

July 24, 1974

Kendall Square Urban Renewal Area
Alternative Illustrative Plans

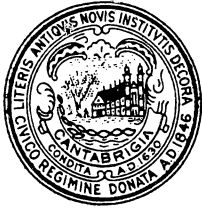
	TASK FORCE	CCA	MIT/ E. C.A.M.B.	PROPOSED CCM
PERMITTED USES (000 S.F. Floor Space)				
Light Ind. and T.O.	1,150	1,300	1,000	1,300
General Office	150	170	300	300
Retail	100	100	250	200
Residential	0	0	500	-
Hotel	0	130	250	200
Fire Station	11	11	11	11
Structured Parking	-	-	500	361
Total	1,411	1,711	2,811	2,372
FAR	1.4	1.7	2.8	2.4
EMPLOYMENT (Jobs)				
Light Ind. and T.O.	4,750	5,370	4,010	5,000
General Office	750	850	1,500	1,500
Retail	330	330	830	600
Hotel	0	130	250	200
Total	5,830	6,680	6,590	7,300
EMPLOYMENT (Type)				
Blue Collar	3,640	3,870	3,270	3,500
Non-Professional White Collar	1,580	2,030	2,410	2,730
Professional	610	780	910	1,070
Total	5,830	6,680	6,590	7,300
Net Effect on Tax Rate	(\$3)	(\$4)	(\$6)	(\$6)
HEIGHT	120	200	250	200
PARKING				
Employees 5/space	1,166	1,336	1,318	1,460
Transients 2/space	-	85	150	133
Residents 1/space	-	-	500	-
Total	1,166	1,421	1,968	1,593

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EXAMPLES OF "PREFERRED" INDUSTRIES INTERESTED IN KENDALL SQUARE

SIC	Line of Business	Empl/ Acre	Empl.	Acres	Floors	Floor Area
283	Biological Elec- tronics	520	250	.5	4	50,000
278	Bookbinding	104	40	.4	2	18,000
3357	Microwave equip.	118	26	.25	1	4,500
3674	Semiconductor products	200	200	1	multi.	20,000
3431,2	Plumbing Fixtures	870	200	.25	5	30,000
229	Curtains & Drapes	240	67	.3	1	10,000
3221	Electronic Mfg.	100	200	2	2	90,000
3952	Drafting Supplies	106	95	.8	2	45,000
173	Alarm Systems	120	70	.6	1	20,000
307	Plastic Products	242	726	3	1	100,000
395	Stationery Mfg.	350	50	.14	2	5,000
3573,4	Data Commun. Equipment	131	381	2.9	1	87,000
3679	Electronics	200	50	.25	2	15,000
3671	Electronic Comp.	360	900	2.5	1	130,000
381	Engin. Mfg. Instru.	275	300	1.1	3	90,000
3674	Mfg. Language labs	250	50	.25	1	8,000
3662	Communications Eq.	125	250	2.0	2	100,000
3821	Mfg. Electronic instruments	220	100	.5	4	40,000
TOTALS	17 firms	206	3855	18.7		862,500

Source: "Industrial Marketability Survey Summary
 Kendall Square Urban Renewal Area,
 Cambridge, Massachusetts,"
 Ryan, Elliott Appraisal and Consulting Company, Inc.



CITY OF CAMBRIDGE

CAMBRIDGE, MASSACHUSETTS 02139
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EXECUTIVE DEPARTMENT
JAMES L. SULLIVAN
City Manager

July 24, 1974

To the Honorable, the City Council:

Re: Land Use Proposals for Kendall Square Development.

In late 1973, the City Manager's office was requested to take a more emphatic role in orchestrating and carrying out Kendall Square reprogramming work. It was recognized that only through the City Manager's office could we attain accurately defined and agreed-upon local community objectives for Kendall Square and secure the necessary prompt and effective provisions of important contributions from a number of Federal, State and local agencies involved in the preparation of an urban renewal plan. Consequently, the City Manager's office placed the Assistant City Manager for Community Development in charge of an interagency Technical Staff to work with the Kendall Square Task Force and to provide clear centralized direction.

After eleven (11) months of hard work by the Technical Staff and Task Force, a consensus on any single plan has not been reached. In fact, various groups prepared a number of land use recommendations which are summarized in the attached appendix, "Alternative Illustrative Plans". Consequently, City Council requested that the City Manager submit a recommendation for Kendall Square to City Council for its consideration, which I am prepared to do at this time.

First, unfortunately, a "perfect" plan for Kendall Square is impossible because of the apparent irreconcilable philosophical, social, economic and political viewpoints held by some groups. Consequently, I am left with really one option: to evaluate Kendall Square redevelopment opportunities from the standpoint of the entire City. Doing this recognizes the reality that any major proposal must, in the final analysis, be acceptable not only to one or even a few groups, but to the entire City and must be economically feasible and workable to potential developers.

While my land use proposal falls between the extremes of the various plans reviewed, I want to emphasize it is not a "compromise" proposal, but represents my judgment as to the kind of development we must pursue in Kendall Square in order to achieve the best combination of economic, social and physical benefits for Cambridge. Further, my proposal is not a "copy" of any of the plans reviewed by me, and no group should feel it has "won" or "lost". Instead, the participants in this process should feel great satisfaction because they brought the issues into focus, clarified the objectives, and helped us to better appreciate the consequences of our actions. Consequently, I am appealing to all the groups and persons participating in the Kendall Square replanning effort to judge my proposal from the standpoints of both feasibility and acceptability by Cambridge as a whole.

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I am confident that if my proposal is judged on that basis, it will receive the support I am respectfully requesting.

LAND USES PROPOSED FOR KENDALL SQUARE

In preparing my proposal for Kendall Square land uses, I have reviewed the original July 2, 1973 City Council Order on Kendall Square, the work of the Technical Staff and Task Force, the land use recommendations for Kendall Square proposed by various organizations and institutions, and available marketability information. The Ryan, Elliott Appraisal and Consulting Company, Inc. prepared a significant document specifying "new actions" by the City needed to develop the entire Kendall Square area for industrial purposes; unfortunately, the "new actions" involve tax concessions and parking subsidies which appear to be too great compared to the number of jobs and net taxes generated if Kendall Square is developed entirely as an industrial park. Consequently, my proposal includes mixed-use development, as outlined below; however, the predominant land use for Kendall Square is proposed to be "Light Industry and Technical Office and Laboratory", without unreasonable tax concessions or parking subsidies, in response to Council's finding last year that "It is indispensable to the future of Cambridge to create and maintain within the City an adequate and balanced economic base capable of providing for the ongoing employment needs of the City's residents".

The main objective of my proposal is to be in accord with the spirit of the priority set forth by Council that "the (Kendall Square) site should, to the maximum extent possible, be developed to meet the employment needs of present and future Cambridge residents and provide for upgrading of workers' skills and wages commensurate with the cost of living in Cambridge". Consequently, the major thrust of my proposal is the creation of as many jobs as possible, particularly of the types identified by the Task Force and Technical Staff; also my proposal is concerned with generating significant tax revenues, without producing unacceptable negative environmental impacts. Some desirable development goals are mutually exclusive, such as maximizing jobs and minimizing traffic; I feel that my proposal includes the best "balance" among development options considered by the Task Force and Technical Staff, including generation of jobs and tax revenues, minimizing traffic, height limitations, etc...

Permitted Uses.

The proposed plan contemplates a multi-use development for Kendall Square, permitting light industrial, office, retail, etc. uses. The dominant land use, in terms of both floor space and land area guideline allocations, is proposed to be light industrial, technical office and laboratory.

In general, the Triangle portion of the Kendall Square project area is proposed for mixed-use development including space for technical office and laboratory, general office, retail, hotel and structured parking; residential is allowed as a "minor supportive" use only if it is the only way a developer can put a workable plan together. The Quadrangle portion of the project area is proposed for primarily light industrial, technical office and laboratory uses, structured parking and a public use, specifically a fire station.

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The following table represents guidelines for floor space allocations implied by my proposal. Open space is not included in the table because it does not involve a "floor space" allocation; however, open space, functional and recreational, is to be considered a major element in the preparation of detailed site plans and one of the major purposes of the design review process is to ensure that adequate open space is provided. It should be understood, however, that these allocations are not rigid; that the market-place itself, in combination with "non-marketplace" priorities, is to determine the actual allocation of space to each use.

Proposed Land Uses for Kendall Square Development

A. <u>Permitted Uses</u>	<u>Floor Space (000 Square Feet)</u>	<u>Estimated Jobs</u>
Light Industry and Technical Office	1,300	5,000
General Office	300	1,500
Retail	200	600
Residential	*	*
Hotel	200	200
Fire Station	11	-
Structured Parking	<u>361</u>	<u>-</u>
Total	2,372	7,300

(*) Considered a minor supportive use; amount of residential space will depend on minimum amount of housing needed to produce a feasible, workable development plan.

B. Floor Area Ratio	2.4
C. Estimated Parking Spaces	1,600
(1) Employees per parking space	5
(2) Hotel rooms per parking space	2
D. Height Limits	100-200 feet
E. Estimated Net Tax Revenue after development is completed, 1974 dollars	\$1.9 million
(1) Net effect on Tax Rate (Reduction)	\$5.85

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It must be emphasized that the floor space allocations in the table are merely guidelines and I intend to be flexible when considering development proposals in order to ensure that our overall objectives concerning jobs and tax revenues are accomplished to the fullest possible extent.

TRIANGLE. Respecting mixed-use development for the Triangle, according to available marketability information, there appear to be strong markets in the urban core, including Kendall Square, for hotel and general office use. The technical office and laboratory uses very likely must be developed by firms who find a special advantage in being located in the Kendall Square area with its unique features of being on a major subway line and close to MIT, the Department of Transportation, and other technical office and laboratory development, and easy accessibility to downtown Boston and to Logan Airport. It is important to note that the purposes of retail space development in the project area are to (1) accommodate the tremendous increase in daytime population arising from new development, (2) take advantage of the existing retail market there, which is under-serviced now, and (3) intercept consumers normally bound for downtown Boston by creating a direct connection between the subway and retail space; Kendall Square retail space is not intended to compete with retail facilities in Central Square or on Cambridge Street.

A hotel is included as one of the major uses in the Triangle, because, as noted by the Planning Board, "a hotel will contribute much to keeping the area populated during evening hours; exploit the locational and transportation advantages of Kendall Square; respond to a demonstrable need of the many commercial and industrial enterprises in the vicinity, as well as MIT; contribute significantly to the City's tax base; and reinforce retail commercial activities".

Residential uses are permitted in the Triangle portion only; however, residential development is allowed as a "minor supportive" use and is limited to the minimum amount of housing needed to produce a feasible, workable development plan.

It is recommended that the Triangle be zoned Business "B", permitting mixed-use development, with the exception of industrial uses.

In summary, it is felt that the mixed-use development proposed above will (a) result in high job density, high value, and high tax revenue producing uses, and (b) make Kendall Square a safe, pleasant, human environment on almost an around-the-clock basis.

QUADRANGLE. It is proposed that the Quadrangle, approximately equal in land area to the Triangle, be developed mainly for industrial, technical office and laboratory uses; also permitted are structured parking and a fire station. Available marketability information indicates that a strong aggressive marketing effort, as well as land write-down and perhaps other inducements, will be required to attract industrial developers providing the kinds of jobs recommended by the Task Force. It is my intention to make every effort to attract high job density industries identified in the industrial surveys. Further, in evaluating industrial development proposals for Kendall Square, I intend to give primary consideration to the "bottom line" combination of projected tax revenues plus the number, kinds and wages of the jobs

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to be created by the proposed development.

It is recommended that the Quadrangle remain Industry "B" zone, permitting all uses except residential.

JOBS. Special efforts must be made to attract the kinds of high density employment uses which survived the Task Force industrial screening stages. The Task Force and Technical Staff conscientiously selected "preferred" industries which seemed to meet City Council guidelines respecting potential for upgrading of workers' skills, payment of "wages commensurate with the cost of living in Cambridge", favorable career opportunities and economic growth potential. In addition, industries with adverse environmental features, such as air or noise pollution, were ruled out. The "preferred" industries also employ high proportions of blue collar, including non-professional white collar workers. Consequently, the industrial job densities are projected at a much higher level than one would expect in an ordinary industrial park. A table showing examples of "preferred" industries interested in Kendall Square is attached.

The replanning work indicated that the total number of jobs and tax revenues in Kendall Square can be increased greatly if General Office is permitted as a major use; accordingly, General Office is considered a major use in this proposal.

The combination of job intensive uses and land intensive development, including implied limitations of the amount of space that could be used for parking, results in very high employment projections within reasonable floor area ratios (FAR's). Consequently, this proposal results in a projection of up to 7,300 new jobs in Kendall Square.

If a job training and placement program is coordinated with Kendall Square development, it is possible that up to 30% of the projected 7,300 jobs, or over 2,000 jobs, may be held by Cambridge residents. The City Manager's office is committing itself to pursuing manpower training programs that will ensure that as many new Kendall Square jobs as possible will go to present and future Cambridge residents.

TAX REVENUES. In general, developers should expect to pay full local taxes unless they can show there are extraordinary extenuating circumstances justifying a trade-off. For example, it must be recognized that it may be very difficult, even impossible, to attract the "right" kind of industry meeting our environmental, job density, wage level, and job advancement standards without some kind of tax incentive. It is proposed therefore, that if a potential developer is willing to develop industrial space meeting our standards, but feels that he cannot do so unless he is offered a "reasonable" tax incentive, the City should at least be willing to negotiate an incentive, provided that the potential tax revenues generated, even with the incentive, are substantial.

The proposed plan includes high tax revenue producing uses, with the exception of light industrial uses. Light industrial uses produce tax gains, but of lesser magnitude than hotel or office uses because light industries are not usually developed at the same high densities as office and hotel uses.

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Estimates of gross tax revenue generation by land use do not consider costs the City must incur to provide services to the users, and therefore can be misleading. Consequently, estimates of net tax revenue, or the difference between gross tax revenues and services costs, are presented herein, with the following qualifications.

While gross tax revenues for new construction, using today's construction costs, can be predicted with reasonable accuracy, it is almost impossible to predict service costs which have to be, at best, educated guesses because of inherent problems in allocating total municipal service costs to specific locations and users. Other problems related to projections of net tax revenues are uncertainties relative to (1) inflation rates; (2) expansion of the City's over-all tax base and service costs; and (3) rate of construction and occupancy, from which tax revenues flow, of new Kendall Square development.

Consequently, net tax revenue calculations are presented not as "forecasts", but for comparative and illustrative purposes only. Further, for simplicity's sake, the estimates are in 1974 dollars, even though none of the net tax revenues will be collected in 1974. Indeed, maximum tax yield from Kendall Square development will be realized after development is fully completed which could require five to ten years after the marketing program commences. The significant point is that parameters for estimating net tax revenues are applied uniformly to all plans under consideration so that comparative, not absolute, differences among the plans can be estimated.

With these qualifications in mind, it is estimated that this proposal results in average annual net tax revenues of \$1.9 million, or a reduction of \$5.85 on the tax rate.

TRAFFIC AND PARKING. One of the major concerns of the replanning effort is the effect of Kendall Square development on traffic volumes on streets in the neighborhoods surrounding Kendall Square. Considering that City Council guidelines expressly prohibited any land takings to upgrade arterials, and no major traffic improvements leading to and from Kendall Square are being planned on a city-wide basis, any new development in Kendall Square is bound to increase traffic on existing streets. The question is, how can the increased volumes be kept to a minimum, avoiding adverse effects on surrounding areas, while simultaneously providing sufficient parking needed to successfully develop Kendall Square so that it yields as many jobs and as much tax revenue as possible.

To begin with, some of the things that are not being recommended for Kendall Square:

- (1) We are not recommending that a heavily subsidized public parking garage be provided, as suggested in the industrial survey.
- (2) We are not recommending that large tracts of renewal land be sold to developers for permanent on-grade parking in the Triangle portion of the renewal area.
- (3) We are not recommending that developers be required to provide parking in excess of zoning requirements.

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- (4) We are not recommending that any new highways be constructed in Cambridge to handle Kendall Square traffic.

The following are recommended with respect to traffic and parking:

- (1) In general, developers are responsible for solving their own parking problems. They can provide for parking by constructing their own parking facilities, including space underneath their buildings or in garage structures; leasing space in parking garages located in and around Kendall Square; leasing or buying vacant land in the industrial area east of Kendall Square, i. e., "remote parking areas"; or a combination of these. In addition, employers will be urged to encourage their employees to use car pools or public transit by arranging with MBTA for reduced rates. For our part, we will work with MBTA to improve and expand public transit serving Kendall Square, including, among other things, shuttle bus service between transportation nodes, such as remote parking areas, and Kendall Square.
- (2) Recognizing that our initial land marketing efforts must be successful because they will set the tone for the entire Kendall Square development, it is proposed that CRA-owned vacant land awaiting development be used to provide temporary on-grade parking for the early developments. Developers can lease parking space from CRA, with the understanding that the arrangement is to terminate when it is time to develop the land. In this way, early developers are assured of adequate parking during the critical "start-up" years, and time is made available for them to work out permanent solutions as noted above.
- (3) Every effort must be made by Cambridge to cooperate with other public agencies endeavoring to reduce the use of automobiles in favor of public transit, including the MBTA's 1.5 billion dollar transit expansion program to be carried out during the next decade in the Greater Boston area; the State DPW's extensive system of "fringe" parking facilities attempting to get commuters to park their cars in lots on the fringes of urban areas and take public transit to the urban core; and the Environmental Protection Agency's (EPA) endeavors to reduce automobile traffic in urban areas in connection with its clean air program.

In summary, it is proposed that everything possible be done to get people working in the Kendall Square area to use as much public transportation and car pooling as possible, while simultaneously providing sufficient parking during the "start-up" years to promote successful development of the Kendall Square area.

It is really impossible to predict the exact amount of traffic Kendall Square development is to generate under the conditions described above. The objective we hope to achieve is to limit the amount of parking spaces in the Kendall Square project area to approximately 1,600 spaces, or approximately 5 jobs per parking space and 2 hotel rooms per parking space; parking spaces for retail customers are not required by the plan.

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If it is assumed that Kendall Square's average daily traffic is equal to the number of parking spaces, we can expect Kendall Square development to increase traffic volumes by about 1,600 motor vehicles; if we further assume that all of this traffic occurs during peak hours, the additional 1,600 cars will increase traffic volumes on the corridors leading to Kendall Square by approximately 6% during peak hours. According to our local traffic experts, this amount of traffic appears to be manageable. Whether this increase in traffic volume becomes serious or insignificant in future years depends largely upon the efforts of the MBTA, State DPW, and EPA to get Americans out of their automobiles and into public transit, and the willingness of people to join car pools.

It appears that traffic resulting from Kendall Square development will not affect the East Cambridge residential neighborhood. This can be done by improving traffic channelization and signalization on Msgr. O'Brien Highway to facilitate the flow of traffic to Commercial Avenue, which is under the control of the MDC, a two-way street; and creating a one-way pair of streets involving Binney Street, one-way easterly, and Munroe Street, one-way westerly, to facilitate traffic between the Kendall Square project area and Commercial Avenue. According to traffic experts, this arrangement can be greatly improved if the prohibition against any takings for traffic circulation purposes is slightly relaxed.

With respect to the neighborhoods west and south of the Kendall Square project area, it is estimated that Kendall Square related traffic will increase traffic volumes during peak hours about 5-6% on existing arterials, or an increase of 800 motor vehicles to a total of 16,800 motor vehicles. This too appears to be manageable, and major revisions in traffic circulation patterns are not necessary at this time from the standpoint of Kendall Square development.

NEXT STEPS. Notwithstanding our mutual concern for moving Kendall Square redevelopment ahead as quickly as possible, I feel, because of the importance of Kendall Square replanning to the future of Cambridge, that before Council takes any actions on the proposal, it is appropriate to give interested parties an opportunity to review the proposal and transmit their comments to Council and the City Manager's office. Further, I recommend that Council plan to hold a public meeting or hearing in September so that public discussions on the proposal can be held. If Council follows this recommendation, I shall immediately start preparations for holding the meeting or hearing.

Respectfully submitted,



James L. Sullivan
City Manager

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Agenda # 14

Kendall Square Development.

*Report to Council
on Housing-land
Development and
Economic Development*

In City Council,

July 24, 1974