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Future Issues Facing Boston: The Assessing Department

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FUTURE ISSUES FACING BOSTON: THE ASSESSING DEPARTMENT

by

Janet L. Hunkel

Prepared for the John W. McCormack Institue of Public Affairs

December 1983

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SUMMARY Finance: The Assessing Department Janet L. Hunkel

Taxpayers' opinions of municipal government often focus on the property tax. Taxpayers are stingy, and they are critical as to whether their money is purchasing competent services. For citizens to have faith that government is democratic, taxes must be equitable — everyone must pay their fair share. For government to function efficiently, tax administration must be efficient in order to support city services.

The property tax is a complex, difficult tax to administer; it is vulnerable to misuse. However, there have been recent, dramatic changes to the tax laws. Municipal government in Massachusetts now has the political and legal wherewithall to properly administer the tax. The new administration has a unique opportunity to initiate programs promoting equity and efficiency. This paper discusses three areas where they can act.

First, assure equitable taxes by maintaining assessments at full and fair market value. This will require a Computer Assisted Mass Appraisal (CAMA) system, a state of the art technological process which can generate consistently accurate values for all of Boston's real etate.

Although all of Boston's property was revalued for Fiscal Year 1983, the assessments were not generated by a CAMA system. The manual system which was used has not withstood the test of quality. Research undertaken in conjunction with this paper demonstrated that assessments were not equitable within one year of the city-wide revaluation.

A CAMA is necessary in order to maintain equity as well as to satisfy certain State Department of Revenue requirements. In particular, a Memorandum of Understanding between the City and the State directs the CAMA's process and product. The City should expect Fiscal Year 1984 tax bills to be based on the CAMA.

Second, because the City relies upon the property tax for 35% of its revenue it should assure that the legal maximum tax is levied. Since maximizing revenue can conflict with the goal of equity it is imperative that action be taken in accordance with the legalized standards. There is a certain flexibility in Proposition 2½ and it should be used to its best advantage. Where the law does not respond to Boston's unique needs it should be amended.

Third, the City must build public confidence in its taxing function. Honesty and integrity are goals which should permeate every aspect of government, revenue producing or not; otherwise the public's confidence deteriorates and government cannot function effectively. The Assessing Department needs internal policing programs.

Looking ahead, there should be information about and public participation in development of the CAMA system.

Immediate action should be taken on the 7000 Fiscal Year 1983 abatement claims which the Assessing Department denied. The Assessing Department can and should act on them in the first three months of 1984. This would eliminate the need for taxpayers to seek relief through the Appellate Tax Board.

It is going to be tough: the property tax remains complex and vulnerable to abuse. The City must commit to administer the tax professionally and must acknowledge the need and legal responsibility of a CAMA. Then, taxpayers will know they pay their fair share and further, that the process has integrity -- that nobody has special benefits or access to power through taxation.

FUTURE ISSUES FACING BOSTON: THE ASSESSING DEPARTMENT

I. STATEMENT OF ISSUE

The focus of this paper is on how the next city administration can professionally administer the property tax. The paper reviews how well the Assessing Department is prepared to do so. It explains the problems challenging the next city administration as well as beneficial changes to the tax environment. It recommends certain programs whereby the Assessing Department can improve its administration and fulfill taxation's goals of equity and efficiency.

Taxes must be equitable--everybody must pay their fair share--in order for citizens to have faith that their government is functioning democratically. Tax administration also has a pragmatic goal: to be efficient in collecting the tax. The City relies on the property tax for 35% of its revenue. Prop 2 1/2 limits the tax levy, thereby controlling the revenue side of the City's budget. Meanwhile, city service needs must be accommodated and unavoidable fixed costs continue to increase. Thus, the maximum, legally allowed amount of taxes must be levied in order to sufficiently support City services.

Equity and efficiency have been neglected goals. In part this is because the property tax is a problematic, complex tax to administer. Unenforcement of some laws, indifference to reform of others, technical difficulties and the administration's commitment to development goals contribute to its complexity. As well, for decades each city administration was confronted with a quagmire of an assessing operation: assessments were inequitable, assessors unqualified and the system lacked standards.

Good news! Changes have occurred in the political and legal environments related to the property tax. New laws reflect much needed reform and the State is enforcing these and pre-existing ones uniformly. Because of the recent revaluation taxes were equitable for the first time in decades and the political costs associated with revaluation are behind the City. The new administration has a clean slate from which the Assessing Department can professionally administered the tax.

II. KEY PROBLEM AREAS AND RECOMMENDED ACTION

Some of the problems which hinder the Assessing Department, such as Proposition 2 1/2's limits of the property tax levy, are externally imposed. Others are problems inherent in the Assessing Department and require self-improvement to correct. The problems and recommended action are summarized in this section. More detailed explanations are in Section IV.

1) Problem: Assessments maintained at less than 100% market value are not equitable and do not allow for levying the maximum allowed tax Action: Implement a Computer Assisted Mass Appraisal (CAMA)

System to maintain equitable assessments based on full market value

The City recently revalued all property to reflect full and fair market value. When completed, in Fiscal Year 1983, taxes were more fairly distributed among neighborhoods, types of housing and classes of property than they had been in decades. Tax payers were paying their fair share.

Research done in conjunction with this project has found that assessments began to lose equity within the first year of revaluation. The root of the problem is that values were not generated by a Computer Assisted Mass Appraisal (CAMA) system. CAMA is a process where information on property and the real estate market is assimilated and analyzed with the assistance of computers and then, through the use of computer programs, the information is used to generate a value for each parcel of property. Determining and then maintaining accurate values on Boston's heterogeneous and extensive number of parcels can only be accomplished with the manageability and precision offerred by a CAMA system.

Originally a CAMA system was planned to generate the FY 1983 values. Unfortunately it has never been fully operational. Besides the issue of equity the Assessing Department must develop and implement a CAMA to satisfy a Memorandum of Understanding between the City and the State as well as other State requirements. The Assessing Department should anticipate Fiscal Year 1986 tax assessments to be based on the CAMA.

Full and fair values are also a means to assure for a maximum of revenue. Proposition 2 1/2's limit to 2 1/2% of the total taxable property's value is calculated on the assessed value. If assessments are less than market value, then the tax levy is less than its legal limit and the City is depriving itself of much needed revenue.

Recommended Actions:

o Appoint a professional certified assessor as the Commissioner of the Assessing Department

- o Determine whether to plan and implement CAMA in-house or contract it out
- o Establish long range plans for the department; allocate personnel according to needs; establish and coordinate budget needs with the City Council
- o Institute internal policing mechanisms such as security controls for the computer and a code of ethics
- 2) Problem: Proposition 2 1/2 regulations restrict the property tax levy, intensifying the need for efficient administration

 Action: Understand and efficiently implement regulations governing the property tax levy, advocate for certain regulatory changes and improve administration to assure that all property is

Proposition 2 1/2 changed the way many Massachusetts municipalities establish their budgets and set their tax rate. No longer can a municipality first determine what they will spend and then obtain the money through simply setting the tax rate. Now Proposition 2 1/2 regulations restrict the tax levy to 2 1/2% of the taxable property value. No differently from one's personal budget, municipalities must now determine their expenditures within the framework of available funds.

Because Boston relies upon the property tax for 35% of its revenue and because the city needs money it is essential that the property tax levy be maximized. This does not mean increasing the property tax rate. Rather it means assuring that the regulations are properly implemented so all property pays what is expected of it.

The regulations pose one particular, serious problem: they do not readily allow increasing the tax levy beyond 2 1/2% of the tax base's market growth. For example, if there is an overall property value increase of 8% only 2 1/2% of the 8% can be taxed. Consequently, the city forgoes the tax on the other 5 1/2%; or to look at it from a larger perspective, the city is taxing only 94 1/2% of the tax base. By Fiscal Year 1986 Boston will be taxing at less than 2 1/2% of full value. The amount of lost revenue depends not only upon the market appreciation of values but also the difference in assessment value between the FY 86 values generated by the CAMA system and the existing values.

In general the regulations are good. They intensify the need of proper administration. It becomes essential to assess property correctly so abatements are minimized and to assure all property is taxed equitably.

Recommended Actions:

properly taxed.

O Understand regulations so the administration is prepared to utilize them to their fullest capacity

- o Work to amend Proposition 2 1/2 to allow increasing the tax at the rate of market growth
- o Assure that all property is taxed through identification of and placing on the tax rolls new construction, substantial rehabilitation, and tax-exempt, income producing properties which do not meet exemption regulations
- o Minimize abatement payments through maintaining accurate assessments
- 3) Problem: A lack of public confidence erodes the Assessing Department's ability to function

Action: Implement internal policing programs and public outreach

Honesty and integrity are standards supported by all. These standards should permeate every aspect of government, revenue producing or not. A less than absolute standard lessens public confidence, which in turn, inhibits the government's ability to function efficiently.

Property tax administration has been particularily resistant to meeting high standards. History speaks -- the assessing functions lack uniform controls and policy makers have used the tax for development actions. The public response has been poor.

Underscoring these problems is taxpayer sensitivity to paying more than their fair share. Actual inequities, complex procedures, simple misunderstandings and intimidation are interpreted by tax payers as Assessing Department misconduct. That does not build public confidence.

Recommended Action:

- o Improve efficency of the Assessing Department through the internal policing and planning programs
- o Assist tax payers with FY 1983 and FY 1984 abatements through providing public information on procedures and hearing claims before taxpayers are required to appeal with the Appellate Tax Board.
- o Provide information about and public participation in development of the CAMA system for the FY 1986 values
- o Establish a public review board to assimilate market information and assure continued maintenance of full values

III. LOOKING BACK AT BOSTON'S ASSESSING PRACTICES

Entertainment value aside, there is reason to glance back into Boston's history of property tax assessment. It is crucial for the new administration to steer away from past practices which evolved through erroneous reasoning and recently reformed laws and procedures. It behooves any administration to withstand pressures for a return to "the good old days" when only special interests had access. Finally, the recent reforms were not comprehensive; the new administration should be cognizant of recent influential tax changes and willing to comply with them.

Following is a 'Reader's Digest' version of the history and tax changes. History buffs will find additional information in Appendix A.

There is Reason for the Tax's Unpopularity

For decades the property tax has been characterized by complexity and talked about as corrupt. Its economic shortcomings have rallied citizens from California to Massachusetts. The criticism was all well deserved.

One of the tax's major problems is setting assessments at less than full and fair market value, a practice known as fractional assessment. In and of itself assessing at less than the offical rate -- which is 100% in Massachusetts -- was not a problem, so long as the assessment-to-value ratio was the same for all classes of property and for all the property within each class. That is equitable, but not legal. However, in Boston, not unlike other cities, there was a tremendous disparity between the ratios for different classes of property.

Table I illustrates the extreme of inequitable assessments. Although not represented on this table inequities also existed within the residential class. In Charlestown the assessment to value ratio was at 14% resulting in a \$35 tax per \$1000 of market value. In the Washington Park area of Roxbury the ratio was 44% so the tax was \$90 per \$1000 of market value.

Table 1: ASSESSMENT-TO-VALUE AND EFFECTIVE TAX -- 1972

CLASS	ASSESSMENT- TO-VALUE	OF MARKET VALUE
RESIDENTIAL NEW COMMERCIAL OLD COMMERCIAL	.27 .18 .52	\$55 \$37 \$106
TOTAL-represents the city wide average	.32	\$66

Source: Estimating the Impact of 100% of Market Value Property Tax Assessments of Boston Real Estate. The Boston Urban Observatory. 1974

One startling statistic sums up Boston's assessing practice: in the 50 years preceding revaluation Boston's assessed values increased 4% while the tax rate increased over 1000%!!

The System was Insulated from Reform

The system was insulated from the implementation of full and fair values, in part, through its own internal mechanism of abatements. While abatements legitimately provide taxpayer relief they 'buy off' any further complaints against the entire system. Taxpayer's suits are the effective legal control over the system. Either they were not initiated, due to ignorance that the system was so inequitable, or suits were settled with abatements.

Further insulation was the political motivation to maintain the status quo. As righteous as equity sounds, it typically shifted tax burdens onto residential owners (read voters). These people vote their dissatisfaction. This political vulnerability was best expressed in San Francisco-- following their revaluation bumper stickers begged 'Bring Back the Crooked Tax Assessor.'

Taxation used as a planning tool: the carrot approach

These administrative problems explain why there was tax payer confusion over what assessments should be and how the tax should be administered. The confusion and lack of controls allowed the political forces to use the tax for purposes other than raising revenue. In some instances it was abused for political and personal gains. In others it was used as a carrot to plan development or stabilize a neighborhood. By not increasing assessments, or by cutting favorable deals on assessments and/or abatements, taxes encouraged rehabilitation in depressed areas, permitted long term owners to retain their homes, facilitated downtown high rise development. In and of themselves these tax deals might appear to be wise ways to develop a city. But, as a comprehensive tax program they were not fair.

The property tax has an inherent defect: it is vulnerable to misuse. The temptation to use the property tax for nonprimary purposes compromises equity in favor of political ends.

Politics tromple homeowners: 100% to 0

Assessing has lacked standards; operating without uniformly enforced laws and with little internal control over individual assessors. The assessor's job is discretionary and subjective. There is temptation for bribery. And the larger the municipality -- and consequently the more complex the assessing -- the easier it is to hide mistakes. As has been proven elsewhere in government, an environment is created where incompetence or corruption are difficult to prove.

Mistakes and personal or political gains were camouflaged as part and parcel of the property tax. The consequenses? Selective access to the power and money -- typically homeowners were excluded, whereas influential property owners made the tax work to their advantage.

Voter's speak their 2 1/2% worth

The tax does have its economic shortcomings. In Boston the effective tax burden (the percentage of the market value paid as tax) prior to the implementation of Prop 2 1/2 was 10%. It was no surprise that Boston voters supported Prop 2 1/2 by a 9 to 7 margin.

With all these problems, why not Proposition 0?

Inequity, abuse, poor administration, excessive tax burdens... why have a property tax? Successful litigation and changes to the tax laws are resolving many of these traditional negatives

The changes: a different climate

The Massachusetts Supreme Judicial Court ordered enforcement of full and fair market value assessments, known as the Sudbury decision. It brought a radical change: municipality-wide equity in taxes. Boston's revaluation in FY 1983 resulted in more equity between classes of property and neighborhoods than had occured in decades. Sudbury also resulted in the State Dept. of Revenue gaining enforcement powers over municipalities.

Classification, passed in 1978, cushioned 100%'s financial impact on residential property owners by maintaining the de facto practice of undertaxing the residential category. Further, Classification's enabling legislation, known as Chapter 797 of the acts of 1979, provided massive tax reform. It established standards and provided some municipalities with abatement relief.

Public frustration reached its fullest expression with the 1980 passage of Proposition 2 1/2. This simply limited the tax levy. The effects, however, were complex. The municipality budget setting process was reversed. In the "good old days" spending was planned and then the money was raised by increasing the tax rate. Now, many municipal budgets are no different than personal budgets. First the amount of available money is acknowledged and then the spending priorities are determined.

Also, Propostition 2 1/2 brought 3 consecutive years of tax reductions to Boston. It had a particular impact on the FY 1983 bills. Prop 2 1/2 and Classification both cushioned revaluation's tax shifts. Owners focused their attention on the favorable, lowered taxes and not the issue at hand: whether the assessment was accurate or not. Consequently revaluation was acceptable.

Besides legal and political changes technological advances, particularily computers, entered the world of assessing. They give the Assessing Dept. tools to administer the tax efficiently.

The Context--A New Tax Environment

The reoccuring theme of these changes is that the political and legal constraints on tax administration have improved. The City has gone through revaluation, reasonable laws and standards are being enforced, new laws have been passed, technology brings efficient and accurate capabilities. This creates an environment which allows a professional administration of the tax.

Changes alone do not guarentee equity and efficiency. It is essential for the next administration, first of all, to confirm its commitment to administer the tax professionally. The next step is for the administration to understand how prepared the Assessing Dept. is and what programs are required in order to properly administer the tax.

IV. PRIMARY DECISION OPTIONS

1) The City Must Develop a Computer Assisted Mass Appraisal System to Maintain Equitable Values

In Fiscal Year 1983 the City assessed all real and personal property at 100% of its full and fair market value. Revaluation's purpose is, of course, to assure for equity. And indeed, in Boston revaluation resulted in more equitable taxes among classes of property and neighborhoods than any tax distribution in memory.

Research done in conjunction with this project has found that assessments began to lose equity within the first year of revaluation. The root of the problem is that values were not generated by a Computer Assisted Mass Appraisal (CAMA) system. CAMA is a process where information on property and the real estate market is assimulated and analyzed with the assistance of computers and then, through the use of computer programs, the information is used to generate a value for each parcel of property. It offers the manageability and precision needed to assess Boston's 100,000 parcels and to maintain the values over time. In accordance with a Memorandum of Understanding between the City and the State and other State regulations Boston must develop a CAMA. The Assessing Dept. should expect the FY 1986 values to be generated by CAMA.

This section of the paper first explains the current status of the Assessing Dept's system. Acknowledging that a CAMA is necessary the section outlines the steps in implementing one; the procedures and performance standards in DOR's and the City's Memorandum of Understanding; and the Assessing Dept.'s current plans for developing a CAMA system. Concluding this section are recommendations.

The Current Status of the Assessing Department's System

The CAMA originally planned by the City's Office of Property Equalization (OPE) and approved by the State DOR did not generate the Fiscal Year 1983 values. Instead, the values were based on a manual system. To be specific, the values were determined by independent appraisers (contracted by OPE) who based the value on data originally collected by OPE, sales information and exterior inspection. Granted, even the manual system could not have been accomplished without computer assistance. However, the manner in which computers were used did not constitute a CAMA system. For example, one of the key elements of a CAMA is the computer based models; OPE's models did not generate the residential class's values.

The result of not generating and maintaining assessments on a CAMA is that assessments can not be maintained at full and fair market value. Research undertaken for this project analyzed the quality of assessments one year after the city-wide revaluation. It measured the uniformity of assessments on single family homes which sold in 1982

relative to the sales prices. The research clearly points out that assessments began to lose equity within the first year of revaluation. According to industry standards the assessments are not within the acceptable range of uniformity.

Table 2 illustrates that uniformity was achieved from the city-wide revaluation and that uniformity was lacking one year after. As a point of interest the recent CODs can be compared to CODs from one year prior to revaluation by looking at both Tables 1 and 2. It says that the disparity, or lack of uniformity, of current assessments is approaching the same unacceptable level immediately preceeding revaluation. Again, this indicates that revaluation without a CAMA system cannot maintain equitable assessments.

For further information on the statistical research refer to Appendix B. Briefly stated COD is the typical statistical measure for uniformity of individual assessments relative to market value. The Internation Association of Assessing Officers (IAAO)'s standard COD on single family homes is less than 15%. The DOR standard is 10%.

Table 2

Coefficients of Dispersion of Assessments to Sales Ratios:
Year of Revaluation vs. One Year Following Revaluation
Single Family Residential

	1981 Sales Assessn		1982 Sales Assessme	
Ward	Median	COD	Mean (a)	COD
1 2 3 4	100 100 98 b	.08 .09 .11	87 77 b b	.26 .36
5 6 7 8	105 100 b	.09 .15	89 81 84 b	.46 .43 .18
9 10 11 12	b b 103 b	.11	b b 92 b	.20
13 14 15 16	102 b 103 102	.10	83 b b 98	.17
17 18 19 20 21	102 100 102 102 102	.07 .09 .09 .08	97 93 95 100 b	.16 .16 .12 .13
22	101	.10	90	.17

a the mean was verified against the median; there was no significant difference

Source: 1981 sales/FY 1983 assessments from information prepared by the City of Boston's Assessing Dept. for the Dept. of Revenue

1982 sales/FY 1984 assessments from information prepared by the City of Boston's Assessing Dept. for the Dept. of Revenue; means and CODs calculated by McCormack Institute

b insufficient sample

Table 3

Coefficients of Dispersion of Assessments to Sales Ratios: Year Preceeding Revaluation Single Family Residential

Planning District	COD
1-East Boston	.25
2-Charlestown	.36
3-North End, Waterfront	a
4-Back Bay, Beacon Hill, Bay Village	a
5-Chinatown, South Cove	a
6-Fenway, Kenmore	a
7-Allston-Brighton	.25
8-Mission Hill	a
9-South End	.53
10- South Boston	.35
11-Jamaica Plain	.23
12-Roxbury	.36
13-Uphams Corner, Dorchester	.43
14-Roslindale	.21
15-Mattapan	.19
16-Fields Corner, Dorchester	.30
17-West Roxbury	.18
18-Hyde Park	.21

a insufficient sample

Source: "Supplemental Report on Quality of Assessments and Future System for Quality Control", prepared by Thomas L. Jacobs and Associates, Inc. Chicago, IL for The City of Boston Assessing Dept., May, 1982.

These inconsistencies were magnified with the FY 1984 assessments. The Assessing Dept. increased the FY83 (revaluation) assessments by uniform percentages to determine the FY84 assessments. This is known as trending. It is an acceptable process to maintain parity with the market for the years between the State's required tri-annual recertification. It is not without problems if assessments are not accurate. For example, consider two similar single family houses both worth \$75,000 but assessed at \$65,000 and \$72,000. If their neighborhood's trending factor was 9% the FY 1984 assessments would be \$70,850 and \$78,480. Whereas the difference had been \$7,000 it is now \$7630.

There are State regulations which require assessments to be maintained at full and fair market value. They establish a strict timetable for the City. As part of the State DOR's certification of the FY 1983 values the City agreed to develop a CAMA system. This agreement, known as the May 31, 1983 Memorandum of Understanding, stipulates the CAMA system "...to be fully operational and is to be implemented on or before June 30, 1984." Deputy Commissioner Edward Collins Jr. stated that the MOU shows good, strong evidentiary intent of the signing parties. Coupled with DOR's statutory powers the City administration will need to comply. They can no longer treat it as a political document. In addition, State legislation requires all municipalities to revalue every third year. Boston is required to do so in FY 1986.

The MOU implies that the CAMA will generate the FY 1985 values which meet DOR's requirements. Realistically speaking, the next administration will not have sufficient time to generate the FY 1985 values from a CAMA system. Although the legal agreement is under DOR's interpretation and control it appears reasonable to the author that the City must have a CAMA system planned with development seriously under way by June 30,1984 and that system must generate the FY 1986 by Fall, 1986.

CAMA System

As the name implies, CAMA is an 'assist', not a replacement for appraising. Computer involved activity is a highly developed tool to manage information. The system requires accurate data, which is collected by people, and evaluation of factors, which is accomplished by human discretion. As the name also implies it is 'mass appraisal'. Although data and assessments are specific to each property, the appraisals themselves are based on standard, easily quantifiable units of comparison as contrasted to analyzing the value of specific elements on each individual house.

In addition to valuation, a CAMA undertakes tax administrative functions such as the preparation of tax impact notices, tax bills and other listing or reportive tasks. It also undertakes data management. Although these two subsystems are important, and hence mentioned, this section focuses on the valuation subsystem.

One can not overstate the glories of computers. Their analytic capabilities have greatly expanded assessment functions. While many

functions are not inherently complex in concept they do involve complex mathematics and a multitude of iterative processes demanding precision. The computer handles this without complaint. Computers are wonderfully proficient at repetitive tasks such as preparing rolls. They can sort through information, store it, aggregate it and manipulate it. And they are cost efficient.

Computers can provide these functions only to the extent that people assemble and organize the information and effectively implement the components of appraisals. Thus, many of the labor intensive tasks such as data collection and updating maps are not eliminated. Nor is the need for human judgement eliminated, such as determining which approach to value should be utilized or where market boundaries have changed. With these appropriate warnings of what to expect of a computer one can better understand how a CAMA system suitable to Boston would be organized.

The steps in developing a valuation system, with specific attention to Boston's needs, are explained as follows. The purpose of this section is to establish the parameters of what one should expect of Boston's system.

1) Planning Planning Planning establishes the program, schedule and cost. Once it is determined that a CAMA system is necessary then the Assessing Dept. must decide whether to plan and implement the system in-house or contract with a professional appraisal company.

The first step is to select the appropriate type of system. This decision is primarily based on testing of property characteristics to determine which ones contribute to value. It is also important to determine which system will best satisfy tax administration needs. Next the planners evaluate existing resources, design manuals and data collection forms, establish market data and valuation standards, test appraisal techniques, determine the appropriate methodologies, recruit and train project staff, and initiate a public education and outreach program. In accordance with State regulations DOR must approve the plan. The City Council and the Mayor must approve the budget, for at least the forthcoming fiscal year.

This step coordinates different elements of the system. It produces the computer programs which analyze the data for purposes of estimating value. To accomplish this it analyzes market data and neighborhood characteristics to define the market dynamics and delineate neighborhood boundaries. These boundaries will be utilized to compare similar properties. It determines land value units. And it also refines which data elements are to be used for which specific methodologies. In this refinement procedure the valuation formulae or models are adjusted to reflect specific trends or uniqueness that are beginning to emerge from the market and data characteristics.

This step is an iterative process of refining the data and methodologies. Therefore it is initiated prior to and is continued throughout the data collection process.

3) Data Collection:
Data collection is one of the most crucial steps in providing for a quality product: "garbage in, garbage out" symbolizes what can be wrong with computer related tasks. It is also the most costly and

time consuming step in the process. Data should not begin prior to the preceeding steps.

Data is collected to create two interrelated files. One is the property record file. It documents the physical characteristics of property which assist in determining the values. It may involve as many as 20-50 entries of objective information, such as type of construction, number of rooms, and property use. It also involves some subjective information such as the condition of the property, the quality of original construction and the attributes of the neighborhood. Income and expense information for income producing property is requested from the owners.

A quality control system must be established to insure success. This involves periodically checking a high percentage of the field work. Supervisors and/or independent appraisers would be responsible for such verification. Data can also be checked through verifying it with the property owners.

A sales file is also created. It contains the property characteristics plus sales from the previous 2-3 years. Financial considerations are noted, specifically sales are qualified as to whether they are 'arms-length' i.e. whether a sale is between a willing seller and buyer and does not involve special situations such as a sale between relatives, foreclosure, zoning change to name a few conditions. The sales file is the 'market value ruler' against which unsold properties are measured.

4) Valuation

Valuation is the result of data collection and pre-valuation. It produces preliminary estimates of value based on the data and methodologies. If models and data have been accurately prepared there should be little difference between the value generated by one methodology relative to another. At this step the differences can be reconciled through knowledge of the data and models or through the field review.

The valuation run produces a 'value review document'. It contains the data characteristics, value produced by each methodology, comparable properties and an evaluation of this information. Experienced appraisers use this information to determine the final values.

5) Field Review:

This is the final step of the mass appraisal process. It is a parcel-by-parcel, field review of all of the computer generated values. It requires professional appraisers who understand the complete valuation process. They use and correct the 'value review document' generated from the valuation step.

The field review is considered the single most important component of any revaluation project. It checks any specific problems observed by those working with the system, refines values of properties located on neighborhood boundaries, confirms that similar properties are equitably assessed and verifies the accuracy of data collection. The field reviewers can override computer generated values. Because of this discretion it is imperative that strict review procedures are established, sufficient time and funds are allocated and all changes are thoroughly documented. Uniformity is critical. A procedures mannual assists in this regard as does using a minimum of field reviewers.

6) Preliminary Certification Review, Taxpayer Impact Notices and Informal Hearings and Final Certification

These steps involve DOR and taxpayer review of the values. Successful completion results in State certification and mailing of the bills.

DOR and the City of Boston's May 31, 1983 Memorandum of Understanding

Besides the standard CAMA procedures which the City should be expected to follow the City has specific tasks as agreed to with the Dept. of Revenue.

On May 31, 1983 a Memorandum of Understanding (MOU) was signed by officials of the DOR, the City of Boston's Assessing Dept. and the Deputy Mayor for Fiscal Affairs. It states "... the City's CAMA system has to date been unable to generate values which meet the minimum standards, statistical and otherwise, set forth in guidelines published by the Department of Revenue." Therefore, it required the Assessing Dept. to implement the necessary CAMA system, as the City had originally planned to do and as the State had previously approved. The MOU goes on to outlined the steps or implementation requirements. They are summarized as follows under specific tasks, performance criteria and DOR's controls. ("At issue" are an explanation of what the steps attempt to resolve; they have been added by the author.)

The specific tasks are:

- o Establish implementation plan: A work schedule, staffing plan and cost estimate to complete the above must be submitted to DOR. City agrees to use their best efforts to secure the necessary appropriation. (At issue: a work plan will allow the DOR and their monitor to assure that the appropriate tasks are being accomplished on schedule.)
- o Data: Data must be collected, via inspections of property sold in the 1982 calender year and documentation of updated expenses and income. The purpose is to establish valid units of comparison from which other property values can be determined. (At issue: prior selection of the key data elements to be used in estimating values was not properly coordinated with the modeling. As a result incorrect data was collected.)
 - o Valuation testing: Property characteristics must be tested

to determine which ones contribute to the property value. (At issue: this was part of the problem cited under data.)

- o Methodology: Methodologies to estimate value must be selected and their suitablity assured through adaptation to Boston's unique situations.
- o Verification of data: All data upon which values are based must be verified as to its accuracy, uniformity and completeness of an inventory. The DOR requires a thorough and ongoing data quality study. As a quality control the DOR recommends mailing owners the data on their property and requesting verification. (At issue: If inaccuracies are pervasive then all data will need to be recollected.)
- o Generate values: The CAMA system must generate values which are then verified. (At issue: prior CAMA generated values did not correlate with actual values as determined by sales.)

Further, the MOU notes performance criteria which the CAMA and the Assessing Dept. must meet. They are:

- o Continual maintenance: The CAMA must be set up to accommodate ongoing maintenance of values through continual data collection, methodology adaptation and sales verification. Also, the Assessing Dept. personnel should be trained to implement the system.
- o DOR's testing and verification of separate elements: Such review would include, but not be limited to, verifying the data base and valuation models. This would allow DOR to monitor the process on an ongoing basis with the intent to arrest any inaccuracies and prevent systemic problems.

To assure for proper execution of the agreement the DOR noted that it would:

- o Retain an independent consultant knowledgable in the CAMA field to monitor, review and analyze the progress. The City and State will share the ccst.
- o Seek enforcement of any provision through the courts. The MOU does not reference what will happen if CAMA is not implemented by June 30, 1984. Nor is there any precedent. DOR is empowered to take over a municipality's revaluation if it does not satisfy their requirements. They can also deny certification of the tax rate, thereby preventing the mailing of tax bills.

The Assessing Department's Plan to Implement the CAMA System

The Assessing Dept. recently prepared a work plan, schedule and cost estimate. It will be available to the new administration. As it was not available to the author at the time of preparing this report the following is based on interviews with people who have a working knowledge of the plan.

The work plan is based, in part, on information from two consultants, Robert Kitchen, Deputy Executive Director of the N.Y. Division of Equalization and Assessment and Bruce Sauter, from the same agency. It is also based on a verification program which the department undertook in summer, 1983. This was to determine the extent of work which the Assessing Dept. would be required to do; it is based on how much of OPE's material could be reused. The program tested the quality of data and values. Further, the work plan used information from the trending analysis upon which the Fiscal Year 1984 assessment increases were based (refer to Appendix B).

Publically the Assessing Dept. maintained that the revaluation was satisfactory and that the system was merely being refined. People knowledgeable with the system acknowledge that the information provided by OPE could not be reused in building a CAMA system. The Assessing Dept.'s work plan assumes this scope of work.

The work plan recommends that the Assessing Dept. both organize the implementation of the CAMA system and maintain it once it is functioning. The implementation will require, for certain specific functions, the use of independent contractors and consultants. For example, Commissioner Edward Jay believes the initial data collection is better accomplished by a contactor who specializes in such work and not by Assessing personnel. Contracting allows the trained Assessing Dept. data collectors to function as the quality control over the contractor. Other tasks will be done by the Assessing Dept. personnel.

In order for the in-house maintenance of the system to succeed a strong operational manager is required. Selection for this position was not completed by the end of 1983.

The steps in the plan are as follows:

1) Data Collection

Based on the Assessing Dept.'s data verification of properties sold in 1982 and a systematic review of parcels in Wards 21 and 22 (Allston-Brighton), they determined that all of the data for R1-3 and Condominiums would need to be recollected.

The task of collecting the data will be contracted out. As part of the above cited verification process the Assessing Dept., under the guidance of a consultant, trained personnel to collect data. They did collect data for the testing. They will function as the quality control over the contractor. These same personnel will maintain data once it is collected by the contractor and CAMA is implemented.

The Assessing Dept.'s current plans are to further verify the data through owner review. They plan to use a verification mailer to do this.

2. Valuation or program

This step will adapt methodologies to Boston's unique situations. The methodologies to be used are a Multiple Regression Analysis (MRA) based on the market approach and the Cost Replacement New less Depreciation (CRNLD). Success in implementation requires a superior Operations Manager skilled in CAMA systems. This is an in-house function.

Land Values

Similar to the data collection this will be contracted out for the initial first time task. Maintenance will be undertaken by the Assessing Dept. Land value is essential for the Cost Replacement methodology as well as the valuation of vacant land and land where existing buildings are not the property's highest and best use. Further, it is required for certain federal tax reasons.

4. Mapping

All parcels must be mapped with a computer link. Although this is not essential for producing computer generated values a digitized mapping system is a cost efficient resource.

5. Data base management

A data base management system must be developed in order to coordinate the computer functions.

Recommended Actions for the Administration to Take in Developing a CAMA

The following recommended actions are intented to assist the new administration in undertaking the development of a CAMA system.

o Appoint a professional certified assessor as the Commissioner of Assessing

The presence of political appointees in such a sensitive position undermines the department's credibility. Moreover, the development and maintenance of a CAMA system demands that the management is professionally qualified to monitor it.

o Determine whether to plan and implement the CAMA in-house or to contract out the function

This decision should be made as soon as possible in order to meet the schdule, coordinate budgeting and personnel. It should also be made in light of the problem that bids for the data collection contract have been received. If this contract were to be awarded it would precede the pre-modeling step.

o Establish long range plans for the department as well as annual plans to allocate appropriate personnel and budget levels

The long range perspective will contradict the typical short term

crisis planning. It will assist in determining the necessary personnel level and funding. This information should be coordinated with the City Council.

o Institute internal policing mechanism of security controls on access to the computer and a code of ethics

As our technology changes we must adapt new procedures which insure for the integrity of the process. Security controls on the computer are essential.

A code of ethics is an important standard for any department. Given the discretionary and oftentimes unsupervised nature of assessing such a code is essential.

2) Proposition 2 1/2 and Related Controls on Revenue

This section identifies the status of Boston's value and tax levy; summarizes Proposition 2 1/2's limits on the levy (the excruciating boring details are in Appendix C); explains how abatements erode the tax levy; and recommends some actions for how to be most efficient at levying the tax given these controls. This information will familiarize policy makers with some of the constraints and flexibilities of the tax.

Boston's Tax Base and Taxes in a Glance

Despite 3 consecutive years of tax levy reductions and increases in State aid Boston still heavily relies upon the property tax. Fiscal Year 1983's \$374.6 million levy was approximately 43% of all City revenues. The Fiscal Year 1984 levy is 35%.

Table 4: BOSTON REMAINS DEPENDENT ON THE PROPERTY TAX (in millions)

FY	Total Rev	Levy	Tax as % of Total Revenue
81	\$ 878	\$ 519	60%
82	838	414	53
83	780	374	48
84	950	333	35

Source: Boston Assessing Dept.

Boston is, at long last, at the sacred 2 1/2% effective tax rate level. This occured in Fiscal Year 1984 through a combination of increasing the tax base and reducing the tax levy.

Table 5: BOSTON'S TAX LEVY IS AT THE PROPOSITION 2 1/2 LEVEL

FY		of Property	Levy	Levy as % of Value
81	a \$ 5.2	Billion b	\$519 M	10.0%
82	7.5	ВЬ	441	5.9%
83	12.2	В	374	3.1
84	13.3	В	333	2.5

- a) 1981 was the last fiscal year preceding implementation of Prop 2 1/2
- b) State DOR's Equalized value

Source: Boston Assessing Dept.

The value of Boston's taxable property is expected to increase through new construction and increased market value. This allows the city to increase the tax levy, within the limits of the Proposition 2 1/2 regulations.

Table 6: TAX BASE AND TAX LEVY PROJECTION: FISCAL YEAR 1984-1986

FISCAL YEAR	TAX BASE	TAX LEVY	TAX AS % OF VALUE
84	\$ 13.3 B	\$ 333.3 M	2.5
85	14.4	359.2	2.5
86	15.7	385.4	2.45

SOURCE: Boston's Fiscal Future: Prognosis and Policy Options for 1984 to 1986 by Joseph S. Slavet and Raymond G. Torto

The chart's last column provides a convenient introduction to one of Propostion 2 1/2's problems specific to Boston. The procedures for adding increased value to the tax base will result in Boston taxing at less than the 2 1/2% rate by FY 1986.

Proposition 2 1/2 Changes Our Lives

As an initiative petition Proposition 2 1/2 required action by the State legislature to become law. The result was Chapter 580 of the acts of 1980. This was amended by the legislature in 1981 as Chapter 782. Propostion 2 1/2, at this very moment is being amended, and can continue to be amended.

Proposition 2 1/2's Golden Rule is: the tax levy can not exceed 2 1/2% of the full and fair market value of the municipality's taxable property [Chapter 792, Section 21c (b)]. Typical of Prop 2 1/2 there is an exception to this; a municipality's debt service can be excluded from the limit thereby allowing the total levy to exceed the 2 1/2% level [Chapter 782, Section 21c (a)].

Some other generalizations of Proposition 2 1/2 help one to understand the law. The regulations require tax increases to be tied, as one would expect, to the growth in the tax base. The levy's increase is limited, however, to not only the Golden Rule's 2 1/2% limit, but also to the prior year's tax levy.

The 1981 amendment, Chapter 782, introduced flexibility so municipalities could better adapt the tax to their specific needs. They allow, on the one hand, for specific exclusions which enable a municipality to increase taxes. These require voter approval. But, they also protect the spirit of Prop 2 1/2 by dismissing the prior opportunity to override the 2 1/2% levy restriction. Specific regulations, which could possibly affect Boston, are reviewed in Appendix C.

There is one particular, serious limitation. The current regulation does not readily allow increasing the tax levy in excess of 2 1/2% of the tax base's market growth. For example, if the existing property values increased by 8%, only 2 1/2% of the 8% would be taxed. Consequently the City forgoes the tax on the other 5 1/2% of market value, or to look at it from a larger perspective, the City is taxing only 94 1/2% of the tax base at the rate of 2 1/2%. Voter approval is the only way to increase the tax up to the 2 1/2% level. By Fiscal Year 1986 it is estimated that Boston will be taxing at a rate of less

than 2 1/2%. The amount of money lost depends upon the market appreciation of values and the difference in assessment value between the FY 86 values generated by the CAMA system and the existing values.

One other Prop 2 1/2 provision is worth noting. The tax levy can be reduced below the 2 1/2% level if approved by local voter referenda. The question can be placed on the ballot either through 2/3 vote of the council or a voter initiative. Passage requires a simple majority of those voting.

Recommended Actions:

- o Understand the regulations in order to implement them to their fullest flexibility
- o Advocate for legislation which would allow fully taxing all valuation increases due to maintaining parity with the market. The process would be to add all valuation increases to the prior year's assessed value and then determine the tax rate.
- o Assure that new construction and substantial rehabilitated parcels are immediately put on the tax rolls
- o Assure that income producing, tax-exempt properties are properly recorded as to their tax liability. Refer to Appendix D for a brief explanation of requirements.

Abatements

Control over the amount of abatements is the natural, logical product of maintaining equitable assessments and professionally managing the assessing function. That is not to say, however, that it is an easy task. The following explains the correlation between abatements and revenue loss and recommends action to better control the system.

Correlation between abatements and revenue

The crux of the problem is that abatement payments are a reduction of the tax levy. In monetary terms this means that of FY 1984's \$333 million levy, the total taxes collected will be reduced by abatement payments. There is no way to redistribute that loss among the City's other tax payers; obviously the tax can not be recalculated and prior habits of increasing the following year's tax rate have been stopped by Prop 2 1/2's control over the municipal equation.

In the past abatement payments have seriously eroded the City's revenues. In 1970, for example, \$15 million was refunded; 6 % of the year's tax levy. That money would otherwise be available for services. Liabilities, although they must eventually be paid, are not always distributed out of the current budget. If the claim is not immediately settled, which occurs when it goes to the Appellate Tax Board (ATB), the liabilities accumulate. Tregor represented several

years accumulation totaling \$150 million! Obviously a \$333 million tax levy can not cover abatements plus city services. In this case special bonding and new taxes were necessary.

Past abatements delivered justice, albeit short sighted, for inequitable taxes. Full and fair value assessments and equitable taxes eliminate the need for abatements for all but genuine assessing errors. From the perspective of how to maximize revenues, equitable assessments are necessary to prevent any potential revenue loss due to abatements.

Problem # 1 reviews the need for a Computer Assisted Mass Appraisal (CAMA) system to maintain equitable values. And as equitable values are the crux of minimizing abatements the need for CAMA is also mentioned relative to abatements. One obvious reason is that CAMA, by virtue of maintaining equitable values, will minimize the number of abatement claims. A more subtle reason is that the quantitative and methodological substance offered by a CAMA system is needed for the Assessing Dept. to adequatelydefend non-legitimate abatement claims.

Recommended Actions on Abatements

- o Maintain equitable values with a CAMA system
- o Correct assessments once an abatement has been agreed to

The abatement procedure remains as the property owner's relief from an error or disproportionate assessments between and within classes. If an owner files for an abatement and it is granted then that says the value is wrong. Past practices were to abate only the tax, requiring the owner to refile the next year. The correct procedure would be for the Assessing Dept. to change the value. This establishes the correct assessment base, in the following year, upon which the levy is determined.

3) Public Confidence

A lack of honesty and integrity in our government deteriorates the public's confidence. This erodes government's ability to function efficiently. The property tax has been particularly resistant to standards and good administration. Policy makers have been tempted to use the tax for other than revenue generating purposes. The public has had a poor understanding and acceptance of the tax.

This section recommends some specific programs related to building public confidence. Some are internal while others are public outreach. Each program is rooted in specific problems, some long term while others are immediate and temporary. (Due to the diverse nature of the programs the problem is discussed in conjunction with the action.)

Recommended Action:

Internal Departmental Programs

- 1) Establish internal planning and policing programs to improve the efficiency of the Assessing Dept. These programs were described under the development of the CAMA system, pages 19 and 20. There are:
- o Establish a code of ethics and conflict of interest statement
 - o Develop computer security
- o Establish staff positions and budget to reflect departmental needs
 - o Appoint a professional certified assessor as Commissioner

Public Outreach

FY 1983 and FY 1984 Abatements Have Not Been Reviewed

Abatements for FY 1983 will not be settled prior to January, 1984. This is due, in part, because the abatement schedule differed for the FY 1983 bills. These bills were mailed at the end of June, 1983. Tax payers had until the end of July to file for an abatement. The Assessing Dept.'s standard procedures are to respond within 3 months as to whether they will allow an abatement or not. This year, typical of other municipalities undergoing revaluation for the first time, the City was granted a 3 month extension to respond on their determination. That changed the deadline to January, 1984. The Assessing Dept. did not take action on some 7,000 abatements and dealt with only certain, select ones. Without action all of the abatement claims will be denied.

The Assessing Dept. will send property owners who filed for an abatement a Notice of Inaction in January, 1984. An owner can take

several actions. They can drop the claim. Or they can pursue it by again asking the Assessing Dept. to hear it. The Assessing Dept. has three months during which to respond. And/or the owner can also appeal the decision to the Appellate Tax Board. Unfortunately this can be a lengthy, cumbersome process involving some costs for the tax payer and the city.

Close on the heels of the FY 1983 abatements are those for FY 1984. Their 3 month determination date will be February, 1984.

The 7,000 abatements are on a total property value of \$ 3.5 Billion, one-third of the total taxable property. Aside from the loss of revenue, which no estimate was available from the Assessing Dept., the public perception is that the Assessing Dept. was unresponsive. That undermines the revaluation process in particular and the Assessing Dept. in general.

Recommended Action:

The new administration can help ease the public perception by taking several actions. For one they can provide public information to those who filed for an abatement. Further they should hear abatement claims during the coming 3 month period to eliminate the need for owners to file with the ATB.

Information About and Public Participation in the Development of the CAMA System

As part of the development of the CAMA system and the FY 1986 certification the Assessing Dept. should inform and involve taxpayers.

o Data collected on each property should be verified by the owner as part of data collection's quality control.

o As part of the certification process the Assessing Dept. is required to hold public hearings with taxpayers on the proposed assessments. These hearings should provide taxpayers with information specific to both their property and the comparable properties used in determining the value as well as an opportunity to contest the value.

o General information provided on a continual basis furthers public understanding and acceptance of the process.

o An open, forthright attitude will reflect the degree of honesty in the development of the system.

Coordinate Information with Public and Private Interests

The Assessing Dept. does not have the market expertise of the real estate industry or the local knowlege of neighborhood groups. In order for the Assessing Dept. to be more proficient in interpreting market trends it would be beneficial to utilize these resources.

Due to the very competitive nature of the real estate industry the best process for coordinating information is a Review Board. It would consist of representatives from the real estate industry, both

commercial and residential, and civic and neighborhood organizations. The purpose would be to interpret market trends on a first hand, informative basis and to assure that assessments were being maintained at 100%. Some suggested tasks are:

- o Review abatement applications for trends in market changes
- o Review on going statistical studies, such as COD of sales and quality controls of data collection
 - o Review rents and sales and discern any influencing factors
- o Keep current on zoning changes, development plans and neighborhood problems

V. CONCLUSION

As the new administration, you face the reality of balancing a budget while confronted with substantial deficits and rising fixed costs.

Meanwhile you wish to honor the spirit of your campaigns by maintaining acceptable levels of service and initiating new programs.

Money counts. Assuring that government is fair and accessible makes a difference.

It is popular to complain that there is too much dependency on the property tax. And indeed nobody is arguing against increases in State and Federal aid to reduce the proportion of the tax while not reducing the amount. But, in these concluding comments I urge you to take a fresh look at the property tax. Look at it as a viable resource.

Many changes have occurred to the tax laws, technology and public perception. Consider that Propostion 2 1/2 and Classification have made the tax financially acceptable to property owners. Consider too that revaluation and the prospects of a CAMA system provide an operative structure; that State regulations have standardized procedures, established performance criteria and minimized local discretionary influence. Today's technology offers new tools for efficient administration. The political costs of revaluation are history. These legal and political changes offer you the wherewithall to properly administer the tax. You have a clean slate.

Don't forget, this tax has problems. The desire to maximize revenue will conflict with efforts to be equitable. It will continue to be vulnerable to misuse. And further, the tax is politically volatile -- it will forever tempt policy makers to base actions on expedient, self-serving and consequently misdirected policy.

It's going to be tough. First, you must commit to properly administering the tax. Then you need professional management to implement programs cited in this paper. Both the management and the programs should be under Mayoral and Council review. And finally, to bond this sensitive function to the rest of government you need to build public confidence. Tax payers must know that there is equity — that they pay their fair share — and further, that the process has integrity — that nobody has special benefits or access to power through taxation.

A new chapter in property tax can be written. It might not be lively or entertaining, but it won't end in a revolution.

APPENDIXES

APPENDIX A: The History of Property Tax Administration and the Current Tax Environment

Since its inception the property tax has been poorly administered. It often reflects the economic and political pressures of the time. Often the tax administration decisions were made for laudable reasons, but unfortunately, they more often than not ignored city-wide equity among commercial, residential and industrial property owners and strayed from the other primary goal of efficiently maintaining revenues.

Boston's Assessing Practices: a look back

Beyond its entertainment value, there is reason to glance back into history. For one, the recent changes, as cited in the Statement of Issues, allow for different administrative procedures. It is crucial for the new administration to steer away from past practices; laws and procedures are very different today. It is important for the new administration to comprehend some of the expectations which special interest groups have of the tax. It behooves any administration to withstand pressures for a return to the "good old days." Finally, because the recent changes were not comprehensive reform, the new administration should understand what has been changed, and what reform is yet to be accomplished.

There are Reasons for the Tax's Unpopularity

The property tax is complex. It has been talked about as corrupt. Its economic shortcomings has rallied citizens to a revolution of sorts. The criticism was all well deserved.

The major cause was the practice of setting assessments at less than full and fair market value. This, known as fractional assessments, meant that a \$100,000 home is assessed at some value less than \$100,000. Say its assessment was \$9,000, then its assessment-to-value ratio is 9% (\$9,000 ÷ \$100,000 = 9%). In and of itself assessing at less than the offical rate -- which is 100% in MA -- was not a problem, so long as the assessment-to-value ratio was the same for all classes of property and for all the property within each class. That is fair, just not legal. However, in Boston, not unlike other cities, there was a tremendous disparity between the ratios for different classes. As a point of information, taxes in Massachusetts must be proportional.

In understanding why fractional assessment was the accepted practice one should appreciate, first of all, that the disparity in varying fractional assessments was a characteristic common to many large assessing districts with heterogenous properties. It is difficult to accurately assess any property and when the amount and types of property increase the difficulty, literally magnifies exponentially.

Appraisal practices were more 'seat of the pants' or subjective than

scientific. In a 1972 study prepared for the Finance Commission by the Jacobs Co. it was determined that the Assessing Dept. had 7 different methods to determine value, none of which were uniform.

Maintaining information on values and changes was next to impossible due to the lack of technology to assist in assimilating the information and the Assessing Dept.'s budgetary constraints. All of the processing work was done by hand and the assessing was neither systematized nor scientific. As some classes or neighborhoods increased in value the mechanics of the system weren't in place to make the corresponding changes. Soon those properties were undervalued. Correspondingly, as some properties decreased in value and some neighborhoods became less desirable those properties became over assessed relative to the city-wide average. Clearly, if it is difficult to determine the actual value it would be no more easy to assess all property at a uniform, fractional assessment.

The following chart illustrates how extreme inequitable assessments were in Boston. The impact is in the pocket book, which is measured by the effective tax rate, or the percentage of the property's value which must be paid each year as the tax. The last column on the chart shows that the old commercial property paid at a rate of almost three times new commercial. The city wide average is what each parcel would pay if assessments were at 100% and Classification was not implemented (which it would not be at that time.)

Inequities also existed within the residential class. In Charlestown the assessment to value ratio was at 14%, whereas in Back Bay and Beacon Hill it was 35% and in the Washington Park area of Roxbury it was 44%. That resulted in tax burdens of \$35 per \$1000 of market value in Charlestown, \$71 in Back Bay and Beacon Hill and \$90 in Roxbury.

Table 1: ASSESSMENT-TO-VALUE RATIOS AND EFFECTIVE TAX FOR CLASSES OF PROPERTY--1972

CLASS	ASSESSMENT- TO-VALUE RATIO	EFFECTIVE TAX ON \$1000 OF MARKET VALUE
RESIDENTIAL NEW COMMERCIAL OLD COMMERCIAL	.27 .18 .52	\$ 55 \$ 37 \$ 106
TOTAL (represents the city wide average)	.32	\$ 66

Source: Estimating the Impact of 100% of Market Value Property Tax Assessments of Boston Real Estate. The Boston Urban Observatory, August, 1974

One startling statistic sums up Boston's assessing history: in the 50 years preceding revaluation Boston's assessed values increased 4% while the tax rate increased over 1000%!!!

The System Was Insulated from Change

If it was so unfair, why didn't some special interest group change it? Granted it was confusing, but it was costing certain property owners thousands and millions of dollars. The problem was that the political dynamics insulated it from change and the availability of abatements insured that individual problems were resolved instead of revamping the entire system.

No administration was motivated to implement 100% values. It took no crystal ball and barely a consultant study to predict that correcting the system would increase residential (read voters) taxes. Any politician knows that increasing taxes is the ticket out of office. The system remained.

The system was insulated from the implementation of full and fair values, in part, through its mechanism of abatements. Abatements are necessary. They correct inequitable assessments caused by individual error or inequities inherent in the system. An unfortunate side effect of providing this tax payer relief is that nobody has an interest in correcting the systemic inequities. Abatements should not be used as a remedy to an inequitable system. On an annual basis at least 10% of properties had abatement requests. There was reason for the cynical name of the Abatement Dept.

To change the system, given that the Assessing Dept. would not correct it itself, required a ten taxpayers suit. This is an exhaustive, expensive process. Since the plantiffs motive was money, the abatement procedure could easily be scuttled with an abatement.

It is curious that no special interest group did persist in effecting a change in assessing practices. A review of the different classes of property owners' political and economic situation explains why.

The owners of new commercial property certainly did not want change as they enjoyed especially favorable low assessments. Favored neighborhoods — the W. Roxburies and Hyde Parks of the city — wished to preserve the status quo. This was assured through their strong representation on the Council and concentration of city hall workers. On the other hand, neighborhoods where property was over taxed always seemed to have much more pressing demands. Roxbury, as an example, was fighting arson, contesting highway clearance and distracted over busing issues. Why didn't the owners of older commercial property find it in their self interest to disrupt the system? They could be, and they were, satisfied with abatements. Moreover, many of them felt that what was good for Boston, and that meant continuation of the status quo, was good for them.

Then too, it was unclear to all but a sophisticated few (and they were generally the abatement lawyers) that the system was so grossly inequitable. Remember ten years back -- prior to California's contribution of Proposition 13 -- taxation simply did not receive the same public attention as it does today.

Taxation Used as a Planning Tool: the carrot approach

The confusion and lack of public accountability allowed for the tax to be used for purposes other than raising revenue. In some instances it was abused for political and personal gains. In others there were good intentions to use the property tax as a carrot to stimulate development or stabilize a neighborhood. For example, in the early days of urban renewal rehabilitated South End properties were not to be reassessed for seven years. This encouraged needed development and home ownership. Or, for example, the city chose not to reassess property unless it sold. This was a contribution to neighborhood stability as well as a benefit for older homeowners. Particularly in gentrifying neighborhoods this made it possible for residents to stay.

Another program, questionable in some people's estimation, was the tax deals with developers of the downtown office towers. These were the private 'golden handshake' deals. They were special tax deals between for profit developers in areas of the City which were not considered blighted. The contents of the agreements were not open to public review. They are not to be confused, although they generally are, with the legal 121a agreements which are publicly acknowledged agreements between the City and a limited dividend or non-profit developer. The developer does pay a certain, pre-arranged tax based on value and income. Further the developer is restricted to building in certain, blighted areas and must meet other public obligations. The argument for the 'golden handshakes' was that had the developers not been promised a stabilized tax rate they might not have located in the city. The argument against them is that there was a legal mechanism available which would have been public, brought in more taxes and not obligated the developer to the Mayor.

In and of themselves this composite of tax deals might appear to be wise ways to run a city. But, as a comprehensive program they were not fair. The owners of property in the gentrifying South End were having their taxes paid, in part, by the owner in the market depressed Roxbury. The latter couldn't afford to move, no matter how high the taxes were. While the old commercial downtown property suffered lack of tenants with the rising of each new commercial development they also paid outrageously high taxes to support the city's development policy. No doubt about it, this was bad administration of the tax, although the deliberate policy choices may have been good for city development. It points out one of the tax's inherent defects, that it is vulnerable to misuse. The temptation to use the property tax for nonprimary purposes takes it off course from its primary goals of equity and providing revenue.

Lack of Standards Resulted in Weak Controls

Whereas the presence of fractional assessments easily lead to the planning tool function, it was the lack of standards and technological control over assessing which allowed for little internal control over the assessors and administrators of the tax. Given the magnitude of

assessing in Boston it was easy to hide mistakes. Or as has been proven elsewhere in government that it is difficult to prove either incompetence or corruption. These covers allowed for sloppy work and even personal gain.

Diane Paul's book, The Politics of Property Tax compared the nature of the street assessor to the police. "Assessing, like police work, is both discretionary and subjective, combining constant temptation with minimal likelihood of exposure." She points out that "the decisions made by urban assessors are sometimes of great importance to taxpayers, particularly owners of apartment buildings and commercial and industrial property and it is precisely for these kinds of property that well-defined standards of assessment are lacking" (p.8) The differences which she points out, that assessing is not as visible and is less understood than police work, illustrate why there is little external control as well as internal control over tax administration.

An amusing example of this lack of control and standards is that buildings on one side of downtown Washington St. had lower assessments than the buildings on the other side. The history behind it, as oral tradition has passed it down, was that the assessing district was split down the middle of Washington St. and the respective assessors didn't talk to each other.

Another predominant characteristic is that taxes were too high. The effective tax burden (the property tax as a percentage of the market value) prior to the implementation of Prop 2 1/2 was 10%. It was no surprise that Boston voters supported Prop 2 1/2 by a 9 to 7 margin.

The reaction to these problems -- the inequity and abuse brought about by poor administration and excessive tax burdens due in large part to the economic shortcomings of the tax -- was successful litigation and changes to the tax laws. Both government and citizens have participated in designing solutions to these problems. The result was dramatic changes to how municipalities can tax. These changes are explained in the remainder of this section.

The Changes: you may have voted for them

The court ordered enforcement of full and fair market value assessments, or 100%, brought a radical change: city-wide equity in taxes. Classification, passed in 1978, cushioned 100%'s financial impacts on residential property owners. It maintained the de facto practice of under taxing residential properties. Further, Classification's enabling legislation provided massive tax reform by establishing standards and providing some municipalities abatement relief. Public rage was expressed in the 1980 passage of Proposition 2 1/2. This limited the tax levy. Technological advances and the use of computers, which allow for efficient and accurate accounting, dramatically changed the assessor's ability to maintain records. The following explains these changes and highlights how they offer new tools for Boston to properly administer the tax.

100% Assessments

The 1974 Supreme Judicial Court's decision of Sudbury v. Commissioner of Corporations and Taxation Mass. Ad. Sh 2405 (1974) forced all MA municipalities to comply with the constitutional requirement that all assessments be proportional. This required all municipalities to assess all property at its full and fair market value. The decision was simple.

The effects were not so simple. It abolished fractional assessment practices. And with it went de facto classification and a history of unfair distribution of State aid based on the total real estate value of the municipality. With equity came disruption or fear of disruption. Most residential tax payers did not understand that prior inequities were in their favor. Refer to Table 1 and compare the effective tax burden of residential to the city wide average. The interpretation is that residential taxes would increase if all property was assessed proportionately. Taxpayers at that time would be hard pressed to believe this. San Francisco responded best when shocked by its own revaluation: bumper stickers begged "Bring Back the Crooked Tax Assessor".

DOR Gains Enforcement Powers

As a result of the Sudbury decision, the State Department of Revenue (DOR) was given enforcement powers over local assessing offices. Additional court cases, Classification's enabling legislation and pressure from certain, already revalued municipalities extended the powers and influenced the DOR to take their role very seriously. The DOR now establishes state wide standards and has a strong supervisory role. It is capable of denying certification of new assessments (it has in the case of Cambridge), holding up certifying tax rates for auditing reasons (such as Boston's FY 1984 tax rate), forcing localities to fund revaluation contracts and carrying out the revaluation themself with funds secured through deducting the municipality's State aid.

Classification is More Than Shifting the Tax Burden Between Classes

Whereas the Sudbury decision meant an enforcement of existing law, two other major changes -- Proposition 2 1/2 and Classification -- were changes to the tax law.

Classification was a 1978 voter referendum which amended the State's Constitution. It permitted the classification of property and its taxation according to the property's use. As is the process with any constitutional amendment change there must be enabling legislation to specifically instruct how the change is to be carried out. The initial legislative attempts established a mandatory system. The final legislation, known as Chapter 797 of the General Laws of 1979, established a local option, flexible system to allocate the tax burden among major classes of property.

Chapter 797 devised an unique mechanism to implement the approving taxpayer's spirit to shift taxes. It established four classes of property: residential, open space, commercial and industrial. Then it allowed different tax rates for the residential, open space and commercial/industrial/personal property classes of property. The residential rate can be no less than 65% of what that class's full share is. It can be as low as 65% so long as the commercial, industrial and personal property class's share does not exceed 150% of its full value share. The tax rates can also be the same for all classes (this made it applicable to smaller municipalities with a minimal amount of commercial property.) In addition each municipality can implement a residential exemption. It can be from 0 to 10% of the municipality's average residential parcel's value. Each residential parcel receives the same exemption. The DOR reviews the distribution as part of the certifying process.

In Boston the implementation of classification occurred in FY 1983. The favorable impact for residential is that it constitutes 46% of the value but pays only 30% of the tax levy. Without classification the residential class would pay the 46%. The difference is about \$750 per parcel!

Table 7: VALUE OF REAL ESTATE AND TAX SHARE BY CLASS -- FY 1983

CLASS ·	ASSESSED VALUE	PERCENT OF TOTAL VALUE	SHARE OF	TAX BILL PER CENT
RESIDENTIAL & LAND COMMERCIAL INDUSTRIAL PERSONAL PROPERTY	\$ 5.7 BIL 4.0 .7 1.8	.46 .33 .06 .15	\$ 114 MIL 164 29 67	.30 .44 .08
TOTAL	\$12.2 B		\$ 374 M	

Source: Boston Assessing Dept.

Table 8: IMPACT OF CLASSIFICATION

CLASS	SHARE OF FY 1983	TAX BURDEN FY 1983
RESIDENTIAL COMMERCIAL INDUSTRIAL PERSONAL PROPERTY	.38 .38 .11 .14	.30 .44 .08

SOURCE: Boston Assessing Dept.

Needless to mention, Classification went a long way towards making revaluation acceptable i.e. along with Proposition 2 1/2's lowering of the tax rate it reduced the residential sector's taxes. Property owners focused their attention on a lower tax bill and not the issue at hand -- whether the assessment was accurate.

In all cases, the law requires full and fair valuation in order for a municipality to implement classification.

Chapter 797 was pervasive tax reform encompassing more than a workable law to implement classification. It provided relief to Boston relative to the Tregor v Board of Assessors (Mass, 387 NE 2nd (1979)) and it improved assessing standards and performance throughout the state. These three aspects of the law are explained below.

Tax Abatements: Tregor becomes a household word

One provision in the Classification law held municipalities harmless for inequitable assessments in excess of the municipality's average. This provided relief for two years, until revaluation was completed. It was immediatly challenged in court under the Kenniston v. Board of Assessors (Mass, 407 NE 2nd 1275 (1980)). The SJC decision upheld 797's provision to award abatements at the municipal average level, but only for abatement application for FY1980 to FY1983. The massive backlog of abatements, estimated at about \$150 million, would still be decided on Tregor's most favored class ruling. Even with this restriction it was estimated that Boston would be 'saved' \$50 million each year. The court noted that the proper remedy was revaluation and not abatements. They agreed to the average assessment only as a sympathetic response to municipalities' financial problems. underscore their belief that this was a temporary measure the provision would expire at the end of the 1983 fiscal year, the time when revaluation was scheduled for completion.

Chapter 797 Also Established Assessing Standards

Chapter 797 had a major impact on improving assessing standards. DOR may establish minimum standards of performance, require certain record keeping, issue guides for rules and give binding opinions on taxation questions. The law requires local assessors to meet certain minimum qualifications. DOR can require them to take special training. This appears to be harmless, although it was hotly contested at the time. Biennial certification (changed to triennial in 1983) by DOR is required to implement classification and certification requires assessments to be at full and fair values. (There is proposed legislation to further weaken this to every five years.)

By providing uniformity and standards the law was establishing consistent procedures for localities. This, in turn, provided for objective practices and insulation from local political decisions. The result should be a more professional assessment environment.

Proposition 2 1/2: a tealess revolution

Proposition 2 1/2 was a voter initiative referendum, overwhelmingly passed in 1980. It is best known for its limit of the property tax levy to 2 1/2% of the value of a municipality's taxable property. It had several interesting effects.

As previously mentioned Classification and Prop 2 1/2 mitigated 100%'s potential tax shifts from the commercial to the residential. In Boston the implementation of a 15% tax cut and a shift of taxes lowered the majority of residential tax bills. This resulted in general acceptance of the revaluation process, a complacent public and consequently little disruption to the existing political process.

Classification and Prop 2 1/2 gives the public an expectation of what their tax should be. Most people know the value of their home. Further they know that Prop 2 1/2 limits the tax to 2 1/2% of the citywide value. (Actually, this is generally misunderstood as 2 1/2% of each individual property, which in theory it should be if all properties are at full and fair value). And they know that classification shifts some of that tax burden to the commercial and industrial classes. A property owner can answer the question of how much tax they should pay. This breakthrough in public understanding introduces public accountability in the tax system.

Technology: R2D2 to the rescue

Another event has slowly and quietly occurred. It is the adaptation of computer technology to assessing practices and advances in appraisal theories. Computers allow for methodical assimulation of vastquantities of information. Values can be readily updated. Appraisal, as a science, is easing out the acceptance of subjectivity of prior assessing in favor of objective standards developed through sophisticated appraising techniques. They offer the tools to implement an affordable system which is accurate and up to date.

The Context--A New Tax Environment

The reoccuring theme of these changes is that the political and legal constraints on tax administration are much improved. The City has equalized values, the political costs of revaluation are history, reasonable laws and standards are being enforced, new laws have been passed, technology has introduced efficiency and accuracy. This structure allows for an efficient, professional administration of the tax.

Appendix B: Explanation and Critique of the Trending Analysis Used to Increase the Fiscal Year 1984 Values

This appendix explains the fiscal impact of trending for Boston's budget, what trending is and what some problems are with trending analysis. Assessment to sales ratios for the year preceding revaluation, year of revaluation and the year immediately following demonstrate that assessments were inaccurate within one year of revaluation. The manual system, such as was used for revaluation did not retain full and fair assessments.

Values Increase, Tax Rates Decrease: 2 1/2% at Last

A combination of increasing the assessments and decreasing the tax rates brought Boston's tax levy in compliance with Propostion 2 1/2's tax cap. The total value of taxable property increased from the FY 1983 level of \$12.5 Billion to \$13.3 Billion in FY 1984. Of the \$800 million increase about one half was a result of new construction and substantial rehabilitation being added to the tax base for the first time. The other half was an increase of existing valuation to maintain parity with the increase in real estate values.

An 11% decrease in the tax rates, resulting in a \$333 million tax levy, completed the third and final year of Propostion 2 1/2's mandated tax rate reductions. Any future tax rate reductions will be due to a change in valuation.

Trending Analysis Uniformly Increases Values

To increase the existing values the Assessing Dept. used a method known as trending. It's intent is to maintain assessments at market levels. DOR accepts trending for the years between their required tri-annual reassessment.

In brief, trending increases or decreases each property's assessment. Properties are aggregated according to class and neighborhood. The percentage change is based on the principal indicators of value which were previously used to estimate the current assessed value. The predominate indicator for residential property was sales, as used in the market approach. Income, expense and interest rates, as used in the capitalization of income approach, besides sales were the predominant indicators for all other classes.

The arms-length sales for the calender year 1982 were the basis for determining the increase in market value. Arms-length means that the property was sold by a willing seller to a willing buyer and did not involve any unique factors influencing the price, such as a sale between relatives, a foreclosure, government sale, zoning change among other disqualifications. Each arms-length sale was compared to their assessed value. This produced a sales to assessment ratio (typically an assessment to sales ratio is calculated.) Then the median ratio for each class of property within each neighborhood was calculated. The ratio is then adjusted by several factors. Knowledge of the

market, acknowledgement of assessment's accuracy, time lag adjustments to sales were considered along with what was designated as the key factor, the reduction in mortgage rates. This resulting rate measures the overall rate of increase (or decrease) in the market value for each class in each neighborhood. Once the respective rates are determined they are applied to all properties in their aggregate class. In summation, this applies the average market increase to all properties' assessed values with the intention of maintaining parity with the market.

This analysis is successful only if the assessed value represented 100%, or full value in FY 1983. To the extent the assessment was below 100% the ratio will be greater than the actual market increase. There is no statistical means to determine what proportion of the ratio increase is based on increased sales prices and what proportion is based on under assessed properties.

Relative to a specific example trending works as follows. All single family homes in the South End, Back Bay, Beacon Hill, Waterfront, Fenway, Chinatown and North End were considered one aggregate. There were 26 arms length sales with a median sales to assessment ratio of 1.082, indicating that within the range of the 26 sales, the one with a 1.082 ratio was in the middle (as compared to the mean or average ratio.) Considering declining mortgage rates and other market factors the final trending factor for single family homes in this neighborhood was 1.09%. That rate was uniformily applied to each single family home's assessed value. Consider, for example, two houses both assessed at \$80,000 and only one which sold in July, 1982, for \$100,000. Both assessmnets were increased by .09% or \$7200. The new assessed value is \$87,200.

Some specific details on the residential trending are as follows. Single, two and three family houses were divdied into 14 neighborhood districts, similar to the BRA's planning districts. Condominiums were divided into 23 districts. All four of these categories used the sales data as the principal indicator of value.

Table 9: THE RANGE OF TRENDING RATES FOR RESIDENTIAL -- FY 1984

CLASS FACTOR	VALUE TO ASSESSMENT RATIO	FINAL TRENDING
R1	.987-1.146	.0310
R2	1.000-1.215	.0310
R3	.983-1.254	.0610
Condo	.962-1.250	006

Source: Assessing Dept.

Some specifics on commercial are as follows. The commercial category included income producing residential property in excess of 3 units, residential/commercial, commercial and industrial properties. Although the income producing residential properties are included in the commercial category they are taxed at the residential rate. Their inclusion is because the principal indicator of value is the income,

expenses and interest rates.

There were two districts: the downtown one includes downtown, Back Bay, Beacon Hill, Waterfront, North End, Chinatown and Fenway and the other is the rest of Boston.

The principle behind the trending was the same as for the residential. It measured the rate of change in the market, as determined on certain properties, and applied that rate to all properties within the same aggregate. The principal indicators of value were the 1982 sales and the changes in factors contributing to the capitalization of income approach, which were interest rates, income, expenses. Income and expenses both rose with no appreciable net change. Interest rates, however, decreased which correspondingly changes the capitalization rate and increases property values. The Assessing Dept. used what they believed to be a conservative capitalization rate. Coupled with the sales to assessment ratio the final trending factors were as follows.

Table 10: TRENDING RATES FOR CLASSES OF PROPERTY--FY 1984

CLASS		DOWNTOWN DECEMBED AND STRENDING	A RATIO	OTHER DIS MEDIAN S & TRENDING	'A RATIO
RESIDENTIAL	*	1.10	1.09	.92	1.04
Commercial		1.12	1.09	1.06	1.05
Industrial		1.12	1.09	1.25	1.09

^{*} Includes R4, Apartments and Residential-Commercial

Source: Assessing Dept.

Problems with Trending Analysis

There are two problematic factors with the trending analysis. One is that there was a small number of arms-length transactions in several wards. Because of this the original neighborhood districts could not be used. There should be at least 20 sales and preferrably 30 to be statistically significant. It appears that some neighborhoods were created as a result of the sample size. For example, the intown one consists of Fenway and Beacon Hill, Back Bay, North End, South End, Chinatown and the Waterfront. There really is no happy solution, either the statistical review's significance is compromised or neighborhoods are drawn within which there are different market trends. It is important to be cognizant of this limitation.

The other problem is the use of the median as the only statistical measure. The median is the middle value when the values are arranged in order of their magnitude. The median indicates the tendency towards the center. It does not indicate the range in values, or simply the difference between the highest and lowest ratios. Nor does the median in and of itself explain how uniform the values are, i.e. whether the ratios are consistently similar to the median or are

spread out within the range of values or are otherwise dispersed within the range. Subsequently, the trending analysis did not indicate whether properties were particularly over or underassessed.

The typical measure of assessment quality uniformity is the Coefficient of Dispersion (COD) from the median. It measures how uniform the individual assessments are to the market value. DOR requires CODs to be 10% or less as part of the certification process (although not as part of the trending).

In conjunction with this project the CODs were calculated by ward, for the single family properties, for the year following revaluation. This information is on Table 2, page 11. The median indicates that the existing assessed values were lower than the prices of the 1982 arms length sales. The difference can be attributable to both market influences and under assessment. The CODs, when at 10% or less says that most ratios were fairly consistent with the median.

CODs for the year of revaluation are compared to the year following revaluation, again refer to Table 2. CODs in excess of 10% indicate a lack of uniformity i.e. many assessments were very different from the sales prices. By then comparing the year following to the year preceding revaluation (Table 3 on page 12) one sees that CODs are beginning to approach the same unacceptable level which required revaluation!

As a point of information the CODs were not calculated for other classes of housing and therefore equity between classes, i.e. whether single families are under or over assessed relative to multi-family or commercial buildings was not measured.

(One cautionary comment on the year of revaluation is necessary. OPE used 1981 sales, as the process calls for, as a factor in estimating the values. Prior to a municipality submitting information to DOR they know that one of DOR's statistical tests is the COD on single family homes. It cannot exceed 10%. Therefore, they know, before turning over information to DOR, to what extent the assessments must match the 1981 sales i.e. they can 'pass the test' by matching the assessments on the 1981 sold properties with the sales price. This is called 'sales chasing'. Analysts of the revaluation process believe that the City did do this.)

This comparison of the CODs identifies two points. If the 1981 sales were used to fit the value, then it is doubtful that the system which was used is accurate. Properties which had not sold had less information available upon which to determine the assessment and therefore would lack accuracy. Also, considering the tremendous disparity with the 1982 CODs, trending is an unacceptable process, when applied to the manual system. This research's conclusion is that a CAMA system is the only way to achieve and maintain equitable values and support the use of trending analysis.

APPENDIX C: Proposition 2 1/2 Regulations

Proposition 2 1/2 Changes Our Lives

Whether it was tax payer stinginess, public rage over the legislature's inaction on tax matters, voter irritation with government spending, or all of the above, voters approved Proposition 2 1/2 by a 3-2 margin in November, 1980. In marked a dramatic turning point in the State's municipal finance.

Propostion 2 1/2 was an initiative petetion and as such it required action by the State legislature to become law. They subsequently passed Chapter 580 of the acts of 1980. This was amended by the legislature in 1981 as Chapter 782. Propostion 2 1/2 can continue to be amended.

It is important for the City's next administration to understand how Prop 2 1/2 functions in order to maximize revenues within its constraints. This appendix explains the different provisions which affect Boston's tax levy. As a cumulative result, and as a summary to the Proposition 2 1/2 discussion, the City should expect to capture tax levy increases based on growth and increasing property values. However, without voter approval the City of Boston will be taxing at less the 2 1/2% by the forthcoming fiscal year.

Proposition 2 1/2 Regulations

The reader deserves caution before preceeding: the law has become extremely complex.

Proposition 2 1/2's Golden Rule is: the tax levy can not exceed 2 1/2% of the full and fair market value of the municipality's taxable property [Chapter 792, Section 21c (b)]. True to Prop 2 1/2 there is an exception to this; a municipality's debt service can be excluded from the limit thereby allowing the total levy to exceed the 2 1/2% level [Chapter 782, Section 21c (a)]. (As a point of clarification an original provision of the law allowed voters to override the 2 1/2% level. The 1981 amendment disallowed this override.)

Some other generalizations of Propostion 2 1/2 frame the parameters of the law. The regulations require tax increases to be tied, as one would expect, to the growth in the tax base. The levy's increase is limited, however, to not only the Golden Rule's 2 1/2% limit, but also to the prior year's tax levy. The 1981 amendment, Chapter 782, introducted flexibility for municipalities to better adapt the tax to their specific needs. They allow, on the one hand, for specific exclusions which enable a municipality to increase taxes. These require voter approval. But, they also protect the spirit of Prop 2 1/2 by dismissing the prior opportunity to override the 2 1/2% levy restriction. The regulations also respond to municipalities unique situations. Through voter approval some flexibility is available.

Specific regulation, which could possibly affect Boston, are as

follows:

1. Increases to the tax levy:
The tax levy can increase or decrease through one or both of the following conditions.

o valuation of existing properties can increase to maintain parity with market appreciation, refered to in this paper as 'valuation increase'.

o valuation can be added to the tax base through new construction, substantial rehabilitation or a change in tax exempt status, referred to in this paper as 'growth increase'.

In more detail, they are as follows:

a) 'Valuation Increase'

'Valuation increase' is the amount of value which assessments are increased between fiscal years. For example, the 'valuation increase' between FY 1983 and FY 1984 was approximately \$800 million or a citywide increase of approximately 8%. This increase was determined by the Assessing Dept. through the use of trending analysis. (Refer to Appendix B). Every third year, when a municipality's values must be recertified by the DOR, the values may change. In interim years the values may change through the trending analysis. In the case of the 'valuation increase' the new levy is determined by multiplying the prior year's levy by 102.5%. (Mathematically this is simply increaing the levy by 2 1/2%). The formula for valuation increase is FY 1984 X 102.5% = FY 1985 levy, so long as this is no more than 2 1/2% of the total taxable valuation.

Remember the Golden Rule: the new levy can be no more than 2 1/2% of the total value. Therefore, if 'valuation' and 'growth' did not increase by at least 2 1/2% then the levy can not be increased the full 102.5%. If, in considering the other extreme, the 'valuation increase' is more than 2 1/2%, the municipality must forgo the tax levy increase above the 2.5% level. There is an exception to the normal procedures. It allows a municipality to take advantage of the value in excess of the 2 1/2 level. This is a voter approval to increase the prior year's levy by more than 2 1/2% (while still remaining within the Golden Rule).

b) 'Growth Increase'

'Growth increase', is the addition of new or rehabilitated parcels' value. For example between FY 1983 and FY 1984 approximately \$345 million was added to the tax base. Any demolished or substantially deteriorated parcels would be deleted from the tax base. Change in tax exemption status either adds or deletes value. Sub-divisions and condo conversions which are transferred to individual parcels are included in this category.

The tax levy increase, as a result of the 'growth increase', is

determined by the prior year's tax rate. (One might expect, in contrast to the actual procedure, that the increased assessments would simply be added to the tax base and thereby incorporated into the new levy. However, like the increase due to market valuation, the levy is tied to the prior year.) The procedure is to 1) determine the amount of value in the commercial/industrial and personal property class and multiply it by the prior year's commercial rate, 2) determine the amount of residential increase and multiply that by the prior year's residential rate and 3) add the two amounts together. The sum is the new tax levy allowable due to growth.

The formula for the allowable tax levy increase is:

Prior FY's
Tax Levy X 102.5 +

- = Next Year's Tax Levy (so long as the sum does not exceed 2 1/2% of the value of all taxable property
- 2. Increasing the Levy Growth by More Than 2 1/2%

As previously mentioned the 'valuation increase's' levy growth in excess of 2 1/2% is not captured under normal procedures. This section discusses what can be done if the 'valuation increase' does exceed 2 1/2%.

Given voter approval the levy can be increased by more than 102 1/2 % of the prior year's levy but only to the limit of the Golden Rule, i.e. the levy can not exceed 2 1/2 % of the full and fair market value. This would allow the tax levy to be at the full 2 1/2% level. If not approved the effective tax rate will fall below the 2 1/2% level.

The process to secure approval is initiated by a 2/3s vote of the City Council calling for the measure to be voted on in an upcoming election or to call for an election. One or both questions can be asked at such an election. One would request increasing the levy from 2 1/2 % up to 5%. This would require a majority of the voters approving. The other would request increasing the levy more than 5%. This would require that 2/3 of the voters approve the referendum.

The fiscal implications are dependent upon whether the political environment would behoove the Council to call for an election and if the voters would approve such an override. Recent voter referendums throughout the United States have actually favored tax increases.

A worrisome implication from the inability to capture the full 2 1/2% under normal procedures is that there is less demand to maintain assessments at their market values—at least when the assessment increase exceeds any revenue benefits. The mostlikely scenerio is that the residential values would not be maintained at 100%. It might

please property owners (read voters) but it would be the new beginning of inequitable assessments.

3. Excluding Debt Obligations from the Golden Rule's 2 1/2% Limit:

The interest a municipality pays on bonds can be excluded from the Golden Rule's 2 1/2 levy limits given voter approval. The levy limit is determined, in Boston's FY85 case, by adding the growth and valuation increases to the FY 1984's \$333 million levy. Then, given voter approval, interest payments on certain bonding is added to the levy. (Tax anticipation notes are not included.) The spirit behind this exclusion is to allow for needed capital expansion such as construction of a school. Enactment of the exclusion requires the majority of voter approval following the City Council's 2/3 vote to call an election. The question before the voters are to exclude either pre-2 1/2 debt and/or, on an issue to issue basis, the post 2/1/2 debt.

Due to a quirk in calculating the allowable levy it so happens that to exclude the pre-2 1/2% debt results in a lowered tax levy! This saves the city from asking one of the questions.

To estimate the amount of money which Boston could increase their levy it is necessary to assume certain bonding levels and rates of interest. These assumptions are taken from Katharine L. Bradbury and John Yinger's Adjusting to the 1980s': Boston's Fiscal Situation in the Years Ahead, 1983. In their report they project the following bonding: \$20 million in FY 1984; \$30 million in FY 1985 and \$40 million in FY 1986. The authors believe this to be well below baseline borrowing. They assume 20 year serial bonds at 9 % interest. Therefore, in FY 1984 the interest is \$1.8 million, in FY 1985 the interest is \$4.4 million and in FY 1986 the interest is \$7.8 million. This is the amount which could be added to the levy in each respective year.

In practical terms this may be a difficult exclusion upon which to gain voter approval. Newton, when faced with the need to provide for a new library, voted 3-2 against such an exclusion in November, 1983. There was considerable sentiment against 'violating Prop 2 1/2'. There was poor public understanding that this provision actually was Prop 2 1/2's acceptable procedure to adapt the law to a municipality's unique needs.

4. State Advances of State Aid to Pay Debt Service

In the event a municipality can not meet payments incurred through debt service they can borrow that amount of money from the State as an advance on their State aid. This does not forgo any financial responsibility on the part of the municipality; it merely postpones the expense.

The process works by the municipality certifing to the DOR Commissioner that they are unable to pay principal or interest due on

bonds, notes or certificates of indebtedness. To the extent there are funds payable to the municipality, as tallied on the Cherry Sheet, they can be distributed in advance. This provision does not pledge the Commonwealth to a locality's payment.

5. Other Municipal Tax Authorities:

Originally other municipal taxing authorities were restricted to increasing their levy by no more than 2 1/2% of the prior year's levy. Chapter 782 now exempts them from any limitation. This applies to the Water and Sewer Commission. If the City succeeds in establishing a commission for fire services that too would be in this category. The implication is favorable as it means that general revenue would not have to be used for any bail out of these independent services.

- 6. Limitation on State assessments: Originally any State assessments, such as the MDC or MBTA, was limited to a 4 % increase over the prior year's assessment. Chapter 782 decreased this amount to 2 1/2 % of the prior year's assessment.
- 7. Levy Reduction: The tax levy can be reduced below the 2 1/2% level if approved by voter referenda. The question would be placed on the ballot either through 2/3 vote of the coucil or a voter initiative. Passage would require majority vote.

Revaluation of tax exempt properties was given less priority than the tax paying ones. Accurate assessments and auditing of accounts are important to determine whether certain income producing, tax-exempt properties are paying taxes. There is reason to believe that some tax exempts are incorrectly exempted.

A charitable organization whose property produces income must meet certain requirements to maintain its tax exempt status. The law's interpretation of these regulations are one, that the institution owning the property must be a public charity and two, the property must be used for the charitable purposes of the organization. case of income generation, the law further states that the income cannot be the principle purpose of the use, even if that income is for support of the charity. Rather, the use must be for the purposes for which the institution was incorporated. Charitable organization can use their properties for generating income so long as: the dominant use of the property is for the organization's charitable purpose, no profits are distributed among the members of the corporation, and the income-generating use was necessary for the functioning of that organization. For example, a building used primarily to print literature which is sold, is not exempt, even if the income is distributed to the charitable organization. On the other hand, a parking garage belonging to a hospital was exempt.

Extensive information on this subject is in <u>Institutional Property</u> Tax Exemptions In Massachusetts , The Massachusetts Taxpayers Foundation, Boston, MA 1971.