ASSET RENEWAL RESERVE CALCS

Years 1 to 25 of 70

APPENDIX 16
ATTACHMENT 1

Version: *May BW6 13 May*

Step 1 - Determine Renewal Expenditure

			2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Buildings	#1	$ms	(0.7)	(0.9)	(0.6)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)	(5.6)	(5.6)	(5.6)	(5.6)	(5.6)	(0.7)
Parks	#1	$ms	(2.3)	(2.0)	(1.9)	(1.9)	(1.9)	(2.1)	(2.1)	(2.1)	(2.1)	(3.8)	(3.8)	(3.8)	(3.8)	(3.8)	(3.7)	(3.7)	(3.7)	(3.7)	(3.7)	(1.9)	(1.9)	(1.9)	(1.9)	(1.9)	(6.4)
Drainage	#1	$ms	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)				(0.0)	(0.1)	(2.2)
Transport, excl Roads	#1	$ms	(0.8)	(0.9)	(0.9)	(0.9)	(0.8)	(2.0)	(2.0)	(2.0)	(2.0)	(2.0)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(2.0)	(1.7)	(1.7)	(1.0)	(1.6)	(1.6)	(3.3)	(1.6)	(1.6)	(1.6)
Roads	#2	$ms	(6.1)	(6.4)	(6.5)	(6.5)	(6.7)	(11.0)	(11.0)	(12.0)	(12.0)	(12.0)	(13.0)	(13.0)	(13.0)	(14.0)	(14.0)	(14.0)	(14.0)	(14.0)	(14.0)	(10.4)	(9.9)	(10.2)	(10.4)	(10.0)	(9.7)
Lighting	#1	$ms	(3.4)	(2.3)	(1.5)	(1.5)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(1.0)
Fleet	#1	$ms	(1.9)	(1.6)	(4.4)	(2.1)	(2.3)	(2.4)	(1.6)	(0.9)	(2.6)	(2.2)	(2.8)	(3.6)	(2.5)	(1.9)	(1.5)	(1.3)	(2.0)	(2.7)	(3.1)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)
Growth_CWP	#3	$ms																				(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)
Growth_Major Projects	#4	$ms																				(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)
Total		$ms	**(15.3)**	**(14.2)**	**(15.8)**	**(13.7)**	**(12.7)**	**(18.6)**	**(17.8)**	**(18.1)**	**(19.8)**	**(21.1)**	**(22.3)**	**(23.1)**	**(22.1)**	**(22.4)**	**(21.9)**	**(22.1)**	**(22.5)**	**(23.2)**	**(23.0)**	**(24.0)**	**(23.5)**	**(25.5)**	**(24.0)**	**(23.7)**	**(25.6)**

#1 Renewal Requirements are based on Inventory & Useful Lives within FinanceOne System as at 30 June 2018.
#2 Roads Renewals currently being reviewed. Values for 2019 to 2067 are based on indicative renewal requirements Dec 2017, and from 2068 onwards the annual depreciation charge
#3 Growth_CWP. This line is the renewal requirement caused by New/Upgrade expenditure within the CWP. It is assumed that renewals only required from Year 21
#4 Growth Major Projects - This line is the renewal requirement caused by New/Upgrade expenditure within the CWP. It is assumed that renewals only required from Year 21

Step 2 - Funding Required by the City

		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Renewal total requirement	$ms	(15.3)	(14.2)	(15.8)	(13.7)	(12.7)	(18.6)	(17.8)	(18.1)	(19.8)	(21.1)	(22.3)	(23.1)	(22.1)	(22.4)	(21.9)	(22.1)	(22.5)	(23.2)	(23.0)	(24.0)	(23.5)	(25.5)	(24.0)	(23.7)	(25.6)
External Funding for Renewals before Internal	$ms	5.2	4.9	3.9	4.7	2.9	2.9	3.0	2.8	2.4	2.9	2.9	3.1	3.3	3.1	2.8	2.7	2.6	2.8	3.0	3.2	2.9	2.9	2.9	2.9	2.9
Funding required by Asset Renewal Reserve	$ms	(10.0)	(9.3)	(11.9)	(9.0)	(9.8)	(15.7)	(14.8)	(15.3)	(17.4)	(18.2)	(19.5)	(20.0)	(18.8)	(19.4)	(19.2)	(19.4)	(19.9)	(20.3)	(20.0)	(20.8)	(20.6)	(22.6)	(21.1)	(20.7)	(22.7)

Step 3 - Asset Renewal Reserve Movements

			2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Opening Balance		$ms	5.0	7.0	9.9	10.3	13.8	16.5	16.4	17.3	17.8	16.3	13.7	11.9	9.4	8.0	5.9	4.0	4.2	4.1	3.4	3.1	1.9	3.4	3.0	4.1	5.5
Transfer In from Operating Cashflows		$ms	12.0	12.0	12.0	12.0	12.0	15.0	15.0	15.0	15.0	15.0	17.0	17.0	17.0	17.0	17.0	19.5	19.5	19.5	19.5	19.5	22.0	22.0	22.0	22.0	22.0
Transfer Out to Fund Renewals		$ms	(10.0)	(9.3)	(11.9)	(9.0)	(9.8)	(15.7)	(14.8)	(15.3)	(17.4)	(18.2)	(19.5)	(20.0)	(18.8)	(19.4)	(19.2)	(19.4)	(19.9)	(20.3)	(20.0)	(20.8)	(20.6)	(22.6)	(21.1)	(20.7)	(22.7)
Interest on Reserve	0% x Average Balance	$ms		0.2	0.3	0.4	0.6	0.7	0.7	0.8	0.8	0.7	0.6	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Balance at end of year		$ms	7.0	9.9	10.3	13.8	16.5	16.4	17.3	17.8	16.3	13.7	11.9	9.4	8.0	5.9	4.0	4.2	4.1	3.4	3.1	1.9	3.4	3.0	4.1	5.5	5.1
Net Transfer In/(Out) for Year		$ms	*2.0*	*2.9*	*0.4*	*3.4*	*2.7*	*(0.1)*	*0.9*	*0.5*	*(1.6)*	*(2.5)*	*(1.9)*	*(2.5)*	*(1.4)*	*(2.1)*	*(1.9)*	*0.3*	*(0.2)*	*(0.7)*	*(0.3)*	*(1.2)*	*1.5*	*(0.4)*	*1.1*	*1.5*	*(0.4)*

Step 4 - Operating Cashflows

			2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Operating Income Baseline	#1	$ms	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0
Operating Income Growth	#2	$ms		1.0	1.7	2.5	3.0	3.9	6.7	8.9	9.4	11.5	12.2	12.9	13.7	14.4	14.7	15.0	15.3	15.7	16.0	16.3	16.6	16.9	17.2	17.5	17.8
Operating Income Total	#3	$ms	157.0	157.9	158.7	159.4	160.0	160.9	163.7	165.9	166.4	168.5	169.2	169.9	170.6	171.3	171.7	172.0	172.3	172.7	173.0	173.3	173.6	173.9	174.2	174.5	174.8
Operating Expenditure Baseline	#1	$ms	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)
Operating Expenditure Growth	#2	$ms		(0.9)	(0.8)	(1.1)	(1.2)	(1.8)	(2.6)	(2.6)	(3.5)	(5.2)	(5.6)	(5.9)	(6.3)	(6.8)	(6.8)	(6.8)	(6.8)	(6.8)	(6.8)	(7.0)	(7.2)	(7.4)	(7.6)	(7.8)	(8.0)
Operating Expenditure Total	#3	$ms	(123.9)	(124.8)	(124.8)	(125.1)	(125.1)	(125.7)	(126.5)	(126.5)	(127.4)	(129.2)	(129.5)	(129.9)	(130.2)	(130.7)	(130.7)	(130.7)	(130.7)	(130.7)	(130.7)	(130.9)	(131.1)	(131.3)	(131.5)	(131.7)	(131.9)
Operating Cash Surplus		$ms	**33.1**	**33.1**	**34.0**	**34.4**	**34.9**	**35.1**	**37.1**	**39.3**	**38.9**	**39.3**	**39.7**	**40.0**	**40.4**	**40.6**	**40.9**	**41.2**	**41.6**	**41.9**	**42.3**	**42.4**	**42.5**	**42.6**	**42.7**	**42.8**	**42.9**

#1 Operating Income Baseline and Operating Expenditure Baseline is based on the Adopted Budget 2018/19
#2 Operating Income and Expenditure Growth up to 2036/37 is based on projects included in Adopted 20 Year SFP (August 2018). This includes growth in Rates Income from new Residential / Commercial. From year 21 an arbitrary increase has been made
#3 Projections exclude escalation. In reality there will be increases in expenses (Enterprise Agreements) and rates will increase. Rates have normally increased by more than expenses so the projections above can be considered prudent

Step 5 - Cash to Fund Loans, Upgrade/New Capex

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Operating Cash Surplus	33.1	33.1	34.0	34.4	34.9	35.1	37.1	39.3	38.9	39.3	39.7	40.0	40.4	40.6	40.9	41.2	41.6	41.9	42.3	42.4	42.5	42.6	42.7	42.8	42.9
Transfer out to Fund Renewals	(12.0)	(12.0)	(12.0)	(12.0)	(12.0)	(15.0)	(15.0)	(15.0)	(15.0)	(15.0)	(17.0)	(17.0)	(17.0)	(17.0)	(17.0)	(19.5)	(19.5)	(19.5)	(19.5)	(19.5)	(22.0)	(22.0)	(22.0)	(22.0)	(22.0)
Remaining Cash to fund New Exp, Loans	21.1	21.1	22.0	22.4	22.9	20.1	22.1	24.3	23.9	24.3	22.7	23.0	23.4	23.6	23.9	21.7	22.1	22.4	22.8	22.9	20.5	20.6	20.7	20.8	20.9

ASSET RENEWAL RESERVE CALCS

Version: *May BW6 13 May*

Step 1 - Determine Renewal Expenditure

			26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
			2045	**2046**	**2047**	**2048**	**2049**	**2050**	**2051**	**2052**	**2053**	**2054**	**2055**	**2056**	**2057**	**2058**	**2059**	**2060**	**2061**	**2062**	**2063**	**2064**	**2065**	**2066**	**2067**	**2068**	**2069**
Buildings	#1	$ms	(0.7)	(0.7)	(0.7)	(0.7)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(1.2)	(1.2)	(1.2)	(1.2)	(1.2)	(10.1)	(10.1)	(10.1)	(10.1)	(10.1)	(3.5)	(3.5)	(3.5)	(3.5)	(3.5)	(4.5)
Parks	#1	$ms	(6.4)	(6.4)	(6.4)	(6.4)	(1.6)	(1.6)	(1.6)	(1.6)	(1.6)	(4.3)	(4.3)	(4.3)	(4.3)	(4.3)	(3.2)	(3.2)	(3.2)	(3.2)	(3.2)	(2.4)	(2.4)	(2.4)	(2.4)	(2.4)	(1.5)
Drainage	#1	$ms	(2.2)	(2.2)	(2.2)	(2.2)	(3.5)	(3.5)	(3.5)	(3.6)	(3.6)	(2.6)	(2.6)	(2.6)	(2.7)	(2.7)	(4.7)	(4.7)	(4.7)	(4.8)	(4.8)	(4.9)	(4.9)	(4.9)	(4.9)	(4.9)	(8.3)
Transport, excl Roads	#1	$ms	(1.6)	(1.6)	(1.6)	(2.5)	(1.6)	(1.6)	(4.9)	(1.6)	(1.6)	(1.8)	(1.8)	(3.0)	(1.9)	(1.8)	(3.5)	(5.0)	(1.8)	(1.8)	(1.8)	(3.8)	(1.8)	(1.8)	(3.4)	(3.1)	(1.8)
Roads	#2	$ms	(11.7)	(11.3)	(10.9)	(11.7)	(11.3)	(11.4)	(11.1)	(11.0)	(10.7)	(12.5)	(12.2)	(12.4)	(12.1)	(11.8)	(11.6)	(11.3)	(11.4)	(11.5)	(11.2)	(11.0)	(10.8)	(10.9)	(10.6)	(10.5)	(10.5)
Lighting	#1	$ms	(1.0)	(1.0)	(1.0)	(1.0)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(3.9)	(3.9)	(3.9)	(3.9)	(3.9)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.5)
Fleet	#1	$ms	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)
Growth_CWP	#3	$ms	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(2.6)	(2.6)	(2.6)	(2.6)
Growth_Major Projects	#4	$ms	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(1.7)	(2.6)	(2.6)	(2.6)	(2.6)
Total		$ms	**(27.6)**	**(27.2)**	**(26.9)**	**(28.5)**	**(25.3)**	**(25.4)**	**(28.3)**	**(25.1)**	**(24.8)**	**(29.0)**	**(28.7)**	**(30.1)**	**(28.7)**	**(28.4)**	**(42.8)**	**(44.1)**	**(40.9)**	**(41.0)**	**(40.8)**	**(33.2)**	**(30.9)**	**(32.7)**	**(34.1)**	**(33.6)**	**(35.5)**

#1 Renewal Requirements are based on Inventory & Useful Lives within FinanceOne System as at 30 June 2018.
#2 Roads Renewals currently being reviewed. Values for 2019 to 2067 are based on indicative renewal requirements Dec 2017, and from 2068 onwards the annual depreciation charge
#3 Growth_CWP. This line is the renewal requirement caused by New/Upgrade expenditure within the CWP. It is assumed that renewals only required from Year 21
#4 Growth Major Projects - This line is the renewal requirement caused by New/Upgrade expenditure within the CWP. It is assumed that renewals only required from Year 21

Step 2 - Funding Required by the City

		2045	**2046**	**2047**	**2048**	**2049**	**2050**	**2051**	**2052**	**2053**	**2054**	**2055**	**2056**	**2057**	**2058**	**2059**	**2060**	**2061**	**2062**	**2063**	**2064**	**2065**	**2066**	**2067**	**2068**	**2069**
Renewal total requirement	$ms	(27.6)	(27.2)	(26.9)	(28.5)	(25.3)	(25.4)	(28.3)	(25.1)	(24.8)	(29.0)	(28.7)	(30.1)	(28.7)	(28.4)	(42.8)	(44.1)	(40.9)	(41.0)	(40.8)	(33.2)	(30.9)	(32.7)	(34.1)	(33.6)	(35.5)
External Funding for Renewals before Internal	$ms	2.9	2.9	2.9	2.9	2.9	2.9	2.9	6.2	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	6.2	2.9	2.9	2.9	5.0	2.9	2.9	2.9	2.9
Funding required by Asset Renewal Reserve	$ms	(24.7)	(24.3)	(23.9)	(25.6)	(22.4)	(22.5)	(25.4)	(18.9)	(21.8)	(26.1)	(25.8)	(27.1)	(25.8)	(25.5)	(39.9)	(41.2)	(34.7)	(38.1)	(37.9)	(30.3)	(25.9)	(29.8)	(31.2)	(30.7)	(32.6)

Step 3 - Asset Renewal Reserve Movements

			2045	**2046**	**2047**	**2048**	**2049**	**2050**	**2051**	**2052**	**2053**	**2054**	**2055**	**2056**	**2057**	**2058**	**2059**	**2060**	**2061**	**2062**	**2063**	**2064**	**2065**	**2066**	**2067**	**2068**	**2069**
Opening Balance		$ms	5.1	5.7	6.7	8.1	7.9	10.9	16.0	18.4	27.6	34.1	36.7	40.7	43.5	47.8	52.7	43.0	34.6	32.5	26.7	21.0	22.7	31.1	35.9	39.4	43.6
Transfer In from Operating Cashflows		$ms	25.0	25.0	25.0	25.0	25.0	27.0	27.0	27.0	27.0	27.0	28.0	28.0	28.0	28.0	28.0	31.0	31.0	31.0	31.0	31.0	33.0	33.0	33.0	33.0	33.0
Transfer Out to Fund Renewals		$ms	(24.7)	(24.3)	(23.9)	(25.6)	(22.4)	(22.5)	(25.4)	(18.9)	(21.8)	(26.1)	(25.8)	(27.1)	(25.8)	(25.5)	(39.9)	(41.2)	(34.7)	(38.1)	(37.9)	(30.3)	(25.9)	(29.8)	(31.2)	(30.7)	(32.6)
Interest on Reserve	0% x Average Balance	$ms	0.2	0.3	0.3	0.4	0.4	0.6	0.8	1.1	1.4	1.6	1.8	1.9	2.1	2.3	2.2	1.8	1.5	1.4	1.1	1.0	1.2	1.5	1.7	1.9	2.1
Balance at end of year		$ms	5.7	6.7	8.1	7.9	10.9	16.0	18.4	27.6	34.1	36.7	40.7	43.5	47.8	52.7	43.0	34.6	32.5	26.7	21.0	22.7	31.1	35.9	39.4	43.6	46.0
Net Transfer In/(Out) for Year		$ms	*0.6*	*1.0*	*1.4*	*(0.2)*	*3.0*	*5.1*	*2.4*	*9.2*	*6.6*	*2.5*	*4.0*	*2.8*	*4.3*	*4.8*	*(9.7)*	*(8.4)*	*(2.1)*	*(5.7)*	*(5.8)*	*1.7*	*8.4*	*4.8*	*3.5*	*4.2*	*2.5*

Step 4 - Operating Cashflows

			2045	**2046**	**2047**	**2048**	**2049**	**2050**	**2051**	**2052**	**2053**	**2054**	**2055**	**2056**	**2057**	**2058**	**2059**	**2060**	**2061**	**2062**	**2063**	**2064**	**2065**	**2066**	**2067**	**2068**	**2069**
Operating Income Baseline	#1	$ms	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0
Operating Income Growth	#2	$ms	18.1	18.4	18.7	19.0	19.3	19.6	19.9	20.2	20.5	20.8	21.1	21.4	21.7	22.0	22.3	22.6	22.9	23.2	23.5	23.8	24.1	24.4	24.7	25.0	25.3
Operating Income Total	#3	$ms	175.1	175.4	175.7	176.0	176.3	176.6	176.9	177.2	177.5	177.8	178.1	178.4	178.7	179.0	179.3	179.6	179.9	180.2	180.5	180.8	181.1	181.4	181.7	182.0	182.3
Operating Expenditure Baseline	#1	$ms	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)
Operating Expenditure Growth	#2	$ms	(8.2)	(8.4)	(8.6)	(8.8)	(9.0)	(9.2)	(9.4)	(9.6)	(9.8)	(10.0)	(10.2)	(10.4)	(10.6)	(10.8)	(11.0)	(11.2)	(11.4)	(11.6)	(11.8)	(12.0)	(12.2)	(12.4)	(12.6)	(12.8)	(13.0)
Operating Expenditure Total	#3	$ms	(132.1)	(132.3)	(132.5)	(132.7)	(132.9)	(133.1)	(133.3)	(133.5)	(133.7)	(133.9)	(134.1)	(134.3)	(134.5)	(134.7)	(134.9)	(135.1)	(135.3)	(135.5)	(135.7)	(135.9)	(136.1)	(136.3)	(136.5)	(136.7)	(136.9)
Operating Cash Surplus		$ms	**43.0**	**43.1**	**43.2**	**43.3**	**43.4**	**43.5**	**43.6**	**43.7**	**43.8**	**43.9**	**44.0**	**44.1**	**44.2**	**44.3**	**44.4**	**44.5**	**44.6**	**44.7**	**44.8**	**44.9**	**45.0**	**45.1**	**45.2**	**45.3**	**45.4**

#1 Operating Income Baseline and Operating Expenditure Baseline is based on the Adopted Budget 2018/19
#2 Operating Income and Expenditure Growth up to 2036/37 is based on projects included in Adopted 20 Year SFP (August 2018). This includes growth in Rates Income from new Residential / Commercial. From year 21 an arbitrary increase has been made
#3 Projections exclude escalation. In reality there will be increases in expenses (Enterprise Agreements) and rates will increase. Rates have normally increased by more than expenses so the projections above can be considered prudent

Step 5 - Cash to Fund Loans, Upgrade/New Capex

	2045	**2046**	**2047**	**2048**	**2049**	**2050**	**2051**	**2052**	**2053**	**2054**	**2055**	**2056**	**2057**	**2058**	**2059**	**2060**	**2061**	**2062**	**2063**	**2064**	**2065**	**2066**	**2067**	**2068**	**2069**
Operating Cash Surplus	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	45.0	45.1	45.2	45.3	45.4
Transfer out to Fund Renewals	(25.0)	(25.0)	(25.0)	(25.0)	(25.0)	(27.0)	(27.0)	(27.0)	(27.0)	(27.0)	(28.0)	(28.0)	(28.0)	(28.0)	(28.0)	(31.0)	(31.0)	(31.0)	(31.0)	(31.0)	(33.0)	(33.0)	(33.0)	(33.0)	(33.0)
Remaining Cash to fund New Exp, Loans	18.0	18.1	18.2	18.3	18.4	16.5	16.6	16.7	16.8	16.9	16.0	16.1	16.2	16.3	16.4	13.5	13.6	13.7	13.8	13.9	12.0	12.1	12.2	12.3	12.4

ASSET RENEWAL RESERVE CALCS

Years 51 to 70 of 70

Version: *May BW6 13 May*

Step 1 - Determine Renewal Expenditure

			51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70		
			2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	Total	Average
Buildings	#1	$ms	(4.5)	(4.5)	(4.5)	(4.5)	(6.3)	(6.3)	(6.3)	(6.3)	(6.3)	(14.3)	(14.3)	(14.3)	(14.3)	(14.3)	(8.2)	(8.2)	(8.2)	(8.2)	(8.2)	(8.2)	**(304.2)**	**(4.3)**
Parks	#1	$ms	(1.5)	(1.5)	(1.5)	(1.5)	(4.0)	(4.0)	(4.0)	(4.0)	(4.0)	(2.1)	(2.1)	(2.1)	(2.1)	(2.1)	(4.9)	(4.9)	(4.9)	(4.9)	(4.9)	(4.9)	**(222.4)**	**(3.2)**
Drainage	#1	$ms	(8.3)	(8.3)	(8.3)	(8.3)	(10.7)	(10.7)	(10.7)	(10.8)	(10.8)	(7.7)	(7.7)	(7.7)	(7.7)	(7.7)	(13.4)	(13.4)	(13.4)	(13.5)	(13.5)	(13.5)	**(305.0)**	**(4.4)**
Transport, excl Roads	#1	$ms	(1.8)	(3.9)	(1.8)	(7.7)	(3.2)	(3.2)	(5.4)	(3.2)	(3.2)	(5.5)	(3.2)	(3.2)	(3.2)	(5.1)	(3.2)	(3.2)	(4.3)	(3.2)	(4.1)	(4.1)	**(174.7)**	**(2.5)**
Roads	#2	$ms	(10.5)	(10.5)	(10.5)	(10.5)	(10.5)	(10.5)	(10.5)	(10.5)	(10.5)	(10.5)	(10.5)	(10.5)	(10.5)	(10.5)	(10.5)	(10.5)	(10.5)	(10.5)	(10.5)	(10.5)	**(766.1)**	**(10.9)**
Lighting	#1	$ms	(1.5)	(1.5)	(1.5)	(1.5)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	(0.4)	**(76.0)**	**(1.1)**
Fleet	#1	$ms	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	(2.3)	**(159.9)**	**(2.3)**
Growth_CWP	#3	$ms	(2.6)	(2.6)	(2.6)	(2.6)	(2.6)	(2.6)	(2.6)	(3.4)	(3.4)	(3.4)	(3.4)	(3.4)	(3.4)	(3.4)	(3.4)	(3.4)	(3.4)	(3.4)	(3.4)	(3.4)	**(106.2)**	**(1.5)**
Growth_Major Projects	#4	$ms	(2.6)	(2.6)	(2.6)	(2.6)	(2.6)	(2.6)	(2.6)	(3.5)	(3.5)	(3.5)	(3.5)	(3.5)	(3.5)	(3.5)	(3.5)	(3.5)	(3.5)	(3.5)	(3.5)	(3.5)	**(108.4)**	**(1.5)**
Total		$ms	**(35.5)**	**(37.7)**	**(35.6)**	**(41.5)**	**(43.1)**	**(43.1)**	**(45.3)**	**(44.9)**	**(44.9)**	**(47.3)**	**(49.7)**	**(47.3)**	**(47.4)**	**(49.3)**	**(49.7)**	**(49.7)**	**(50.8)**	**(49.7)**	**(50.6)**	**(50.6)**	**(2,223.0)**	**(31.8)**

#1 Renewal Requirements are based on Inventory & Useful Lives within FinanceOne System as at 30 June 2018.
#2 Roads Renewals currently being reviewed. Values for 2019 to 2067 are based on indicative renewal requirements Dec 2017, and from 2068 onwards the annual depreciation charge
#3 Growth_CWP. This line is the renewal requirement caused by New/Upgrade expenditure within the CWP. It is assumed that renewals only required from Year 21
#4 Growth Major Projects - This line is the renewal requirement caused by New/Upgrade expenditure within the CWP. It is assumed that renewals only required from Year 21

Step 2 - Funding Required by the City

		2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	Total	Average
Renewal total requirement	$ms	(35.5)	(37.7)	(35.6)	(41.5)	(43.1)	(43.1)	(45.3)	(44.9)	(44.9)	(47.3)	(49.7)	(47.3)	(47.4)	(49.3)	(49.7)	(49.7)	(50.8)	(49.7)	(50.6)	(50.6)	**(2,223.0)**	**(31.8)**
External Funding for Renewals before Internal	$ms	2.9	2.9	5.1	2.9	8.9	2.9	2.9	5.1	2.9	2.9	2.9	5.3	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	**232.0**	**3.3**
Funding required by Asset Renewal Reserve	$ms	(32.6)	(34.8)	(30.5)	(38.6)	(34.2)	(40.2)	(42.4)	(39.8)	(42.0)	(44.4)	(46.8)	(42.1)	(44.5)	(46.4)	(46.8)	(46.8)	(47.8)	(46.8)	(47.7)	(47.7)	**(1,991.0)**	**(28.4)**

Step 3 - Asset Renewal Reserve Movements

			2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	Total	Average
Opening Balance		$ms	46.0	50.7	53.3	60.4	59.6	63.2	62.9	60.3	60.3	58.1	53.2	47.8	46.9	43.6	38.1	31.9	27.6	21.9	17.0	10.9	**5.0**	
Transfer In from Operating Cashflows		$ms	35.0	35.0	35.0	35.0	35.0	37.0	37.0	37.0	37.0	37.0	39.0	39.0	39.0	39.0	39.0	41.0	41.0	41.0	41.0	41.0	**1,907.5**	**27.3**
Transfer Out to Fund Renewals		$ms	(32.6)	(34.8)	(30.5)	(38.6)	(34.2)	(40.2)	(42.4)	(39.8)	(42.0)	(44.4)	(46.8)	(42.1)	(44.5)	(46.4)	(46.8)	(46.8)	(47.8)	(46.8)	(47.7)	(47.7)	**(1,991.0)**	**(28.4)**
Interest on Reserve	0% x Average Balance	$ms	2.2	2.4	2.6	2.8	2.8	2.9	2.8	2.8	2.7	2.6	2.3	2.2	2.1	1.9	1.6	1.4	1.1	0.9	0.6	0.4	**83.0**	**1.2**
Balance at end of year		$ms	50.7	53.3	60.4	59.6	63.2	62.9	60.3	60.3	58.1	53.2	47.8	46.9	43.6	38.1	31.9	27.6	21.9	17.0	10.9	4.6	**4.6**	**0.1**
Net Transfer In/(Out) for Year		*$ms*	*4.6*	*2.6*	*7.1*	*(0.8)*	*3.6*	*(0.3)*	*(2.6)*	*(0.0)*	*(2.2)*	*(4.8)*	*(5.4)*	*(0.9)*	*(3.4)*	*(5.5)*	*(6.1)*	*(4.4)*	*(5.7)*	*(4.9)*	*(6.0)*	*(6.3)*	***(0.4)***	***(0.0)***

Step 4 - Operating Cashflows

			2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	Total	Average
Operating Income Baseline	#1	$ms	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	**10,989.0**	**157.0**
Operating Income Growth	#2	$ms	25.6	25.9	26.2	26.5	26.8	27.1	27.4	27.7	28.0	28.3	28.6	28.9	29.2	29.5	29.8	30.1	30.4	30.7	31.0	31.3	**1,392.7**	**19.9**
Operating Income Total	#3	$ms	182.6	182.9	183.2	183.5	183.8	184.1	184.4	184.7	185.0	185.3	185.6	185.9	186.2	186.5	186.8	187.1	187.4	187.7	188.0	188.3	**12,381.6**	**176.9**
Operating Expenditure Baseline	#1	$ms	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	(123.9)	**(8,675.1)**	**(123.9)**
Operating Expenditure Growth	#2	$ms	(13.2)	(13.4)	(13.6)	(13.8)	(14.0)	(14.2)	(14.4)	(14.6)	(14.8)	(15.0)	(15.2)	(15.4)	(15.6)	(15.8)	(16.0)	(16.2)	(16.4)	(16.6)	(16.8)	(17.0)	**(691.2)**	**(9.9)**
Operating Expenditure Total	#3	$ms	(137.1)	(137.3)	(137.5)	(137.7)	(137.9)	(138.1)	(138.3)	(138.5)	(138.7)	(138.9)	(139.1)	(139.3)	(139.5)	(139.7)	(139.9)	(140.1)	(140.3)	(140.5)	(140.7)	(140.9)	**(9,366.4)**	**(133.8)**
Operating Cash Surplus		$ms	**45.5**	**45.6**	**45.7**	**45.8**	**45.9**	**46.0**	**46.1**	**46.2**	**46.3**	**46.4**	**46.5**	**46.6**	**46.7**	**46.8**	**46.9**	**47.0**	**47.1**	**47.2**	**47.3**	**47.4**	**3,015.3**	**43.1**

#1 Operating Income Baseline and Operating Expenditure Baseline is based on the Adopted Budget 2018/19
#2 Operating Income and Expenditure Growth up to 2036/37 is based on projects included in Adopted 20 Year SFP (August 2018). This includes growth in Rates Income from new Residential / Commercial. From year 21 an arbitrary increase has been made
#3 Projections exclude escalation. In reality there will be increases in expenses (Enterprise Agreements) and rates will increase. Rates have normally increased by more than expenses so the projections above can be considered prudent

Step 5 - Cash to Fund Loans, Upgrade/New Capex

	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	Total	Average
Operating Cash Surplus	45.5	45.6	45.7	45.8	45.9	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	47.0	47.1	47.2	47.3	47.4	**3,015.3**	**43.1**
Transfer out to Fund Renewals	(35.0)	(35.0)	(35.0)	(35.0)	(35.0)	(37.0)	(37.0)	(37.0)	(37.0)	(37.0)	(39.0)	(39.0)	(39.0)	(39.0)	(39.0)	(41.0)	(41.0)	(41.0)	(41.0)	(41.0)	**(1,907.5)**	**(27.3)**
Remaining Cash to fund New Exp, Loans	10.5	10.6	10.7	10.8	10.9	9.0	9.1	9.2	9.3	9.4	7.5	7.6	7.7	7.8	7.9	6.0	6.1	6.2	6.3	6.4	**1,107.8**	**15.8**