

RDH

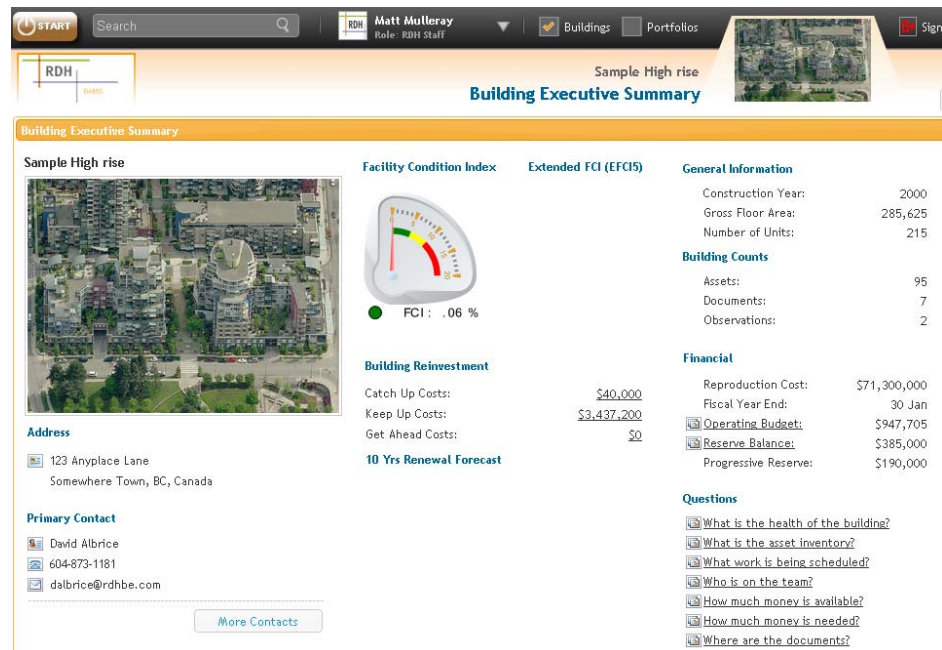
# Depreciation Reports & The Strata Property Act of British Columbia

→ Matt Mulleray, P.Eng.

RDH

April 29, 2012


Nanaimo, BC





RDH

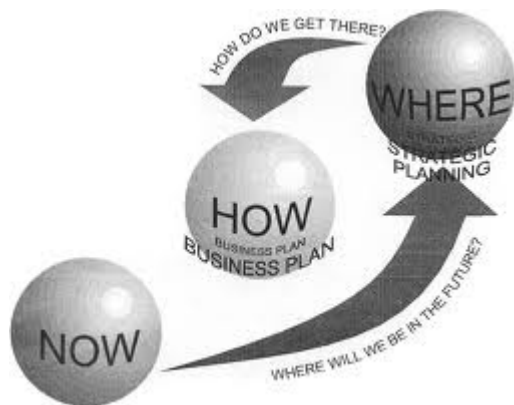
## Agenda

- Depreciation Reports and New BC Regulations
  - Report Requirements
    - Types of assets
    - Service life estimates
    - Renewal and major maintenance items
  - Evaluating proposals
- 



## What is a Depreciation Report?

- A depreciation report is a legislated planning requirement for strata corporations of 5 strata lots or more.
  - A strata can vote to decline the depreciation report (3/4 vote)
- Long-range financial planning tool (30 year forecast)
- A static document that requires updates every 3 years.
- An element utilized in the operation of a building



## ➔ What is the purpose of a Depreciation Report?

- ➔ Long term planning for maintenance and renewals for common property and common assets that a strata corporation is required to maintain and repair

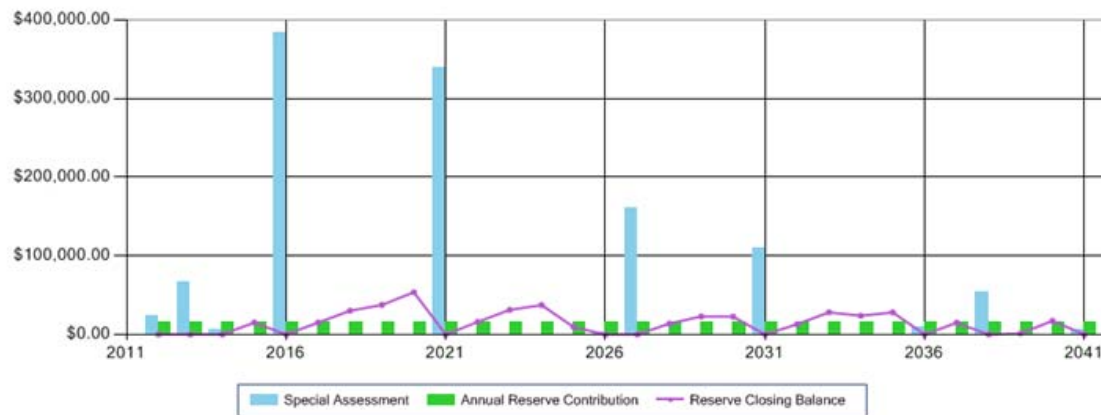


Fig. 5.2.2 Status Quo Funding Model \$16,000: Graphical Analysis



## Value of a Depreciation Report

No Depreciation Report



Lots of surprises; not much peace of mind  
“Failing to plan is planning to fail”

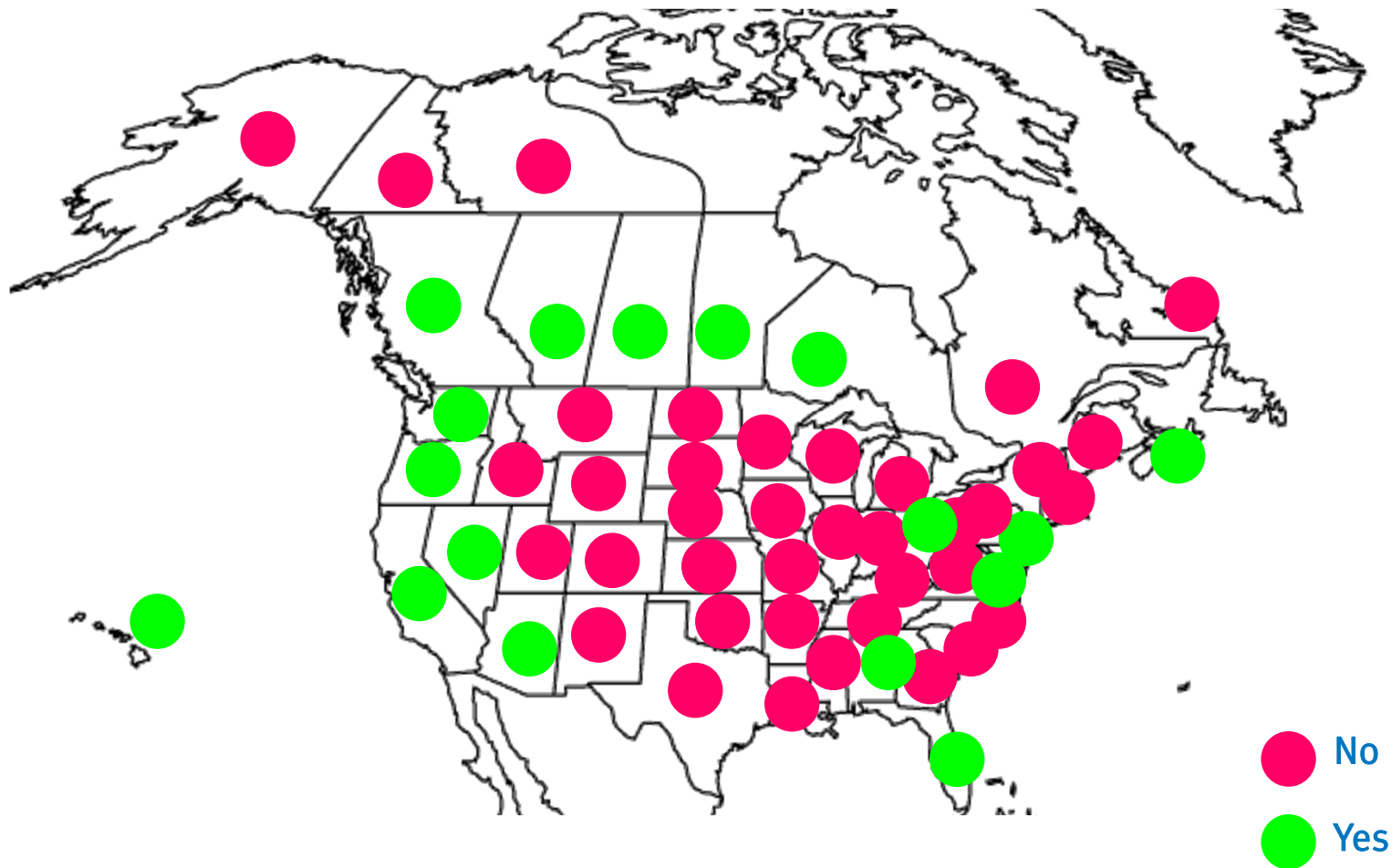
With a Depreciation Report



Few surprises; peace of mind  
“Plan the work and work the plan”

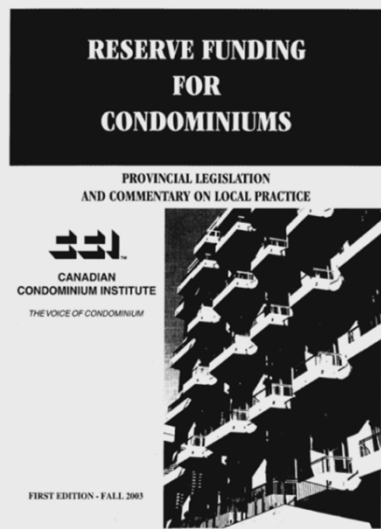


## Are Mandatory Depreciation Reports Common?

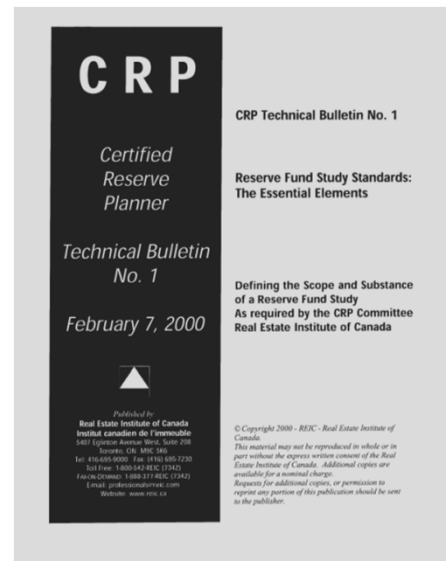




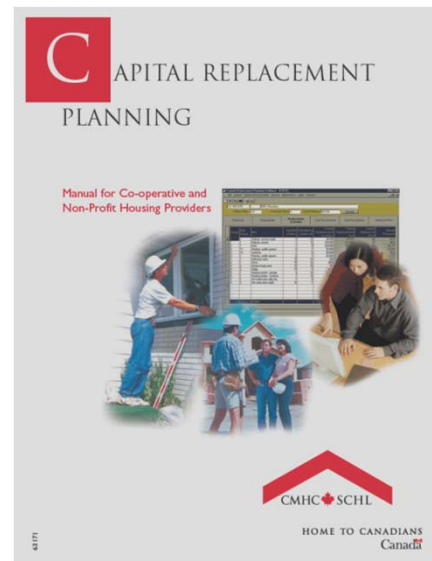
# Standards & Best Practices



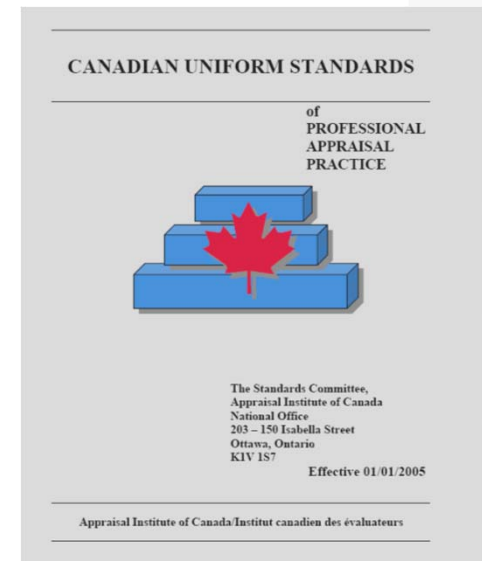
CCI, 2003



REIC, 2000



CMHC, 2005



AIC, 2005

Reserve Fund Study,  
Capital Replacement Plan,  
Depreciation Report (?)





## Required Content within Depreciation Report

- Physical component inventory of commonly owned assets
- Evaluation based on an on-site visual inspection
- All repair, renewal, and maintenance costs (> 1 year frequency) anticipated for each asset for a 30-year planning horizon
- Factors used to calculate costs (ie. inflation, tax rate, interest rate)
- Current balance of CRF and minimum of 3 cash flow funding models

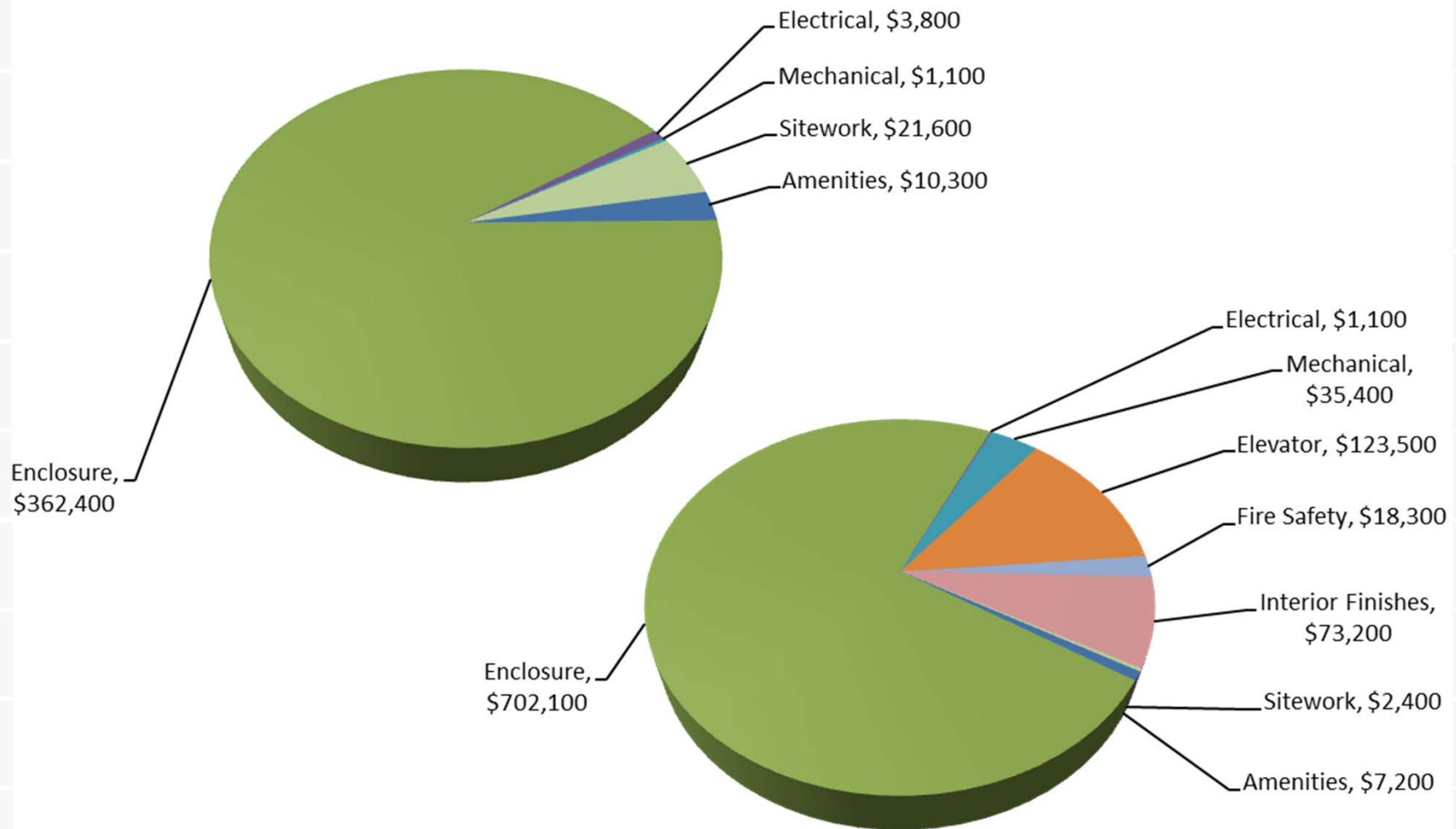




## Who is a Qualified Person ?

- Legislation requires depreciation report to be completed by a “qualified person”
- Likely includes engineers, accountants, professional reserve analysts, and appraisers
- Why are Building Envelope Engineers leading the completion of many of the reports within the current market?

## → Example Breakdowns of Typical Building Renewal Costs



5-yr Building Renewal Costs



## E&O Insurance

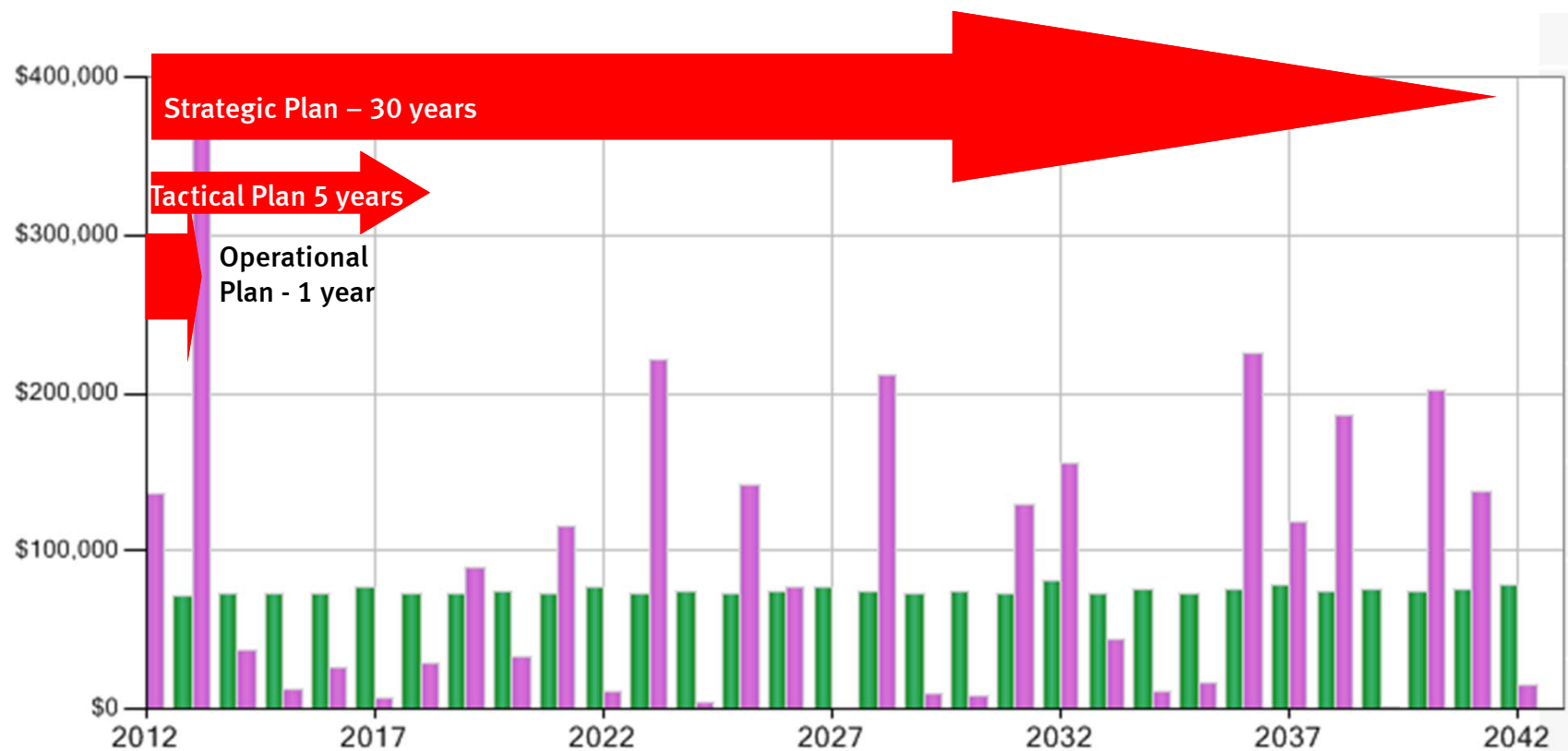
How does E&O insurance affect the depreciation planner and the strata corporation?

Errors and Omissions insurance, if carried by the depreciation planner, is basically carried for the purpose of protection of the consumer and planner in the event there is a material error in the report that results in a loss or claim against the strata corporation.



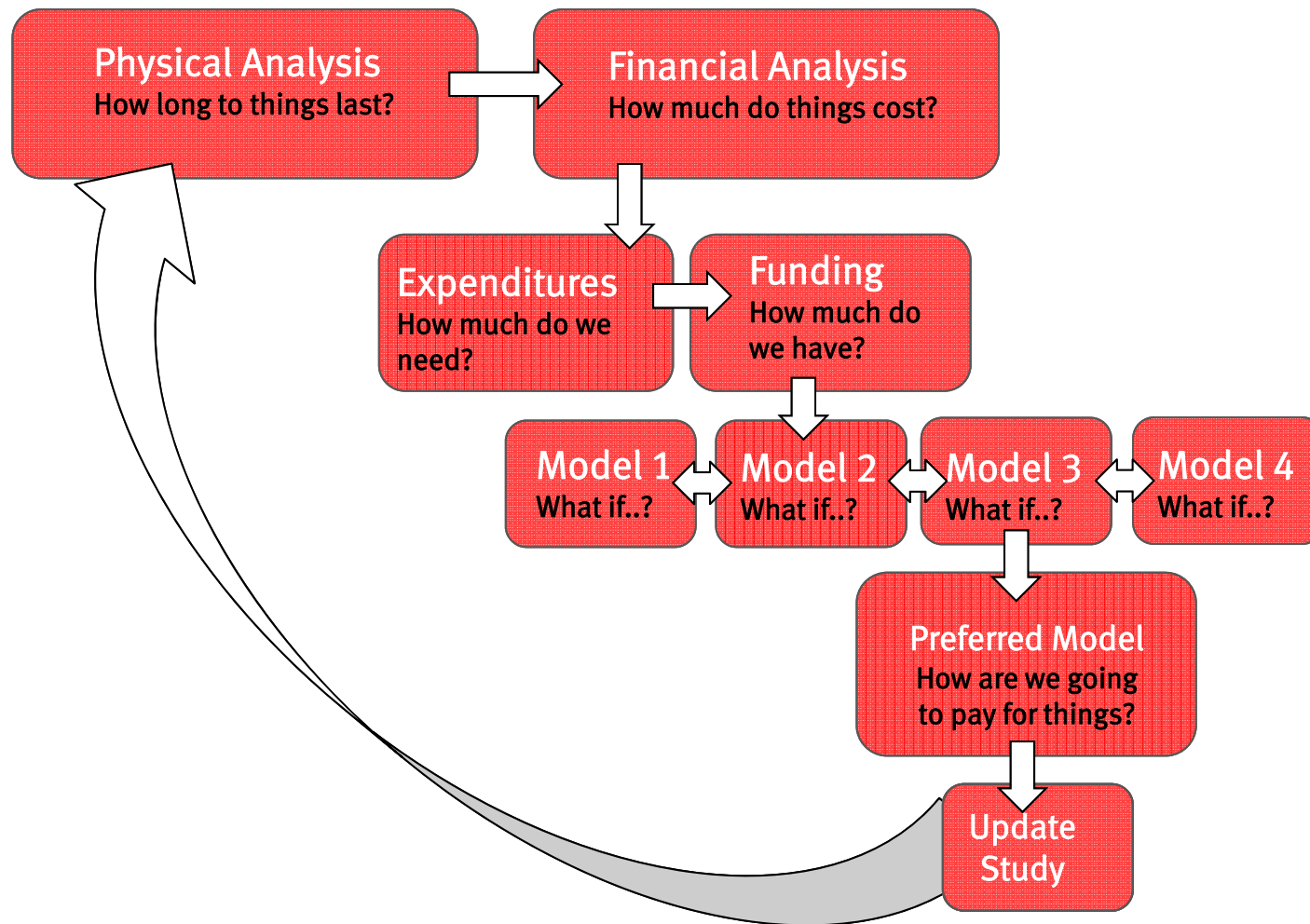
## How long is a Depreciation Report Valid For?

30 Year timeline to be updated every 3 years





# Process to Complete a Depreciation Report





# Documents Required for a Depreciation Report

## Financial Documents

- Operating budget
- Balance sheet
- General ledger
- Copies of invoices
- Insurance certificate/appraisal

## Legal Documents

- Reciprocal easements
- Service agreements
- Air Parcel Agreements
- Leases and Licenses

## Technical Documents


- Drawings
- Prior investigation reports
- Annual fire inspection report
- Maintenance manuals
- Maintenance logs
- Other

## Governance Documents

- Strata Plan
- Bylaws



# Examples of Provided Documents



POLICY NO

INSURED:

LOCATION

POLICY PE

ALL PROPE

UNDERGR

EARTHQUA

FLOOD

SEWER BAI

WATER DAI

90% CO-INS

REPLACEM

COMPREHE

SUBJECT TO

MEDICAL PA

\$5,000.00 PE

DIRECTORS

LIMITED PO

EXTERIOR C

LOST KEY C

BOILER & M

EXTRA EXP

Operating Account GIC's

Bank GIC held at

Scotia Bank

Total Operating Account GIC

TOTAL OPERATING FUN

CONTINGENCY RESERV

CRF Savings Account

80010 0102016 GL 1302.10

Contingency Reserve Fund

Bank GIC held at

Coast Capital

Scotia Bank

Total Contingency Reserve Fu

TOTAL CONTINGENCY F

TOTAL ASSETS

Interest Rate on Business Account

Bldg 868

QUEENSPORT - STRATA PLAN NO. 1692

OPERATING BUDGET

Spectra

REVENUE

3704 Assessment

3710 Parking

3715 Misc. Income

CRD Subsidy

Move In

3720 Car Wash

3726 Operating Int

TOTAL REVI

EXPENSES

Operating

6020 Insurance Pre

6025 Insurance Cle

6030 Water

6031 Sewage

6040 Hydro

6111 Gas

6177 Security Servi

6080 Sanitation & F

6100 Elevator Main

6130 Management

6162 Photocopy

6164 Postage

6298 Janitorial Serv

6175 Electrical Re

6176 Emergency

6183 Annual Firep

6185 Carpet Clear

6191 Garage Door

6195 Plumbing Re

6207 Light Bulbs

6210 Cleaning Sur

6211 Pest Control

6197 Fountain Area

Ms. I

Brov

1125

Vict

V8W

Dear

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above

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Gord

Vice

/np

QUEEN

cantec

NOTES

SCOPE OF WORK

1. This fence board preparat

of the building is not includ

ACCESS TO THE WORK

1. The balcony facias shall be

FACSIM RESTORING

1. The balcony facias boards s

Repairing Manual. The car

Remove all loose st

Locally remove all m

Preparation (DIPS) Sta

Remove all dirt and c

2. The existing wood facias sh

Remainder of the hole shall

3. Ensure the wood facias an

4. Once facias are ready for s

5. Stain shall be "ICI WoodPro

Colour "Crisp Khaki"

6. Provide necessary protecti

splash as using means and

METAL CAP FLASHINGS

1. Install new metal cap flashi

2. Metal flashing to be 2ga.

3. Colour shall be "Stone Whit

4. Fasteners shall be colour-m

20 YEARS OF SERVICE

1974 - 1994

October 21, 1994

Brown Bros.

1125 Blanshard St.,

Victoria, B.C.

V8W 2M7

Attention: Malley Mar

Dear Malley,

Re: Fire Alarm Inspa

I am pleased to prese

The National Fire Cod

"All components of a Fi

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Annual inspection of t

when it is needed. Car

service for fire alarm i

customers with annual

of the year. Cantec is

(Underwriters Laborat

standards set by ULC.

Cantec provides two si

provide the technical c

Our price to provide A

\$

Thank you for allowi

concerning this propos

Yours truly

Edward W. Lyle

General Manager

Cantec Insurance Co


RDH Building Engineering Ltd.

7855 E Saanich Rd unit 7

Saanichton BC V8M 2B4

Phone: 1260.110

Date: 28 February, 2010



Maintenance Plan and Reserve Study

Queensport, 55 Songhees Road, Victoria, BC

RDH Building Engineering Ltd.

OWNER: The Owners, Strata Plan V15 1692

55 Songhees Road

Victoria, BC

SUBMITTED BY: RDH Building Engineering Ltd.

7855 E Saanich Rd unit 7

Saanichton BC V8M 2B4

PHONE: 1260.110

DATE: 28 February, 2010

Insurance, Balance Sheet, Mortgage, Building, Bylaw, Planning, Servicing, Project, Maintenance





# Physical Analysis

- Inventory all assets
- Estimate remaining service life or major maintenance for all assets





# Major Building Systems

The screenshot shows a web application interface. At the top, there is a navigation bar with a 'START' button, a search bar, and a user profile icon labeled 'RDH'. Below the navigation bar, there is a section titled 'Asset Inventory'. Under this section, there is a search bar labeled 'Search By Name' with a magnifying glass icon. Below the search bar, there is a list of building systems, each preceded by a plus icon in a square box. The list includes: Enclosure, Electrical, Mechanical, Elevator, Fire Safety, Interior Finishes, Amenities, and Sitework. A blue rectangular box highlights the entire list of building systems. A blue arrow points from the text 'Major systems' to the 'Fire Safety' item in the list.

START Search RDH

RDH BAMS

Asset Inventory

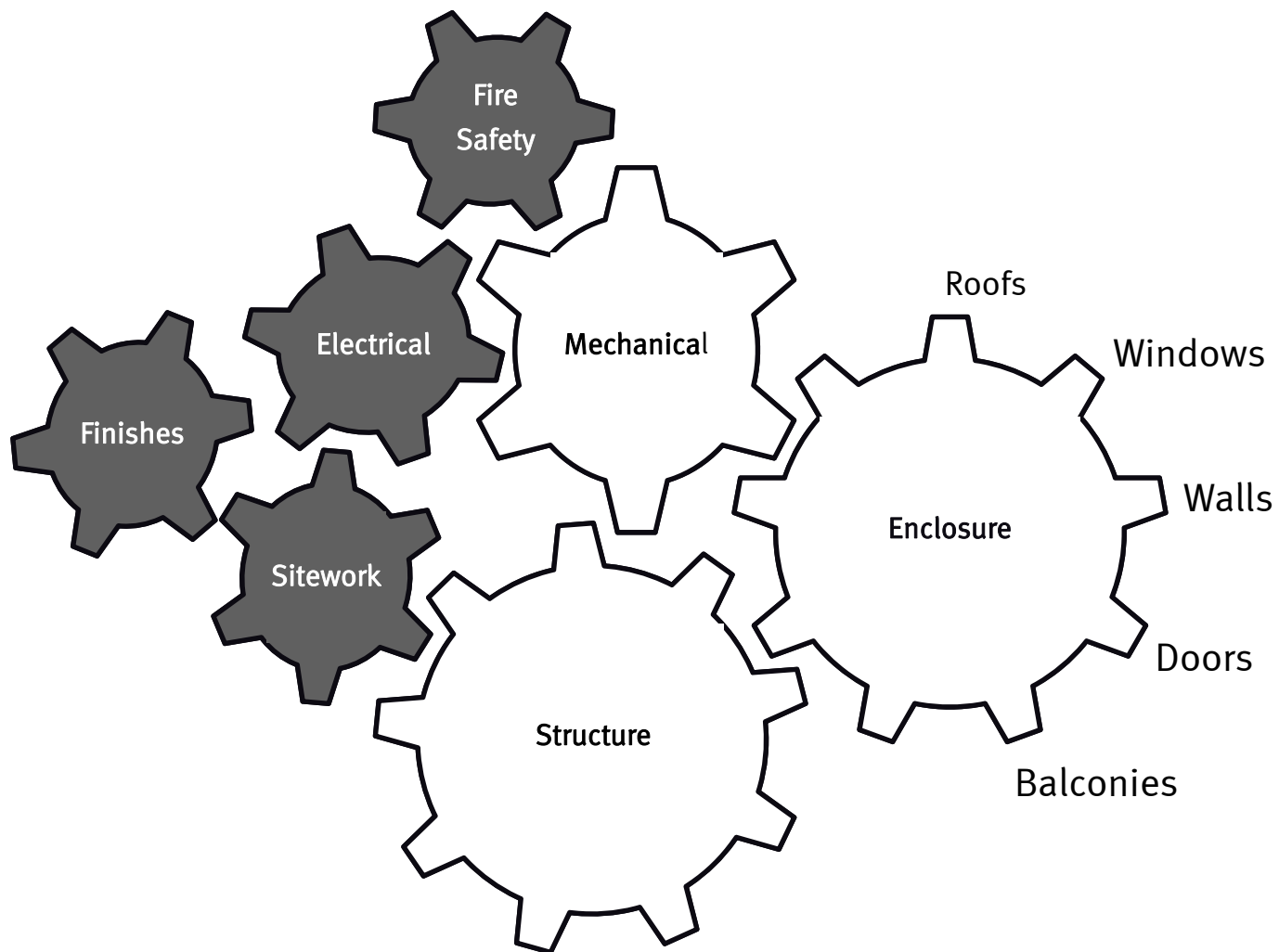
Search By Name

- Enclosure
- Electrical
- Mechanical
- Elevator
- Fire Safety
- Interior Finishes
- Amenities
- Sitework

Major systems



# Interconnected Systems in Buildings





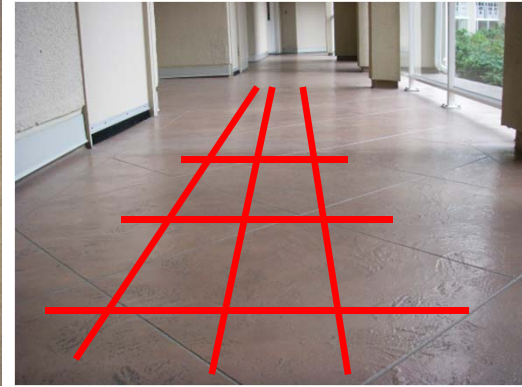
## Samples of Building Assets



Roofs



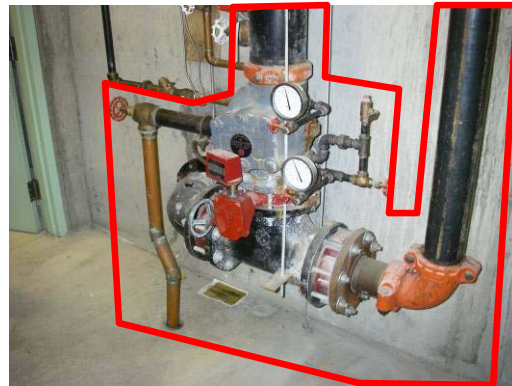
Enterphone



Floor finishes



Sensors



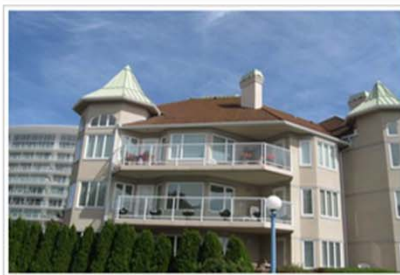
Fire sprinkler system



Guardrails



# Asset Inventory - Enclosure



## Metal-clad Turrets



Location:	Turrets at east and west elevation of roof.		
Description:	Steep standing seam metal roof over a membrane underlayment.		
Chronological Age:	24	Service Life:	40
Effective Age:	24	Remaining Service Life:	16
		Outstanding Conditions:	0



## Profiled Metal Shingle Roof



Location:	Main sloped roof area.		
Description:	Decra Bond metal roof shingles over a membrane underlayment.		
Chronological Age:	24	Service Life:	40
Effective Age:	40	Remaining Service Life:	0
		Outstanding Conditions:	3



## Walkways w/ Concrete Pavers



Location:	2nd and 3rd floor walkways.		
Description:	2-Ply SBS modified asphalt thermo-fusible membrane overlaid with concrete pavers.		
Chronological Age:	11	Service Life:	35
Effective Age:	11	Remaining Service Life:	24
		Outstanding Conditions:	0

3 Skylight



## Sloped Glazing



Location:	In roof areas above the main entrance lobby and the east end of the exterior walkway.		
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# Asset Inventory - Electrical



## Elec 02

### Electrical Distribution

Location:	Main electrical room on parkade level.		
Description:	Commander switchgear, distribution boards, panelboards and metering equipment.		
Chronological Age:	24	Service Life:	50
Effective Age:	24	Remaining Service Life:	26
		Outstanding Conditions:	0

## Light Fixtures



## Elec 03

### Exterior Light Fixtures

Location:	Mounted to walls and soffits; buried amongst the soft landscaping.		
Description:	A variety of fixture types, including recessed pot lamps, wall mounted fixtures, and landscape lighting.		
Chronological Age:	14	Service Life:	20
Effective Age:	14	Remaining Service Life:	6
		Outstanding Conditions:	0



## Elec 04

### Interior Light Fixtures

Location:	Parkade, hallways, service rooms.		
Description:	A variety of fixture types, including incandescent and fluorescent, wall mounted, recessed ceiling pot lights, pendant fixtures, compact fluorescents, and strip fluorescent fixtures.		
Chronological Age:	12	Service Life:	25
Effective Age:	17	Remaining Service Life:	8
		Outstanding Conditions:	0

## Security



## Elec 05

### Enterphone System

Location:	Mounted beside lobby door.		
Description:	Enterphone 2000 panel, control cabinet, wiring, electric door release and ancillary devices for security access at the primary point of pedestrian entry the building.		
Chronological Age:	24	Service Life:	25



# Asset Inventory - Mechanical

## Controls



### Mech 01

Location:

#### Parkade Gas Detection

Mounted to walls on parkade level.

Description:

CET series electronic devices for detection of dangerous carbon monoxide (CO), produced by vehicles and to activate fans accordingly.

Chronological Age:

12

Service Life:

12

Effective Age:

12

Remaining Service Life:

0

Outstanding Conditions:

0



### Mech 02

Location:

#### Valves & Cross Connection

Parkade level, suite interiors. Backflow preventor at car wash. Various types and sizes of valves, including shut off valves, pressure-reducing valves, check valves and balancing valves to regulate water flow through domestic systems.

Chronological Age:

24

Service Life:

25

Effective Age:

22

Remaining Service Life:

3

Outstanding Conditions:

0

## Plumbing & Drainage



### Mech 03

Location:

#### Plumbing Distribution

Throughout the building.

Description:

Type K copper risers and branch lines of various sizes, with valves and accessories for the water supply to various appliances and fixtures.

Chronological Age:

24

Service Life:

35

Effective Age:

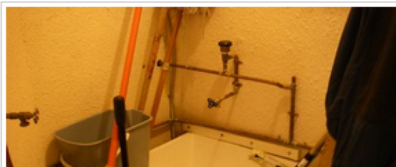
24

Remaining Service Life:

11

Outstanding Conditions:

0



### Mech 04

Location:

#### Plumbing Fixtures

Janitor's room.

Description:

Janitor's mop sink.

Chronological Age:

24

Service Life:

25

Effective Age:

22

Remaining Service Life:

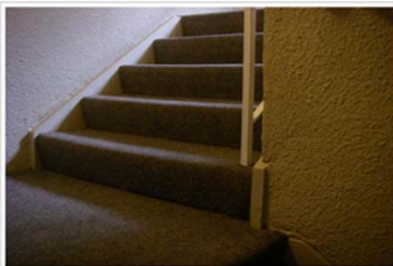
3





# Asset Inventory – Interior Finishes

## Floors



### Finish 01

#### Carpet Flooring

**Location:** Stairwells.

**Description:** 30 oz. cutpile nylon tex border colour schemes, undercushion.

**Chronological Age:** 11

**Effective Age:** 9



### Finish 02

#### Tiled Flooring

**Location:** Lobby entrance.

**Description:** Ceramic tiles and grout

**Chronological Age:** 24

**Effective Age:** 20

## Walls



### Finish 03

#### Interior Painting

**Location:** Corridors, parkade, stairwells.

**Description:** Primers and multiple pig gypsum wallboard, millwork.

**Chronological Age:** 10

**Effective Age:** 9

## Furnishings



### Finish 04

#### Interior Swing Doors

**Location:** Stairwells, service room

**Description:** Variety of hollow core, openings. Exterior door enclosure system.



# Asset Inventory – Site Work



Site 02

## Interlocking Unit Paving

Location:	Vehicular access roadway and pedestrian access at north side of building.		
Description:	Concrete unit pavers, combination of joint filler and jointing sand, bedding sand, compacted gravel base, compacted sub-base.		
Chronological Age:	24	Service Life:	40
Effective Age:	24	Remaining Service Life:	16
		Outstanding Conditions:	0

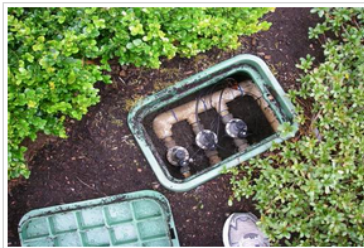


Site 03

## Stone Retaining Walls

Location:	Entrances to parking garage.		
Description:	"Precut stone unit façade, precast concrete cap; planting soil filter fabric; 6" drain rock; 4" perforated PVC pipe; compacted sub-grade."		
Chronological Age:	24	Service Life:	50
Effective Age:	24	Remaining Service Life:	26
		Outstanding Conditions:	0

### Soft Landscaping



Site 04

## Irrigation Sprinklers

Location:	Groundlevel perimeter of the building. Controller in electrical room.		
Description:	"LawnMaster controller with network of pipes, backflow preventor valves, and 4" pop-up irrigation heads buried amongst the exterior 'soft' landscaping."		
Chronological Age:	12	Service Life:	15
Effective Age:	11	Remaining Service Life:	4
		Outstanding Conditions:	0



Site 05

## Soft Landscaping

Location:	At grade around the building.		
Description:	Various forms of plant material, including lawns, shrubs, flowers, ground cover, hedges and trees. Also considered are growing medium such as top soil.		
Chronological Age:	24	Service Life:	40
Effective Age:	24	Remaining Service Life:	16



# Maintenance & Renewal of Assets



They require periodic maintenance...

- Cleaning
- Lubricating
- Adjusting
- Inspecting



They deteriorate over time...

- Cracking
- Staining
- Splintering
- Corroding

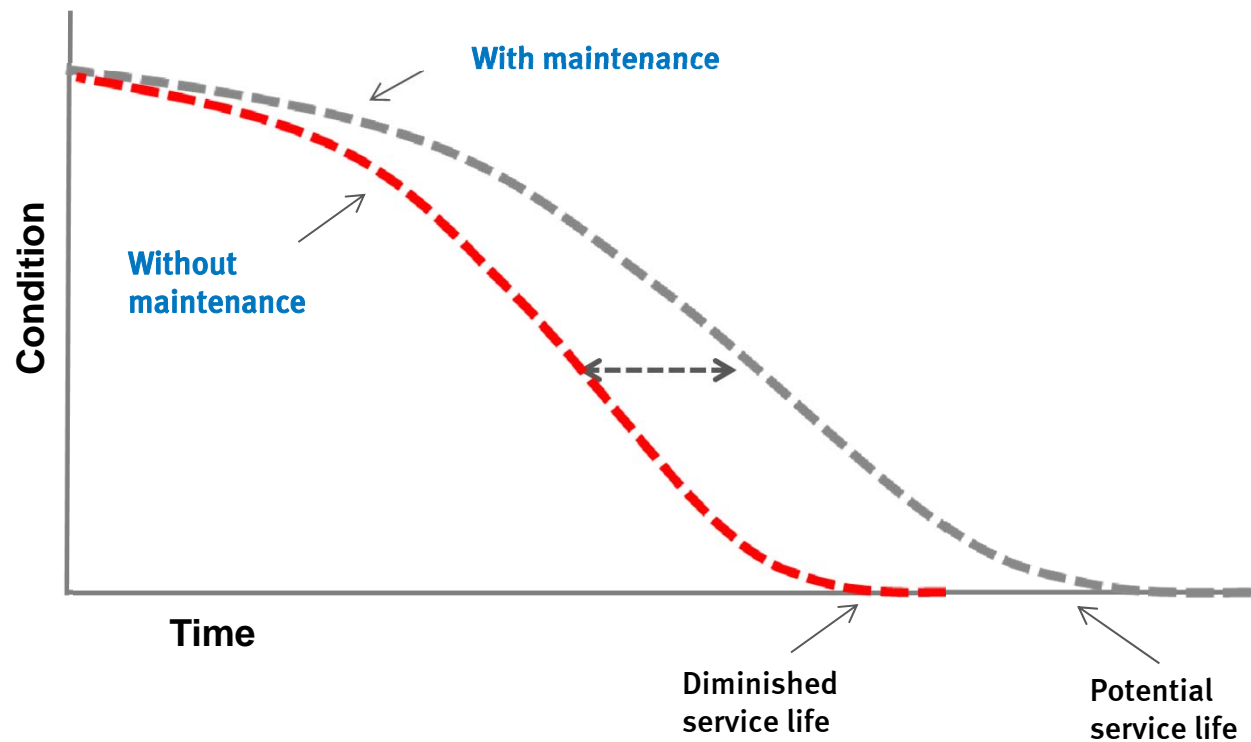


They eventually need to be replaced...

- Balcony fascia improvements
- Re-roofing
- Carpet replacement
- Elevator modernization



# Impact of Maintenance on the Life of Assets





# Service Life, Chronological & Effective Ages



## Encl 04

### Profiled Metal Shingle Roof

Location: Main sloped roof area.

Description: Decra Bond metal roof shingles over a membrane underlayment.

Chronological Age:	24	Service Life:	40
Effective Age:	39	Remaining Service Life:	1
		Outstanding Conditions:	1



### Stucco Cladding - Face Seal

Location: Non-rehabilitated walkway suite walls and chimneys.

Description: Face-sealed stucco applied to protect exterior wall assemblies.

Chronological Age:	24	Service Life:	45
Effective Age:	13	Remaining Service Life:	32
		Outstanding Conditions:	0





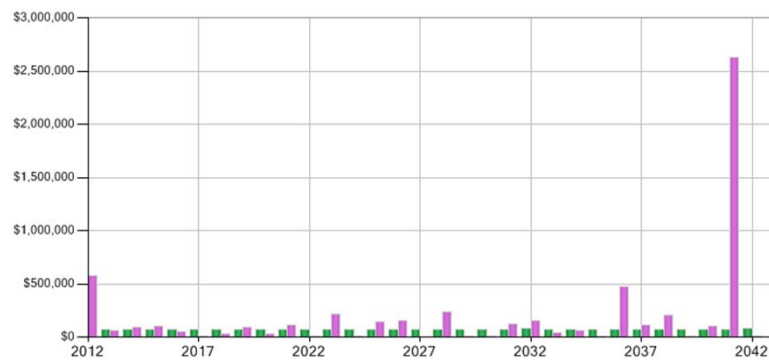
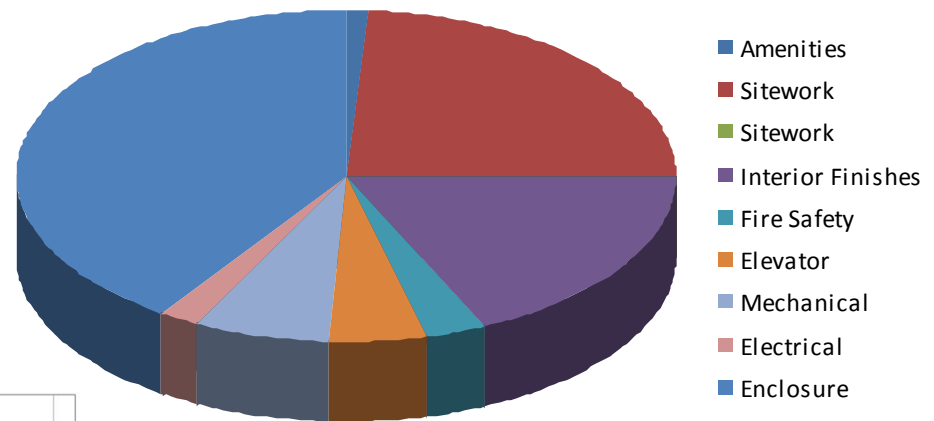
## Service Life, Chronological & Effective Ages





# Financial Analysis

- Contingency Reserve Fund
- Cash Flow Models



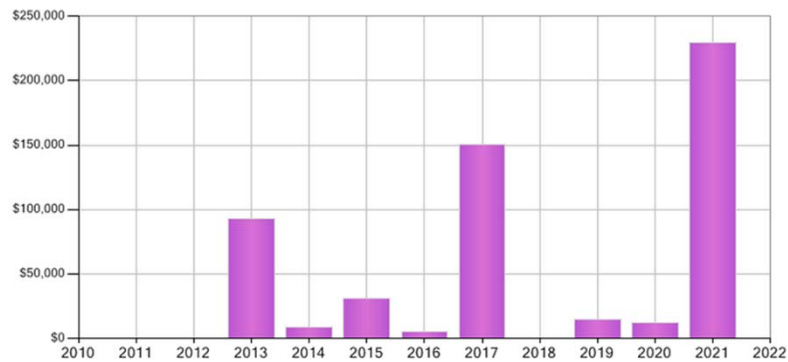


# 10-Year Forecast – Major Maintenance & Renewals

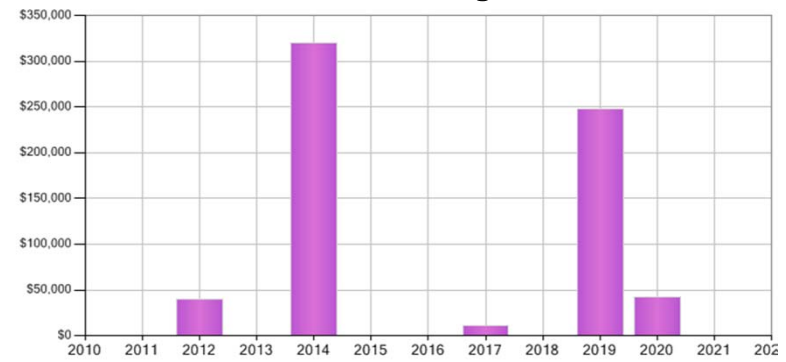


# Every Building has its Own Pulse – Different Forecasts

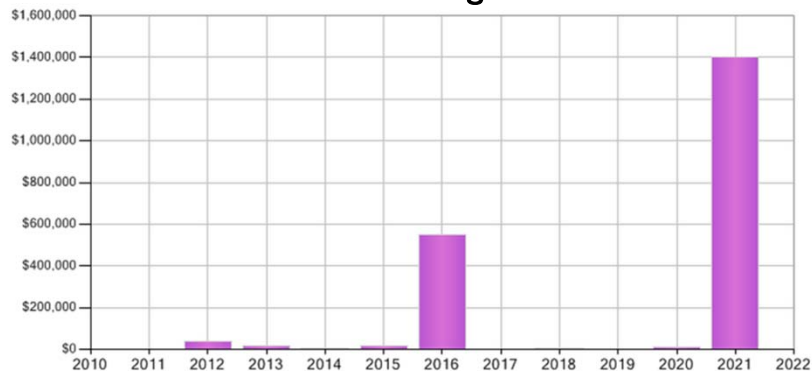
Building A



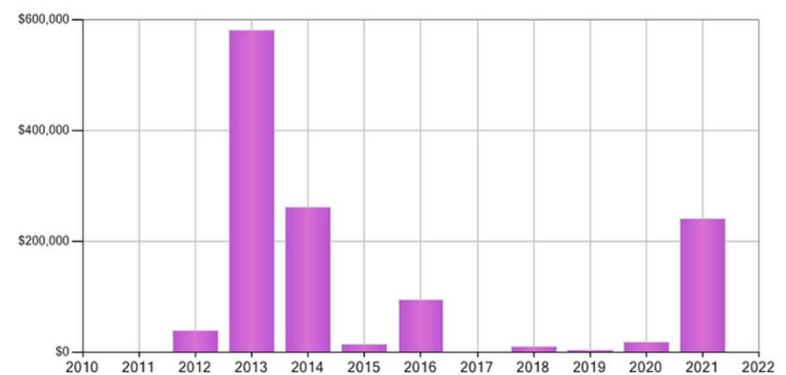
Building B



Building C

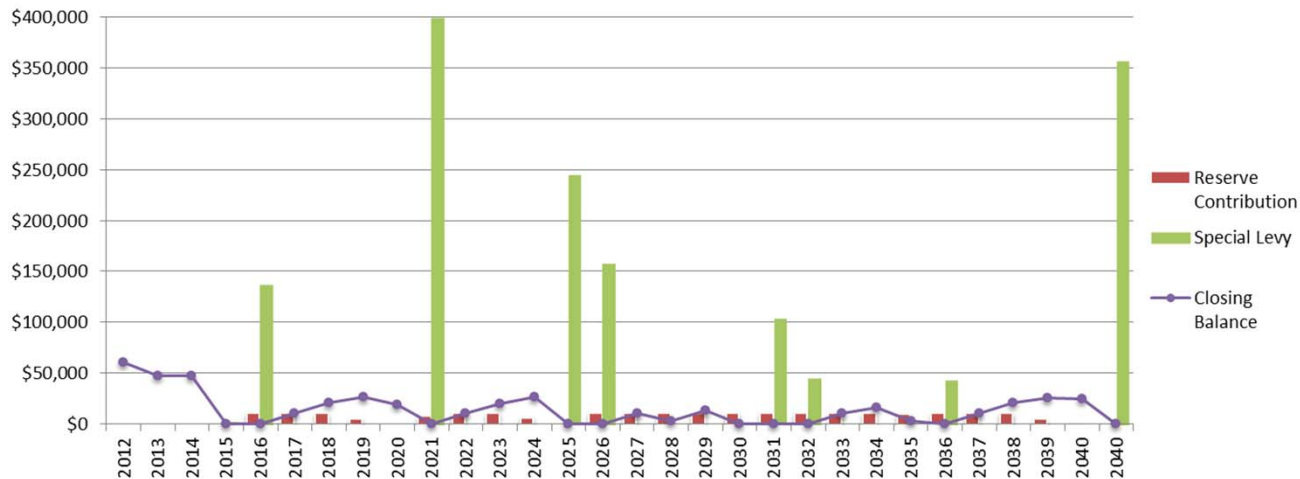


Building D

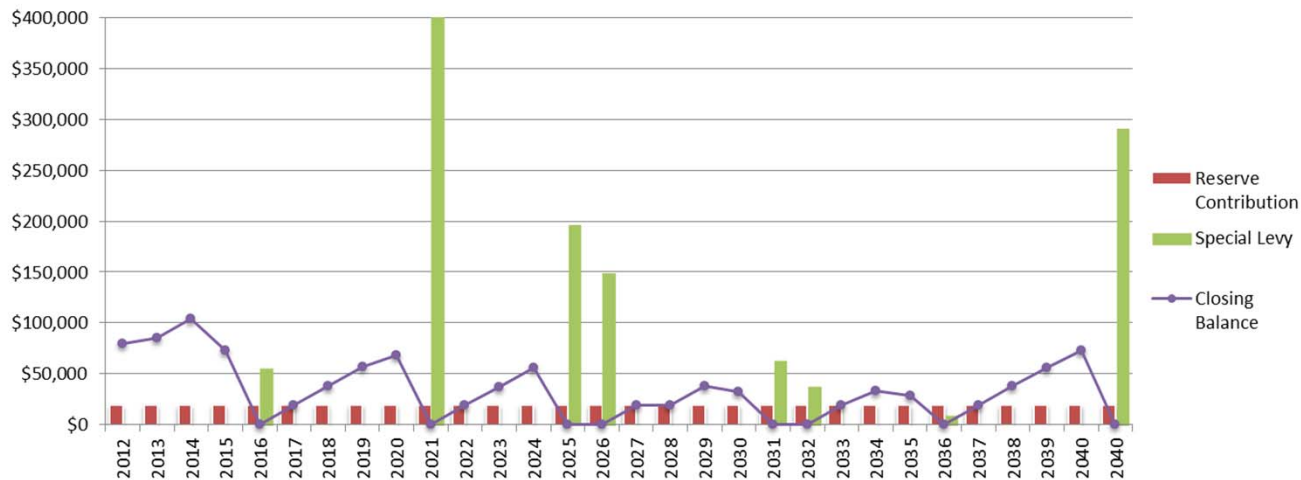




## Example Building – Funding Models



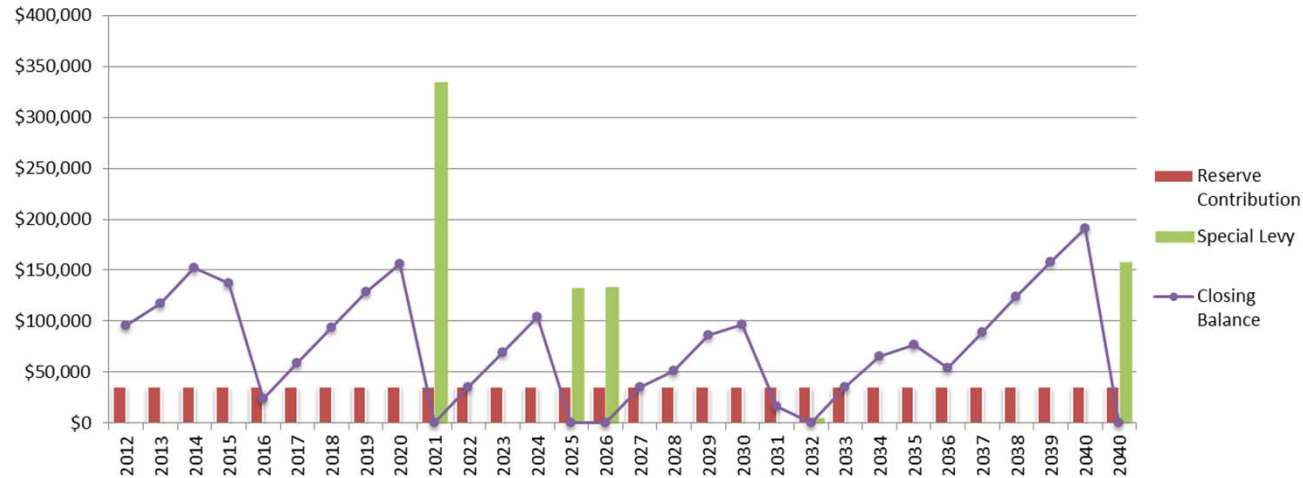
**STATUTORY FUNDING**  
(min. requirements)  
Max \$23/suite/month



**ALTERNATE FUNDING #1**  
(User defined)  
\$40/suite/month



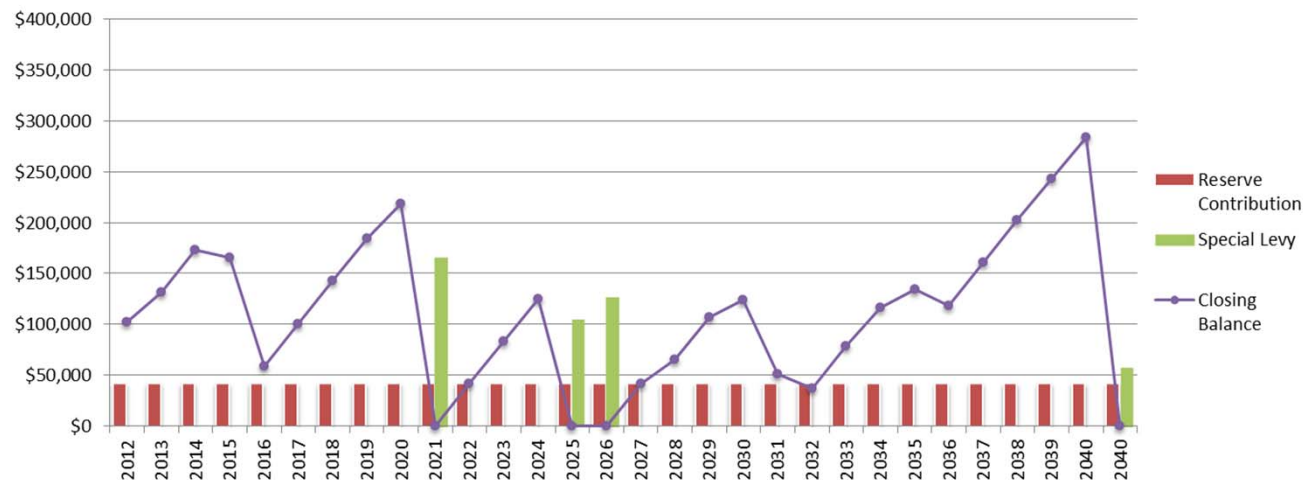
## Example Building – Funding Models



### ALTERNATE FUNDING #2

(User defined)

**\$75/suite/month**



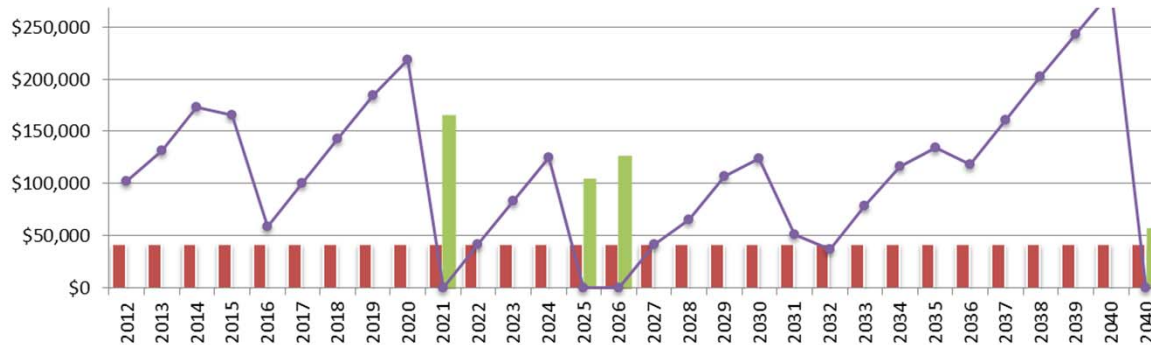
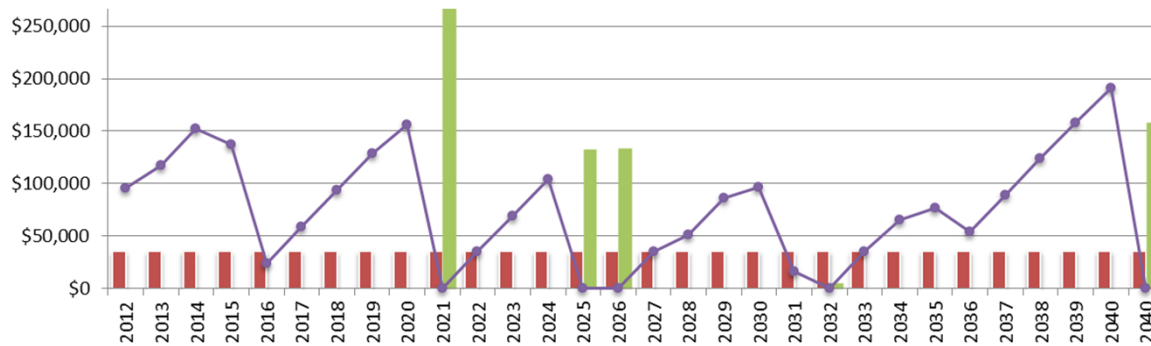
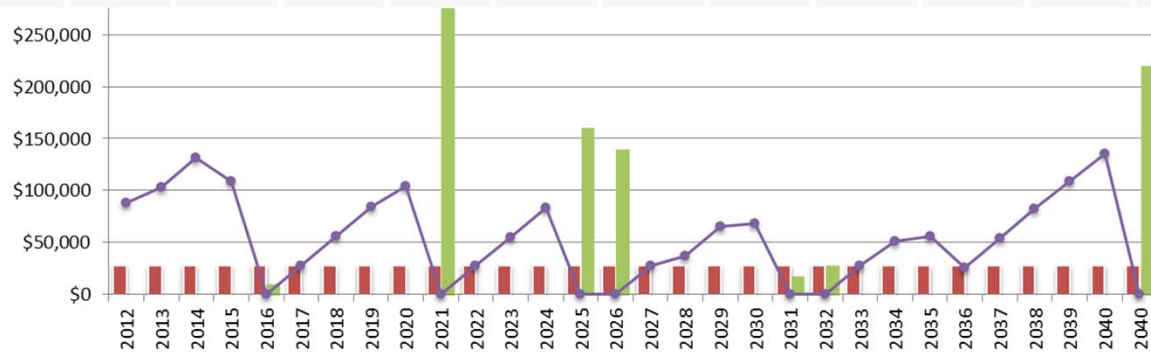
### ALTERNATE FUNDING #3

(User defined)

**\$96/suite/month**



# BAM Software – Review of Funding Models



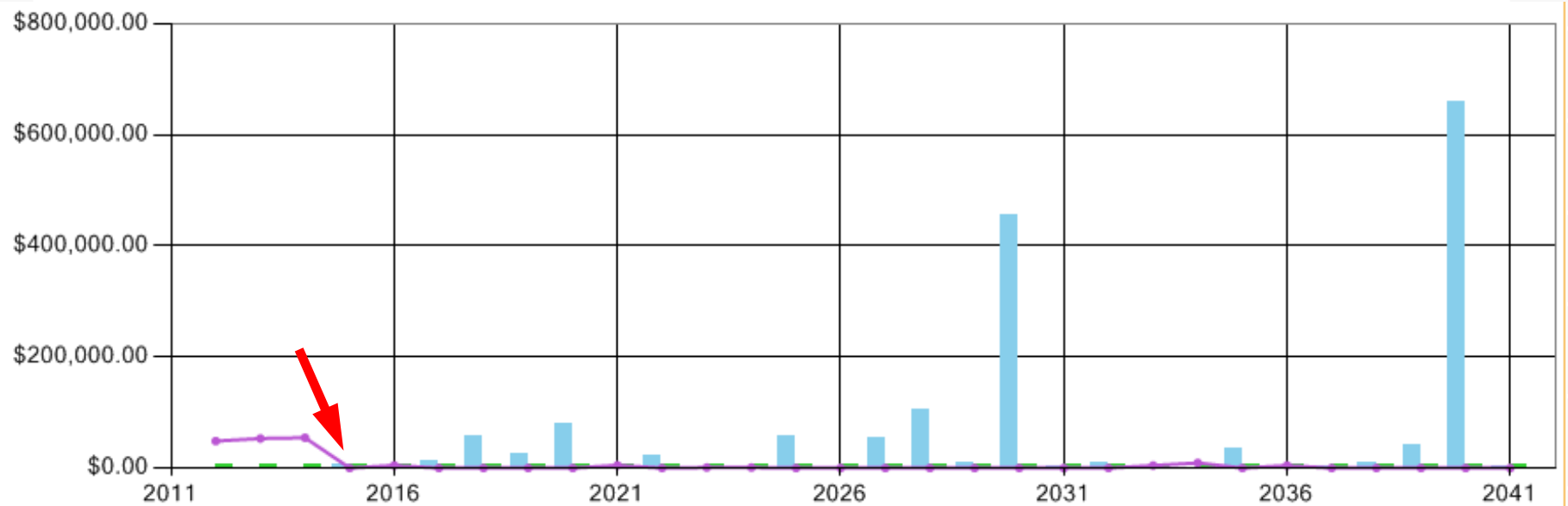


## Discussion on Legislated Minimum Funding

- Legislation mandates a minimum level of funding for the CRF.
  - Based on value of operating budget
- If CRF balance is less than 25% of operating budget the strata must contribute the lesser of:
  - 10% of operating budget value
- OR
- Sufficient funds to raise CRF balance to 25% of operating budget

## ➤ Funding Models – Discussion on Minimum Funding

- Operating budget = \$60,000
- 25% of operating budget = \$15,000
- 10% of operating budget = \$6,000
- Current CRF contribution = ???







## Other Funding Options

- Alternate monthly contributions?
- Minimum/maximum CRF balances?
- Inflation of contributions?
- Phasing of projects?
- Bundling of projects?



# Questions & Discussion