



## Bornengineering Presentation

# Bornengineering Overview

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- Stand in

# Site & Building Evaluation Group

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- ❑ Core Focus: Property Condition Assessments  
Reserve Studies  
Construction Compliance
- ❑ Performing Reserve Studies for 16 years
- ❑ Completed over 700 Reserve Studies
- ❑ Completed over 1500 Building Evaluations
- ❑ Completed over 20 Large-scale, multi-disciplinary repair projects
- ❑ Clients include Property Managers and Common Interest Realty Associations
- ❑ Team of Specialists

# Purpose of a Reserve Study

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- ❑ Evaluation of common and limited common area components for Common Interest Realty Associations, Special Districts and Municipalities
- ❑ Assessment of reserve (capital) funding
- ❑ Sample of reserve components:
  - Site grading and drainage
  - Asphalt roadways and/or parking
  - Community monuments
  - Building siding and roofs
  - Centralized mechanical systems

# Bornengineering's Role

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- ❑ Customize scope of work to meet the Association's needs
- ❑ Unbiased, independent property assessment
- ❑ Consultation and interpretation



# Reserve Study Procedure

# Research

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- ❑ Review Association's legal documents (CC&R, plats, etc.)
  - Paying particular attention to components that may or may not be the Association's responsibility, i.e. windows and doors.
- ❑ Review the history of each component
- ❑ Review any future plans pertaining to the Association components
- ❑ Review current financial information
- ❑ Review any available construction documents
- ❑ Review any maintenance contracts

# Site Survey

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## □ Project Observations

- Photograph each component
- Obtain quantity of each component
- Estimate required major maintenance, repair or replacement tasks and the associated timeframes for each component
  - Additional notes for potential improper installation or maintenance of an item which could cause shortened repair or replacement cycles.
  - Additional notes for exceptional maintenance which could extend major maintenance, repair or replacement cycles.

# Assembling the Report

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- Review the information obtained from the site visit
- Break the report up by categories:
  - Examples include:
    - Site
    - Architectural
    - Mechanical
    - Interior
- For each component, the report states a location, general description, condition, age, expected useful life, remaining useful life, any major work actions and associated costs.



# Example Component: Flooring

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### B3. Flooring

**Location(s):** Interior flooring.

**Description:**

- The majority of the flooring is commercial grade carpeting.
- The kitchen area has tile flooring.



**Condition:**

- Carpeting – Fair to poor condition. The carpet is nearing the end of its useful life.
- Tile – Fair condition.

**Age:**

- Carpeting – 10 to 12 years.
- Tile – 10 to 12 years.

**Expected Useful Life:**

- Carpeting – 10 to 12 years.
- Tile – 12 to 15 years.

**Effective Useful Life:**

- Carpeting – 0 to 1 years.
- Tile – 2 to 3 years.

**Quantity(s):**

- Carpeting – 2,500 square feet.
- Tile – 1,200 square feet.

**Action/Cost(s):**

- Cyclically remove and replace the carpeting every 10 years, starting in 2007. Estimated cost: \$10,000.
- Cyclically remove and replace the tile flooring in the kitchen every 13 years, starting in 2009. Estimated cost: \$4,000.

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### B4. Kitchen

**Location(s):** Lower level.

**Description:** There is a Whirlpool microwave, Whirlpool refrigerator, Hotpoint electric range/oven, Whirlpool electric range/oven, countertops and cabinets.



**Condition:** Good to fair condition.

# Assembling the Reserve Projections

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- Assemble and tabulate cost estimates for each component
  - Estimates are obtained from cost estimating books, historical costs, projects in the area of similar size and scope, and actual contractor bids
- After the cost estimates are established, inflation can be accounted for;
  - Typically between 4% and 6%.
  - This value is applied annually to the cost of the major maintenance/repair/replacement tasks for each component
    - Example - Replacement of a component with 6% inflation
      - Replace this year: \$10,000.00
      - Replace next year:  $\$10,000.00 \times 1.06 = \$10,600.00$
      - Replace in 3 years:  $\$10,000.00 \times 1.06 \times 1.06 \times 1.06 = \$11,910.00$
      - Replace in 19 years:  $\$10,000.00 \times (1.06)^{19} = \$30,256.00$

# Projection Details

Preliminary Reserve Study

Vail Recreation District

## Reserve Component Detail

.1	Cyclical	6,600 Sq. Feet	100%	\$ .75	\$4,950.00	Jun-2008	4	6 Years	Jun-2026
Cyclically maintain and paint the walls and ceilings.									
<b>B3 3,700 Sq. Feet of Flooring</b>									
.1	Cyclical	2,500 Sq. Feet	68%	\$4.00	\$10,000.00	Jun-2007	2	10 Years	Jun-2017
Cyclically remove and replace the carpeting.									
.2	Cyclical	1,200 Sq. Feet	32%	\$3.33	\$3,996.00	Jun-2009	2	10 Years	Jun-2022
Cyclically remove and replace the tile flooring in the kitchen.									
<b>B4 1 EA of Kitchen</b>									
.1	Replacement	1 EA	100%	\$10,000.00	\$10,000.00	Jun-2012	1		Jun-2012
Remodel the kitchen at the Imagination Station.									
<b>B5 4 EA of Televisions</b>									
.1	Cyclical	4 EA	100%	\$250.00	\$1,000.00	Jun-2013	2	13 Years	Jun-2026
Cyclically remove and replace the televisions.									
<b>B6 1 UT of Activity Accessories</b>									
.1	Cyclical	1 UT	100%	\$1,000.00	\$1,000.00	Jun-2008	4	5 Years	Jun-2023
Cyclically remove and replace a portion of the activity stations.									
<b>B7 2 EA of Furnaces</b>									
.1	Replacement	2 EA	100%	\$5,750.00	\$11,500.00	Jun-2007	1		Jun-2007
Replace the two furnace units.									

### C: DOBSON ICE ARENA

Code	Description	Quantity	% of Total	Unit Cost	Total Cost	Start Work	# of Cycles	Occurs Every	End Work
<b>C1 13,000 Sq. Feet of Grading and Drainage</b>									
.1	Replacement	1 UT	---	\$5,500.00	\$5,500.00	Jun-2014	1		Jun-2014
Regrade project.									
<b>C2 1 UT of Substructure</b>									
.1	Replacement	1 UT	100%	\$2,000.00	\$2,000.00	Jun-2007	1		Jun-2007
Epoxy inject horizontal crack in boiler room foundation wall.									
.2	Replacement	1 UT	100%	\$15,000.00	\$15,000.00	Jun-2008	1		Jun-2008
Clean spalled and loose concrete on south abutments, install SikaTop 122PLUS repair mortar and coat with Thorolastic elastomeric waterproof coating.									
<b>C3 1 UT of Superstructure</b>									



# Reserve Projections

## Reserve Summary

### Project Information

Project Name Vail Recreation District	Type of Property Recreation Facilities
Property Management Company N/A	Number of Units 1
Phone: 970-479-2461	Age of Complex 20 Years
Fax: 970-479-2197	

### Calculations and Recommendations

Initial average contribution per unit: \$1,750,492.00  
 Lowest projected fund balance: \$21,991.45  
 First year fund falls to minimum balance: 0

### Notes

### General Information

Study year: 2006  
 Fiscal month: January

### Funding Information

Initial balance: \$0.00  
 Planned account funding increase: 0 %  
 Projected interest rate earned: 3 %  
 Inflation rate for projected expenditures: 4 %  
 Tax rate on interest earned: 0 %  
 Average loan rate on borrowed monies: 0 %

### Assessment Schedule

Year	Annual Total Contribution	Average Monthly Contribution
2007	\$1,750,492.00	\$145,874.33
2008	\$526,524.00	\$43,877.00
2009	\$3,779,504.00	\$314,958.67
2010	\$423,951.00	\$35,329.25
2011	\$219,494.00	\$18,291.17
2012	\$286,881.00	\$23,906.75
2013	\$490,146.00	\$40,845.50
2014	\$436,570.00	\$36,380.83
2015	\$507,945.00	\$42,328.75
2016	\$512,315.00	\$42,692.92

Year	Annual Total Contribution	Average Monthly Contribution
2017	\$667,815.00	\$55,651.25
2018	\$1,237,991.00	\$103,165.92
2019	\$220,528.00	\$18,377.33
2020	\$447,646.00	\$37,303.83
2021	\$521,096.00	\$43,424.67
2022	\$255,714.00	\$21,309.50
2023	\$674,512.00	\$56,209.33
2024	\$571,723.00	\$47,643.58
2025	\$1,604,138.00	\$133,678.17
2026	\$340,598.00	\$28,383.17

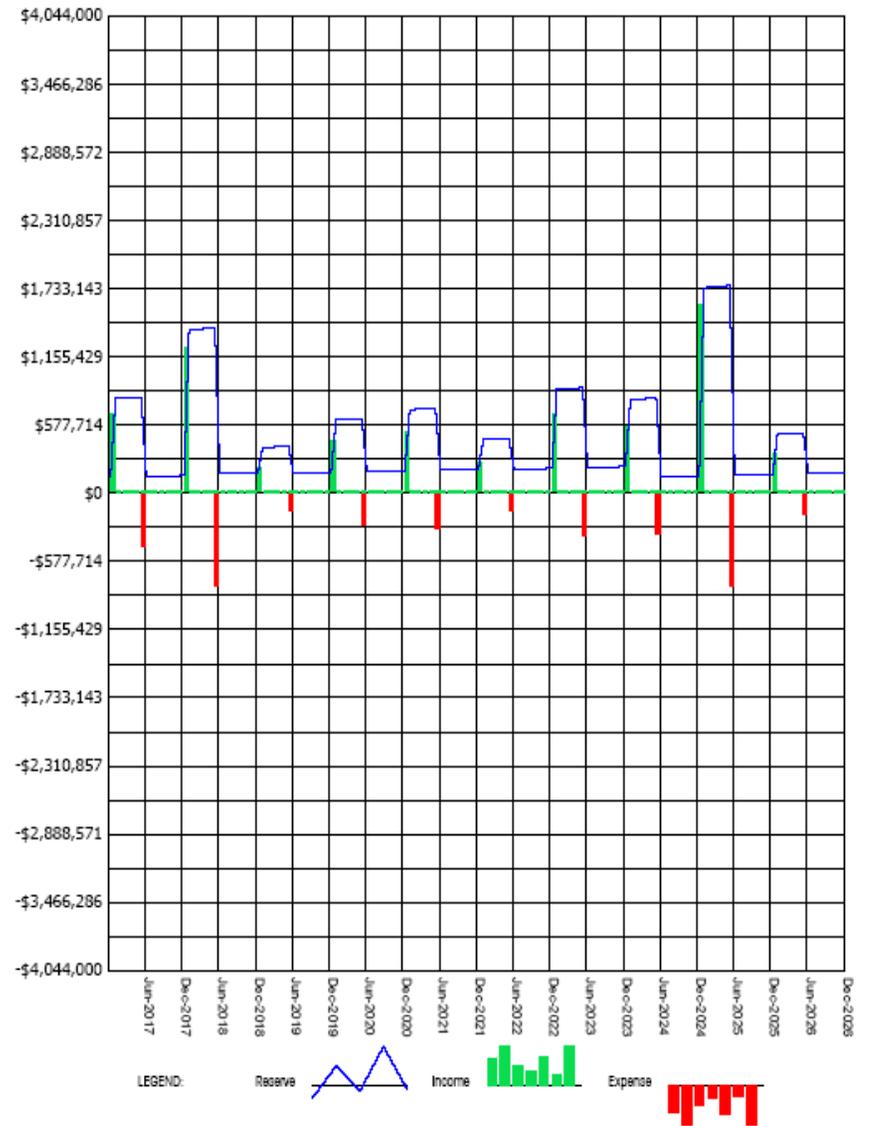


# Projection Graph

### Reserve Projection Graph



### Reserve Projection Graph





# Reserve Projections

## Reserve Projections

Fiscal Year	Month	Assessment Income	Special Assessment Income	Interest / Other Income	Reserve Income	Estimated Expenses	Inflation Factor	Projected Expenses	Loan Payments	Reserve Balance
2007	Jan	2,367,662.00			2,367,662.00		1.00			2,367,662.00
	Feb			5,919.15	5,919.15		1.00			2,373,581.25
	Mar			5,933.95	5,933.95		1.00			2,379,515.00
	Apr			5,948.79	5,948.79	7,499.70	1.00	7,499.70		2,377,964.25
	May			5,944.91	5,944.91		1.00			2,383,909.00
	Jun			5,959.77	5,959.77	2,360,162.50	1.00	2,360,162.50		29,706.38
	Jul			74.27	74.27		1.00			29,780.64
	Aug			74.45	74.45		1.00			29,855.10
	Sep			74.64	74.64		1.00			29,929.73
	Oct			74.82	74.82		1.00			30,004.56
	Nov			75.01	75.01		1.00			30,079.57
	Dec			75.20	75.20		1.00			30,154.77
Totals:		\$2,367,662.00	\$0.00	\$30,154.97	\$2,397,816.97	\$2,367,662.20		\$2,367,662.20		
2008	Jan	606,159.81		75.39	606,235.19		1.04			636,389.94
	Feb			1,590.97	1,590.97		1.04			637,980.94
	Mar			1,594.95	1,594.95		1.04			639,575.88
	Apr			1,598.94	1,598.94		1.04			641,174.81
	May			1,602.94	1,602.94		1.04			642,777.75
	Jun			1,606.94	1,606.94	582,846.00	1.04	606,159.81		38,224.89
	Jul			95.56	95.56		1.04			38,320.45
	Aug			95.80	95.80		1.04			38,416.25
	Sep			96.04	96.04		1.04			38,512.30
	Oct			96.28	96.28		1.04			38,608.57
	Nov			96.52	96.52		1.04			38,705.10
	Dec			96.76	96.76		1.04			38,801.86
Totals:		\$606,159.81	\$0.00	\$8,647.10	\$614,806.90	\$582,846.00		\$606,159.81		
2009	Jan	3,930,592.00		97.00	3,930,689.00		1.08			3,969,490.75
	Feb			9,923.73	9,923.73		1.08			3,979,414.50
	Mar			9,948.54	9,948.54		1.08			3,989,363.00
	Apr			9,973.41	9,973.41		1.08			3,999,336.50
	May			9,998.34	9,998.34		1.08			4,009,334.75
	Jun			10,023.34	10,023.34	3,634,053.00	1.08	3,930,591.50		88,766.71
	Jul			221.92	221.92		1.08			88,988.63
	Aug			222.47	222.47		1.08			89,211.09
	Sep			223.03	223.03		1.08			89,434.13
	Oct			223.59	223.59		1.08			89,657.71
	Nov			224.14	224.14		1.08			89,881.85
	Dec			224.70	224.70		1.08			90,106.55
Totals:		\$3,930,592.00	\$0.00	\$51,304.20	\$3,981,896.20	\$3,634,053.00		\$3,930,591.50		
2010	Jan	887,142.50		225.27	887,367.75	1,000.00	1.12	1,124.86		976,349.44
	Feb			2,440.87	2,440.87		1.12			978,790.31
	Mar			2,446.98	2,446.98		1.12			981,237.31
	Apr			2,453.09	2,453.09		1.12			983,690.38

## Reserve Projections

Fiscal Year	Month	Assessment Income	Special Assessment Income	Interest / Other Income	Reserve Income	Estimated Expenses	Inflation Factor	Projected Expenses	Loan Payments	Reserve Balance
	May			2,459.23	2,459.23		1.12			986,149.63
	Jun			2,465.37	2,465.37	787,666.50	1.12	886,017.56		102,597.42
	Jul			256.49	256.49		1.12			102,853.91
	Aug			257.13	257.13		1.12			103,111.05
	Sep			257.78	257.78		1.12			103,368.83
	Oct			258.42	258.42		1.12			103,627.25
	Nov			259.07	259.07		1.12			103,886.32
	Dec			259.72	259.72		1.12			104,146.04
	<b>Totals:</b>	<b>\$887,142.50</b>	<b>\$0.00</b>	<b>\$14,039.42</b>	<b>\$901,181.90</b>	<b>\$788,666.50</b>		<b>\$887,142.43</b>		
2011	Jan	221,623.50		260.37	221,883.86		1.17			326,029.91
	Feb			815.07	815.07		1.17			326,844.97
	Mar			817.11	817.11		1.17			327,662.09
	Apr			819.16	819.16		1.17			328,481.25
	May			821.20	821.20		1.17			329,302.44
	Jun			823.26	823.26	189,444.73	1.17	221,623.50		108,502.20
	Jul			271.26	271.26		1.17			108,773.45
	Aug			271.93	271.93		1.17			109,045.38
	Sep			272.61	272.61		1.17			109,318.00
	Oct			273.29	273.29		1.17			109,591.30
	Nov			273.98	273.98		1.17			109,865.27
	Dec			274.66	274.66		1.17			110,139.94
	<b>Totals:</b>	<b>\$221,623.50</b>	<b>\$0.00</b>	<b>\$5,993.91</b>	<b>\$227,617.40</b>	<b>\$189,444.73</b>		<b>\$221,623.50</b>		
2012	Jan	329,767.31		275.35	330,042.66		1.22			440,182.59
	Feb			1,100.46	1,100.46		1.22			441,283.06
	Mar			1,103.21	1,103.21		1.22			442,386.25
	Apr			1,105.97	1,105.97		1.22			443,492.22
	May			1,108.73	1,108.73		1.22			444,600.94
	Jun			1,111.50	1,111.50	271,044.69	1.22	329,767.22		115,945.23
	Jul			289.86	289.86		1.22			116,235.10
	Aug			290.59	290.59		1.22			116,525.69
	Sep			291.31	291.31		1.22			116,817.00
	Oct			292.04	292.04		1.22			117,109.05
	Nov			292.77	292.77		1.22			117,401.81
	Dec			293.50	293.50		1.22			117,695.32
	<b>Totals:</b>	<b>\$329,767.31</b>	<b>\$0.00</b>	<b>\$7,555.30</b>	<b>\$337,322.60</b>	<b>\$271,044.69</b>		<b>\$329,767.22</b>		
2013	Jan	469,563.81		294.24	469,858.06		1.27			587,553.38
	Feb			1,468.88	1,468.88		1.27			589,022.25
	Mar			1,472.56	1,472.56		1.27			590,494.81
	Apr			1,476.24	1,476.24		1.27			591,971.06
	May			1,479.93	1,479.93		1.27			593,451.00
	Jun			1,483.63	1,483.63	371,103.25	1.27	469,563.91		125,370.71
	Jul			313.43	313.43		1.27			125,684.13
	Aug			314.21	314.21		1.27			125,998.34



# Projection Overview

## Reserve Projection Overview

2007		2007 (cont.)		2007 (cont.)	
D17-7th Tee Box Retaining Wall	\$ 27,495.95	C12-Exhaust Stacks	\$ 9,200.00	D54-14th Hole Bridge	\$ 28,999.35
D59-Safety Nets	\$ 21,999.00	C52-Stage Drapes and Curtains	\$ 2,500.00	F6-Field Grading and Drainage	\$ 3,500.00
E7-Steep Slope Roofing	\$ 30,100.00	D18-Clubhouse - Plumbing	\$ 20,000.00	C29-Sky Light Louver System	\$ 32,984.00
C10-Steep Slope Roofing	\$ 755,506.00	D10-Asphalt Cart Paths	\$ 106,876.50	D32-11th Hole Pump House Building Envelop	\$ 1,198.80
C37-Boiler/Domestic Circulation System	\$ 20,800.00	F5-Steep Slope Roofing	\$ 9,997.00	D17-Clubhouse - Extinguishers	\$ 5,000.00
D28-Starter Shack Building Envelope	\$ 5,600.00	D53-11th Hole Pedestrian Bridges	\$ 3,000.00	E3-Wood Trim and Soffits	\$ 3,889.90
C6-Wood Trim and Exposed Glulam Beams	\$ 7,096.60	F1-Restroom/Storage Facility - Structure	\$ 1,100.00	D9-Golf Cart Storage Walls and Ceilings	\$ 9,350.00
D35-13th Hole Restroom Building Envelope	\$ 18,499.96	F11-Chain Link Fencing	\$ 2,796.20	D24-Rooftop HVAC Units	\$ 88,999.98
2007 (cont.)		2007 (cont.)		2007 (cont.)	
D25-Rooftop Exhaust Hoods	\$ 5,000.00	D22-Clubhouse Heat Pumps	\$ 14,000.00	A12-Mechanical Systems	\$ 1,200.00
E26-Tree Replacement	\$ 10,000.00	E2-Stucco	\$ 8,878.00	D3-Clubhouse - Sand/Oil Interceptor	\$ 7,000.00
E23-Wood Privacy Fencing	\$ 6,098.40	D21-Clubhouse Domestic Hot Water Heaters	\$ 8,200.00	A31-Tennis Court Fencing	\$ 53,287.50
D33-11th Hole Pump House Mechanical	\$ 22,000.00	D41-Concrete Walkways, Stairs and Patios	\$ 4,597.30	H10-Retaining Walls	\$ 18,897.00
D16-5th Hole Retaining Wall	\$ 24,998.00	E19-Storage Building - Structure	\$ 23,000.00	A15-Low Slope Roofing	\$ 22,255.00
F4-Windows	\$ 1,100.00	D8-Low Slope Roofing	\$ 394,000.00	A24-Ball Field Grading and Drainage	\$ 8,000.00
D6-Windows	\$ 3,300.00	C38-Air Compressor	\$ 1,100.00	A3-Wood Skiing & Trim	\$ 550.00
D42-Concrete Drain Pans	\$ 13,496.40	D56-17th Hole Bridge	\$ 15,500.00	D7-Exterior Doors	\$ 27,699.96
2007 (cont.)		2007 (cont.)		2007 (cont.)	
J1-Trailers	\$ 1,500.00	D15-2nd Green/3rd Tee Box Retaining Wall	\$ 24,998.40	B7-Furnaces	\$ 19,500.00
J1-Pickup Trucks and Passenger Vehicles	\$ 67,100.00	C55-Ice Skates	\$ 3,800.00	G11-Teepee	\$ 1,000.00
A29-Tennis Courts	\$ 5,000.00	G6-Miscellaneous Signage	\$ 4,499.96	B1-Structure	\$ 3,500.00
A17-Asphalt Walkways	\$ 4,050.00	C2-Substructure	\$ 2,000.00	H9-Concrete Drain Pan	\$ 5,600.00
A30-Tennis Court Retaining Walls	\$ 184,800.00	C34-Hot Water Storage Tanks	\$ 10,000.00	A7-Clubhouse Roofing	\$ 7,500.00
A9-Clubhouse Flooring	\$ 16,465.00	C41-Copper Piping	\$ 2,200.00	B2-Walls and Ceilings	\$ 5,544.00
A2-Clubhouse - Structure	\$ 1,000.00	H17-Cubbies and Lockers	\$ 1,000.00	B3-Flooring	\$ 20,000.00
H22-Gymnastic Equipment	\$ 12,000.00	A16-Outbuilding Restrooms	\$ 1,000.00	H1-Windows	\$ 1,000.00
2007 (cont.)		2008		2008 (cont.)	
D4-Stucco	\$ 31,958.00	E26-Tree Replacement	\$ 10,400.00	A13-Outbuilding - Structure	\$ 6,864.00
H20-Miscellaneous Mechanical Improvement	\$ 20,000.00	A24-Ball Field Grading and Drainage	\$ 2,600.00	A8-Clubhouse Walls and Ceilings	\$ 8,112.00
Total:	\$ 2,367,662.00	A29-Tennis Courts	\$ 5,200.00	A16-Outbuilding Restrooms	\$ 7,176.00
		C41-Copper Piping	\$ 2,288.00	A28-Irrigation System	\$ 4,160.00
		D34-13th Hole Restroom - Structure	\$ 14,560.00	A2-Clubhouse - Structure	\$ 2,080.00
		D38-Concrete Parking Blocks	\$ 1,040.00	B6-Activity Accessories	\$ 1,040.00
		D51-2nd Hole Bridge	\$ 5,720.00	B9-Red Sandstone Elementary Gym	\$ 6,760.00
		C17-Steel Gate	\$ 1,144.00	C4-Exterior Transformer Foundation	\$ 2,080.00
2008 (cont.)		2008 (cont.)		2008 (cont.)	
C53-Crowd Control Dividers	\$ 1,456.00	C18-Interior Walls and Ceilings	\$ 22,834.24	D47-7th Tee Box Retaining Wall	\$ 23,400.00
C24-Concessions	\$ 2,912.00	C28-Interior Doors	\$ 1,144.00	F15-Miscellaneous Improvements	\$ 14,559.48
C49-Event Stage	\$ 9,880.00	C2-Substructure	\$ 15,600.00	F12-Wood Split Rail Fence	\$ 11,648.00
D43-Clubhouse Retaining Walls	\$ 5,198.13	D20-Clubhouse Boiler System	\$ 30,159.98	F7-Asphalt Parking Lot	\$ 97,718.40
C42-Central Air Handling Units	\$ 71,760.00	D23-Clubhouse Circulation Pumps	\$ 6,447.97	J1-Pickup Trucks and Passenger Vehicles	\$ 71,448.00
C39-Chemical Feed System	\$ 1,144.00	A26-Bleachers	\$ 23,111.15	H23-Rubber Floor Mats	\$ 9,360.00
C27-Hand Railings	\$ 4,054.02	D2-Clubhouse - Grease Traps	\$ 10,400.00	H16-Dance Studio	\$ 17,367.98
C20-Interior Lighting	\$ 3,432.00	C25-Ice Rink	\$ 1,144.00	E21-Asphalt Driving and Parking Area	\$ 5,903.04
2008 (cont.)		2009		2009 (cont.)	
D31-Golf Course Weather Shelters	\$ 46,800.00	E26-Tree Replacement	\$ 10,816.00	D63-Irrigation System	\$ 2,595,840.00
D40-Asphalt Cart Paths	\$ 14,597.44	A24-Ball Field Grading and Drainage	\$ 2,704.00	B3-Flooring	\$ 4,802.30
D12-Clubhouse Flooring	\$ 1,456.00	A29-Tennis Courts	\$ 5,408.00	D57-Golf Course Pond System	\$ 594,879.90
Total:	\$ 606,159.90	C41-Copper Piping	\$ 2,379.52	A17-Asphalt Walkways	\$ 37,964.16
		H3-Cedar Skiing	\$ 2,051.80	G12-Shade Structure	\$ 4,218.24
		D52-11th Hole Timber Bridge	\$ 2,703.73	A3-Wood Skiing & Trim	\$ 3,569.28
		H6-Building Canopies / Sunscreens	\$ 7,246.58	C9-Windows	\$ 1,189.76
		D40-Asphalt Cart Paths	\$ 34,664.20	F10-Volleyball Courts	\$ 13,628.13
2009 (cont.)		2009 (cont.)		2009 (cont.)	
C5-Concrete Tilt-Up Walls	\$ 3,244.80	A18-Concrete Walkways	\$ 5,364.74	C19-Interior Flooring	\$ 1,513.63
D37-Asphalt Parking Areas	\$ 243,360.00	D41-Concrete Walkways, Stairs and Patios	\$ 8,649.99	D56-17th Hole Bridge	\$ 28,121.60
G7-Walking and Driving Paths	\$ 5,371.77	I1-Turf and Nordic Equipment	\$ 205,504.00	Total:	\$ 3,930,592.00
F14-Irrigation System	\$ 32,448.00	D1-Clubhouse - Structure	\$ 17,304.73		
C9-Exterior Doors	\$ 1,730.02	J1-Pickup Trucks and Passenger Vehicles	\$ 24,876.80		
G5-Interior	\$ 7,242.39	D64-Split Rail Fencing	\$ 2,271.36		
G6-Miscellaneous Signage	\$ 3,785.60	A11-Kitchenette	\$ 8,977.28		
A14-CMU Block Veneer	\$ 4,056.00	A19-Brick Pavers	\$ 2,703.57		

## Reserve Projection Overview

2010		2010 (cont.)		2010 (cont.)	
E26-Tree Replacement	\$ 11,248.64	C15-Rock Walls	\$ 1,237.35	D11-Clubhouse Interior Walls and Ceilings	\$ 10,022.54
A24-Ball Field Grading and Drainage	\$ 2,812.16	C18-Interior Walls and Ceilings	\$ 27,536.67	A21-Metal Hand Railings	\$ 2,875.15
A29-Tennis Courts	\$ 7,311.62	C22-Restrooms	\$ 24,971.98	J1-Pickup Trucks and Passenger Vehicles	\$ 49,831.47
H22-Gymnastic Equipment	\$ 13,498.37	D60-Clubhouse Signage	\$ 3,937.02	C16-Exterior Lighting	\$ 1,237.35
C55-Ice Skates	\$ 4,274.48	D19-Clubhouse Exterior Furniture	\$ 5,286.86	A12-Mechanical Systems	\$ 3,374.59
C41-Copper Piping	\$ 2,474.70	C25-Ice Rink	\$ 8,211.51	C37-Boiler/Domestic Circulation System	\$ 1,237.35
C19-Interior Flooring	\$ 1,574.18	A13-Outbuilding - Structure	\$ 298,718.70	H17-Cubbies and Lockers	\$ 2,249.73
H14-Gymnasium Lighting	\$ 1,124.86	G1-Wood Siding and Trim	\$ 5,849.29	D52-11th Hole Timber Bridge	\$ 33,745.58
2010 (cont.)		2010 (cont.)		2011	
B8-Elevator System	\$ 224,972.80	D26-Lift Station Pumps	\$ 7,311.62	C12-Exhaust Stacks	\$ 3,158.62
B9-Red Sandstone Elementary Gym	\$ 1,687.30	D40-Asphalt Cart Paths	\$ 28,121.60	E26-Tree Replacement	\$ 11,698.58
ES-Maintenance Building Interior	\$ 2,771.67	D5-Wood Trim	\$ 3,707.10	A24-Ball Field Grading and Drainage	\$ 2,924.65
H12-Interior Walls and Ceilings	\$ 12,591.73	E3-Wood Trim and Soffits	\$ 4,382.25	A29-Tennis Courts	\$ 5,849.29
J2-Dump Truck	\$ 36,243.20	D32-11th Hole Pump House Building Envelop	\$ 1,124.86	C41-Copper Piping	\$ 2,573.69
C45-Forklift	\$ 20,247.55	F3-Wood Trim, Posts and Beams	\$ 2,474.70	C28-Interior Doors	\$ 1,286.84
A10-Clubhouse Locker Rooms	\$ 33,745.92			C19-Interior Flooring	\$ 1,637.15
C26-Bleacher Seating	\$ 3,118.12	Total:	\$ 887,142.60	C40-Rink Chiller System	\$ 7,487.09
2011 (cont.)		2011 (cont.)		2012	
C54-Electric Spider Boxes and Cords	\$ 21,642.35	C47-Man Lift	\$ 21,057.45	D28-Starter Shack Building Envelope	\$ 6,813.26
C48-Washer and Dryer	\$ 2,924.65	D15-Clubhouse Kitchen	\$ 7,136.14	E26-Tree Replacement	\$ 12,166.53
D10-Golf Cart Storage Floor	\$ 5,261.93	D39-Parking Lighting	\$ 7,019.15	E3-Wood Trim and Soffits	\$ 1,330.29
D42-Concrete Drain Pans	\$ 1,298.54	D12-Clubhouse Flooring	\$ 39,995.12	A31-Tennis Court Fencing	\$ 13,732.97
A22-Signage	\$ 4,094.50	J3-Snowmobile	\$ 9,943.80	A24-Ball Field Grading and Drainage	\$ 9,733.22
A1-Clubhouse Grading and Drainage	\$ 3,509.58	D50-1st Hole Timber Path	\$ 52,642.93	A29-Tennis Courts	\$ 6,083.26
A25-Ball Field Chain Link Fence	\$ 5,205.87			A17-Asphalt Walkways	\$ 4,927.44
G9-Benches and Tables	\$ 3,275.60	Total:	\$ 221,623.50	C41-Copper Piping	\$ 2,676.64
2012 (cont.)		2012 (cont.)		2012 (cont.)	
C17-Steel Gate	\$ 1,338.32	C30-Sound System	\$ 15,816.48	O6-Wood Trim and Exposed Glulam Beams	\$ 5,349.87
I1-Turf and Nordic Equipment	\$ 72,999.16	C13-Concrete Walkways	\$ 1,824.91	ES-Maintenance Building Interior	\$ 6,438.53
C19-Interior Flooring	\$ 1,702.63	C21-Changing Rooms	\$ 20,196.43	E13-Domestic Hot Water Heater	\$ 1,581.65
C20-Interior Lighting	\$ 18,858.12	F7-Asphalt Parking Lot	\$ 12,482.86	O8-Windows	\$ 1,338.32
A23-Lighting Units	\$ 8,112.03	G8-Wood Open Rail Fencing	\$ 8,516.57	D36-13th Hole Restrooms	\$ 9,733.22
B4-Kitchen	\$ 12,166.53	H8-Concrete Walkway and Stairs	\$ 1,581.53	D35-13th Hole Restroom Building Envelope	\$ 1,216.65
C50-Event Chairs	\$ 42,580.41	C27-Hand Railings	\$ 3,406.63	D55-15th Hole Bridge	\$ 18,249.79
C14-Brick Pavers	\$ 1,338.08	D49-1st Hole Bridge	\$ 5,474.94	Total:	\$ 329,767.30
2013		2013 (cont.)		2013 (cont.)	
F6-Field Grading and Drainage	\$ 4,428.62	C55-Ice Skates	\$ 4,808.21	C24-Concessions	\$ 3,542.89
D9-Golf Cart Storage Walls and Ceilings	\$ 11,830.73	C41-Copper Piping	\$ 2,783.70	C27-Hand Railings	\$ 4,932.34
E26-Tree Replacement	\$ 12,653.19	H17-Cubbies and Lockers	\$ 5,061.28	C20-Interior Lighting	\$ 4,175.55
A24-Ball Field Grading and Drainage	\$ 3,163.30	D7-Exterior Doors	\$ 2,151.04	C18-Interior Walls and Ceilings	\$ 27,781.34
A3-Wood Siding & Trim	\$ 695.93	B2-Walls and Ceilings	\$ 7,014.93	E21-Asphalt Driving and Parking Area	\$ 7,181.95
A15-Low Slope Roofing	\$ 1,518.38	A8-Clubhouse Walls and Ceilings	\$ 9,869.49	D40-Asphalt Cart Paths	\$ 127,039.30
A29-Tennis Courts	\$ 6,326.59	B6-Activity Accessories	\$ 1,265.32	C19-Interior Flooring	\$ 11,256.83
H22-Gymnastic Equipment	\$ 15,183.83	C53-Crowd Control Dividers	\$ 1,771.45	F9-Soccer Goals	\$ 8,477.61
2013 (cont.)		2013 (cont.)		2014	
H4-Windows	\$ 4,048.84	B5-Televisions	\$ 1,265.32	D17-Clubhouse - Extinguishers	\$ 6,579.66
D41-Concrete Walkways, Stairs and Patios	\$ 12,647.94			E3-Wood Trim and Soffits	\$ 3,680.00
F2-Coated Exterior Gypsum Board	\$ 2,277.57			E26-Tree Replacement	\$ 13,159.31
D58-Weather Stations	\$ 25,306.38			A24-Ball Field Grading and Drainage	\$ 3,289.83
D10-Golf Cart Storage Floor	\$ 19,565.62			A29-Tennis Courts	\$ 6,579.66
D37-Asphalt Parking Areas	\$ 28,469.67			C41-Copper Piping	\$ 2,895.05
C26-Bleacher Seating	\$ 91,068.79			D38-Concrete Parking Blocks	\$ 1,315.93
				C39-Chemical Feed System	\$ 1,447.53
				Total:	\$ 1,447.53
2014 (cont.)		2014 (cont.)		2014 (cont.)	
C28-Interior Doors	\$ 1,447.53	C19-Interior Flooring	\$ 1,841.57	J4-Trailers	\$ 1,315.93
H23-Rubber Floor Mats	\$ 11,843.38	C25-Ice Rink	\$ 17,895.83	D28-Starter Shack Building Envelope	\$ 23,686.77
H16-Dance Studio	\$ 21,976.03	D29-Starter Shack Interior	\$ 17,501.89	E21-Asphalt Driving and Parking Area	\$ 75,597.63
H3-Cedar Siding	\$ 2,496.32	D41-Concrete Walkways, Stairs and Patios	\$ 1,315.38	C46-Zamboni	\$ 92,115.20
F10-Volleyball Courts	\$ 9,211.51	C1-Grading and Drainage	\$ 7,237.62	D59-Safety Nets	\$ 105,274.50
G7-Walking and Driving Paths	\$ 6,535.57	D16-Clubhouse Locker Rooms	\$ 29,213.68	D53-11th Hole Pedestrian Bridges	\$ 15,791.18
A18-Concrete Walkways	\$ 6,527.02	F13-Bleachers	\$ 14,606.84	D34-13th Hole Restroom - Structure	\$ 26,316.39
A19-Brick Pavers	\$ 3,289.30	J1-Pickup Trucks and Passenger Vehicles	\$ 28,292.53	Total:	\$ 560,276.60

# What does this mean?

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- You will have a timeline for major maintenance, repairs and replacement
- You will have a clear determination whether you are properly funded
  - If you are not properly funded we will review the available options to increase funding



# Case Study

## Vail Recreation District

# Why was a Reserve Study necessary?

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- ❑ The Recreation District, under the Town of Vail, was receiving poor reviews and International complaints about the condition of the Town's amenities while meeting the highest expectations
- ❑ The Town Council understood the need for a Third Party Consultant to complete a comprehensive Reserve Study

# Case Study

## Vail Recreation District

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# Vail Recreation District

## Scope of Services

- ▣ Annual facility funding provided by The Town of Vail from the CIP (Capital Improvement Project) budget
- ▣ 20-year Physical Needs incorporating existing capital improvement plans



# Facilities Overview

# Ford Park

- ❑ Tennis and ball field facility with a clubhouse and an outbuilding
- ❑ Constructed in 1983
- ❑ Clubhouse renovation in 1993



# Imagination Station

- ❑ Interactive children's facility
- ❑ Located at the Lionshead parking structure
- ❑ Constructed in 1973



# Dobson Ice Arena

- ❑ Full-size ice rink with locker rooms and conference facilities
- ❑ Constructed in 1979
- ❑ Conference Room addition constructed in 2002



# Vail Golf Club

- ❑ 18-hole golf course with a driving range, clubhouse and outbuildings
- ❑ Originally constructed in 1978
- ❑ Clubhouse remodel in 1983



# Golf Club Maintenance Facility

- ❑ Houses the majority of the district's maintenance equipment
- ❑ Constructed in 1999



# Athletic Field

- ❑ Full-size football and soccer field with an outbuilding
- ❑ Three sand volleyball courts
- ❑ Constructed in 1989
- ❑ Field renovated in 2001



# Nature Center

- ❑ Nature facility utilizing an original homestead building
- ❑ Nature trails and interactive monuments
- ❑ Homestead building, estimated at 100 years old



# Gymnastics Center

- ❑ Gymnastics teaching and training facility
- ❑ Lower level dance studio
- ❑ Constructed in 2005



# Conclusions

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- ❑ Discovered \$3m worth of assets that have exceeded their useful life
- ❑ Discovered \$5m worth of assets coming due within the next 5 years
- ❑ Condemned one building
- ❑ Several buildings were in need of immediate remediation
- ❑ Town passed the bond initiative based on our study and recommendations

# Question & Answer

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