

# Town of Yarmouth

Per M.G.L.: All town and school boards, committees, commissions, and authorities shall post a notice of every meeting at least 48 hours prior to such meeting, excluding Saturdays, Sundays, and legal holidays. Notice shall contain a listing of topics/agenda that the chair reasonably anticipates will be discussed at the meeting.

## Notice of Meeting

Name of committee, board, etc:	<b>Community &amp; Economic Development Committee (CEDC)</b>
Date of Meeting:	<b>October 7, 2019</b>
Time:	<b>4:30 p.m.</b>
Place:	<b>Cape Light Compact Conference Room 261 White's Path South Yarmouth, MA 02664</b>

### Agenda

1. Yarmouth Businesses Broadband Needs Project Update
  - o Discussion with Dave Talbot from CTC
  - o Survey Discussion/Possible Vote
2. Tourism Revenue Preservation Fund
  - o Budget Update
  - o Lodging Tax Receipts Update
3. Committee Member Updates
4. Staff Updates
  - o Opportunity Zone Update
  - o Fencing and CIB Progress Report
  - o Grant Application Updates
5. Future Agenda Items
  - o Collaborative Workspace/Makerspace
  - o GIZ Extension
  - o Redevelopment Authorities
  - o Public Art
6. Minutes for Review
  - o August 12, 2019
7. Upcoming Meetings
  - o October 10, 2019
8. Adjourn

YARMOUTH TOWN CLERK

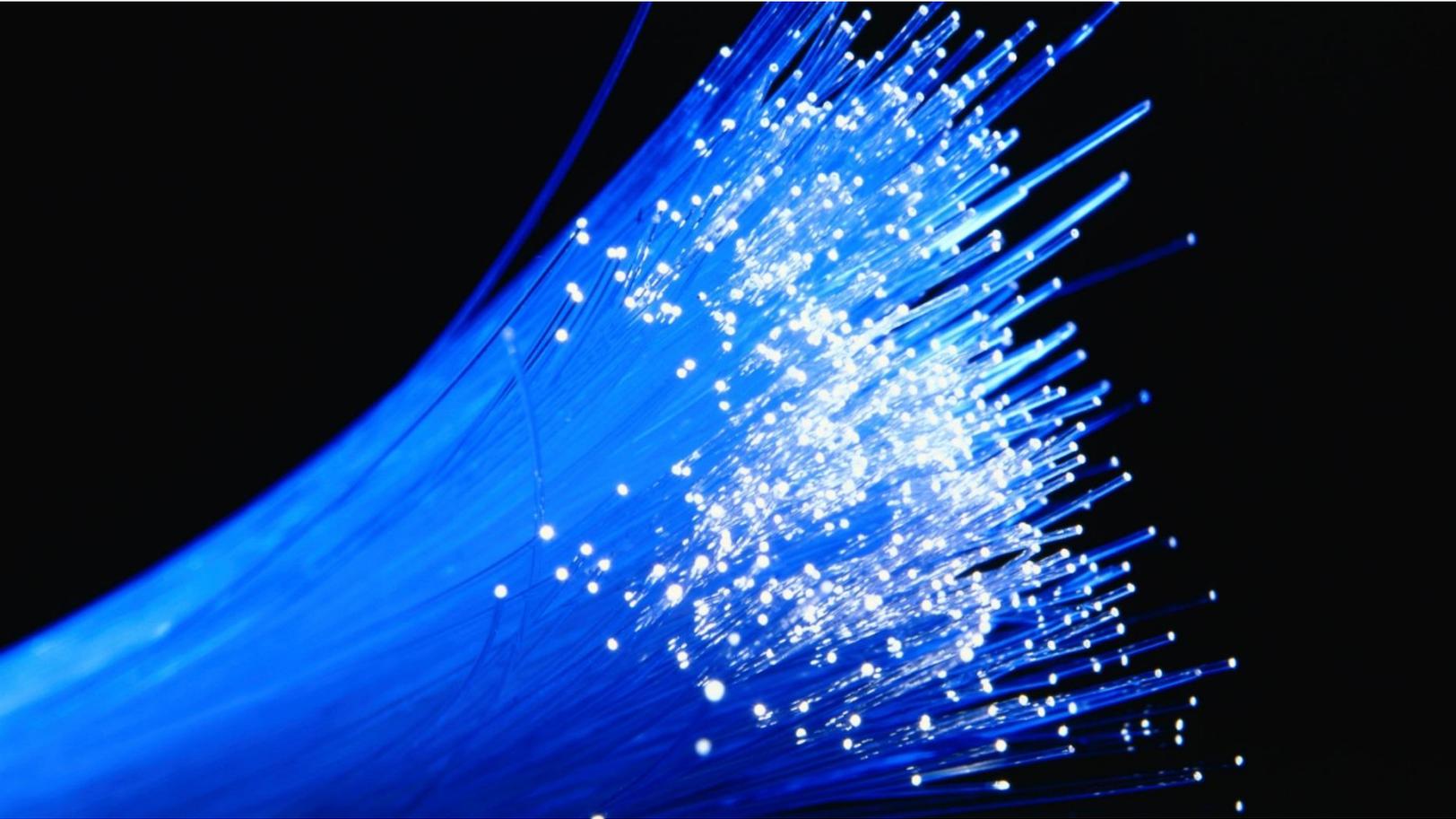
'19SEP30AM11:32 REC

Posted By (Name):	Kyle Pedicini
Signature:	<i>Kyle Pedicini</i>

Copies of documents and other exhibits listed here may be found in the Department of Community Development at Yarmouth Town Hall.

# ctc technology & energy

engineering & business consulting



## **Analysis of Business Data in Yarmouth, Massachusetts**

**Prepared for the Town of Yarmouth  
September 2019**

**Columbia Telecommunications Corporation**

10613 Concord Street • Kensington, MD 20895 • Tel: 301-933-1488 • Fax: 301-933-3340 • [www.ctcnet.us](http://www.ctcnet.us)

**Contents**

- 1 Executive Summary and Recommendations ..... 1
  - 1.1 Most Yarmouth Businesses are Small and Likely to be Price Sensitive When Considering Broadband Services..... 1
  - 1.2 The Large Number of Businesses Along Route 28 and in the Opportunity Zone Warrants Further Study About Their Needs..... 3
  - 1.3 Many Local Businesses May be Unaware of OpenCape as a Potential Alternative ..... 3
  - 1.4 Additional Data Gathering and Analysis Could Enable the Town to Identify Next Steps 5
- 2 Overview of Businesses in Yarmouth ..... 6
- 3 Summary of Attributes of Town Businesses..... 9
- 4 Potential Business Broadband Customers in Yarmouth..... 13
- 5 Analysis of Business Data by Zone ..... 15
- 6 Perspective on the Route 28 Abutment and Opportunity Zone Areas ..... 17
- Appendix A: Chamber of Commerce Responses to Information Request ..... 18
- Appendix B: Responses to OpenCape Information Request ..... 20
- Appendix C: Connectivity Use Survey for Businesses ..... 22

**Figures**

- Figure 1: Number of Yarmouth Businesses by Tier ..... 2
- Figure 2: OpenCape Fiber Network in Yarmouth ..... 4
- Figure 3: Map of All Yarmouth Businesses, Emphasizing Route 28 Abutment Zone ..... 6
- Figure 4: Map of Zones B1, B2, and B3 Showing Business Locations ..... 7
- Figure 5: Business Locations in Route 28 Abutment Zone ..... 8
- Figure 6: Map of Opportunity Zone Showing Business Locations ..... 8
- Figure 7: Employment Levels at Yarmouth Businesses ..... 9
- Figure 8: Reported Annual Telecommunications Spending by Yarmouth Businesses ..... 10
- Figure 9: Reported Technology Spending by Yarmouth Businesses..... 11
- Figure 10: Annual Sales Reported by Yarmouth Businesses..... 12
- Figure 11: Average Number of Employees of Local Businesses, by Zone ..... 15
- Figure 12: Average Annual Sales of Yarmouth Businesses by Zone ..... 16

**Tables**

Table 1: Potential Business Target Market (Reported by InfoUSA)..... 14  
Table 2: Estimated Businesses by Tier ..... 15

## **1 Executive Summary and Recommendations**

In the summer of 2019, the Town of Yarmouth engaged CTC Technology & Energy (CTC) to help identify the potential broadband needs of Yarmouth businesses. The analysis was intended as a first step toward developing strategies to potentially assist in promote economic development by meeting those needs.

Within the scope of this engagement, CTC purchased and analyzed a verified dataset from InfoUSA containing information about businesses in the Town. We also prepared and sent information requests to the Yarmouth Chamber of Commerce (Appendix A), and the regional fiber provider, OpenCape (Appendix B), and incorporated the responses into our analysis. Finally, we drafted a survey instrument and provided it to the Town for the Town's future use. This instrument is provided as Appendix C.

The InfoUSA dataset, which has already been provided to the Town, contained information about 990 unique businesses, including the businesses' number of employees, location, annual sales, annual telecommunications expenditures (for communications services including telephone, broadband, and other data transmission services) and annual technology spending (for computer networking, supply, and repair services).

These data points provide a general profile of the businesses. Two metrics in particular—number of employees and annual telecommunications spending—enabled us to categorize the 990 businesses in four “tiers” that provide a general sense of how interested they might be in alternatives to existing broadband services.

### **1.1 Most Yarmouth Businesses are Small and Likely to be Price Sensitive When Considering Broadband Services**

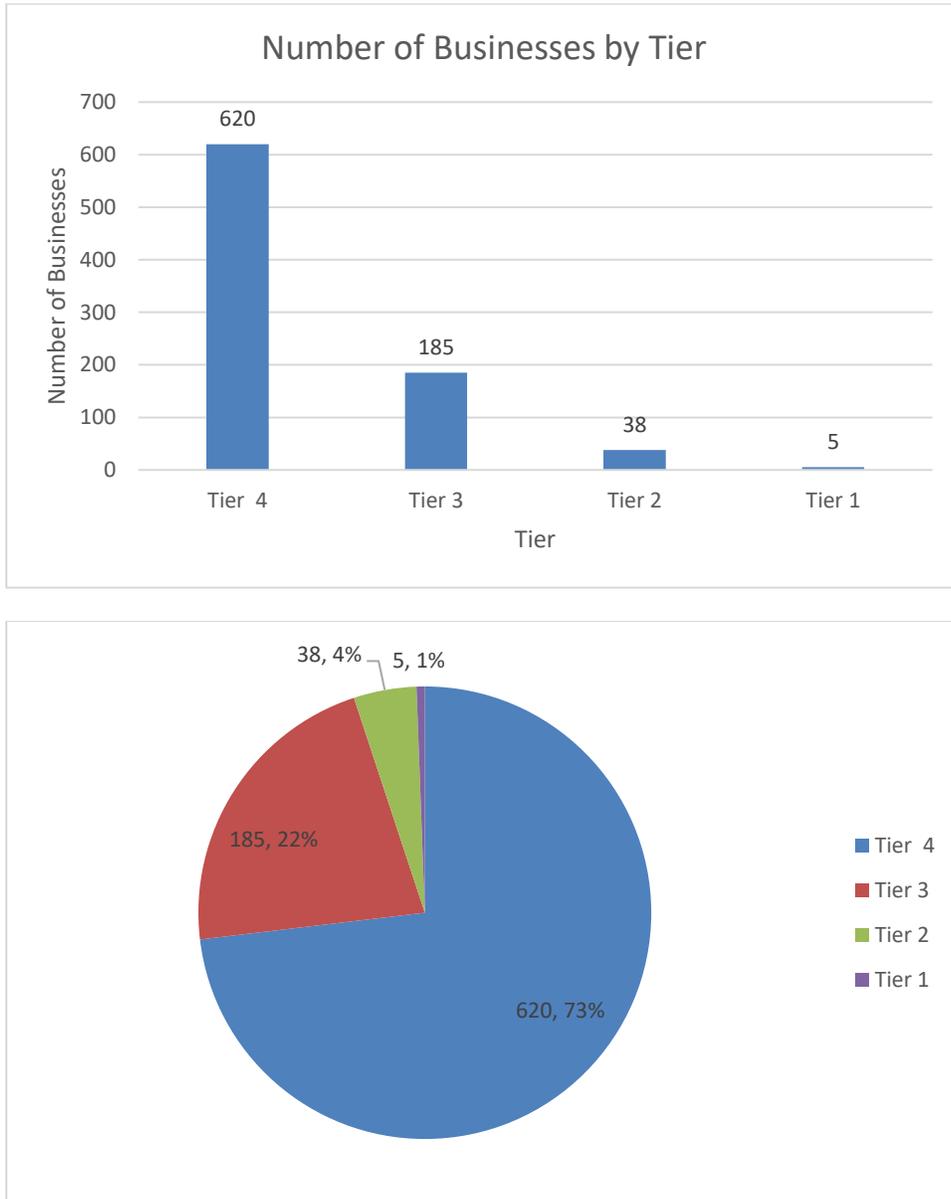
The tiers are explained more fully in Section 4. Briefly, Tier 1 comprises businesses spending \$100,000 or more annually on telecommunications services and that have 10 or more employees; Tier 2, for the most part, comprises businesses that spend between \$20,000 and \$100,000 annually on telecommunications services and have five or more employees. Businesses in these two tiers are more likely to be interested in premium services.

Tier 3, for the most part, comprises businesses that spend between \$5,000 and \$20,000 each year on telecommunications services; Tier 4 comprises businesses that spend less than \$5,000 each year on telecommunications. Businesses in these two tiers are likely to use cable modem or DSL services and may be unwilling to spend more for a premium alternative. (However, if existing service is unreliable and affecting their ability to conduct business, this calculus may change.)

We found that the great majority of Yarmouth businesses fall into the smaller categories and are unlikely to be interested in premium services, a characteristic also noted by OpenCape in its reply

to our information request (see Appendix B). Figure 1 provides a summary by tier, with the data presented two ways (bar chart and pie chart). The total number of businesses represented is 848 because not all business reported the relevant data. Of the 848 businesses, 805—or approximately 95 percent—are Tier 4 or Tier 3 businesses.

**Figure 1: Number of Yarmouth Businesses by Tier**



## 1.2 The Large Number of Businesses Along Route 28 and in the Opportunity Zone Warrants Further Study About Their Needs

CTC mapped the locations of Yarmouth business and—after receiving guidance from the Town—mapped them according their proximity to Route 28; their presence in the federal Opportunity Zone; or their presence in the Town’s B1, B2, and B3 business zones.

Our findings include the following:

- The mix of businesses (by tier) is generally similar within all of the zones.
- The large number of businesses (257) along Route 28, and their proximity to one of the rights-of-way carrying OpenCape fiber in Yarmouth, suggest an area of focus for studying the potential for alternative service provision leveraging OpenCape. The analysis would consist of engaging with the businesses (through a survey or other means) to determine need and willingness to pay; facilitating a discussion with businesses and OpenCape to determine whether any solutions can be developed through that dialogue; identifying any gaps that OpenCape cannot meet; and finally determining what role, if any, the Town might play in closing any identified gaps.
- Yarmouth’s Opportunity Zone also has a large number of businesses (205), many along Route 28. An analysis similar to the one outlined above for the Route 28 abutters might be sensible to conduct. In addition, fiber in this zone could theoretically provide a further inducement for private investment in redevelopment and other projects, in addition to the inducement of significant federal tax breaks available within Opportunity Zones.

## 1.3 Many Local Businesses May be Unaware of OpenCape as a Potential Alternative

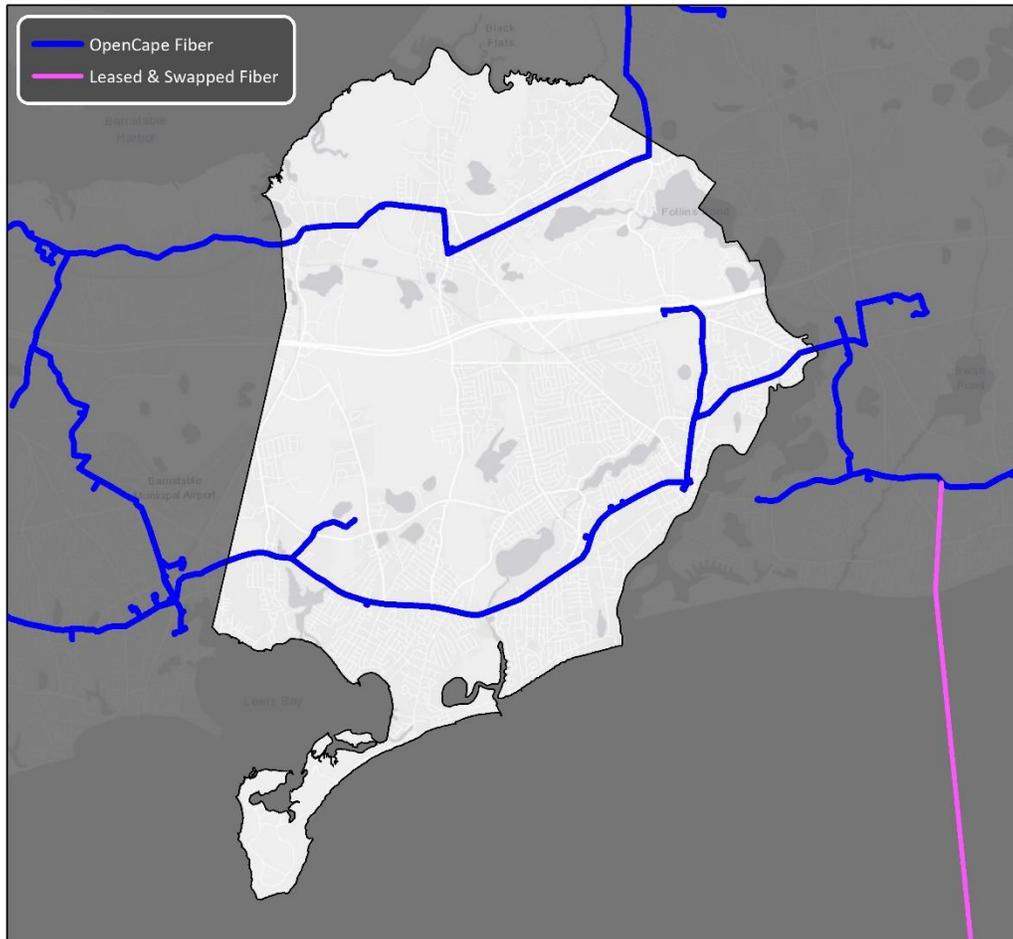
In response to CTC’s information request, Mary Vilbon, director of the Yarmouth Chamber of Commerce, stated that local businesses often report that existing services are sometimes “unreliable and slow” and that she believes many businesses may be unaware of alternatives.

The scope of this study did not include measuring actual delivered speeds or gathering other data about Comcast or Verizon DSL service quality. But in general, network congestion can be a problem during periods of heavy use, such as during busy summer periods. This condition may provide an additional motivation for businesses to seek alternatives.

In its response to CTC, OpenCape reported that it currently has five customers in Yarmouth. We recommend that the Town and/or the Chamber of Commerce communicate the potential availability of OpenCape fiber services, which—after a connection is established—includes a reliable, symmetrical 20 Mbps service for \$300 monthly and 50 Mbps service for \$450 monthly. (A full price sheet is provided as part of OpenCape’s response in Appendix B.) While the scope of

this study did not include analyzing the connection costs required to obtain this service, it is worth noting that OpenCape fiber is present widely in Yarmouth. Figure 2 provides a map of OpenCape’s fiber routes in the Yarmouth area. We looked on Fiberlocator.com—a subscription service that shows many but not all fiber routes in the United States—to see if any other routes are posted in Yarmouth. No additional ones appeared. However, Comcast and other providers also surely have fiber in Yarmouth, but do not share or post this data publicly.

**Figure 2: OpenCape Fiber Network in Yarmouth**



OpenCape presently does not offer any service costing less than \$300 monthly (plus initial connection costs) in Yarmouth. However, we note that in an innovative pilot project in the Town of Falmouth, OpenCape is planning to offer businesses along Main Street a shared 1 Gbps service at a much lower cost.

## **1.4 Additional Data Gathering and Analysis Could Enable the Town to Identify Next Steps**

The analysis of InfoUSA data presented in this report is a first step. In terms of next steps, we make the following suggestions and observations:

1. The Town would benefit by gathering more information from local business owners. CTC has provided the Town a survey instrument. This survey, if conducted by the Town, would provide additional insights into problems businesses may be experiencing and—of critical importance—more detail about what new services they might want to obtain and how much they would be willing to pay.
2. Mapping the proximity of the businesses to an alternative broadband resource (i.e., OpenCape fiber connection points) would also add value. With that analysis, the Town and the Chamber can more easily inform local businesses about the potential availability of this resource. The Town can potentially perform this task with GIS data from InfoUSA augmented by OpenCape data, if such data is provided to the Town.
3. After the Town collects more data—and if it finds demand and willingness to pay on the part of local businesses—it may wish to undertake a study of whether and how OpenCape can play a larger role and what role the Town might play in facilitating this alternative.

## 2 Overview of Businesses in Yarmouth

According to the data CTC purchased from InfoUSA, there currently are about 990 businesses in Yarmouth. Based on input from Town staff, we mapped the data in three zones:

- 1) All businesses throughout the Town, highlighting those along Route 28 (i.e., the Route 28 abutment zone)
- 2) Businesses inside the Town of Yarmouth's business zones (B1, B2, and B3 )
- 3) Businesses inside the federally-designated Opportunity Zone

The map in Figure 3 shows all businesses in Yarmouth. The area highlighted in purple indicates businesses that abut Route 28. Of the town's 990 businesses, 257 abut Route 28.

**Figure 3: Map of All Yarmouth Businesses, Emphasizing Route 28 Abutment Zone**

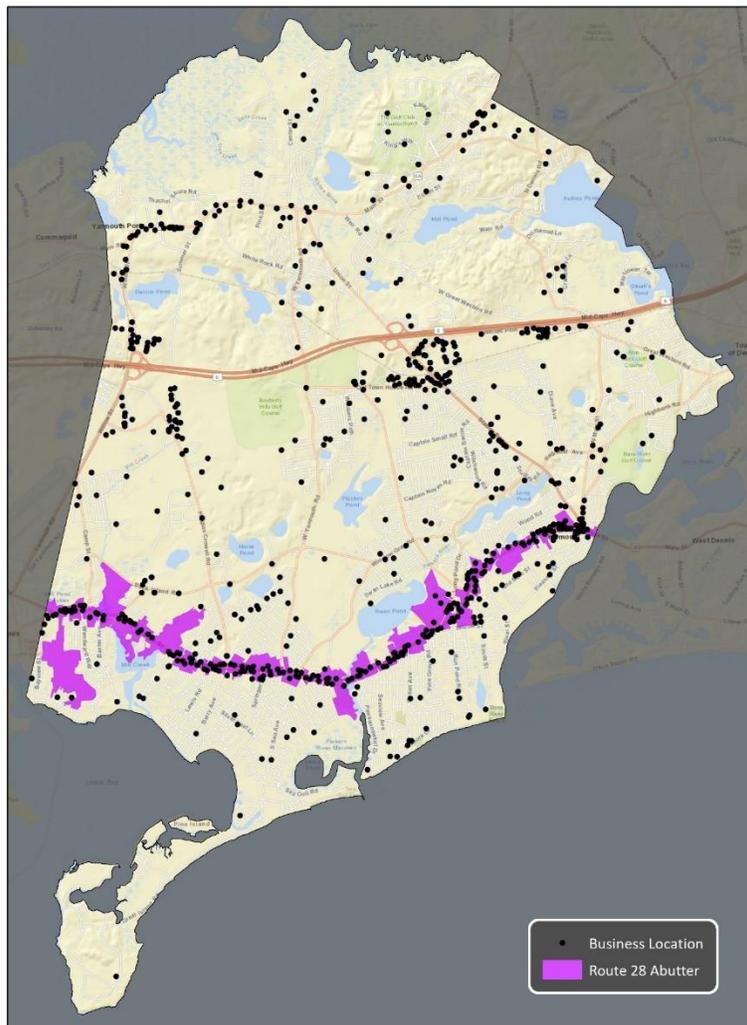


Figure 4 shows all Town businesses on a map that highlights the Town's B1, B2, and B3 zones. The Route 28 corridor dominates as a business location, with other clusters found along the other major roadways of Yarmouth, including along Route 6A and the shopping centers near Route 6.

**Figure 4: Map of Zones B1, B2, and B3 Showing Business Locations**

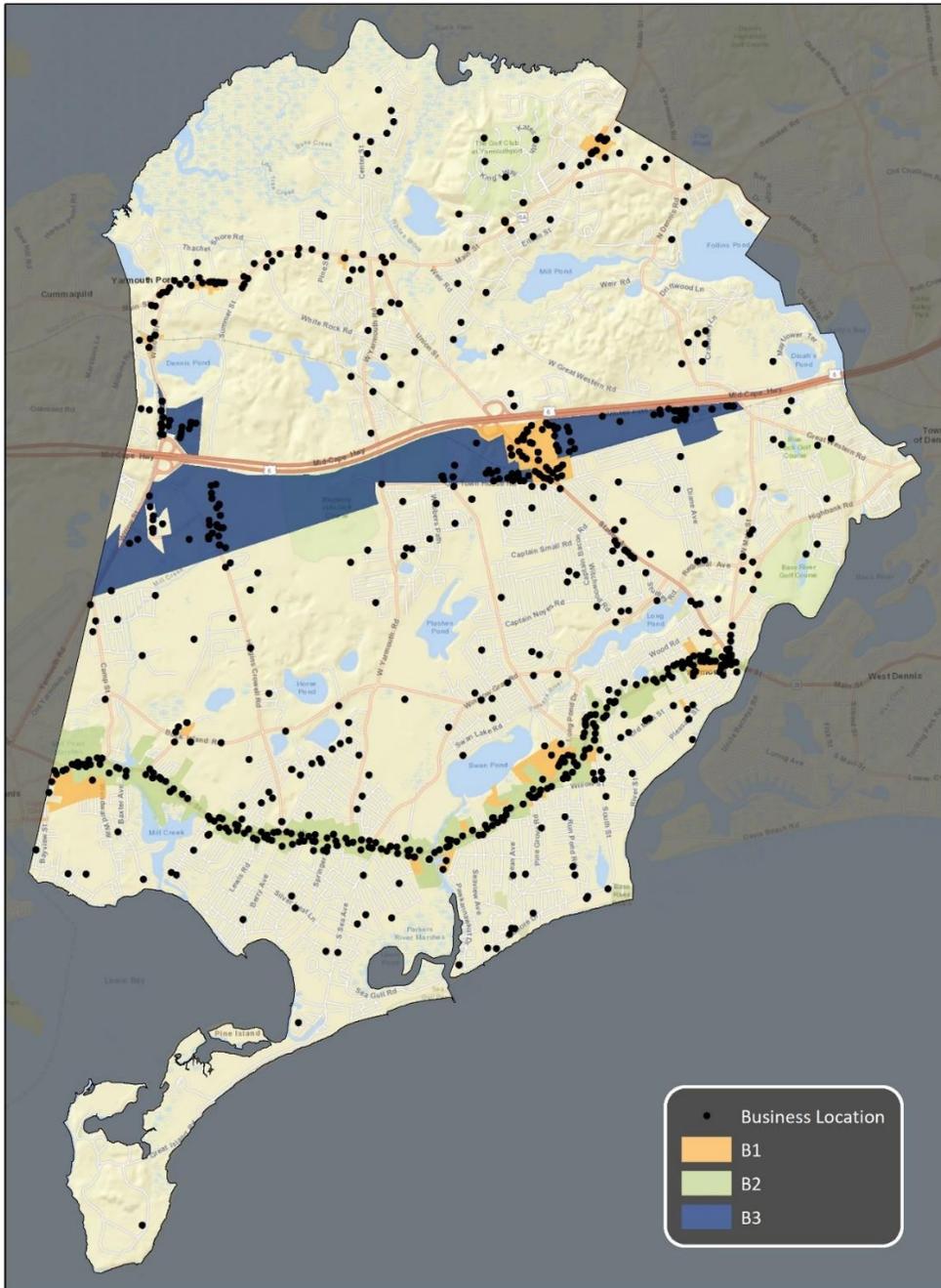


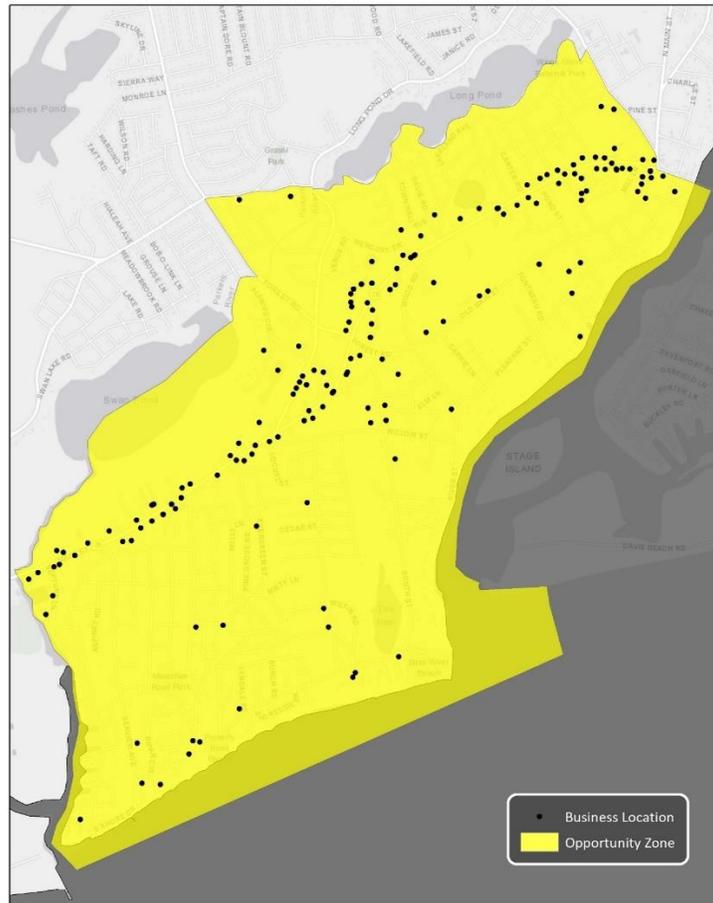
Figure 5 isolates the Route 28 abutment zone to highlight the large number of businesses (257).

**Figure 5: Business Locations in Route 28 Abutment Zone**



Figure 6 highlights the location of 205 businesses within the Opportunity Zone. As the Town knows, the Opportunity Zone is a census tract; this federal designation is unrelated to Town zoning designations.

**Figure 6: Map of Opportunity Zone Showing Business Locations**



### 3 Summary of Attributes of Town Businesses

Most Yarmouth businesses are of limited size. As indicated in Figure 7 below, 525 Yarmouth businesses employ only one to four people; another 182 businesses report having five to nine employees. In terms of the larger businesses, 128 businesses have 10 to 19 employees, 70 have 20 to 49 employees, 24 have 50 to 99 employees, nine have 100 to 249 employees, and five (including the Town of Yarmouth itself) have more than 250 employees.

**Figure 7: Employment Levels at Yarmouth Businesses**

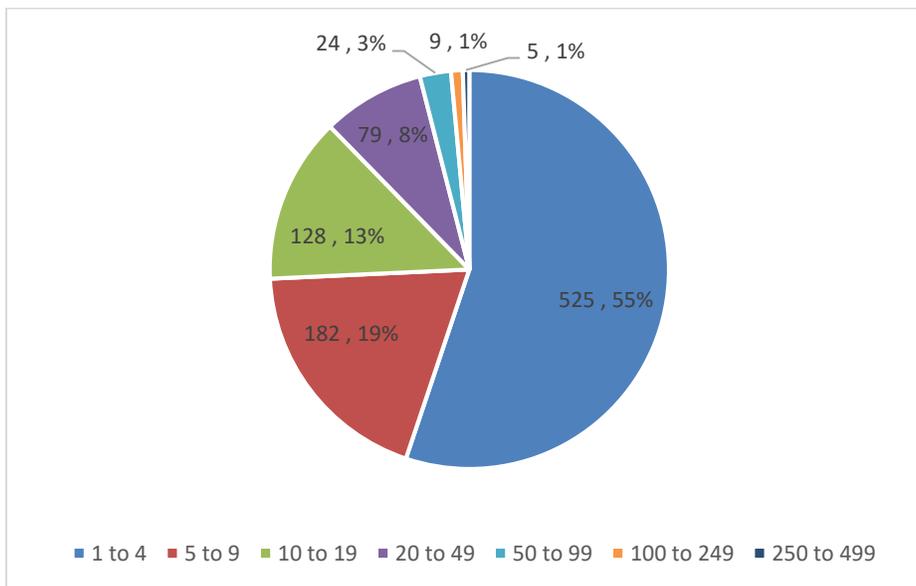
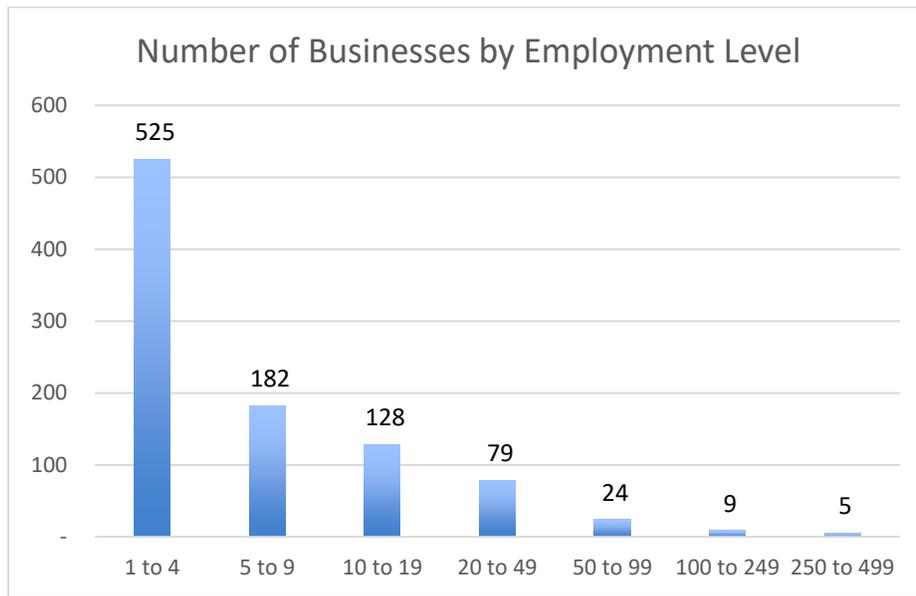


Figure 8 shows the telecommunications spending reported by Yarmouth businesses. The great majority do not spend large sums on telecommunications. The largest number of businesses (371) report spending less than \$2,000 per year on all telecommunications (data, video, and phone) services. Another 275 businesses report spending between \$2,000 and \$5,000.

At the higher end, 185 report spending \$5,000 to \$20,000; 30 report spending \$20,000 to \$45,000; eight report spending \$50,000 to \$100,000; three spend \$100,000 to \$250,000; and two spend more than \$250,000. A total of 142 did not provide information on their spending.

**Figure 8: Reported Annual Telecommunications Spending by Yarmouth Businesses**

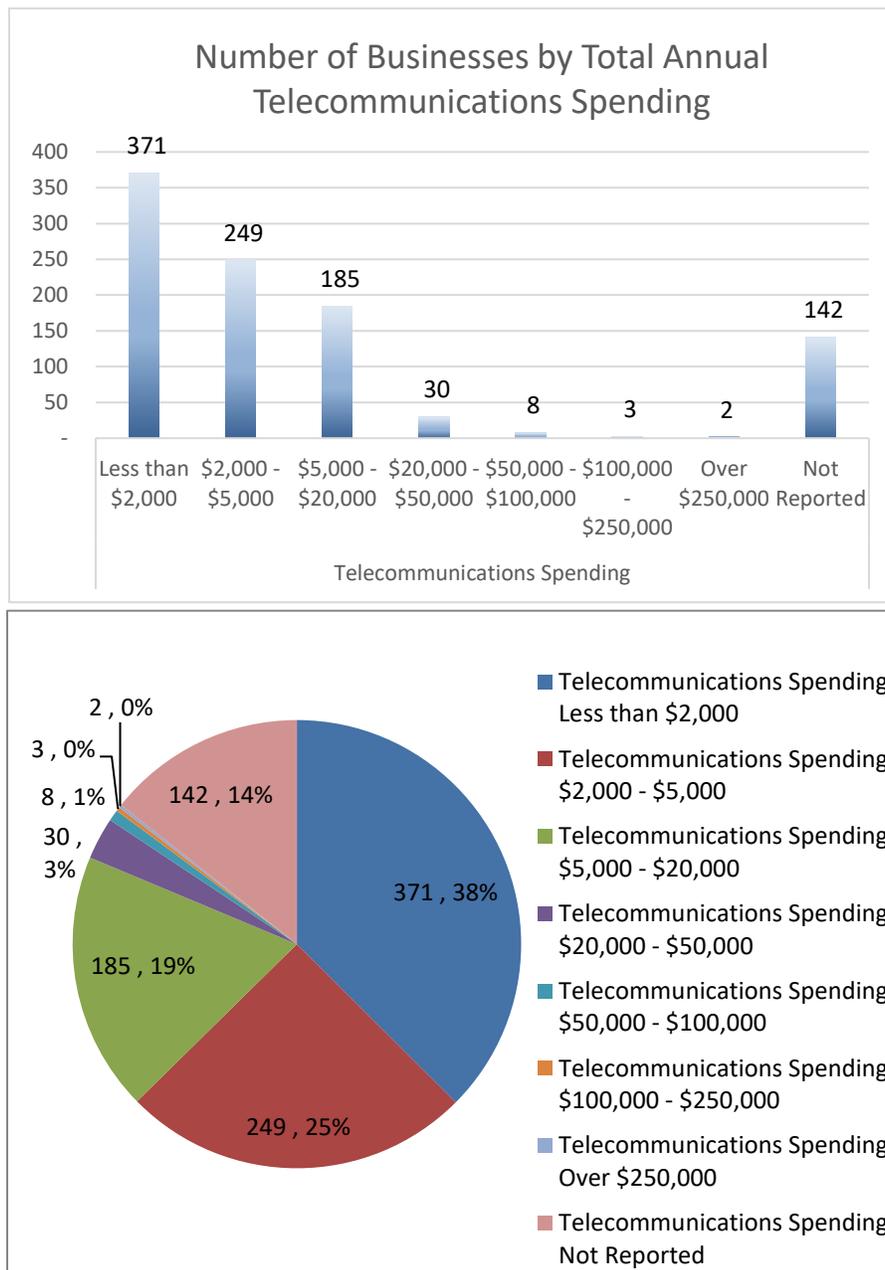
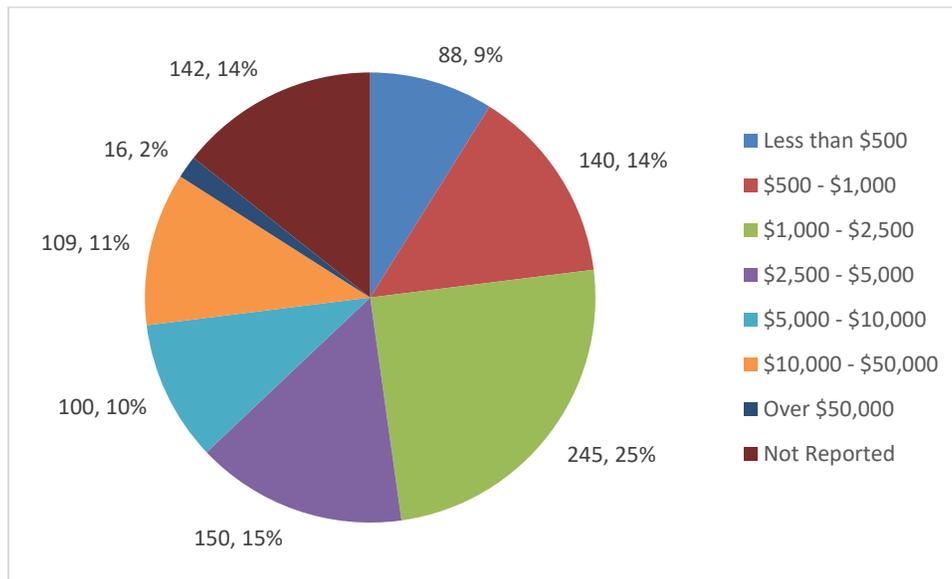
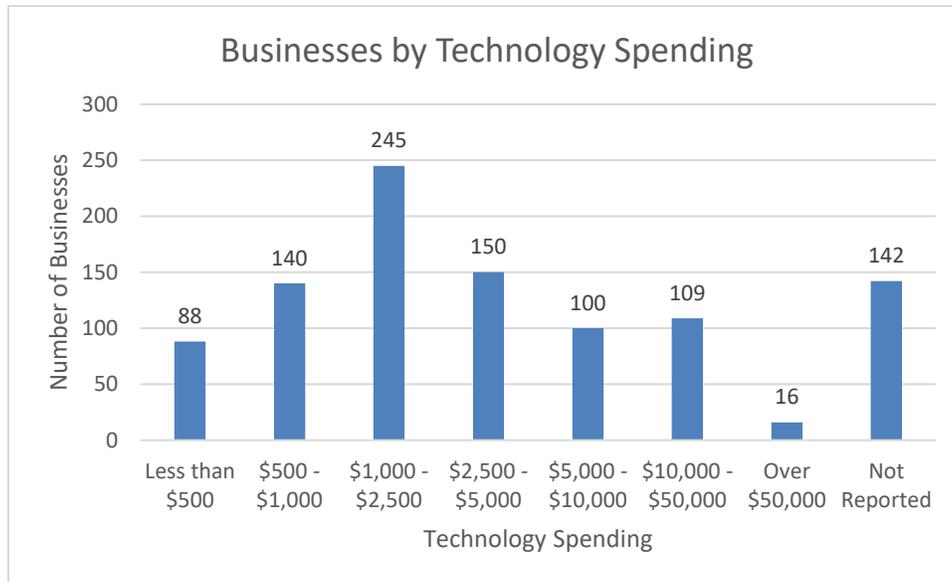
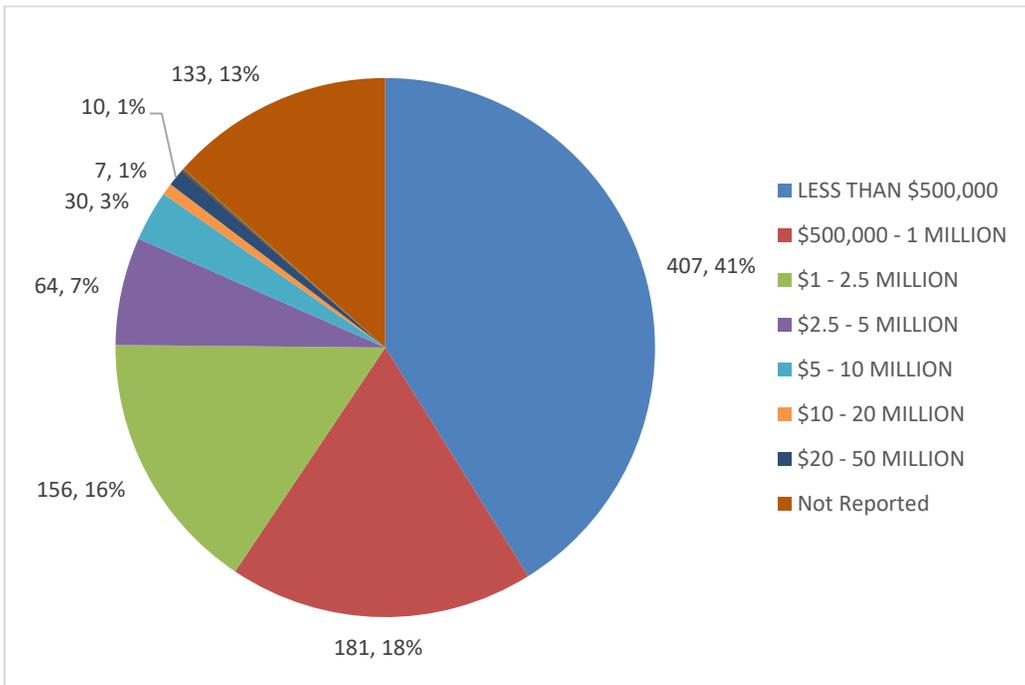
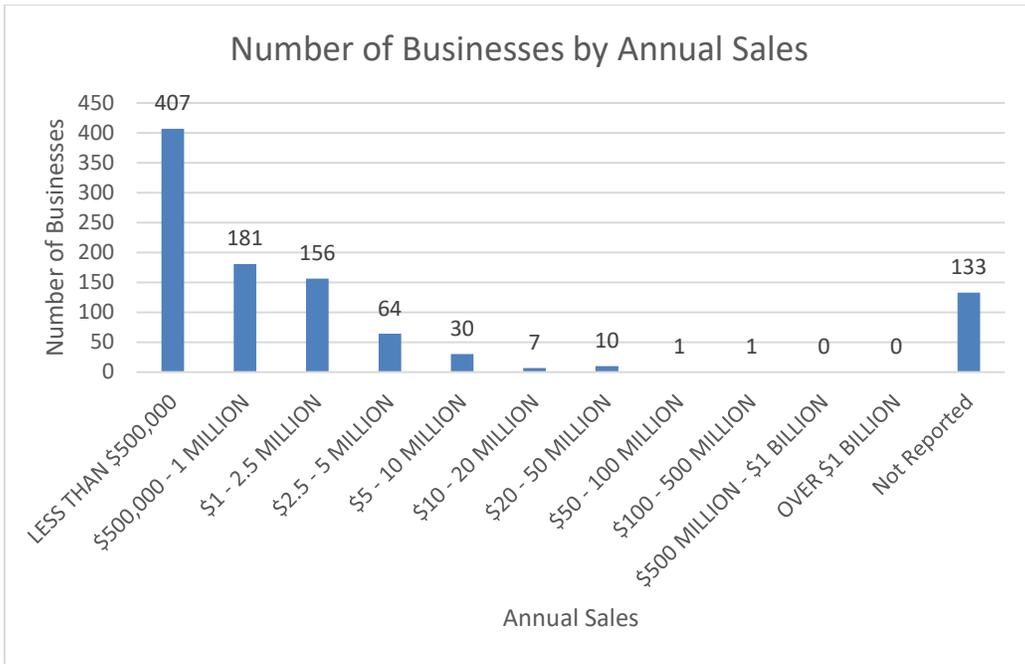


Figure 9 and Figure 10, below, shows technology spending and annual sales, respectively. The vertical axis shows the number of businesses. While telecommunications spending and number of employees are sufficient proxies for potential broadband demand, these additional metrics provide additional detail about characteristics of local businesses. The data show that

**Figure 9: Reported Technology Spending by Yarmouth Businesses**



**Figure 10: Annual Sales Reported by Yarmouth Businesses**



## 4 Potential Business Broadband Customers in Yarmouth

To quantify the potential broadband service market among the 990 businesses in Yarmouth, we categorized businesses based on the type of service they would likely be interested in purchasing. Our analysis focused on two key data points—number of employees and annual telecommunications expenditures—that we believe provide a solid basis for assumptions around the businesses' connectivity needs.<sup>1</sup>

Because not all businesses reported all data to InfoUSA, the data we analyzed represented a subset of 848 businesses (those that reported all data) out of the total of 990 businesses. We developed four categories of businesses, based on their annual telecommunications expenditures and their total number of employees:

- **Tier 1** consists of potential customers on the high end that are spending \$100,000 or more annually on telecommunications services and that have 10 or more employees. These are enterprise customers, which means they likely prioritize reliability and will opt for higher-capacity services, or service with committed interface rates (CIR) and service level agreements (SLA). Enterprise customers tend to be well-served. (And we note from OpenCape's response to our information request that OpenCape does serve five businesses in Yarmouth today.)
- **Tier 2** comprises businesses that spend between \$20,000 and \$100,000 annually on telecommunications services and that have five or more employees, as well as businesses that spend over \$100,000 on telecommunications services and have between five and nine employees. This category tends to be underserved, and often may have little choice but to purchase cable modem service, even though it may not fully meet their needs. While cable modem *speeds* may be enough to meet their needs, these businesses often also need to be able to prioritize factors like reliability and overall performance. These customers are likely to pay a slight premium for a mid-range product, and—in our experience across the country—companies like Comcast have begun to place high priority on addressing gaps in this market.
- **Tier 3** comprises businesses that spend between \$5,000 and \$20,000 each year on telecommunications services, as well as businesses that have between one and four employees and spend at least \$5,000 per employee. For this type of business, cable modem service is likely acceptable, as price and speed tend to be more important factors than reliability. These businesses are likely to place some importance on reliability, though not to the degree that Tier 2 and Tier 1 businesses do.

---

<sup>1</sup> We note that no Yarmouth businesses in the InfoUSA data reported having more than 499 employees.

- Tier 4** consists of businesses of any size that spend less than \$5,000 each year on telecommunications. Based on annual telecommunications expenditures, we assume these businesses likely are well served with cable modem service. Although reliability is important for any business, it is unlikely to be a critical driving factor for businesses in the Tier 4 category the way it is for those in the other categories.

Table 1, below, summarizes the distribution of businesses by number of employees and annual telecommunications spending. The total is lower than 990 because not all businesses reported information. Of the 848 businesses that reported this information, 620 are Tier 4 businesses (red), 185 are Tier 3 businesses (green), 38 are Tier 2 businesses (yellow), and five are Tier 1 businesses (blue).

**Table 1: Potential Business Target Market (Reported by InfoUSA)**

Number of Employees	Total Businesses (Responses)							TOTAL
	Less than \$2,000	\$2,000 – \$5,000	\$5,000 – \$20,000	\$20,000 – \$50,000	\$50,000 – \$100,000	\$100,000– \$250,000	Over \$250,000	
1 to 4	324	111	21	–	–	–	–	456
5 to 9	41	87	37	2	1	–	–	168
10 to 19	5	36	74	3	–	1	–	119
20 to 49	1	15	46	12	1	–	–	75
50 to 99	–	–	7	8	3	–	–	18
100 to 249	–	–	–	5	3	–	–	8
250 to 499	–	–	–	–	–	2	2	4
500 to 999	–	–	–	–	–	–	–	–
1000 to 4999	–	–	–	–	–	–	–	–
<b>Total</b>	<b>371</b>	<b>249</b>	<b>185</b>	<b>30</b>	<b>8</b>	<b>3</b>	<b>2</b>	<b>848</b>

Most businesses in Yarmouth fall into the Tier 4 category. These may not be “small” businesses, but their telecommunications spending is less than \$5,000 per year, which indicates that they likely do not need an especially fast service or guaranteed service and repair response times.

We note that in its response to our questions, OpenCape stated that it presently has five customers in Yarmouth.

## 5 Analysis of Business Data by Zone

We did not find significant differences—in terms of the potential broadband needs of Yarmouth businesses—when we examined the data by zones (B1, B2, B3, Opportunity Zone, and Route 28 abutment). The mix of businesses within the various zones are roughly similar. Differences, though present, do not hold huge meaning without having additional data from the businesses about demand and price sensitivity, and from OpenCape about the cost of supplying an alternative. Table 2, below, shows the breakdown of businesses by tier within the zones. (Please note that because these zones overlap, these numbers should not be added.)

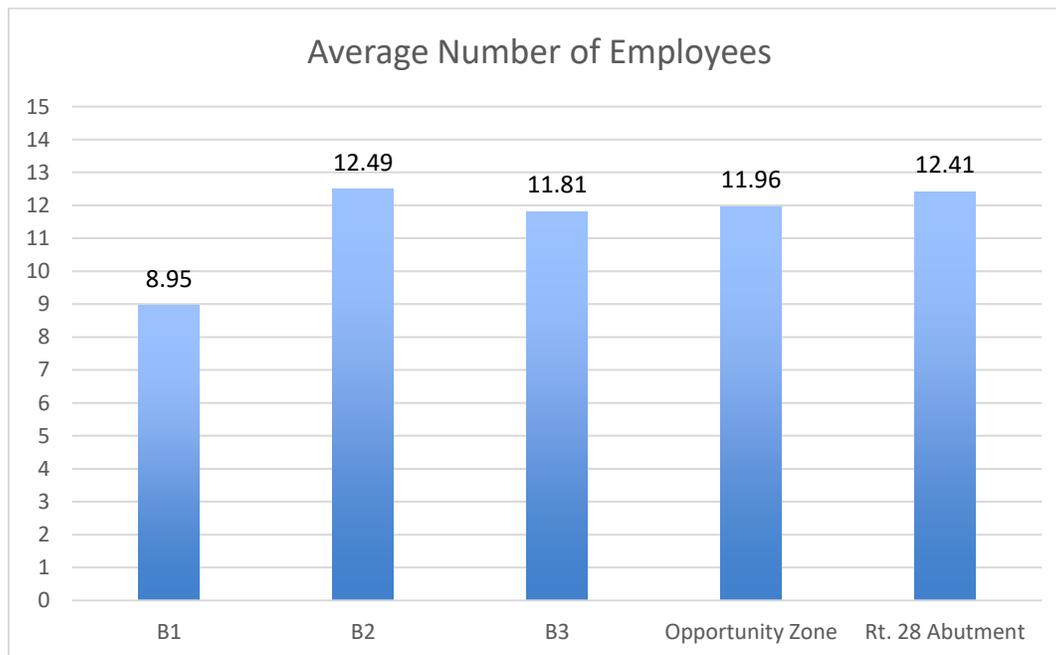
**Table 2: Estimated Businesses by Tier**

	B1	B2	B3	Opportunity	Rt 28
Tier 4	129	195	112	158	195
Tier 3	52	51	39	38	52
Tier 2	9	6	11	9	7
Tier 1	<u>1</u>	<u>2</u>	<u>2</u>	=	<u>2</u>
	191	254	164	205	256

*Note: there is overlap in these zones, so these numbers should not be added.*

Figure 11, below, shows the average number of employees of Yarmouth businesses broken down by the Town’s B1, B2 and B3 zones; the Opportunity Zone; and the Route 28 abutment zone. (We note that there is overlap in these zones, so the averages should not themselves be averaged.)

**Figure 11: Average Number of Employees of Local Businesses, by Zone**



*Note: there is overlap in these zones, so the averages should not themselves be averaged.*

Figure 12, below, shows the average annual sales of Yarmouth businesses broken down by these same zones.<sup>2</sup> A glance at the map reveals the likely reason that B1 and B3 have larger sales numbers—a handful of larger stores or supermarkets are likely increasing the averages for the zone. (We again note that there is overlap in these zones, so the averages should not themselves be averaged.)

**Figure 12: Average Annual Sales of Yarmouth Businesses by Zone**



*Note: there is overlap in these zones, so the averages should not themselves be averaged.*

## **6 Perspective on the Route 28 Abutment and Opportunity Zone Areas**

The potential opportunity within the Route 28 abutment zone is revealed less by the InfoUSA data than by the high number of businesses, the complaints of broadband unreliability noted by Mary Vilbon, and the presence of OpenCape fiber. We recommend further study to see whether and how the existing fiber can be leveraged to benefit Yarmouth businesses along Route 28 and throughout the town.

As noted above, the analysis of data on Yarmouth's Route 28 businesses shows that there are nine businesses classified as Tier 1 or Tier 2 businesses. Another 52 businesses are Tier 3 businesses and the remaining 195 businesses are in Tier 4.

The Opportunity Zone covers a portion of Route 28 and surrounding areas and contains 205 businesses. This zone is potentially of special interest because the Opportunity Zone program allows investors to use tax-deferred capital gains to invest in a wide variety of business ventures. Such new businesses could potentially require high-speed data service; the availability of such service could provide a further incentive for local investment. In addition, a business providing such services could, at least in theory, itself become a tax-advantaged business within an Opportunity Zone.

As noted above, the InfoUSA data indicates that there are no Tier 1 businesses in the Opportunity Zone. The zone has nine Tier 2 businesses, 38 Tier 3 businesses, and 158 Tier 4 businesses.

## Appendix A: Chamber of Commerce Responses to Information Request

Date: August 6, 2019

To: Mary Vilbon, Yarmouth Chamber of Commerce

From: David Talbot, Senior Researcher and Analyst, CTC Technology & Energy

Re: Information Request

---

The Town of Yarmouth has engaged CTC to better understand the broadband usage and needs of Yarmouth businesses. As part of this engagement, we would appreciate input from the Chamber of Commerce.

This is a preliminary step. We would like any information you are able to share about any issues or requests that may have come to your attention to date. Feel free to provide any detail or elaboration. If you have any questions, call me at 857-998-1606. We would appreciate a reply by August 14. Thank you.

1: Have you heard anything from businesses about any unmet need for broadband service?

*Yes, many of our businesses have commented that we are not providing adequate service for our guests. Our visitors come from all over the world and expect high speed access.*

*The residents also complain access is limited and unreliable.*

2: Have you heard anything from businesses about any issues with their current service provider?

*Yes, in many instances we have heard that the service is unreliable and slow. We have been in businesses when they are trying to run a credit card transaction and they need to wait for a good connection. They feel they of no other alternative except for the current provider.*

3: Do you think that businesses are aware that services are potentially available, especially along Route 28, from OpenCape (in addition to Comcast)?

*No. Our impression is that most are not aware that fiber is on Route 28. We have one current new property owner that did a complete renovation of a hotel (\$5m+) and was never aware of the*

*option. They intend on renovating 2 additional properties on Route 28 in the near future that we hope they will take advantage of Open Cape.*

4: Have you heard from any businesses—including ones seeking to potentially locate in Yarmouth—about issues with getting a direct fiber connection from any provider? Please note that this could include a home business.

*We have not spoken directly to any new developer recently. However, we know this would be a basic service developers would seek and expect if they would investing in property in Yarmouth.*

## Appendix B: Responses to OpenCape Information Request



Q1: Have you had requests for fiber service in Yarmouth that you've not been able to meet because of the cost?

A1: Not really, we had specific very large projects..Davenport and Great Island, where the build out was \$165K and \$250K respectively. In the case of Davenport, Comcast was able to undercut us to win that business. For Great Island, we won that business and the Comcast came back and offered to build in for ½ their original quoted cost.

2: In general, what kinds of demand and inquiries are you seeing in Yarmouth?

A2: Honestly....the businesses near our fiber in Yarmouth are not at the top of our prospect list as ideal Fiber candidates. The smaller "Mom and Pop" hotel/motels are problematic and typically our dedicated service has been too expensive for them. We have not had many requests for service in Yarmouth.

3: What services and prices are you offering in town?

A3: We offer dedicated, symmetrical Internet service, anywhere for 20Mbps to 100GBps. Our pricing, which has not changed at all since it was created in Sept 2016 is below.

Shortly we would be able to offer an asymmetrical service for smaller business. We are doing a PILOT project in Falmouth along these lines

### 2019 Pricing for Clients Entering 3-Year Contracts

Service Level	Monthly MRC
20 Mbps Symmetrical	\$300
50 Mbps Symmetrical	\$450
100 Mbps Symmetrical	\$800
200 Mbps Symmetrical	\$1,150
300 Mbps Symmetrical	\$1,450
500 Mbps Symmetrical	\$1,950
1GB Symmetrical	\$2,500
2GB Symmetrical	\$4,250

5GB Symmetrical	Upon Request
10GB Symmetrical	Upon Request
100GB Symmetrical	Upon Request

Transport, TLS or TLAN pricing is also available upon request

OpenCape also offers a 10% discount off 3-year pricing for 5 year contracts

Also OpenCape offers discounted rates for schools and educational clients to utilize the OpenCape DataCenter designed and constructed by IBM.

\*Note: Pricing detailed above does not include connections to facilities. For new clients or facilities that are not currently connected, NRC charges would apply.

**OpenCape's Pricing Philosophy**

Our philosophy on pricing is simple. OpenCape strives to deliver service that is reliable, redundant and affordable. Not-for-Profit OpenCape's 100% Fiber Network was designed and built to offer clients in our service footprint an alternative provider. Our pricing is based on the cost to provide service and maintain the most advanced, state of the art Network on the Cape, Islands and Southeastern Mass.

4: How many customers do you have in Yarmouth?

Currently, we have five (5)

## **Appendix C: Connectivity Use Survey for Businesses**

### **Connectivity Use Survey for Businesses**

**Town of Yarmouth, Massachusetts**

**September 2019**

Dear Yarmouth Business,

The Town of Yarmouth is committed to ensuring that members of our business community have broadband access to support growth and continued success. The Town is sending you this survey as part of its research into how businesses access and use data connection services, including the internet.

The information gathered will not be used to sell you anything. It will not be used for any purpose other than to inform the Town's understanding of businesses' use of connectivity services and to explore strategies to improve accessibility and affordability in Yarmouth.

We understand that, as a business owner, your time is precious. This survey will take approximately 10 to 15 minutes to complete. It should be completed by the person who makes purchasing decisions for your businesses' use of internet services.

If you have any questions regarding this survey, please contact \_\_\_\_\_.

Thank you!

## Information About Your Business

*The following questions will help describe the total group of survey respondents. Your individual information will not be reported separately – it will be reported only as a part of a larger group to help ensure that the respondents are a representative sample of Yarmouth businesses.*

**1. How many employees does your business employ in Yarmouth?**

- 1 to 4
- 5 to 9
- 10 to 19
- 20 to 49
- 50 to 99
- 100 to 249
- 250 to 499
- 500 or more

**2. How many total locations does your business have in Yarmouth?**

- 1
- 2
- 3
- 4
- 5 or more

**3. Does your business own or lease its Yarmouth location(s)?**

- Lease
- Own
- Combination of lease and own

**4. Do your Yarmouth location(s) share space with other, unrelated businesses (e.g., in an office building)?**

- Yes
- No
- Other (please specify) \_\_\_\_\_

**5. How many personal computers or terminals do you have at your Yarmouth location(s)?**

- None
- 1 to 4
- 5 to 9
- 10 to 19
- 20 to 49
- 50 or more
- Don't know

**6. What is the ANNUAL telecommunications (voice, video, and data) expense for your business?**

- Less than \$499 per year
- \$500 to \$999 per year
- \$1,000 to \$2,499 per year
- \$2,500 to \$4,999 per year
- \$5,000 to \$9,999 per year
- \$10,000 to \$49,999 per year
- \$50,000 or more per year

## Business Use of Data Transport and Other Connectivity Services

7. What connectivity services do you use at your PRIMARY business location? (✓ all that apply)

- Data
- Internet
- Telephone
- Video conferencing
- Other (Please Specify) \_\_\_\_\_

8. Does your business use data transport and other connectivity services on a day-to-day basis to transfer data to other locations or organizations?

- Yes – to locations in Yarmouth only
- Yes – to locations outside Yarmouth only
- Yes – to locations both inside and outside Yarmouth
- No

9. Do you have a contract with an internet service provider (ISP) or telecommunications provider for data connectivity services?

- Yes – Please continue to **Question 10**
- No – Please skip to **Question 11**

10. Approximately how many months remain on your existing contract with your ISP?

- 1-3
- 4-6
- 7-9
- 10-12
- 13-18
- 19-24
- More than 24
- Don't know

11. Where are decisions about connectivity services made in your organization?

- Within Yarmouth (local)
- Outside of Yarmouth (non-local)
- A combination of local and non-local
- Don't know

## Business Internet Connection and Use

**12. What do you use for your PRIMARY internet connection? (Please indicate the way the building/office is connected to the internet, not the internal Wi-Fi wireless or internal building cabling.)**

- Cable modem (Comcast/Xfinity)
- DSL (Digital Subscriber Line)
- Fiber service (OpenCape)
- Fractional T1 or full T1
- Metro Ethernet
- Satellite
- Telephone line (dedicated dial-up or share with voice line)
- Wireless
- Don't know
- Do not have an internet connection **Please skip to Question 20**
- Other (Please Specify) \_\_\_\_\_

**13. Do you use a backup or secondary connection? If so, what type?**

- Cable modem (Comcast/Xfinity)
- DSL (Digital Subscriber Line)
- Fiber service (OpenCape)
- Fractional T1 or Full T1
- Metro Ethernet
- Satellite
- Telephone Line (dedicated Dial-Up or share with voice line)
- Wireless
- Other (Please Specify) \_\_\_\_\_
- Don't know
- Not applicable – no backup or secondary connection

**14. Would you say your internet connection speed is:**

- Fast enough for your needs
- Not bad but not quite fast enough for your needs
- Fairly slow and you would like to be connected at much higher speeds
- Very slow and you would like to be connected at much higher speed
- Don't know

**15. How IMPORTANT are the following aspects of your business internet service?** (please circle your response for each aspect, where 1=Not at all important, 2=Slightly important, 3=Moderately important, 4=Very important, 5=Extremely important)

Aspect	Not at All Important			Extremely Important	
	1	2	3	4	5
(a) Speed of connection	1	2	3	4	5
(b) Reliability of connection (up time)	1	2	3	4	5
(c) Price of services	1	2	3	4	5
(d) Technical support service	1	2	3	4	5
(e) Overall customer service	1	2	3	4	5

**16. How SATISFIED are you with the following aspects of your current business internet service?** (please circle your response for each aspect, where 1=Not at all satisfied, 2=Slightly satisfied, 3=Moderately satisfied, 4=Very satisfied, 5=Extremely satisfied)

Aspect	Not at All Satisfied			Extremely Satisfied	
	1	2	3	4	5
(a) Speed of connection	1	2	3	4	5
(b) Reliability of connection	1	2	3	4	5
(c) Price of services	1	2	3	4	5
(d) Technical support service	1	2	3	4	5
(e) Overall customer service	1	2	3	4	5

**17. Approximately how much do you pay PER MONTH for internet service at your primary location?** (Do not include charges for telephone lines, data circuit, etc.)

- Less than \$25
- \$25 to \$49
- \$50 to \$99
- \$100 to \$149
- \$150 to \$199
- \$200 to \$299
- \$300 to \$499
- \$500 to \$749
- \$750 to \$999
- \$1,000 or more
- Don't Know

**18. Please indicate how willing you would be to pay for access to 1 Gbps carrier-grade Ethernet transport and internet access service.** (A carrier-grade service provides service level agreements that offer a level of reliability and stability that far exceeds consumer-grade products.) *(please circle your response at each price level, where 1=Not at all willing, 2=Slightly willing, 3=Moderately willing, 4=Very willing, 5=Extremely willing)*

Monthly Price	Not at All Willing					Extremely Willing				
	1	2	3	4	5	1	2	3	4	5
(a) \$250 per month	1	2	3	4	5	1	2	3	4	5
(b) \$500 per month	1	2	3	4	5	1	2	3	4	5
(c) \$750 per month	1	2	3	4	5	1	2	3	4	5
(d) \$1,000 per month	1	2	3	4	5	1	2	3	4	5
(e) \$1,250 per month	1	2	3	4	5	1	2	3	4	5

**19. What would be the maximum one-time fee that you would be willing to pay for access to 1 Gbps?**

- Less than \$500
- \$500
- \$750
- \$1,000
- \$1,500
- \$2,500
- \$5,000
- More than \$5,000

**20. Please indicate how willing you would be to pay for access to 1 Gbps consumer-grade internet access service (10 to 20 times faster than a cable modem).** (please circle your response at each price level, where 1=Not at all willing, 2=Slightly willing, 3=Moderately willing, 4=Very willing, 5=Extremely willing)

Monthly Price	Not at All Willing			Extremely Willing	
	1	2	3	4	5
(f) \$50 per month	1	2	3	4	5
(g) \$70 per month	1	2	3	4	5
(h) \$90 per month	1	2	3	4	5
(i) \$110 per month	1	2	3	4	5
(j) \$130 per month	1	2	3	4	5

## Role of the Town of Yarmouth

**21. Using a scale of 1 to 5, where 1 is Strongly Disagree and 5 is Strongly Agree, please indicate to what degree you believe that the Town of Yarmouth should do the following:**

*(please circle your response for each statement, where 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree)*

<b>Aspect</b>	<i>Strongly Disagree</i>			<i>Strongly Agree</i>	
	1	2	3	4	5
(a) Help provide communications for local nonprofit organizations	1	2	3	4	5
(b) Help ensure that all businesses have access to competitively priced broadband internet services	1	2	3	4	5
(c) Lease existing fiber assets to private Internet providers	1	2	3	4	5
(d) Offer internet services directly to local businesses	1	2	3	4	5

**22. Please provide any other comments or thoughts related to access and the use of data connection services.**

Description	2019 Revised Budget	2019 Actual	2019 Encumbrances	2019 Available	2020 Allocation	2020 Original Budget	FY20 Transfers	2020 Revised Budget	2020 Actual	2020 Encumbrances	2020 Available
UNALLOCATED FUNDING	125,239.73	0.00	0.00	125,239.73	284,673.60	409,913.33	-278,900.00	131,013.33	0.00	0.00	131,013.33
PERSONAL SERVICES	41,937.03	22,031.90	0.00	19,905.13	25,000.00	44,905.13		44,905.13	5,774.73	0.00	39,130.40
LEGAL ADS - TRPF	296.10	199.53	0.00	96.57	100.00	196.57		196.57	0.00	0.00	196.57
SUPPLIES - TRPF	1,091.88	769.26	0.00	322.62	500.00	822.62		822.62	18.87	0.00	803.75
MARKETING & PROMOTION	150,253.93	120,648.04	0.00	29,605.89		29,605.89	270,000.00	299,605.89	27,905.37	268,553.41	3,147.11
PROJECTS & EVENTS	137,761.60	127,464.83	0.00	10,296.77		10,296.77		10,296.77	6,945.00	3,351.77	0.00
PUBLIC IMPROVEMENTS EXPENSE	97,864.50	8,582.45	0.00	89,282.05	77,568.40	166,850.45	-4,000.00	97,480.45	0.00	4,000.00	93,480.45
Beautifcation Team 2019	20,000.00	3,960.92	0.00	16,039.08		16,039.08		16,039.08	6,151.98	0.00	9,887.10
BROADBAND - REPAIRS & MAINT	0.00	0.00	0.00	0.00			8,900.00	8,900.00	0.00	8,900.00	0.00
COMM INFO BOARD REP & MAINT	20,250.00	0.00	0.00	20,250.00		20,250.00		20,250.00	0.00	20,250.00	0.00
Drive In Site - Site Improv	42,000.00	32,700.00	0.00	9,300.00		9,300.00		9,300.00	0.00	0.00	9,300.00
Fencing Improvement	28,327.50	17,949.00	0.00	10,378.50		10,378.50		10,378.50	0.00	0.00	10,378.50
Gateway Signs	27,675.00	0.00	0.00	27,675.00		27,675.00		27,675.00	0.00	0.00	27,675.00
PACKET LANDING CAP IMPROVE	0.00	0.00	0.00	0.00				10,370.00	0.00	0.00	10,370.00
Packet Landing Maintenance	4,400.00	0.00	0.00	4,400.00		4,400.00		4,400.00	0.00	0.00	4,400.00
PARKERS RIVER BRIDGE LIGHTS	0.00	0.00	0.00	0.00				55,000.00	0.00	55,000.00	0.00
RT 6A FENCE PROJECT	0.00	0.00	0.00	0.00			9,000.00	9,000.00	9,000.00	0.00	0.00
<b>Total PI Expense</b>				177,324.63				268,793.03		88,150.00	

Allocated PI Expense

\$5000 Donation from Rotary + \$9000 Transfer For Route 6A Fencing



## Town of Yarmouth Revenue Trending Non Tax Levy Accounts

	Actuals to EOY				% Current to Prior Year to Date	Full Year Actuals			Full Year Budget	Budget Projection
	2016	2017	2018	2019		2016	2017	2018	2019	2020
<b>Local Receipts</b>										
01 Motor Vehicle Excise	3,318,783	3,541,347	3,896,721	3,759,280	96.47	3,318,783	3,541,347	3,896,721	3,300,000	3,300,000
02 a.Meals Tax	584,203	585,857	628,343	641,161	102.04	584,203	585,857	628,343	555,000	550,000
<b>02 b.Room Tax</b>	<b>2,878,451</b>	<b>2,943,900</b>	<b>2,885,029</b>	<b>2,845,651</b>	<b>98.64</b>	<b>2,878,451</b>	<b>2,943,900</b>	<b>2,885,029</b>	<b>2,800,000</b>	<b>2,600,000</b>
02 c.Other Excise	20,551	20,272	20,204	18,600	92.06	20,551	20,272	20,204	19,000	17,000
03 Penalties and Interest	315,603	254,170	216,066	204,717	94.75	315,603	254,170	216,066	140,000	140,000
05 Water	4,458,155	5,044,401	4,641,949	4,392,308	94.62	4,458,155	5,044,401	4,641,949	3,878,441	4,392,404
06 Septage Host Fee	257,000	257,000	257,000	257,000	100.00	257,000	257,000	257,000	257,000	0
08 Solid Waste Fees	2,986,276	3,267,750	3,675,157	3,795,309	103.27	2,986,276	3,267,750	3,675,157	3,200,000	3,400,000
09 Other Charges	819	545	387	1,146	296.28	819	545	387	0	0
10 Fees	1,189,968	1,167,517	1,200,177	1,342,777	111.88	1,189,968	1,167,517	1,200,177	1,100,000	1,100,000
11 Rentals	428,513	439,570	431,484	406,698	94.26	428,513	439,570	431,484	400,000	300,000
15 Recreation	758,426	730,569	687,226	894,410	130.15	758,426	730,569	687,226	650,000	600,000
16 Other Dept Revenue	206,855	305,161	343,385	487,566	141.99	206,855	305,161	343,385	170,000	250,000
17 Licenses and Permits	1,281,217	1,191,082	1,287,143	1,206,945	93.77	1,281,217	1,191,082	1,287,143	1,100,000	1,000,000
19 Fines and Forfeits	56,320	54,182	57,343	57,540	100.34	56,320	54,182	57,343	50,000	50,000
20 Investments	77,455	114,583	228,564	494,442	216.33	77,455	114,583	228,564	90,000	100,000
22 Cable (Misc. Recurring)	504,294	533,337	546,515	519,988	95.15	504,294	533,337	546,515	500,000	400,000
<b>Subtotal Local Receipts</b>	<b>19,322,890</b>	<b>20,451,243</b>	<b>21,002,693</b>	<b>21,325,538</b>	<b>101.54</b>	<b>19,322,890</b>	<b>20,451,243</b>	<b>21,002,693</b>	<b>18,209,441</b>	<b>18,199,404</b>
<b>Spec Rev/Enterprise</b>										
E1 Septage	2,032,591	2,672,820	2,202,767	3,152,769	143.13	2,032,591	2,672,820	2,202,767	2,088,231	2,156,801
<b>Subtotal Spec Rev/Enterprise</b>	<b>2,032,591</b>	<b>2,672,820</b>	<b>2,202,767</b>	<b>3,152,769</b>	<b>143.13</b>	<b>2,032,591</b>	<b>2,672,820</b>	<b>2,202,767</b>	<b>2,088,231</b>	<b>2,156,801</b>
<b>Grand Total</b>	<b>21,355,482</b>	<b>23,124,063</b>	<b>23,205,460</b>	<b>24,478,307</b>	<b>105.49</b>	<b>21,355,482</b>	<b>23,124,063</b>	<b>23,205,460</b>	<b>20,297,672</b>	<b>20,356,205</b>

\*\* Un-audited revenues to be used for trending -- adjustments to current year amounts may alter these values

## Cape and Island Questions and Answers

1. How many people have registered?
  - a. As of 7-8-19, 455 people have registered.
2. Will towns be provided with a list of registered short term rental operators?
  - a. Communities can request a list from Lisa Krzywicki at [databank@dor.state.ma.us](mailto:databank@dor.state.ma.us).
  - b. The registration process through DOR Mass Connect opened on June 27, 2019. Link to DOR Mass Connect: <https://www.mass.gov/how-to/register-your-business-with-masstaxconnect>
  - c. I recommend that you request a list after August 1<sup>st</sup>.
    - i. Databank will be able to provide a separate list of traditional Hotel / Motel and Short Term Rental operators that are registered.
3. Will towns be provided with an amount of tax that is paid for short term rentals?
  - a. Hotel / Motel and STR reimbursements will be distributed together as one amount.
  - b. Databank will post a break out of the traditional hotel / motel and the STR reimbursements online with the local aid distribution information. Here is the link: <https://www.mass.gov/service-details/cherry-sheets-state-owned-land-payments-municipal-revenue-growth-factors-mrgf>
  - c. The reimbursement will be sent out quarterly, beginning September 30<sup>th</sup>.
4. Is there any way for a town to project the revenue from the short term rentals?
  - a. No. There is no historical data to work with in order to determine an estimate.
  - b. The database through DOR Mass Connect opened on June 27, 2019.
5. What is DOR's recommendation for local estimated receipts for FY2020 regarding short term revenue?
  - a. Communities should be conservative if estimating any new revenue.
  - b. DLS will require uploaded documentation to substantiate any new revenue estimates (new revenue received to date).
  - c. Suggestion would be to increase your overall estimates on Page 3 to cover what you believe will come in as additional revenue.
6. Is the tax applied to the rental base rate or does it include all of the fees?
  - a. Total rent subject to excise includes **all amounts** charged including service and cleaning charges.
  - b. If rent is less than \$15 per day, no tax is collected.
7. Has DOR contacted the local businesses that are within the member towns of the Cape & Islands Water Protection Fund to make sure they collect the additional 2.75%?
  - a. Yes. Per conversations that I have had, DOR conducted several out reach campaigns.
8. If a Town opts out of the Cape & Islands Water Protection Fund will they receive all taxes paid on its behalf?
  - a. Can withdraw from the fund by a two-thirds vote of your legislative body.
  - b. Cannot withdraw during the term of a financial assistance award from the fund.
  - c. Cannot withdraw until March 28, 2020, which is one year after the effective date.
  - d. Community will not receive taxes that were paid in from the community excise.
9. Who will be bonding the loans disbursed by the Cape & Islands Water Protection Fund?
  - a. Mass Clean Water Trust
  - b. Amounts credited to the fund shall be expended or applied only with the approval of the Cape Cod and Islands Water Protection Fund Management Board.
  - c. DOR will collect and turn funds over. DEP will be the administrator of the fund.
  - d. Legislation stipulates up to 10% of revenue can be spent on administration of the fund.
  - e. At this time we are unsure if each community can request how much has come in from your own community.
10. Community Impact Fee:
  - a. DOR will collect this and distribute quarterly.
  - b. You may see this distributed as one figure with H/M and STR.
  - c. Databank will show the breakout of all three figures.
  - d. If adopting this, must do two warrant articles.

On xx, on a motion by xx, seconded by xx, the committee voted xx to approve these minutes.

## Town of Yarmouth

### MINUTES OF THE COMMUNITY & ECONOMIC DEVELOPMENT COMMITTEE MEETING OF August 12, 2019

The Yarmouth Community & Economic Development Committee held a Business Meeting at 4:30 p.m. on Monday, August 12, 2019 at the Yarmouth Town Hall, Room B, located at 1146 Route 28, South Yarmouth, MA.

**Committee Members Present:** Jack McCormack, Ken Smith, Peter Smith, Stephen O'Neil, Mary Vilbon

**Staff:** Kyle Pedicini, Economic Development Coordinator

The meeting was opened by Peter Smith at 4:35 pm

#### 1. OpenCape Fiber Discussion

Angela Hurwitz, OpenCape, gave the committee an update on OpenCape's operations on Cape Cod since the last update given last year. Mr. Hurwitz explained that the Town of Falmouth's Economic Development and Industrial Corporation (EDIC) recently released a request for proposals for a feasibility study for a community fiber network for the Town of Falmouth, Massachusetts. She explained that in Falmouth there is currently a fiber project along Main Street and \$10 a month a charged to customers to fund future connections in Town. It was also explained that OpenCape is currently involved in a mix use development in Hyannis that could be a profit generating venture for the landlord in addition to providing residents/businesses with excellent internet connectivity.

Ms. Hurwitz explained that the Town of Yarmouth has potential to see a large benefit from fiber being implemented throughout Town. She explained that the Town is currently working on a plan to connect all Town buildings to fiber, which would make implementing the 'Last Mile' to the rest of the Town much more feasible.

Kyle Pedicini, Economic Development Coordinator, gave the committee an update on the analysis of the broadband needs of Yarmouth businesses being conducted by CTC Technology. He explained that town staff and the Chamber of Commerce have spoken with CTC to provide them context on the current business climate in Yarmouth. Final deliverables from the project are expected to be received by the Town in a couple of weeks.

On xx, on a motion by xx, seconded by xx, the committee voted xx to approve these minutes.

**2. Tourism Revenue Preservation Fund**

Kyle Pedicini, Economic Development Coordinator, presented a proposal to the Committee for \$9,000 to replace the remaining sections of the Route 6A Common. It was explained that this proposal came from the same contractor who completed the front section of the fencing and work would not be able to commence until the fall. Duncan Oliver, Historic Society of Old Yarmouth, spoke in favor of the fencing replacement, stating that it is desperately needed at this location.

**Vote:** On a motion from Stephen O’Neil, seconded by Mary Vilbon, the Committee voted to approve the request for \$9,000 (from unallocated Physical Improvements) for a proposal to replace the remaining sections of fencing at the Route 6A Common, by a vote of 5-0 with a condition.

**Condition:** Work must be completed by October 30<sup>th</sup>, 2019.

Mr. Pedicini also gave an update on the budget for the Tourism Revenue Preservation Fund. He explained that there is \$131,013.33 available in unallocated funding and \$157,480.45 available in unallocated physical improvements. The Committee discussed potential upcoming projects that might need funding. The CEDC discussed the possibility of funding some future fiber projects in certain target areas of Town. Improvements to the Drive-In site were also discussed, and it was suggested that the CEDC have a joint meeting with the Drive-In Site Utilization Committee to identify exactly what improvements need to be made to the site.

**3. Proposed Polystyrene Reduction Bylaw Discussion**

The Committee reviewed the proposed Polystyrene Reduction Bylaw. Committee members expressed that they did not have enough information on the Bylaw to offer a memo of support but did submit a couple of comments regarding the Bylaw. They urged the Recycling and Solid Waste Advisory Committee to conduct robust business outreach before proposing the Bylaw to make sure to receive ample comments from the business community on it. They also urged the Committee to investigate how this Bylaw could potentially affect mobile vendors at special events in Town.

Mary Vilbon left the meeting at 5:30pm

**4. Committee Member Updates**

Jack McCormack updated the Committee on recent Cape Cod Commission business. He explained that on 8/14 there will be a public meeting to discuss a potential bike/pedestrian connection project in Yarmouth, with members of the Cape Cod Commission’s staff present to explain things.

**5. Staff Updates**

Kyle Pedicini updated the Committee on various ongoing projects. He stated that the community information board would be delivered on 8/26 and should be installed during

**On xx, on a motion by xx, seconded by xx, the committee voted xx to approve these minutes.**

the first week of September. He also announced various upcoming public meetings such as the Bike Path meeting on 8/14 and the WRAC meeting on 8/20. He also explained that there will be Opportunity Zone visioning workshops upcoming in September and October and the Town is hoping a couple members of the CEDC can participate. The Final Report for the Country Festival was also presented.

**6. Minutes for Review**

The Committee reviewed draft minutes from their meeting on July 12, 2019.

**Vote:** On a motion from Jack McCormack, seconded by Ken Smith, the Committee approved the minutes for July 12, 2019 by a vote of 4-0.

**7. Upcoming Meetings**

Committee members agreed to place the topic of GIZ extension at their next meeting on September 9<sup>th</sup>.

**8. Adjourn**

On a motion from Jack McCormack, seconded by Stephen O'Neil, the Committee voted 4-0 to adjourn at 6:04 pm.

**9. Documents provided:**

- a. Agenda for the meeting
- b. TRPF Budget Update
- c. Fencing Proposal from Reliable Fence Co.
- d. Draft Polystyrene Reduction Bylaw
- e. Draft Minutes from CEDC meeting on July 12, 2019

Respectfully Submitted,  
Kyle Pedicini, Community Development Office