



Quantifying South Africa's asset value and FM operating cost & FM and Circumnavigating SA journey

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CER

Facility and Property Management

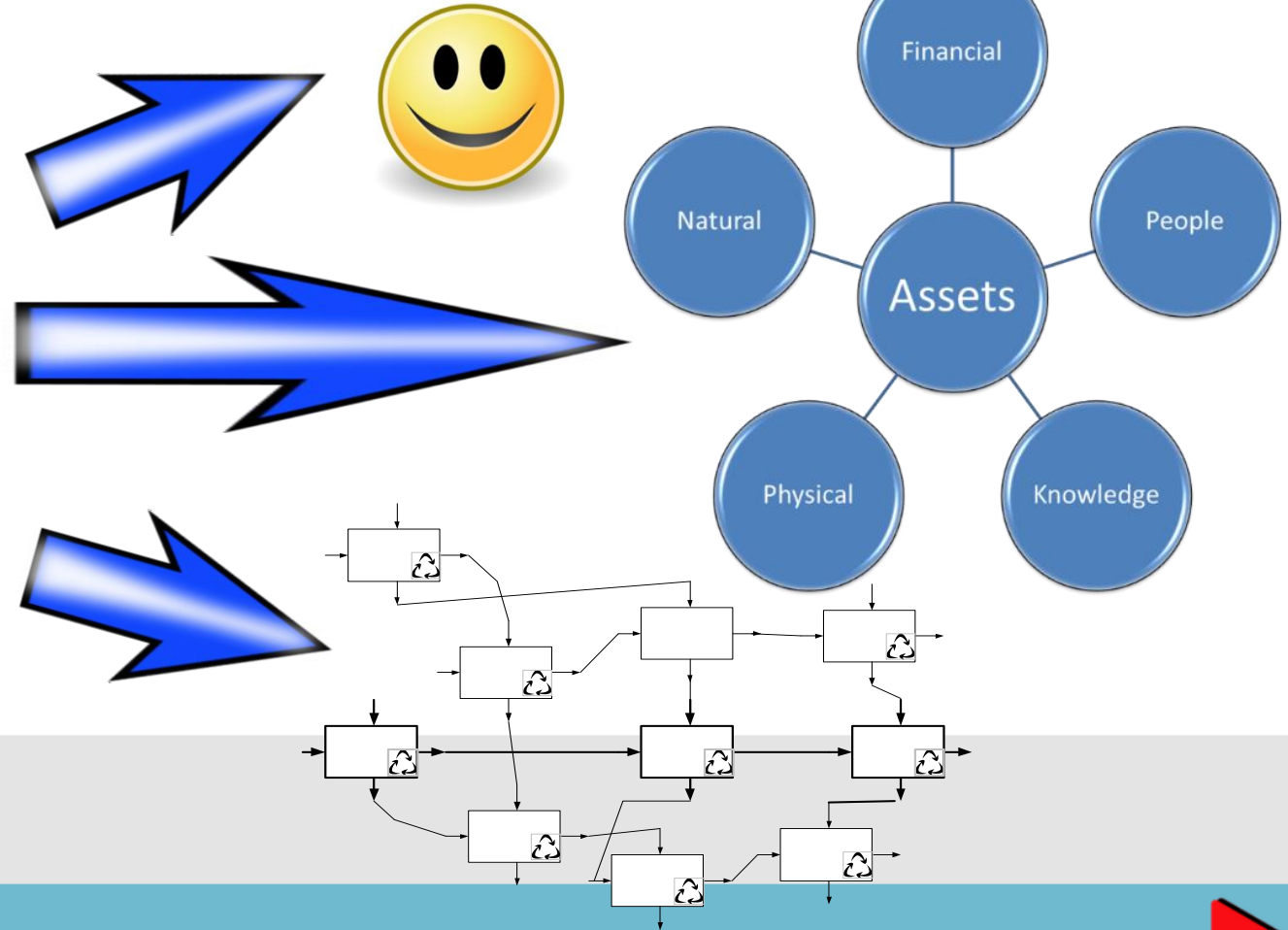
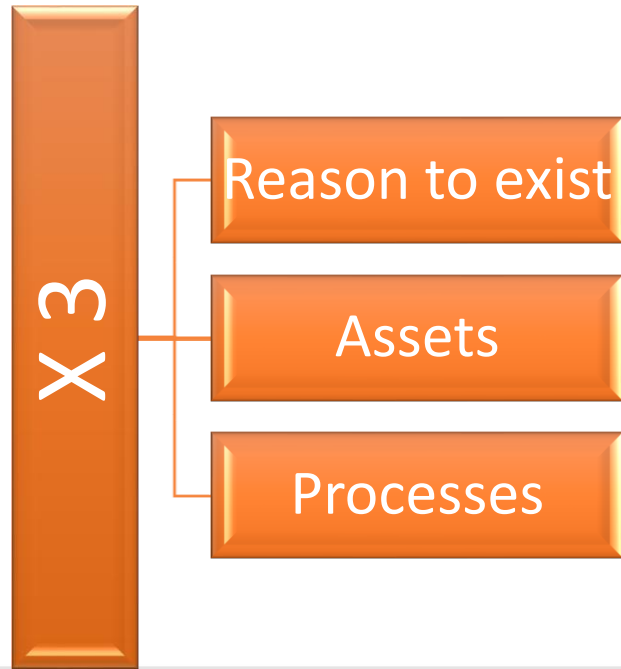
PRESENTATION OUTLINE

- Contextualising the role and components of FM that drives cost
- Built-environment asset value and FM spend:
 - 2017 Industry Financials'
 - 2015 Public Sector Annual Financial Statements
- State of SA's Built-Environment assets – A reflection of state of public sector FM
- An analogy of FM – Circum-navigating SA

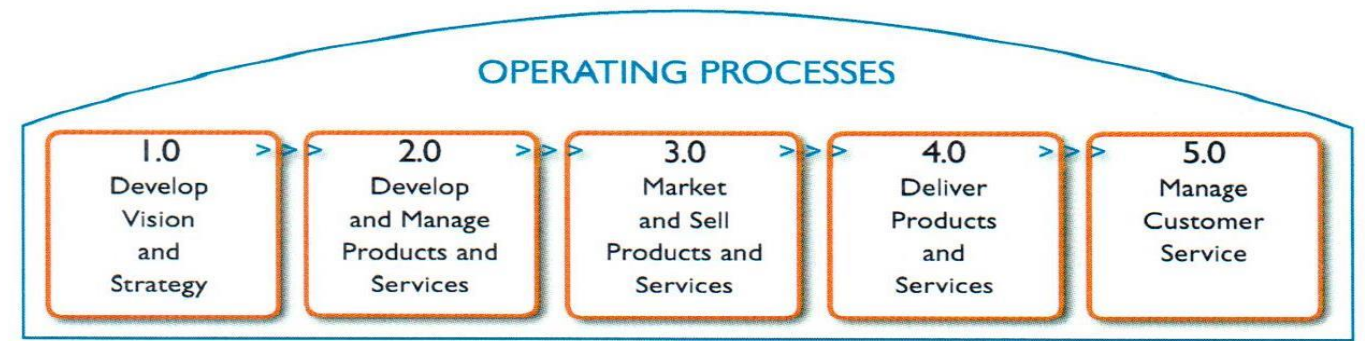
CONTEXTUALISING FACILITY MANAGEMENT



GENERIC ORGANISATIONAL IMPERATIVES



APQC'S BUSINESS PROCESS CLASSIFICATION FRAMEWORK



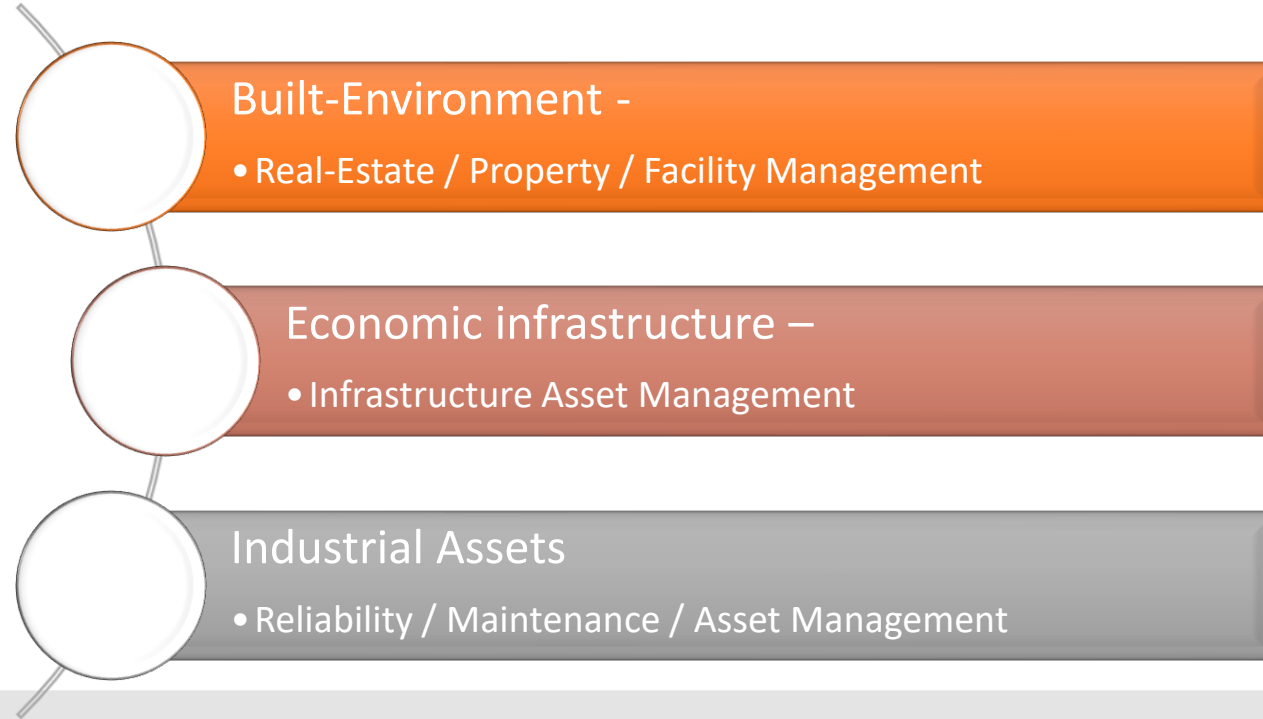
APQC - American Productivity and Quality Centre's Process Classification Framework

CATEGORY OF PHYSICAL ASSETS

- Built-environment – Land, surface and sub-surface buildings and civil structures
- Economic infrastructure - Roads, airports, water, sanitation, etc.
- Industrial assets - Plant and machinery for manufacturing, mining, etc.
- Residential - Houses/flats
- Movable transportation assets - Vehicles, Aircraft, Watercraft, Trains, etc.



MAJOR DISCIPLINES/STREAMS FOR THE ASSET MANAGEMENT



WHAT IS A FACILITY?

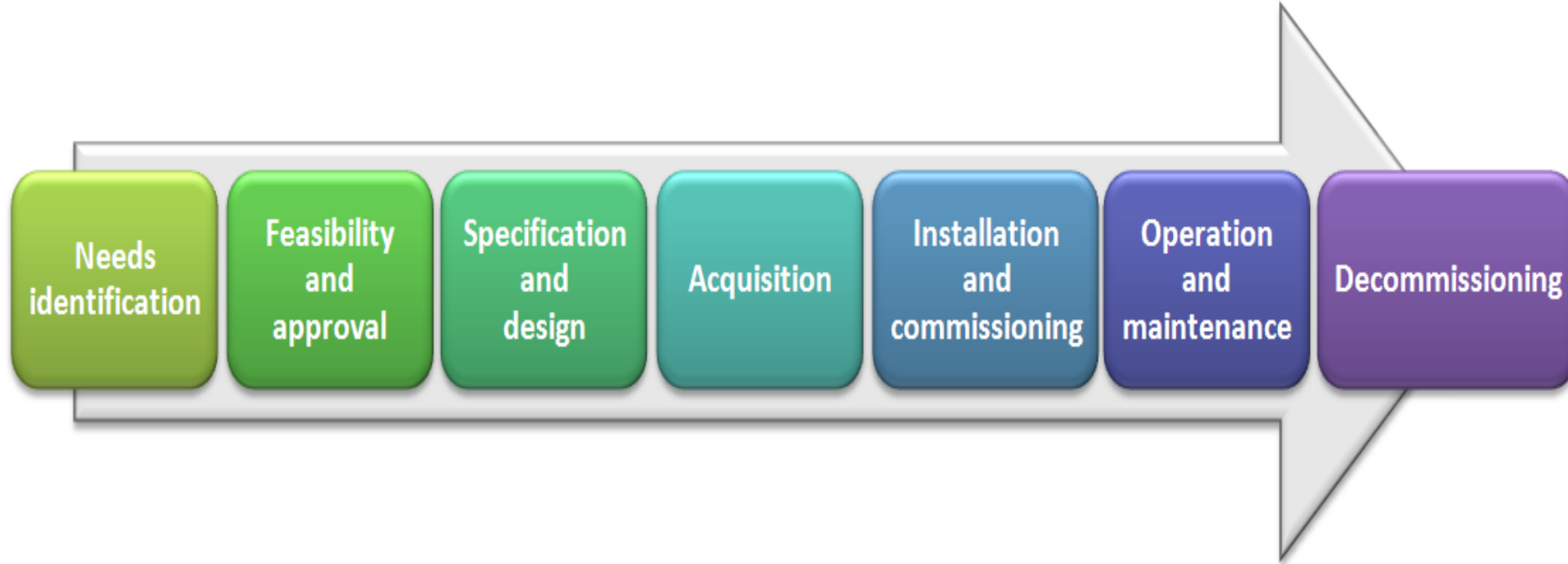
- A FACILITY is a Built-Environment for Work (BE_fW), for Living (BE_fL) and/or for Service (BE_fS):
 - BE_fL include our residence and varied other places for non-work purpose, e.g. recreation, vacation and fitness
 - BE_fW is typically the place where you perform responsibilities related to your profession, skill or trade
 - BE_fS include all places where a service is provided to people or other organisations
- A FACILITY can be a BE_fL , BE_fW and BE_fS in one. As example, a local fitness centre, is both a place of work to the fitness instructor, a place of Living to the exercising person, and a place of service where health and wellbeing is provided as a holistic service



WHAT IS FACILITY MANAGEMENT (FM)?

- The international definition of Facility Management per ISO 41011:2017,: “**Organisational function which integrates people, place and process within the built-environment with the purpose of improving the quality of life of people and the productivity of the core business**”.
- FM includes the following:
 - Physical Asset Management (PAM)
 - Provision of several specialised Facility Services, also defined as logistical or business support services
 - The integrative management of activities related to PAM and Facility Services to create the desired Facility experience, being the totality of quantitative performance and qualitative experiences important to people

PHYSICAL ASSET MANAGEMENT



WHAT ARE FACILITY SERVICES?

- Individual services delivered with excellence, and all services managed to create a seamless experience:

The 'Experience Tunnel'



Source and credit: Advanced Workplace Associates Limited, The Workplace Management Framework, Dr Graham Jervis and Andrew Mawson

STATISTICS SA – 2017 INDUSTRY FINANCIALS



REFERENCE DATA

- Annual Financial Statements (2017), Statistical Release P0021
- Industry classification is based on Standard Industry Classification for All Economic Activity, 5th Edition, January 1993
- Excludes Agriculture, National, Provincial and Local Government
- Excludes VAT
- All values are R-million
- Based on sample of 12 897 enterprises
- Statistical basis and methodologies referenceable in the document available at www.statssa.gov.za , Statistical Release P0021

INDUSTRY TANGIBLE ASSET CARRYING VALUE

- Industry ordered from largest to least carrying value
- Total carrying value is R2.978 trillion
- Property, Plant and Equipment is further categorised in the second table

Industry		Sum of Carrying value
Electricity, Gas and Water Supply	R	706 128,00
Transport, Storage and Communication	R	583 676,00
Mining and quarrying	R	486 105,00
Manufacturing	R	480 849,00
Trade	R	223 646,00
Agriculture	R	201 383,00
Real estate and other business services	R	141 650,00
Community, social and personal services	R	76 963,00
Construction	R	63 693,00
Forestry and fishing	R	13 659,00
Grand Total	R	2 977 752,00

Asset category		Sum of Carrying value
Plant, Machinery, ICT & Office Equipment	R	1 482 214,00
Plant, Machinery & Equipment	R	1 370 212,00
Information and Communication equipment	R	112 002,00
Land, buildings and constructed works	R	684 249,00
Buildings	R	321 521,00
Land	R	200 464,00
Construction works, roads and parking areas	R	162 264,00
Capital work in progress	R	492 473,00
Capital work in progress	R	492 473,00
Motor vehicles and other transport equipment	R	318 816,00
Motor vehicles and other transport equipment	R	318 816,00
Grand Total	R	2 977 752,00

FACILITY PROVISION AND MANAGEMENT OPERATING COST

- Operating costs were categorised into asset provision, asset-services and asset management (AM) cost; and other than AM cost
- Each was further categorised to present the dominant cost categories
- AM cost is 12.6% of total cost but 55.4% of operating cost less direct and employment costs

Cost category		2017 Cost/Expense
<input type="checkbox"/> Other than FM	R	9 028 106,17
Other than FM	R	9 028 106,17
<input type="checkbox"/> Facility provision and management	R	581 358,66
Built-environment occupation and use	R	334 673,82
Facility services - Work/Workplace enablers	R	188 045,65
Facility maintenance	R	37 888,83
Facility service - Security	R	20 750,37
Grand Total	R	9 609 464,83

FACILITY PROVISION AND MANAGEMENT OPERATING COST

- AM cost related to asset ownership or leasing; occupation and use is the dominant cost category at 74% of total AM cost
- This cost category considers all the cost consequent to occupation and use regardless of whether owned or leased.

Cost category		2017 Cost/Expense
Facility provision and management	R	581 358,66
Built-environment occupation and use	R	334 673,82
Property rates, leasing and utilities	R	253 068,78
Depreciation	R	71 137,09
Insurance premiums	R	10 467,95
Facility services - Work/Workplace enablers	R	188 045,65
Motor vehicle running expenses	R	62 231,00
Operational leasing and hiring of plant, machinery, equipment and vehicles	R	50 650,80
Travelling, accommodation and entertainment	R	37 254,00
ICT services	R	23 725,85
Print and stationary, postal and courier	R	14 184,00
Facility maintenance	R	37 888,83
Repair and maintenance	R	37 888,83
Facility service - Security	R	20 750,37
Security services	R	20 750,37
Grand Total	R	581 358,66

PUBLIC SECTOR'S NATIONAL PROVINCIAL AND LOCAL GOVERNMENT FINANCIAL

2015 Financial Year escalated with CPI



PUBLIC SECTOR INSTITUTIONS, EXCLUDING SUBSIDIARIES

Sum of Number	
Institutions	Total
Municipalities	278
Other public entities	260
Departments	145
Educational institutions	78
Major public entities	21
Constitutional institutions	8
Grand Total	790

Sum of Number	
Entity	Total
Local Municipalities	226
National public entities	154
Provincial Departments	105
Provincial public entities	68
Technical Vocational Education and Training Colleges	50
District Municipalities	44
National Departments	40
National Government Business Enterprises	22
Major public entities	21
Universities	17
Provincial Government Business Enterprises	16
University of Technologies	11
Metropolitan Municipalities	8
Constitutional institutions	8
Grand Total	790

PUBLIC SECTOR – BUILT-ENVIRONMENT ASSET VALUE

Public sector - National and Provincial Departments, and Municipalities	Land - Carrying Value	Buildings - Carrying Value	Construction works, roads and parking areas - Carrying Value	Total Property, Plant and Equipment - Carrying Value
<input type="checkbox"/> Public	R 45 007,50	R 286 419,50	R 208 388,00	R 1 020 244,00
Department	R 18 111,00	R 201 264,00	R 186 687,00	R 561 625,00
Municipality	R 26 896,50	R 85 155,50	R 21 701,00	R 458 619,00
Grand Total	R 45 007,50	R 286 419,50	R 208 388,00	R 1 020 244,00

- Built-environment asset value of land, buildings and other structures R539.8 billion, or 53% of the total asset value

PUBLIC SECTOR FACILITY MANAGEMENT COST (2014/15)

Data (R million)										
Nature of government entity		Sum of Total FM cost		Sum of Depreciation (other than infrastructure)		Sum of Insurance (other than infrastructure)		Sum of Repairs and maintenance (other than infrastructure)		Sum of Sub-contractors (other than infrastructure)
Department	R	83 782	R	611	R	914	R	5 648	R	13 384
Municipality	R	35 004	R	6 975	R	393	R	3 540	R	4 572
State Owned Company	R	66 403	R	13 107	R	664	R	7 695	R	3 119
Grand Total	R	185 190	R	20 692	R	1 971	R	16 883	R	21 074

- Note – Department assets are not depreciated with exception of SARS and Public Works PMTE

PUBLIC SECTOR FACILITY MANAGEMENT COST (2014/15)

Nature of government entity	Data (R million)									
	Sum of Total FM cost		Sum of Operational leasing and hiring of plant, machinery, equipment and vehicles		Sum of Paper, printing and stationery		Sum of Postal and courier services		Sum of Property tax	
Department	R	83 782	R	6 434	R	2 456	R	835	R	7 016
Municipality	R	35 004	R	1 797	R	682	R	303	R	102
State Owned Company	R	66 403	R	2 824	R	909	R	217	R	879
Grand Total	R	185 190	R	11 056	R	4 047	R	1 355	R	7 998

- Note – Department assets are not depreciated with exception of SARS and Public Works PMTE

PUBLIC SECTOR FACILITY MANAGEMENT COST (2014/15)

Data (R million)												
Nature of government entity	Sum of Total FM cost		Sum of Rental of land, buildings and other structures including water and electricity		Sum of Security services		Sum of Telecommunication services		Count of Travelling, accommodation and entertainment		Sum of Other	
Department	R	83 782	R	20 692	R	4 949	R	2 768	R	76	R	8 471
Municipality	R	35 004	R	3 732	R	2 703	R	878	R	193	R	6 324
State Owned Company	R	66 403	R	17 224	R	4 533	R	1 980	R	74	R	8 325
Grand Total	R	185 190	R	41 648	R	12 184	R	5 625	R	343	R	23 120

- Note – Department assets are not depreciated with exception of SARS and Public Works PMTE

COMBINED PRIVATE AND PUBLIC SECTOR ASSET SPEND

Note, Public asset spend is the 2015 Financial Year and escalated with
CPI to 2017/2018 financial year



PUBLIC AND PRIVATE SECTOR - BUILT-ENVIRONMENT ASSET VALUE

Source data	Carrying value
STATS SA Industry Financials - 2017	R689.2 billion
Public sector National and Provincial Departments and Municipalities – 2015 Annual financial statements	R539.8 billion
Total	R1,229.0 billion




COMBINED PUBLIC AND PRIVATE SECTOR ASSET MANAGEMENT SPEND (R-BILLION)

Facility provision and management cost category		2017 Stats SA industry financials	Public sector - National and provincial departments	Public sector - Municipalities	Total
Built-environment occupation and use	Property rates, leasing and utilities	R 253 068,78	R 33 001,52	R 4 565,95	R 290 636,25
	Depreciation	R 71 137,09	R 727,13	R 8 307,12	R 80 171,34
	Insurance premiums	R 10 467,95	R 1 088,23	R 468,08	R 12 024,25
Facility/Work place enablers	leasing and hiring of plant, machinery, equipment and	R 112 881,80	R 7 663,38	R 2 140,73	R 122 685,91
	Travelling, accommodation and entertainment	R 37 254,00	R 90,52	R 229,87	R 37 574,38
	ICT services	R 23 725,85	R 3 296,72	R 1 045,18	R 28 067,75
	Print and stationary, postal and courier	R 14 184,00	R 3 920,17	R 1 173,21	R 19 277,37
Facility maintenance	Repair and maintenance	R 37 888,83	R 6 727,02	R 4 215,79	R 48 831,64
Facility service - Security	Security services	R 20 750,37	R 5 894,09	R 3 218,85	R 29 863,31
Grand Total		R 581 358,66	R 62 408,77	R 25 364,77	R 669 132,20

ASSET VALUE PER 2015 MUNICIPAL VALUATIONS



PUBLIC AND PRIVATE SECTOR PROPERTY VALUE – VALUATIONS ARE BASIS OF MUNICIPAL PROPERTY TAXES (2015 FINANCIAL YEAR)

Category of municipality 	Sum of Land	Sum of Residential	Sum of Commercial	Sum of Agricultural	Sum of State	Sum of Total
Metropolitan	R 27 396	R 2 238 257	R 941 418	R 43 481	R 120 143	R 3 436 881
Local	R 7 763	R 692 012	R 207 546	R 230 450	R 113 743	R 1 318 385
District						
Grand Total	R 35 159	R 2 930 269	R 1 148 964	R 273 931	R 233 886	R 4 755 266

- Valuation methods
 - Commercial (based on income stream divided by capitalisation rate)
 - Market (will buyer/seller)
 - Replacement (insurance purposes)
 - Special use (Replacement value less wear/tear)

PUBLIC AND PRIVATE SECTOR PROPERTY VALUE – CORROBORATING RESEARCH TO SA PROPERTY SECTOR VALUE

- 2012 research commissioned by the Property Sector Charter Council and performed by IPD
- Various research studies estimate number of housing units from 8 to 13 million

Sector		Property value (R billion)	Size (Million m ²)
Non-Residential	Retail	340	37
	Office	228	30
	Industrial	187	55
	Hospitality, Leisure & Other	25	
	Sub-total	780	
Residential	Total	3000	
Public	National	188	37.4
	Provincial	342	68.2
	Local	37	
	State Own Enterprise	6	2
	Total	573	
Zoned urban land	Total	520	
Value of SA property sector		4873	

OVERALL ASSET VALUE FOR SOUTH AFRICA



SOUTH AFRICA ASSET VALUE

Sector	Value (R-trillion)
Stats SA and Public sector Municipalities and Departments (Carrying Value)	R1.229
Residential land and building value per Municipal valuations	R2.930
Total	R4.159



STATE OF SA'S PUBLIC SECTOR INFRASTRUCTURE



SAICE 2017 - STATE OF INFRASTRUCTURE REPORT

A	B	C	D	E
WORLD-CLASS	FIT FOR THE FUTURE	SATISFACTORY FOR NOW	AT RISK OF FAILURE	UNFIT FOR PURPOSE
<p>Infrastructure is comparable to the best internationally in every respect. It is in excellent condition and well maintained, with capacity to endure pressure from unusual events.</p>	<p>Infrastructure is in good condition and properly maintained. It satisfies current demands and is sufficiently robust to deal with minor incidents.</p>	<p>Infrastructure condition is acceptable, although stressed at peak periods. It will need investment in the current Medium-Term Expenditure Framework (MTEF) period to avoid serious deficiencies.</p>	<p>Infrastructure is not coping with demand and is poorly maintained. It is likely that the public will be subjected to severe inconvenience and even danger without prompt action.</p>	<p>Infrastructure has failed or is on the verge of failure, exposing the public to health and safety hazards. Immediate action is required.</p>



SAICE 2017 - STATE OF INFRASTRUCTURE REPORT

The following infrastructure are either at risk of failure or unfit for use

- All municipal infrastructure except metropolitan
- All education facilities except universities
- All health facilities

Infrastructure	Area	2017 Grade	Grade change from 2006 to 2011	Grade change from 2011 to 2017
Rail	Passenger lines - Gautrain	A	New	New
Airports	ACSA airports	B+	Improved	Unchanged
Rail	Heavy-haul freight lines	B+	Improved	Unchanged
Roads	National roads	B	Improved	Unchanged
Harbours	Commercial ports	B-	Improved	Unchanged
Electricity	Transmission network - Eskom	B-	Improved	Unchanged
Water	Major urban areas	C+	Unchanged	Unchanged
Electricity	Generating infrastructure - Eskom	C+	Unchanged	Unchanged
Education	Universities	C+	New	New
Solid Waste	Waste disposal in major urban areas	C+	Improved	Unchanged
Solid Waste	Waste collection in major urban areas	C	Improved	Unchanged
Rail	General freight lines	C	Unchanged	Decline
Roads	Paved metropolitan roads	C-	Unchanged	Unchanged
Sanitation	Major urban areas	C-	Unchanged	Unchanged
Healthcare	Hospitals - Public	D+	Decline	Unchanged
Education	TVET Colleges	D+	New	New
Rail	Passenger lines - PRASA	D+	Improved	Decline
Overall	Overall Grade	D+	Improved	Decline
Healthcare	Clinics - Public	D	Decline	Unchanged
Roads	Paved provincial roads	D	Unchanged	Improved
Solid Waste	Waste collection in all other areas	D	Unchanged	Unchanged
Electricity	Local distribution	D	Unchanged	Unchanged
Education	Public ordinary schools	D	New	Unchanged
Water	Bulk supply	D-	Decline	Unchanged
Water	All other areas	D-	Unchanged	Unchanged
Roads	Other paved municipal roads	D-	Unchanged	Decline
Solid Waste	Waste disposal in all other areas	D-	Unchanged	Decline
Rail	Branch lines	D-	Improved	Decline
Sanitation	All other areas	E	Decline	Unchanged
Roads	Gravel roads	E	Unchanged	Unchanged

SAICE 2017 - STATE OF INFRASTRUCTURE REPORT

- Considering the 2014/2015 CV of R459 billion and the reported R&M spend of R15 billion; then the spend is 3.2% of CV or only 40% of NT's benchmark

Municipality	Infrastructure	2017 Grade	Grade change from 2006 to 2011	Grade change from 2011 to 2017
Metropolitan	Solid Waste collection	C	Improved	Unchanged
Metropolitan	Roads	C-	Unchanged	Unchanged
Metropolitan	Sanitation	C-	Unchanged	Unchanged
Metropolitan	Solid Waste disposal	C+	Improved	Unchanged
Metropolitan	Water	C+	Unchanged	Unchanged
Local	Electricity	D	Unchanged	Unchanged
Local	Solid Waste collection	D	Unchanged	Unchanged
Local	Roads	D-	Unchanged	Decline
Local	Solid Waste disposal	D-	Unchanged	Decline
Local	Water	D-	Unchanged	Unchanged
Local	Sanitation	E	Decline	Unchanged

CONCLUDING COMMENTS



CONCLUSION

- South Africa's built-environment asset value is at least R4.2 trillion.
- South Africa's operational spend consequent to owning and using built-environment, facility services and management is at least R670 billion rand
- South Africa's public sector municipal infrastructure and education and health social services infrastructure is at risk of failure
- It is evident that SA is not applying appropriate levels of facility and asset management to assure integrity and performance of economic and social services infrastructure.

ASSET MANAGEMENT JOURNEY AND CIRCUM- NAVIGATING SA



CIRCUM-NAVIGATING THE PERIMETER OF SOUTH AFRICA



- 7200 kilometres
- 12 days
- 9 hours per day
- Routing – Pretoria-> eastwards along -> northwards to Pafuri, along northern border to Alexander Bay, southwards to Cape Town, southern and eastern coast to Sodwana Bay and westwards to Pretoria



FACILITY MANAGEMENT SYSTEM - STRATEGY



- Life goal to circum-navigate SA
- Options to realise goal: walk, cycle, drive
- Options for driving: car or motorbike
- Options for motorbiking: superbike or adventure bike
- Options for adventure biking: BMW, KTM, Triumph

FACILITY MANAGEMENT SYSTEM – PLANNING AND READINESS PREPARATIONS



- Planning for the journey
- Travel/Routing plan with key milestones for decision-review
- Resource requirements and acquisition plan
- Operations and maintenance plan
- Contingency plan



ASSET MANAGEMENT SYSTEM – PERFORMANCE MEASUREMENT AND MONITORING



- Constant awareness of progress relative to strategic, tactical and operational objectives using multiple measures



FACILITY MANAGEMENT SYSTEM – CONTINGENCY AND CONTINUITY PLAN ACTIVATION



FACILITY MANAGEMENT ALONG THE WAY



FACILITY MANAGEMENT ALONG THE WAY



FACILITY MANAGEMENT ALONG THE WAY



CONCLUSION



CONCLUSION

- South Africa's has a considerable physical and natural asset base that can leverage and sustain socio-economic value for all citizens
- We are however failing to care for this very asset that is our hope and future
- Facility management is a considerable industry with turnover of no less than R500 billion per annum
- Yes, we require technical competence in Facility Management but more importantly we require uncompromising leadership that places asset and facility management at the forefront of socio-economic wellbeing



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Thank you for
attending!

