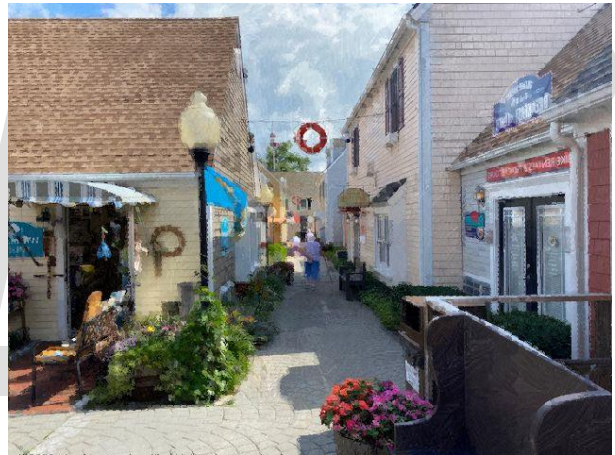




Ayer Road Corridor Vision Plan Framework

MARCH 2021 – Version 8.2



Harvard Planning Board

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A. Executive Summary

Ayer Road, with its Commercial zoning district, is unquestionably the single best opportunity that the Town of Harvard has in developing even a modest commercial tax base and offsetting the residential and agricultural tax burden. However, the approach must be measured and sensitive to the desires and expectations of the citizens of Harvard and also align with sustainability and smart growth principles important to the Town. Some of the feedback from residents has been in the form of responses to business-oriented surveys, other feedback was collected during the master planning process. Based on this strong interest, creating a framework for action is viewed as a critical task in the Economic Development work program for the Director and is expected to be a part of a more formal local economic development program. Therefore, since such a project must be meticulously scoped and framed, and the fact that you get to do this only once and if it is not a success, we may live with the result for a generation or more, this effort required a form of “white paper” to recommend a 3-phase strategy for achieving a successful planning and regulatory outcome in order to “set the table” appropriately in a methodical manner, for the ultimate development and re-development of the Ayer Road Corridor. Thus, the following steps are recommended, in specific order:

1. Market Study and Fiscal Impact Analysis – This shall provide data regarding the types and scales of uses that the market area can support. It will also show how much this development will contribute to local municipal revenues. It will not, of course, make the call related to whether all of the development that is viable, should be pursued.
2. Corridor Vision Plan – This will be a comprehensive plan for a specific area, the Ayer Road commercial corridor, which will include traffic and transportation network analysis, land use and zoning analysis, design analysis, public and stakeholder outreach, and other criteria relevant to studying the commercial objectives of the town while preserving and protecting what is important to the town’s character as the Town moves forward.
3. Zoning and Regulatory Tools – An anticipated result of the Corridor Vision Plan is a recommendation to significantly improve the zoning and other regulatory tools that govern the C district along Ayer Road. Once these tools are on place and other facets of the Vision are achieved, then the desired type and scale of development can commence with much less concern over the outcome and impacts. It should be noted up front that water and sewer infrastructure should not be available for corridor lands until this regulatory framework is in place.

These three (3) steps have been identified as critical because meticulously building a convincing argument for the type and scale of development that could be of immense value to the Town of Harvard is a required prerequisite. This argument requires hard data on marketability as well as net positive fiscal impact. It requires significant public input into design and outreach regarding development impact. Finally, it requires a predictable tool for both citizens and the developer to assure that the vision developed in the corridor plan is achieved. It is important to note that the analysis, planning and potential creation and adoption of zoning tools to achieve the desired

outcomes constitutes a public process. Inherent in this process is continuous public outreach and feedback.

This document is intended to provide the detailed steps that this office believes are necessary to have that successful outcome. It also notes the timeframe, anticipated range of costs, and actions that need to occur. It is meant to inspire informed discussion of how the Town should proceed and ultimately it is a kind of policy paper for the Planning Board so that it may formally endorse the proposed program.

B. Property Summary

1. Location Information and Description:

The area is located on the north side of the Town of Harvard approximately 4 miles west of Interstate 495, approximately 19 miles from Route 128, and approximately 34 miles to the center of Boston. Harvard is also 10 miles to Leominster, MA, 20 miles to Nashua, NH, and 29 miles to Worcester, MA. Harvard is defined¹ as a “Developing Suburb” with a sub-type description as a Country Suburb. This type of community is typified with *very low density, room to grow, country character*. Additionally, these types of communities generally are:

- Low density communities with no significant town center and no compact neighborhoods;
- Possess large amounts of vacant developable land (>35% of total town area is vacant & [technically assumed to be] developable);²
- Characterized by new growth: with conventional low-density subdivision development on vacant land; and
- Generally, are often growing rapidly (population and households).

While Harvard does not fully embody all of these descriptors, the potential for higher population growth through the proliferation of conventional subdivisions is a distinct possibility, although not widely supported as noted in the 2016 Master Plan.

2. Site Dimensions:

The project area is approximately 344.5 acres along a +/- 1.2 mile stretch of Ayer Road (Route 110/111) extending from the Route 2 interchange to 1/3 mile south of the Ayer Rotary. See map on the following page (Figure 1) for a recent zoning assessment of the study area (the lands zoned Commercial or C).

3. Existing Land Use and Building Conditions:

¹ MAPC, Massachusetts Community Types, http://www.mapc.org/wp-content/uploads/2017/09/Massachusetts-Community-Types-Summary-July_2008.pdf

² Note that this does not take into consideration zoning constraints and land constraints such as ledge.

There are a variety of land uses within the +/- 344.5-acre corridor area. They include retailing, general office, medical office, over-55 rental residential, single-family residential, personal services, heavy commercial uses, manufacturing, institutional, and indoor recreation.

See APPENDIX A – Inventory of Properties in Commercial District (pending), for a complete description of properties in the corridor. In summary, there are a variety of commercial, industrial, and residential buildings in the corridor in varying conditions and quality. There is no overall character or design theme or pattern of the development currently in the project area other than it is very low density.

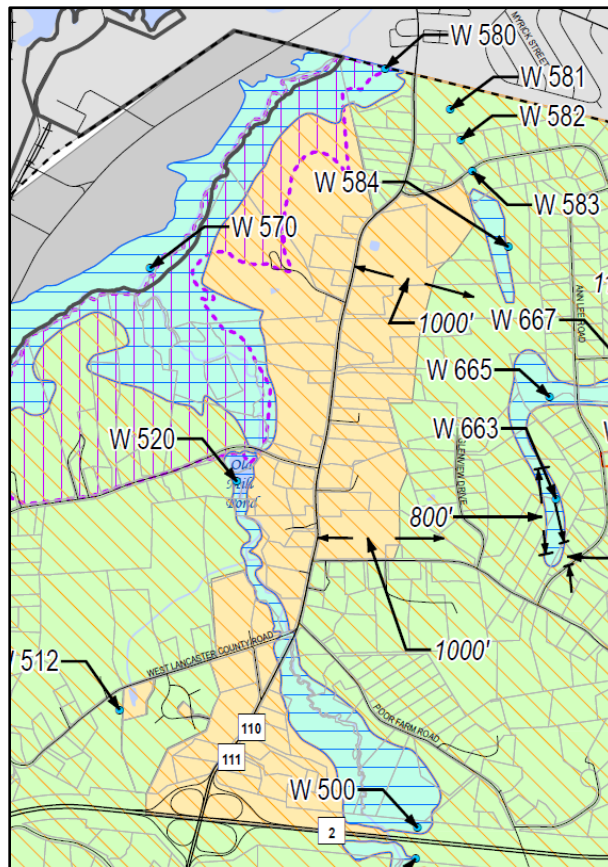


Figure 1 - Map of Harvard Commercial Zoning

4. Zoning Criteria:

The current zoning in the corridor is Commercial (C) with the option for an Ayer Road Village Special Permit (ARV-SP) that allows mixed-use development. However, one purpose of the proposed project is to modify the zoning to be denser with more specific and articulated design requirements, favoring mixed-use development more clearly, and facilitating specialized zoning tools and process to assure residents of a specific design and siting scheme.

5. Utilities and Other Infrastructure:

Presently, the Ayer Road commercial corridor is not served by public water or sewer. Nearby Devens has a public water supply system that is estimated to have a capacity in excess of five (5) million gallons/day. Devens also has a wastewater treatment plant that has the capacity of approximately 4.65 million/gpd and is presently at 30% of capacity. Both of these systems could conceivably be extended to the Ayer Road corridor either via Old Mill Road, Lancaster County Road, or another option.

As summarized in the Economic Development Analysis Team (EDAT) report, a gravity system from Devens along Old Mill Road was estimated to cost \$8.0 million. The Team also suggested an alternative low-pressure system (LPSS) alternative at a lower cost. Investigations into linking the corridor to that system are ongoing and are a vital element in a successful development plan. Without it, some change can be facilitated but the development pattern would remain largely the same.

As noted above and below, the extension of utilities, particularly water and sewer, must be coordinated closely with the Ayer Road TIP project so that they can seamlessly address the engineering and construction schedules and technical details.

6. Transportation and Access:

The site area (corridor) is directly adjacent to the State Route 2 interchange and directly follows State Route 110/111 which is a minor arterial. The closest mass transit to the site is the Ayer commuter rail station located 1.6 miles to the north and west. Ayer Road is bisected by:

- West Lancaster County Road
- Poor Farm Road
- South Shaker Road
- Old Mill Road
- Myrick Lane

Ayer Road traffic counts for the area north of Route 2 (Location 255178) were 13,572 average daily traffic (ADT) as of 2019. This exceeds the count for a number of more urbanized roads such as Route 4 in Chelmsford (9200 as of 2017) or Littleton Road in Westford (9718 in 2018) and not much less than Great Road in Littleton or in Acton. A fairly substantial number of tractor trailer trucks use this corridor, coming from the Route 2 exit or from Ayer, and this has been augmented by the opening in 2019 of the Alltown truck fueling facility at the Harvard-Ayer municipal line.

The 2010 EDAT Report on Ayer Road was very detailed about the existing problems and challenges related to transportation. Some of the key points made in 2010 included:

- Trucks and cars use Poor Farm, Pinnacle, Oak Hill, and Littleton County roads as cut through routes between Ayer traffic circle and I-495.
- High accident areas along the corridor include the Dunkin Donuts entrance, the Post Office entrance, and the Poor Farm Road intersection.
- The report references a 2007 functional design report for Ayer Road prepared by Camp Dresser McKee (CDM). Recommendations of the CDM report suggested a location that met minimum warrants for a traffic signal but only after intersection reconfiguration. Increase in ADT since that time plus updated traffic accident information might require additional locations for traffic control solutions.

As noted above, the Town of Harvard is working with transportation consultant TEC, Inc. to move an engineering design forward as part of the region's Transportation Improvement Program (TIP). It must be emphasized that while the TIP project and the project that is the subject of this report are separate and distinct, they must each be informed by each other and not proceed independently. Therefore, as this development framework moves forward, the TIP project should be kept in mind and coordination with TEC and Harvard DPW is imperative.

7. Ownership:

There are 58 parcels of land in the corridor. Twenty-nine of the parcels totaling 116 acres, are currently in commercial use. Ownership of these commercial parcels is diverse and there is no entity that owns more than three (3) properties. Property assemblage for larger scale developments would be challenging. The EDAT included a table of property ownership in an appendix. The Planning Division of the Land Use Boards has updated this list in an Excel spreadsheet.

8. Area and Proximity Character:

The southern end of Ayer Road north of the Route 2 interchange is the most recently developed and urbanized part of the corridor. Land uses include condominiums, several commercial uses including a Dunkin Donuts and a dry cleaner, offices, age-restricted rental apartments, a real estate office, and two vacant older buildings just off the interchange. Other proximal uses include conservation land, a soccer field, running track, a post office, and additional offices including medical offices.

Presently, there is no design theme to most of this area except for the mixed-use development where the Dunkin Donuts is located as they utilized the ARV-SP that includes design requirements. Density throughout the corridor is very low, as is typical for development not served by public utilities.

Further north along the corridor, there are heavy commercial use buildings, some are metal fabricated, but none meet any aesthetic nor include landscaping as a site feature. A veterinarian

office and kennel, bank, and shopping center with a restaurant line the west side of Ayer Road as it approaches the Ayer town line. The remaining uses include commercial-scale solar farm, a small light industrial building, apple orchard, and several single-family residences. Most of these land uses are very old, dating back to the 1950's through the 1980's, in relatively poor maintenance—particularly parking lots, and again, there is no design theme nor much consideration to New England architecture in most cases. Finally, as noted before, the low density and deep setbacks in some cases give the corridor a sprawl-like character.

9. Taxes and Assessment:

The FY2020 Tax Rate for the Town of Harvard is 18.47 (Rate is per \$1000 of assessed valuation) and this compares to prior years as noted below in Table 1:

Table 1 – Tax Rate, 2010 to 2020

Year (FY)	Property Tax Rate (x \$1000)
2020	18.47
2019	17.42
2018	17.15
2017	18.10
2016	18.05
2015	17.79
2014	17.09
2013	16.68
2012	16.24
2011	15.47
2010	14.33

Since the EDAT report was released, Harvard's property tax rate has increased 28.89% and still remains a single tax rate for both residential and commercial property.

EDAT researched alternate assessing methods for commercial property. Their recommendation was to shift to a straight commercial income basis of commercial taxation. However, they noted that it would require a new software program to implement and the current (at the time) commercial revenues did not justify the expense.

It is also useful and an important part of the market analysis to compare Harvard's tax rate with those of surrounding communities. This is one measure of whether a community is business-friendly from a taxation perspective:

Table 2 – Comparable Tax Rates 2020

Town	Property Tax Rate (x \$1000)
Harvard	18.47
Ayer	28.80
Shirley	16.08
Bolton	20.47
Stow	20.13
Boxborough	16.42
Littleton	28.27
Groton	18.11
Hudson	34.10
Clinton	28.20

It appears as though Harvard's tax rate isn't particularly onerous compared to surrounding communities, all with single-rate tax structure.

10. Recent Issues:

As of late 2020, the Land Use Boards office, inclusive of the Economic Development Division, has received a number of development inquiries for properties within the Ayer Road commercial corridor. While intentionally ambiguous regarding specific locations, questions regarding the siting of large multifamily apartment complexes in excess of 200 units and commercial and industrial uses such as self-storage facilities, auto repair, and warehousing exemplify that the current zoning, while not resulting in development preferred by the community, is still attractive to unintended uses. The commercial corridor is the only land area in Harvard zoned for business uses and is expected to provide commercial tax ratables currently lacking in the Town portfolio. Taking this land out of potential commercial development or use for large multi-family development is not a preferred scenario. While mixed-use development that includes a residential component is indeed a desirable outcome in this area, no multi-family developer as of now is interested in providing any commercial element. Harvard must provide land area that multi-family development can be built, meet it's 10% SHI mandate, and upzone the Ayer Road corridor in order to better facilitate the mixed-use scenario desired.

C. History/Background of Planning Efforts

Summary

The consideration of the Ayer Road Corridor for commercial development has been discussed for decades and included in three successive master plans. These efforts resulted in a number of zoning changes, creation of an Economic Development Commission, and a number of surveys and public meetings. Yet as of 2021, new commercial development over the last two decades has been limited to a small mixed-use development at Bowers Brook. Economic development was of particular interest to the community since a fiscal impact analysis confirmed that Harvard has had a structural deficit due to too few commercial ratables. Since the 1980's, net commercial square footage allowed by zoning has been reduced significantly. Over the past year, two redevelopment projects have been approved, one for an indoor athletic facility and another for a landscaping business. Neither project will make any significant change to the corridor either in design or function.

Additional activity consists of inquiries to the Planning Office in regard to multifamily housing development opportunity and it is believed that such inquiries will increase going forward due to several factors including Covid-19 demographic shifts.

In order to be able to move forward on a consensus-driven plan for the Ayer Road corridor, we need to take a step back in time and note the historical context of where we find ourselves at the present. Until 1965, most of the Town of Harvard's commercial properties were those located along Ayer Road, both north and south of Route 2, with others scattered in the town's center and on major roadways. Other commercial uses were operated out of residences as in-home occupations, both legal and otherwise. At that time, there was no commercial zoning. Recognizing that a commercial district was an important means to facilitate development that could add to the tax base, Annual Town Meeting of March 6, 1965 approved both the Commercial [C] district and the Business [B] district. In the years following the establishment of the B and C districts, some sporadic commercial development occurred including a small shopping center, office buildings, and several heavy commercial uses.

As part of the 2002 Master Plan project, the consultants prepared a document that included an Appendix A that was entitled, "A Zoning Diagnostic Evaluation for Harvard" which provided an evaluation of the existing zoning districts and a recommendation for change that would better meet the goals and objectives of the Master Plan. The evaluation and recommendations for the "C" district were as follows:

"The C District needs to be newly described and use and development regulations need to be tailored specifically to encourage uses consistent with the Town's village identity. Warehouse and storage as a principal use should be discouraged, as should petroleum product storage and transfer. (See Section II for more detail on potential new regulations for the C District.)"

Thus, planning experts as far back as 2002 were recommending significant changes to the district in order to accomplish local goals. Even earlier, the completion of the 1969 Master Plan by renown landscape architect Charles W. Eliot II led Eliot to expect changes such as more *"village nodes and a bustling business district north of Route 2"* similar to recommendations in all Harvard plans since that time. This plan envisioned a village shopping center but also recommended downzoning (reducing the extent of) the "C" district. An initial Economic Study Committee was established by the Town in response to the plan and a strong interest in commercial and industrial development. But in 1986, the Town voted to eliminate the Industrial (I) zoning district.

However, further erosion of commercial opportunity occurred in 1987 when Town Meeting reduced the permitted Floor Area Ratio from 0.25 to 0.10 which translated to a sixty (60%) percent reduction in commercial development opportunity. At this time, the dialogue related to commercial development was limited to how much commercial square footage was necessary to support the population of Harvard. Not discussed was how much and what kinds of businesses were needed by the *other businesses already in Harvard* or what businesses could be supported locally that would bring in dollars from outside of the community.

Yet, even with these limited perspectives and reductions in commercial opportunity, the 1988 Master Plan still included goals that hazily articulated village-scale development north of Route 2 on Ayer Road. But until the 2002 Plan, none had sought to establish a development vision nor how commercial development could contribute to municipal fiscal health. As noted in the *“Report of the Economic Development Analysis Team (EDAT)”* submitted in 2010, the 2002 Plan noted that piecemeal zoning changes to the “C” district “...may have exacerbated both the planning and fiscal challenges” and recommended a different zoning solution which led to the 2004 adoption of the Ayer Road Village Special Permit (ARV-SP). This overlay allowed for an alternative development model for the corridor seeking to facilitate a greater “village-like” identity rather than sprawling and uncoordinated development. As of 2019, only the 206 Ayer Road collection of buildings that house a Dunkin Donuts, dry cleaner, offices, medical offices, and senior rental apartments, has sought to employ the ARV-SP. Time since the establishment of the ARV-SP has clearly shown that not only is it a challenge to build that density and scale due to the lack of public water and sewer infrastructure, but it also isn’t necessarily going to translate into a “village-like” design nor meet any broader goals or vision for the corridor.

The Town established a Fiscal Impact Analysis Team (FIAT) to investigate root causes of the Town’s chronic structural fiscal deficit. Recognizing that over-reliance on residential tax base was an obvious driver of the deficit, the FIAT recommended the creation of an Economic Development Analysis Team (EDAT) and proposed a warrant article in 2009 Annual Town Meeting in support of that recommendation. Please refer to EDAT’s 2010 report for details regarding their charge but to summarize, it was to prepare a commercial and industrial strategy by analyzing opportunities to increase commercial tax revenue by encouraging desirable development of commercial and industrial properties. Their 2010 report was the culmination of their work and it made the following general findings and recommendations:

1. Identification of high revenue generating commercial land uses including offices, assisted living facility, and a retail plaza that includes a grocery store. The target square footage was in the range of 155,000 to 280,000 square feet.
2. Protective (Zoning) Bylaw should be amended to be more development-friendly by recodification and reformatting and allowing the uses that the EDAT recommended.
3. Simplification of the permitting process by making it simpler and more predictable.
4. Traffic recommendations include facilitating traffic calming and beautification to make the road safer and to accommodate more vehicles. As part of this, they suggest:
 - a. Signalizing or other shared traffic flow device for Old Mill Road intersection.
 - b. Signalizing or other shared traffic flow device for Dunkin Donuts intersection.
 - c. Work with Devens to encourage or require heavy trucks to use Jackson Road exit. If this isn’t successful, add the shared traffic flow devices at the two intersections noted above plus a roundabout at Lancaster County Road intersection.
 - d. Pedestrian and bike facilities along the length of Ayer Road above Route 2.

5. Create a sewer district within the corridor that is exclusively reserved for the commercial uses within the corridor and not for residential or 40B projects. There must be a critical mass of development to pay for the system. Further, they recommend a fair and predictable permitting process. Finally, that the Town should engage the public and assess the level of support in the Old Mill Road neighborhood. The options provided in the report were either bringing it from Devens or creating a low-pressure sewer system (LPSS) alternative for a targeted area. Note that there are a number of ways in which a project of this type and scale can be funded. Certainly, the sewer district is a possibility, but so is a Business Improvement District (BID), a special assessment area, a revenue bond, MassWorks grants, and private developer funding.
6. Create an economic development team to carry the recommendations forward including a town planner and a permanent Economic Development Committee.
7. Seek Economic Target Area (ETA) designation by becoming part of the Devens regional ETA.

Since the EDAT report was issued, the following steps have been taken in support of their plan:

1. The Economic Development Commission (EDC) was established in 2012 and accomplished the following in their short existence:
 - a. Facilitated Harvard's designation as part of the Devens ETA in August 2012
 - b. Participated in Phase 1 of the 2016 Master Plan process by looking more closely at the grocery store use and publishing a Grocery Store White paper in 2013.
 - c. Researched linking Devens water and sewer to the "C" district.
 - d. Worked to improve communications with local businesses in "C" district and local residents
 - e. Developed five (5) year objectives and strategies plan for improving the business environment in 2013.
 - f. Considered joining Nashoba Valley Chamber of Commerce.
 - g. Held open forum on "C" district development in 2013
 - h. Recommended hiring of town planner in 2013.
 - i. Considered gas station/convenience store use but did not act on it.

In 2013, the EDC was disbanded as a Town Committee. Lack of support for economic development by the public and by Town officials appear to be key reasons for this action.

2. In November of 2014, the Montachusett Regional Planning Commission (MRPC) published a report funded through the District Local Technical Assistance (DLTA) program on the recommendation of the 2016 Master Plan consultant. The five (5) tasks that made up the report consisted of:
 - a. **Task 1:** Background Information
 - b. **Task 2:** Ayer Development Plans & Business Analyst Online (BOA) Assessment
 - c. **Task 3:** Map of Businesses in the C District
 - d. **Task 4:** Parking Assessment and Building Permits

e. Task 5: Business and Property Owners Surveys

This relatively confounding document presents as a series of appendices that are not woven together as a coherent, connected report. There is useful information in each of the Tasks (sections) but there is no purpose or introduction nor any conclusion or recommendations and thus the usefulness of the report is negligible.

Since the 2016 Master Plan has been adopted, the Town has hired a permanent, full-time Community and Economic Development Director

D. Description of Proposed Project

Summary

In preparation for the kind and scale of quality development that would be appropriate for the Town of Harvard, a series of preparatory steps need to be taken to insure that we have all the data that we need, that the public has been sufficiently involved in the planning process, and that a shared vision for the corridor and its importance is established. There are three (3) proposed phases for this project, each building a framework for the next steps. This project will be expensive and the exact cost will be dependent on what type of firm is selected for the work.

The three-phase proposed project for the Ayer Road Commercial Corridor is intended to be cumulative and include:

1. An initial market analysis to determine the amount of square footage of uses by type projected in to the future with a narrowly focused fiscal impact analysis will take those projected square footages and add them to the tax rolls and determine how much this projected development would add to the tax base. Should this analysis indicate a net positive impact, Phase 2 would be initiated.
2. The next step would be the development of a vision plan for the Ayer Road corridor. This plan would look at the market data, infrastructure, the transportation network, land use, existing zoning, environmental issues, and other factors to develop a vision for the area. This vision will be informed by a number of activities that develop an aesthetic vision for the area and will include graphics and visuals that provide glimpses of what that could look like. There must be significant public participation during this phase in order to develop the support necessary to take the findings of this plan and take the steps necessary to initiate the next phase. We assert that an important part of this vision plan is for the creation of a model sustainable development framework that aligns with local climate change planning, net zero energy regimes, and other facets of smart growth and sustainable development.
3. Finally, the last phase of this proposed project would be the development of a very carefully crafted set of zoning tools to facilitate and realize the vision. This is anticipated to be a “form-based” zoning³ model that is currently being considered as a tool in Littleton and Ayer and that has already been utilized in Lowell and many communities across the U.S.

³ A prescriptive, graphic-based zoning tool that pre-establishes the building form, siting, and bulk (see p. 19).

These three (3) phases are described in more detail below but the reason that these steps have been identified as important relates to meticulously building a convincing argument for the type and scale of development that could be of immense value to the Town of Harvard. This argument requires hard data on marketability as well as net positive fiscal impact. It requires significant public input into design and outreach regarding development impact. Finally, it requires a predictable tool for both citizens and the developer to assure that the vision developed in the corridor plan is achieved.

[illegible]

Phase 1: Market Analysis and Fiscal Impact Assessment

Summary

The first step in this three-phase process is to gather the data required to justify a development framework. A market study is necessary to determine what uses can be supported and at what scale. Once this is done, a fiscal impact analysis of adding this development to the town tax base will be performed.

Description of the Need and the Project

As noted in Section C., there have been prior studies conducted on the market by the Montachusett Regional Planning Commission but no prior study has undertaken a complete market assessment of the range of uses and square footages that could be supported in the C district now and in the predictable future given growth projections for communities in our region. For example, the communities within the 10-mile commute shed includes Ayer, Acton, Westford, Littleton, Sterling, Clinton, Marlborough, Hudson, Leominster, Lunenburg, Stow, Bolton, Boxborough, Shirley, Groton, Lancaster, Berlin, Maynard, and Boylston. Even modest growth over the next 10-15 years would put several hundred thousand people within a fifteen-minute drive to Harvard. It will be vital to accurately predict this buying power, the resistance factor to make the trip, and the specific uses that could be successfully supported. The 2014 MRPC Business Conditions Assessment ran ESRI Business Analyst Online to provide an overview of the retail market potential of the district (one of the several uses that residents indicated that they support in recent surveys). The analysis was limited to data within the Retail Trade, Food Services, and Drinking Places database and thus can only extrapolate from that narrower use domain. The report notes \$390.4 million in demand for retail, food, and drink within a ten-minute drive-time radius while only \$158.5 million is being supplied forcing a leakage of approximately \$232 million dollars from the area. The proposed market analysis would update these numbers and add additional market sectors to round out the other potentially desirable uses that could be supported within the corridor.

As a part of this first phase, a targeted fiscal impact analysis would be conducted to determine the fiscal contribution that several options of use type mix and square footage would make to the Town's tax base and municipal revenue stream. The data from the fiscal impact analysis could also be slotted in to a more comprehensive fiscal impact analysis that may be proposed subsequent to this study.

Market Analysis and Fiscal Impact Assessment Scope

The Phase 1 Market Analysis and Fiscal Impact Analysis would consist of the following steps:

1. Overview of regional and local economy and market (market delineation) for context
2. Identification of local and regional trade areas for each market type
3. Inventory of each market sector of interest:
 - a. Housing (number of units by type)
 - b. Retailing and Dining (square footage by subtype)
 - c. Office (square footage by office market subtype)
 - d. Services and Other, e.g Entertainment, (square footage by subtype)
 - e. Other (square footage by identified type)

4. Updated gap and leakage analysis (can use 2014 ESRI data as a point of comparison;
5. Interviews with individuals and/or small groups to gain additional insights into market conditions. The Town will help to identify stakeholder groups if desired. Intercept data gathering⁴ would also be helpful.
6. Forecast of fundamental and marginal demand (factors impacting demand);
7. Competitive supply analysis;
8. Calculation of marginal demand;
9. Forecast of subject area capture (\$ and s.f.) and translation into buildable s.f.;
10. Fiscal impact analysis of additional uses contributing to tax base; and
11. Summary of strengths and weaknesses of study area.

The written report of findings would include the following:

1. Executive summary of findings;
2. Description of existing market conditions to address relevant issues such as the quantified amount of various businesses and housing types, vacancy space/units, product mix and pricing, and similar characteristics. In particular, this section should identify and key strengths or weaknesses/deterrents to investment in Harvard's Ayer Road corridor.
3. Written description of any conclusions related to the impacts of Harvard's proximity to other commercial or employment centers (e.g. Ayer center, Littleton, Leominster).
4. Description of the optimal commercial use or housing type mix in the corridor based on the projected future absorption trends and other relevant factors. The full buildout of the various use types should be provided.
5. A fiscal impact analysis and narrative describing the impact on Harvard's tax base if the full buildout of the use mix noted in 4. above were realized. This should be compared to the existing tax structure as of the beginning of the project.

Additionally, the Report could also include the following data points added to the outcome of this analysis and should be priced separately for evaluative purposes:

1. Recommendations of specific businesses that exist in other communities to target in a recruitment effort, based on the quantified opportunities and needs identified in the study. This

⁴ Capturing respondents in public or at events for their feedback.

also may include specific developers or housing contractors. Evaluation should be tied directly to the previously expressed needs and desires of community and other measures.

2. Recommendations of specific businesses that already exist in the corridor that could expand or diversify to capitalize on identified market opportunities.

The Market Analysis is expected to be what is termed a fundamental demand study and conducted at the C or D level⁵ that includes property productivity analysis; market delineation; a forecast of fundamental demand; a competitive supply analysis; calculation of marginal demand; and a forecast of subject capture.

The markets that we are seeking analysis of for this corridor include uses that could not only serve the needs of local residents (and reduce leakage) but also used to assess potential market capture from potential external demand. We are seeking assessment of retailing, services, industrial, office, and housing as a component of mixed-use development. The final part of the market analysis should show how much square feet of space, by use category, is expected to be in demand within the corridor, for the purpose of development scaling and zoning amendments.

Fiscal Impact Assessment

The fiscal impact assessment would be limited to the uses determined to be feasible and the amounts supportable and the fiscal impact of several buildout scenarios. Each would include the following data points for Commercial and Residential Uses in the event that there is a mixed-use component:

Commercial Impacts

1. Net Fiscal Impact Resulting from Development;
2. Total Revenue from Development;
3. Total Costs Due to Servicing New Development;
4. Net Fiscal Impact per Year; and
5. Cost to Revenue Ratio.

Residential Impacts

1. Net Fiscal Impact Resulting from Development;
2. Total Revenue from Development;
3. Total Costs Due to Servicing New Development;
4. Net Fiscal Impact per Year; and
5. Break Even Value of New Units.

Once completed, these multiple scenarios can be plugged in to the townwide fiscal impact analysis that is proposed to be conducted after a buildout analysis can be conducted. Each of these latter projects could be funded by DLTA monies.

Anticipated Cost: \$35,000 to \$45,000

⁵ A formal description of the type of analysis that will elicit the specific data that the Town needs.

Status: Applied for MassDevelopment Real Estate Technical Assistance Grant for \$35,000 on February 27, 2019 and was denied. In the spring of 2019, the Montachusett Regional Planning Commission was undergoing the Comprehensive Economic Development Strategy (CEDS) for the region which is a U.S. EDA mechanism to develop strategies and actions for economic development in the region. Unfortunately, due to Harvard's high median income, the Town is not eligible for the appropriate funding for a market analysis. Next, in late 2019, this office applied for \$37,000 from the Capital Stabilization and Investment Fund. This request was defeated at 2020 Annual Town Meeting. This office is continuing to see a source of funding for this step as of this writing.

Phase 1: Market Analysis and Fiscal Impact Assessment

Start Mo.	Complete Mo.	Task	Phase
One	Three	Secure Funding	Administrative
Three	Three	Identify Consultant	
	Three	Finalize Scope	
	Three	Project Kick-Off	
Three	Four	Secondary Data Collection	Data Collection
Three	Four	Primary Data Collection	
Four	Five	Map, plans, and bylaws review	
Three	Five	Site visits and observations	
Five	Five	Review and Summarize Findings	Data Synthesis and Analysis
Five	Five	Develop In Depth Analysis	
	Five	Preliminary Findings	
Five	Six	Refine Findings	
Six	Seven	Fiscal Impact Analysis Phase	Fiscal Impact Analysis and Final Combined Report
Six	Seven	Develop Report	

Summary of Phase 1 and Next Steps

Phase 1 of the Ayer Road Corridor planning process will provide the Town with data that will indicate what types of uses could be supported by the local and regional market. In all likelihood, not all of these supportable uses will be desirable in the community or at least in the corridor. Given that, a public process will be needed to narrow down the uses to a group that can be widely supported. Once this has been completed, a targeted fiscal impact analysis will be conducted on how the desirable uses at the scale supportable by the market, could impact the Harvard tax base. At this point, there are several ways to approach further development of the collection of uses. One would be to only move forward with uses that provide a net positive fiscal impact. Another would be to only assess the uses as a bundle that overall result in a net positive fiscal impact while some may be hugely positive and some may be negative but are supportable since they provide a public purpose.

Phase 2: Corridor Vision Plan

Summary

The second step in this three-phase process is develop a Vision Plan for the corridor. This plan would start with a scale of development informed by the market analysis and assess what Harvard residents want to see related to architectural design, siting, massing, and other development aesthetics. It would also dive into traffic and

transportation, utilities, and other development impact criteria in a model sustainability framework. The basis of this plan should pave the way for phase-three, a form-based code tool to carry out the plan's vision.

Introduction

A vision plan is defined as a plan for the future of a community or area that is derived through a visioning process and involves the generation of a series of graphic renderings that depict an illustrative view of the expressed vision. This "vision" of a preferred future is the outcome of a planning process that brings the necessary feedstock (raw, base) data to the process, allowing the foundational analysis, outreach, and creative collaboration to result in a supportable plan.

Visioning is a tool that brings citizens and stakeholders together to develop a shared vision of the future. It helps to answer the question, "What do we want to see in place 5-10 years from now along the Ayer Road Corridor?" By engaging participants in the formulation of a common goal, visioning gives people a sense of control and motivation, and offers a possibility for fundamental positive change.

Visioning provides a positive paradigm by offering something to move toward, offering a bigger picture, generating creative thinking and passion to overcome the problems that might arise when moving toward a vision. A good vision is both realistic and stretching, avoiding looking too far into the future but moving far enough out from today to be able to have time to accomplish the necessary tasks.

The following sections describe what an Ayer Road Corridor Vision Plan might consist of and how much would be required to develop one.

Project Area

The project area is proposed to be the existing commercially zoned area of Ayer Road. The study would assess whether additional lands in the proximity would merit consideration for rezoning to whatever next generation zoning concept is proposed for the corridor.

Some Key Questions Informing Study

1. How can we transform Ayer Road into a preferred place to live, work, shop, and travel?
2. What are the possibilities?
3. What are the limits?
4. What is the vision?
5. How can we realize a model of sustainable development?
6. How can we make this happen?

Elements of the Study

1. Existing Conditions Analysis
 - a. Land use patterns and values
 - b. Existing zoning and other regulatory constraints
 - c. Transportation analysis
 - d. Public infrastructure (including in proximity)
 - e. Preliminary opportunities for positive change

2. Community and Stakeholder Input

- a. Identify Stakeholder Domain and Begin Making Connections
- b. Develop Themes and Principles (e.g. sustainability, fiscal engine, meets Harvard standards)
- c. SWOT⁶ Analysis
- d. Visioning
- e. Alternatives Analysis
- f. Rendering Vision
- g. Goal Development

3. Implementation Plan

4. Appendices

Examples of Corridor Vision Plans

The following are examples of corridor plan documents. While the communities that they represent are not in any way reflective of Harvard, the plan structure could be emulated as to form.

1. West Broadway Corridor Community Vision Plan; Missoula, MT
2. US 180 Corridor Vision Plan; Weatherford, TX

Anticipated Cost: \$75,000 to 100,000

Status: Refer to Phase 3 status below. There are a number of ways in which a corridor vision plan could be conducted, from an in-house process to the highest end consultant. There are benefits to these and other options in between.

1. In-House Planning Process: This would be the lowest cost option. The question is, does Harvard want to do something as important as this on the cheap? That's a question that should be pondered long and hard. In this scenario, the Director of Community and Economic Development would take a large percentage of their work hours and dedicate it to data collection, public outreach, and assembling the plan. Most likely, the graphics for the plan, mostly site plans and renderings, would need to be contracted out. The Harvard Graduate School of Design, RISD, or The Conway School are options for this element.
2. Regional Planning Agency – Many plans of this type are prepared by regional planning agencies or RPAs. The RPA for Harvard is the Montachusett Regional Planning Commission. The most likely source of funds would be the District Local Technical Assistance program or DLTA. Using DLTA funds limits the amount of money available for a project but the Town could conceivably add match money. Depending on local funds available, such a project could pull together up to \$40,000. The key questions to ask are:

⁶ A strategic planning process assesses strengths, weaknesses, opportunities, and threats of an organization, community, or area.

- a. Does MRPC have the staff experience and knowledge to develop a plan of a quality and detail that Harvard would need and expect?
 - b. Is \$40,000 enough for a very graphic intensive plan?
3. Local Consultant – The next level up the ladder would be to contract with a New England-based consulting firm. Given the graphic element, a firm that has an architect and urban designer would be important. If the practice was schooled and experienced in New Urbanism. New Urbanism is a philosophy of urban⁷ design that includes principles of walkability, connectivity, mixed-use and diversity, mixed housing, quality architecture and urban design, traditional neighborhood structure, increased density, green transportation, sustainability, and quality-of-life. At this level of aptitude, the likely price for a plan and some form of smart code will easily exceed \$100,000 and may approach \$150,000.
4. Open RFP Process – The open RFP process will allow for seeking bids for the project from consulting firms across the U.S. Benefits of the bid process include evaluating a number of proposals from many qualified bidders and hopefully experiencing a competitive price due to the fact that it is a bid process. It will still likely be in the price range for a local consultant.
5. DPZ Town Planners – The firm of DPZ (Duany Plater-Zyberk & Company) is a Miami-based urban design and architectural firm that pioneered the concept of New Urbanism in the 1980's. They have designed communities across the globe and were responsible for notable communities such as Seaside, FL; Kentlands, MD; Mashpee Commons in Mashpee, MA; Celebration, FL; Woodmont Commons in Londonderry, NH; Sky, FL; and DOWNCITY Providence in Rhode Island among many others. See <https://www.dpz.com/projects/all> for links to all projects. The perspective that merits this option relates to the uniqueness and special character of Harvard, and the importance of this specific project, require a one-of-a-kind consulting practice that can singularly internalize the character, history, and culture of Harvard and translate that into a very special design solution that will create a legacy and model development. The other side of that coin is that unique quality and expertise will cost in the range of \$285,000. Whether this price is worth it depends on the value the citizens and leaders of Harvard place on getting it right in the C district and whether the expertise from DPZ far exceeds that of another firm with same general skill sets.

⁷ See Appendix B for a narrative about the concept of urban and density.

Phase 2: Ayer Road Corridor Vision Plan

Start Mo.	Complete Mo.	Task	Phase
One	Five	Secure Funding	Administrative
Five	Six	Identify Working Group	
	Six	Finalize Scope	
	Six	Project Kick-Off	Data Collection
	Six	Identify Stakeholders	
Six	Eight	Map, plans, and bylaws review	
Nine	Thirteen	Site visits and observations	Stakeholder and Public Involvement
	Nine	Stakeholder Meeting	
Nine	Nine	Issue Identification	
	Ten	Meeting on Transportation	Conceptual Analysis
	Ten	Meeting on Infrastructure	
	Eleven	Meeting on Planning Issues	
Eleven	Eleven	Review and Summarize Findings	Conceptual Analysis
Eleven	Thirteen	Develop Renderings	
	Thirteen	Preliminary Recommendations	
Eleven	Fourteen	Draft Vision Plan	Conceptual Analysis
Fourteen	Fourteen	Reviews	
	Fifteen	Adopt Plan	

Phase 3: Form-Based Zoning

Summary

The final step in this three-phase process is to create a zoning tool to carry out the vision for the corridor. This tool is anticipated to be a form-based zoning code that would prescribe how development would be done in the area.

Subsequent to the adoption of the Vision Plan and, of course, contingent upon whether one of the recommendations of the Plan were to proceed in this direction, the next phase would be to develop and adopt sophisticated zoning tools to facilitate the kind of development that Harvard citizens and stakeholders wanted to see, actually come to fruition. Planning and zoning are not the same, and zoning by itself does not make economic development happen without well considered plans. Zoning is merely a tool to achieve a desired planning or economic development outcome. The initial expectation for the type of zoning tool appropriate to the task is to employ what is called a Form-Based Code (bylaw) which is defined as follows:

Form-Based Code: A method of regulating development to achieve a specific urban form. Form-Based Codes create a predictable public realm primarily by controlling physical form, with a lesser focus on land use, through city or county regulations (Source: Parolek, Parolek, and Crawford. 2008. Form-Based Codes: A Guide for Planners, Urban Designers, Municipalities, and Developers. Hoboken, NJ: John Wiley & Sons, Inc.).

Another way of describing it is a prescriptive, graphic-based zoning tool that pre-establishes the building form, siting, and bulk. Instead of a developer interpreting a typical zoning bylaw and by noting the setbacks, height limits, and other dimensional criteria and designing a building to fit

them, in form-based zoning, the building has already been positioned on the lot and framed out generally before applications are made. In this sense, residents of Harvard will already know what a specific building, block, and district or project will look like.

While the entire Ayer Road corridor may not be suitable for a form-based code application, it is likely that there are areas along the corridor in which it can be successfully applied. As Figure 2 below shows, a form-based code includes illustrative graphics so that users (and others) can see precisely the siting of buildings on parcels as well as massing and façade elements that would be developed *prior to any applications being made*.

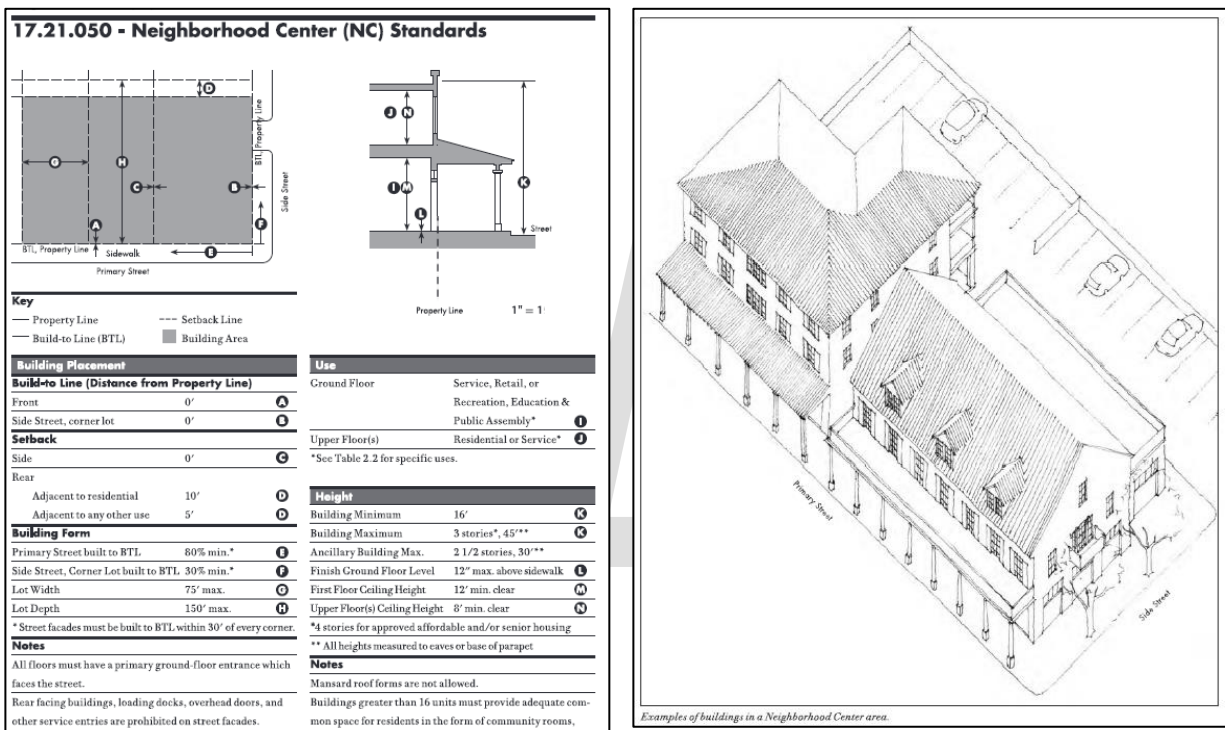


Figure 2-Examples from Form Based Codes

Appendix A provides sizeable sections taken from both the Grass Valley, CA code and the Montgomery, AL code for further examples of how much these codes prescribe related to a specific development pattern. This was a critical criterion related to coming up with a program that is anticipated as acceptable to Harvard residents since it would remove most of the unpredictability from the zoning and development process. Through a public process, an acceptable form-based bylaw can be developed so that what is built on the ground has already largely been authorized by the very presence of the bylaw.

Thus, the recommendations of the Vision Plan can be articulated and advanced by the form-based code so that the values of residents can be realized predictably. The development of such a code is a fairly quick process but tends to be intensive and often extremely expensive due to the intense time required by a team of architects and urban designers. The challenge for Harvard will be to find a suitable design team that can be funded by grants or a combination of grants and local funds.

Anticipated Cost: \$160,000 to \$190,000

Status: The Director of Community and Economic Development has spent approximately 10 staff hours on preparations for this phase. This includes the following:

1. Researched form-based codes both on the internet and also textbooks, the Form-Based Codes Institute, and other sources.
2. Contacted several sources of potential funding such as DHCD, MassDevelopment, and the Funders Network.
3. Discussed concept with professional colleagues seeking ideas for structure and funding.
4. Developed a dialogue with the pre-eminent new urbanist architectural and planning practice based in Miami, FL with an office in Boston (DPZ). Provided background on Harvard C district and DPZ prepared a scope and budget estimate for the Town.
5. Contacted the Conway School to determine if their students could provide lower cost rendering and design services for this project.

Currently, tasks such as the above will be undertaken or advanced based on opportunity and feedback. Please see a suggested set of tasks and timeline that a Phase 3 could include.

Phase 3: Ayer Road Form-Based Code and Village Overlay

Start Mo.	Complete Mo.	Task	Phase
One	Five	Secure Funding	Administrative
Five	Five	Retain Consultant	
Five	Five	Identify Stakeholders	
	Five	Project/Focus Group 1	STAGE1: Project Initiation
	Five	Focus Group 2	
	Six	Synthesize Focus Group Findings	
Five	Seven	Vision Plan Review	STAGE 2: Visioning and Master Planning Charette
Five	Six	Initial site visits and observations	
Seven	Seven	Prepare for Charette	
Seven	Seven	Conduct 7-day Charette	STAGE 3: Draft Master Development
Seven	Eight	Synthesize Charette Results	
Six	Nine	Prepare Draft Master Plan and Code Report	
Nine	Ten	Review of Draft	Final Plan and Adoption
Ten	Eleven	Final Master Plan and Code Report	
	Fifteen	Adopt Plan	

As noted above, there are various price points for each phase and the delivered product will vary accordingly. Given the magnitude of the outcome of this program, it is highly recommended that Harvard at least ensure that the final product scope and quality is at least on par with what a high range firm could produce.

A Note on Infrastructure

Noted above, water and sewer infrastructure will be a very important part of the development of the Ayer Road corridor. But having such infrastructure “on line” before a regulatory framework is in place is not wise. However, that does not mean that planning for such infrastructure cannot begin in tandem with the other steps in the plan. In fact, it makes sense to initiate discussions and research related to bringing water and sewer to the corridor as soon as possible. Perhaps this can be subsumed under the auspices of a newly formed Economic Development Commission or an Ayer Road Development Study Group. As noted above, this effort must be coordinated with the planning and engineering of the Ayer Road TIP project currently underway.

Building Awareness and Support

One idea generated once it became clear that a number of grants and funding sources might need to be cobbled together was to try to set up a meeting with multiple potential funding partners and other strategic groups such as:

- MassDevelopment
- Executive Office of Housing and Economic Development (EOHED)
- Executive Office of Energy and Environmental Affairs (EEA)
- Massachusetts Smart Growth Alliance
- Mass Audubon
- MRPC
- 495 Metrowest Partnership.

Many smart growth advocates would likely be very interested in participating in helping facilitate a project that could be a model for future projects.

Outreach will need to begin early and be sustaining. Using social media, websites, frequent talks, articles in the local paper, blog posts, public listening sessions, open houses, and many more techniques, to assure that this process has maximum transparency and exposure.

Other potential elements of building support may include the establishment of a special group or committee to help facilitate and build project backing. Once the project scope has been fully developed, these tools will be clearly identified.

Funding Options and Approaches to Development

As previously noted, the funding for all phases of this project will be extensive and thus far, elusive. While municipal funding support for any phase of this project is unlikely, the Town, through the office of the Director of Community and Economic Development, could continue to seek grant funds from sources such as:

1. EEA Planning Technical Assistance Grants
2. MRPC District Local Technical Assistance Grants
3. MassDevelopment Real Estate Technical Assistance Grants
4. MassDevelopment Commonwealth Places 50-50 Match
5. Town of Harvard CPIC
6. Crowd Funding (ioby, GoFundMe, Patronicity)

7. Private Trust Funding and Other Private Capital Funding
8. Private Foundation Funds (Ford Foundation, Kresge Foundation, Levitt Foundation)
9. National Association of Realtors Smart Growth Grants
10. USDA Rural Jobs and Innovation Accelerator Challenge
11. Funders' Network for Smart Growth and Livable Communities

The most inefficient way to approach it in this way would be to separately communicate with each agency and apply for as many as show eligibility. A more coordinated approach would begin a dialogue with agencies that were interested in a team process where the appropriate grants could be assembled matching the task and need to the source. Another method could be to have the Town establish a development authority, with non-profit status, that could control the process, accept all forms of funding, acquire and own property, and coordinate with entities related to public utilities, infrastructure, and other aspects of corridor planning and development.

Conclusion

There is no question that the two biggest challenges to the full realization of this proposed program are budgetary and legislative. Even the least expensive pathway to achieving all three phases could cost as much as \$125,000 and at this price point, grants are more likely to pay for a large measure of the work. However, the “Cadillac” version of the process could cost as much as \$310,000 and only a small portion could likely be grant funded (unless very creative and well-coordinated grants seeking were utilized). As of this latest update, the state has rolled out a grant program called “One Stop for Growth” which could be the answer to the question of how to solve coordinated grant funding.

The other challenge is legislative and the difficulty in achieving a super-majority affirmative vote in Town Meeting, particularly with a “bylaw” that will be very technical and unfamiliar, will be great. The amount of outreach and due diligence may be unprecedented for a Town like Harvard. Once the bylaw language and graphics are completed, it may require a full year of additional outreach to be ready for action.

And while these challenges are great, the risk of inaction may be much greater. Allowing unplanned, random commercial and light industrial development along the corridor, very little of which is of an optimal quality of design or siting, risks losing further opportunity for a generation or longer. The current sprawled character of this development to-date, instead of preserving character and open space, actually degrades the character significantly. Further, as pressure to develop corridor lands for multifamily housing, including 40B projects increases, opportunity to develop the corridor according to local interests and desires will decrease and as Harvard has had to adapt to increasing traffic due to development in adjacent towns, Harvard will have to further succumb to outside interests if we continue to be reactive in regard to our planning future.

Resistance to change of any kind is somewhat understandable given the tremendous assets and character that Harvard possesses. However, even if Harvard doesn’t want to change and grow strategically, the wider world will inexorably move forward, possibly overwhelming Harvard in the process. To be proactive and shape the future carefully and thoughtfully is a far better option than being reactive and ending up with unplanned and unwanted development. Every community in the commonwealth is in competition with the others. There are some zero-sum aspects to the game of growth and development. What others may get, we may not. We have to strive to attract the right development, in easily absorbable quantities, and assure that impacts are minimized.

There should be development in this corridor which compliments and is in harmony with the design ethic that has been established over the past 250 or more years by wise founders and residents such as Willard, Alcott, Lane, Palmer, Lee, Sears, and others. As planners from the notable Eliot II up to today have been urging, this strategic corridor could be a significant asset in a number of ways for the community, and the time is now to shift from reactive and vulnerable to proactive and putting destiny in the hands of the Town.

DRAFT

Appendix A – Market Analysis 101

Market analysis is a process for examining the demand for and supply of a property type and the geographic market area for that property type. In its broadest sense, market analysis provides vital information needed to apply the three traditional approaches to value—sales comparison, cost, and income. Further, market analysis is relevant to the final reconciliation of the value indicators derived from the three traditional approaches to value.

A market study is a macroeconomic analysis that examines the general market conditions of supply, demand, and pricing or the demographics of demand for specific area or property type.

A marketability study is a microeconomic study that examines the marketability of a given property or class of properties, usually focusing on the market segment (or segments) in which the property is likely to generate demand. It includes a critique of the subject property, a study of the economic environment in which it is and will be functioning, and an estimate of the subject property's proportional capture of market demand.

Every market analysis begins with a market study of the broad, or macroeconomic, influences on a subject property. A market study always precedes a marketability study, which uses the data gathered in the market study of a property type in the general market area. The marketability study adds to the market study data and focuses the study on a specific property in a specific market area.

A market analysis is generally divided into one of four levels: A, B, C, or D:

- **Level A** consists of simple, non-complex properties in a stable market and relies on inferred demand studies. With Level A, timing is now.
- **Level B** consists of more complex properties in a more volatile market and typically relies on inferred demand analysis. With Level B, timing is probably now.
- **Level C** consists of complex, large properties in a volatile market and relies on fundamental demand studies. These studies involve a six-step process that includes (1) a property productivity analysis; (2) market delineation; (3) a forecast of fundamental demand; (4) a competitive supply analysis; (5) calculation of marginal demand; and (6) a forecast of subject capture. Timing is an issue.
- **Level D** is labor intensive and usually not needed in assignments for valuation purposes.

Source: Renwick and Associates (2020)