



The MAV Renewal Gap Model Program

“A State Wide Approach”



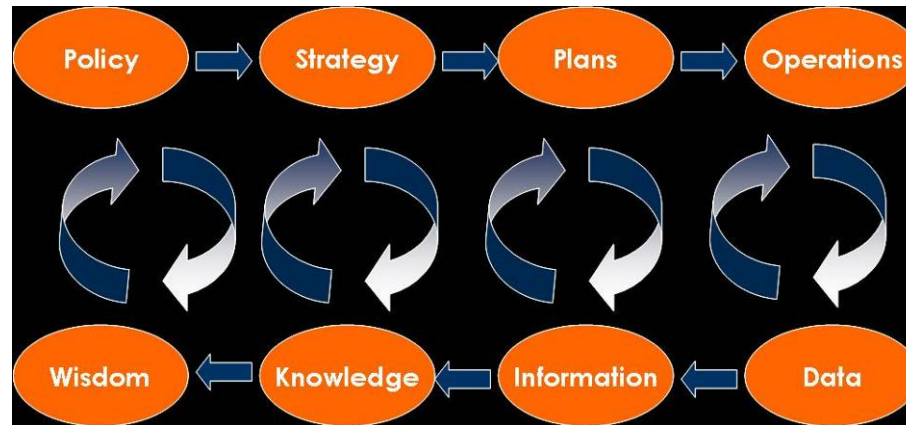
MAV STEP *Program* Objectives

1. Lift the profile & provide **focus** on AM involving **Councillors & Chief Executive Officers**
2. Assist development of **AM capacity** by:
 - improving awareness of asset management
 - improving asset management **capability**
3. Set **minimum** process standards for asset mgmt

Renewal Gap Program Need?

MAV Step Program - 4 key pillars:

1. Policy
2. Strategy
3. Plans
4. Operations



- o Delivery of 1st Cut AM Plans difficult without financial information on renewal \$
- o Need for holistic approach “**total picture**”



MAV Renewal Gap Key Objectives

- Size of **renewal** “liability” for all asset classes for 20-50 yrs
 - **Under & over** funding by asset class x time
 - **Growth & decline** of gap by class x time
- % asset class **outside** desired **intervention**
 - are your services sustainable?
- What to do about it? **Management** options



Renewal Gap - National Perspective

- Victoria – MAV Statewide 05 - 07
- Tasmania Statewide 29 Councils 06
- WA part of “WAAMI” Statewide 07
- Qld – LG Asset “Money Box’ 06 – Statewide 69/125





Standard Definitions

Maintenance: Regular ongoing day-to-day work necessary to keep assets operating, eg road patching



Operations: Regular activities to provide public health, safety and amenity, eg street sweeping, grass mowing, street lighting



Renewal/Refurbishment: Restores, rehabilitates, replaces existing asset to its original capacity, eg gravel resheets



Upgrade/Improvements: Enhances existing asset to provide higher levels of service, eg widen seal



New: Creation of an new asset to meet additional service level requirements





Key Information Required – 1st Cut

- **Quantity** of Asset—eg sqm seal pavement
- Average **Unit cost** to renew/replace
- Current **Renewal** Expend on asset
- Current **Mtce** Expend on asset (not operational)
- Estimated **life** to “cactus”
- ~ **Condition** Profile

SEA Sample Input Pro Forma

Asset & \$ Information - Roads

Council Name	Wombat				3	Regional City				
Some overall Performance Indicators	Total Renewal Value All Assets \$	597,413,378	Total Present Renewal Exp \$	3,779,500	Annual Renewal Demand \$	9,074,954	First Est of Renewal Shortfall	5,295,454	Funding Ratio % of demand being Met	42

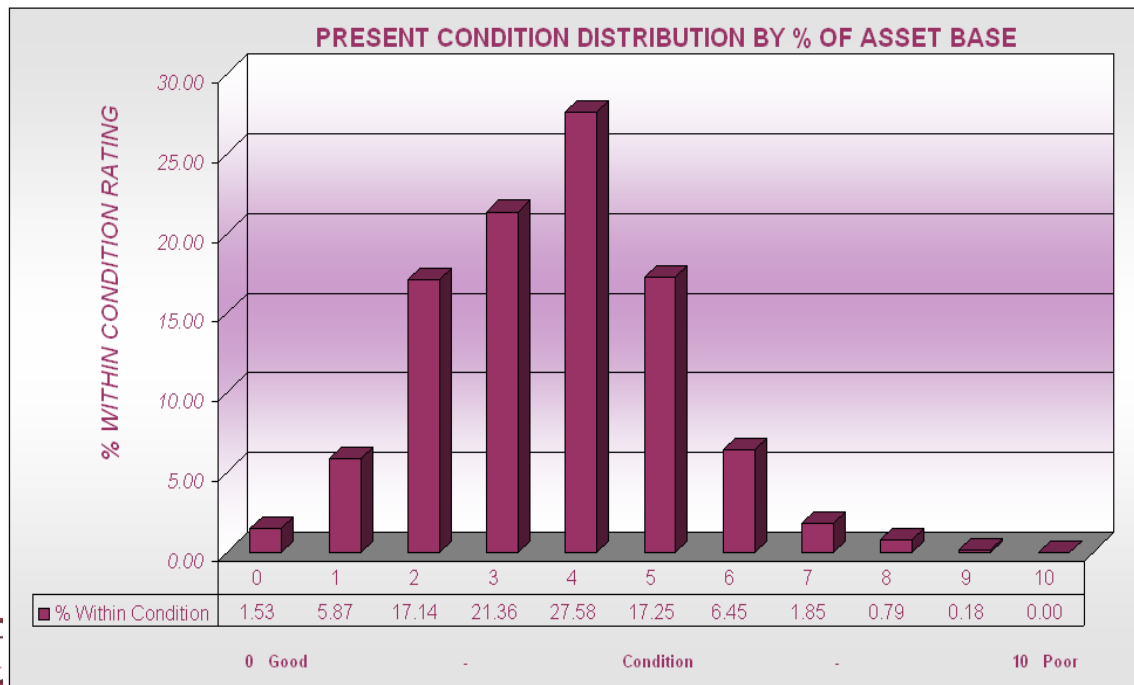
Table No 1 Asset Quantity - Description and Expenditure details - All Green Shaded Cells Essential

Asset Group	Roads										
% of the Required Exp Being Met	56	57	63	166	85	32	32	110	121	35	5
Asset Set No.	1	2	3	4	5	6	7	8	9	10	11
Asset Set Description	Pavement (Sealed Link Rds)	Pavement (Sealed Collector Rds)	Pavement (Sealed Access Rds)	Gravel Resheets Major	Gravel Resheets Collect	Gravel Resheets Minor Access	All Asphalt Surfaces	All Spray Seals	Concrete Footpaths	Other Footpaths	All Kerbs
Asset Quantity	691,467	2,451,657	730,788	790,000	2,300,000	3,600,000	760,000	3,443,680	51,778	22,963	77,910
Units	sqm	sqm	sqm	sqm	sqm	sqm	sqm	sqm	sqm	sqm	Metre
Total Asset Group Renewal Cost \$	\$10,372,005	\$36,774,855	\$10,961,820	\$3,160,000	\$8,050,000	\$10,800,000	\$16,720,000	\$7,142,824	\$3,666,365	\$829,270	\$6,645,479
Annual Renewal Exp.	\$105,000	\$349,000	\$106,000	\$350,000	\$298,000	\$100,000	\$230,000	\$524,000	\$88,500	\$11,500	\$5,000
Annual Maintenance Exp.	\$58,000	\$203,000	\$60,000	\$300,000	\$250,000	\$200,000	\$1,000	\$624,000	\$95,500	\$32,500	\$19,000
Retreat. Intervention Condition	7.5	8.0	8.5	7.0	8.0	8.0	8.0	7.5	7.0	8.0	9.0
Total Asset life in Years	55.0	60.0	65.0	15.0	23.0	35.0	23.0	15.0	50.0	25.0	60.0
Av Unit Renewal Cost \$	\$15.00	\$15.00	\$15.00	\$4.00	\$3.50	\$3.00	\$22.00	\$2.07	\$70.81	\$36.11	\$85.30



Reasons for Monitoring Condition/Performance

- Triggers day-to-day maintenance & renewals
- Long term planning - future renewal needs
- Understand asset deterioration trends
- Identifying the optimal asset lifecycle
- Measuring asset performance to levels of service



Also demonstrates sustainable stewardship



Rating 10 = "Cactus"

Road - Condition Rating Examples



Crawford St Wilkins - Paine 4
Kerb 8



Bitumen
Seal 7.5



Gravel Rd
8



Bit Footpath 8



Pavement 8



Pavement 8



5 Key Asset Classes

○ Roads

- Pavements
- Gravel
- Surfaces
 - asphalt
 - seals
- Footpaths
 - Concrete
 - Other
- Kerb & Channel

○ Bridges

- Long life (concrete/steel)
- Short Life (Timber)

○ Drainage

- Pits
- Pipes

○ Buildings

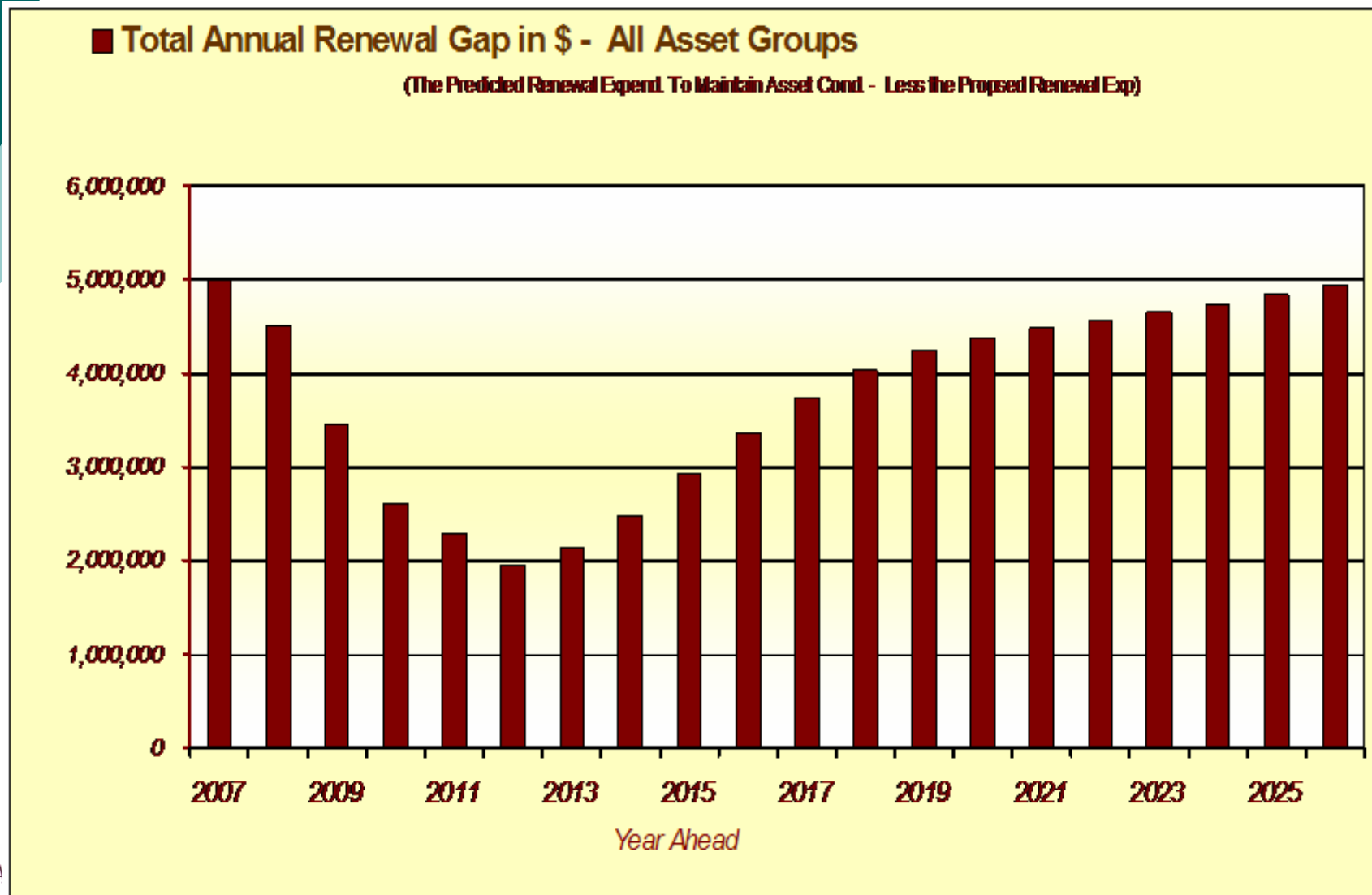
- Long life Structures
- Short Life Structures
- Roof
- Mechanical Services
- Fit out

○ Recreation

- Playgrounds
- Sporting Ovals



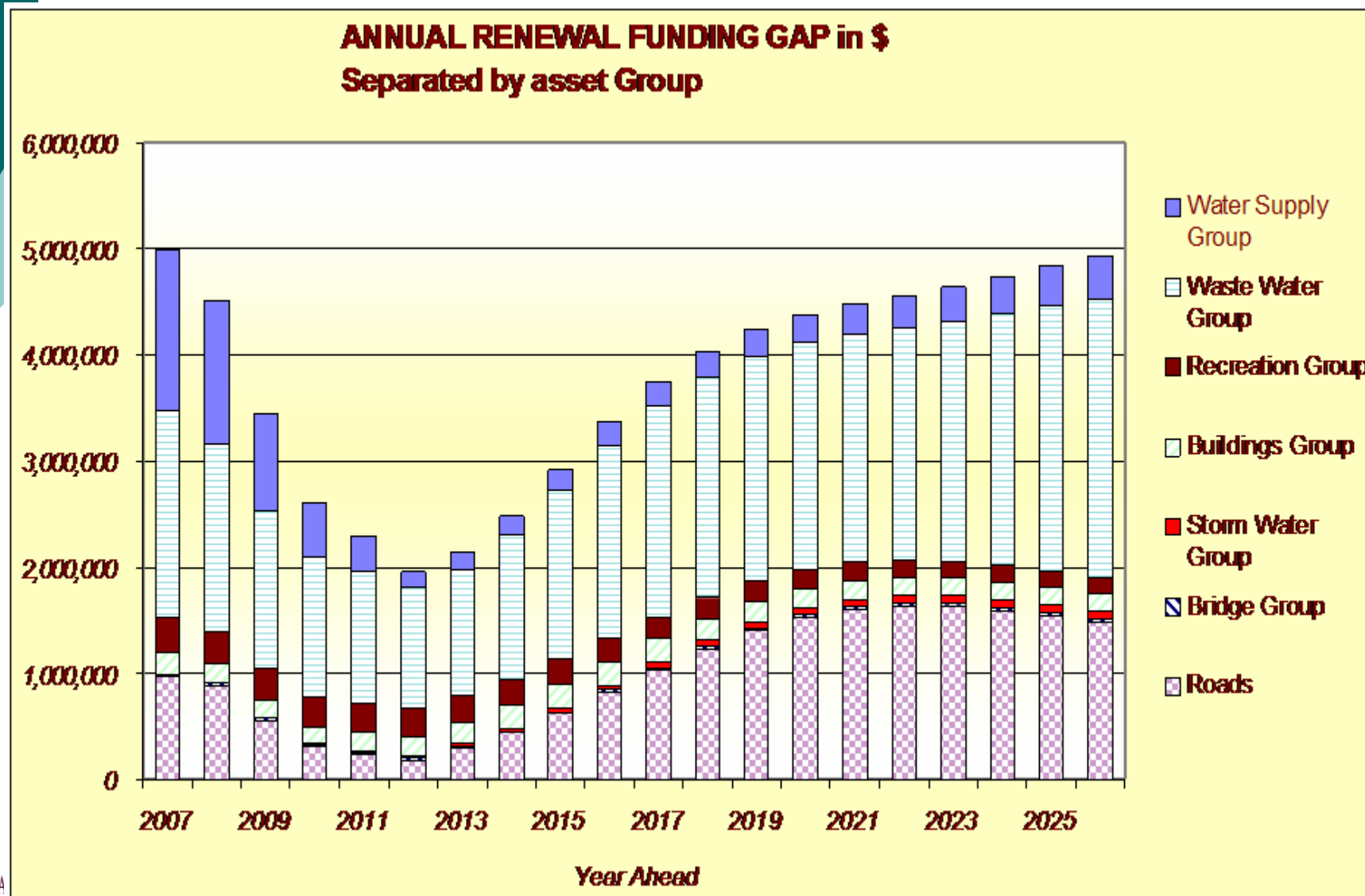
Wombat Total Renewal Liability all Assets - Level of Service





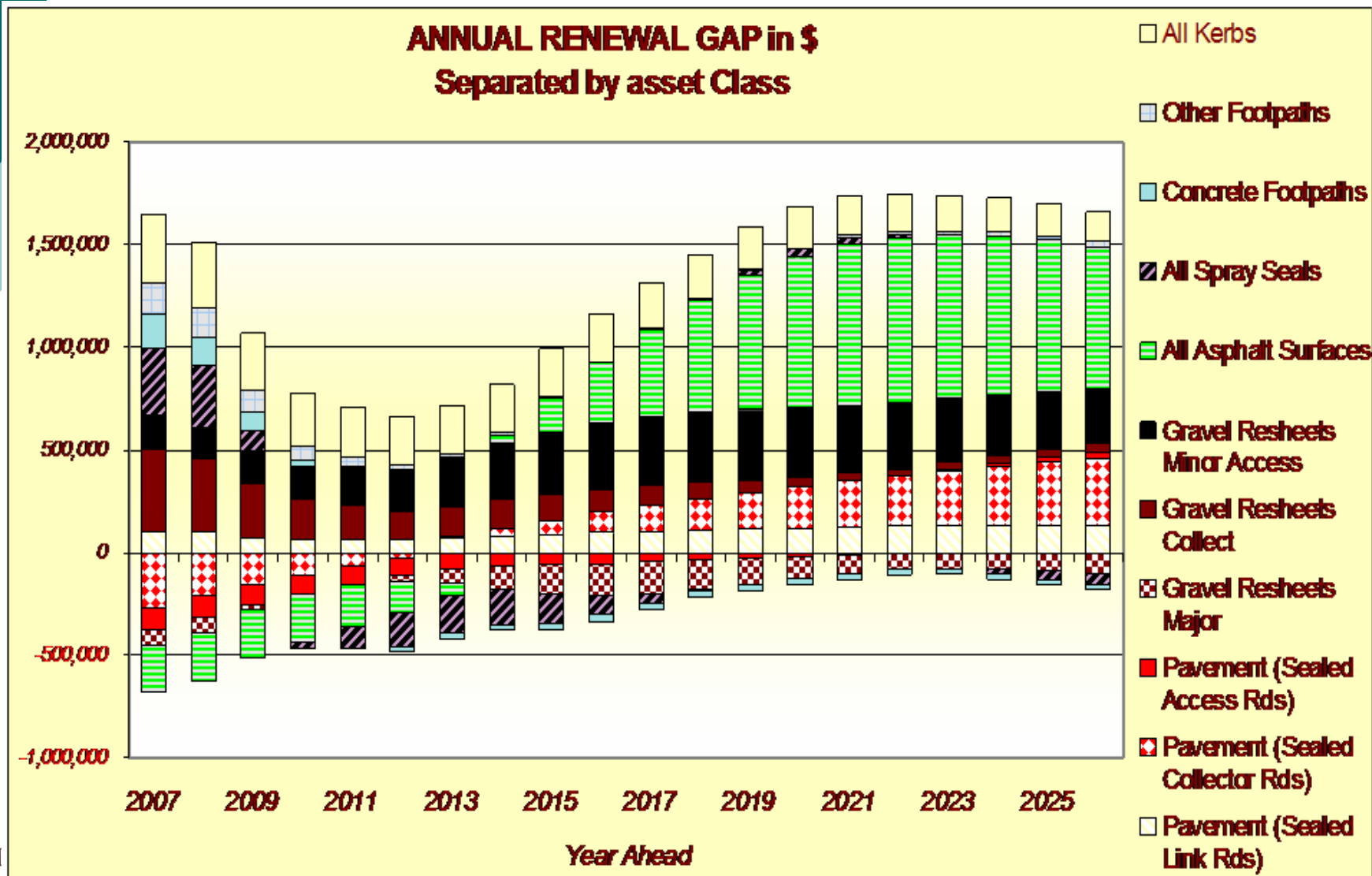
Wombat Renewal Gap

Key Asset Groups



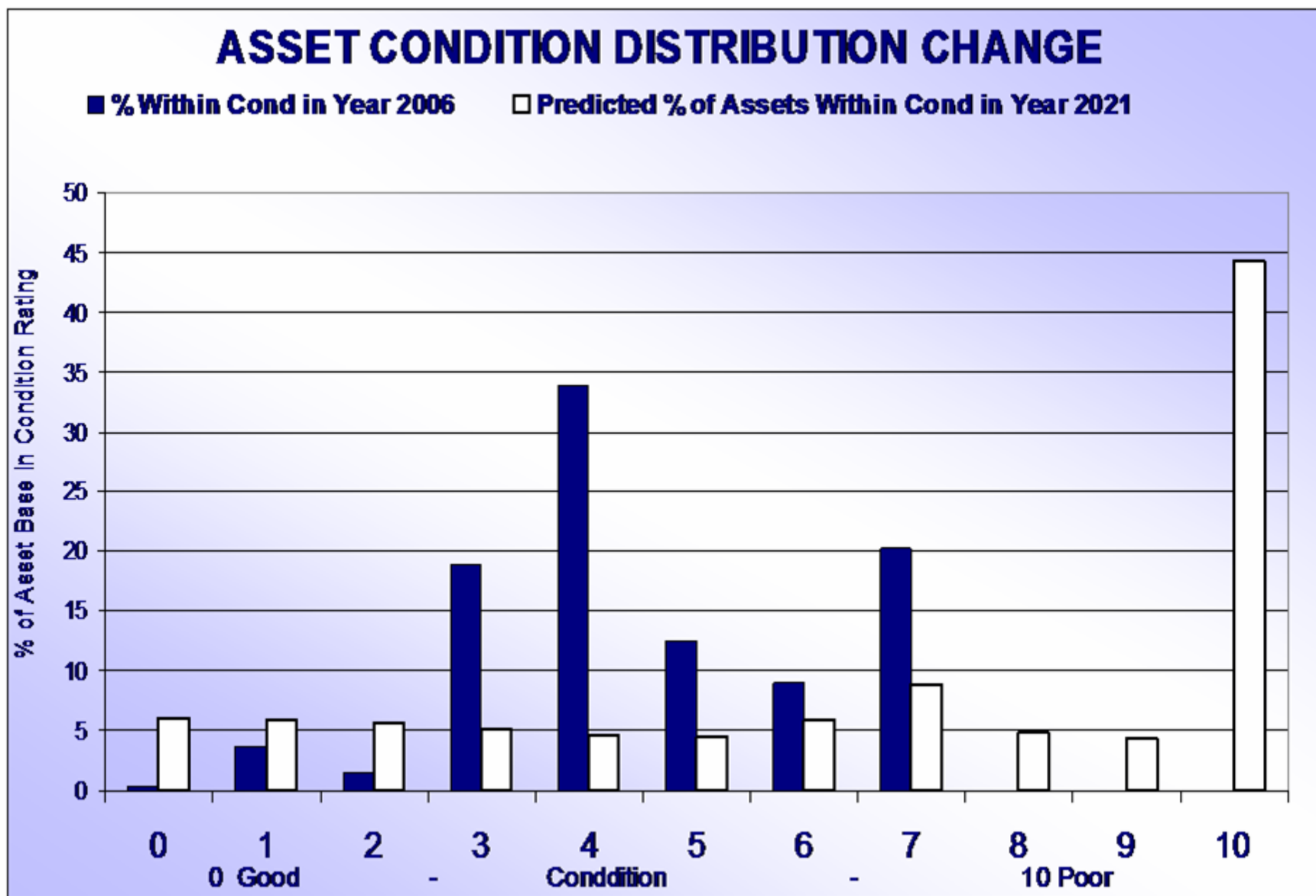


Wombat Roads Renewal Gap





Road Pavement - Example of Condition Changes 15 year period



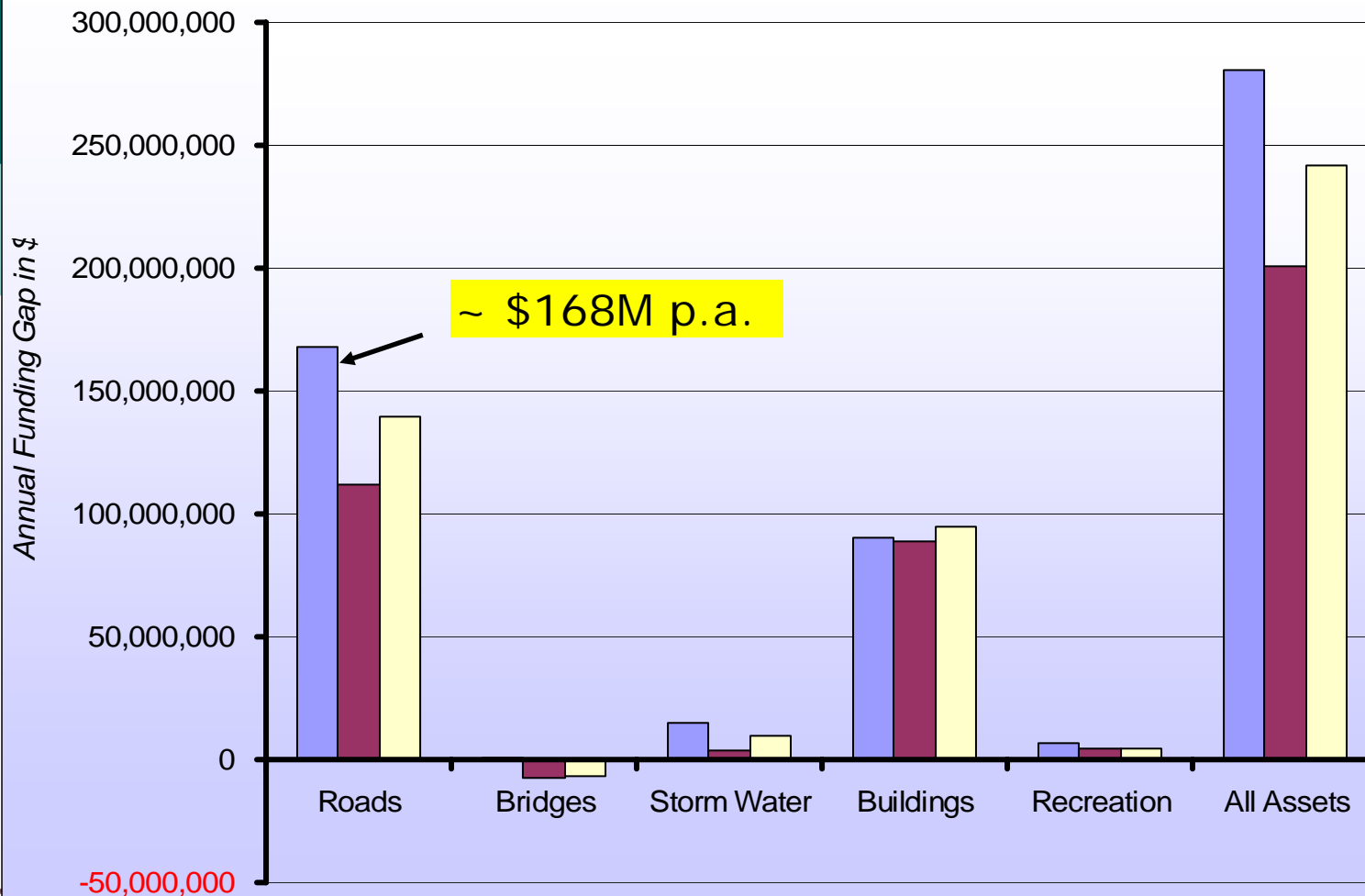


MAV RENEWAL GAP PROJECT

RESULTS 06 – Total Annual \$ GAP

Renewal Gap By Asset Class for all 74 Councils that Participated

■ Annual Gap Funding 07 - 11 ■ Annual Funding Gap 12 - 16 □ Annual Funding Gap 17 - 21



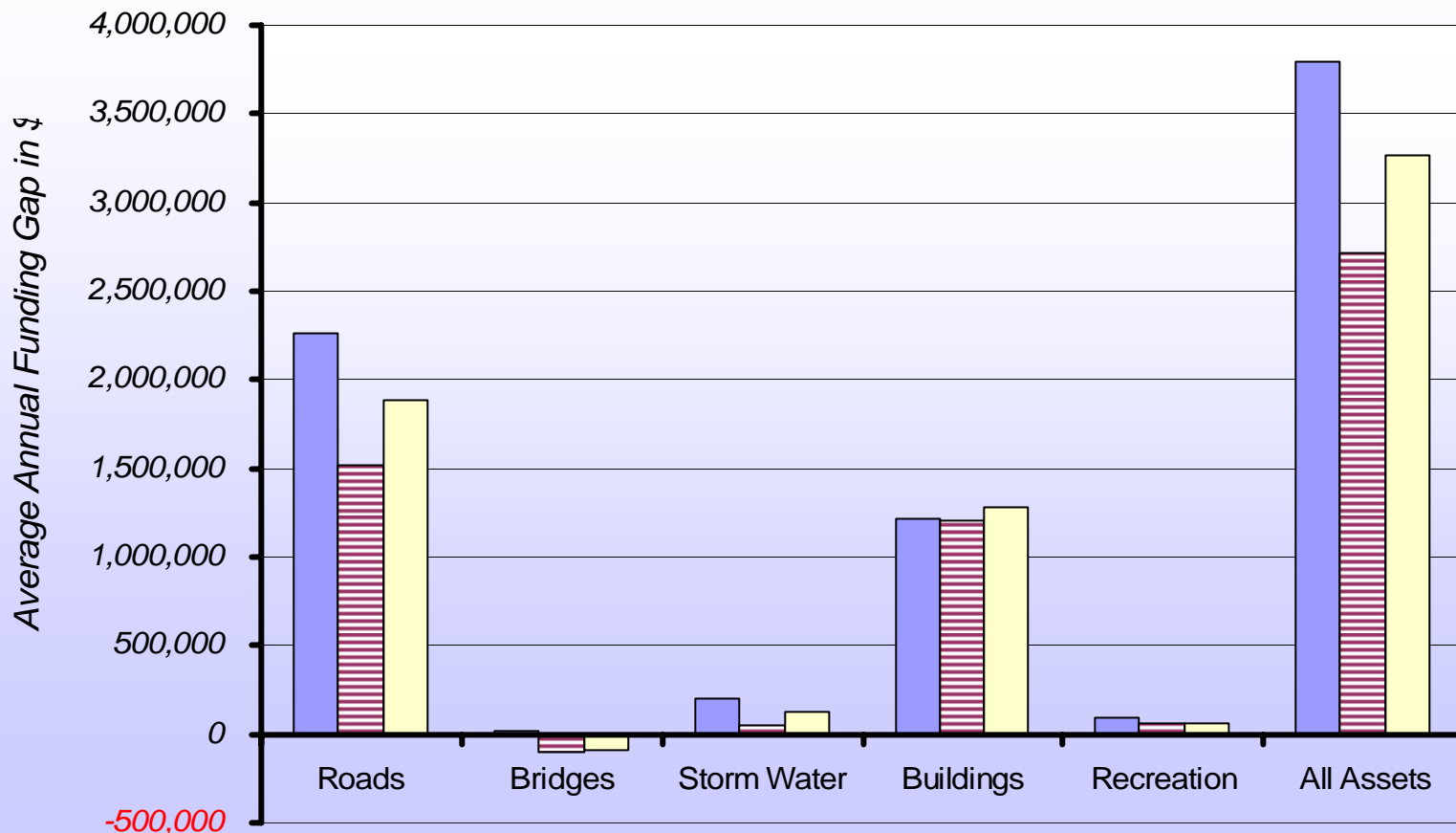


MAV RENEWAL GAP PROJECT

AVE \$ GAP/YR/Council

Av. Renewal Gap By Asset Class 74 Councils out of 78

■ Av Annual Gap Funding 07 - 11
 ■ Av Annual Funding Gap 12 - 16
 ■ Av Annual Funding Gap 17 - 21



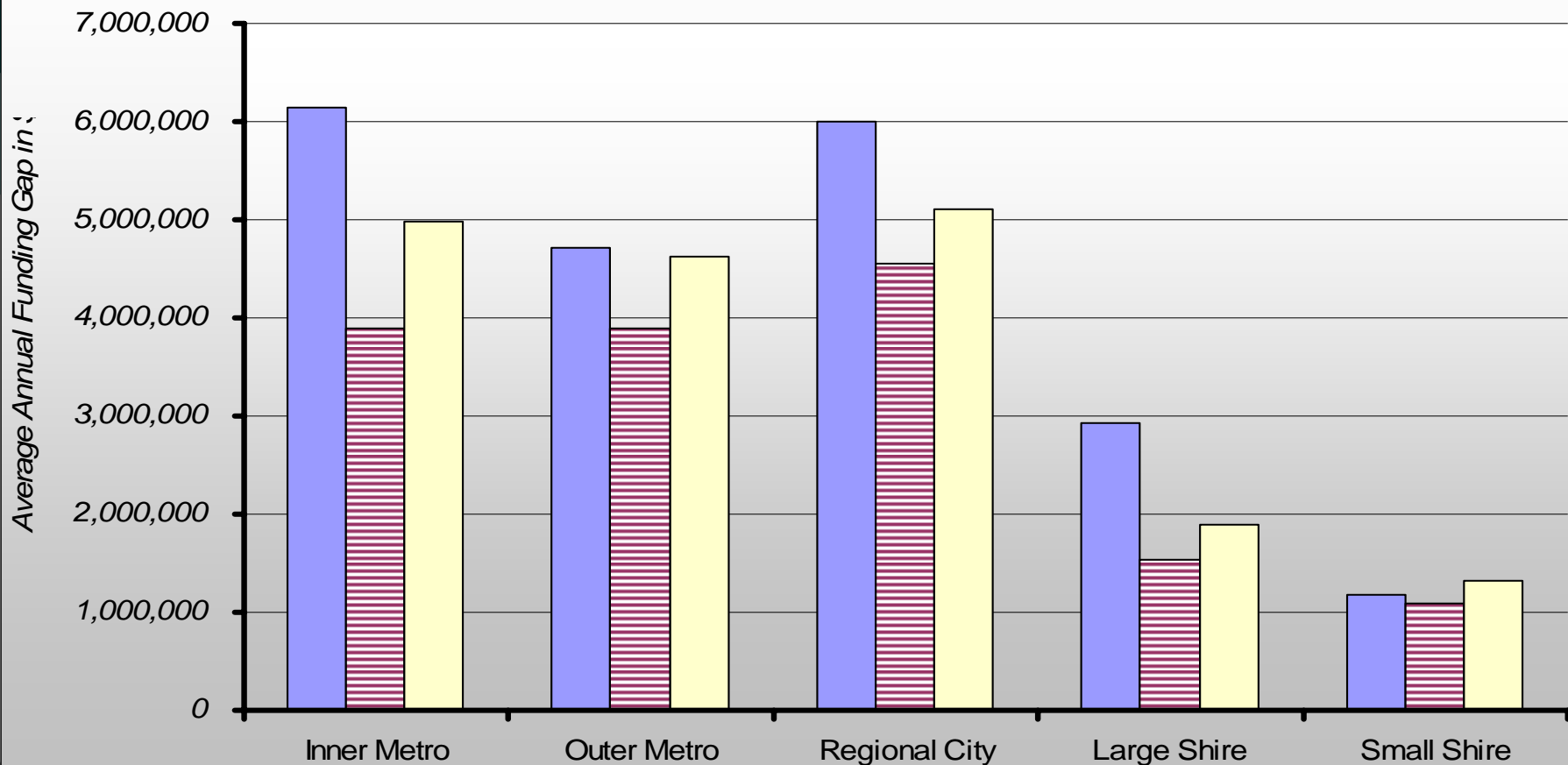
SEATS



MAV RENEWAL GAP PROJECT RESULTS – AVE \$ GAP/YR

Av. Renewal Gap For All Assets by Council Class for all Councils

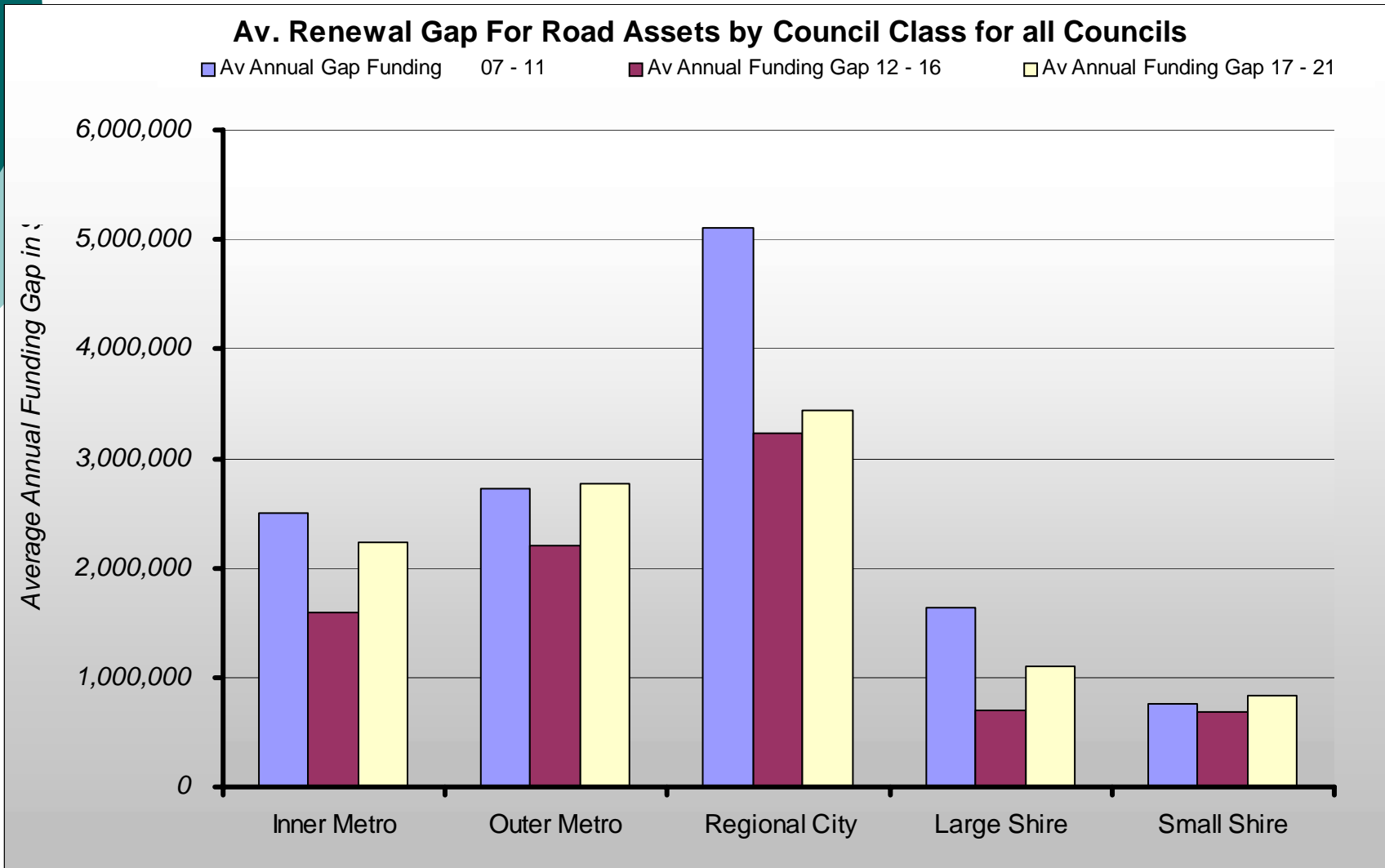
■ Av Annual Gap Funding 07 - 11 ■ Av Annual Funding Gap 12 - 16 ■ Av Annual Funding Gap 17 - 21





MAV RENEWAL GAP PROJECT

Roads— AVE \$ GAP/YR

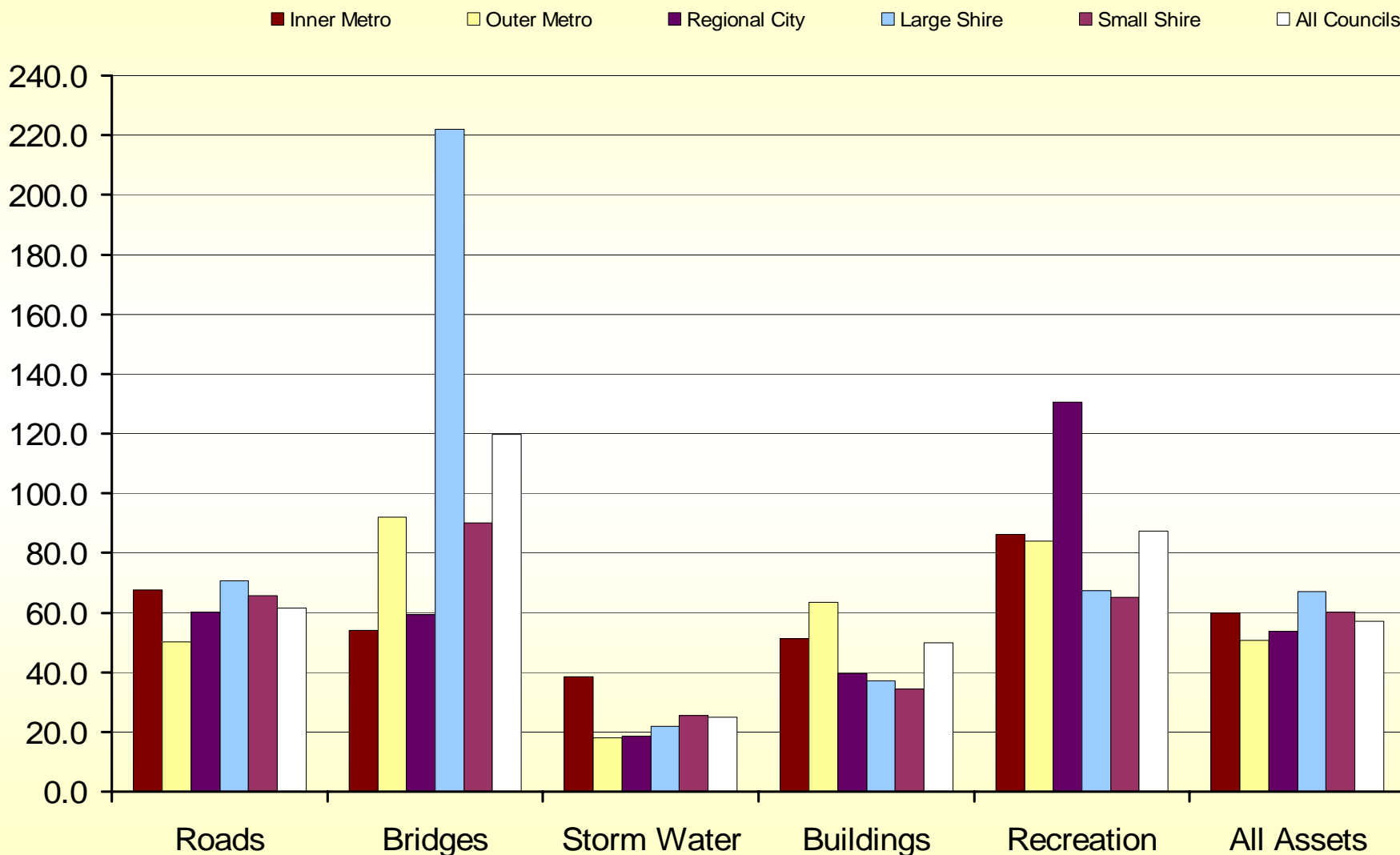




RENEWAL GAP PROJECT

% Renewal Demand Being Met

% of The Long Term Average Renewal Demand Being Met - by Asset Group



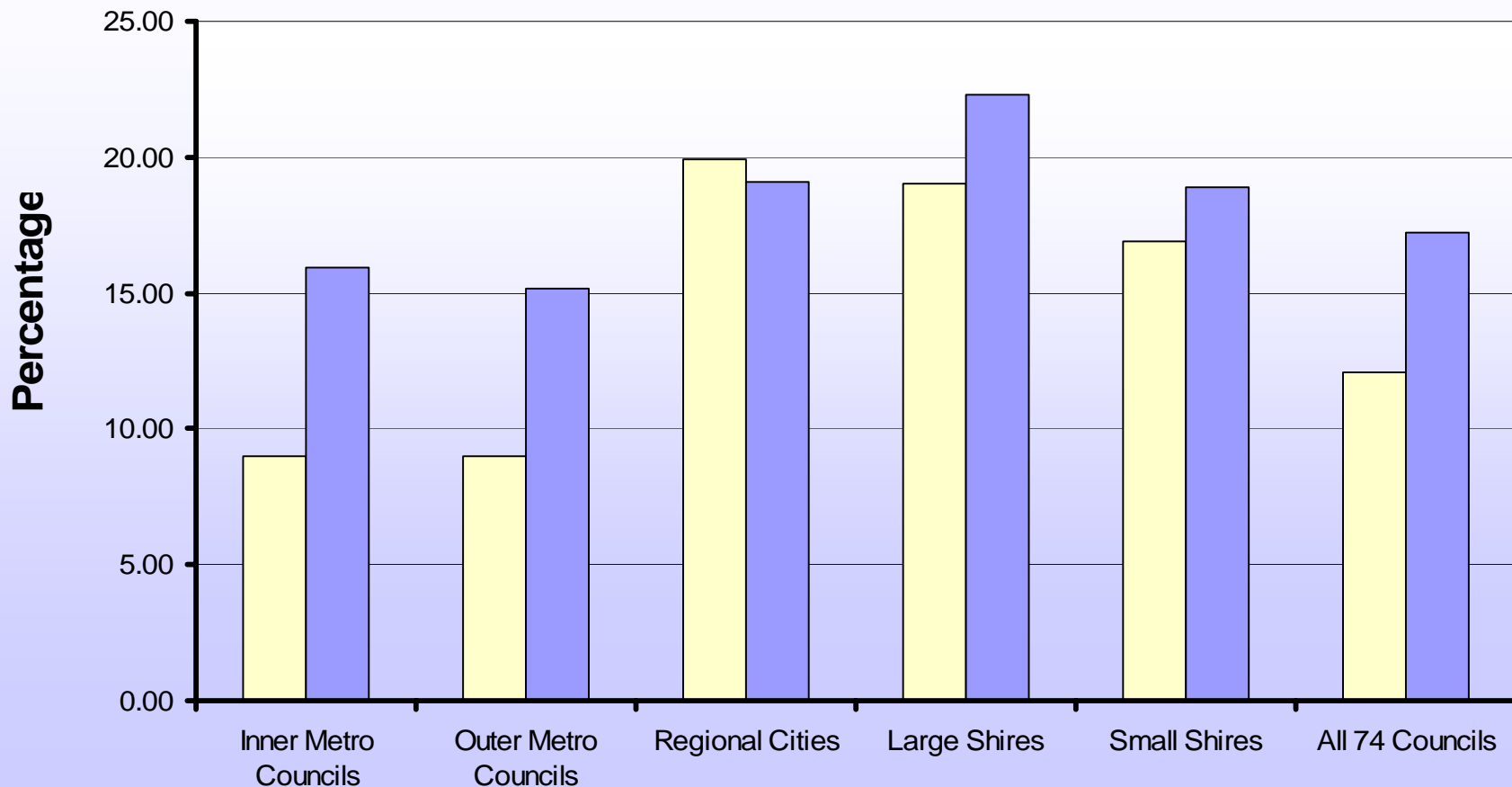


RENEWAL GAP AS % RATES

Renewal Gap as a % of Rate Revenue - Round 1 to Round 2

■ Figures for Round 2 in 2007

■ Figures for Round 1 in 2006





Secondary Outputs from MAV Program - Benchmarking

- Asset lives
- Intervention condition levels
- Funding levels (% rate revenue, % of replacement value)
- Ave Unit Rehabilitation Costs (for each asset category)
- Unit maintenance costs (for each asset category)



Key Issues Arising

- Renewal/Upgrade/New funds not separated
- Distinction b/w mtce/renewal/upgrade
- Mtce inspections & condition assessments
- Incomplete and /or Lack of good quality data
- Reliance on grant funds for renewal
- Asset lives pessimistic
- Lack of reliable \$ data renewal/rehab/replace



Key Benefits of Renewal Gap Assessment

- Project = robust/practical Long Term \$ Plan = **safe & function road network**
- Funding based on “real” cost of renewal
- Council’s can now readily see the outcomes of decisions (Eg condition standards)
- Key information for AM Plans
- Demonstrates knowledge not “rhetoric”



CONCLUSIONS



- Shift towards a **Corporate** approach to AM;
- 2nd cut outputs now form part of **\$ plans**
- Real **paradigm** shift—renewal/upgrade & new
- Council's **motivated** to **review** their assets
- **State** governments recognising importance
- Essential Information to maintain current & gain additional AM **funding**

SEA



MAV Renewal Gap Project QUESTIONS?

50-YEAR AGGREGATED CAPITAL FUNDING GAP by ASSET TYPE

