

Comprehensive Community Infrastructure
Key Metrics Dashboard

Please refer to the CCI Grant Guidelines for instructions on completing this form.

Applicant Profile	
Applicant Name	Massachusetts Technology Collaborative
Title	Massachusetts Broadband Institute MassBroadband 123
Easygrants ID	4722
Headquarters	Westborough, MA
Size (2009 Data) of Applicant Entity	<ul style="list-style-type: none"> • Current Year Revenues: \$55,064,358 • Employees: 52
Technology Type	Aerial Fiber
Key Partners	WesternMA Connect Western Massachusetts Regional Planning Agencies Massachusetts Information Technology Division (ITD) Massachusetts Executive Office of Public Safety and Security (EOPSS) Massachusetts Executive Office of Housing and Economic Development Massachusetts Department of Transportation (MassDOT) University of Massachusetts MITI Northeast Research and Education Network (NEREN)

Project Economics			
Budget Information		Project Financials	
Project Budget	\$71,645,444	Project Revenues (Yr 8)	
Federal Contribution (%)	63.43%	Net Income and Margin (Yr 8)	
Cash Match Amount (%)	32.23%	EBITDA and Margin (Yr 8)	
In Kind Match Amount (%)	4.34%	Rate of Return (w/o BTOP Funds)	
Middle Mile/Last Mile Budget Allocation		Rate of Return (w/ BTOP Funds)	
Middle Mile Percentage (%)	100	Cost Efficiency	
Last Mile Percentage (%)	0	Cost per Mile (MM)	\$42,430
Rural Last Mile Percentage	0	Cost per Household (LM)	N/A

Market Territory	
Geographic Area(s)	123 towns in western and north central Massachusetts, consisting of 3,429 square miles
Middle Mile Network Composition	
Total Proposed Network Miles (MM only)	<ul style="list-style-type: none"> • Total Miles: 1,338.7 • Backbone Miles: 1,016.1 • Lateral Miles: 322.7
New Construction Network Miles (MM only)	<ul style="list-style-type: none"> • Total Miles: 1,012.4 • Backbone Miles: 689.7 • Lateral Miles: 322.7

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Existing Applicant Network Miles Utilized (MM only)	<ul style="list-style-type: none"> • Total Miles: 18.9 • Backbone Miles: 18.9 • Lateral Miles: 0
Leased Network Miles Utilized (MM only)	<ul style="list-style-type: none"> • Total Miles: 307.4 • Backbone Miles: 307.4 • Lateral Miles: 0
Underserved/Unserved	<ul style="list-style-type: none"> • Percentage of Backbone Miles in Underserved/Unserved Areas: 43% • Percentage of Lateral Miles in Underserved/Unserved Areas: 48%
Existing Customer Base	
Existing Residential/Individual Customers within PFSA	None
Existing Business Customers within PFSA	None
Existing Community Anchor Institution Customers within PFSA	<ul style="list-style-type: none"> • Total CAI's: None • Community Colleges: None • Public Safety Entities: None
Existing Third Party Service Provider Customers within PFSA	None
Potential Customer Base	
Market Potential Households (within PFSA)	<ul style="list-style-type: none"> • Total HH's: 388,405 • Located in Underserved/Unserved Areas: 32,260
Market Potential Businesses (within PFSA)	<ul style="list-style-type: none"> • Total Businesses: 44,306 • Located in Underserved/Unserved Areas: 7,701
Market Potential Community Anchor Institutions (within PFSA)	<ul style="list-style-type: none"> • Total CAI's: 2,121 • Located in Underserved/Unserved Areas: 451 • Community Colleges: 10 • Public Safety Entities: 495
Market Potential Third Party Service Providers (within PFSA)	<ul style="list-style-type: none"> • Total Third Party Service Providers in PFSA: 17 • Expressing Commitment or Letter of Interest: 8
Funded Network Coverage	
Households Connected to Network (via BTOP Funds by end of Year 3)	<ul style="list-style-type: none"> • Total Households Connected: 0 • Located in Underserved/Unserved Areas: 0
Businesses Connected to Network (via BTOP Funds by end of Year 3)	<ul style="list-style-type: none"> • Total Businesses Connected: 0 • Located in Underserved/Unserved Areas: 0
Community Anchor Institutions Directly Connected (via BTOP Funds by end of Year 3)	<ul style="list-style-type: none"> • Total Directly Connected CAI's: 1,392 • Located in Underserved/Unserved Areas: 385 • Community Colleges: 10 • Public Safety Entities: 378

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Projected Subscribers by Year Five	<p><u>Directly Served by Applicant</u></p> <ul style="list-style-type: none"> • Community Anchor Institutions: 796 • Households: 0 • Businesses: 0 • Third Party Service Providers: 8 <p><u>Served by Proposed Network Via Third Party Service Provider</u></p> <ul style="list-style-type: none"> • Community Anchor Institutions: 722 • Households: 31,480 • Businesses: 9,348
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Other	
Proposed MM Network Capacity	<ul style="list-style-type: none"> • Backbone: Lit Multiple 10 Gig Lambdas, plus 288 Strand Dark Fiber • Laterals: Lit Minimum 1Gig, plus 48-288 Strands Dark Fiber
Proposed LM Network Speed	<ul style="list-style-type: none"> • Highest offered speed tier: N/A • Estimated Average speed for highest speed tier: N/A
Total Points of Interconnection	<ul style="list-style-type: none"> • Total Pol's: 82 • Pol's in Underserved/Unserved Areas: 33 • Environmentally-controlled, non-passive Pols: 25
Jobs Created	<ul style="list-style-type: none"> • Direct Job-years: 420 • Indirect Job-years: 348 • Induced Job-years: 2,207
Required Time for Project Completion (Number of Required Quarters to Fully Build-out and Test Network and Make Ready for Commercial Service)	9

Broadband Subscriber E

Name of Service Offering	Customer Type	Year 0	Cumulative/Net Add	
			Qtr 1	
Broadband 50	Community Anchor Inst.	0	Cumulative	0
			Net Add	0
Broadband 100	Third Party Service Provider	0	Cumulative	0
			Net Add	0
Broadband 100	Community Anchor Inst.	0	Cumulative	0
			Net Add	0
Broadband 100	Third Party Service Provider	0	Cumulative	0
			Net Add	0
Metro Ethernet 100	Community Anchor Inst.	0	Cumulative	0
			Net Add	0
Metro Ethernet 100	Third Party Service Provider	0	Cumulative	0
			Net Add	0
Metro Ethernet 1000	Community Anchor Inst.	0	Cumulative	0
			Net Add	0
Metro Ethernet 1000	Third Party Service Provider	0	Cumulative	0
			Net Add	0
DS-1	Community Anchor Inst.	0	Cumulative	0
			Net Add	0
DS-1	Third Party Service Provider	0	Cumulative	0
			Net Add	0
DS-3	Community Anchor Inst.	0	Cumulative	0
			Net Add	0
DS-3	Third Party Service Provider	0	Cumulative	0
			Net Add	0
Wavelength 5G	Community Anchor Inst.	0	Cumulative	0
			Net Add	0
Wavelength 5G	Third Party Service Provider	0	Cumulative	0
			Net Add	0
Wavelength 10G	Community Anchor Inst.	0	Cumulative	0
			Net Add	0
Wavelength 10G	Third Party Service Provider	0	Cumulative	0
			Net Add	0
Backhaul to Boston [Mbps]	Community Anchor Inst.	0	Cumulative	0
			Net Add	0
Backhaul to Boston [Mbps]	Third Party Service Provider	0	Cumulative	0
			Net Add	0
Served by Third Party Service	Indirect - Com. Anchor Inst.	0	Cumulative	0
			Net Add	0
Served by Third Party Service	Indirect - Business	0	Cumulative	0
			Net Add	0

Providers	Indirect - Business	0	Net Add	0
	Indirect - Res./Ind.	0	Cumulative Net Add	0 0
Cumulative Totals (excluding Indirect)	Residential/Individual	0	Total	0
	Business	0	Total	0
	Community Anchor Inst.	0	Total	0
	Third Party Service Provider	0	Total	0
Cumulative Totals (including Indirect)	Residential/Individual	0	Total	0
	Business	0	Total	0
	Community Anchor Inst.	0	Total	0

Table of Customer Types

Residential/Individual
Business
Community Anchor Inst.
Third Party Service Provider
Indirect - Res./Ind.
Indirect - Business
Indirect - Com. Anchor Inst.

Explanation of

An in-depth ex

We have follow
census statistic

For each custo
customer segr

To achieve gre:

- Anchor institu
- Public Safety
- Households a

For third party
demand by cor
backhaul dema

estimates

Year 1			Year 2				Year 3		
Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3
0	0	0	0	0	15	35	63	100	137
0	0	0	0	0	15	20	28	37	37
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	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	15	34	61	98	134
0	0	0	0	0	15	19	27	37	36
0	0	0	0	0	37	68	109	146	186
0	0	0	0	0	37	31	41	37	40
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	2	4	8	16	22
0	0	0	0	0	2	2	4	8	6
0	0	0	0	0	2	5	10	16	21
0	0	0	0	0	2	3	5	6	5
0	0	0	0	0	1	3	5	7	10
0	0	0	0	0	1	2	2	2	3
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	3	5	8	11	14
0	0	0	0	0	3	2	3	3	3
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	1	1
0	0	0	0	0	0	0	1	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
0	0	0	0	0	0	0	0	0	1
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	229	579	1,007	1,450	1,880
0	0	0	0	0	229	350	428	443	430
0	0	0	0	0	0	29	68	122	194
0	0	0	0	0	0	29	39	54	72
0	0	0	0	0	329	1,129	1,969	2,940	3,775

0	0	0	0	0	329	800	840	971	835
0	0	0	0	0	1,135	4,031	7,137	10,386	13,332
0	0	0	0	0	1135	2896	3106	3249	2946
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	32	74	134	214	292
0	0	0	0	0	43	80	131	181	234
0	0	0	0	0	1,135	4,031	7,137	10,386	13,332
0	0	0	0	0	329	1,129	1,969	2,940	3,775
0	0	0	0	0	32	103	202	336	486

Methodology:

A detailed explanation of our methodology is provided in the Key Assumptions document in the Supplemental Information.

We developed a granular bottom-up build of customer volumes, tied back to market and program data. Source data for forecasts on broadband penetration and adoption within the region, and primary research with our principal customer

segments. For the residential customer segment we have developed an adoption profile reflecting the network rollout schedule and the expected time for customers to take services from the MassBroadband 123 network.

To improve accuracy in forecasting, the major customer segments have been further segmented on the following basis:

- Residential customers segmented on whether or not they are directly connected to the network

- Government customers (State and Security, Commonwealth and Municipal Govt.) are treated as a separate segment as committed anchor tenants

- Business customers segmented on whether or not they are in an area which is currently served.

For service providers we have considered the connectivity needs of both wireless and wireline providers. A bottom-up connectivity application has been developed which includes demand for backhaul bandwidth from broadband providers and is tied to the projected number of household and business customers.

	Year 4				Year 5				
Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1
175	210	244	278	311	329	341	346	343	339
38	35	34	34	33	18	12	5	-3	-4
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
0	3	6	9	14	18	23	27	31	34
0	3	3	3	5	4	5	4	4	3
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
171	206	242	277	312	333	348	356	355	354
37	35	36	35	35	21	15	8	-1	-1
223	258	297	334	365	387	402	411	412	411
37	35	39	37	31	22	15	9	1	-1
0	1	1	3	4	5	6	8	9	10
0	1	0	2	1	1	1	2	1	1
29	37	43	49	58	62	66	68	69	72
7	8	6	6	9	4	4	2	1	3
27	33	39	45	50	54	56	58	58	58
6	6	6	6	5	4	2	2	0	0
13	15	20	21	23	24	25	25	26	26
3	2	5	1	2	1	1	0	1	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
16	18	20	22	22	23	24	24	25	25
2	2	2	2	0	1	1	0	1	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
2	2	3	3	4	4	4	4	4	4
1	0	1	0	1	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	1	1	1	1	1	2	2	2	2
0	0	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
2,280	2,692	3,124	3,535	3,926	4,182	4,370	4,476	4,573	4,671
400	412	432	411	391	256	188	106	97	98
266	338	411	483	555	627	671	704	722	722
72	72	73	72	72	72	44	33	18	0
4,611	5,449	6,288	7,129	7,971	8,564	8,952	9,184	9,348	9,513

836	838	839	841	842	593	388	232	164	165
16,293	19,268	22,256	25,258	28,274	30,130	31,131	31,381	31,480	31,578
2961	2975	2988	3002	3016	1856	1001	250	99	98
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
373	453	532	612	691	739	774	795	796	795
284	331	384	430	473	501	523	534	538	540
16,293	19,268	22,256	25,258	28,274	30,130	31,131	31,381	31,480	31,578
4,611	5,449	6,288	7,129	7,971	8,564	8,952	9,184	9,348	9,513
639	791	943	1,095	1,246	1,366	1,445	1,499	1,518	1,517

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Year 6			Year 7				Year 8		
Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3
335	331	328	324	320	317	313	309	305	302
-4	-4	-3	-4	-4	-3	-4	-4	-4	-3
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
38	42	46	49	53	57	61	64	68	72
4	4	4	3	4	4	4	3	4	4
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
353	352	351	350	349	347	346	345	344	343
-1	-1	-1	-1	-1	-2	-1	-1	-1	-1
411	411	411	410	411	411	409	409	409	408
0	0	0	-1	1	0	-2	0	0	-1
11	12	13	14	15	16	17	19	20	21
1	1	1	1	1	1	1	2	1	1
73	74	75	78	79	80	84	85	86	88
1	1	1	3	1	1	4	1	1	2
58	58	58	58	58	58	58	58	58	58
0	0	0	0	0	0	0	0	0	0
26	27	27	28	28	28	29	29	30	30
0	1	0	1	0	0	1	0	1	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
26	27	27	28	29	29	30	30	31	31
1	1	0	1	1	0	1	0	1	0
0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
4	4	4	4	5	5	5	5	5	5
0	0	0	0	1	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
2	2	2	2	2	2	2	2	2	2
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
4,771	4,871	4,972	5,073	5,176	5,280	5,384	5,490	5,596	5,681
100	100	101	101	103	104	104	106	106	85
722	722	722	722	722	722	722	722	722	722
0	0	0	0	0	0	0	0	0	0
9,678	9,844	10,009	10,175	10,341	10,508	10,675	10,842	11,009	11,177

Qtr 4
298
-4
0
0
75
3
0
0
342
-1
406
-2
22
1
89
1
58
0
30
0
0
0
31
0
0
0
5
0
0
0
2
0
0
0
5,765
84
722
0
11,344

167
32,626
93
0
0
795
563
32,626
11,344
1,517

Proposed Middle Mile Service Offerings

Name of Service Offering	Distance Band or Point to Point	Minimum Peak Load Network Bandwidth Capacity (Mbps)	Monthly/Yearly Pricing (\$)	Other Comments/Description/Features or Limitations
Broadband-50	Point to Point (to any Service Providing Location)	5	\$ 99 / Month	50 Mbps Business Broadband 5 Mbps CIR, 50 Mbps EIR
Broadband-100	Point to Point (to any Service Providing Location)	10	\$ 149 / Month	100 Mbps Business Broadband 10 Mbps CIR, 100 Mbps EIR
Ethernet-100	Point to Point (to any Service Providing Location)	100	\$ 475 / Month	Guaranteed Bandwidth, Point to Point
Ethernet-1000	Point to Point (to any Service Providing Location)	1,000	\$ 1200 / Month	Guaranteed Bandwidth, Point to Point
Wavelength-2.5G	Point to Point (to any Service Providing Location)	2,500	\$ 2500 / Month	Guaranteed Bandwidth, Point to Point
Wavelength-5G	Point to Point (to any Service Providing Location)	5,000	\$ 4000 / Month	Guaranteed Bandwidth, Point to Point
Wavelength-10G	Point to Point (to any Service Providing Location)	10,000	\$ 7500 / Month	Guaranteed Bandwidth, Point to Point
Dark Fiber Mile	Per Strand Mile	N/A	\$15 / Strand / Mile / Month	
DS-1	Point to Point (to any Service Providing Location)	1.5	\$ 150 / Month	Guaranteed Bandwidth, Point to Point
DS-3	Point to Point (to any Service Providing Location)	45	\$1100 / Month	Guaranteed Bandwidth, Point to Point
OC-3	Point to Point (to any Service Providing Location)	155	\$2200 / Month	Guaranteed Bandwidth, Point to Point

Boston Transport	Srpingfield to Boston	10,000 Max	\$3 / Mbps / Month	Priced Per Mbps, Providing Connectivity to Major Boston Carrier Neutral Facilities, Including Nothern Crossroads and Internet2 Peering
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Notes:

Commonwealth of Massachusetts Executive Agencies will receive 15% discount on all services

All products are wholesale, open access transport

Internet access provided by ISP's and other service providers

Competitor Data

Competitor Data - Last Mile Service Providers

Service Provider	Service Areas Where Service Available, with Percentage Covered	Technology Platform	Service Tiers	Downstream Speed	Monthly Pricing	Other Comments/Description/Features or Limitations
Verizon Residential DSL with Verizon Landline	Service Area 3 - 43% Service Area 4 - 56% Service Area 5 - 36% Service Area 6 - 3% Service Area 7 - 41% Service Area 8 - 95% Service Area 9 - 89% Service Area 10 - 90% Service Area 11 - 52% Service Area 12 - 89% Service Area 13 - 75% Service Area 14 - 82%	ADSL over Copper POTS	1.0Mbps/384Kbps	1.0Mbps	\$ 20	Limited Availability (Even in Covered Service Areas)
			3.0Mbps/768Kbps	3.0Mbps	\$ 30	
			7.1Mbps/768Kbps	7.1Mbps	\$ 40	
			1.0Mbps/384Kbps	1.0Mbps	\$ 35	
Verizon Residential DSL without Verizon Landline	Service Area 3 - 43% Service Area 4 - 56% Service Area 5 - 36% Service Area 6 - 3% Service Area 7 - 41% Service Area 8 - 95% Service Area 9 - 89% Service Area 10 - 90% Service Area 11 - 52% Service Area 12 - 89% Service Area 13 - 75% Service Area 14 - 82%	ADSL over Copper Dry Loop	3.0Mbps/768Kbps	3.0Mbps	\$ 45	Long Distances from Sparse Central Offices and Remote Terminals, Combined with Poor Copper Quality Prevent DSL Delivery of Service to Many Residences and Business
			7.1Mbps/768Kbps	7.1Mbps	\$ 55	
			Up to 7.1 Mbps/768Kbps	7.1Mbps	\$ 150	
Verizon Business DSL	Service Area 3 - 43% Service Area 4 - 56% Service Area 5 - 36% Service Area 6 - 3% Service Area 7 - 41% Service Area 8 - 95% Service Area 9 - 89% Service Area 10 - 90% Service Area 11 - 52% Service Area 12 - 89% Service Area 13 - 75% Service Area 14 - 82%	DSL over Copper Landline or Dry Loop	Up to 3.0Mbps/768Kbps	3.0Mbps	\$ 80	Lower Cost Residential Service Requires Verizon Landline
			15Mbps/5Mbps	15Mbps	\$ 55	
Verizon Residential FIOS	Service Area 12 - 10%	FTTP	25Mbps/25Mbps	25Mbps	\$ 70	Limited Availability (Even in Covered Service Area)
			50Mbps/20Mbps	50Mbps	\$ 145	
			15Mbps/5Mbps	15Mbps	\$ 110	

Verizon <u>Business</u> FIOS	Service Area 12 - 10%	FTTP	25Mbps/25Mbps	25Mbps	\$	125	(Even in Covered Service Area)
			50Mbps/20Mbps	50Mbps	\$	190	
Verizon T1	Spotty Availability in Most of PFSA	ILEC DS1	1.5 Mbps / 1.5 Mbps	1.5Mbps	\$	494	Minimum Cost in All Service Areas
Comcast <u>Residential</u> without TV or Phone	Service Area 4 - 32% Service Area 6 - 2% Service Area 7 - 28% Service Area 10 - 81% Service Area 12 - 74% Service Area 14 - 63%	Cable Internet Access	1Mbps/384Kbps	1Mbps	\$	40	Limited Availability (Even in Covered Service Area)
			15Mbps/3Mbps	15Mbps	\$	58	
			20Mbps/4Mbps	20Mbps	\$	68	
			30Mbps/7Mbps	30Mbps	\$	78	
			50Mbps/10Mbps	50Mbps	\$	117	
Comcast <u>Business</u>	Service Area 4 - 32% Service Area 6 - 2% Service Area 7 - 28% Service Area 10 - 81% Service Area 12 - 74% Service Area 14 - 63%	Cable Internet Access	6Mbps/1Mbps	6Mbps	\$	60	Limited Availability (Even in Covered Service Area)
			22Mbps/5Mbps	22Mbps	\$	100	
			50Mbps/10Mbps	50Mbps	\$	190	
Charter <u>Residential</u>	Service Area 7 - 15% Service Area 13 - 82% Service Area 14 - 22%	Cable Internet Access	1Mbps/128Mbps	1Mbps	\$	20	Limited Availability (Even in Covered Service Area)
			5Mbps/1Mbps	5Mbps	\$	40	
			10Mbps/2Mbps	10Mbps	\$	50	
			20Mbps/2Mbps	20Mbps	\$	65	
Charter <u>Business</u>	Service Area 7 - 15% Service Area 13 - 82% Service Area 14 - 22%	Cable Internet Access	8Mbps/1Mbps	7Mbps	\$	75	Limited Availability (Even in Covered Service Area)
			16Mbps/2Mbps	10Mbps	\$	105	
			20Mbps/5Mbps	20Mbps	Site Survey		
Time Warner <u>Residential</u>	Service Area 3 - 50% Service Area 5 - 13% Service Area 8 - 84% Service Area 9 - 83% Service Area 12 - 10%	Cable Internet Access	10Mbps/5Mbps	10Mbps	\$	47	Limited Availability (Even in Covered Service Area)
			15Mbps/5Mbps	15Mbps	\$	57	
Time Warner <u>Business</u>	Service Area 3 - 50% Service Area 5 - 13% Service Area 8 - 84% Service Area 9 - 83% Service Area 12 - 10%	Cable Internet Access	7Mbps/768kbps	5Mbps	\$	90	Limited Availability (Even in Covered Service Area)
			10Mbps/1Mbps	10Mbps	\$	140	
Cox Communications Residential	Service Area 14 - 0.3%	Cable Internet Access	3 Mbps/384k	3Mbps	\$	32	Very Limited Availability (Even in Covered Service Area)
			10Mbps/768kbps	10Mbps	\$	47	
			20Mbps/1.5Mbps	20Mbps	\$	60	
Cox Communications Business	Service Area 14 - 0.3%	Cable Internet Access	15Mbps/2Mbps	15Mbps	\$	89	

Competitor Data - Middle Mile Service Providers

Service Provider	Service Areas Where Service Available	Technology Platform	Service Tiers	Distance Band or Point-to-Point	Minimum Peak Load Network Bandwidth Capacity	Monthly Pricing	Other Comments/Description/Features or Limitations
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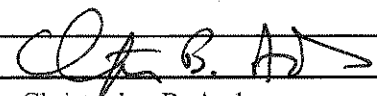
Verizon	Spotty Availability in Most of PFSA	Digital Switched Circuit	DS-3	Distance Band	45Mbps	\$ 2,414	Minimum Cost in All Service Areas Higher Mileage Increases Cost Pricing Reflects 3 Year Commit
Verizon	Very Limited Availability in PFSA	Optical Carrier	OC-3	Distance Band	155 Mbps	\$ 5,860	Minimum Cost in All Service Areas Higher Mileage Increases Cost Pricing Reflects 3 Year Commit
Verizon	Very Limited Availability in PFSA	Optical Carrier	OC-12	Distance Band	622 Mbps	\$ 13,575	Minimum Cost in All Service Areas Higher Mileage Increases Cost Pricing Reflects 3 Year Commit

Note limited availability of services, even in covered Service Areas

DISCLOSURE OF LOBBYING ACTIVITIES

Approved by OMB
0348-0046

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See reverse for public burden disclosure.)

1. Type of Federal Action: <input type="checkbox"/> a. contract <input checked="" type="checkbox"/> b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance	2. Status of Federal Action: <input checked="" type="checkbox"/> a. bid/offer/application b. initial award c. post-award	3. Report Type: <input checked="" type="checkbox"/> a. initial filing b. material change For Material Change Only: year _____ quarter _____ date of last report _____
4. Name and Address of Reporting Entity: <input checked="" type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, if known: Massachusetts Technology Park Corporation 75 North Drive Westborough, MA 01581 Congressional District, if known:	5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime: Congressional District, if known:	
6. Federal Department/Agency: National Telecommunications and Information Administration- Department of Commerce	7. Federal Program Name/Description: Broadband Technology Opportunities Program- CCI CFDA Number, if applicable: <u>11.557</u>	
8. Federal Action Number, if known:	9. Award Amount, if known: \$	
10. a. Name and Address of Lobbying Registrant <i>(if individual, last name, first name, MI):</i> N/A	b. Individuals Performing Services <i>(including address if different from No. 10a)</i> <i>(last name, first name, MI):</i> N/A	
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Signature: <u></u> Print Name: <u>Christopher B. Andrews</u> Title: <u>Chief Financial and Administrative Officer</u> Telephone No.: <u>(508) 870-0312</u> Date: <u>5/13/10</u>	
Federal Use Only:		Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

CERTIFICATION REGARDING LOBBYING LOWER TIER COVERED TRANSACTIONS

Applicants should review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 15 CFR Part 28, "New Restrictions on Lobbying."

LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into a grant, cooperative agreement or contract over \$100,000 or a loan or loan guarantee over \$150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the applicant certifies that to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

In any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above applicable certification.

NAME OF APPLICANT

AWARD NUMBER AND/OR PROJECT NAME

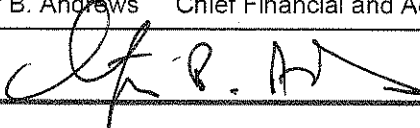
Massachusetts Technology Park Corporation

MassBroadband 123

PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

Christopher B. Andrews Chief Financial and Administrative Officer

SIGNATURE



DATE

5/13/10

CERTIFICATION REGARDING LOBBYING

Applicants should also review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 15 CFR Part 28, "New Restrictions on Lobbying." The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Commerce determines to award the covered transaction, grant, or cooperative agreement.

LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into a grant, cooperative agreement or contract over \$100,000 or a loan or loan guarantee over \$150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the applicant certifies that to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

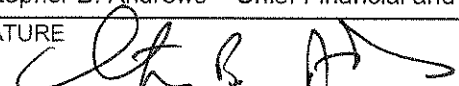
Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

In any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

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As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above applicable certification.

NAME OF APPLICANT	AWARD NUMBER AND/OR PROJECT NAME
Massachusetts Technology Park Corporation	MassBroadband 123
PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE	
Christopher B. Andrews Chief Financial and Administrative Officer	
SIGNATURE 	DATE 5/13/10

**U.S. Department of Commerce
Broadband Technology Opportunities Program
Authentication and Certifications**

1. I certify that I am the duly Authorized Organization Representative (AOR) of the applicant organization, and that I have been authorized to submit the attached application on its behalf.
2. I certify that I have examined this application, that all of the information and responses in this application, including certifications, and forms submitted, all of which are part of this grant application, are material representations of fact and true and correct to the best of my knowledge, that the entity(ies) that is requesting grant funding pursuant to this application and any subgrantees and subcontractors will comply with the terms, conditions, purposes, and federal requirements of the grant program; that no kickbacks were paid to anyone; and that a false, fictitious, or fraudulent statements or claims on this application are grounds for denial or termination of a grant award, and/or possible punishment by a fine or imprisonment as provided in 18 U.S.C. §1001 and civil violations of the False Claims Act.
3. I certify that the entity(ies) I represent has and will comply with all applicable federal, state, and local laws, rules, regulations, ordinances, codes, orders and programmatic rules and requirements relating to the project. I acknowledge that failure to do so may result in rejection or deobligation of the grant or loan award. I acknowledge that failure to comply with all federal and program rules could result in civil or criminal prosecution by the appropriate law enforcement authorities.
4. I certify that the entity(ies) I represent has and will comply with all applicable administrative and federal statutory, regulatory, and policy requirements set forth in the Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements ("DOC Pre-Award Notification"), published in the Federal Register on February 11, 2008 (73 FR 7696), as amended; DOC Financial Assistance Standard Terms and Conditions (Mar. 8, 2009); the Department of Commerce American Recovery and Reinvestment Act Award Terms (Apr. 9, 2009); and any Special Award Terms and Conditions that are included by the Grants Officer in the award.
5. I certify that any funds awarded to the entity(ies) I represent as a result of this application will not result in any unjust enrichment of such entity(ies) or duplicate any funds such entity(ies) receives under federal universal service support programs administered by the Universal Service Administrative Corporation (USAC).
6. I certify that the entity(ies) I represent has secured access to pay the 20% of total project cost or has petitioned the Assistant Secretary of NTIA for a waiver of the matching requirement.

March 24, 2010
Date


Authorized Organization Representative Signature

Christopher B. Andrews
Print Name

Chief Financial Officer
Title