

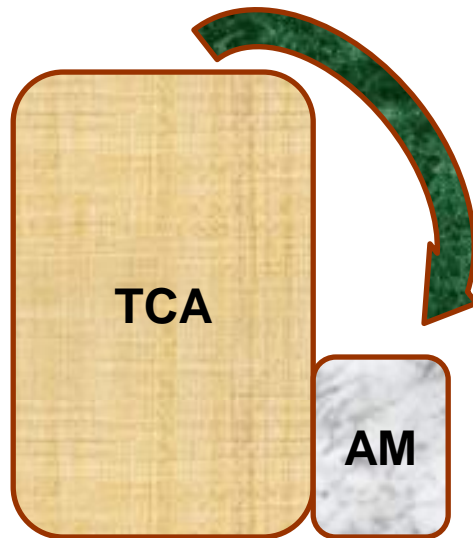
The Link Between TCA and Asset Management – Results and Prospects



2011....

TCA and Asset Management

Who is driving what?



Present State

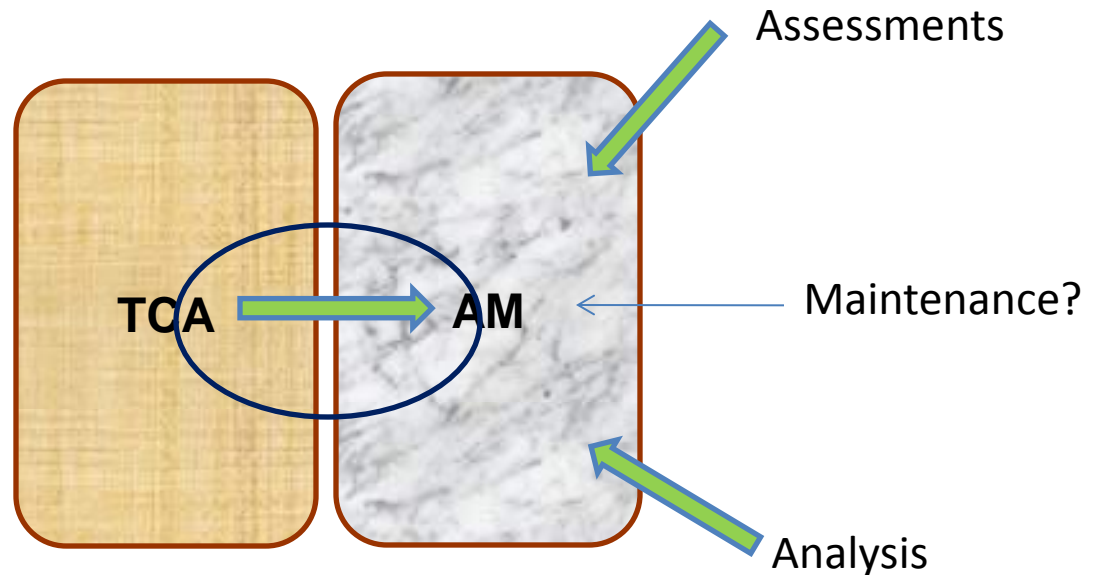


Future State

Current State

Where are We Today?

Who is driving what?



TCA is still driving how we record asset management data, but Asset Management as a practice is much more robust today. TCA is only 1 input.

Results and Prospects - Agenda

1. About CPB
2. TCA vs Asset Management
3. The results (Current State)
4. The prospects (Future State)
5. Discussion

1. About CPB *Providing excellent workspaces and places*

- Corporate Properties & Buildings (CPB) provides land, corporate accommodation and property management services to enable business units to deliver quality frontline services to the citizens of Calgary
- The business unit is comprised of five divisions totalling over 200 employees
- Buildings portfolio is comprised of approximately 3M sq. ft.
- Estimated current replacement value of buildings is \$800m
- Main asset types: buildings, land, furniture and equipment (This presentation is about Buildings)

2. TCA vs Asset Management

Goals

Asset Management

- Informed risk-based decision making
- Capital planning
- Capital budget allocation
- Operational costs captured & managed
- Understand the portfolio with regards to levels of service targets and delivery

Tangible Capital Assets

- Compliance
- Financial accountability
- Dollars spent (above a threshold)
- To inform asset management

TCA vs Asset Management

Outputs

Asset Management

- Comprehensive Asset Inventory
- Current Replacement Cost (CRV)
- Remaining Life
- Facility Condition Index
- Risk Management

Tangible Capital Assets

- Financially Informed Asset Inventory (threshold based)
- Historical Cost
- Useful Life (Based on asset type)

3. Results – *Where we are today (Buildings)*

- PeopleSoft for Financials and a Financial Asset Registry
- VFA for Asset Management, updated by TCA loads and periodic condition assessments
- Two systems because they both serve different functions - Linked data between systems

About PeopleSoft (TCA)

- ERP System - Financial and Asset Management Modules
- All financial costs and financial entries are captured in this system
- Asset registry satisfies PSAB 3150 TCA requirements
- Automatically calculates depreciation based on Asset Type
- Asset management module is generally not used for asset management decisions; we use VFA for that...

About VFA (AM)

- Provider of software & services for facilities capital planning & management
- Established 1998;
- **Canadian Headquarters in** in Burnaby, B.C.
 - Offices in the United States & the UK
- Workforce of over 200; rich domain expertise
- Over 500 clients in corporate, education, healthcare and government markets
- VFA.facility® used to manage 4 billion square feet of assets in 35 countries

VFA Provides

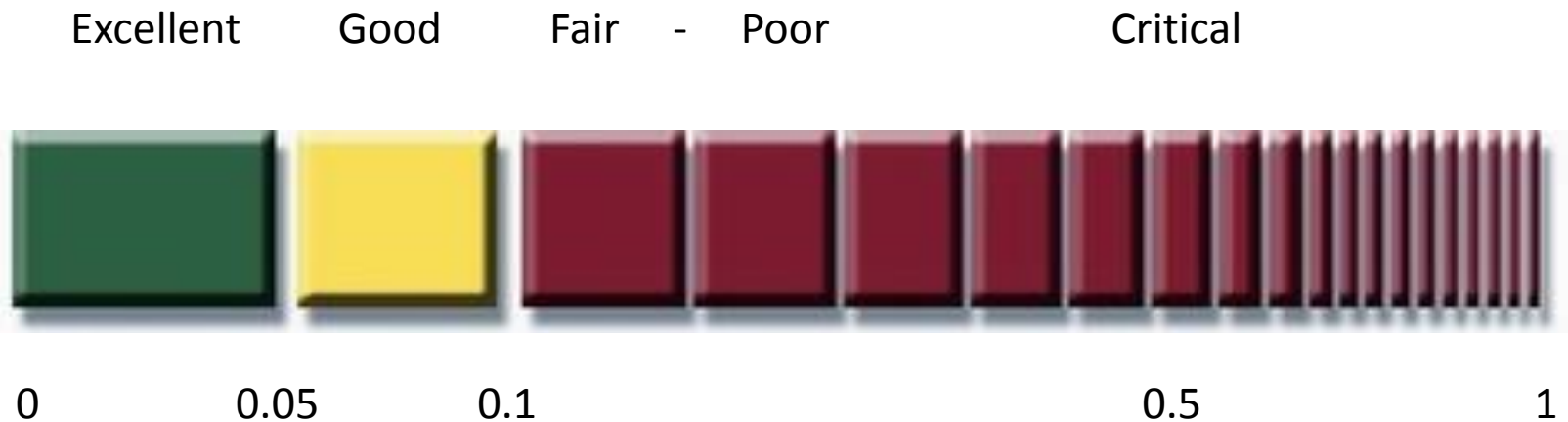
- Central location of buildings information
- Current state of facilities conditions (FCI)
- Arguments to support capital funding requests
- Full capital lifecycle costs w/ opportunities to capture operating costs

VFA Enables

- Long term planning
- Comprehensive reporting
- Scenario planning
- Required budgets / funding identification
- FCI (our super tool!) as reflection of actual condition of buildings
- Prioritization / long-term strategic operational planning

About FCI...

Facility Condition Index is defined as all Deferred Maintenance Costs
(all maintenance that is due or has been due but not yet completed)
divided by the total current replacement value of the building.



The Challenge

- Limited resources to sustain both AM and TCA
- The challenge: how to keep both TCA and Asset management systems 'alive', relevant and reliable?



TCA Process and Systems

- All costs and invoices are recorded in PeopleSoft
- We analyze all capital costs and tie them to capital projects working closely with the project managers
- Create “Asset” packages to be analyzed and submitted into both TCA and Asset Management Systems

TCA Packages

1. Detailed project cost breakdown and or progress bill (using project manager tracking tools)

Description	Original Budget	Budget Changes	Revised Budget
Direct Work			
Sitework			
Demo Interior Building Finishes	\$52,013.00	\$0.00	\$52,013.00
SITWORK SUBTOTAL	\$52,013.00	\$0.00	\$52,013.00
Concrete & Placing			
Place Slab on Ground	\$477.00	\$0.00	\$477.00
Concrete Materials	\$1,376.00	\$0.00	\$1,376.00
CONCRETE & PLACING SUBTOTAL	\$1,853.00	\$0.00	\$1,853.00
Cement Finishing			
Grout	\$322.00	\$0.00	\$322.00
Concrete Cutting	\$6,500.00	\$0.00	\$6,500.00
CEMENT FINISHING SUBTOTAL	\$6,822.00	\$0.00	\$6,822.00
Metals			
Miscellaneous Metals	\$47,200.00	\$0.00	\$47,200.00
METALS SUBTOTAL	\$47,200.00	\$0.00	\$47,200.00

2. Journal entries from the general ledger extracted and reconciled for audit support

PAYMENTS REPORT			Bldg Construction:		\$ 10,793,649.00		
Cost Code	Inv Date (m/d/y)	Received Date	Approved Date	Invoice Number	Invoice Description	Gross Invoice Amount	Holdback (10%)
20.10	05/14/2013	06/10/2013	06/10/2013	506633	pp#001	585,155.23	58515.523
20.10	05/14/2013	06/10/2013	06/10/2013	506685	pp#002	566,450.68	56645.068
20.10	05/14/2013	06/10/2013	06/10/2013	506740	pp#003	507,960.23	50796.023
20.10	05/14/2013	06/10/2013	06/10/2013	556781	pp#004	477,049.73	47704.973

3. Project categorization in Unifomat.

In Service Date (YYYYMMDD)	VendorName	FM BASIC COMP TYPE LEVEL2	FM BASIC COMP TYPE LEVEL3	Quantity	UOM	Weighted	Cost to allocate
1 2013/05/31	LEAR CONSTRUCTION MANAGEMENT	A10 Foundations	A1030 Slab on Grade	1	Each	0.00	9,193.17
2 2013/05/31	LEAR CONSTRUCTION MANAGEMENT	B20 Exterior Closure	B2010 Exterior Walls	1	Each	0.01	28,841.14
3 2013/05/31	LEAR CONSTRUCTION MANAGEMENT	B20 Exterior Closure	B2020 Exterior Windows	1	Each	0.02	92,488.33
4 2013/05/31	ELLIS DON CONSTRUCTION SERVICES	B20 Exterior Closure	B2030 Exterior Doors	1	Each	0.01	37,649.78
5 2013/05/31	ELLIS DON CONSTRUCTION SERVICES	B30 Roofing	B3010 Roof Coverings	1	Each	0.07	242,093.17
6 2013/05/31	ELLIS DON CONSTRUCTION SERVICES	_C10 Interior Construction	C1010 Partitions	1	Each	0.22	797,723.23
7 2013/05/31	ELLIS DON CONSTRUCTION SERVICES	_C10 Interior Construction	C1030 Specialties	1	Each	0.04	163,626.64
8 2013/05/31	ELLIS DON CONSTRUCTION SERVICES	_C30 Interior Finishes	C3020 Floor Finishes	1	Each	0.03	119,477.46
9 2013/05/31	ELLIS DON CONSTRUCTION SERVICES	D10 Conveying Systems	D1010 Elevators & Lifts	1	Each	0.08	278,839.52
10 2013/05/31	ELLIS DON CONSTRUCTION SERVICES	D30 HVAC	D3040 Distribution Systems	1	Each	0.37	1,361,278.16
11 2013/05/31	ELLIS DON CONSTRUCTION SERVICES	D50 Electrical	D5010 Electrical Service & Distribut	1	Each	0.15	547,816.09
12 2013/05/31	LEAR CONSTRUCTION MANAGEMENT	D50 Electrical	D5030 Communications & Security	1	Each	0.00	2,944.45
13						0.00	-



Uniformat

- CPB Reports at Subclass 2

Example:

- Subclass 1 – HVAC
- Subclass 2 – D3020 Heat Generating Systems

Linking Process

- Assets are loaded into VFA (subclass 2)
- Creates a unique asset ID
- Data is then loaded into PeopleSoft, using the same asset ID
- Data is linked between the two systems with strong audit backup which includes: invoices, project manager tracking tools and Unifomat categorization

Benefits of this Approach

- Track project costs from start to finish
- Reasonably efficient – analyzed \$200M worth of GL lines in 2013
- Project managers are inputs to the process
- Strong audit backup

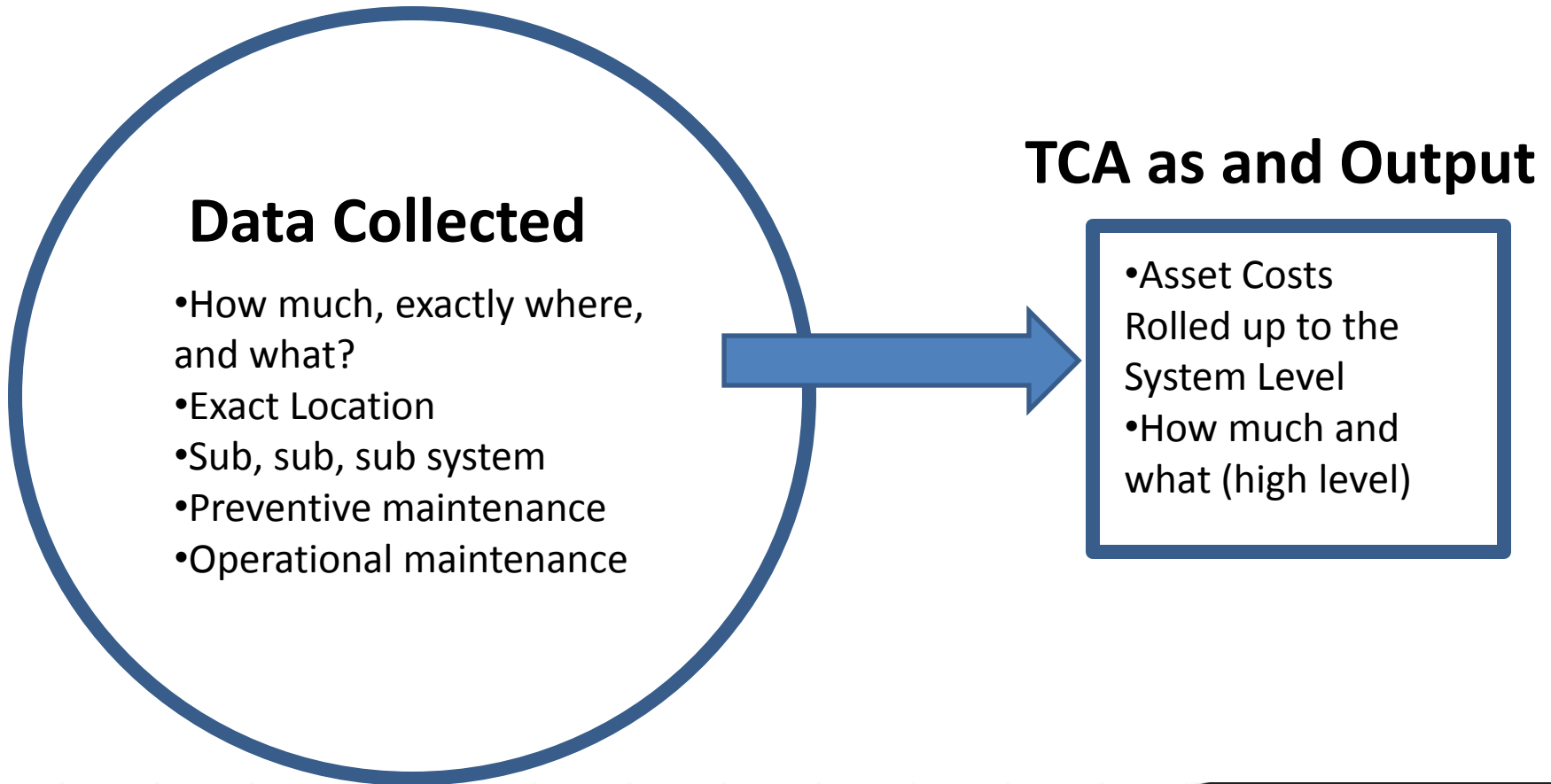
Downside of this Approach

- For asset management purposes, data is produced at too high a level
 - Disposals are challenging to handle
- The data often not detailed enough to inform asset management decision making
- Backward looking – “What happened?” vs “What is likely to happen?”
- Two systems instead of one

4. Prospects

- Integration of Operations and Asset Management (IOAM)
 - Down to the system level
 - Would require a more detailed asset inventory
 - Would require much deeper project analysis, heavily involving the project manager
 - Impact to contracted work
 - Include maintenance data
 - Much more reliable data with integration of operations, capital / preventive, and maintenance / reactive work

More Detailed Project Data



Less TCA, More Asset Management?

- Our short-term solution is to detach TCA and Asset management:
 - Report TCA at a higher level
 - Use resulting time and resources to proactively manage assets
 - This will provide for more detailed Asset Management reporting

Changing Legislative Mandates?

- We are on alert, watching developments in requirements for provincial funding
- In Ontario AM plans are now required if you request money
- We wonder, when this will be adopted in Alberta?
- Will this change the current historical perspective of TCA, replacing it by the strategic view of Asset Management?

Conclusion...

- What does the future look like?
- How will we get here?

