

# **Report of the Economic Development Analysis Team (EDAT)**

**Submitted to the Board of Selectmen**



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## **Summary of Findings and Recommendations**

The EDAT started the process of preparing a commercial and industrial development strategy for Harvard's Commercial (C) district with a very open mind, considering all possible business opportunities on all developable parcels. As the investigation progressed, the set of reasonable alternatives quickly converged.

After a thorough analysis of each parcel in the C district, coupled with selective landowner interviews, it became very apparent that, beyond the approved projects behind Dunkin' Donuts, there are presently but 4 sets of parcels that offer high potential for commercial development or re-development in the reasonable future. These parcel sets are:

- **40.94 acre** area on the northwest corner of Old Mill Road and Ayer Road (current site of Sorrento's Pizzeria and Rollstone Bank)
- **13.69 acre** area across from Old Mill Road (former site of Toreku Tractor)
- **10.03 acre** area on the southwest corner of Old Mill Road and Ayer Road (currently vacant wooded land)
- **15.93 acre** area across Ayer Road from Dunkin' Donuts

Three formal surveys of town residents were conducted to determine their desires and concerns relative to new commercial services. The first was administered during the 2009 Annual Town Meeting, and reflects a broad cross-section of the Town. The second was targeted to the residents of North Harvard, in order to learn the specific concerns and ideas of people living within the neighborhoods that would be most impacted by any changes in the C District. The final survey was conducted in April 2010, and was a large town wide survey on attitudes towards commercial development and specific areas of concern and appeal. The feedback from the surveys was well correlated, with a clear majority of respondents favoring some development based around specific retail uses such as a grocery store, pharmacy, restaurants, and small shops, as well as office buildings. EDAT did some preliminary market research with both developers and representative retail store chains to verify the economic viability of both the grocery store and pharmacy opportunity relative to our local demographics. EDAT also tested for resident receptiveness to the development of an assisted living center in the third survey, and received strong positive support. The final survey also solicited resident feedback on some desired implementation characteristics for each of these businesses.

With respect to the existing infrastructure, EDAT reviewed the detailed traffic and road safety analysis conducted by CDM in June 2007, as well as inputs from the survey and discussions with local residents. There are some clear problems that need to be addressed relative to traffic speed, traffic flow and entry from side roads, and pedestrian safety. EDAT also looked at the limiting factors of water and septic capacity on the high potential commercial properties, and explored alternatives for creating shared wastewater services for these properties.

Based on resident feedback, the input from owners of commercial property, and the current restrictive economic climate, EDAT is recommending a very focused initiative as a first step in a Town strategy for further commercial development of the C district. The vision is a limited commercial expansion that offers the highest benefit to the Town for desired services and tax benefits, while starting to address the infrastructure deficiencies for the future.

One element of the vision is the development of a small village-style plaza that would provide a grocery store, pharmacy and other small shops. EDAT is also recommending the development of an assisted living facility (elderly housing with 24-hour medical and personal care) that would offer the Town a housing alternative which is missing for senior members of Harvard's existing families. The third commercial element being proposed is a small office park. All three commercial developments would incorporate Town-appropriate building aesthetics, screened parking, adequate green space and visual buffering to abutters. EDAT investigated three different implementation scenarios that varied the size of each of these elements to suggest an aggregate commercial property tax revenue potential of \$249,000-\$444,000. This would be a 45%-80% increase over today's C district property tax revenue.

EDAT asked the Harvard Fire Chief and Police Chief to estimate the added costs of supplying public safety services to these new businesses. The incremental fire department costs were negligible, and the incremental ambulance service costs were large for some of the uses, but fully recoverable through insurance reimbursements. The police force would need to upgrade the remaining single-person shifts to two people, but this expansion, estimated to add \$150,000 in personnel costs to the annual police budget, is already being considered for safety and training reasons independent of any new commercial development.

The EDAT strongly believes that the current issues of traffic speed, traffic flow, and driver/pedestrian safety need to be addressed independent of any new commercial development. Efforts should be made to shift the Devens truck traffic away from Ayer Road and over to Jackson Road. Limited access to neighborhood roads during peak traffic times should be considered to reduce the ever-increasing volume of commuter cut-throughs. Traffic control devices such as lights, roundabouts, or 4-way stops should be considered at appropriate locations along Ayer Road to calm traffic flow, create gaps for vehicles attempting to enter Ayer Road from side streets and heavily trafficked businesses, and where appropriate, enable pedestrian crossing.

Looking ahead at the four new sites targeted by EDAT, it is recommended that comprehensive solutions for traffic management be required as part of any new development, with the developers shouldering the cost burden for design and construction costs of any road changes. In addition, EDAT proposes a requirement for both new commercial development and redevelopment, that the proponent build pedestrian/bike paths along their frontage. Over time, the Town should consider extending this path to connect to trails and other walkways within and outside the C district.

The developers for each of the four target parcels are constrained in their projects by the limited sewage capacity of a local septic system on each parcel. As such, EDAT investigated the feasibility and costs of a small and highly localized sewer district using a low-pressure sewer system to connect the three high-potential parcels near Old Mill Road to the Devens sewer system. Under either of two different implementation proposals, the cost of this low-pressure system is estimated at \$1.5M. This proposal looks to consolidate the individual investments that each property owner would have made into their local septic solutions (\$350,000-\$500,000 each) into this public system, so as to minimize any long-term town investment. However, before considering the creation of a sewer district in the Commercial district, the key issue that must be **conclusively** resolved is ensuring that the capacity of the district is solely reserved for commercial uses on Ayer Road, and cannot be tapped by new housing/40B developments. Harvard has many areas zoned for residential uses, but only a small area zoned for commercial uses, and the target development areas are collectively far smaller still.

The total cost to the Town for the suggested infrastructure improvements can only be roughly estimated because: (1) no actual design work has been done; (2) there has been no formal negotiation with Devens relative to wastewater connection costs on their end; and (3) the Town contribution is highly dependent on what contributions can be negotiated with the State and with the developers. As noted, the goal for the roughly \$1.5M sewer construction would be a 75%-100% cost recovery from the commercial developments tying into the system backbone. The remaining costs to the Town may be eligible for low interest (2%) State Revolving Fund (SRF) loans. The design and construction costs for road improvements and traffic control could be largely, if not fully, reimbursed by TIP (Transportation Improvement Program) monies and/or PWED (Public Works Economic Development) grants from the state.

In addition, the State offers financial support to businesses creating jobs in communities that have been designated an Economic Target Area (ETA) under the Economic Development Incentive Program (EDIP) administered by the Economic Assistance Coordinating Council (EACC) under the auspices of the Massachusetts Office of Business Development. Such designation offers the business access to state investment tax credits, and enables the Town to legally negotiate partial tax exemptions over a defined period (TIFs) or descending tax abatements over a 5-year period (STAs) to stimulate desired development if it so desires

In sum, the EDAT offers a vision of a limited but highly impactful commercial expansion strategy for the C district that would offer residents the retail services they most highly desire, provide a key housing alternative for seniors that is currently missing, and increase commercial tax revenues by 40% - 76% with limited, if any, annual cost burden. The potential exists for significant cost-sharing of the required infrastructure investments, which would not only address long-standing traffic and pedestrian safety issues, but potentially create the backbone for a sewer system capability in North Harvard that could have significant long-term strategic advantages, if the Town decides to pursue it.

There are still many details to analyze, many questions to answer, and certainly many discussions/negotiations with residents, landowners/developers and the State. However, this will require a very significant investment of time, volunteer effort, and dollars on the part of the Town. This investment should only be undertaken if there is strong support from residents to proceed ahead with proactive development of the Commercial district, given the potential opportunities and estimated costs from EDAT's feasibility analysis.

As such, the EDAT has submitted a warrant article for consideration at the 2010 Town Meeting, asking the Selectmen to create and appropriately empower a permanent Economic Development Committee (EDC) for the proactive planning and implementation of commercial development that most benefits the Town. The article further recommends that the new EDC work with the State to designate Harvard as an Economic Target Area (ETA), in order to give the Town some powerful tools to attract business, as well as priority access to State funds for infrastructure improvements.

At its public meeting on April 27, 2010, the attending members of EDAT voted unanimously to approve this final report for submission to the Board of Selectmen, and unanimously to support Article 29 as published in the 2010 Harvard Annual Town Meeting Warrant.

# 1. Introduction

In FY 2009, the Board of Selectmen created a Fiscal Impact Analysis Team (FIAT) to examine the historic causes and primary drivers of Harvard's perpetual structural deficit. The FIAT concluded that even if all of its recommended revenue enhancements and expense reductions were implemented, Harvard would still have a structural deficit. This is because the most significant driver of the deficit is the Town's excessive reliance on residential property taxes compared not only to the state average, but to a comparable population of 80 towns in Massachusetts<sup>1</sup> (see **Table 1.1**).

**Table 1.1 Harvard's Total Assessed Valuation vs. State Average**

Total Valuation of ...	Residential Property	Open Space	Commercial & Industrial Property	Personal Property	Grand Total
<b>HARVARD</b>	\$1,086,713,988	0	\$37,120,612	\$14,498,322	\$1,182,225,622
	95.5%	0%	3.3%	1.2%	
<b>Comparable Towns</b>	88.5%	0%	9.6%	1.9%	100%
<b>State Average</b>	83.6%	0%	13.8%	2.5%	100%

Sources: MA Department of Revenue (FY 2010)

The land use decisions Harvard has made over the years – to eliminate its Industrial district (1986), reduce and limit the amount of development that can occur in the Commercial district, and resist all types of residential development except single family homes on large lots – have contributed to its current fiscal challenges. The town has attracted the type of development that is the most costly to service – single-family homes that appeal to families seeking high performing schools – and little else that could generate revenue to offset those costs.

FIAT's findings underscore the need for Harvard to encourage more balanced land use policies, both to expand its non-residential (commercial/industrial) land uses and to encourage a broader range of residential uses. To this end FIAT presented a warrant article at the May 2009 Annual Town Meeting directing the Board of Selectmen to appoint an Economic Development Analysis Team (EDAT) to:

*"prepare a commercial and industrial (C&I) development strategy for the Town. The EDAT will analyze the town's opportunities to reduce its reliance on residential property tax revenue and increase its commercial property tax revenue by encouraging managed and desirable development of C&I (including retail) property. The EDAT will report progress to the Board of Selectmen on a quarterly basis, and issue a final report to the town no later than the Annual Town Meeting of 2010. Such report will include, but not necessarily be limited to:*

- *identification and cost/benefit analysis of C&I development opportunities that meet community-driven service needs and/or maximize revenue potential;*
- *current obstacles to desired C&I development and recommended solutions, e.g.;*
  - *infrastructure and/or other potential investment requirements;*
  - *necessary changes to zoning ordinances;*
  - *mitigation measures, if necessary, to protect nearby residential areas, and*
  - *recommended changes to taxation structure; and*
- *proposed implementation plan defining tasks and drivers, projected schedule, and estimated costs.*

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<sup>1</sup> includes neighboring towns, the state's top fifty performing public school districts based on 2008 10<sup>th</sup> grade MCAS scores, and a number of other eastern Massachusetts communities with population, density, and development patterns similar to Harvard.

This warrant article was passed with a near-unanimous vote, and as such, EDAT was created on September 1, 2009 with the appointment of six volunteers by the Board of Selectmen:

- Michelle Catalina                      Carrie Fraser
- Bill Johnson                            Elaine Lazarus
- Rick Maiore                             Brian Smith

The following people were formally added to the team as advisors and liaisons:

- Tim Bragan – Town Administrator
- Peter Warren – Board of Selectmen liaison
- Joe Sudol – Planning Board liaison
- Eric O'Brien – professional commercial real estate broker/developer

With a very specific focus on Harvard's Commercial Zoning District that lies along Ayer Road north of Route 2, the EDAT organized its investigation by sub-teams to:

1. Identify target businesses based on surveyed needs/desires of Town residents, and tested for market viability and tax-revenue potential
2. Identify high-potential sites for near-term commercial development based on site characteristics and landowner interviews
3. Solicit Town input on building/landscape architectural styles to provide input to developers and guidance for potential zoning/regulation changes
4. Identify critical road/water/sewer infrastructure issues, and analyze potential solutions for viability and cost
5. Evaluate best practices of official economic development organizations in other towns to develop an appropriate model for Harvard

EDAT used multiple vehicles to invite input and communicate its progress:

- Survey of North Harvard residents in November 2009
- Town-wide survey in March/April 2010
- Televised status reports to the Tri-Board (9/30/2009) and Board of Selectmen (3/2/2010)
- Interactive focus group meeting (4/12/2010) with Town residents
- Public meetings
- Emails to Town residents
- Newspaper articles, interviews, and letters
- Postings of meeting minutes, presentations, and town-wide communications on the Town website

The vast wealth of data collected and analyzed through this process was used by EDAT to create a substantive vision for a very focused but highly beneficial commercial development initiative that brings to Harvard the services that its residents most desire and need, while offering feasible solutions to current and future infrastructure limitations. EDAT will conclude its mission on May 1, 2010 by sponsoring a warrant article at the 2010 Annual Town Meeting, asking voters to encourage the Board of Selectmen to establish a standing committee to continue this economic development initiative.

## **2. Development potential of Harvard's Commercial district**

Although scattered commercial, industrial, and retail establishments exist in other areas, Ayer Road north of Route 2 is the only area zoned for commercial uses<sup>2</sup>. This area, defined as Harvard's **C district** extends from Route 2 to, and including, Doe Orchards on the west side of Ayer Road and Myrick Lane on the east side (see **Appendix A**).

### **Historical Perspective**

Harvard has long been conflicted about non-residential development and, over time, it has limited the amount and type of development that could occur in the C district. The town's first master plan (1969) noted that Harvard had unusually few business establishments for a town of its size and for the purchasing power of its residents. While that plan raised the issue of whether or not the town should attract more commercial and industrial (C&I) activity to help keep down the tax rate and reduce its reliance on the residential property tax base – it envisioned a village shopping center and hotel just to the north of the Route 2/Route 110 interchange – no action was taken. The Town did vote favorably on the Plan's recommendation to downzone a portion of the C district, but took no action on any of the measures that would have allowed more intense use of the remaining land or more flexible development patterns. Townspeople were sufficiently interested in attracting industry, however, to have established an Economic Study Committee to determine the most appropriate commercial and industrial uses for Harvard.

The 1988 town plan articulated goals that, in general, were very similar to those put forth 20 years earlier, but it called for a substantially reduced scale of development on Ayer Road. The maximum floor area ratio (FAR)<sup>3</sup> at that time was 0.25, or 25 percent, and the plan concluded that 3,485,000 square feet of commercial (office and retail) development was possible. The plan also concluded that 300,000 square feet of retail and office space was the maximum required for a local population of 10,000 (roughly double the town's 1988 population), and it noted that the C district was already quite close to that level of development.<sup>4</sup> As a result, Annual Town Meeting (ATM) in March 1987 voted to reduce the allowable FAR to 0.10 (10 percent). This reduced the potential build-out to 1,300,000 square feet, which was still larger than what the plan had determined would be required to serve local needs. The 1987 Town Meeting also voted to increase open space requirements and prohibited the use of setback areas for parking.

While Harvard did adopt a few of the C district recommendations from each of its first two master plans, it never came to terms with the larger physical planning issues that would give the district a

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<sup>2</sup> There is a small Business district which consists of four properties near the Common, comprising less than 4 acres.

<sup>3</sup> Floor area ratio is a measure of the amount of built space in relation to lot size. With an FAR of 1, a one-acre lot – 43,560 square feet – could accommodate a building of the same square footage, say a two-story structure containing 21,780 square feet per floor, or a three-story building with 14,520 square feet per floor. With an FAR of 0.25, that one acre lot could accommodate a 10,890 square foot building.

<sup>4</sup> The suggestion that the Commercial district was close to accommodating the 300,000 square feet of office and retail space deemed appropriate for a population of 10,000 appears greatly exaggerated. The 235,000 square feet of development that existed at the time included residential as well as commercial development. It cautioned that future development beyond the 300,000 square foot level would need to draw on a regional market, and it recommended that total commercial development in the C district be capped at 600,000 square feet (about one-third its potential at that time and about three times what then existed).



sense of place that was compatible with the town at large (e.g., development performance standards, better site plan review criteria, design review and village center zoning) *or* the economic issues of how the town would achieve and maintain financial sustainability. The 2002 plan, in fact, observed that the piecemeal zoning changes that were implemented may have exacerbated both the planning and fiscal challenges, and it recommended a new zoning option. Acting on the plan's recommendation, Annual Town Meeting in 2004 voted to amend the zoning bylaw by adding the "Ayer Road Village Special Permit" (ARV-SP) as an alternative development model for commercial properties along Ayer Road. The purpose of the ARV-SP is to enable the Town to create and maintain a village identity for the C district in contrast to the sprawling and uncoordinated development encouraged by the existing zoning framework, but has been used only once so far to permit the office building and senior housing under construction behind Dunkin' Donuts.<sup>5</sup>

Given the historical reluctance to fully develop the commercial district we already have, it is unlikely that additional land will be zoned for commercial uses in the foreseeable future. Zoning changes require a 2/3 vote of Town Meeting, and expansion of the C District or establishment of additional such districts would likely be controversial and difficult to pass. Therefore, the supply of undeveloped or re-developable commercial land in Harvard is limited, resulting in limited opportunities to satisfy the service needs of residents, and limited opportunities for net-positive tax revenue. As such, it should be treated as a scarce resource for the Town.

Development of non-commercial uses (such as residential or conservation) on land in the C District permanently reduces this scarce resource pool, and further limits the net-positive tax revenue and service opportunities for the residents of the Town. A decision to once again shrink the size of the commercial area through re-zoning to residential would do the same, and would likely replace the net-positive revenue opportunities with a net-negative situation, for most new housing in Harvard generally costs the Town more in added school services than the new tax revenues they generate. Hence, it is important to recognize the need to maintain and leverage what developable space we have in the existing C District, both as a potential revenue generator, and as the only place where residents' needs for goods and services can be met.

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<sup>5</sup> Under the ARV-SP, the Planning Board may more flexibly apply dimensional regulations and site standards. The zoning allows for privately owned and maintained on-site sewage disposal or treatment systems to serve buildings and lots in an ARV-SP. As an incentive for specific uses the Planning Board may permit more flexible building siting, allow more than one structure on a lot, apply alternative site standards relative to parking, loading and driveway, and allow up to 10 percent more floor area than allowed under the existing zoning (no building shall exceed 30,000 square feet of gross floor area).

## Current utilization of the C district

The parcels that are fully or partially zoned in the C District comprise 495.8 acres. 75% of the parcels have been developed for something – residential and commercial uses are common. The district does include some land that cannot be developed for any purpose, including 77 acres owned by the Town as conservation land and a 26-acre water supply area. At the present time, half of parcels in the C District are in commercial use<sup>6</sup>. Half of the remaining parcels are in residential use, and the remainder are in open space or agricultural uses, or undeveloped (see **Table 2.1**). Because much of the land in the district has already been developed, much of what the Town may see in the C District in the future is *redevelopment* rather than new development.

**Table 2.1 Current utilization of the C district (acres)**

	Commercial	Residential	Agricultural	Vacant land	Conservation	Total
<b>Parcels</b>	29	15	2	8	4	<b>58</b>
<b>Acreage</b>	116	178	82	43	77	<b>496</b>

Source: Harvard Assessor's Office

The 2002 Master Plan estimated that nearly 1.3 million additional square feet of buildable floor area in commercial or industrial uses could be developed in the C District. This analysis was a theoretical calculation to assist the Town in planning for the future, but did not reflect the desires or intentions of landowners in the C district, the difficult site characteristics that might be present, or whether there would be a market for so much commercial space. Hence, it is merely an indication of what can be built, but not a practical estimate of what will be built.

Most property owners in commercial districts will choose to develop (or sell) land in the most profitable way possible, with their desire tempered by the constraints of the land, the zoning, supporting infrastructure, and the market. The commercial uses of the land in C district will expand if and only if the appropriate parcels are available, infrastructure needs can be met, the market justifies the commercial use, the Town has a straightforward and predictable permitting process, and the zoning is clear and allows the right mix of uses by right. Otherwise, the land will remain undeveloped as commercial developers and property owners wait for appropriate conditions, or will be developed for other uses that are more profitable for the owner but not necessarily beneficial to the Town.

## High potential sites for near-term development

Assuming market and financial requirements could be met, EDAT's first task was to identify what sites, if any, offered the potential for high tax revenue commercial development in the near-term timeframe of 3-5 years. EDAT started its investigation by looking for the potential target development areas with a comprehensive analysis of all the parcels that lie within the C district. A spreadsheet was created from the assessors' database,

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<sup>6</sup> Two mixed use parcels (a commercial and residential use) are considered commercial uses for the purpose of this analysis.

identifying for each land parcel:

- Owner
- Tax Map/Parcel #
- Street address
- Property acreage and road frontage
- Existing buildings and current use
- Land and building valuation
- FY2009 property taxes

A summary of this spreadsheet is attached as **Appendix B**.

A sub-team of EDAT then visited every parcel to affirm its current use and assess its development/re-development potential based on:

- *site characteristics* such as size, frontage, topography, observable and recorded wetland areas, and anecdotal data on water or septic capabilities;
- *site location*, such as proximity to Route 2, distance to residential areas, and adjacency to other developable parcels; and
- *current land/building utilization*, such as building occupancy and development potential of remaining open land.

Finally, selective landowner and/or developer interviews were conducted for high potential areas to assess intent and/or interest in developing or redeveloping their parcels in the 3-5 year timeframe. The few who had real plans were asked to share them with EDAT members, and most did to the level of current public disclosure. Permitting challenges, septic limitations, and the difficulty of attracting both tenants and funding in the current economic climate were common issues for all who were actively pursuing development.

This thorough assessment made it very apparent that, beyond the already approved projects behind Dunkin' Donuts, there are presently but 4 sets of parcels which offer high potential for commercial development or re-development in the 3-5 year time horizon of interest. These target development parcel sets are highlighted in **Appendix A** and include:

- **Area 1: 40.94 acres** on the northwest corner of Old Mill Road and Ayer Road (current site of Sorrento's Pizzeria and Rollstone Bank)
- **Area 2: 13.69 acres** across from Old Mill Road (former site of Toreku Tractor)
- **Area 3: 10.03 acres** on the southwest corner of Old Mill Road and Ayer Road (currently vacant wooded land)
- **Area 4: 15.93 acres** across Ayer Road from Dunkin' Donuts

Each parcel has adequate buildable area and sufficient frontage. Proximity to residential neighborhoods varies, which will dictate differing needs for visibility and sound buffering, and may limit acceptable uses for the sites. Each appears to have adequate water, but face varying limitations on septic capacity. All would have to address traffic entry and exit issues given their proximity to road intersections and/or existing businesses with traffic. Most importantly, all either have current, or have had very recent, project development activity.

### **3. Survey of Town desires for new commercial development**

In parallel with potential site analysis, the EDAT used three public surveys to investigate the intensity and type of commercial development that would best meet the stated needs and desires of Town residents.

#### **Survey from Town Meeting – May 2009**

During the 2009 Annual Town Meeting (ATM), the FIAT conducted a paper survey of residents regarding their level of interest in commercial development in North Harvard. The data are shown in **Appendix C**. Of the 263 respondents to this survey:

- **59%**<sup>7</sup> agreed or strongly agreed with the statement *“I can accept limited commercial development to provide some residential tax relief but don’t want to see the commercial district fully developed”*;
- **44%**<sup>7</sup> agreed or strongly agreed with the statement *“I want Harvard to fully develop its commercial potential to provide the maximum residential tax relief”*; and
- only **13%**<sup>7</sup> favored avoiding development by pursuing other options for reduction of residential tax increases.

Respondents were given the opportunity to comment on the services they would most like to see. Four businesses were clear standouts:

- Restaurant/café: 134 responses
- Grocery /supermarket/food store: 130 responses
- Pharmacy/drug store: 92 responses
- Offices, including medical: 82 responses

#### **Survey of North Harvard Residents – October 2009**

While the responses from town meeting showed strong interest in the commercial development of Ayer Road, the EDAT was concerned with the impact on abutters to the commercial district. In order to gain town-wide support for any plan in the commercial district, the EDAT thought it was imperative to understand the views of residents specifically living near the Ayer Road commercial district. Accordingly, in October 2009 a survey repeating the 2009 ATM questions plus some new ones was offered to registered voters living North of Route 2. Survey results can be found at the Harvard Town web site and **Appendix D** of this document.

187 households from North Harvard participated in the survey. Their responses differed noticeably from the 2009 Town Meeting participants on two of the questions:

- **21%** of North Harvard households agreed with the statement, *“I want Harvard to fully develop the Ayer Road’s commercial potential to provide maximum tax relief”*; and
- **35%** of households from North Harvard agreed or strongly agreed that they *“would rather limit residential tax increases by trimming services than by increasing commercial development”*

But interestingly, when respondents were asked whether they could accept some commercial development in the Ayer Road commercial district, **66%** of the residents of North Harvard agreed with this statement, exceeding the 59% of the 2009 ATM who responded favorably. The survey tool allowed the EDAT to analyze the negative responders to this last question and over half of them

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<sup>7</sup> Participants could respond to more than one statement, resulting in response totals >100%

disagreed with this statement not because they didn't want any development, but because they wanted maximum development. The EDAT found these results extremely helpful and illuminating.

The results received from the 2009 ATM survey allowed the EDAT to further survey the North Harvard residents relative to the types of businesses that residents at the ATM had listed as highly desirable. The top three preferences echoed those from Town Meeting:

- Restaurant/café: 143 responses
- Grocery /supermarket/food store: 126 responses
- Pharmacy/drug store: 102 responses

Only 20% of residents from North Harvard chose "no more restaurants" on Ayer Road while the other 80% chose characteristics of restaurants they would like to see on Ayer Road. A majority of people wanted a locally owned restaurant with very few votes for fast food (2/177) or another take-out restaurant (8/177). Thirty percent of the residents of North Harvard would like a sit-down restaurant serving alcohol. Residents of North Harvard were then asked about the size of a grocery market they would like to see only Ayer Road. 44.9% of households would like a small market with less than 25,000 square feet while 20% of households would like a larger market in the 25,000 - 50,000 sq. feet range. Only 5.4% of North Harvard residents wanted a grocery market greater than 50,000 square feet. Of note is that 30.5% of North Harvard residents do not want any grocery market. When asked if they would like a pharmacy on Ayer Road, 58% of North Harvard residents agreed.

## **Broad survey of Harvard residents – March/April 2010**

The EDAT decided to take the responses received from the ATM and North Harvard surveys to the next level, by conducting a more in-depth survey across the Town as a whole. Accordingly, an online survey was created and offered between March 13<sup>th</sup> and April 5<sup>th</sup> 2010. The survey was publicized through email distribution, school notices to HES and Bromfield parents, a sign on the Common, on the Town web site and in local papers. 538 full and partial responses were collected. The survey focused on attitude towards commercial development on Ayer Road, areas of concern regarding development, appeal and visual preferences of specific commercial development projects, and sought additional ideas and feedback. Survey results can be found at the Harvard Town web site and **Appendix E** of this document.

**68.6%** of respondents overall agreed or strongly agreed with the statement "I believe Harvard should pursue additional commercial development on Ayer Road". Only 17.3% disagreed or strongly disagreed. For those that self-identified as living north of Route 2, the percentage in agreement or strong agreement regarding additional commercial development was **51.5%** with only 26.6% of respondents disagreeing or strongly disagreeing.

The survey asked for feedback on specific types of development identified as commercial services of interest in prior surveys. Respondents rated as high or very high the desirability of a **Village Shopping Plaza with Grocery Market (72.8%)**, with an **Assisted Living Facility (51%)**, and an **Office Building (37.9%)** ranking lower. Visual appearance was of concern for all types of development, with percentage of respondents expressing high/very high concern regarding visual appearance ranging from 68.1% (Assisted Living Facility) to 82.5% (Village Shopping Plaza). 88.6% reported that visual appearance is important to them because of its impact on perception and value of Harvard property, and 60.8% expressed that visual appearance is important because they will be able to see the development from Ayer road as they drive by. No single visual component of architecture

and design ranked significantly higher than any other. The survey also asked respondents to rate the appeal of sample commercial developments. Details can be found in **Appendix D**.

Of the populations that disagreed or strongly disagreed with development (93 respondents, 44 of whom live north of Route 2), primary reasons were traffic/safety issues (86.9%) and negative visual or environmental impact (85.7%). 60.7% of these 93 negative respondents believed that there are better ways to address Harvard's tax base and revenue issues, and 38% believed that Harvard's focus for commercial development should be exclusively on Devens. 91% reported that visual appearance is important to them because of its impact on perception and value of Harvard property, while 71% expressed that visual appearance is important because they will be able to see the development from Ayer road as they drive by.

## **Proposed business development targets**

The 2002 Master Plan recommended that development should be encouraged that provides positive fiscal impacts while assuring that new or expanded commercial growth supports the major goals of the master plan. The Master Plan also noted that the residents have unmet needs for goods and services within Harvard. After review of the survey responses and financial data, the EDAT recommends that the Town facilitate the development and/or redevelopment of parcels in the C District for the following uses:

- Retail plaza with a grocery market anchor, pharmacy, and small retail stores and/or office space
- Office park/buildings

These uses would provide a mix of services that residents indicate are desired, and net revenue to the Town which would help to alleviate the property tax burden on residents. There are municipal costs associated with these uses, but the revenue from such uses should significantly exceed the costs (see section 4).

To the extent that some of the need for office space may be satisfied by a new building under construction behind Dunkin' Donuts, the Town should monitor how fast the space is leased and the rental amounts paid. This information will provide insight on the strength of the market, and guide decision-making with regard to future office buildings.

The EDAT also recommends that the Town consider an assisted living facility, but only if the following are addressed to the Town's satisfaction:

- review and quantification of costs associated with fire and ambulance services, and proponent contribution/funding of those costs; and
- the facility should be a for-profit enterprise so the Town can capture property tax revenue.

Despite the strong desire by residents for a restaurant in the Commercial district, EDAT did not prioritize it as a recommendation for two reasons: (1) it is a relatively low tax revenue generator, even counting meal taxes; and (2) none of the target sites have sufficient septic capacity to support a restaurant with the 100-seat minimum required for a liquor serving license. Hence, development of a restaurant would force the creation of a sewer district.

## **4. Estimated revenues and annual costs for proposed development**

The assessed value of commercial and industrial property in the C District increased from \$28,473,990 when the FIAT report was completed in 2009 to \$29,093,800 in 2010. The C District will generate \$550,014 in property tax revenue in FY10.

As part of its charter, the EDAT investigated alternative assessing methods for commercial property. Currently, Harvard has a single tax rate for all properties, residential and other. Until recently, C district properties were valued similar to residential (land and improvements). In the last town-wide revaluation in October 2009, the Board of Assessors employed a simulated commercial income valuation method, making use of factor charts and schedules within its (DOR approved) Vision computerized property assessment program. While this new approach changed very little the previous valuations for existing businesses, it offers more upside tax revenue opportunity for the types of new businesses that EDAT has been exploring. A change to straight commercial income basis would offer even more upside, but would require a new program, whose cost is not currently justified given that less than 4% of our value is derived from the C district.

Part of EDAT's charge from the Board of Selectmen and Town Meeting was to look at the costs and benefits of commercial and industrial development opportunities that meet community driven service needs and/or maximize revenue potential. The surveys identified the community driven service needs; to look at revenue potential, the EDAT consulted assessing professionals. Their consensus was that the parcels with the highest tax revenue would be located in an area that would be considered commercially/industrially zoned and that would attract investors to develop and invest in such parcels. Specific uses that the assessing professionals identified as high revenue generators are (in no particular order):

- Hotels/motels – because the town would also receive room and meals taxes
- Class A office space and medical buildings – attracts tenants willing to pay top rents
- Research and development facilities (similar to class A office space)
- Fast food chains with drive-through windows (money makers for investors in the right location)
- Power plants
- Nursing/assisted living facilities (except for non-profit facilities)
- Gas stations
- Strip malls/retail plazas
- Big box stores
- Movie theaters

Because new revenue must be balanced with added costs to the municipality in order to get a more complete picture of the net revenue that can be expected, a fiscal analysis professional was asked about businesses that are high municipal cost generators.

She indicated that nursing homes and assisted living facilities typically place the biggest demand on Town support, primarily for ambulance and EMT services. Retail and restaurants require additional public safety and emergency medical support in direct relation to the level of customer visits. A large store with high customer traffic like Walmart can create high demands for additional emergency services, while smaller high-end retail stores would generate far less. Research and development facilities and Class A commercial office space place relatively little demand on public services, as they

typically have on-site security and sophisticated fire prevention systems. This could change if the commercial space contains a manufacturing and distribution component, or an activity with a bio-safety factor of 3 or higher. An office building taller than 3 stories might also drive the need for specialized equipment such as a ladder truck.

Since each business development typically pays for its own property maintenance and sewage treatment costs, there is negligible increase in DPW costs to the town for any of these proposed uses. And obviously, none of these uses incur additional costs to the schools, our Town's biggest expense.

With this background in mind, the EDAT asked the Town's assessor to provide revenue estimates for the mix of uses residents have identified as desirable in the surveys and which are also high revenue generators. In parallel, the EDAT asked Harvard's Police Chief and Fire Chief to estimate the added public safety costs these businesses would place on the Town, based on data from other towns with similar sizes/types of businesses. Uses that are not desired by residents, even though they may generate significant revenue, were not evaluated. The results of the analysis are below. Note that revenue calculations are based on the current FY2010 commercial tax rate.

### **Office Building**

A 50,000 sq. ft. professional office building with class A space would be valued today at \$5,829,000 and generate \$83,500 in annual revenue. A 50,000 sq. ft. building could be a 4 level structure (3 stories with basement) with a 112 ft. x 112 ft. footprint. An office park with more than one such building would generate additional revenue accordingly.

### **Assisted Living Facility**

Assisted living facilities typically include independent living units and services and recreational amenities for residents, with the larger ones also including nursing home beds and medical office/rehabilitation space. A small facility with 60 units would be valued at \$7,043,000 and generate \$100,900 in tax revenue. A larger facility with 130 units would be valued at \$11,395,000 and generate \$163,300.

### **Retail Plaza**

Three scenarios were used to evaluate retail plazas, based on size.

- A small plaza with 45,000 sq. ft. comprised of a 15,000 sq. ft. grocery store and 30,000 sq. ft. of other retail space would be valued at \$4,509,000 and generate \$64,600 in tax revenue.
- A plaza with 75,000 sq. ft. comprised of a 25,000 sq. ft. grocery store and 50,000 sq. ft. of other retail space would be valued at \$7,243,000 and generate \$103,800 in tax revenue.
- A plaza with 140,000 sq. ft. comprised of a 48,000 sq. ft. grocery store, 12,000 sq. ft. second anchor store/pharmacy and 80,000 sq. ft. of additional retail space would be valued at \$13,760,000 and generate \$197,200 in tax revenue.

For comparison purposes, the retail plaza on Rt. 2A in Acton (with Trader Joe's) is 75,940 sq. ft. in size and the plaza on Rt. 111 in Acton (with Roche Bros.) is 112,196 sq. ft. The retail plaza at 285 Ayer Road (Hirsch) contains a bank (3,000 sq. ft.) and retail space (17,220 sq. ft.), for a total of 20,220 sq. ft. Its current assessed value is \$1,851,000.



The aggregate revenue potential for all three projects is obviously dependent on how each is implemented. To get a sense of the range of this potential, the EDAT considered three build-out scenarios that ranged from low intensity to higher intensity (see **Figure 4.1**). These three scenarios yield estimated tax revenues that range from \$249,000 to \$444,000 per year. This would be a net incremental increase of 40% to 76%, respectively, over the current C district tax revenue of \$550,014, when offset by tax revenues already being collected for the existing buildings on the four identified development sites.

**Figure 4.1 Estimated new tax revenue for a range of build-out scenarios**

Property Description	Sq. Ft.	Valuation	Estimated Taxes <sup>8</sup>	Scenario 1	Scenario 2	Scenario 3
				LOW build-out	MEDIUM build-out	HIGH build-out
Office Building (Class A)	50,000	\$5,829,000	\$83,500	\$83,500	\$83,500	\$83,500
Assisted Living Facility						
Typical - 60 units	60,000	\$7,043,000	\$100,900	\$100,900		
Large - 130 units	90,000	\$11,395,000	\$163,300		\$163,300	\$163,300
Retail Center						
Small - 45,000sf						
Grocery Store	15,000	\$1,303,000	\$18,700	\$18,700		
Other Retail	30,000	\$3,206,000	\$45,900	\$45,900		
Medium - 75,000sf						
Grocery Store	25,000	\$1,900,000	\$27,200		\$27,200	
Other Retail	50,000	\$5,343,000	\$76,600		\$76,600	
Large - 140,000sf						
Grocery Store	48,000	\$3,648,000	\$52,300			\$52,300
2nd Anchor (Pharmacy)	12,000	\$1,563,000	\$22,400			\$22,400
Other Retail	80,000	\$8,549,000	\$122,500			\$122,500
<b>TOTAL ESTIMATED TAX REVENUES</b>				<b>\$249,000</b>	<b>\$350,600</b>	<b>\$444,000</b>
<b>NET INCREASE OVER EXISTING TAX REVENUE<sup>9</sup></b>				<b>40%</b>	<b>59%</b>	<b>76%</b>

<sup>8</sup> Based on 2010 single class tax rate

<sup>9</sup> To determine the net revenue increase over the aggregate C district tax revenue of \$550,014, total estimated tax revenue for each scenario is adjusted down by the \$26,889 property taxes collected in FY09 for existing buildings on the four identified sites.

Discussions with the Harvard Police Chief and Harvard Fire Chief yielded the following estimate of annual costs to the Town of providing safety services for these businesses (based on data from other towns):

	Added calls/yr.		
	Ambulance	Fire	Police
Assisted living center	120-180	5	120-180
Retail plaza	5	15	200
Office Building (non-medical)	10	5	20
<b>TOTAL ADDED CALLS</b>	145-195	25	340-400
<b>CURRENT CALL LEVEL</b>	310	215	8045
<b>CALL INCREASE</b>	45%-65%	12%	4-5%

As the data shows, the increased demand for ambulance service is the most significant. While it would not require an extra vehicle, it would add a large burden to the volunteer staff. However, the Town receives on average a \$500-\$600 insurance reimbursement for each ambulance call. An additional 170 calls each year would generate an extra \$85,000-\$102,000 of revenue for the ambulance service which could be used to address staffing issues.

The retail plaza drives the biggest demand for additional police service, particularly if it includes a pharmacy. Although the increase in total calls is not statistically large, the issue for the police force would be ensuring two-person coverage on all shifts during normal business hours. Given current staffing levels, this would require a minimum of 2 additional officers. This cost is estimated to be about \$150,000 for salary and benefits. However, Town leadership is already exploring today's need to expand coverage to 2-person shifts independent of any new commercial development. If this happens, there would be sufficient capacity to handle the added load of these new businesses without any additional costs.

As for the Fire Department, it is the Chief's opinion that the added load will be manageable. To preclude the need for purchasing an expensive ladder truck, EDAT suggests that office building heights continue to be appropriately limited.

Note that this financial analysis only estimates the monetary costs and benefits. To each stakeholder in Town, development of these businesses in the Commercial district would bring a uniquely personal mix of potential benefits for the local services they offer and the potential costs to the changes they make to the Commercial district and its surrounding neighborhoods. These quality of life issues are an integral component, and often the focus, of the public hearing process before local permitting boards as development proposals are submitted for approval. These issues are important to residents, and as such, it is important to incorporate public involvement at every step in the process.

## **5. Analysis of infrastructure issues/opportunities**

### **Zoning**

The EDAT reviewed the existing Protective (Zoning) Bylaw in Harvard to assess whether the services and uses desired by residents would fit. It appeared that most of the uses are listed as allowed in the C District, but only under certain circumstances.

#### ***Grocery Market***

A grocery store is allowed by right on Ayer Road, as long as it does not exceed 15,000 square feet in area. This is large enough to accommodate a convenience store or limited produce market/farm stand. It is possible for a larger grocery store to be accommodated if it is located within a mixed-use village development, a recipient of an Ayer Road Village Special Permit (AYV-SP). The special permit may allow a building to be up to 30,000 sq. ft. in area, and may authorize a larger grocery store within this space. Small grocery markets such as Trader Joe's are typically 25,000 to 30,000 sq. ft., so the size limit would likely not be prohibitive. However, the requirement for the development to contain a mix of uses (not just retail) is likely a limiting factor because of the design and marketing challenges posed by the AYV-SP requirements. In Harvard, the only opportunity for a grocery market to be practically constructed is if it is located within a mixed-use village development.

#### ***Pharmacy***

A stand alone pharmacy/drug store is allowed in the C District by right, if less than 15,000 square feet in area. A standard CVS is about 10,000 sq. ft., so it appears as though a reasonably-sized pharmacy is an allowed use at the present time.

#### ***Restaurant***

A standalone restaurant without live entertainment is allowed in the C District by right, with a special permit only required in the unlikely event that the restaurant is larger than 10,000 sq. ft. Therefore, it appears as though the use would be allowed only with Site Plan Review. Additional permitting may be required for site-specific/dimensional reasons depending on the parcel, and live entertainment would require a special permit.

#### ***Offices***

Several types of office uses are allowed by right in the C District. However, the size of the buildings is limited and subject to review. The bylaw requires a special permit for nonresidential buildings of 10,000 gross square feet or more, and only one primary building is permitted on a lot. If part of a mixed use village development that is the recipient of an Ayer Road Village Special Permit, office uses can be accommodated within those buildings. A professional office park with office uses only does not appear to be possible because of the limit on the number of buildings on a lot, and the 10,000 sq. ft. maximum size is too small.

#### ***Assisted Living Facility***

It appears as though assisted living facilities are not an allowed use in Harvard. While a "nursing home/extended or intermediate care facility" is allowed, this is typically only one component of the "continuing care retirement communities" or "assisted living facilities" that we typically see today. Other components of the use may include medical offices, rehabilitation facilities, educational facilities and recreational facilities that are chiefly for the residents, but which may also be open to the

public. Over the last few years, assisted living facilities/continuing care retirement communities have evolved in zoning bylaws to become distinct uses that are different than a nursing home, given that such facilities provide various levels of care and amenities for residents.

### *Recommendations*

A commercial developer or investor needs to understand the permitting landscape before an investment is made, and the Town needs good tools to handle the proposals it will receive. If it is difficult to determine what permits are needed and what the process is for obtaining them, the business will likely go elsewhere unless the market is very strong. When it comes to retail businesses Harvard is a desirable location, but the market is probably not strong enough to overcome significant permitting obstacles. Without a clear and predictable process, investors are likely to go elsewhere. The EDAT recommends the following:

1. *Make the Zoning Bylaw more “user-friendly”.* The Master Plan recommended that the Zoning Bylaw be made more “user-friendly” by re-codifying it with a new format, including such things as a consolidated table of dimensional regulations and table of use regulations. Changes such as these would make the bylaw easier to use and permitting processes easier to manage. A user-friendly bylaw will also assist abutters in their participation with boards and proponents, by putting everyone on the same page. A re-codification effort would require a dedicated group of volunteers or a consultant, working with the Planning Board.
2. *Simplify the permitting process for the target businesses without giving up the control of the special permit process where appropriate.* If the Town is serious about facilitating new development in the C District and making it an asset to the community, it should consider simplifying the permitting process for the businesses/services that residents want. Much can be gained by making permitting processes predictable and clear, without giving up a necessary level of control, especially if the result fills a community need. Working with developers, land owners and abutters is a cooperative venture, and all parties need effective tools. The zoning and permitting processes are in the Town’s toolbox, and they can’t be used effectively unless they are simple, reasonable and understood by all.
3. *Consider allowing assisted living facilities and office parks.* The Town should decide whether assisted living facilities and office parks are uses it wishes to accommodate. If so, the Planning Board should develop bylaw amendments for town meeting action that would allow them by right under the proper terms and conditions.
4. *Consider modifying the bylaw to facilitate a grocery market.* It is recommended that bylaw amendments be considered that would allow a grocery store up to 25,000 to 30,000 sq. ft. in size to be located on a lot alone or with other retail uses.

## Roads and Traffic

### *Existing Problems and Challenges*

Ayer Road was designed to be part of a regional road network, and accordingly functions that way. It already has serious traffic volume and traffic safety issues that need to be addressed independent of new commercial development. Non-Harvard commuter and truck traffic between Route 2 and the Ayer traffic circle has significantly increased. An informal analysis of north-bound truck traffic indicates about half of the trucks (mostly trash trucks) head into Devens, and the other half (mostly 18-wheel tractor-trailer trucks) head toward Littleton/Ayer, with essentially none traveling to Harvard destinations. This non-Harvard traffic is spilling into residential side streets as well, particularly along Poor Farm/Pinnacle/Oak Hill/Littleton County Roads as both cars and 18-wheelers seek a shortcut between the Ayer traffic circle and I-495. Accident reports highlight the Dunkin Donuts driveway, the Post Office driveways and the Poor Farm Road intersection as concerns for traffic safety. Although the 2002 Master Plan envisioned the creation of a village shopping district atmosphere where individuals could safely walk and bike along Ayer Road, people do so now at their own peril. The traffic increase, and its associated impact on both pedestrian and driver safety, were cited as the number one concern of residents living north of Route 2 in the November 2009 survey. The same concern was also noted by many residents living south of Route 2 in the April 2010 survey.

The EDAT has reviewed the functional design report prepared by CDM in June 2007 for the 1.7 mile Ayer Road corridor. Members also spoke to Town officials who have been involved with planning and permitting in the area. Other publications were reviewed, including the Manual on Uniform Traffic Control Devices (2009), to further research the traffic signals and traffic calming methods mentioned in the CDM report.

The CDM report concluded that only the intersection at Poor Farm Road meets enough criteria to warrant a traffic light at this time. However, the geometry of the intersection is poor and the road would first need to align more directly with Lancaster County Road. Traffic entering/exiting the Post Office driveway on Saturday morning, and Lancaster County Road in general, also met some criteria for traffic light control, but not enough to warrant it at the time of the report. Similarly, the Dunkin Donuts driveway during the morning rush hour met some of the traffic light criteria, but not enough. Certainly the addition of two more buildings in the Dunkin Donuts plaza, one with medical services and the other with 42 elderly residents, will change the traffic data, but the driveway's proximity to the Route 2 ramps may preclude many of the options for traffic control.

CDM also measured actual vehicle speeds as compared to posted limits, and concluded that any attempt to lower the posted limit would fail, and in fact may cause the posted limit to go up to 45 mph. Hence, it is recommended that this approach **not** be pursued.

Regardless of any new development, the EDAT recommends that the Town address the existing traffic and volume safety issues, considering some of the following suggestions:

- Work with Devens officials to strongly encourage or require heavy trucks to use the Jackson Road Route 2 exit. If that doesn't work, consider the installation of traffic flow devices such as traffic light(s), roundabout(s) (see **Figure 5.1**), or 4-way stops at high traffic intersections to discourage truck flow.

**Figure 5.1 A typical rural roundabout**



- Regardless of the truck traffic issue, the effect of one well placed traffic light or roundabout in the Ayer Road corridor should be studied, to calm traffic and discourage cut-through traffic.
- Conduct a formal study to verify that people are using neighborhood streets, such as Poor Farm Road, as cut-throughs, and if warranted, limit access to local traffic only during peak traffic times
- A coordinated approach that involves the Town and MassDOT should be undertaken with respect to access to/from the Dunkin Donuts plaza and the developable commercial property across the street. Solutions to explore should include modifying Ayer Road markings so there is only one lane in each direction over the overpass, and moving the Dunkin' Donuts plaza access north along Ayer Road to a new driveway that is sufficiently far from Route 2 to allow for a traffic signal or roundabout. If any development is to be considered on the parcel across the street from the Dunkin Donuts, the EDAT recommends a specific traffic and engineering study be done of the proposed intersection, paid for by the developer, so that the Town can determine the best way to create a safe situation.
- After reviewing the CDM report as well as taking into consideration the desires and needs of residents, the EDAT recommends that a comprehensive plan be developed that results in a multi-use path or sidewalk along Ayer Road. The Town should determine the location and construction standards, and any subsequent development along Ayer Road should be required to implement the plan adjacent to that property. If the development is on one side of the road and the path/sidewalk is on the other, the developer should contribute to a fund that the Town can use to make necessary connections.

### ***Traffic from New Development***

Businesses, especially retailers, need traffic to make their businesses successful. Residents need safe roads without traffic congestion. The challenge is to accommodate both.

The proactive approach to development suggested by EDAT could add 155,000 to 280,000 square feet of commercial space on Ayer Road. There could be a significant increase in traffic on the road, although it is not known how many patrons of future businesses are already traveling Ayer Road, and clearly some commercial uses generate less traffic than others. Nevertheless, any increase in traffic that is not mitigated could exacerbate existing congestion and push more commuter traffic onto neighborhood roads.

The goals outlined by the Town in the past are still valid, and along with commercial development on Ayer Road, the Town should seek to create a safe environment for motorists, pedestrians and bicyclists while preserving the small town rural character of Harvard. Road widening and straightening should be discouraged, in favor of traffic calming and beautification. To that end, the EDAT recommends:

- *Old Mill Road area* -- EDAT's focused approach to development on Ayer Road identifies 3 parcels clustered around the Old Mill Road intersection. According to the CDM report, Old Mill Road does not have significant traffic issues at the present time except for occasional delays in turning left to go north on Ayer Road during peak traffic hours. Assuming all three parcels were developed, with one of them being a retail plaza, there would be a marked increase in cross-traffic flow due to cars and trucks entering and exiting these businesses. As such, EDAT believes that a comprehensive solution must be proposed before any single development is approved, with the developers shouldering the cost burden for design and construction costs of any road changes. Solutions to be considered are:
  - Corner properties at the Old Mill Road intersection might be more safely accessed from Old Mill Road, concentrating the Ayer Road entry/exit flow through the existing intersection.
  - Access to the Callahan property should perhaps be aligned directly across from the Old Mill Road intersection.
  - Doing both of the above would facilitate the effective use of a shared traffic flow device such as a roundabout, traffic light, or 4-way stop signs to slow traffic and ensure cross-traffic flow. It would also eliminate the need for left-hand turn-lanes on Ayer Road or in business driveways, as well as the road widening and safety issues that they engender.As mentioned above, any development of these three parcels should carry the requirement to build pedestrian and bike paths along the Ayer Road frontage to the specifications of the Town.
- *Dunkin' Donuts area* – As mentioned above, development of the target parcel across the street from Dunkin' Donuts will likely exacerbate the existing problems. A holistic solution to these problems should be a minimum requirement for any new development moving forward. EDAT recommends that the traffic flow solutions outlined earlier be considered. And of course, any new development should build sidewalks as well.

The EDAT believes that the construction costs of these development-driven road improvements should incur little, if any, taxpayer burden, by:

- developers assuming all design and construction costs for entry and exit to/from Ayer Road, as well as sidewalks along their Ayer Road frontage, and
- the State reimbursing the Town for any additional traffic calming investments such as roundabouts, lights, signage and road markings, etc.

Developing the holistic plan for Ayer Road traffic management would be an upfront cost to the Town that would have to be investigated. However, this plan is long overdue regardless of any new development, and may qualify for available grants.



## Wastewater Treatment

Many of the parcels within the C district contain ledge and significant wetlands that constrain local septic capacity for sewage treatment. This constraint determines the type and intensity of use that is possible on any given parcel. For example, a 12,000 sq. ft. general office building might require 900 gallons/day of sewage capacity, while the same building housing 30 doctors' offices might require 10,500 gallons/day. A 100-seat family restaurant might require 3,500 gallons/day.

The four high potential sites are no exception, with each facing varying degrees of constraint on the types and intensity of commercial usage they can support. Because there is no collective/congregate option to assist with overcoming the individual septic obstacles, each landowner/developer is responsible for overcoming them on their own. If the Town would like to facilitate the development of the services it desires at an optimal tax revenue potential, it may wish to work with owners to expand the sewage capacity in the target development areas that EDAT has identified. One of the solutions could be the installation of sewer infrastructure.

However, before considering the creation of a sewer district within the Commercial district, the key issue that must be **conclusively** resolved is ensuring that the capacity of the sewer district is solely reserved for commercial uses on Ayer Road, and cannot be tapped by new housing/40B developments. Harvard has many areas zoned for residential uses, but only a small area zoned for commercial uses, and the target development area is far smaller still. Accordingly, the EDAT has identified four criteria which must be met before considering a commercial sewer district:

- 1) The sewer district must be legally established and managed in a manner which guarantees that the sewer capacity can be utilized only for commercial development, and may not be tapped for new housing development.
- 2) There must be sufficient critical mass of committed commercial development plans for specific parcels before a sewer district is created to serve them. This critical mass must be sufficient to ensure full absorption of all annual system operating and maintenance costs, and cover most, if not all, of the system design and construction costs.
- 3) The Town has to be committed to the commercial development that is proposed on those properties, and ensure that the permitting process is reasonable and predictable. If the Town is difficult to work with or the regulations are difficult to understand and navigate, a developer may find housing easier and commercial development not worth the effort.
- 4) The Town should engage the public and heavily consider the level of support in the Old Mill Road residential neighborhood.

Assuming that these criteria can be met at some point in the future, the EDAT explored the options for connecting the targeted development parcels to the Devens sewage treatment system. Noting the close proximity of three of them to each other, the EDAT explored the option of creating a very localized sewer district which connects the three parcels to the existing Devens sewer system. The fourth parcel (across from Dunkin Donuts) was not included, due to its distance from the other three. A 2008 feasibility study suggested that a gravity system could be built along the length of Old Mill Road to connect its intersection with Ayer Road to the Devens infrastructure at an approximate cost of \$8,000,000. Given this prohibitively high cost, the EDAT worked with Chris Ashley from the Town Center Sewer Building Committee to examine the feasibility and cost of a Low Pressure Sewer System (LPSS) alternative.

After examining maps of the area, two possible routing scenarios (described in detail in **Appendix G**) were developed for connecting the Ayer Road/Old Mill Road intersection to an existing lift station in Devens. The cost for constructing either LPSS system was estimated at approximately \$1.5M.

Since the development of this small sewer district would directly benefit the three target development parcels/areas, the owners/developers of the parcels would be expected to contribute to the majority of the costs associated with any sewer project. It is estimated that each developer is already facing a major investment of \$300,000 - \$500,000 to build a local septic system with limited capacity, significant annual maintenance costs, and a perpetual risk of potential system failure in the future. If they were instead to shift that same investment into a shared sewer that relieved their capacity constraint and offered lower annual costs with no risk of permanent failure, they could be better off. We explicitly explored Mr. Hirsch's interest in this alternative investment, as well as his willingness to support the Scenario B implementation option on his property, and he seemed quite open to the idea. Hence it is quite feasible that this limited sewer capability could be constructed with minimal financial investment by the Town, particularly since economic development grants exist at the State level for subsidizing sewage infrastructure design and construction costs. Annual system costs for administration and maintenance of this localized sewer district should be fully allocated to the businesses utilizing the system, to ensure that the Town has no long-term cost burden. However, this proposal will need detailed design, operational, and costing analysis before being brought to the Town for its consideration.

A key issue that must be explored is the potential need for recharge of local aquifers if wastewater flows to the Devens system. Recharge of local groundwater is important to maintain wetlands systems and water supplies. When drinking water is withdrawn from a location and re-enters the ground nearby, the aquifer is recharged. When water is withdrawn from one location and re-enters the ground or a surface water system some distance away, there may be impacts that need to be mitigated. This inter-basin transfer will be important in the State permitting process. Solutions include installing water infrastructure so the parcels are receiving water and sending wastewater to the same aquifer, increasing stormwater recharge in the Ayer Road area, or the re-use of gray water for irrigation.

There are choices to be made for the future – how the C district grows, and with what public or private services. Additional study and civic engagement will help to guide the Town so that at the appropriate time the decision can be made as to whether a public or private sewer system is a viable option for some of the C district.

## **6.0 Model for managing future development**

The EDAT was created as a short-term task force to conduct a feasibility analysis. It has done its job, and has brought a comprehensive vision of what “*could be*” if the town were to proactively pursue a limited commercial development vision in the C-district. Assuming the Town decides to move ahead on this vision, the EDAT did significant research to determine the best management model for doing so.

### **Economic Development Committee**

While there are several established departments and boards in the Town of Harvard government that review, monitor, and regulate commercial development initiatives, there is presently no body that focuses on encouraging it or shaping it to meet Town needs. The EDAT discussed whether such a body was needed and whether the timing was appropriate now. It reached the following conclusions:

- Town leadership needs a single focus and source of continuity to develop and maintain a long-term vision and dynamic plan for commercial development that meets the evolving needs of the Town. It needs a dedicated entity to coordinate the complex issues surrounding the process of commercial development, from the point when a business or landowner has an idea and creates a plan to when approval is obtained and construction is completed. A standing committee will build the knowledge base needed to monitor this long term process.
- Residents need a responsive forum to get information and be heard.
- Developers and landowners need a simpler interface to the Town that is charged with making “win-win” commercial developments happen.
- It is far more productive and far less frustrating for all to proactively address the concerns of the Town, residents, businesses, developers and landowners prior to the completion of costly architectural plans. These discussions can influence the project before it is presented to the Planning Board. The further along in the process, the less likely the developer is to make costly changes for the sole purpose of meeting discretionary requests. An example is that if a project makes it through the regulatory, zoning and permitting hurdles and is required to pass a Town Meeting vote (e.g, for a Tax increment Financing [TIF] agreement), it is possible that it may fail if there are critical resident concerns about the project that were not addressed early enough in the process. The committee can provide a focused effort to work with the developer to have these concerns addressed. Residents will have a voice through the committee to developers and businesses that does not exist today.
- While the EDAT ***strongly*** supports the Planning Board’s proposal for a professional Town Planner, this position will not (and should not) serve unilaterally as an advocate for economic development. However, such a focused advocacy role complements and aids the overall Town Planning function.
- Without a long-term commercial development strategy and a team to execute it, Harvard will end up with what it has now -- piecemeal development without any thread that binds the projects together. Harvard needs and deserves thoughtfully planned commercial development. ***The alternative to good planning is bad development.***

To learn from the best management practices of others, the EDAT reviewed the types of economic development entities that are created by other Massachusetts communities, and especially those created in similar rural towns with a high reliance on the residential tax base. **Appendix G** identifies the different types of entities that could be created to address economic development in Massachusetts. The more formal and more powerful quasi-public entities are more appropriate for developing specific industrial complexes or Town-owned property. These are independent entities that are subject to State control. These entities have powers that are not necessary for Harvard, including issuing bonds, acquiring land outright or by eminent domain, borrowing money, and managing and operating development projects.

Applying these learnings to Harvard's unique situation and culture, the EDAT recommends that an Economic Development Committee be established by, and held accountable to, the Board of Selectmen for the following:

- create and maintain a development plan for the Commercial District that is consistent with the overall Town Master Plan, incorporating the findings and recommendations of the Economic Development Analysis Team;
- define, plan and coordinate Town-approved infrastructure improvement projects for the Commercial District;
- act as a formal conduit for resident input;
- serve as the Town liaison for commercial landowners and developers to facilitate commercial project planning and coordination; and
- advise the Board of Selectmen on policies to attract and retain businesses.

EDAT recommends the following operating assumptions:

1. Similar to other committees chartered by the Board of Selectmen, they would not assume any powers or approval authority that is currently enabled elsewhere in Town Government (including Town Meeting), or not allowed by law. They may initiate, explore, and facilitate agreements with commercial property owners, developers and residents, but authority to approve such agreements would rest with the Board of Selectmen and other appropriate entities as it does today.
2. The Committee should be expected to meet bi-annually with the Board of Selectmen and Planning Board to review its progress against goals, and set future goals as appropriate.
3. The Committee will need to debate economic policy and develop consensus within the Town, reflecting their findings into their plans.
4. To cover the costs of required consulting and engineering design fees, if any, the Committee would submit an itemized budget request to the Board of Selectmen through the normal annual review and approval processes.

## Economic Target Area Designation

In 1993, Massachusetts created the Economic Development Incentive Program (EDIP) to promote increased business development and expansion in designated Economic Target Areas (ETAs), for the purpose of retaining and creating jobs in these areas. An ETA can be a town or a region comprising several towns. The EDIP program is administered by the Economic Assistance Coordinating Council (EACC) within the MA Office of Business Development.

ETA designation enables two significant actions that are otherwise not possible:

1. it gives new business development within the ETA access to state investment tax credits, and
2. it uniquely gives the designated town the legal right to negotiate partial tax exemptions over a defined period through Tax Increment Financing (TIF) or Special Tax Assessment (STA) descending tax abatements over a 5 year period .

Equally significantly, this designation gives the town priority access to state grant and reimbursement funds for infrastructure projects that support new business development.

Applying for and receiving ETA designation incurs no cost (other than time to apply) nor any obligation to actually pursue any economic development, nor offer any tax incentives. It merely gives the Town an optional tool. The desirability of this tool is why so many communities in Massachusetts have sought to be designated an ETA. Those that aren't are at a disadvantage when competing with neighboring communities for desirable commercial development.

It is significant to note that the neighboring towns of Littleton, Boxborough, Ayer, Shirley, Devens, Lancaster, Leominster, Hudson, Clinton, Bolton, and Groton(West) are all part of an ETA (see **Appendix I**). Harvard may end up competing with them for a highly desirable commercial development. A business will locate where the most attractive proposal is presented, and Harvard needs to be ready to compete with the same tools in hand.

Thus, since there is no downside and only high upside, it is recommended that Harvard seek ETA designation. It is unlikely that Harvard would be able to create a new ETA – the EDIP program has capped the number of ETA designations to a maximum of 40 across the state, and 37 have been awarded to date. In addition, Harvard on its own would most likely not fulfill the economic requirements for ETA designation. Instead, the EDIP leadership has suggested that Harvard join Shirley, Pepperell, Ayer, and West Groton as part of the Fort Devens ETA. By applying to the Fort Devens ETA, Harvard's demographics would be aggregated with the other member communities to meet the ETA requirements.

The Fort Devens ETA was created by legislation, and as such adding Harvard to this ETA would require an act by the State Legislature. The specific change would require a modification of Chapter 498 Section 18 of the acts of 1993, last updated October 29, 2008 shown below:

*"Section 18. Designation as Commonwealth Economic Target and Opportunity Areas.*  
Devens and the town of Ayer are hereby designated Economic Target Areas and Economic Opportunity Areas as defined in section 3 of chapter 23A of the General Laws. Pursuant to such designations, certain development projects within Devens, and the towns of Shirley, Pepperell and Ayer, shall be eligible for tax deductions, credits and abatements and other economic incentives as provided for in chapter 19 of the acts of

1993. The designation of Devens and the towns of Ayer, Pepperell and Shirley as Economic Target Areas shall be in addition to the Economic Target Areas that are authorized to be established throughout the commonwealth pursuant to section 6 of chapter 110 of the acts of 1993. For the purposes of this act, the Ayer Economic Target Area and Economic Opportunity Area shall include the land located in the town of Groton known as the West Groton Mill or the Old Leatherboard Mill, and shown on the town of Groton assessors' map M as parcel 129."

It is recommended that the Economic Development Committee coordinate Harvard's ETA designation process for the Board of Selectmen.

More information can be found at the EDIP website at:

[http://www.mass.gov/?pageID=ehedterminal&L=3&L0=Home&L1=Start%2C+Grow+%26+Relocate+Your+Business&L2=Taxes+%26+Incentives&sid=Ehed&b=terminalcontent&f=mobd tax incentives edip info&csid=Ehed](http://www.mass.gov/?pageID=ehedterminal&L=3&L0=Home&L1=Start%2C+Grow+%26+Relocate+Your+Business&L2=Taxes+%26+Incentives&sid=Ehed&b=terminalcontent&f=mobd+tax+incentives+edip+info&csid=Ehed)

## **7.0 Conclusion**

The EDAT was tasked by the 2009 Town Meeting with a short-term feasibility analysis to investigate the potential revenue opportunities and associated costs of expanding development in Harvard's Commercial district. It has completed that task, and offers to the Town a measured first step that can generate \$250,000-\$450,000 in stable revenue each year, while meeting residents' desires for local services.

The only measurable burden of this development on Town services would be for additional ambulance and police service. The ambulance service should be able to self-fund its expansion through the additional insurance reimbursements it will receive. On the police side, Town leadership is already exploring today's need to expand coverage to 2-person shifts independent of any new commercial development. If this happens, there would be sufficient capacity to handle the added load of these new businesses without any additional resources.

Construction costs for all potential infrastructure improvements should be covered by developer contributions and State reimbursements. There are also grants available to help, but some of the design costs may have to be borne by the Town. Assuming the Town's net infrastructure investment is in the range of \$300,00-600,000, the payback period is very short.

To enable better access to the grants and reimbursements, and to give the Town some tax incentive tools that it can selectively use to attract the businesses it wants, the EDAT recommends that the Town pursue official designation by the State as an Economic Target Area (ETA). This will put Harvard on a level playing field with the surrounding towns that already have ETA status.

Given the complexity and time it takes for any new development project to come to fruition, the EDAT recommends that a standing committee be established by, and accountable to, the Board of Selectmen for shepherding this process. This Economic Development Committee (EDC) would not replace any formal review or approval process that exist today, but would rather serve as a facilitator/coordinator to collect and transmit resident inputs to developers, attract desirable businesses, and investigate infrastructure improvement projects. When the Town has the resources to hire a part-time planner, the EDC would serve a useful complementary resource to her/him as an economic development advocate.

Moving ahead on this initiative will require a fundamental change to Harvard's existing culture. Currently, the town attitude towards commercial expansion ranges from general passivity to passionate resistance. As such, most commercial developers perceive Harvard as a difficult development environment, which is why so many of our commercial tracts sit today with vacant buildings and unsightly landscaping, and why 40B projects loom as constant threats. It is also why Harvard homeowners are burdened with such a disproportionately high residential tax burden.

Before any more volunteer time and taxpayer money is invested in moving the EDAT initiative forward, the Town must make a decision:

- bring more balance to the tax structure by proactive implementation of thoughtfully planned development that meets the Town's needs for local services while protecting the surrounding neighborhoods; **OR**
- resist further commercial development and accept the inevitability of repeated spending overrides to meet annual budget growth.

Accordingly, EDAT is bringing the following warrant article to the 2010 Annual Town meeting:

**ARTICLE 29: RESOLUTION TO PROACTIVELY PURSUE COMMERCIAL DEVELOPMENT IN HARVARD'S COMMERCIAL DISTRICT**

To see if the Town will vote to ask the Board of Selectmen to:

- (1) Define and appoint a standing **Economic Development Committee** to act on the behalf of the Town for the proactive planning and implementation of desired commercial development in Harvard's Commercial District. This committee would:
  - a. be responsible for the creation and maintenance of a development plan for the Commercial District that is consistent with the overall Town Master Plan, incorporating the findings and recommendations of the Economic Development Analysis Team;
  - b. define, plan, and coordinate Town-approved infrastructure improvement projects for the Commercial District;
  - c. serve as the Town liaison for commercial landowners and developers to facilitate commercial project planning and coordination; and
  - d. advise the Board of Selectmen on policies to attract and retain businesses
- (2) Actively pursue the designation of Harvard as a new or part of an existing **Economic Target Area** to enable its participation in the Massachusetts Economic Development Incentive Program.

or pass any vote or votes in relation thereto.

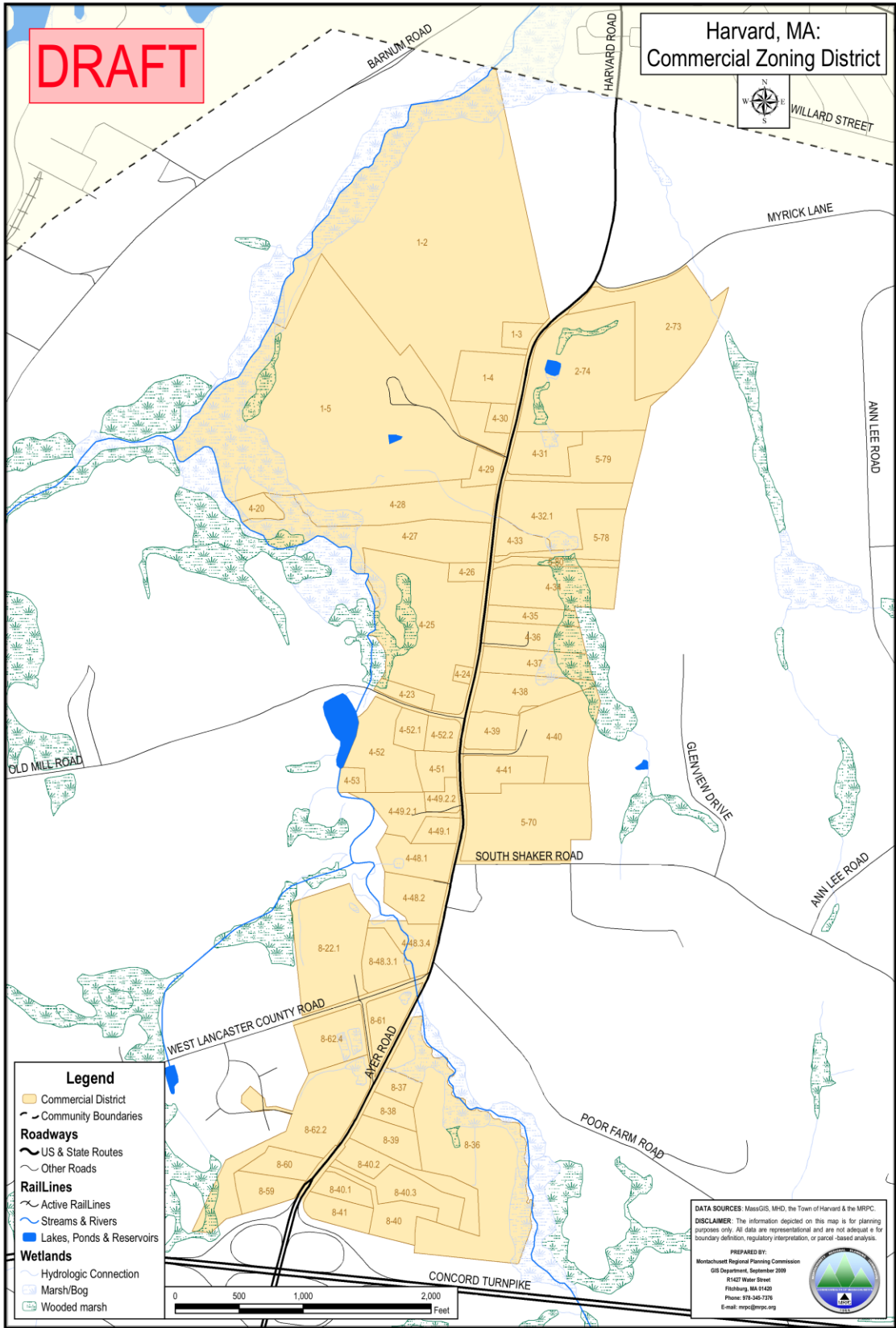
In sum, the EDAT offers a vision of a limited but highly impactful commercial expansion strategy for the C district that would offer residents the retail services they most highly desire, provide a key housing alternative for seniors that is currently missing, and enhance the character of the Town. If implemented, this vision would increase commercial tax revenues by 40% - 76% with limited, if any, annual cost burden. The potential exists for significant cost-sharing of any required infrastructure improvements, including those that would address long-standing traffic and pedestrian safety issues, thus ensuring the Town a short payback period for any investment it chooses to makes.

***It is now up to the residents to decide whether to actively pursue this vision further . . . .***

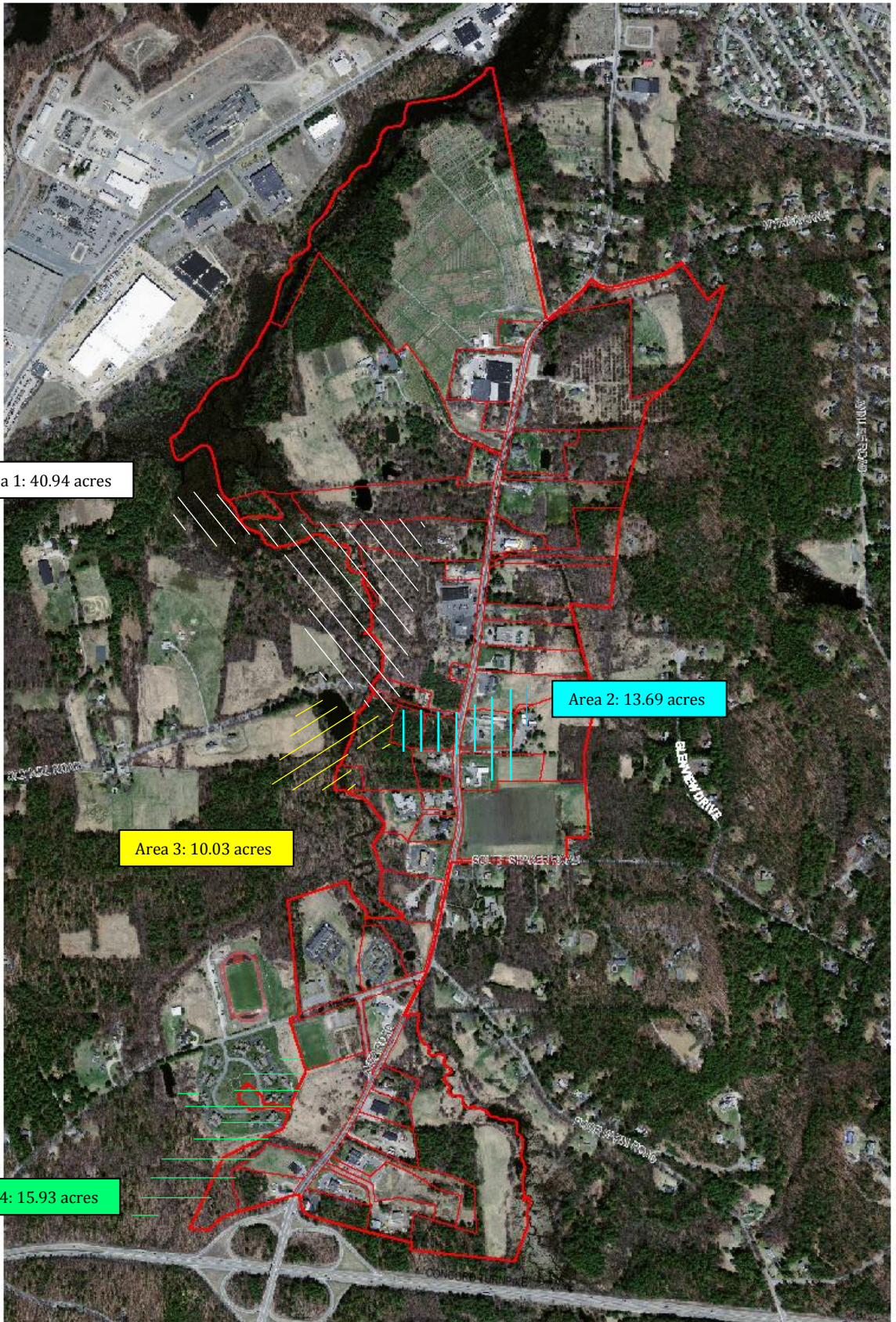


## Appendix A

### Assessor's Map of the C District







Area 1: 40.94 acres

Area 2: 13.69 acres

Area 3: 10.03 acres

Area 4: 15.93 acres

**Appendix B****Assessor's Database of Properties in the C District**

<b>Address</b>	<b>Owner</b>	<b>Parcel ID</b>	<b>Land Area (acres)</b>	<b>Frontage (feet)</b>	<b>Building Size (sq. ft.)</b>	<b>Current Use</b>
253 Ayer	Foxglove Hsng Assoc LTD Prtshp	4.49.2.1	3.21	50	24,572	Apartments
294 Ayer	Gokey and Quinn	4.33	1.71	315	6,000	Auto repair
264 Ayer	Callahan Rlty TR II	4.39	2.68	306	3,225	Auto shop
285 Ayer	Hirsch	4.25	26.11	889	20,220	Bank, retail
204 Ayer	A&N Corp	8.38	1.61	200	10,080	Bowling
256 Ayer	Stone	4.41	3.54	389	8,052	Commercial/Single family residence
202 Ayer	Fairbanks Trs	8.39	3.01	197	5,700	Construction
12 Lancaster County	12 Lancaster County LLC	8.22.1	10.42	509	16,044	Office building
16 Lancaster County	12 Lancaster County LLC	8.22.2	NA	NA	5,600	Office building
184 Ayer	Corliss Rev Tr	8.41	2.27	218	3,242	Office building
187 Ayer	Brown	8.60	2.2	250	4,800	Office building
188 Ayer	Samanthas Rlty LLC	8.40.1	1.86	221	8,124	Office building
206 Ayer	206 Ayer RD Condo	8.37	1.5	209	5,520	Office building
231 Ayer	Jill Realty Trust	4.48.2	3.76	350	8,076	Office building
233 Ayer	Shaker Pl Rlty Tr	4.48.1	3.69	300	11,200	Office building
249 Ayer	Blanchard House Nom Tr	4.49.1	1.58	213	11,287	Office building
257 Ayer	TAPB Realty Trust	4.49.2.2	1.28	253	6,581	Office building
270 Ayer	Lorden Trs of Harvard Condo Trust	4.38	4.74	326	5,037	Office building
276 Ayer	D.Francis Murphy Insurance Agency Inc.	4.37	3.96	201	2,643	Office building
280 Ayer	Jensam Rlty LLC	4.36	3.54	200	14,076	Office building
284 Ayer	Alexander	4.35	1.88	121	2,096	Office building
325 Ayer	Harvard Appleworks LP	1.4	4.71	401	84,012	Office building
6 Lancaster County	Bowers Brook Place	8.48.3.1	3.35	355	10,128	Office building
185 Ayer	Holmes	8.59	2.7	215	3,506	Office/apartments
329 Ayer	Doe	1.2	63.01	110	3,936	Orchard/Ch. 61A
215 Ayer	Harvard Associates	8.61	3.06	813	6,033	Post office
200 Ayer	Harvard Office Park LLC	8.40.2	3.83	206	16,580	Professional building
275 Ayer	Hirsch	4.24	0.41	129	1,199	Single family residence
288 Ayer	Yusuf	4.34	8.53	277	1,984	Single family residence
292 Ayer	Myer	5.78	6.52	41	1,712	Single family residence

295 Ayer	Hirsch	4.27	13.41	306	829	Single family residence
304 Ayer	West & Poitras	4.32.1	10.64	283	2,003	Single family residence
307 Ayer	Brown	4.29	1.51	220	3,656	Single family residence
310 Ayer	Watson	4.31	3.82	315	4,320	Single family residence
320 Ayer	Harvard Orchard LP	2.74	23.01	453	2,179	Single family residence
327 Ayer	CJ Doe Test	1.3	1.01	240	2,474	Single family residence
6 Old Mill	Johnston	4.23	1.21	120	1,056	Single family residence
309 Ayer	Berwind	1.5	53.71	30	3,338	Single family residence/agriculture/Ch. 61A
306 Ayer	McCarthy Rlty Trust	5.79	19.91	83	1,872	Single family residence/Ch. 61
289 Ayer	O'Malley	4.26	1.01	150	4,000	Store
313 Ayer	Lombardelli	4.30	0.98	215	3,874	Two family residence
6 Myrick	Hannigan	2.73	29.66	356	2,701	Two family residence
198 Ayer	Wheeler Rlty Tr	8.40.3	3.98	52	-	Vacant land
203 Ayer	Russo	8.62.2	11.03	892	-	Vacant land
208 Ayer	Town Conservation	8.36	23.91	511	-	Vacant land
261 Ayer	Pleasant Properties	4.52.2	1.51	428	-	Vacant land
290 Ayer	Town Conservation	5.80	29.42	58	-	Vacant land
297 Ayer	Berwind	4.28	10.83	319	-	Vacant land
Lancaster County	Town of Harvard	4.48.3.4	19.04	367	-	Vacant land
Lancaster County	Town of Harvard	8.62.4	5.05	549	-	Vacant land
Old Mill	Pleasant Properties	4.52	7.51	235	-	Vacant land
Old Mill	Pleasant Properties	4.52.1	1.51	210	-	Vacant land
Old Mill	Pleasant Properties	4.53	1.01	0	-	Vacant land
	Unknown	4.20	5.51	0	-	Vacant land
260 Ayer	Stone Realty Trust	5.70	19.01	529	-	Vacant land/Ch. 61
259 Ayer	Kelleher	4.51	2.01	170	13,026	Veterinarian/kennel/office
262 Ayer	Callahan	4.40	11.01	80	3,844	Warehouse
196 Ayer	Wheeler Rlty Tr	8.40	2.92	52	4,448	Warehouse
		<b>TOTAL</b>				
		<b>ACREAGE</b>	<b>495.81</b>			

## **Appendix C**

## **May 2009 Town Meeting Survey Data**

At Town Meeting on May 2, 2009, immediately after approval of the warrant article to form the EDAT, a paper survey was distributed to all voters. The surveys were collected when the meeting broke for lunch, and at the end of the meeting. The data was hand tabulated and is presented below:



Preliminary Town Survey on Developing Harvard's Commercial/Industrial Tax Base  
May 2, 2009

**Overall Reaction:**

**1. My vote on Warrant Article 22:**

	<i>Number</i>	<i>Percent</i>
For	233	88.93%
Against	17	6.49%
Blank	12	4.58%
Total	262	

**2. More precisely where I stand:**

	<i>Number</i>	<i>Percent</i>
Strongly for	127	48.47%
Somewhat for	79	30.15%
Wait and see	26	9.92%
Somewhat against	10	3.82%
Strongly against	6	2.29%
Blank	14	5.34%
Total	262	

*For written comments - see Written Comments section*

**What motivated your vote?**

**1. I would rather limit residential tax increases by trimming services and spending, rather than by increasing commercial development.**

	<i>Number</i>	<i>Percent</i>
Strongly agree	16	6.08%
Agree	17	6.46%
Neutral	36	13.69%
Disagree	87	33.08%
Strongly disagree	78	29.66%
Blank	29	11.03%
Total	263	

*For written comments - see Written Comments section*

**2. I can accept limited commercial development to provide some residential tax relief but don't want to see the commercial district fully developed.**

	<i>Number</i>	<i>Percent</i>
Strongly agree	51	19.39%
Agree	103	39.16%
Neutral	33	12.55%
Disagree	35	13.31%
Strongly disagree	18	6.84%
Blank	23	8.75%
Total	263	

*For written comments - see Written Comments section*

**3. I want Harvard to fully develop its commercial potential to provide the maximum residential tax relief.**

	Number	Percent
Strongly agree	53	20.23%
Agree	61	23.28%
Neutral	37	14.12%
Disagree	52	19.85%
Strongly disagree	41	15.65%
Blank	18	6.87%
Total	262	

For written comments - see Written Comments section

Note: 262 survey responses received. One respondent checked two boxes on question both were tabulated

**Types of businesses I would like to see\*:**

See "Types of businesses would like" section for list and Written Comments section for a summary below.

**Types of businesses I would object to\*:**

See "Types of businesses object to" section for list and Written Comments section for a summary below.

The survey contained this list at the bottom:

\*e.g. supermarket, pharmacy, bar/pub, hardware store, department store, clothing store services, hair/nail salon, fitness center, medical offices, full service restaurant, book/stationery research and development firms, gas station, bank, hotel, liquor store, etc. List specific if you wish.

**Summary of Results - Types of businesses:**

Types of businesses I would like to see:

134	<u>Restaurant/café</u>
130	<u>Grocery/supermarket/food store</u>
92	<u>Pharmacy/drug store</u>
82	<u>Offices, including medical</u>
58	<u>Book/stationery store</u>
44	<u>General retail</u>
42	<u>Hardware store</u>
39	<u>Fitness center</u>
30	<u>Banking</u>
30	<u>Research &amp; development/high tech</u>
26	<u>Gas/service station</u>
15	<u>Bar/pub</u>
14	<u>Liquor store</u>

Types of businesses I would object to:

46	<u>Big box stores</u>
45	<u>Liquor store</u>
44	<u>Hotel</u>
34	<u>Gas/service station</u>
30	<u>Bar/pub</u>
29	<u>Fast food</u>
25	<u>Chain stores</u>
24	<u>Department store</u>
19	<u>Grocery/supermarket/food store</u>
16	<u>Industrial/heavy industry</u>
15	<u>Restaurant</u>
14	<u>Adult uses</u>

## **Appendix D**

## **November 2009 North Harvard Survey Data**

For survey purposes North Harvard was defined as all residents living North of Route 2 on Ayer Road and Poor Farm Road and included all of the residents of Myrick Lane, Simon Atherton Row, Babbit Lane, Ann Lee Road, Glenview Road, South Shaker Road, Old Mill Road, Blanchard Road, Lancaster County Road, Quarry Lane, White Lane, Stonecutter's Path, Graniteview Lane, Sheehan Road and Shaker Road. The town clerk gave EDAT a list of all registered voters residing on the above named streets. The first six questions were developed by the FIAT and a repeat of questions given to attendee's of the 2009 Harvard ATM. The next four questions were developed by the EDAT committee to investigate further the responses given by respondents to the survey given at the 2009 Harvard ATM. The questionnaire was accessed on line and hosted by Survey Monkey, an on line company specializing in hosting surveys. The website was sent directly by email to 160 households in North Harvard and a paper mailing of the survey link was sent to the remaining individuals without known email addresses. Additional hard copies of the questionnaire for those without internet access were made available. Results were tabulated by the website host, Survey Monkey. Because electronic responses were limited to one per computer the 187 responses more closely represents 187 households than 187 individuals.

A summary comparison of the 2009 Town Survey and the North Harvard Survey is shown below:



# Survey Results regarding Ayer Road Commercial Development

November 18, 2009 EDAT

## 1. My reaction to the formation of the Economical Development Action Team (EDAT):

		North Harvard			Town Meeting
Answer Options	Response Percent	Response Count		Response Percent	Response Count
Strongly for	32.1%	60		48.5%	127
Somewhat for	21.4%	40		30.2%	79
Wait and see	30.5%	57		9.9%	26
Somewhat against	5.9%	11		3.8%	10
Strongly against	8.0%	15		2.3%	6
<b>answered question</b>		<b>183</b>			<b>248</b>
<b>skipped question</b>		<b>4</b>			<b>14</b>

## 2. I would rather limit residential tax increases by trimming services and spending, than by increasing commercial development.

		North Harvard			Town Meeting
Answer Options	Response Percent	Response Count		Response Percent	Response Count
Strongly Agree	17.1%	32		6.1%	16
Agree	17.6%	33		6.5%	17
Neutral	24.6%	46		13.7%	36
Disagree	25.7%	48		33.1%	87
Strongly disagree	12.8%	24		29.7%	78
<b>answered question</b>		<b>183</b>			<b>234</b>
<b>skipped question</b>		<b>4</b>			<b>29</b>

## 3. I want Harvard to fully develop Ayer Road's commercial potential to provide the maximum tax relief.

		North Harvard			Town Meeting
Answer Options	Response Percent	Response Count		Response Percent	Response Count
Strongly agree	7.5%	14		20.2%	53
Agree	13.4%	25		23.3%	61
Neutral	11.2%	21		14.1%	37
Disagree	30.5%	57		19.9%	52
Strongly disagree	35.3%	66		15.7%	41
<b>answered question</b>		<b>183</b>			<b>244</b>
<b>skipped question</b>		<b>4</b>			<b>18</b>

<b>4. I can accept limited commercial development on Ayer Road to provide some residential tax relief but don't want to see the commercial district fully developed.</b>					
		North Harvard			Town Meeting
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>		<b>Response Percent</b>	<b>Response Count</b>
Strongly agree	30.5%	57		19.4%	51
Agree	<b>35.3%</b>	<b>66</b>		<b>39.2%</b>	<b>103</b>
Neutral	9.6%	18		12.6%	33
Disagree	12.8%	24	*	13.3%	35
Strongly disagree	10.7%	20	*	6.8%	18
<b>answered question</b>		<b>185</b>			<b>240</b>
<b>skipped question</b>		<b>2</b>			<b>23</b>
* 20 of these 44 people agreed to full development of the commercial zone					
<b>7. The type of restaurant which appeals to me (you may check more than one box)</b>					
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>			
Fast Food Restaurant	1.1%	2			
Deli	34.5%	61			
Primarily take-out	4.5%	8			
Primarily sit down with	40.1%	71			
Chain restaurant (eg.	8.5%	15			
Locally owned	66.7%	118			
Restaurant serving	39.0%	69			
Restaurant which	11.9%	21			
5 star restaurant	22.6%	40			
No more restaurants	19.2%	34			
<b>answered question</b>		<b>177</b>			
<b>skipped question</b>		<b>10</b>			
<b>8. The size of grocery/market which appeals to me on Ayer Road is (pick only one)</b>					
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>			
Large (> 50,000	5.4%	9			
Medium (25,000 -	19.2%	35			
Small (< 25,000	44.9%	82			
No grocery/market on	30.5%	53			
<b>answered question</b>		<b>179</b>			
<b>skipped question</b>		<b>8</b>			
<b>9. Would you like a pharmacy on Ayer Road?</b>					
<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>			
Yes	58.0%	102			
No	42.0%	74			
<b>answered question</b>		<b>176</b>			
<b>skipped question</b>		<b>11</b>			

This survey was a town-wide online survey hosted by Survey Monkey, and conducted between March 13<sup>th</sup> and April 5<sup>th</sup> 2010. Its goal was to solicit input on the factors that residents thought were most important to manage as commercial development moves ahead. It also attempted to gauge residents' preferences for building and landscape architecture by soliciting feedback on images of existing businesses.

The survey was publicized through personal email distribution, on the Town web site, in local papers, and by a sign on the Town Common. 538 respondents completed all or part of the survey, with 442 respondents completing all required questions. It was decided that the partial information should be included in the total results after a comparison of removing vs. keeping partial data was done and the results did not vary substantially. The survey tool also allowed inspection of possible duplicates or "ballot box stuffing", and this was eliminated as a concern.

**EDAT survey****I believe Harvard should pursue additional commercial development on Ayer**

Answer Options	Response	Response
Strongly Agree	36.4%	196
Agree	32.2%	173
Neutral	14.1%	76
Disagree	8.2%	44
Strongly Disagree	9.1%	49
<b>answered question</b>		<b>538</b>
<b>skipped question</b>		<b>0</b>

**My view of the overall desirability of the following types of commercial development on Ayer Road**

Answer Options	Very High	High	Medium	Low	Very Low	Response
Assisted Living Facility	105	123	130	52	37	447
Village shopping plaza with grocery market	222	107	61	25	37	452
Office building	78	89	129	79	66	441
<b>answered question</b>						<b>455</b>
<b>skipped question</b>						<b>83</b>

**My level of concern over visual appearance for each commercial development type**

Answer Options	Very High	High	Medium	Low	Very Low	Response
Assisted Living Facility	201	106	85	42	17	451
Village shopping plaza with grocery store	252	120	49	18	12	451
Office building	212	110	80	29	13	444
<b>answered question</b>						<b>455</b>
<b>skipped question</b>						<b>83</b>

**My view of the relative importance of the following components of visual appearance**

Answer Options	Very High	High	Medium	Low	Very Low	Response
Building architecture	257	149	41	4	1	452
Landscaping Design	239	151	50	9	2	451
Parking Area Design	231	144	67	5	3	450
View from the road or adjacent properties	255	126	52	15	4	452
Changes/improvements to Ayer Road	228	109	73	19	5	434
Other (please specify)						49
<b>answered question</b>						<b>455</b>
<b>skipped question</b>						<b>83</b>

**Reasons why visual appearance is important to me (check all that apply)**

Answer Options	Response	Response
I care about the visual appearance of places where I shop	47.5%	212
I live near the proposed development area	33.6%	150
I drive by the proposed area and can see it from the road	60.8%	271
Visual appearance affects perception and value of Harvard	88.6%	395
Other (please specify)		55
<b>answered question</b>		<b>446</b>
<b>skipped question</b>		<b>92</b>

**I believe that if Harvard pursues commercial development on Ayer Road, we will be able to control the visual appearance of what is developed.**

Answer Options	Response	Response
Strongly Agree	23.1%	105
Agree	34.7%	158
Neutral	23.7%	108
Disagree	12.5%	57
Strongly Disagree	5.9%	27
<b>answered question</b>		<b>455</b>
<b>skipped question</b>		<b>83</b>

**My level of concern regarding noise increase related to commercial development**

Answer Options	Response	Response
Very High	24.4%	111
High	20.2%	92
Medium	32.7%	149
Low	15.2%	69
Very Low	7.5%	34
<b>answered question</b>		<b>455</b>
<b>skipped question</b>		<b>83</b>

**My level of concern regarding traffic increase related to commercial development**

Answer Options	Response	Response
Very High	37.9%	171
High	22.8%	103
Medium	25.5%	115
Low	9.1%	41
Very Low	4.7%	21
<b>answered question</b>		<b>451</b>
<b>skipped question</b>		<b>87</b>

**EDAT survey - population that disagrees or strongly disagrees with commercial development on Ayer Road**

<b>My reason(s) for disagreeing with development of the commercial uses on Ayer Road (check all that apply):</b>		
<b>Answer Options</b>	<b>Response</b>	<b>Response</b>
I do not believe Harvard needs or wants these services	40.5%	34
I think there are better ways to address Harvard's tax base/revenue issues	60.7%	51
I believe traffic/safety issues will result	86.9%	73
I am concerned about negative visual or environmental impact (building quality/character, nighttime light, noise)	85.7%	72
I believe in commercial development for Harvard but not on Ayer Road	20.2%	17
I believe we should be focusing exclusively on Devens	38.1%	32
I have environmental concerns	50.0%	42
Write in other reasons or additional comments here:		18
<b>answered question</b>		<b>84</b>
<b>skipped question</b>		<b>454</b>

**My relative level of visual or environmental concern for each area**

<b>Answer Options</b>	<b>Very Low</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>	<b>Very High</b>	<b>Response</b>
Assisted Living Facility	17	18	21	15	11	82
Village Shopping Plaza with grocery store	3	4	11	26	38	82
Office Building	4	11	30	18	19	82
Changes to Ayer Road visual appearance	2	0	15	28	37	82
Increased traffic noise	1	1	2	18	60	82
<b>answered question</b>						<b>84</b>
<b>skipped question</b>						<b>454</b>

**Reasons why visual appearance is important to me (check all that apply)**

<b>Answer Options</b>	<b>Response</b>	<b>Response</b>
I care about the visual appearance of places where I shop	45.1%	37
I live near the proposed development area	54.9%	45
I drive by the proposed area and can see it from the road	69.5%	57
Visual appearance affects perception and value of Harvard	91.5%	75
Other (please specify)		11
<b>answered question</b>		<b>82</b>
<b>skipped question</b>		<b>456</b>

## EDAT survey - demographics of respondents

### Gender?

Answer Options	Response	Response
Male	42.4%	191
Female	57.6%	260
<b>answered question</b>		<b>451</b>
<b>skipped question</b>		<b>87</b>

### Age?

Answer Options	Response	Response
Under 18	0.2%	1
18-25	0.4%	2
26-35	2.9%	13
36-45	19.3%	87
46-55	41.7%	188
56-65	22.2%	100
65+	13.3%	60
<b>answered question</b>		<b>451</b>
<b>skipped question</b>		<b>87</b>

### How long have you lived in Harvard?

Answer Options	Response	Response
less than 2 years	2.0%	9
2-5 years	8.4%	38
6-10 years	18.4%	83
11-15 years	22.0%	99
16-21 years	16.4%	74
22-27 years	14.9%	67
more than 27 years	18.0%	81
<b>answered question</b>		<b>451</b>
<b>skipped question</b>		<b>87</b>

### Where do you live in Harvard?

Answer Options	Response	Response
North of Route 2	36.6%	165
Town Center area	12.2%	55
Still River area	9.1%	41
Oak Hill area	9.3%	42
South of Town Center	23.3%	105
North of Town Center but South of Route 2	9.5%	43
<b>answered question</b>		<b>451</b>
<b>skipped question</b>		<b>87</b>

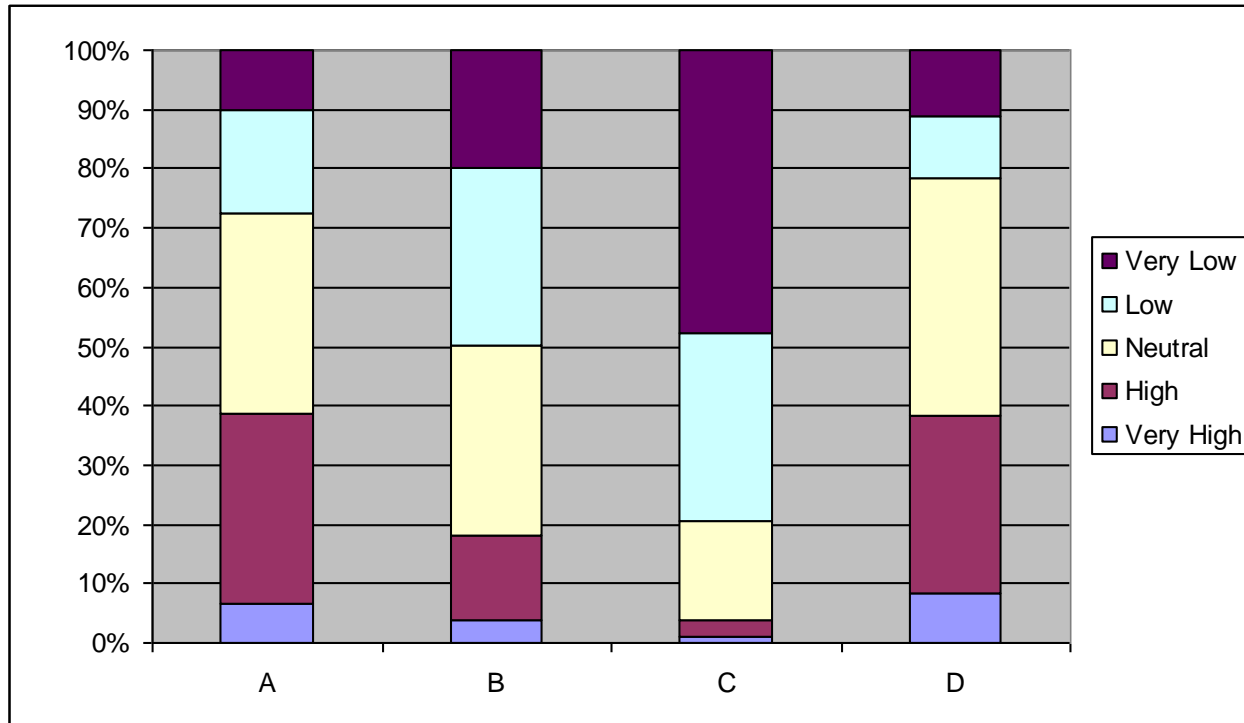
### Are you:

Answer Options	Response	Response
Working	68.7%	310
Retired	14.9%	67
Student	0.4%	2
Other	16.0%	72
<b>answered question</b>		<b>451</b>
<b>skipped question</b>		<b>87</b>

# Visual Survey Feedback

## Shopping/Grocery Plaza

### Appeal of Sample Photos



2.919169



3.477855



4.2194

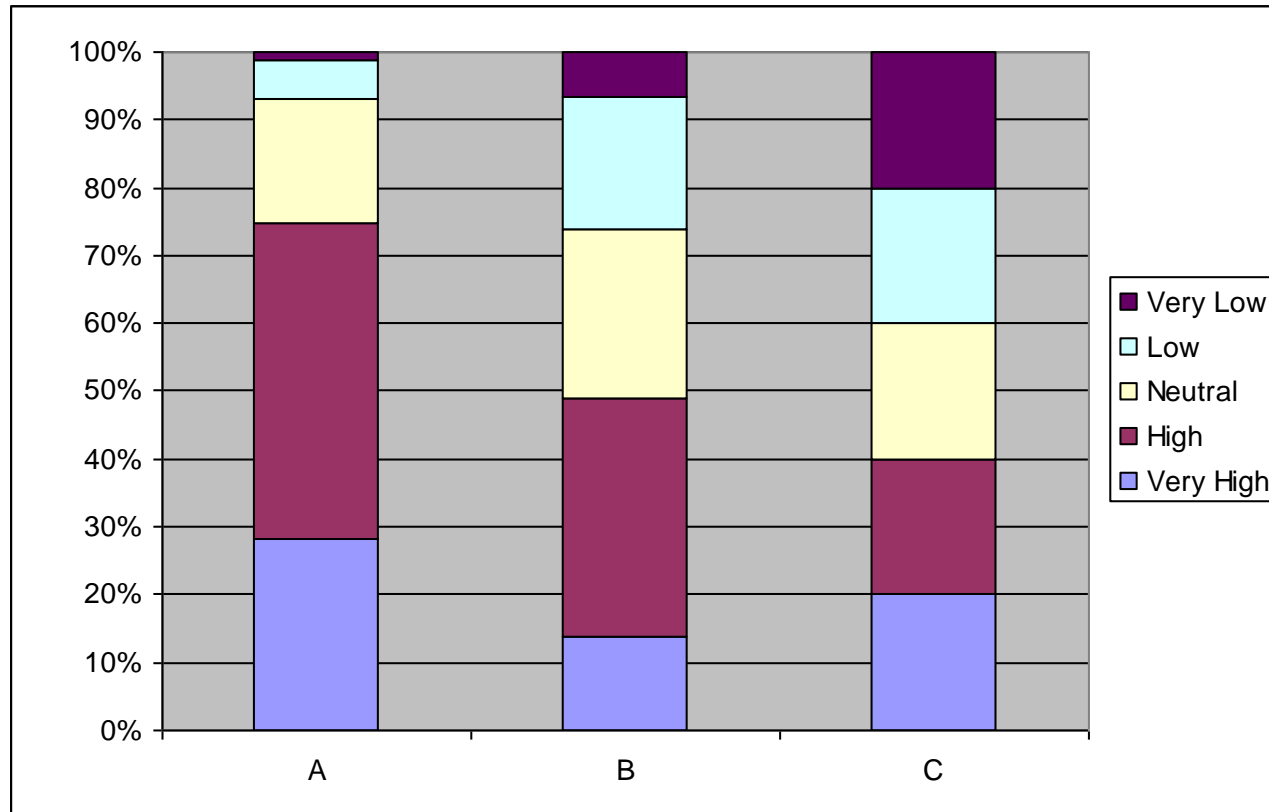


2.84813

All scores out of 5, with 1 being highest appeal, and 5 lowest

## Office Buildings

### Appeal of Sample Photos



2.044393



2.693925



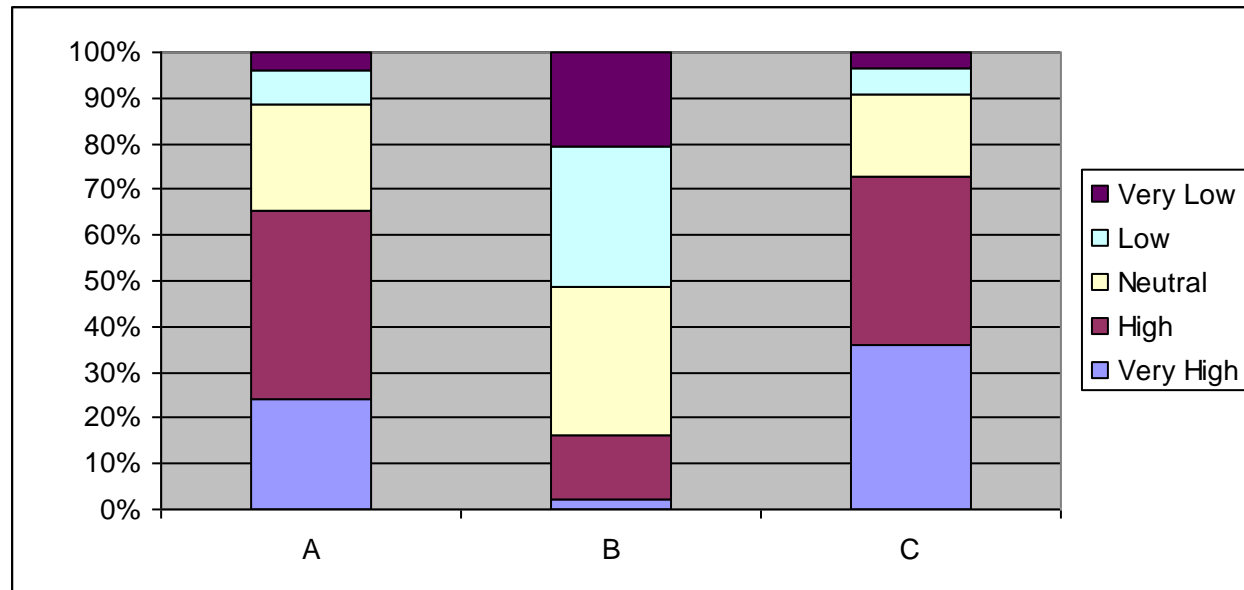
3.941589

All scores out of 5, with 1 being highest appeal, and 5 lowest



## Assisted Living

Appeal of Sample Photos



2.242353



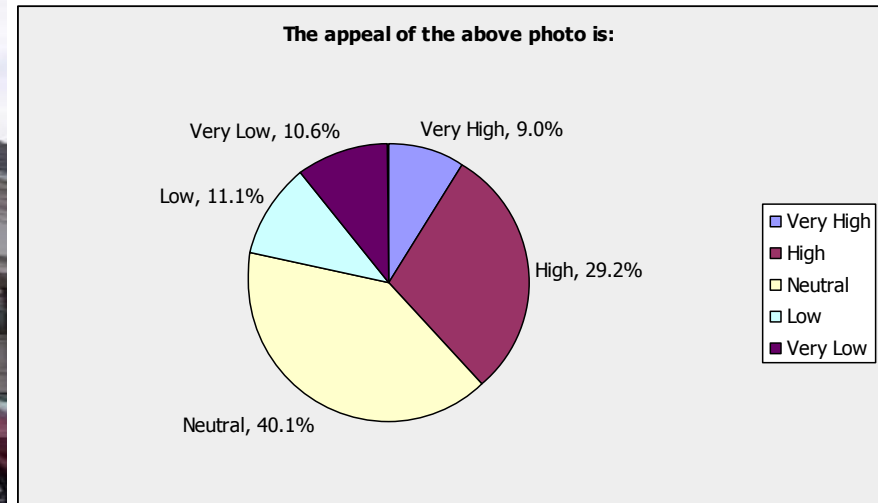
3.541176



2.04

All scores out of 5, with 1 being highest appeal, and 5 lowest

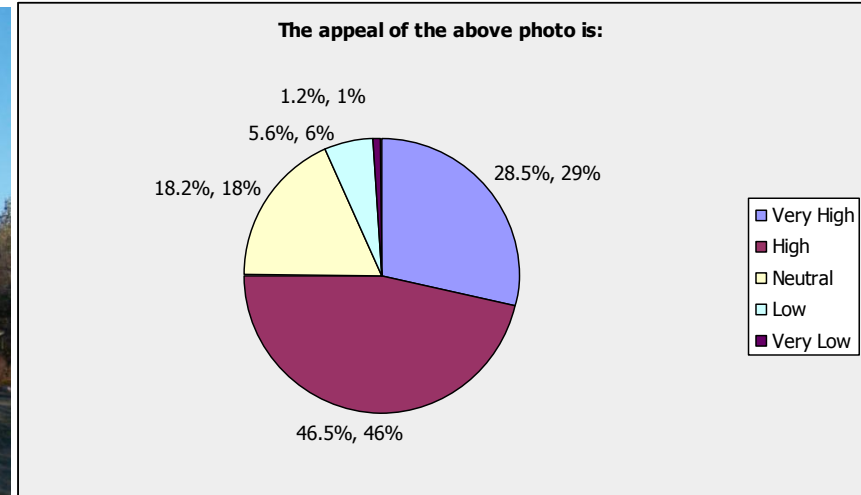
## Details – Top score from shopping plaza samples



Appealing (representative comments): architecture, modest size, signage, roofline, colonial/New England look, materials (columns, brick, woodwork), quality construction, newness

Not Appealing (representative comments): lack of landscaping, pavement, against franchises, too cookie-cutter, too urban looking

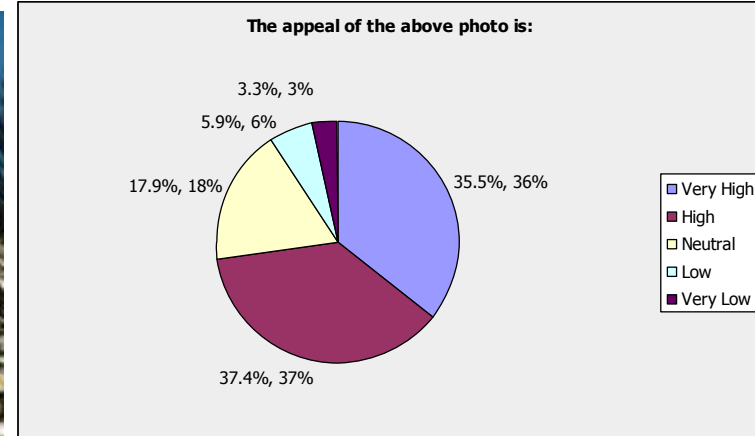
## Details – Top score from office building samples



Appealing (representative of many comments): landscaping, architecture, residential look and feel, set back from the road, low profile, varied rooflines

Not Appealing (representative of very few comments): too residential looking, non-descript, dated, not in keeping with New England architecture

## Details – Top score from assisted living samples

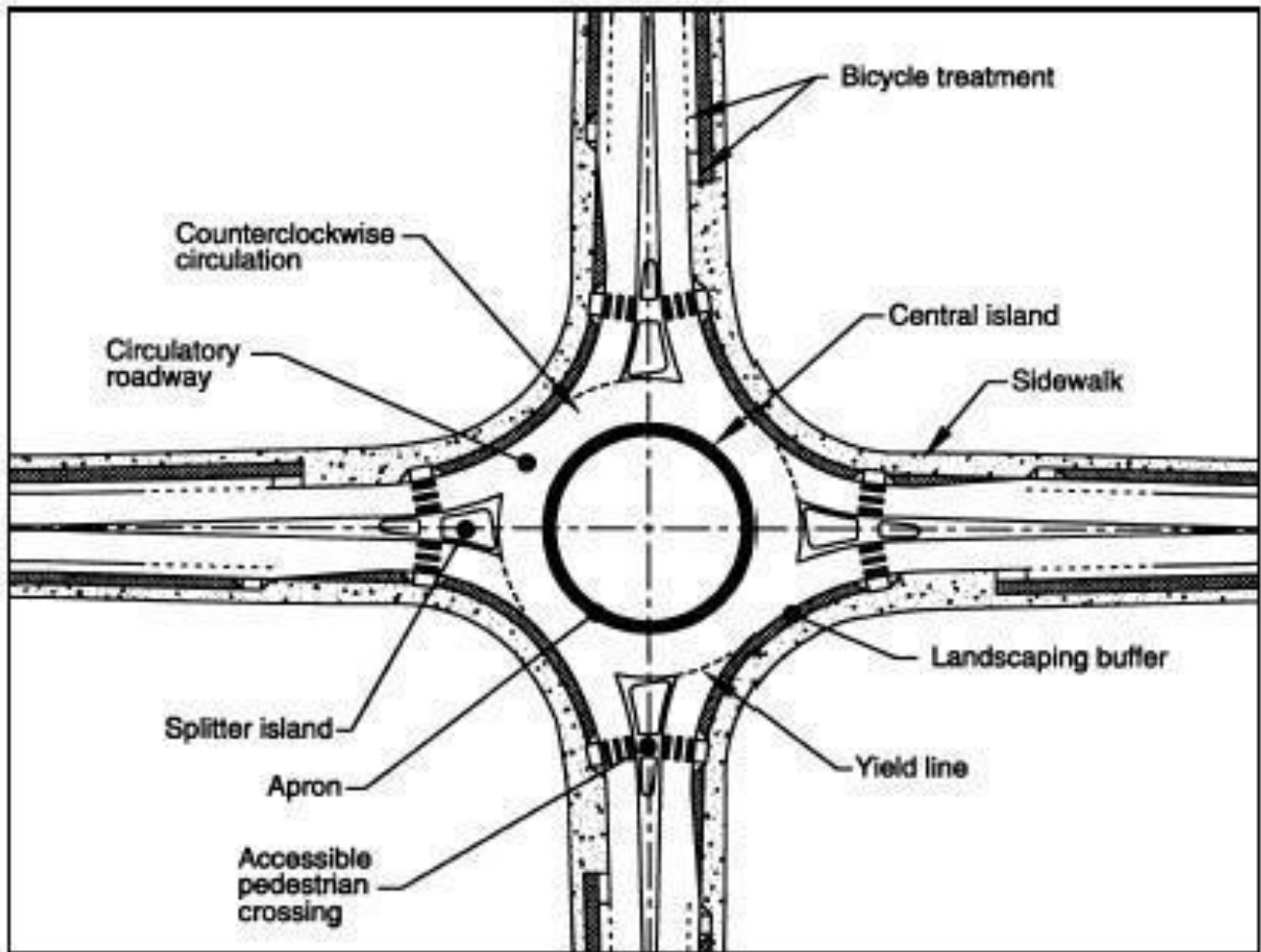


Appealing (representative comments): architectural design, details, landscaping, stone wall, quality, New England look, mansion look, "a modern Hildreth House"

Not Appealing (representative comments): hotel look, not a fit for Harvard, too big

**1. What is a Roundabout?**

A Roundabout is generally a circular shaped intersection where traffic travels in a counterclockwise direction around a center island. Vehicles entering the circulating roadway must yield to vehicles already circulating. Roundabouts have specific design elements that require vehicles to approach and proceed through the intersection at slow speeds, increasing safety and efficiency. **Figure F-1** below shows all the features that are included in a typical single lane Roundabout.

**2. What are the differences between Roundabouts and the Rotaries typically seen in New England?**

Some examples of the Rotaries most people are familiar with in New England are the Greenfield Rotary at Exit 26 of Interstate 91, the Concord Rotary along Route 2, or the Sagamore Rotary at the entrance to Cape Cod. Although Rotaries and Roundabouts are generally circular in shape, there are significant differences in their appearance and operation. Rotaries are typically large, for example the Greenfield Rotary has a diameter of approximately 650 feet. This size results in high circulating vehicle speeds of between 30 and 40 miles per hour. These high circulating speeds mean that entering vehicles must wait for larger gaps between circulating traffic before entering, which reduces

the volume of traffic (capacity) Rotaries can process. This lower capacity means that during peak traffic periods, long delays and congestion are very common. Finally, due to a combination of vehicle speeds, congestion and lack of adequate signage and pavement markings, the frequency of crashes is often high. Of the approximately 100 Rotaries in Massachusetts, 17 appear on MassHighway's list of the 1000 Most Hazardous Intersections.

Roundabouts are much smaller, with single lane Roundabouts typically having a diameter of between 100 and 140 feet (larger diameter to accommodate large tractor-trailers), and multi-lane Roundabouts no larger than about 250 feet in diameter. This smaller size, plus additional design features on the approaches, results in much slower entering and circulating vehicle speeds of between 10 and 25 miles per hour. These lower speeds mean entering traffic can access much smaller gaps between circulating vehicles, which results in an increased volume of traffic (capacity) being processed and minimizes delays and congestion for all users. Finally, primarily due to the lower vehicle speeds, Roundabouts all but eliminate the occurrence of fatal and serious injury crashes, while minimizing the occurrence of minor injury and property damage crashes.

### **3. Are Roundabouts an appropriate solution for all locations?**

NO. A Roundabout may not be the appropriate solution for all locations. Therefore, it is important to conduct a detailed evaluation of whether a Roundabout, stop sign or traffic signal option is the most effective option for a location. A Roundabout may not be a suitable option in locations where:

- there is limited available space (right-of-way), such as a town center where buildings may be built close to the edge of the street;
- there is a large concentration of pedestrians wishing to cross, as this may impact the capacity of the Roundabout to process vehicles; and
- traffic volumes are heavily unbalanced, i.e. one entry has a volume of traffic significantly greater than the other entries. If this situation occurs for a limited time each day, i.e. one peak period, the situation may be mitigated by using measures such as metering traffic signals to break up the entering flow and allowing traffic to enter from the other entries.

### **4. Are Roundabouts safer than traffic signals?**

Research in the U.S. and abroad has shown that Roundabouts experience lower crash rates than both traffic signal and stop sign controlled intersections. The Insurance Institute for Highway Safety conducted a study of 24 intersections located throughout the U.S. where Roundabouts replaced traffic signals or stop signs. This study found fatality and incapacitating injury crashes were reduced by 90%, injury crashes were reduced by 76%, pedestrian related crashes were reduced by 30 to 40% and overall crashes were reduced by 39%<sup>1</sup>. The impacts on bicycle related crashes could not be determined, due to the small number of bicycle crashes recorded both before and after the Roundabout installations.

At Roundabouts the geometric design features ensure that vehicle speeds are low, therefore, when collisions do occur the severity is typically nothing more than a fender-bender type crash. Secondly, as described in question 4, the number of potential conflict points at roundabouts is significantly fewer at Roundabouts. Most people assume traffic signal controlled intersections are safe, and in most instances traffic signals can improve safety at an intersection. But there are inherent dangers at signalized intersections. For example, during the year 2003, approximately 9,200 people lost their lives in crashes at intersections. Of those fatalities, 934 were directly attributable to red light running at intersections controlled by traffic signals. Aggressive driving is recognized as a growing

problem on the nation's roadways<sup>2</sup> and red light running is one of the most common results of this behavior.

In general, single lane Roundabouts are shown to be far safer than traffic signals. As additional entry lanes are added to roundabouts, the crash rates begin to increase, with three lane Roundabouts having a similar crash rate to traffic signals. Although, it should be noted that the crashes at multilane Roundabouts remain less severe than at traffic signal controlled intersections.

### **5. Are Roundabouts more efficient than traffic signals?**

Efficiency can be measured by the volume of traffic processed (capacity) and the length of delay incurred by all users. Roundabouts are typically more efficient than traffic signals. At traffic signals there is "lost time" where vehicles on all approaches are stopped simultaneously between phases when the signal changes from green on one approach and turns to green on another. At Roundabouts, vehicles can enter the circulating roadway whenever there is a suitable gap, most often without coming to a full stop. Additionally, vehicles can enter from multiple approaches simultaneously. These factors mean that Roundabouts can typically process more vehicles in a given time with less delay than traffic signals. During off-peak traffic periods Roundabouts excel, as there is no need to be stopped waiting for a green light. The reduced delays at Roundabouts translate into less fuel being wasted and less polluting emission being produced.

### **6. What are the benefits of Roundabouts over other intersection types?**

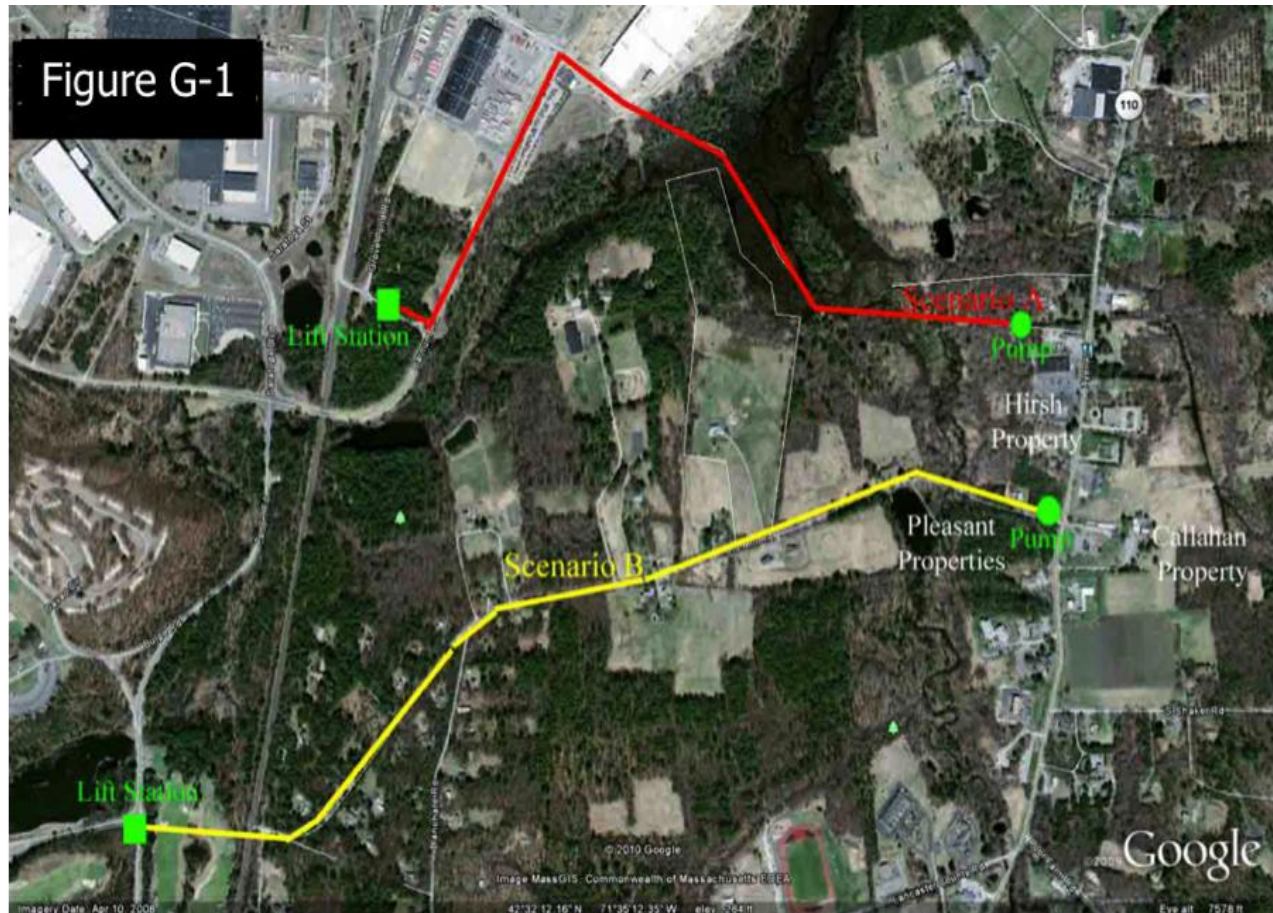
- **Slower Vehicle Speeds**
  - Provides more time for drivers to judge and react to other drivers and pedestrians;
  - Are advantageous to older and novice drivers;
  - Reduces the occurrence and severity of crashes;
  - Makes for a more comfortable pedestrian and bicycling environment.
- **Crash Reduction**
  - Fatalities and incapacitating injuries have been shown to be reduced by 90%;
  - Injury crashes have been shown to be reduced by 76%;
  - Pedestrian crashes have been shown to be reduced by 30 to 40%;
  - All crashes have been shown to be reduced by 39 %.
- **Efficient Traffic Flow**
  - Traffic Capacity (volume of vehicles processed) can be increased by 30 to 50%;
  - Results in reduced vehicle emissions and fuel use;
  - Reduces the need for storage lanes that are often seen at signalized intersections.
- **Reduced Costs**
  - No signal equipment to install and repair;
  - Savings estimated at an average of \$5,000 per year in electricity and maintenance costs;
  - Service life of a Roundabout is 25 years vs. 10 years for traffic signals.
- **Aesthetics**
  - The center island provides an opportunity for landscaping, placing monuments, etc.

For more information, visit:

[http://www.frcog.org/pubs/transportation/Roundabouts/Roundabout\\_FAQ\\_FINAL.pdf](http://www.frcog.org/pubs/transportation/Roundabouts/Roundabout_FAQ_FINAL.pdf)



## Appendix G Low Pressure Sewer System – Alternative Connection Scenarios



### ***Scenario A***

Connection to Devens would be achieved overland, through property owned by Hirsch, owner unknown (#20 on Harvard Assessors Map 4, 5.5Ac) and Berwind. An overland route was examined to determine if the costs were significantly different if no roadwork was involved other than that immediately adjacent to the development parcels and at Devens. A pump station would be used to transfer the wastewater to the Barnum Road lift station through a transfer main. The distance between the Hirsch property and the Barnum Road lift station is about 4,000 feet. Force main would be used to connect the other properties in the sewer district, around 2,000 feet. It is not known whether this route is practical, given that the exact extent of wetlands and other features are largely unknown, and the landowners have not been consulted. An overland system would impact the Bower's Brook area, which is environmentally fragile, and an analysis of whether it would be possible to run sewer pipe using directional boring through the area is needed. This scenario also assumes an area of upland with sufficient elevation on the Hirsch property for the pump station and a large pump chamber. A rough estimate of the cost of sewer through this area is about \$1,500,000. A breakdown of the costs is shown in **Table G-1**. Potential problems with the scenario include the need for easements or land acquisitions from private property owners, and the cost of permitting and construction through the wetlands.



### **Scenario B**

In this scenario, the sewer district would connect to Devens just above Salerno Circle through a transfer main running along Old Mill Road. A pump station would be located on the Hirsch property near the end of Old Mill Road. The pipes would be installed in Old Mill Road, about 7,000 feet to the lift station at Devens, and the system appears to need approximately 1,200 linear feet of force main to connect the sewer district properties. The rough estimated cost for is about \$1,500,000, about the same as scenario A. While there would be less force main than scenario A and lower permitting costs, there would be more transfer main. The advantages of scenario B include the avoidance of wetlands permitting and impacts, and less of a need for easements and/or property acquisitions. Potential problems with each include ledge. Scenario B would also require that the Town institute a civic engagement process early on, so a decision can be made as to whether Old Mill Road residents would connect to the system, based on their wishes. More detailed and definite information on the costs and benefits would need to be provided to residents before reaching consensus.

**Table G-1: Preliminary Cost Estimates**

	<b>Scenario A</b>	<b>Scenario B</b>
Force Main	\$120,000 (2000 ft)	72,000 (1200 ft)
Transfer Main	\$240,000 (4000 ft)	420,000 (7000 ft)
Pump Station	\$150,000	150,000
Connection to Devens	?	?
Grinder Pumps	\$100,000	\$100,000
Permitting, Design and Construction Services	>\$300,000	>\$200,000
Preliminary Subtotal	>\$910,000	>\$942,000
*Ballpark Total with contingencies and connection to Devens	1.5 million	1.5 million

*Note: Preliminary estimates based on Town Center costs. Costs for easements and/or land acquisitions are unknown and not included.*

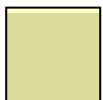
*Assumptions: 1. Devens has capacity and will allow connection. 2. Commercial property owners will be interested in connection and share costs. 3. Town will develop sewer district and set guidelines for participation, and a Town entity will be control connections. 4. Total cost to lay pipe at \$60/foot, but it could be as high as \$150/foot through wetlands or ledge. The increased cost is included in the contingencies\*.*

## Appendix H

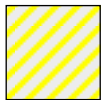
## Alternative Organizational Models for Economic Development

Type	Town/Cities	Comments	
The below are quasi public, publicly chartered but independent of Town government.			
Redevelopment Authority	Fitchburg 1964  Gardner 1966	Owns and manages Putnam Place and Riverfront Park Summit and East Gardner Industrial Parks	Defined in MGL Chapter 121B; Requires an Urban Renewal Plan; especially effective for large scale projects like industrial parks.
Economic Development Industrial Corporation (EDIC)	Athol Ch 422 2004 Orange 1996 Amherst Ch 93 1995 Lynn Ch 778 1977	Mashpee Ch 376 2002 Watertown Ch 460 1996 Framingham Ch 124 1995 Boston Ch 1096 1971	Defined in MGL Ch. 121C, for redeveloping blighted areas with labor surplus and limited to industrial and manufacturing.
Economic Development Corporation (EDIC-like)	Acton Ch 135 2001 Billerica Ch 165 1994 Brockton Ch 137 1993 Everett Ch 73 1982	Shrewsbury Ch 493 2002 Plymouth Ch 182 2002 Quincy Ch 102 1992 Provincetown	Using Ch 121C as a basis, the municipality can enact special legislation to design an entity that has powers similar to an EDIC without meeting the criteria.
Development and Industrial Commission	Dalton 2002 Northborough		Defined in MGL Chapter 40 Section 8A as a purpose for which the town can appropriate money.
The below function as municipal line departments subject to oversight and control of Town government.			
Municipal Offices/Departments			
Economic Development Office	Gardner 2008 Lexington	These seem to consolidate numerous offices to encourage a comprehensive planning and implementation approach to economic development.  If created by town by-law, has only grant administration and planning functions.	
Office of Planning and Development	Leominster		
Municipal Committees			
Economic Development Task Force	West Boylston, Lancaster		
Economic Development Committee	Bolton Hamilton Chelmsford 10/09 Littleton 2004-05 Acton Duxbury	Typical is set up for marketing and promotion to recruit new businesses. Also focus on retention of existing businesses. Advise BOS and Planning on policies and zoning to foster commercial and business growth. Support businesses by assisting with state and local licensing and permitting. Local monitoring of local parcels and businesses.	

## Appendix I      Economic Target Areas Surrounding Harvard



Communities already designated as Economic Target Areas



Bolton has applied to join an existing Economic Target Area