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Economic Development Assessment

Introduction

The purpose of this task is to provide an overview of economic conditions and trends for the Core Communities (Towns of Ayer, Shirley and Harvard including Devens) and the economic region (Worcester and Middlesex Counties). The intent of this research analysis effort is to assist the Devens Disposition Executive Board (DDEB) develop a better understanding of the economic conditions of the Core Communities in relation to the economic region, in support of evaluating disposition options for the former Fort Devens military base. Additionally, this research assesses the progress made in accomplishing the goals of the *Devens Reuse Plan*[1] and provides information to target new (re)development options for Devens.

The following bullet points summarize the economic condition of the Core Communities and economic region as well as provides implications for the future.

- Although the regional and state economies have been sluggish in the early part of this decade, the Core Communities have outperformed the economic region in terms of job retention and growth and business establishment growth. It is very likely that without the employment and business attraction assets of Devens, the economic performance of the Core Communities over the time period would have generally resembled that of the economic region.

- With the help of Devens, the Core Communities have "bucked the trend" and outperformed the economic region in terms growth in manufacturing, information and professional and scientific jobs – industrial sectors that have been hit hard during the economic downturn. Lower average annual wages as compared to the region may have helped fuel the growth of these sectors within the Core Communities.

- Devens is home to up to 3,500 jobs – approximately half the total number of jobs lost directly as a result of the closure of Fort Devens.

[1] *Devens Reuse Plan*. Prepared by Vanasse Hangen Brustlin, Inc. 1994

- Devens offers competitive business advantages compared to other communities in such criteria as:

  - Location
  - Quality and available infrastructure
  - “One-stop” permitting
  - Wages below regional average in growth industries
  - Available serviced land (although limited)
  - High quality of life

  These competitive advantages should continue to be used as the “cornerstone” in attracting new businesses, as well as encouraging expansion and investment in Devens’ existing commercial and industrial business establishments.

- Barring unforeseen economic, political or regulatory changes, it is likely that Devens will continue to capture a better-than-average share of the region’s industrial, research and development and office (especially build-to-suit) growth. However, although Devens has competitive advantages, it should be noted that the region contains a large supply of available functional and competitively priced land and buildings with locations that are equal to or better than those offered at Devens.

- Depending on the goals and objectives of the community, absorption of Devens’ commercial and industrially-zoned land for non-residential uses will likely take two or more decades. Conversely, utilizing the land for residential purposes (assuming that the land was zoned for such uses and depending on market conditions, etc.), could increase the rate of absorption considerably.

Methodology

In order to obtain data and information for this technical memorandum, the goals and objectives of the *Devens Reuse Plan* were reviewed and an analysis of economic trend data and information provided by the Massachusetts Division of Career Services and Unemployment Assistance, MassDevelopment, the Massachusetts Department of Local Services, the U.S. Census Bureau, Spaulding and Slye and The Foster Company was conducted. Within the analysis, the most current data available for the Core Communities and the economic region was utilized. The economic indicators analyzed included the change in at-place employment and business establishments between 2001 and 2004[2], and unemployment rates between 1990 and 2004. A comparison of current wages by industrial sector, a summary of information collected during a survey of selected Devens businesses, as well and other economic

[2] First quarter (Q1) of 2004.

variables (commercial and industrial real estate conditions and tax rates) have been provided.

Devens Reuse Plan

The Devens Reuse plan was completed in 1994 as a framework outlining the necessary steps for conversion of the Fort Devens Military Reservation to civilian uses over the next several decades. The plan was developed by many stakeholders including local and state government representatives and was developed based on the varied interests of the host communities, the region and state government, focusing on the principal that economic development and environmental protection are common interests. The plan called for the ultimate development of up to 8 million square feet of commercial and industrial space at Devens and limited housing development to a maximum of 312 units, including the existing historic homes and an affordable housing project. The goals and objectives for the plan include:

- Development must be sustainable, which means achieving a balance of economic, social and environmental needs, while maintaining and enhancing the natural resource base;
- Provide a diversity of uses to avoid dependence on one type of use, and to provide employment opportunities for a range of skill and experience levels;
- Achieve success. Demonstrate the interdependence of economic development and environmental protection and the symbiosis of public and private uses; and
- Balance local, regional and state interests.

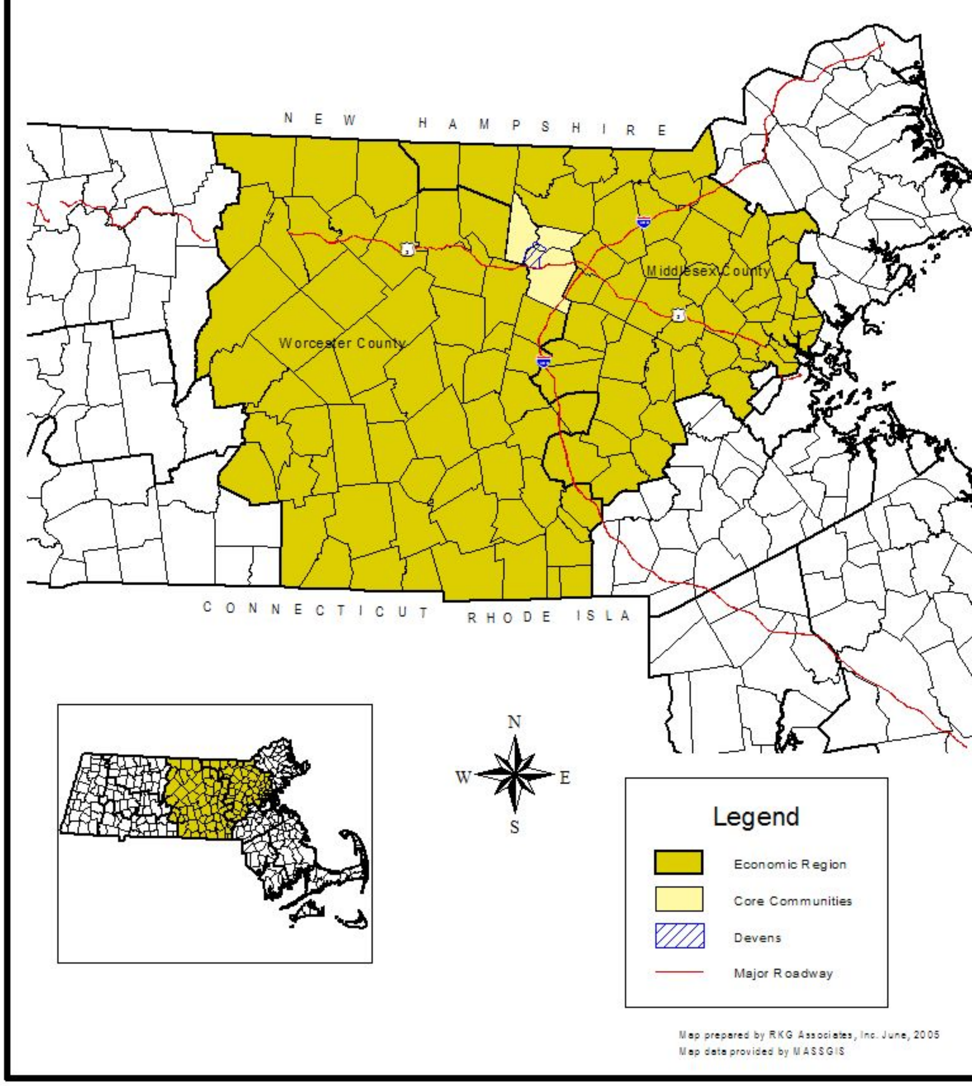
The Plan stated several specific objectives, including:

- Foster uses which will create, at a minimum, the equivalent number of the jobs and value of economic activity at Devens in 1990 (7,000 to 8,000 jobs);
- Take advantage of the skills and experience of the regional workforce, and match the skills of the future workforce with the needs of industries of the future;
- Foster a long-term mix of uses which will enhance the regional economy through future growth potential;
- Build on Devens' unique characteristics to complement the regional economy and expand the economic base; and
- Exhibit and foster an attitude that supports reuse goals, successful redevelopment and the provision of economic activities for individual and collective prosperity.

Summary of Economic Conditions

The following section summarizes general regional socioeconomic conditions within the Core Communities and the economic region. Economic information provided includes the change in at-place employment and business establishments between 2001 and 2004, and unemployment rates between 1990 and 2004. A comparison of current wages by industrial sector for 2004 was provided. As shown in Figure 6.1, the economic region is comprised of all the communities within Worcester and Middlesex Counties.

Figure 6.1: Core Communities and Economic Region



It should be noted that due to Devens and the Core Communities being geographically located at the nexus of several economic data regions as well as data source limitations, for the purposes of this analysis, Worcester and Middlesex Counties were used to define the economic region. Devens is located in-between two distinct market areas. For industrial and warehouse activity, Devens is considered primarily in the Leominster/Fitchburg/Route 2 market area that begins at I-495 and stretches westward out Route 2. Secondarily, it also can be considered part of the Metro West/I-495 beltway market as well as being influenced by the Worcester industrial market to a lesser extent. For office and R&D uses, it is primarily considered as part of the I-495/Metro West market.

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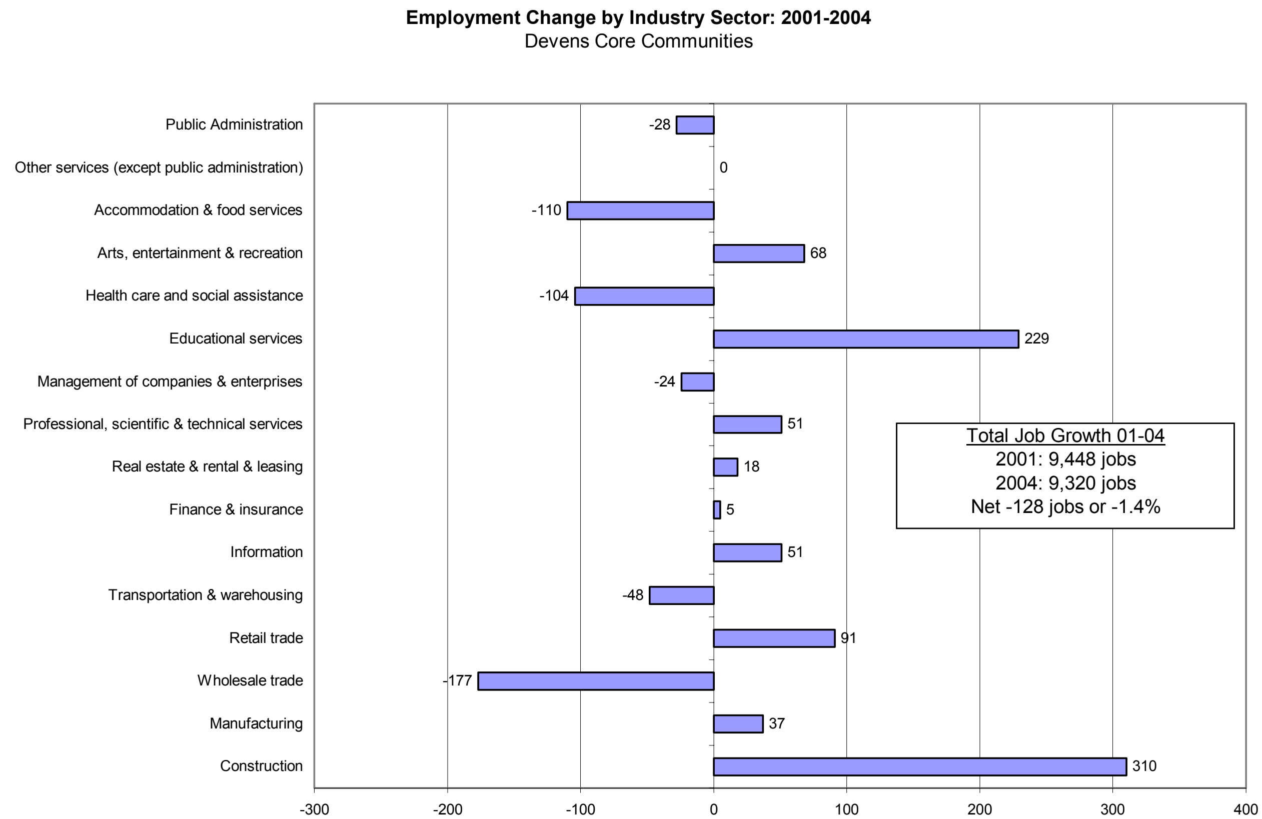
Employment

The following section summarizes the change in at-place employment conditions for the Core Communities and economic region between 2001 and 2004.

- Based on the most current at-place employment estimates provided by the Massachusetts Division of Career Services and Unemployment Assistance, in 2004, the Core Communities had an employment base of about 9,300 jobs (about 1% of the economic region's employment base of 1.079 million jobs) which represents a decline of 128 jobs (1.4%) since 2001. Over the same 2001 to 2004 time period, the number of jobs in the economic region declined by about 92,000 (8%) – the overwhelming majority (89%) of jobs lost coming from Middlesex County.

- As shown in Figure 6.2, the industry sectors in the Core Communities that experienced the most significant declines over the 2001 to 2004 time period included wholesale trade (177 jobs or 31%), accommodation and food services (110 jobs or 33%) and health care and social assistance (104 jobs or 10%). Sectors within the economic region that were hardest hit included manufacturing (38,646 jobs or 23%), information (11,755 or 22%), and the professional, scientific and technical services (14,214 or 12%). The greater Boston area (especially within the Route 128 and I-495 corridors) is one of the country's largest information technology research and development hubs and was hit especially hard during the latest economic downturn – the effects of which have extended into the eastern-central Massachusetts and the greater Devens area.

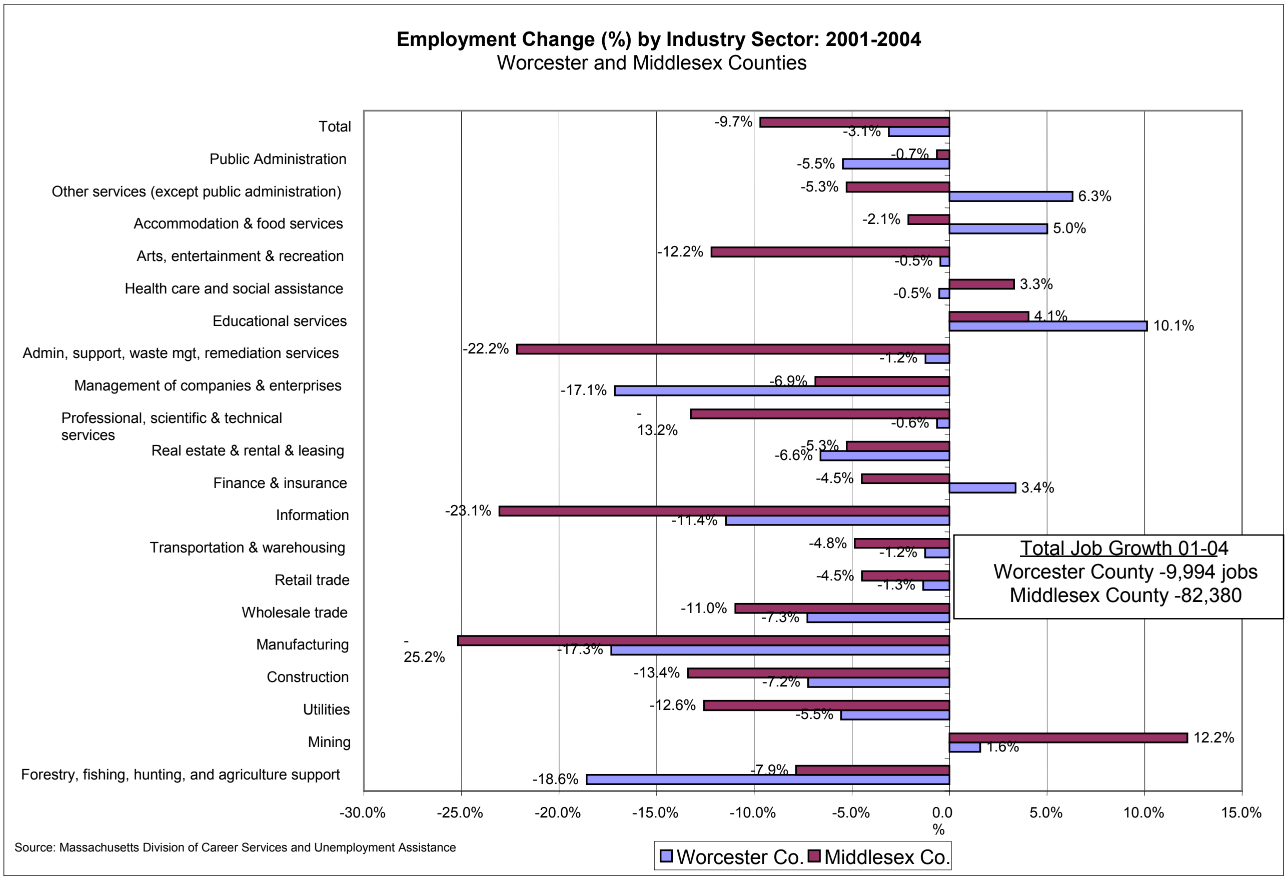
Figure 6.2



Note: Employment data within some industry sectors suppressed due to confidentiality reasons and therefore may not add to total
Source: Massachusetts Division of Career Services and Unemployment Assistance

- Over the same time period, the industry sectors in the Core Communities that experienced job growth included construction (310 jobs or 91%), retail trade (91 jobs or 22%), professional, scientific and technical (51 jobs or 12%) and manufacturing (37 jobs or 2%). As shown in Figure 6.3, sectors within the economic region that experienced job growth included educational services (6,669 jobs or 6%) and health care and social assistance (2,504 jobs or 2%).

Figure 6-3



- Based on the most recent employment information available provided by MassDevelopment, Devens provides upwards of 3,500 jobs with an estimated two-thirds being private sector or municipal public sector positions (the other third being state or federal public sector or non-profit positions). A detailed distribution of the types of jobs created at Devens has not been compiled.

- Although the last "official" recession occurred in the latter part of 2001, total non-agricultural employment in New England peaked in January 2001 and declined steadily until January 2004. Since then, employment growth has resumed, albeit at a less robust pace then experienced in the late 1990s.

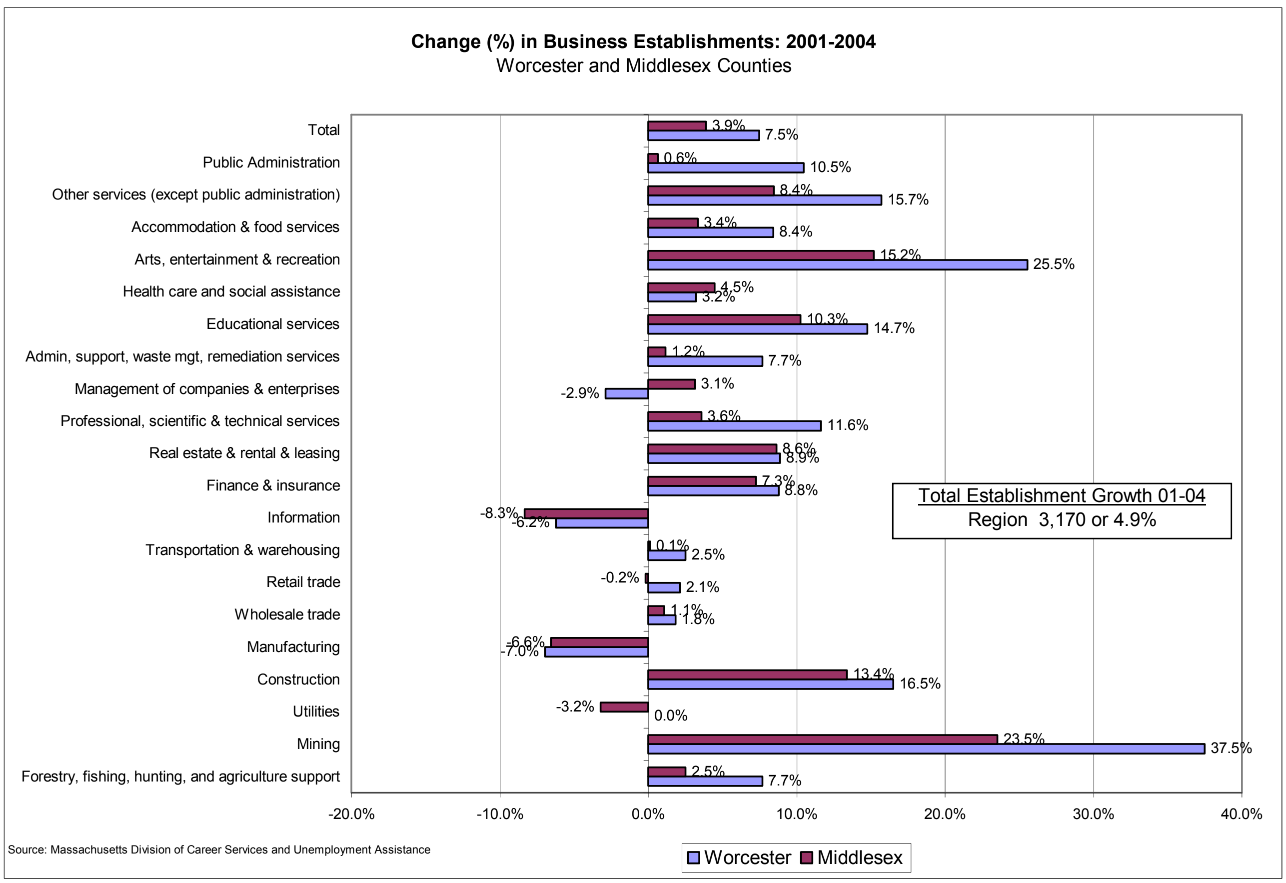
Business Establishments

The following section summarizes the change in business establishments for the Core Communities and economic region between 2001 and 2004.

- The Core Communities outpaced the economic region in the growth of businesses establishments. Based on the most current business establishment estimates provided by the Massachusetts Division of Career Services and Unemployment Assistance, in 2004, the Core Communities had an establishment base of 643 businesses (about 1% of the economic region's business base of about 68,000 establishments) which represents an increase of 49 businesses (8%) since 2001. Over the same 2001 to 2004 time period, the number of establishments in the economic region increased by about 3,100 (5%).

- The industry sectors in the Core Communities that experienced business growth included construction (9 establishments or 14%), manufacturing (5 establishments or 9%) and wholesale trade (3 establishments or 6%). As shown in Figure 6.4, the economic region experienced business growth within the construction (885 establishments or 14%), other services (808 establishments or 11%) and the professional, scientific and technical services (494 establishments or 5%) sectors.

Figure 6.4



- During the economic downturn of the early part of this decade, the economic region's manufacturing economy was hit especially hard, losing 248 manufacturing businesses representing a loss of almost 7%. Interestingly, the

Core Communities' manufacturing economy bucked the regional (and statewide) trend of manufacturing business losses by increasing its manufacturing base as noted above.

- Based on the most recent business establishment information available provided by MassDevelopment, Devens contains 71 businesses – almost 90% of which are private sector or municipal public sector establishments. The types of businesses located at Devens are spread across a wide spectrum of industry sectors including manufacturing, information technology, professional, scientific and technical services, transportation and warehousing, financial services, educational services and public administration.

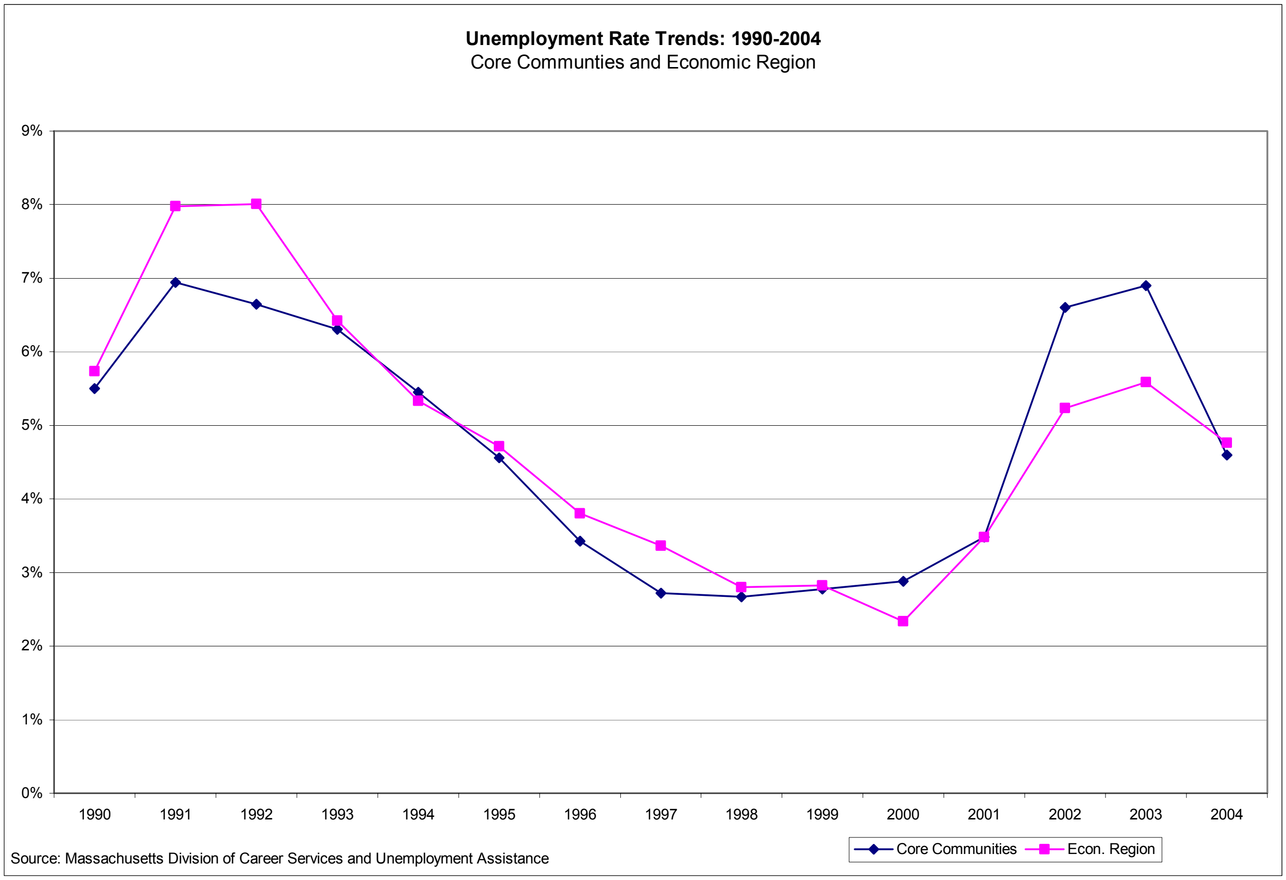
Unemployment

The following section summarizes the change unemployment rates for the Core Communities and economic region between 1990 and 2004.

- Based on unemployment data provided by the Massachusetts Division of Career Services and Unemployment Assistance, the Core Communities had a 2004 unemployment rate of 4.6% - 0.2 percentage points below the economic region's 2004 rate.

- The Core Communities' 2004 unemployment rate (4.6%) represents an increase of 1.9 percentage points since the unemployment low-point in 1997/1998, but is well below (by 2.3 percentage points) the peak unemployment rate in 1991. As shown in Figure 6.5, between 1990 and 2004, the Core Communities' unemployment rate has fluctuated between 1.4 percentage points above and below the economic region's unemployment rate, however, the Core Communities have had an unemployment rate that is, on average, 0.05 points below that of the economic region over the time period.

Figure 6.5



Earnings and Income

Median household income in the Core Communities was estimated at $66,340 in 2004, although median incomes in Ayer and Shirley were below this level, and higher in Harvard, as shown in Table 6-1 below. In comparison, the median household income in the economic region was $60,434, about $5,900 lower than indicated for the Core Communities.

Table 6-1

Median Household Income: 2004

	Ayer	Harvard	Shirley	Core Communities	Region
Median Household Income	$49,986	$119,387	$59,752	$66,336	$60,434

Source: DemographicNOW & RKG Associates, Inc.

Wages

The following section summarizes current average annual wage conditions for the Core Communities and economic region in 2004(Q1).

- Based on 2004(Q1) wage estimates provided by the Massachusetts Division of Career Services and Unemployment Assistance, the average annual wage (for all industrial sectors) within the Core Communities was approximately $42,400. The Town of Shirley had the highest average annual wage at approximately $46,500 while Ayer had the lowest at $39,700.

- The average annual wage (across all industrial sectors) within the economic region is approximately $3,100 (7%) higher than the average annual wage within the Core Communities.

- As shown in Table 6-2 (highlighted in grey), within industrial sectors that are experiencing growth within the Core Communities, average annual wages are lower (which is attractive for firms considering whether to locate to the area) within the Core Communities as compared to the economic region. For example, the average annual manufacturing wage within the Core Communities is approximately $16,500 lower than the average annual manufacturing wage within the economic region. The difference between the average annual professional and technical services wage within the Core Communities and the economic region is even more pronounced, at approximately $25,000.

Table 6-2
Average Annual Wage: 2004(Q1)
Economic Region and Core Communities

	Ayer	Harvard	Shirley	Worcester Co.	Middlesex Co.
Construction	$36,750	$46,950	$37,500	$40,950	$49,700
Manufacturing	$43,050	$47,550	$49,650	$50,150	$76,400
Wholesale Trade	$47,300	$50,200	$40,850	$46,400	$85,550
Retail Trade	$28,900	$23,850	$25,750	$24,600	$25,700
Transportation and Warehousing	$35,850	N/A	$31,400	$34,400	$39,200
Information	$32,350	$51,200	N/A	$62,050	$85,650
Finance and Insurance	$35,500	$38,900	N/A	$57,850	$69,350
Real Estate and Rental and Leasing	$20,300	$75,700	$24,250	$34,700	$45,650
Professional and Technical Services	$49,600	$54,500	$37,300	$56,800	$87,700
Administrative and Waste Services	$31,300	$50,100	$18,650	$26,100	$31,550
Educational Services	$37,750	N/A	N/A	$38,600	$43,500
Health Care and Social Assistance	$39,000	$30,500	$35,900	$32,800	$36,650
Arts, Entertainment, and Recreation	$19,850	$33,300	N/A	$15,750	$29,450
Accommodation and Food Services	$14,100	N/A	N/A	$12,750	$17,200
Other Services, Ex. Public Admin	$20,000	$23,900	$38,650	$22,650	$27,750
Public Administration	$50,550	N/A	N/A	$40,150	$49,950
Total - All Industries	$39,700	$40,950	$46,450	$37,350	$53,650

Source: Massachusetts Division of Career Services and Unemployment Assistance

Survey of Devens Businesses

During the third week of July 2005, telephone interviews were conducted with business establishments located at Devens in order to solicit information about economic, community and housing issues related to the disposition of Devens. MassDevelopment representatives provided contact information for seven businesses (all manufacturers) willing to participate in the survey. Although all businesses were contacted, two were unavailable for discussion.

Results of the telephone survey indicate that businesses were drawn to Devens primarily due to the availability of serviced land and buildings along with competitive infrastructure costs and close proximity to the available labor force. All business representatives interviewed indicated that in order to better plan and manage the future of their community, as a development option, they would prefer Devens as a separate municipality. The following summarizes the results of the survey.

Business Operations

- All establishments have been in business for at least twenty-five years
- Businesses located to Devens in either 2001 or 2002
- When asked how their business had performed over the past year, all indicated that business was profitable and generally positive
- When asked to give a general indication of how they see their business performing over the next year, all projected positive future growth

Employment

- With the exception of two businesses (with over 80 employees) all businesses interviewed currently had less than 25 employees
- Four businesses indicated that their current staffing level had increased over the past five years. One business indicated that staffing had decreased due to increased productivity relative to automation.
- All businesses interviewed indicated that their current staffing level would, at the least, stay at the current level or likely increase over the next five years
- Typically, one-quarter to one-half of staff are production-related with the remainder being professional (engineering), management, sales, and/or administrative support staff

Wages

- Average wages (across all labor segments) range between $40,000 and $50,000 per year

- On average, production and administrative support staff earn wages at or below this average. Professional and management staff generally earn wages at or above this average (up to approximately $60,000). Sales staff earn at or above this wage range and, in some cases, may earn up to four-times above the stated average wage range

Site Selection

- Businesses indicated that they relocated to Devens primarily for the following five reasons:
  - Available land and buildings
  - Competitively priced and available infrastructure
  - "One stop" permitting
  - Tax advantages
  - Location – close proximity to their labor

Housing

- When asked in what communities their labor resides, all businesses indicated that their staff live within a relatively short commuting distance to Devens including communities such as:
  - Fitchburg
  - Gardner
  - Groton
  - Leominster
  - Littleton
  - Lowell

- Three businesses indicated that the housing market within the greater Devens area has not negatively impacted their ability to attract or retain employees. Two businesses indicated that the high cost of living has impacted their ability to attract (management or professional) labor.

Devens Disposition

- All businesses interviewed were aware of the current disposition planning process and were aware of the two broad disposition options (separate municipality or resumption of governance by Core Communities) being considered

- Citing a desire to better plan and manage their community's future, all businesses interviewed preferred that Devens become a separate municipality (separate municipality disposition option) rather than having the Core Communities resume governance of their respective portions of Devens

In addition to the survey completed for this task, a survey of Devens businesses was completed in 2005 by representatives of the local business community. The purpose of the survey was to gather the opinions of local businesses relative to the broad community impact (summarized in nine topic areas including property taxes, infrastructure capacity, municipal services, etc.) of the disposition of Devens on their business. A total of fifteen businesses or non-profit organizations were surveyed.

All of the disposition impact topic areas were considered important to businesses, however, the cost and capacity of utilities, police, fire department and public works service, and infrastructure maintenance and improvement were considered the most important.

The following summarizes the information collected from the survey presented as the percentage of respondents rating the topic area as "very important" or "extremely important" to their business:

➤ Cost and Capacity of Utilities	100%
➤ Police, Fire, DPW Service Levels	87%
➤ Infrastructure Maintenance and Improvement	87%
➤ Property Taxes	80%
➤ Maintenance of Public Open Spaces	73%
➤ Environmental Cleanup and Enforcement	67%
➤ Character of Future Commercial Development	47%
➤ Preservation of Current Zoning Bylaws	33%
➤ Location of Future Residential Development	20%

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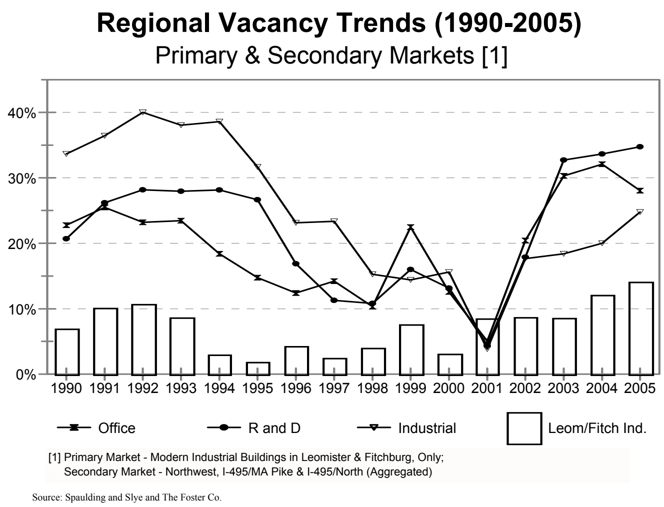
Office and Industrial Market Activity

The following provides a summary of the office and industrial land and building market trends within the primary market (Leominster and Fitchburg) and secondary market (Northwest I-495/Mass. Pike and I-495 North) areas. It should be noted that these market areas were used based on the availability of reliable and current office and industrial real estate market data and generally corresponds to the greater Devens region.

- As shown in Figure 6.6, vacancy for all building types and in almost all market areas were at there lowest points in January 2001 (year-end 2000). Since that point vacancy has increased, and the larger surge in the secondary market occurred in 2002 & 2003, which coincided with the region's slow recovery from the 2001 national recession Industrial vacancy in the primary market was historically below the 10% level prior to 2004, and typically below that indicated for the secondary market with the exception of 2001.

Figure 6.6



- At the end of 2004, the office sector of the secondary market had nearly 9.56 million SF available, or 28.1% of the supply. This supply of available office space in January 2005 in the secondary market area was about 3 times greater than that available in 1990.

- Office absorption in 2004 was positive, as compared to negative in the three prior years. The office availability rate also declined from 32% in 2003, when it was the highest rate during the 15-year period. Over 0.82 million SF of office space was absorbed within the secondary market in 2004, and 71% of this occurred in the I-495/MA Pike region. Based on this absorption figure, the available office space in the current market represents a 10-year supply.

- The asking rents (gross) for office space ranged between $15 and $20/SF, with the low end being the average quoted rent in I-495/North submarket and the high-end in the Northwest submarket. Rental rates for the most part have declined since 2000 when vacancy was at its lowest point. In 1997, asking office rents were averaging between $13/SF(495-North) and $21/SF(Northwest)

- There were nearly 9.2 million SF of R & D space available in the secondary market at the end of 2004, indicating a 34.8% rate. Nearly 6.5 million SF of R & D space has become available since January 2001, when the availability rate was 4.4%. Absorption of R & D space in the region continued to be negative in 2004, as evident by an aggregated loss of 70,000 SF. Positive absorption was evident in the Northwest submarket and to a much lesser extent in the I-495/North submarket.

- The asking rents (net) for R & D space ranged between $8 and $10/SF, with the high end from I-495/Mass Pike submarket to the low end in the I-495/North submarket. The range in 1997 was between $6.50 (I-495/North) and $12.20/SF (I-495/MA Pike).

- There were nearly 3.9 million SF of industrial space available in the secondary market at the end of 2004, indicating a 24.8% rate. Nearly 2.4 million SF of industrial pace has become available since January 2001, when the availability rate was 3.84%. Absorption of industrial space in the region continued to be negative in 2004, as evident by an aggregated loss of 0.82 million SF. Positive absorption of 0.2 million SF was only evident in the I-495/MA Pike submarket

- The asking rents (net) for industrial space ranged between $5.50 and $6.50/SF, with the high end from I-495/Mass Pike submarket to the low end in the Northwest submarket. The range in asking rents in 1997 was between $4 and $5/SF.

Table 6-3

Conditions in Winter 2005

Submarket/Type	Supply [1]	Available [1]	Rate	Absorption
Northwest				
Office	12.59	3.63	28.8%	0.08
R & D	9.36	2.98	31.8%	0.22
Industrial	2.44	1.18	48.4%	(0.49)
I-495/MA Pike				
Office	11.96	3.04	25.4%	0.58
R & D	6.12	2.34	38.3%	(0.31)
Industrial	7.19	1.33	18.5%	0.22
I-495/North				
Office	9.57	2.90	30.3%	0.16
R & D	10.75	3.80	35.3%	0.02
Industrial	6.16	1.40	22.7%	(0.56)
Secondary Market				
Office	34.12	9.57	28.1%	0.82
R & D	26.23	9.12	34.8%	(0.07)
Industrial	15.79	3.91	24.8%	(0.83)

[1] in millions of SF
Source: Spaulding & Slye

Table 6-4

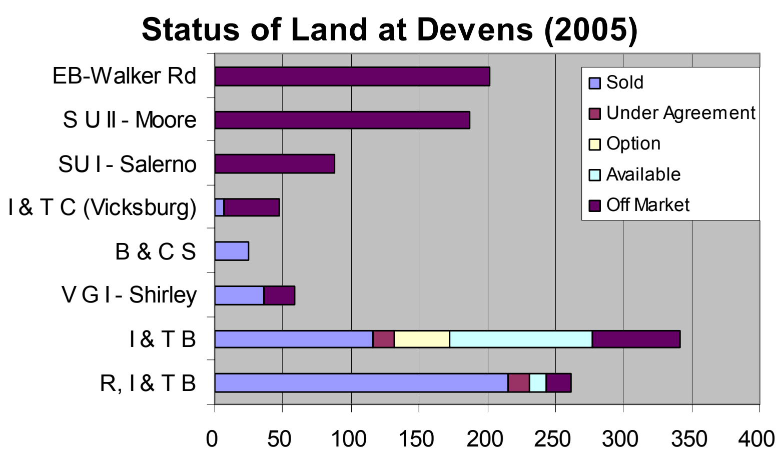
Trends in Asking Rents by Property Types

Submarket	January	Office [1]	R & D [2]	Industrial [2]
Northwest	1997	$20.63	$9.49	$4.06
	2001	$39.03	$26.38	$6.95
	2005	$19.72	$9.70	$5.51
I-495/MA Pike	1997	$17.42	$12.23	$4.91
	2001	$27.40	$16.97	$8.04
	2005	$17.58	$9.90	$6.50
I-495/North	1997	$12.71	$6.55	$4.65
	2001	$19.44	$13.23	$5.11
	2005	$14.97	$8.27	$5.91

[1] Gross rates except electricity
[2] Net Rates
Source: Spaulding & Slye

Land Supply and Absorption Trends at Devens

Figure 6.7



Source: MassDevelopment & RKG Associates, Inc.

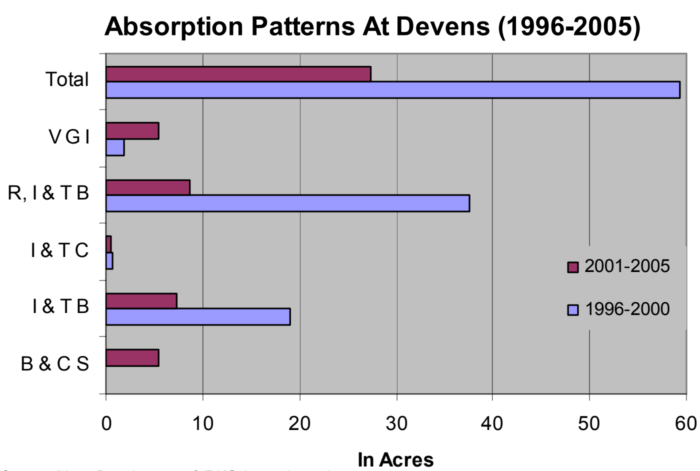
As shown in Figure 6.7, about one-third (398.5 acres) of the 1,210 acres available for reuse at Devens sold between 1996 and 2005. Over half the amount of land sold is in the Rail, Industrial and Trade Business (R, I & T B) district, and another 29% is in the Innovation and Technology Business District (I & T B) district. The remaining 17% of sold land is in the Village Growth 1 (VG-1) district, the Business and Community Service (B & C S) district, or with existing buildings that had sold in the Innovation and Technology Center (I & T C). Another 32.9 acres is under agreement which is evenly divided between the R, I & T B district and the I & T B district, and another 40.4 acres in the I & T B district is under option[3]. Assuming these parcels sell, approximately 738.6 acres would remain undeveloped, and only 16% of this supply or 116.4 acres are presently available, ready-to-go sites, which are in the I & TB and the R, I, T B districts. This means that 51% of the acreage at Devens is off-the-market

[3] The option period for the Pharmeco parcel, located west of the Army Reserve enclave, is set to end in July. If the option is not extended, this property would be available for sale by MassDevelopment.

due to infrastructure or other predevelopment needs. Most of this off-the-market supply is in the Environmental Business (E B) (201.9 acres off Walker Road), the Special Use II (SU II) (186.7 acres around Moore Airfield), the Special Use I (SU I) (87.4 acres around former Salerno housing) or the I & T C (40.2 acres with existing buildings in Vicksburg Square) districts. The current zoning, existing building stock, limited infrastructure and/or other predevelopment issues (such as demolition) affect the potential marketing of the properties in relation to what has been transferred at Devens.

Absorption of existing land at Devens has varied with the economic cycles of the last 10 years. Land absorption averaged nearly 59 acres per year between 1996 and 2000, when the economy was growing. However, the pace had slowed to an average of 27 acres per year between 2001 and 2005. It is also important to understand that the premier land areas at Devens in terms of infrastructure, zoning, and access were typically the first sites that were transferred, so it is difficult to allocate the average annual absorption pattern from what has sold to the remaining undeveloped supply. Future absorption will also be impacted by the large amount of available building supply in the region since it would be less expensive to occupy and existing building than build new in most cases. Figure 6.8 shows the absorption of land at Devens between 1996 and 2005.

Figure 6.8



Source: MassDevelopment & RKG Associates, Inc.

Regional Supply of Business Parks

The region along the Route 2 corridor has fifteen established business parks (excluding Devens) containing a total of nearly 900 acres, with 24% (or 213 acres) undeveloped and/or available (ready-to-go). The region also has more than 950 acres available at 11 scattered undeveloped sites that is zoned for commercial or industrial uses. This latter supply lacks internal infrastructure and/or utilities. Pricing for this land ranges from less than $25,000 per acre (undeveloped but zoned sites) to more than $100,000 per acre (shovel-ready sites in industrial parks). Location, access, utilities, site and development constraints, to name a few, influence value.

In comparison, Devens has over 116 acres at ready-to-go sites, which would increase the regional supply to about 330 acres, with Devens reprsenting about 35% of the ready-to-go supply. The remaining 622 acres at Devens would increase the region supply of long-term business park sites to nearly 1,600 acres and Devens would account for about 40% of the long-term supply of industrial land, provided portions of the supply would not be converted to alternative uses, such as being proposed at Devens.

Recent land sales at Devens indicate that pricing ($80,000 to $100,000) is at the high-end indicated for the region ($25,000 to $100,000/acre). This is more likely attributed to its location on the eastern side of the Route 2 corridor, and accessibility and location within Devens in comparison to the location of the other business parks in the region.

Tables 6-5 and 6-6 below summarize the supply of land within industrial parks along the Route 2 corridor. Additionally, the availability of infrastructure such as water (W), sewer (S), natural gas (G), electricity (E), rail (R), and internal park roads have been provided. These types of infrastructure are typically considered very important to businesses when locating to a prospective community. In combination with other factors, such as site location, interstate highway access, quality of life and proximity to customers, industrial or business parks with fully-serviced and ready-to-go sites are typically absorbed prior to other (non-serviced) sites.

Table 6-5
Industrial Parks with Ready-to-Go Sites

Park	Address	Town	Total Acres	Available Acres	Year	Range in Price/acre Low	High	Utilities Available	Internal Roads
Devens Commerce Ctr	Rtes. 2, 2A, 110	Devens	515	116	1996	$75,000	$95,000	W,S,G,E,R	Yes
Montachusett Industrial Park	Route 2A	Fitchburg	102	6	1980	$35,000	$60,000	W,S,G,E	Yes
Montachusett IP Annex	Route 2A	Fitchburg	30	30	1999	$18,500	$30,000	W,S,G,E	Yes
Blueberry Lane	Abutting Airport	Fitchburg	11	0	1985			W,S,G,E	Yes
231 Industrial Park	Rtes 2 & 31	Fitchburg	75	0	1972			W,S,G,E	Yes
East Gardner Ind. Park	Betty Spring Road	Gardner	125	0	1980	$10,000	$25,000	W,S,G,E	Yes
West Gardner Ind. Park	Fredette,Wilkins & Ind. Rowe	Gardner	95	30	1965	$10,000	$25,000	W,S,E	Yes
Summit Park	Route 101 (Pearl Street)	Gardner	60	35	1997	$25,000	$40,000	W,S,G,E	Yes
FBC Industrial Park	Mohawk Drive/off Nashua St.	Leominster	20	5	1975	--	$75,000	W,S,G,E	Yes
Jytek Industrial Park	Central Street	Leominster	100	5	1980	--	$65,000	W,S,G,E	Yes
Orangewood Ind. Park	Industrial Road	Leominster	16	16	1990	--	$65,000	W,S,G,E	None
Gianna Industrial Park	Leominster Road	Lunenburg	17	10	1989	$70,000	$80,000	W,S,G,E	Yes
Business Park at Westminster	Junction Rtes. 31 & 2	Westminister	53	38	1991	$50,000	$75,000	W,S,G,E	Yes
Mountain Laurel IP	Lancaster Road	Shirley	28	19	1986	$60,000	$75,000	W, E	Yes
Spring Valley IP	Pratts Junction/Chocksett Rd	Sterling	150	19	1972	$20,000	$40,000	W, G. E	Yes
		Subtotal	1,397	329					
		Available Supply w/o Devens	882	213					

Table 6-6
Near to Long Term Industrial Parks or Large Sites with Limited Infrastructure

Park	Address	Town	Total Acres	Available Acres	Year	Range in Price/acre Low	High	Utilities Available	Internal Roads
Devens Commerce Ctr	Rtes. 2, 2A, 110	Devens	622	622	1996	$75,000	$95,000	W, S, G, E	None
101 Industrial Park	Route 101 (Gardner Hill Rd)	Ashburnham	86	86		U/A	U/A	unk	None
Stoney Brook Ind. Park	Willow Road	Ayer	126	126		N/A	N/A	W,S,G,E,R	None
Littleton Corporate Commons	Rte 119/I-495	Littleton	64	64		N/A	N/A	W, E	None
Taylor Street	Intersection Rt.2/I-495	Littleton	50	50			$70,000		None
Foster Street	Exposure to I-495	Littleton	40	40		N/A	N/A	W, E, R	None
Lancaster Technology Park	Off Route 2/Lunenburg Rd	Lancaster	283	283		U/A	U/A		None
Pioneer Industrial Park	Off Route 70	Leominster	135	40		$50,000	$65,000	W, E	Some
Former Borden Site	Aspinwall Rd.	Leominster	20	20		U/A	U/A		None
Route 117/Jungle Road	Old Mill Rd/Jungle Rd/I-190	Leominster	200	200		U/A	U/A		Some
Leominster Industrial Park	Route 117	Leominster	35	35					
Tanzio Industrial Park	Route 117	Leominster	70	10	1980	U/A	U/A		Minimal
		Subtotal	1,731	1,576					
		Available Supply w/o Devens	1,109	954					
		Regional Total	3,128	1,905					
		Available Supply w/o Devens	1,991	1,167					
		Devens as a percent of total	36%	39%					

Source: RKG Associates, Inc.,The Massachusetts Industrial and Research Park Directory, North Central Mass. Chamber of Commerce, Foster Company, MassAlliance, RE brokers and property owners.

Future Absorption of Unsold Land at Devens

A short and long-term absorption period has been estimated for the remaining unsold land in each of the zoning districts in order to estimate the potential employment gains that would be realized at Devens. Within the next five years, it is estimated that nearly 150 acres will be sold, which is similar to historic absorption patterns at Devens. A key assumption is that zoning in the EB district is modified to allow more traditional light industrial/contractor uses than what is allowed. Another key to this assumption is the potential marketing of 5-acre frontage lots along Walker Road to accommodate these types of users which utilize buildings generally up to 25,000 SF. It is also assumed that one lot sale will result per year, after the first year.

Table 6-7
Potential Absorptions of Unsold Land at Devens

		Acres		Non-Residential Bldg [1]		Employment [2]		
Zoning District	Acres Unsold	Five-Year	Twenty-Year	Five-Year	Twenty-Year	Five-Year	Twenty-Year	Acres Remaining
R, I & T B	47	47	47	616,810	616,810	617	617	0
I & T B	226	81	226	709,157	1,964,556	709	1,965	0
VG 1	23	0	5	0	54,450	0	109	18
I & T C (Vicksburg)	40	0	0	0	0	0	0	40
S U I - Salerno	87	0	87	0	750,000	0	1,500	0
S U II - Moore [3]	187	0	50	0	435,600	0	436	137
E B Walker [3]	202	20	95	130,680	620,730	187	621	107
Total	812	149	510	1,456,646	4,442,146	1,513	5,247	302

[1] FAR of 30% in the R, I & TB Zone; 20% in the I & TB & SU II zones; 15% in the EB zone
[2] Assumes 1 employee per 1,000 SF except VG I and SU I 1 employee per 500 SF
[3] Assumes change of zoning to be similar to I & T B and R, I & T B Zones
Source: RKG Associates, Inc.

Over the long-term (twenty years) it is estimated that over 510 acres will be sold and developed with more than 4.4 million SF of additional building area, and more than 5,200 jobs would be created, such that the 8,000 job benchmark for Devens will be met and/or exceeded. Table 6-7 identifies where most of the development and what land would remain undeveloped at the end of the twenty years.

■

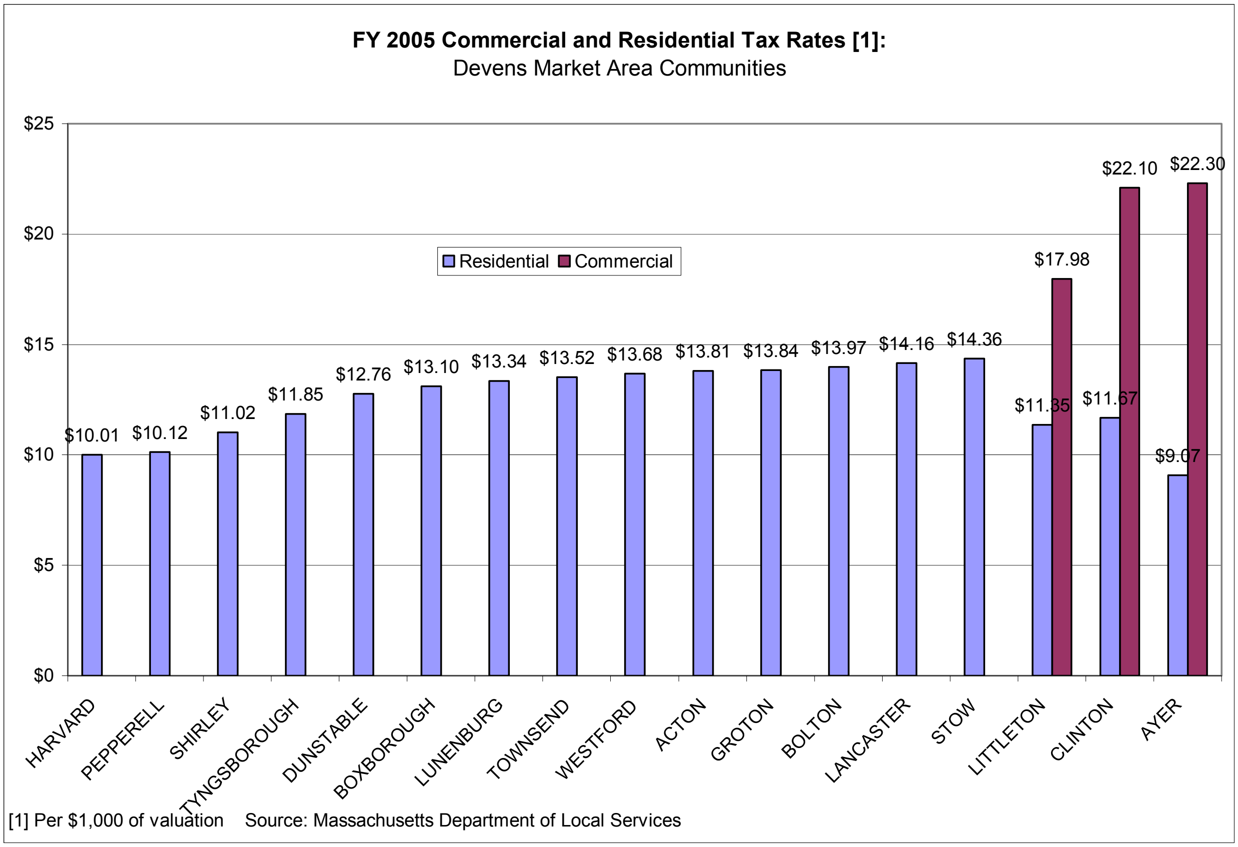
Property Tax Rates

The following section summarizes current 2005 property tax rates (per $1,000 of property valuation) for the Core Communities and economic region as provided by the Massachusetts Department of Local Services. Where applicable, split (residential and commercial) property tax rates have been provided.

- As shown in Figure 6.9, for communities without a split property tax rate, property tax rates for seventeen communities within the market area generally range between $10 and $14 per $1,000 of property valuation. The towns of Harvard ($10.01) and Shirley ($11.02) are among the lowest in the market area.

- For communities with a split property tax rate (Ayer, Clinton and Littleton), residential property tax rates range between $9.07 (Ayer) and $11.67 (Clinton) per $1,000 of property valuation. Commercial property tax rates in each of these communities are significantly higher than the residential rates ranging from $17.98 (Littleton) to $22.30 (Ayer) per $1,000 of property valuation.

Figure 6.9



Employment Growth under the Devens Reuse Plan

It appears that regional housing costs have not been a significant impediment to employment growth at Devens. Businesses report that many of their workers commute from nearby cities such as Fitchburg, Gardner, Leominster and Lowell – communities that provide relatively affordable housing. In the Census Bureau's "journey-to-work" data series, the same communities are identified as origin points for a large percentage of commuters to Ayer, which historically served as the official location of employment at Devens. Since Devens does not have a distinct geographic identity for labor reporting purposes, the economic data programs of federal and state agencies combine the number of people working for Ayer businesses with the number of people working at Devens, and report them on Ayer's employment base. However, Ayer-Devens jobs can be disaggregated to some degree, and the results provide an incomplete but revealing picture of what has happened in the Core Communities since BRAC-91 announced that Fort Devens would close. For example, a comparison of 1990-2000 journey-to-work statistics for Ayer shows that in 1990 when Fort Devens was still an active military installation, the community listed as the largest single generator of workers in Ayer was the Town of Harvard, followed by Ayer and Shirley. By 2000, Harvard had fallen well below the midpoint among places of residence for Ayer-bound commuters. In the same period, the total number of commuters to Ayer declined from 8,548 to 5,415.

Construction-ready land and the Devens Enterprise Commission's one-stop permitting authority have helped Devens compete for a large share of the region's economic growth, but so has proximity to a slightly lower-cost labor supply. Although the data used to generate location quotients in Table X include employment in Ayer and Devens, the overall size and composition of the employment base, coupled with journey-to-work characteristics of "Ayer" workers, suggest that many of the jobs in Table 6-8 are in fact at Devens.

Table 6-8: Location Quotients, Ayer-Devens

		Location Quotients		
INDUSTRY CLASS	Local Employment	Ayer to State	Ayer to County	Ayer to LMA
Total, All Industries	6,234	1.00	1.00	1.00
GOODS-PRODUCING DOMAIN	2,198	**2.29**	**2.04**	**2.70**
Natural Resources and Mining	0	0.00	0.00	0.00
Agriculture, Forestry, Fishing & Hunting	0	0.00	0.00	0.00
Mining	0	0.00	0.00	0.00
Construction	156	0.53	0.50	0.56
Manufacturing	2,041	**3.15**	**2.71**	**3.91**
Durable Goods Manufacturing	732	**1.73**	**1.32**	**2.04**
Non-Durable Goods Manufacturing	1,309	**5.82**	**6.63**	**8.03**
SERVICE-PROVIDING DOMAIN	4,037	0.77	0.78	0.74
Trade, Transportation and Utilities	1,043	0.86	0.90	0.92
Utilities	0	0.00	0.00	0.00
Wholesale Trade	299	1.11	0.90	1.12
Retail Trade	402	0.57	0.63	0.63
Transportation and Warehousing	322	**1.55**	**1.93**	**1.54**
Information	105	0.55	0.35	0.47
Financial Activities	120	0.27	0.43	0.22
Finance and Insurance	83	0.24	0.42	0.19
Real Estate and Rental and Leasing	37	0.42	0.48	0.37
Professional and Business Services	402	0.46	0.33	0.39
Professional and Technical Services	264	0.60	0.37	0.47
Management of Companies and Enterprises	0	0.00	0.00	0.00
Administrative and Waste Services	0	0.00	0.00	0.00
Education and Health Services	1,181	0.80	0.88	0.83
Educational Services	292	0.50	0.44	0.51
Health Care and Social Assistance	888	1.01	1.30	1.03
Leisure and Hospitality	306	0.53	0.65	0.55
Arts, Entertainment, and Recreation	74	0.73	1.00	0.75
Accommodation and Food Services	232	0.48	0.58	0.51
Other Services	156	0.67	0.78	0.71
Public Administration	724	**2.71**	**3.69**	**2.63**

It is unsurprising that many people employed at Devens do not live in the Core Communities, or that cities and rural towns west of Ayer generate a disproportionately large number of Devens commuters. The shortage of housing affordable to lower- and modest-wage workers in Harvard, Ayer and Shirley means that for the most part, Devens employers have to draw labor from a much larger region. Average wages paid by businesses located in Devens-Ayer are not high enough for a one-person or single-parent household to afford market housing prices around Devens, so many workers commute. Table 6-9 provides estimates of affordable purchase prices and monthly rents for the same workers represented in the location quotients in Table 6-8.

Table 6-9: Housing Affordability for Ayer-Devens Employees

Industry	Average Annual Wage (Ayer-Devens)	Maximum Affordable Price		
		Monthly Rent	Mortgage Loan	Purchase Price[4]
Construction	$36,750	$919	$88,191	$92,833
Manufacturing	$43,050	$1,076	$114,461	$120,485
Wholesale Trade	$47,300	$1,183	$132,182	$139,139
Retail Trade	$28,900	$723	$55,458	$58,377
Transportation and Warehousing	$35,850	$896	$84,438	$88,882
Information	$32,350	$809	$69,844	$73,520
Finance and Insurance	$35,500	$888	$82,979	$87,346
Real Estate and Rental and Leasing	$20,300	$508	$19,598	$20,629
Professional and Technical Services	$49,600	$1,240	$141,773	$149,235
Administrative and Waste Services	$31,300	$783	$65,466	$68,911
Educational Services	$37,750	$944	$92,361	$97,222
Health Care and Social Assistance	$39,000	$975	$97,573	$102,709
Arts, Entertainment, and Recreation	$19,850	$496	$17,722	$18,654
Accommodation and Food Services	$14,100	$353	-$6,255	-$6,584
Other Services (Ex. Public Admin)	$20,000	$500	$18,347	$19,313
Public Administration	$50,550	$1,264	$145,734	$153,404
Total: All Industries	$39,700	$993	$100,492	$105,781

Source: ES-202, Community Opportunities Group, Inc.

A "Smart Growth" affordable housing plan for Devens and the host communities could emphasize affordability at the wage levels paid by local employers. While workers may continue to commute from non-local housing, the probability that Devens will reach the 8,000-job target of the Reuse Plan poses a challenge for local officials and MassDevelopment: if more employees can be housed on site, continued growth at Devens will generate fewer environmental and traffic impacts than if businesses continue to rely on workers from the larger economic region. Appendix 6-1 identifies a variety of housing assistance programs that may be used to develop housing for low-, moderate- and median-wage workers.

[4] Assumes a 30-year, fixed-rate mortgage at 6% interest, and a 5% downpayment.