

# **North Reading Sewer Infrastructure Economic Impact Analysis**

## ***Final Technical Memorandum***

**To:** Heidi Griffin, Community Planning Administrator  
Town of North Reading Office of Community Planning  
via e-mail: [hgriffin27@gmail.com](mailto:hgriffin27@gmail.com) , [hbriffin@northreadingma.gov](mailto:hbriffin@northreadingma.gov)  
**From:** FXM Associates  
**Date:** July 7, 2011  
**Re:** Summary of Technical Analysis for Development Potential and Municipal Fiscal Impacts with and without Municipal Sewer in the Main Street/Route 28 and Concord Street Area

---

### **1.0 Summary Findings**

#### **1.1 Development Potential with and without Provision of Municipal Sewer**

- Development potential with municipal sewer based on foreseeable market conditions affecting Main Street/Route 28 Concord St. business activity suggest supportable demand for about 400,000 to 800,000 square feet of office, retail, restaurant and other commercial space. Main Street/Route 28 development potential without municipal sewer could be negligible, based on the competitive environment and informed observations made to FXM by property owners and commercial real estate brokers interviewed during the course of research for this study.
- These estimates of market driven development potential do not account for full build-out potential of the Main Street/Route 28 and Concord Street Study Areas. Under current I-B zoning build-out potential could be close to 27,000,000 square feet, far exceeding foreseeable market demand.

#### **1.2 Fiscal Effects of Development Scenarios with and without Municipal Sewer Service**

- Estimates of the amount of land suitable for development were prepared by SEA Engineering for property located along the frontage of the Main Street/Route 28 and Concord Street Study Areas, using North Reading GIS data. Estimates of value per acre and per square foot of built space were derived from data provided by the Town Assessor and FXM analysis of comparable properties within the regional market area.
- Based on projected market demand and realistic scenarios for capturing a portion of regional growth, the Town of North Reading could realize between \$600,000 and \$1,356,000 of net new property taxes per year with municipal sewer provided to prospective users in both the Main Street/Route 28 and Concord Street Study Areas. Full absorption of projected demand may require at least 10 years under currently

foreseeable market conditions, and in the absence of a major new development not now foreseen which could dramatically alter that time line.

The FXM estimates of additional tax revenues attributable to municipal sewer service within the Concord Street and Main Street Study Area are shown in the table below. The revenue estimates are based on the current commercial tax rate of \$13.47 per \$1,000 valuation.

**Analysis of Potential Increase in Annual Property Tax Revenues  
Attributable to Municipal Sewer Service**

|  | <b>Concord St.</b> | <b>Main St.</b> | <b>Combined</b> |
|--|--------------------|-----------------|-----------------|
| Current Assessed Value   | \$ 70,207,734      | \$ 123,323,207  | \$ 193,530,941  |
| Current Property Taxes   | \$ 961,846         | \$ 1,689,528    | \$ 2,651,374    |
| <b>Potential New Tax Revenues: <i>Existing Uses</i></b>                              |                    |                 |                 |
| Low Range  | \$ 27,000          | \$ 58,000       | \$ 85,000       |
| High Range   | \$ 55,000          | \$ 269,000      | \$ 324,000      |
| <b>Potential New Tax Revenues: <i>Projected Market Growth</i></b>                    |                    |                 |                 |
| Low Range  | \$ 222,000         | \$ 294,000      | \$ 516,000      |
| High Range   | \$ 444,000         | \$ 588,000      | \$ 1,032,000    |
| <b>Potential New Tax Revenues: <i>Existing Uses Plus Projected Market Growth</i></b> |                    |                 |                 |
| Low Range  | \$ 249,000         | \$ 352,000      | \$ 601,000      |
| High Range   | \$ 499,000         | \$ 857,000      | \$ 1,356,000    |

For existing commercial properties within the Concord Street and Main Street Study Area, and based largely on land value increases attributable to sewer service, FXM estimates that the Town of North Reading could realize between \$85,000 and \$324,000 in additional property taxes annually at the current commercial tax rate of \$13.47 per \$1,000 in valuation.

Potential new commercial property tax revenues attributable to sewer service within the Study Area, derived from additional development based on projected market growth, are estimated to range between \$516,000 and \$1,032,000 annually. Under foreseeable market conditions, full absorption of projected new growth is expected to require at least 10 years. The combination of land value increases and new development of buildings within the Study Area is estimated to provide between \$601,000 and \$1,356,000 annually at full absorption of projected new growth. The table shows incremental revenues from new growth separately for Concord and Main Streets based on the relative buildout potential of each area. However, this is not meant to imply that development will or should occur in this fashion – under current zoning there is ample buildout potential within either area to absorb foreseeable market driven growth. Even with this large hypothetical buildout potential scattered throughout the Concord and Main Streets Study Area, however, it may be necessary or desirable to consider exceptions to current zoning that might be needed for individual development proposals to succeed in an extremely competitive market environment.

The High Growth Range market and revenue estimates assume that new development in North Reading will parallel the growth by type of space projected for the local region. About 60% of the employment growth projected is for businesses that use office space. Currently, office space represents less than 20% of the commercial buildings square footage within the Study Area. Retail space accounts for about 20% of projected growth, and currently represents about 40% of commercial buildings square footage within the Study Area. These assumptions are made to assure analytic consistency for the particular purposes of this study, but may or may not reflect actual market potential in North Reading. A detailed market study specific to individual properties within the Study Area was beyond the scope of this study.

In addition to the above, there is a vast amount of vacant space currently available in existing buildings (4 million SF among the six communities) as well as industrial park scale vacant parcels available elsewhere. Many of these opportunities for development/redevelopment are already served by sewers and have necessary infrastructure in place to support new/expanded commercial uses. Not all the vacant space is suitable or appropriate for capturing projected new growth, but many of the vacant buildings and parcels present strong competition for new employment in the region, and may affect the assumptions regarding North Reading's share of future new development.

It should also be noted that a single major development could dramatically alter the total growth potential and additional municipal revenues derived in this analysis, which is based on long term projected employment growth within the local region. Without municipal sewer the Town of North Reading will continue to forego opportunities to meet current and projected demand for commercial space. This assessment is based on the actual experience and judgment of property owners and commercial realtors interviewed during the course of this research and FXM's independent assessment of current and foreseeable market conditions, including competition for new growth by other communities within the local market area that already provide sewer to commercial areas.

## **2.0 Method**

FXM Associates and SEA visited the Main Street/Route 28 and Concord Street to observe land uses and conditions within the Study Area, and visited commercial sties in the bordering towns of Reading and Wilmington within the competitive market area. Senior staff reviewed all available information concerning potential development in the Town, as well as data and reports on market conditions and trends which could affect development potential in the Study Area. FXM used secondary source data describing population, employment, business activity, and growth projections for the market area to develop an understanding of relevant market factors and trends. FXM also assessed historical growth and commercial leasing prices in nearby communities with and without municipal sewer service to commercial and industrial properties.

The essence of this assignment was to estimate potential additional fiscal revenues by assessing foreseeable (short term) and projected (long term) market demand, and by identifying developable land area and buildout potential for buildings under current zoning. To accomplish

the study objectives, FXM utilized a variety of data sources -- ranging from the records of the North Reading Assessor and the Towns GIS data base to establish detailed characteristics of Study Area land uses, to population and employment projections prepared by the Metropolitan Area Planning Council to help estimate potential market demand for new development. Interviews were conducted with a cross section of Study Area property and business owners, as well as with commercial real estate brokers and other knowledgeable public and private sector officials. With the exception of the Assessor's records and Town GIS, no single data source or analytic method was relied upon to derive estimates of additional municipal revenue potentially attributable to sewer service. FXM developed a spreadsheet model that incorporated data from several relevant secondary sources, including proprietary information obtained from FXM subscription data services, and tested a range of probable market value and growth scenarios.

It is important to note that the economic assessments accomplished for this study should *not* be construed as an appraisal derived from individual parcel assessments. Formal appraisals were clearly beyond the scope and budget for this assignment and thus, FXM estimates are for general planning purposes only and should not be used as the basis for changing current assessments of individual properties once sewer service is provided. The following bullet points summarize the analytic steps, data sources and methods used by FXM for this study:

- Compiled parcel by parcel data from the North Reading Assessor and Town GIS and prepared a master parcel data spreadsheet. All estimates of land area, existing buildings square footage, and assessed values of land and buildings are based on this data base. FXM assumes no responsibility for omissions or inaccuracies in this data base.
- Created a subset of developable area from the Master Parcel Data spreadsheet excluding wetlands and existing building footprints, as well as parcels currently in residential use, to estimate the baseline developable area from which buildout under current zoning could occur. This approach is not as rigorous as a parcel by parcel analysis of development potential, which was beyond the scope of this study, but analyses of selected individual parcels suggest that the estimate derived for total buildout potential is not unreasonable. Furthermore, even if the buildout estimate is overstated, the magnitude of potential new commercial development under current Town zoning so vastly exceeds foreseeable market demand that the method used is acceptable for the purposes of this planning study.
- Compiled and analyzed relevant socioeconomic data from publicly available secondary sources, such as the Massachusetts Department of Labor and Workforce training, the Metropolitan Area Planning Council (MAPC), the US Department of Commerce Regional Economic Information System, websites for selected communities in the market region; and proprietary data from A.C. Nielsen *Claritas Site Reports* and Co Star *Property Information Systems*. From these sources, FXM analyzed historical and projected trends in employment by type of industry, historical and projected trends in commercial space absorption, and applied square footage per employee estimates derived from relevant empirical studies (including prior work by FXM) to estimate regional and

local demand for office, retail, and other commercial space in the local and regional market areas.<sup>1</sup>

- Compiled and analyzed relevant data from Co Star *Property Information Systems* comparing average per square foot leasing prices for office, retail, and other commercial space within the local market area reported for communities with and without municipal sewer service to commercial uses. The availability of sewer service is not the only reason that market prices for commercial properties differ between communities, so FXM made some adjustments to the derived price differentials to account for tax rates, accessibility, and scale of development. It was found, for example, that prices reported for certain commercial uses in North Reading were not representative of the local market averages reported for other communities. On closer examination, FXM determined that the small sample size and mix of commercial uses now in North Reading most likely accounted for the variation in average prices. When deriving incremental revenue potentially attributable to sewer service, FXM therefore relied primarily on the differences in market averages (adjusted as noted above) between all communities with and without sewer within the local region.
- Developed a spreadsheet model for testing a variety of reasonable hypotheses for market growth and price differentials attributable to sewer service. The principal difference in these scenarios is the assumptions made for market growth potentially captured within North Reading. FXM thus developed a low range estimate based upon North reading capturing new growth based on a moderate increase in its current share of local market area employment, and a high range estimate based on North Reading capturing a higher share of projected increases in local market area employment and commercial space.

With this information as background, FXM interviewed selected property and business owners in the Study Area, commercial real estate brokers, and others identified by the Community Development Department. These interviews focused on sewerage issues affecting business operations, costs for septic and on-site treatment plants, recruitment of commercial tenants, competitive locations, business expansion, and development of under-utilized property. .

### **3.0 Local and Regional Context**

#### **3.1 North Reading Community Vision Statement**

The North Reading Community Development Plan described economic development goals to sustain, diversify and grow the local economy, and increase the number and types of jobs available for North Reading residents.<sup>2</sup> The Plan articulated a vision for the Town's economic future that focused on a mix of local small-chain retail establishments to support local not regional needs, retention of industrial/warehouse businesses, and maximum build-out of areas zoned for those commercial and industrial uses. The Plan emphasized the need to diversify the

---

<sup>1</sup> Commercial as defined for the purposes of this Study includes office, retail, restaurants, and light manufacturing uses.

<sup>2</sup> *North Reading Community Development Plan*, Terrasphere (June 2004)

local job market by increasing retail, office and technical jobs at various wage levels for Town residents to reduce commuting and keep a larger percentage of those wages in the local economy.

Several Town actions were recommended in the Plan to advance local economic development, generally, and the build-out of identified target areas, specifically. These action items included:

- identifying vacant property, single-family residences and older businesses in commercial areas for redevelopment to meet future market demand;
- establishing local economic development incentives to encourage office and high-tech business to locate in North Reading, and a marketing strategy to attract such uses;
- locating industrial and commercial development along or near transportation links, and in locations that do not impact sensitive open space resources;
- expanding the public sewer system to the Route 28/Main Street corridor, Concord Street, J.T. Berry property, and gravel facility off Lowell Road, possibly using a ‘turn-key’ arrangement between a developer and the Town.

The 2004 Plan described future economic development in North Reading as linked to the Town’s highway access, available land, market demand, and zoning regulations. The recommended economic development strategy recommended reuse of existing vacant property, recognizing due limited land available for commercial growth, and the community’s goal to protect sensitive environmental areas. The 2004 Economic Development Strategy Map identified four areas to accommodate new industrial and office uses with the provision of public sewer: (1) vacant and under-utilized property on Concord Street, (2) J.T. Berry property, (3) Main Street/Route 28 corridor, and (4) the gravel processing facility off Lowell Road.

Consistent with the Plan’s recommendations, this study has examines two of these areas: Concord Street and the Main Street/ Route 28 corridor. The Town’s overall goals and objectives for this sewer infrastructure economic impact study are to:

- Maintain a stable residential property tax rate and undertake municipal infrastructure needed to strengthen Town’s competitive ability to retain as well as attract new commercial and light industrial businesses;
- Provide improved/upgraded municipal sewer infrastructure for technology-based (“clean”) light industrial and office uses to expand and locate in the Concord Street area, and for new and future commercial uses (office, retail, restaurant, services) along Route 28/Main Street;
- Generate data and findings to help the Town formulate a compelling argument for eligibility as an ETA/EOA that will facilitate proposed build-out of the Concord Street and Main Street Study Area with state (EOHED) approval of TIF financing agreements.



This economic impact analysis addresses three primary topics: (1) how much existing and potentially developable land is there in the Study Area; (2) what is the maximum build-out; of Study Area parcels under current Town zoning; and, (3) what are the probable effects of future development in terms of estimated number and type of businesses, jobs and municipal tax revenue generated by Study Area parcels build-out with and without municipal sewer.

### **3.2 Definition of the Study Area and Market Area**

The North Reading defined the Town's two primary commercial corridors on Concord Street and Main Street/Route 28 as the study area for this economic impact assessment (EIA) of proposed municipal sewer service. The Concord Street Study Area includes 31 parcels extending from 20 Concord Street on the east to the North Reading boundary with the Town of Wilmington on the west, and contains no residential uses. The Main Street/Route 28 Study Area includes 146 parcels extending from the Town's northern boundary with the Town of Andover to its southern boundary with the Town of Reading. Study Area maps and parcel maps are shown in Attachments to this Tech Memo. Current zoning of land uses in the Study Area is illustrated in Figure A of Attachments to this Tech Memo.

For the purposes of this study, the market area is defined to include the six communities adjacent to North Reading -- Andover, Lynnfield, Middleton, North Andover, Reading and Wilmington. These communities and North Reading constitute the Local Region, which serves as the basis for socioeconomic and business activity comparisons contained in this Tech Memo. FXM examined retail sales potential, characterized as the difference between market area (defined by drive times) demand (household annual expenditures for retail goods) and market area supply (number of establishments and sales in specific retail categories).<sup>3</sup> The North Reading retail market area was defined by 10, 15 and 20 minutes from the center points of the Study Area at Concord and Park Streets, and Main and North Streets. FXM analyzed selected trade areas for each retail category indicating potential for expansion, referred to as leakage or gap between consumer spending potential and actual store sales in the market area. This estimate of retail potential was then refined based on FXM understanding of competing development locations.

### **3.3 Population and Employment Characteristics of the Market Area**

FXM examined the demographic, economic and employment characteristics of communities in the Local Region – Andover, Lynnfield, Middleton, North Andover, North Reading, Reading and Wilmington. Key socioeconomic features are highlighted below, displayed in summary charts, and detailed in attachments to this Tech Memo.<sup>4</sup>

- In 2010, North Reading had an estimated population of 17,345 residents, representing about 12% of the estimated 143,788 total population in the Local Region.

---

<sup>3</sup> The Annual Consumer Expenditure Survey of the U.S. Bureau of Labor Statistics provides information on market area demand; the Census of Retail Trade provides data on sales of retail business establishments.

<sup>4</sup> Demographic Snapshot Reports 2010, Nielsen Claritas *SiteReports*

- By 2015, the Town's population is projected to reach 18,786 residents with 8.3% growth projected growth from 2010 to 2015), while the Local Region population is projected to increase by 2% to 145,629 during the same period.
- There were an estimated 6,083 households in North Reading in 2010, of which 4,437 were family households (78% of all Town households); North Reading households represented about 12% of the estimated households and family households in the Local Region.
- Approximately 2% of North Reading families had household incomes below poverty level, compared to 5.7% of Local Region family households.
- In 2010, North Reading households had an average income of \$127,773, median income of \$99,917, and per capita income of \$42,789; households in the Local Region had an average income of \$124,952, median income of \$100,081, and per capita income of \$43,901.
- Approximately 3% of North Reading households had incomes less than \$25,000, and 2% had incomes greater than \$150,000, while 7% of Local Region households had incomes less than \$25,000 and 11% had incomes higher than \$150,000.
- An estimated 93% of North Reading residents aged 25 and older had a high school degree or above, and 46% had a Bachelor degree or higher, and 95% of Local Region residents were high school graduates or above and 53% had a Bachelor degree or above.
- There were an estimated 9,600 North Reading residents in civilian employment, representing 13% of all Local Region workers, and 6,700 of Town residents had private sector employment; 7% of Town and Local Region workers are self-employed.
- North Reading resident occupations were classified as 13% Blue Collar (1,441), almost 74% White Collar (7,053), 12% Service and Farm, (1,109) compared to the Local Region with 78% White Collar, 11% Blue Collar, and 11% Service and Farm.
- There were 6,219 housing units in North Reading, about 12% of the 52,093 in the Local Region; about 92% of the Town's housing were owner-occupied (5,586), while 85% of Local Region housing units were owner-occupied. The Town and Local Region had the same average length of residency (tenure) for owner-occupants (19 years) and renters (9) years.
- North Reading had 739 housing units in structures with three (3) or more units, representing about 12% of the Town's housing stock, and 43% of all multi-family housing and 35% of all housing with 50 or more units in the Local region.
- In 2010, the median value of North Reading owner-occupied housing was \$409,919, similar to the Local Region median value of \$415,619; the Town had 45% of all



housing in the Local Region valued at \$500,000-\$747,000, and 23% of housing valued at \$750,000 to \$1 million.

The North Reading employment and business profile is analyzed in subsequent sections of this Tech Memo, displayed in tables and figures in Attachments to this Tech Memo, and summarized in the following highlights.<sup>5</sup>

- In 2010, North Reading had 644 business establishments providing 6,555 jobs, and generating more than \$840 million in annual sales; this business activity accounted for 7% of all jobs and 8% of total sales in the Local Region.
- Retailing sector businesses in North Reading totaled 115, provided 1,436 jobs, and had estimated sales of \$167 million, accounting for 18% of the Town's business establishments, 20% of all jobs, and 20% of all sales. North Reading accounted for 12% share of retail establishments, jobs and sales in the Local Region.
- Other important industry sectors in North Reading included: Construction accounting for 12% of the Town's business establishments, 14% of all jobs, and 19% of all sales; and, Wholesale Trade accounting for 6% of the Town's business establishments, 18% of all jobs, and 24% of all sales.
- The Transportation,-Communication-Public Utility industry sector in North Reading was comprised largely of Motor Freight-Transportation & Warehouse sub-sector businesses (10), provided 255 jobs, and generated more than \$27 million in sales.

---

<sup>5</sup> Business Activity Reports 2010, Nielsen Claritas *SiteReports*

**Town of North Reading and Local Region  
Businesses, Employment and Annual Sales Summary**

| Categories of Businesses                                       | Number of<br>Businesses | Share of<br>Local<br>Region | Number of<br>Jobs | Share of<br>Local<br>Region | Business<br>Sales in<br>Million \$ | Share of<br>Local<br>Region |
|--|-------------------------|-----------------------------|-------------------|-----------------------------|------------------------------------|-----------------------------|
| <b>All Industries</b>  | <b>644</b>              | <b>10.2%</b>                | <b>6,659</b>      | <b>6.8%</b>                 | <b>841.1</b>                       | <b>7.6%</b>                 |
| All Manufacturing (SIC 20-39)                                  | 22                      | 6.7%                        | 214               | 1.3%                        | 16.6                               | 1.3%                        |
| All Retailing (SIC 52-59)                                      | 115                     | 11.8%                       | 1,436             | 11.9%                       | 166.8                              | 11.6%                       |
| Public Administration (SIC 90-97)                              | 17                      | 5.0%                        | 119               | 2.7%                        | 0                                  | 0.0%                        |
| Agriculture (SIC 1-7)  | 15                      | 10.5%                       | 52                | 6.4%                        | 2.2                                | 6.4%                        |
| Construction (SIC 13-17)                                       | 91                      | 16.1%                       | 916               | 20.8%                       | \$160.5                            | 22.3%                       |
| Manufacturing (SIC 20-39)                                      | 22                      | 6.7%                        | 214               | 1.3%                        | \$16.6                             | 1.3%                        |
| Transportation, Communication,<br>Public Utilities (SIC 41-49) | 20                      | 12.9%                       | 292               | 14.1%                       | \$30.7                             | 18.1%                       |
| Wholesale Trade (50-51)  | 39                      | 12.2%                       | 1,189             | 13.4%                       | \$205.4                            | 14.1%                       |
| Retail Trade (SIC 52-59)                                       | 115                     | 11.8%                       | 1,436             | 11.9%                       | \$166.8                            | 11.6%                       |
| Finance, Insurance, Real Estate<br>(SIC60-67)                  | 64                      | 9.6%                        | 710               | 11.5%                       | \$123.7                            | 9.9%                        |
| Services (SIC 70-89)   | 254                     | 9.1%                        | 1,671             | 4.0%                        | \$135.2                            | 2.9%                        |
| Government (SIC 91-99)   | 39                      | 11.5%                       | 179               | 4.1%                        | 0                                  | 0.0%                        |

Source: FXM Associates and *Claritas SiteReports* 2010

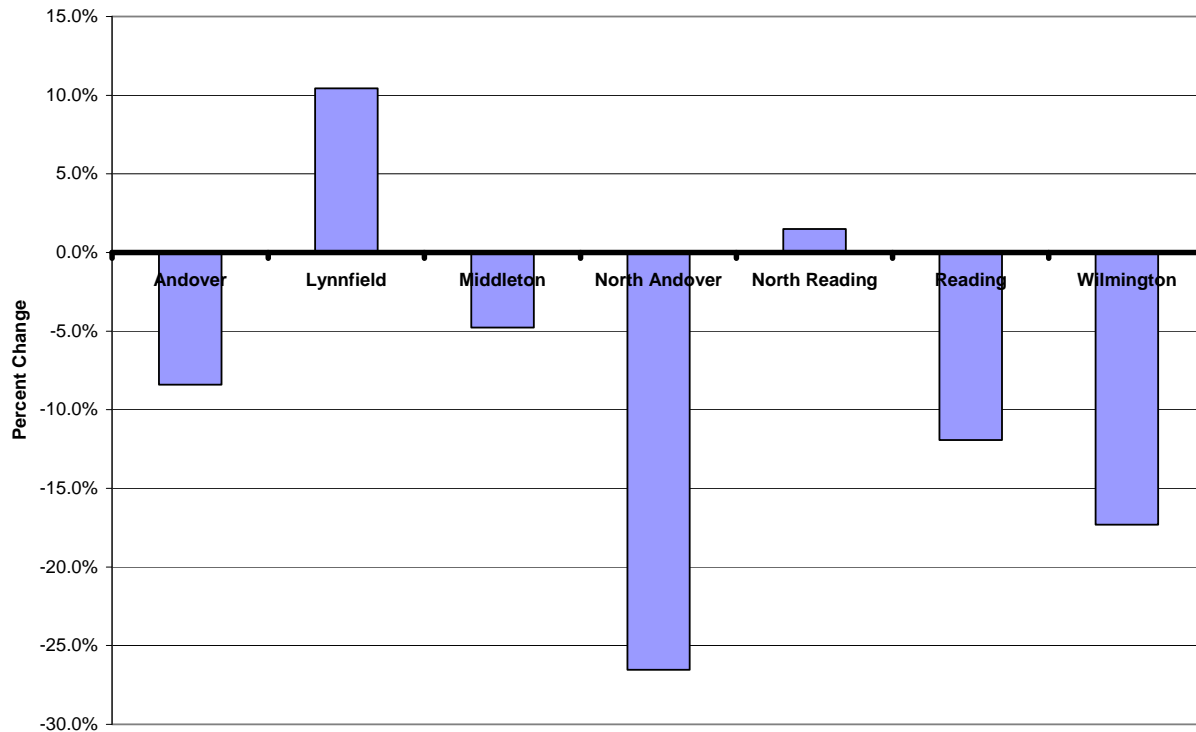
FXM analyzed Town of North Reading population and employment growth compared to trends in the market area, comprised of Andover, Lynnfield, Middleton, North Andover, Reading, Wilmington, and North Reading. More detailed analysis and graphic illustrations of population trends are presented in Attachments to this technical Memorandum. From 2000 to 20010, North Reading grew at a slightly higher rate (5.1%) than the average rate in the market area communities (4.3%); Middleton population grew 30.5% and Reading decreased 2.6%.

**3.3.1 MAPC Population Projections** – North Reading is one of the 32 communities within the Metropolitan Planning Council (MAPC) district. MAPC has projected an overall population increase of 1.1% from 2010 to 20030 for the 164 municipalities in the MAPC region (466,106 new residents, from 4,309,456 to 4,775,562).<sup>6</sup> MAPC forecasts projected population in North Reading will indicate to 14,864 residents in 2020, and to 15,210 residents by 2030, or approximately 1.1% overall growth rate.

This analysis of historical employment growth in North Reading compared local employment changes with the market area communities to identify any differences in employment where communities provide sewer service to commercial/industrial property. Overall, North Reading employment grew by 1.5% compared to a 12.2% job loss for the market area as a whole, and this slight increase in jobs was better than five of the six other market area communities during the past decade. Lynnfield lost jobs from 2001 to 2005 but rebounded from 2006 to 2010.

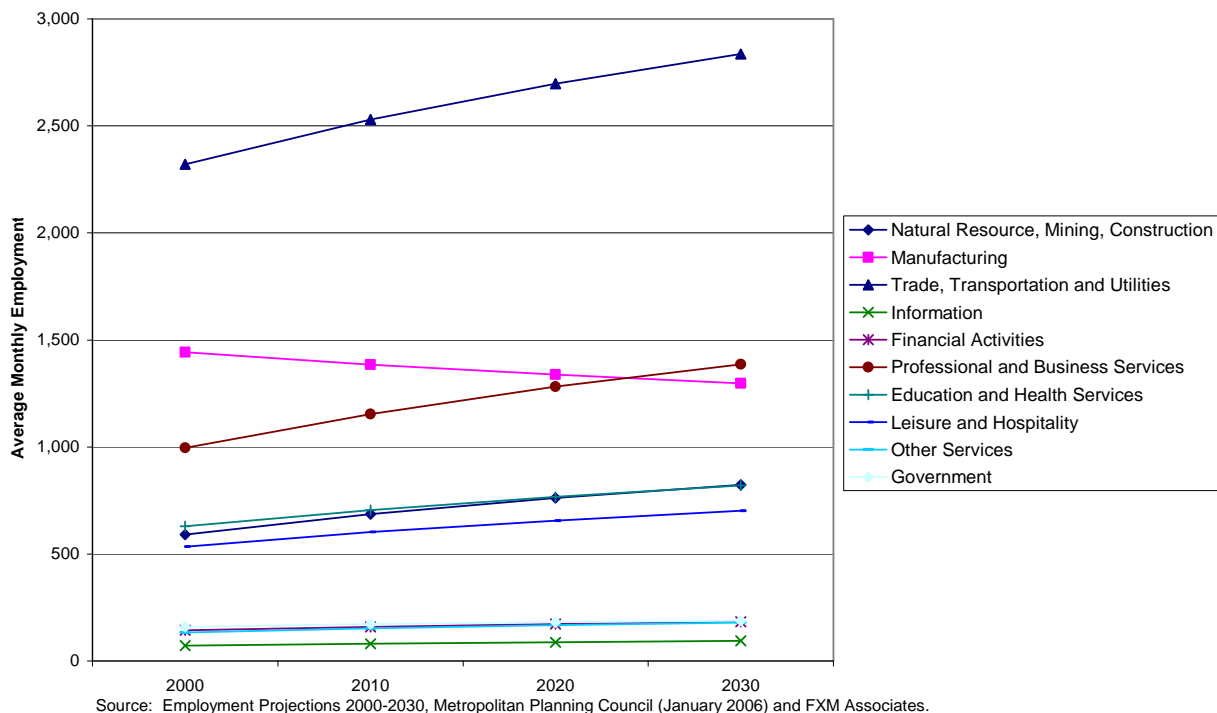
<sup>6</sup> *Employment Projections 2000-2030*, Metropolitan Planning Council (January 2006) at [www.mapc.org](http://www.mapc.org)

**Figure 1. Percent Change in Employment by Town, 2001-2010**



Over the past 10 years, Transportation and Warehousing has been the largest growth sector in the North Reading economy, increasing 128% while most other sectors experienced marked declines. The biggest decline (-80%) was in Professional and Technical Services. North Reading's share of Transportation employment increased from 35.9% to 57.4% of market area Transportation; its share of Professional Services declined from 9.7% to 2.1% of the market area. The FXM review of employment by community by NAICS category indicated that North Reading job growth was not significantly different from other market area communities, as described in the Appendix to this Tech Memo. FXM did not identify any significant employment trend differences in market area communities with or without municipal sewer service to commercial properties.

**Figure 2. North Reading Projected Employment 2000-2030**



**3.3.2 MAPC Employment Projections** -- MAPC has projected an overall employment increase of 1.1% from 2010 to 2030 for its 164-municipality region (138,783 new jobs, from 2,446,555 to 2,585,338).<sup>7</sup> MAPC forecasts that employment in North Reading will increase to 8,111 jobs in 2020 and to 8,509 jobs in 2030, or approximately 1.1%, with the strongest growth in Transportation, Trade and Utilities, and Professional Services sectors. According to MAPC projections, North Reading growth in the Trade, Transportation, and Utilities sector will be less than other communities in its market area.

In November 2010, the Town of North Reading had a 6% unemployment rate with 593 of its labor force unemployed; compared to the statewide unemployment rate of 8.1%.<sup>8</sup> Massachusetts Labor and Workforce Development data indicates that over the past four years, the North Reading unemployment rate (not seasonally adjusted) was 6.6% (2009), 4.0% (2008), 3.4% (2007), and 3.9% (2006).

<sup>7</sup> *Employment Projections 2000-2030*, Metropolitan Planning Council (January 2006) at [www.mapc.org](http://www.mapc.org)

<sup>8</sup> *Laborforce, Employment and Unemployment*, Massachusetts Labor and Workforce Department at [www.mass.gov](http://www.mass.gov)

### 3.4 Employment and Space Forecasts

Employment forecasts by category were obtained from the Metropolitan Area Planning Council<sup>9</sup> for North Reading and other towns in the North Reading Local Region (Andover, Lynnfield, Middleton, North Andover, Reading, Wilmington, and North Reading). Table A shows projections for 2000 to 2030 by ten year increment for North Reading and the Local Region by category. Overall the MAPC projected increase is 880 new employees for North Reading and 8,654 new employees in the Local Region.

**Table A. 2000-2030 Employment Projections for North Reading and Local Region**

|                             |              |              |              |              | <b>% Increase</b>  | <b>Increase</b>    |
|-----------------------------|--------------|--------------|--------------|--------------|--------------------|--------------------|
| <b>North Reading</b>        | <b>2000</b>  | <b>2010</b>  | <b>2020</b>  | <b>2030</b>  | <b>2010 - 2030</b> | <b>2010 - 2030</b> |
| Natural Resource, Mining, ( | 590          | 687          | 762          | 824          | 19.9%              | 137                |
| Manufacturing               | 1,443        | 1,385        | 1,339        | 1,297        | -6.4%              | -88                |
| Trade, Transportation and I | 2,320        | 2,530        | 2,697        | 2,835        | 12.1%              | 305                |
| Information                 | 72           | 81           | 88           | 94           | 16.0%              | 13                 |
| Financial Activities        | 143          | 160          | 173          | 183          | 14.4%              | 23                 |
| Professional and Business   | 996          | 1,154        | 1,281        | 1,387        | 20.2%              | 233                |
| Education and Health Servi  | 629          | 705          | 767          | 819          | 16.2%              | 114                |
| Leisure and Hospitality     | 534          | 602          | 656          | 702          | 16.6%              | 100                |
| Other Services              | 134          | 153          | 167          | 180          | 17.6%              | 27                 |
| Government                  | 160          | 172          | 181          | 188          | 9.3%               | 16                 |
| <b>Total</b>                | <b>7,021</b> | <b>7,629</b> | <b>8,111</b> | <b>8,509</b> | <b>11.5%</b>       | <b>880</b>         |

|                             |               |                |                |                | <b>% Increase</b>  | <b>Increase</b>    |
|-----------------------------|---------------|----------------|----------------|----------------|--------------------|--------------------|
| <b>Sub-Region</b>           | <b>2000</b>   | <b>2010</b>    | <b>2020</b>    | <b>2030</b>    | <b>2010 - 2030</b> | <b>2010 - 2030</b> |
| Natural Resource, Mining, ( | 3,844         | 4,443          | 4,901          | 5,278          | 18.8%              | 835                |
| Manufacturing               | 30,694        | 29,655         | 28,661         | 27,750         | -6.4%              | -1,905             |
| Trade, Transportation and I | 15,805        | 17,478         | 18,553         | 19,441         | 11.2%              | 1,963              |
| Information                 | 6,603         | 7,353          | 7,912          | 8,370          | 13.8%              | 1,017              |
| Financial Activities        | 5,074         | 5,624          | 6,044          | 6,389          | 13.6%              | 765                |
| Professional and Business   | 13,126        | 15,055         | 16,536         | 17,766         | 18.0%              | 2,711              |
| Education and Health Servi  | 11,108        | 12,289         | 13,214         | 13,987         | 13.8%              | 1,698              |
| Leisure and Hospitality     | 4,978         | 5,549          | 5,990          | 6,361          | 14.6%              | 812                |
| Other Services              | 1,942         | 2,191          | 2,380          | 2,538          | 15.8%              | 347                |
| Government                  | 4,642         | 4,947          | 5,173          | 5,358          | 8.3%               | 411                |
| <b>Total</b>                | <b>97,816</b> | <b>104,584</b> | <b>109,364</b> | <b>113,238</b> | <b>8.3%</b>        | <b>8,654</b>       |

Source: Metropolitan Area Planning Council, Boston, MA, February 2006 and FXM Associates

The projected employment increases were converted to SF of commercial building space using an average of 500 SF/employee. Table B presents the estimated space demand over the next two decades for North Reading and the Local Region. The demand for North Reading alone is very

<sup>9</sup> Metropolitan Area Planning Council (February 2006).

modest, new sewer commercial property will draw from the entire Local Region, making the likely market for North Reading parcels with sewers equal to about 4 million SF.

**Table B. 2010-2030 Projected Demand for Commercial Space**

|                     | <b>North Reading</b> | <b>Sub-Region</b> |
|---------------------|----------------------|-------------------|
| <b>Total Demand</b> | 358,500              | 4,013,000         |
| <b>Office</b>       | 142,500              | 2,452,000         |
| <b>Retail</b>       | 130,100              | 889,300           |

## 4.0 Market Overview

### 4.1 North Reading Attributes, Limitations and Opportunities

The North Reading Community Development Plan identified these economic development assets and liabilities, based on input from residents and municipal officials.<sup>10</sup>

- *Assets* -- central areas for commerce (Route 28/Main Street, Concord Street, J.T. Berry site); proximity to I-93; existing high-tech, light industrial development; concentrated industrial area (not disperse); plenty of service-based industry.
- *Liabilities* – lack of public sewer; no “”destination” businesses in Town Center; Post Office Annex occupies significant amount of valuable land; no hotels; no comprehensive development plan.

The 2004 Community vision Statement reflected resident satisfaction with the mix of commercial businesses within Town, and stressed the need for a more diversified local industry base and support of locally-owned retail businesses. The vision supported retention of industrial technology-oriented businesses, additional “clean-industry” jobs, and maximum build-out of industrial/warehouse areas with development located near access to transportation links. In addition, the local economy should provide a mix of jobs at various levels, supporting local housing initiatives to enable employees of these businesses to live in North Reading.

Town officials, business representatives and residents typically describe North Reading as a “business-friendly” environment, where the cost of doing business and current tax rate makes it a competitive location. Commercial real estate brokers and retailers interviewed by FXM believe the main reasons that businesses are attracted to North Reading are because its “I-93 provides easy access to the Town’s commercial districts, and 20,000 vehicles pass Main Street daily.” These specific attributes are highlighted in many real estate advertisements for office, industrial and retail space in North Reading. The Plan also described the Town’s location in the Ipswich River Watershed as a natural resource as well as limitation on land available for commercial and industrial growth, a condition echoed by almost all of the property and business owners interviewed for this study.

<sup>10</sup> *North Reading Community Development Plan*, Terrasphere (June 2004)



Commercial property tax rates often are considered a factor important to business location decisions and a possible competitive advantage for North Reading, according to Town officials. North Reading has one of the lowest FY 2010 commercial property tax rates (\$13.47 per \$1,000 valuation) of several nearby communities; Middleton has the lowest (\$11.84), and Burlington has the highest tax rate at \$30.80. As shown in the following table, North Reading, Middleton, and Reading have a single tax rate with the same residential and commercial property tax rate. Andover, Lynnfield, North Andover, Wilmington, Burlington, and Woburn have a ‘split rate’ property tax with much lower residential rates. Commercial real estate brokers interviewed by FXM indicated that municipal water and wastewater service to commercial and industrial property is more advantageous than lower property taxes, although high tax rates can be a disadvantage in a competitive market area. Reading is the only nearby municipality with a single-rate property tax rate that provides municipal sewer to its commercial areas.

**Table C I-93 Corridor Commercial Tax Rates & Sewered Commercial Areas**

| <b>FY 2010</b>       | <b>Residential</b> | <b>Commercial</b> | <b>Personal Property</b> | <b>Sewer</b> |
|----------------------|--------------------|-------------------|--------------------------|--------------|
| Andover              | \$13.11            | \$21.33           | \$21.33                  | Yes          |
| Burlington           | \$11.50            | \$30.80           | \$30.80                  | Yes          |
| Lynnfield            | \$12.84            | \$13.72           | \$13.72                  | No           |
| Middleton            | \$11.84            | \$11.84           | \$11.84                  | No           |
| North Andover        | \$12.74            | \$17.64           | \$17.64                  | Yes          |
| <b>North Reading</b> | <b>\$13.47</b>     | <b>\$13.47</b>    | <b>\$13.47</b>           | <b>No</b>    |
| Reading              | \$13.75            | \$13.75           | \$13.75                  | Yes          |
| Tewksbury            | \$12.55            | \$19.77           | \$19.77                  | Yes          |
| Wilmington           | \$11.55            | \$21.17           | \$21.17                  | Yes          |
| Woburn               | \$10.32            | \$26.10           | \$26.10                  | Yes          |

Source: *At A Glance Report*, Massachusetts Department of Revenue and FXM Associates

## 4.2 Current Market Activity and Trends

FXM review of secondary source data and input gained from interviews with local real estate brokers, as well as property owners and business operators provides the following insight and observations about North Reading market conditions and trends.

Generally, commercial real estate listings indicate there is vacant commercial space in the North Reading area but not as much vacant retail space, and North Reading prices are slightly lower than retail and office space prices in Reading and Andover. The majority of inquiries to real estate brokers about Main Street/Route 28 space are from food/restaurants, retail services, and other businesses, such as dentist/medical offices, pet grooming, hair salons, that are not possible with septic system. Commercial brokers interviewed by FXM reported that more than half of inquires for Main Street space/land comes from businesses, entrepreneurs of North Reading and surrounding communities, with fewer Mom & Pop types over past few years, and described the market area for most tenants is within 20-minute drive of Main Street

FXM reviewed several sources of real estate listings for commercial (retail and office) and industrial property for lease or sale in the Study Areas, which provides a sample of current prices and types of available commercial/industrial space.

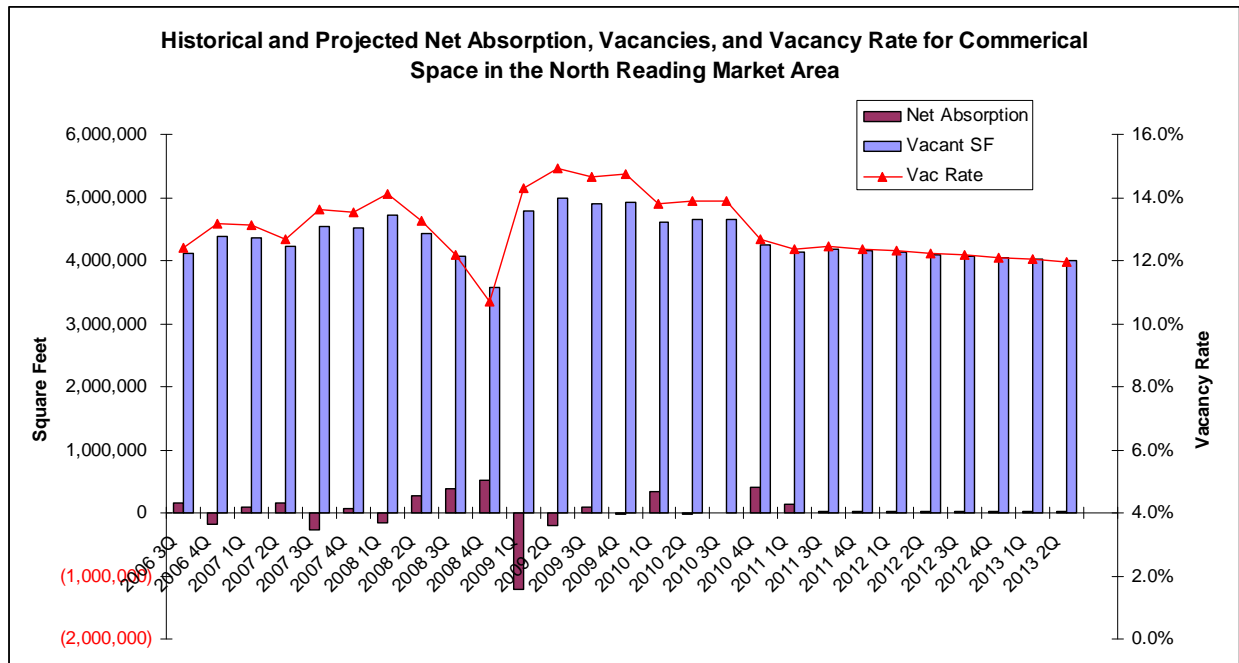
- *Concord Street* – Office space ranging in size from 9,000 sq. ft. to 35,000 sq. ft. available at \$9.00/sf. to \$16.81/sf. Industrial condominiums from 1,000-1,200 sq. ft. priced at \$180,000 to \$376,000 or \$180 per sq. ft.
- *Main Street* – Retail space for lease ranged in size from 3,500 sq. ft. to 8,500 sq. ft. with an average price of \$10.00 per sq. ft.; retail space for sale averaged \$180 sq. ft. Class A office space for lease ranged in size from 1,940 sq. ft. to 4,000 sq. ft. with pricing from \$9.28 to \$15.00 sq. ft. or average of \$14.50, and medical office spaced priced highest at \$18.0 sq. ft. Industrial condominiums averaging 4,000 sq. ft. had an average price of \$350,000 or \$87.50 sq. ft.

RiverPark Office Park on Concord Street is the only commercial area in North Reading served by municipal sewer, which is provided by the Town of Wilmington. Commercial real estate brokers point to recent sales and leases by major companies at the office park as an example of existing demand for office and industrial space in North Reading. In 2008, *DivcoWest* and *Taurus Investment Holdings* acquired buildings at 300 and 400 RiverPark Drive totaling that total approximately 359,000 sq. ft., and since that time, have leased more than 300,000 sq. ft. with major tenants including Kiva, Crowe Paradis and Teradyne.<sup>11</sup>

The following graph shows historical and forecast trends in net absorption, vacancies, and vacancy rates for commercial space in the North Reading market area. These data, compiled by Co Star *Property Information Systems* -- the leading provider of commercial space data and analytics and the source most relied upon by real estate analysts and brokers -- show a persistent inventory of more than 4 million vacant square feet, and projected net absorption of less than 25,000 square feet per quarter through the 3<sup>rd</sup> quarter of 2013. These weak current and foreseeable market conditions mandate that North Reading, or any community in the local market area, must offer superior site attributes to capture potential new development.

---

<sup>11</sup> *Kiva Systems Signs Lease at RiverPark Drive in North Reading*, Tim Gallen (July 12, 2010) at [www.gallen.com](http://www.gallen.com)



Source: Co Star Property Information System and FXM Associates

### 4.3 Retail Opportunity/Gap Analysis

FXM estimated the potential demand for various types of retail development within the market area by comparing estimated household expenditures in a range of retail store categories with actual sales by stores in those categories. Where expenditures by households in the market area exceeded sales, a gap or opportunity exists for stores within the market area to “capture” more of those household expenditures. Conversely, where market area household expenditures are less than actual sales in particular retail categories, stores in the market area already attract consumer dollars from outside the market area and opportunities for additional retail development would be more limited.

The following table shows consumer expenditures, actual store sales, the retail opportunity/gap, and what that opportunity/gap may mean in terms of potentially supportable square footage of retail development within the Study Area. The market area for this assessment is defined as a 15-minute drive time from about the center of the Main Street/Route 28 Study Area.

Data in the table indicate there are now substantial hypothetical opportunities for development of the types of stores shown to be currently under-represented within that 15-minute drive time market area. This does not mean that other retail store types could not be developed, nor does it

mean that the identified store types would necessarily find development in North Reading attractive. Some may prefer locating in large regional shopping centers rather than as stand alone or in a smaller strip mall, in spite of the market opportunities within a convenient drive time. The data may be useful, however, to property owners looking for tenants and may help the Town better understand retail development potential in the Study Area.

**Table D: Potentially Supportable Retail Activity in the Study Area: Selected Opportunities (2010 Data)**

|  | Consumer Expenditures (\$) | Retail Sales (\$) | Gap/Surplus (\$)   | Median Sales per SF (\$) | Supportable SF |
|--|----------------------------|-------------------|--------------------|--------------------------|----------------|
| Electronics and Appliance Stores-443           | 130,373,406                | 102,503,076       | 27,870,330         | 250                      | 111,481        |
| Household Appliances Stores-443111             | 22,444,290                 | 11,688,535        | 10,755,755         | 180                      | 59,754         |
| Radio, Television, Electronics Stores-443112   | 74,186,149                 | 61,446,446        | 12,739,703         | 245                      | 51,999         |
| Camera and Photographic Equipment Stores-44313 | 6,028,750                  | 1,812,194         | 4,216,556          | 240                      | 17,569         |
| Paint and Wallpaper Stores-44412               | 13,048,618                 | 6,253,328         | 6,795,290          | 130                      | 52,271         |
| Hardware Stores-44413                          | 47,655,675                 | 40,674,335        | 6,981,340          | 130                      | 53,703         |
| Nursery and Garden Centers-44422               | 41,310,551                 | 10,718,365        | 30,592,186         | 185                      | 165,363        |
| Women's Clothing Stores-44812                  | 47,267,065                 | 27,378,837        | 19,888,228         | 188                      | 105,788        |
| Jewelry Stores-44831                           | 37,383,658                 | 18,022,310        | 19,361,348         | 460                      | 42,090         |
| Office Supplies, Stationery, Gift Stores-4532  | 55,528,394                 | 47,064,922        | 8,463,472          | 175                      | 48,363         |
| Gift, Novelty and Souvenir Stores-45322        | 23,976,129                 | 16,208,599        | 7,767,530          | 145                      | 53,569         |
| Used Merchandise Stores-4533                   | 12,379,002                 | 2,059,919         | 10,319,083         | 180                      | 57,328         |
| Other Miscellaneous Store Retailers-4539       | 44,723,224                 | 34,630,914        | 10,092,310         | 210                      | 48,059         |
| <b>TOTAL</b>                                   |                            |                   | <b>175,843,131</b> |                          | <b>867,338</b> |

Source: Claritas *Site Reports*, and FXM Associates

## 5.0 Concord Street Study Area

The Concord Street Study Area is an industrial district within the I-93 commercial corridor, physically and functionally, due to its excellent accessibility from Exit 39/Concord Street and established industrial and business centers in bordering Wilmington. A small part the RiverPark Office Park complex is located in the southwest portion of the Study Area, while warehouse storage, distribution, landscape, and construction uses dominate the rest of the Study Area

The Concord Street industrial district is within the I-93 commercial corridor, physically and functionally, due to its excellent accessibility from the west (Concord Street - Exit 39) as well as established industrial and business centers in bordering Wilmington.

### 5.1 Concord Street Existing Business Activity

A summary profile of Concord Street Study Area business, employment and annual sales in 2010 is displayed in Figure B, and with more detailed industry information is in Attachments to this Tech Memo. Characteristics of existing business activity include these highlights.

- In 2010, the 41 business establishments in the Concord Street Study Area employed 2,186 workers, generated sales of \$32 million, which accounted for approximately 6% of all North Reading businesses, 32% of all jobs, and 39% of all sales.

- The five (5) Concord Street Study Area businesses in Manufacturing industry sectors accounted for 23% of the North Reading manufacturing establishments, 30% of its manufacturing jobs, 42% of manufacturing sales.
- Wholesale Trade companies in the Concord Street Study Area provided 90% of the Town's jobs (1,069) and 83% of sales (more than \$180 million) in this industry sector.
- Motor Freight, Transportation and Warehouse sector business establishments in the Concord Street Study Area provided 240 jobs and generated more than \$25 million in sales, representing 94% of all North Reading jobs and 92% of sales in this subsector.
- More than half of the Concord Street Study Area business (21) each had more than 20 employees, including one manufacturing firm, three retailers, four construction companies, and four freight transportation companies.

### Concord Street Study Area and Town of North Reading Businesses, Employment and Annual Sales Summary

| Categories of Businesses   | Number of<br>Businesses | Share of<br>Town | Number of<br>Jobs | Share of<br>Town | Business<br>Sales in<br>Million \$ | Share of<br>Town |
|--|-------------------------|------------------|-------------------|------------------|------------------------------------|------------------|
| <b>All Industries</b>  | <b>41</b>               | <b>6.4%</b>      | <b>2,106</b>      | <b>31.6%</b>     | <b>\$331.6</b>                     | <b>39.4%</b>     |
| <b>All Manufacturing (SIC 20-39)</b>                                   | <b>5</b>                | <b>22.7%</b>     | <b>64</b>         | <b>29.9%</b>     | <b>\$6.9</b>                       | <b>41.6%</b>     |
| <b>All Retailing (SIC 52-59)</b>                                       | <b>9</b>                | <b>7.8%</b>      | <b>126</b>        | <b>8.8%</b>      | <b>\$17.3</b>                      | <b>10.4%</b>     |
| <b>Public Administration (SIC 90-97)</b>                               | <b>0</b>                | <b>0.0%</b>      | <b>0</b>          | <b>0.0%</b>      | <b>\$0.0</b>                       | <b>0.0%</b>      |
| <b>Agriculture (SIC 1-7)</b>   | <b>1</b>                | <b>6.7%</b>      | <b>15</b>         | <b>28.8%</b>     | <b>\$0.6</b>                       | <b>27.3%</b>     |
| <b>Construction (SIC 13-17)</b>  | <b>8</b>                | <b>8.8%</b>      | <b>476</b>        | <b>52.0%</b>     | <b>\$86.7</b>                      | <b>54.0%</b>     |
| <b>Manufacturing (SIC 20-39)</b>                                       | <b>5</b>                | <b>22.7%</b>     | <b>64</b>         | <b>29.9%</b>     | <b>\$6.9</b>                       | <b>41.6%</b>     |
| <b>Transportation, Communication,<br/>Public Utilities (SIC 41-49)</b> | <b>5</b>                | <b>25.0%</b>     | <b>240</b>        | <b>82.2%</b>     | <b>\$25.1</b>                      | <b>81.8%</b>     |
| <b>Wholesale Trade (50-51)</b>   | <b>5</b>                | <b>12.8%</b>     | <b>1,064</b>      | <b>89.5%</b>     | <b>\$180.3</b>                     | <b>87.8%</b>     |
| <b>Retail Trade (SIC 52-59)</b>  | <b>9</b>                | <b>7.8%</b>      | <b>126</b>        | <b>8.8%</b>      | <b>\$17.3</b>                      | <b>10.4%</b>     |
| <b>Finance, Insurance, Real Estate<br/>(SIC 60-67)</b>                 | <b>0</b>                | <b>0.0%</b>      | <b>0</b>          | <b>0.0%</b>      | <b>\$0.0</b>                       | <b>0.0%</b>      |
| <b>Services (SIC 70-89)</b>  | <b>8</b>                | <b>3.1%</b>      | <b>121</b>        | <b>7.2%</b>      | <b>\$14.7</b>                      | <b>10.9%</b>     |
| <b>Government (SIC 91-99)</b>  | <b>0</b>                | <b>0.0%</b>      | <b>0</b>          | <b>0.0%</b>      | <b>\$0.0</b>                       | <b>0.0%</b>      |

Source: FXM Associates and Claritas SiteReports 2010

Notwithstanding the generally sluggish market conditions, nationally and statewide, area real estate brokers interviewed by FXM for this study indicated that there has been “an up-tick” over the past two years in the I-93 Corridor. They pointed to Charles River Labs expansion, Kiva

Systems, Shire and Avnet new locations in RiverPark Business Park, and emphasize that water/wastewater discharge flows for most clean-tech office and manufacturing facilities, as well as many retailers, require sewer service.

## **5.2 Concord Street Study Area Development Potential with Municipal Sewer**

The Concord Street Study Area has 156 acres of potentially developable land now in commercial use containing 31 parcels owned by private individuals, companies, and real estate trusts. The developable acreage in the Concord Street Study Area excludes wetlands, tax-exempt and public property, as well as existing built space. The Concord Street Study Area parcels are zoned Industrial-Office and there are no residential uses.

5.2.1 Town of North Reading Industrial/Office (I/O-1) District is designed to provide for administrative and research industries, offices and limited light manufacturing and assembling of building materials, machinery and other commodities to provide employment opportunities surrounding residents and protection of underground water supplies.<sup>12</sup> The I/O District is intended to encourage medium-rise land development emphasizing service oriented or light manufacturing uses. Residential buildings and dwellings, and shopping malls of less than 50,000 sq. ft. are among the uses expressly prohibited in I/O Districts; hotels and motels, medical laboratories, and communication services require a special permit.

The vast majority of tenant inquiries received by commercial brokers serving North Reading originate in the I-93 Corridor spanning from River Road in Andover to Woburn. According to area brokers, property with septic systems and on-site treatment plants are of no interest to office and light industrial tenants, and cannot function as multi-tenanted buildings. They also pointed out that there is no retail space in the nearby I-93 Corridor, and observed that municipal sewer on Concord Street would definitely attract larger retailers and increase retail uses.

There is broad consensus that municipal sewer service in the Concord Street Study Area would be “a total game changer, without question.” The prevailing view among commercial real estate brokers interviewed by FXM is that demand for quality, affordable commercial space near I-93 would result in development very similar to the RiverPark Business Park. Currently, the RiverPark Business Park on Concord Street is the only location in North Reading served by public sewer service, which is provided by the Town of Wilmington. The multi-building RiverPark Business Park is situated partially in North Reading (100 and 700 RiverPark Drive). The rest of RiverPark is in the Town of Wilmington (400, 700, 900 RiverPark Drive), representing the vast majority of the total built space.

Some business owners with low water discharge operations and no expansion plans requiring municipal sewer voiced concern about hook-up cost and rate charges, but also expressed general support for municipal sewer service on Concord Street. Business and property owners identified the presence of extensive environmental restrictions as the controlling constraint on the amount of land suitable for uses allowed under Town zoning, citing Ipswich River wetlands to the south

---

<sup>12</sup> Section 200-40 Article VIII Use Regulations, Town of North Reading By-Laws at [www.northreadingma.gov](http://www.northreadingma.gov)



and an aquifer north of the Study Area, Others identified the character and traffic capacity of Concord Street as another key factor influencing the location and types of new and more intensive commercial office or new retail development, and urged examination of potential ‘spill-over’ effects (congestion) at on Park Street and Main Street.

### **5.3 Concord Street Study Area Development Potential without Municipal Sewer**

Some existing businesses in the Concord Street Study Area have operations that are unaffected by the lack of municipal sewer service including general contractors, landscaping firms, building suppliers. However, the amount of land required for septic systems/leaching fields does affect the efficiency and flexibility of their business operations. The most common issues mentioned are the limited area available for parking, maneuvering heavy equipment, and costs incurred to evaporate wastewater from washing equipment (\$25,000 to \$30,000 per year for natural gas).

The freight distribution and warehouse businesses in the Street Study Area reportedly have vacant or under-utilized facilities, and are pursuing plans to redevelop property at 80, 81, 91 and 95 Concord Street. FXM was unable to contact company representatives or the property owners to determine the level of business activity or confirm possible redevelopment plans.

## **6.0 Main Street/Route 28 Study Area**

The Main Street/Route 28 Study Area is an established neighborhood commercial strip extending from the North Reading northern boundary with the Town of Andover to its southern boundary with the Town of Reading. The Main Street corridor has a variety of residential uses, including large condominium complexes, mobile homes, and single-family houses interspersed among commercial uses. There are approximately 210 acres of potentially developable land now in commercial use containing 146 parcels. The developable acreage for the Main Street/Route 28 Study Area excludes wetlands, tax-exempt and public property, existing and built space.<sup>13</sup> Current zoning of land uses in the Main Street Study Area is illustrated in Figure A of Attachments to this Tech Memo.

Demographic characteristics of the Main Street/Route 28 Study Area are presented in Attachments to this Tech Memo, and summarized in the following highlights.<sup>14</sup>

- In 2010, there were an estimated 530 residents and 195 households in the Main Street Study Area, approximately 3% of the Town’s total population and total households. The average household income was \$88,282, median income was \$78,879) and per capita income was \$36,224, each of which was about 15% lower than the Town overall.

---

<sup>13</sup> Study Area Parcel Data from Assessor’s Office Town of North Reading to Kleinfelder S E A (March 4, 2011)

<sup>14</sup> Nielson Claritas *SiteReports* 2009

- Residents in the Main Street/Route 28 Study Area had slightly lower education levels than Town-wide population, with 93% high-school graduates or above and 33% with a Bachelor degree or above, compared to 95% and 46% town-wide, respectively.
- An estimated 307 residents aged 16 and older in the Main Street Study Area were in the workforce, comprising about 3% of the Town's resident workers; 72% of whom were in private sector employment. Resident occupations were classified as 65% White Collar (192), 19% Blue Collar (57), and 19% Service and farm (58).
- The Main Street Study Area contained a total of 201 housing units, of which 81% were owner-occupied (167), and the median value of owner-occupied housing was \$294,776 which was about 72% of the Town's median value of owner-occupied housing. The average length of residency was 15 years for owner-occupants and 6 years for renters.

Route 28 was identified in the Community Development Plan as suitable for new commercial and retail uses, and having the capacity to support additional traffic generated by that such uses. Vacant land and under-utilized property along the corridor were cited as indicative of its growth potential as well as single-family houses that could be relocated to residential zones in Town and the parcels redeveloped for commercial uses, and older businesses that would transition to meet future market demand.

## **6.1 Main Street/Route 28 Study Area Existing Business Activity**

A summary profile of Main Street/Route 28 Study Area business, employment and annual sales in 2010 is displayed in Figure C, and with more detailed industry information is in Attachments to this Tech Memo. Characteristics of existing business activity include these highlights.

- In 2010 the 326 business establishments in the Main Street Study Area represented 51% of all businesses in North Reading, employed 2,612 workers accounting for 37% of all Town jobs, and generated 37% of all business sales (\$310 million in sales).
- Retailing sectors were predominant in the Main Street Study Area with 75 establishments, 1,057 jobs, and sales of \$120 million, which represented 63% of all North Reading retail establishments, 74% of all retail jobs, and 72% of all retail sales.
- The Main Street Study Area had 146 businesses in Service sectors, and 41 businesses in Finance-Insurance-Real Estate (FIRE) sectors that accounted for 57% and 64% of the Town's businesses establishments in those sectors, respectively.
- Other Main Street/Route 28 Study Area business activity of significance included:
  - General Merchandise Stores (244 jobs, \$27 million sales);
  - Eating & Drinking Places (414 jobs, \$20 million sales);
  - Automobile Dealers & Gas Service Stations (97 jobs, \$36 million sales); and
  - Miscellaneous Retail (154 jobs, \$17 million sales).

## Main Street/Route 28 Study Area and Town of North Reading Businesses, Employment and Annual Sales Summary

| Categories of Businesses                                       | Number of<br>Businesses | Share of<br>Town | Number of<br>Jobs | Share of<br>Town | Business<br>Sales in<br>Million \$ | Share of<br>Town |
|--|-------------------------|------------------|-------------------|------------------|------------------------------------|------------------|
| <b>All Industries</b>  | <b>326</b>              | <b>50.6%</b>     | <b>2,612</b>      | <b>39.2%</b>     | <b>\$310.8</b>                     | <b>37.0%</b>     |
| All Manufacturing (SIC 20-39)                                  | 9                       | 40.9%            | 27                | 12.6%            | \$2.1                              | 12.7%            |
| All Retailing (SIC 52-59)                                      | 73                      | 63.5%            | 1,057             | 73.6%            | \$120.0                            | 71.9%            |
| Public Administration (SIC 90-97)                              | 0                       | 0.0%             | 0                 | 0.0%             | \$0.0                              | 0                |
| Agriculture (SIC 1-7)  | 5                       | 33.3%            | 17                | 32.7%            | \$0.7                              | 31.8%            |
| Construction (SIC 13-17)                                       | 15                      | 16.5%            | 183               | 20.0%            | \$25.2                             | 15.7%            |
| Manufacturing (SIC 20-39)                                      | 9                       | 40.9%            | 27                | 12.6%            | \$2.1                              | 12.7%            |
| Transportation, Communication,<br>Public Utilities (SIC 41-49) | 7                       | 35.0%            | 30                | 10.3%            | \$4.0                              | 13.0%            |
| Wholesale Trade (50-51)  | 19                      | 48.7%            | 79                | 6.6%             | \$15.7                             | 7.6%             |
| Retail Trade (SIC 52-59)                                       | 73                      | 63.5%            | 1,057             | 73.6%            | \$120.0                            | 71.9%            |
| Finance, Insurance, Real Estate<br>(SIC 60-67)                 | 41                      | 64.1%            | 532               | 74.9%            | \$93.3                             | 75.4%            |
| Services (SIC 70-89)   | 146                     | 57.5%            | 656               | 39.3%            | \$49.8                             | 36.8%            |
| Government (SIC 91-99)   | 10                      | 25.6%            | 31                | 17.3%            | \$0.0                              | 0                |

Source: FXM Associates and *Claritas SiteReports* 2010

Notably, a number of restaurants, retailers and retail property owners on Main Street are family-owned and operated, and some establishments have been there for more than 50 years. They emphasized their role in maintaining stable business activity, providing affordable goods and services for area residents and workers, and the importance of preserving locally-owned business establishments in Town. The majority of retail operators indicated that most of their customers come from or were headed to one of the I-93 exist serving North Reading, and reside or work in North Reading and nearby communities. Restaurant managers described a broader market area with the majority of their customers coming from within a 5-mile area, as well as communities near Boston and New Hampshire.

## 6.2 Main Street/Route 28 Study Area Development Potential with Municipal Sewer

The Main Street/Route 28 Study Area developable area includes 210 acres of land now in commercial use containing 146 parcels.<sup>15</sup> For the purposes of this analysis, parcels now in residential use were excluded from the analysis of buildout potential since (as will be

<sup>15</sup> Study Area Parcel Data from Assessor's Office Town of North Reading to Kleinfelder S E A (March 4, 2011)

subsequently discussed) there is more than enough buildout potential under current zoning for parcels now vacant or in commercial use to absorb all foreseeable market demand. Frontage along Main street in low density residential use could be considered for commercial redevelopment, or parcels assembled for mixed-use redevelopment, but that potential buildout it is not necessary for the purposes of this analysis. The Main Street Study Area parcels are zoned for auto-oriented commercial (office and retail) and industrial uses, and also contains the Town's Adult Use Overlay District.

6.2.1 Town of North Reading Highway-Business (HB) District provides for business involved in retailing, services, amusement, and recreational activities in facilities ranging in degree of intensity from neighborhood services to regional commercial centers.<sup>16</sup> The HB District is encouraged to provide unique design and site planning for intensive or mixed-uses, incorporating desirable amenities as an integral part of each development. All proposed retail, service, commercial, wholesale, transportation and industrial development, redevelopment or expansion within the HB District is subject to site plan review, and mixed-use development requires approval of the Community Development Commission. Private households, correction facilities, used auto dealers, massage and escort services are among uses expressly prohibited in the HB District.

Some North Reading business owners expect residential uses still exist on Main Street/Route 28 because septic system limits other uses, or the cost of on-site wastewater treatment to support other uses can't be justified or recouped by business and property owners; and generally speculated that with municipal sewer service, those residential properties would become commercial uses. These observations echo transformation of other commercial strips resulting from municipal sewer installation (e.g. Town of Abington), which may be germane to small-scale residential properties in the Main Street Study Area, especially those already converted to commercial uses.

Many property owners, business operators interviewed by FXM have been long-time advocates for Main Street/Route 28 municipal sewer service, referencing previous Town plans over the past 50 years as well as a more recently aborted plan for the nearby Martins Pond area. When asked during FXM interviews, what effects municipal sewer on Main Street/Route 28 would have, almost everyone responded that property values would increase or double; the quality and profile (height) of buildings would change dramatically and owners would be able to attract higher-quality retailers and get higher rents "Lack of sewer limits North Reading's tax base; with sewer there would be an explosion of growth on Main Street, property owners could go vertical with office buildings, and there would be more restaurants." Some opined that municipal sewer would allow owners to invest in their buildings rather than in septic systems; and with proper growth planning/design guidelines, within five years Main Street/Route 28 would resemble Salem N.H. or sections of Woburn but not Andover. A few property owners didn't foresee any change in existing or potential business tenants but acknowledged that Town sewer would enhance their property values, and there would be sufficient space without septic systems to offer options for possible future development. Main Street residential property managers are in full

---

<sup>16</sup> Section 200-39 Article VIII Use Regulations, Town of North Reading By-Laws at [www.northreadingma.gov](http://www.northreadingma.gov)

support of municipal sewer installation which will reduce their annual operating/maintenance costs as well as improve the marketability of condominium units to prospective buyers.

Some business owners/managers interviewed voiced concern about potential displacement by chain or franchise business operations, especially eating and drinking establishments, pointing out that chains/franchises are attracted to the Main Street/Route 28 but require municipal sewer service or unwilling/unable to invest in capital cost of septic systems. Others were concerned about perceived limitations of Main Street/Route 28 traffic capacity and circulation related to more intensively developed commercial buildings; noting issues of accessibility for their workers and congestion that could reduce peak-hour customer volume/profits. Several business owners were very concerned about disruption during sewer installation construction due to limited roadway width in the Concord Street Study Area, and as much as 20% reduced sales experienced during the duration of the Main Street/Route 28 reconstruction in 2000.

### **6.3 Main Street/Route 28 Study Area Development Potential without Municipal Sewer**

Current Main Street septic system conditions were viewed by virtually all FXM interviewed as totally inhibiting the variety and quality of stores, business growth generally, and particularly onerous for restaurant operators and some retail service providers. Data describing conditions of Study Area septic systems were not available to FXM during this analysis but anecdotal reports from interviews suggest that few new septic systems have been installed over the last 10 years, and many older septic systems serving Main Street businesses are near failing.

Several Main Street restaurant managers estimated capital construction costs to rebuild a restaurant septic system at \$100,000 to \$200,000 for modest, full-service establishments, and \$300-\$400,000 for more effective 'state-of-the-art septic systems. These proprietors estimated annual septic system maintenance at \$4,000 to \$6,500 for pump-outs about four times per year, ground water purification inspections, system repairs and permits. Managers of residential property incur higher costs for septic system maintenance, averaging \$84,000 per year), and are required by DEP to escrow funds for system replacement (averaging \$32,000 per years), which are reflected in condominium owner (sewer) fees of about \$950.00 per year.

Main Street/Route 28 restaurants would continue operating at current built-out and conditions, and unable to proceed with expansion plans for additional seating based on septic system reported discharge per day capacity usually calculated at about 30 gallons per seat, and diversify menu offerings as some have proposed. In addition, wastewater discharge would continue to afflict other Main Street commercial property owners who cannot expand built space to add or intensify office and retail services uses.

## **7.0 Potential Property Tax Impacts of Development Scenarios**

The FXM estimates of additional tax revenues attributable to municipal sewer service within the Concord Street and Main Street Study Area are shown in the table below. The revenue estimates are based on the current commercial tax rate of \$13.47 per \$1,000 valuation.

### Analysis of Potential Increase in Annual Property Tax Revenues Attributable to Municipal Sewer Service

|   | Concord St.   | Main St.       | Combined       |
|---|---------------|----------------|----------------|
| Current Assessed Value  | \$ 70,207,734 | \$ 123,323,207 | \$ 193,530,941 |
| Current Property Taxes  | \$ 961,846    | \$ 1,689,528   | \$ 2,651,374   |
| <b>Potential New Tax Revenues: Existing Uses</b>                              |               |                |                |
| Low Range   | \$ 27,000     | \$ 58,000      | \$ 85,000      |
| High Range  | \$ 55,000     | \$ 269,000     | \$ 324,000     |
| <b>Potential New Tax Revenues: Projected Market Growth</b>                    |               |                |                |
| Low Range   | \$ 222,000    | \$ 294,000     | \$ 516,000     |
| High Range  | \$ 444,000    | \$ 588,000     | \$ 1,032,000   |
| <b>Potential New Tax Revenues: Existing Uses Plus Projected Market Growth</b> |               |                |                |
| Low Range   | \$ 249,000    | \$ 352,000     | \$ 601,000     |
| High Range  | \$ 499,000    | \$ 857,000     | \$ 1,356,000   |

For existing commercial properties within the Concord Street and Main Street Study Area, and based largely on land value increases attributable to sewer service, FXM estimates that the Town of North Reading could realize between \$85,000 and \$324,000 in additional property taxes annually at the current commercial tax rate of \$13.47 per \$1,000 in valuation.

Potential new commercial property tax revenues attributable to sewer service within the Study Area, derived from additional development based on projected market growth, are estimated to range between \$516,000 and \$1,032,000 annually. Under foreseeable market conditions, full absorption of projected new growth is expected to require at least 10 years. The combination of land value increases and new development of buildings within the Study Area is estimated to provide between \$601,000 and \$1,356,000 annually at full absorption of projected new growth. The table shows incremental revenues from new growth separately for Concord and Main Streets based on the relative buildout potential of each area. However, this is not meant to imply that development will or should occur in this fashion – under current zoning there is ample buildout potential within either area to absorb foreseeable market driven growth.

The High Growth Range market and revenue estimates assume that new development in North Reading will parallel the growth by type of space projected for the local region. About 60% of the employment growth projected is for businesses that use office space. Currently, office space represents less than 20% of the commercial buildings square footage within the Study Area. Retail space accounts for about 20% of projected growth, and currently represents about 40% of commercial buildings square footage within the Study Area. These assumptions are made to assure analytic consistency for the particular purposes of this study, but may or may not reflect



actual market potential in North Reading. A detailed market study specific to individual properties within the Study Area was beyond the scope of this study.

Also, it should also be noted that a single major development could dramatically alter the total growth potential and additional municipal revenues derived in this analysis, which is based on long term projected employment growth within the local region. Without municipal sewer the Town of North Reading will continue to forego opportunities to meet current and projected demand for commercial space. This assessment is based on the actual experience and judgment of property owners and commercial realtors interviewed during the course of this research and the FXM independent assessment of current and foreseeable market conditions, including competition for new growth by other communities within the local market area that already provide sewer to commercial areas.

## **8.0 Other Considerations Influencing Development Potential**

### **8.1 Municipal Sewer Rate Structure**

While there is broad support among property and business owners that municipal sewer will make North Reading more competitive and a better community, there is equal concern about the cost of sewer service. During FXM interviews, business owners/managers routinely asked about probable sewer rates, whether sewer hook-up would be mandatory, as well as whether the sewer rate structure would favor residential users and commercial users would be charged higher rates. Those who had upgraded or installed new septic systems, and are still recouping large capital expenses, were hopeful that the Town would consider some type of credit toward future sewer bill payments.

### **8.2 Municipal Water Supply**

The availability of sufficient, reliable water supply is an important consideration for future North Reading economic development initiatives intended to increase industrial and commercial uses, generally, and to accommodate bio-tech companies in particular. As the Town explores options for alternative water supply sources that will address its average day and maximum day deficits, the scope of analysis should include potential increased water demand associated with projected build-out of the Concord Street and Main Street/Route 28 Study Area. The Town could use the RiverPark Office Park water demand data as a basis for calculating estimated future demand by similar industrial and commercial uses proposed in the Concord Street Study Area.

### **8.3 Other North Reading Major Development Sites**

This study only assessed two of four major sites identified in the Community Development Plan to accommodate current and future market demand for commercial and industrial uses, and also recommended for installation of municipal sewer infrastructure. It is important to acknowledge the existence of other major development sites in North Reading, which could influence the type, pace and volume of near-term build-out of commercial and industrial property in the Concord

Street and Main Street Study Area. Examining potential competitive aspects of major development sites in Town was beyond the scope of this economic impact analysis.

8.3.1 *Edgewood Office Park*, formerly the J.T. Berry Rehabilitation Center/North Reading Sanatorium, is a 43-acre site and a designated Priority Development Site (PDS) by the Town and state Executive Office of Housing and Economic Development (EOHED) under provisions of Chapter 43D. The Giuterrez Company was awarded development rights to the property by the Town and DCAM (Department of Capital Asset Management). The Town reviewed conceptual plans to construct 600,000 sq. ft. of mixed-use space (zoned industrial/office) in two or three buildings (3 to 4 story), and an on-site sewage treatment facility. Currently, the property is advertised by Hunneman Commercial Real Estate Services, as a “prime location one mile off I-93, near MBTA for “build-to-suit” office/research space with on-site expansion for growing companies, 2,100 garage and surface parking spaces, and terrific views.”<sup>17</sup> The planned site build-out includes installation of a signalized intersection at Lowell Road; however, the developer has not received state or local permits. The Town and DCAM will re-establish a committee to solicit new bids for site disposition/development when the current developer’s designation expires in 2012.<sup>18</sup>

8.3.2 *Gravel Pit & Processing Facility* off Lowell Road is identified in the Plan for long-range industrial/commercial redevelopment, when extraction resources are depleted. This privately-owned site is located at Lowell Road (Route 62) and is zoned for industrial and commercial uses.

## **9.0 Recommended Implementation Strategy & Next Steps**

The Town of North Reading should consider a phased approach to provision of municipal sewer to service to its prime commercial and industrial areas, beginning with the Concord Street Study Area. The most expeditious and cost-effective means to achieve this goal may be through an inter-municipal agreement with the Town of Wilmington, which currently provides sewer service to other Concord Road property located in North Reading. Subsequent phases of Town sewer installation on Main Street/Route 28 could proceed following more detailed examination of issues raised in this economic impact analysis, including retention of local, family-owned businesses, definition of growth management policy/design guidelines, and creation of measures to minimize/mitigate disruption to existing business activity during sewer construction. In addition, the Town should explore the feasibility of an inter-municipal agreement with the Town of Reading for provision of Main Street/Route 28 sewer service, as well as investigate probable effects of more intensive commercial development on established residential areas

Suggested next steps to advance Phase I of this recommended implementation strategy would include the following actions by Town of North Reading officials.

---

<sup>17</sup> Edgewood Office Park, North Reading, MA at [www.naihunnemand.com](http://www.naihunnemand.com)

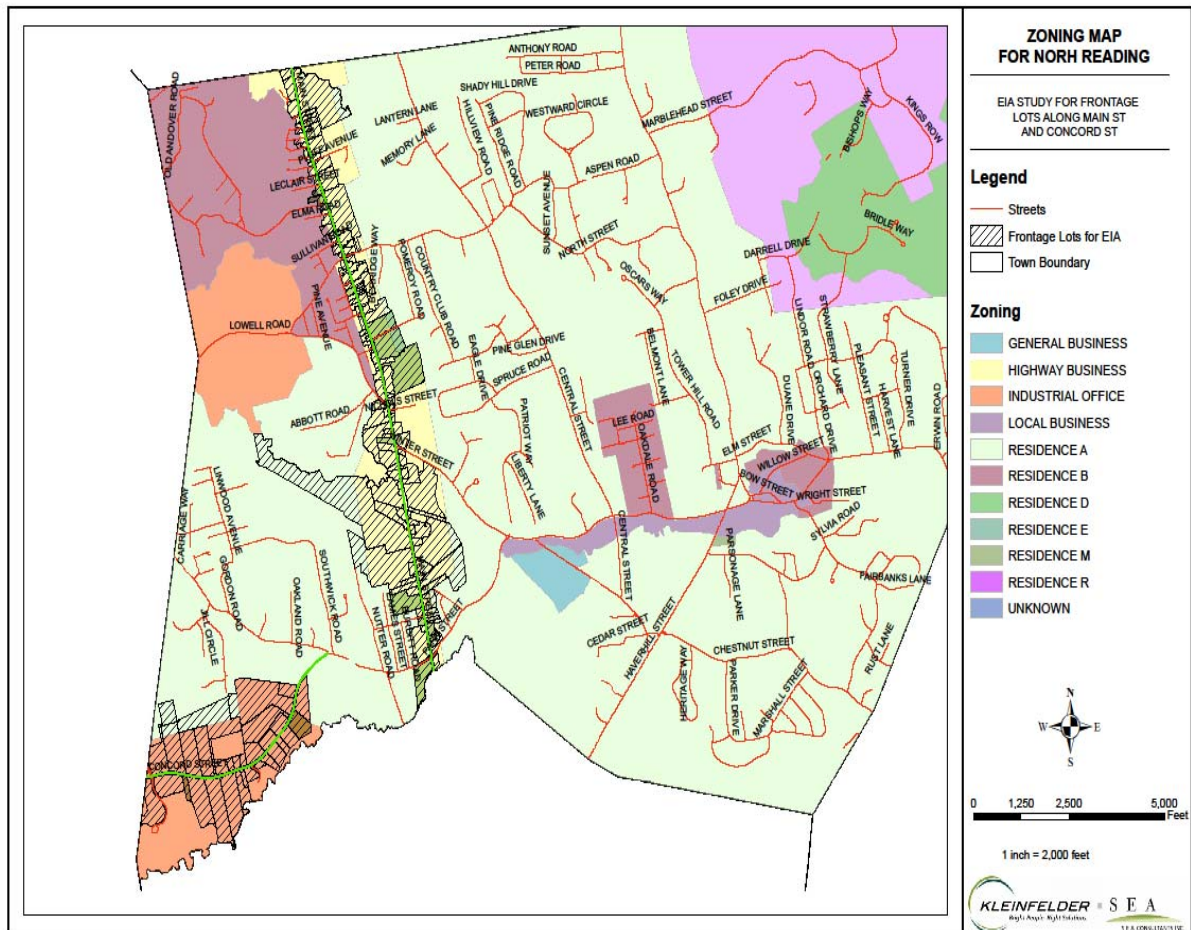
<sup>18</sup> FXM Associates communication with Heidi Griffin, North Reading Community Development Administrator (February 3, 2011)

- Contact all Concord Street Study Area property owners and business managers to inform them of planning for proposed municipal sewer installation, and ascertain their interest in future property redevelopment and business expansion.
- Determine the estimated cost for Concord Street sewer installation, and prepare a cost-benefit analysis for the Concord Street Study Area and the identified western sub-area.
- Conduct discussion with the Town of Wilmington and MWRA an agreement to extend existing sewer service to property on the north side of Concord Street and beyond. Identify and secure funding for pre-development planning, engineering and legal services (prepare permit, design/construction documents) for sewer infrastructure installation.
- Determine projected water supply needs for potential additional Concord Street commercial and industrial uses, and pursue options identified in preliminary findings contained in the “MWRA Emergency Water Supply” report (March 2, 2011) to ensure adequate capacity.
- Determine adequacy of telecommunications infrastructure and coverage in the Concord Street Study Area, identify upgrades/improvements needed, and examine feasibility of incorporating installation with sewer infrastructure project construction.
- Document Main Street/Route 28 roadway/traffic and circulation improvements needed to accommodate future volume, movements and activity centers associated with Study Area potential build-out with municipal sewer.

# North Reading Sewer Infrastructure Economic Impact Analysis

## Attachments

Figure A -- Frontage Lots along Main Street and Concord Street



## **List of FXM Contacts & Interviews**

- **Kristen Almon**, Broker, *CB Richard Ellis*
- **Sean Bonner**, District Facilities Manager, *Walgreens*
- **Deborah Carbone**, Assessor, Town of North Reading
- **Richard M. Carnevale**, Director North Reading Public Works
- **Paul Connolly**, Asset Management Director, *Shaw's Plaza*
- **James Demetri**, Broker, *Renaissance Real Estate Advisors*
- **Brad Ferrin**, *Milton Caterpillar*
- **Jerry Gonsalves**, Owner, *Gonsalves Associates*
- **Heidi Griffin**, Planning Administrator, North Reading Community Development
- **Robert Harrington**, Property Manager, *Park Colony Condominiums*
- **David Katz**, *Wilmington Grain & building Materials Company*
- **Christopher Lawrence**, Broker, *Collier International/Meredith & Grew*
- **Pat Lee**, *Horseshoe Grille*
- **John Lucci**, Trustee Administrator, *Lucci Realty Trust/Eastgate Plaza*
- **Chris Madden**, New England Facilities Operations, *USPS*
- **John Magazzu**, Principal/Owner, *Renaissance Commercial Realtors*
- **Robert Maher**, *D.L. Maher Services*
- **Lori Medeiros**, Property Manager, *Walmart/KGI Properties*
- **Michael Monahan**, Property Manager, *Greenbriar Estates Condominiums*
- **Jeff Morgan**, Real Estate Department, *Stop & Shop*
- **John J. Pasquale**, Proprietor, *Viking Tree, Inc.* and *Trio Realty*
- **Eric Rubin**, Real Estate Department, *Stop & Shop*
- **Ryan**, *Sullivan Tire Company*
- **Patrick St. Pierre**, Property Management, *Howland Development Company*
- **John Weir**, Proprietor, *Kitty's Restaurant*
- **Victor**, Proprietor, *China Cuisine*
- **William A. Yetman**, Partner, *Howland Development Company*

## Town of North Reading

### Population & Households

|   | Town of North Reading | % of Town | Local Region | % of Region | Town Share of Region |
|---|-----------------------|-----------|--------------|-------------|----------------------|
| <b>Population</b>   |                       |           |              |             |                      |
| 2015 Projection   | 18,786                |           | 146,629      |             | 12.8%                |
| 2010 Estimate   | 17,345                |           | 143,788      |             | 12.1%                |
| 2000 Census   | 13,890                |           | 135,752      |             | 10.2%                |
| 1990 Census   | 12,043                |           | 119,649      |             | 10.1%                |
| <i>Projected Growth 2010-2015</i>                           | 8.3%                  |           | 2.0%         |             |                      |
| <i>Estimated Growth 2000-2010</i>                           | 24.9%                 |           | 4.4%         |             |                      |
| U.S. Census Growth 1990-2000                                | 15.3%                 |           | 17.9%        |             |                      |
| <b>Households</b>   |                       |           |              |             |                      |
| 2015 Projection   | 6,613                 |           | 51,735       |             | 12.8%                |
| 2010 Estimate   | 6,083                 |           | 50,698       |             | 12.0%                |
| 2000 Census   | 4,814                 |           | 47,767       |             | 10.1%                |
| 1990 Census   | 4,078                 |           | 41,351       |             | 9.9%                 |
| <i>Projected Growth 2010-2015</i>                           | 8.7%                  |           | 2.3%         |             |                      |
| <i>Estimated Growth 2000-2010</i>                           | 26.4%                 |           | 5.1%         |             |                      |
| Growth 1990 - 2000  | 18.0%                 |           | 17.1%        |             |                      |
| <b>2010 Estimated Household Income</b>                      | 6,083                 |           | 50,698       |             | 12.0%                |
| Income Less than \$15,000                                   | 170                   | 2.8%      | 2,655        | 5.2%        | 6.4%                 |
| Income \$15,000 - \$24,999                                  | 201                   | 3.3%      | 2,466        | 4.9%        | 8.2%                 |
| Income \$25,000 - \$34,999                                  | 337                   | 5.5%      | 2,463        | 4.9%        | 13.7%                |
| Income \$35,000 - \$49,999                                  | 477                   | 7.8%      | 3,781        | 7.5%        | 12.6%                |
| Income \$50,000 - \$74,999                                  | 957                   | 15.7%     | 7,326        | 14.5%       | 13.1%                |
| Income \$75,000 - \$99,999                                  | 902                   | 14.8%     | 6,900        | 13.6%       | 13.1%                |
| Income \$100,000 - \$124,999                                | 939                   | 15.4%     | 6,759        | 13.3%       | 13.9%                |
| Income \$125,000 - \$149,999                                | 613                   | 10.1%     | 4,961        | 9.8%        | 12.4%                |
| Income \$150,000 - \$199,999                                | 745                   | 12.2%     | 6,067        | 12.0%       | 12.3%                |
| Income \$200,000 - \$499,999                                | 640                   | 10.5%     | 6,037        | 11.9%       | 10.6%                |
| Income \$500,000 and more                                   | 102                   | 1.7%      | 1,283        | 2.5%        | 8.0%                 |
| <b>Household Income Less than \$25,000</b>                  | 371                   | 6.1%      | 5,121        | 10.1%       | 7.2%                 |
| <b>Household income more than \$150,000</b>                 | 1,487                 | 24.4%     | 13,387       | 26.4%       | 11.1%                |
|   | Town of North Reading | % of Town | Local Region | % of Region | Town Share of Region |
| <b>2010 Est. Average Household Income</b>                   | \$121,773             |           | \$124,952    |             | 97.5%                |
| <b>2010 Est. Median Household Income</b>                    | \$99,917              |           | \$100,081    |             | 99.8%                |
| <b>2010 Est. Per Capita Income</b>                          | \$42,769              |           | \$43,901     |             | 97.4%                |
| <b>Family Households</b>                                    |                       |           |              |             |                      |
| 2015 Projection   | 5,147                 | 77.8%     | 39,330       | 76.0%       | 13.1%                |
| 2010 Estimate   | 4,737                 | 77.9%     | 38,507       | 76.0%       | 12.3%                |
| 2000 Census   | 3,770                 | 78.3%     | 36,252       | 75.9%       | 10.4%                |
| 1990 Census   | 3,288                 | 80.6%     | 32,370       | 78.3%       | 10.2%                |
| <b>2010 Estimated Family Households Below Poverty Level</b> | 48                    | 1.0%      | 836          | 2.2%        | 5.7%                 |

Source: Nielson Claritas SiteReports 2010 and FXM Associates



## Town of North Reading

### Education & Employment

|   | Town of<br>North<br>Reading | % of Town | Local<br>Region | % of<br>Region | Town<br>Share of<br>Region |
|---|-----------------------------|-----------|-----------------|----------------|----------------------------|
| <b>2010 Est. Pop. Age 25+ by Educational Attainment</b> | 11,208                      |           | 93,601          |                | 12.0%                      |
| Less than 9th grade                                     | 254                         | 2.3%      | 1,633           | 1.7%           | 15.6%                      |
| Some High School, no diploma                            | 341                         | 3.0%      | 2,885           | 3.1%           | 11.8%                      |
| High School Graduate or GED                             | 2,774                       | 24.8%     | 18,842          | 20.1%          | 14.7%                      |
| Some College, no degree                                 | 1,787                       | 15.9%     | 13,770          | 14.7%          | 13.0%                      |
| Associate Degree  | 853                         | 7.6%      | 6,599           | 7.1%           | 12.9%                      |
| Bachelor's Degree                                       | 3,397                       | 30.3%     | 28,372          | 30.3%          | 12.0%                      |
| Master's Degree   | 1,452                       | 13.0%     | 15,486          | 16.5%          | 9.4%                       |
| Professional School Degree                              | 226                         | 2.0%      | 3,347           | 3.6%           | 6.8%                       |
| Doctorate Degree  | 124                         | 1.1%      | 2,667           | 2.8%           | 4.6%                       |
| High School or above                                    | 10,613                      | 94.7%     | 89,083          | 95.2%          | 11.9%                      |
| Bachelor's or above                                     | 5,199                       | 46.4%     | 49,872          | 53.3%          | 10.4%                      |
| <b>2010 Est. Population 16+ by Employment Status</b>    | 13319                       |           | 112,312         |                | 11.9%                      |
| In Armed Forces   | 0                           | 0.0%      | 25              | 0.0%           | 0.0%                       |
| Civilian - Employed                                     | 9,558                       | 71.8%     | 75,686          | 67.4%          | 12.6%                      |
| Civilian - Unemployed                                   | 129                         | 1.0%      | 2,106           | 1.9%           | 6.1%                       |
| Not in Labor Force                                      | 3,632                       | 27.3%     | 34,495          | 30.7%          | 10.5%                      |
| <b>2010 Est. Civ. Employed Pop. 16+ by Class</b>        | 9,603                       |           | 74,451          |                | 12.9%                      |
| For-profit Private Workers                              | 6,700                       | 69.8%     | 52,901          | 71.1%          | 12.7%                      |
| Non-Profit Private Workers                              | 942                         | 9.8%      | 7,031           | 9.4%           | 13.4%                      |
| Local Government Workers                                | 776                         | 8.1%      | 5,505           | 7.4%           | 14.1%                      |
| State Government Workers                                | 340                         | 3.5%      | 1,926           | 2.6%           | 17.7%                      |
| Federal Government Workers                              | 158                         | 1.6%      | 1,316           | 1.8%           | 12.0%                      |
| Self-Employed Workers                                   | 679                         | 7.1%      | 5,702           | 7.7%           | 11.9%                      |
| Unpaid Family Workers                                   | 8                           | 0.1%      | 70              | 0.1%           | 0.0%                       |
| <b>2010 Est. Civ Employed Pop 16+ by Occupation</b>     | 9,603                       |           | 74,451          |                | 12.9%                      |
| Architect/Engineer                                      | 315                         | 3.3%      | 2,820           | 3.8%           | 11.2%                      |
| Arts/Entertain/Sports                                   | 131                         | 1.4%      | 1,620           | 2.2%           | 8.1%                       |
| Building Grounds Maintenance                            | 125                         | 1.3%      | 1,290           | 1.7%           | 9.7%                       |
| Business/Financial Operations                           | 796                         | 8.3%      | 5,139           | 6.9%           | 15.5%                      |
| Community/Social Services                               | 142                         | 1.5%      | 993             | 1.3%           | 14.3%                      |
| Computer/Mathematical                                   | 337                         | 3.5%      | 3,546           | 4.8%           | 9.5%                       |
| Construction/Extraction                                 | 397                         | 4.1%      | 2,941           | 4.0%           | 13.5%                      |
| Education/Training/Library                              | 570                         | 5.9%      | 5,302           | 7.1%           | 10.8%                      |
| Farm/Fish/Forestry                                      | 26                          | 0.3%      | 67              | 0.1%           | 38.8%                      |
| Food Prep/Serving                                       | 356                         | 3.7%      | 2,354           | 3.2%           | 15.1%                      |
| Health Practitioner/Technician                          | 741                         | 7.7%      | 5,115           | 6.9%           | 14.5%                      |
| Healthcare Support                                      | 147                         | 1.5%      | 1,020           | 1.4%           | 14.4%                      |
| Maintenance Repair                                      | 385                         | 4.0%      | 1,536           | 2.1%           | 25.1%                      |
| Legal   | 126                         | 1.3%      | 1,365           | 1.8%           | 9.2%                       |
| Life/Phys/Soc Science                                   | 108                         | 1.1%      | 1,534           | 2.1%           | 7.0%                       |
| Management  | 1,546                       | 16.1%     | 12,394          | 16.6%          | 12.5%                      |
| Office/Admin Support                                    | 1,233                       | 12.8%     | 9,060           | 2.6%           | 13.6%                      |
| Production  | 311                         | 3.2%      | 1,907           | 2.6%           | 16.3%                      |
| Protective Services                                     | 186                         | 1.9%      | 1,273           | 1.7%           | 14.6%                      |
| Sales/Related   | 1,008                       | 10.5%     | 9,180           | 12.3%          | 11.0%                      |
| Personal Care/Services                                  | 269                         | 2.8%      | 1,988           | 2.7%           | 13.5%                      |
| Transportation/Moving                                   | 348                         | 3.6%      | 2,007           | 2.7%           | 17.3%                      |
| <b>2010 Est. Pop 16+ by Occupation Classification</b>   | 9,603                       |           | 74,451          |                | 12.9%                      |
| Blue Collar   | 1,441                       | 15.0%     | 8,391           | 11.3%          | 17.2%                      |
| White Collar  | 7,053                       | 73.4%     | 58,068          | 78.0%          | 12.1%                      |
| Service and Farm  | 1,109                       | 11.5%     | 7,992           | 10.7%          | 13.9%                      |
| 2010 Average Travel Time to Work (Minutes)              | 32                          |           | 30              |                | 106.8%                     |

\* NOTE: Main Street/Route 28 Study Sub-Area only; Concord Street Sub-Study Area has no residential uses.

Source: Nielson Claritas SiteReports 2010 and FXM Associates

## Town of North Reading

### Housing & Occupancy

|  | Town of<br>North<br>Reading | % of<br>Town | Local<br>Region | % of<br>Region | Town<br>Share of<br>Region |
|--|-----------------------------|--------------|-----------------|----------------|----------------------------|
| <b>2010 Est. Owner-Occupied Housing Values</b>           | 5,586                       |              | 42,878          |                | 13.0%                      |
| Value Less than \$20,000                                 | 11                          | 0.2%         | 43              | 0.1%           | 25.6%                      |
| Value \$20,000 - \$39,999                                | 17                          | 0.3%         | 81              | 0.2%           | 21.0%                      |
| Value \$40,000 - \$59,999                                | 20                          | 0.4%         | 92              | 0.2%           | 21.7%                      |
| Value \$60,000 - \$79,999                                | 5                           | 0.1%         | 57              | 0.1%           | 8.8%                       |
| Value \$80,000 - \$99,999                                | 28                          | 0.5%         | 130             | 0.3%           | 21.5%                      |
| Value \$100,000 - \$149,999                              | 186                         | 3.3%         | 739             | 1.7%           | 25.2%                      |
| Value \$150,000 - \$199,999                              | 169                         | 3.0%         | 1,548           | 3.6%           | 10.9%                      |
| Value \$200,000 - \$299,999                              | 958                         | 17.2%        | 6,163           | 14.4%          | 15.5%                      |
| Value \$300,000 - \$399,999                              | 1,289                       | 23.1%        | 9,687           | 22.6%          | 13.3%                      |
| Value \$400,000 - \$499,999                              | 1,113                       | 19.9%        | 8,284           | 19.3%          | 13.4%                      |
| Value \$500,000 - \$749,999                              | 1,375                       | 24.6%        | 3,053           | 7.1%           | 45.0%                      |
| Value \$750,000 - \$999,999                              | 313                         | 5.6%         | 1,354           | 3.2%           | 23.1%                      |
| Value \$1,000,000 or more                                | 102                         | 1.8%         | 1,354           | 3.2%           | 7.5%                       |
| <b>2010 Est. Median All Owner-Occupied Housing Value</b> | \$409,919                   |              | \$443,619       |                | 92.4%                      |
| <b>2010 Est. Housing Units by Units in Structure</b>     | 6,219                       |              | 52,093          |                | 11.9%                      |
| 1 Unit Attached  | 272                         | 4.4%         | 2,518           | 4.8%           | 10.8%                      |
| 1 Unit Detached  | 5,110                       | 82.2%        | 38,342          | 73.6%          | 13.3%                      |
| 2 Units  | 41                          | 0.7%         | 2,257           | 4.3%           | 1.8%                       |
| 3 or 4 Units   | 106                         | 1.7%         | 1,525           | 2.9%           | 7.0%                       |
| 5 to 19 Units  | 153                         | 2.5%         | 4,179           | 8.0%           | 3.7%                       |
| 20 to 49 Units   | 435                         | 7.0%         | 1,243           | 2.4%           | 35.0%                      |
| 50 or More Units   | 47                          | 0.8%         | 1,889           | 3.6%           | 2.5%                       |
| Mobile Home or Trailer                                   | 55                          | 0.9%         | 136             | 0.3%           | 40.4%                      |
| Boat, RV, Van, etc.                                      | 0                           | 0.0%         | 4               | 0.01%          | 0.0%                       |
| <b>2010 Est. Tenure of Occupied Housing Units</b>        | 6,083                       |              | 50,698          |                | 12%                        |
| Owner Occupied   | 5,586                       | 91.8%        | 42,878          | 84.6%          | 13%                        |
| Renter Occupied  | 497                         | 8.2%         | 7,820           | 15.4%          | 6%                         |
| <b>2010 Owner Occupied Avg. Length of Residence</b>      | 19                          |              | 19              |                | 98%                        |
| <b>2010 Renter Occupied: Avg. Length of Residence</b>    | 9                           |              | 9               |                | 103%                       |

Source: Nielson Claritas SiteReports 2010 and FXM Associates

**Town of North Reading**
**Industries, Jobs and Business Sales**

| 2 Digit SIC | INDUSTRY SECTORS                                 | Number of Businesses | % of Town Total | Jobs         | % of Town Total | Business Sales in Million \$ | % of Town Total |
|-------------|--|----------------------|-----------------|--------------|-----------------|------------------------------|-----------------|
|             | <b>All Industries</b>                            | <b>644</b>           | <b>100.0%</b>   | <b>6,659</b> | <b>100.0%</b>   | <b>\$841.10</b>              | <b>100.0%</b>   |
| 20-39       | All Manufacturing                                | 22                   | 3.4%            | 214          | 3.2%            | \$16.60                      | 2.0%            |
| 52-55       | All Retailing                                    | 115                  | 17.9%           | 1,436        | 21.6%           | \$166.80                     | 19.8%           |
| 90-97       | Public Administration                            | 17                   | 2.6%            | 119          | 1.8%            | \$0.00                       | 0.0%            |
| 1           | Agricultural Production - Crops                  | 0                    | 0.0%            | 0            | 0.0%            | \$0.00                       | 0.0%            |
| 2           | Agricultural Production - Livestock              | 1                    | 0.2%            | 1            | 0.0%            | \$0.10                       | 0.0%            |
| 7           | Agricultural Services                            | 14                   | 2.2%            | 51           | 0.8%            | \$2.10                       | 0.2%            |
| 13          | Oil & Gas Extraction                             | 0                    | 0.0%            | 0            | 0.0%            | \$0.00                       | 0.0%            |
| 15          | Building Construction & General Contractors      | 19                   | 3.0%            | 198          | 3.0%            | \$53.20                      | 6.3%            |
| 16          | Heavy Construction (Except SIC 15)               | 4                    | 0.6%            | 14           | 0.2%            | \$1.80                       | 0.2%            |
| 17          | Construction-Special Trade Contractors           | 53                   | 8.2%            | 704          | 10.6%           | \$105.50                     | 12.5%           |
| 20          | Food and Kindred Products                        | 0                    | 0.0%            | 0            | 0.0%            | \$0.00                       | 0.0%            |
| 22          | Textile Mill Products                            | 0                    | 0.0%            | 0            | 0.0%            | \$0.00                       | 0.0%            |
| 23          | Apparel & Other Fabric Products                  | 0                    | 0.0%            | 0            | 0.0%            | \$0.00                       | 0.0%            |
| 24          | Lumber & Wood Products                           | 0                    | 0.0%            | 0            | 0.0%            | \$0.00                       | 0.0%            |
| 25          | Furniture & Fixtures                             | 1                    | 0.2%            | 1            | 0.0%            | \$0.10                       | 0.0%            |
| 26          | Paper and Allied Products                        | 0                    | 0.0%            | 0            | 0.0%            | \$0.00                       | 0.0%            |
| 27          | Printing, Publishing & Allied Industries         | 3                    | 0.5%            | 22           | 0.3%            | \$1.20                       | 0.1%            |
| 28          | Chemicals & Allied Products                      | 1                    | 0.2%            | 15           | 0.2%            | \$1.40                       | 0.2%            |
| 29          | Petroleum Refining and Related Industries        | 0                    | 0.0%            | 0            | 0.0%            | \$0.00                       | 0.0%            |
| 30          | Rubber & Plastic Products                        | 1                    | 0.2%            | 6            | 0.1%            | \$0.40                       | 0.0%            |
| 31          | Leather & Leather Products                       | 0                    | 0.0%            | 0            | 0.0%            | \$0.00                       | 0.0%            |
| 32          | Stone, Clay, Glass & Concrete Products           | 1                    | 0.2%            | 9            | 0.1%            | \$1.50                       | 0.2%            |
| 33          | Primary Metal Industries                         | 1                    | 0.2%            | 1            | 0.0%            | \$0.10                       | 0.0%            |
| 34          | Fabricated Metal Products                        | 3                    | 0.5%            | 18           | 0.3%            | \$1.40                       | 0.2%            |
| 35          | Industry, Commercial Machinery & Computers       | 6                    | 0.0%            | 62           | 0.9%            | \$6.00                       | 0.7%            |
| 36          | Electrical, Electronic Equipment (Ex. Computers) | 3                    | 0.5%            | 18           | 0.3%            | \$1.30                       | 0.2%            |
| 37          | Transportation Equipment                         | 0                    | 0.0%            | 0            | 0.0%            | \$0.00                       | 0.0%            |
| 38          | Measuring & Analyzing Instruments                | 1                    | 0.2%            | 60           | 0.9%            | \$3.00                       | 0.4%            |
| 39          | Miscellaneous Manufacturing Industries           | 1                    | 0.2%            | 2            | 0.0%            | \$0.20                       | 0.0%            |
| 41          | Local, Suburban & Interurban Transportation      | 2                    | 0.3%            | 5            | 0.1%            | \$0.30                       | 0.0%            |
| 42          | Motor Freight Transportation & Warehouse         | 10                   | 1.6%            | 255          | 3.8%            | \$27.20                      | 3.2%            |
| 43          | U.S. Postal Service                              | 1                    | 0.2%            | 4            | 0.1%            | \$0.10                       | 0.0%            |
| 45          | Transportation by Air                            | 0                    | 0.0%            | 0            | 0.0%            | \$0.00                       | 0.0%            |
| 47          | Transportation Services                          | 2                    | 0.3%            | 6            | 0.1%            | \$1.20                       | 0.1%            |
| 48          | Communication                                    | 2                    | 0.3%            | 7            | 0.1%            | \$0.70                       | 0.1%            |
| 49          | Electric, Gas & Sanitary Services                | 3                    | 0.5%            | 15           | 0.2%            | \$1.20                       | 0.1%            |
| 50          | Wholesale Trade-Durable Goods                    | 33                   | 5.1%            | 1,171        | 17.6%           | \$200.90                     | 23.9%           |
| 51          | Wholesale Trade-NonDurable Goods                 | 6                    | 0.9%            | 18           | 0.3%            | \$4.50                       | 0.5%            |

**Town of North Reading -- continued**

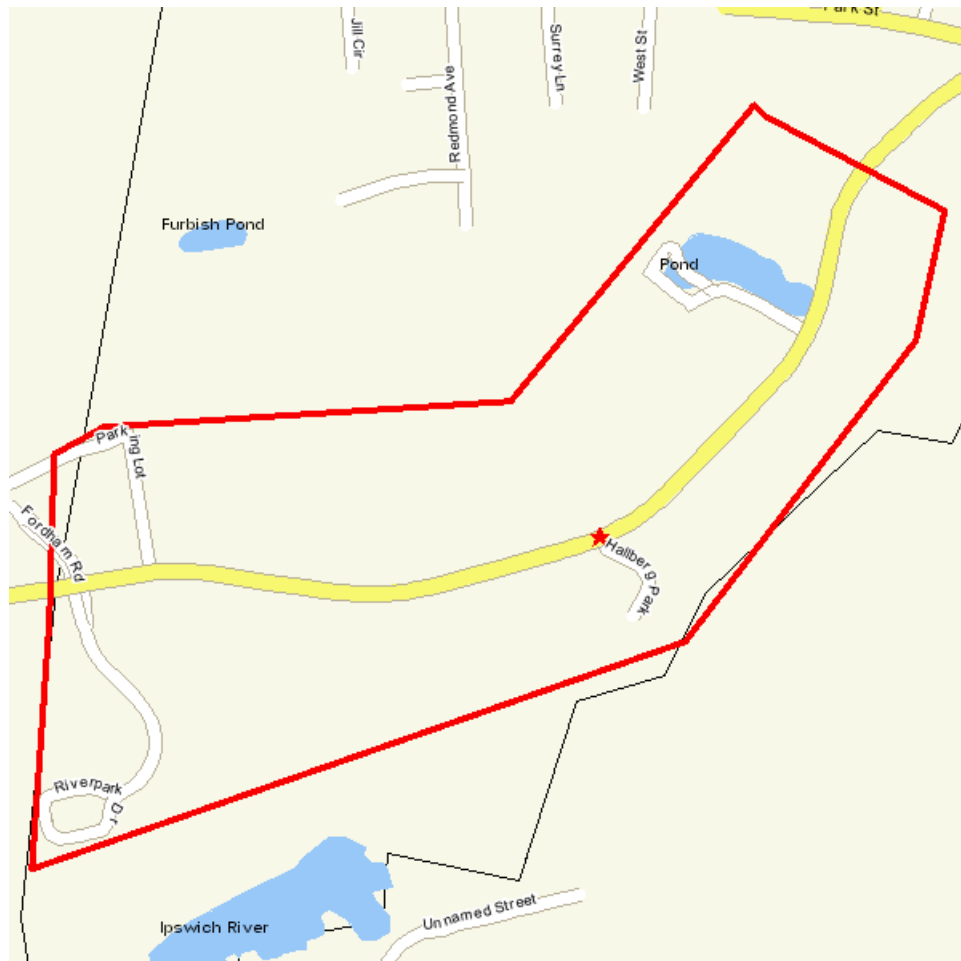
| <b>2 Digit<br/>SIC</b> | <b>INDUSTRY SECTORS</b>                          | <b>Number of<br/>Businesses</b> | <b>% of Town<br/>Total</b> | <b>Jobs</b> | <b>% of Town<br/>Total</b> | <b>Business<br/>Sales in<br/>Million \$</b> | <b>% of Town<br/>Total</b> |
|------------------------|--|---------------------------------|----------------------------|-------------|----------------------------|---|----------------------------|
| 52                     | Building Materials, Garden Supply & Mobile Homes | 8                               | 1.2%                       | 172         | 2.6%                       | \$23.30                                     | 2.8%                       |
| 53                     | General Merchandise Stores                       | 3                               | 0.5%                       | 246         | 3.7%                       | \$27.30                                     | 3.2%                       |
| 54                     | Food Stores                                      | 15                              | 2.3%                       | 104         | 1.6%                       | \$12.90                                     | 1.5%                       |
| 55                     | Automobile Dealers & Gas Service Stations        | 13                              | 2.0%                       | 116         | 1.7%                       | \$39.60                                     | 4.7%                       |
| 56                     | Apparel & Accessory Stores                       | 7                               | 1.1%                       | 19          | 0.3%                       | \$1.50                                      | 0.2%                       |
| 57                     | Home Furniture, Furnishings & Equipment          | 16                              | 2.5%                       | 120         | 1.8%                       | \$20.20                                     | 2.4%                       |
| 58                     | Eating & Drinking Places                         | 25                              | 3.9%                       | 492         | 7.4%                       | \$23.70                                     | 2.8%                       |
| 59                     | Miscellaneous Retail                             | 28                              | 4.3%                       | 167         | 2.5%                       | \$18.30                                     | 2.2%                       |
| 60                     | Depository Institutions                          | 10                              | 1.6%                       | 49          | 0.7%                       | \$13.60                                     | 1.6%                       |
| 61                     | NonDepository Credit Institutions                | 6                               | 0.9%                       | 46          | 0.7%                       | \$14.50                                     | 1.7%                       |
| 62                     | Security & Commodity Brokers & Service           | 9                               | 1.4%                       | 321         | 4.8%                       | \$52.30                                     | 6.2%                       |
| 63                     | Insurance Carriers                               | 0                               | 0.0%                       | 0           | 0.0%                       | \$0.00                                      | 0.0%                       |
| 64                     | Insurance Agents, Brokers and Service            | 6                               | 0.9%                       | 19          | 0.3%                       | \$4.50                                      | 0.5%                       |
| 65                     | Real Estate                                      | 33                              | 5.1%                       | 275         | 4.1%                       | \$38.80                                     | 4.6%                       |
| 67                     | Holding & Other Investment Offices               | 0                               | 0.0%                       | 0           | 0.0%                       | \$0.00                                      | 0.0%                       |
| 70                     | Hotels & Other Lodging Places                    | 0                               | 0.0%                       | 0           | 0.0%                       | \$0.00                                      | 0.0%                       |
| 72                     | Personal Services                                | 45                              | 7.0%                       | 126         | 1.9%                       | \$5.80                                      | 0.7%                       |
| 73                     | Business Services                                | 32                              | 5.0%                       | 122         | 1.8%                       | \$15.20                                     | 1.8%                       |
| 75                     | Automobile Repair, Services & Parking            | 26                              | 4.0%                       | 76          | 1.1%                       | \$4.70                                      | 0.6%                       |
| 76                     | Miscellaneous Repair Services                    | 10                              | 1.6%                       | 33          | 0.5%                       | \$4.40                                      | 0.5%                       |
| 78                     | Motion Pictures                                  | 1                               | 0.2%                       | 2           | 0.03%                      | \$0.50                                      | 0.1%                       |
| 79                     | Amusement & Recreational Service (Ex. Movies)    | 22                              | 3.4%                       | 76          | 1.1%                       | \$5.20                                      | 0.6%                       |
| 80                     | Health Services                                  | 19                              | 3.0%                       | 213         | 3.2%                       | \$14.00                                     | 1.7%                       |
| 81                     | Legal Services                                   | 19                              | 3.0%                       | 57          | 0.9%                       | \$10.60                                     | 1.3%                       |
| 82                     | Educational Services                             | 14                              | 2.2%                       | 362         | 5.4%                       | \$42.00                                     | 5.0%                       |
| 83                     | Social Services                                  | 16                              | 2.5%                       | 169         | 2.5%                       | \$7.70                                      | 0.9%                       |
| 84                     | Museums, Art Galleries, Zoos, Etc.               | 0                               | 0.0%                       | 0           | 0.0%                       | \$0.00                                      | 0.0%                       |
| 86                     | Membership Organizations                         | 11                              | 1.7%                       | 201         | 3.0%                       | \$5.10                                      | 0.6%                       |
| 87                     | Eng, Acct, Research & Mgmt Related Services      | 36                              | 5.6%                       | 130         | 2.0%                       | \$14.80                                     | 1.8%                       |
| 89                     | Miscellaneous Services                           | 3                               | 0.5%                       | 104         | 1.6%                       | \$5.20                                      | 0.6%                       |
| 91                     | Exec., Leg. & General Govt. (Except Finance)     | 12                              | 1.9%                       | 36          | 0.5%                       | \$0.00                                      | 0.0%                       |
| 92                     | Justice, Public Order & Safety                   | 2                               | 0.3%                       | 63          | 0.9%                       | \$0.00                                      | 0.0%                       |
| 93                     | Public Finance, Taxation & Monetary Policy       | 1                               | 0.2%                       | 13          | 0.2%                       | \$0.00                                      | 0.0%                       |
| 94                     | Administration of Human Resource Programs        | 2                               | 0.3%                       | 7           | 0.1%                       | \$0.00                                      | 0.0%                       |
| 95                     | Admin. of Environ. Quality & Housing Programs    | 0                               | 0.0%                       | 0           | 0.0%                       | \$0.00                                      | 0.0%                       |
| 96                     | Administration of Economic Programs              | 0                               | 0.0%                       | 0           | 0.0%                       | \$0.00                                      | 0.0%                       |
| 97                     | National Security & International Affairs        | 0                               | 0.0%                       | 0           | 0.0%                       | \$0.00                                      | 0.0%                       |
| 99                     | NonClassifiable Establishments                   | 22                              | 3.4%                       | 60          | 0.9%                       | \$0.00                                      | 0.0%                       |

Source: Nielson Claritas SiteReports 2010 and FXM Associates

## North Reading Sewer Infrastructure Economic Impact Analysis Concord Street Sub-Area

Reference Point: Concord Street at Hallberg Park

---



---

Nielsen Claritas *Site Reports* 2010 and FXM Associates

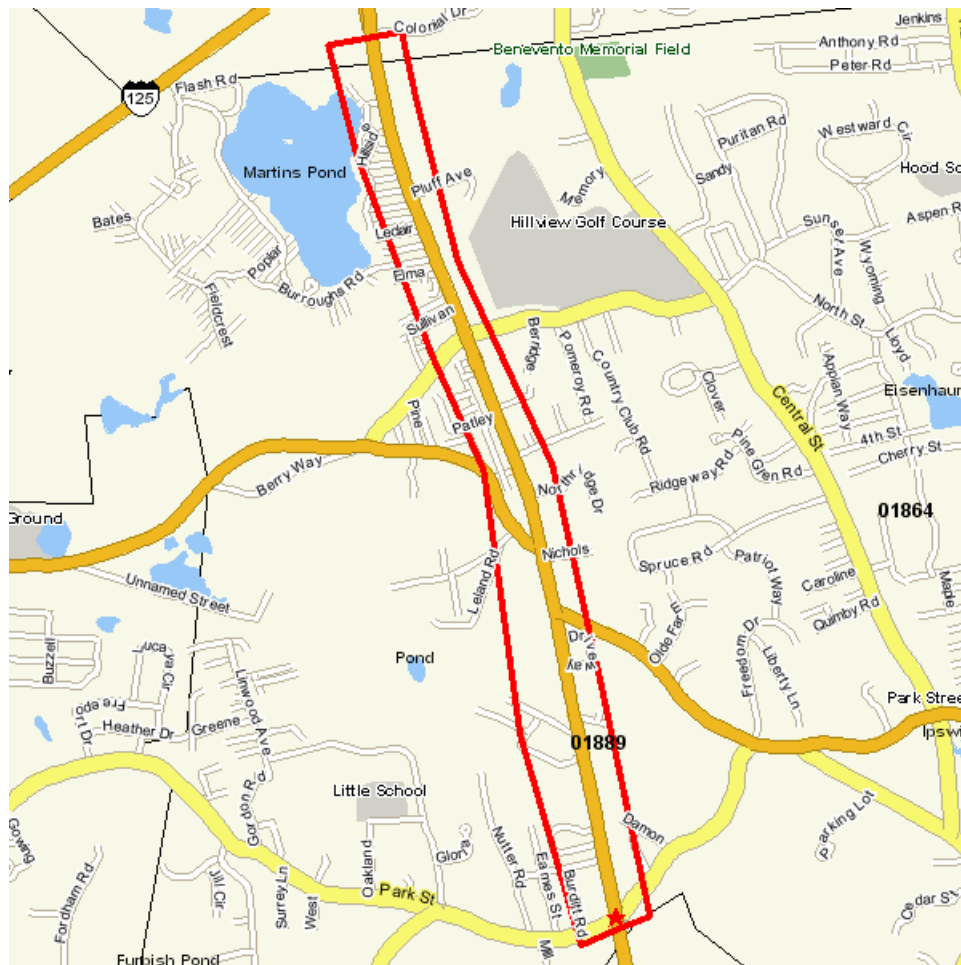
0 miles 0.09 0.18



## North Reading Sewer Infrastructure Economic Impact Analysis

### Main Street/Route 28 Sub-Area

Reference Point: Main Street at Park



Nielsen Claritas Site Reports 2010 and FXM Associates

0 miles 0.09 0.18



**Town of North Reading, Main Street/Route 28 Sub-Area & Local Region**
**Population & Households**

|   | Main St.<br>Sub-Area *  | Town of<br>North<br>Reading | Main St.<br>Sub-Area<br>% of Town | Local<br>Region | Town % of<br>Region |
|---|-------------------------|-----------------------------|-----------------------------------|-----------------|---------------------|
| <b>Population</b>   |                         |                             |                                   |                 |                     |
| 2015 Projection   | 582                     | 18,786                      | 3.1%                              | 146,629         | 12.8%               |
| 2010 Estimate   | 530                     | 17,345                      | 3.1%                              | 143,788         | 12.1%               |
| 2000 Census   | 403                     | 13,890                      | 2.9%                              | 135,752         | 10.2%               |
| 1990 Census   | 361                     | 12,043                      | 3.0%                              | 119,649         | 10.1%               |
| <i>Projected Growth 2010-2015</i>                               | 9.8%                    | 8.3%                        |                                   | 1.98%           |                     |
| <i>Estimated Growth 2000-2010</i>                               | 31.5%                   | 24.9%                       |                                   | 4.40%           |                     |
| <i>U.S. Census Growth 1990-2000</i>                             | 11.6%                   | 15.3%                       |                                   | 17.94%          |                     |
| <b>Households</b>   |                         |                             |                                   |                 |                     |
| 2015 Projection   | 215                     | 6,613                       | 3.3%                              | 51,735          | 12.8%               |
| 2010 Estimate   | 195                     | 6,083                       | 3.2%                              | 50,698          | 12.0%               |
| 2000 Census   | 147                     | 4,814                       | 3.1%                              | 47,767          | 10.1%               |
| 1990 Census   | 124                     | 4,078                       | 3.0%                              | 41,351          | 9.9%                |
| <i>Projected Growth 2010-2015</i>                               | 10.3%                   | 8.7%                        |                                   | 2.25%           |                     |
| <i>Estimated Growth 2000-2010</i>                               | 32.7%                   | 26.4%                       |                                   | 5.14%           |                     |
| <i>Growth 1990 - 2000</i>                                       | 18.5%                   | 18.0%                       |                                   | 17.07%          |                     |
| <b>2010 Estimated Household Income</b>                          | 195                     | 6,083                       | 3.2%                              | 50,698          | 12.0%               |
| Income Less than \$15,000                                       | 9                       | 170                         | 5.3%                              | 2,655           | 6.4%                |
| Income \$15,000 - \$24,999                                      | 3                       | 201                         | 1.5%                              | 2,466           | 8.2%                |
| Income \$25,000 - \$34,999                                      | 12                      | 337                         | 3.6%                              | 2,463           | 13.7%               |
| Income \$35,000 - \$49,999                                      | 20                      | 477                         | 4.2%                              | 3,781           | 12.6%               |
| Income \$50,000 - \$74,999                                      | 46                      | 957                         | 4.8%                              | 7,326           | 13.1%               |
| Income \$75,000 - \$99,999                                      | 35                      | 902                         | 3.9%                              | 6,900           | 13.1%               |
| Income \$100,000 - \$124,999                                    | 25                      | 939                         | 2.7%                              | 6,759           | 13.9%               |
| Income \$125,000 - \$149,999                                    | 17                      | 613                         | 2.8%                              | 4,961           | 12.4%               |
| Income \$150,000 - \$199,999                                    | 16                      | 745                         | 2.1%                              | 6,067           | 12.3%               |
| Income \$200,000 - \$499,999                                    | 12                      | 640                         | 1.9%                              | 6,037           | 10.6%               |
| Income \$500,000 and more                                       | 2                       | 102                         | 2.0%                              | 1283            | 8.0%                |
| Household Income Less than \$25,000                             | 12                      | 371                         | 3.2%                              | 5,121           | 7.2%                |
| Household income more than \$150,000                            | 30                      | 1,487                       | 2.0%                              | 13387           | 11.1%               |
|   | Main Street<br>Sub-Area | North<br>Reading            | Sub-Area %<br>of Town             | Local<br>Region | Town % of<br>Region |
| <b>2010 Est. Average Household Income</b>                       | \$100,596               | \$121,773                   | 82.6%                             | \$124,952       | 97.5%               |
| <b>2010 Est. Median Household Income</b>                        | \$81,250                | \$99,917                    | 81.3%                             | \$100,081       | 99.8%               |
| <b>2010 Est. Per Capita Income</b>                              | \$37,124                | \$42,769                    | 86.8%                             | \$43,901        | 97.4%               |
| <b>Family Households</b>  |                         |                             |                                   |                 |                     |
| 2015 Projection   | 153                     | 5,147                       | 3.0%                              | 39,330          | 13.1%               |
| 2010 Estimate   | 139                     | 4,737                       | 3.7%                              | 38,507          | 12.3%               |
| 2000 Census   | 106                     | 3,770                       | 2.8%                              | 36,252          | 10.4%               |
| 1990 Census   | 93                      | 3,288                       | 2.8%                              | 32,370          | 10.2%               |
| <b>2010 Estimated Family Households<br/>Below Poverty Level</b> | 1                       | 48                          | 2.1%                              | 836             | 5.7%                |

\* NOTE: Main Street/Route 28 Study Sub-Area only; Concord Street Sub-Study Area has no residential uses.

Source: Nielson *Claritas SiteReports* 2010 and FXM Associates



## Town of North Reading, Main Street/Route 28 Sub-Area & Local Region

### Education & Employment

|   | Main St<br>Study Sub<br>Area | Town of<br>North<br>Reading | Sub-Area<br>% of Town | Local<br>Region | Town % of<br>Region |
|---|------------------------------|-----------------------------|-----------------------|-----------------|---------------------|
| <b>2010 Est. Pop. Age 25+ by Educational Attainment</b> | 345                          | 11,208                      | 3.1%                  | 93,601          | 12.0%               |
| Less than 9th grade                                     | 8                            | 254                         | 3.1%                  | 1,633           | 15.6%               |
| Some High School, no diploma                            | 16                           | 341                         | 4.7%                  | 2,885           | 11.8%               |
| High School Graduate or GED                             | 113                          | 2,774                       | 4.1%                  | 18,842          | 14.7%               |
| Some College, no degree                                 | 65                           | 1,787                       | 3.6%                  | 13,770          | 13.0%               |
| Associate Degree  | 25                           | 853                         | 2.9%                  | 6,599           | 12.9%               |
| Bachelor's Degree                                       | 82                           | 3,397                       | 2.4%                  | 28,372          | 12.0%               |
| Master's Degree   | 26                           | 1,452                       | 1.8%                  | 15,486          | 9.4%                |
| Professional School Degree                              | 7                            | 226                         | 3.1%                  | 3,347           | 6.8%                |
| Doctorate Degree  | 2                            | 124                         | 1.6%                  | 2,667           | 4.6%                |
| <b>High School or above</b>                             | 320                          | 10,613                      | 3.0%                  | 89,083          | 11.9%               |
| <b>Bachelor's or above</b>                              | 117                          | 5,199                       | 2.3%                  | 49,872          | 10.4%               |
| <b>2010 Est. Population 16+ by Employment Status</b>    | 406                          | 13,319                      | 3.0%                  | 112,312         | 11.9%               |
| In Armed Forces   | 0                            | 0                           | 0.0%                  | 25              | 0.0%                |
| Civilian - Employed                                     | 308                          | 9,558                       | 3.2%                  | 75,686          | 12.6%               |
| Civilian - Unemployed                                   | 5                            | 129                         | 3.9%                  | 2,106           | 6.1%                |
| Not in Labor Force                                      | 93                           | 3,632                       | 2.6%                  | 34,495          | 10.5%               |
| <b>2010 Est. Civ. Employed Pop. 16+ by Class</b>        | 307                          | 9,603                       | 3.2%                  | 74,451          | 12.9%               |
| For-profit Private Workers                              | 220                          | 6,700                       | 3.3%                  | 52,901          | 12.7%               |
| Non-Profit Private Workers                              | 31                           | 942                         | 3.3%                  | 7,031           | 13.4%               |
| Local Government Workers                                | 30                           | 776                         | 3.9%                  | 5,505           | 14.1%               |
| State Government Workers                                | 10                           | 340                         | 2.9%                  | 1,926           | 17.7%               |
| Federal Government Workers                              | 3                            | 158                         | 1.9%                  | 1,316           | 12.0%               |
| Self-Employed Workers                                   | 13                           | 679                         | 1.9%                  | 5,702           | 11.9%               |
| Unpaid Family Workers                                   | 0                            | 8                           | 0.0%                  | 70              | 0.0%                |
| <b>2010 Est. Civ Employed Pop 16+ by Occupation</b>     | 307                          | 9,603                       | 3.2%                  | 74,451          | 12.9%               |
| Architect/Engineer                                      | 6                            | 315                         | 1.9%                  | 2,820           | 11.2%               |
| Arts/Entertain/Sports                                   | 5                            | 131                         | 3.8%                  | 1,620           | 8.1%                |
| Building Grounds Maintenance                            | 10                           | 125                         | 8.0%                  | 1,290           | 9.7%                |
| Business/Financial Operations                           | 14                           | 796                         | 1.8%                  | 5,139           | 15.5%               |
| Community/Social Services                               | 6                            | 142                         | 4.2%                  | 993             | 14.3%               |
| Computer/Mathematical                                   | 7                            | 337                         | 2.1%                  | 3,546           | 9.5%                |
| Construction/Extraction                                 | 18                           | 397                         | 4.5%                  | 2,941           | 13.5%               |
| Education/Training/Library                              | 13                           | 570                         | 2.3%                  | 5,302           | 10.8%               |
| Farm/Fish/Forestry                                      | 1                            | 26                          | 3.8%                  | 67              | 38.8%               |
| Food Prep/Serving                                       | 21                           | 356                         | 5.9%                  | 2,354           | 15.1%               |
| Health Practitioner/Technician                          | 21                           | 741                         | 2.8%                  | 5,115           | 14.5%               |
| Healthcare Support                                      | 8                            | 147                         | 5.4%                  | 1,020           | 14.4%               |
| Maintenance Repair                                      | 15                           | 385                         | 3.9%                  | 1,536           | 25.1%               |
| Legal   | 2                            | 126                         | 1.6%                  | 1,365           | 9.2%                |
| Life/Phys/Soc Science                                   | 2                            | 108                         | 1.9%                  | 1,534           | 7.0%                |
| Management  | 57                           | 1,546                       | 3.7%                  | 12,394          | 12.5%               |
| Office/Admin Support                                    | 35                           | 1,233                       | 2.8%                  | 9,060           | 13.6%               |
| Production  | 6                            | 311                         | 1.9%                  | 1,907           | 16.3%               |
| Protective Services                                     | 7                            | 186                         | 3.8%                  | 1,273           | 14.6%               |
| Sales/Related   | 24                           | 1,008                       | 2.4%                  | 9,180           | 11.0%               |
| Personal Care/Services                                  | 10                           | 269                         | 3.7%                  | 1,988           | 13.5%               |
| Transportation/Moving                                   | 19                           | 348                         | 5.5%                  | 2,007           | 17.3%               |
| <b>2010 Est. Pop 16+ by Occupation Classification</b>   | 307                          | 9,603                       | 3.2%                  | 74,451          | 12.9%               |
| Blue Collar   | 57                           | 1,441                       | 0.8%                  | 8,391           | 17.2%               |
| White Collar  | 192                          | 7,053                       | 2.7%                  | 58,068          | 12.1%               |
| Service and Farm  | 58                           | 1,109                       | 5.2%                  | 7,992           | 13.9%               |
| <b>2010 Average Travel Time to Work (Minutes)</b>       | 29                           | 32                          | 90.4%                 | 30              | 106.8%              |

\* **NOTE:** Main Street/Route 28 Study Sub-Area only; Concord Street Sub-Study Area has no residential uses.

Source: Nielson *Claritas SiteReports* 2010 and FXM Associates

**Town of North Reading, Main Street/Route 28 Sub-Area & Local Region  
Housing & Occupancy**

|  | <b>Main St.<br/>Sub-Area *</b> | <b>Town of<br/>North<br/>Reading</b> | <b>Main St.<br/>Sub-Area<br/>% of Town</b> | <b>Local<br/>Region</b> | <b>Town % of<br/>Region</b> |
|--|--------------------------------|--------------------------------------|--|-------------------------|-----------------------------|
| <b>2010 Est. Owner-Occupied Housing Values</b>               | 167                            | 5,586                                | 3.0%                                       | 42,878                  | 13.0%                       |
| Value Less than \$20,000                                     | 0                              | 11                                   | 0.0%                                       | 43                      | 25.6%                       |
| Value \$20,000 - \$39,999                                    | 0                              | 17                                   | 0.0%                                       | 81                      | 21.0%                       |
| Value \$40,000 - \$59,999                                    | 1                              | 20                                   | 5.0%                                       | 92                      | 21.7%                       |
| Value \$60,000 - \$79,999                                    | 0                              | 5                                    | 0.0%                                       | 57                      | 8.8%                        |
| Value \$80,000 - \$99,999                                    | 1                              | 28                                   | 3.6%                                       | 130                     | 21.5%                       |
| Value \$100,000 - \$149,999                                  | 6                              | 186                                  | 3.2%                                       | 739                     | 25.2%                       |
| Value \$150,000 - \$199,999                                  | 11                             | 169                                  | 6.5%                                       | 1,548                   | 10.9%                       |
| Value \$200,000 - \$299,999                                  | 66                             | 958                                  | 6.9%                                       | 6,163                   | 15.5%                       |
| Value \$300,000 - \$399,999                                  | 43                             | 1,289                                | 3.3%                                       | 9,687                   | 13.3%                       |
| Value \$400,000 - \$499,999                                  | 17                             | 1,113                                | 1.5%                                       | 8,284                   | 13.4%                       |
| Value \$500,000 - \$749,999                                  | 14                             | 1,375                                | 1.0%                                       | 3,053                   | 45.0%                       |
| Value \$750,000 - \$999,999                                  | 4                              | 313                                  | 1.3%                                       | 1,354                   | 23.1%                       |
| Value \$1,000,000 or more                                    | 1                              | 102                                  | 1.0%                                       | 1,354                   | 7.5%                        |
| <b>2010 Est. Median All Owner-Occupied<br/>Housing Value</b> | <b>\$294,776</b>               | <b>\$409,919</b>                     | <b>71.9%</b>                               | <b>\$443,619</b>        | <b>92.4%</b>                |
| <b>2010 Est. Housing Units by Units in<br/>Structure</b>     | 201                            | 6,219                                | 3.2%                                       | 52,093                  | 11.9%                       |
| 1 Unit Attached  | 2                              | 272                                  | 0.7%                                       | 2,518                   | 10.8%                       |
| 1 Unit Detached  | 164                            | 5,110                                | 3.2%                                       | 38,342                  | 13.3%                       |
| 2 Units  | 0                              | 41                                   | 0.0%                                       | 2,257                   | 1.8%                        |
| 3 or 4 Units   | 2                              | 106                                  | 1.9%                                       | 1,525                   | 7.0%                        |
| 5 to 19 Units  | 5                              | 153                                  | 3.3%                                       | 4,179                   | 3.7%                        |
| 20 to 49 Units   | 25                             | 435                                  | 5.7%                                       | 1,243                   | 35.0%                       |
| 50 or More Units   | 1                              | 47                                   | 2.1%                                       | 1,889                   | 2.5%                        |
| Mobile Home or Trailer                                       | 2                              | 55                                   | 3.6%                                       | 136                     | 40.4%                       |
| Boat, RV, Van, etc.  | 0                              | 0                                    | 0.0%                                       | 4                       | 0.0%                        |
| <b>2010 Est. Tenure of Occupied Housing Units</b>            | 195                            | 6,083                                | 3.2%                                       | 50,698                  | 12.0%                       |
| Owner Occupied   | 167                            | 5,586                                | 3.0%                                       | 42,878                  | 13.0%                       |
| Renter Occupied  | 28                             | 497                                  | 5.6%                                       | 7,820                   | 6.4%                        |
| <b>2010 Owner Occupied Avg. Length of<br/>Residence</b>      | 15                             | 19                                   | 81.7%                                      | 19                      | 97.9%                       |
| <b>2010 Renter Occupied: Avg. Length of<br/>Residence</b>    | 6                              | 9                                    | 73.5%                                      | 9                       | 102.7%                      |

\* NOTE: Main Street/Route 28 Study Sub-Area only; Concord Street Sub-Study Area has no residential uses.

Source: Nielson *Claritas SiteReports* 2010 and FXM Associates

**Concord Street Study Sub-Area**
**Industries, Jobs and Business Sales**

| 2 Digit SIC |  | Number of Businesses | % of Town | Number of Jobs | % of Town  | Business Sales in Million \$ | % of Town    |
|-------------|--|----------------------|-----------|----------------|------------|------------------------------|--------------|
|             | <b>All Industries</b>                            | <b>41</b>            | <b>6%</b> | <b>2,106</b>   | <b>32%</b> | <b>\$331.60</b>              | <b>39.4%</b> |
| 20-39       | All Manufacturing                                | 5                    | 23%       | 64             | 30%        | \$6.90                       | 41.6%        |
| 52-55       | All Retailing                                    | 9                    | 8%        | 126            | 9%         | \$17.30                      | 10.4%        |
| 90-97       | Public Administration                            | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 1           | Agricultural Production - Crops                  | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 2           | Agricultural Production - Livestock              | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 7           | Agricultural Services                            | 1                    | 7%        | 15             | 2%         | \$0.60                       | 0.6%         |
| 13          | Oil & Gas Extraction                             | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 15          | Building Construction & General Contractors      | 2                    | 11%       | 106            | 54%        | \$28.30                      | 53.2%        |
| 16          | Heavy Construction (Except SIC 15)               | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 17          | Construction-Special Trade Contractors           | 6                    | 11%       | 370            | 53%        | \$58.40                      | 55.4%        |
| 20          | Food and Kindred Products                        | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 22          | Textile Mill Products                            | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 23          | Apparel & Other Fabric Products                  | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 24          | Lumber & Wood Products                           | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 25          | Furniture & Fixtures                             | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 26          | Paper and Allied Products                        | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 27          | Printing, Publishing & Allied Industries         | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 28          | Chemicals & Allied Products                      | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 29          | Petroleum Refining and Related Industries        | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 30          | Rubber & Plastic Products                        | 1                    | 100%      | 6              | 100%       | \$0.40                       | 100.0%       |
| 31          | Leather & Leather Products                       | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 32          | Stone, Clay, Glass & Concrete Products           | 1                    | 100%      | 9              | 100%       | \$1.50                       | 100.0%       |
| 33          | Primary Metal Industries                         | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 34          | Fabricated Metal Products                        | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 35          | Industry, Commercial Machinery & Computers       | 3                    | 50%       | 49             | 79%        | \$5.00                       | 83.3%        |
| 36          | Electrical, Electronic Equipment (Ex. Computers) | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 37          | Transportation Equipment                         | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 38          | Measuring & Analyzing Instruments                | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 39          | Miscellaneous Manufacturing Industries           | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 41          | Local, Suburban & Interurban Transportation      | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 42          | Motor Freight Transportation & Warehouse         | 5                    | 50%       | 240            | 94%        | \$25.10                      | 92.3%        |
| 43          | U.S. Postal Service                              | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 45          | Transportation by Air                            | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 47          | Transportation Services                          | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 48          | Communication                                    | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 49          | Electric, Gas & Sanitary Services                | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |
| 50          | Wholesale Trade-Durable Goods                    | 5                    | 15%       | 1,064          | 91%        | \$180.30                     | 89.7%        |
| 51          | Wholesale Trade-NonDurable Goods                 | 0                    | 0%        | 0              | 0%         | \$0.00                       | 0.0%         |

**Concord Street Sub-Area -- continued**

| 2 Digit SIC | INDUSTRY SECTORS                                 | Number of Businesses | % of Town Total | Number of Jobs | % of Town Total | Business Sales in Million \$ | % of Town Total |
|-------------|--|----------------------|-----------------|----------------|-----------------|------------------------------|-----------------|
| 52          | Building Materials, Garden Supply & Mobile Homes | 1                    | 13%             | 12             | 7%              | \$1.50                       | 33.3%           |
| 53          | General Merchandise Stores                       | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 54          | Food Stores                                      | 2                    | 13%             | 25             | 24%             | \$1.70                       | 13.2%           |
| 55          | Automobile Dealers & Gas Service Stations        | 2                    | 15%             | 12             | 10%             | \$2.60                       | 6.6%            |
| 56          | Apparel & Accessory Stores                       | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 57          | Home Furniture, Furnishings & Equipment          | 3                    | 19%             | 75             | 63%             | \$11.40                      | 56.4%           |
| 58          | Eating & Drinking Places                         | 1                    | 4%              | 2              | 0%              | \$0.10                       | 0.4%            |
| 59          | Miscellaneous Retail                             | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 60          | Depository Institutions                          | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 61          | NonDepository Credit Institutions                | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 62          | Security & Commodity Brokers & Service           | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 63          | Insurance Carriers                               | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 64          | Insurance Agents, Brokers and Service            | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 65          | Real Estate                                      | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 67          | Holding & Other Investment Offices               | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 70          | Hotels & Other Lodging Places                    | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 72          | Personal Services                                | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 73          | Business Services                                | 1                    | 3%              | 25             | 32%             | \$4.50                       | 29.6%           |
| 75          | Automobile Repair, Services & Parking            | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 76          | Miscellaneous Repair Services                    | 1                    | 10%             | 20             | 61%             | \$3.00                       | 19.7%           |
| 78          | Motion Pictures                                  | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 79          | Amusement & Recreational Service (Ex. Movies)    | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 80          | Health Services                                  | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 81          | Legal Services                                   | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 82          | Educational Services                             | 2                    | 14%             | 35             | 10%             | \$5.30                       | 12.6%           |
| 83          | Social Services                                  | 1                    | 6%              | 23             | 14%             | \$0.50                       | 6.5%            |
| 84          | Museums, Art Galleries, Zoos, Etc.               | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 86          | Membership Organizations                         | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 87          | Eng, Acct, Research & Mgmt Related Services      | 3                    | 8%              | 18             | 0%              | \$1.40                       | 9.5%            |
| 89          | Miscellaneous Services                           | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 91          | Exec., Leg. & General Govt. (Except Finance)     | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 92          | Justice, Public Order & Safety                   | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 93          | Public Finance, Taxation & Monetary Policy       | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 94          | Administration of Human Resource Programs        | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 95          | Admin. of Environ. Quality & Housing Programs    | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 96          | Administration of Economic Programs              | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 97          | National Security & International Affairs        | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |
| 99          | NonClassifiable Establishments                   | 0                    | 0%              | 0              | 0%              | \$0.00                       | 0.0%            |

Source: Nielson *Claritas SiteReports* 2010 and FXM Associates

**Main Street/Route 28 Sub-Areas  
Industries, Jobs and Business Sales**

| <b>2 Digit<br/>SIC</b> | <b>INDUSTRY SECTORS</b>                          | <b>Number of<br/>Businesses</b> | <b>% of Town<br/>Total</b> | <b>Number of<br/>Jobs</b> | <b>% of Town<br/>Total</b> | <b>Business<br/>Sales in<br/>Million \$</b> | <b>% of Town<br/>Total</b> |
|------------------------|--|---------------------------------|----------------------------|---------------------------|----------------------------|---|----------------------------|
|                        | <b>All Industries</b>                            | <b>326</b>                      | <b>51%</b>                 | <b>2,612</b>              | <b>39%</b>                 | <b>\$310.8</b>                              | <b>37.0%</b>               |
| 20-39                  | All Manufacturing                                | 9                               | 41%                        | 27                        | 13%                        | \$2.1                                       | 12.7%                      |
| 52-55                  | All Retailing                                    | 73                              | 63%                        | 1,057                     | 74%                        | \$120.0                                     | 71.9%                      |
| 90-97                  | Public Administration                            | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 1                      | Agricultural Production - Crops                  | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 2                      | Agricultural Production - Livestock              | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 7                      | Agricultural Services                            | 5                               | 36%                        | 17                        | 33%                        | \$0.7                                       | 33.3%                      |
| 13                     | Oil & Gas Extraction                             | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 15                     | Building Construction & General Contractors      | 5                               | 26%                        | 17                        | 9%                         | \$4.5                                       | 8.5%                       |
| 16                     | Heavy Construction (Except SIC 15)               | 2                               | 50%                        | 7                         | 50%                        | \$0.9                                       | 50.0%                      |
| 17                     | Construction-Special Trade Contractors           | 8                               | 15%                        | 159                       | 23%                        | \$19.8                                      | 18.8%                      |
| 20                     | Food and Kindred Products                        | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 22                     | Textile Mill Products                            | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 23                     | Apparel & Other Fabric Products                  | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 24                     | Lumber & Wood Products                           | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 25                     | Furniture & Fixtures                             | 1                               | 100%                       | 1                         | 100%                       | \$0.1                                       | 100.0%                     |
| 26                     | Paper and Allied Products                        | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 27                     | Printing, Publishing & Allied Industries         | 2                               | 67%                        | 9                         | 41%                        | \$0.6                                       | 50.0%                      |
| 28                     | Chemicals & Allied Products                      | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 29                     | Petroleum Refining and Related Industries        | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 30                     | Rubber & Plastic Products                        | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 31                     | Leather & Leather Products                       | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 32                     | Stone, Clay, Glass & Concrete Products           | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 33                     | Primary Metal Industries                         | 1                               | 100%                       | 1                         | 100%                       | \$0.1                                       | 100.0%                     |
| 34                     | Fabricated Metal Products                        | 1                               | 33%                        | 5                         | 28%                        | \$0.4                                       | 28.6%                      |
| 35                     | Industry, Commercial Machinery & Computers       | 2                               | 33%                        | 8                         | 13%                        | \$0.6                                       | 10.0%                      |
| 36                     | Electrical, Electronic Equipment (Ex. Computers) | 1                               | 33%                        | 1                         | 6%                         | \$0.1                                       | 7.7%                       |
| 37                     | Transportation Equipment                         | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 38                     | Measuring & Analyzing Instruments                | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 39                     | Miscellaneous Manufacturing Industries           | 1                               | 100%                       | 2                         | 100%                       | \$0.2                                       | 100.0%                     |
| 41                     | Local, Suburban & Interurban Transportation      | 1                               | 50%                        | 4                         | 80%                        | \$0.2                                       | 66.7%                      |
| 42                     | Motor Freight Transportation & Warehouse         | 3                               | 30%                        | 13                        | 5%                         | \$1.9                                       | 7.0%                       |
| 43                     | U.S. Postal Service                              | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 45                     | Transportation by Air                            | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 47                     | Transportation Services                          | 2                               | 100%                       | 6                         | 100%                       | \$1.2                                       | 100.0%                     |
| 48                     | Communication                                    | 2                               | 100%                       | 7                         | 100%                       | \$0.7                                       | 100.0%                     |
| 49                     | Electric, Gas & Sanitary Services                | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 50                     | Wholesale Trade-Durable Goods                    | 15                              | 45%                        | 68                        | 6%                         | \$13.1                                      | 6.5%                       |
| 51                     | Wholesale Trade-NonDurable Goods                 | 4                               | 67%                        | 11                        | 61%                        | \$2.6                                       | 57.8%                      |

**Main Street/Route 28 Corridor -- continued**

| <b>2 Digit<br/>SIC</b> | <b>INDUSTRY SECTORS</b>                          | <b>Number of<br/>Businesses</b> | <b>% of Town<br/>Total</b> | <b>Number of<br/>Jobs</b> | <b>% of Town<br/>Total</b> | <b>Business<br/>Sales in<br/>Million \$</b> | <b>% of Town<br/>Total</b> |
|------------------------|--|---------------------------------|----------------------------|---------------------------|----------------------------|---|----------------------------|
| 52                     | Building Materials, Garden Supply & Mobile Homes | 3                               | 38%                        | 53                        | 31%                        | \$8.2                                       | 35.2%                      |
| 53                     | General Merchandise Stores                       | 2                               | 67%                        | 244                       | 99%                        | \$27.1                                      | 99.3%                      |
| 54                     | Food Stores                                      | 10                              | 67%                        | 70                        | 67%                        | \$9.7                                       | 75.2%                      |
| 55                     | Automobile Dealers & Gas Service Stations        | 8                               | 62%                        | 97                        | 84%                        | \$35.7                                      | 90.2%                      |
| 56                     | Apparel & Accessory Stores                       | 5                               | 71%                        | 16                        | 84%                        | \$1.3                                       | 86.7%                      |
| 57                     | Home Furniture, Furnishings & Equipment          | 5                               | 31%                        | 9                         | 8%                         | \$1.5                                       | 7.4%                       |
| 58                     | Eating & Drinking Places                         | 18                              | 72%                        | 414                       | 84%                        | \$19.9                                      | 84.0%                      |
| 59                     | Miscellaneous Retail                             | 22                              | 79%                        | 154                       | 92%                        | \$16.6                                      | 90.7%                      |
| 60                     | Depository Institutions                          | 7                               | 70%                        | 30                        | 61%                        | \$8.2                                       | 60.3%                      |
| 61                     | NonDepository Credit Institutions                | 5                               | 83%                        | 38                        | 83%                        | \$12.0                                      | 82.8%                      |
| 62                     | Security & Commodity Brokers & Service           | 8                               | 89%                        | 318                       | 99%                        | \$51.8                                      | 99.0%                      |
| 63                     | Insurance Carriers                               | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 64                     | Insurance Agents, Brokers and Service            | 5                               | 83%                        | 16                        | 84%                        | \$3.8                                       | 84.4%                      |
| 65                     | Real Estate                                      | 16                              | 48%                        | 130                       | 47%                        | \$17.5                                      | 45.1%                      |
| 67                     | Holding & Other Investment Offices               | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 70                     | Hotels & Other Lodging Places                    | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 72                     | Personal Services                                | 36                              | 80%                        | 110                       | 87%                        | \$4.9                                       | 84.5%                      |
| 73                     | Business Services                                | 12                              | 38%                        | 46                        | 38%                        | \$4.8                                       | 31.6%                      |
| 75                     | Automobile Repair, Services & Parking            | 21                              | 81%                        | 57                        | 75%                        | \$3.6                                       | 76.6%                      |
| 76                     | Miscellaneous Repair Services                    | 3                               | 30%                        | 5                         | 15%                        | \$0.5                                       | 11.4%                      |
| 78                     | Motion Pictures                                  | 1                               | 100%                       | 2                         | 100%                       | \$0.5                                       | 100.0%                     |
| 79                     | Amusement & Recreational Service (Ex. Movies)    | 13                              | 59%                        | 47                        | 62%                        | \$3.1                                       | 59.6%                      |
| 80                     | Health Services                                  | 13                              | 68%                        | 75                        | 35%                        | \$7.4                                       | 52.9%                      |
| 81                     | Legal Services                                   | 19                              | 100%                       | 57                        | 100%                       | \$10.6                                      | 100.0%                     |
| 82                     | Educational Services                             | 3                               | 21%                        | 3                         | 1%                         | \$0.5                                       | 1.2%                       |
| 83                     | Social Services                                  | 7                               | 44%                        | 95                        | 56%                        | \$4.8                                       | 62.3%                      |
| 84                     | Museums, Art Galleries, Zoos, Etc.               | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0.0%                       |
| 86                     | Membership Organizations                         | 1                               | 9%                         | 1                         | 0%                         | \$0.1                                       | 2.0%                       |
| 87                     | Eng, Acct, Research & Mgmt Related Services      | 15                              | 42%                        | 56                        | 43%                        | \$3.9                                       | 26.4%                      |
| 89                     | Miscellaneous Services                           | 2                               | 67%                        | 102                       | 98%                        | \$5.1                                       | 98.1%                      |
| 91                     | Exec., Leg. & General Govt. (Except Finance)     | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0%                         |
| 92                     | Justice, Public Order & Safety                   | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0%                         |
| 93                     | Public Finance, Taxation & Monetary Policy       | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0%                         |
| 94                     | Administration of Human Resource Programs        | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0%                         |
| 95                     | Admin. of Environ. Quality & Housing Programs    | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0%                         |
| 96                     | Administration of Economic Programs              | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0%                         |
| 97                     | National Security & International Affairs        | 0                               | 0%                         | 0                         | 0%                         | \$0.0                                       | 0%                         |
| 99                     | NonClassifiable Establishments                   | 10                              | 45%                        | 31                        | 52%                        | \$0.0                                       | 0%                         |

Source: Nielson Claritas SiteReports 2010 and FXM Associates



## North Reading Local Region

### Population & Households

|   | Andover          | Lynnfield        | Middleton        | No Andover       | No Reading       | Reading          | Wilmington       |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| <b>Population</b>                                   |                  |                  |                  |                  |                  |                  |                  |
| 2015 Projection                                     | 33,092           | 11,159           | 10,540           | 29,115           | 18,786           | 22,142           | 21,795           |
| 2010 Estimate                                       | 32,658           | 11,340           | 9,600            | 28,650           | 17,345           | 22,507           | 21,688           |
| 2000 Census   | 31,241           | 11,587           | 7,358            | 27,241           | 13,890           | 23,117           | 21,318           |
| 1990 Census   | 29,148           | 11,324           | 4,746            | 22,809           | 12,043           | 21,960           | 17,619           |
| <i>Projected Growth 2010-2015</i>                   | 1.33%            | -1.60%           | 9.79%            | 1.62%            | 8.3%             | -1.62%           | 0.49%            |
| <i>Estimated Growth 2000-2010</i>                   | 4.54%            | -2.13%           | 30.47%           | 5.17%            | 24.9%            | -2.64%           | 1.74%            |
| Growth 1990 - 2000                                  | 7.18%            | 2.32%            | 55.04%           | 19.43%           | 15.3%            | 5.27%            | 20.99%           |
| <b>Households</b>                                   |                  |                  |                  |                  |                  |                  |                  |
| 2015 Projection                                     | 12,051           | 4,097            | 3,121            | 10,312           | 6,613            | 8,208            | 7,333            |
| 2010 Estimate                                       | 11,867           | 4,145            | 2,865            | 10,173           | 6,083            | 8,316            | 7,249            |
| 2000 Census   | 11,304           | 4,201            | 2,219            | 9,738            | 4,814            | 8,481            | 7,010            |
| 1990 Census   | 10,415           | 3,931            | 1,753            | 7,898            | 4,078            | 7,735            | 5,541            |
| <i>Projected Growth 2009-2015</i>                   | 1.55%            | -1.16%           | 8.94%            | 1.37%            | 8.71%            | -1.30%           | 1.16%            |
| <i>Estimated Growth 2000-2010</i>                   | 4.98%            | -1.33%           | 29.11%           | 4.47%            | 26.36%           | -1.95%           | 3.41%            |
| Growth 1990 - 2000                                  | 8.54%            | 6.87%            | 26.58%           | 23.30%           | 18.05%           | 9.64%            | 26.51%           |
| <b>2010 Est. Household Size</b>                     | <b>2.72</b>      | <b>2.73</b>      | <b>2.85</b>      | <b>2.61</b>      | <b>2.83</b>      | <b>2.69</b>      | <b>2.96</b>      |
| <b>2010 Est. Households Income</b>                  | <b>11,867</b>    | <b>4,145</b>     | <b>2,865</b>     | <b>10,173</b>    | <b>6,083</b>     | <b>8,316</b>     | <b>7,249</b>     |
| Income Less than \$15,000                           | 835              | 166              | 168              | 659              | 170              | 366              | 291              |
| Income \$15,000 - \$24,999                          | 506              | 144              | 159              | 671              | 201              | 477              | 308              |
| Income \$25,000 - \$34,999                          | 511              | 223              | 96               | 626              | 337              | 394              | 276              |
| Income \$35,000 - \$49,999                          | 752              | 299              | 207              | 851              | 477              | 626              | 569              |
| Income \$50,000 - \$74,999                          | 1,627            | 552              | 375              | 1,537            | 957              | 993              | 1,285            |
| Income \$75,000 - \$99,999                          | 1,301            | 635              | 332              | 1,172            | 902              | 1,203            | 1,355            |
| Income \$100,000 - \$124,999                        | 1,406            | 522              | 382              | 1,142            | 939              | 1,079            | 1,289            |
| Income \$125,000 - \$149,999                        | 976              | 386              | 331              | 894              | 613              | 934              | 827              |
| Income \$150,000 - \$199,999                        | 1,457            | 459              | 403              | 1,159            | 745              | 1,177            | 667              |
| Income \$200,000 - \$499,999                        | 2,023            | 619              | 347              | 1,170            | 640              | 908              | 330              |
| Income \$500,000 and more                           | 473              | 140              | 65               | 292              | 102              | 159              | 52               |
| Household Income Less than \$25,000                 | 1,341            | 310              | 327              | 1,330            | 371              | 843              | 599              |
| Household income more than \$150,000                | 3,953            | 1,218            | 815              | 2,621            | 1,487            | 2,244            | 1,049            |
| <b>2010 Est. Average Household Income</b>           | <b>\$141,694</b> | <b>\$136,384</b> | <b>\$127,599</b> | <b>\$120,925</b> | <b>\$121,773</b> | <b>\$123,880</b> | <b>\$102,405</b> |
| <b>2010 Est. Median Household Income</b>            | <b>\$107,143</b> | <b>\$102,581</b> | <b>\$106,266</b> | <b>\$90,835</b>  | <b>\$99,917</b>  | <b>\$102,303</b> | <b>\$91,519</b>  |
| <b>2010 Est. Per Capita Income</b>                  | <b>\$51,581</b>  | <b>\$49,978</b>  | <b>\$39,076</b>  | <b>\$43,487</b>  | <b>\$42,769</b>  | <b>\$45,896</b>  | <b>\$34,522</b>  |
| <b>Family Households</b>                            |                  |                  |                  |                  |                  |                  |                  |
| 2015 Projection                                     | 9,070            | 3,281            | 2,363            | 7,404            | 5,147            | 6,052            | 6,013            |
| 2010 Estimate                                       | 8,919            | 3,320            | 2,171            | 7,282            | 4,737            | 6,133            | 5,945            |
| 2000 Census   | 8,488            | 3,363            | 1,686            | 6,915            | 3,770            | 6,265            | 5,765            |
| 1990 Census   | 7,993            | 3,246            | 1,320            | 5,826            | 3,288            | 5,955            | 4,742            |
| <b>2010 Est. Family Household by Poverty Status</b> |                  |                  |                  |                  |                  |                  |                  |
| Families Below Poverty Level                        | 247              | 44               | 40               | 177              | 48               | 143              | 137              |

Source: Nielson Claritas SiteReports 2010 and FXM Associates

## North Reading Local Region

### Education & Occupation

|   | Andover       | Lynnfield    | Middleton    | No Andover    | No Reading    | Reading       | Wilmington    |
|---|---------------|--------------|--------------|---------------|---------------|---------------|---------------|
| <b>2010 Est. Pop. Age 25+ by Educational Attainment</b> | 21,455        | 7,803        | 6,136        | 18,022        | 11,208        | 14,903        | 14,074        |
| Less than 9th grade                                     | 313           | 132          | 195          | 324           | 254           | 186           | 229           |
| Some High School, no diploma                            | 320           | 166          | 691          | 498           | 341           | 374           | 495           |
| High School Graduate (or GED)                           | 2,444         | 1,435        | 1,588        | 3,095         | 2,774         | 3,053         | 4,453         |
| Some College, no degree                                 | 2,452         | 1,221        | 988          | 2,712         | 1,787         | 2,132         | 2,478         |
| Associate Degree  | 1,218         | 521          | 479          | 1,166         | 853           | 1,112         | 1,250         |
| Bachelor's Degree                                       | 7,422         | 2,401        | 1,291        | 5,870         | 3,397         | 4,474         | 3,517         |
| Master's Degree   | 4,915         | 1,278        | 631          | 3,300         | 1,452         | 2,673         | 1,237         |
| Professional School Degree                              | 1,254         | 416          | 218          | 561           | 226           | 449           | 223           |
| Doctorate Degree  | 1,117         | 233          | 55           | 496           | 124           | 450           | 192           |
| <b>High School or above</b>                             | <b>20,822</b> | <b>7,505</b> | <b>5,250</b> | <b>17,200</b> | <b>10,613</b> | <b>14,343</b> | <b>13,350</b> |
| <b>Bachelor's or above</b>                              | <b>14,708</b> | <b>4,328</b> | <b>2,195</b> | <b>10,227</b> | <b>5,199</b>  | <b>8,046</b>  | <b>5,169</b>  |
| <b>2010 Est. Population 16+ by Employment Status</b>    | 25,604        | 9,082        | 7,694        | 22,531        | 13,319        | 17,515        | 16,567        |
| In Armed Forces   | 14            | 0            | 0            | 1             | 0             | 3             | 7             |
| Civilian - Employed                                     | 17,201        | 5,718        | 4,428        | 14,766        | 9,558         | 12,138        | 11,877        |
| Civilian - Unemployed                                   | 549           | 248          | 133          | 465           | 129           | 319           | 263           |
| Not in Labor Force                                      | 7,840         | 3,116        | 3,133        | 7,299         | 3,632         | 5,055         | 4,420         |
| <b>2010 Est. Civ. Employed Pop. 16+ by Class</b>        | 16,685        | 5,525        | 4,338        | 14,299        | 9,603         | 12,114        | 11,887        |
| For-profit Private Workers                              | 11,882        | 3,814        | 3,197        | 10,429        | 6,700         | 8,249         | 8,630         |
| Non-Profit Private Workers                              | 1,679         | 495          | 316          | 1,244         | 942           | 1,375         | 980           |
| Local Government Workers                                | 1,015         | 449          | 242          | 1,037         | 776           | 1,083         | 903           |
| State Government Workers                                | 384           | 168          | 140          | 311           | 340           | 264           | 319           |
| Federal Government Workers                              | 314           | 39           | 57           | 202           | 158           | 192           | 354           |
| Self-Employed Workers                                   | 1,388         | 555          | 376          | 1,067         | 679           | 948           | 689           |
| Unpaid Family Workers                                   | 23            | 5            | 10           | 9             | 8             | 3             | 12            |
| <b>2010 Est. Civ Employed Pop 16+ by Occupation</b>     | 16,685        | 5,525        | 4,338        | 14,299        | 9,603         | 12,114        | 11,887        |
| Architect/Engineer                                      | 809           | 173          | 144          | 572           | 315           | 354           | 453           |
| Arts/Entertain/Sports                                   | 574           | 101          | 38           | 284           | 131           | 313           | 179           |
| Building Grounds Maint                                  | 198           | 83           | 119          | 267           | 125           | 201           | 297           |
| Business/Financial Ops                                  | 989           | 363          | 171          | 1,167         | 796           | 894           | 759           |
| Community/Soc Svcs                                      | 236           | 69           | 23           | 279           | 142           | 154           | 90            |
| Computer/Mathematical                                   | 1,041         | 220          | 117          | 623           | 337           | 616           | 592           |
| Construction/Extraction                                 | 397           | 198          | 382          | 401           | 397           | 526           | 640           |
| Edu/Training/Library                                    | 1,376         | 388          | 258          | 1,033         | 570           | 884           | 793           |
| Farm/Fish/Forestry                                      | 1             | 1            | 0            | 28            | 26            | 4             | 7             |
| Food Prep/Serving                                       | 348           | 178          | 185          | 526           | 356           | 325           | 436           |
| Health Practitioner/Tec                                 | 1,282         | 387          | 249          | 752           | 741           | 951           | 753           |
| Healthcare Support                                      | 111           | 81           | 28           | 265           | 147           | 157           | 231           |
| Maintenance Repair                                      | 153           | 82           | 84           | 221           | 385           | 197           | 414           |
| Legal   | 481           | 163          | 52           | 220           | 126           | 217           | 106           |
| Life/Phys/Soc Science                                   | 612           | 50           | 36           | 245           | 108           | 382           | 101           |
| Management  | 3,383         | 1,081        | 763          | 2,432         | 1,546         | 1,798         | 1,391         |
| Office/Admin Support                                    | 1,434         | 493          | 556          | 1,836         | 1,233         | 1,581         | 1,927         |
| Production  | 218           | 139          | 122          | 379           | 311           | 296           | 442           |
| Protective Svcs   | 153           | 93           | 49           | 215           | 186           | 298           | 279           |
| Sales/Related   | 2,069         | 922          | 653          | 1,830         | 1,008         | 1,388         | 1,310         |
| Personal Care/Svc                                       | 418           | 178          | 158          | 438           | 269           | 278           | 249           |
| Transportation/Moving                                   | 402           | 82           | 151          | 286           | 348           | 300           | 438           |
| <b>2010 Est. Pop 16+ by Occupation Classification</b>   | 16,685        | 5,525        | 4,338        | 14,299        | 9,603         | 12,114        | 11,887        |
| Blue Collar   | 1,170         | 501          | 739          | 1,287         | 1,441         | 1,319         | 1,934         |
| White Collar  | 14,286        | 4,410        | 3,060        | 11,273        | 7,053         | 9,532         | 8,454         |
| Service and Farm  | 1,229         | 614          | 539          | 1,739         | 1,109         | 1,263         | 1,499         |
| <b>2010 Average Travel Time to Work (Minutes)</b>       | 31            | 29           | 30           | 30            | 32            | 29            | 30            |

Source: Nielson Claritas SiteReports 2010 and FXM Associates

**North Reading Local Region**
**Housing & Occupancy**

|  | Andover          | Lynnfield        | Middleton        | No Andover       | No Reading       | Reading          | Wilmington       |
|--|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| <b>2010 Est. All Owner-Occupied Housing Values</b>       | 9,543            | 3,934            | 2,497            | 7,668            | 5,586            | 7,020            | 6,630            |
| Value Less than \$20,000                                 | 0                | 6                | 0                | 18               | 11               | 8                | 0                |
| Value \$20,000 - \$39,999                                | 20               | 0                | 11               | 24               | 17               | 5                | 4                |
| Value \$40,000 - \$59,999                                | 36               | 0                | 8                | 3                | 20               | 7                | 18               |
| Value \$60,000 - \$79,999                                | 32               | 0                | 7                | 7                | 5                | 0                | 6                |
| Value \$80,000 - \$99,999                                | 36               | 0                | 0                | 56               | 28               | 0                | 10               |
| Value \$100,000 - \$149,999                              | 83               | 12               | 14               | 340              | 186              | 52               | 52               |
| Value \$150,000 - \$199,999                              | 351              | 110              | 34               | 408              | 169              | 181              | 295              |
| Value \$200,000 - \$299,999                              | 707              | 226              | 430              | 1,141            | 958              | 893              | 1,808            |
| Value \$300,000 - \$399,999                              | 1,281            | 536              | 529              | 1,462            | 1,289            | 2,205            | 2,385            |
| Value \$400,000 - \$499,999                              | 1,813            | 927              | 435              | 1,208            | 1,113            | 1,659            | 1,129            |
| Value \$500,000 - \$749,999                              | 3,394            | 1,355            | 671              | 2,244            | 1,375            | 1,754            | 854              |
| Value \$750,000 - \$999,999                              | 1,147            | 521              | 257              | 565              | 313              | 210              | 40               |
| Value \$1,000,000 or more                                | 643              | 241              | 101              | 192              | 102              | 46               | 29               |
| <b>2010 Est. Median All Owner-Occupied Housing Value</b> | <b>\$530,412</b> | <b>\$527,747</b> | <b>\$449,541</b> | <b>\$431,059</b> | <b>\$409,919</b> | <b>\$409,608</b> | <b>\$347,045</b> |
| <b>2010 Est. Housing Units by Units in Structure</b>     | 12,266           | 4,259            | 2,933            | 10,471           | 6,219            | 8,501            | 7,444            |
| 1 Unit Attached  | 285              | 132              | 314              | 821              | 272              | 319              | 375              |
| 1 Unit Detached  | 8,804            | 3,657            | 2,062            | 5,850            | 5,110            | 6,307            | 6,552            |
| 2 Units  | 529              | 45               | 116              | 920              | 41               | 489              | 117              |
| 3 or 4 Units   | 423              | 112              | 92               | 517              | 106              | 217              | 58               |
| 5 to 19 Units  | 1,102            | 302              | 148              | 1,679            | 153              | 565              | 230              |
| 20 to 49 Units   | 335              | 1                | 1                | 158              | 435              | 239              | 74               |
| 50 or More Units   | 750              | 10               | 178              | 517              | 47               | 356              | 31               |
| Mobile Home or Trailer                                   | 38               | 0                | 22               | 6                | 55               | 8                | 7                |
| Boat, RV, Van, etc.                                      | 0                | 0                | 0                | 3                | 0                | 1                | 0                |
| <b>2010 Est. Tenure of Occupied Housing Units</b>        | 11,867           | 4,145            | 2,865            | 10,173           | 6,083            | 8,316            | 7,249            |
| Owner Occupied   | 9,543            | 3,934            | 2,497            | 7,668            | 5,586            | 7,020            | 6,630            |
| Renter Occupied  | 2,324            | 211              | 368              | 2,505            | 497              | 1,296            | 619              |
| <b>2010 Owner Occupant Avg. Length of Residence</b>      | 18               | 23               | 14               | 16               | 19               | 21               | 22               |
| <b>2010 Renter Occupant Avg. Length of Residence</b>     | 7                | 12               | 7                | 8                | 9                | 9                | 7                |

Source: Nielson Claritas *SiteReports* 2010 and FXM Associates

**Town of North Reading  
Businesses, Employment and Annual Sales Summary**

| Categories of Businesses                                       | Number of<br>Businesses | Share of<br>Town | Number of<br>Jobs | Share of<br>Town | Business<br>Sales in<br>Million \$ | Share of<br>Town |
|--|-------------------------|------------------|-------------------|------------------|------------------------------------|------------------|
| <b>All Industries</b>  | <b>644</b>              | 100.0%           | <b>6,659</b>      | 100.0%           | <b>\$841.1</b>                     | 100.0%           |
| All Manufacturing (SIC 20-39)                                  | 22                      | 3.4%             | 214               | 3.2%             | \$16.6                             | 2.0%             |
| All Retailing (SIC 52-59)                                      | 115                     | 17.9%            | 1,436             | 21.6%            | \$166.8                            | 19.8%            |
| Public Administration (SIC 90-97)                              | 17                      | 2.6%             | 119               | 1.8%             | \$0.0                              | 0.0%             |
| <br>Agriculture (SIC 1-7)                                      | 15                      | 2.3%             | 52                | 0.8%             | \$2.2                              | 0.3%             |
| Construction (SIC 13-17)                                       | 91                      | 14.1%            | 916               | 13.8%            | \$160.5                            | 19.1%            |
| Manufacturing (SIC 20-39)                                      | 22                      | 3.4%             | 214               | 3.2%             | \$16.6                             | 2.0%             |
| Transportation, Communication,<br>Public Utilities (SIC 41-49) | 20                      | 3.1%             | 292               | 4.4%             | \$30.7                             | 3.6%             |
| Wholesale Trade (50-51)  | 39                      | 6.1%             | 1,189             | 17.9%            | \$205.4                            | 24.4%            |
| Retail Trade (SIC 52-59)                                       | 115                     | 17.9%            | 1,436             | 21.6%            | \$166.8                            | 19.8%            |
| Finance, Insurance, Real Estate<br>(SIC60-67)                  | 64                      | 9.9%             | 710               | 10.7%            | \$123.7                            | 14.7%            |
| Services (SIC 70-89)   | 254                     | 39.4%            | 1,671             | 25.1%            | \$135.2                            | 16.1%            |
| Government (SIC 91-99)   | 39                      | 6.1%             | 179               | 2.7%             | 0                                  | 0.0%             |

Source: FXM Associates and *Claritas SiteReports* 2010

**Concord Street Study Area and Town of North Reading  
Businesses, Employment and Annual Sales Summary**

| Categories of Businesses                                       | Number of<br>Businesses | Share of<br>Town | Number of<br>Jobs | Share of<br>Town | Business<br>Sales in<br>Million \$ | Share of<br>Town |
|--|-------------------------|------------------|-------------------|------------------|------------------------------------|------------------|
| <b>All Industries</b>  | <b>41</b>               | 6.4%             | <b>2,106</b>      | 31.6%            | <b>\$331.6</b>                     | 39.4%            |
| All Manufacturing (SIC 20-39)                                  | 5                       | 22.7%            | 64                | 29.9%            | \$6.9                              | 41.6%            |
| All Retailing (SIC 52-59)                                      | 9                       | 7.8%             | 126               | 8.8%             | \$17.3                             | 10.4%            |
| Public Administration (SIC 90-97)                              | 0                       | 0.0%             | 0                 | 0.0%             | \$0.0                              | 0.0%             |
| Agriculture (SIC 1-7)  | 1                       | 6.7%             | 15                | 28.8%            | \$0.6                              | 27.3%            |
| Construction (SIC 13-17)                                       | 8                       | 8.8%             | 476               | 52.0%            | \$86.7                             | 54.0%            |
| Manufacturing (SIC 20-39)                                      | 5                       | 22.7%            | 64                | 29.9%            | \$6.9                              | 41.6%            |
| Transportation, Communication,<br>Public Utilities (SIC 41-49) | 5                       | 25.0%            | 240               | 82.2%            | \$25.1                             | 81.8%            |
| Wholesale Trade (50-51)  | 5                       | 12.8%            | 1,064             | 89.5%            | \$180.3                            | 87.8%            |
| Retail Trade (SIC 52-59)                                       | 9                       | 7.8%             | 126               | 8.8%             | \$17.3                             | 10.4%            |
| Finance, Insurance, Real Estate<br>(SIC 60-67)                 | 0                       | 0.0%             | 0                 | 0.0%             | \$0.0                              | 0.0%             |
| Services (SIC 70-89)   | 8                       | 3.1%             | 121               | 7.2%             | \$14.7                             | 10.9%            |
| Government (SIC 91-99)   | 0                       | 0.0%             | 0                 | 0.0%             | \$0.0                              | 0.0%             |

Source: FXM Associates and *Claritas SiteReports* 2010

**Main Street/Route 28 Study Area and Town of North Reading  
Businesses, Employment and Annual Sales Summary**

| Categories of Businesses                                       | Number of<br>Businesses | Share of<br>Town | Number of<br>Jobs | Share of<br>Town | Business<br>Sales in<br>Million \$ | Share of<br>Town |
|--|-------------------------|------------------|-------------------|------------------|------------------------------------|------------------|
| <b>All Industries</b>  | <b>326</b>              | <b>50.6%</b>     | <b>2,612</b>      | <b>39.2%</b>     | <b>\$310.8</b>                     | <b>37.0%</b>     |
| All Manufacturing (SIC 20-39)                                  | 9                       | 40.9%            | 27                | 12.6%            | \$2.1                              | 12.7%            |
| All Retailing (SIC 52-59)                                      | 73                      | 63.5%            | 1,057             | 73.6%            | \$120.0                            | 71.9%            |
| Public Administration (SIC 90-97)                              | 0                       | 0.0%             | 0                 | 0.0%             | \$0.0                              | 0                |
| Agriculture (SIC 1-7)  | 5                       | 33.3%            | 17                | 32.7%            | \$0.7                              | 31.8%            |
| Construction (SIC 13-17)                                       | 15                      | 16.5%            | 183               | 20.0%            | \$25.2                             | 15.7%            |
| Manufacturing (SIC 20-39)                                      | 9                       | 40.9%            | 27                | 12.6%            | \$2.1                              | 12.7%            |
| Transportation, Communication,<br>Public Utilities (SIC 41-49) | 7                       | 35.0%            | 30                | 10.3%            | \$4.0                              | 13.0%            |
| Wholesale Trade (50-51)  | 19                      | 48.7%            | 79                | 6.6%             | \$15.7                             | 7.6%             |
| Retail Trade (SIC 52-59)                                       | 73                      | 63.5%            | 1,057             | 73.6%            | \$120.0                            | 71.9%            |
| Finance, Insurance, Real Estate<br>(SIC60-67)                  | 41                      | 64.1%            | 532               | 74.9%            | \$93.3                             | 75.4%            |
| Services (SIC 70-89)   | 146                     | 57.5%            | 656               | 39.3%            | \$49.8                             | 36.8%            |
| Government (SIC 91-99)   | 10                      | 25.6%            | 31                | 17.3%            | \$0.0                              | 0                |

Source: FXM Associates and *Claritas SiteReports* 2010

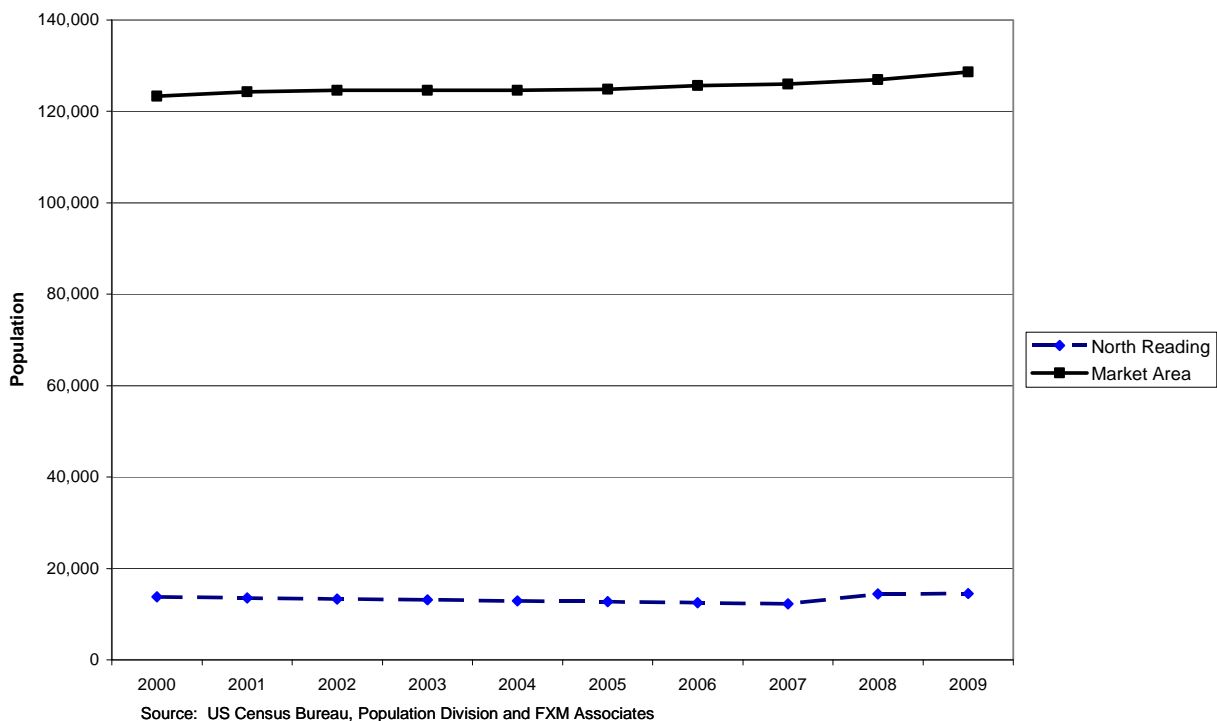


# North Reading Sewer Infrastructure Economic Impact Analysis

## Appendix I -- North Reading Population Trend

FXM analyzed population growth trends in North Reading and compared them to the market area identified for the town. This market area consisted of the following communities: Andover, Lynnfield, Middleton, North Andover, Reading, Wilmington, and North Reading itself. In 2009 North Reading contained 10.1% of the total market area population and accounted for 11.7% of the growth between 2000 and 2009.<sup>19</sup> The annual population estimates are shown in Figure A.

Figure A. Population: North Reading and Surrounding Communities

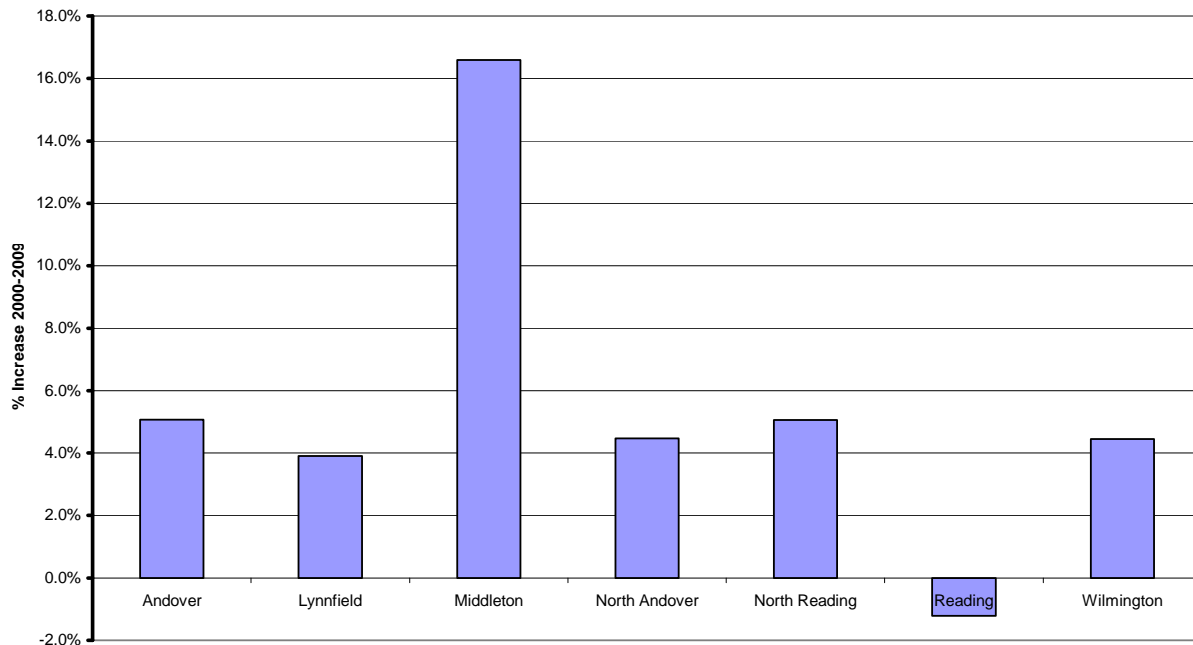


From 2000 to 2009 North Reading grew by 697 persons, a slightly higher rate than the average of the surrounding communities. The total increase was 5.1% for North Reading and 4.3% for the entire market area.

<sup>19</sup> Annual Estimates of the Resident Population for Minor Civil Divisions in Massachusetts, US Census Bureau, Population Division, September 2010.

However, Figure B, percent increase by community, shows that with the exceptions of Middleton and Reading, North Reading growth was typical of the other communities in the market area.

Figure B. 2000-2009 Percent Population Increase by Town



Source: US Census Bureau, Population Division and FXM Associates

### *North Reading and Market Area Employment Trends*

FXM analyzed historical growth in employment in North Reading and compared employment changes in North Reading to those of surrounding communities. The object of this analysis was to determine whether, and to what extent, changes in employment in North Reading might have differed from those in other communities currently served by sewer, and not served by sewer to commercial properties.

Figure C presents average monthly employment by community for 2001 to 2010. Overall North Reading employment grew by 1.5% compared to a loss of -12.2% for the market area as a whole.

Figure D shows the annual change in employment relative to 2001. This chart illustrates that North Reading had a net gain in jobs compared to all other communities which lost jobs in the decade, except for Lynnfield which lost jobs from 2001 to 2005 but rebounded from 2006 to 2010. Thus, North Reading has had but a slight increase in jobs, it did better than 5 of the other 6 communities in its market area. This is illustrated in Figure E.

Figure C. Average Monthly Employment by Town

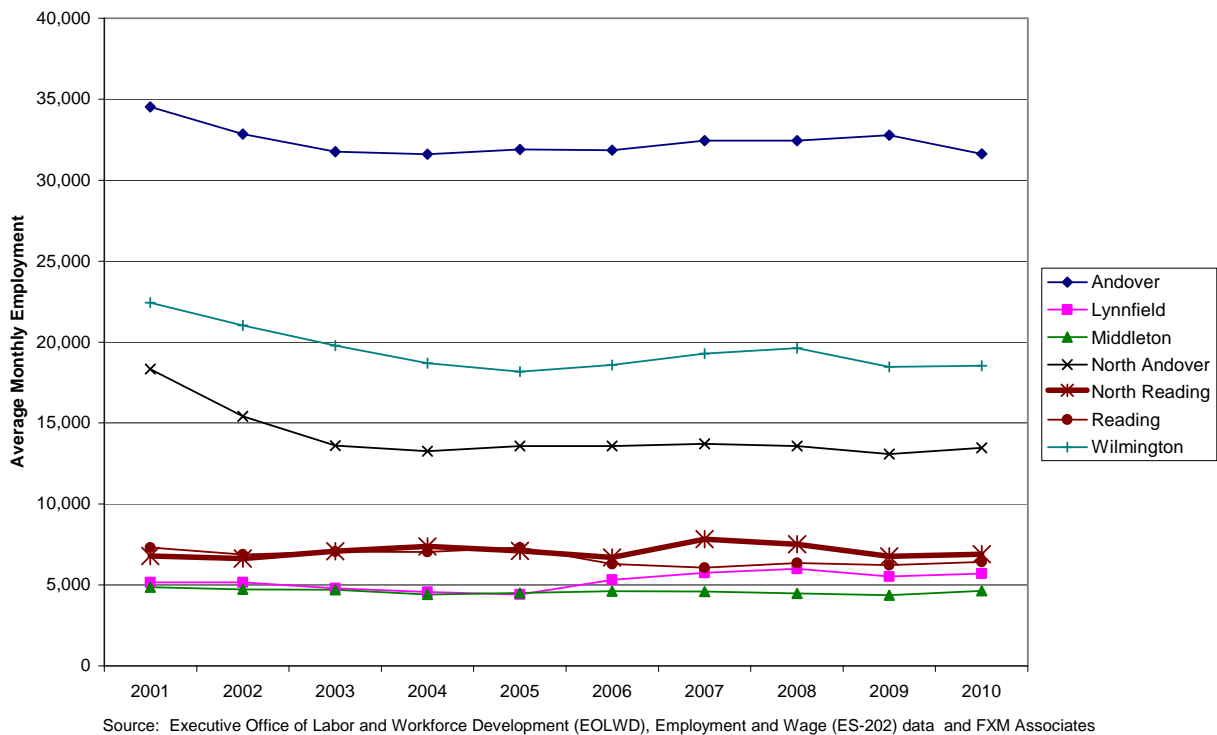


Figure D. Index of Average Monthly Employment by Town

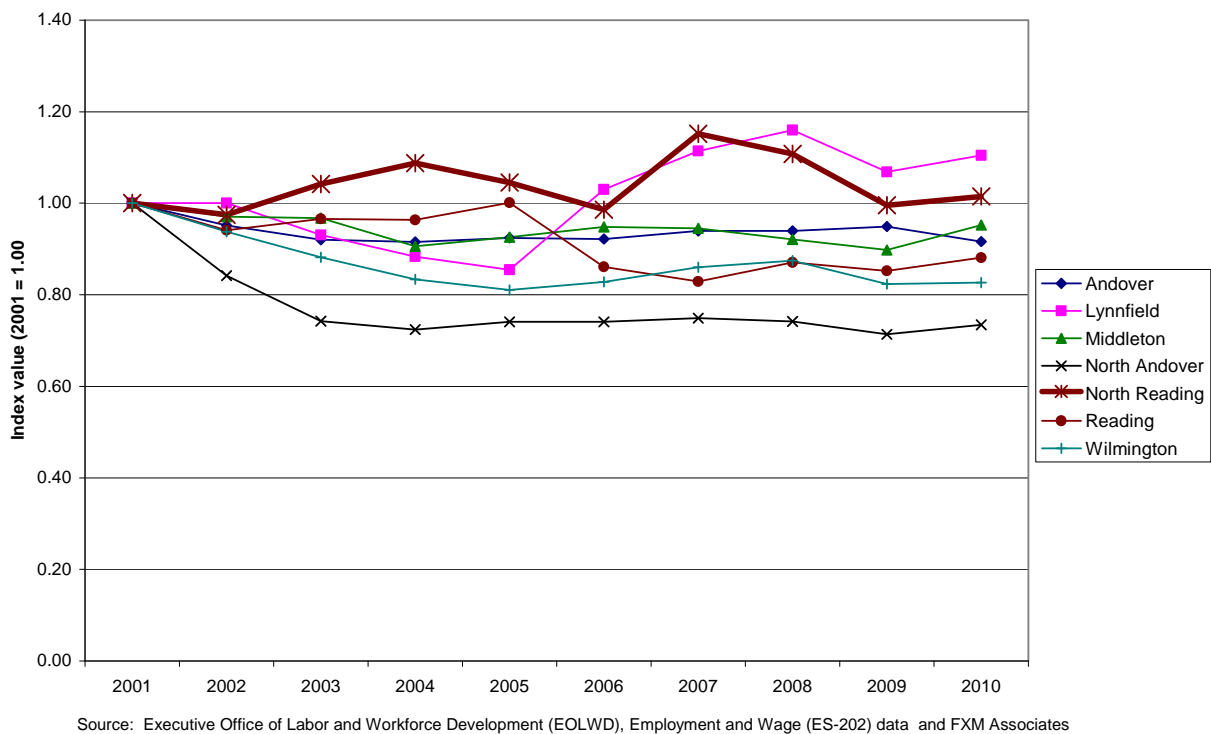
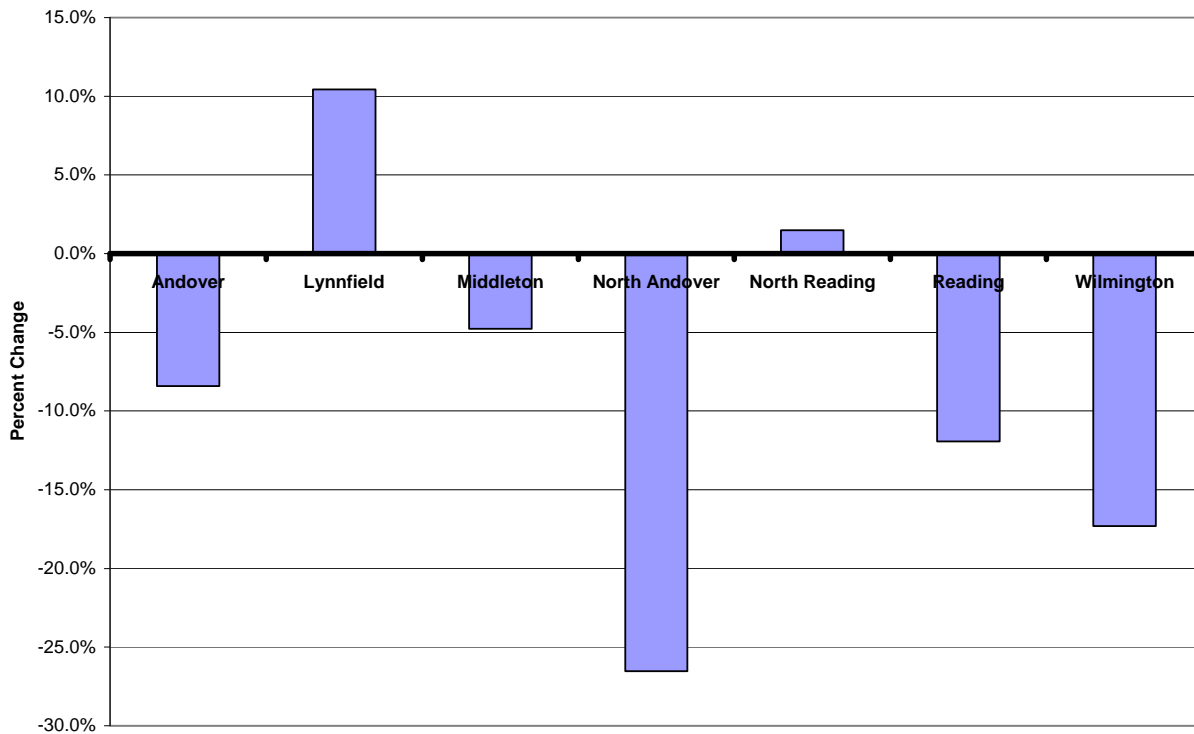


Figure E. Percent Change in Employment by Town, 2001-2010



Over the past 10 years, Transportation and Warehousing has been the largest growth sector in North Reading. Figure F shows average monthly employment by year in North Reading for 13 NAICS categories. Transportation and Warehousing increased by 128% from 2001 to 2010, while most other sectors showed marked declines. The biggest decline (-80%) was in Professional and Technical Services. North Reading's share of Transportation employment increased from 35.9% to 57.4% of market area Transportation; its share of Professional Services declined from 9.7% to 2.1% of the market area. FXM review of employment by town by NAICS category indicated that North Reading job growth was not significantly different from other market area communities.

Figure F. North Reading Average Monthly Employment by NAICS Category, 2001-2010

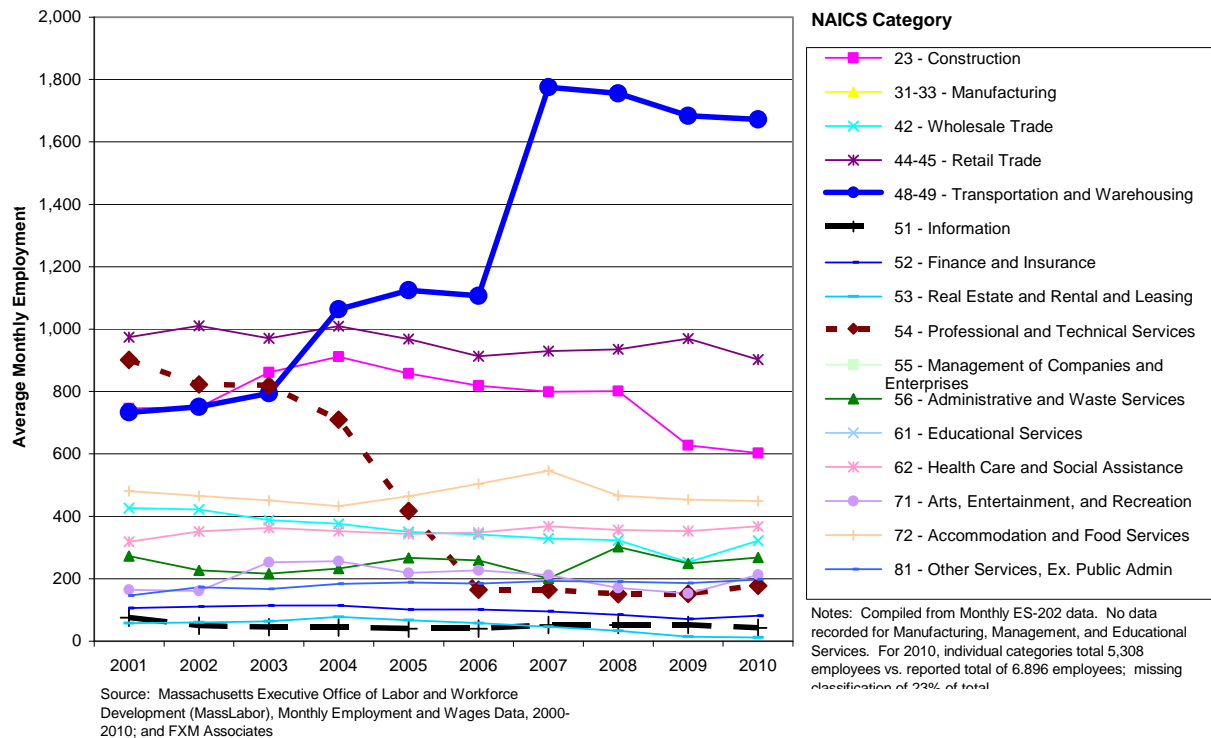
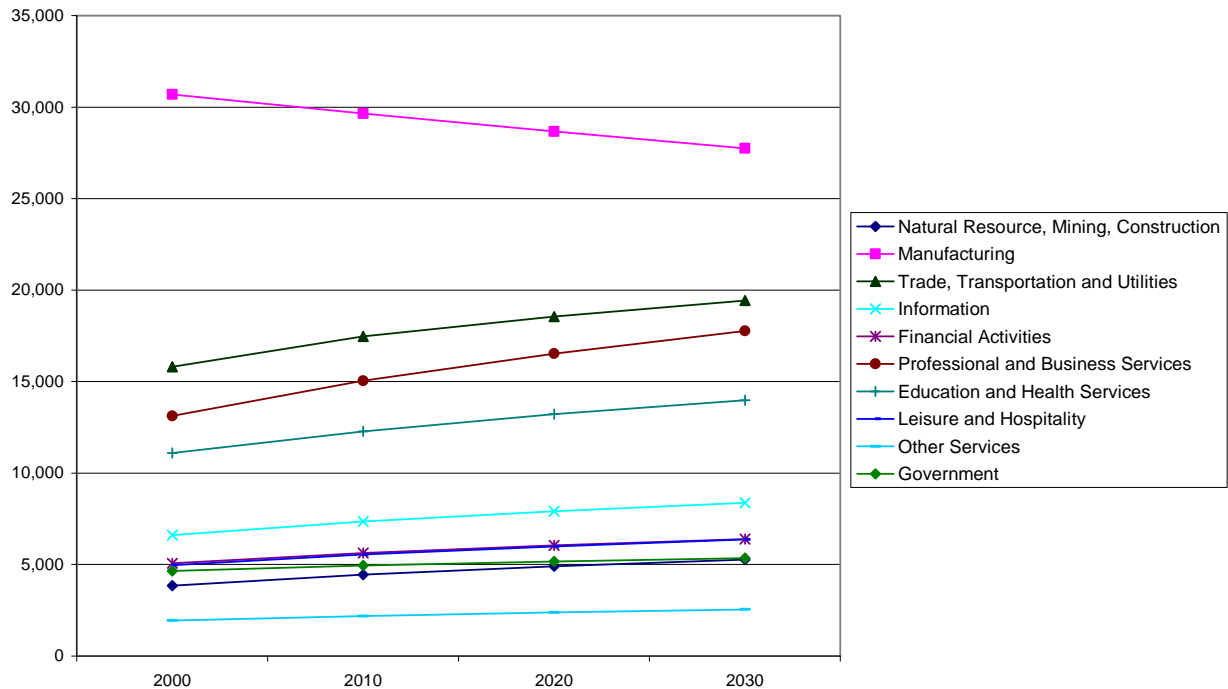


Figure G shows the expected employment trends in the North Reading region from 2000 to 2030 as projected by MAPC.<sup>20</sup> MAPC expects slow to moderate growth in most industrial sectors with the exception of Manufacturing, which declines by 9.6% over the 30-year period. Figure G. MAPC 2006 Employment Projections for North Reading Region, 2000-2030



Source: Employment Projections 2000-2030, Metropolitan Planning Council (January 2006) and FXM Associates.

Figure H illustrates the MAPC projected growth of employment in North Reading for 2000 to 2030 by industrial sector. MAPC projects the strongest growth will be in the Transportation, Trade and Utilities, and Professional Services sectors, 22% and 39% increases over 2000, respectively. However, although these increases are strong, Figure I indicates that North Reading will have less growth in the Trade, Transportation, and Utilities sector than other nearby communities according to MAPC. The relatively strong growth indicated for the Information sector (dark red line on Figure I) is probably significantly over stated because the increase in only from 72 (2000) to 94 (2030) jobs over the three decades.

<sup>20</sup> Source: Employment Projections 2000-2030, Metropolitan Planning Council (January 2006) and FXM Associates.



Figure H. MAPC Projected Employment for North Reading by NAICS Category, 2000-2030

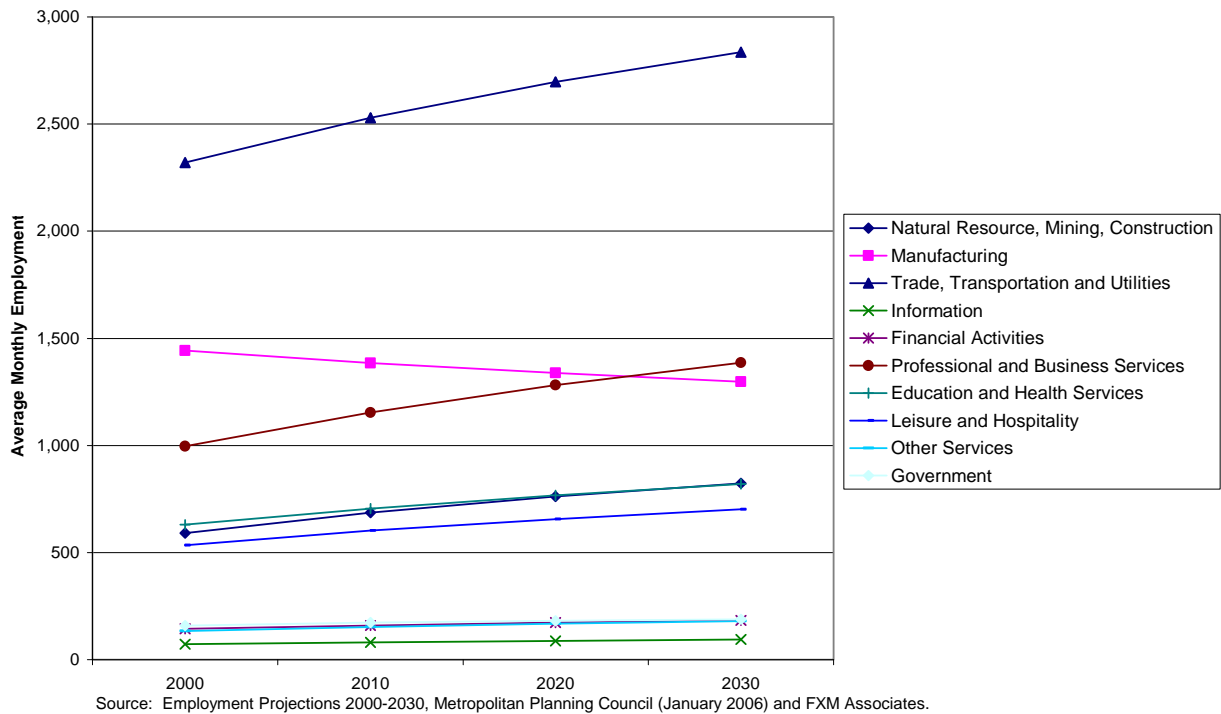
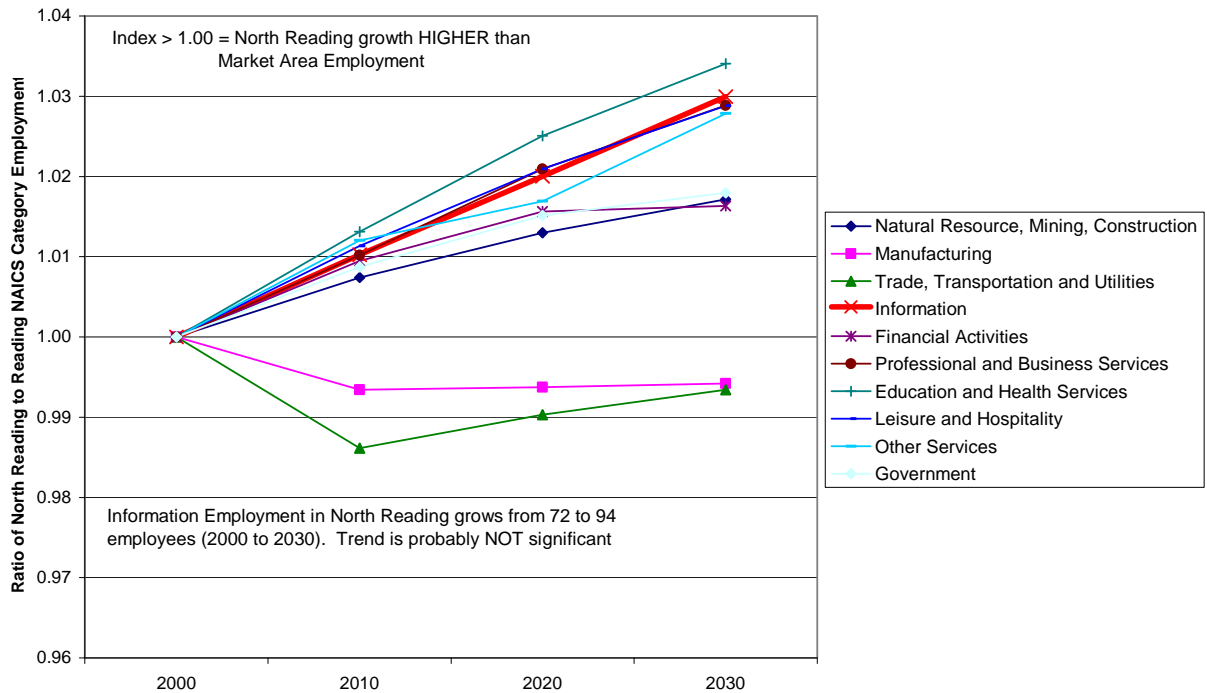


Figure I. Index of North Reading MAPC Projected Employment Growth Relative to Market Area



Source: Employment Projections 2000-2030, Metropolitan Planning Council (January 2006) and FXM Associates.

Figure J. Employment Growth Index of Sewered vs. Non-sewered Communities

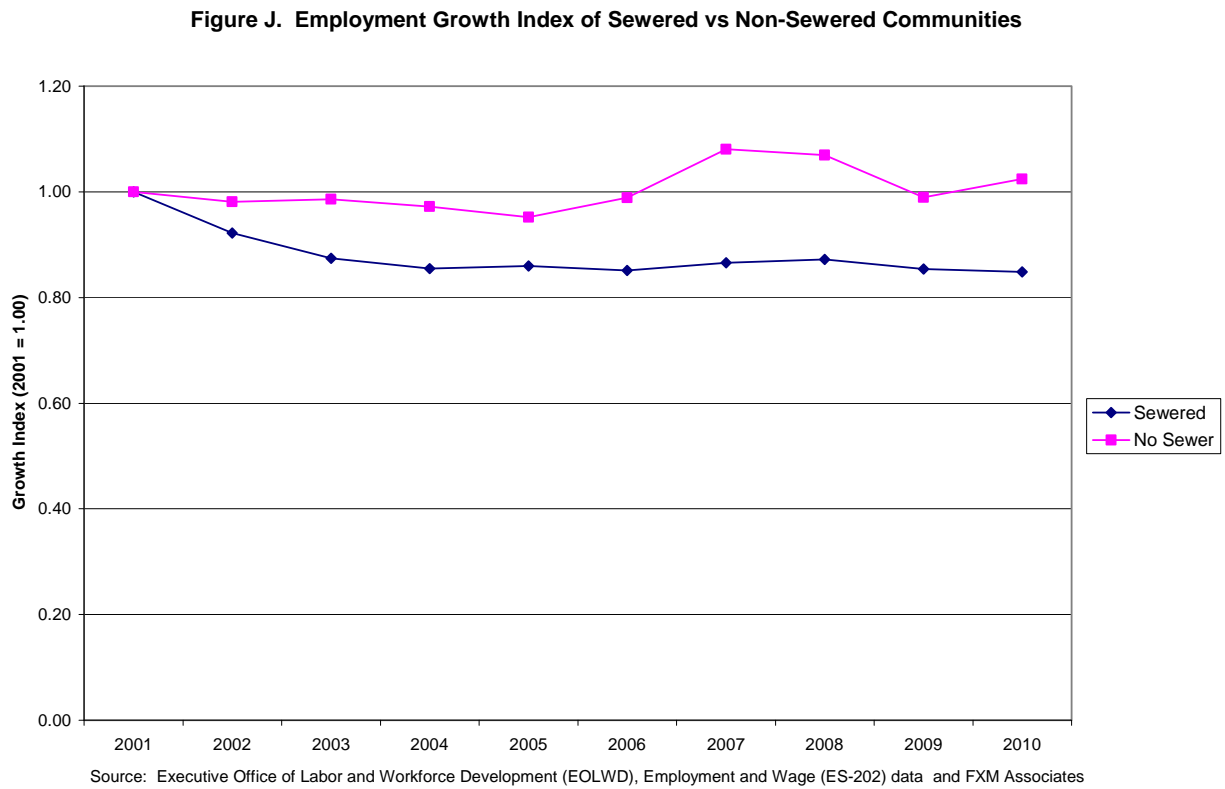
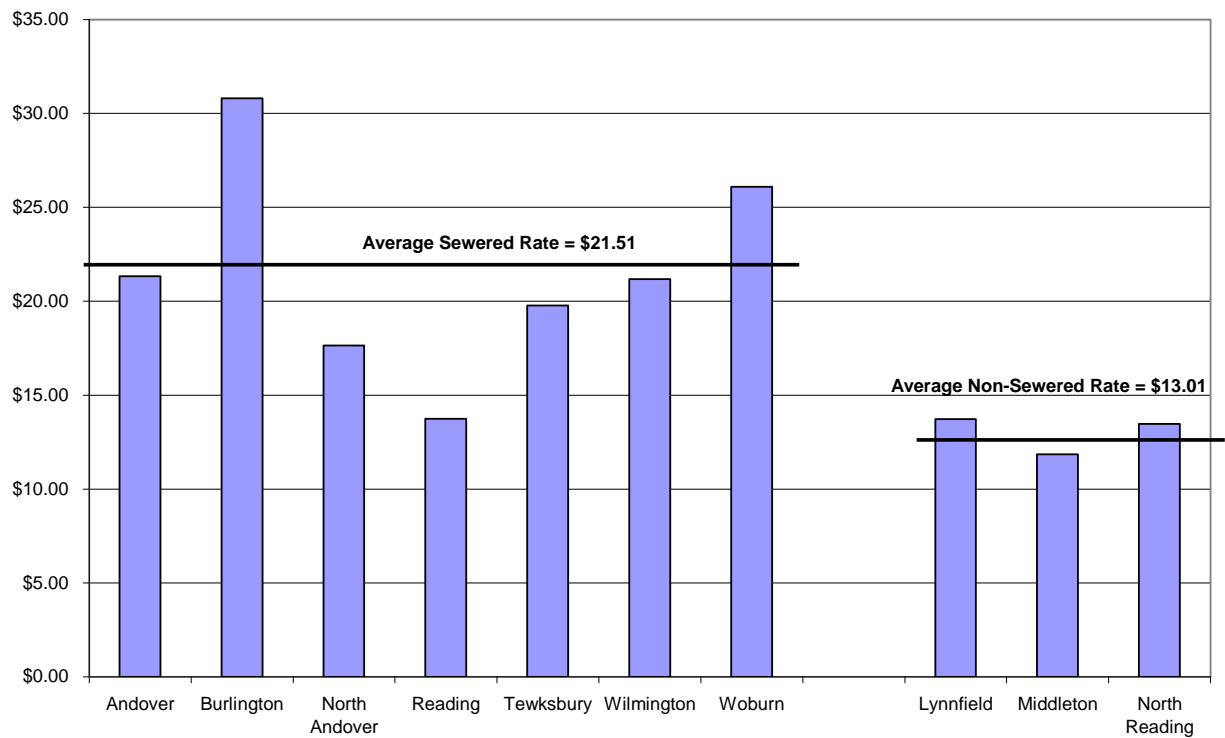


Figure K. Commercial Tax Rate by Community



## APPENDIX II – North Reading Market Area Employment 2001 – 2010

Figure A-1. Index of Accommodation and Food Services Employment by Town

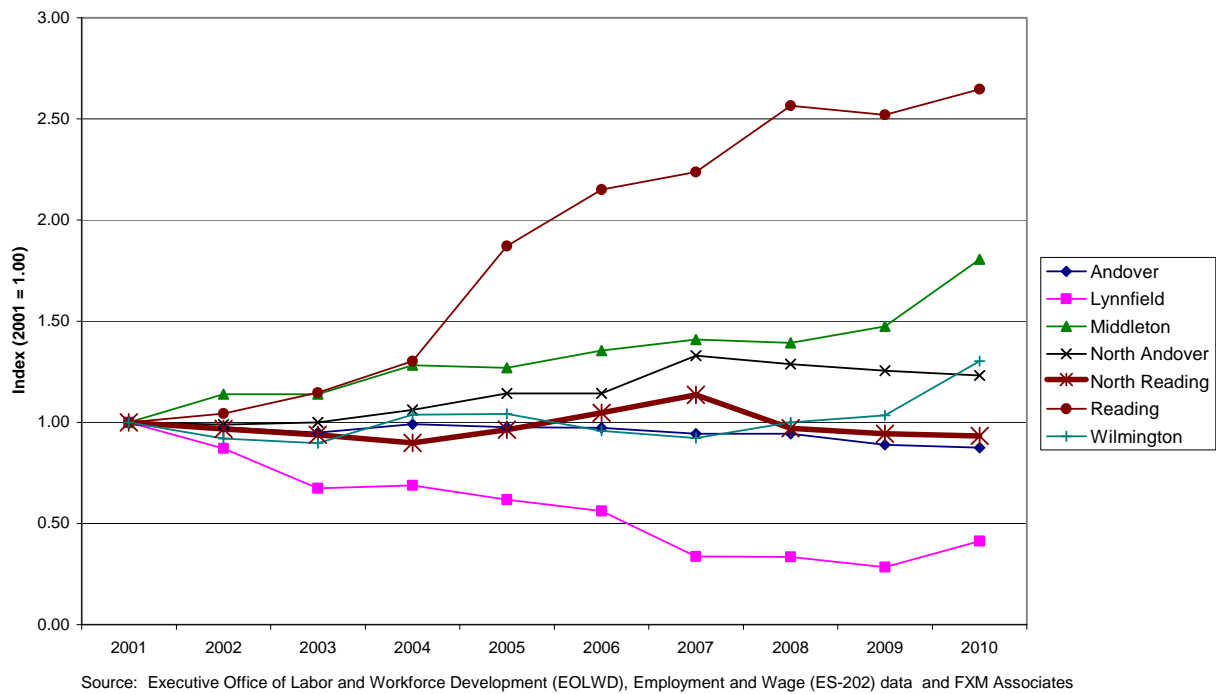
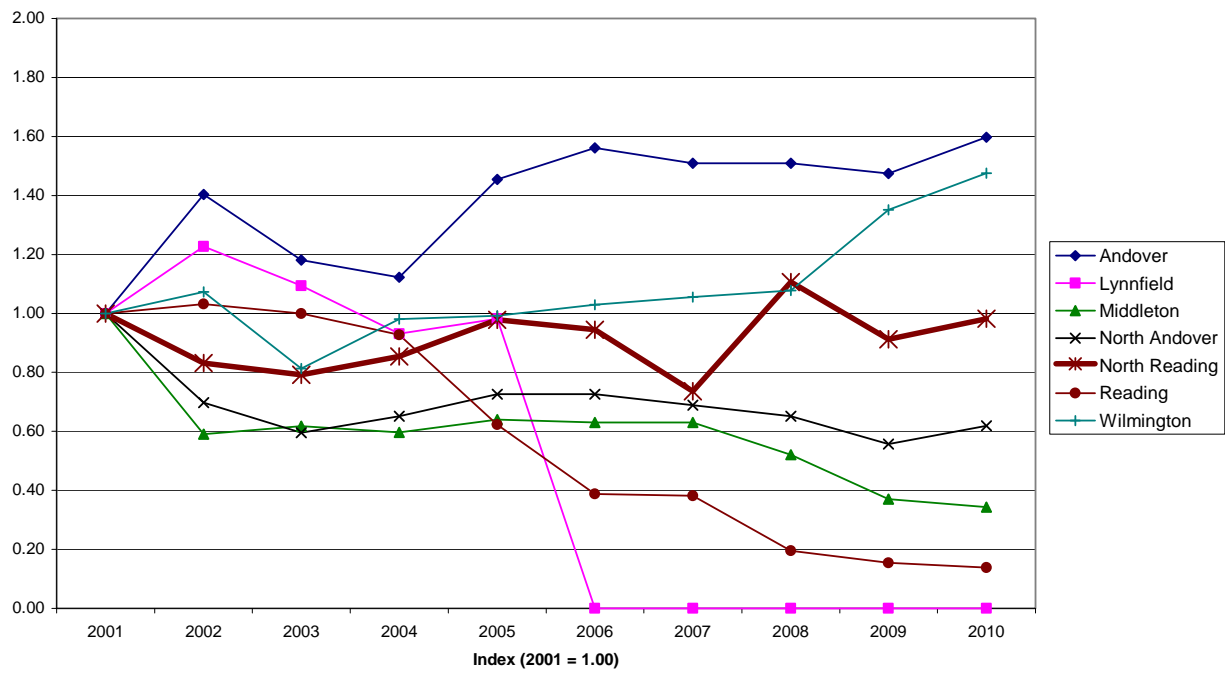


Figure A-2. Index of Administrative Services Employment by Town



Source: Executive Office of Labor and Workforce Development (EOLWD), Employment and Wage (ES-202) data and FXM Associates

Figure A-3. Arts, Entertainment Monthly Employment by Town

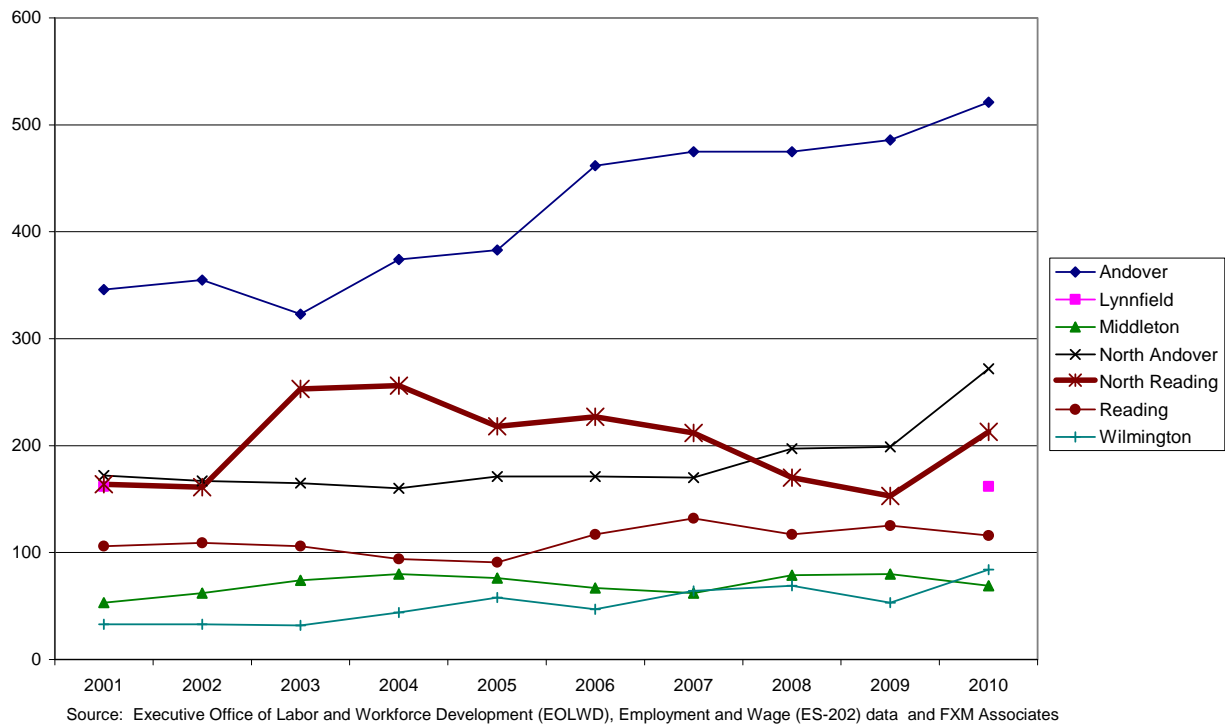
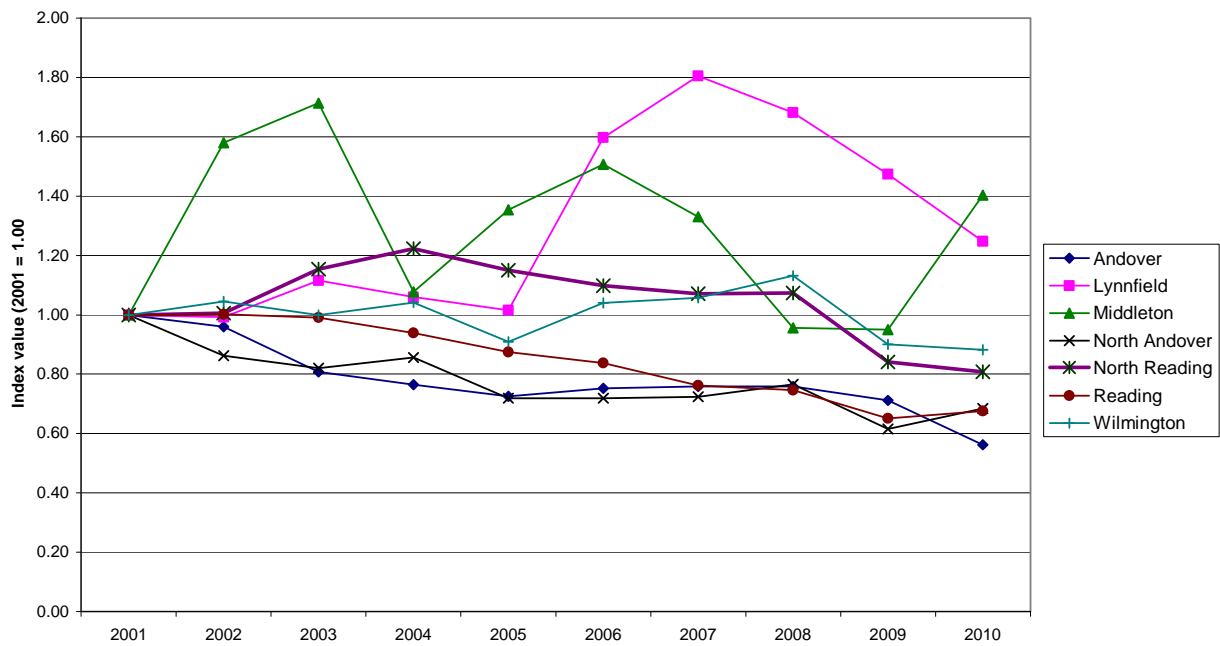


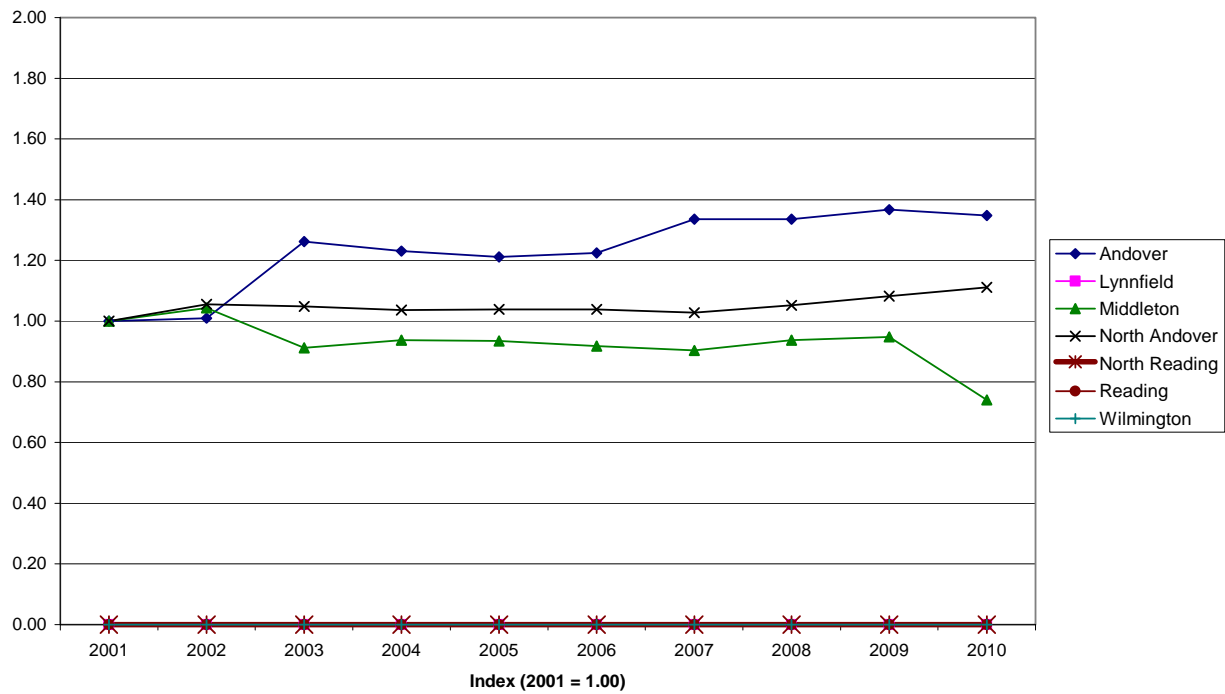


Figure A-4. Index of Construction Employment by Town  
Monthly Employment by Town



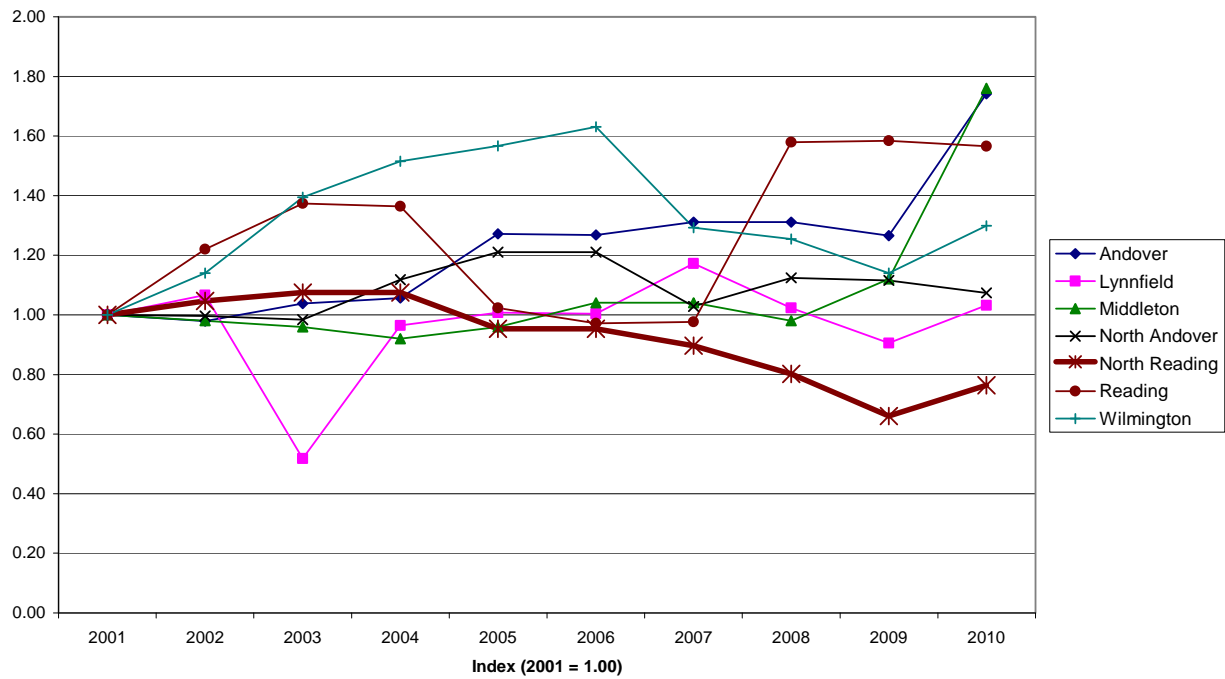
Source: Executive Office of Labor and Workforce Development (EOLWD), Employment and Wage (ES-202) data and FXM Associates

Figure A-5. Index of Education Employment by Town



Source: Executive Office of Labor and Workforce Development (EOLWD), Employment and Wage (ES-202) data and FXM Associates

Figure A-6. Index of Finance and Insurance Employment by Town



Source: Executive Office of Labor and Workforce Development (EOLWD), Employment and Wage (ES-202) data and FXM Associates

Figure A-7. Index of Health Care Employment by Town

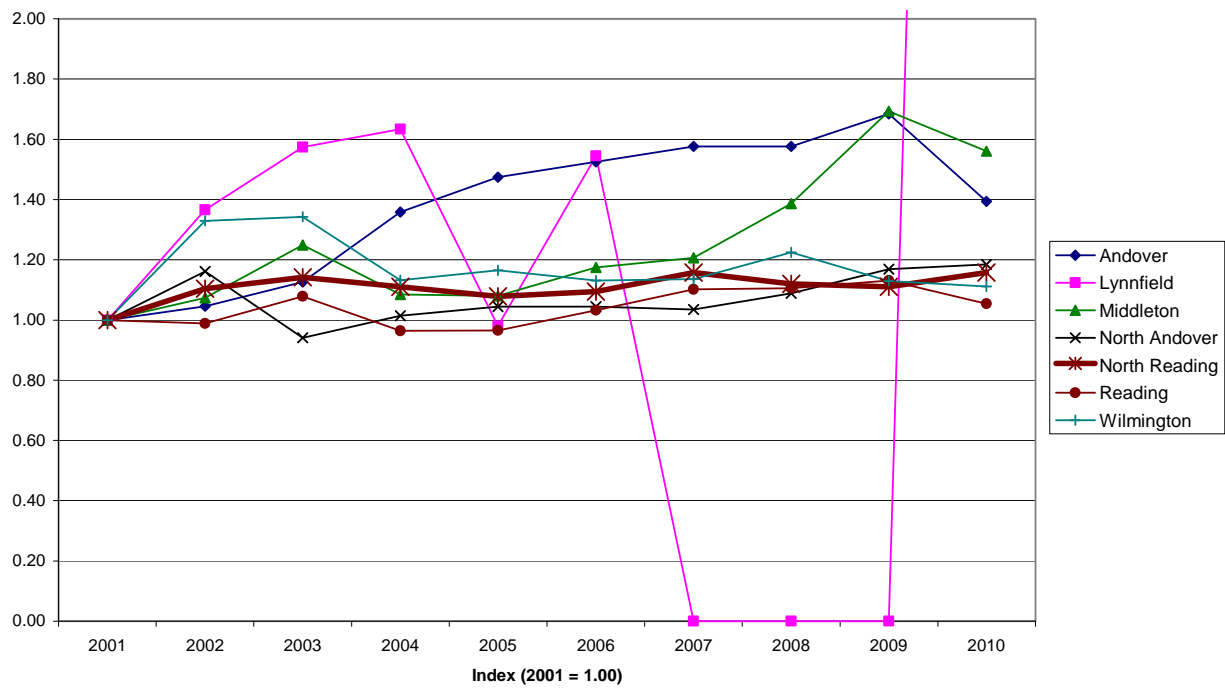
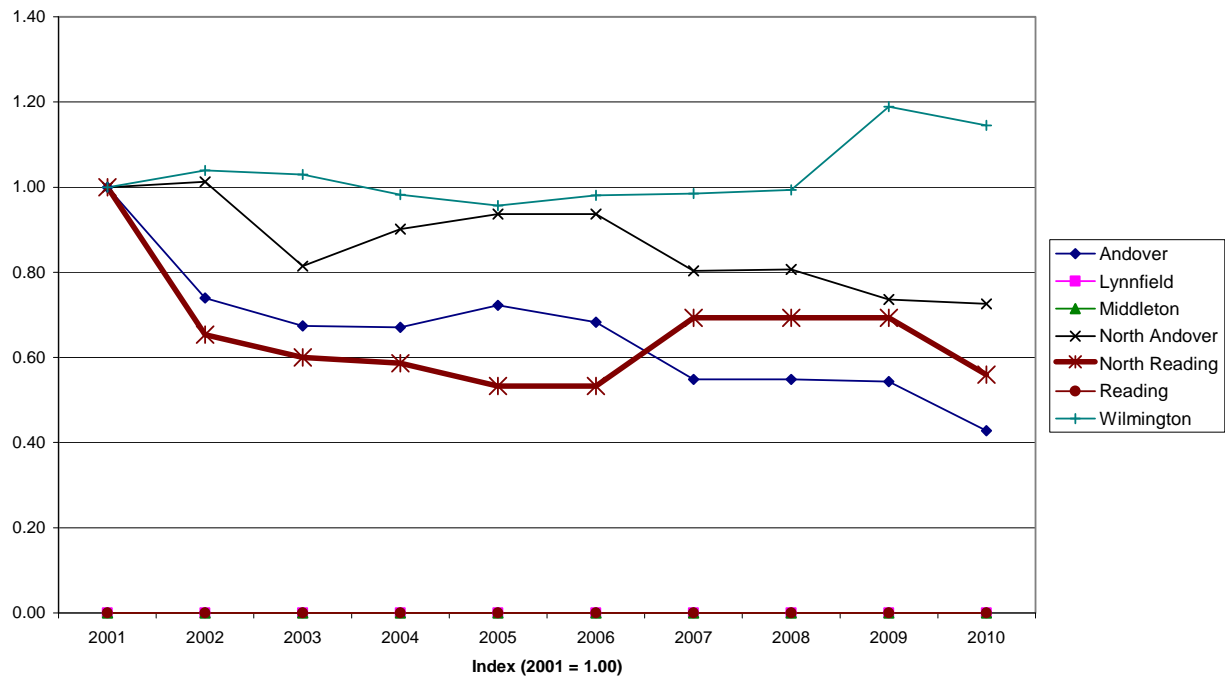
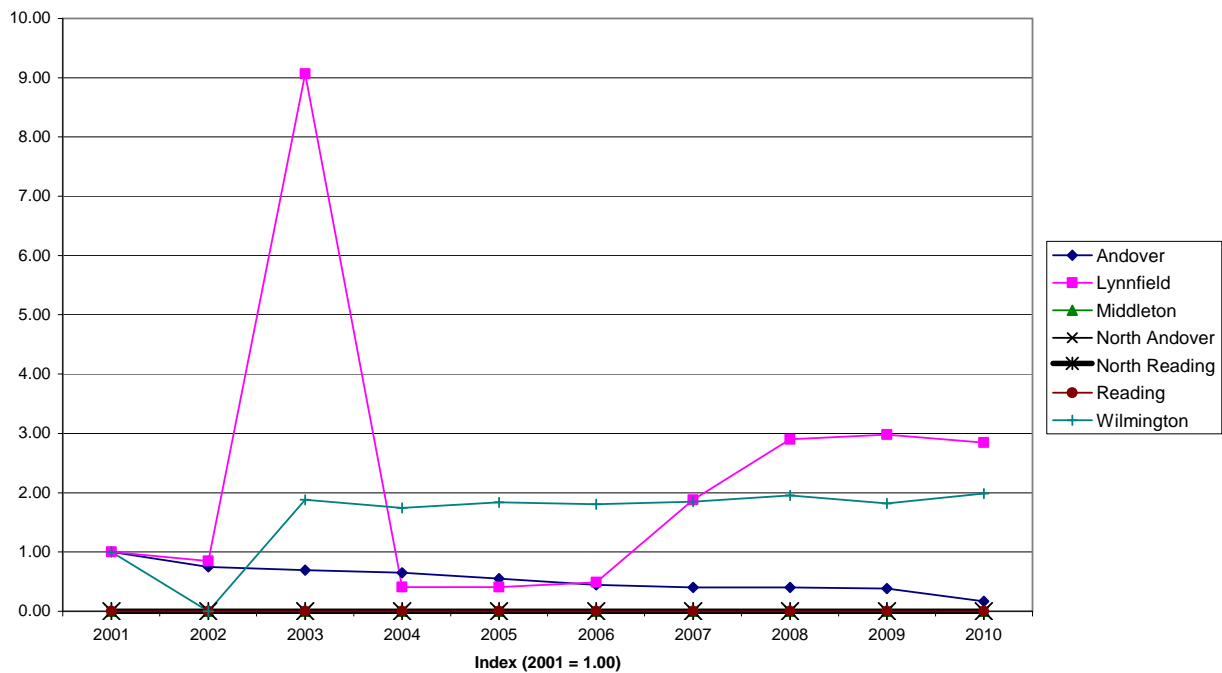


Figure A-8. Index of Information Employment by Town



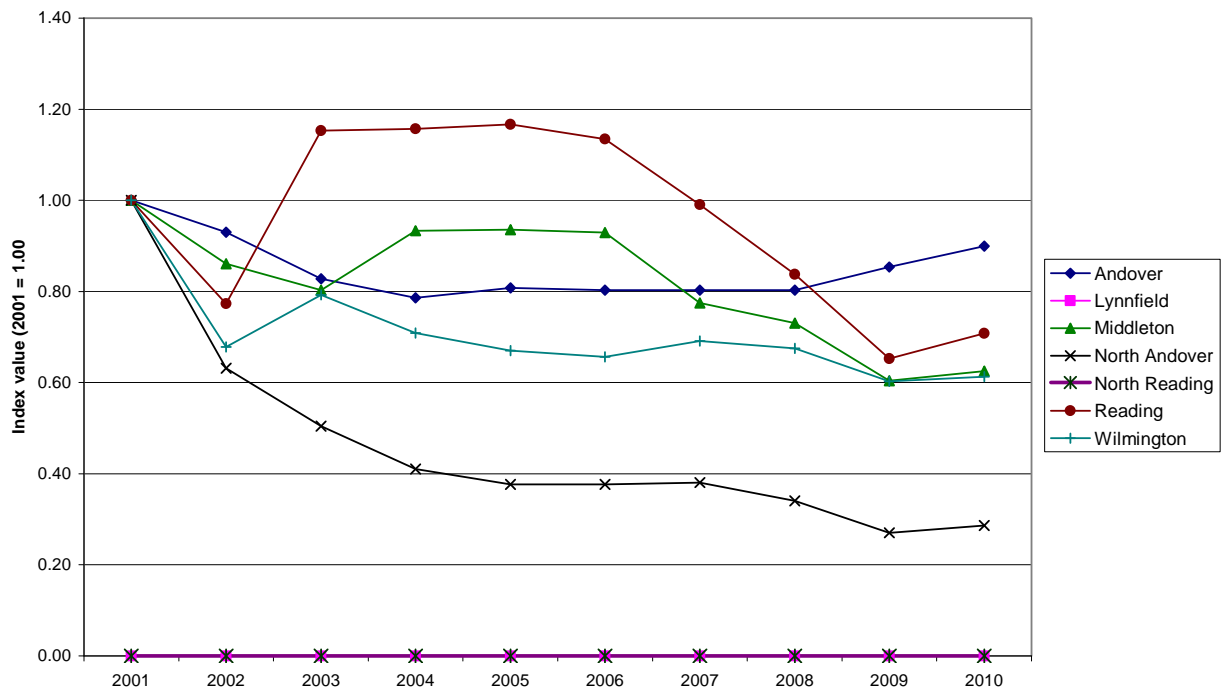
Source: Executive Office of Labor and Workforce Development (EOLWD), Employment and Wage (ES-202) data and FXM Associates

Figure A-9. Index of Management Employment by Town



Source: Executive Office of Labor and Workforce Development (EOLWD), Employment and Wage (ES-202) data and FXM Associates

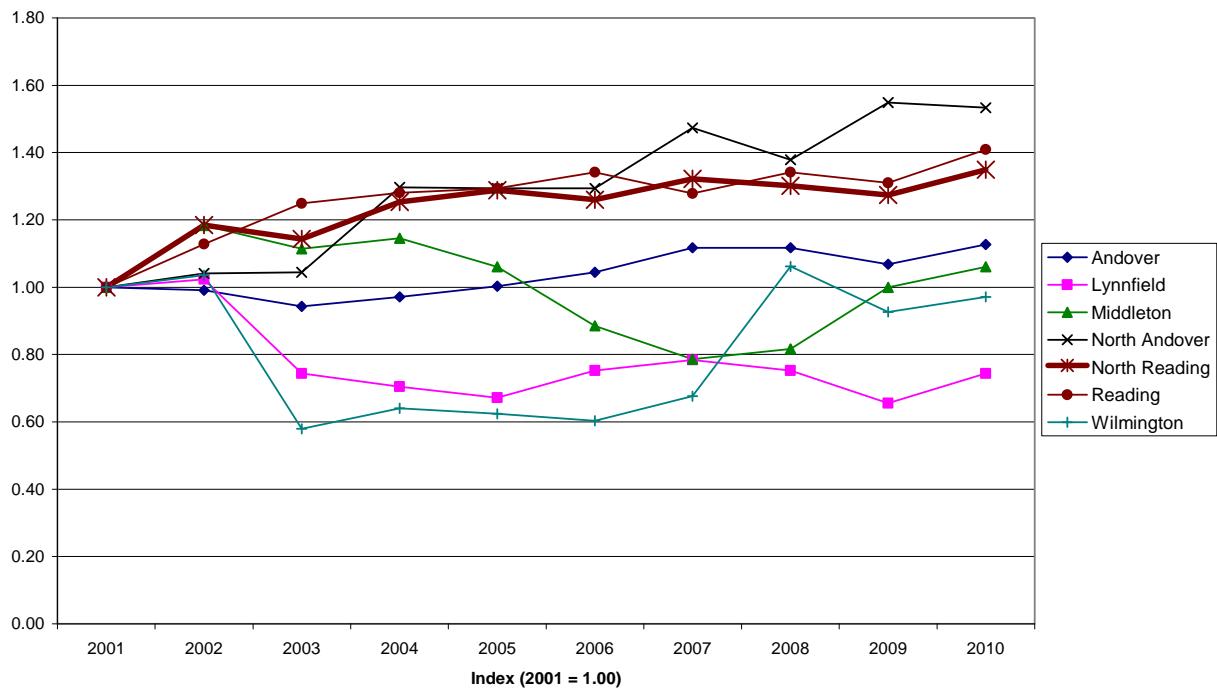
Figure A-10. Index of Manufacturing Employment by Town



Source: Executive Office of Labor and Workforce Development (EOLWD), Employment and Wage (ES-202) data and FXM Associates

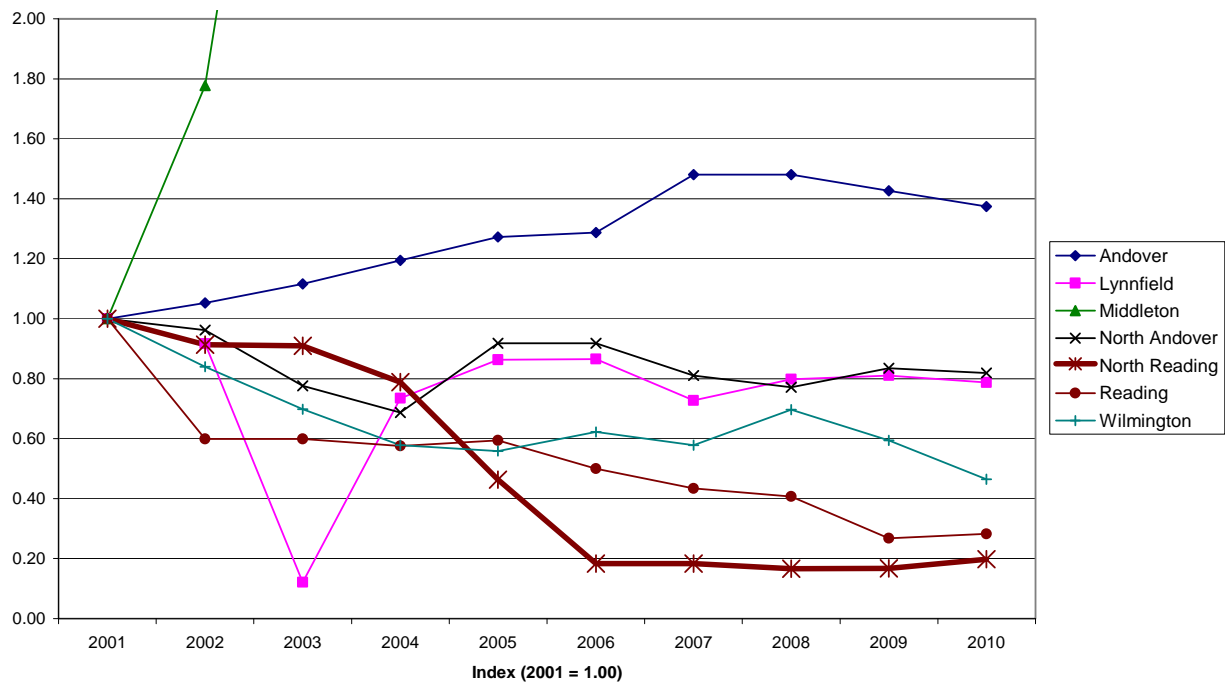


Figure A-11. Index of Other Services Employment by Town



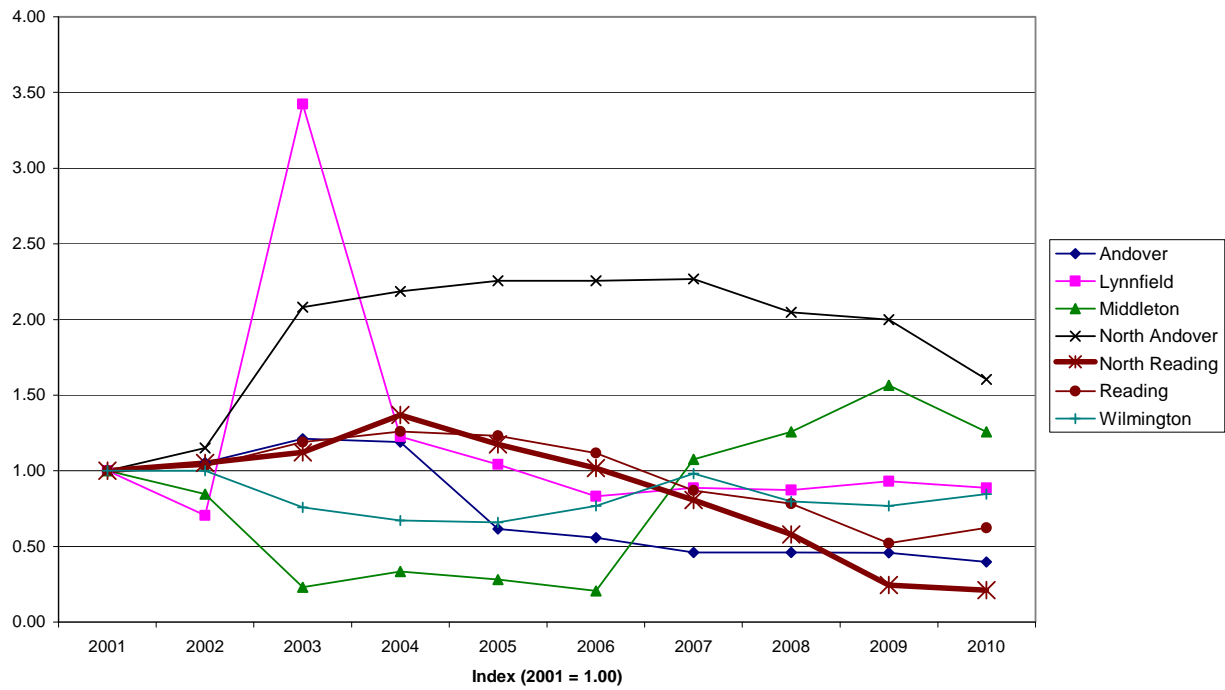
Source: Executive Office of Labor and Workforce Development (EOLWD), Employment and Wage (ES-202) data and FXM Associates

Figure A-12. Index of Professional Services Employment by Town



Source: Executive Office of Labor and Workforce Development (EOLWD), Employment and Wage (ES-202) data and FXM Associates

Figure A-13. Index of Real Estate Employment by Town



Source: Executive Office of Labor and Workforce Development (EOLWD), Employment and Wage (ES-202) data and FXM Associates

Figure A-14. Index of Retail Employment by Town

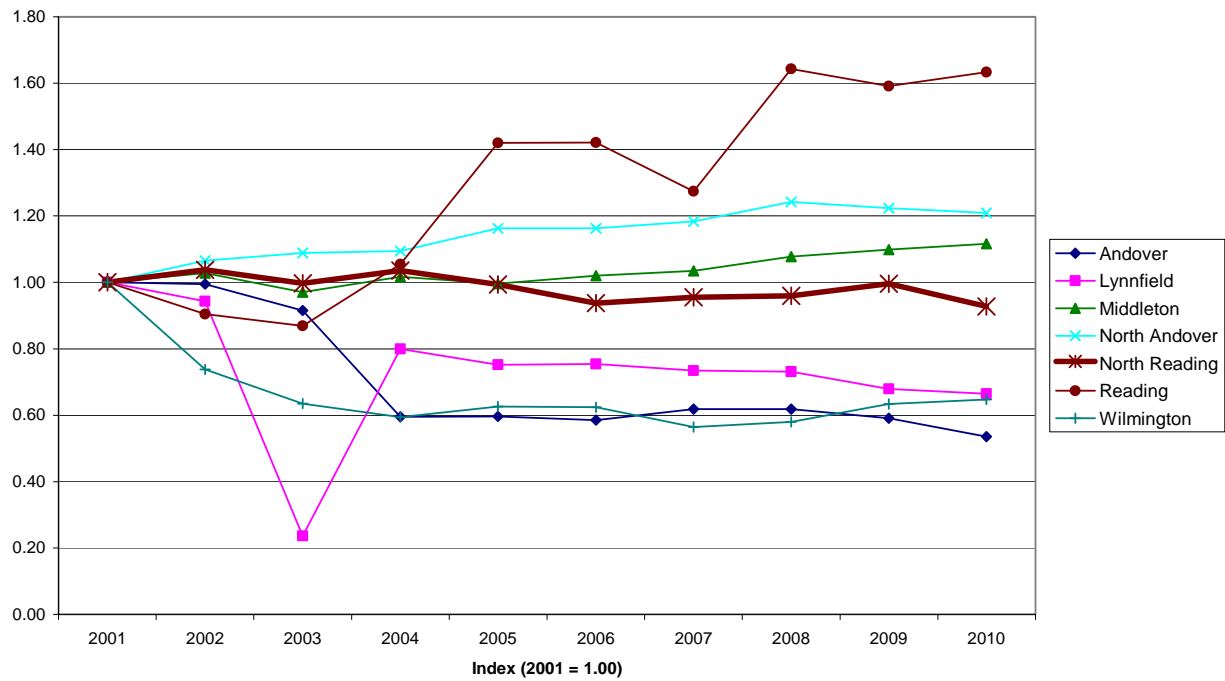
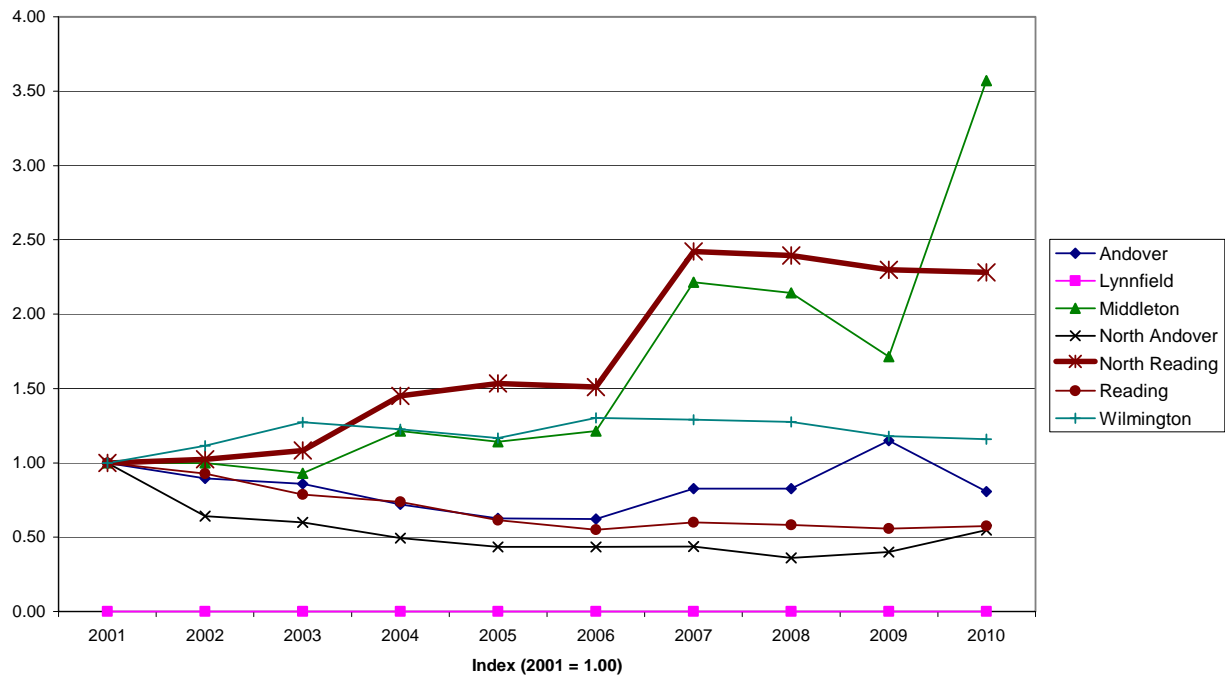
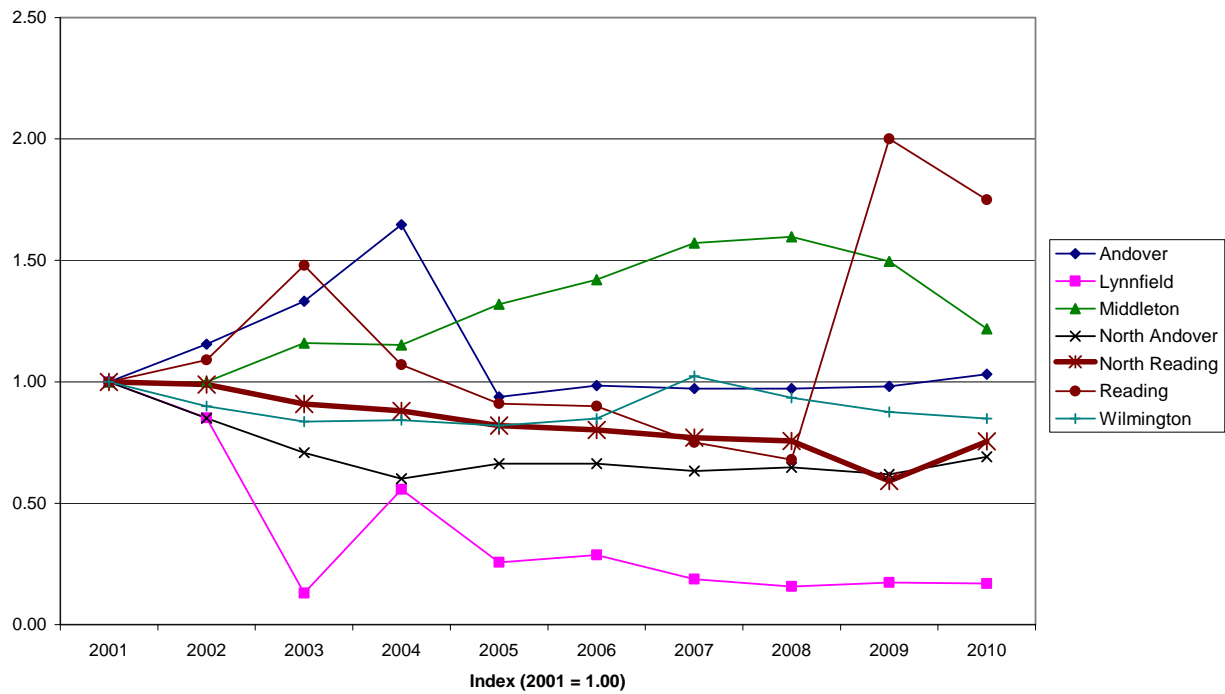


Figure A-15. Index of Transportation Employment by Town



Source: Executive Office of Labor and Workforce Development (EOLWD), Employment and Wage (ES-202) data and FXM Associates

Figure A-16. Index of Wholesale Employment by Town



## **List of Acronyms**

**C. 43D** – Chapter 43D of the Massachusetts General Laws (20060 offers communities a tool for targeted economic development to guarantee local permitting decisions within 180 days for designated Priority Development Sites approved by the state Interagency Permitting Board. The C.43D program is administered by EOHEd, and includes municipal PDS planning grants.

**EOA**—Economic Opportunity Area is located within an Economic Target Area designated by a municipality for economic development based on specific criteria of economic distress.

**EOHEd** – Executive Office of Housing and Economic Development is the Massachusetts state agency responsible for creating housing and jobs in the Commonwealth.

**FY** – Fiscal Year is the 12-month period during which an organization, government or firm plans to use its funds, and annually accounts for revenues and expenses; commonly, fiscal years are from July 1 through June 30 or October 1 to September 30 for the U.S. government.

**GIS** – Geographic Information Systems are computer hardware and software used for storage, retrieval, mapping, and analysis of thematic data, such as roadways, utilities, land use, wetlands.

**ETA** – Economic Target Area is a municipality certified by application to the state Economic Assistance Coordinating Committee (EACC), based on income, unemployment and other economic characteristics or factors, where development projects may receive certain tax benefits.

**MAPC** – Metropolitan Area Planning Council is the regional planning agency for 101 Greater Boston communities, including North Reading in the North Suburban Planning Council area.

**NAICS** – North American Industry Classification System is the standard used by Federal statistical agencies to classify business establishments for the purpose of collecting, analyzing and publishing data related to the U.S. economy.

**PDS** – Priority Development Site is a location for a planned or proposed private or public-private real estate development project that has received municipal designation for expedited permitting.

**SIC** – Standard Industrial Classification system was replaced by the NAICS in 1997 but several data sources still are available with SIC-based data, including Nielsen Claritas *SiteReports*.