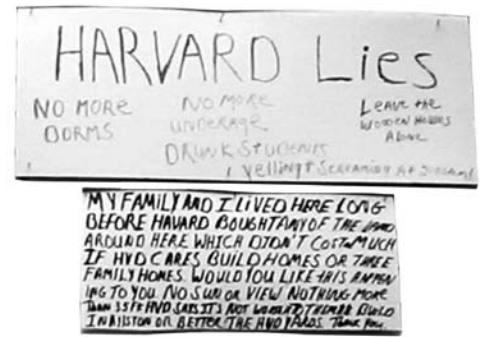


charity fundraising,
t-shirt printing, egg
packing, furniture
exchanging, car windscreen
mending, sunflower growing,
radio show broadcasting, truck
renting, gas storing, web designing,
biomedical researching, cheese
processing, electric servicing, goods handling,
chicken rearing, light bulb selling, car and truck
repairing, dog walking and package shipping are some of the
things that happen in the edge between MIT and Cambridgeport.





Fine mix industrial strip

Between Brookline Street, at the edge of Cambridgeport's residential neighborhood, and MIT to the south, runs "the edge" -- a rich seam of local businesses, community enterprises and research laboratories. This little strip, three blocks thick at its widest point, contains over 60 businesses. The growing medium for these enterprises is an unusually fine grain mix of small industrial units, offices and recently-constructed research facilities. With a combination of high density and small-scale buildings (almost half are less than 10,000 square feet in floor area), any given block in this strip may contain several offices, a garage, a local shop and two or three houses, all with a front door on the street. This area also contains a large number of well-preserved and architecturally-attractive old industrial buildings, many of which make up continuous sections of the strip.

Just under half of the businesses located in the edge are scientific research firms, which cluster in this area for the relatively cheap rents, availability of industrial units with roomy service systems and high load capacities, and close proximity to MIT. Smaller research firms are typically involved in short-term 5 to 10 year drug or technology development projects, so the turnover of these companies is high. The other, generally more established portion of the strip is made up of local auto repair businesses and small industrial uses such as egg packing and t-shirt printing.

As well as labs, offices and local industries, the strip also hosts an important Cambridge institution -- the Good News Garage. Its owners, Tom and Ray Magliozzi (aka the Click and Clack brothers) present the weekly radio show *Car Talk*, which started in 1977 in a back room in Boston University but is now broadcast on 370 stations to an estimated 2 million listeners. Their practical car care advice, peppered with mother-in-law jokes and tall tales about Boston, is also printed in over 200 newspapers nationwide.

Despite vigorous small business (and celebrity) activity, the overriding perception of the place seems to be that of industrial decline, emptiness and inactivity. In planners' terms, it might be considered 'brownfield land', and to MIT it may be seen as a 'land bank'. However, these descriptions would more accurately depict the situation ten or twenty years ago, when the slack space left by the exodus of heavy industry from the area had yet to be filled by technology firms and small local enterprises. Now the strip has a strong cluster of businesses and an expanding high-tech presence. Unfortunately, the broken down condition of the streets and open spaces, the lack of sufficient lighting, and MIT's use of the open sites for parking and earth-dumping mean that many still think of the area as a bit of a dump.



Displacement and de-mixing

The strip could be on the verge of major change. Pressure to build housing for the City and MIT, and MIT expansion (almost half of the strip is owned by the Institute), threaten to squeeze out the current uses and transform its grain and character. Internally, pressure from biotech expansion -- a land use almost as lucrative as housing -- could displace many of the local businesses, such as car repair garages and goods handling firms. The recent rezoning of the area for housing is a strong incentive for change, and makes the protection of existing uses almost impossible in planning terms.

Why should these changes concern us? It is very apparent that Cambridge and MIT both need to build significant amounts of housing, and supporting the growth of technology firms is key to the continuing competitiveness of MIT. There appear to be five strong reasons to consider preserving and intensifying businesses uses in the strip -- including a significant proportion of non-technology uses -- rather than wholesale redevelopment for housing, or a total shift to technology uses:

> **The long term health of the business economy**, especially in scientific research fields, depends on the steady cultivation of new companies and research groups and the development of a critical mass of such activity in an area. If a significant portion of the old factories are converted to housing, and land values go up due to the development 'hope values' housing brings, the area will not be able to sustain this bubbling-up of new ventures.

> **Sustainability**. Locating local businesses close to the areas they serve can go a long way in supporting environmental and urban sustainability. If all of the egg packing factories, t-shirt printing companies and research labs were to move out to suburban industrial parks, more and longer vehicle trips would be generated each day by commuters, visitors and delivery vehicles.

> **Varied employment opportunities** offered by disparate business enterprises, from auto repair garages to biotech laboratories, help to sustain a varied local community.

> **Rarity is a valuable commodity**. There aren't many places like this in Cambridge, and since the rezoning of all 17 of Cambridge's industrial areas for housing, significant clusters of small businesses and light industry are likely to become even scarcer. This will potentially mean a high demand for business space in the edge strip from companies displaced from the other 16 areas.

> **Once it's gone, it's gone forever**. Once converted to housing, land is very unlikely to ever revert to industrial use. And once the dense agglomeration of small workspace is gone, it is unlikely to ever be replaced. The economics of the contemporary development industry tend to favor large-scale development, making areas like the edge practically irreplaceable.

Preserving and intensifying business uses would not rule out housing development, but preserving a critical mass of work space and the fine grain quality of the area would necessitate the concentrated effort of planners and developers to achieve nimble, dense developments on small plots of land and control the location of housing development. Overleaf, key design issues relating to this strategy are explored in more depth.

The Cambridge/MIT junction

In abstract terms, it is possible to imagine four alternative configurations for the relationship between Cambridgeport and MIT across the edge:

- > **Direct proximity**. MIT's academic buildings and student dormitories face Cambridgeport housing across a street. There is a tight edge between the two and it is very evident where one stops and the other starts.
- > **Separation**. MIT and Cambridgeport are separated by a neutral area which is perceived as the territory of neither.
- > **Overlap**. The edge zone is shared by Cambridgeport and MIT. Student housing and local residences sit side by side, and blocks contain a mix of academic space, local businesses, housing and student dormitories.
- > **Thickened edge**. The edge zone between Cambridgeport and MIT has its own distinct identity. It is 'owned' by neither group but contains activities and places that are participated in by both.

The edge strip largely falls into the fourth category now, although there are points where the other three conditions occur. In the future, if MIT built out its land holdings with housing and academic space, the condition would move towards direct proximity with Cambridgeport. In contrast, if MIT expanded its policy of using these 'land-bank' sites for temporary activities such as truck parking and earth dumping, then the sense of separation that already exists in the area around Fort Washington would grow.

The distance between university housing and local residences appears to be a key factor guiding perceptions of the relationship between university and neighborhood. At Harvard, for example, where student dormitories front directly onto local homes perceptions of encroachment are very evident. It is possible that by preserving the thick edge and expanding densely behind it, MIT would be able to expand further and build higher but cause less concern to local residents than would result from a very close proximity between the two.

But the edge strip is not simply a buffer area. It is potentially a place with a strong identity of its own. A strategy that embraced the current condition and sought to intensify activity and the possibility of both Cambridge and MIT sharing in the area could potentially provide benefits to both.



a core mixed edge
b Albany Street edge

Town Gown Committee
January 2004
Agenda

- 1 Matters arising
- 2 The Edge - issues for discussion
 - Future action on the Edge
 - Special Overlay Zone
 - Business Improvement District
 - Amending current zoning
 - Design Guidelines study
 - 'Catch and Steer' appointment
 - Designs for Rail Trail and links
 - Signing and advertising the Edge
 - MIT Centre for Entrepreneurship
 - Business Incubator program
 - Housing strategy
 - Urban Ring: strategies for short and long term study, planning and development
 - Buildings and spaces audit
 - Research space audit
 - Low value uses study

3 Next steps

4 AOB



Agenda

The Edge is in a vulnerable state - recent rezoning for housing and development pressure from MIT create the possibility of rapid, sweeping change. It is also the potential source of great opportunity - to contribute to the sustainability of the City's economy, ease tensions between MIT and local residents, enhance the competitiveness of the Institute and enrich the lives of local people. Without coordinated planning and precise control of development, these opportunities will be lost. The time is right for MIT and the City of Cambridge to consider its future. Here we put forward seven planning and delivery mechanisms for the Town Gown Committee's consideration.

1 Sustain and intensify current uses

There are a number of mechanisms for protecting strengthening and enhancing the Edge that could be considered by the Town Gown Committee:

- > **Establish a Business Improvement District** BIDa are self-taxing associations comprising more than 50% of the businesses in an area. A BID would create a support mechanism for existing businesses to improve their competitive position. It would also give Edge businesses a stronger collective voice in development discussions with MIT and the City. Revenue from the BID could be used to improve public spaces and community initiatives, as is the case in many of America's 800 existing BIDs.
- > **Create a Special Overlay Zone** Zoning is an imprecise and cumbersome tool for controlling development. The successful future of the Edge depends on being able to carefully manage intensification and fine tune the mix. Planned Unit Developments could be the model for this overlay. Usually PUDs are initiated and put forward by developers for large sites in single ownership where fine-grain variations in use and density are desired that may deviate from existing broad-brush zoning ordinances. PUDs are generally used to facilitate the development of large plots and high value uses in a single development and at one time, rather than to encourage smaller plots and protect lower-value uses over a long period of time. However, given PUDs' capability to allow for detailed and closely-controlled development, in an amended form they could become important tools in steering and controlling fine-grain development in the edge strip.
- > **Use zoning to create certainty** Without a change to the current base zoning, any policies put forward in a special overlay zone will be ineffective, as it developers are permitted to choose to follow City zoning ordinances instead. In order to generate a stable, vigorous business presence, and enough certainty in uses and land values to protect lower-end businesses, the recent rezoning of the Edge for residential development needs to be reconsidered.
- > **Monitor research space** Lab space is oversupplied at the moment but the market is very volatile and it is likely that more research space will be needed in the future, as MIT expands its research connections. A study of trends in research space need and supply, would make it possible to plan for relative levels of lab and other business space supply.

2 Sustain a vigorous small business presence in the long term

- Support the development of affordable space for small local initiatives and start-up companies and monitor the affordability of rental space in the area.
- > **Promote current initiatives** Free business development advice is already offered to small businesses by the Community Development Department. Aspiring or emerging businesses receive help with start-up and growth business planning. This program could be actively marketed to businesses in the Edge.
 - > **Establish business incubators** Cambridge currently has eight business incubators - facilities that offer low rent space and support services. The Edge would be an ideal place to establish more. Incubators are proven tools for encouraging technology transfer, revitalizing communities and creating new jobs. They offer flexible space and leases, relationships with financial institutions, legal, accounting, and design advice, access to university resources, and new business opportunities through strategic partnerships with other incubator clients.
 - > **MIT centre for Entrepreneurship** could expand its program of providing low rent space (\$14/sqf, as opposed to over \$40 on average) to MIT related start-ups.
 - > **Study the contribution of low value uses** (such as auto repair garages and egg packing factories) to tax revenues, the supply of local services, and employment choice and provision in the area, in order to better understand how to support them, and make decisions about the appropriate level of protection these low value businesses should be given

3 Make the most of the Urban Ring

- The Edge adjoins two potential Urban Ring stations. It is imperative that, in time, sites close to these stations are used to their full potential and developed at appropriately high densities in a configuration that supports pedestrian access to the T. But it is likely to take 10 or 15 years for Urban Ring proposals to reach a stage of precision sufficient to be able to develop sites around stations without running the risk of limiting the future potential and constraining Urban Ring plans.
- > **Safeguard sites key to the Urban Ring** Areas surrounding future stations (shown in dotted line on the diagram above) should be safeguarded from permanent development - in particular housing development - within a special overlay district, and through stringent development control.
 - > **Jam first: short term use of Urban Ring sites** Proposals for vigorous 15-20 year uses of the safeguarded areas should be encouraged. The California Products site is an example of this type of opportunity. The large two-story brick and metal-clad factory building on Albany Street is a former paint factory currently owned by MIT and scheduled for redevelopment in 2004. The California Products site could be economically refitted by MIT then leased for a 10-15 year period for small business use, events and community programs. This strategy would be modest in its demands on capital but enrich activity in the Edge in the short term and pave the way for positive longer term change in 20 years time. To land-bank the site as parking or earth dumping, or to prematurely develop it without considering long-term plans would be an enormous waste.
 - > **Build at appropriate densities and use the 'air space' above single storey uses** Increase density in new developments in line with the future accessibility of public transport. Require new single-story uses (garages, workspace) to stack other uses above, and require MIT to develop and implement a strategy for stacking ground level car parking in parking decks
 - > **Connections and linking spaces** Carry out pre-emptive street design work on spaces and routes linking to the Rail Trail and future Urban Ring station sites (such as the Pacific Street track crossing and community field to MIT field connection outlined in *Crossing the Tracks*) to guide incremental change such as small-scale sidewalk replacement and street repair.



- Area of proposed Special Overlay Zone
- Edge areas - core mixed edge (left) and Albany edge
- Existing business space - office/lab-based
- Existing business space - warehouse/garage-based
- MIT work, research and service space
- Areas with potential for housing development
- Areas with potential for business space development
- Areas immediately adjacent to future Urban Ring stations
- Land owned by MIT
- Key connections and streets
- A** Significant short to medium term opportunity for housing
- B** Significant short to medium term opportunity for housing and business space development
- C** Short to medium term opportunity for business space
- D** Longer term opportunity for housing and business space development, contingent on Urban Ring, with potential for other short term uses

4 Preserve the grain and building-to-building mix

The current grain of relatively small plots (4-10 to a block) and varied building typologies sustains a larger number and greater variety of uses than in a large area of agglomerated parcels built in concert (such as University Park). Mixed use in this context is between buildings rather than within buildings, which allows for more flexibility of use, stability and change in the long term than a situation where business uses and housing share buildings.

> Disallow parcel grouping to preserve the current grain and stock of small and medium-sized business space in the long term. Prevent simultaneous multiple development unless specifically approved by the City through regulations in a Special Overlay Zone ordinance.

5 Enable housing development without compromising the grain or displacing other uses

The City urgently needs to increase the supply of housing. There is considerable potential for providing more housing in the Edge while preserving a large stock of business space and allowing room for business expansion, but only if the design and location of housing is precisely and tightly controlled.

> Planned Unit Development Model Adopting a PUD model for the special overlay zone would permit this sort of precise control of housing supply, design and location. PUDs also uniquely offer the possibility to reject development proposals that fail to meet certain pre-defined detailed urban design and land use criteria.

> Suitable locations for housing and housing mix areas are suggested on the map above.

> Nimble, dense infill (rather than mix within buildings) should form the majority of housing development, to preserve the current pattern of building-to-building mix.

> There are also 6 larger housing sites in the Edge, four of which could be developed in the short term, providing up to 1000 homes, depending on the degree of mix. The Henry Street site (see *MIT Casa, su casa* section) has immediate potential for around 200 units.

6 Ensure developments enhance the coherence and extraordinariness of the place

> Guidelines and Design Review Establish a design review process as part of planning applications for the special overlay zone. Appoint a design consultant to develop design guidelines for use in the design review process. Specific elements to be considered for incorporation into the guidelines are:

*** Measures to unify streets along their length** and enhance their existing character. Street by street guidelines should consistent with overall design guidelines for the Edge area but focus on ways to consolidate and enhance main streets and spaces – the Rail Trail space and links, the three streets from Mass Ave to the river and connecting spaces at BU Bridge. Specifically, for Albany, Waverly and Vassar guidelines for new business space and housing should steer designs towards a direct and close relationship with the street edge, with main entrances from the street, and following the front/back pattern of existing industrial buildings

*** A design strategy for tree planting** should differ from surrounding residential streets and preserve the pattern of intermittent clumps of trees, rather than lines along the street edge. The current pattern of trees creates special moments along a street while retaining long views.

> 'Catch and Steer' Cambridge could create a new appoint a design officer (or call-up consultant) with a strong architectural background to assess major and small strategic development proposals, negotiate with developers and steer designs towards a better outcome.

> Audit buildings and spaces to identify places and structures of outstanding individual value. Protect and enhance these places through public space improvement projects, design review and guidelines

7 Increase the offer to MIT and Cambridgeport residents

> Support the development of shops, services and community programs through the Special Overlay and Business Improvement District. A central element of strategies to accommodate the Urban Ring could be the short term use of buildings adjacent to future stations for markets, exhibitions, community programs and events. The Metropolitan Warehouse, owned by MIT and soon to be vacated by its current occupants, could be an ideal venue for these activities, as well as the California Products building and

> Improve the public realm Move towards consistency in street design, fittings and materials between the residential district and MIT by guiding small incremental repair work and major street projects with consistent design guidelines. Collect betterment funds from new developments in a single pot, to be used for public space improvements across the area. A self-taxing Business Improvement District, could be required to make part of its financial contribution to the City to this central public space betterment pot.

> Advertise and signpost what's on offer A Business Association or Business Improvement District could collectively advertise shops, services and activities in the Edge area through the local press. In addition, businesses could be permitted to signpost their shops/services at Mass Ave.