annual
- Link to a financial collection /approval system?
 - Jobs not so useful

4. Operational Improvements

Finer spatial framework: to capture real sense of value and transport supply.

Incorporate Service Frequency

Apply to roads??

Establish Sensitivity of levy income to annual shifts in development

5. Strategic/Policy questions

Recurrent versus capital?

Inner versus outer

The size of the target:

- 100% of the total annual charges?

Collection mechanisms:

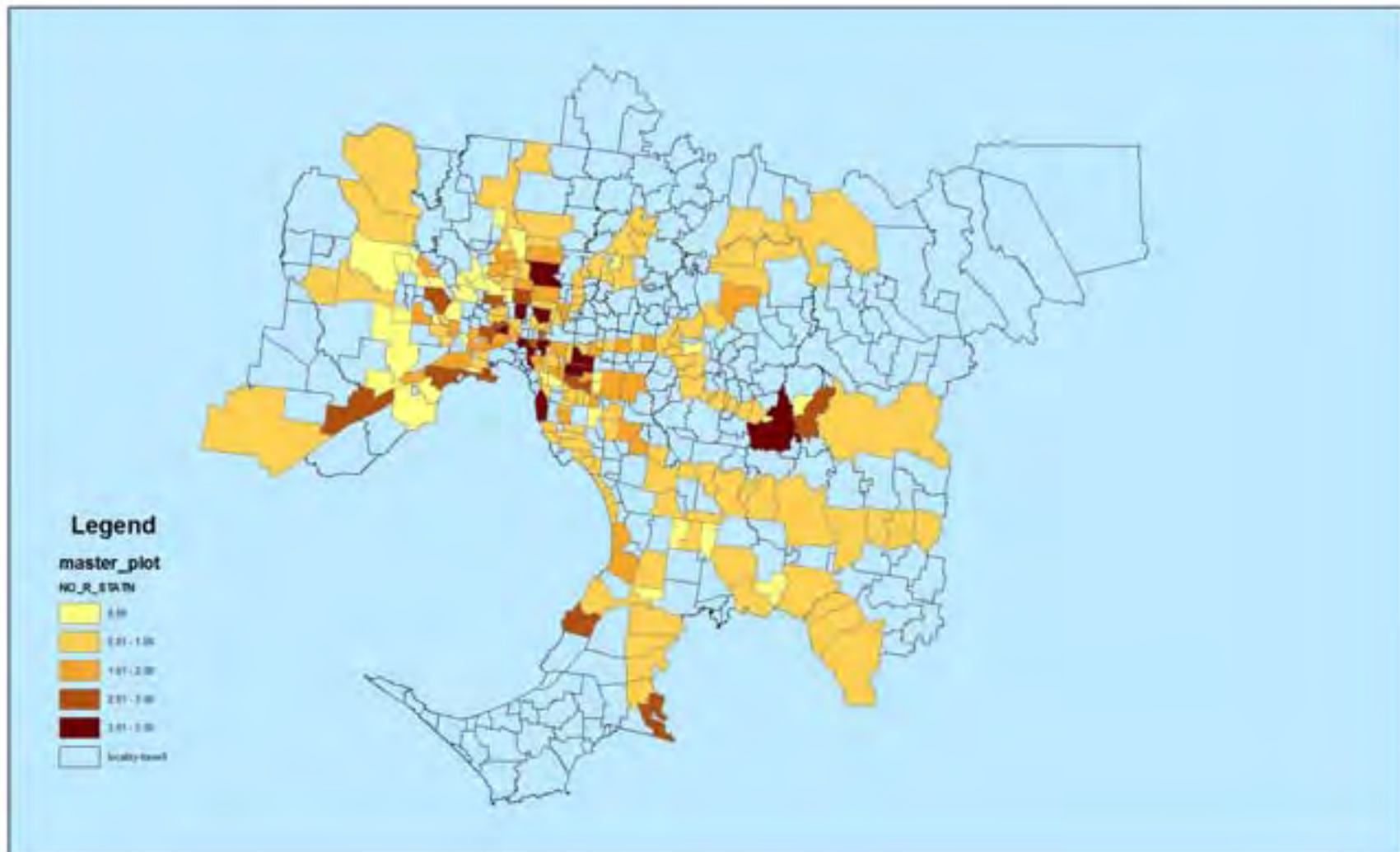
- Municipal Housing/commercial rate bases

Some preliminary refinements

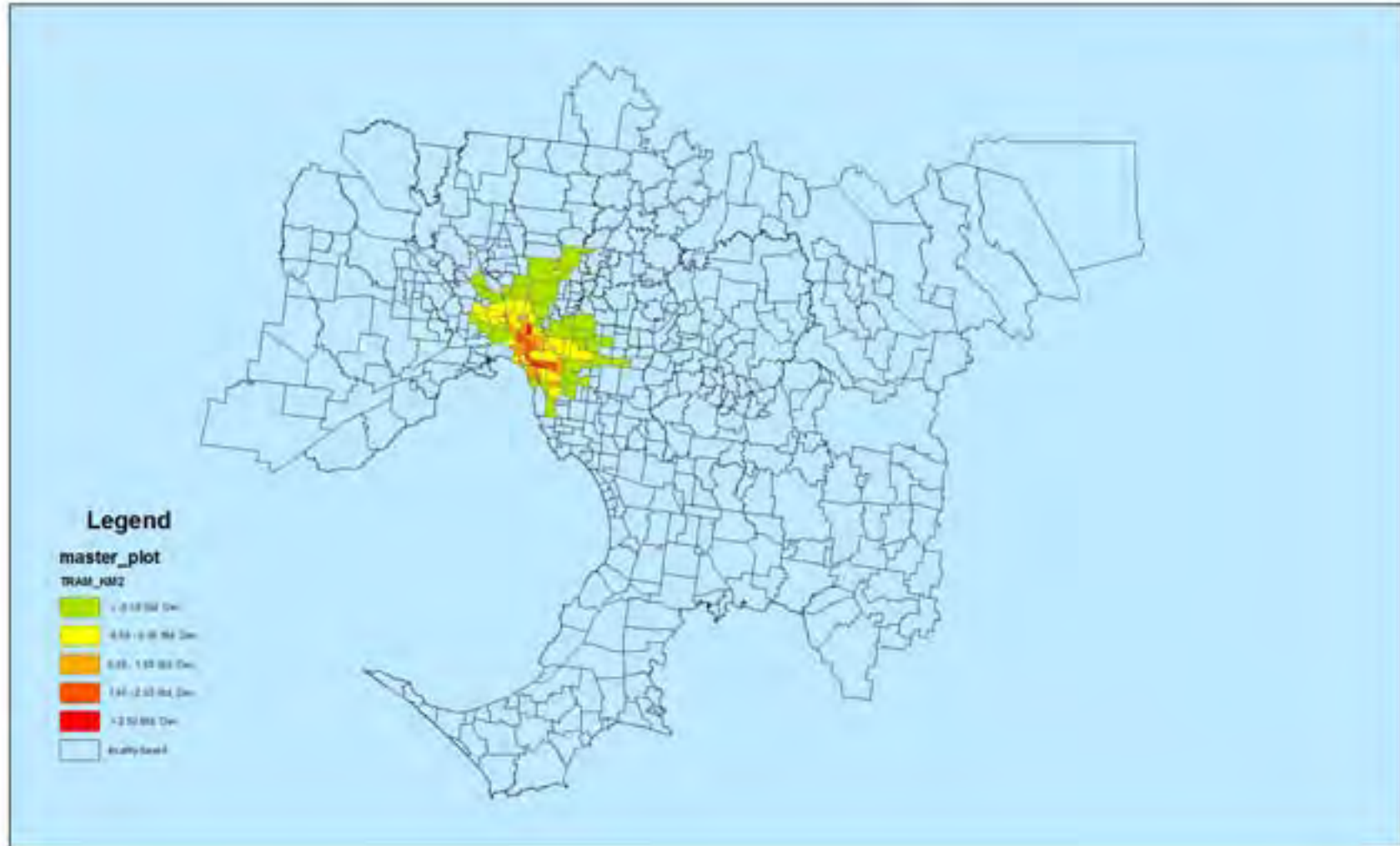
Transport services by neighbourhoods.

To be linked to house prices by neighbourhoods.

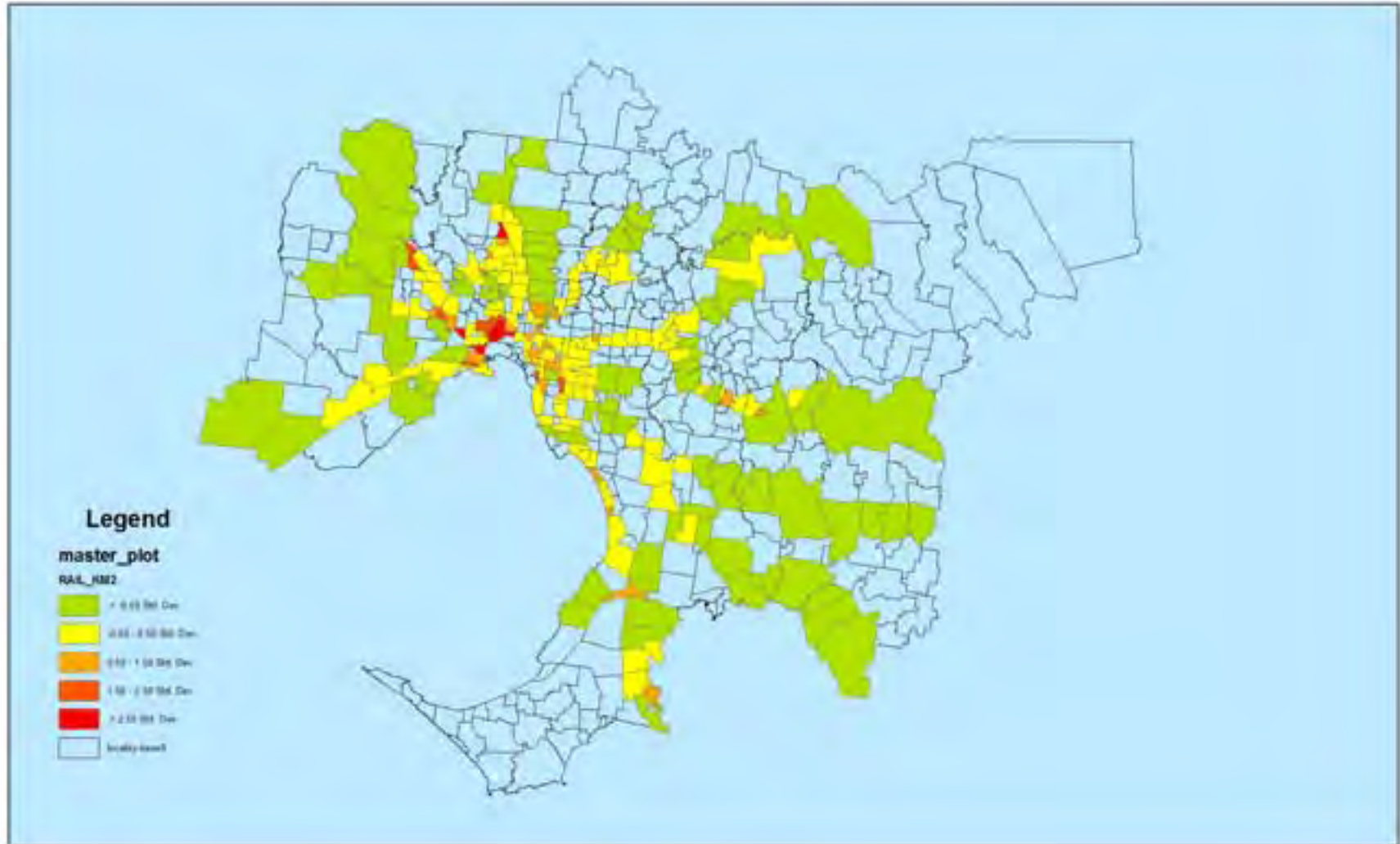
Number of train stations - grouped by absolute number



Length of tram services per sq km - grouped by standard deviation



Length of rail lines per sq km - grouped by standard deviation



Number of train stations per sq km - grouped by standard deviation

