

**City of Seattle
Seattle, Washington
FTTP Network - Data Services
June 2015**

Construction in Communication Space & Survey Market Projections

First is to ensure that all assumptions are clearly understood and their impact to the projected results. Second is to present a plausible outcome of the proposed broadband business. Third is to provide a guide to judge the progress of the broadband business as it unfolds. CTC does not warrant the analysis, the assumptions, or the success of the broadband business. CTC only offers this tool as a means of providing consultative advice. There will usually be differences between the projected and actual results, because events and circumstances frequently do not occur as expected, and those differences may be material.

City of Seattle
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City of Seattle
 FFTP Network - Data Services
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Income Statement

	Year	1	2	3	4	5	6	7	8	9	10
a. Revenues											
Video	\$	-	-	-	-	-	-	-	-	-	-
Internet - Residential		8,868,600	47,379,600	85,818,600	85,818,600	85,818,600	85,818,600	85,818,600	85,818,600	85,818,600	85,818,600
Internet - Business		1,193,400	3,449,640	5,708,940	5,708,940	5,708,940	5,708,940	5,708,940	5,708,940	5,708,940	5,708,940
Enterprise		-	-	-	-	-	-	-	-	-	-
Voice		-	-	-	-	-	-	-	-	-	-
Connection Fee (net)		1,653,600	6,750,300	6,738,750	-	-	-	-	-	-	-
Provider Fee		-	-	-	-	-	-	-	-	-	-
Assessments		-	-	-	-	-	-	-	-	-	-
Ancillary Revenues		-	-	-	-	-	-	-	-	-	-
Total	\$	11,715,600	57,579,540	98,266,290	91,527,540	91,527,540	91,527,540	91,527,540	91,527,540	91,527,540	91,527,540
b. Content Fees											
Internet	\$	206,310	958,760	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160
Enterprise		-	-	-	-	-	-	-	-	-	-
Total	\$	206,310	958,760	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160
c. Operating Costs											
Labor Costs	\$	4,740,570	13,345,970	20,773,170	21,182,580	21,600,170	22,026,120	22,460,590	22,903,740	23,355,760	23,816,820
Insurance		200,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
Utilities		36,000	72,000	72,000	72,000	72,000	72,000	72,000	72,000	72,000	72,000
Office Expenses		36,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Facility Lease		120,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000
Locates & Ticket Processing		-	280,000	561,000	561,000	561,000	561,000	561,000	561,000	561,000	561,000
Peering		33,100	168,100	302,900	302,900	302,900	302,900	302,900	302,900	302,900	302,900
Contingency		200,000	400,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
Billing Maintenance Contract		-	-	-	-	-	-	-	-	-	-
Fiber & Network Maintenance		1,181,210	2,362,430	2,362,430	2,362,430	2,362,430	2,362,430	2,362,430	2,362,430	2,362,430	2,362,430
Vendor Maintenance Contracts		-	-	-	-	-	-	-	-	-	-
Legal and Lobby Fees		750,000	500,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000
Planning		-	-	-	-	-	-	-	-	-	-
Consulting		500,000	500,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
Marketing		2,400,000	2,400,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
Education and Training		186,300	527,120	818,810	835,190	851,890	868,930	886,310	904,040	922,120	940,560
Customer Handholding		13,230	67,230	121,140	121,140	121,140	121,140	121,140	121,140	121,140	121,140
Customer Billing (Unit)		6,610	33,620	60,570	60,570	60,570	60,570	60,570	60,570	60,570	60,570
Allowance for Bad Debts		117,160	575,800	982,660	915,280	915,280	915,280	915,280	915,280	915,280	915,280
Churn (acquisition costs)		82,680	420,200	757,130	757,130	757,130	757,130	757,130	757,130	757,130	757,130
Low Income Assistance		-	-	-	-	-	-	-	-	-	-
Pole Attachment Expense		263,180	263,180	263,180	263,180	263,180	263,180	263,180	263,180	263,180	263,180
Total	\$	10,866,040	22,615,650	30,024,990	30,383,400	30,817,690	31,260,680	31,712,530	32,173,410	32,643,510	33,123,010
d. EBITDA	\$	643,250	34,005,130	66,531,140	59,433,980	58,999,690	58,556,700	58,104,850	57,643,970	57,173,870	56,694,370
e. Depreciation	\$	17,224,850	38,978,250	47,923,240	47,943,310	47,963,390	46,814,110	42,364,570	37,923,310	37,923,310	37,923,310
f. Operating Income (EBITDA less depreciation)	\$	(16,581,600)	(4,973,120)	18,607,900	11,490,670	11,036,300	11,742,590	15,740,280	19,720,660	19,250,560	18,771,060
g. Non-Operating Income											
Interest Income	\$	-	113,760	85,350	110,110	137,440	167,590	153,520	83,860	104,440	142,110
Interest Expense (10 Year Bond)		(820,400)	(1,094,000)	(990,630)	(883,120)	(771,310)	(655,020)	(534,090)	(408,320)	(277,510)	(141,470)
Interest Expense (20 Year Bond)		(12,537,500)	(25,925,000)	(26,477,350)	(25,427,260)	(24,332,540)	(23,191,300)	(22,001,560)	(20,761,240)	(19,468,210)	(18,120,240)
Interest Expense (Loan)		-	-	-	-	-	-	-	-	-	-
Total	\$	(13,357,900)	(26,905,240)	(27,382,630)	(26,200,270)	(24,966,410)	(23,678,730)	(22,382,130)	(21,085,700)	(19,641,280)	(18,119,600)
h. Net Income (before taxes)	\$	(29,939,500)	(31,878,360)	(8,774,730)	(14,709,600)	(13,930,110)	(11,936,140)	(6,641,850)	(1,365,040)	(390,720)	651,460
i. Facility Taxes	\$	389,700	1,968,620	3,544,860	3,544,860	3,544,860	3,544,860	3,544,860	3,544,860	3,544,860	3,544,860
j. Net Income	\$	(30,329,200)	(33,846,980)	(12,319,590)	(18,254,460)	(17,474,970)	(15,481,000)	(10,186,710)	(4,909,900)	(3,935,580)	(2,893,400)

City of Seattle
 FTTP Network - Data Services
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Income Statement

	Year	11	12	13	14	15	16	17	18	19	20	
a. Revenues												
Video	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Internet - Residential		85,818,600	85,818,600	85,818,600	85,818,600	85,818,600	85,818,600	85,818,600	85,818,600	85,818,600	85,818,600	
Internet - Business		5,708,940	5,708,940	5,708,940	5,708,940	5,708,940	5,708,940	5,708,940	5,708,940	5,708,940	5,708,940	
Enterprise		-	-	-	-	-	-	-	-	-	-	
Voice		-	-	-	-	-	-	-	-	-	-	
Provider Fee		-	-	-	-	-	-	-	-	-	-	
Assessments		-	-	-	-	-	-	-	-	-	-	
Ancillary Revenues		-	-	-	-	-	-	-	-	-	-	
Total	\$	91,527,540	91,527,540	91,527,540	91,527,540	91,527,540	91,527,540	91,527,540	91,527,540	91,527,540	91,527,540	
b. Content Fees												
Internet	\$	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	
Enterprise		-	-	-	-	-	-	-	-	-	-	
Total	\$	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	1,710,160	
c. Operating Costs												
Labor Costs	\$	24,287,100	24,766,790	25,256,070	25,755,130	26,264,180	26,783,410	27,313,020	27,853,220	28,404,230	28,966,260	
Insurance		400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000	
Utilities		72,000	72,000	72,000	72,000	72,000	72,000	72,000	72,000	72,000	72,000	
Office Expenses		60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	
Facility Lease		240,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000	240,000	
Locates & Ticket Processing		561,000	561,000	561,000	561,000	561,000	561,000	561,000	561,000	561,000	561,000	
Peering		302,900	302,900	302,900	302,900	302,900	302,900	302,900	302,900	302,900	302,900	
Contingency		600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	
Billing Maintenance Contract		-	-	-	-	-	-	-	-	-	-	
Fiber & Network Maintenance		2,362,430	2,362,430	2,362,430	2,362,430	2,362,430	2,362,430	2,362,430	2,362,430	2,362,430	2,362,430	
Vendor Maintenance Contracts		-	-	-	-	-	-	-	-	-	-	
Legal and Lobby Fees		250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	
Planning		-	-	-	-	-	-	-	-	-	-	
Consulting		200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	
Marketing		1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	
Education and Training		959,370	978,560	998,130	1,018,090	1,038,450	1,059,220	1,080,410	1,102,010	1,124,060	1,146,540	
Customer Handholding		121,140	121,140	121,140	121,140	121,140	121,140	121,140	121,140	121,140	121,140	
Customer Billing (Unit)		60,570	60,570	60,570	60,570	60,570	60,570	60,570	60,570	60,570	60,570	
Allowance for Bad Debts		915,280	915,280	915,280	915,280	915,280	915,280	915,280	915,280	915,280	915,280	
Churn (acquisition costs)		757,130	757,130	757,130	757,130	757,130	757,130	757,130	757,130	757,130	757,130	
Low Income Assistance		-	-	-	-	-	-	-	-	-	-	
Pole Attachment Expense		263,180	263,180	263,180	263,180	263,180	263,180	263,180	263,180	263,180	263,180	
Total	\$	33,612,100	34,110,980	34,619,830	35,138,850	35,668,260	36,208,260	36,759,060	37,320,860	37,893,920	38,478,430	
d. EBITDA	\$	56,205,280	55,706,400	55,197,550	54,678,530	54,149,120	53,609,120	53,058,320	52,496,520	51,923,460	51,338,950	
e. Depreciation	\$	37,923,310	37,923,310	37,923,310	37,923,310	37,923,310	37,923,310	37,923,310	37,923,310	37,923,310	37,923,310	
f. Operating Income (EBITDA less depreciator	\$	18,281,970	17,783,090	17,274,240	16,755,220	16,225,810	15,685,810	15,135,010	14,573,210	14,000,150	13,415,640	
g. Non-Operating Income												
Interest Income	\$	163,370	144,860	126,490	164,160	150,550	154,720	136,200	117,830	155,500	193,170	
Interest Expense (10 Year Bond)		-	-	-	-	-	-	-	-	-	-	
Interest Expense (20 Year Bond)		(16,714,980)	(15,249,970)	(13,722,730)	(12,130,570)	(10,470,740)	(8,740,370)	(6,936,460)	(5,055,880)	(3,095,390)	(1,051,560)	
Interest Expense (Loan)		-	-	-	-	-	-	-	-	-	-	
Total	\$	(16,551,610)	(15,105,110)	(13,596,240)	(11,966,410)	(10,320,190)	(8,585,650)	(6,800,260)	(4,938,050)	(2,939,890)	(858,390)	
h. Net Income (before taxes)	\$	1,730,360	2,677,980	3,678,000	4,788,810	5,905,620	7,100,160	8,334,750	9,635,160	11,060,260	12,557,250	
i. Facility Taxes	\$	3,544,860	3,544,860	3,544,860	3,544,860	3,544,860	3,544,860	3,544,860	3,544,860	3,544,860	3,544,860	
j. Net Income	\$	(1,814,500)	(866,880)	133,140	1,243,950	2,360,760	3,555,300	4,789,890	6,090,300	7,515,400	9,012,390	

City of Seattle
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Cash Flow Statement

	1	2	3	4	5	6	7	8	9	10
a. Net Income	\$ (30,329,200)	\$ (33,846,980)	\$ (12,319,590)	\$ (18,254,460)	\$ (17,474,970)	\$ (15,481,000)	\$ (10,186,710)	\$ (4,909,900)	\$ (3,935,580)	\$ (2,893,400)
b. Cash Outflows										
Debt Service Reserve	\$ (15,775,500)	\$ (16,092,000)	\$ (1,250,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Reserve	(26,715,800)	(27,296,350)	(2,084,510)	-	-	-	-	-	-	-
Depreciation Reserve	-	-	-	(11,026,960)	(11,031,580)	(18,725,640)	(16,945,830)	(15,169,320)	(15,169,320)	(15,169,320)
Financing	(3,155,100)	(3,218,400)	(250,000)	-	-	-	-	-	-	-
Capital Expenditures	(269,167,230)	(287,902,620)	(44,724,940)	(100,370)	(100,370)	(6,664,710)	(22,574,460)	(43,032,190)	(6,938,220)	(100,370)
Total	\$ (314,813,630)	\$ (334,509,370)	\$ (48,309,450)	\$ (11,127,330)	\$ (11,131,950)	\$ (25,390,350)	\$ (39,520,290)	\$ (58,201,510)	\$ (22,107,540)	\$ (15,269,690)
c. Cash Inflows										
Interest Reserve	\$ 13,357,900	\$ 27,019,000	\$ 14,697,750	\$ 1,022,010	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Depreciation Reserve	-	-	-	100,370	100,370	6,664,710	22,574,460	43,032,190	6,938,220	100,370
Start Up Capital	-	-	-	-	-	-	-	-	-	-
Start Up Funds	-	-	-	-	-	-	-	-	-	-
Grants (infrastructure)	-	-	-	-	-	-	-	-	-	-
Grants (customer premises)	-	-	-	-	-	-	-	-	-	-
10-Year Bond Proceeds	20,510,000	6,840,000	-	-	-	-	-	-	-	-
20-Year Bond Proceeds	295,000,000	315,000,000	25,000,000	-	-	-	-	-	-	-
Loan Proceeds	-	-	-	-	-	-	-	-	-	-
Total	\$ 328,867,900	\$ 348,859,000	\$ 39,697,750	\$ 1,122,380	\$ 100,370	\$ 6,664,710	\$ 22,574,460	\$ 43,032,190	\$ 6,938,220	\$ 100,370
d. Total Cash Outflows and Inflows	\$ 14,054,270	\$ 14,349,630	\$ (8,611,700)	\$ (10,004,950)	\$ (11,031,580)	\$ (18,725,640)	\$ (16,945,830)	\$ (15,169,320)	\$ (15,169,320)	\$ (15,169,320)
e. Non-Cash Expenses - Depreciation	\$ 17,224,850	\$ 38,978,250	\$ 47,923,240	\$ 47,943,310	\$ 47,963,390	\$ 46,814,110	\$ 42,364,570	\$ 37,923,310	\$ 37,923,310	\$ 37,923,310
f. Adjustments										
Proceeds from Additional Cash Flows (10 Year Bond)	\$ (20,510,000)	\$ (6,840,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Proceeds from Additional Cash Flows (20 Year Bond)	\$ (295,000,000)	\$ (315,000,000)	\$ (25,000,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Proceeds from Additional Cash Flows (Loan)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
g. Adjusted Available Net Revenue	\$ (314,560,080)	\$ (302,359,100)	\$ 1,991,950	\$ 19,683,900	\$ 19,456,840	\$ 12,607,470	\$ 15,232,030	\$ 17,844,090	\$ 18,818,410	\$ 19,860,590
h. Principal Payments on Debt										
10 Year Bond Principal	\$ -	\$ 2,584,380	\$ 2,687,750	\$ 2,795,260	\$ 2,907,070	\$ 3,023,360	\$ 3,144,290	\$ 3,270,060	\$ 3,400,870	\$ 3,536,910
20 Year Bond Principal	-	12,003,640	24,707,970	25,758,060	26,852,780	27,994,020	29,183,760	30,424,080	31,717,110	33,065,080
Loan Principal	-	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ 14,588,020	\$ 27,395,720	\$ 28,553,320	\$ 29,759,850	\$ 31,017,380	\$ 32,328,050	\$ 33,694,140	\$ 35,117,980	\$ 36,601,990
i. Net Cash	\$ 949,920	\$ 4,892,880	\$ (403,770)	\$ (8,869,420)	\$ (10,303,010)	\$ (18,409,910)	\$ (17,096,020)	\$ (15,850,050)	\$ (16,299,570)	\$ (16,741,400)
j. Cash Balance										
Unrestricted Cash Balance	\$ 949,920	\$ 5,842,800	\$ 5,439,030	\$ (3,430,390)	\$ (13,733,400)	\$ (32,143,310)	\$ (49,239,330)	\$ (65,089,380)	\$ (81,388,950)	\$ (98,130,350)
Depreciation Reserve	-	-	-	10,926,590	21,857,800	33,918,730	28,290,100	427,230	8,658,330	23,727,280
Interest Reserve	13,357,900	13,635,250	1,022,010	-	-	-	-	-	-	-
Debt Service Reserve	15,775,500	31,867,500	33,117,500	33,117,500	33,117,500	33,117,500	33,117,500	33,117,500	33,117,500	33,117,500
Total Cash Balance	\$ 30,083,320	\$ 51,345,550	\$ 39,578,540	\$ 40,613,700	\$ 41,241,900	\$ 34,892,920	\$ 12,168,270	\$ (31,544,650)	\$ (39,613,120)	\$ (41,285,570)
Un-depreciated Value of Capital Assets	\$ 251,942,380	\$ 500,866,740	\$ 497,668,440	\$ 449,825,500	\$ 401,962,480	\$ 361,813,070	\$ 342,022,960	\$ 347,131,840	\$ 316,146,750	\$ 278,323,800
Debt Service Balance (10 Year Bond)	\$ 20,510,000	\$ 27,350,000	\$ 24,765,620	\$ 22,077,870	\$ 16,375,540	\$ 16,375,540	\$ 13,352,180	\$ 10,207,890	\$ 6,937,830	\$ 3,536,960
Debt Service Balance (20 Year Bond)	\$ 295,000,000	\$ 610,000,000	\$ 622,996,360	\$ 598,288,390	\$ 572,530,330	\$ 545,677,550	\$ 517,683,530	\$ 488,499,770	\$ 458,075,690	\$ 426,358,580
Debt Service Balance (Internal Loan)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service (P&I)	\$ 13,357,900	\$ 41,607,020	\$ 54,863,700	\$ 54,863,700	\$ 54,863,700	\$ 54,863,700	\$ 54,863,700	\$ 54,863,700	\$ 54,863,700	\$ 54,863,700
Debt Coverage Ratio	-	(18.87)	1.08	1.61	1.50	1.18	1.17	1.16	1.10	1.04
Debt Service Coverage Ratio	-	(20.73)	0.07	0.69	0.65	0.41	0.47	0.53	0.54	0.54

City of Seattle
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Cash Flow Statement

	11	12	13	14	15	16	17	18	19	20
a. Net Income	\$ (1,814,500)	\$ (866,880)	\$ 133,140	\$ 1,243,950	\$ 2,360,760	\$ 3,555,300	\$ 4,789,890	\$ 6,090,300	\$ 7,515,400	\$ 9,012,390
b. Cash Outflows										
Debt Service Reserve	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Reserve	-	-	-	-	-	-	-	-	-	-
Depreciation Reserve	(15,169,320)	(15,169,320)	(15,169,320)	(15,169,320)	(15,169,320)	(15,169,320)	(15,169,320)	(15,169,320)	(15,169,320)	(15,169,320)
Financing	-	-	-	-	-	-	-	-	-	-
Capital Expenditures	(6,664,710)	(22,574,460)	(22,518,640)	(100,370)	(20,613,920)	(13,502,560)	(22,574,460)	(22,518,640)	(100,370)	(100,370)
Total	\$ (21,834,030)	\$ (37,743,780)	\$ (37,687,960)	\$ (15,269,690)	\$ (35,783,240)	\$ (28,671,880)	\$ (37,743,780)	\$ (37,687,960)	\$ (15,269,690)	\$ (15,269,690)
c. Cash Inflows										
Interest Reserve	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Depreciation Reserve	6,664,710	22,574,460	22,518,640	100,370	20,613,920	13,502,560	22,574,460	22,518,640	100,370	100,370
Start Up Capital	-	-	-	-	-	-	-	-	-	-
Start Up Funds	-	-	-	-	-	-	-	-	-	-
Grants (infrastructure)	-	-	-	-	-	-	-	-	-	-
Grants (customer premises)	-	-	-	-	-	-	-	-	-	-
10-Year Bond Proceeds	-	-	-	-	-	-	-	-	-	-
20-Year Bond Proceeds	-	-	-	-	-	-	-	-	-	-
Loan Proceeds	-	-	-	-	-	-	-	-	-	-
Total	\$ 6,664,710	\$ 22,574,460	\$ 22,518,640	\$ 100,370	\$ 20,613,920	\$ 13,502,560	\$ 22,574,460	\$ 22,518,640	\$ 100,370	\$ 100,370
d. Total Cash Outflows and Inflows	\$ (15,169,320)	\$ (15,169,320)	\$ (15,169,320)	\$ (15,169,320)	\$ (15,169,320)	\$ (15,169,320)	\$ (15,169,320)	\$ (15,169,320)	\$ (15,169,320)	\$ (15,169,320)
e. Non-Cash Expenses - Depreciation	\$ 37,923,310	\$ 37,923,310	\$ 37,923,310	\$ 37,923,310	\$ 37,923,310	\$ 37,923,310	\$ 37,923,310	\$ 37,923,310	\$ 37,923,310	\$ 37,923,310
f. Adjustments										
Proceeds from Additional Cash Flows (10 Year Bond)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Proceeds from Additional Cash Flows (20 Year Bond)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Proceeds from Additional Cash Flows (Loan)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
g. Adjusted Available Net Revenue	\$ 20,939,490	\$ 21,887,110	\$ 22,887,130	\$ 23,997,940	\$ 25,114,750	\$ 26,309,290	\$ 27,543,880	\$ 28,844,290	\$ 30,269,390	\$ 31,766,380
h. Principal Payments on Debt										
10 Year Bond Principal	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20 Year Bond Principal	34,470,340	35,935,350	37,462,590	39,054,750	40,714,580	42,444,950	44,248,860	46,129,440	48,089,930	24,742,620
Loan Principal	-	-	-	-	-	-	-	-	-	-
Total	\$ 34,470,340	\$ 35,935,350	\$ 37,462,590	\$ 39,054,750	\$ 40,714,580	\$ 42,444,950	\$ 44,248,860	\$ 46,129,440	\$ 48,089,930	\$ 24,742,620
i. Net Cash	\$ (13,530,850)	\$ (14,048,240)	\$ (14,575,460)	\$ (15,056,810)	\$ (15,599,830)	\$ (16,135,660)	\$ (16,704,980)	\$ (17,285,150)	\$ (17,820,540)	\$ 7,023,760
j. Cash Balance										
Unrestricted Cash Balance	\$ (111,661,200)	\$ (125,709,440)	\$ (140,284,900)	\$ (155,341,710)	\$ (170,941,540)	\$ (187,077,200)	\$ (203,782,180)	\$ (221,067,330)	\$ (238,887,870)	\$ (231,864,110)
Depreciation Reserve	32,231,890	24,826,750	17,477,430	32,546,380	27,101,780	28,768,540	21,363,400	14,014,080	29,083,030	44,151,980
Interest Reserve	-	-	-	-	-	-	-	-	-	-
Debt Service Reserve	33,117,500	33,117,500	33,117,500	33,117,500	33,117,500	33,117,500	33,117,500	33,117,500	33,117,500	33,117,500
Total Cash Balance	\$ (46,311,810)	\$ (67,765,190)	\$ (89,689,970)	\$ (89,677,830)	\$ (110,722,260)	\$ (125,191,160)	\$ (149,301,280)	\$ (173,935,750)	\$ (176,687,340)	\$ (154,594,630)
Un-depreciated Value of Capital Assets	\$ 247,065,200	\$ 231,716,350	\$ 216,311,670	\$ 178,488,730	\$ 161,179,340	\$ 136,758,590	\$ 121,409,730	\$ 106,005,060	\$ 68,182,120	\$ 30,359,170
Debt Service Balance (10 Year Bond)	\$ 50	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service Balance (20 Year Bond)	\$ 391,888,240	\$ 355,952,890	\$ 318,490,300	\$ 279,435,550	\$ 238,720,970	\$ 196,276,020	\$ 152,027,160	\$ 105,897,720	\$ 57,807,790	\$ 33,065,170
Debt Service Balance (Internal Loan)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service (P&I)	\$ 51,185,320	\$ 51,185,320	\$ 51,185,320	\$ 51,185,320	\$ 51,185,320	\$ 51,185,320	\$ 51,185,320	\$ 51,185,320	\$ 51,185,320	\$ 25,794,180
Debt Coverage Ratio	1.09	1.03	0.98	0.93	0.87	0.83	0.78	0.73	0.69	
Debt Service Coverage Ratio	0.61	0.61	0.61	0.61	0.62	0.62	0.62	0.63	0.63	

City of Seattle
 FTTP Network - Data Services
 Construction in Communication Space & Survey Market Projections
 June 2015

Capital Additions

	1	2	3	4	5	6	7	8	9	10
Network Equipment										
Headend- Data	\$ 20,513,550	\$ 6,837,850	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TBD	-	-	-	-	-	-	-	-	-	-
TBD	-	-	-	-	-	-	-	-	-	-
TBD	-	-	-	-	-	-	-	-	-	-
TBD	-	-	-	-	-	-	-	-	-	-
Additional Annual Capital	-	-	-	-	-	-	-	-	-	-
Total	\$ 20,513,550	\$ 6,837,850	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Outside Plant and Facilities										
Total Backbone and FTTP	\$ 236,242,600	\$ 236,242,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Additional Annual Capital	-	-	-	-	-	-	-	-	-	-
Total	\$ 236,242,600	\$ 236,242,600	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Last Mile and Customer Premises Equipment										
CPE Gbps Commercial	\$ 1,141,920	\$ 2,158,910	\$ 2,161,840	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CPE Residential & Small Commercial	5,121,720	22,240,570	22,198,990	-	-	-	-	-	-	-
Enterprise CPE and Drop	-	-	-	-	-	-	-	-	-	-
IP Telephone Adapter (2 telephones)	-	-	-	-	-	-	-	-	-	-
Average Drop Cost	4,951,440	20,212,690	20,178,110	-	-	-	-	-	-	-
TBD	-	-	-	-	-	-	-	-	-	-
TBD	-	-	-	-	-	-	-	-	-	-
TBD	-	-	-	-	-	-	-	-	-	-
Digital Set-top Box and CAT-5 Wiring	-	-	-	-	-	-	-	-	-	-
Additional Annual Replacement Capital	-	-	-	100,370	100,370	100,370	100,370	100,370	100,370	100,370
Total	\$ 11,215,080	\$ 44,612,170	\$ 44,538,940	\$ 100,370	\$ 100,370	\$ 100,370	\$ 100,370	\$ 100,370	\$ 100,370	\$ 100,370
Miscellaneous Implementation Costs										
Splicing	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vehicles	300,000	-	-	-	-	-	-	-	-	-
Emergency Restoration Kit	50,000	-	-	-	-	-	-	-	-	-
Work Station, Computers, and Software	96,000	210,000	186,000	-	-	-	-	-	-	-
Fiber OTDR and Other Tools	150,000	-	-	-	-	-	-	-	-	-
Generators & UPS	100,000	-	-	-	-	-	-	-	-	-
Billing Software	250,000	-	-	-	-	-	-	-	-	-
Additional Annual Capital	-	-	-	-	-	-	-	-	-	-
Total	\$ 1,196,000	\$ 210,000	\$ 186,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Replacement Costs for Depreciation										
Network Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$20,513,550	\$ 6,837,850	\$ -
Last Mile and Customer Premises Equipment	-	-	-	-	-	5,607,540	22,306,090	22,269,470	-	-
Miscellaneous Implementation Costs	-	-	-	-	-	956,800	168,000	148,800	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,564,340	\$22,474,090	\$42,931,820	\$ 6,837,850	\$ -
Total Capital Additions	\$ 269,167,230	\$ 287,902,620	\$ 44,724,940	\$ 100,370	\$ 100,370	\$ 6,664,710	\$22,574,460	\$43,032,190	\$ 6,938,220	\$ 100,370
		\$ 601,794,790	\$ 464,708,720							

Depreciation Reserve Contribution	\$	-	\$	-	\$	-	\$	11,026,960	\$	11,031,580	\$	18,725,640	\$	16,945,830	\$	15,169,320	\$	15,169,320	\$	15,169,320
Draws from Depreciation Reserve		-		-		-		(100,370)		(100,370)		(6,664,710)		(22,574,460)		(43,032,190)		(6,938,220)		(100,370)
Net Depreciation Reserve Balance	\$	-	\$	-	\$	-	\$	10,926,590	\$	21,857,800	\$	33,918,730	\$	28,290,100	\$	427,230	\$	8,658,330	\$	23,727,280

**City of Seattle
FTTP Network - Data Services
June 2015**

Capital Additions

	11	12	13	14	15	16	17	18	19	20
Network Equipment										
Headend- Data	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TBD	-	-	-	-	-	-	-	-	-	-
TBD	-	-	-	-	-	-	-	-	-	-
TBD	-	-	-	-	-	-	-	-	-	-
TBD	-	-	-	-	-	-	-	-	-	-
TBD	-	-	-	-	-	-	-	-	-	-
Additional Annual Capital	-	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Outside Plant and Facilities										
Total Backbone and FTTP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Additional Annual Capital	-	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Last Mile and Customer Premises Equipment										
CPE Gbps Commercial	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CPE Residential & Small Commercial	-	-	-	-	-	-	-	-	-	-
Average Drop Cost	-	-	-	-	-	-	-	-	-	-
Additional Annual Replacement Capital	100,370	100,370	100,370	100,370	100,370	100,370	100,370	100,370	100,370	100,370
Total	\$ 100,370	\$ 100,370	\$ 100,370	\$ 100,370	\$ 100,370	\$ 100,370	\$ 100,370	\$ 100,370	\$ 100,370	\$ 100,370
Miscellaneous Implementation Costs										
Splicing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Vehicles	-	-	-	-	-	-	-	-	-	-
Emergency Restoration Kit	-	-	-	-	-	-	-	-	-	-
Work Station, Computers, and Software	-	-	-	-	-	-	-	-	-	-
Fiber OTDR and Other Tools	-	-	-	-	-	-	-	-	-	-
Generators & UPS	-	-	-	-	-	-	-	-	-	-
Additional Annual Capital	-	-	-	-	-	-	-	-	-	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Replacement Costs for Depreciation										
Network Equipment	\$ -	\$ -	\$ -	\$ -	\$ 20,513,550	\$ 6,837,850	\$ -	\$ -	\$ -	\$ -
Last Mile and Customer Premises Equipment	5,607,540	22,306,090	22,269,470	-	-	5,607,540	22,306,090	22,269,470	-	-
Miscellaneous Implementation Costs	956,800	168,000	148,800	-	-	956,800	168,000	148,800	-	-
Total	\$ 6,564,340	\$ 22,474,090	\$ 22,418,270	\$ -	\$ 20,513,550	\$ 13,402,190	\$ 22,474,090	\$ 22,418,270	\$ -	\$ -
Total Capital Additions	\$ 6,664,710	\$ 22,574,460	\$ 22,518,640	\$ 100,370	\$ 20,613,920	\$ 13,502,560	\$ 22,574,460	\$ 22,518,640	\$ 100,370	\$ 100,370

PROJECT ASSUMPTIONS

Page Title Information

Organization	City of Seattle Seattle, Washington	Power Space?	No
Plan Name	FTTP Network - Data Services Construction in Communication Space & Survey Market Projections		
Date	June 2015		

Financial Assumptions

10 Year Bond or Loan	
Finance Rate	4.00%
Period (Years)	10
Principal Repayment Period Start	2
Bond Issuance Cost	1.00% of issue
Debt Service Reserve	5.00%
Interest Reserve	yes

20 Year Bond	
Finance Rate	4.25%
Period (Years)	20
Principal Repayment Period Start	3
Bond Issuance Cost	1.00% of issue
Debt Service Reserve	5.00%
Interest Reserve	yes

Loan					
	Year				
Finance Rate	1	2	3	4	5
Period (Years)	3	3	3	3	3
Principal Repayment Start	3	2	1	1	1

Other	
Interest Earned on Available Cash	0.25% only applied to reserve funds in calculation

Source of Funds		Amount Issued	Year									
Cash flow w/o investment funds, grants, bonds, loans, or interest			\$ (616,712,180)	\$ (597,180,100)	\$ 4,459,930	\$ 45,994,280	\$ 44,560,690	\$ 12,607,470	\$ 15,232,030	\$ 17,844,090	\$ 18,818,410	\$ 19,860,590
Cash flow after investment funds (no principle payments)			\$ (314,560,080)	\$ (302,359,100)	\$ 1,991,950	\$ 19,683,900	\$ 19,456,840	\$ 12,607,470	\$ 15,232,030	\$ 17,844,090	\$ 18,818,410	\$ 19,860,590
Unrestricted cash balance (years 1 to 10)			\$ 949,920	\$ 5,842,800	\$ 5,439,030	\$ (3,430,390)	\$ (13,733,400)	\$ (32,143,310)	\$ (49,239,330)	\$ (65,089,380)	\$ (81,388,950)	\$ (98,130,350)
Total cash balance			\$ 30,083,320	\$ 51,345,550	\$ 39,578,540	\$ 40,613,700	\$ 41,241,900	\$ 34,892,920	\$ 12,168,270	\$ (31,544,650)	\$ (39,613,120)	\$ (41,285,570)
Unrestricted cash balance (years 11 to 20)			\$ (111,661,200)	\$ (125,709,440)	\$ (140,284,900)	\$ (155,341,710)	\$ (170,941,540)	\$ (187,077,200)	\$ (203,782,180)	\$ (221,067,330)	\$ (238,887,870)	\$ (231,864,110)

Use Start Up Capital		1	2	3	4	5		
Start Up Capital	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	IRR	-8.36% Calculated from cash flow w/start-up capital
Start Up Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Grants (infrastructure)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Grants (customer premises)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
		0.00%	0.00%	0.00%	0.00%	0.00%	Weighted rate	
		89.39%	95.08%	95.07%	100.00%	100.00%	Percent Residential	
		10.61%	4.92%	4.93%	0.00%	0.00%	Percent Commercial	
10-Year Bond Proceeds	\$ 27,350,000	\$ 20,510,000	\$ 6,840,000	\$ -	\$ -	\$ -		
20-Year Bond Proceeds	\$ 635,000,000	\$ 295,000,000	\$ 315,000,000	\$ 25,000,000	\$ -	\$ -		
Loan Proceeds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Sub-total	\$ 662,350,000	\$ -	\$ -	\$ -	\$ -	\$ -		
Total	\$ 662,350,000							

Depreciation (Straight Line)		Years	Annual Rate		
Outside Plant and Facilities	20	5.00%	Sheet D1	If years changed, need to change CA sheet (when replenishments occur)	
Network Equipment	7	14.29%	Sheet D2	If years changed, need to change CA sheet (when replenishments occur)	
Miscellaneous Implementation Costs	5	20.00%	Sheet D3	If years changed, need to change CA sheet (when replenishments occur)	
Last Mile and Customer Premises Equipment	5	20.00%	Sheet D4	If years changed, need to change CA sheet (when replenishments occur)	

Depreciation Reserve (years 1 to 10)	-	-	-	10,926,590	21,857,800	33,918,730	28,290,100	427,230	8,658,330	23,727,280
Depreciation Reserve (years 11 to 20)	32,231,890	24,826,750	17,477,430	32,546,380	27,101,780	28,768,540	21,363,400	14,014,080	29,083,030	44,151,980
Funded Depreciation	1	2	3	4	5	6	7	8	9	10

Replacement/Upgrade Costs (Percent of Total Costs)	0%	0%	0%	23%	23%	40%	40%	40%	40%	40%
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Replacement		Replacement	Start in year
Network Equipment	100%		
Miscellaneous Implementation Costs	80%		
Last Mile and Customer Premises Equipment	50%		3

Revenues		246,635	Total taxable properties	N/A	\$ -	per month per property (taxes)
Property Taxes		Will be different mix, needs updating if used		N/A	\$ -	fees per property
					\$ -	average cost (per property)

Annual Assessment	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0

Internet Services	Monthly Retail Price
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PROJECT ASSUMPTIONS

Dial-up	\$ -	\$ -	\$ -	100.00%	Oversubscription	
R 30 Mbps	\$ -	\$ -	\$ -	100.00%	30	
R 50 Mbps	\$ -	\$ -	\$ -	100.00%	30	
R 100 Mbps	\$ -	\$ -	\$ -	100.00%	30	-8.36%
R 250 Mbps	\$ -	\$ -	\$ -	100.00%	30	
R 1 Gbps	\$ 75.00	\$ -	\$ 75.00	100.00%	400	Allcatel & others report .5 to .8 Mbps per user at peak demand
B 30 Mbps	\$ -	\$ -	\$ -	100.00%	400	
B 100 Mbps	\$ -	\$ -	\$ -	100.00%	400	
B 250 Mbps	\$ -	\$ -	\$ -	100.00%	400	
B 1 Gbps	\$ 85.00	\$ -	\$ 85.00	100.00%	400	
10 Gbps	\$ -	\$ -	\$ -			only used with enterprise customer

Unrestricted Cash Balance (yr. 1 to yr. 10)	\$ 949,920	\$ 5,842,800	\$ 5,439,030	\$ (3,430,390)	\$ (13,733,400)	\$ (32,143,310)	\$ (49,239,330)	\$ (65,089,380)	\$ (81,388,950)	\$ (98,130,350)
Unrestricted Cash Balance (yr. 11 to yr. 20)	\$ (111,661,200)	\$ (125,709,440)	\$ (140,284,900)	\$ (155,341,710)	\$ (170,941,540)	\$ (187,077,200)	\$ (203,782,180)	\$ (221,067,330)	\$ (238,887,870)	\$ (231,864,110)

Other Revenues/Services

Digital Equipment Rental	\$ -	per month per digital customer					
		Year 1	Year 2	Year 3	Year 4	Year 5+	
Advertising	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	(Revenue per year)
Utility Allocation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-8.36%
Provider Fee (open access)	\$ -						
	\$ -						per residential Internet service per month
	\$ -						per business Internet service per month
	\$ -						per residential cable service per month
	\$ -						per business cable service per month
	\$ -						per residential telephone service per month
	\$ -						per business telephone service per month
Connection Fee (new Internet customer)	\$ 150						
Data Storage Annual Revenue per Space	\$ -	Spaces	Year 1	Year 2	Year 3	Year 4	Year 5+
Late Payment Fee	\$ -	per bill	1.0%	Late			

Operation and Maintenance Expenses

Annual Fixed Operating Expense

		Year 1	Year 2	Year 3	Year 4	Year 5 plus	
Insurance	\$	200,000	400,000	400,000	400,000	400,000	
Utilities	\$	36,000	72,000	72,000	72,000	72,000	
Office Expenses	\$	36,000	60,000	60,000	60,000	60,000	
Facility Lease	\$	120,000	240,000	240,000	240,000	240,000	
Locates & Ticket Processing	\$	-	280,000	561,000	561,000	561,000	\$ 3,750 per month per
Peering	\$	33,100	168,100	302,900	302,900	302,900	0.5 Mbps per customer
Contingency	\$	200,000	400,000	600,000	600,000	600,000	
Billing Maintenance Contract	\$	-	-	-	-	-	
Fiber & Network Maintenance	\$	-	-	-	-	-	
Vendor Maintenance Contracts	\$	-	732,000	732,000	732,000	732,000	Link to Network Sheet
		Year 1	Year 2	Year 3	Year 4	Year 5 plus	
Legal and Lobby Fees	\$	750,000	500,000	250,000	250,000	250,000	
Planning	\$	-	-	-	-	-	
Consulting	\$	500,000	500,000	200,000	200,000	200,000	
Marketing	\$	2,400,000	2,400,000	1,200,000	1,200,000	1,200,000	\$ 200,000 \$ 2,400,000

Annual Variable Operating Expense (not including DIA)

Education and Training	\$	4%	percent of direct payroll					
Customer Handholding	\$	0.10	per subscriber per month					
Customer Billing (Unit)	\$	0.05	per bill					
Allowance for Bad Debts	\$	1.00%	percentage of revenues					
Customer Churn (annual)	\$	2.50%	Customer Promotions/Acquisition	\$ 300				
Internet Connection Fee	\$	206,310	\$ 958,760	\$ 1,710,160	\$ 1,710,160	\$ 1,710,160	\$ 0.50 per Mbps per month	-8.36%
Minimum BW	\$	2,000	Mbps	\$ 1,000	per month	\$ 0.50	per Mbps per month	

Pole Attachment Expense

Attachment Fees	13,159 poles at	\$ 20.00 per year	3,289,661 feet	250 per span
		Charge even if in Power Space - perception		

Franchise Fees	0%	percent of access fee revenue	Starts in year	6	Overhead	1,912.17	75.42%
City and State Tax	3.8730%	percent of revenue	State	3.8730%	Underground	623.04	24.58%
Property Tax	0.00%	of outside plant	Starts in year	2		2,535.22	

Low Income Assistance

Assistance Rate	0%	for	0%	of households	based on assessment and access fee
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Labor Expense

Labor (Direct)

		Year 1	Year 2	Year 3	Year 4	Year 5+	Labor Cost	
Business Manager		1.00	1.00	1.00	1.00	1.00	170,000	229,500
Market & Sales Manager		1.00	1.00	1.00	1.00	1.00	120,000	

PROJECT ASSUMPTIONS

Broadband Service Engineer	1.00	2.00	2.00	2.00	2.00	120,000			
Headend Technician	-	-	-	-	-	-			
Telephone Technician	-	-	-	-	-	-			
Internet Technician (staff in field tech support)	-	-	-	-	-	-			
Customer Service Representative	5.00	23.00	41.00	41.00	41.00	50,000	2,500	1	Number of Customers per CSR-Number of Shifts
Service Technicians/Installers & IT Support	5.00	23.00	41.00	41.00	41.00	70,000	2,500	1	Number of Customers per Tech Number of Shifts
Sales and Marketing Representative	10.00	10.00	10.00	10.00	10.00	75,000			with commissions
Call Center Support (24x7)	14.00	71.00	128.00	128.00	128.00	50,000	750	1	Ratio for 24x7
Fiber Plant O&M Technicians	11.00	22.00	22.00	22.00	22.00	90,000	120		In power space- lineperson required 3 for 350 miles (Wilson)
TBD	-	-	-	-	-	-	2,535		Miles of line
Total New Staff	48	153	246	246	246		50.00%		In Year 1

Based on Wilson
Based on Wilson 4 fc
Based on Wilson
Wilson 750

Existing Employees		Year 1	Year 2	Year 3+	Labor Cost	Seattle Min Wage			
Broadband Service Manager	-	-	-	-	\$ 50,000	\$ 15.00	per hour		
Broadband Technician	-	-	-	-	\$ 70,000	\$ 31,200	per year		
Switch Technician	-	-	-	-	\$ 75,000			internet	250 calls per month
Customer Service Representative	-	-	-	-	\$ 50,000			call customers dedicated 24X7	month
Service Technicians	-	-	-	-	\$ 90,000				10 staff
Sales and Marketing Representative	-	-	-	-	\$ -				7500
Total Existing Staff	-	-	-	-	\$ -				750 customers

Service Position Total	Year 1	Year 2	Year 3	Year 4	Year 5+	Year 1 Salary	
Business Manager	1.00	1.00	1.00	1.00	1.00	1.00	\$ 170,000
Market & Sales Manager	1.00	1.00	1.00	1.00	1.00	1.00	\$ 120,000
Broadband Service Engineer	1.00	2.00	2.00	2.00	2.00	2.00	\$ 120,000
Headend Technician	-	-	-	-	-	-	\$ -
Telephone Technician	-	-	-	-	-	-	\$ -
Internet Technician (staff in field tech support)	-	-	-	-	-	-	\$ -
Customer Service Representative	5.00	23.00	41.00	41.00	41.00	41.00	\$ 50,000
Service Technicians/Installers & IT Support	5.00	23.00	41.00	41.00	41.00	41.00	\$ 70,000
Sales and Marketing Representative	10.00	10.00	10.00	10.00	10.00	10.00	\$ 75,000
Call Center Support (24x7)	14.00	71.00	128.00	128.00	128.00	128.00	\$ 50,000
Fiber Plant O&M Technicians	11.00	22.00	22.00	22.00	22.00	22.00	\$ 90,000
TBD	-	-	-	-	-	-	\$ -
Total Existing Staff	-	-	-	-	-	-	\$ -
Total	48.00	153.00	246.00	246.00	246.00	246.00	
Total Customers	11,024	56,026	100,951	100,951	100,951	100,951	
Customers per Employee	229.67	366.18	410.37	410.37	410.37	410.37	

Total Salaries	\$ 3,450,000	\$ 9,570,000	\$ 14,580,000		
Benefits	35%	of base salary			
Total Direct Labor Cost	\$ 4,657,500	\$ 12,919,500	\$ 19,683,000	Not including multiplier (multiplier applied on sheet E1)	
Salary Multiplier	2.00%	annual multiplier	(i.e. salaries increase by x percent faster than ability to increase fees)		

Operation Support Services									
Help Desk Fee	\$0	set-up fee +							
	\$0.00	per customer per month		outsource avoid					
ISP Hosting	\$0	set-up fee +							
	\$0.00	per customer per month							
Billing	\$50,000	set-up fee +							
	\$0.25	per customer per month							
Core Network Monitoring, Installation and Configuration	\$0	set-up fee +							
	\$0.00	per month							
Unrestricted cash balance (years 1 to 10)	\$ 949,920.00	\$ 5,842,800.00	\$ 5,439,030.00	\$ (3,430,390.00)	\$ (13,733,400.00)	\$ (32,143,310.00)	\$ (49,239,330.00)	\$ (65,089,380.00)	\$ (81,388,950.00)

Market Size									
Residential									
Number of Potential Subscribers	220,725				City of Seattle	220,725	From Survey	48.00%	MS Ceiling
Potential Multi-Housing	0	Applies to All Services			tbd	-		40.00%	MS Ceiling
Subscriber Growth Rate	0.00%				tbd	-		40.00%	MS Ceiling
						220,725		48.00%	MS Weighted
Commercial									
Number of Potential Subscribers	25,910				City of Seattle	25,910		24.00%	MS Ceiling
Subscriber Growth Rate	0.00%	Applies to All Services			tbd	-		0.00%	MS Ceiling
					tbd	-		0.00%	MS Ceiling

Penetration Rates - Data									
Residential Internet Services									
Existing Dial-up Customers	0								
Number of Potential New Subscribers	220,725								
Initial Data Users	96%	From Survey			Input to Network Cost Estimate	40.93%	Take Rate of all households/businesses passed		
Occupancy Rate	93%	Census Data			Residential Business	43.2%		220,725	95,354
						21.6%		25,910	5,597
								246,635	100,951
Projected Market Size	Year 1	Year 2	Year 3	Year 4	Year 5				
	89%	90%	90%	90%	90%				
	Year 6	Year 7	Year 8	Year 9	Year 10+				
	90%	90%	90%	90%	90%				

- Check Sum

PROJECT ASSUMPTIONS

	Year 1	Year 2	Year 3	Year 4	Year 5	yr. 1	yr. 2	yr. 3	
Market Share		5%	27%	48%	48%	48%	1.00	5%	
Percentage of Market		4.5%	23.9%	43.2%	43.2%	43.2%	Market share multiplier for sensitivity analysis		
	Year 6	Year 7	Year 8	Year 9	Year 10+				
Market Share		48%	48%	48%	48%	48%			
Percentage of Market		43.20%	43.20%	43.20%	43.20%	43.20%			

Package Take Rate	Year 1	Year 2	Year 3	Year 4	Year 5
R 30 Mbps	0%	0%	0%	0%	0%
R 50 Mbps	0%	0%	0%	0%	0%
R 100 Mbps	0%	0%	0%	0%	0%
R 250 Mbps	0%	0%	0%	0%	0%
R 1 Gbps	100%	100%	100%	100%	100%

Commercial Internet Services

Number of Potential Subscribers	25,910
Initial Data Users	95% Estimate
Occupancy Rate	95% Estimate

Projected Market Size	Year 1	Year 2	Year 3	Year 4	Year 5
	90%	90%	90%	90%	90%
	Year 6	Year 7	Year 8	Year 9	Year 10+
	90%	90%	90%	90%	90%

	Year 1	Year 2	Year 3	Year 4	Year 5	yr. 1	yr. 2	yr. 3		
Market Share		5%	15%	24%	24%	24%	1.00	5%	15%	24%
Percentage of Market		4.5%	13.1%	21.6%	21.6%	21.6%				-8.36%
	Year 6	Year 7	Year 8	Year 9	Year 10+					
Market Share		24%	24%	24%	24%	24%				
Percentage of Market		21.60%	21.60%	21.60%	21.60%	21.60%				

Package Take Rate	Year 1	Year 2	Year 3	Year 4	Year 5
B 30 Mbps	0%	0%	0%	0%	0%
B 100 Mbps	0%	0%	0%	0%	0%
B 250 Mbps	0%	0%	0%	0%	0%
B 1 Gbps	100%	100%	100%	100%	100%
10 Gbps	0%	0%	0%	0%	0%

Capital Additions

Network Equipment

	1	2	3	4	5	1	2	3	4	5
Headend- Data	\$ 20,513,550	\$ 6,837,850	\$ -	\$ -	\$ -	\$ 27,351,400	75.00%	25.00%	0.00%	0.00%
TBD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%
TBD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	75.00%	25.00%	0.00%	0.00%
TBD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
TBD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
TBD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
TBD	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				
Additional Annual Capital		0% (of turn-key cost)		Starts in year	4					

Outside Plant and Facilities

	1	2	3	4	5	1	2	3	4	5
FTTP OSP (passing)	\$ 236,242,600	\$ 236,242,600	\$ -	\$ -	\$ -	\$ 472,485,200	50.00%	50.00%	0.00%	0.00%
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	50.00%	50.00%	0.00%	0.00%
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	50.00%	50.00%	0.00%	0.00%
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	100.00%	0.00%	0.00%	0.00%
Total Backbone and FTTP	\$ 236,242,600	\$ 236,242,600	\$ -	\$ -	\$ -	\$ 472,485,200	50.00%	50.00%	0.00%	0.00%
	\$ 236,242,600	\$ 472,485,200	\$ 472,485,200	\$ 472,485,200	\$ 472,485,200	\$ 472,485,200				
Additional Annual Capital		0% (of turn-key cost)		Starts in year	4					

Last Mile and Customer Premises Equipment

	1	2	3	4	5				
CPE Gbps Commercial	\$ 1,141,920	\$ 2,158,910	\$ 2,161,840	\$ -	\$ -				
CPE Residential & Small Commercial	\$ 520	per new subscriber (average)							
CPE Gbps Commercial	\$ 976	per new subscriber (average)							
IP Telephone Adapter (2 telephones)	\$ -	per new telephone subscriber			\$ 2,394	\$ 499,836,600			
Average Drop Cost	\$ 449	per new residential subscriber				\$ 400.00	overhead	75.42%	\$ 400.00
Average Drop Cost	\$ 449	per new commercial subscriber				\$ 600.00	underground	24.58%	\$ 600.00
TBD	\$ -	per	1 residential subscribers				Residential		Business

PROJECT ASSUMPTIONS

TBD	\$	-	per		1 residential subscribers
TBD	\$	-	per		1 residential subscribers
Digital Set-top Box and CAT-5 Wiring	\$	-	per television		\$ 125 Wiring
Additional Annual Replacement Capital		0.10%	(% of CPE's in service ²)	Starts in year	4 \$ 499,836,600
Miscellaneous Implementation Costs					
		1	2	3	4
Splicing	\$	250,000	\$ -	\$ -	\$ -
Vehicles	\$	300,000	\$ -	\$ -	\$ -
Emergency Restoration Kit	\$	50,000	\$ -	\$ -	\$ -
Work Station, Computers, and Software	\$	2,000	per employee		
Fiber OTDR and Other Tools	\$	150,000	\$ -	\$ -	\$ -
Generators & UPS	\$	100,000	\$ -	\$ -	\$ -
Billing Software	\$	250,000	\$ -	\$ -	\$ -
Additional Annual Capital		0%	(% of Year 1)	Starts in year	4

175,057
45,668

ONT Kit - Basic	\$	395	20%
ONT Kit - Premium	\$	455	80%
ONT Kit - Basic (MDU)	\$	766	20%
ONT Kit - Premium (MDU)	\$	826	80%
ONT Kit - Premium (Bus.)	\$	976	
SFU	79.31%	\$	443
MDU	20.69%	\$	814
			9864,288

²Approximate required additional annual capital, set to equal full reinvestment in replacement CPE.

City of Seattle
FTTP Network - Data Services
Construction in Communication Space & Survey Market Projections
June 2015
Supplemental Tables

	Year 1	Year 5	Year 10	Year 15	Year 20
Operating Expenses					
Insurance	\$ 200,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000
Utilities	36,000	72,000	72,000	72,000	72,000
Office Expenses	36,000	60,000	60,000	60,000	60,000
Facility Lease	120,000	240,000	240,000	240,000	240,000
Locates & Ticket Processing	-	561,000	561,000	561,000	561,000
Peering	33,100	302,900	302,900	302,900	302,900
Contingency	200,000	600,000	600,000	600,000	600,000
Billing Maintenance Contract	-	-	-	-	-
Fiber & Network Maintenance	1,181,210	2,362,430	2,362,430	2,362,430	2,362,430
Vendor Maintenance Contracts	-	732,000	732,000	732,000	732,000
Legal and Lobby Fees	750,000	250,000	250,000	250,000	250,000
Planning	-	-	-	-	-
Consulting	500,000	200,000	200,000	200,000	200,000
Marketing	2,400,000	1,200,000	1,200,000	1,200,000	1,200,000
Education and Training	186,300	851,890	940,560	1,038,450	1,146,540
Customer Handholding	13,230	121,140	121,140	121,140	121,140
Customer Billing (Unit)	6,610	60,570	60,570	60,570	60,570
Allowance for Bad Debts	117,160	915,280	915,280	915,280	915,280
Churn (acquisition costs)	82,680	757,130	757,130	757,130	757,130
PSTN Connection Fee	-	-	-	-	-
Internet	206,310	1,710,160	1,710,160	1,710,160	1,710,160
Sub-Total	\$ 6,068,600	\$ 11,396,500	\$ 11,485,170	\$ 11,583,060	\$ 11,691,150
Labor Expenses	\$ 4,740,570	\$ 21,600,170	\$ 23,816,820	\$ 26,264,180	\$ 28,966,260
Attachment Fees	263,180	263,180	263,180	263,180	263,180
Sub-Total	\$ 5,003,750	\$ 21,863,350	\$ 24,080,000	\$ 26,527,360	\$ 29,229,440
Total Expenses	\$ 11,072,350	\$ 33,259,850	\$ 35,565,170	\$ 38,110,420	\$ 40,920,590
Principal and Interest	\$ 13,357,900	\$ 54,863,700	\$ 54,863,700	\$ 51,185,320	\$ 25,794,180
Facility Taxes	389,700	3,544,860	3,544,860	3,544,860	3,544,860

City of Seattle
FTTP Network - Data Services
Construction in Communication Space & Survey Market Projections
June 2015
Supplemental Tables

Sub-Total	\$	13,747,600	\$	58,408,560	\$	58,408,560	\$	54,730,180	\$	29,339,040
Total Expenses, P&I, and Taxes	\$	24,819,950	\$	91,668,410	\$	93,973,730	\$	92,840,600	\$	70,259,630

		Year 1		Year 5		Year 10		Year 15		Year 20
a. Revenues										
Internet - Residential	\$	8,868,600	\$	85,818,600	\$	85,818,600	\$	85,818,600	\$	85,818,600
Internet - Business		1,193,400		5,708,940		5,708,940		5,708,940		5,708,940
Connection Fee (net)		1,653,600		-		-		-		-
Provider Fee		-		-		-		-		-
Assessments		-		-		-		-		-
Ancillary Revenues		-		-		-		-		-
Total	\$	11,715,600	\$	91,527,540	\$	91,527,540	\$	91,527,540	\$	91,527,540
b. Content Fees										
Internet	\$	206,310	\$	1,710,160	\$	1,710,160	\$	1,710,160	\$	1,710,160
Total	\$	206,310	\$	1,710,160	\$	1,710,160	\$	1,710,160	\$	1,710,160
c. Operating Costs										
Operation Costs	\$	5,862,290	\$	9,686,340	\$	9,775,010	\$	9,872,900	\$	9,980,990
Labor Costs		4,740,570		21,600,170		23,816,820		26,264,180		28,966,260
Pole Attachment Expense		263,180		263,180		263,180		263,180		263,180
Total	\$	10,866,040	\$	31,549,690	\$	33,855,010	\$	36,400,260	\$	39,210,430
d. EBITDA										
	\$	643,250	\$	58,267,690	\$	55,962,370	\$	53,417,120	\$	50,606,950
e. Depreciation										
		17,224,850		47,963,390		37,923,310		37,923,310		37,923,310
f. Operating Income (EBITDA less Depreciation)										
	\$	(16,581,600)	\$	10,304,300	\$	18,039,060	\$	15,493,810	\$	12,683,640
g. Non-Operating Income										
Interest Income	\$	-	\$	142,110	\$	142,110	\$	150,550	\$	193,170
Interest Expense (10 Year Bond)		(820,400)		(141,470)		(141,470)		-		-

**City of Seattle
FTTP Network - Data Services
Construction in Communication Space & Survey Market Projections
June 2015**

Supplemental Tables

Interest Expense (20 Year Bond)	(12,537,500)	(18,120,240)	(18,120,240)	(10,470,740)	(1,051,560)
Interest Expense (Loan)	-	-	-	-	-
Total	\$ (13,357,900)	\$ (18,119,600)	\$ (18,119,600)	\$ (10,320,190)	\$ (858,390)

h. Net Income (before taxes)	\$ (29,939,500)	\$ (13,930,110)	\$ 651,460	\$ 5,905,620	\$ 12,557,250
i. Facility Taxes	\$ 389,700	\$ 3,544,860	\$ 3,544,860	\$ 3,544,860	\$ 3,544,860
j. Net Income	\$ (30,329,200)	\$ (17,474,970)	\$ (2,893,400)	\$ 2,360,760	\$ 9,012,390

	Year 1	Year 5	Year 10	Year 15	Year 20
Net Income	\$ (30,329,200)	\$ (17,474,970)	\$ (2,893,400)	\$ 2,360,760	\$ 9,012,390
Cash Flow	\$ 949,920	\$ (10,303,010)	\$ (16,741,400)	\$ (15,599,830)	\$ 7,023,760

	Year 1	Year 5	Year 10	Year 15	Year 20
Principle Payments	\$ -	\$ 29,759,850	\$ 36,601,990	\$ 40,714,580	\$ 24,742,620
Interest Payments	13,357,900	25,103,850	18,261,710	10,470,740	1,051,560
Total Debt Service	\$ 13,357,900	\$ 54,863,700	\$ 54,863,700	\$ 51,185,320	\$ 25,794,180

	Year 1	Year 5	Year 10	Year 15	Year 20
Unrestricted Cash Balance	\$ 949,920	\$ (13,733,400)	\$ (98,130,350)	\$ (170,941,540)	\$ (231,864,110)
Funded Depreciation	-	21,857,800	23,727,280	27,101,780	44,151,980
Restricted Cash Balance (Interest Reserve)	13,357,900	-	-	-	-
Restricted Cash Balance (Debt Service Reserve)	15,775,500	33,117,500	33,117,500	33,117,500	33,117,500
Total Cash Balance	\$ 30,083,320	\$ 41,241,900	\$ (41,285,570)	\$ (110,722,260)	\$ (154,594,630)

Capital Additions

	Year 1	Year 2	Year 3	Total Years 1 to 3
Network Equipment				

City of Seattle
FTTP Network - Data Services
Construction in Communication Space & Survey Market Projections
June 2015

Supplemental Tables

Headend- Data	\$	20,513,550	\$	6,837,850	\$	-	\$	27,351,400
TBD		-		-		-		-
Total	\$	20,513,550	\$	6,837,850	\$	-	\$	27,351,400

Outside Plant and Facilities

Total Backbone and FTTP	\$	236,242,600	\$	236,242,600	\$	-	\$	472,485,200
Additional Annual Capital		-		-		-		-
Total	\$	236,242,600	\$	236,242,600	\$	-	\$	472,485,200

Last Mile and Customer Premises Equipment

CPE Gbps Commercial	\$	1,141,920	\$	2,158,910	\$	2,161,840		
CPE Residential & Small Commercial	\$	5,121,720	\$	22,240,570	\$	22,198,990	\$	49,561,280
Enterprise CPE and Drop		-		-		-		-
IP Telephone Adapter (2 telephones)		-		-		-		-
Average Drop Cost		4,951,440		20,212,690		20,178,110		45,342,240
Total	\$	11,215,080	\$	44,612,170	\$	44,538,940	\$	100,366,190

Miscellaneous Implementation Costs

Splicing	\$	250,000	\$	-	\$	-		
Vehicles		300,000		-		-		
Emergency Restoration Kit		50,000		-		-		
Work Station, Computers, and Software	\$	96,000	\$	210,000	\$	186,000	\$	492,000
Fiber OTDR and Other Tools		150,000		-		-		150,000
Generators & UPS		100,000		-		-		100,000
Billing Software		250,000		-		-		250,000
Additional Annual Capital		-		-		-		-
Total	\$	1,196,000	\$	210,000	\$	186,000	\$	1,592,000

Total Capital Additions	\$	269,167,230	\$	287,902,620	\$	44,724,940	\$	601,794,790
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