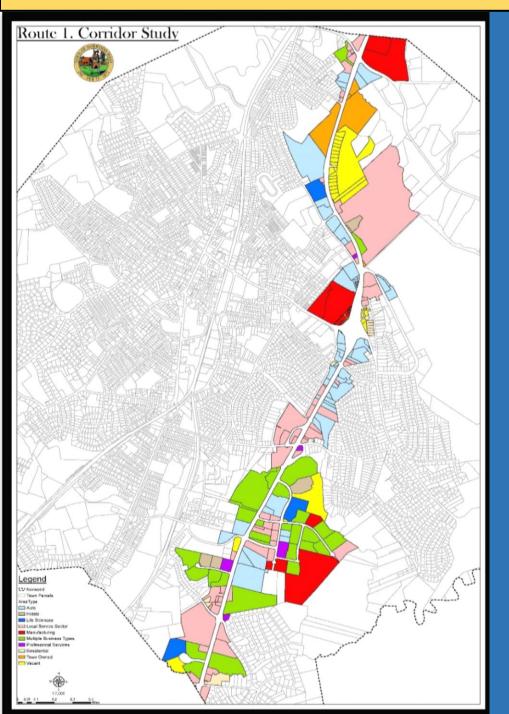
2020

Route 1 Corridor Economic Impact Study



Joseph Collins, Budget & Management Analyst Town of Norwood 9/14/2020

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1. Executive Summary

The purpose of this analysis is to measure the financial impact Route 1 Corridor businesses have on the Town of Norwood's revenues. The effects of businesses were analyzed in two ways, the traded sector vs. the local sector and by business type. Statistical analysis was used to compile, interpret, and verify the Corridor's impact on the Town's revenues.

The traded sector, also known as basic industry, traded industry, new wealth, and the primary sector, includes firms that trade locally produced goods or services with firms or households outside of the firm's region.¹ A business that manufactures goods and sells those goods outside of its region is an example of a traded sector firm. The local sector, also known as the non-traded sector, includes businesses that trade locally produced goods or services with firms or households. Dry cleaners and gas stations are examples of local sector firms.²

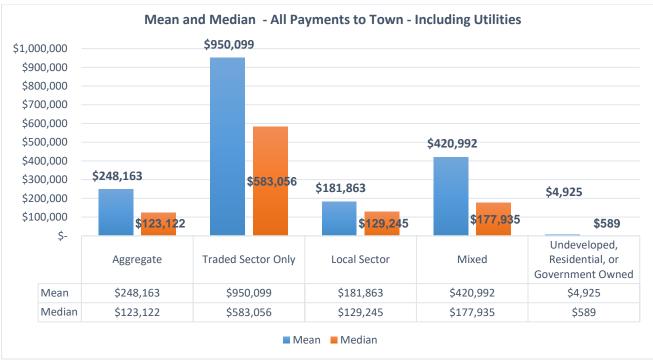


Figure 7 – Mean & median FY2019 payments, by sector type, traded or local

As Figure 7 shows, which can be found in Chapter 6.2 Traded and Local Sector Analysis, a parcel's sector type affects the amount of revenue the Town generates. In FY2019, parcels containing only traded sector businesses generated more revenue on average than parcels categorized as undeveloped, residential, or government owned; parcels with more than one sector type (mixed) of businesses; and parcels with only local sector businesses.

¹ Michael Porter, "The Economic Performance of Regions," *Regional Studies*, 37, pp. 549-578.

² Oklahoma University Business, Expansion, and Retention IEDC Course, spring 2019.

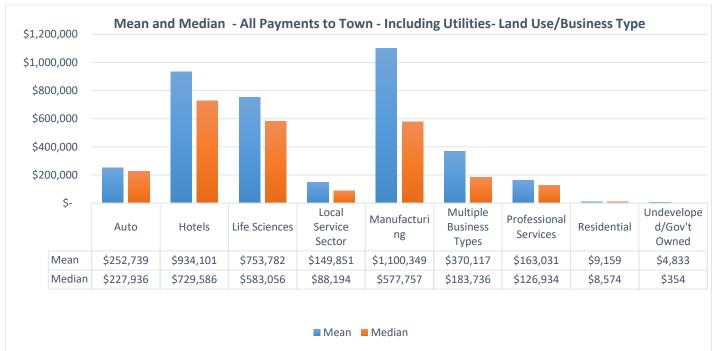


Figure 13 – Mean & median FY2019 payments, by sector type, Land Use/Business Type

As shown in Figure 13, which can also be found in Chapter 6.3 Land Use/Business Type Analysis, some types of businesses generated substantially more revenue than other business types in FY2019. For example, hotels, manufacturing, and the life sciences generated considerably more revenue for the Town in FY2019 than any type of business.

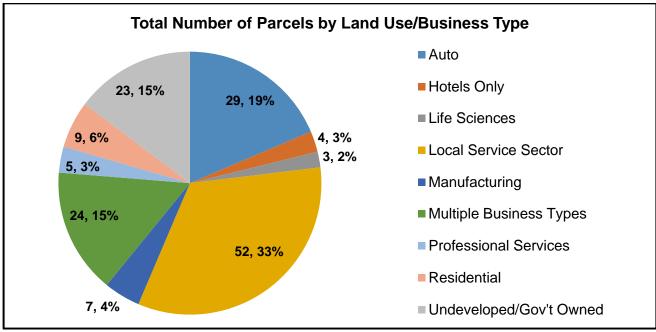


Figure 8 – Number of parcels by Land Use/Business Type

Only a small percentage of parcels on the Route 1 Corridor can be classified as a hotel, a life sciences firm, or a manufacturer. As Figure 8 displays, which can also be found in Chapter 6.3 Land Use/Business Type Analysis, only 14 of the 189 parcels, or 9 percent, are classified as one of these three types of parcels. It is argued that it is in the Town's best interest to prioritize future economic development and planning efforts that will retain and attract new manufacturers, hotels, and businesses in the life sciences, all of which are traded sector industries.

The following will be analyzed in the Route 1 Corridor Economic Impact Study:

- i. how analysis and data lead to these conclusions;
- ii. how the data was collected and aggregated;
- iii. how inferential statistics were used to verify the results of the descriptive analysis; and
- iv. why the Town's insufficient available land for new commercial or industrial development makes future development and redevelopment, coupled with the findings of this report, critically important to the Town's tax base.

2. Introduction: The Route 1 Corridor

US Route 1 is a major highway that extends from Key West, Florida to Fort Kent, Maine. Route 1 also travels through Norwood, where in addition to being a major transportation route, is also a major commercial corridor. A significant portion of the Route 1 Corridor in Norwood is known as the "Auto Mile," which is home to numerous new and used car dealers. The results of these analyses will show that the Route 1 Corridor is much more economically diverse than the widely held conception that the Corridor is a monolithic automobile mall.

The purpose of the Route 1 Corridor Economic Impact Study is to accomplish the following:

- i. inventory the businesses on the Route 1 Corridor;
- ii. quantify and analyze the financial impact of sector types (traded vs. local) by using utility and tax receipts from FY2019 only; and
- iii. quantify and analyze the financial impact of various business types using FY2019 utility and tax data.

Although every business type will be examined, a special emphasis will be placed on comparing the auto sales industry with other business types on the Route 1 Corridor. Descriptive statistics and inferential statistics will be used.

It is hypothesized that a statistically significant relationship exists between sector types (traded, local, and mixed), and it is hypothesized that a statistically significant relationship exists between business types.

To analyze the Route 1 Corridor as equitably as possible and make these findings intuitive for the reader, a framework to categorize businesses on the Route 1 Corridor was created. This framework will be thoroughly examined in Chapters 3, 4, and 5.

2.1 The Route 1 Corridor

The size of the Route 1 Corridor can vary depending on one's interpretation. Figure 1 displays the parcels that were included in these analyses. Generally, only parcels with frontage on Route 1 were included. The primary exception to this rule is parcels that can only be accessed from Route 1. For example, the entire Vanderbilt Area Commercial District can only be accessed from Route 1. So, the entire district was included.

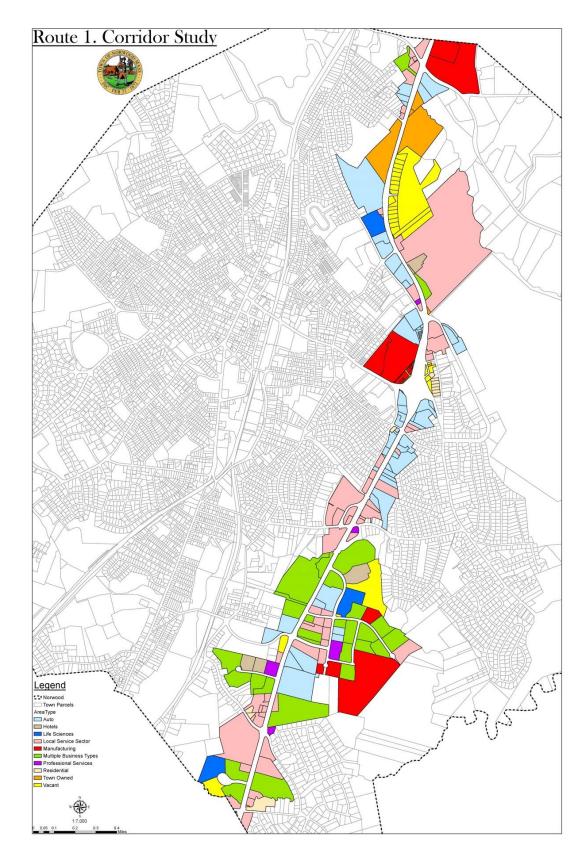


Figure 1 – This is a map of the area of Route 1 that highlights all the parcels included in the Route 1 Corridor Economic Impact Study. The map is color coded showing the different business types used in the analysis.

3. Revenue Types

This report examines the various revenues generated by every parcel on Route 1 and the type of land use. Revenue types include the local receipts, real estate tax, personal property tax, water and sewer fees, electric fees, and broadband fees. Only revenue from FY2019 was used in this study.

3.1 Local Receipts

Local receipts as they are reported in the Town of Norwood budget include the revenue from the Light Department. In this report, local receipts include revenue from room occupancy excise tax, the meals tax, license and permit fees, and vehicle excise tax.

Room Occupancy Excise Tax

Patrons pay a 6 percent room occupancy excise tax (hotel tax) on the gross receipt of every stay in a hotel or motel in Norwood. In FY2019, the Town's hotel/motel tax generated \$1,317,623, all of which was generated in the five hotels on the Route 1 Corridor. The Division of Local Services was unwilling to release the specific amount of revenue each hotel generated in hotel tax to the Town of Norwood. To spread the total \$1,317,623 as equitably as possible, the same proportion of tax revenue was allocated to the corresponding number of hotel rooms at each hotel. See Table 1 for more information.

FY2019 Hotel Tax Breakdown				
Hotel	Hotel Rooms	Percentage of Hotel Rooms in Norwood	Hotel Tax Distribution Based on Hotel Rooms	
Four Points	230	33%		434,173.77
Holiday Inn	85	12%		160,455.52
Residence Inn	97	14%		183,108.07
Marriott	147	21%		277,493.67
Hampton Inn	139	20%		262,391.97
Total	698	100%	1	,317,623.00

 Table 1 - FY2019 room occupancy tax breakdown

Meals Tax

The Town of Norwood accepted the "Local Option Meals Excise Tax" (Meals Tax), which is a .75 percent tax on the gross receipts on the sale of prepared meals. The Division of Local Services was unwilling to release the specific amount of revenue each restaurant generated in meals tax in the Town of Norwood. To divide the revenue as equitably as possible, the total amount of revenue generated from the meals tax in FY2019 (\$753,635) was divided by the number of Common Victualler Licenses that were issued in the same year, a total of 93, to find the average, which is \$8,103.60. Therefore, \$8,103.60 was used as the total meals tax generated in FY2019 for each restaurant.

Vehicle Excise Tax

The Commonwealth of Massachusetts sets the vehicle excise tax for Massachusetts residents, which is \$25 per \$1000 in assessed value. An automobile with an assessed value of \$10,000 would owe the Town \$250 in vehicle excise tax. The Treasurer's Office provided me with the FY2019 vehicle excise tax information. The Town collected \$593,257 in Vehicle Excise Tax revenue from the residents and businesses on the Route 1 Corridor during FY2019.

Permits/Licenses Fees

The Board of Selectmen issues a wide variety of permits and licenses to businesses. Table 2 displays permits and licenses that were issued to businesses on the Route 1 Corridor in FY2019. In total, the Town generated \$78,771 in permit and license fees from businesses on the Route 1 Corridor during FY2019.

Permit or License Name	Amount	Renewal Frequency	FY2019 Totals
Used Car Dealer – Class II License	200	Annual	1,600
Agent or Seller License (Auto sales) – Class 1	200	Annual	4,800
Inn Holder License	100	Annual	500
Auto Amusement Device License	175	Annual	875
Music/Entertainment License Weekdays	330	Annual	2,970
Junk Collector License	55	Annual	55
Gas Registration License	125	Annual	1,875
Liquor License – Package Store	2,142	Annual	2,142
Liquor License – Package Goods Store	1,326	Annual	1,326
Liquor License – Restaurant AAB	3,162	Annual	37,944
Liquor License – Restaurant WMB	2,040	Annual	8,160
Brewery Pouring Permit	1,224	Annual	1,224
Liquor License Inn Holder	5,100	Annual	15,300
		Total	78,771

 Table 2 – Permits and licenses issued to businesses on the Route 1 Corridor

3.2 Real Estate Tax

The Town's FY2019 residential real estate tax rate was \$10.89 per \$1,000 in assessed value. A residential parcel with an assessed value of \$100,000 would owe the Town \$1,089 in real estate tax in FY2019. The Town's commercial and industrial real estate tax rate was \$22.82 per \$1,000 in assessed value. The assessments for all real estate were found by using the Assessors' Office Online database.

3.3 Personal Property Tax

The Town's FY2019 personal property tax rate was \$22.82 per \$1,000 in assessed value. The Assessor's Office supplied me with the personal property assessment for each parcel.

3.4 Water & Sewer Fees

Norwood Light Broadband, which manages all utility billing for the Town, gave me every FY2019 water and sewer bill for every parcel on Route 1.

3.5 Electric Fees

Norwood Light Broadband, which manages all utility billing for the Town, provided me with every FY2019 electric bill for every parcel on Route 1. Several parcels contain multiple electric accounts.

3.6 Broadband Fees

Norwood residents and businesses are fortunate to have access to municipal broadband. Norwood Light Broadband, which manages all utility billing for the Town, supplied me with FY2019 broadband bills for every parcel on Route 1. Several parcels have more than one broadband account.

<u>3.6 TIFs</u>

Tax Increment Financing (TIF) is an economic development tool used to spur economic growth. A TIF affords a business with a reduction in the increase in real estate tax and or personal property tax payments as a result of increasing the property value due to a renovation or new construction. In FY2019, there two active TIFs on the Route 1 Corridor: Hampton Inn & Mick Morgan's (434 Boston-Providence Turnpike) and FM Global and Sheraton Four Points (1151-1177 Boston-Providence Turnpike). The reduction in real estate tax assessments due to the TIFs are included in the FY2019 tax payments for both parcels. Once the TIFs on these parcels expire, the real estate tax assessment will increase on both parcels.

4. Categories for Analysis, excluding Traded Vs. Local Sector

There were 358 businesses on the Route 1 Corridor in FY2019. Two types of categories were used to inventory and analyze the 358 businesses found on the Route 1 Corridor: Business Types and Land Use/Business Type. The Business Type and Land Use/Business categories are made up of a wide variety of classes that provide detailed explanations of what each type of business does and offers its customers.

4.1 Business Type

The classes found in the Business Type category are specific and required far more, 21 in total, classes than the Land Use/Business Type category, 10 in total. The Business Type category is used as a building block for the Land Use/Business Type category, which was used in the descriptive and inferential analyses. Many of the class names, were taken directly from the North American Industrial Classification System (NAICS).

Accommodations – Food & Beverage

- LOCAL SECTOR
- Restaurants, coffee shops, and bars

Accommodations - Lodging

- TRADED SECTOR
- Hotels, motels, bed-and-breakfast inns

Arts, Entertainment, Creative

- TRADED SECTOR
- Businesses engaged in the development of products or services related to moving pictures, performing arts, still pictures, museum exhibit creation, etc. meet the criteria for the arts, entertainment, and creative class.

Auto Sales

- LOCAL SECTOR
- Businesses engaged in the sale or leasing of new or used passenger automobiles meet the auto sales criteria.

Auto Repair, Maintenance, or Care

- LOCAL SECTOR
- Firms that offer basic to advanced auto repair and maintenance meet the auto repair, maintenance, or care criteria. Businesses that offer car cleaning are included in this class. Many businesses that meet the auto sales criteria also offer some level of auto repair or maintenance and have been categorized accordingly.

Day Care

- LOCAL SECTOR
- Businesses involved in the care of children, not including schools, satisfy the day care criteria.

Distribution

- LOCAL SECTOR
- Businesses involved in the distribution of wholesale goods to retail businesses, not individual consumers, fulfill the distribution criteria.

Life Sciences

- TRADED SECTOR
- According to the Massachusetts Life Sciences Center, "life sciences means advanced and applied sciences that expand the understanding of human physiology and have the potential to lead to medical advances or therapeutic applications including, but not limited to, agricultural biotechnology, bio-generics, bioinformatics, biomedical engineering, biopharmaceuticals, biotechnology, chemical synthesis, chemistry technology, diagnostics, genomics, image analysis, marine biology, marine technology, medical devices, nanotechnology, natural product pharmaceuticals, proteomics, regenerative medicine, RNA interference, stem cell research, and veterinary science."³
 - Some businesses satisfy both the life sciences and manufacturing class criteria and have been labeled accordingly.

Manufacturing

- TRADED SECTOR
- According to the United States Government, "The Manufacturing sector comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction."⁴ Several businesses that meet the Manufacturing class also fulfill the life sciences class criteria and have been labeled accordingly.

Open Lot Vehicle Storage

- LOCAL SECTOR
- A parcel that is used to store new cars and is not located on the same parcel categorized as auto sales comply with the open lot vehicle storage criteria.

Personal Care Services

- LOCAL SECTOR
- Nail salons, barbers, dry cleaning, tanning salons, spas, and laundry services businesses are considered personal care services.

Place of Worship

- LOCAL SECTOR
- All churches, synagogues, mosques, etc. are considered places of worship.

³ "About the Massachusetts Life Sciences Center," Massachusetts Life Sciences Center, February 23, 2020, <u>https://www.masslifesciences.com/about/.</u>

⁴ U.S. Census Bureau, "North American Industry Classification System: 2012 NAICS Definition: Sector 31-33— Manufacturing."

http://www.census.gov/cgi%20bin/sssd/naics/naicsrch?code=31&search=2012%20NAICS%20.

Professional Services

- MAY BE TRADED OR LOCAL SECTOR
- Professional services include the following types of businesses:
 - \circ financial services;
 - insurance;
 - accounting services;
 - architectural services;
 - \circ engineering services;
 - consulting;
 - sales;
 - o administrative;
 - \circ offices;
 - o professional associations;
 - o medical facilities;
 - o dental offices;
 - o doctor offices;
 - o childcare; and
 - o legal services.

Recreation/Health Clubs

- LOCAL SECTOR
- Health clubs, gyms, and golf courses are a few types of businesses in this class. Here are a few examples of businesses on Route 1 that fulfill the criteria for this class: Ty Law's Launch Trampoline Park, BayState Archers Training Center, and Norwood Country Club.

Rental

- LOCAL SECTOR
- Businesses engaged in renting of equipment, tools, automobiles, or storage space satisfy the rental class criteria.

Residential

- NEITHER LOCAL nor TRADED SECTOR
- The residential class includes single-family and multi-family homes.

Retail

- LOCAL SECTOR
- Businesses in the retail class include the following:
 - liquor stores;
 - grocery stores;
 - o pharmacies;
 - convenience stores;
 - hardware stores;
 - \circ office supplies stores;
 - pet supply stores;
 - gas stations; and
 - \circ car washes.

Technology

- TRADED SECTOR
- The technology business type includes those involved in, but not limited to, software development, database management, and automation solutions.
 - Several companies could meet the technology, life sciences class, or manufacturing class. Because so many businesses could be included in this class, the decision was made to limit the number of businesses in this class by not including companies that meet the manufacturing and/or life sciences criteria.

Traded Service

- LOCAL SECTOR
- This business type may include businesses that offer the following services: security system installation, electricians, plumbers, pool and spa services, painters, and construction services.

Town or Government

- NEITHER LOCAL nor TRADED SECTOR
- A parcel owned by the Town of Norwood or another governmental entity comply with the town or government criteria.

Undeveloped Land

- NEITHER LOCAL nor TRADED SECTOR
- Parcels that have not been developed comply with the undeveloped land criteria.

4.2 Land Use/Business Type

The Land Use/Business Type category is a condensed version of the Business Type category. The only way to complete a thorough analysis of the Route 1 Corridor was to condense the Business Type category. Therefore, each class, on average, has a broader definition than the Business Type category. The description of each class displays the Business Type category classes included in each Land Use/Business Type class. The Land Use/Business Type category was used in the descriptive and inferential analysis.

Auto

- LOCAL SECTOR
- The following classes from the Business Type category are included in the auto class: auto sales; open lot vehicle storage; and auto repair, maintenance, or care businesses when the same business also sells automobiles.

Hotels

- TRADED SECTOR
- The following classes from the Business Type category are included in the hotels class: accommodations lodging.

Life Sciences

- TRADED SECTOR
- The following classes from the Business Type category are included in the life sciences class: life sciences.
- Many businesses that could meet this class are in office buildings that share a parcel with businesses in other classes, which placed several businesses in the life sciences class in the multiple business types class. To more easily identify and learn about these firms, see Appendix A.

Local Service Sector

- LOCAL SECTOR
- The following classes from the Business Type category are included in the local service sector class:
 - o retail;
 - accommodations food & beverage;
 - storage facilities;
 - o rental;
 - places of worship;
 - \circ personal care services;
 - recreation/health clubs;
 - traded services;
 - o day care; and
 - $\circ\;$ auto repair, maintenance, or car businesses that are not involved in the sale or rental of automobiles.

Manufacturing

- TRADED SECTOR
- The following classes from the Business Type category are included in the manufacturing class: manufacturing.

Multiple Business Types

- MAY BE TRADED OR LOCAL SECTOR
- Because several parcels comprise of multiple businesses with a wide range of business types, it was determined that the only logical solution was to create a new class, for analysis purposes only, to better compare parcels.
- Most business types can be found in at least one parcel labeled as the multiple business types class.

Technology

- TRADED SECTOR
- There were no parcels on Route 1 in FY2019 that exclusively contained companies that met the technology class. Every business that meets this class can be found in multiple business type class. For more information about technology companies in the Route 1 Corridor, see Appendix A.

Professional Services

- MAY BE TRADED OR LOCAL SECTOR
- The following classes from the Business Type class are included in the professional services class: professional services.

Residential

- NEITHER LOCAL nor TRADED SECTOR
- The following classes from the Business Type class are included in the residential class: residential

Undeveloped or Government Owned

- NEITHER LOCAL nor TRADED SECTOR
- The following classes from the Business Type class are included in the residential class: undeveloped, N/A, and town or government.

5. Traded Vs. Local Sector

5.1 Definition of Traded Sector and Local Sector

The traded sector, also known as the basic industry, traded industry, new wealth, and the primary sector, includes firms that trade locally produced goods or services with firms or households outside of the firm's region.⁵ For example, an automobile manufacturer in Ohio would be categorized as a traded sector business because it sells cars outside of its region. For example, an automobile manufacturer in Ohio would be categorized as a traded sector business because it sells cars outside sector business because it sells cars outside of its region. For example, an automobile manufacturer in Ohio would be categorized as a traded sector business because it sells cars outside of its region. The local sector, also known as the non-traded sector, includes businesses that trade locally produced goods or services with local firms or households. A dry cleaner is an example of a local sector firm.⁶

In Michael Porter's, "The Economic Performance of Regions," he uses metropolitan statistical areas, like the Boston-Cambridge-Newton, MA-NH Metro Area, to define regions. The same definition of regions will be used in this analysis.

5.2 Wealth Creation

Adding value to resources, shipping those higher value goods and services out of the region, and bringing dollars in is the only way to create wealth for a community.⁷ That is, traded sector industries are the only type of businesses capable of creating wealth in a community.

Traded sector wages, on average, are significantly higher than an employee can expect from a local sector business. In addition, it has been found that a region's traded sector businesses tend to influence the wages of those who work for local sector businesses and the region's overall average wage.⁸ Traded sector businesses not only provide good paying jobs, but they can also increase the wages of those who work in the local sector.

Local sector firms are still important. They provide goods and services for traded sector firms, provide goods and services for individuals who work for traded and local sector businesses, and help create a sense of place.⁹

Descriptive and inferential analyses were completed to determine if there is a statistical difference between traded and local sector businesses on the Route 1 Corridor.

⁵ Michael Porter, "The Economic Performance of Regions," *Regional Studies*, 37, pp. 549-578.

⁶ Oklahoma University Business, Expansion, and Retention IEDC Course, spring 2019.

⁷ Oklahoma University Business, Expansion, and Retention IEDC Course, spring 2019.

⁸ Michael Porter, "The Economic Performance of Regions," *Regional Studies*, 37, pp. 549-578.

⁹ Oklahoma University Business, Expansion, and Retention IEDC Course, spring 2019.

5.3 Leakage

Leakage, at the local level, can be described as money flowing out of a local economy to another local economy.¹⁰ For example, purchasing a meal at a local restaurant creates some leakage because the restaurant does not grow or process all of the food sold at the restaurant in Norwood. An economy entirely dependent upon its local sector would not be sustainable. This is due to leakage. Local customers typically purchase most of their goods and services produced outside of their local area, which results in money leaving their local economy, or leakage. Traded sector industries do the opposite.¹¹ For example, someone in Los Angeles who purchases a pharmaceutical product manufactured or designed in Norwood is sending his or her wealth to the Norwood area.

5.4 Business Type by Sector

The following business type categories are considered traded sector industries:

- accommodations lodging;
- arts, entertainment, creative;
- life sciences;
- technology;
- manufacturing; and
- professional services*.

The asterisk (*) is used to show business type classes that may be traded or local depending on the specific business.

The following business type categories are local sector industries:

- accommodations food & beverage;
- auto sales;
- auto repair, maintenance, or care;
- day care;
- distribution;
- open lot vehicle storage;
- personal care services;
- place of worship;
- professional services*;
- recreation/health clubs;
- rental;
- retail; and
- traded services.

¹⁰ Oklahoma University Business, Expansion, and Retention IEDC Course, spring 2019.

¹¹ Michael Porter, "The Economic Performance of Regions," *Regional Studies*, 37, pp. 549-578.

6. Analysis

Several analyses were conducted to determine what the impact the Route 1 Corridor has on the Town's overall budget, the aggregate of traded and local sector businesses on Route 1 were analyzed, and the Land Use/Business Type category was used to compare the nine (9) classes identified on Route 1. Descriptive and inferential statistical tools were used. Several uncommon statistical terms are used in Chapter 6. Analysis. A list of statistical terms and definitions used in Chapter 6 can be found in Appendix G.

	FY2019 Actuals - Town Wide		FY2019 Actuals - Route 1 Corridor		Percentage of FY2019 Actuals
Electric	\$	59,375,294.61	\$	17,108,246.98	28.81%
Water & Sewer	\$	15,420,301.46	\$	4,097,133.41	26.57%
Broadband	\$	7,868,274.16	\$	350,633.51	4.46%
Real Estate Taxes	\$	77,176,326.40	\$	14,298,264.20	18.53%
Utilities Only	\$	82,663,870.23	\$	21,556,013.89	26.08%
Total (Utilities and Real Estate Taxes)	\$	159,840,196.63	\$	35,854,278.10	22.43%

6.1 Route 1 Corridor's Budget Impact

 Table 3 – Route 1 Corridor FY2019 Actuals vs. Town of Norwood

Acres - Town of	Acres - Route 1	Route 1 Corridor Acreage as a Percentage
Norwood	Corridor	of the Town's Total Land Area
6784	823	

 Table 4 - Route 1 Corridor FY2019 Actuals vs. rest of Town of Norwood

The Route 1 Corridor encompasses about 12 percent of the land area of the Town but contributed 18.5 percent of the Town's total real estate tax levy in 2019, nearly 30 percent of the revenue for electricity, and nearly 27 percent of the water and sewer payments. The Route 1 Corridor keeps real estate tax rates and utility rates low for the rest of Norwood. Without the Route 1 Corridor, The Town of Norwood would be forced to either reduce its service level or increase real estate taxes and utility rates to maintain the Town's service level.

6.2 Traded and Local Sector Analysis

6.2.1 Descriptive Analysis

The purpose of conducting this descriptive analysis is to determine if a business's sector type, in this case, traded sector, local sector, or mixed, affects the amount of revenue the Town of Norwood generates by parcel. The independent variable is the sector type, traded, local, and mixed. The dependent variable is the revenue generated by the Town in tax and utility revenues. Undeveloped parcels, government-owned parcels, and residential parcels were analyzed in aggregate because none of these land use types fit into the mixed, traded, or local sector type industries.

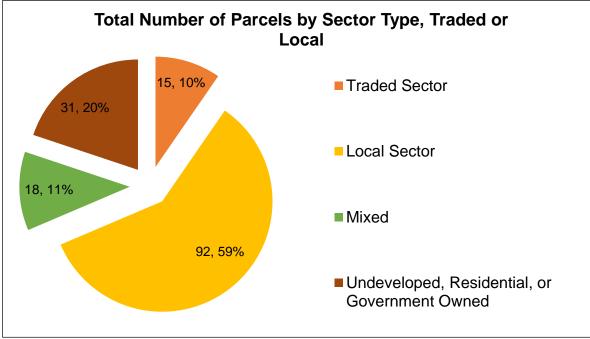
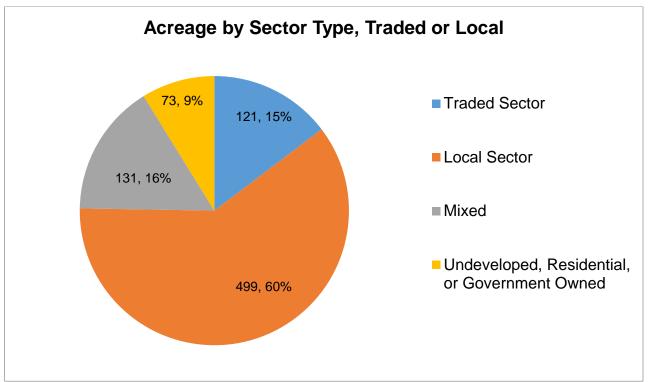
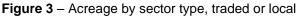


Figure 2 – Number of parcels by sector type, traded or local





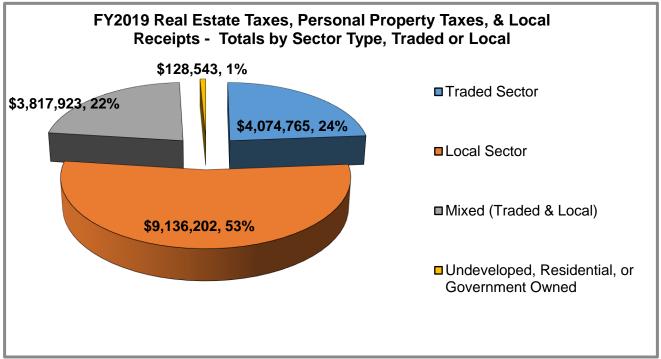


Figure 4 – FY2019 payments, excluding utility payments, aggregated by sector type, traded or local

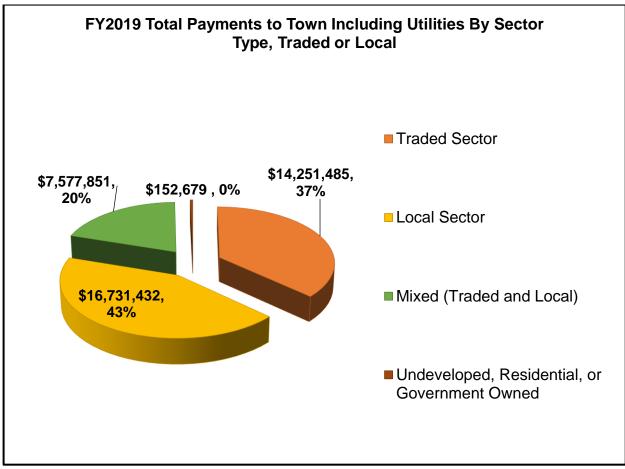


Figure 5 - FY2019 payments aggregated by sector type, traded or local

Figures 2-5 tell a compelling story: There are more local sector businesses on the Route 1 Corridor than traded or mixed sector businesses, they consume more space than other sectors, and generate more revenue than undeveloped, residential, or government owned; mixed sector; or traded sector businesses. However, traded sector businesses, when aggregated, account for 24 percent of the Corridor's total tax payment to the Town and 37 percent of the Corridor's total tax payment when utilities are included. Traded sector businesses accomplish this despite only accounting for 10 percent (15 total) of the businesses on the Corridor and consuming 121 acres (15 percent) of the Corridor's land area.

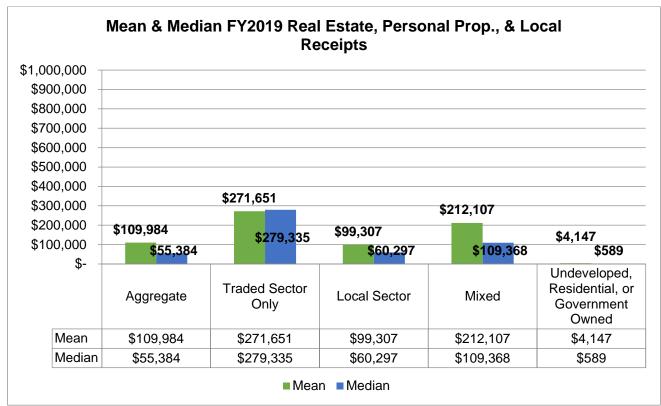


Figure 6 – Mean & median FY2019 payments, excluding utility payments, by sector type, traded or local

The traded sector's median and mean tax payments to the Town, excluding utilities, is greater than the local sector median and mean and the mixed sector median and mean tax payments to the Town. Table 5 exhibits the mean and median differences between the traded sector and the other sectors.

Mean and Median Differences FY2019 Real Estate, Personal Property, and Local Receipts				
	Mean Difference	Median Difference		
Traded Sector - Local Sector	172,344	219,038		
Traded Sector - Mixed	59,544	169,967		
Traded - Undeveloped, Residential, or				
Government Owned	267,504	278,746		

Table 5 – Sector Mean and Median differences

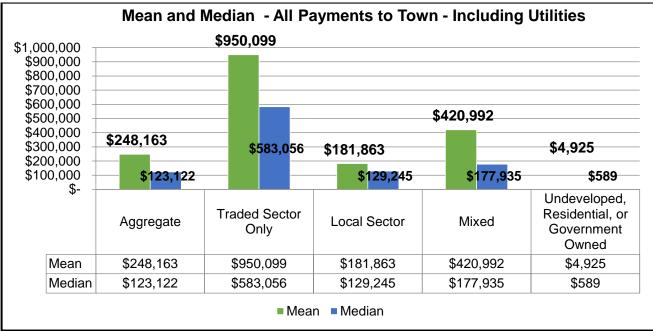


Figure 7 – Mean & median FY2019 payments, by sector type, traded or local

When utility payments are added to the dependent variable, the gap between traded sector businesses and local sector and mixed sector businesses grow a great deal. Table 6 demonstrates the mean and median difference between the traded sector and the other sectors.

Mean and Median Differences - All Payments to Town - Including Utilities				
	Mean Difference	Median Difference		
Traded Sector - Local Sector	768,236	453,810		
Traded Sector - Mixed	529,107	405,121		
Traded - Undeveloped, Residential, or				
Government Owned	945,174	582,467		

 Table 6 - Sector Mean and Median differences, including utilities

6.2.1.1 Results

Overall, it was found that a parcel's sector type affects the amount of revenue the Town generates. These descriptive analyses clearly show that in FY2019, parcels containing only traded sector businesses generated more revenue than parcels categorized as undeveloped, residential, or government owned; parcels with more than one sector type (mixed) of businesses; and parcels with only local sector businesses.

6.2.2 Inferential Analysis – Traded and Local Sectors

Inferential statistics is different from categorical statistics in that inferential statistics can help us make educated estimates about the future. Categorical statistics are valuable, but they can only describe what has already happened.¹² Also, inferential statistics can be used to confirm if there is a statistical difference between data sets. We can perceive differences between data sets using the results of categorical statistical tools, but they can't validate that a statistical relationship exists; inferential statistics can prove that a statistical relationship exists. Therefore, inferential statistics are crucial to helping us confirm what type of sector(s), and later business classes will generate more revenue for the Town in the future.

The purpose of this analysis is to verify, by using a t-Test, whether a business's sector type affects the amount of revenue the Town earns in taxes and utility payments. It is hypothesized that the t-Test will suggest that there is a statistical relationship between sector types and the amount of revenue the Town generates on an annual basis. The following sentence is the null hypothesis of the Route 1 Corridor Economic Impact Study: There is no statistical relationship between a business's sector type and the amount of revenue the Town generates from that type of parcel on an annual basis. The following sentence is the alternative hypothesis of the Route 1 Corridor Economic Impact Study: There is a statistical relationship between a business's sector type and the amount of revenue the Town generates from that type of parcel on an annual basis. The following sentence is the alternative hypothesis of the Route 1 Corridor Economic Impact Study: There is a statistical relationship between a business's sector type and the amount of revenue the Town generates from that type of parcel on an annual basis. The following sentence is the alternative hypothesis of the Route 1 Corridor Economic Impact Study: There is a statistical relationship between a business's sector type and the amount of revenue the Town generates from that type of business on an annual basis. The level of significance for each analysis .05. The two-tail results of the t-Test will be examined to determine whether the null hypothesis will be accepted or not.¹³

The independent variable in this analysis is the sector type, traded, local, or mixed. Some parcels are home to multiple businesses, traded and local alike. So, several parcels have been classified as mixed. The dependent variable is the amount of revenue the Town generated in revenue in FY2019 by parcel, with and without utility payments. A t-Test was conducted to compare all three sector types, six total t-Tests, using all revenue types in the dependent variable and without utility-related revenues.

¹² Evan M. Berman and XiaoHu Wang, *Essential Statistics for Public Managers and Policy Analysts, 3rd Edition,* (Washington, D.C.: Sage Publications, 2012).

^{13 &}quot;FAQ: WHAT ARE THE DIFFERENCES BETWEEN ONE-TAILED AND TWO-TAILED TESTS?" UCLA Institute for Digital Research & Education, March 9, 2020, <u>https://stats.idre.ucla.edu/other/mult-</u> pkg/fag/general/fag-what-are-the-differences-between-one-tailed-and-two-tailed-tests/.

t-Test	 al Sector Mean	Trad	ded Sector Mean	p-value	Statistically Significant Relationship
FY2019 Real Estate Taxes, Personal Property Taxes, & Local Receipts: Local Sector Vs. Traded Sector	\$ 86,889	\$	199,951	0.00	Yes
FY2019 All Payments to Town Including Utilities: Local Sector Vs. Traded Sector	\$ 181,863	\$	950,099	0.00	Yes
t-Test	 al Sector Mean		Mixed Mean	p-value	Statistically Significant Relationship
FY2019 Real Estate Taxes, Personal Property Taxes, & Local Receipts: Local Sector Vs. Mixed	\$ 86,889	\$	176,579	0.11	No
FY2019 All Payments to Town Including Utilities: Local Sector Vs. Mixed	\$ 181,863	\$	420,992	0.17	No
t-Test	Mixed Mean	Trad	ded Sector Mean	p-value	Statistically Significant Relationship
FY2019 Real Estate Taxes, Personal Property Taxes, & Local Receipts: Mixed Vs. Traded Sector	\$ 176,579	\$	199,951	0.7	No
FY2019 All Payments to Town Including Utilities: Mixed Vs. Traded Sector	\$ 420,992	\$	950,099	0.08	No

 Table 7 – Summary of the six t-Tests

6.2.2.1 Results

Statically speaking, traded sector industries generate more tax and utility revenue than local sector industries. A statistically significant relationship exists between the traded sector and the local sector both when utilities are included in the dependent variable and when utilities are not included in the dependent variable. This is not surprising based on the results of the descriptive analysis. For example, when utilities are included in the dependent variable, the traded sector and local sector mean difference is \$768,236.

The t-Test, although an invaluable statistical tool, is not the only mechanism at our disposal. The traded sector and the mixed sector do not have a statistically significant relationship. However, the descriptive analyses demonstrate that the traded sector mean and median are larger than the mixed sector mean and median. When utilities are included in the dependent variable, the traded sector and mixed mean difference is \$529,107.

Even in aggregate, the traded sector generates a lot of revenue for the Town in comparison to the local and mixed sectors. Only fifteen, or 10 percent of the parcels, are exclusively made up of traded sector business. Despite its small footprint, the traded sector generated \$14,251,485, or 39 percent, of the revenue generated by the Route 1 Corridor when utilities are included. The local sector by comparison generated \$16,731,432, or 43.2 percent, of the revenue generated by the Corridor despite comprising 59 percent, 92 total, of the parcels on the Corridor.

The traded sector has a statically significant relationship with the local sector, it's mean and median are substantially larger than the mixed sector, and it's aggregate tax payments, including utilities, equate to over one-third of the Corridor's total tax payments despite only comprising 10 percent of the parcels on the Corridor. The descriptive and inferential analysis suggest that traded sector business generate more tax and utility revenue than mixed and local sector businesses.

6.3 Land Use/Business Type Analysis

6.3.1 Descriptive Analysis

The purpose of conducting this descriptive analysis is to determine if the type of business, as defined in the Land Use/Business Type category, affects the amount of revenue the Town of Norwood generates by parcel. The independent variable in this analysis is the classes of businesses identified in the Land Use/Business Type category. Land Use/Business Type classes include the following:

- auto;
- hotels;
- life sciences;
- local service sector;
- manufacturing;
- multiple business types;
- professional services;
- residential; and
- undeveloped or government owned.

The dependent variable is the revenue generated by the Town in tax and utility payments. The impact of Land Use/ Business Sector classes on total revenues generated for the Town and total revenues without utility payments was analyzed.

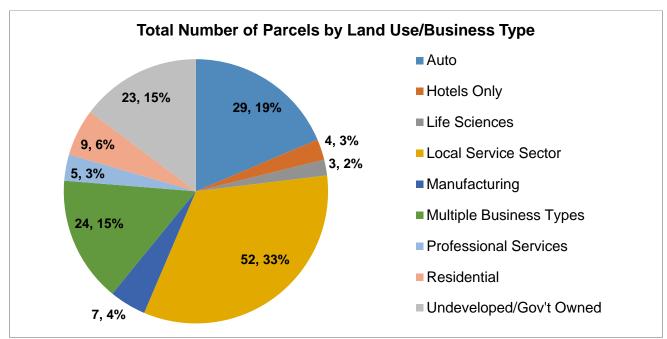


Figure 8 – Number of parcels by Land Use/Business Type

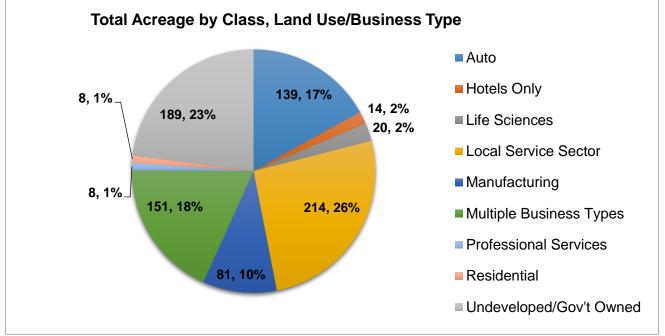


Figure 9 – Acreage by class, Land Use/Business Type

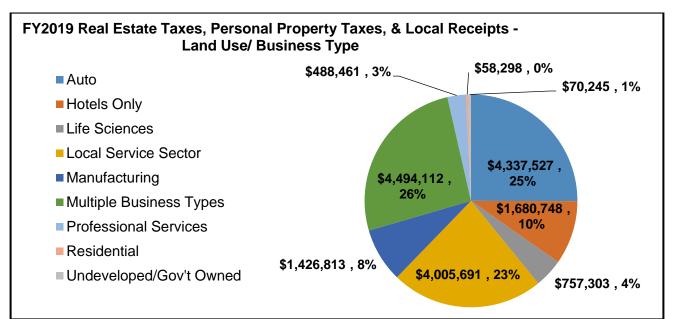


Figure 10 – FY2019 payments, excluding utility payments by class, Land Use/Business Type

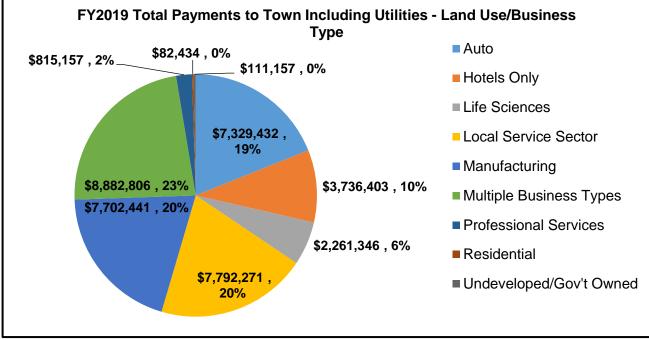


Figure 11 – FY2019 payments aggregated by class, Land Use/Business Type

Figures 8-11 present a diverse, economically speaking, area of Norwood. The local service sector, auto, and multiple business types classes dominate the Route 1 Corridor in the number of parcels and acreage. That, however, doesn't tell the whole story. Hotels, for example, contribute 10 percent of the Corridor's total tax base and utility payments to the Town. Four of the five hotels on the Corridor accomplish this by only consuming 2 percent of the Corridor's land area. The parcel on which the Four Points sits is shared with FM Global and Dedham Medical Associates, which is why the Four Points Hotel is included in the multiple business types class.

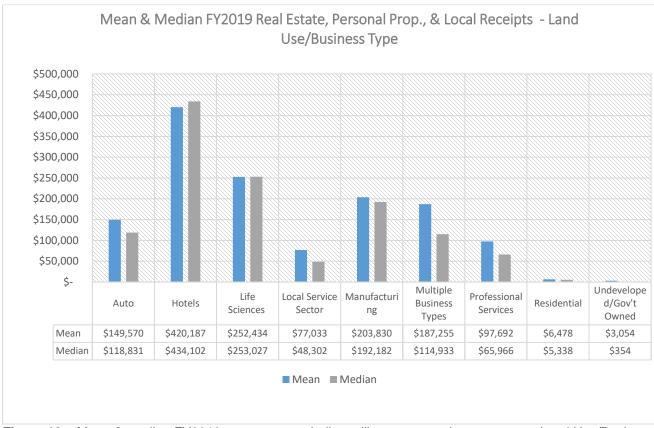


Figure 12 – Mean & median FY2019 payments, excluding utility payments, by sector type, Land Use/Business Type

A few of the classes stand out among the nine classes in Figure 12. Specifically, the hotels, life sciences, and manufacturing classes distinguish themselves from the other classes. Even in comparison to the classes with the fourth and fifth largest mean and median, auto and multiple business types, the hotels, life sciences, and manufacturing classes have prominently larger means and medians. Table 8 displays the mean and median differences between the hotels, life sciences, and manufacturing with the auto and multiple business classes.

Mean and Median Differences FY2019 Real Estate, Personal Property, and Local Receipts			
	Mean Difference	Median Difference	
Hotels- Auto	\$ 270,617	\$ 315,271	
Hotels - Multiple Business Types	\$ 232,932	\$ 319,169	
Life Sciences - Auto	\$ 102,865	\$ 134,196	
Life Sciences - Multiple Business Types	\$ 65,180	\$ 138,094	
Manufacturing - Auto	\$ 54,260	\$ 73,351	
Manufacturing - Multiple Business Types	\$ 16,576	\$ 77,249	

 Table 8 – Mean and median differences

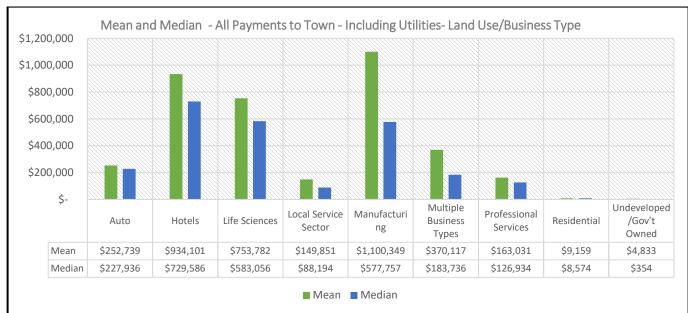


Figure 13 – Mean & median FY2019 payments, by sector type, Land Use/Business Type

When utility payments are added to the dependent variable, the size of the gap between the hotels, life sciences, and manufacturing classes and the other six classes surge. Table 9 exhibits the mean and median differences between the hotels, life sciences, and manufacturing with the auto and multiple business classes.

Mean and Median Differences - All Payments to Town - Including Utilities				
	Mean Difference	Median Difference		
Hotels - Auto	\$ 681,362	\$ 501,650		
Hotels - Multiple Business Types	\$ 563,984	\$ 545,850		
Life Sciences - Auto	\$ 501,043	\$ 355,120		
Life Sciences - Multiple Business Types	\$ 383,665	\$ 399,319		
Manufacturing - Auto	\$ 847,610	\$ 349,822		
Manufacturing - Multiple Business Types	\$ 730,232	\$ 394,021		

Table 9 - Mean and median differences, including utilities

6.3.1.1 Results

Overall, it was found that the Land Use/ Business Type class affects the amount of revenue the Town generates. These descriptive analyses show that some classes generate a great deal more revenue than others. Specifically, these analyses show that businesses in the hotels, life sciences, and manufacturing classes generate more revenue for the Town of Norwood in taxes and utility revenues than businesses not classified as hotels, life sciences, or manufacturing by the Land Use/ Business Type category.

6.3.2 Inferential Analysis - ANOVA with Tukey's HSD Post Hoc

The purpose of this analysis is to ascertain, by using ANOVA with Tukey's HSD Post Hoc, if a parcel's Land Use/Business Type class affects the amount of revenue the Town earns in taxes and utility payments. The independent variable in this analysis is the classes of businesses identified in the Land Use/Business Type category. Land Use/Business Type classes include the following:

- auto;
- hotels;
- life sciences;
- local service sector;
- manufacturing;
- multiple business types;
- professional services;
- residential; and
- undeveloped or government owned.

The dependent variable is the revenue generated by the Town in tax and utility payments. The impact of Land Use/ Business Type classes on total revenues generated for the Town and tax revenues with and without utility payments was inspected. ANOVA with Tukey's HSD Post Hoc was conducted twice, with utilities and without utilities. The same hypothesis, null hypothesis, and alternative hypothesis were used for both tests. The level of significance for both analyses is .05. The expanded results of both sets of ANOVA with Tukey's HSD Post Hoc can be found in Appendix F.

6.3.2.1 FY2019 Real Estate Taxes, Personal Property Taxes, and Local Receipts

The first step in this process is to complete an ANOVA. The following sentence is the null hypothesis of the analysis: There is no statistical relationship between the Land Use/Business Type classes and the amount of revenue the Town generates on an annual basis when utilities are not included. The following sentence is the alternative hypothesis of the analysis: There is a statistical relationship between the Land Use/Business Type classes and the amount of revenue the Town generates on an annual basis of the analysis: There is a statistical relationship between the Land Use/Business Type classes and the amount of revenue the Town generates on an annual basis when utilities are not included.

A one-way ANOVA showed that a statistically significant relationship exists, with a p-value of **0.00**, when utilities are not included in the dependent variable. The null hypothesis is rejected. This tells us that there is a statistically significant relationship between at least two of the Land Use/Business Type classes. The next step is to complete a Tukey's HSD Post Hoc to determine which classes have statistically significant relationships.

ANOVA With Tukey's Post HSD Post Hoc - Land Use/Business Type				
FY2019 Real Estate Taxes, Personal Property Taxes, &				
	Local Receipts Statistically Significant Relationsh	ips		
Land Use/ Business Type	Land Use/ Statistically Significant Relationship -			
Auto	Undeveloped or Government Owned (Mean Difference: 146,516) (p-value: 0.02)	Hotels (Mean Difference: - 270,617) (p-value: 0.02)		
Hotels	 Auto (Mean Difference: 270,617) (p-value: 0.02) Local Service Sector (Mean Difference: 343,154) (p-value: 0.00) Professional Services (Mean Difference: 354,848) (p-value: 0.02) Residential (Mean Difference: 413,709) (p-value: 0.00) Undeveloped or Government Owned (Mean Difference: 417,133 (p-value: 0.00) 	None		
Life Sciences	None	None		
Local Service Sector	None	Hotels (Mean Difference: - 343,154) (p-value: 0.00)		
Manufacturing	Undeveloped or Government Owned (Mean Difference: 200,776) (p-value: 0.05)	None		
Multiple Business Types	Undeveloped or Government Owned (Mean Difference: 184,201) (p-value: 0.00)	None		
Professional Services	None	Hotels (Mean Difference: - 354,848) (p-value: 0.02)		
Residential	None	Hotels (Mean Difference: - 413,709) (p-value: 0.00)		
Undeveloped or Government Owned	None	 Auto (Mean Difference: - 146,516) (p-value: 0.02) Hotels (Mean Difference: - 417,133 (p-value: 0.00) Multiple Business Types (Mean Difference: -184,201 (p-value: 0.00) 		

Table 10 – Statistically Significant Relationships - Land Use/Business Type – No Utilities

ANOVA with Tukey's HSD Post Hoc of all Land Use/Business Type classes, excluding utilities, shows that there is a statistically significant relationship, a p-value less than .05, between several classes. The null hypothesis is rejected. Statistically speaking, a parcel's Land Use/Business Type class affects the amount of revenue the Town generates when utilities are not included. Table 10 illustrates which Land Use/Business Type classes have statistically significant relationships. The corresponding p-value and mean difference were also included in Table 10. Like the findings from the descriptive analysis, the hotels class generates, on average, significantly more revenue than other classes.

It's important to consider a couple of important facts when reviewing the ANOVA with Tukey's HSD Post Hoc of all Land Use/Business Type classes:

- The .05 significance level is a high bar. This tells us that we are 95 percent certain that there is a statistically significant relationship between the independent variables.
- Several businesses on the Route 1 Corridor pay a lot of money to the Town in utility payments, and this is critical to understanding why certain classes generate so much revenue for the Town. The results of the next section will show that some classes, like manufacturing, use a great deal of electricity and water, which increased the manufacturing class's average annual Norwood tax and utility payment.

To read the expanded results of the ANOVA with Post HSD Post Hoc, see Appendix F.

6.3.2.2 FY2019 Real Estate Taxes, Personal Property Taxes, Local Receipts, and Utility Payments

The first step in this process is to complete an ANOVA. The following sentence is the null hypothesis of the analysis: There is no statistical relationship between the Land Use/Business Type classes and the amount of revenue the Town generates on an annual basis. The following sentence is the alternative hypothesis of the analysis: There is a statistical relationship between the Land Use/Business Type classes and the amount of revenue the Town generates on an annual basis.

A one-way ANOVA showed that the Land Use/Business Type classes was significant, with a p-value of **0.00**. The null hypothesis is rejected. This tells us that there is a statistically significant relationship between at least two of the Land Use/Business Type classes. The next step is to complete a Tukey's HSD Post Hoc to help us determine which classes have statistically significant relationships with which Land Use/Business Type classes.

ANVOA With Tukey's Post HSD Post Hoc - Land Use/Business Type						
FY2019 Real Estate Taxes, Personal Property Taxes, Local Receipts, & Utility Payments						
	Statistically Significant Relationships					
Land Use/ Business Type	Statistically Significant Relationship - Larger Average Mean	Statistically Significant Relationship - Smaller Average Mean				
Auto	None	 Hotels (Mean Difference: -681,362) (p-value: 0.05) Manufacturing (Mean Difference: -847,610) (p-value: 0.00) 				
Hotels	 Auto (Mean Difference: 681,362) (p-value: 0.05) Local Service Sector (Mean Difference: 789,990) (p-value: 0.01) Residential (Mean Difference: 924,941) (p-value: 0.01) Undeveloped or Government Owned (Mean Difference: 929,268) (p-value: 0.00) 	None				
Life Sciences	None	None				
Manufacturing	 Auto (Mean Difference: 847,610) (p-value: 0.00) Local Service Sector (Mean Difference: 956,238) (p-value: 0.00) Multiple Business Types: (Mean Difference: 730,232) (p-value: 0.00) Professional Services (Mean Difference: 937,317) (p-value: 0.00) Residential (Mean Difference: 1,091,189) (p-value: 0.00) Undeveloped or Government Owned (Mean Difference: 1,095,516) (p-value: 0.00) 	None				
Local Service Sector	None	 Hotels (Mean Difference: - 789,990) (p-value: 0.01) Manufacturing (Mean Difference: -956,238) (p-value: 0.00) 				
Multiple Business Types	None	Manufacturing (Mean Difference: -730,232) (p-value: 0.00)				
Professional Services	None	Manufacturing (Mean Difference: -937,317) (p-value: 0.00)				
Residential	None	 Hotels (Mean Difference: - 924,941) (p-value: 0.01) Manufacturing Residential (Mean Difference: -1,091,189) (p-value: 0.00) 				
Undeveloped or Government Owned	None	 Hotels (Mean Difference: - 929,268) (p-value: 0.00) Manufacturing (Mean Difference: -1,095,516) (p-value: 0.00) 				

Table 11 - Statistically Significant Relationships - Land Use/Business Type - Utilities

ANOVA with Tukey's HSD Post Hoc of all Land Use/Business Type classes, including utilities, shows that there is a statistically significant relationship, a p-value less than .05, between several classes. The null hypothesis is rejected. Statistically speaking, a parcel's Land Use/Business Type class affects the amount of revenue the Town generates. Table 11 shows which Land Use/Business Type classes have statistically significantly larger and smaller means than other Land Use/Business Type classes. The corresponding p-value and mean difference were included, which are illuminating. For example, parcels classified as manufacturing generate, on average, \$847,609.75 per year more than the average parcel classified as auto. Like the descriptive analyses, the ANOVA Tukey's HSD Post Hoc analysis demonstrates that the manufacturing and the hotels classes generate significantly more revenue than almost all the other classes. To read the expanded results of the ANOVA with Post HSD Post Hoc, see Appendix F.

6.3.2.3 Results

The descriptive analyses reveal that hotels, manufacturing, and life sciences generate, on average, much more revenue than other classes. However, the local service sector and auto classes, in aggregate, pay a lot in taxes and utility payments to the Town. When utilities are excluded, the local service sector generated \$4,005,691, or 23 percent, of the Corridor's total tax payments in FY2019, and the auto class generated \$4,337,527, or 25 percent, of the Corridor's total tax payments in FY2019. When utilities are included, the local service sector generated \$7,792,271, or 20 percent of the Corridor's total tax and utility payments in FY2019, and the auto class generated \$7,329,432, or 19 percent, of the Corridor's total tax and utility payments in FY2019.

The results of the ANOVA with Tukey's HSD Post Hoc illustrate that the hotels and manufacturing classes generate more revenue for the Town than nearly all the other classes, on average. The results of the ANOVA with Tukey's HSD Post Hoc prove this by demonstrating that a statistically significant relationship exists between the manufacturing and hotels and several classes. When utilities are included in the dependent variable, the manufacturing class has a statistically significant relationship with every class except for the hotels and life sciences classes. This validates that a significant gap exists between the amount of revenue the Town generates from hotels and manufacturing classes and every other business class, except the life sciences class, on the Corridor.

Despite having the third-largest mean and median total revenues and second-largest median and median total revenues when utilities are not included, the life sciences class does not have a statistically significant relationship with any Land Use/Business Type class. This is likely due to the small sample size, a total of three parcels. The fact that the life sciences classes mean isn't statistically significantly larger than the undeveloped or government owned class provides more evidence to this argument. The life sciences and undeveloped or government owned class mean difference is \$748,949, which is \$67,587 larger than the mean difference of the hotels and auto classes, \$681,362. Hotels and auto classes have a statistically significant relationship.

7. Creativity, Tech, Manufacturing, Innovation, & Life Sciences on Route 1

Aggregating business types was the only way to develop a thorough analysis of the Route 1 Corridor that can later be used to make decisions related to zoning, planning related policies, and economic development. Aggregating the data, however, makes it challenging to display the numerous firms on the Route 1 Corridor that generate wealth for the Norwood area (traded sector industries), provide high wage jobs, push creative boundaries, develop lifesaving pharmaceuticals, or develop new ideas or products that enhance our lives or reduce the cost of conducting business. Most municipalities across the country should be envious of any, let alone all, of the firms listed in Appendix A. Appendix A lists the company name, NAICS code(s), a link to the company website or important news story, address, and a summary explaining what the company does.

8. Study Limitations

Although comprehensive, the Route 1 Corridor Economic Impact Study has limitations. Here is a list of limitations that have been identified:

- Only the revenue the Town generates from the Route 1 Corridor was analyzed. To complete a full economic impact analysis for the Town, we would need to complete additional analysis to understand how much it costs the Town of Norwood to offer municipal services to the 358 businesses on the Route 1 Corridor.
- Due to time constraints, compiling and analyzing the salary figures of employees who work for businesses on the Route 1 Corridor could not be conducted. The lack of data about salaries and employment is a limitation. This information should be critical to the Town's economic development efforts and potential zoning changes of the Route 1 Corridor. Further analysis of this topic is recommended. Being in the Boston Metropolitan Area, there are many high wage jobs within commuting distance, but it's still an asset for our residents and residents of surrounding towns if Norwood has plentiful high wage jobs.
- The Town of Norwood does not collect revenue generated from the Room Occupancy Excise Tax and Meals Excise Tax; the Commonwealth of Massachusetts collects these taxes on the Town's behalf. The Commonwealth of Massachusetts's DLS, unfortunately, does not make this data easily accessible. After multiple attempts spanning several months, it was concluded that DLS was unwilling to fulfill requests for any information regarding Room Occupancy Excise Tax and Meals Excise Tax revenues generated by individual businesses or the Corridor in aggregate. Using the average Meals Excise Tax revenue from FY2019 and the average Room Occupancy Excise Tax revenue based on room totals was a practical alternative, but it would have been more accurate to use the actual FY2019 Room Occupancy Excise Tax or Meals Excise Tax receipts generated by each business.

9. Conclusion and Recommendations

The Route 1 Corridor has a diverse array of businesses. The Corridor is far from the automile monolith many believe it to be. Not only does the analysis show that a great deal of economic diversity exists on Route 1, but this report also shows that the Corridor is home to numerous businesses that generate wealth for the Norwood area (traded sector), provide high wage jobs, push creative boundaries, develop lifesaving pharmaceuticals, and generate new ideas or products that enhance our lives or reduce the cost of conducting business. Numerous municipalities across the country should be envious of Norwood for being home to any business listed in Appendix A.

Chapter 6.2 Traded and Local Sector Analysis establishes that traded sector businesses generated more revenue for the Town than local and mixed sector businesses in FY2019. The descriptive analysis made this clear. The t-Tests verified that traded sector businesses generate more revenue for the Town than local sector businesses. The hypothesis that a statistically significant relationship exists between sector types was proven correct.

Although the actual salaries associated with the traded sector industry could not be ascertained, traded sector wages, on average, are significantly higher than an employee can expect from a local sector business. Also, it has been found that traded sector industries tend to influence the wages for those who work for local sector industries found in the same region.¹⁴ Traded sector firms contribute more tax revenue to the Town, pay higher wages than local sector firms, and even increase the wages for those who work in the local sector. It is in the Town's best interest to commit its limited economic development resources to expand and retain traded sector businesses already in Norwood and to attract new traded sector businesses to Norwood.

The Land Use/Business Type Analysis chapter demonstrates that some business types generate more revenue than others. We know that, on average, hotels generate more revenue than the following business classes:

- auto;
- local service sector;
- residential; and
- undeveloped or government owned.

Also, we know that manufacturing, on average, generates more revenue than the following:

- auto;
- local service sector;
- multiple business types;
- professional services;
- residential; and
- undeveloped or government owned classes.

¹⁴ Michael Porter, "The Economic Performance of Regions," *Regional Studies*, 37, pp. 549-578.

The hypothesis that a statistically significant relationship exists between business classes was proven correct. It should be noted that hotels, manufacturing, and life sciences are all considered traded sector industries.

The hotel industry is an anomaly as this industry does not produce high wage jobs, and without another variable, like tourism, additional hotels could cannibalize one another and may not produce an increased level of tax revenue for the Town. Conversely, jobs in manufacturing and life sciences do tend to create higher wages and, based on the analysis found in this report, would increase the Town's commercial tax base, and pay a great deal in utility fees. It is in the Town's best interest to commit its limited economic development resources to expand and retain manufacturing and life science jobs already in Norwood and to attract businesses in the manufacturing and life sciences industries. It is in the Town's best interest to retain the stock of hotels in Norwood and, if the demand exists, attract new hotels to Norwood.

In aggregate, the auto sales industry contributed \$7,329,432 in tax payments, local receipts, and utility payments, which equates to 19 percent of the Corridor's total tax and utility payments to the Town, 25 percent when utility payments are not included. In aggregate, the auto sales industry generates a lot of revenue for the Town. However, businesses in the auto class do not generate, on average, as much revenue for the Town as several industries. Chapter 6.3 Land Use/Business Type Analysis shows that hotels, manufacturing, and life sciences generate significantly more revenue on average than the auto class when utility payments are and are not included. The hotels and manufacturing classes even have a statistically significant relationship with the auto class. The auto sales industry is also considered a local sector industry. Meaning, much of the revenue generated by the auto sales industry in Norwood is sent to the locations where the automobiles are manufactured or the location of the automaker's headquarters, neither of which are well represented in Norwood or New England.

The Corridor's most valuable and scarce resource, land, is not utilized as well as it could be. Businesses included in the local service sector and auto classes consume 43 percent of the land area of the Route 1 Corridor. The businesses included in these two categories, on average, do not generate nearly as much revenue as businesses in other classes, and businesses included in the local service sector or auto categories are all local sector industries. For example, the life sciences, manufacturing, and hotels categories, in aggregate, consume only 13.9 percent of the Corridor's total land area.

In sum, the Route 1 Corridor is critical to the Town's tax base. The Town's influence over development or redevelopment on the Route 1 Corridor is limited, but the Town can still make zoning, bylaw, and policy improvements to retain and assist in the expansion of businesses in Norwood and to attract new businesses. The Town should use its economic development resources to retain and expand traded sector industries on the Corridor and attract new traded sector industries to the Route 1 Corridor.

10. Appendices

- Appendix A Creativity, Tech, Manufacturing, Innovation, Life Sciences on the Route 1 Corridor
- **Appendix B** Descriptive Analysis Tables, includes the Route 1 Corridor in Aggerate; traded sector, local sector, and mixed sectors; and Land Use/Business Type classes
- Appendix C Every Parcel that was analyzed along with applicable financial and classification information
- **Appendix D** 1500 Boston-Providence contains numerous businesses. Including 1500 Boston-Providence in Appendix C would have made Appendix C more challenging to read. Therefore, 1500 Boston-Providence received its own appendix.
- Appendix E Inferential Analysis Traded and Local Sectors t-Tests and f-Test Tables
- Appendix F ANOVA with Tukey's Post HSD Post Hoc Results, Expanded
- Appendix G Definitions of Statistical Terms

Business Name and Website Link	NAICS Code	Address	Summary
Cardiovascular Engineering Inc.	3391 Medical Equipment and Supplies Manufacturing	1 EDGEWATER DR	Cardiovascular Engineering manufacturers products used in research related to the cardiovascular system and care of the cardiovascular system of patients.
Intlx Solutions, LLC	5415 Computer Systems Design and Related Services	1 EDGEWATER DR	Intlx Solutions is a technology driven solution provider.
Ntirety Inc.	541511 Computer programming services	1 EDGEWATER DR	Ntirety is a is a technology driven solution provider.
<u>Aurus</u>	54199 All Other Professional, Scientific, and Technical Services	1 EDGEWATER DR	Aurus is a technology driven solution provider.
<u>Analog Devices</u>	33441 Semiconductor and electronic Component Manufacturing	10 BOSTON PROVIDENCE/ 1TECHNOLOGY WAY	Analog Devices is a recipient of 4,700 patents and manufactures numerous products including, but not limited to, sensors, amplifiers, electrical equipment, ethernet, fiber optic controls, numerous types of controllers, audio and video equipment, multiplexers, and much more. Unfortunately, Analog Devices decided to move almost its entire Norwood operation to Wilmington in 2018.
			Patch article about Analog Devices consolidating operations in Wilmington, MA.
<u>High Point</u>	54169 Other Scientific and Technical Consulting Services	100 RIVER RIDGE DRIVE	Highpoint is a technology and IT provider that exclusively serves business in the life sciences and healthcare industries.
<u>Aculab</u>	334210 Data communications equipment (e.g., Bridges, Gateways, Routers) Manufacturing, 5415 Computer Systems Design and Related Services, and 517919 All Other Telecommunications	100 RIVER RIDGE DRIVE	Aculab is a "Custom Computer Programming Service" provider, data communications equipment (e.g., bridges, gateways, routers) manufacturer, and much more.
<u>Skillsoft</u>	541511 Custom Computer Programming Services	100 RIVER RIDGE DRIVE	Skillsoft offers computer systems design and related services.

Business Name and Website Link	NAICS Code	Address	Summary
<u>Opentext (Recommind)</u>	541511 Custom Computer Programming Services	100 RIVER RIDGE DRIVE	Opentext offers computer systems design and related services.
Entrinsic Bioscience	541715 Medical research and development laboratories or services and 3254 Pharmaceutical and Medicine Manufacturing	100 RIVER RIDGE DRIVE	Entrinsic Bioscience is a life sciences research firm and pharmaceutical manufacturer. According to the company website, "Entrinsic Bioscience is pioneering the development and commercialization of Prescription Amino AcidsTM (RxAAs) to treat gastrointestinal disorders and other conditions associated with dysfunctional transport membrane (DTM) proteins."
KydaFlow (Cloud Square)	541512 Office automation computer systems integration design services and 541 Professional, Scientific, and Technical Services	100 RIVER RIDGE DRIVE	Kydaflow offers a variety of software designed to improve productivity, data collection and analysis, and cybersecurity.
FM Global	52429 Other Insurance Related Activities	1151 BOSTON PROVIDENCE	FM Global is an insurance provider. At its Norwood location, FM Global offers a wide variety of risk-related training and analysis testing.
EPSG Polymer Technologies	31-33 Manufacturing (too many to list)	129 MORGAN DR / 76 ASTOR AVE	EPSG Polymer Technologies manufactures numerous standards products and manufactures custom products in the medical, aerospace, defense, and automotive industries. They provide numerous other manufacturing related services to private industries.
<u>Apogee Technology</u>	54171 Research & Development in the Physical, Engineering, & Life Sciences	129 MORGAN DR / 76 ASTOR AVE	Apogee is a life sciences company that is currently "developing and commercializing" a "transdermal drug delivery platform, primarily targeting large molecule biopharmaceuticals or compounds that are highly insoluble or have a very low bioavailability."
Home Market Foods	311 Food Manufacturing	140 MORGAN DR	Home Market Foods is a food processing company that specializes in meatballs.
<u>Virtex (Formerly PPI-Timezone)</u>	334 Computer and electronic product manufacturing	1400 BOSTON PROVIDENCE	Virtex provides "Electronic Manufacturing Services (EMS)" to numerous industries, including defense and aerospace; space and satellite; industrial; medical; "High Reliability," which includes communications, robotics, utilities, communications, instrumentation, and sensors; and "Something New," which includes artificial intelligence and IT, scientific instrumentation, advanced electronics, energy, and connected devices.

Business Name and Website Link	NAICS Code	Address	Summary
Spectra-Solutions	334516 Analytical Laboratory Instrument Manufacturing	1500 BOSTON PROVIDENCE	"Sprecta Solutions, Inc. is a manufacturer of spectroscopic analytical instruments and fiber optic Raman probes." <u>US Department of Energy Spectra Solution Grant Funding List</u>
BCCUSA-MA	54151 Computer Systems Design and Related Services	1500 BOSTON PROVIDENCE	BCCUSA-MA is a custom software developer.
<u>Navo Systems</u>	54151 Computer Systems Design and Related Services	1500 BOSTON PROVIDENCE	Navo Systems is a software developer
SIGMAXIM, Inc.	54151 Computer Systems Design and Related Services	1500 BOSTON PROVIDENCE	SIGMAXIM develops design software for numerous types of manufactures. SIGMAXIM's global headquarters is located in Norwood.
<u>SRI INFOTECH, INC</u>	54151 Computer Systems Design and Related Services	1500 BOSTON PROVIDENCE	SRI INFOTECH is a software developer that provides services in the following fields: business management process, security accounting systems, big data, and robotic process automation.
Transformative Engineering	334 Computer and Electronic Product Manufacturing	190-196 VANDERBILT AVE	Transformative Engineering designs and manufactures audio, visual, and data communications devices.
<u>Siemens</u>	5417 Scientific Research and Development Services	2 Edgewater	The Siemens office at 2 Edgewater houses one of Siemens' research and development operations for the medical industry.
Advanced Instruments	334516 Microbiology Instruments Manufacturing	2 Technology Way	Advanced Instruments manufacturers instruments used in biotechnology and microbiology research.
<u>American Holt Engineered Savings</u>	332 Fabricated Metal Product Manufacturing	203 CARNEGIE	American Holt designs and manufactures aftermarket machinery components. According to the website, "American Holt is a full-service engineering firm that focuses on the reverse engineering of high-usage machinery components." American Holt states on their website that they use advanced techniques to serve their customers, as follows: "We have made substantial investments in cutting-edge metrology equipment including material analyzers utilizing X-ray fluorescence, optical emission, and Fourier transmission. We employ state-of-the-art coordinate measuring machines, video inspection as well as an array of other metrology equipment. American Holt utilizes 3D printing to rapidly develop prototypes and identify potential issues before manufacturing parts."

Business Name and Website Link	NAICS Code	Address	Summary					
Source Code Corporation	3341 Computer and Peripheral Equipment Manufacturing	228, 232, 244 VANDERBILT AVE	Source Code manufactures custom computers, servers, storage servers, and a wide variety of hardware for computers.					
<u>United Citrus</u>	3121 Beverage Manufacturing	228, 232, 244 VANDERBILT AVE	United Citrus manufactures cocktail mixes, sports drinks, energy drinks, iced tea, and much more. United Citrus also provides packaging solutions and research and development for food and beverage innovation.					
Pratt & Whitney	331221 Rolled steel shape manufacturing	249 VANDERBILT AVE	Pratt Whitney conducted rolled steel manufacturing in Norwood. Pratt Whitney, at the time of this writing, is no longer operating in Norwood.					
Boston Productions	51210 Motion Picture and Video Industries	290 VANDERBILT AVE	Boston Production produces museum exhibits and interactive displays for museums, corporate offices, hospitals, and other businesses using numerous mediums.					
<u>Smonik Systems</u>	41511 Custom Computer Programming Services	3 EDGEWATER DR	Smonik Systems, according to their website, "is a financial software and consulting firm specializing in providing innovative solutions to investment firms and fund administrators."					
Immugen Inc	3254 Pharmaceutical & Medicine Manufacturing	309-349 BOSTON- PROV TPKE	Immugen is a biopharmaceutical manufacturer. Immugen no longer has an office in Norwood.					
<u>Organogenesis</u>	54171 Research and Development in the Physical, Engineering, & Life Sciences and 3254 Pharmaceutical & Medicine Manufacturing	309-349 BOSTON- PROV TPKE	Organogenesis is a pharmaceutical manufacturer and life sciences research and development firm.					
<u>1 Global Health Institute</u>	54171 Research and Development in the Physical, Engineering, & Life Sciences	309-349 BOSTON- PROV TPKE	1 Global Health Institute is a life sciences research and development firm.					
Castle Island Brewing	312120 Breweries; 7224 Drinking places, alcoholic beverages	31 ASTOR AVE	Castle Island is a craft brewing company.					
<u>Imugen</u>	621511 Medical Laboratories	315 NORWOOD PARK SOUTH	RK According to Imugen's website, "The Norwood, MA laboratory has offered clinical laboratory testing services for over 25 years and specializes in testing for tick-born infections through the Accutix test menu."					

Business Name and Website Link	NAICS Code	Address	Summary
<u>BancTec</u>	541511 Programming services, custom computer programming services	320 NORWOOD PARK SOUTH	BancTec designs, develops, and manufactures computer software.
Revolution Composites	334511 Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing		Revolution Composites designs and manufactures composites used in Aerospace & defense industries.
Prize Possessions	Prize Possessions - 332999 All Other Miscellaneous Fabricated Metal Product Manufacturing	340 - 346 VANDERBILT AVE	Prize Possessions manufactures and engraves high-end awards and trophies.
Box Fort	334413 Semiconductor and Related Device Manufacturing and 541490 Other Specialized Design Services	375 BOSTON PROVIDENCE	Box Fort manufactures touch sensors used in interactive displays. Box Fort also specializes "in the design and fabrication of immersive adventure experiences, interactive exhibits, and special effects for museums, theme parks, theaters, and other popular destinations of educational and entertainment value."
Corbus Pharmaceuticals	3254 Pharmaceutical and Medicine Manufacturing	500 RIVER RIDGE DRIVE	Corbus Pharmaceuticals is a life sciences research firm and pharmaceutical manufacturer. According to the company website, "Corbus Pharmaceuticals Holdings, Inc. is a Phase 3 clinical-stage pharmaceutical company focused on the development and commercialization of novel therapeutics to treat inflammatory and fibrotic diseases by leveraging its pipeline of rationally designed, endocannabinoid system-targeting drug candidates."
<u>Admet</u>	31-33 Manufacturing (Too many to list)	51 MORGAN	Admet manufactures machines and controllers for material testing.
TE Connectivity	334 Computer and Electronic Product Manufacturing	65 - 63 NAHATAN ST	TE Connectivity manufacturers computer components, sensors, and other products used in or with electronic devices.

Descriptive Analysis Tables

							Agg	gre	gate							
Land A in Acr		Wat Sewer I				tric ents	Personal P	rop	,		ty Ta	ixes, L	Taxes, Personal ocal Receipts, & yments		ocal I	Receipts, &
Mean	5.28	Mean	\$	26,264	Mean	\$ 109,668	Mean	\$	109,984	Mean		\$	248,163	Mean	\$	59,228
Median	2.24	Median	\$	3,165	Median	\$ 32,989	Median	\$	55,384	Median		\$	123,122	Median	\$	47,028
Mode	3.00	Mode		0	Mode	0	Mode		0	Mode		\$	354	Mode	\$	1,977
Standard Deviation	13	Standard Deviation		131136	Standard Deviation	260687	Standard Deviation		168115	Standa Deviati			477546	Standard Deviation		60818
Range	124.21	Range	\$ 1	1,239,643	Range	\$ 2,156,130	Range	\$	1,531,596	Range		\$	3,675,108	Range	\$	570,202
Minimum	0.03	Minimum		0	Minimum	0	Minimum		0	Minimu	ım		0	Minimum		0
Maximum	124.24	Maximum	\$ 1	1,239,643	Maximum	\$ 2,156,130	Maximum	\$	1,531,596	Maximu	um	\$	3,675,108	Maximum	\$	570,202
Sum	823.43	Sum	\$ 4	4,097,133	Sum	\$ 17,108,247	Sum	\$	17,157,433	Sum		\$	38,713,447	Sum	\$	9,239,549
Count	156	Count		156	Count	156	Count		156	Count			156	Count		156

				TRAD	ED	OR LOC	AL SECT	0	R DESCR		NA	LYSIS			
				Mixed	- T	raded and	d Local S	ect	or Busine	esses In C)ne	Parcel			
Land A in Acr		Wate Sewer F	 		ect /me	ric ents	Personal P	rop	-	Property T	axes,	e Taxes, Personal Local Receipts, & Payments		ocal R	eceipts, &
Mean	7.29	Mean	\$ 12,950	Mean	\$	186,574	Mean	\$	212,107	Mean	\$	420,992	Mean	\$	49,789
Median	4.19	Median	\$ 7,513	Median	\$	68,522	Median	\$	109,368	Median	\$	177,935	Median	\$	49,045
Mode	3.00	Mode	#N/A	Mode	, , ,			Mode #N/A				#N/A	Mode		#N/A
Standard Deviation	I X	Standard Deviation	12462	Standard Deviation		355122	Standard Deviation		337472	Standard Deviation		700243	Standard Deviation		19782
Range	30.08	Range	\$ 48,161	Range	\$	1,526,578	Range	\$	1,478,809	Range	\$	3,046,291	Range	\$	73,618
Minimum	3.00	Minimum	\$ 532	Minimum		0	Minimum	\$	52,787	Minimum	\$	74,303	Minimum	\$	20,717
Maximum	33.08	Maximum	\$ 48,692	Maximum	\$	1,526,578	Maximum	\$	1,531,596	Maximum	\$	3,120,594	Maximum	\$	94,335
Sum	131.13	Sum	\$ 233,101	Sum	\$	3,358,333	Sum	\$	3,817,923	Sum	\$	7,577,851	Sum	\$	896,197
Count	18	Count	18	Count		18	Count		18	Count		18	Count		18

Descriptive Analysis Tables

							Loca	al S	ector				_		
Land A in Acr		Wat Sewer I	 		lect yme	ric ents	Personal F	Prop	-	Property Ta	axes,	e Taxes, Personal Local Receipts, & Payments		Local F	eceipts, &
Mean	5.42	Mean	\$ 9,086	Mean	\$	71,794	Mean	\$	99,307	Mean	\$	181,863	Mean	\$	65,275
Median	1.94	Median	\$ 4,348	Median	\$	41,802	Median	\$	60,297	Median	\$	129,245	Median	\$	55,730
Mode	5.00	Mode	0	Mode		0	Mode		#N/A	Mode		#N/A	Mode		#N/A
Standard Deviation	16	Standard Deviation	12219	Standard Deviation		101698	Standard Deviation		114336	Standard Deviation		218219	Standard Deviation		38596
Range	123.89	Range	\$ 71,406	Range	\$	776,907	Range	\$	760,075	Range	\$	1,605,371	Range	\$	215,354
Minimum	0.34	Minimum	0	Minimum	\$	-	Minimum		0	Minimum	\$	3,017	Minimum	\$	329
Maximum	124.24	Maximum	\$ 71,406	Maximum	\$	776,907	Maximum	\$	760,075	Maximum	\$	1,608,388	Maximum	\$	215,684
Sum	498.93	Sum	\$ 835,906	Sum	\$	6,605,022	Sum	\$	9,136,202	Sum	\$	16,731,432	Sum	\$	6,005,288
Count	92	Count	92	Count		92	Count		92	Count		92	Count		92

								Trade	ed S	Sector						
Land A in Acre		Wate Sewer F				ecti /me	ric ents		rop	erty Taxes,	Property T	axes,	e Taxes, Personal Local Receipts, & Payments		cal F	eceipts, &
Mean	8.06	Mean	\$	201,511	Mean	\$	475,483	Mean	\$	271,651	Mean	\$	950,099	Mean	\$	141,886
Median	6.10	Median	\$	35,057	Median	\$	284,905	Median	\$	279,335	Median	\$	583,056	Median	\$	129,587
Mode	#N/A	Mode		#N/A				Mode		#N/A	Mode			Mode		#N/A
Standard Deviation	ŏ	Standard Deviation		390709	Standard Deviation		587524	Standard Deviation		150234	Standard Deviation		945290	Standard Deviation		129796
Range	26.75	Range	\$ `	1,237,501	Range	\$	2,138,606	Range	\$	479,881	Range	\$	3,626,535	Range	\$	527,593
Minimum	1.14	Minimum	\$	2,142	Minimum	\$	17,525	Minimum	\$	28,112	Minimum	\$	48,574	Minimum	\$	42,609
Maximum	27.89	Maximum	\$ ·	1,239,643	Maximum	\$	2,156,130	Maximum	\$	507,992	Maximum	\$	3,675,108	Maximum	\$	570,202
Sum	120.84	Sum	\$ 3	3,022,666	Sum	\$	7,132,244	Sum	\$	4,074,765	Sum	\$	14,251,485	Sum	\$	2,128,284
Count	15	Count		15	Count		15	Count		15	Count		15	Count		15

Descriptive Analysis Tables

					U	ndevelop	ed,	Resident	ial,	or Gove	rnment O	wned			
Land A in Acre		Wate Sewer F	er and Paymo	-		ectric /ments			rope	rty Taxes,	Property Ta	Estate Taxes, Personal axes, Local Receipts, & ility Payments		al Re	ceipts, &
Mean	2.34	Mean	\$	176	Mean	\$ 4	-08	Mean	\$	4,147	Mean	\$ 4,925	Mean	\$	6,767
Median	0.36	Median		0	Median		Median	\$	589	Median	\$ 589	Median	\$	2,365	
Mode	0.36	Mode		0	Mode				\$	-	Mode	0	Mode		0
Standard Deviation	5	Standard Deviation	\$	341	Standard Deviation	\$7	66	Standard Deviation	\$	(.121	Standard Deviation	/528	Standard Deviation		9086
Range	23.46	Range	\$	1,244	Range	\$ 2,2	81	Range	\$	30,789	Range	\$ 30,789	Range	\$	28,479
Minimum	0.03	Minimum		0	Minimum	\$-		Minimum	\$	-	Minimum	0	Minimum		0
Maximum	23.49	Maximum	\$	1,244	Maximum	\$ 2,2	81	Maximum	\$	30,789	Maximum	\$ 30,789	Maximum	\$	28,479
Sum	72.52	Sum	\$	5,460	Sum	\$ 12,6	648	Sum	\$	128,543	Sum	\$ 152,679	Sum	\$	209,779
Count	31	Count		31	Count	Count \$ 31 Cou				31	Count	31	Count		31

						LAN	D USE/B	U	SINESS	TYPE					
							A	U	ГО						
Land A in Acr		Wate Sewer F	 -		ectr /me	-	Personal P	rop	tate Taxes, perty Taxes, eceipts	Property Ta	axes	ate Taxes, Personal s, Local Receipts, & / Payments	FY19 Real Estate Ta Property Taxes, Loc Utility Payments	al Re	eceipts, &
Mean	4.81	Mean	\$ 7,832	Mean	\$	93,531	Mean	\$	149,570	Mean	\$	252,739	Mean	\$	59,613
Median	3.10	Median	\$ 5,153	Median	\$	84,723	Median	\$	118,831	Median	\$	227,936	Median	\$	48,791
Mode	5	Mode	0	Mode		0	Mode		#N/A	Mode		#N/A	Mode		#N/A
Standard Deviation	6	Standard Deviation	9616	Standard Deviation		95331	Standard Deviation		126656	Standard Deviation		217945	Standard Deviation		43444
Range	28.89	Range	\$ 40,577	Range	\$	317,078	Range	\$	524,474	Range	\$	799,391	Range	\$	214,175
Minimum	0.51	Minimum	0	Minimum		0	Minimum	\$	3,017	Minimum	\$	3,017	Minimum	\$	1,508
Maximum	29.40	Maximum	\$ 40,577	Maximum	\$	317,078	Maximum	\$	527,491	Maximum	\$	802,408	Maximum	\$	215,684
Sum	139.47	Sum	\$ 227,123	Sum	\$	2,712,396	Sum	\$	4,337,527	Sum	\$	7,329,432	Sum	\$	1,728,776
Count	29	Count	29	Count		29	Count		29	Count		29	Count		29
				Διιτ	o V	Vithout F	our Open		ot Vehicle	Storage	Par	rcels			
Land A in Acr		Wate Sewer F	 	El	ectr /me	ic	FY19 Real Personal P	Es rop	tate Taxes,	FY19 Real Property Ta	Esta axes	ate Taxes, Personal s, Local Receipts, & / Payments	FY19 Real Estate Ta Property Taxes, Loc Utility Payments	al Re	eceipts, &
Mean	5.31	Mean	\$ 9,085	Mean	\$	108,496	Mean	\$	172,134	Mean	\$	291,810	Mean	\$	68,395
Median		Median	\$	Median	\$	92,655	Median	\$,	Median	\$		Median	\$	66,106
Mode	5	Mode	#N/A	Mode		#N/A	Mode		#N/A	Mode		#N/A	Mode		#N/A
Standard Deviation	6	Standard Deviation	9799	Standard Deviation		94400	Standard Deviation		121901	Standard Deviation		209470	Standard Deviation		40229

Deviation	0	Deviation	9799	Deviation	94400	Deviation	121901	Deviation	209470	Standard Deviation	40229
Range	28.89	Range	\$ 40,577	Range	\$ 317,078	Range	\$ 506,441	Range	\$ 775,943	Range	\$ 197,034
Minimum	0.51	Minimum	0	Minimum	0	Minimum	\$ 21,049	Minimum	\$ 26,465	Minimum	\$ 18,650
Maximum	29.40	Maximum	\$ 40,577	Maximum	\$ 317,078	Maximum	\$ 527,491	Maximum	\$ 802,408	Maximum	\$ 215,684
Sum	132.72	Sum	\$ 227,123	Sum	\$ 2,712,396	Sum	\$ 4,303,348	Sum	\$ 7,295,252	Sum	\$ 1,709,878
Count	25	Count	25	Count	25	Count	25	Count	25	Count	25

								Н	ote	ls						
Land A in Acro		Wate Sewer F				ectri /mer		FY19 Real Personal P & Loca	rope	erty Taxes,	Property Ta	axes,	e Taxes, Personal Local Receipts, & Payments		_ocal F	eceipts, &
Mean	dian 3.16 Median \$ 113			327,785	Mean	\$	186,129	Mean	\$	420,187	Mean	\$	934,101	Mean	\$	280,990
Median	3.16	Median	\$	113,726	Median	\$	181,758	Median	\$	434,102	Median	\$	729,586	Median	\$	198,125
Mode	#N/A	Mode		#N/A	Mode		#N/A	Mode		#N/A	Mode		#N/A	Mode		#N/A
Standard Deviation	1	Standard Deviation		486013	Standard Deviation		92852	Standard Deviation		93326	Standard Deviation		642814	Standard Deviation		193918
Range	3.05	Range	\$1	,021,655	Range	\$	226,791	Range	\$	203,440	Range	\$	1,451,886	Range	\$	412,694
Minimum	2.19	Minimum	\$	31,017	Minimum	\$	77,103	Minimum	\$	304,552	Minimum	\$	412,673	Minimum	\$	157,508
Maximum	5.24	Maximum	\$1	,052,672	Maximum	\$	303,894	Maximum	\$	507,992	Maximum	\$	1,864,559	Maximum	\$	570,202
Sum	13.75	Sum	\$ 1	,311,141	Sum	\$	744,514	Sum	\$	1,680,748	Sum	\$	3,736,403	Sum	\$	1,123,959
Count	4	Count		4	Count		4	Count		4	Count		4	Count		4

								Life S	Scie	nces					
Land A in Acr		Wate Sewer F				ectı /me	ric nts	FY19 Real Personal P & Loca	rope	rty Taxes,	Property Ta	Estate Taxes, Personal ixes, Local Receipts, & ility Payments		al Re	eceipts, &
Mean	6.41 Median \$ #N/A Mode #N		30,937	Mean	\$	463,406	Mean	\$	252,434	Mean	\$ 753,782	Mean	\$	113,306	
Median	6.41	Median	\$	18,140	Median	\$	369,082	Median	\$	253,027	Median	\$ 583,056	Median	\$	90,960
Mode	#N/A	Mode		#N/A	Mode		#N/A	Mode		#N/A	Mode	#N/A	Mode		#N/A
Standard Deviation	1 1	Standard Deviation		23546	Standard Deviation		230003	Standard Deviation		//321	Standard Deviation	320761	Standard Deviation		38757
Range	1.01	Range	\$	41,551	Range	\$	451,326	Range	\$	154,638	Range	\$ 569,306	Range	\$	67,158
Minimum	6.1	Minimum	\$	16,560	Minimum	\$	284,905	Minimum	\$	174,819	Minimum	\$ 554,492	Minimum	\$	90,900
Maximum	7.11	Maximum	\$	58,110	Maximum	\$	736,231	Maximum	\$	329,457	Maximum	\$ 1,123,798	Maximum	\$	158,059
Sum	19.62	Sum	\$	92,810	Sum	\$	1,390,218	Sum	\$	757,303	Sum	\$ 2,261,346	Sum	\$	339,919
Count	3.00	Count		3	Count		3	Count		3	Count	3	Count		3

								Local Se	rvi	ce Sector	•					
Land A in Acr		Wate Sewer F				ecti /me	ric ents		rop	•	Property Ta	axes,	te Taxes, Personal , Local Receipts, & Payments	FY19 Real Estate Ta Property Taxes, Loc Utility Payments	al R	eceipts, &
Mean	n 1.43 Median \$ 3,861			9,543	Mean	\$	62,453	Mean	\$	77,033	Mean	\$	149,851	Mean	\$	67,629
Median	1.43	Median	\$	3,861	Median	\$	32,989	Median	\$	48,302	Median	\$	88,194	Median	\$	55,730
Mode	1.38 Mode #N			#N/A	Mode		0	Mode		#N/A	Mode		#N/A	Mode		#N/A
Standard Deviation	13 Standard		13870	Standard Deviation		112141	Standard Deviation		108355	Standard Deviation		228382	Standard Deviation		36436	
Range	93.17	Range	\$	71,406	Range	\$	776,907	Range	\$	745,317	Range	\$	1,593,426	Range	\$	133,296
Minimum	0.39	Minimum		0	Minimum		0	Minimum	\$	14,758	Minimum	\$	14,962	Minimum	\$	3,782
Maximum	93.56	Maximum	\$	71,406	Maximum	\$	776,907	Maximum	\$	760,075	Maximum	\$	1,608,388	Maximum	\$	137,078
Sum	213.61	Sum	\$	496,222	Sum	\$			Sum	\$	7,792,271	Sum	\$	3,516,687		
Count	52.00	Count		52	Count		52	Count		52	Count		52	Count		52

								Manu	fac	turing						
Land A in Acr		Wate Sewer F				ecti /me	ric ents		rop	erty Taxes,	Property T	axes, I	e Taxes, Personal Local Receipts, & ayments		ocal R	eceipts, &
Mean	7.49 Median \$ 3		226,385	Mean	\$	670,020	Mean	\$	203,830	Mean	\$	1,100,349	Mean	\$	74,685	
Median	7.49	Median	\$	35,057	Median	\$	376,135	Median	\$	192,182	Median	\$	577,757	Median	\$	50,182
Mode	#N/A	Mode		#N/A	Mode		#N/A	Mode		#N/A	Mode		#N/A	Mode		#N/A
Standard Deviation	I 11	Standard Deviation		455413	Standard Deviation		826360	Standard Deviation		163450	Standard Deviation		1337058	Standard Deviation		42394
Range	26.75	Range	\$	1,239,111	Range	\$	2,138,606	Range	\$	442,578	Range	\$	3,626,535	Range	\$	98,229
Minimum	1.14	Minimum	\$	532	Minimum	\$	17,525	Minimum	\$	28,112	Minimum	\$	48,574	Minimum	\$	37,890
Maximum	27.89	Maximum	\$	1,239,643	Maximum	\$	2,156,130	Maximum	\$	470,690	Maximum	\$	3,675,108	Maximum	\$	136,119
Sum	81.09	Sum	\$	1,584,695	Sum	\$	4,690,138	Sum	\$	1,426,813	Sum	\$	7,702,441	Sum	\$	522,798
Count	7	Count		7	Count		7	Count		7	Count		7	Count		7

Route 1 Corridor Economic Impact Study

							Ν	Iultiple B	ısi	ness Typ	es					
Land A in Acro		Wate Sewer F				ectı /me	ric ents	Personal P	rop		Property T	axes,	e Taxes, Personal Local Receipts, & Payments		cal R	eceipts, &
Mean	an 3.92 Median \$			14,057	Mean	\$	161,052	Mean	\$	187,255	Mean	\$	370,117	Mean	\$	55,329
Median	3.92	Median	\$	10,669	Median	\$	69,781	Median	\$	114,933	Median	\$	183,736	Median	\$	51,913
Mode	#N/A Mode #N			Mode		0	Mode			Mode			Mode		#N/A	
Standard Deviation		Standard Deviation		11636	Standard Deviation		309800	Standard Deviation		295185	Standard Deviation		611593	Standard Deviation		23915
Range	32.24	Range	\$	47,360	Range	\$	1,526,578	Range	\$	1,490,899	Range	\$	3,069,893	Range	\$	91,119
Minimum	0.84	Minimum	\$	1,332	Minimum		0	Minimum	\$	40,697	Minimum	\$	50,701	Minimum	\$	20,717
Maximum	33.08	Maximum	\$	48,692	Maximum	\$	1,526,578	Maximum	\$	1,531,596	Maximum	\$	3,120,594	Maximum	\$	111,836
Sum	150.93	Sum	\$	337,374	Sum	\$	3,865,244	Sum	\$	4,494,112	Sum	\$	8,882,806	Sum	\$	1,327,905
Count	24	Count		24	Count		24	Count		24	Count		24	Count		24

							Professio	na	Service:	S					
Land A in Acr		Wate Sewer F			ectr /mei		FY19 Real Personal P & Loca	rope	erty Taxes,	Property Ta	axes,	e Taxes, Personal Local Receipts, & Payments	FY19 Real Estate Ta Property Taxes, Loc Utility Payments	al Re	eceipts, &
Mean	1.64 Mean \$ 8,204 Mean \$ 1.72 Median \$ 2,515 Median \$ #N/A Mode #N/A Mode #		81,179	Mean	\$	97,692	Mean	\$	163,031	Mean	\$	93,879			
Median	1.72	Median	\$ 2,515	Median	\$	43,981	Median	\$	65,966	Median	\$	126,934	Median	\$	98,206
Mode	#N/A	Mode	#N/A	Mode	#N/A Mode		Mode		#N/A	Mode		#N/A	Mode		#N/A
Standard Deviation	1	Standard Deviation	10610	Standard Deviation	ndard 85587 Stand		Standard Deviation		96186	Standard Deviation		13/126	Standard Deviation		33702
Range	2.66	Range	\$ 25,499	Range	\$	190,762	Range	\$	198,066	Range	\$	288,051	Range	\$	82,066
Minimum	0.34	Minimum	\$ 686	Minimum	\$	8,339	Minimum	\$	10,503	Minimum	\$	32,028	Minimum	\$	47,521
Maximum	3.00	Maximum	\$ 26,185	Maximum	\$	199,101	Maximum	\$	208,569	Maximum	\$	320,079	Maximum	\$	129,587
Sum	8.21	Sum	\$ 41,019	Sum	\$	405,895	Sum	\$	488,461	Sum	\$	815,157	Sum	\$	469,395
Count	5	Count	5	Count		5	Count		5	Count		5	Count		5

								Res	ide	ntial						
Land A in Acr		Wat Sewer I				ecti /me	ric ents	FY19 Real Personal P & Loca	rope	erty Taxes,	Property Ta	axes, L	Taxes, Personal .ocal Receipts, & ayments		s, Local F	Receipts, &
Mean	0.87	Mean	\$	607	Mean	\$	1,405	Mean	\$	6,478	Mean	\$	9,159	Mean	\$	18,713
Median	0.36	Median	\$	654	Median	\$	1,553	Median	\$	5,338	Median	\$	8,574	Median	\$	22,293
Mode	0.36	Mode		#N/A	Mode		#N/A	Mode		#N/A	Mode		#N/A	Mode		#N/A
Standard Deviation	1	Standard Deviation		379	Standard Deviation		788	Standard Deviation		3310	Standard Deviation		3677	Standard Deviation		8629
Range	4.06	Range	\$	1,244	Range	\$	2,281	Range	\$	10,436	Range	\$	12,646	Range	\$	24,197
Minimum	0.22	Minimum		0	Minimum		0	Minimum	\$	4,751	Minimum	\$	5,683	Minimum	\$	4,282
Maximum	4.28	Maximum	\$	1,244	Maximum	\$	2,281	Maximum	\$	15,187	Maximum	\$	18,329	Maximum	\$	28,479
Sum	7.86	Sum	\$	5,460	Sum	\$	12,648	Sum	\$	58,298	Sum	\$	82,434	Sum	\$	168,416
Count							9	Count		9	Count		9	Count		9
							Undeve	loped or	Go	vernmen	t Owned					
Land A	Land Area		er a	ind ments		ecti	ric	FY19 Real Personal P		•			Taxes, Personal .ocal Receipts, &			

Land A in Acr			-		ectric yments		Propert	y Taxes,	Property Ta	Estate Taxes, Personal axes, Local Receipts, & ility Payments		cal Re	ceipts, &	
Mean	8.21	Mean	\$	56	Mean	\$ 1,723	Mean	\$	3,054	Mean	\$ 4,833	Mean	\$	1,813
Median	0.20	Median		0	Median		0 Median	\$	354	Median	\$ 354	Median	\$	1,669
Mode	0.18	Mode		0	Mode		0 Mode		0	Mode	\$ 354	Mode	\$	1,977
Standard Deviation	26			269	Standard Deviation	826	2 Standard Deviation		7904	Standard Deviation	11131	Standard Deviation		1826
Range	124.21	Range	\$	1,289	Range	\$ 39,623	Range	\$	30,789	Range	\$ 40,913	Range	\$	5,920
Minimum	0.03	Minimum		0	Minimum		0 Minimum		0	Minimum	\$-	Minimum		0
Maximum	124.24	Maximum	\$	1,289	Maximum	\$ 39,623	Maximum	\$	30,789	Maximum	\$ 40,913	Maximum	\$	5,920
Sum	188.90	Sum	\$	1,289	Sum	\$ 39,623	Sum	\$	70,245	Sum	\$ 111,157	Sum	\$	41,693
Count	23	Count		23	Count	2	3 Count		23	Count	23	Count		23

Business Name (s)	Traded or Local Sector	Business Type	Category for Analysis	Property Address	Parcel Number	Owner Name	Use Description	Land Area in Acres	Water and Sewer Payments	Electric Payments	Broadband	Local Receipts	Most Recent Personal Property Tax Bill	FY19 Real Estate Tax Bill	FY19 Real Estate Taxes, Personal Property Taxes, & Local Receipts	Total Utilities	FY19 Real Estate Taxes, Personal Property Taxes, Local Receipts, & Utility Payments
Home Market Food	Traded Sector	Manufacturing	Manufacturing	140 MORGAN DR	16-8-4	DOWE REALTY, LLC	INDUSTRIAL	27.9	\$ 1,239,643	\$ 2,156,130	\$-	\$-	\$-	\$ 279,335	\$ 279,335	\$ 3,395,773	\$ 3,675,108
FM Global Sheraton Four Points - Hotel Dedham Medical Associates Norwood	Traded Sector, Local Sector	Accommodations - Lodging; Professional Services	Multiple Business Types	1151-1177 BOSTON- PROVIDENCE TPKE	15-20-2, 15-15-7, 15-13B-1A	NEPONSET RIVER LLC	R & D FACIL, HOTELS, ACC COM LAND	33.1	\$ 48,692	\$ 1,526,578	\$ 13,728	\$ 447,807	\$ 73,821	\$ 1,009,968	\$ 1,531,596	\$ 1,588,998	\$ 3,120,594
TE Connectivity	Traded Sector	Manufacturing; Undeveloped Land	Manufacturing	65 - 63 NAHATAN ST	18-9-83, 18-7-41, 18-11-82, 18-7-51, 18-7-49, 18-11-82, 18-7-47, 18-6-3, 18-6-2, 18-6-70, 18-6-74, 18-6-1	NISSAN NORWOOD REALTY, LLC	AUTO DEALER, DEVEL LAND, POT DEVEL, UNDEV LAND, IND VAC LD UD	14.8	\$ 250,808	\$ 1,444,009	\$-	\$ 125	\$-	\$ 323,880	\$ 324,005	\$ 1,694,817	\$ 2,018,822
Hampton Inn, Mick Morgan's	Traded Sector	Accommodations - Lodging; Accommodations - Food & Beverage	Hotels	434 BOSTON- PROVIDENCE TPKE	22-9-7	SUMMIT HOSPITALITY 122, LLC	HOTELS & Restaurant	3.3	\$ 1,052,672	\$ 303,894	\$-	\$ 276,026	\$ 23,948	\$ 208,018	\$ 507,992	\$ 1,356,567	\$ 1,864,559
Home Depot, Stop & Shop, Red Box Chipotle Mexican Grill, Supercuts, Peapod LLC Verizon Wireless	Local Sector	Accommodations – Food & Beverage; Retail; Personal Care Services	Local Service Sector	1415 BOSTON- PROVIDENCE TPKE	15-3-21	SUMNER STREET MARKETPLACE LLC	SHOPNG CTR	22.2	\$ 71,406	\$ 776,907	\$-	\$ 10,369	\$ 15,648	\$ 734,058	\$ 760,075	\$ 848,313	\$ 1,608,388
Siemens Healthcare Diagnostics	Traded Sector	Professional Services;	Life Sciences	2 EDGEWATER DR	15-3-3	EDGEWATER DR LL, LLC	CLASS A/B OFC	7.1	\$ 58,110	\$ 736,231	\$-	\$ -	\$ -	\$ 329,457	\$ 329,457	\$ 794,341	\$ 1,123,798
Analog Devices Elena's Café	Traded Sector	Life Sciences Manufacturing; Accommodations – Food & Beverage	Manufacturing	10 BOSTON- PROVIDENCE TPKE / 1 TECHNOLOGY WAY	22-1-4B, 22-1-4A, 22-1-2	WALKER WILLIAM J ET AL TRS	R & D FACIL, DEVEL LAND, POT DEVEL	23.7	\$ 47,073	\$ 599,199	\$ -	\$ 8,204	\$ -	\$ 462,486	\$ 470,690	\$ 646,271	\$ 1,116,961
Courtyard by Marriot	Traded Sector	Accommodations -	Hotels	300 RIVER RIDGE DRIVE	15-22-3	RIVER RIDGE LTD PTNSHP	HOTELS	5.2	\$ 155,260	\$ 187,706	\$-	\$ 282,694	\$ 13,092	\$ 186,590	\$ 482,376	\$ 342,966	\$ 825,341
Boch Toyota, Boch Honda	Local Sector	Lodging Auto Sales; Auto Repair, Maintenance, or Care	Auto	277 BOSTON- PROVIDENCE TPKE	19-15-3	BOSTON PORT SERVICE INC	AUTO DEALER	29.4	\$ 12,137	\$ 262,780	\$ -	\$ 12,129	\$ 9,141	\$ 506,221	\$ 527,491	\$ 274,917	\$ 802,408
Lan-Tel Communications Inc, Hallkeen Management Inc, Digiscribe New England LLC, Advantage Waypoint, I&I Slingmax Inc, Tyco Integrated Security, The Sign Center, Virtex (formerly PPI-timezero)	Traded Sector, Local Sector	Professional Services; Technology; Manufacturing	Multiple Business Types	1400 BOSTON- PROV TPKE	15-7-1	JUMBO CAPITAL MANAGEMENT, LLC	IND OFFICE	18.3	\$ 19,982	\$ 386,367	\$ 4,786	\$ 4,269	\$ 13,244	\$ 298,769	\$ 316,281	\$ 411,135	\$ 727,417
Ovid Technologies (sales and customer support only in Norwood), Lugten & Morin, Comprep Associates, Highpoint Solutions, Aculab, Inc, Rogal & Donnellan PC, Wolters Kluwer US Inc, Manchel & Brennan, Skillsoft Corporation, Opentext (formerly Recommind), BL Companies, Verso Corp, Compassus, Angoff Goldmann Mann, CBERA LLC, Consensus Advisory SVCS LLC, Entrinsic Bioscience, Cloud Square	Traded Sector, Local Sector	Technology; Manufacturing; Professional Services; Life Sciences	Multiple Business Types	100 RIVER RIDGE DRIVE	15-23-1	RIVER RIDGE LTD PTNSHP	CLASS A/B OFC	12.9	\$ 28,116	\$ 344,584	\$ 62,485	\$-	\$ 33,179	\$ 255,388	\$ 288,567	\$ 435,185	\$ 723,752

Business Name (s)	Traded or Local Sector	. Business Type	Category for Analysis	Property Address	Parcel Number	Owner Name	Use Description	Land Area in Acres	Water and Sewer Payments	Electric Payments	Broadband	Local Receipts	Most Recent Personal Property Tax Bill	FY19 Real Estate Tax Bill	FY19 Real Estate Taxes, Personal Property Taxes, & Local Receipts	Total Utilities	FY19 Real Estate Taxes, Personal Property Taxes, Local Receipts, & Utility Payments
Gallery Automotive Group - BMW	Local Sector	Auto Sales; Auto Repair, Maintenance, or Care	Auto	918 BOSTON- PROVIDENCE TPKE	17-15-2	SPIEGEL, DAVID & RAVECH, MELVIN TRS	AUTO DEALER	6.4	\$ 14,079	\$ 242,882	\$ 5,579	\$ 55,013	\$ 7,380	\$ 328,409	\$ 390,802	\$ 262,540	\$ 653,342
Carmax	Local Sector	Auto Sales	Auto	1320 BOSTON- PROVIDENCE TNPK	15-7-4	CARMAX AUTO SUPERSTORES INC	AUTO DEALER	15.6	\$ 23,536	\$ 317,078	\$-	\$ 2,077	\$ 15,751	\$ 279,942	\$ 297,770	\$ 340,613	\$ 638,383
Residence Inn - Marriott Boston Norwood/Canton	Traded Sector	Accommodations - Lodging	Hotels	275 NORWOOD PARK SOUTH	15-6-46	NORWOOD HOTEL PROPERTY COMPANY LLC	HOTELS	3.1	\$ 72,192	\$ 175,811	\$-	\$ 183,208	\$ 20,405	\$ 182,215	\$ 385,828	\$ 248,002	\$ 633,830
Corbus Pharmaceuticals	Traded Sector	Manufacturing; Life Sciences	Life Sciences	500 RIVER RIDGE DRIVE	15-22-55	RIVER RIDGE LTD PTNSHP	CLASS A/B OFC	6.4	\$ 18,140	\$ 369,082	\$ 21,015	\$ 381	\$ 4,009	\$ 170,429	\$ 174,819	\$ 408,237	\$ 583,056
Advanced Instruments	Traded Sector	Manufacturing; Life Sciences	Manufacturing	4 BOSTON- PROVIDENCE TPKE / 2 TECHNOLOGY WAY	22-1-1	1000 HIGHLAND LIMITED	OFFICE BLD	7.5	\$ 9,440	\$ 376,135	\$-	\$ 1,784	\$ -	\$ 190,399	\$ 192,182	\$ 385,575	\$ 577,757
Immugen Inc (No longer in Norwood) 1 Global Health Institute, Mobility Works, Organogenesis	Traded Sector	Life Sciences; Manufacturing; Auto Repair, Maintenance, or Care	Life Sciences	309-349 BOSTON- PROV TPKE	19-14-4	BOBSON NORWOOD COMMERCIAL LLC	R & D FACIL	6.1	\$ 16,560	\$ 284,905	\$-	\$ 400	\$ 36,269	\$ 216,359	\$ 253,027	\$ 301,465	\$ 554,492
Herb Chambers Volvo Dealership, Lincoln Dealership	Local Sector	Auto Sales; Auto Repair, Maintenance, or Care	Auto	1120 1130 BOSTON- PROV TURNPIKE	15-22-10	HERB CHAMBERS OF NORWOOD, LLC	AUTO DEALER	6.3	\$ 40,577	\$ 134,707	\$ 8,985	\$ 69,407	\$ 6,545	\$ 245,913	\$ 321,865	\$ 184,270	\$ 506,135
Staples Office Supplies, Apna Bazar, Rite Aid, Westbury Farms Family, Starbucks Coffee, Royal Pizza Inc, Ocean State, Fashion Nails & Spa, Saab's Market	Local Sector	Accommodations – Food & Beverage; Retail; Personal Care Services	Local Service Sector	989-1001 BOSTON- PROV TPKE	15-19-2	G & B NORWOOD LLC	SHOPNG CTR	5.9	\$ 11,414	\$ 264,172	\$-	\$ 17,298	\$ 4,963	\$ 203,495	\$ 225,755	\$ 275,586	\$ 501,342
Boch New to You	Local Sector	Auto Sales; Auto Repair, Maintenance, or Care	Auto	1201 BOSTON- PROV TPK	15-13B-4, 15-11-3, 15-12D-3	BOCH REALTY, INC	AUTO DEALER, IND VAC LD UD, ACC COM LAND	10.2	\$ 6,495	\$ 232,650	\$ 1,230	\$ 1,790	\$ 2,615	\$ 252,622	\$ 257,027	\$ 240,375	\$ 497,402
Clay Chevrolet, Clay Hyundai	Local Sector	Auto Sales; Auto Repair, Maintenance, or Care	Auto	391 BOSTON- PROVIDENCE TPKE / 381 BOSTON- PROVIDENCE TPKE	19-14-1, 19-14-1A	391 PROVIDENCE HIGHWAY, LLC	AUTO DEALER	5.0	\$ 12,170	\$ 202,493	\$ 7,302	\$ 27,174	\$ 2,227	\$ 196,138	\$ 225,539	\$ 221,965	\$ 447,504
Epic Lifetime Dental Care, Finarc Investments, Imugen Inc, Norris, Murray, & Peloquin LLC, Wiedenbach-Brown Co Inc, Beta Group Inc	Traded Sector, Local Sector	Professional Services; Life Sciences; Traded Services	Multiple Business Types	315 NORWOOD PARK SOUTH	15-6-43	1144 PROPERTIES LLC	CLASS A/B OFC	6.0	\$ 22,382	\$ 203,230	\$-	\$-	\$ 18,315	\$ 183,379	\$ 201,694	\$ 225,612	\$ 427,306
Holiday Inn Express	Traded Sector	Accommodations - Lodging	Hotels	225 NORWOOD PARK SOUTH	15-7-5	PVG ONE LLC	HOTELS	2.2	\$ 31,017	\$ 77,103	\$-	\$ 160,556	\$ 15,518	\$ 128,479	\$ 304,552	\$ 108,121	\$ 412,673
Ferrari & Maserati	Local Sector	Auto Sales; Auto Repair, Maintenance, or Care	Auto	441 BOSTON- PROVIDENCE TPKE/ 386 NEPONSET STREET	19-13-2, 19-13-3	BOCH NORWOOD, LLC	AUTO DEALER, ACC COM LAND	3.6	\$ 2,941	\$ 186,603	\$ 2,255	\$ 3,425	\$ 4,366	\$ 182,733	\$ 190,525	\$ 191,799	\$ 382,324
Boch Nissan	Local Sector	Auto Sales; Auto Repair, Maintenance, or Care	Auto	525 BOSTON- PROVIDENCE TPKE	18-14-3	NISSAN NORWOOD REALTY, LLC	AUTO DEALER	5.0	\$ 6,865	\$ 159,839	\$ 790	\$ 5,339	\$ 3,169	\$ 193,409	\$ 201,917	\$ 167,494	\$ 369,411
Land Rover Norwood	Local Sector	Auto Sales; Auto Repair, Maintenance, or Care	Auto	449 NEPONSET STREET	18-14-2	JMK DEVELOPMENT LLC	AUTO DEALER	3.4	\$ 10,525	\$ 92,655	\$-	\$ 129,220	\$-	\$ 132,224	\$ 261,443	\$ 103,180	\$ 364,623
Avaya Inc (no longer at this location), Collins Loughran & Peloquin: Loughran Michael, Banctec	Traded Sector, Local Sector	Professional Services; Technology	Multiple Business Types	320 NORWOOD PARK SOUTH	15-6-42	BROOKWOOD PARK SOUTH INVESTORS, INC	CLASS A/B OFC	5.1	\$ 9,211	\$ 265,240	\$ -	\$-	\$ 146	\$ 88,669	\$ 88,815	\$ 274,452	\$ 363,267
Work-Out-World (WOW), Monkey Sports	Local Sector	Recreation/Health Clubs; Retail	Local Service Sector	911-949 BOSTON- PROVIDENCE TPKE	17-10-1	MONKEYSPORTS CAPITAL MA LLC	RET >10,000 SF	10.0	\$ 16,282	\$ 89,462	\$-	\$-	\$ 3,615	\$ 246,130	\$ 249,744	\$ 105,744	\$ 355,488
Body By Design, Norwood Country Club, Chateau Restaurant	Local Sector	Accommodations – Food & Beverage; Recreation/Health Clubs; Personal Care Services	Local Service Sector	400-520 BOSTON- PROV TPKE	22-9-5	VJ PROPERTIES LIMITED PARTNER	REST/CLUBS	93.6	\$ 47,921	\$ 153,002	\$ 3,032	\$ 25,484	\$ 1,607	\$ 122,806	\$ 149,897	\$ 203,956	\$ 353,853

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Business Name (s)	Traded or Local Sector	Business Type	Category for Analysis	Property Address	Parcel Number	Owner Name	Use Description	Land Area in Acres	Water and Sewer Payments	Electric Payments	Broadband	Local Receipts	Most Recent Personal Property Tax Bill	FY19 Real Estate Tax Bill	FY19 Real Estate Taxes, Personal Property Taxes, & Local Receipts	Total Utilities	FY19 Real Estate Taxes, Personal Property Taxes, Local Receipts, & Utility Payments
Jack Madden Ford Sales, Inc.	Local Sector	Auto Sales; Auto Repair, Maintenance, or Care	Auto	735 BOSTON- PROVIDENCE TPKE, 751 BOSTON- PROVIDENCE TPKE E CROSS STREET	18-3-10, 18-3-9, 18-3-99	MADDEN JOHN P JR	AUTO REPR, ACC COM LAND, PARK LOT	3.9	\$ 4,534	\$ 199,601	\$ 2,888	\$-	\$ -	\$ 146,803	\$ 146,803	\$ 207,023	\$ 353,827
GZA Geoenvironmental Pratt & Whitney (No Longer in Norwood)	Traded Sector	Professional Services; Manufacturing	Multiple Business Types	249 VANDERBILT AVE	15-14-60, 15-14-59	SPIEGEL, DAVID TRUSTEE	IND OFFICE, IND WHSES	6.9	\$ 25,084	\$ 149,380	\$-	\$ 903	\$ 16,921	\$ 152,600	\$ 170,423	\$ 174,463	\$ 344,887
Landry's Bicycles, PetCo, Outback Steakhouse, Norwood Urgent Care PC, Olivio's Grill & Pizzeria	Local Sector	Retail; Accommodations - Food and Beverage; Professional Services	Multiple Business Types	1210 BOSTON- PROVIDENCE TPKE,	15-13B-9, 15-11-2	1210 REALTY, LLC	RET >10,000 SF, DEVEL LAND	4.2	\$ 21,451	\$ 126,745	\$-	\$ 23,142	\$ 11,846	\$ 159,343	\$ 194,331	\$ 148,196	\$ 342,527
Siemens Healthcare Diagnostics	Traded Sector	Professional Services;	Professional Services	115 NORWOOD PARK SOUTH	15-7-1C	SIEMENS MEDICAL SOLUTIONS DIAGNOSTICS	CLASS A/B OFC	2.5	\$ 9,468	\$ 199,101	\$-	\$-	\$ -	\$ 111,510	\$ 111,510	\$ 208,569	\$ 320,079
JI ENTERPRISE INC, Express Employment Professionals, ISA-Ecash, Regal Press	Traded Sector, Local Sector	Manufacturing; Professional Services	Multiple Business Types	79-85 ASTOR AVENUE	15-11-62	LAZDOWSKY MICHAEL TRUSTEE	IND OFFICE	4.0	\$ 3,486	\$ 175,076	\$ 14,246	\$ 451	\$ 137	\$ 107,510	\$ 108,098	\$ 192,808	\$ 300,906
Carolos Moreno MD PC, CMI Property Management, Consulting Engineering SVC Inc	Local Sector	Professional Services	Professional Services	128 CARNEGIE ROW/ 24 ASTOR AV	15-11-44	SPIEGEL, DAVID TRS	IND OFFICE	3.0	\$ 26,185	\$ 143,095	\$ 22,077	\$ 200	\$ 494	\$ 102,567	\$ 103,261	\$ 191,357	\$ 294,618
Lydon & Murphy Insurance, Cushing & Dolan PC, Arista Development LLC, Bath & Kitchen of Norwood, Inc., H&R Block, VJ Properties, MG Restaurant Management, Tanorama of Norwood, Acapulcos, Minerva Indian Cuisine, Beauty Systems Group, Cosmo Prof, Studio Salons Inc, I Love Kick Boxing, Inc, Boston Stage Kidney Care	Local Sector	Professional Services; Accommodations – Food & Beverage; Traded Services; Recreation/Health clubs; Retail	Multiple Business Types	500 BOSTON- PROVIDENCE TPKE	22-10-2	GALLERIA PROPERTIES LLC	RET >10,000 SF	2.5	\$ 27,481	\$ 119,010	\$ 2,023	\$ 21,939	\$ 18,587	\$ 93,907	\$ 134,432	\$ 148,514	\$ 282,947
The Jeep Grill; Central Chrysler, Jeep, Dodge, Ram, Fiat	Local Sector	Accommodations - Food & Beverage; Auto Sales; Auto Repair, Maintenance, or Care	Auto	56 BOSTON- PROVIDENCE TPKE	22-2-1	P CHRISTOPHER ASSOCIATES	AUTO DEALER	3.1	\$ 7,913	\$ 102,649	\$ 1,157	\$ 45,571	\$-	\$ 105,604	\$ 151,175	\$ 111,718	\$ 262,893
Gallery Automotive Group LLC - Volkswagen	Local Sector	Auto Sales	Auto	1280 BOSTON PROVIDENCE TNPK	15-11-64, 15-11-65	SPIEGEL, DAVID& RAVECH, MELVIN TR	AUTO DEALER, DEVEL LAND	8.0	\$ 3,313	\$ 99,708	\$ 3,700	\$ 55,013	\$ 2,789	\$ 89,607	\$ 147,409	\$ 106,721	\$ 254,131
Cadillac of Norwood, Enterprise Rent-A-Car	Local Sector	Auto Sales; Rental	Auto	700 BOSTON- PROVIDENCE TPKE	18-2-1	ARGIROS, ALEXANDER A TRS	AUTO DEALER	6.8	\$ 27,076	\$-	\$-	\$ 41,385	\$ 3,910	\$ 177,663	\$ 222,958	\$ 27,076	\$ 250,034
Ecolab, Inc, Amichetti Deluca & Co PC, Cardiovascular Engineering Inc, Seasons Hospice & Palliative, Intell X Solutions LLC, BAO Inc (No longer in Norwood), Ntirety, Inc; Aurus, Infusion Nurses Society	Traded Sector, Local Sector	Professional Services; Manufacturing; Technology; Town or Government	Multiple Business Types	1 EDGEWATER DR	15-3-4A	180-194 WFST LLC	CLASS A/B OFC	5.2	\$ 25,512	\$ -	\$ 8,129	\$-	\$ 9,100	\$ 193,625	\$ 202,726	\$ 33,641	\$ 236,366
Infiniti of Norwood	Local Sector	Auto Sales; Auto Repair, Maintenance, or Care	Auto	866 & 880 BOSTON- PROVIDENCE TPKE/ 880 BOSTON- PROVIDENCE TPKE	17-14-7, 17-14-6	BOSTON PORT SERVICE	AUTO DEALER, ACC COM LAND	3.0	\$ 5,153	\$ 112,043	\$-	\$ 325	\$ 5,232	\$ 113,274	\$ 118,831	\$ 117,196	\$ 236,028

Business Name (s)	Traded or Local Sector	Business Type	Category for Analysis	Property Address	Parcel Number	Owner Name	Use Description	Land Area in Acres	Water and Sewer Payments	Electric Payments	Broadband	Local Receipts	Most Recent Personal Property Tax Bill	FY19 Real Estate Tax Bill	FY19 Real Estate Taxes, Personal Property Taxes, & Local Receipts	Total Utilities	FY19 Real Estate Taxes, Personal Property Taxes, Local Receipts, & Utility Payments
Fuji Hibachi, Title Boxing Club of Norwood, American Nail Spa, Paradise Indian Foods, Dunkin Donuts	Local Sector	Accommodations – Food & Beverage; Personal Care Services; Recreation/Health clubs	Local Service Sector	1200, 1202, & 1206 BOSTON-PROVIDENCE TPKE	15-13B-8	GEBSCO REALTY CORP	RET >10,000 SF	2.6	\$ 25,343	\$ 92,160	\$ 330	\$ 32,082	\$ 5,267	\$ 80,053	\$ 117,402	\$ 117,834	\$ 235,236
859 Newbury Comics, Enterprise Rent-A-Car LLC, Lunch Box Deli, Boch Rent a Car	Local Sector	Accommodations – Food & Beverage; Retail; Rental	Local Service Sector	859-861, 881 BOSTON-PROVIDENCE TPKE	17-12-6, 17-12-3	BOCH REALTY INC	RET >10,000 SF, PARK LOT	2.1	\$ 4,510	\$ 107,260	\$ 1,645	\$ 16,905	\$ 1,488	\$ 98,035	\$ 116,427	\$ 113,416	\$ 229,843
See Appendix D to review the businesses at 1500 Boston Providence Turnpike	Traded Sector, Local Sector	Technology; Distribution; Professional Services; Traded Services; Manufacturing; Place of Worship; Retail; Life Sciences	Multiple Business Types	1500-1506 BOSTON- PROV TPK				10.9	\$ 5,815	\$ 76,578	\$ 8,704	\$ 7,010	\$ 2,315	\$ 128,965	\$ 138,289	\$ 91,096	\$ 229,386
Norwood Subaru Inc.	Local Sector	Auto Sales; Auto Repair, Maintenance, or Care	Auto	842 BOSTON- PROVIDENCE TPKE	17-4-6	NORWOOD SUBARU LLC	AUTO DEALER	5.4	\$ 6,355	\$ 86,872	\$ 1,955	\$ 19,000	\$ 1,901	\$ 111,852	\$ 132,753	\$ 95,182	\$ 227,936
McDonalds	Local Sector	Accommodations – Food & Beverage	Local Service Sector	31 BOSTON- PROVIDENCE TPKE	19-11-2	MCDONALD'S CORPORATION	RET >10,000 SF	1.9	\$ 12,896	\$ 113,411	\$ 3,376	\$ 8,204	\$ 3,508	\$ 82,921	\$ 94,632	\$ 129,683	\$ 224,315
Jake N Joes	Local Sector	Accommodations – Food & Beverage	Local Service Sector	475 BOSTON- PROVIDENCE TPKE	19-12-3	MARGARETMIT, LLC	REST/CLUBS	1.8	\$ 43,454	\$ 100,531	\$-	\$ 11,696	\$ 4,950	\$ 63,090	\$ 79,736	\$ 143,985	\$ 223,721
Prime Mazda	Local Sector	Auto Sales; Auto Repair, Maintenance, or Care	Auto	920 BOSTON- PROV TPKE	17-13-2	GIRARD ELEANOR	AUTO DEALER	1.0	\$ 20,911	\$ 84,723	\$ 2,437	\$ 54,888	\$-	\$ 51,151	\$ 106,039	\$ 108,070	\$ 214,109
Extra Space Storage	Local Sector	Rental	Local Service Sector	1450 BOSTON- PROVIDENCE TPKE	15-2-10	GRE NORWOOD LLC	COMM WHSE	5.3	\$ 4,530	\$ 65,539	\$ 1,932	\$-	\$ 483	\$ 133,885	\$ 134,368	\$ 72,001	\$ 206,369
Bertucci's Brick Oven, Norwal Cleaners, O'Reilly Auto Parts	Local Sector	Accommodations – Food & Beverage; Personal Care Services; Retail	Local Service Sector	1405-1407 BOSTON- PROV TPKE	15-7-2	SALINSKY, JUNE TRUSTEE	GAS ST SRV VAC	1.5	\$ 15,965	\$ 85,203	\$ 2,002	\$ 11,774	\$ 15,080	\$ 68,875	\$ 95,730	\$ 103,171	\$ 198,901
Walgreens	Local Sector	Retail	Local Service Sector	951-969 BOSTON- PROV TPKE	17-9-3	DEAN NORWOOD, LLC	RET >10,000 SF	1.6	\$ 788	\$ 103,505	\$-	\$ 2,242	\$ 960	\$ 89,598	\$ 92,800	\$ 104,293	\$ 197,093
McDonalds	Local Sector	Accommodations – Food & Beverage	Local Service Sector	1600 BOSTON- PROV TPKE	15-30-24	MCDONALD'S REAL ESTATE COMPANY	REST/CLUBS	2.2	\$ 18,879	\$ 109,294	\$-	\$ 8,204	\$ 4,778	\$ 50,099	\$ 63,081	\$ 128,172	\$ 191,253
Siam Lotus Leslie's Pool Supplies Steward Medical Group	Local Sector	Accommodations – Food & Beverage; Retail; Professional Services	Multiple Business Types	1325-45 NORWOOD PARK SOUTH	15-7-10	FRENCH, L EONARD S TRUSTEE	RET >10,000 SF	3.1	\$ 10,388	\$ 58,577	\$ -	\$ 10,244	\$ 4,272	\$ 106,024	\$ 120,540	\$ 68,965	\$ 189,505
Central Motor Inc of Norwood	Local Sector	Auto Sales; Auto Repair, Maintenance, or Care	Auto	70 BOSTON- PROVIDENCE TPKE	22-2-2	SEVENTY BOS-PROV HGHY LLC	AUTO DEALER	2.3	\$ 2,255	\$ 71,793	\$ 981	\$ 15,381	\$ 2,247	\$ 93,270	\$ 110,899	\$ 75,029	\$ 185,928
Savers	Local Sector	Retail	Local Service Sector	560 BOSTON- PROVIDENCE TPKE	21-4-34	ACCESS ROAD, LLC	RET >10,000 SF	3.0	\$ 8,642	\$ 84,515	\$-	\$-	\$ 2,367	\$ 84,619	\$ 86,986	\$ 93,158	\$ 180,143
Boston Productions, SMBLC LLC, Jump Start, Athletic Republic, Revival Church for the Nations	Traded Sector, Local Sector	Arts, Entertainment, Creative; Retail; Professional Services; Recreation/Health Clubs	Multiple Business Types	290 VANDERBILT AVE	15-14-67	VANDERBILT REALTY VENTURES LLC	IND OFFICE	3.5	\$ 2,494	\$ 64,837	\$-	\$-	\$ 5,588	\$ 105,050	\$ 110,637	\$ 67,331	\$ 177,968
King Information Systems, Inc, Barrow Industries Inc, Saurino Maryann -Ameriprise Financials, LCB Senior Living, Root Family Medicine PC, Smonik System LLC, Northstar Centers LLC,	Traded Sector, Local Sector	Professional Services; Distribution; Technology	Multiple Business Types	3 EDGEWATER DR	15-2-2	E & F REALTY ASSOC LTD PTNSHP	CLASS A/B OFC	4.4	\$ 17,680	\$-	\$ 12,148	\$ 416	\$ 2,478	\$ 145,179	\$ 148,073	\$ 29,828	\$ 177,901
Sky Restaurant		Accommodations –		1369 BOSTON-		CORCORAN, STEPHEN T											

Business Name (s)	Traded or Local Sector	r Business Type	Category for Analysis	Property Address	Parcel Number	Owner Name	Use Description	Land Area in Acres	Water and Sewer Payments	Electric Payments	Broadband	Local Receipts	Most Recent Personal Property Tax Bill	FY19 Real Estate Tax Bill	FY19 Real Estate Taxes, Personal Property Taxes, & Local Receipts	Total Utilities	FY19 Real Estate Taxes, Personal Property Taxes, Local Receipts, & Utility Payments
Nextenture, BL Companies, W. I. CONNELL CO, Dr. Richard H. Seder, MD, Wells Lionelle D MD, Valuation Research, Shorepoint Capital Partners, Peartree Design & Marketing, Nautilus Investment Research	Traded Sector Local Sector	Technology; Professional Services;	Multiple Business Types	220 NORWOOD PARK SOUTH	15-7-6	1144 PROPERTIES LLC	CLASS A/B OFC	3.0	\$ 16,392	\$ 72,207	\$-	\$-	\$-	\$ 86,022	\$ 86,022	\$ 88,599	\$ 174,621
Boston Jack Madden Ford Sales, Inc.	Local Sector	Auto Sales; Auto Repair, Maintenance, or Care	Auto	825 BOSTON- PROVIDENCE TPKE / 165 EAST CROSS ST	17-3-22, 17-3-194	MADDEN REALTY ASSOCIATES, LLC	AUTO DEALER, DEVEL LAND	2.5	\$ 7,664	\$ 55,884	\$-	\$ 16,655	\$ 2,385	\$ 91,285	\$ 110,324	\$ 63,548	\$ 173,872
Republic Plumbing Supply	Local Sector	Distribution	Local Service Sector	890 BOSTON- PROVIDENCE TPKE	17-14-5	CARROLL PAUL B ET AL TR	COMM WHSE	3.3	\$ 1,363	\$ 52,815	\$-	\$ 4,416	\$ 653	\$ 113,632	\$ 118,701	\$ 54,178	\$ 172,879
Launch Trampoline Floors & Kitchens Inc	Local Sector	Recreation/Health Clubs, Retail	Local Service Sector	568-570 BOSTON- PROV TRNPKE	21-4-36A	ACCESS ROAD, LLC	RET >10,000 SF	4.4	\$ 4,753	\$ 57,449	\$-	\$ 650	\$ 4,690	\$ 104,331	\$ 109,670	\$ 62,202	\$ 171,873
National Electric Corp, CTC Associates Inc, Bay State Archers Training Center, HMI Inc, Greater Metrowest DRMSRGNS	Traded Sector Local Sector	Traded Services;	Multiple Business Types	55-57 BOSTON- PROVIDENCE TPKE	19-9-10	KINGDOM PROPERTIES ASSOCIATES, LLC	OFFICE BLD	3.2	\$ 5,752	\$ 36,005	\$ 35,071	\$ 186	\$ 3,307	\$ 89,422	\$ 92,916	\$ 76,828	\$ 169,744
Apogee Technology, Office Gallery International, LLC, ESPG Polymer Technologies INC, GERBOR RADIO SUPPLY CO INC, Imgen Diagnostics, Need Personnel Placement Inc, Quantum Pathology LLC, Raven & Murph (Ravech Law Offices), Herbert F Hunter, Northland Fence, Stevn P Smith, MD	Traded Sector Local Sector	Distribution; Manufacturing; Life Sciences; Professional Services; Traded Services	Multiple Business Types	129 MORGAN DR / 76 ASTOR AVE	15-11-45	HEATH NORWOOD, LLC	IND WHSES	3.0	\$ 10,949	\$ 44,894	\$ 2,968	\$ 181	\$ 7,372	\$ 100,458	\$ 108,011	\$ 58,810	\$ 166,822
Yankee Spirits, Honey Baked Hams	Local Sector	Retail; Accommodations – Food & Beverage	Local Service Sector	940-950 &954 BOST-PROV TPKE	17-13-100	ROLL-LAND INC	SHOPNG CTR	3.0	\$ 3,537	\$ 67,388	\$-	\$ 10,426	\$ 3,771	\$ 76,707	\$ 90,904	\$ 70,925	\$ 161,829
The Feisty Greek, Subway, Marjorie Cohen, Medical Laser Solutions, Norwood Pediatrics, Orange Leaf	Local Sector	Accommodations – Food & Beverage; Professional Services	Local Service Sector	36-38A38 VANDERBILT AVE / 10 VANDERBILT AVE	15-22-11	RIDDELL MARIANNE E TRUSTEE	RET >10,000 SF	1.2	\$ 6,875	\$ 69,293	\$ 2,017	\$ 26,651	\$ 4,440	\$ 52,477	\$ 83,568	\$ 78,185	\$ 161,753
Castle Island Brewing	Traded Sector	Manufacturing; Accommodations – Food & Beverage	Manufacturing	31 ASTOR AVE	15-11-63	CARNEGIE ASTOR, LLC	IND WHSES	3.0	\$ 35,057	\$ 56,034	\$-	\$ 9,933	\$ 20,220	\$ 30,305	\$ 60,457	\$ 91,091	\$ 151,549
The Vanderbilt Club; Pinnacle Health & Sports Performance; Shear Illusions	Local Sector	Recreation/Health clubs; Personal care Services	Local Service Sector	45 VANDERBILT AVE	15-13B-13	VANDERBILT ASSOCIATES LLC	HEALTH SPA	1.2	\$ 34,679	\$ 78,634	\$ 5,068	\$-	\$ 1,332	\$ 30,070	\$ 31,402	\$ 118,381	\$ 149,782
International Car Parts Inc, Box Fort, Player One Amusement Group	Traded Sector Local Sector	Creative; Professional Services	Multiple Business Types	375 VANDERBILT AVE	15-14-61	BOARDWALK ASSOCIATES, LLC	IND OFFICE	3.2	\$ 1,332	\$ 95,640	\$-	\$ 1,539	\$ 2,834	\$ 48,415	\$ 52,787	\$ 96,972	\$ 149,759
Central Kia	Local Sector	Auto Sales; Auto Repair, Maintenance, or Care	Auto	105-107 BOSTON- PROV TPKE	19-10-1	ONE HUNDRED & FIVE BOSTON- PROV HWY LLC	AUTO DEALER	2.1	\$ 903	\$ 35,279	\$ 10,367	\$ 485	\$ 1,270	\$ 90,518	\$ 92,273	\$ 46,548	\$ 138,822
Friendly's Restaurant	Local Sector	Accommodations – Food & Beverage	Local Service Sector	1469 BOSTON- PROVIDENCE TPKE	15-3-9	O ICE, LLC	REST/CLUBS	1.4	\$ 17,510	\$ 68,695	\$-	\$ 8,204	\$ 1,066	\$ 40,820	\$ 50,090	\$ 86,206	\$ 136,296
Wendy's and BJ's Gas	Local Sector	Accommodations – Food & Beverage; Retail	Local Service Sector	1412-1420 BOSTON- PROV TPKE	15-3-3A	ARGIROS, ALEXANDER A TRS	DEVEL LAND	3.0	\$ 24,044	\$ 58,279	\$-	\$ 100	\$-	\$ 51,311	\$ 51,411	\$ 82,324	\$ 133,735

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Business Name (s)	Traded or Local Sector	Business Type	Category for Analysis	Property Address	Parcel Number	Owner Name	Use Description	Land Area in Acres	Water and Sewer Payments	Electric Payments	Broadband	Local Receipts	Most Recent Personal Property Tax Bill	FY19 Real Estate Tax Bill	FY19 Real Estate Taxes, Personal Property Taxes, & Local Receipts	Total Utilities	FY19 Real Estate Taxes, Personal Property Taxes, Local Receipts, & Utility Payments
Dart Sales Inc, Admet Inc, Tractel Inc, Radiator.com, Sunburst Shutters, BM Flooring, New Academy of Jiu Jitsu	Traded Sector, Local Sector	Retail; Manufacturing; Distribution;	Multiple Business Types	51 MORGAN DR	15-14-46	MORGAN DRIVE ASSOC	IND OFFICE	3.7	\$ 4,942	\$ 2,623	\$ 6,230	\$ 53	\$ 1,576	\$ 117,601	\$ 119,229	\$ 13,794	\$ 133,023
Advanced Auto Parts, Direct Tire Sales	Local Sector	Retail	Local Service Sector	981 BOSTON- PROVIDENCE TPKE	17-9-13	LEVI LLC	AUTO REPR	2.0	\$ 9,107	\$ 23,686	\$-	\$-	\$ 617	\$ 97,975	\$ 98,592	\$ 32,793	\$ 131,386
Burger King	Local Sector	Accommodations – Food & Beverage	Local Service Sector	41 BOSTON- PROVIDENCE TPKE	19-11-4	NORTHSON FAMILY LIMITED PRTNSHP	REST/CLUBS	1.1	\$ 14,220	\$ 66,680	\$-	\$ 8,204	\$ 1,392	\$ 39,618	\$ 49,214	\$ 80,900	\$ 130,114
South Shore Therapies, Little Sprouts Early Education & Child Care	Local Sector	Professional Services; Day Care	Multiple Business Types	325 RIVER RIDGE DRIVE	15-22-1	RIVER RIDGE LTD PTNSHP	PROF BLDG	3.9	\$ 15,239	\$ 67,355	\$ 5,086	\$-	\$-	\$ 40,697	\$ 40,697	\$ 87,679	\$ 128,377
Voci Anthony Law, Payroll Matters, Erickson Associates, Andelman & Lelek Engineering, Neponset Valley Financial Partners, Bingham Frank Insurance, Westwood Insurance Partners Inc Hanlon & Associates LLC, Norwood Engineering Co Inc, QRGA LLP, Ben Choice Inc, Cantave Realty Group LLC,	Local Sector	Professional Services	Professional Services	1408-1414 BOSTON- PROV TPKE	15-25-1	1410 REALTY TRUST	OFFICE BLD	1.7	\$ 2,515	\$ 43,981	\$ 19,471	\$ 3,677	\$ 3,902	\$ 53,390	\$ 60,968	\$ 65,966	\$ 126,934
Currently being used as a body shop and open lot vehicle storage, but is in the process of becoming a Central Auto body shop.	Local Sector	Auto Repair, Maintenance, or Care; Open Lot Vehicle Storage	Auto	401 BOSTON- PROVIDENCE TPKE	19-13-1	401 PROVIDENCE HIGHWAY, LLC	AUTO DEALER	2.9	\$ 1,394	\$ 8,104	\$ 935	\$ 118	\$ -	\$ 113,014	\$ 113,131	\$ 10,432	\$ 123,564
Goden Abacus, Savaria Dance Studio Inc, Gyro & Kebob Inc, Mumin Halal Food	Local Sector	Accommodations – Food & Beverage; Recreation/Health clubs	Local Service Sector	1275 BOSTON- PROVIDENCE TPKE	15-11-1A	DOCTORS OF NORWOOD, LLC	RET >10,000 SF	1.0	\$ 9,081	\$ 38,367	\$ 4,206	\$ 19,569	\$ 1,150	\$ 50,307	\$ 71,026	\$ 51,654	\$ 122,680
Autopart International, Source Code Corp, United Citrus Products Corporation	Traded Sector, Local Sector	Retail; Manufacturing;	Manufacturing	228, 232, 244 VANDERBILT AVE	15-14-50	VANDERBILT AVE, LLC	INDUSTRIAL	3.0	\$ 532	\$ 41,106	\$-	\$ -	\$ 293	\$ 71,739	\$ 72,032	\$ 41,638	\$ 113,670
Revolutions Composits, Hill Rom Inc, Makita, New Box Solutions; Prize Possessions	Traded Sector, Local Sector	Manufacturing; Distribution; Traded Service; Retail	Multiple Business Types	340 - 346 VANDERBILT AV	15-14-68	LAROSA PAULA S TRUSTEE	IND WHSES	5.4	\$ 4,797	\$ 11,572	\$-	\$-	\$ 2,495	\$ 92,181	\$ 94,676	\$ 16,369	\$ 111,045
IHOP	Local Sector	Accommodations – Food & Beverage	Local Service Sector	1378 BOSTON- PROVIDENCE TPKE	15-6-10A	IHOP PROPERTY LLC	REST/CLUBS	1.1	\$ 15,695	\$ 52,142	\$ -	\$ 8,204	\$ 1,272	\$ 33,034	\$ 42,510	\$ 67,837	\$ 110,346
Honey Dew Donuts, Hibachi Steak House	Local Sector	Accommodations – Food & Beverage	Local Service Sector	285 and 315 MORSE ST	15-11-1	SPIEGEL, DAVID ET AL TRS	RET CONDO	4.2	\$ 13,081	\$ 38,030	\$ -	\$ 16,801	\$-	\$ 26,074	\$ 42,875	\$ 51,110	\$ 93,985
Pier 1 Imports	Local Sector	Retail	Local Service Sector	1583 BOST- PROV TURNPIKE	15-2-5	NPN NORWOOD ONE, LLC	RET < 10,000 SF	1.7	\$ 271	\$ 33,380	\$ -	\$-	\$ 79	\$ 48,673	\$ 48,752	\$ 33,651	\$ 82,403
Starbucks	Local Sector	Accommodations – Food & Beverage	Local Service Sector	1000 BOSTON- PROVIDENCE TPKE	15-21-8	BOCH, ERNEST J TRS	REST/CLUBS	0.9	\$ 9,578	\$ 29,211	\$-	\$ 8,534	\$ 1,929	\$ 32,295	\$ 42,758	\$ 38,790	\$ 81,548
Bon Caldo Restaurant	Local Sector	Accommodations – Food & Beverage	Local Service Sector	1381 BOSTON- PROVIDENCE TPKE	15-6-10B	SIMONI FRANK R TRS	REST/CLUBS	0.8	\$ 5,319	\$ 28,706	\$ 2,512	\$ 11,696	\$ 450	\$ 32,849	\$ 44,995	\$ 36,537	\$ 81,533

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Business Name (s)	Traded or Local Sector	Business Type	Category for Analysis	Property Address	Parcel Number	Owner Name	Use Description	Land Area in Acres	Water and Sewer Payments	Electric Payments	Broadband	Local Receipts	Most Recent Personal Property Tax Bill	FY19 Real Estate Tax Bill	FY19 Real Estate Taxes, Personal Property Taxes, & Local Receipts	Total Utilities	FY19 Real Estate Taxes, Personal Property Taxes, Local Receipts, & Utility Payments
Cosmetheque USA Inc; Quinlan & Sadowski PC; O'Brien Loretta S JD; Family Psychological Associates; Larry Liberfarb PC; Eastway Wellness LLC; United Real Estate; Lainco US Inc; Caccavaro, Fitzpatrick & Seifar, Michael Beradi; Arbello	Local Sector	Distribution; Professional Services;	Multiple Business Types	11 VANDERBILT AVE	15-13B-11	GEBSCO REALTY	OFFICE BLD	0.8	\$ 2,431	\$ 25,620	\$ 8,748	\$ 95	\$ 859	\$ 41,929	\$ 42,883	\$ 36,799	\$ 79,682
Exide Technologies, Cheer Advantage Allstars; Home Theater Concepts, A Plus Adult Day Health; Norwood Church of God; Mass Association of Chamber of Commerce Executives, Transformative Engineering,	Traded Sector, Local Sector	Recreation/Health clubs; Traded Service; Manufacturing; Professional Services; Distribution;	Multiple Business Types	190-196 VANDERBILT AVE	15-14-51	MAYFAIR ASSOCIATES LLC	INDUSTRIAL	3.2	\$ 5,035	\$ 11,797	\$-	\$ 288	\$ 1,109	\$ 56,076	\$ 57,472	\$ 16,831	\$ 74,303
Commonwealth Fireplace & Grill, Altair Auctions Inc, Buddy's Tile Outlet	Local Sector	Retail, Traded Service	Local Service Sector	151 CARNEGIE ROW	15-11-42	REARDON, PAUL D	RET >10,000 SF	1.8	\$ 1,612	\$ 12,069	\$ 2,511	\$ 1,055	\$ 811	\$ 51,429	\$ 53,296	\$ 16,192	\$ 69,488
Park Place Self Storage	Local Sector	Rental	Local Service Sector	410 VANDERBILT AVE	15-14-30	LAROSA PAULA S TRS	COMM WHSE	5.5	\$ 1,705	\$ 18,729	\$-	\$ 60	\$ 41	\$ 47,751	\$ 47,852	\$ 20,434	\$ 68,286
Mobile Gas Station	Local Sector	Retail	Local Service Sector	971 BOSTON- PROVIDENCE TPKE	17-9-2	BANDONI, PAULINE TRS	FUEL SV/PR	0.5	\$ 2,425	\$ 32,598	\$ 862	\$ 1,451	\$ 933	\$ 24,924	\$ 27,308	\$ 35,884	\$ 63,193
Irving Gas, RoJo Car Wash, Elite Tailor's & Cleaners, Touchless Laser Wash, Norwood Fireplace, Cavanaugh Insurance Agency, Inc., Acu Spa, Herbal Spa	Local Sector	Professional Services; Personal Care Services; Retail	Local Service Sector	75-83 BOSTON- PROVIDENCE TPKE	19-10-4	69 PROVIDENCE HIGHWAY ASSOC LLC	RET >10,000 SF	2.0	\$-	\$ -	\$ -	\$ 1,665	\$ 3,034	\$ 57,885	\$ 62,585	\$-	\$ 62,585
Open Lot Vehicle Storage	Local Sector	Open Vehicle Lot Storage	Auto	780 BOSTON- PROVIDENCE TPKE/ 776 BOSTON- PROVIDENCE TPKE	17-4-2, 17-4-3	BOCH, ERNEST J	PARK LOT	3.3	\$-	\$ 1,853	\$-	\$-	\$-	\$ 59,626	\$ 59,626	\$ 1,853	\$ 61,480
Budget Rent-A-Car, Don & Wally's Service	Local Sector	Rental; Auto Repair, Maintenance, or Care	Local Service Sector	885-905 BOSTON- PROVIDENCE TPKE	17-11-2A	BANDONI DONALD G &	OTH MOTOR	1.3	\$ 103	\$ 13,675	\$ 3,096	\$ 1,060	\$ 980	\$ 38,874	\$ 40,914	\$ 16,875	\$ 57,789
Monster Mini Golf	Local Sector	Recreation/Health Clubs	Local Service Sector	1560 BOSTON- PROVIDENCE TPKE	15-2-21	VARA, RICHARD H. GENERAL PARTNER	COMM WHSE	1.4	\$ 3,016	\$ 18,646	\$-	\$ 8,379	\$-	\$ 25,643	\$ 34,021	\$ 21,662	\$ 55,684
K&M Studio, Inc, McDonald Flooring, Micorp	Local Sector	Recreation/Health Clubs; Traded Sector; Auto Repair, Maintenance, or Care	Local Service Sector	55 CARNEGIE ROW	15-11-40	J & S DEVELOPMENT, LLC	COMM WHSE	1.4	\$ 1,001	\$ 18,866	\$ 515	\$ 1,424	\$ 202	\$ 32,728	\$ 34,354	\$ 20,382	\$ 54,736
Central Fiat of Norwood	Local Sector	Auto Sales; Auto Repair, Maintenance, or Care	Auto	141 BOSTON- PROVIDENCE TPKE	19-10-2	141 PROVIDENCE HIGHWAY ASSOC LLC	AUTO DEALER	1.3	\$ 8,028	\$ 3,767	\$-	\$ 441	\$ 146	\$ 38,379	\$ 38,966	\$ 11,795	\$ 50,760
Personal Best Karate, Marathon Physical Therapy	Local Sector	Recreation/Health Clubs; Professional Services	Multiple Business Types	99-103 VANDERBILT AVE	15-14-56	PICCADILLY ASSOCIATES LLC	RET >10,000 SF	1.3	\$ 2,730	\$ 1,331	\$ 1,726	\$-	\$ 502	\$ 44,412	\$ 44,914	\$ 5,787	\$ 50,701
Office Gallery International, Children of America	Local Sector	Retail; Day Care	Local Service Sector	68-76 VANDERBILT AVE	15-22-13	SHANE, ROSALIE TRUSTEE	CHILD CARE M94		\$ 4,185			\$ 1,091				\$ 25,533	
American Holt Corporation	Traded Sector	Manufacturing Traded Services;	Manufacturing	201-203 CARNEGIE ROW	15-11-52		IND OFFICE	1.1	\$ 2,142	\$ 17,525	\$ 796	\$ 194	\$ 721	\$ 27,197	\$ 28,112	\$ 20,462	\$ 48,574
Norwood Sheet Metal, Automal Service Center	Local Sector	Auto Repair, Maintenance, or Care	Local Service Sector	740-744 BOSTON- PROV TPKE	18-2-14	GERMANO ORLANDO JOSEPH JR &	AUTO REPR	1.5	\$ 2,786	\$ 14,031	\$-	\$ 113	\$ 1,761	\$ 29,817	\$ 31,690	\$ 16,817	\$ 48,507

Route 1 Corridor Economic Impact Study

Business Name (s)	Traded or Local Sector	Business Type	Category for Analysis	Property Address	Parcel Number	Owner Name	Use Description	Land Area in Acres	Water and Sewer Payments	Electric Payments	Broadband	Local Receipts	Most Recent Personal Property Tax Bill	FY19 Real Estate Tax Bill	FY19 Real Estate Taxes, Personal Property Taxes, & Local Receipts	Total Utilities	FY19 Real Estate Taxes, Personal Property Taxes, Local Receipts, & Utility Payments
RM Car Care, Spencer Collision	Local Sector	Maintenance, or Care; Open Vehicle Lot Storage	Auto	1150 BOSTON- PROVIDENCE TPKE	15-22-5A	MAND CORP	AUTO REPR	1.2	\$ 649	\$ 10,310	\$ 1,824	\$ 369	\$ 2,313	\$ 30,978	\$ 33,660	\$ 12,783	\$ 46,443
Gulf Gas	Local Sector	Retail	Local Service Sector	960 BOSTON- PROVIDENCE TPKE	17-13-1	STATION AT RT ONE REALTY LLC	FUEL SV/PR	0.5	\$ 370	\$ 14,052	\$-	\$ 125	\$ 419	\$ 27,452	\$ 27,996	\$ 14,422	\$ 42,418
John Hoffman (Hoffman Law Group)	Local Sector	Professional Services	Professional Services	501 BOSTON- PROV TURNPIKE	19-12-2	JIATING CHI YOU LLC	OFF CONDO	0.3	\$ 2,164	\$ 8,339	\$-	\$-	\$ 780	\$ 30,214	\$ 30,994	\$ 10,503	\$ 41,497
Town of Norwood	Local Sector	Town or Government	Undeveloped or Government Owned	160 BOSTON- PROV TURNPIKE	19-16-3	NORWOOD, TOWN OF	MUN I	124.2	\$ 1,289	\$ 39,623	\$-	\$-	\$-	\$-	\$-	\$ 40,913	\$ 40,913
Universal Power Yoga, Overhead Door Inc, Oreck of Norwood Inc (no longer at this location)	Local Sector	Recreation/Health Clubs; Retail	Local Service Sector	1401 BOSTON- PROVIDENCE TPKE	15-7-3	COBB CORNER LIMITED PNTSH	RET < 10,000 SF	0.4	\$ 2,383	\$ 6,432	\$ 1,053	\$-	\$ 591	\$ 28,717	\$ 29,308	\$ 9,867	\$ 39,175
Sunoco	Local Sector	Retail	Local Service Sector	515 BOSTON- PROVIDENCE TPKE	19-12-1	BEST PETROLEUM NET LEASE, LLC	FUEL SV/PR	0.4	\$ 336	\$ 17,363	\$-	\$ 125	\$ 171	\$ 20,205	\$ 20,501	\$ 17,699	\$ 38,200
Center Auto Body	Local Sector	Auto Repair, Maintenance, or Care	Local Service Sector	101 CARNEGIE ROW	15-11-41	KELLEHER ROBERT J ET AL TRS	AUTO REPR	0.9	\$ 2,157	\$ 11,414	\$ 682	\$ 1,164	\$ 826	\$ 21,535	\$ 23,525	\$ 14,253	\$ 37,778
Furlong's Candies & Ice Cream	Local Sector	Retail	Local Service Sector	1361 BOSTON- PROVIDENCE TPKE	15-6-22	SPIEGEL, DAVID TRS	RET < 10,000 SF	0.7	\$ 804	\$ 12,808	\$-	\$-	\$-	\$ 21,357	\$ 21,357	\$ 13,613	\$ 34,970
New England Pool & Spa, Tiles Direct	Local Sector	Retail; Traded Service	Local Service Sector	810 BOSTON- PROVIDENCE TPKE	17-4-5	MCCARTHY RONALD C & SUSAN P	RET < 10,000 SF	0.4	\$ 1,457	\$ 2,737	\$-	\$ 9,685	\$ 156	\$ 19,632	\$ 29,473	\$ 4,194	\$ 33,667
Village Green Nurseries	Local Sector	Professional Services; Retail	Local Service Sector	151 BOSTON- PROVIDENCE TPKE	19-2-9, 19-2-13	EYSIE FAMILY, LLC	RES TYP OFFC, PARK LOT	1.1	\$ 1,780	\$ 1,803	\$-	\$-	\$ 33	\$ 28,660	\$ 28,692	\$ 3,583	\$ 32,275
Gentle Dental	Local Sector	Professional Services	Professional Services	980 BOSTON- PROVIDENCE TPKE	15-21-2	HERB'S CORNER, LLC	RET < 10,000 SF	0.7	\$ 686	\$ 11,379	\$-	\$-	\$-	\$ 19,963	\$ 19,963	\$ 12,065	\$ 32,028
Adam & Eve Superstore	Local Sector	Retail	Local Service Sector	1570 BOSTON- PROVIDENCE TPKE	15-2-14	APV 1570 FAMILY LIMITED PARTNERSHIP	RET < 10,000 SF	0.8	\$ 128	\$ 7,189	\$ 1,866	\$-	\$ 164	\$ 22,293	\$ 22,457	\$ 9,183	\$ 31,640
Vacant Land	<u>N/A</u>	Undeveloped Land	Undeveloped or Government Owned	RIVER RIDGE DRIVE	15-22-4	RIVER RIDGE LTD PTNSHP	IND VAC LD PO	13.0	\$-	\$-	\$-	\$-	\$-	\$ 30,789	\$ 30,789	\$-	\$ 30,789
Route One Auto service, Norwood Bottle Gas	Local Sector	Auto Repair, Maintenance, or Care; Retail	Local Service Sector	305 BOSTON- PROVIDENCE TPKE	19-14-3	GAETANI, STEPHEN M. TRS.	AUTO REPR	0.4	\$ 171	\$ 5,887	\$ 5,601	\$-	\$ 416	\$ 17,950	\$ 18,366	\$ 11,659	\$ 30,025
Jiffy Lube	Local Sector	Auto Repair, Maintenance, or Care	Local Service Sector	770 BOSTON- PROVIDENCE TPKE	18-2-3A	MAMMONE, VINCENT A & JUDITH E	AUTO REPR	0.5	\$ 1,945	\$ 7,146	\$-	\$ 125	\$ 1,180	\$ 17,181	\$ 18,486	\$ 9,091	\$ 27,577
Clay Cars	Local Sector	Auto Sales	Auto	858 BOSTON- PROVIDENCE TPKE	17-14-2	J D & K LIMITED PARTNERSHIP	RET < 10,000 SF	0.6	\$ 221	\$ 4,137	\$-	\$ 258	\$-	\$ 22,815	\$ 23,073	\$ 4,358	\$ 27,431
Ticket One, Washington Motor Cars (closed in June 2019), Pop-A-Lock Dedham,	Local Sector	Auto Sales; Traded Service; Retail	Auto	824 BOSTON- PROVIDENCE TPKE	17-4-4	5111 LLC	RET < 10,000 SF	0.5	\$ 1,428	\$ 3,987	\$-	\$ 200	\$79	\$ 20,771	\$ 21,049	\$ 5,415	\$ 26,465
Gymnastics Academy of Boston	Local Sector	Recreation/Health clubs	Local Service Sector Undeveloped or	95 VANDERBILT AVE BOSTON-	15-13B-15	REILLY, CINDY L TRS WALKER WILLIAM	CHILD CARE M94	1.0	\$ 1,563 \$ -		\$ -	<u>\$</u> -					,
Vacant Land	N/A	Undeveloped Land	Government Owned	PROVIDENCE TPKE	22-1-4A	J ET AL TR	POT DEVEL	6.2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,636	\$ 24,636	\$ -	\$ 24,636
Friece Electrical Services Inc, Cap World Truck Accessories, Inc	Local Sector	Retail; Traded Services	Local Service Sector	596, 602,604,608, 616 BOSTON-PROV TPKE	18-5-5, 18-5-4	ATKINS SHERYL TRUSTEE	RET < 10,000 SF	1.0	\$ 1,162	\$ 4,143	\$ 479	\$ 680	\$ 720	\$ 15,143	\$ 16,543	\$ 5,784	\$ 22,327
Open Lot Vehicle Storage	Local Sector	Open Lot Vehicle Storage	Auto	Next to 128 CARNEGIE ROW	15-11-22, 15-11-43	SPIEGEL, DAVID TRS	IND VAC LD DV	2.6	\$-	\$-	\$-	\$-	\$-	\$ 22,176	\$ 22,176	\$-	\$ 22,176
Single Family Home	N/A	Residential	Residential	60 UNION STREET 924 BOSTON-	15-1-5		SING FAM	4.3	\$ 861	. ,	\$-			, ,			
All Seasons Rental	Local Sector	Rental	Local Service Sector	PROVIDENCE TPKE 595 NEPONSET	17-13-12	BANDONI DONALD G &	RET < 10,000 SF	0.8	\$ 205		\$ -	\$ 1,095			\$ 14,758		
Single Family Home	N/A	Residential	Residential	STREET 583 NEPONSET	18-4-5		SING FAM	0.4	\$ 654					\$ 4,701	\$ 5,006	\$ 4,452	
Single Family Home	N/A	Residential	Residential	STREET 589 NEPONSET	18-4-2		SING FAM	0.4	\$ 755		\$ 2,024	\$ 264		\$ 4,628	\$ 4,892	\$ 4,421	
Single Family Home	N/A	Residential	Residential	STREET 605 NEPONSET	18-4-4		SING FAM	0.9	\$ 605					\$ 5,462	\$ 5,587	\$ 3,254	
Single Family Home	N/A	Residential	Residential	STREET 585 NEPONSET	18-4-7		SING FAM	0.5	\$ 759			\$ 206		\$ 6,056	\$ 6,262	\$ 2,311	
Single Family Home	N/A	Residential	Residential	STREET 599 NEPONSET	18-4-3		SING FAM	0.4	\$ 466			\$ 393		\$ 4,944	\$ 5,338	\$ 2,740	. ,
Single Family Home	N/A	Residential	Residential	STREET	18-4-6		SING FAM	0.4	\$ 1,244	\$ 1,988	\$ -	\$ 135	\$-	\$ 4,616	\$ 4,751	\$ 3,233	
Multifamily Home	N/A	Residential	Residential	958 BOSTON- PROVIDENCE TPKE	17-13-3		POT DEVEL LAND	0.2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,175 (5,722)			\$ 6,175 \$ 722
Open Lot Vehicle Storage	Local Sector	Open Lot Vehicle Storage	Auto	ACCESS ROAD	21-4-35	ACCESS ROAD, LLC	DEVEL LAND	1.5	\$-	\$-	\$-	\$ -	\$-	\$ 5,723	\$ 5,723	\$-	\$ 5,723

Route 1 Corridor Economic Impact Study



Business Name (s)	Traded or Local Sector	Business Type	Category for Analysis	Property Address	Parcel Number	Owner Name	Use Description	Land Area in Acres	Water and Sewer Payments	Electric Payments	Broadband	Local Receipts	Most Recent Personal Property Tax Bill	FY19 Real Estate Tax Bill	FY19 Real Estate Taxes, Personal Property Taxes, & Local Receipts	Total Utilities	FY19 R Estate Ta Persor Property T Local Rec & Utility Pa	Taxes, onal / Taxes, eccipts,
Multifamily Home	N/A	Residential	Residential	569 NEPONSET STREET	18-5-7		TWO FAMILY	0.5	\$ 116	\$ 467	\$-	\$ 225	\$-	\$ 4,874	\$ 5,099	\$ 584	\$	5,683
Vacant Land	N/A	Undeveloped Land	Undeveloped or Government Owned	EDGEWATER DR	15-2-1	BOYLSTON 399 LIMITED PARTNERSHIP	UNDEV LAND	3.9	\$-	\$-	\$-	\$-	\$-	\$ 3,982	\$ 3,982	\$-	\$	3,982
Open Lot Vehicle Storage	Local Sector	Open Lot Vehicle Storage	Auto	ACCESS ROAD	21-13-263	MICHIENZI, NOREEN	COM OUTBLG	0.6	\$-	\$-	\$-	\$-	\$-	\$ 3,263	\$ 3,263	\$-	\$	3,263
Vacant Land	N/A	Undeveloped Land	Undeveloped or Government Owned	BOSTON- PROVIDENCE TPKE	15-11-6	BOSTON PORT SERVICE	UNDEV LAND	1.9	\$-	\$-	\$-	\$-	\$ -	\$ 3,104	\$ 3,104	\$ -	\$	3,104
Open Lot Vehicle Storage	Local Sector	Open Lot Vehicle Storage	Auto	ACCESS ROAD	21-13-262	MICHIENZI, VINCENT	POT DEVEL	2.0	\$-	\$-	\$-	\$-	\$-	\$ 3,017	\$ 3,017	\$-	\$	3,017
Vacant Land	N/A	Undeveloped Land	Undeveloped or Government Owned	BOSTON-PROV TURNPIKE OFF	22-8-1	141 BOSTON PROVIDENCE HIGHWAY LLC	RES VAC UNDEV	23.5	\$-	\$-	\$-	\$-	\$-	\$ 1,919	\$ 1,919	\$-	\$	1,919
Vacant Land	N/A	Undeveloped Land	Undeveloped or Government Owned	BOSTON-PROV TURNPIKE OFF	22-8-18	141 BOSTON PROVIDENCE HIGHWAY LLC	RES VAC UNDEV	11.3	\$-	\$-	\$-	\$-	\$-	\$ 1,852	\$ 1,852	\$-	\$	1,852
Vacant Land	N/A	Undeveloped Land	Undeveloped or Government Owned	VANDERBILT AVE	15-22-73	SHANE, ROSALIE, TR	UNDEV LAND	0.2	\$-	\$-	\$-	\$-	\$-	\$ 589	\$ 589	\$-	\$	589
Town Owned	N/A	Town or Government	Undeveloped or Government Owned	CLINTON ST	18-5-57	NORWOOD, TOWN OF	MUN V TT	0.1	\$-	\$-	\$-	\$-	\$-	\$ 500	\$ 500	\$ -	\$	500
Vacant Land	N/A	Undeveloped Land	Undeveloped or Government Owned	BOSTON-PROV TURNPIKE OFF	22-9-1	BOSTON METROPOLITAN AIRPORT IN	RES VAC UNDEV	2.4	\$-	\$-	\$-	\$-	\$-	\$ 389	\$ 389	\$-	\$	389
Vacant Land	N/A	Undeveloped Land	Undeveloped or Government Owned	CHESTNUT ST	18-6-75	TELCROSS ASSOC LTD PTNSHP	IND VAC LD UD	0.2	\$-	\$ -	\$-	\$-	\$-	\$ 354	\$ 354	\$-	\$	354
Vacant Land	N/A	Undeveloped Land	Undeveloped or Government Owned	CHESTNUT ST	18-6-76	TELCROSS ASSOC LTD PTNSHP	IND VAC LD UD	0.2	\$-	\$ -	\$-	\$ -	\$-	\$ 354	\$ 354	\$-	\$	354
Vacant Land	N/A	Undeveloped Land	Undeveloped or Government Owned	CHESTNUT ST	18-6-77	TELCROSS ASSOC LTD PTNSHP	IND VAC LD UD	0.2	\$-	\$-	\$-	\$-	\$-	\$ 354	\$ 354	\$-	\$	354
Vacant Land	N/A	Undeveloped Land	Undeveloped or Government Owned	BOSTON- PROV TURNPIKE	18-5-2	ATKINS, SHERYL TRUSTEE	RES VAC UNDEV	0.5	\$-	\$-	\$-	\$-	\$-	\$ 268	\$ 268	\$-	\$	268
Vacant Land	N/A	Undeveloped Land	Undeveloped or Government Owned	BOSTON- PROV TURNPIKE	18-5-1	ATKINS, SHERYL TRUSTEE	RES VAC UNDEV	0.3	\$-	\$-	\$-	\$-	\$-	\$ 234	\$ 234	\$-	\$	234
Vacant Land	N/A	Undeveloped Land	Undeveloped or Government Owned	CLINTON ST	18-5-6	ATKINS, SHERYL TRUSTEE	RES VAC UNDEV	0.3	\$-	\$-	\$-	\$-	\$-	\$ 232	\$ 232	\$-	\$	232
Vacant Land	N/A	Undeveloped Land	Undeveloped or Government Owned	STATE & CLINTON STS	18-5-3	ATKINS, SHERYL TRUSTEE	RES VAC UNDEV	0.1	\$-	\$-	\$-	\$-	\$-	\$ 216	\$ 216	\$-	\$	216
Vacant Land	N/A	Undeveloped Land	Undeveloped or Government Owned	NAHATAN ST OFF	18-7-46	NAHATAN COMMERCE PARK II, LLC	IND VAC LD UD	0.1	\$-	\$ -	\$-	\$-	\$-	\$ 169	\$ 169	\$-	\$	169
Vacant Land	N/A	Undeveloped Land	Undeveloped or Government Owned	CHESTNUT ST	18-6-78	TELCROSS ASSOC	IND VAC LD UD	0.0	\$-	\$-	\$-	\$-	\$-	\$ 153	\$ 153	\$-	\$	153
Vacant Land	N/A	Undeveloped Land	Undeveloped or Government Owned	CHESTNUT ST	18-6-80	TELCROSS ASSOC LTD PTNSHP	IND VAC LD UD	0.0	\$-	\$-	\$-	\$-	\$-	\$ 153	\$ 153	\$-	\$	153
Town Owned	N/A	Town or Government	Undeveloped or Government Owned	BOSTON- PROV TURNPIKE	22-10-3	NORWOOD, TOWN OF	MUN V	0.2	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$	-
Town Owned	N/A	Town or Government	Undeveloped or Government Owned	BOSTON- PROVIDENCE TPKE	15-2-40	TOWN OF NORWOOD	MUN V TT	0.0	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$	-
Town Owned	N/A	Town or Government	Undeveloped or Government Owned	NAHATAN STREET	18-3-13	TOWN OF NORWOOD	MUN V TT	0.0	\$-	\$ -	\$-	\$-	\$-	\$-	\$-	\$-	\$	-

1500 Boston-Providence Highway - Norwood Corporate Center

Business Name and Personal Property Tax Assessment	Traded or Local Sector	Business Type	NAICS Category and Code	Property Address	Property Street	Parcel Number	Use Code	Use Descript
				1500 BOSTON PROV TPK UNIT 22A	BOSTON PROV TPK UNIT 22A	15-2-451	4050	IND/WHSCON
				1500 BOSTON PROV TPK UNIT 22B	BOSTON PROV TPK UNIT 22B	15-2-451	4050	IND/WHSCON
BCCUSA-MA Inc	Traded Sector	Technology	54151 Computer Systems Design and Related Services	1500 BOSTON PROV TPK UNIT 27B	BOSTON PROV TPK UNIT 27B	15-2-451	4050	IND/WHSCON
Best Seafood USA, Inc	Local Sector	Distribution	42446 Fish and Seafood Merchant Wholesalers	1500 BOSTON PROV TPK UNIT 28B	BOSTON PROV TPK UNIT 28B	15-2-451	4050	IND/WHSCON
Navo Systems (software Company)	Traded Sector	Technology	54151 Computer Systems Design and Related Services	1500 BOSTON PROV TPK UNIT 29B	BOSTON PROV TPK UNIT 29B	15-2-451	4050	IND/WHSCON
Lord Associates	Traded Sector	Professional Services	54162 Environmental Consulting Services	1500 BOSTON PROV TPK UNIT 30B	BOSTON PROV TPK UNIT 30B	15-2-451	4050	IND/WHSCON
Cullen, Murphey & Co., PC	Local Sector	Professional Services	541211 Offices of Certified Public Accountants	1500 BOSTON PROV TPK UNIT 31B	BOSTON PROV TPK UNIT 31B	15-2-451	4050	IND/WHSCON
Pokorny JH Associates	Local Sector	Professional Services	42372 Plumbing & Heating Equipment and Supplies (Hydronics) Merchant Wholesalers	1500 BOSTON PROV TPK UNIT 3A	BOSTON PROV TPK UNIT 3A	15-2-451	4050	IND/WHSCON
New England Psychological Association	Local Sector	Professional Services	81392 Professional Organizations	1500 BOSTON PROV TPK UNIT 4A	BOSTON PROV TPK UNIT 4A	15-2-451	4050	IND/WHSCON
				1500 BOSTON PROV TPK UNIT 5A	BOSTON PROV TPK UNIT 5A	15-2-451	4050	IND/WHSCON
				1500 BOSTON PROV TPKE UNIT 24	BOSTON PROV TPKE UNIT 24	15-2-451	4050	IND/WHSCON
Ambrose Grant INS Agency	Local Sector	Professional Services	52411 Direct Life, Health, and Medical Insurance Carriers	TPKE UNIT 24B	BOSTON PROV TPKE UNIT 24B	15-2-451	4050	IND/WHSCON
Oasis Behavior Health Institute	Local Sector	Professional Services	621112 Offices of Physicians, Mental Health Specialists	1500 BOSTON PROV TPKE UNIT 25	BOSTON PROV TPKE UNIT 25	15-2-451	4050	IND/WHSCON
				1500 BOSTON PROV TPKE UNIT 26	BOSTON PROV TPKE UNIT 26	15-2-451	4050	IND/WHSCON
SIGMAXIM, Inc.	Traded Sector	Technology	54151 Computer Systems Design and Related Services	1500 BOSTON PROV TPKE UNIT 2A	BOSTON PROV TPKE UNIT 2A	15-2-451	4050	IND/WHSCON

1500 Boston-Providence Highway - Norwood Corporate Center

Business Name and Personal Property Tax Assessment	Traded or Local Sector	Business Type	NAICS Category and Code	Property Address	Property Street	Parcel Number	Use Code	Use Descript
<u>SRI INFOTECH, INC</u>	Traded Sector	Technology	54151 Computer Systems Design and Related Services	1500 BOSTON PROV TPKE UNIT 32	BOSTON PROV TPKE UNIT 32	15-2-451	4050	IND/WHSCON
ELDAMAA ACCOUNTING & TAX LLC	IL ocal Sector	Professional Services	541211 Offices of Certified Public Accountants	1500 BOSTON PROV TPKE UNIT 33	BOSTON PROV TPKE UNIT 33	15-2-451	4050	IND/WHSCON
WA Leonard & Company, PC	Local Sector	Professional Services	541211 Offices of Certified Public Accountants	1500 BOSTON PROV TPKE UNIT 36	BOSTON PROV TPKE UNIT 36	15-2-451	4050	IND/WHSCON
Beacon Equity Advisors	Local Sector	Professional Services	54161 Management Consulting Services	1500 BOSTON PROV TPKE UNIT 38	BOSTON PROV TPKE UNIT 38	15-2-451	4050	IND/WHSCON
Schwartz & Hayes	Local Sector	Professional Services	5411 Legal Services	1500 BOSTON PROV TPKE UNIT 39	BOSTON PROV TPKE UNIT 39	15-2-451	4050	IND/WHSCON
M Brett Painting Inc.	Local Sector	Traded Services	23832 Painting and Wall Covering Contractors	1500 BOSTON PROV TPKE UNIT 6	BOSTON PROV TPKE UNIT 6	15-2-451	9090	CHARITABLE
				1500 BOSTON PROV TPKE UNIT 7	BOSTON PROV TPKE UNIT 7	15-2-451	4050	IND/WHSCON
Physical Therapy & Sports	II ocal Sector	Professional Services	62134 Offices of Physical, Occupational and Speech Therapists, and Audiologists	1500 BOSTON PROV TPKE UNIT 8A	BOSTON PROV TPKE UNIT 8A	15-2-451	4050	IND/WHSCON
Puritan Flood Restoration	Local Sector	Traded Services	238 Specialty Trade Contractors	1500 BOSTON PROV TPKE UNIT 9A	BOSTON PROV TPKE UNIT 9A	15-2-451	4050	IND/WHSCON
Strategic Financial Services	Local Sector	Professional Services	5239 Other Financial Investment Activities	1500 BOSTON PROV TPK UN34-35	BOSTON PROV TPK UN34-35	15-2-451	4050	IND/WHSCON
<u>Health Markets</u>	II ocal Sector	Professional Services	5242 Agencies, Brokerages, and Other Insurance Related Activities	1500 BOSTON PROV TPK UNIT 20C	BOSTON PROV TPK UNIT 20C	15-2-451	4050	IND/WHSCON
				1500 BOSTON PROV TPK UNIT 1	BOSTON PROV TPK UNIT 1	15-2-451	4050	IND/WHSCON
					BOSTON PROV TPK UN 23	15-2-451	4050	IND/WHSCON
				1500 BOSTON PROV TPK UNIT 10A	BOSTON PROV TPK UNIT 10A	15-2-451	4050	IND/WHSCON

1500 Boston-Providence Highway - Norwood Corporate Center

Business Name and Personal Property Tax Assessment	Traded or Local Sector	Business Type	NAICS Category and Code	Property Address	Property Street	Parcel Number	Use Code	Use Descript
Reliable Respiratory	Local Sector	Retail	4461 Health and Personal Care Stores	1500 BOSTON PROV TPK UNIT 11A	BOSTON PROV TPK UNIT 11A	15-2-451	4050	IND/WHSCON
				1500 BOSTON PROV TPK UNIT 12A	BOSTON PROV TPK UNIT 12A	15-2-451	4050	IND/WHSCON
				1500 BOSTON PROV TPK UNIT 13A	BOSTON PROV TPK UNIT 13A	15-2-451	4050	IND/WHSCON
				1500 BOSTON PROV TPK UNIT 14A	BOSTON PROV TPK UNIT 14A	15-2-451	4050	IND/WHSCON
Maloney Insurance	Local Sector	Professional Services	5241 Insurance Carriers	1500 BOSTON PROV TPK UNIT 15A	BOSTON PROV TPK UNIT 15A	15-2-451	4050	IND/WHSCON
Brand Advantage	Traded Sector	Manufacturing	323 Printing and related support activities	1500 BOSTON PROV TPK UNIT 16A	BOSTON PROV TPK UNIT 16A	15-2-451	4050	IND/WHSCON
Shree Haridham Temple	Local Sector	Place of Worship	813110 Places of worship	1500 BOSTON PROV TPK UNIT 17A	BOSTON PROV TPK UNIT 17A	15-2-451	4050	IND/WHSCON
Favor Online	Local Sector	Retail	453 Miscellaneous Store Retailers	1500 BOSTON PROV TPK UNIT 18A	BOSTON PROV TPK UNIT 18A	15-2-451	4050	IND/WHSCON
				1500 BOSTON PROV TPK UNIT 19	BOSTON PROV TPK UNIT 19	15-2-451	4050	IND/WHSCON
				1500 BOSTON PROV TPK UNIT 20C	BOSTON PROV TPK UNIT 20C	15-2-451	4050	IND/WHSCON
Boston Tech Partners	Traded sector	Technology	54151 Computer Systems Design and Related Services	1500 BOSTON PROV TPK	BOSTON PROV TPK UNIT 21	15-2-451	4050	IND/WHSCON
EHK Adjorlol & Assoc, Inc	Traded sector	Professional Services	5413 Architectural and engineering services	1500 BOSTON PROV TPK	BOSTON PROV TPK			
American Copyright	Traded sector	Manufacturing	323 Printing and related support	1500 BOSTON PROV TPK				
Spectra-Solutions	Traded sector	Manufacturing, Life Sciences	334516 Analytical Laboratory Instrument Manufacturing	1500 BOSTON PROV TPK				
<u>Air Temperature Systems</u>	Local Sector	Traded Services	23822 Plumbing, Heating, and Air- Conditioning Contractors	1500 BOSTON PROV TPK				

	, Personal Property Sector Vs. Traded S	Taxes, & Local Receipts Sector									
F-Test Two-Sample for Variances											
Local Sector Traded Sector											
Mean \$ 86,889 \$ 199,951											
Variance	11159942531	13067340612									
Observations	92	15									
Df	91	14									
F	0.8	354033186									
P(F<=f) one-tail 0.310993568											
F Critical one-tail0.55495044											

Table 1-F-Test – local Vs. traded sectors – no utilities. The p-value of the F-Test is **0.31**, which is above the .05 level of significance for this analysis. Therefore, a T-Test assuming equal variance was used.

FY19 Real Estate Taxes, Personal Property Taxes, & Local Receipts Local Sector Vs. Traded Sector											
t-Test: Two-Sample Assuming Equal Variances											
	Local	l Sector	Trade	ed Sector							
Mean	\$	86,889	\$	199,951							
Variance 11159942531 13067340612											
Observations 92 15											
Pooled Variance		11414	126227	5							
Hypothesized Mean Difference			0								
df		1	105								
t Stat		-3.800	049614	2							
P(T<=t) one-tail		0.000	12124	5							
t Critical one-tail		1.659	495383	3							
P(T<=t) two-tail		0.00	024249								
t Critical two-tail 1.982815274											

 Table 2 – t-Test local Vs. traded sectors – no utilities.

FY19 All Payments to Town Including Utilities Local Sector Vs. Traded Sector											
F-Test Two-Sample for Variances											
Local Sector Traded Sector											
Mean	\$ 181,863	\$ 950,099									
Variance	47619566311	8.93572E+11									
Observations	92	15									
df	91	14									
F	0.0	053291223									
P(F<=f) one-tail 0											
F Critical one-tail 0.55495044											

Table 3 - F -Test – local Vs. traded sectors – with utilities. The p-value of the F-Test is 0.00, which is below the .05 level of significance for this analysis. A t-Test assuming unequal variance was used.

FY19 All Payments to T Local Sector Vs			ilities								
t-Test: Two-Sample Assuming Unequal Variances											
	Loca	l Sector	Trade	ed Sector							
Mean											
Variance 47619566311 8.93572E+11											
Observations	92		15								
Hypothesized Mean Difference			0								
df			14								
t Stat		-3.133	398281	9							
P(T<=t) one-tail		0.003	66051	4							
t Critical one-tail 1.761310136											
P(T<=t) two-tail		0.007	32102	9							
t Critical two-tail 2.144786688											

Table 4 - t-Test local Vs. traded sectors - with utilities

FY19 Real Esta	te Taxes, Personal Property Local Sector Vs. Mix	•
F-Test Two-Sample for	r Variances	
	Local Sector	Mixed
Mean	\$ 86,889	\$ 176,579
Variance	11159942531	47706688446
Observations	92	18
df	91	17
F	(0.233928258
P(F<=f) one-tail		2.66615E-06
F Critical one-tail	(0.575973316

Table 9 – F-Test local Vs. mixed sectors – without utilities. The p-value of the F-Test is **0.00**, which is below the .05 level of significance for this analysis. Therefore, a t-Test assuming unequal variance was used.

FY19 Real Estate Taxes, Perse Local S	onal Property Tax Sector Vs. Mixed	es, & Loca	al Receipts
t-Test: Two-Sample Assuming Unequ	al Variances		
	Local Sector	N	<i>lixed</i>
Mean	\$ 86,8	389 \$	\$ 176,579
Variance	11159942531	4	7706688446
Observations	92	1	8
Hypothesized Mean Difference	0		
df	19		
t Stat	-1.703622085		
P(T<=t) one-tail	0.052376479		
t Critical one-tail	1.729132812		
P(T<=t) two-tail	0.104752957		
t Critical two-tail	2.093024054		

 Table 10 - t-Test Local Vs. Mixed Sectors – Without Utilities

FY19 All Payments to Town Including Utilities Local Sector Vs. Mixed Sector						
F-Test Two-Sample for Varia	ances					
	Local Sector	Mixed				
Mean	\$ 181,863	\$ 420,992				
Variance	47619566311	4.9034E+11				
Observations	92	18				
df	91	17				
F		0.09711533				
P(F<=f) one-tail		1.12E-14				
F Critical one-tail		0.57597332				

Table 11 – F-Test local Vs. mixed sectors – with utilities. The p-value of the F-Test is **0.00**, which is below the .05 level of significance for this analysis. A t-Test assuming unequal variance was used.

FY19 All Payments to Town Including Utilities Local Sector Vs. Mixed Sector							
t-Test: Two-Sample Assuming Unequal Variances							
Local Sector Mixed							
Mean	\$	181,863	\$	420,992			
Variance	47619566311 4.9034E+11						
Observations	92 18						
Hypothesized Mean Difference			0				
df			18				
t Stat		-1.43	5261952				
P(T<=t) one-tail	0.084180829						
t Critical one-tail	1.734063607						
P(T<=t) two-tail	0.168361658						
t Critical two-tail		2.10	092204				

Table 12 - t-Test local Vs. mixed sectors - with utilities

FY19 Real Est	ate Taxes, Personal Pro Mixed Vs. Trade	perty Taxes, & Local Receipts d Sector
F-Test Two-Sample for	or Variances	
	Mixed	Traded Sector
Mean	\$ 176,579	\$ 199,951
Variance	47706688446	13067340612
Observations	18	15
df	17	14
F		3.650833774
P(F<=f) one-tail		0.009213583
F Critical one-tail		2.428179001

Table 13 - F-Test traded Vs. mixed sectors – without utilities. The p-value of the F-Test is **0.01**, which is below the .05 level of significance for this analysis. A t-Test assuming unequal variance was used.

FY19 Real Estate Taxes, Personal Property Taxes, & Local Receipts Mixed Vs. Traded Sector							
t-Test: Two-Sample Assuming Unequa	t-Test: Two-Sample Assuming Unequal Variances						
	Mixed	Traded Sector					
Mean	\$ 176,579	\$ 199,951					
Variance	47706688446	13067340612					
Observations	18	15					
Hypothesized Mean Difference		0					
df	27						
t Stat	-0.393847657						
P(T<=t) one-tail	0	.348393394					
t Critical one-tail	1.703288446						
P(T<=t) two-tail	0	.696786787					
t Critical two-tail	2	.051830516					

 Table 14 - t-Test traded Vs. mixed sectors – without utilities

FY	19 All Payments to Town Mixed Vs. Trade					
F-Test Two-Sample fo	r Variances					
	Mixed	Traded Sector				
Mean	\$ 420,992	\$ 950,099				
Variance	4.9034E+11	8.93572E+11				
Observations	18	15				
df	17	14				
F		0.548741619				
P(F<=f) one-tail		0.119763244				
F Critical one-tail		0.429377673				

Table 15 - F-Test traded Vs. mixed Sectors – with utilities. The p-value of the F-Test is **0.12**, which is above the .05 level of significance for this analysis. A t-Test assuming equal variance was used.

FY19 All Payments to Town Including Utilities Mixed Vs. Traded Sector					
t-Test: Two-Sample Assuming Equal Variances					
	Mixed	Traded Sector			
Mean	\$ 420,992	\$ 950,099			
Variance	4.9034E+11	8.93572E+11			
Observations	18	15			
Pooled Variance		6.72445E+11			
Hypothesized Mean Difference		0			
df		31			
t Stat		-1.845611334			
P(T<=t) one-tail		0.037259512			
t Critical one-tail		1.695518783			
P(T<=t) two-tail		0.074519024			
t Critical two-tail		2.039513446			

Table 16 - t-Test - traded Vs. mixed Sectors - with utilities

ANOVA FY19 Real Estate Taxes, Personal Property Taxes, and Local Receipts						
Sum of Squares df Mean Square F p-value					p-value	
Between Groups	1.220E+12	8	1.403E+11	6.33	0.00	
Within Groups	3.259E+12	147	2.217E+10			
Total	4.381E+12	155				

Table 17- ANOVA – FY2019 real estate taxes, personal property taxes, and local receipts

	ANOVA With Tukey's FY19 Real Es	state Taxes, Persona Local Receipt	al Property 1				
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value		95% Confidence Interval	
	Hotels	*-270616.97	79413	0.02	-520654	-20580	
	Life Sciences	-102864.51	90298	0.97	-387174	18144	
	Local Service Sector	72537.40	34507	0.48	-36110	18118	
	Manufacturing	-54260.49	62700	0.99	-251675	14315	
Auto	Multiple Business Types	-37684.77	41086	0.99	-167048	91678	
	Professional Services	84230.76	72097	0.96	-142772	31123	
	Residential	143092.36	56811	0.23	-35782	32196	
	Undeveloped or Government Owned	146515.79*	41572	0.02	15623	27740	
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value		95% Confidence Interval	
	Auto	270616.97*	79413	0.02	20580	52065	
	Life Sciences	167752.46	113716	0.87	-190290	52579	
	Local Service Sector	343154.36*	77255	0.00	99912	58639	
	Manufacturing	216356.47	93321	0.34	-77472	51018	
Hotels	Multiple Business Types	232932.20	80409	0.10	-20242	48610	
	Professional Services	354847.73*	99878	0.02	40375	66932	
	Residential	413709.33*	89471	0.00	132003	69541	
	Undeveloped or Government Owned	417132.76*	80659	0.00	163173	67109	
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value	95% Cor Inte	nfidenc rval	
	Auto	102864.512	90298	0.97	-181445	38717	
	Hotels	-167752.46	113716	0.87	-525795	19029	
	Local Service Sector	175401.91	88406	0.56	-102951	45375	
	Manufacturing	48604.02	102743	1.00	-274890	37209	
Life Sciences	Multiple Business Types	65179.75	91176	1.00	-221893	35225	
	Professional Services	187095.27	108733	0.73	-155259	52945	
	Residential	245956.88	99260	0.25	-66568	55848	
	Undeveloped or Government Owned	249380.31	91396	0.15	-38385	53714	

 Table 18 – ANOVA With Tukey's Post HSD Hoc – Land Use/Business Type – No Utilities – 1/3

	ANVOA With Tukey	's Post HSD Post H	oc - Land	Use/Business T	уре	
	FY19 Real E	state Taxes, Perso Local Recei		rty Taxes, &		
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
	Auto	-72537.40	34507	0.48	-181185	36110
	Hotels	-343154.36*	77255	0.00	-586396	-99912
	Life Sciences	-175401.91	88406	0.56	-453755	102951
	Manufacturing	-126797.83	59943	0.47	-315533	61937
Local Service Sector	Multiple Business Types	-110222.16	36742	0.08	-225907	5463
	Professional Services	11693.366	69713	1.00	-207803	231190
	Residential	70554.97	53753	0.93	-98691	239801
	Undeveloped or Government Owned	73978.40	37285	0.56	-43414	191371
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value	95% Cont Inter	
	Auto	54260.49	62700	0.99	-143154	251675
	Hotels	-216356.48	93321	0.34	-510185	77472
	Life Sciences	-48604.02	102743	1.00	-372098	274890
	Local Service Sector	126797.89	59943	0.48	-61937	315533
Manufacturing	Multiple Business Types	16575.73	63957	1.00	-184798	217949
	Professional Services	138491.26	87181	0.81	-136003	412985
	Residential	197352.86	75033	0.18	-38894	433600
	Undeveloped or Government Owned	200776.29*	64270	0.05	-1583	403136
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value	95% Cont Inter	
	Auto	37684.77	41086	0.99	-91678	167048
	Hotels	-232932.20	80409	0.10	-486107	20242
	Life Sciences	-65179.75	91176	1.00	-352253	221893
Multiple	Local Service Sector	110222.16	36742	0.08	-5463	225907
Business	Manufacturing	-16575.73	63957	1.00	-217949	184798
Types	Professional Services	121915.53	73193	0.77	-108539	352370
	Residential	180777.13	58196	0.06	-2457	364011
	Undeveloped or Government Owned	184200.56*	43445	0.00	47410	320991

 Table 19 – ANOVA With Tukey's Post HSD Hoc – Land Use/Business Type – No Utilities – 2/3

	ANVOA With Tukey	's Post HSD Post Ho	c - Land U	se/Business T	уре	
	FY19 Real E	state Taxes, Person Local Receip		/ Taxes, &		
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value	95% Cont Inter	
	Auto	-84230.76	72097	0.96	-311234	142772
	Hotels	-354847.73*	99878	0.02	-669320	-40375
	Life Sciences	-187095.27	108733	0.73	-529450	155259
	Local Service Sector	-11693.37	69713	1.00	-231190	207803
Professional	Manufacturing	-138491.26	87181	0.81	-412985	136003
Services	Multiple Business Types	-121915.53	73193	0.77	-352370	108539
	Residential	58861.60	83046	1.00	-202616	320339
	Undeveloped or Government Owned	62285.03	73467	1.00	-169031	293601
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value	95% Cont Inter	
	Auto	-143092.36	56811	0.23	-321967	35782
	Hotels	-413709.33*	89471	0.00	-695416	- 132003
	Life Sciences	-245956.88	99260	0.25	-558482	66568
	Local Service Sector	-70554.97	53753	0.93	-239801	98691
Residential	Manufacturing	-197352.86	75033	0.18	-433600	38894
	Multiple Business Types	-180777.13	58196	0.06	-364011	2457
	Professional Services	-58861.60	83046	1.00	-320339	202616
	Undeveloped or Government Owned	3423.43	58540	1.00	-180894	187741
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value	95% Cont Inter	
	Auto	-146515.79*	41572	0.02	-277408	-15623
	Hotels	-417132.76*	80659	0	-671092	- 163173
Undeveloped	Life Sciences	-249380.31	91396	0.15	-537146	38385
or	Local Service Sector	-73978.40	37285	0.56	-191371	43414
Government	Manufacturing	-200776.29*	64270	0.05	-403136	1583
Owned	Multiple Business Types	-184200.56*	43445	0.00	-320991	-47410
	Professional Services	-62285.03	73467	1.00	-293601	169031
	Residential	-3423.43	58540	1.00	-187741	180894

Table 20 – ANOVA With Tukey's Post HSD Hoc – Land Use/Business Type – No Utilities – 3/3

ANOVA						
FY19 Real Estate Taxes, Personal Property Taxes, Local Receipts, and Utility Payments						
Sum of Squares		df	Mean Square	F	p-value	
Between	1.061E+13	8	1.326E+12	8.05	0.00	
Groups						
Within Groups	2.487E+13	151	1.647E+11			
Total	3.547E+13	159				

Table 22- ANOVA - FY2019 real estate taxes, personal property taxes, local receipts, and utility payments

	FY19 Real Estate Local Rec	e Taxes, Person eipts, and Utilit				
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
	Hotels	-681361.73*	216446	0.05	-1362587	-136
	Life Sciences	-501042.84	246115	0.52	-1275644	273559
	Local Service Sector	108627.91	92841	0.96	-183572	400827
	Manufacturing	-847609.75*	170894	0.00	-1385466	-309753
Auto	Multiple Business Types	-117377.89	111984	0.98	-469827	235071
	Professional Services	89707.62	196507	1.00	-528762	708177
	Residential	243579.67	154844	0.82	-243763	730922
	Undeveloped or Government Owned	247906.09	113308	0.42	-108711	604523
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
	Auto	681361.73*	216446	0.05	136	136258
	Life Sciences	180318.89	309942	1.00	-795168	115580
	Local Service Sector	789989.63*	210026	0.01	128970	145101
	Manufacturing	-166248.02	254355	1.00	-966783	634287
Hotels	Multiple Business Types	563983.83	219162	0.21	-125789	125375
	Professional Services	771069.34	272225	0.12	-85711	162784
	Residential	924941.39*	243861	0.01	157432	169245
	Undeveloped or Government Owned	929267.82*	219842	0.00	237356	162118
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
Life Sciences	Auto	501042.84	246115	0.52	-273559	127564
	Hotels	-180318.89	309942	1.00	-1155806	795168
	Local Service Sector	609670.74	240488	0.22	-147222	136656
	Manufacturing	-346566.91	280035	0.95	-1227927	534793
	Multiple Business Types	383664.95	248507	0.83	-398464	116579
	Professional Services	590750.46	296361	0.55	-341993	152349
	Residential	744622.51	270540	0.14	-106852	159609
	Undeveloped or Government Owned	748948.93	249106	0.07	-35067	153296

 Table 23- ANOVA With Tukey's Post HSD Hoc – Land Use/Business Type – With Utilities –

 1/3

	ANVOA With Tukey's Po				s Type	
		te Taxes, Person ceipts, and Utili				
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
	Auto	-108627.91	92841	0.96	-400827	183572
	Hotels	-789989.63*	210026	0.01	-1451010	-128970
	Life Sciences	-609670.74	240488	0.22	-1366564	147222
Local	Manufacturing	-956237.65*	162686	0.00	-1468262	-444214
Service	Multiple Business Types	-226005.80	99007	0.36	-537614	85602
Sector	Professional Services	-18920.29	189412	1.00	-615061	577221
	Residential	134951.76	145735	0.99	-323723	593626
	Undeveloped or Government Owned	139278.19	100503	0.90	-177036	455592
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
	Auto	847609.75*	170894	0.00	309753	138546
	Hotels	166248.02	254355	1.00	-634287	966783
Manufacturing	Life Sciences	346566.91	280035	0.95	-534793	122792
	Local Service Sector	956237.65*	162686	0.00	444214	146826
	Multiple Business Types	730231.85*	174321	0.00	181590	127887
	Professional Services	937317.36*	237618	0.00	189459	168517
	Residential	1091189.41*	204509	0.00	447535	173484
	Undeveloped or Government Owned	1095515.84*	175174	0.00	544187	164684
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
Multiple Business Types	Auto	117377.89	111984	0.98	-235071	469827
	Hotels	-563983.83	219162	0.21	-1253757	125789
	Life Sciences	-383664.95	248507	0.83	-1165794	398464
	Local Service Sector	226005.80	99007	0.36	-85602	537614
	Manufacturing	-730231.85*	174321	0.00	-1278874	-181590
	Professional Services	207085.51	199494	0.98	-420787	834958
	Residential	360957.56	158618	0.36	-138264	860179
	Undeveloped or Government Owned	365283.99	118414	0.06	-7401	737969

 Table 24- ANOVA With Tukey's Post HSD Hoc – Land Use/Business Type – With Utilities –

 2/3

	ANOVA With Tukey's P	ost HSD Post Ho	oc - Land L	Jse/Business	з Туре	
		ate Taxes, Perso eceipts, and Util				
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
	Auto	-89707.617	196507	1.00	-708177	528762
	Hotels	-771069.342	272225	0.12	-1627849	85711
	Life Sciences	-590750.46	296361	0.56	-1523494	341993
Professional	Local Service Sector	18920.28907	189412	1.00	-577221	615061
Services	Manufacturing	-937317.36*	237618	0.00	-1685176	-189459
	Multiple Business Types	-207085.51	199494	0.98	-834958	420787
	Residential	153872.05	226350	1.00	-558523	866267
	Undeveloped or Government Owned	158198.48	200241	1.00	-472023	788420
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
	Auto	-243579.70	154844	0.818	-730922	243763
	Hotels	-924941.39*	243861	0.01	-1692450	-157432
	Life Sciences	-744622.51	270540	0.14	-1596097	106852
	Local Service Sector	-134951.76	145735	0.99	-593626	323723
Residential	Manufacturing	-1091189.41*	204509	0.00	-1734844	-44753
	Multiple Business Types	-360957.56	158618	0.36	-860179	138264
	Professional Services	-153872.05	226350	1.00	-866267	558523
	Undeveloped or Government Owned	4326.42	159556	1.00	-497846	506499
(I) Category for Analysis	(J) Category for Analysis	Mean Difference (I-J)	Std. Error	p-value	95% Confidence Interval	
	Auto	-247906.09	113308	0.42	-604523	108711
Undeveloped or Government Owned	Hotels	-929267.82*	219842	0.00	-1621180	-237356
	Life Sciences	-748948.93	249106	0.07	-1532965	35067
	Local Service Sector	-139278.19	100503	0.90	-455592	177036
	Manufacturing	-1095515.84*	175174	0.00	-1646845	-544187
	Multiple Business Types	-365283.99	118414	0.06	-737969	7401
	Professional Services	-158198.48	200241	1.00	-788420	472023
	Residential	-4326.42	159556	1.00	-506499	497846

 Table 25- ANOVA With Tukey's Post HSD Hoc – Land Use/Business Type – With Utilities –

 3/3

Definitions of Statistical Terms Found in the Route 1 Corridor Economic Impact Study

Alternative Hypothesis: The alternative hypothesis is the opposite of the null hypothesis. Both the null hypothesis and alternate hypotheses are used by statisticians to interpret and report the findings of analytical studies.¹

ANOVA: The purpose of ANOVA is to test for significant differences between the means of more than two samples. ANOVA is like the t-Test. However, ANOVA can be used to analyze more than two sets of continuous variables at one time; a t-Test is only used to analyze two samples of continuous variables.

ANOVA with Tukey's HSD Post Hoc: Tukey's HSD Post Hoc is used after completing an ANOVA and a statistically significant relationship. After the ANOVA is completed, the statistician should complete the post hoc, the results of which will show where the statistically significant relationships exist among the independent variables in the test. Completing the post hoc is very similar to running multiple t-Tests at one time. The ANOVA needs to be completed first because if there is not statistically significant relationship after completing an ANOVA, you won't find a statistically significant relationship among the various variables.

Categorical Variable: "A categorical variable (sometimes called a nominal variable) is one that has two or more categories, but there is no intrinsic ordering to the categories. For example, gender is a categorical variable having two categories (male and female) and there is no intrinsic ordering to the categories. Hair color is also a categorical variable having several categories (blonde, brown, brunette, red, etc.) and again, there is no agreed way to order these from highest to lowest. A purely categorical variable is one that simply allows you to assign categories but you cannot clearly order the variables."²

Continuous Variable: A continuous variable is a variable that is quantifiable, numbers. Interval scales and ratio scales are both considered continuous variables.

Degree of Freedom (df): The degree of freedom (df) is the number of independent values that may vary within an analysis. It is often reported as n-1, "n" being the number of independent values.

Dependent Variable: A dependent variable is the variable within the experiment that is affected by another variable. This definition gets its name because it depends on other variables to impact it someway. The results of which make up the findings of the study.

¹ Unless specifically cited, all of the definitions were found using this source: Evan M. Berman and XiaoHu Wang, *Essential Statistics for Public Managers and Policy Analysts, 3rd Edition, (*Washington, D.C.: Sage Publications, 2012).

² "WHAT IS THE DIFFERENCE BETWEEN CATEGORICAL, ORDINAL AND NUMERICAL VARIABLES?" **UCLA** Institute for Digital Research & Education, August 11, 2020, <u>https://stats.idre.ucla.edu/other/mult-pkg/whatstat/what-</u> is-the-difference-between-categorical-ordinal-and-numerical-variables/

Definitions of Statistical Terms Found in the Route 1 Corridor Economic Impact Study

Descriptive Statistics: Descriptive statistics are used to describe data from the present or past. Although invaluable, descriptive statistics cannot verify statistical relationships or be used to make estimates about the future.

Independent Variable: Independent variables are the variables that are used to measure and study the effect on dependent variables. Experimenters may use multiple independent variables to measure different impacts on a single dependent variable.

Inferential Statistics: Inferential statistics are used to make estimates about the future. Inferential statistics are also used to identify and verify statistical relationships between data sets.

Null Hypothesis: The null hypothesis will state the opposite of what the statistician hypothesizes about the analysis. Therefore, all the null hypotheses in this study appear to be the opposite of the corresponding hypothesis.

One Tailed vs. Two Tailed t-Tests: A one tailed t-Test is used to determine if a statistically significant relationship exists in one direction. A two tailed t-Test is used to determine if a statistically significant relationship exists in either direction.³ When conducting t-Tests in this study, the author exclusively used two tailed t-Tests.

Significance Level: A p-value ranges from zero (0) and one (1). A .05 level of significance is commonly used as a significant level in the social sciences. A .05 level of significance essentially allows us to state that we are 95 percent confident that there is a statistically significant relationship. The medical field often uses a smaller level of significance, like .01. A .01 significance level would allow us to state that we are 99 percent confident that there is a statistically significant relationship, or significantly different means. Therefore, the significance level can be thought of as a scale. The closer the p-value is to 0, the stronger the relationship.

Standard Deviation: Average distance from the mean

t-Test: The t-Test is used to determine if a significant difference exists between the means of two continuous variables. A t-Test generates a p-value, which tells us the probability that a significant difference exists between the means of two continuous variables.

Variance: Standard deviation squared

³"FAQ: WHAT ARE THE DIFFERENCES BETWEEN ONE-TAILED AND TWO-TAILED TESTS?" UCLA Institute for Digital Research & Education, March 9, 2020, <u>https://stats.idre.ucla.edu/other/mult-pkg/faq/general/faq-what-are-the-differences-between-one-tailed-and-two-tailed-tests/</u>.