

Mission Statement

The mission of Telecommunications Division within Concord Municipal Light Plant is to supply reliable and cost effective telecommunications services, in a responsible and courteous manner, which meets the current and future needs of our customers.

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Telecommunications Highlights

- The 2013 Concord Town Meeting authorized CMLP to borrow up to \$1,000,000 to fund the expenses associated with expansion of telecommunication activity to include commercial and residential Internet services.
- In March 2014, High Speed Internet service was made generally available to both commercial and residential customers of CMLP over the same infrastructure that was constructed for the Smart Grid and the municipality.
- Over 200 customers were connect by January 2015. The 2015 budget plans to more than double High Speed Internet customers.
- The Public Safety radio network was greatly expanded in 2014 using the CMLP fiber infrastructure. Both coverage and reliability improved at a lower cost.

Expenditure Summary				
	FY12 Actual	FY13 Actual	FY14 Budget	FY15 Proposed
Operating Income	\$ -	\$ (40,389)	\$ (18,460)	\$ 154,100
Startup Expenses	\$ -	\$ (76,599)	\$ (257,015)	\$ (560,000)
Fund Balance	\$ -	\$ (116,988)	\$ (294,340)	\$ (303,615)

Description

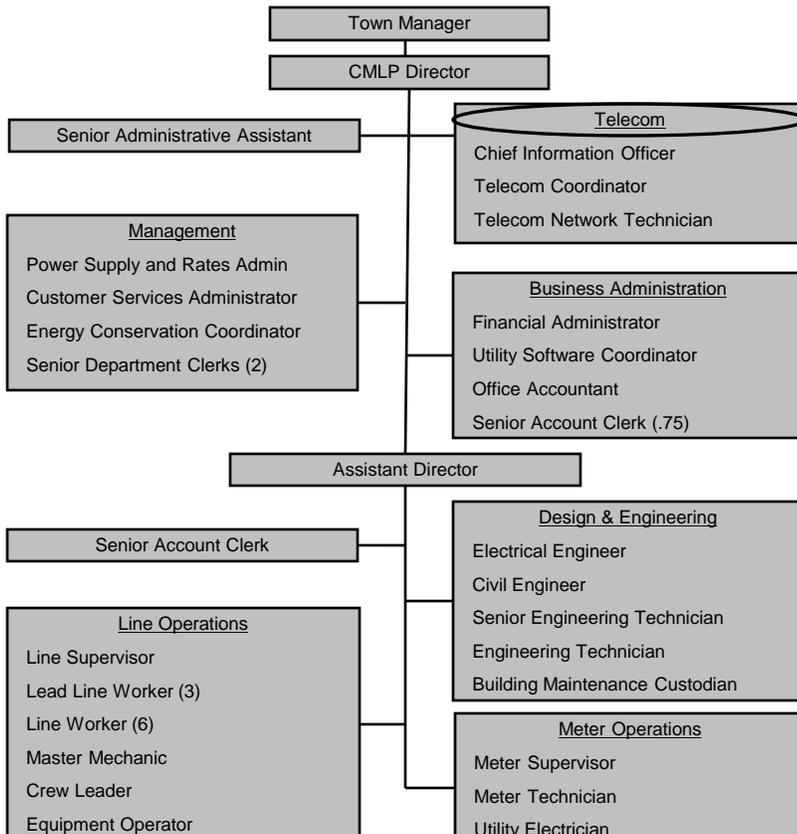
The Telecommunications Division was established within the Concord Municipal Light Plant to provide telecommunication services to the electric utility and support the Town’s municipal operations while also offering services to Concord residents and businesses.

In 2014, CMLP the Telecommunications division, employs Technician, a part-time Specialist and a Coordinator. The Telecommunication division is managed by the Town’s CIO who also manages the information Technology Department.

A result of this management structure is that both the Town’s municipal operations and CMLP’s electrical operations can benefit from having in-house networking resources.

Business administration, customer service for the Telecommunication Division is shared with Electric operations. Engineering and Line Operations also performs some of the outside plant management.

Professional service contracts provide the Division with a 24x7 Help Desk, fiber installation and restoration, network performance monitoring, and technical customer service support. Billing systems are integrated with Electric Utility Billing.



Telecommunications Revenue

In 2015 the total telecommunications revenue growth will depend primarily on new customer installations. Demand for the service is high and there is a backlog which represents a significant portion of the full year plan. CMLP will address the demand in a controlled way to balance the relatively high cost of the initial installations and achieve growth that remains within the funding plan.

Revenue comes from the following activities:

- One-time installation fees of the fiber optic service to homes and business.
- Monthly fees for High Speed Internet Service
- Monthly fees for private data services.

Telecommunications Programs

The Light Plant, Town Government and the other Town enterprises need to have access to high quality telecommunications. Public Safety, Education and Administration are all increasingly dependent on data and data communications. The Light Plant's investment in fiber laid the foundation for a number projects which contribute to efficient and effective operations. The Telecommunication Division provides the necessary operational capability to utilize the fiber network. There are three main program areas.

Broadband Services (Details at: <http://www.concordma.gov/broadband>)

The 2013 Annual Town Meeting approved a borrowing authorization which enabled CMLP to finance the startup and initial operating costs of retail broadband telecommunication services. The action ensured that neither taxes or electric rates would be used pay for the startup. Telecommunications revenue will be used to repay the initial expenses. As the broadband operating revenue grows it will help to reduce the burden on the electric operations of maintaining the fiber network.

CMLP primarily offers general retail High Speed Internet offerings. By providing a fiber optic based internet service, CMLP is filling a gap in the service available to the community while generating a revenue stream that helps to pay for the fiber investment and the telecommunications staff. 2012 Citizen survey data (next page), indicates that interest is high.

Smart Grid Infrastructure

CMLP's Smart Grid Infrastructure is a major investment in technology that supports the distribution of electricity to the customer. Advanced meters, load control, and customer engagement applications have been deployed. Each of these application relies on telecommunications to function. It is the responsibility of Telecommunications Division to deploy and maintain this network. The network contains over 600 devices and is capable of real time communications with our customers throughout the CMLP electric service area.

In 2014, the growth in solar installations drove increases in smart meter usage. Smart meters are read using the smart grid infrastructure.

The fiber network is also being leveraged to support the Water and Sewer enterprises as well. Command and control of this important infrastructure is more reliable, comprehensive and secure as a result the use of fiber.

Municipal Operations Support:

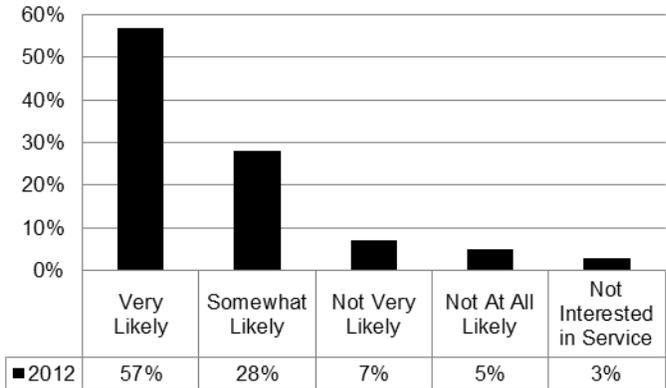
The telecommunications needs of Town Departments is constantly evolving. Separately, neither the Town or the Light Plant could realistically afford to have in-house resources to help meet the requirements. The resulting dependency on vendors and suppliers would be costly and responsiveness would also be reduced. The costs of for providing municipal support for the data and voice network are recovered by the Telecommunication Division through labor sharing agreements that benefit both the Town and the Light Plant. Management by the CIO enables effective coordination and given the close interrelationship between Information Technology and Telecommunications.

Potential Subscription to Town Internet Service

2012 Survey Question- “If the Town were to offer a high-speed internet service to your home, how likely would you be to subscribe to this service?”

Results- 57% of respondents said that they would be “very likely” to subscribe. More men said they would be “very likely” to subscribe than women and the respective percentages are 64% and 51%. In terms of age the number 72% for those under 45, 72% between 45 and 54, 53% between 55 and 64, and 48% 65 and over. Of those respondents who have children in the household 72% replied that they would be “very likely” to subscribe. It should be noted that no price point for the possible internet service was given when the question was asked.

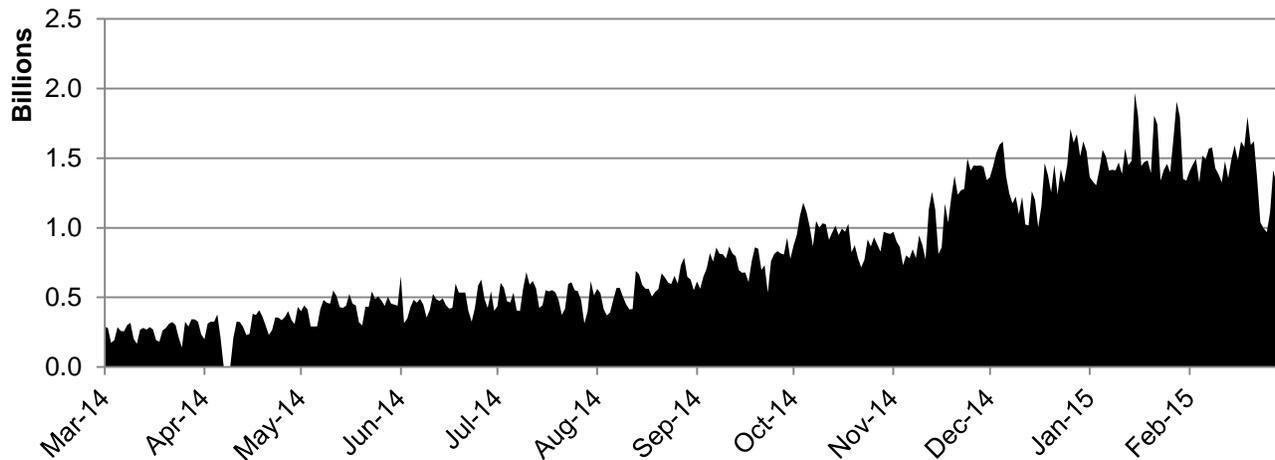
Likelihood of Subscribing to Town Internet Service



Internet Activity

Results- Since the introduction of service, the total daily traffic volume of the Internet service has grown from less than 250 Gigabytes per day to a peak of nearly two Terabytes. A fact of almost 10 times.

Daily Traffic kBytes



OPERATING REVENUES

		2012	2013	2014	2015
		Actual	Actual	Actual	Budget
Operations					
1	Residential & Commercial Fees	\$ -	\$ 5,087	\$ 91,608	\$ 332,000
2	Municipal Fees	-	3,000	56,439	63,600
3	Other	-	-	5,985	-
A	Operating Revenues Total	\$ -	\$ 8,087	\$ 154,032	\$ 395,600

OPERATING EXPENSES

		2013	2013	2014	2015
		Actual	Actual	Actual	Budget
Operations					
4	Personnel Expenses	\$ -	\$ 11,200	\$ 51,613	\$ 72,000
5	Purchased Services	-	25,257	97,222	97,000
6	Supplies & Materials	-	10,999	2,341	37,500
7	Other Charges & Expenses	-	1,020	21,316	35,000
B	Operating Expense	\$ -	\$ 48,476	\$ 172,492	\$ 241,500

NET INCOME

		2013	2013	2014	2015
		Actual	Actual	Actual	Budget
Operations					
A	Operating Revenues	\$ -	\$ 8,087	\$ 154,032	\$ 395,600
B	Less Operating Expenses	-	(48,476)	(172,492)	(241,500)
	Operating Income	\$ -	\$ (40,389)	\$ (18,460)	\$ 154,100
Non-Operations					
8	Less Interest Expense		\$ -	\$ (1,877)	\$ (3,375)
C	Net Income	\$ -	\$ (40,389)	\$ (20,337)	\$ 150,725

AUTHORIZED POSITIONS

		FY15 Budget		FY16 Proposed	
		FTE	Amount	FTE	Amount
9	Chief Information Officer	0.40 FTEs	-	0.40 FTEs	-
10	Telecommunication Coordinator	1.00	-	1.00	-
11	Telecommunication Technician	1.00	-	1.00	-
	Total Personnel Costs	2.40 FTEs	-	2.40 FTEs	-

AVAILABLE RESOURCES

		2012	2013	2014	2015
		Actual	Actual	Actual	Budget
Capital Purposes					
D	Add Net Income	\$ -	\$ (40,389)	\$ (20,337)	\$ 150,725
12	Add Debt Financing	-	-	100,000	425,000
E	Add Intra-Fund Financing	-	116,988	177,352	9,275
13	Less Bonds Payable	-	-	-	(25,000)
F	Net Available for Capital	\$ -	\$ 76,599	\$ 257,015	\$ 560,000

CAPITALIZABLE EXPENSES

		2012	2013	2014	2015
		Actual	Actual	Actual	Budget
Operations					
14	Capital Equipment	\$ -	\$ 3,259	\$ -	\$ 14,000
	Subtotal	\$ -	\$ 3,259	\$ -	\$ 14,000
Capitalizable Startup Expense					
15	Personnel Expenses	\$ -	\$ 33,601	\$ 120,430	\$ 168,000
16	Purchased Services	-	18,273	-	100,000
17	Supplies & Materials	-	-	97,923	150,000
18	Other Charges & Expenses	-	-	6,661	8,000
19	Computer Software	-	900	-	15,000
20	Network Software	-	-	4,425	15,000
21	Network Hardware	-	20,567	27,576	90,000
	Subtotal	\$ -	\$ 73,340	\$ 257,015	\$ 546,000
G	Total Capital Expenses	\$ -	\$ 76,599	\$ 257,015	\$ 560,000

NET CAPITAL

		2012	2013	2014	2015
		Actual	Actual	Actual	Budget
Net Capital					
F	Available for Capital	\$ -	\$ 76,599	\$ 257,015	\$ 560,000
G	Capital Expenses	-	(76,599)	(257,015)	(560,000)
H	Capital Surplus / Deficit	\$ -	\$ -	\$ -	\$ -

FUND BALANCE

		2012	2013	2014	2015
		Actual	Actual	Actual	Budget
Fund Balance					
I	Fund Balance at January 1st	\$ -	\$ -	\$ (116,988)	\$ (294,340)
E	Intra-Fund Financing	-	(116,988)	(177,352)	(9,275)
J	Fund Balance at December 31st	\$ -	\$ (116,988)	\$ (294,340)	\$ (303,615)

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