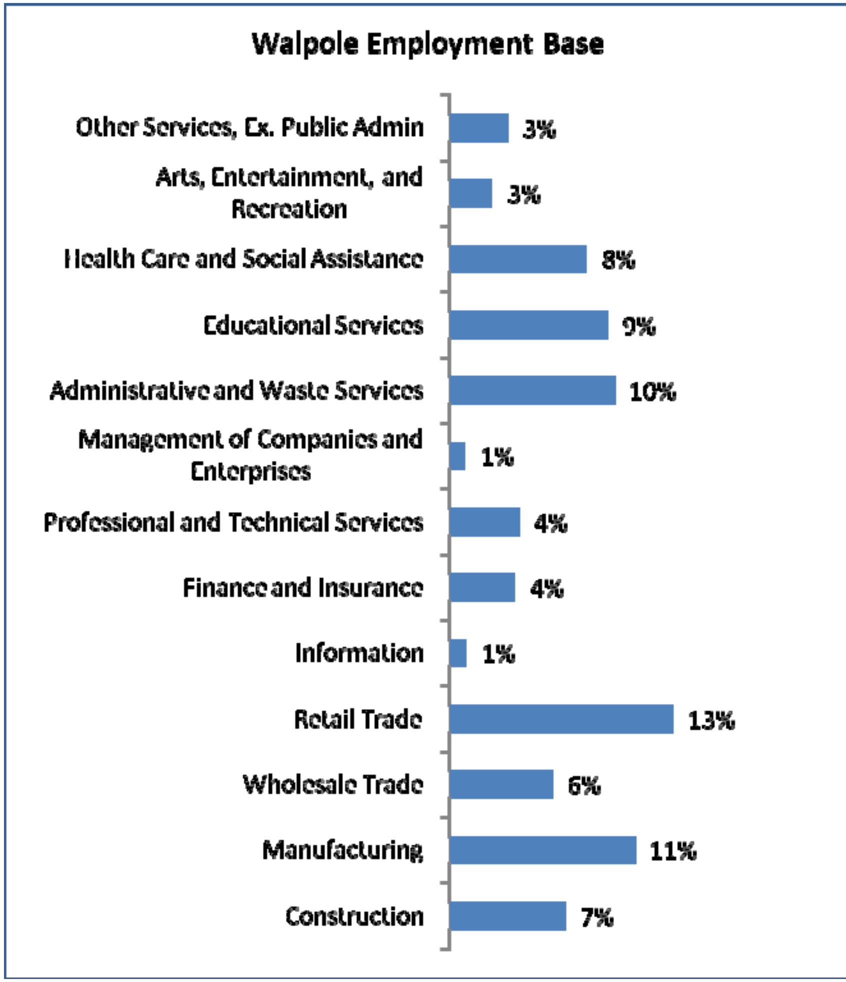
Walpole Economic & Market Trends Analysis

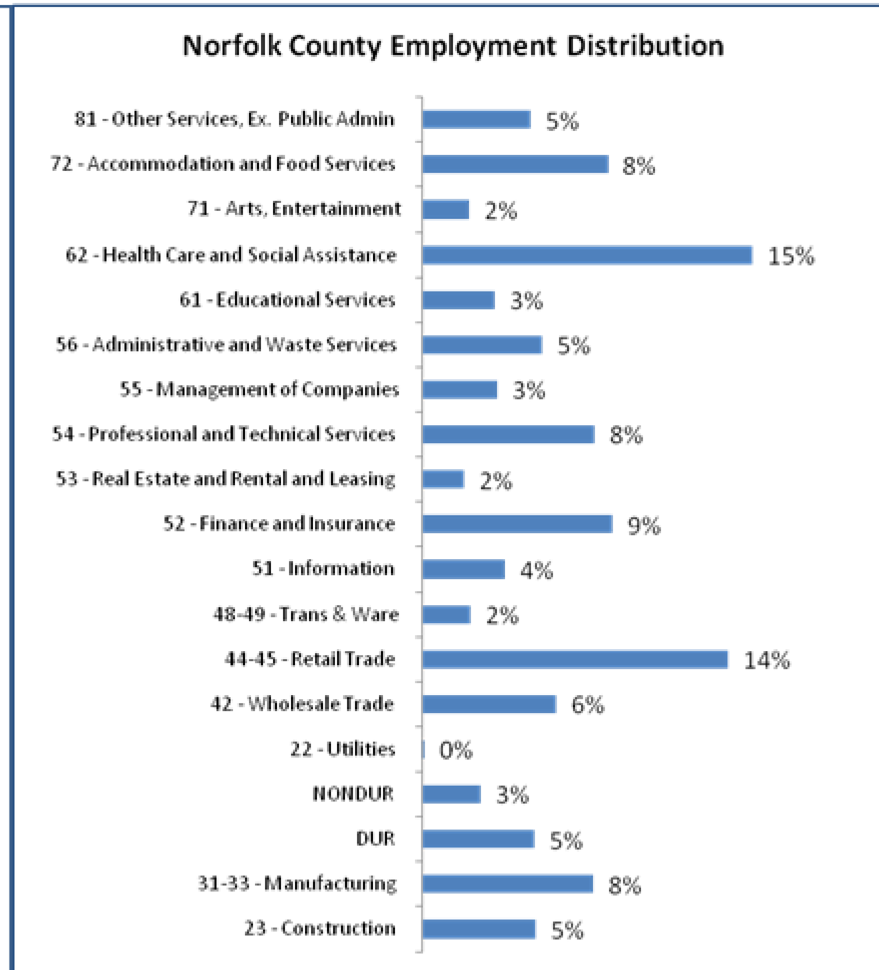
Public Meeting

3/1/2011

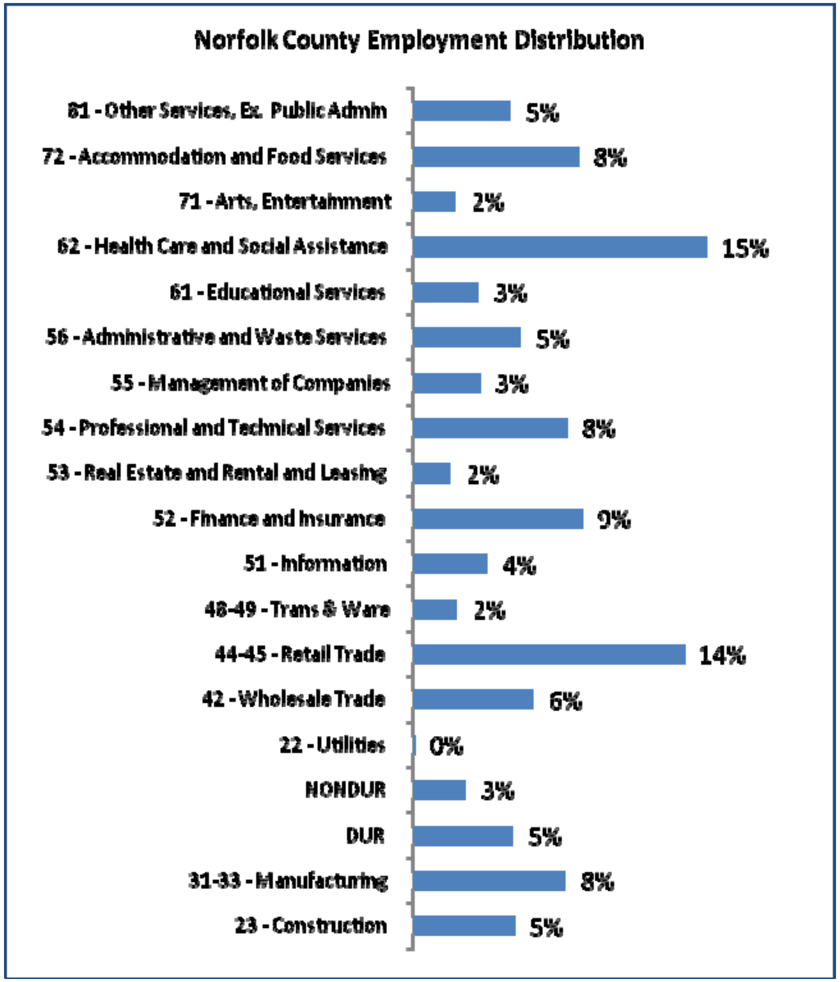
Ninigret | Partners

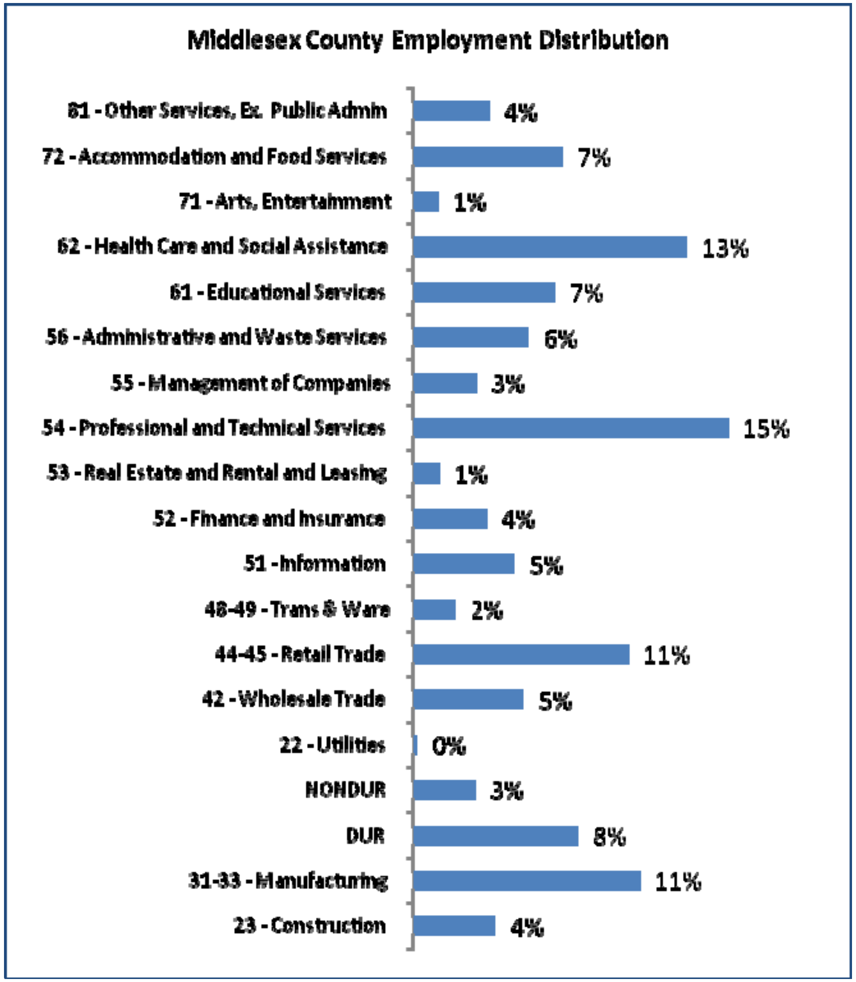
Walpole's 808 businesses employ 10,200 people with major concentrations in manufacturing and industries that don't generate substantial demand for office space





Middlesex vs. Norfolk county employment





Several of Massachusett's leading industries have undergone significant shrinkage in the last decade leading to the opening of large amounts of space

NAICS	Industry	Year 2001	2009	Difference	% change
541	Professional and Technical Services	244,148	251,386	7,238	3%
722	Food Services and Drinking Places	201,904	220,142	18,238	9%
622	Hospitals	141,879	176,986	35,107	25%
6221	General Medical and Surgical Hospitals	124,999	155,208	30,209	24%
621	Ambulatory Health Care Services	121,290	146,119	24,829	20%
561	Administrative and Support Services	160,113	140,508	(19,605)	-12%
611	Educational Services	111,914	126,713	14,799	13%
7221	Full-Service Restaurants	100,160	114,270	14,110	14%
623	Nursing and Residential Care Facilities	87,560	98,728	11,168	13%
445	Food and Beverage Stores	92,050	92,523	473	1%
6113	Colleges and Universities	77,433	85,076	7,643	10%
7222	Limited-Service Eating Places	71,333	80,298	8,965	13%
4451	Grocery Stores	75,440	78,001	2,561	3%
624	Social Assistance	58,582	68,249	9,667	17%
524	Insurance Carriers & Related Activities	64,299	65,365	1,066	2%
334	Computer and Electronic Product Mfg	101,659	63,096	(38,563)	-38%
522	Credit Intermediation & Related Activity	60,492	60,196	(296)	0%
6231	Nursing Care Facilities	57,799	59,266	1,467	3%
5511	Management of Companies and Enterprises	71,925	59,003	(12,922)	-18%
423	Merchant Wholesalers, Durable Goods	73,227	56,030	(17,197)	-23%
5415	Computer Systems Design and Rel Services	60,145	55,245	(4,900)	-8%
6211	Offices of Physicians	45,141	51,969	6,828	15%
5221	Depository Credit Intermediation	50,056	51,605	1,549	3%
5617	Services to Buildings and Dwellings	46,966	49,282	2,316	5%
5613	Employment Services	64,881	47,979	(16,902)	-26%

While industries with the largest employment growth have specialized space needs or are not real estate driven businesses

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722	Food Services and Drinking Places	201,904	220,142	18,238	9%
611	Educational Services	111,914	126,713	14,799	13%
814	Private Households	15,673	29,894	14,221	91%
7221	Full-Service Restaurants	100,160	114,270	14,110	14%
623	Nursing and Residential Care Facilities	87,560	98,728	11,168	13%
5417	Scientific Research and Development Svc	33,319	43,818	10,499	32%
624	Social Assistance	58,582	68,249	9,667	17%
454	Nonstore Retailers	13,376	22,992	9,616	72%
7222	Limited-Service Eating Places	71,333	80,298	8,965	13%
6216	Home Health Care Services	19,104	27,004	7,900	41%
6113	Colleges and Universities	77,433	85,076	7,643	10%
541	Professional and Technical Services	244,148	251,386	7,238	3%
6211	Offices of Physicians	45,141	51,969	6,828	15%
6241	Individual and Family Services	24,127	30,930	6,803	28%
4251	Electronic Markets and Agents/Brokers	21,261	27,502	6,241	29%
6232	Residential Mental Health Facilities	13,318	18,895	5,577	42%
5239	Other Financial Investment Activities	20,510	25,657	5,147	25%
813	Membership Organizations & Associations	33,412	38,466	5,054	15%
4543	Direct Selling Establishments	6,997	11,934	4,937	71%
5191	Other Information Services	1,094	5,850	4,756	435%
6233	Community Care Facility for the Elderly	10,535	15,240	4,705	45%
5313	Activities Related to Real Estate	8,639	13,241	4,602	53%

Corporate Real Estate Market Conditions

A note of caution

- Any market study conducted today will indicate negative to flat square foot absorption of space
- Market analysis / forecasting in these economic conditions is exceptionally difficult
  - Past trends can't be applied – particularly since credit markets are likely to stay tight for the foreseeable future tempering real estate development
  - Employment forecasts suggests a jobless recovery with a lack of clear indications of industry leadership in rehiring
- Some of the major sources of employment growth – higher education and healthcare – are not easily accessible to Walpole

The 495 corridor has less office space but substantially more industrial space than the 128 corridor

495 West/South

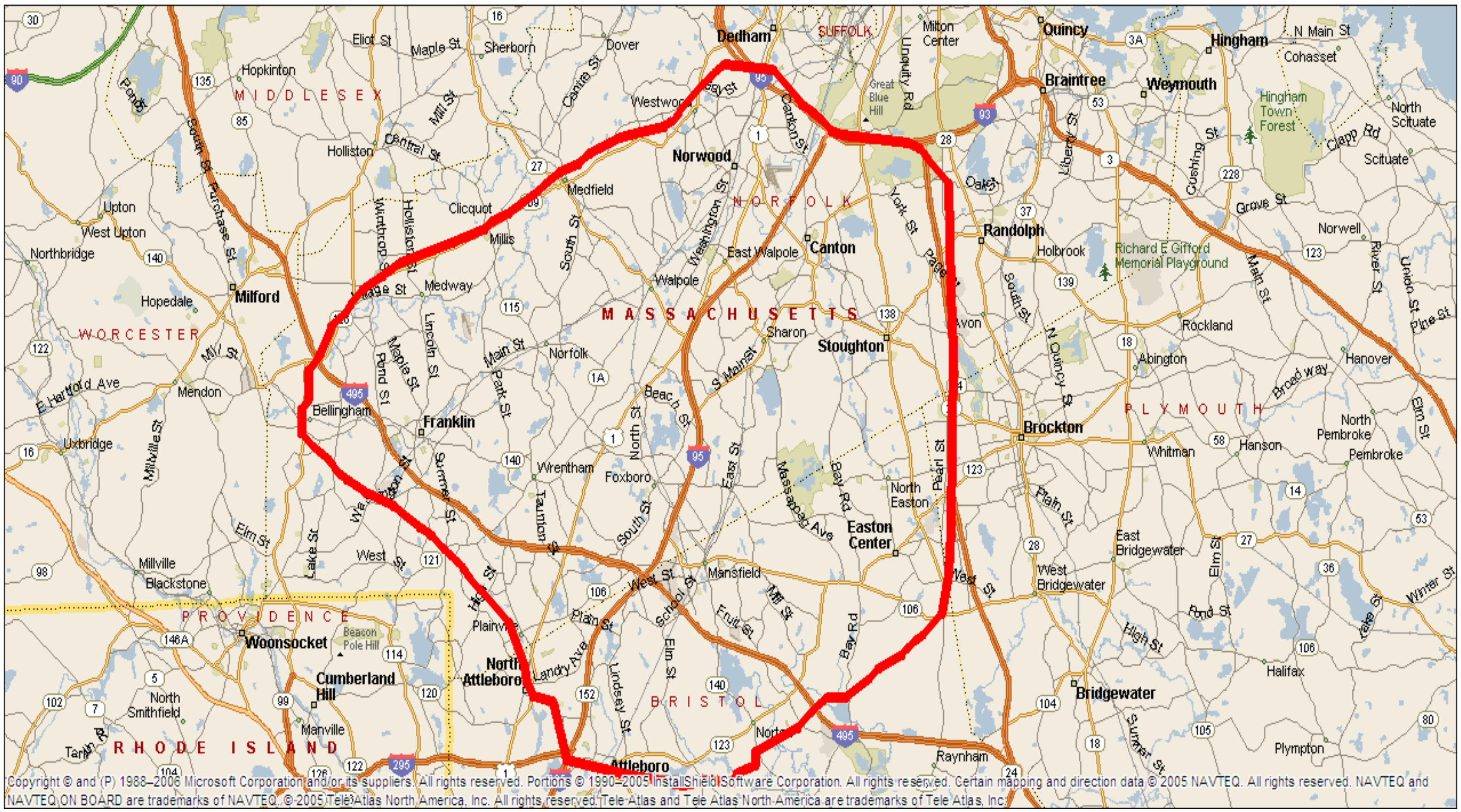
- Office (class A&B) market size: 14 msft
  - Vacancy: 18%
  - Lease rate $16-$21
- Industrial market size: 46 msft
  - Vacancy: 15%
  - Lease rate $4.60 – $5.76

Rt 128 West / South

- Office market size: 35msft
  - Vacancy: 14%
  - Lease rate: $16-27
- Industrial: 24.6 msft
  - Vacancy: 5.5%
  - Lease rate: $5.28-$7.09

The competitive market area has been defined as running along Rt 109 to I-495 over to US 24 with the focus being on real estate in close proximity to the I-95 corridor

- In practice Walpole competes with sites ranging from Rt 2 through to US 24, however, because of the size of this market it was determined to narrow the assessment to communities in close proximity to the I-95 corridor



Market Perspective

Our perspective is to not look at corporate real estate through the lens of a developer but rather through the lens of the tenant or buyer by understanding the real estate market on a segmented basis

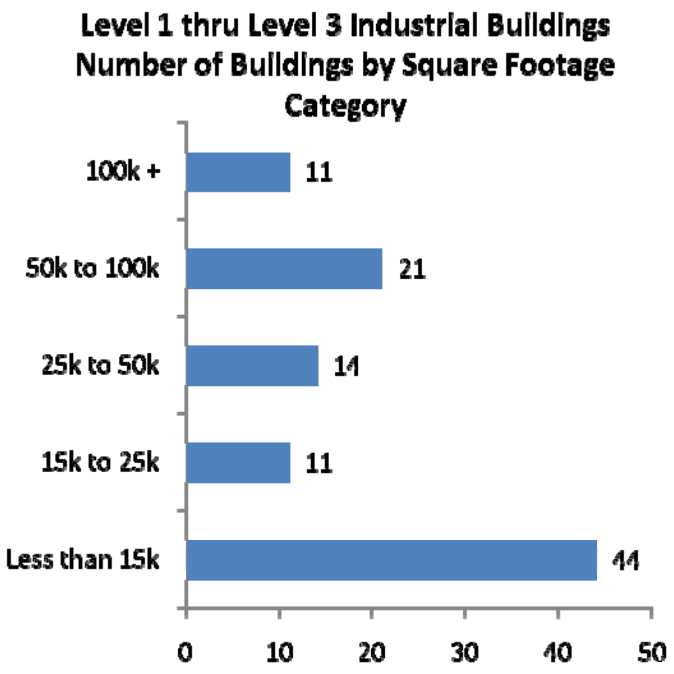
Framework for examining competitive supply

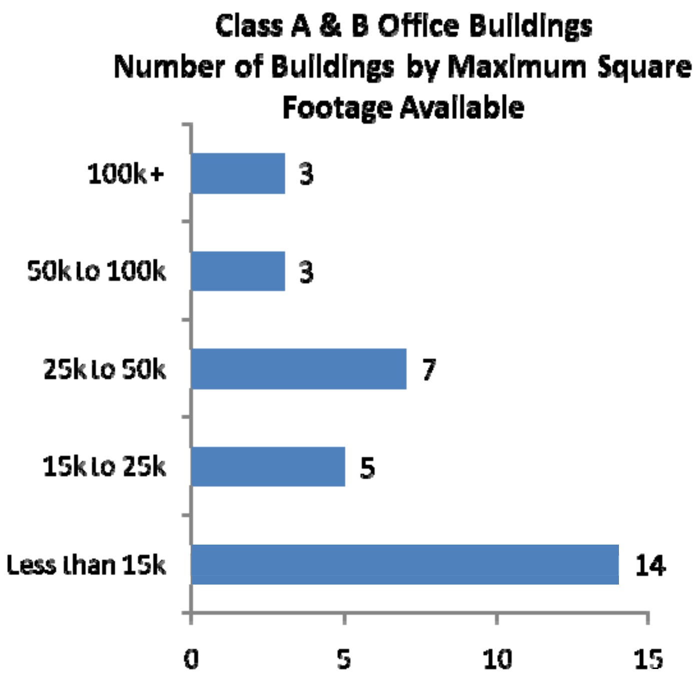
- Level 1: Building at move-in quality
- Level 2: Building needs refurbishment, modifications, or final build-out
- Level 3: Building in place but requires substantial renovation or code upgrades (mill and older industrial buildings)
- Level 4: Developed “pad ready” site with full site approvals, site plans and infrastructure in place
- Level 5: Raw land, zoned industrial or office / industrial
- Level 6: Raw land not necessarily zoned but designated for future business use

Examples of available product in the area at various stages of market readiness

Across the market area approximately 4.1 million square feet of industrial space is available as well as approximately 1 million square feet of office space

- Approximately 10% of the industrial space consists of one warehouse with nearly 400ksft
- A potential opportunity in the marketplace is for buildings with relatively small footprints in the 25ksft range
- Under present economic conditions buildings will accept smaller lease arrangements to generate some revenue, however, that will likely change as the economy improves
- It is also important to note that much of the industrial can be easily converted to office space

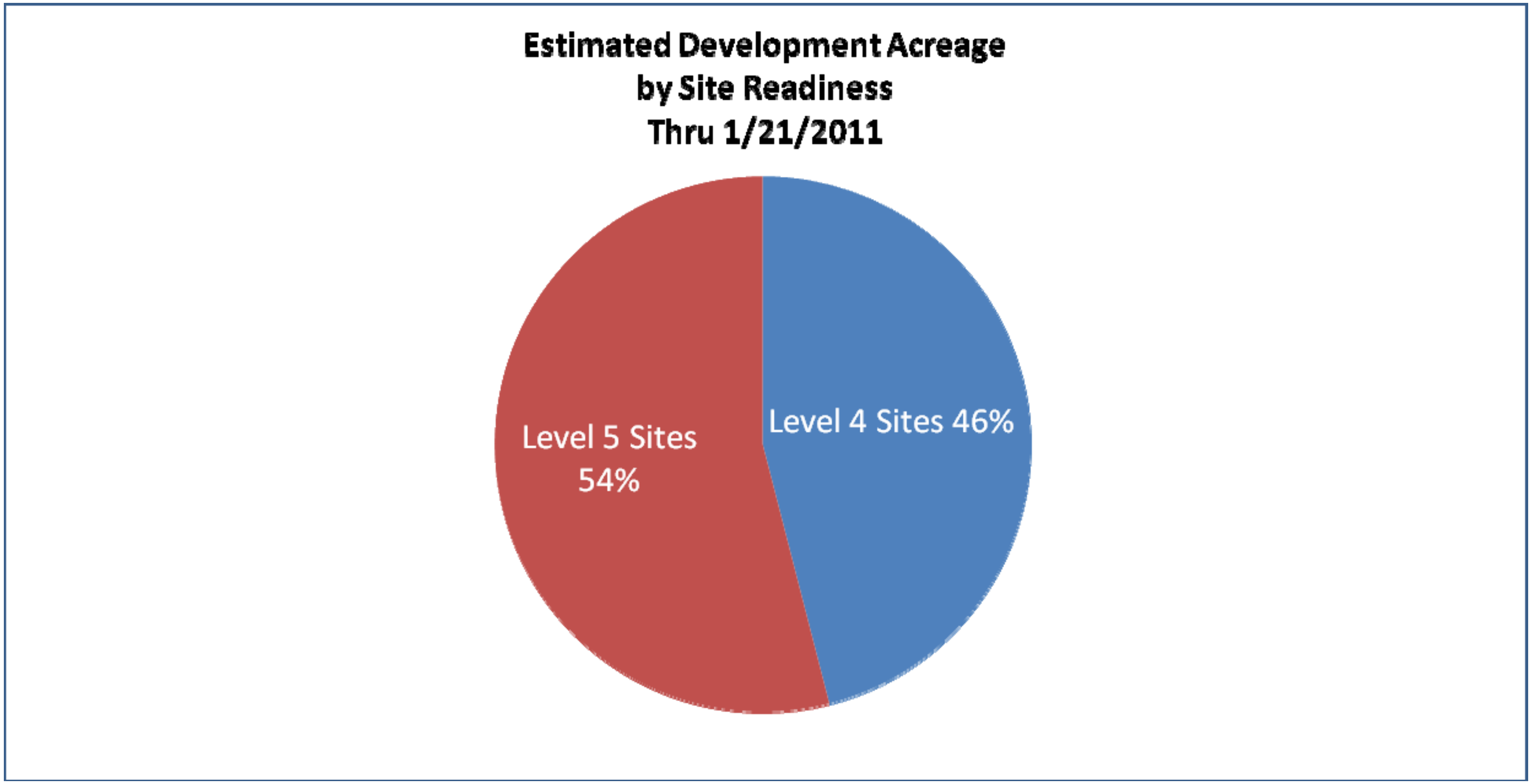




Note: there is some overlap in building types due to existence of FLEX buildings
Source: NP calculations based on broker reportsand Loopnet searches

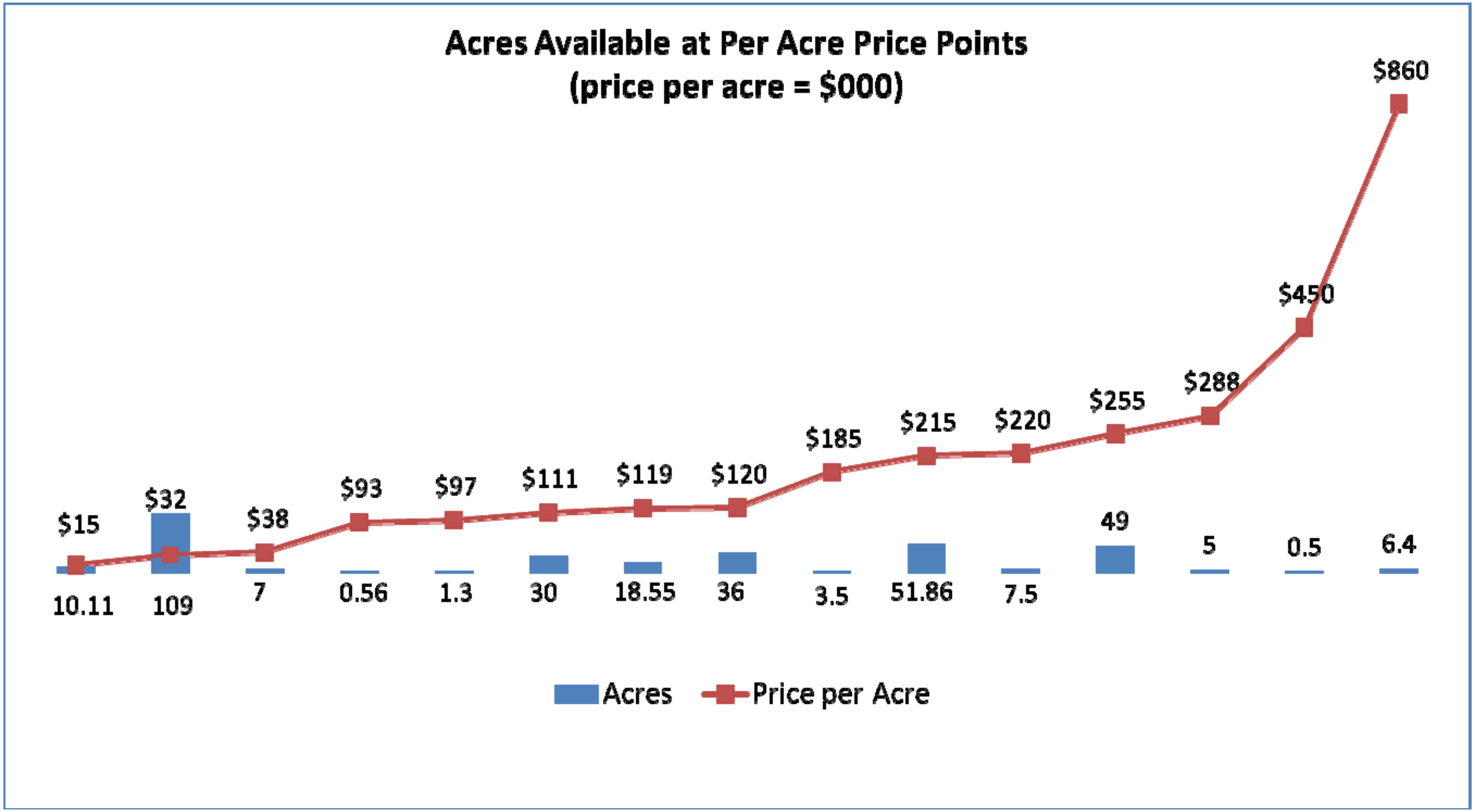
An estimated 387 acres are available for commercial or industrial development in the market area

- 179 acres in the market area are considered site ready by MassEcon
- 208 unimproved acres are available between I-90/495 and Franklin
- Note: This excludes more than 200 acres of land for sale presently zoned residential



Source: Mass Site Finder – Loopnet; NP calculations

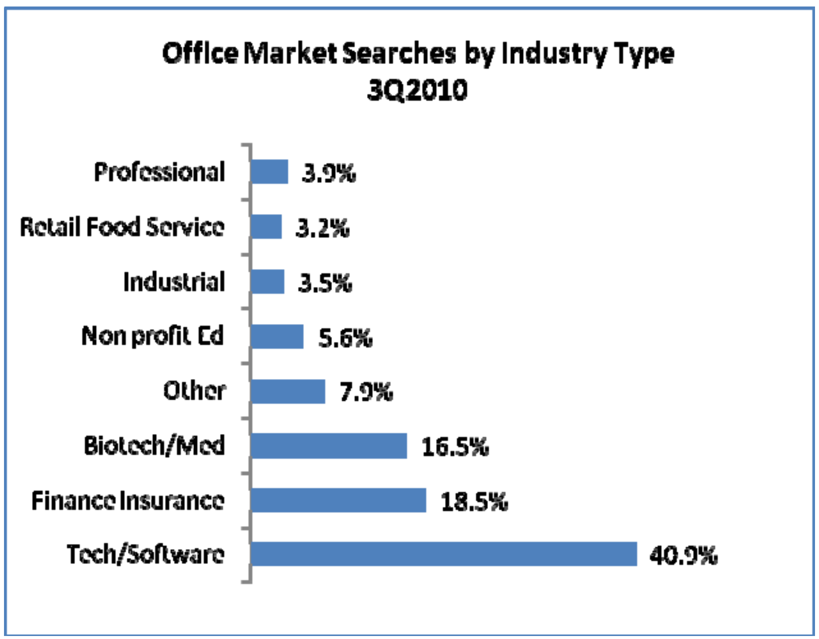
56% of the acreage in the market area is available for less than $200K per acre reflecting the large amount of unimproved land

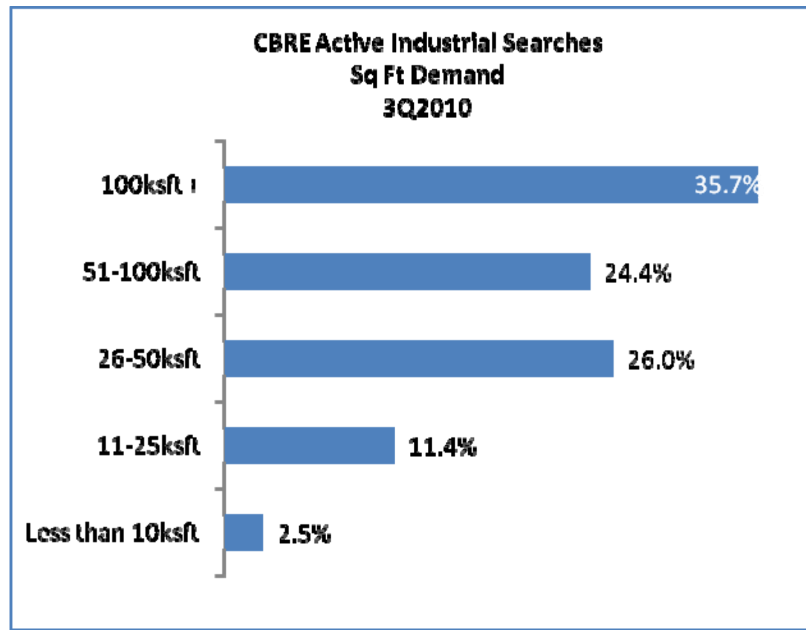


Source: Mass Site Finder – Loopnet; Broker reports; NP calculations

Active searches provide an indication of the type of real estate requirements that are in the marketplace to assist in site planning

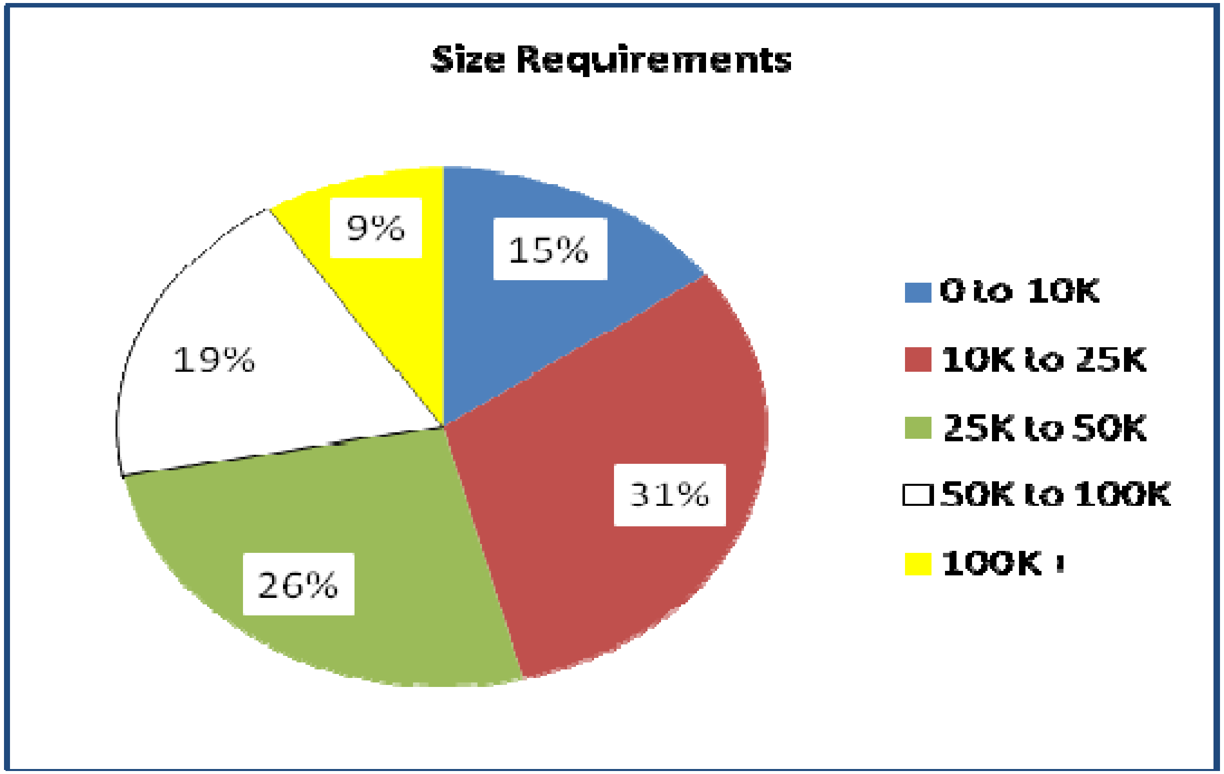
- CB Richard Ellis market summaries provide an indication of the type of space demand across the larger regional market
- Total activity in the market during 3Q10 represents 9.2 million sq ft in searches – based on analysis of various brokerage reports most of this does not represent net new demand but lease expirations and consolidations with high likelihood of renewals
- 47.8% of the searches are for space less than 50 ksft





At the height of the Massachusetts economy (2007), an additional 3.1 million in industrial space was in demand over the present 5 million sq ft with more than 72% of space less than 50ksft

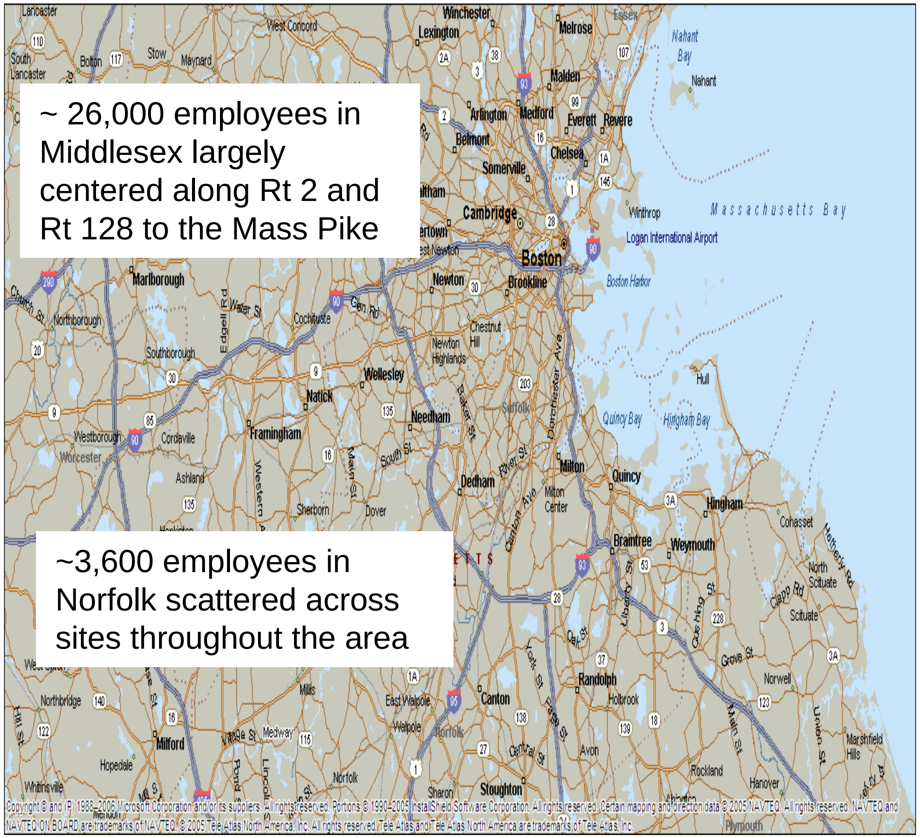
- This information is presented since making investment decisions solely on present economic conditions misses the long-term potential
- An economic recovery could radically shift the majority of demand away from large spaces back to smaller spaces



Source: CBRE MarketView, 4Q 2007

Biotech and Life Sciences

BioMedical industry employment in suburban Boston is nearly 30,000



- Employment in Middlesex appears to have more than doubled since 2001
  - From 10,200 to 26,300 in 2009
  - Note: this may be due to a reclassification of data
  - However, since 2007 employment has grown by nearly 1900 people
- In contrast Norfolk county employment has stayed stable during this period

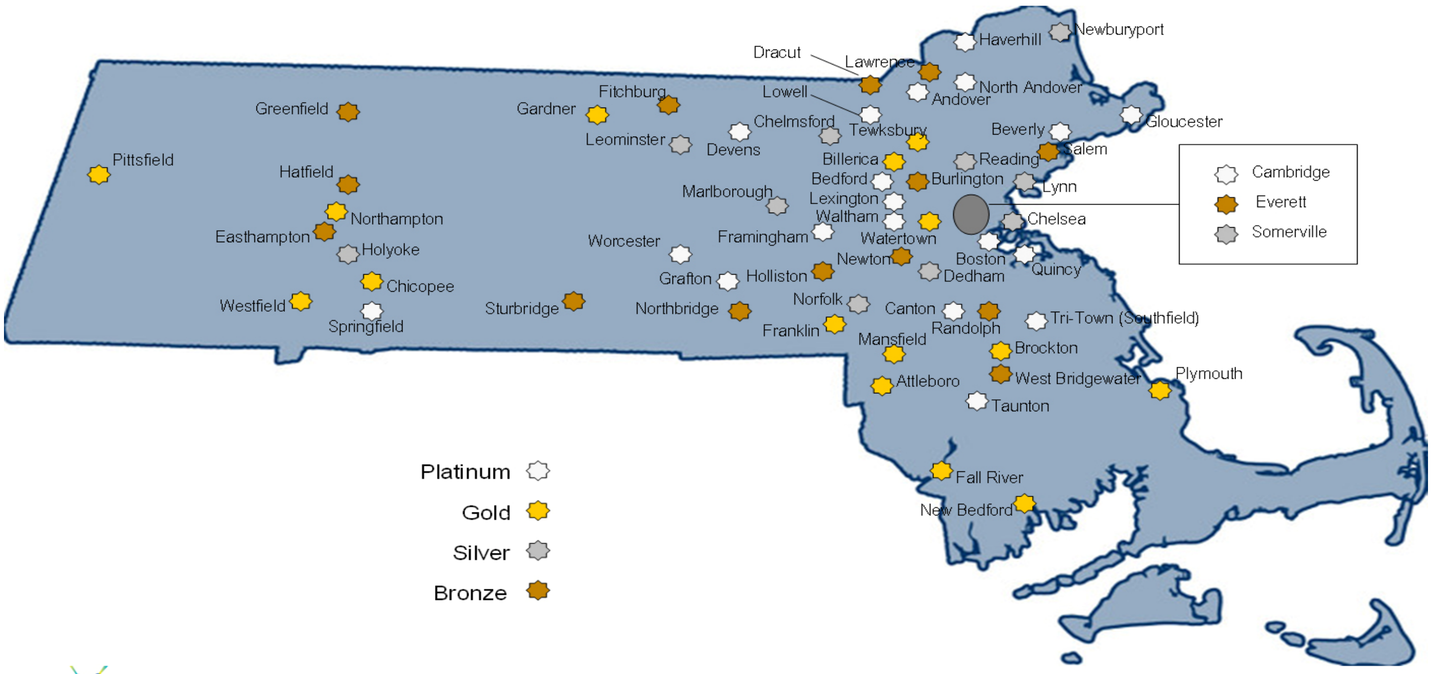
Note: Biomedical employment classified as NAICS 3391 Medical supplies and equipment; NAICS 334510 Electromedical apparatus; NAICS 541711 Biotech R&D NAICS 3254 Bio and Pharm med manufacturing
source: Bls.gov, NP analysis.

Competing for biotech/life sciences will likely require becoming a BioReady community given the regional competition

- At this point it's a "needed to play" situation as opposed to "needed to win"

Massachusetts BioReady™ Community Ratings Map

(January 2011)



MassBio
MASSACHUSETTS BIOTECHNOLOGY COUNCIL

BioReady Community requirements

Rating	Requirements
Bronze	A municipality at this level features municipal water and sewer in commercial and industrial areas, zoning allowing for biotech laboratory and manufacturing uses by *special permit, and has identified a local point of contact in to assist biotech projects.*
Silver	A municipality meets all Bronze criteria AND allows biotech uses *by right, convene Site Plan Review meetings to expedite development projects, and has identified sites for biotech uses in municipal plans or has land sites and/or buildings included in BioSites inventory at* ***www.massachusettssitefinder.com,*** or is a Growth District, or has identified Priority Development Sites per Chapter 43D.
Gold	A municipality meets Silver criteria *plus has sites or buildings pre-permitted for biotechnology use, OR has existing buildings in which biotech laboratory or manufacturing activities are taking place.*
Platinum	A municipality meets Gold criteria plus has adopted the National Institutes of Health guidelines on rDNA activity as part of its Board of Health regulations, has a building or buildings that are already permitted for biotech uses and which have 20,000+ square feet available space for biotech uses *OR has a shovel-ready pre-permitted land site with completed MEPA review and municipal water and sewer capacity to meet additional demand.*

Source: MASSBio

Typical utility infrastructure requirements for life science companies

- Note significant process development work is underway to reduce the amount of water consumed through single use technologies

	Footprint	Water Use	Sewer	Natural Gas
Basic Research	10-20ksft minimum with expansion capacity	8-20000 gpd	Some pretreatment, use of neutralization tanks	Required
Process Development	10 to 20ksft minimum Typically able to expand to pilot plant	20000 gpd	Same as above	Required
Pilot Manufacturing	10 to 35ksft	2400 gph per 1000sft	Adequate public sewer capacity. Discharges require kill systems and pH pretreatment	Higher volume than process development
Manufacturing	At least 100ksft	Varies by process but planning model 1.5 million gpd per 100ksft manufacturing Also requires standby water system	Same as pilot with larger scale	High volume
Fill & Finish	20ksft minimum	Much less than manufacturing		Required

“Green Industries”

Clean Tech Industry Universe

Clean Energy
Energy Production
Energy Management

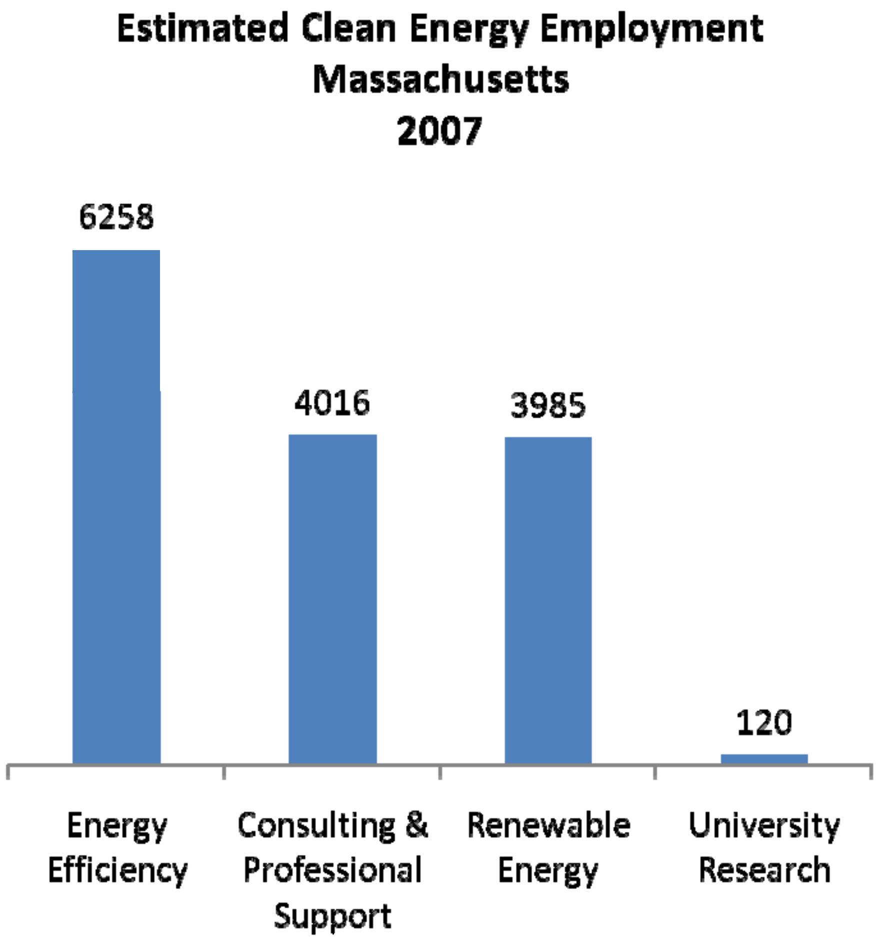
Propulsion Technology
Fuel Cells
Electric
Hybrid
High Compression

Pollution Abatement
Phytoremediation
By-Product Synergy

Industrial Biotech
Biopolymers
Biomaterials

Water
Recycling/Reuse
Purification

556 clean energy companies employing approximately 14000 people exist in Massachusetts

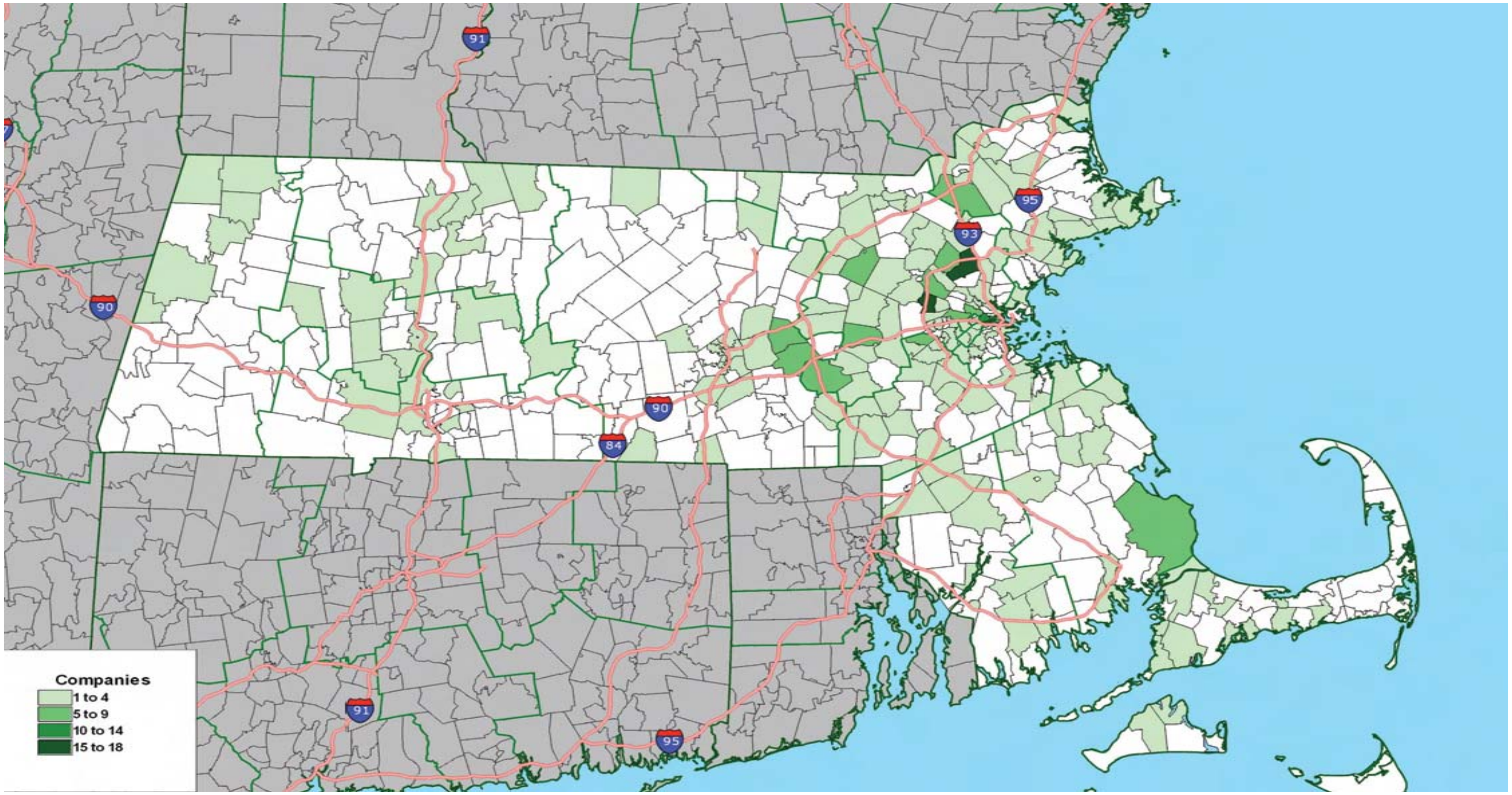


- Most of these companies are small with 40% having fewer than $1 million in revenues
- Most companies in the renewable space are less than 5 years old
- Renewable energy is the fastest growing sector in Massachusetts
  - Projections are for 30% employment growth in this subsector in the next year
- MassTech estimates that clean energy could employ 75,000 people statewide by 2017
- If the present configuration of industry continues forward flex space that can accommodate industrial and office uses will be required

Source: MASSTECH; NP analysis

Distribution of Clean Energy Companies in MA

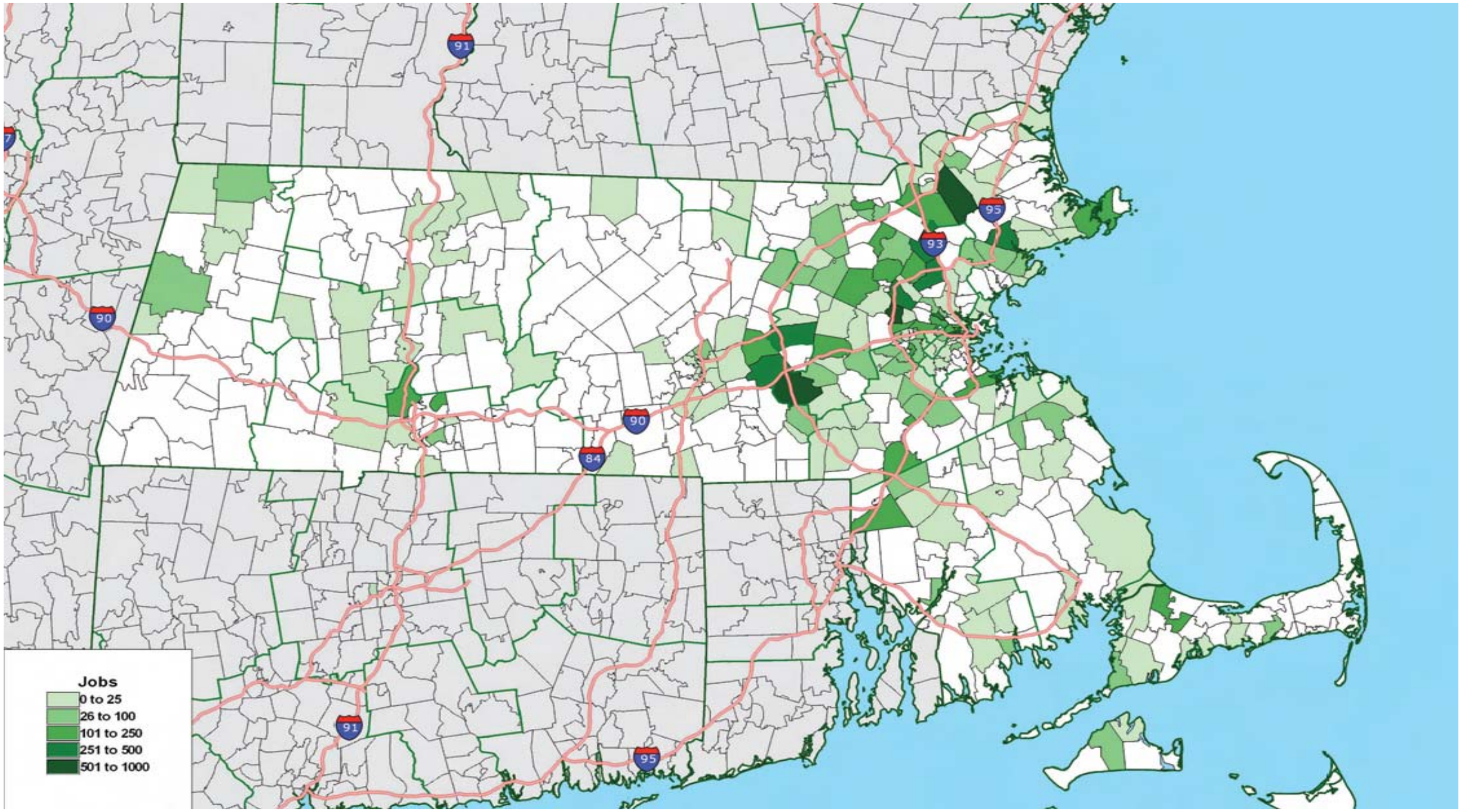
- ❑ The RT 128 / I 495 corridor as expected is a central location for Clean energy businesses…



Source: MassTech

Distribution of Clean Energy Jobs in MA

- With relatively low levels of employment…



Source: MassTech

Manufacturing clean tech can be an involved industrial process

Example: Photovoltaic cells

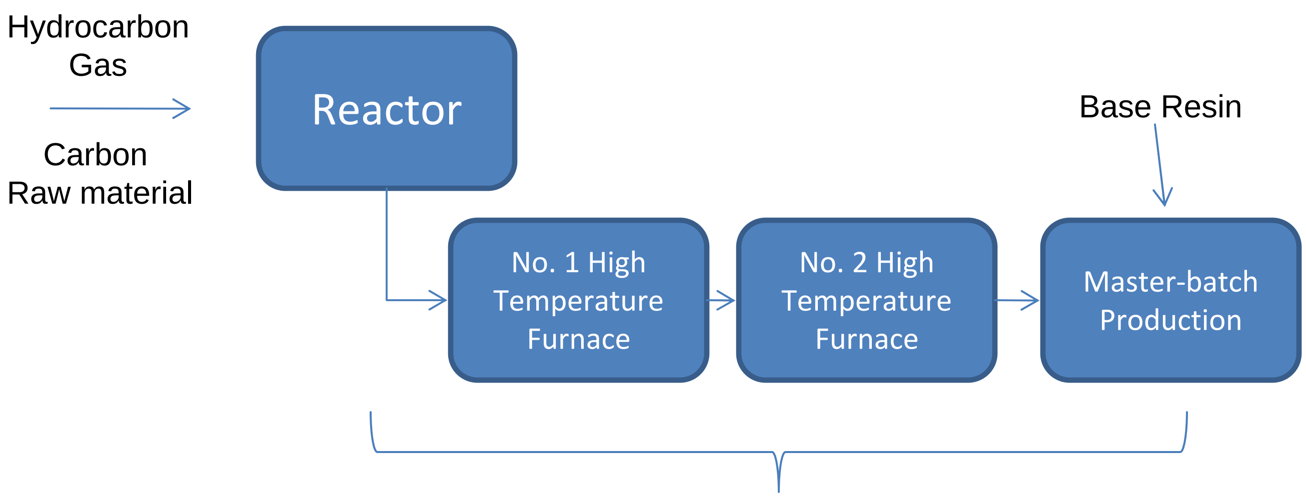
Material	Process Source	TLV-TWA1 (ppm)	STEL2 (ppm)	IDLH3 (ppm)	ERPG24 (ppm)	Critical Effects
Arsine	GaAs CVD	0.05	-	3	0.5	Blood, kidney
Arsenic compounds	GaAs	0.01 mg/m^3	-	-	-	Cancer, lung
Cadmium compounds	CdTe and CdS deposition $CdCl_2$ treatment	0.01 mg/m^3 (dust) 0.002 mg/m3 (fumes)	-	-	NA	Cancer, kidney
Carbon tetrachloride	Etchant	5	10		100	Liver, cancer, greenhouse gas
Chloro-silanes	a-Si and x-Si deposition	5	-	800	-	Irritant
Copper	CIS deposition	1 mg/m^3 (dust) 0.2 mg/m3 (fumes)	-	100 mg/m^3	-	
Diborane	a-Si dopant	0.1	-	40	1	CNS, pulmonary
Germane	a-Si dopant	0.2	-	-	-	Blood, CNS, kidney
Hydrogen	a-Si deposition	-	-	-	-	Fire hazard
Hydrogen fluoride	Etchant	-	C5 3	30	20	Irritant, burns, bone, teeth
Hydrogen selenide	CIS sputtering	0.05	-	1	-	Irritant, GI, flammable
Hydrogen sulfide	CIS sputtering	10	15	100	30	Irritant, CNS, flammable
Indium compounds	CIS deposition	0.1 mg/m^3	-	-	-	Pulmonary, bone,GI
Lead	Soldering	0.05 mg/m^3	-	-	-	CNS, GI, blood, kidney, reproductive
Nitric acid	Wafer cleaning	2	4	25	-	Irritant, Corrosive
Phosphine	a-Si dopant	0.3	1	50	0.5	Irritant, CNS, GI, flammable
Phosphorous oxychloride	x-Si dopant	0.1				Irritant, kidney
Selenium compounds	CIS deposition	0.2 mg/m^3		1 mg/m^3		Irritant
Sodium hydroxide	Wafer cleaning		C5 2 mg/m^3	10 mg/m^3	5 mg/m^3	Irritant
Silane	a-Si deposition	5	-	-	-	Irritant, fire & explosion hazard
Silicon tetrafluoride	a-Si deposition	-				
Tellurium compounds	CIS deposition	0.1 mg/m^3				CNS, cyanosis, liver

Source: Photovoltaic Environmental Research Assistance Center-Brookhaven National Laboratory

Manufacturing clean tech can be an involved industrial process (cont)

- ❑ Carbon nanotube (CNTs) are anticipated to be a critical element in many new energy storage or propulsion technologies
- ❑ CNTs are one of the first nano material technologies to enter near industrial scale production and may serve as a template for other nano structure manufacturing

Chemical Vapor Disposition Mode
Greatly Simplified



By products of the chemical process include 15 aromatic hydrocarbons including 4 PAHs that are considered toxic to humans including benzo(a)pyrene
NOTE: There is research to create methods to “scrub” this process

Source: WTEC; American Chemical Society
PAH = polycyclic aromatic hydrocarbons

Retail & Hotel/Hospitality

Retail & Hotel/Hospitality

- Retail and hospitality were not examined in depth
- Our site survey quickly identified a substantial amount of retail capacity in the immediate vicinity
  - Retail capacity represents a full range of retail mix from local retail to chain store discount shopping to branded consumer / mass luxury retail
- In addition the close proximity to Patriots Place and Wrentham outlets leaves little gaps in the market place for a differentiated retail product
- Moreover the location is not conducive to a major retail development or lifestyle center given its location and more attractive options on main thoroughfares
- Similarly its our opinion that the location is unattractive as a hotel site for a major chain hotel group given its low visibility to major traffic corridors or lack of proximity to major employment centers

Development and Planning Implications

Opportunities for Walpole

Options

- Given the site location and overall market situation its most likely uses are smaller industrial, small scale warehousing, and business support-type industries needing a low cost location
- It may be of interest to a larger industrial company given its access to labor markets as well as "out of the way" location but this will have infrastructure investment requirements

Implications

- Maximizing the land's development potential will require investing in core infrastructure
  - Water
  - Sewer
  - Gas
  - Potentially telecommunications
- Given the market ready sites in the area as well as the need for low

Access to water could be an important factor

IWR MAIN Water Use Coefficients

Industry	Water Use GPD per Employee	GPD Per 100 Employ	100ksft Office = 400 employ
Transportation	51	5,100	20,400
Wholesale trade	58	5,800	23,200
Retail trade	71	7,100	28,400
Services	106	10,600	42,400
Government	71	7,100	28,400
Construction	35	3,500	14,000
Food mfg	469	46,900	187,600
Tobacco mfg	0	-	-
Textile mfg	315	31,500	126,000
Apparel mfg	13	1,300	5,200
Lumber	78	7,800	31,200
Furniture	30	3,000	12,000
Paper	863	86,300	345,200
Printing	42	4,200	16,800
Chemicals	289	28,900	115,600
Petroleum	1045	104,500	418,000
Rubber	119	11,900	47,600
Leather	148	14,800	59,200
Stone clay concrete	202	20,200	80,800
Primary metals	178	17,800	71,200
Fabricated metals	95	9,500	38,000
Industrial & computing machines	58	5,800	23,200
Electronics	71	7,100	28,400
Transport equip mfg	63	6,300	25,200
Measuring analytics	66	6,600	26,400
Misc mfg	36	3,600	14,400