

Residential Assets

“The Problem we Had to Have”

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Overview

- Background to Charles Sturt University (CSU)
- Definition of “the problem”
- Our Residential portfolio
- Process of Change
- Asset Management issues – major components
- Some of the process / future developments
- Summarise / questions

Acknowledgements

- Wayne Millar - Director of Operational Services, DFM
- David Griffin – Director, Residence Life, DoF

Introduction to CSU



Students on campus: 10,000

Albury-Wodonga (2,000)

Bathurst (3,000)

Dubbo (300)

Orange (700)

Wagga Wagga (4,000)

Distance Education: 22,000

Mixed Mode: 6,000

Total (approx) 38,000

Defining the problem

- CSU Owns and Operates all its Residential assets
- Historically DFM had little involvement in the management and support of Residential Assets
- Add hock approach to maintenance, expansion, and business in general.
- Building stock clearly deteriorated and high risk
- Senior Management Mindset – “not your problem”

So We have

- Large % (25 by ARV) of the University's building assets not being managed under anything that resembles an appropriate Total Asset Management (TAM) process or philosophy
- Expansion phases planned to meet demand (problem getting worse)
- Development of a two tiered system in relation to asset management.
- An opportunity for change

So a bit about the Residential Assets Portfolio

The Numbers

Campus	# Buildings	# Beds	ARV (\$)	Area (m2)
Bathurst	61	1145	\$77,406,360	31,560
Orange	23	268	\$18,989,160	8,311
Wagga	99	1187	\$75,312,524	32,655
Albury Wodonga	18	246	\$16,704,095	5,914
Dubbo	9	62	\$2,302,320	1,725
Totals	210	2908	\$190,714,495	80,165

Albury-Wodonga Campus



Bathurst Campus



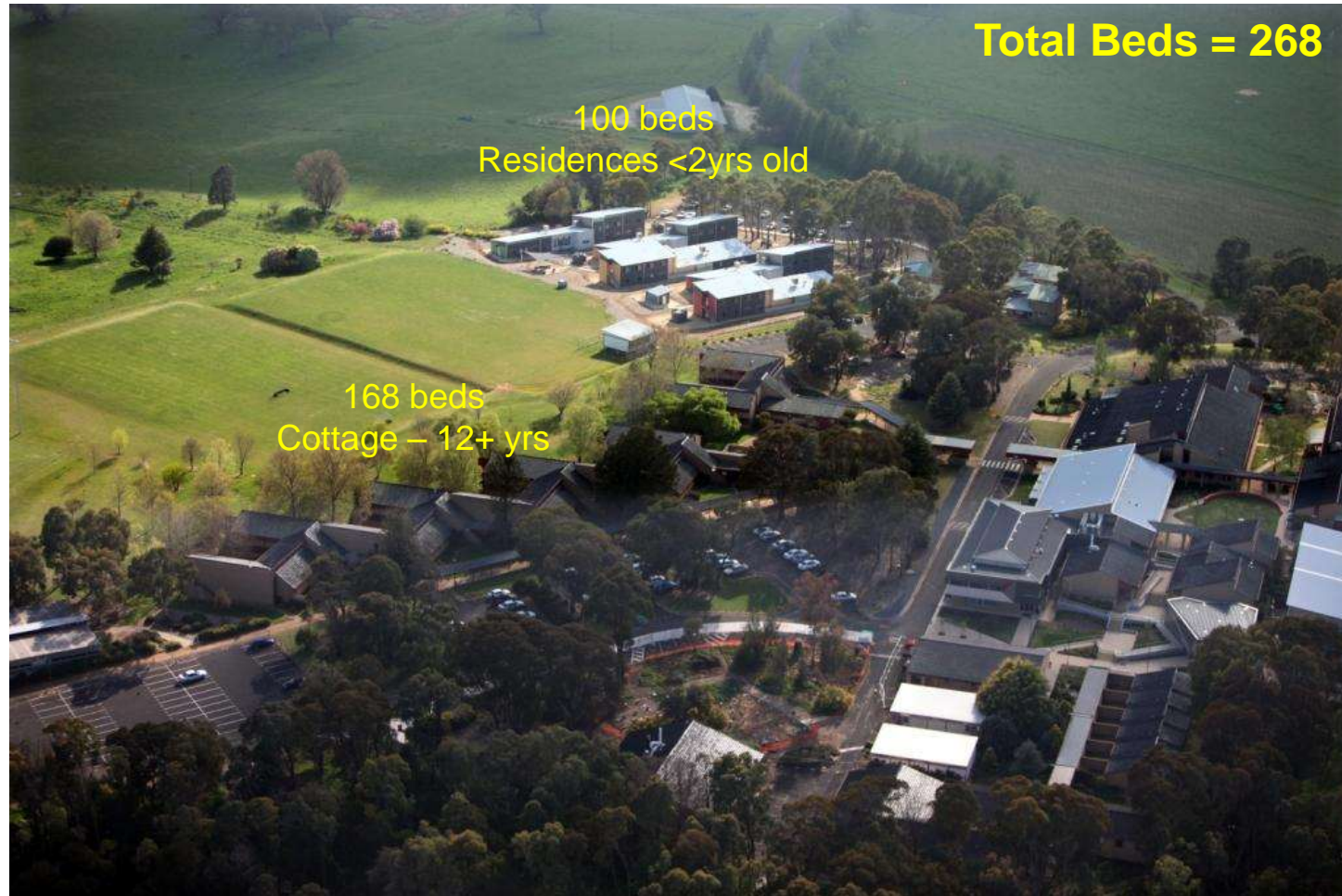
Dubbo Campus



Total Beds = 62

**62 beds
Cottage – 10 yrs old**

Orange Campus



Wagga Wagga Campus



Operational Points of consideration

- Regionality requires a significant residential asset base
 - nowhere to stay = no enrolments (29% or ratio or 3.4)
- Regionality also leads to a higher incidence of “itinerant students” - 52 weeks occupancy not attractive in comparison to Metro locations
- Intensive Residential schools and placements now placing more pressure on rooms
- Academic calendar provides opportunity for conference trade
 - also allows time for scheduled maintenance projects

Operational Points of consideration

- In-house operation (management, admin, operations, dining, maintenance, cleaning, security)
- Pastoral care / community is a priority focus
- Objectives align with University mission. eg: larger concentrations allow cross-subsidisation of sites with less than “critical mass”



Operational Points of consideration

- Broad range of assets, age & FFE, catered & non-catered, ensuite and shared facility
- Broad range of pricing points – meets a range of needs within the market
- Multi-site but single entity approach – consistency as far as possible whilst still recognising individuality



Some other considerations

- Car use – rural setting, culture, necessity
- Lack of public transport services
- Social and recreational space needs



The Management *Shift*

- Progressive change in senior management to reflect more corporate processes.
- Acknowledgement that DFM's more structured approach and systems were providing better outcomes in regards to asset management.
- Through continuous badgering / examples, demonstrations etc. building a picture that we couldn't have 2 processes
- In 2010 we won the prize !!!

But what was the prize ?

- \$200m of assets
- Limited records / detail of the asset base
- No real understanding of the previous monies spent on maintenance by Student Services (totally reactive)
- **“Cautious client”**
- Some money to spend on refurb
- An opportunity to follow a structured process
- A transition period.

Asset Management Approach

- Previous “Enterprise Model” lacked strategic asset approach
- Realisation that the residences portfolio could not be managed outside of a structured framework
- DFM charged with providing Total Asset Management service and Residences treated as Organisational Assets which aligns more positively with University Strategic Directions

The puzzle

- Multiple assets
- Multiple locations
- Multiple needs
- Previous developments typically modelled on small buildings and duplication
- Changing student needs



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The Numbers

- Estimated Backlog Liability (2008) **\$8.151m**
- Backlog Liability \$ as % ARV **4.27 %**
- Benchmark % / ARV **3 %**
- CSU Main Spaces **5%**
- Current Maintenance Spend as % ARV **0.524 %**
- Benchmark Maintenance % / ARV **1-1.5 %**
- Investment needs supported in broad terms by SEC and significant allocations made

The approach

- TAM Fundamentals –
 - Condition Audit, Analysis and then Strategic Decision Making to determine whether to
 - Maintain
 - Rebirth
 - New build
 - Dispose



The approach – some issues

- Sheer size m2 – no time, no money – extrapolation ??
- The good / the bad / and the ugly
- Opportunity - Same type of buildings
- Sampling, then testing
- Standards
- Timing - session breaks
- In house or contract



The Good



The bad



And the ugly



The Process

- Audit (takes time)
- Immediate action (no brainers)
- Planning
- Strategic Direction (need one !)

2011-16 Prioritised Backlog Plan Progress

While not complete the audit process is indicating the condition - reflects the campus & asset age:

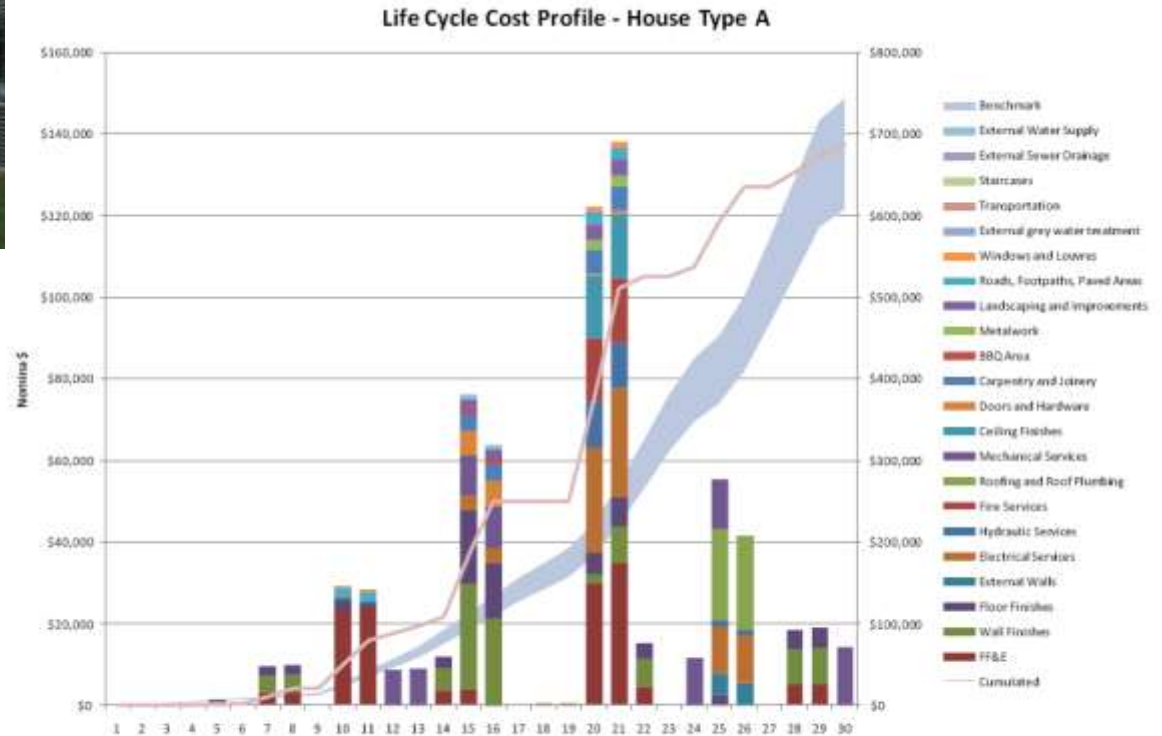
- Generally paint and carpet - result of robust buildings
- Notable exceptions - Towers/John Oxley/East and West Halls/10 or so 4 bed cottages at wagga
- In some cases we need to take buildings off line to make an impact
- Exit strategy for several buildings & South Campus
- Feasibility studies require application of revenue streams to determine payback and IRR

Compliance Issues

Generally related to age & compliance at build date

- Electrical safety – wiring condition, no RCD protection devices in older buildings
- Provision of fire protection is still a significant issues in some building
- Disability access would rate poorly
- General issues i.e. freshwater protection, balustrade
 - *Risk assessments would indicate some standards need to be above BCA requirement.*

New Facilities



The chart shows major replacements between year 10 to 16, 20 and 22, 24 to 26 and 28 to 30. The five building elements that represent the major life cycle cost components are FF&E with \$142k, Wall Finishes with \$97k, Electrical Services with \$84k, Mechanical Services with \$76k and Floor Finishes with \$73k.

3.5 Summary on OPEX

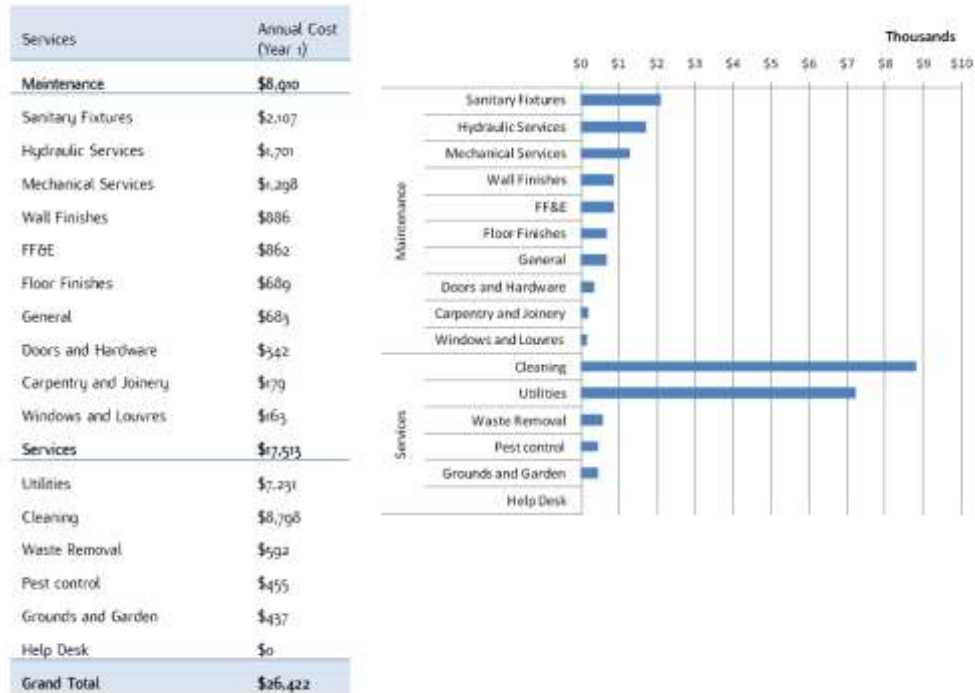


Figure 4 – Summary of OPEX Cost



Existing Facilities

Charles Sturt University - Wagga Wagga Campus Condition Audit



Facility: Cottage 351
Boorooma St
Wagga Wagga NSW 2678

Inspection date: 18 May 2011

Report status: Draft

Property type: Residential

Construction date (est): 0

Gross floor area: 176

Primary building material: Brick

Primary roofing material: Metal

Number of spaces: 21




REPAIR AND FIVE-YEAR REPLACEMENT COST CASHFLOW BY ASSEMBLY

Assembly Name	2011	2012	2013	2014	2015	2016+	Total
Door Assemblies / Access Hatch	\$90	-	-	-	-	-	\$90
Door Assemblies / Timber Door (hollowcore)	\$55	-	-	-	-	-	\$55
Door Assemblies / Timber Door (solid core)	\$88	-	-	-	-	-	\$88
Fans / Extractor Fan (ceiling)	\$34	-	-	-	-	-	\$34
Floor Finish / Carpet	\$1,740	\$348	-	-	\$5,568	-	\$7,656
Floor Finish / Ceramic Floor Tiles	\$42	-	-	-	-	-	\$42
Floor Finish / Vinyl Floor Tiles	\$80	-	-	-	-	-	\$80
Lining / Plasterboard Lining (Ceiling)	\$684	-	-	-	\$1,782	-	\$2,466
Lining / Plasterboard Lining (Wall)	\$136	-	-	-	-	-	\$136
Luminaires / Fluorescent Batten Unit	\$347	-	-	-	-	-	\$347
Luminaires / Fluorescent Troffer Unit	\$117	-	-	-	-	-	\$117
Painting / Eaves	-	-	-	-	\$460	-	\$460
Plastering / Hardwell Plaster	\$576	-	-	-	-	-	\$576
Roofing / Fascia Board	\$1,700	-	-	-	\$1,116	-	\$2,816
Roofing / Sheet Metal Roofing	\$6	-	-	-	-	-	\$6
Sanitary Plumbing / Basin	-	-	-	\$550	-	-	\$550
Sanitary Plumbing / Shower Assembly	\$27	-	-	-	-	-	\$27
Sanitary Plumbing / Tapware	\$45	-	-	-	-	-	\$45
Shelving & Storage / Built-in Wardrobe	\$215	-	-	-	-	-	\$215
Signs and Display / Signage	\$150	-	-	-	-	-	\$150
Stormwater / Downpipe (Zincalume steel)	\$234	-	-	-	\$108	-	\$342
Stormwater / Roof Guttering (Zincalume Steel)	\$196	-	-	\$400	\$400	-	\$996
Structural Timber / Timber Posts	-	-	-	-	\$90	-	\$90
Timber Fixtures / Architrave (Timber)	-	-	-	-	\$350	-	\$350
Timber Fixtures / Vanity Benchtop	\$480	-	-	-	-	-	\$480
Wall Covering / Ceramic Wall Tiles	\$84	-	-	-	-	-	\$84
Window Hardware / Flyscreen	\$60	-	-	-	-	-	\$60
Totals:	\$7,186	\$348	0	\$950	\$9,874	0	\$18,358
Inflated totals (3% pa):	\$7,186	\$358	0	\$1,038	\$11,113	0	\$19,695

SUMMARY FIVE-YEAR SCHEDULED AND STATUTORY MAINTENANCE CASHFLOW BY ASSEMBLY

Assembly Name	2011	2012	2013	2014	2015	Total
Security Screen Door						
Check operation of fire egress doors (Annually)	\$14	\$14	\$14	\$14	\$14	\$70
Timber Door (hollowcore)						
Check operation of fire egress doors (Annually)	\$105	\$105	\$105	\$105	\$105	\$525
Timber Door (solid core)						
BCA Inspection (Annually)	\$28	\$28	\$28	\$28	\$28	\$140
Check operation of fire egress doors (Annually)	\$14	\$14	\$14	\$14	\$14	\$70
Fire Blankets						
Safety Inspection (Every 6 months)	\$120	\$120	\$120	\$120	\$120	\$600
Powder Extinguisher						
5 Year testing (Every 5 years)	\$150	-	-	-	-	\$150
Safety inspection (Every 6 months)	\$35	\$35	\$35	\$35	\$35	\$175
Water Extinguisher						
5 Year testing (Every 5 years)	\$150	-	-	-	-	\$150
Safety inspection (Every 6 months)	\$35	\$35	\$35	\$35	\$35	\$175
Extractor Fan (ceiling)						
Scheduled Maintenance (Annually)	\$51	\$51	\$51	\$51	\$51	\$255
Smoke Detectors						
Test and inspect (Every 6 months)	\$1,330	\$1,330	\$1,330	\$1,330	\$1,330	\$6,650
Carpet						
Scheduled Maintenance (Bi-annual)	\$264	-	\$264	-	\$264	\$792
Ceramic Floor Tiles						
Maintenance (Replace silicone, Clean grout lines and replace missing grout) (Every 3 years)	\$90	-	-	\$90	-	\$180
Sheet Metal Roofing						
Roof inspection and minor repairs (Annually)	\$616	\$616	\$616	\$616	\$616	\$3,080
Basin						
Apply silicone sealant (Every 3 years)	\$64	-	-	\$64	-	\$128
Tapware						
Replace washers (Every 3 years)	\$450	-	-	\$450	-	\$900
Downpipe (Zincalume steel)						
Clean out downpipes (Annually)	\$126	\$126	\$126	\$126	\$126	\$630
Roof Guttering (Zincalume Steel)						
Clean gutters (Annually)	\$196	\$196	\$196	\$196	\$196	\$980
Domestic Switchboard						
Annual maintenance (Annually)	\$70	\$70	\$70	\$70	\$70	\$350



GROUND FLOOR / 111

Estimated repair for this space: \$1,099

Ref #	Assembly Name	Unit	Repair Size	Condition	Year	Repair Action	Repair Notes	Est. Cost
68	Fans / Extractor Fan (ceiling)	item	1	Average	2011	Carry out monthly, quarterly, 6 monthly and yearly maintenance		\$17
286	Floor Finish / Ceramic Floor Tiles	sq m	2	Average	2011	RegROUT ceramic floor tiles		\$42
20	Plastering / Hardwall Plaster	sq m	8	Average	2011	Paint walls to paint manufacturers instructions - 2 coats. (COLOUR AS DIRECTED).		\$88
					2011	Repair hardwall plaster		\$400
297	Sanitary Plumbing / Shower Assembly	item	1	Average	2011	Carry out general maintenance to shower including replacing washers and minor repairs		\$27
70	Sanitary Plumbing / Tapware	item	1	Average	2011	Remove and dispose of existing and supply and fix washer to one tap. Including repack gland or replace O-ring and re seat with stainless steel seat if required (Stop tap from leaking). Retain replaced items as specified.		\$45
79	Timber Fixtures / Vanity Benchtop	m	1	Average	2011	Repair or replace damaged sections of laminate to match existing.		\$480

Plastering/Hardwall Plaster (Ref: 20)



Plastering/Hardwall Plaster (Ref: 20)



Timber Fixtures/Vanity Benchtop (Ref: 79)



2011 Residential Audit Results

Campus	# Buildings	# Beds	Repair Costs – General ‘000	Repair Costs – HVAC ‘000
Albury Wodonga	18	246	\$108,000	190,000
Bathurst	61		\$2,546,000	568,000
Dubbo	9	62	0	0
Orange	23	268	\$744,000	17,000
Wagga	99	1187	\$3,534,000	899,000
Totals	210	2908	\$6,932,000	1,674,000

The Backlog Numbers 2008-11

- Estimated Backlog Liability (2008) **\$8.151m**
- Backlog Liability \$ as % ARV **4.27 %**
- Benchmark % / ARV **3 %**
- CSU Main Spaces **5%**
- Current Maintenance Spend as % ARV **0.524 %**
- Benchmark Maintenance % / ARV **1-1.5 %**
- Estimated Backlog Liability (2011) **\$8,795m**
 - **Conservative - incomplete data**
 - **Specialist audits required**
 - **Includes investments from 2008**

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EXAMPLE REPORTS

BEIMS Building Summary Report

Building Code	Description	Total Estimated Cost	Interior Total Estimated Cost	Replacement Cost	Building Value	ACI	FCI
WRA01	W - Roundabout 1	\$115,500	\$0	\$120,000	\$120,000	0%	0.04
BCP7	Carpark 7 - BCP7	\$150,000	\$0	\$272,727	\$272,727	0%	0.45
ORD09	Orange Road 09	\$220,000	\$0	\$400,000	\$400,000	0%	0.45
BCP12	Carpark 12 - BCP12	\$79,800	\$0	\$145,091	\$145,091	0%	0.45
ORD01	Orange Road 01	\$57,000	\$0	\$103,636	\$103,636	0%	0.45
WWSP1	Wagga sth - Car Park 01	\$42,000	\$0	\$109,091	\$109,091	0%	0.62
WWSP2	Wagga sth - Car Park 02	\$19,320	\$0	\$50,182	\$50,182	0%	0.62
WWSP3	Wagga sth - Car Park 03	\$13,125	\$0	\$34,091	\$34,091	0%	0.62
WWSP6	Wagga sth - Car Park 06	\$3,900	\$0	\$10,909	\$10,909	0%	0.64
BVILLDR	Bathurst Village Drive	\$217,865	\$0	\$621,364	\$621,364	0%	0.65
BRST	Research Station Drive - BRST	\$228,000	\$0	\$681,818	\$681,818	0%	0.67
ORD10	Orange Road 10	\$40,000	\$0	\$134,545	\$134,545	0%	0.70
ORD04	Orange Road 04	\$11,500	\$0	\$38,636	\$38,636	0%	0.70
ORD03	Orange Road 03	\$15,000	\$0	\$54,545	\$54,545	0%	0.72
WCP10	Carpark 10 - Uni Properties	\$16,800	\$0	\$62,727	\$62,727	0%	0.73
1 2 3 4 5 6 7 8							

Residential Audit - 2011

Building Group Element Report

Survey: CSU2011
Campus: *
Source: *
Space: Residential

Repair Cost

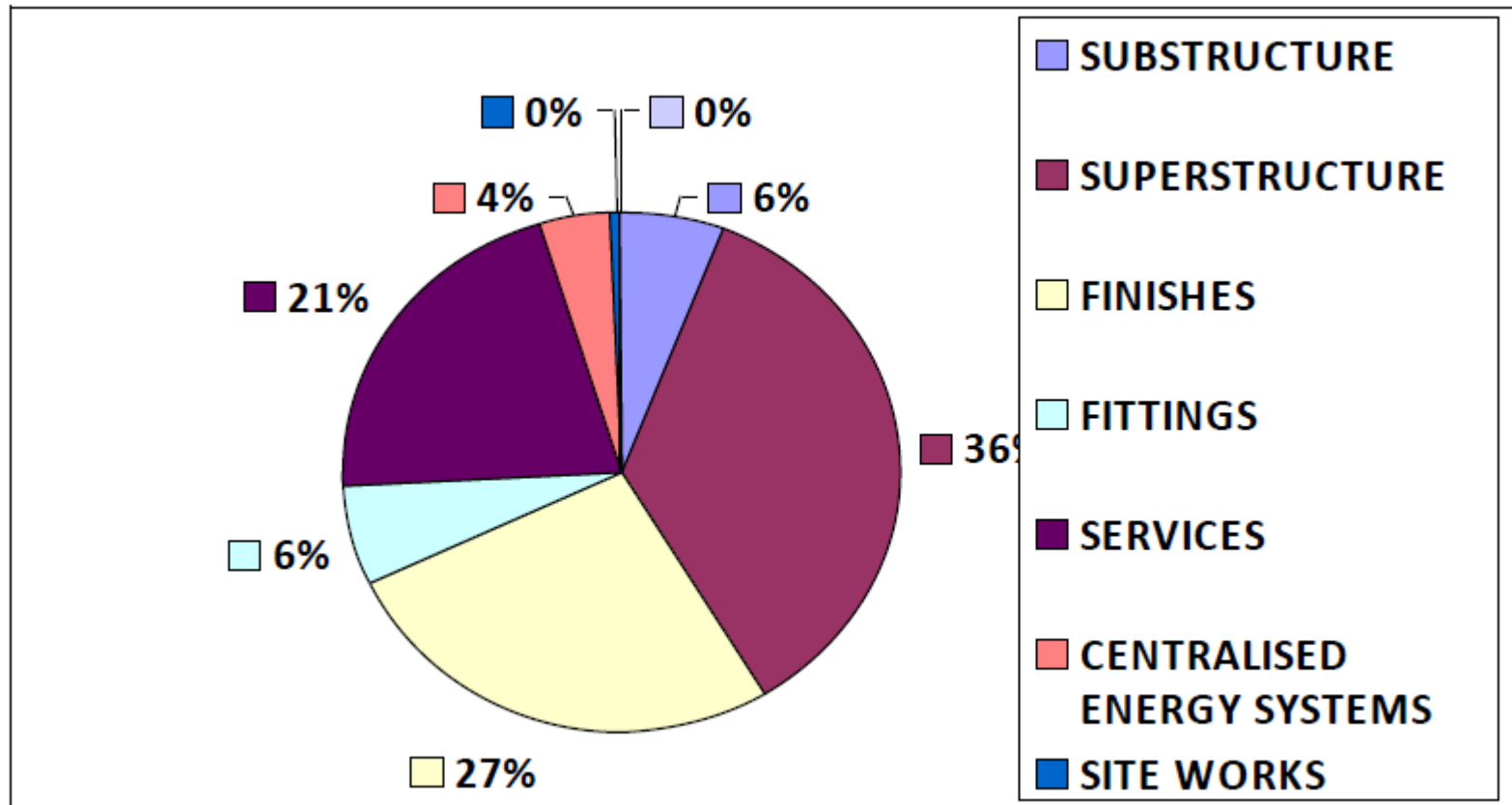
A1	SUBSTRUCTURE	529,770
B1	SUPERSTRUCTURE	3,031,658
C1	FINISHES	2,275,422
D1	FITTINGS	524,037
E1	SERVICES	1,840,644
F1	CENTRALISED ENERGY SYSTEMS	365,945
H1	SITE WORKS	31,627
I1	EXTERNAL SERVICES	7,960

Report Total:

8,607,063

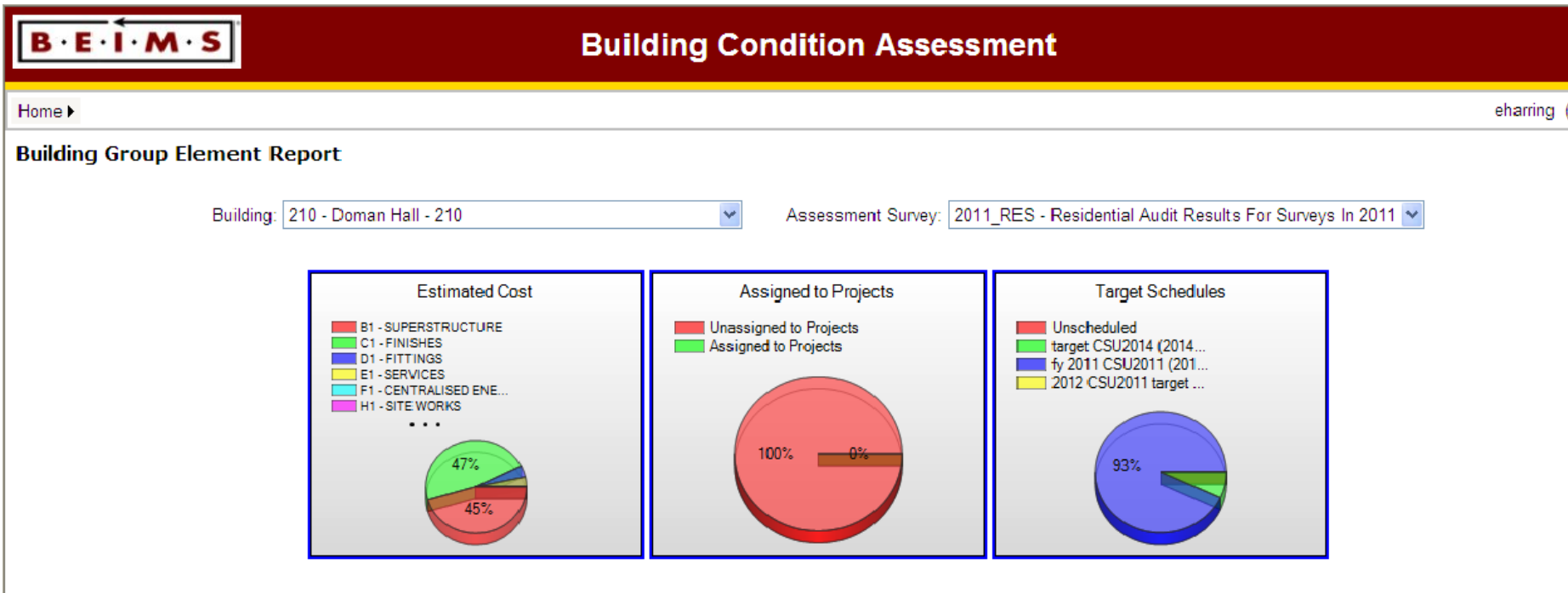
Building Group Element Report

Residential Audit - 2011



		Repair Cost
B1	SUPERSTRUCTURE	146,529
C1	FINISHES	152,142
D1	FITTINGS	12,784
E1	SERVICES	10,768
F1	CENTRALISED ENERGY SYSTEMS	
H1	SITE WORKS	105
I1	EXTERNAL SERVICES	
Report Total:		322,328

Building Group Element Report



Doman Halls Wagga \$322,328

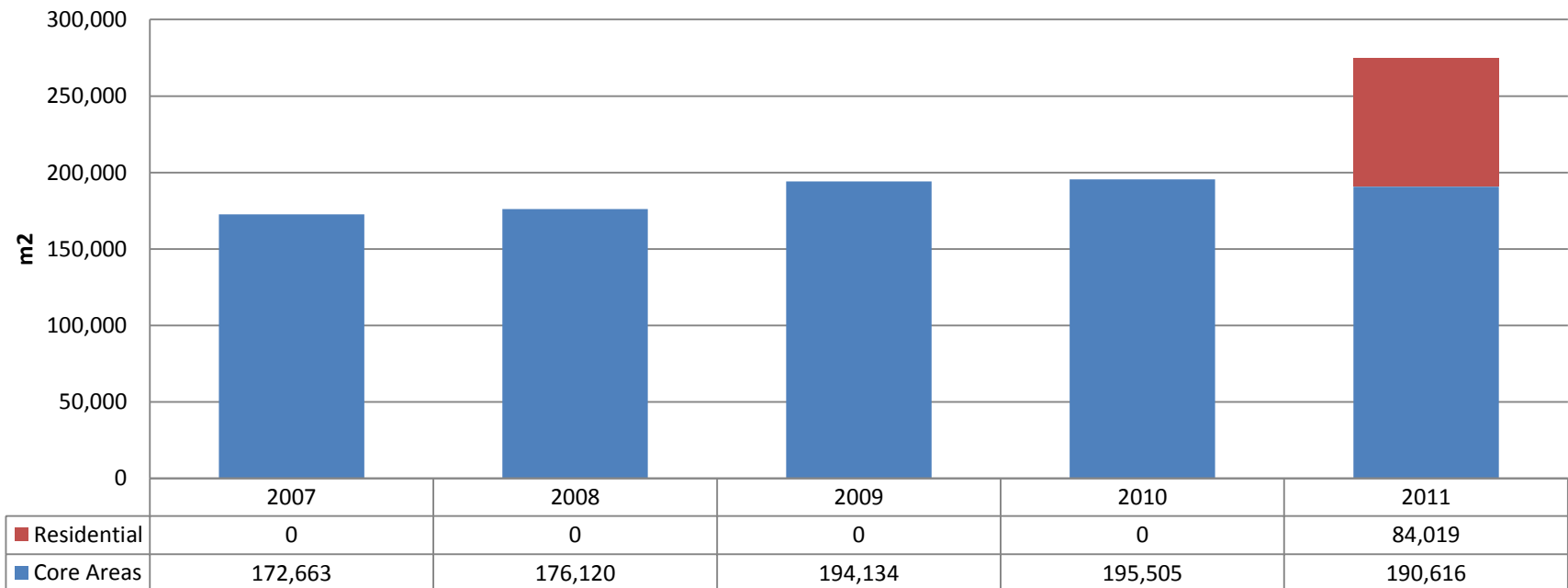
The Changing of the guard

- Building the data picture
- Process Management (need for consistency)
- Expectation management

Increase of DFM Responsibilities

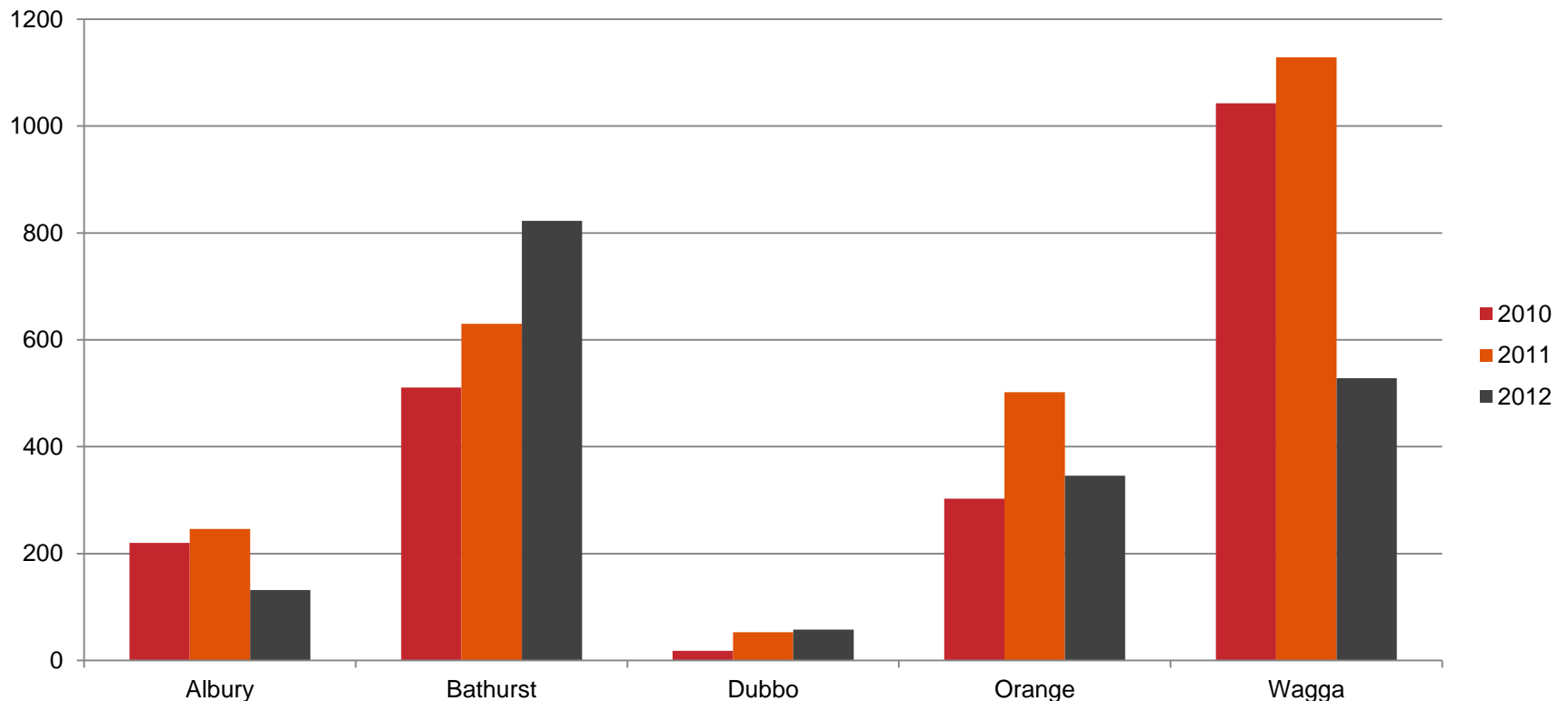
**Additional
44% GFA**

Total DFM Responsibility - GFA (m2)

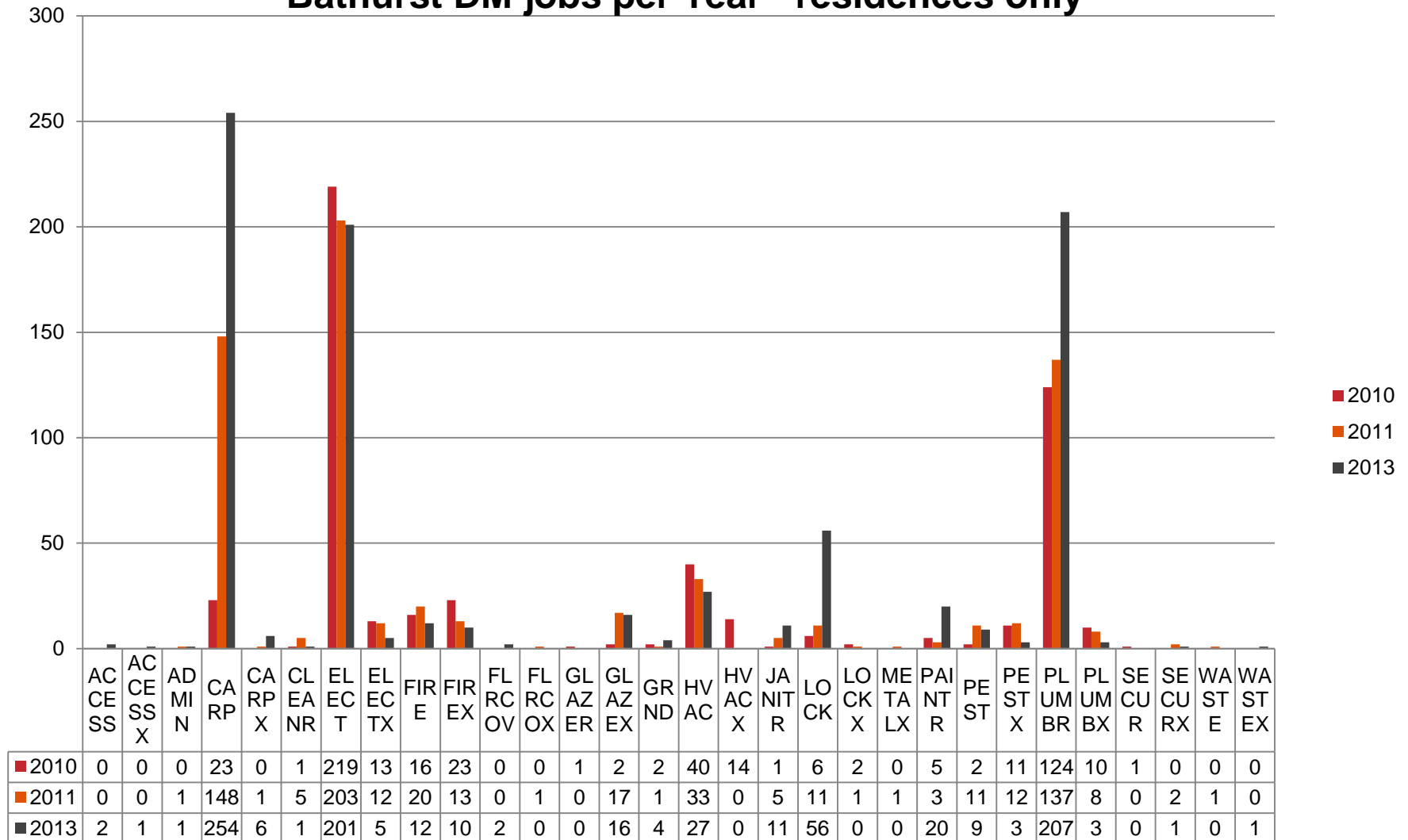


Trend in Work Order Load (2010 – May 12)

DM jobs per Year - residences only



Bathurst DM jobs per Year - residences only



The no brainers

- paint, carpet, joinery, furniture,
- garbage bins, clothes lines
- landscaping
- pathways
- fire compliance
- electrical safety
- drainage, gutters
- first impressions

The no brainers

- Dec 2010 – Feb 2012 spent approximately \$2m in the blink of an eye.
- Projects just grew and grew as each stone was uncovered
- Audits are great, but build in a risk factor (a big one !)

Whoa....



Whalaa....



Whalaa....



Whoa.....



Whalaa....



Future needs

- \$5m for refurbishment available
- Probably need \$15m (to address backlog and improve functionality)
- \$1m for maintenance previously (we think)
- Moved to \$1.4m with some gentle persuasion
- Should be at around \$2m as minimum

The Real Issue

- **No Strategic Plan**
- Currently developing, however hesitancy because we can anticipate the results
- Data collected will be critical component in determining future direction
- First time that CSU may have to consider assets as a strategic driver / contributor to business outcomes
- What is the “student experience” when it comes to student accommodation ?

The future

- Establish appropriate maintenance investment and standardise service
- Grapple with the issue of functionality and changing student needs (as part of the maintenance upgrades ?)
- Increase the social space areas (internally and externally) – part of rebirthing ??
- Develop and plan for replacement strategies
- Exit strategy from South Campus
- Different models of delivery ?

The future

- All audit data stored in BEIMS / Archibus systems
- Seamless student requisition support system
- Consolidated and improved maintenance support.
- Commitment to ongoing process of TAM.



Conclusions

- Serious asset base with significant liabilities
- Implementing a more structured approach to managing it (takes time)
- Some assets will no longer be suitable.
- The mix is part of its strength
- Social spaces are deficient in older designs, however small nature of the assets present opportunities.
- Future incremental growth and rebirthing can incorporate recent learning's and will be assisted by Master Planning
- Let Facilities Managers, manage the Facilities
- Extend TEFMA Benchmarking to Residences ???

Thank you

Questions ??

