IVINS CITY LONG-TERM CAPITAL NEEDS: Roads/Trails

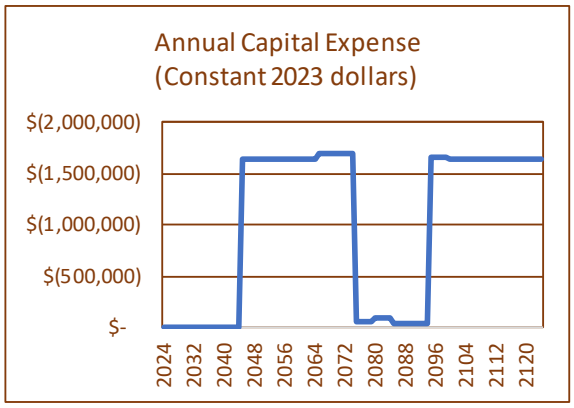
For infrastructure in place in 2024 - excludes additions after 2024

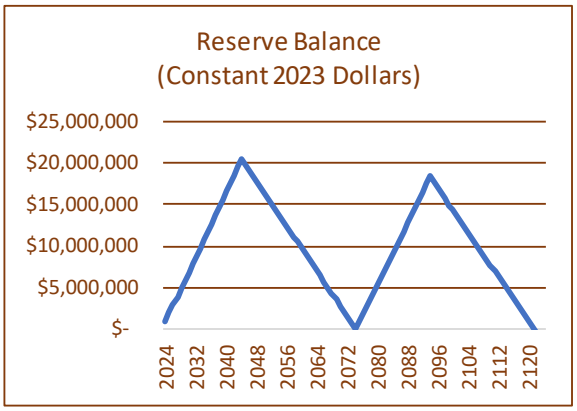
30-Oct-23

SCENARIO: BASELINE - ROAD REPLACEMENT BEGINS IN 2045

Annual Reserve: **$ 975,000** **Ending reserve balance in 2124:** **$ (1,719,473)**

Component	Cost Today	Useful Life	Cost/Year Over Useful Life (2023 dollars)	Start Year	Years In Use (to date)	Begin Replacement	End Replacement
Roads (1)	$ 82,113,750	50	$ 1,642,275	1995	29	2045	2074
Trails (2)	$ 3,373,920	60	$ 56,232	2005	19	2065	2084
Sidewalks (3)	$ 1,000,000	75	$ 13,333	2005	19	2080	2099
Curb/gutter (4)	$ 1,000,000	75	$ 13,333	2005	19	2080	2099
Totals	**$ 87,487,670**		**$ 1,725,174**				





NOTES

All dollars are constant 2023 dollars. It is possible but unlikely interest earnings will offset increasing costs. So, the annual reserve needs to be increased regularly to account for inflation.

#1 - Roads: 130 lane miles x 50 year life. $8/sq.ft. x 16 ft lane x 5280 feet = $675,000/lane mile. Roads that are regional in nature could get state/Federal grants. Estimate these to total 16.7 lane miles (Hwy 91 = 3.5mi approx. x 2 lanes = 7 miles. Snow Canyon Pkwy to Tuacahn Dr = 0.75mi approx. x 2 lanes = 1.5 mi. Tuacahn Dr. = 0.6mi x 2 lanes = 1.2 mi approx., Center Street to Kayenta Cml = 3.5mi x 2 = 7 mi.) Estimate grants cover 50% of cost. Inter-local roads to be fully funded by the city total approx. 113.3 lane miles. Cost: 113.3 x $675,000 = $76,477,500 + 16.7 x $675000/2 = $5,636,250 = $82,113,750

#2 - Trails: Cost: $733,950/mile x 12.78 miles = $9,379,881 (Parks & Trails Master Plan, May 2023). However, the realistic cost to rebuild = $5/sq.ft. x 10 ft wide x 5280 = $264,000/mile x 12.78 miles.

#3 - Sidewalks: Need more data. Hypothetical cost only. Useful life estimated at 50 to 100 years depending on how bad the trip hazards get. We have to replace panels when they create a trip hazard greater than ¼" or grind them down as another option, but it is not a whole lot different in cost to just replace the panel that moved so that has been our solution.

#4 - Curb/Gutter: Need more data. Hypothetical cost only. Should last 75 to 100 years, heaving curbs are less trouble than sidewalks.

IVINS CITY LONG-TERM CAPITAL NEEDS: Roads/Trails

For infrastructure in place in 2024 - excludes additions after 2024

30-Oct-23

SCENARIO: START OF ROAD REPLACEMENT DELAYED 10 YEARS TO 2055

Annual Reserve: $ 650,000 **Ending reserve balance in 2124: $ (1,698,973)**

Component	Cost Today	Useful Life	Cost/Year Over Useful Life (2023 dollars)	Start Year	Years In Use (to date)	Begin Replacement	End Replacement
Roads (1)	$ 82,113,750	50	$ 1,642,275	2005	19	2055	2074
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Sidewalks (3)	$ 1,000,000	75	$ 13,333	2005	19	2080	2099
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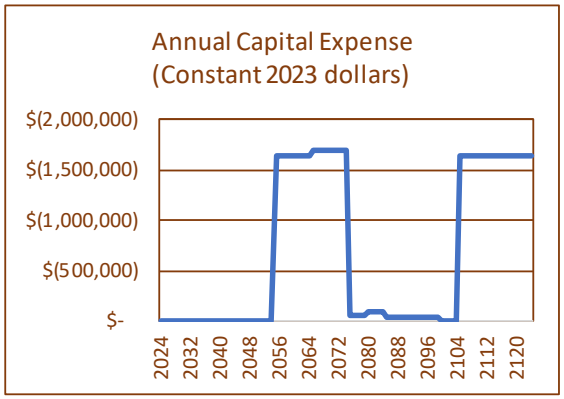
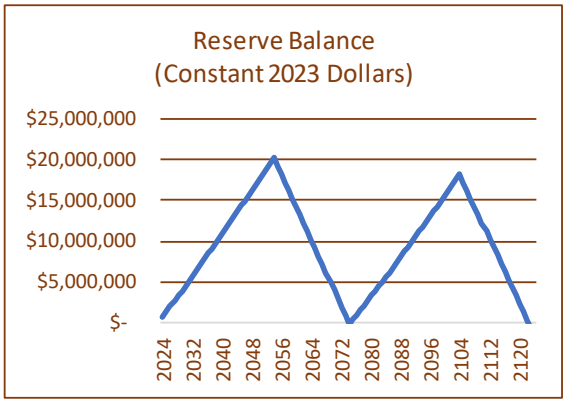
Totals	**$ 87,487,670**		**$ 1,725,174**				





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