

MIDTOWN DEVELOPMENT

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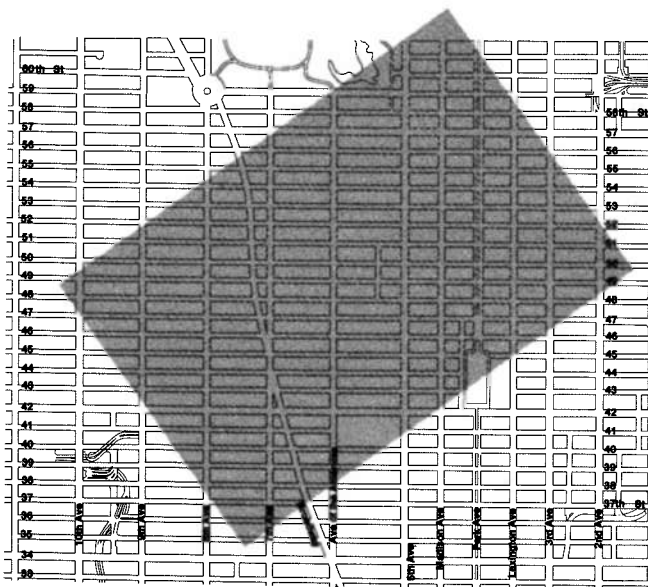
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Cover superimposed on map of Midtown.

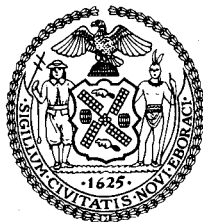
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MIDTOWN DEVELOPMENT

JUNE 1981

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MIDTOWN DEVELOPMENT

**A report of the
Department of City Planning**



Herbert Sturz, Chairman
Alanne Baerson, Executive Director

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A Message From The Chairman

Last July the Department of City Planning released the Midtown Development Project Draft Report for public review and comment. The report was a major undertaking initiated almost a year earlier by my predecessor, Deputy Mayor Bob Wagner, Jr. It embodied proposals for public policy, programs and regulations to deal with the development needs, problems and potential of Midtown Manhattan.

While there had been extensive public consultation from the beginning of the project, it was my belief that a draft report that served to focus public review and comment would be of great value to us.

That belief has been justified. A great deal of time and effort has been accorded the report by community boards, developers, architects and other concerned citizens. The response has been serious, responsible and constructive. It has helped us shape the proposals in this report. While we were encouraged by the broad support the draft report engendered, we profited at least as much from the criticism it received.

There was widespread acceptance of the basic development strategy—to ease the pressure on the crowded, valuable East Side office core by helping to shift new development west and south. The proposal to give this strategy a planning framework by identifying growth, stabilization and preservation areas in Midtown was particularly well received.

But there was criticism that the report did not adequately spell out how to implement this strategy. The specific measures were neither sufficient to stabilize the East Side nor to promote growth on the West Side. We were urged to make our recommendations simpler, more incisive and bolder.

The reaction to the discussion draft reflects a shared view of Midtown's importance to the economy and to the tax base of the entire City, a common concern that many of the ground rules to guide development in Midtown are not working well, and an optimistic sense that we can do better.

This report concentrates on the development strategy with recommendations to implement that strategy. The principal features include the following:

- A strengthened framework with the three types of strategy areas—growth, stabilization and preservation—providing an explicit base for planning and zoning recommendations;
- The proposed creation of a New York City Economic Development Corporation to provide assistance in site assemblage, by condemnation if necessary;

- An incentive package for the West Side with tax exemption, public project, public service and zoning elements;
- A midblock zoning strategy that will help stabilize the East Side while providing growth incentives for the West Side; and that will help keep the impact of zoning lot mergers within predictable and acceptable limits.
- A theatre district program to implement our strategy of preserving existing theatres;
- A specific floor area ratio (FAR) differential between East and West Side which includes mapping the avenue frontages in the West Side growth area for FAR 18 as-of-right, subject to a "sunset" provision;
- A sharp cut-back in the bonusable amenities system with more planning elements, such as widened sidewalks, mandated without bonus;
- A simplified system of as-of-right bulk regulations.

We believe that these actions will help carry out our proposed development strategy while achieving our goal of zoning that is predictable and as-of-right.

We recognize that not all our recommendations will please everyone. We have tried to balance two concerns: that developers are entitled to a fair return on their investments; and that it is in the public interest that there be adequate light and air, and streets that are not overly congested. We believe that it is a role of government to attempt to reconcile these sometimes competing interests.

The end product of the Midtown Development Project is not a report. Our objective is to implement the changes in public policies, programs and regulations that will help make a better Midtown in the interest of a stronger City.

We will be keenly interested in the reaction to this final report. My fellow members of the Planning Commission and I will carefully consider any further comments and recommendations that may be made in the next month or so as we prepare the zoning text and complete the work necessary for processing our proposals through ULURP, and in the subsequent public hearings.

While the major work of producing this report and the entire responsibility for its recommendations and conclusions are those of the Department of City Planning, the project would not have been possible without the expert assistance of our consultants. In particular we are grateful for the brilliant analysis and creative pro-

posals of our bulk consultants, Alan Schwartzman of Davis, Brody and his associates, Michael Kwartler and Thomas Jones of Kwartler/Jones; to Abram Barkan and his colleagues at James Felt Realty Services for always being available with wise and informed counsel on real estate trends and economics; and to William H. (Holly) Whyte for his perceptive and common sense analysis of public spaces.

I also wish to express my gratitude on behalf of the Department and the City to five foundations which generously supplemented our own limited budget: Robert Sterling Clark Foundation, Inc.; Fund for the City of New York; The J. M. Kaplan Fund; The Lucy Wortham James Memorial and the Frederick J. Whiton Fund of the New York Community Trust; and the Rockefeller Brothers Fund.



Herbert Sturz
June 1981

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SUMMARY OF Recommendations

DEVELOPMENT STRATEGY

We propose to divide commercial Midtown into three types of planning areas—*growth*, *stabilization* and *preservation*—to serve as a framework for public policies and zoning regulations.

The major areas proposed for Midtown *growth* are the West Side from Avenue of the Americas to Eighth Avenue, 40th to 60th Streets; the Fifth and Sixth Avenue corridors south of 40th Street to 34th Street; 34th Street between Fifth and Eighth; and the Penn Station-Herald Square area.

The East Side office core area—roughly 40th to 60th Streets between Third Avenue and Avenue of the Americas—is the *stabilization* area. Policies are aimed at protecting this area by relieving development pressures; guiding the change and development that will occur so that it respects the existing character, values and ambience; and easing congestion and overcrowding.

We also seek *preservation* of the existing theatres which collectively make the Broadway theatre district a major cultural and economic asset of the City; and of the midblock area between Fifth Avenue and Avenue of the Americas in the vicinity of the Museum of Modern Art whose quality town houses, low-scale buildings and streetfront shops and restaurants provide a unique and irreplaceable contribution to the East Side office area.

Special Incentives

We are proposing a number of special incentives to encourage and facilitate development of the growth areas.

Tax incentives

An as-of-right 50 percent tax exemption, declining five percent annually, for pioneering new commercial buildings in selected growth areas of Midtown designated by the Industrial and Commercial Incentive Board;

Extension of the 421-a program in the high-density commercial growth areas of Midtown for mixed commercial-residential buildings only;

Exclusion of all tax incentive programs from the East Side core area, and of residential benefits (J-51 conversions and 421-a new construction) from the growth areas except Eighth Avenue.

"Turn-around" Projects

Three publicly assisted projects are of special importance in upgrading and helping to turn around the West Side to make it more competitive with the East Side. They are the 42nd Street Development Project, for which the City and UDC have recently issued requests for development proposals; the Portman Hotel, which has now been approved for federal assistance under the Urban Development Action Grant (UDAG) program, and which will front on the proposed Broadway Plaza; and the Special Theatre District program we are proposing to preserve, reconstruct or renovate existing theatres.

Site Assemblage and Development Assistance

We propose that a New York City Economic Development Corporation be established with powers to assist private-sector development of projects authorized by the Board of Estimate—assembling sites by condemnation if necessary, coordinating and expediting related public improvements, and cutting red-tape. State legislation will be sought in the next session.

Zoning Incentives

We propose higher densities (FAR's) on the West Side than on the East Side, increasing the major avenue frontages in the West Side growth area to FAR 18 as-of-right, subject to a "sunset" review; we also propose zoning regulations that should return zoning to a predictable, largely as-of-right basis from the uncertain, costly and time-consuming negotiated zoning of recent years.

Mixed Buildings and Housing

We propose to zone all growth areas "CR" to encourage mixed commercial and residential buildings, which some builders view as a safer bet initially for the West Side market; we also are studying revision of the special Clinton District in consultation with the community; and we intend to look into the feasibility of a new kind of high-density residential district for the housing market that is essentially Midtown-oriented.

Public Investments and Services

More than three-quarters of a billion dollars of public projects are now in construction or scheduled to go ahead on the West Side. This considerable public investment in major capital projects, the important service projects that are starting to improve conditions in the area and the "turn around" projects

should significantly upgrade the West Side and provide a foundation for substantial private development.

In the East Side stabilization area, the emphasis of public programs and projects is on relieving congestion and improving pedestrian circulation and bus travel.

Zoning

Density (FAR) limits

We propose to change the generally uniform FAR 15-18 limits that now blanket Midtown to a more selective pattern based on the development strategy. The avenue frontages in the stabilization area will remain FAR 15, but the midblocks would be reduced to FAR 12. In the West Side growth area the principal avenue frontages (Sixth, Seventh and Broadway) would be increased to a base of FAR 18 (subject to a sunset clause) with the midblocks remaining at FAR 15. These changes not only should provide a clear distinction between the East and West Sides, but should help retain New York City's traditional development pattern of higher buildings on the avenues and lower ones on the sidestreets.

The Fifth Avenue, Sixth Avenue and 34th Street growth corridors will be increased 50 percent, from FAR 10 to FAR 15. No change is now proposed for Eighth Avenue. The Museum midblock preservation area will be reduced to FAR 8 from FAR 10.

Mandated Planning and Urban Design Controls

Six important planning and urban design features are proposed to be mandated for new development without bonuses.

On specified avenues and streets, the base of new buildings must be within ten feet of the lot line to maintain an existing strong *street wall*; and street level *retail continuity* must be maintained. These two planning requirements are intended to protect the character and vitality of Midtown's major avenues and cross-streets.

Subway stairs adjacent to the site of a new development must be relocated from the street to within the development site.

Curb cuts for vehicles are prohibited on avenues and wide cross streets.

All new developments must *alleviate sidewalk congestion* by a choice or combination of such measures as widening sidewalks, providing streetfront or corner arcades, corner cuts or through-block passageways.

In three mapped areas in the long blocks west of

Sixth Avenue where there are existing networks of *through block pedestrian passageways*, new developments with the opportunity to continue these useful networks must do so.

Bonusable Amenities

The number of bonusable amenities has been reduced. For the most part so has the amount of bonus.

Only three types of amenities are bonused throughout Midtown: *urban plazas*, *urban parks* and *special subway station connections*.

Urban plazas, which may be open or glassed over, can generate a maximum FAR bonus of one. They can be built as-of-right but must conform to prescribed standards.

A non-contiguous *urban park* may transfer its development rights to a receiving site in the same ownership. The urban park must be maintained by the developer. A special permit is required. Bonus may not exceed 20 percent of site's base FAR.

A federally funded study just being started is expected to develop standards, criteria and cost estimates for *superior subway station connections*. Until this study is completed, a bonus will be available by special permit. A superior connection that meets Transit Authority and City Planning standards can generate a bonus up to 20 percent of the site's base FAR.

The only other bonusable amenities proposed are limited to the Theatre District.

To help *preserve existing theatres* whose demolition we propose to restrict, we recommend that adjacent development sites can receive a bonus up to 20 percent of the site's FAR either from transferring the theatres' unused development rights or from their rehabilitation, reconstruction and where necessary reconversion back to legitimate theatre use.

The bonus for building *new theatres* is continued, but with added requirements.

Because of the Theatre District's special characteristics, we are also proposing a bonus for a through-block galleria. It would be eligible only if built in designated locations which would be mapped. It could be partially glassed over and would have to meet high standards. It could earn a maximum bonus of FAR one.

Special Districts

Two special districts will be retained with major modifications.

In the *Theatre District*, to achieve the objective of

theatre preservation for which the special bonuses are being proposed, 36 theatres, to be designated in the zoning resolution, could not be demolished without a special permit from the Planning commission.

The special *Fifth Avenue District* will be extended south to 34th Street. Requirements for street-level retail continuity and the special Fifth Avenue use group will be retained. To maintain the Avenue's special character, new buildings must be built to the lot line up to a height of at least 85 feet but not over 125 feet, at which point they must set back at least ten feet. In addition, at least 20 percent of the building up to the 85-foot height must be faced with light colored masonry. The mixed-building bonus that permitted FAR 21.6 and all other special bonuses which tended to encourage excess bulk on the Avenue would be eliminated.

Bulk Regulations

We are proposing a two-tier set of regulations significantly different in operation from those proposed in the draft report, but based on the same daylighting principle. The architect is free to use whichever set of regulations he prefers.

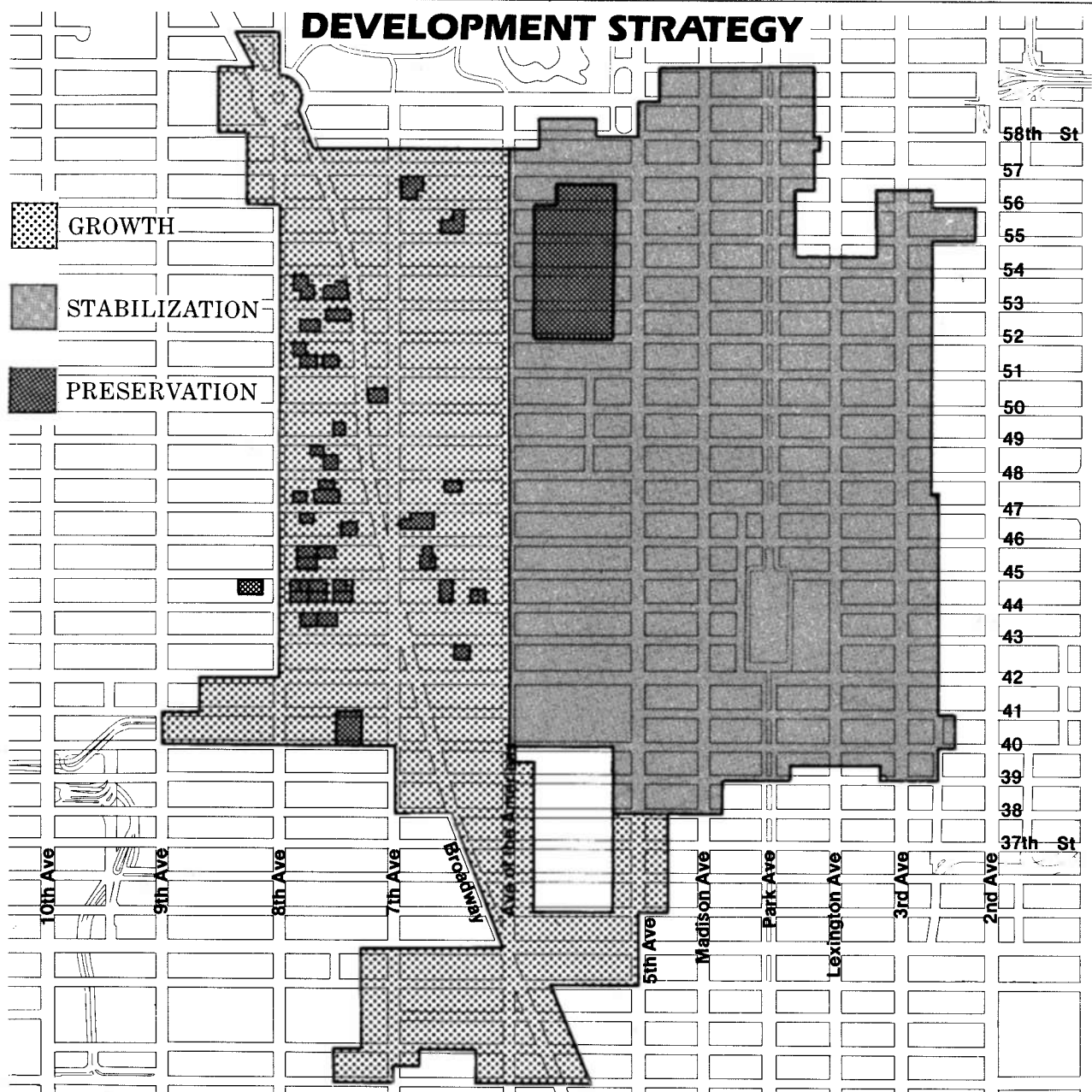
The first or daylight compensation tier is entirely new. It establishes a simple set of trade-off rules to compensate for any portion of a building that extends beyond the daylight curve by retracting an equal or larger portion behind the curve.

The performance tier, which establishes the basic daylight standards of both systems, has been simplified. The Daylight Evaluation (Waldram) Chart which provides an objective measure of how much daylight or sky is blocked by a new building is the basis of the system. To pass, a building must provide an average of 75 percent daylight, as measured on the chart, with no street frontage worse than 66 percent. How this is accomplished is up to the architect and developer.

Both systems must also, of course, adhere to the mandated planning and urban design controls. The two-tier system is intended to give maximum design flexibility while setting reasonable but firm standards to protect the light and openness of public streets and adjacent buildings. It should largely remove any basis for exceptions or variances.

Administration

The proposed zoning regulations are intended to make zoning once again predictable and largely *as-of-right*. With the exception of the limited number of bonusable amenities requiring special permits, its administration should be primarily in the Department of Buildings.



To encourage Midtown to grow west and south, special incentives are proposed. They include an ICIB as-of-right tax exemption for pioneer builders, site assemblage assistance through a new NYC Economic Development Corporation, and projects to turn the area around such as the 42nd Street Development Project, the Portman Hotel and Broadway Plaza.

In addition, to stimulate the West Side and protect and stabilize the East Side office core, we propose higher West Side than East Side zoning densities: West Side avenue frontages upped to FAR 18 as-of-right with midblocks remaining at FAR 15; East Side avenue frontages kept at FAR 15 with midblocks lowered to FAR 12.

To assist appropriate development throughout Midtown, help stabilize land costs and shorten the approval process, we propose direct and predictable as-of-right zoning regulations. Bonusable amenities would be reduced and emphasize midblock open space and subway station connections. Planning features to ease sidewalk congestion and protect Midtown streets would be required without bonus. In the Special Theatre District, to preserve existing theatres we propose to require a special permit for their demolition; to bonus their reconstruction; and to facilitate shifting their air rights to avenue development sites.

THE DEVELOPMENT STRATEGY

Goals

Our prime goal is to encourage the sound growth and development of Midtown. We need to provide room for the expansion of the Midtown commercial core whose office, retail, institutional, hotel and entertainment uses provide the jobs, revenue, and tax base that are a major source of the City's economic strength. To do so, we must ensure that public policies, programs and regulations facilitate and promote that growth, not frustrate it.

At the same time, we must try to safeguard the quality that makes Midtown desirable and vital, and strengthen the conditions that enable it to function well and efficiently. Excess growth can impair the very conditions that inspire it. We want to relieve the further congestion of East Midtown and the pressure on its overtaxed public facilities.

The Basic Strategy

The overall development strategy is to facilitate the expansion of Midtown from the prestigious, densely developed, high-value East Side office core to the west and to the south where there is room to grow, where sites and development opportunities are available, where congestion is less and mass transit more available.

This is the direction development was moving when the last office building boom came to a halt in the early seventies. When building started again at the end of the decade, after the most severe construction hiatus the City has experienced, two factors stood in the way of its resumption outside the core. Pent-up demand and inflation made East Side sites more desirable than ever and capable of commanding undreamed-of-rents; and developers and bankers were leary of the West Side, whose few new buildings had experienced difficulty renting during the office glut of the seventies' recession and whose physical and social environment had since deteriorated. Despite cheaper land, the high fixed costs of construction and money did not permit enough of a rent bargain, everything else being equal, to attract tenants from the East Side.

Area Goals and Strategy

The planning framework proposed to help overcome the obstacles to implementing the development strategy is to divide Midtown into three basic types of areas—stabilization, growth and preservation.

The three-area planning framework has had widespread public acceptance not only in pointing a general direction but in providing an explicit basis for the policies required to meet the needs of the three types of areas.

The Stabilization Area

The stabilization area consists of the East Side office core, Third Avenue to Avenue of the Americas, 40th to 60th Streets. It is an area where public development incentives should no longer be given. They only fuel an overheated private market. Although available sites and development opportunities are becoming limited, the area will continue to attract corporate headquarters and prestigious, top-of-the-line office buildings. There is no intent to stop new development of this type. It remains in the City's interest. But the ground rules should respect the historically developed character that gives the area its great value and makes it so desirable. Buildings should be in scale and not further overburden crowded streets and congested subway stations. Public improvements and services should relieve congestion and improve circulation.

The Growth Areas

The major areas that can accommodate Midtown expansion are: the Theatre District including Broadway, Times Square and Seventh Avenue; Eighth Avenue between 42nd and 57th Streets; Fifth Avenue from 40th to 34th Streets; Sixth Avenue from 42nd to 34th Streets; the 34th Street corridor from Fifth to Eighth Avenue; and the Herald Square-Penn Station area.

Despite advantages of access, openness and availability of sites, development of the proposed growth areas is handicapped because developers believe they cannot produce space at rents sufficiently below East Side rents to attract a market under current conditions. The goal of public policy is to make these areas competitive with the East Side—by targeting available tax and zoning incentives, at least initially; and by concentrating public investment on projects that will directly improve the areas' environment and ability to command higher rents.

The Preservation Areas

In 1968, when the office building boom was peaking

and starting to move west, there was concern that it would wipe out the old theatres. The special theatre district, the first of the special districts, was created by the Planning Commission. It provided an additional floor-area bonus for new office buildings that would include new theatres. This seemed necessary to save the Broadway legitimate theatre, an invaluable economic as well as cultural asset of the City. Since then, the theatre industry has prospered and we have learned that in many ways the old theatres work better than the few new ones built under the theatre district provisions. Their preservation, not replacement, is key to maintaining a vital theatre industry. We think this can be accomplished by providing incentives for preservation and facilitating the transfer of theatre development rights to avenue development sites.

As we suggested in the draft report, the Museum of Modern Art midblock area is likewise worthy of preservation. It is characterized by landmark-quality buildings, well-kept townhouses, low and medium rise apartments and residential hotels, street level shops and restaurants including the 56th Street "restaurant row." Its relief of scale and variety of uses contribute to the well-being and sound functioning of the surrounding densely developed commercial core area. If lost, its unique combination of quality, scale and use is not likely to be replaced.

Since publication of the draft report, several buildings within the area on 54th Street have been given landmark status by the Landmarks Preservation Commission. The area is presently zoned lower, at FAR 10, than the rest of Midtown; and we propose to downzone it further, to FAR 8, to reflect more accurately its built character. But zoning cannot guarantee preservation. We therefore recommend that the Landmarks Preservation Commission consider designating the area an historic district, which would subject the area to preservation controls and permit imposition of a height limitation.

We examined the East Side stabilization area for other possible mid-block preservation areas, but concluded that additional designations were unnecessary as a result of mapping changes recommended for midblocks generally and for two small areas at the northern periphery of the study area specifically. These proposals are set forth in the Zoning Overview chapter of this report.

A Common Goal

In both stabilization and growth areas, a common goal has been the almost unanimous desire for zoning certainty and predictability. Builders as well as civic groups, community boards and critics have expressed a need for clear, workable as-of-right regulations with firm limits. There is widespread agreement that the price paid in land speculation, costly delay, aggravation, suspicion of the public process and oversize buildings as a result of the special permit and exception game that zoning has become in recent years has been too high. The benefits received in public amenities or architectural quality have not been worth it.

Boundaries

Perhaps not surprisingly, a number of questions were raised regarding boundaries of the strategy areas proposed in the draft report.

Determining boundary lines is always difficult. The real world is never as neat as a map. Areas merge into one another. What happens on one side of the street affects the other. Nevertheless, lines have to be drawn.

While the goal of encouraging expansion of Midtown development to the west met with consensus, there was concern expressed about expansion south—principally that it might conflict with protection of industry and jobs in the garment district. We would not have proposed commercial growth on the Fifth and Sixth Avenue frontages if we believed it entailed a threat to the garment district; and now an additional safeguard has been built in with the Commission's commitment to rezone the midblock loft area from 35th to 40th Streets to manufacturing.

There was some trepidation that development of Fifth Avenue as far south as 34th Street might endanger the department stores on this part of the Avenue. Our real estate consultant thought otherwise; he believed new development with retail continuity would strengthen existing stores and reinforce lower Fifth Avenue as a quality shopping street. The Fifth Avenue Association agreed.

On the other hand, several groups urged that we extend the Fifth Avenue growth corridor south to 23rd Street. That might make sense in the future. To this end we want to study the area more closely while seeing what happens north of 34th Street.

We also received conflicting recommendations about extending the study area east of the Third Avenue frontage. Some wanted it extended to encourage commercial growth in the area, which we do not think is

desirable; and some wanted it extended to prevent such growth, which we do not believe is necessary.

Finally, we were urged to extend the growth area west of Eighth Avenue, for housing in Clinton, and not to delay in planning the Convention Center area. There is general agreement that the Special Clinton District needs revision, and a review of the district in collaboration with the local community board has been initiated. There is also agreement that the Convention Center area requires special planning, and a major study of that area by the Department of City Planning and the City Department of Transportation is well along. It is being coordinated by a steering committee whose other members are the Department of Buildings, the Urban Development Corporation and Community Board No. 4.

SPECIAL INCENTIVES

Goals

There is agreement that the shift of Midtown development west, a basic strategy of our proposal, is desirable, logical and probably in the long run inevitable. The long run can, however, be far off. It is in the City's interest to get development rolling as soon as possible.

The concern of the developer and his mortgage lender is that a West Side location will not, currently, command a high enough rent to meet the costs of new development and return a profit. The construction bust of the seventies aborted westward expansion of office construction. Since that time the spread between obtainable East and West side rents has grown more rapidly than the spread between development costs.

The decline in West Side conditions was the main reasons for this. The collapse of the Midtown real estate boom led to the rapid deterioration of the Times Square area. Speculators who had assemblages with deteriorating properties looked for ways to carry those properties until the market recovered. They rented to sex-related uses—then an expanding sector of the economy—and other transient activities able to pay high rents and willing to accept short-term leases. The proliferation of these uses, together with other signs of blight such as the increase in vacant storefronts in parts of the area, reduced the value of existing office space and discouraged new construction.

Recent improvements have started to turn the situation around, but are not yet sufficient to overcome the legacy of the seventies. New development needs help to reduce costs so that it can offer rents low enough to attract a market. But equally important, the improvement of the area must be accelerated so that it becomes increasingly desirable and can command higher rents.

There is no one magic way to do this. It requires a number of actions, large and small, public and private, some new and some to build upon the large number of public programs and projects already under way. Special incentives are needed to help get development started, especially in the West Side growth area. Some can and should lapse after a relatively short time. Once private development successfully takes hold it will induce and sustain continued growth. It is the pioneer who needs help. Following are the special incentives we recommend.

Tax Incentives

In the draft report we recommended targeting tax incentives to growth areas by excluding them from the stabilization area. There was agreement that tax incentives should not be continued in the East Side core area but were needed to encourage development in marginal areas.

The reason is simple economics. Builders will not build nor will bankers advance mortgage loans if the market does not bring in profitable rents. A building in a less desirable area will have to offer a bargain to attract tenants. To induce office construction on the West Side, rents must come in substantially below East Side rents.

But a builder cannot build any more cheaply on the West Side than on the East Side. Construction costs are as high. The cost of money is as high, perhaps higher because of the greater risk. The only difference is the cost of land. Even this is surprisingly little when spread over an FAR 18 building and financed as part of the mortgage loan.

Operating costs are likewise the same, except for taxes. But the tax differential resulting from the lower assessed values on major West Side buildings compared to East Side buildings is not great enough to make up the difference in present market rents. It is clear that more substantial tax benefits are needed to help stimulate a shift in development west.

Targeting tax incentives by exclusion is not, however, a satisfactory way to bring them to bear where they are most needed. We recognized this as did the Real Estate Board which recommended, in its critique of the draft report, that the City seek State legislation that would authorize as-of-right tax exemption in designated development areas. The Real Estate Board espoused a "deep discount" real estate tax exemption—50 percent of new taxes initially exempt with the exemption decreasing by ten percent biannually so that full taxes would be paid after ten years—and a ten year waiver of the six percent commercial occupancy tax on tenants. They estimated that the combination of the two tax incentives could reduce a tenant's gross rent by 15 to 20 percent. Only new buildings erected in designated areas within a comparatively short period of time would be eligible.

The City had reached a similar conclusion. Legislation has been drafted for submission to the State legislature that would authorize the City's Industrial and Commercial Incentive Board (ICIB), which administers the major tax incentive program for commercial construction, to grant tax exemption on an as-of-right basis in specially designated areas. This

proposal is substantially similar to the Real Estate Board's "deep-discount" proposal; it would provide a 50 percent exemption, which would decrease at the rate of five percent a year over the ten-year period during which the tax is brought up to full value. Based on the Real Estate Board's figures, this alone should reduce gross rents in the range of nine percent at a minimum. In combination with proposed density differentials and lower land costs, this would enable new West Side office space to come on the market at about 25 percent less than new East Side space.

The legislation would also authorize ICIB to designate areas which would not be eligible for tax exemption, as well as those where exemption would be considered on a case-by-case basis as at present. ICIB would be mandated to redesignate or submit new designations on a regular, periodic basis.

There are two other tax incentive programs that we proposed for modification in the draft report—J-51 and 421-a. The J-51 program has already been modified by the City Council's recent adoption of an Administration bill which authorizes exclusion of J-51 tax benefits for conversion of commercial buildings to residential use in the high-density commercial area of Midtown. The substantial benefits of the J-51 program for converting older commercial buildings and hotels to housing tends to bias the market and is counterproductive in Midtown.

The 421-a program which offers substantial tax benefits for new multi-family housing can be similarly counterproductive in competing for scarce commercial sites. We therefore recommend that it also be excluded from the high-density commercial area with one important exception. It should continue to be available for mixed buildings which combine substantial commercial use with residential use. It should also continue to be fully available, as is the J-51 program, in the Eighth Avenue corridor.

We are not now, however, recommending the commercial occupancy tax exemption. It would require a change in the City's current financial plan which has been submitted to the Financial Control Board and the Treasury Department. There is also agreement that the occupancy tax needs overall policy review before being altered.

"Turn-Around" Projects

Bringing in pioneering buildings at lower rents with the aid of tax incentives is not enough. If the West Side is to attract the growth that is desired, there must be a public commitment to projects of the scope and nature that can turn the area around enough to sustain a competitive rental market. This does not mean making it a replica of East Midtown. The magic that has made Broadway-Times Square a symbol of New York for a century should not be lost. The City is committed to four special projects which, together, can enhance the area and improve the climate for private investment. They are the 42nd Street Development Project, the Portman Hotel, Broadway Plaza and Theatre District Preservation.

42nd Street Development Project

Perhaps the most significant new City initiative in the area is the commitment that Mayor Koch made last June to redevelop 42nd Street between Times Square and Eighth Avenue. The New York State Urban Development Corporation would join the City, he announced, to help bring to fruition the long needed redevelopment of the area, using public powers of condemnation should that be necessary.

The deterioration of the 42nd Street area, the crossroads of New York, symbolizes the decline of the West Side. The concentration and combination of problems on this block not only exert a depressing influence on a much larger area, but make individual, uncoordinated private development risky. Coordinated redevelopment of the project area is needed to eliminate blight and to induce and protect private investment.

In February, a 67-page "Discussion Document" was produced by the Department of City Planning and the Public Development Corporation, the two agencies acting for the City Administration, and the Urban Development Corporation. Based on the discussion draft proposals, some of which were modified after public reaction, a request for proposals from private developers was issued earlier this month.

The redevelopment area consists of the two blocks facing 42nd Street between Seventh and Eighth Avenues, the Eighth Avenue half of the block immediately to the south (between 41st and 40th Streets), and the small "Crossroads" and "Times Tower" blocks, and the northeast corner of Broadway and 42nd Street. Several options are proposed for each of the sites within the project area. The Broadway-Seventh Avenue intersection is proposed for major office development. The midblock segment will seek the restoration of the existing low-scale theatres, and will serve

as an extension and support of the Broadway legitimate theatre district to the north. And the Eighth Avenue segment contemplates a merchandise or apparel mart, office, hotel or residential use. The western end of the project would relate to the Garment District and the Convention Center area to the south, the Clinton residential district, and the improvement of Eighth Avenue to the north.

In addition the project provides an opportunity for a pedestrian link with the Port Authority Bus Terminal across Eighth Avenue; and for a major renovation of the Times Square subway station, as well as requiring direct connections to the subways from the buildings at the major intersections. A variety of retail uses and restaurants is being sought, particularly along 42nd Street, to make it lively, exciting and attractive, day and night, for a broad range of New Yorkers and tourists.

The City and Urban Development Corporation expect to select developers in the fall based on proposals submitted during the summer. Criteria for selection include the extent to which the proposal carries out the public objectives of the project, its planning and design merits, the financial return to the public sector, the proposal's impact on the project and surrounding areas, and the capacity and commitment of the developer to carry it through. The project plan will be submitted to the Board of Estimate and to the Urban Development Corporation Directors for approval by the end of the year with implementation as a single, integrated plan, under Urban Development Corporation supervision to follow.

Portman Hotel and Broadway Plaza

The 2,000 room first class Portman Hotel planned for the blockfront between 45th and 46th Streets on the west side of Broadway will be the first major hotel on Times Square since the Astor was torn down. To be built at a cost of more than \$290 million with the aid of a \$21.5 million federal urban development action grant (UDAG), the hotel will have a spectacular interior atrium and a new 1,500 seat theatre. Since it was approved by the Board of Estimate in 1978, it has generated considerable controversy because it will replace the Bijou, Morosco and Helen Hayes Theatres as well as the Picadilly Hotel. But it was approved by the City and has been supported by the League of New York Theatres and the Broadway Association because it is seen as a "turn-around" project that will significantly contribute to the upgrading of Times Square.

It was planned to front on Broadway Plaza, a pedestrian plaza that would be created by closing off Broadway for several blocks north of 45th Street. Broadway

Plaza will create a worthy front door and promenade for the theatre district and Times Square at a cost of \$12.5 million provided by the federal Urban Mass Transportation Administration (UMTA), New York State and the City.

Theatre District Preservation

A preservation district is in this instance not only a protector and preserver of a special and valuable heritage of New York, but an integral component of a growth program. As will be explained in the zoning chapter, 36 theatres in the Broadway Theatre District will be protected from demolition. Incentives in the way of floor area bonuses applicable on avenue development sites will be provided to encourage preservation and where necessary restoration and rehabilitation of these theatres.

Expediting Site Assemblage and Development

Both the 42nd Street Development Project and the Portman Hotel come under the Urban Development Corporation umbrella. UDC, an agency of New York State with broad powers, has been used frequently and to good purpose to help plan and manage major development projects by and in the City. We will undoubtedly continue to call on UDC, with which an excellent cooperative working relationship has been established. But UDC has state-wide responsibilities.

We are recommending that the City seek approval in Albany in the next legislative session to establish a New York City Economic Development Corporation, with a Board of Directors appointed by the Mayor. It would be analogous to UDC, with similar broad powers. It could help plan, acquire sites by condemnation if necessary, and cut red tape for projects approved by the Board of Estimate. It would use its powers to help private sector development of projects of special importance to the City.

This is consistent with the emphasis of the Real Estate Board of New York, in its thoughtful and constructive response to our draft report, on the importance of legislation that would authorize the City, or its agent, to help in site assemblage and in expediting the development process by cutting through red tape. With costs increasing at a rate of about one percent a month, the delays that normally characterize the construction process and the public approvals it requires can be very expensive.

Mixed Buildings and Housing

The strong Manhattan housing market is closely related to the growth of the Manhattan CBD (Central Business District) functions. It is the executives, managers, professionals, entrepreneurs, technicians, artists, and entertainers whose desire to live near to where they work and play generates the strong demand for Manhattan apartments.

The strength of this market creates problems and opportunities. A recent example addressed by the Planning Commission in its Loft rezoning proposal was the conversion market. Here the Commission sought a creative balance between increasing the housing supply by recycling loft buildings no longer suitable for manufacturing and commercial use, and preventing the housing market from squeezing out manufacturing activity and jobs that continue to be important to the City's economic and social welfare.

It is important to satisfy this housing market which helps provide the skilled, trained and expert labor force that sustains Midtown activity. It is likewise important to seize the opportunity that this market provides as an incentive to Midtown growth. One step we are taking is to recommend rezoning all of the growth areas as mixed commercial-residential ("CR") districts. The mixed building can provide the developer with a hedge on the West Side, where he is confident of the housing market but less so of the initial commercial market. While mixed buildings may be built in ordinary commercial ("C") districts, the regulations in effect penalize them by reducing the amount of floor area. The "CR" district removes this penalty.

We recognize the importance of addressing the need for new housing opportunities in Manhattan more broadly. The re-examination of the Clinton Special District which we have initiated in consultation with the community will focus on this need. We also intend to give priority to re-examining the regulations governing high-density housing, as we are now doing for the upper West Side with Community Board 7. A prime goal will be to develop a new high-density residential district whose regulations are responsive to the nature of today's market, to the realities of construction needs, and which will lend itself to being mapped and accepted in new as well as existing residential areas.

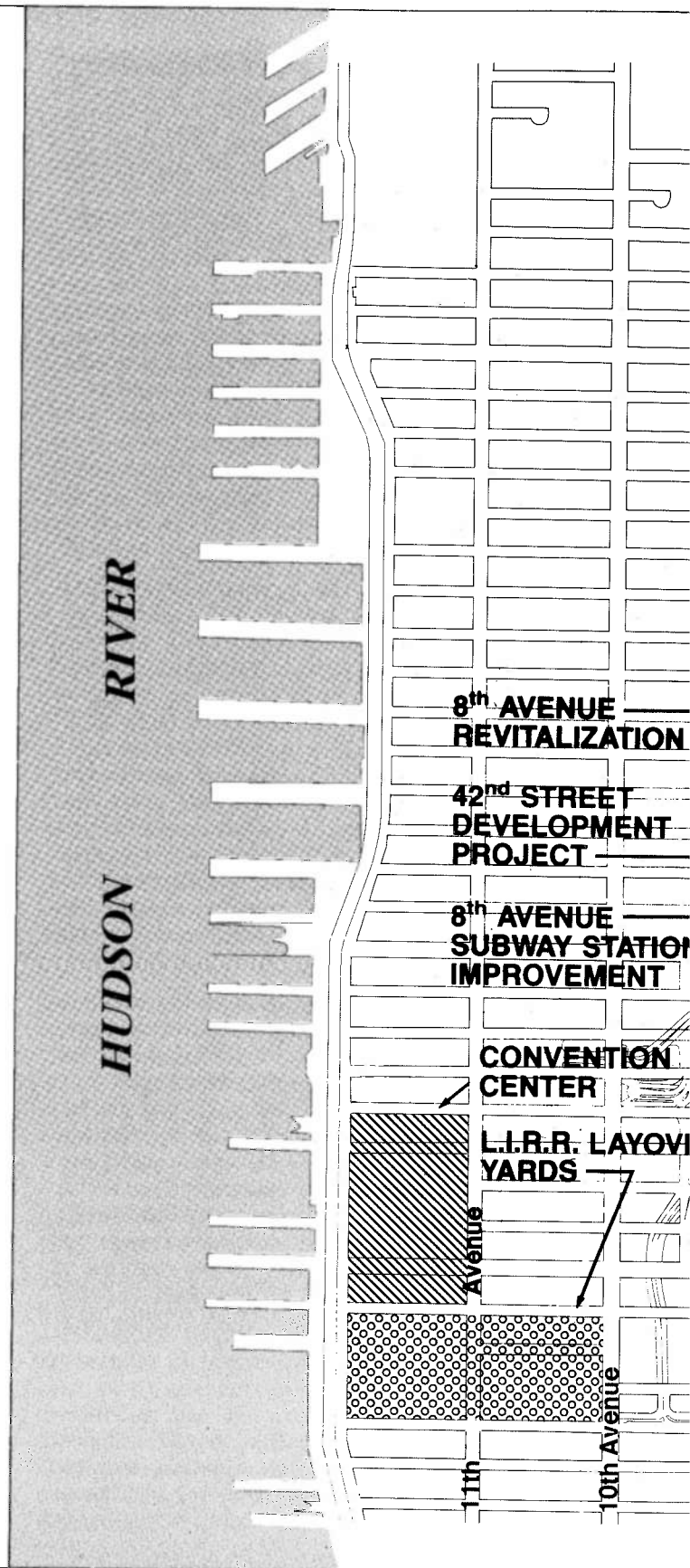
Zoning Incentives

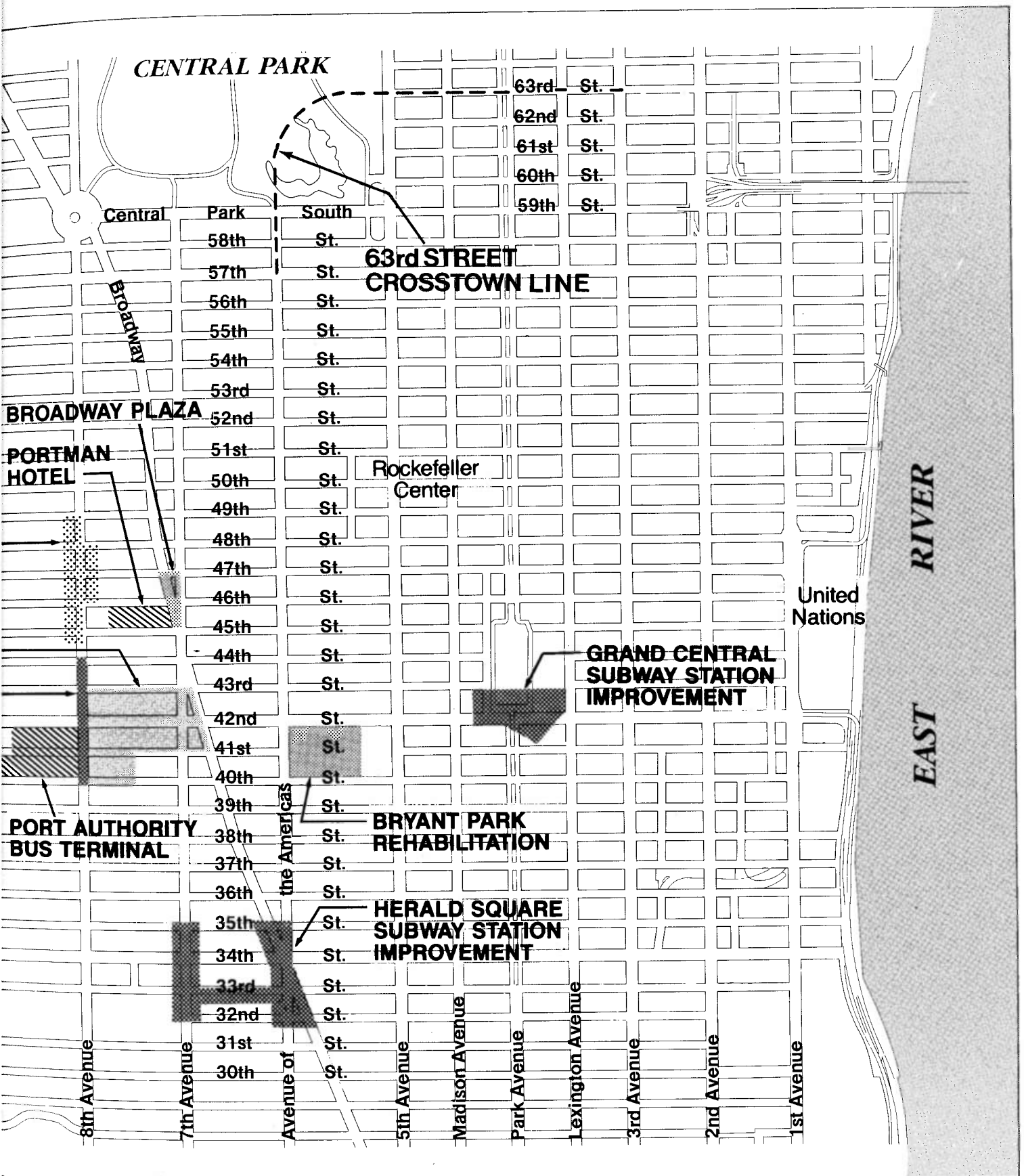
Several major zoning incentives are proposed to aid development in the growth areas. Most important, perhaps, is the return to as-of-right zoning with predictable, straight-forward and certain regulations. A major effort has been made to get away from discretionary, negotiated zoning. Differential densities are proposed for avenue frontages in the East Side stabilization area (FAR 15) and the West Side growth area (FAR 18), with the latter subject to a "sunset" clause. In addition, the Fifth Avenue growth corridor (34th-38th Streets), the Sixth Avenue growth corridor (34th-38th Streets) and the 34th Street growth corridor are to be upzoned from FAR 10 to FAR 15, a 50 percent increase. These changes are discussed in the zoning section.

PUBLIC INVESTMENTS

The strategy of shifting private sector Midtown development to the west and south is supported by a massive public investment in new projects that should help to upgrade and change the area dramatically in the next decade. Well over three-quarters of a billion dollars of public funds are committed to projects now being built or fully approved, mostly on the West Side.

PROJECTS	COST (In Millions)
Convention Center	\$375.0
Port Authority Bus Terminal	200.0
LIRR Layover Yard	168.0
Portman Hotel (UDAG grant)	21.5
Herald Square Subway Station	16.0
Grand Central Subway Station	14.0
Broadway Plaza	12.5
42nd Street & 8th Ave. Subway Station	10.0
8th Avenue Revitalization	.2
Bryant Park Rehabilitation	.2
Total	\$817.4





PUBLIC INVESTMENTS & SERVICES

Goals

In the broadest sense, the public investment and service goals for Midtown are to protect its continued strong and healthy functioning, facilitate and encourage its growth and expansion, and anticipate and plan for the needs that accompany growth.

Unlike zoning regulations or tax incentives which come into play when private development occurs, public investments and services represent a direct, up-front cost to government. The substantial expenditures of public funds and energy in Midtown now being made or planned need to return large dividends if they are to be justified. To do so, they must respond to the needs of the area and leverage maximum private investment.

In the growth areas, particularly the West Side, there are three principal goals. One is to improve the physical and social conditions that have become a barrier to logical growth and development. Another is to broaden opportunities for private investment and increase its desirability. And a third is to make sure that the growth we seek does not destroy the variety and vitality that is an historic characteristic of the area.

In the East Side stabilization area, the prime goal is to mitigate the problems of congestion and circulation that are an undesirable by-product of the area's attraction and success, and a threat to the continuation of that success.

For Midtown as a whole, the major goal of public investment is to deal with the developing problems of access, particularly in mass transit, a key to the area's growth and strength in the first place.

The West Side

Public investment in West Side projects now under construction or on the drawing boards totals more than three-quarters of a billion dollars. Even in these days of inflation this represents a significant public investment. And it does not include a rebuilt West Side Highway which will add another \$575 million to \$1.7 billion depending on whether Westway or an alternative gets built.

Among the most important public investments that provide a strong foundation and support for the special incentives described previously are the Convention Center, major transit station and terminal projects, and the service and enforcement projects now going forward.

Convention Center

The \$375 million Convention Center being built by UDC on a 37.8 acre site between 39th and 34th Streets, 11th and 12th Avenues, is scheduled to be opened in the summer of 1984. The I.M. Pei-designed Convention Center will provide 750,000 square feet of exhibit space on its main floor as well as a skylit central galleria. It will make a major contribution to the City's economy and tourist industry, and is also expected to exert a positive influence on West Side development. There are indications that it may already be creating interest in additional hotel construction to the north, in the 42nd Street, Eighth Avenue area, and in office development in the Penn Station-Herald Square area.

What is less clear is what its impact will be on its immediate surroundings. The Planning Department, in cooperation with the City's Department of Transportation, UDC and Community Board No. 4, has been making a major study of the area—bounded by Eighth Avenue on the east, the River on the west, 30th Street on the south and 42nd Street on the north—to determine what planning and zoning changes would be desirable.

Preliminary conclusions suggest a go-slow approach to major land-use or zoning changes, although some relatively minor ones may be desirable. The major current land-uses in the study area are transportation and automotive-related, and manufacturing. Apart from the fact that these uses play an important function and should not hastily be displaced, it does not seem wise to encourage premature development. The planning question most critical to the success of the Convention Center is that of public access. Before development in the surrounding area is encouraged, it would be well to allow the assumptions of transportation and traffic studies to be tested by actual operation of the Center.

Station and Terminal Projects

Major subway station and bus terminal facilities serving the West Side will be upgraded by projects now in construction or design. The \$160 million expansion and improvement of the Port Authority Bus Terminal on Eighth Avenue, which will increase its capacity and improve its appearance, is almost completed. Two joint UMTA/Urban Initiatives Program subway station improvement projects are in planning. Design work for the 42nd Street and Eighth Avenue station is almost complete and construction of this \$10 million improvement is expected to start early next year. A \$16 million Herald Square station improvement will improve two stations—the Broadway-Sixth Avenue-PATH complex and the Seventh Avenue IRT station, as well as the passageway connecting the two stations. Bids for construction are expected to be taken early next year.

The Mayor's Office of Midtown Enforcement

In addition to these "brick and mortar" projects, the Mayor's Office of Midtown Enforcement has helped to bring about significant improvements in Times Square over the past three years. These improvements have, in turn, helped restore investor and consumer confidence in the area. The Office has helped to upgrade delivery of municipal services; reduce significantly, through civil litigation and code enforcement activities, the number of sex-related establishments; and create new programs and strategies aimed at improving street conditions and attracting good uses to the area.

Midtown Enforcement's efforts, together with changes in market conditions and other factors, have been responsible for the decline in the number of sex-related establishments operating in the Times Square area. Since January 1978 sex establishments of all kinds—adult movies, bookstores, peep shows, topless bars, and massage parlors—declined from 92 to 68; massage parlors declined from 13 to five in the Times Square area (40th to 50th Streets between Sixth and Ninth Avenues). The remaining uses frequently offer goods and services (books, movies, dancing) that are protected by the First Amendment.

Sanitation

Conditions in the area from 40th to 52nd Streets (excluding 42nd) between Sixth and Eighth Avenues have improved as a direct consequence of the Broadway Association's CETA "Sweep-Up" Project, which was developed by Midtown Enforcement in October 1978. At its peak it employed 50 people to sweep sidewalks and empty litter baskets; staff supervision

was provided and paid for by the Port Authority and the State Division of Substance Abuse Services. The project has received support from the business community and from the Department of Sanitation. As a result of this cooperative effort, sidewalks throughout the area are cleaner. However, the staff was reduced to 38 people last spring and the operating funds will run out this spring. The CETA program appears to be a casualty of the federal budget cuts.

Demonstration Blocks Projects

Midtown Enforcement sought to bring about noticeable improvement to two typical midtown blocks (43rd Street between 7th and 8th Avenues and 45th Street between 6th and 7th Avenues) by concentrating existing City resources on their problems and by enlisting the active participation of block proprietors to upgrade conditions. This strategy, first tested on 43rd Street, resulted in a block that today is cleaner, lighter and safer. All of its storefronts are leased. Trees, paid for by the proprietors, line the sidewalks. A block association was organized in 1980 to sustain these improvements and monitor conditions.

The 45th Street project was launched in June 1980. Since that time, the threatening street conditions, crime and loitering by prostitutes that had made 45th the most dangerous block in the Times Square area after 42nd Street, have all but disappeared. Streets are cleaner. There has been an improvement in the bagging and removal of commercial garbage.

Physical improvements including facade upgrading, new street lights, and tree planting have been proposed by the Manhattan Office of City Planning and will be implemented and paid for by the property owners on the block.

Operation Crossroads

In March 1978 the Police Department added nearly 100 plain clothes and uniformed police officers to patrol the area from 40th to 60th Streets from Sixth to Eighth Avenues from 6:00 p.m. to 2:00 a.m. During these hours of operation reported crimes in the covered area declined from 8,735 in 1979 to 6,621 in 1980. The Midtown South Precinct which includes Times Square, was one of only two precincts in the City to show a decline in reported felonies in 1980.

Eighth Avenue Commercial Revitalization Program

From the mid-1960's through the mid-1970's, Eighth Avenue between 40th and 57th Streets became the center of New York's commercial sex industry. As conditions worsened, more and more properties fell

into disrepair; dilapidated facades and vacant storefronts proliferated.

However, over the past four years, Eighth Avenue has undergone a transformation. Fifteen illegal sex-related businesses on Eighth Avenue have been closed. Many of these were street-oriented massage parlors which contributed to highly visible prostitution along the Avenue.

The future of Eighth Avenue is brighter than it has been in nearly twenty years. The Royal Manhattan, closed for eight years, reopened in September 1980, as the new Milford Plaza, a moderately priced hotel. However, serious visual and economic problems remain along Eighth Avenue. Partially as the result of successful City enforcement efforts against illicit sex-related businesses, there were 27 vacant storefronts between 40th and 57th Streets with 22 additional vacant stores on the side streets. The building stock, already aging, has deteriorated further. Disinvestment by property owners of tenements and smaller hotels has brought about an increase in the number of dilapidated facades, above ground vacancies and broken, dangerous sidewalks in need of repair.

Last year, in an effort to address these conditions, the 42nd Street Development Corporation in conjunction with the Manhattan Office, Department of City Planning, organized an Association of Eighth Avenue property owners, merchants and residents. The Eighth Avenue Community Association has 54 members who meet monthly to plan and implement projects designed to improve conditions along the street.

The Association in conjunction with the 42nd Street Development Corporation, Midtown Enforcement, City Planning and Office of Economic Development have designed a \$700,000 commercial revitalization program. Its goal is to spur private investment along the Avenue by attracting new storefront uses and by improving the appearances of existing good uses. Over \$200,000 in commercial revitalization funds have been allocated by the City to pay for the creation of a Clearinghouse of Available Resources which will help landlords find good uses for their vacant space, and a series of publicly funded improvements to be concentrated on six model blocks. Over \$400,000 in private matching funds will be spent by Eighth Avenue property owners to implement this program.

Forty-Second Street West of Eighth Avenue

Efforts to improve 42nd Street are greatly helped by improvements at the western end of the Street which is anchored by the 1,680 unit Manhattan Plaza development on 9th and 10th Avenues. These efforts are additionally strengthened by the Forty-Second

Street Local Development Corporation which has initiated or assisted a number of other projects. Developments underway or in planning include a 400 unit market-rent housing project on the east side of 11th Avenue between 42nd and 43rd Streets which will incorporate a 700 seat National Theatre Center; 150 unit luxury condominium lofts on the north side of 42nd Street between 10th and 11th Avenues; upgrading the Holland Hotel on 42nd Street between Eighth and Ninth Avenues to a moderate priced, theatrical hotel; and the conversion of the former West Side airlines terminal building into a large audio-video studio with sound stages.

With the help of the Corporation there will also be a new headquarters for the Midtown Mounted Division of the Police Department on the north side of 42nd Street between 11th and 12th Avenues. This will provide a constant police presence on the Street. The City has also received approval of a federal grant of \$225,000 for a Forty-Second Street Traffic Engineering Study to determine if it is feasible to provide an exclusive transit lane on 42nd Street.

The East Side

The goal of public investment and services on the East Side is to deal with the consequences of existing development and the new buildings now going ahead. It is not to stimulate development. Within the small, compact area—one mile long, barely over a half-mile wide—is the greatest concentration of commercial activity and most expensive collection of real estate in the world. This concentration gives the total area a value greater than the sum of its parts. It also gives rise to the crowding and congestion that impair good internal circulation and the easy face-to-face contact that are key attributes to the area. Available public resources must be aimed at these problems.

Competition for Streets

Buses, trucks, taxis, delivery vans, automobiles and pedestrians all compete for the limited street space of Midtown, and all need to be accommodated. Complete separation of these competing users may be ideal but is not practicable. But it is important to recognize that not all streets can serve all purposes equally well. Even in the heart of Midtown there are working examples—Grand Central Station, Penn Station and Bryant Park among them—that demonstrate that the regular grid street system can be interrupted to serve a special purpose. Not all streets need be through streets. Some should give priority to serving local access and needs, and pedestrian movement.

The Manhattan Office of City Planning, with the aid of a \$100,000 Tri-State planning grant, has developed a planning framework to help identify and test potential local or pedestrian-oriented projects. The feasibility of five such projects is now being studied by the Department's engineering consultants, Vollmer Associates.

1. Madison Avenue

The City's Department of Transportation put a \$750,000 federally-funded demonstration project into operation this spring. It reserves the two right hand lanes of Madison Avenue from 42nd Street to 59th Street exclusively for buses. They are separated from the other traffic lanes by a painted island; right turns off the Avenue are severely restricted. In effect, this demonstration creates a transitway. Related to the bus lane project, we are examining the feasibility of widening Madison Avenue sidewalks from 42nd Street to 59th Street, four feet on each side, to bring them up to a minimum standard of 17 feet for the pedestrian volumes on the Avenue. These projects deal with two of the East Side's most critical circulation issues: the movement of buses and the movement of pedestrians on one of the two avenues (the other being Lexington) identified by our consultant, William "Holly" Whyte, as congested because of their narrow sidewalks. Any sidewalk widening will depend on the ability to successfully enforce no-parking regulations so as not to further restrict moving traffic, and on the availability of capital funds.

2. 56th Street

By the end of next year three major new buildings will have opened on 56th Street between Madison and Fifth Avenues: the 41-story IBM headquarters on the north side of the street at Madison; also on the north side of the street at 5th Avenue the 60-story Trump tower; and on the south side of the street at Madison the 37-story AT&T headquarters. These three buildings will provide more than two million square feet of new office, residential and retail space as well as significant ground-floor pedestrian spaces. The 56th Street study is aimed at improving the appearance and function of the street to better serve the heavy pedestrian traffic expected to be generated. The Vollmer study suggests that this can be accomplished by reversing traffic on 56th Street west of Fifth Avenue, making it westbound, while it would remain eastbound east of Fifth. This appears practicable since 57th, 58th and 59th Streets all carry eastbound through traffic. Sidewalks could be widened and given special treatment. As an added dividend, 56th Street between Fifth and Sixth Avenues—part of our recommended midblock preservation area and an East Side restaurant row—could also be treated

PEDESTRIAN SPACE



A planning framework to help identify and test the feasibility of street improvements aimed at improving pedestrian movement and local access in Midtown without disrupting essential through traffic has been de-

veloped by the Department of City Planning. Five such projects are now being studied by our engineering consultants.

to better accommodate pedestrians and provide opportunities for sidewalk cafes which are not permitted elsewhere in Midtown because sidewalks are too narrow.

3. Grand Central Area

The Vollmer study is examining ways of improving pedestrian crossings above and below ground in the vicinity of the terminal, particularly along 45th and Vanderbilt Avenues. This is in addition to the major station improvement program, funded by the UMTA/Urban Initiatives Program, which is scheduled for bidding by the end of the year. A related vehicular improvement is reconstruction of the Park Avenue viaduct around Grand Central station, now under design contract.

4. 53rd Street

The combination of the Independent subway which crosses Manhattan under 53rd Street east of Broadway, with stations at Seventh Avenue, Fifth Avenue and Lexington-Third Avenues, and the museums and institutions on the street provides an unusual opportunity to improve pedestrian movement and subway access. Several options are being studied.

5. 49th/50th Streets

The purpose of this study is to identify pedestrian improvements that would complement the Department of Transportation's plan to either couple 49th and 50th Streets as preferential bus routes, or make 49th a two-way transit street. The possibility of widening the sidewalks at the avenue intersections and providing bus shelters, information kiosks, seating and the like is being studied. This would physically define and help to enforce the special function of these streets, as well as increase space for pedestrians at the crosswalks, where it is needed most.

Fifth Avenue Plan

A plan for the improvement of Fifth Avenue, from 33rd to 59th Streets, has been underwritten and published by the Fifth Avenue Association. It is intended to protect and enhance the Avenue as one of the world's premier shopping streets. It would involve repaving the Avenue, providing decorative and possibly slightly widened sidewalks, new lighting and graphics, specially designed street furniture, information kiosks and planting of mature street trees. Special treatment would be given to four areas as focal points: Empire State Building, New York Public Library, Rockefeller Center and Grand Army Plaza.

The Fifth Avenue Association, which worked closely with City officials in formulating the plan, recognizes that there would have to be substantial private par-

ticipation in its estimated \$28,000,000 development cost as well as in maintenance and policing. The Association is discussing with the City the obligations that each would undertake if a special benefit or assessment district were established for Fifth Avenue. The Association is particularly concerned about control of food peddlers. Meanwhile, enabling legislation to permit the establishment of such districts has been submitted to the State legislature.

Street Peddlers and Spillback

A major cause of pedestrian congestion in Midtown is the blocking of sidewalks by street peddlers and the friction between pedestrians and vehicles, particularly at midday. These probably cause more irritation and sense of congestion than anything except crowded subway stations at rush hour.

Since passage of the new peddler law, which went into effect in September 1979, there has been some improvement in the peddler situation. The law permits the police to remove merchandise from peddlers operating in large areas of the City without a prior hearing where exigent circumstances exist because of vehicular and pedestrian traffic. When the law went into effect, the Police Department assigned 69 officers to enforce it and there have since been over 10,000 removals. The Fifth Avenue, Sixth Avenue, and Bloomingdale areas of Midtown are improved. Complaints have dropped.

Two problems remain. Effective enforcement requires a continued substantial commitment of police which the Department may not be able to give in the face of its other priorities. And the peddler statute applies only to peddlers of merchandise, not food peddlers. The latter are licensed by the Department of Health and outnumber licensed merchandise peddlers by 20 to one. If peddler-related congestion is to be further improved, some control over the number of food peddlers is needed.

The friction between pedestrian and vehicular traffic when both are at a peak is a more difficult issue. Certainly, everyone who walks the streets of Midtown during the noon hour has a sense of being hemmed in by vehicles—trucks, buses, delivery vans, station wagons, private cars and taxis.

The most effective way to ease this friction, given present levels of vehicular traffic, would be to control vehicular "spillback," the blocking of crosswalks and streets at a change of light that forces the pedestrian to become a broken-field runner. The City showed that spillback can be controlled during the transit strike, when there were traffic controllers at every intersection to prevent "gridlock." Midtown—particularly the East Side with its short cross

blocks—needs traffic controllers at virtually every intersection at midday.

The Madison Avenue transitway demonstration project will carry 28 enforcement agents for a year. But the City is getting federal funding for that project. Without help, the City's budget probably cannot afford the level of enforcement needed. We recommend that businessmen, merchants, and block associations of the area—who stand to profit from the easier flow of pedestrians—consider how they might contribute, perhaps through a special assessment district.

Bryant Park Restoration

After Rockefeller Center, Bryant Park is Midtown's most important open space—and its only green park. It covers five acres—nine counting the public library—and its location between Fifth Avenue and Avenue of the Americas, 40th to 42nd Streets, links the East Side core area to the western and southern growth areas. However, while the recent construction of plazas and vest pocket parks created many new smaller open spaces throughout Midtown, Bryant Park deteriorated rapidly. The park was overrun with drug sellers. Although serious crime was never a major problem in the park, its threatening and seedy environment discouraged its use by tourists and shoppers.

In 1980, at the suggestion of the City and with its enthusiastic support, two groups—the Parks Council and the Bryant Park Restoration Corporation—instituted an ambitious privately funded program to improve physical conditions and to attract good users to the park at all times of day. During 1980 these two groups implemented 11 different projects, costing nearly \$350,000. They have repaired the fountains, removed overgrown shrubs, planted flower beds, erected a cafe and several bookstalls and scheduled daily performances of dance, music and drama to attract visitors to the park after lunch hour. They have also provided funds for a maintenance program. The restoration of this park is essential to the area's development. The Department of Parks and Recreation has budgeted \$281,000 for architectural work, rehabilitation of flagstone pavement and lighting within the park. Work is expected to be completed by the spring of 1982.

Midtown in General

More than 600,000 people work in Midtown. Thousands more come to do business, shop, be entertained, visit, or just look. Almost 3,000,000 people come into the central business district—Manhattan below 60th Street—every day. Over 700,000 arrive in the peak hour of the morning rush, between eight and nine o'clock. The ability to reliably move these large numbers of people in and out of a small section of the small island of Manhattan in safety and reasonable comfort is the priority issue to which public investment and service priorities must be directed.

Subway Service

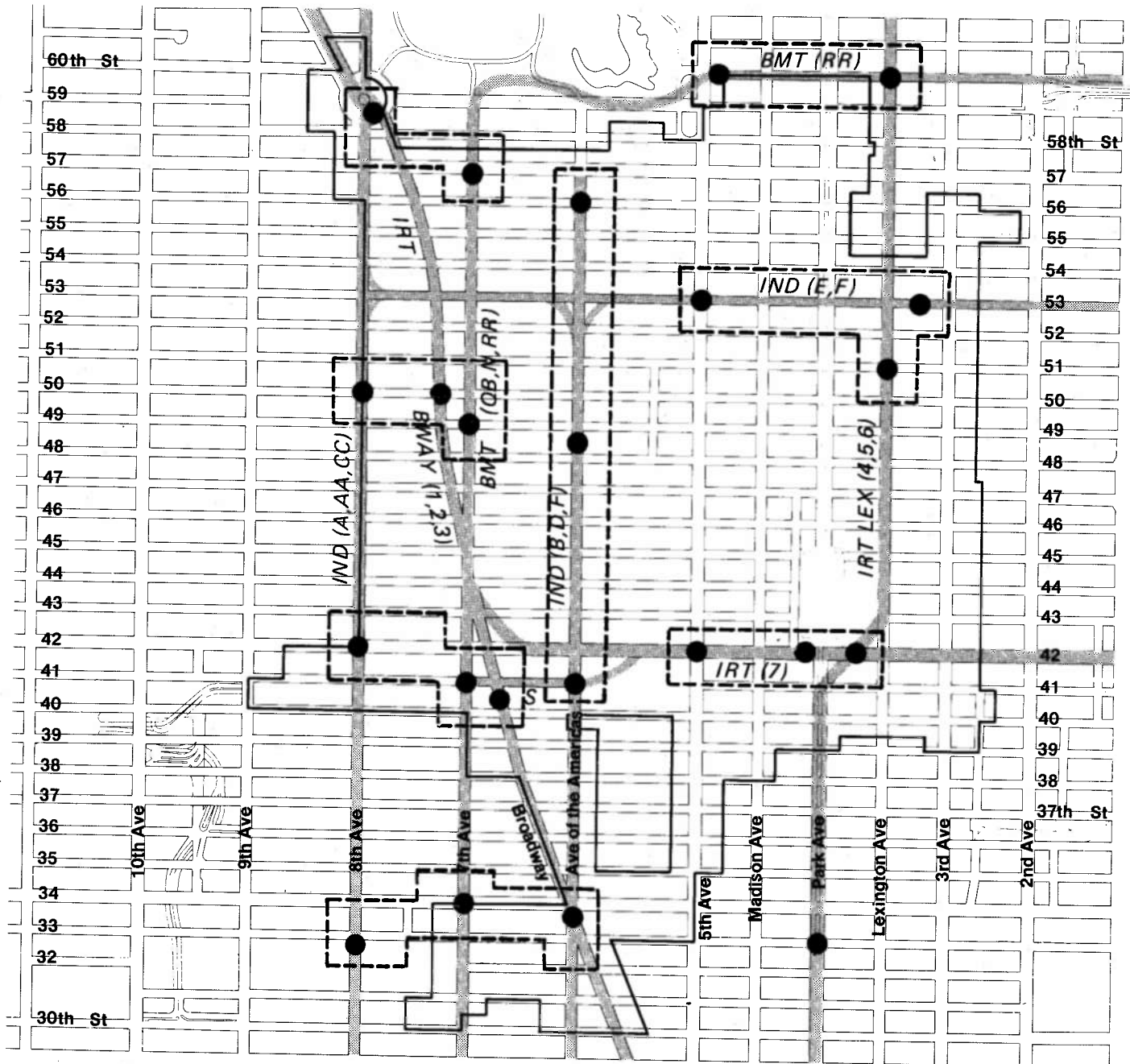
The key to access is of course the subway system. It was the development of this marvelous system, starting at the turn of the century, that gave shape to the Midtown of today. The greatest threat to the continued successful functioning of Midtown would be the system's breakdown.

As everyone knows, subway service has been deteriorating markedly in recent years. Never have as many trains been pulled out of service in the middle of rush hour runs. Never have there been as many malfunctioning doors. Vandalism is increasing. Trains are dirty. Subway crime makes riders increasingly nervous if it does not frighten them off.

There are many causes and few villains. In part it is the price we are paying for having the first great subway system—and now the oldest. In part, it is the price we are paying for having so extensive and complicated a system and one of the few in the world that operates 24 hours a day, seven days a week. It reflects too many years of deferred maintenance in an effort to hold the line on fares. In hindsight, it also reflects a misplaced emphasis in the sixties on over-ambitious plans to build new lines to serve the massive shifts of population and changing job mix that occurred in the years following World War II.

To turn the subway system around will require drastic improvements in management. But it will also require massive capital expenditures. MTA Chairman Ravitch has estimated MTA's funding needs at \$14 billion in 1980 dollars, \$11 billion for the subways alone, over a period of ten years. The Governor has proposed a five-year, \$5 billion program; and that does not take into account the need for operating subsidies—not to keep the fare from rising at all, but to keep it from rising faster than the rate of inflation, which is of great concern to the Mayor, and for adequately maintaining present equipment.

MIDTOWN SUBWAY SYSTEM



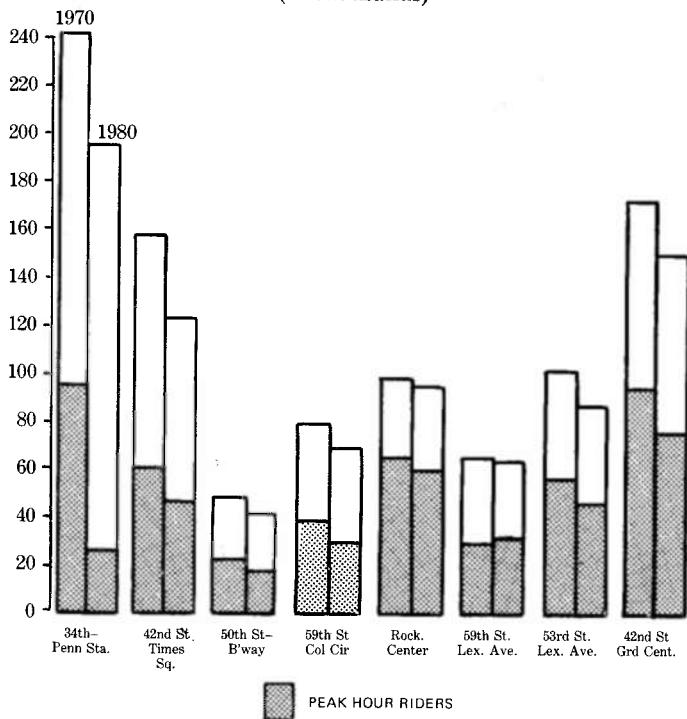
The planning logic of shifting Midtown growth to the west and south is further supported by the greater concentration of subway lines and stations in West Midtown than in East Midtown. The adjacent graph shows that with few exceptions, ridership dropped

appreciably between 1970 and 1980. This underscores that deterioration of service (longer headways and more breakdowns) is the main cause of today's subway crowding and discomfort, not lack of capacity.

Clearly the subway system and the commuter rail system—which faces many of the same problems, although on a smaller scale—will require continued local financial assistance, increased State assistance, and ingenuity in putting together a financial package of the magnitude needed. It will also need continued federal capital and operating support. Reduction or elimination of federal support for mass transit as a budget-cutting measure is a misplaced economy. Endangering the economy of the most productive and most fuel efficient metropolitan region in the country is not in the national interest.

CHANGES IN DAILY SUBWAY RIDERSHIP

1970 & 1980
(in thousands)



Source: Dept. of City Planning from Transit Authority turnstile counts October 1970 and October 1980..

Express Buses

Express bus service to Midtown from the outer parts of the City has increased as subway service has deteriorated. The buses fill the gap for people whose jobs are in Midtown and who cannot conveniently get to or are no longer willing to ride the subway. They also demonstrate that many people are willing to pay higher fares for better service. Until subway service is a lot better, express bus service cannot be cut back, even though it adds to Midtown congestion.

63rd Street Tunnel

The new East River transit tunnel, a vestige of the over-ambitious expansion program, is scheduled to be completed in early 1984. It will then provide local service between 21st Street, Queens, Roosevelt Island and, after passing under Central Park, into the Sixth Avenue system. Until the line is extended east of 21st Avenue, it will not provide relief for heavily utilized Queens lines, a major purpose it was intended to serve. To determine practical ways of extending the service given funding limitations, the City Department of Transportation, in cooperation with other City, State and regional agencies, has been conducting a special study with engineering consultants. The Queens Transit Alternate Study will be completed before summer and will propose options for extending the new line east of 21st Avenue, utilizing either LIRR or subway trackage.

Empire Line Service

Another boost for the West Side would be the proposal of the State Department of Transportation to bring AMTRAK Empire Line service into Penn Station rather than Grand Central as it is now. If it proves feasible, a tunnel would be built under the planned LIRR West Side Yard and built in conjunction with the Yard.

Airport Access

New York's position as a dominant center of commerce has always been closely related to its port function. The City's business district drew strength from and was shaped by its proximity first to the docks and wharves, and then to the great rail terminals. Now its position as a headquarters city—for the nation and the world—depends to a considerable extent on access to the CBD from the City's airports. That is why the MTA's JFK subway express experiment has been made. And that is why there is a current effort to locate a terminal for the Carey airport buses closer to Grand Central.

LIRR West Side Storage Yard

Both the capacity and the operations of the LIRR are hampered by the need to turn around morning rush hour trains, take them back through the limited capacity East River tunnels and store them in Queens until they have to be brought back, empty, for the evening rush hour. It is a time-consuming and wasteful operation. A \$168 million project, made possible by the 1979 State transportation bond issue, to build a lay-up yard and light maintenance facility on 33rd Street between 10th and 12th Avenues is in design, scheduled for construction early next year. When completed in 1983 or 1984, it will increase the potential LIRR capacity into Penn Station by 25 to 30 percent. This is obviously an important project for all of Midtown and a stimulus for the West Side in particular. It is being designed so that a major development could be built over it.

West Side Highway

When the West Side Highway issue gets resolved and Westway or a substitute is built, it will provide an opportunity to reorganize traffic patterns and the basic surface transportation system of Manhattan below 60th Street to ease traffic on the major avenues of Midtown and improve the environment.

ZONING OVERVIEW

Goals

The proposed zoning revisions reflect four principal goals of our basic Midtown development strategy.

- To help stabilize the prime East Side core area and to provide direction and incentives for its growth and expansion to the west and to the south.
- To make the zoning regulations as predictable and as-of-right as possible, reversing the practice of negotiated zoning.
- To emphasize that zoning's underlying planning concern is with the impact of buildings on the streets and avenues of Midtown—not only in terms of their openness to light and air, but in how well the streets serve the movement of people, define Midtown as a special place and enhance its role as the world's preeminent “downtown.”
- To protect the theatre district (by helping to preserve existing theatres) and the midblock area around the Museum of Modern Art which makes a special contribution to the function and ambiance of Midtown and is unlikely to be replaced if destroyed.

Recommendations

A comprehensive revision of Midtown zoning is proposed to achieve these goals. It consists of a package of closely knit recommendations for 1) density limits, 2) mandated planning and urban design requirements, 3) bonusable amenities, 4) special districts, 5) bulk regulations, and 6) administration.

1. Density (FAR) Limits

Changes in density limits are proposed in order to distinguish between the stabilization area and the growth areas, particularly on the West Side, and to retain and enhance New York's traditional development pattern of higher bulk on the avenues and lower bulk on the midblocks. These are appreciable changes since the draft report, responsive to Midtown's needs and to public comments.

Growth Areas

Avenues in the theatre district (Sixth, Seventh and Broadway) would have their base FAR increased to 18 subject to a "sunset" provision of five to seven years.

Midblocks would remain at FAR 15.

Fifth Avenue, Sixth Avenue and 34th Street growth corridors would be increased to base FAR 15 from base FAR 10.

Eighth Avenue would remain at FAR 10 base.

Stabilization Area

Avenues would be zoned base FAR 15 with substantially reduced opportunity to get to maximum FAR 18. This includes reducing Fifth Avenue from its present FAR 21.6.

Midblocks would be reduced to FAR 12.

Preservation Areas

The Museum of Modern Art preservation area would be reduced to FAR 8 from its present FAR 10; and we would propose a height limit if it were to be designated an historic district by the Landmarks Preservation Commission.

2. Mandated Planning and Urban Design Features

In the discussion draft we proposed a system of mandated features; targeted bonusable amenities, one of which was mandated and all of which had to be addressed in a priority order; and a number of additional bonusable amenities that were not prioritized. We are now proposing a simpler and more direct

system. Its foundation consists of six planning and urban design features which we would mandate but not bonus.

- Retail continuity on specified streets
- Street wall continuity on specified streets
- Relocation of adjacent subway stairs from street to within development site
- Curb cut prohibitions on specified streets
- Alleviating sidewalk congestion
- Continuing through-block circulation networks

3. Bonusable Amenities

The number of bonusable amenities and, in general, the amount of bonus available has been considerably reduced. A lean system is the result.

Midtown-Wide

Urban plaza. An urban plaza can achieve a maximum bonus of FAR 1 at a ratio of six square feet of floor space for one square foot of plaza. It is as-of-right but must meet current plaza requirements. It may be glassed-in to provide greater use throughout the year.

Urban park. A nearby off-site urban park where permitted can generate a maximum bonus of 20 percent of the base FAR of the development site through transfer of its development rights. A special permit would be required.

Subway station connection. A superior subway station connection (other than a simple stairway relocation) built to Transit Authority and City Planning Commission standards may provide a maximum bonus of up to 20 percent of the base FAR of the development site. There are a limited number of mapped sites eligible. Until detailed specifications and cost estimates have been developed by a recently approved federally funded study, a special permit would be required.

Theater District

New theater. The bonus for new theaters by special permit is being retained, but with additional requirements. Maximum bonus is 20 percent of base FAR.

Theater preservation. A bonus for reconversion or substantial reconstruction of existing theaters or transfer of theater development rights or a combination of the two would allow a maximum bonus of 20 percent of base FAR.

Through-block galleria built to prescribed standards in mapped locations would permit a maximum bonus of FAR 1.

4. Special Districts

Two special districts are being retained, but with sharply redefined objectives.

Theater District. The emphasis has been shifted to the preservation of existing theaters, as noted above. Sign and retail use requirements are proposed to protect the special character of the Broadway-Times Square area.

Fifth Avenue District. The maintenance and strengthening of Fifth Avenue as one of the world's great shopping boulevards continues to be emphasized. The special Fifth Avenue retail use group is retained and retail continuity is extended south to 34th Street. Incentives to buildings out of scale and character with the Avenue's architectural heritage would be eliminated.

5. Bulk Regulations

The bulk regulations being proposed are based on principles and criteria evolved by actual midtown development under the 1916 and 1961 zoning regulations. The emphasis is on providing an acceptable degree of daylight or openness to the sky for the street and for respecting the context of existing development. The bulk regulations are intended to give maximum design flexibility to the developer and his architect. The sacrifice of light and openness to the street by waiver or modification of the bulk regulations would no longer be permitted.

6. Administration

The Midtown zoning regulations, to the extent practicable, will be incorporated in a single new chapter in the Zoning Resolution to make them relatively easy to use and administer, and to minimize the need for cross references. They will be administered principally by the Department of Buildings. Any new system is likely to have "bugs" that will not show up until it is actually in use. We are proposing to set up a joint staff oversight group with the Department of Buildings to review experience under the new regulations and to insure that required changes or modifications would consider both planning goals and administrative needs.

A Density (FAR) Differential

The recommendation that a sharp density differential be established between the East Side stabilization area and the growth areas was a frequent response to the draft report.

We had proposed keeping the basic FAR 15-18 range throughout Midtown, but targeting bonusable amenities so that it would be relatively easy to reach the top limit on the West Side and relatively difficult on the East Side. But this fudged the difference between the stabilization and growth areas, and still required an elaborate bonus system.

We also considered a proposal that we map the East Side at a base FAR of 12 or 12.5, and the West Side at a base FAR of 15. Bonusable amenities would permit a 20 percent increase in both areas. This would also have required an elaborate bonus system.

In the end, the proposal that seemed to make the most sense was not only based on an East Side-West Side distinction, but on an avenue-midblock distinction as well. We propose to retain FAR 15 for the East Side avenue frontages, but reduce the midblocks to FAR 12. On the West Side we would upzone the avenue frontages to FAR 18 and keep the midblocks at FAR 15. This provides a clear differential between East and West Sides. FAR 15 and 18 on the avenue frontages are realistic densities for Midtown and provide continuity with 1961 zoning. An extensive bonus system is not needed. The uniformly lower midblock zoning is in accord with the traditional development pattern of New York.

Manhattan zoning south of 96th Street has generally followed a policy of conferring higher FAR on wide avenues and streets than on midblocks. The basis for this policy is that the combination of avenue width and short blockfront permits proportionately more light and air to reach the street even in the face of higher FAR. Similarly, avenue frontage is generally more accessible to both pedestrian and vehicular traffic.

This policy was implicit in the 1916 zoning resolution which, although it did not contain explicit FAR limitations, related bulk controls to the width of streets; wider streets were allowed greater bulk. As a result, Manhattan buildings adjacent to avenues and wide streets incorporated higher bulk (and FAR) than buildings adjacent to narrow streets; and the east/west grid, with the exception of the major wide streets, showed smaller midblock scale and lower FAR following the enactment of the 1916 resolution.

In the comprehensive legislation of 1961, the policy reflecting lower midblock bulk and FAR was

explicitly codified in predominantly residential areas south of 96th street but not in the Midtown core. The 1961 amendments in the Midtown core controlled midblock bulk by the combined effects of the 40 percent tower limitation and the height and setback regulations.

As long as there were many avenue sites available for development, these indirect controls worked and few new midblock developments occurred. A substantial portion of east Midtown's midblocks—while zoned to FAR 15—are in actuality built to FAR 12 or less. However, since 1977, the combined effects of large numbers of East Side developments, many based upon waivers of bulk controls and the discovery by developers that even as-of-right towers with very small floors could be leased in prime locations, has put tremendous pressure on the remaining low-scale midblock areas. Proposals for tall midblock buildings threaten to change Midtown's scale irretrievably.

Accordingly, we believe it is now appropriate to make the midblock policy explicit, and our proposed amendments to the Zoning Resolution incorporate both the midblock/avenue differential and a midblock FAR limit consistent with the built character of the East Side.

Reducing midblock zoning in this area to base FAR 12 will in all likelihood slow construction of new midblock office towers in East Midtown. The higher rents required could hold the market to specialized, small-space-using, high prestige commercial tenants. Developers who have assembled midblock sites may opt for mixed commercial-residential or residential towers, to tap the luxury coop and condominium market. In addition, the tendency for new Midtown office development to expand west and south, a central objective of our proposed rezoning, would increase. This is consistent with the goal of our development strategy to relieve pressure on the East Side. There are already clear signs that over concentration of building leads to congestion of streets and strains on public transportation that threaten the very values that make the area so desirable.

A similar midblock avenue differential in West Midtown reflects our West Midtown growth strategy, which would retain FAR 15 on midblocks and allow FAR 18 on the avenues. The split-lot-rule restrictions in the Zoning Resolution avoid an unlimited aggregation of bulk on both avenues and streets from transfer of development right in excess of what the daylight regulations would accommodate. They thereby help prevent distortions of scale and restrict pressure for waiver of bulk regulations.

Even so we propose that the base FAR 18 on the

West Side avenue frontages be reduced to FAR 15 after five to seven years unless it is reaffirmed after review and public hearing. This should provide reasonable protection against the growth areas being overbuilt, which is unlikely but not impossible.

The growth corridors to the south, along Fifth Avenue and the Avenue of the Americas are proposed to be zoned FAR 15, a 50 percent increase over current zoning. Eighth Avenue in the theatre district is not now proposed to be changed from its existing FAR 10. It is a natural part of the West Side growth area, probably more for mixed buildings, hotels and housing than office buildings. We believe it warrants and should receive the maximum possible tax incentives. But as a transition to the Clinton residential area—indeed, the west side of the avenue is within the Clinton Special District—we think that zoning changes should await completion of the Clinton re-study which is being undertaken in consultation with the community. The study is expected to be completed in the Fall.

Zoning Lot Mergers and Development Rights Transfers

No consideration of FAR limits can disregard the impact of the use of "air rights," the unused development potential of landmarks or of existing low-rise buildings whose zoning lots are merged with that of the development site. Both types of transfer have in the past resulted in buildings that were oversized and out of scale on their actual building site. The pressure they put on existing as-of-right bulk regulations has contributed to the erosion of the as-of-right regulations.

Landmark transfers serve a public purpose in helping to preserve our architectural heritage. In any case they require a special permit with approval by both the Landmarks Preservation Commission and the City Planning Commission. There is ample opportunity for the public to be heard and we are not considering any change in current procedures.

Zoning lot mergers are another story. They are private transactions which require neither public approval nor notice. Although recorded, they normally do not come to light until an application for a building permit is filed with the Department of Buildings. While they serve a useful purpose in preserving existing low-scale buildings, they also create problems. Their increased use in recent years as site assemblage became more difficult in the East Side core area led to the so-called "shoehorning" and "piggy-

backing" that helped create the demand for revising Midtown zoning.

In the draft report we had proposed indirectly governing the impact of a merger by a limitation on the amount of unused floor area that could be transferred from the granting site. Some groups, however, called for a "cap" on the actual development or "footprint" site as a better and more direct control.

We gave careful consideration to this proposal. It appeared to have the virtue of simplicity and directness. But it turned out to be entangled in a web of zoning, legal and definitional complications. In addition, we believe that our midblock zoning strategy will sufficiently limit the impact of zoning lot mergers as to make other controls unnecessary.

The zoning regulations which govern "split lots"—that is, lots that are in two zoning districts—do not permit a transfer of floor area across the district boundary line unless the line was mapped across a pre-existing lot that was formerly in a single district. In that case, the permissible floor areas may be averaged, on a pro rata basis, to permit architectural uniformity. These regulations should serve to keep zoning lot mergers within predictable and close limits.

"CR" Mapping for Mixed Buildings

There appears to be interest in the development community in constructing mixed commercial and residential buildings in the growth areas, particularly on the West Side. From the developers' point of view, the mixed building can provide a hedge, even though it normally requires separate lobbies and elevators. There is some concern that the market for office space on the West Side, initially at least, may still be limited. The market for Manhattan market-rate housing, however, is strong.

From a planning point of view, the mixed building in this area also makes sense. Its market is CBD oriented, consisting largely of individuals and couples who work in mid-Manhattan and who thus help to ease the strain on the transit system without greatly burdening other municipal services.

Mixed buildings are permitted in "C" (commercial) districts, but are penalized by the residential lot-area-per-room requirement. In the mixed "CR" district, this penalty is eliminated, making it possible to utilize much more of the total permissible floor area. Accordingly, we propose to map all of the growth areas "CR."

BONUSABLE AMENITIES

Since the draft report we have gone much further in simplifying and paring down bonusable amenities. In the draft report we had suggested a priority system of targeted amenities. There was general agreement that this represented a step in the right direction, but that it was too complicated and included items that could and should be required without bonus or need not be included at all.

By pursuing this course, we have developed a lean system of bonusable amenities. Basically it includes three elements: an open-space package (plazas and urban parks), superior subway station connections, and theatre district preservation bonuses.

The provision of usable open space which provides respite to the pedestrian and office worker, and contrast to the crowded and busy streets of Midtown remains a worthwhile public amenity. Our proposal expands the definition of open space but limits its location.

Plazas (as-of-right)

A floor-area bonus in the ratio of six square feet to one will be granted for plazas that meet required standards as to location, size, access, seating and planning. The maximum bonus will be an additional FAR of one. It is not intended as an inducement for a plaza that otherwise would not be provided, but as an incentive to develop the open space that the builder is providing for any of a variety of reasons to acceptable and usable standards. Plazas can provide through-block access (as, for example, Exxon Park) or be glassed-in (as will be the heavily planted and accessible plaza in the new IBM building), but they must meet plaza standards to receive a bonus. Bonuses will not, of course, be given to plazas on avenues which require street wall and retail continuity.

Urban Parks (special permit)

The midblock urban park built and maintained to acceptable standards similar to Paley or Greenacre Parks, is a wonderful public amenity. The development rights of an approved urban park can be transferred to the development site, limited to a maximum of 20 percent of the base FAR. Because it is not contiguous to the development site, a special permit would be required. The urban park must be located on a midblock, within 1,000 feet of the development site.

Special Subway Entrance (special permit)

Major improvements of access to Midtown's subway stations, which not only permit easier and more direct movement of the surge of riders who use these stations at rush hour, but open the stations to light and air, are highly desirable. Indeed, the Regional Plan Association gives them a top priority in its comments on the draft report, in which we had suggested a range of improvements that new buildings within designated transit improvement zones would be required to make. Most would earn a floor area bonus.

While we received support for this in principle, two reservations were expressed: one, that it might be contrary to current operating policy of the Transit Authority; and two, that it would require detailed specifications, cost estimates and procedures worked out in advance.

The first is not a problem. Both the MTA and the Transit Authority support the requirement of such improvements. But the second is valid. A developer cannot reasonably be required to do something which is open-ended as to cost and time. We have agreed with the T.A. to undertake a joint planning and engineering study over the next year, with Federal funds already in hand to detail these major station improvements.

Meanwhile, however, we would hope to encourage such improvements being made for any building which may be planned in the designated transit improvement zones. A major subway entrance improvement can benefit the building as well as the public. To encourage this, we will sanction a floor area bonus up to 20 percent of base FAR, depending upon the nature and cost of the station improvement. Prior to the study, the amount of bonus cannot be spelled out. It will have to be negotiated and it will require a special permit.

Theatre District Bonuses

We have two objectives in the Broadway-Times Square Theatre District. We want to retain the existing, mostly midblock, theatres; and we want to encourage new development on the avenues. To accomplish both of these we propose to list 36 theatres in the zoning resolution which cannot be demolished without a special permit. However, avenue development sites adjacent to these theatres could receive a bonus of up to 20 percent as an incentive to help preserve them. We have developed this proposal to implement the goal we set forth in the draft report of preserving existing theatres, and we look forward to receiving comments on it from the industry and the public.

The bonus could be for the reconversion of a theatre that was in some other use, for the substantial reconstruction of a theatre that needed it, or for the transfer of unused theater development rights. A transfer would be permitted across a zoning district line provided the theatre remained in theatre use. Bonuses would still be available for new theatres, but only if there was a lease or contract for their use from a legitimate operator, and if their construction resulted in a net increase in the number of theatres. These bonuses would require special permits and an advisory committee of professional theatre people would be established to help guide the Commission. Because of the special characteristics of the district, a bonus up to FAR 1 would also be allowed for through-block galleries in suitable locations. Bonuses could be combined, but could not exceed 20 percent of base FAR. We are also proposing a special retail use group and sign regulations, including requirements for "super" signs, in order to maintain the distinct character of the Great White Way.

MANDATED PLANNING AND URBAN DESIGN FEATURES

A clearly defined set of unbonded design requirements aimed at meeting Midtown development planning goals is proposed for new buildings. There are six such required features.

Street Wall and Retail Continuity

On designated avenues and a few major cross streets new buildings will be required to include a street wall and retail shops. For the most part, although not entirely, these go together. This is clearly a controversial proposal. It was criticized as an attempt to impose an aesthetic judgment, in the case of the street wall, and to tinker with market forces that can regulate themselves, in the case of retail continuity.

We disagree. We believe the proposed requirements reflect a planning judgment as to how Midtown as a whole functions and contributes to the well being of the City. Much of the strength and vitality of Midtown is centered on its streets; they are its most important public amenity. New York is not a city of shopping centers or arcades (above or underground), or even of distinguished public plazas. It is a city of great avenues and streets. The street wall defines the Manhattan grid and helps give the major streets and avenues a sense of identity. Where it is historically strong, it should be maintained.

The retail continuity of the City's major shopping streets contributes both to the street life which helps make New York an exciting city, and to its economy.

We have been justifiably criticized in the past for encouraging or requiring retail frontage off the streets and avenues. We are no longer doing so. Instead, we are requiring that this retail continuity not be broken on streets where, our consultants assure us, the market is strong enough to sustain it.

But, the argument is made, if the market is there won't retail be provided without being required? Not necessarily. The institutional or corporate builder may have other priorities. He may consider the leasing and management of retail shops a nuisance, not worth the bother, even though it is the most profitable use of ground floor street frontage. His prime concern, unlike ours, is not with how well the avenue functions as an ensemble, how the parts contribute to the whole.

Two other questions have been raised. Doesn't the street wall requirement conflict with desired sidewalk widenings? And isn't it too rigid, precluding the possibility of occasional, desirable plazas or open spaces? To the first the answer is no. Required street walls may, with few exceptions, be set back as much as ten feet from the property line. The second question raises a point that has merit. Accordingly, we are providing a procedure where a plaza that meets defined criteria can be permitted to break the street wall. It will not, however, be bonused.

Alleviating Sidewalk Congestion

In the draft report alleviating sidewalk congestion was proposed as part of the priority, bonused amenity system. There was a surprising consensus that if this were a necessary and desirable improvement—and there was general agreement that it was—we should simply require it. Without bonus. We agree.

A new building would be required to include one or more features to ease sidewalk congestion—a continuous sidewalk widening, an arcade, a corner arcade or similar designated features. The choice will be up to the developer.

Off-Street Relocation of Subway Stairs

A relocation of subway entrance stairs from the street to within the property line will be required for any development sites adjacent to subway entrances. The standards and procedures for such simple relocation will be spelled out in advance. Certification of compliance by the Transit Authority and City Planning will be within a strict time limit. As with the pedestrian circulation improvements and the street wall and retail continuity, the simple relocation of subway stairs will not be bonused.

Continuing Through-Block Pedestrian Networks

We have dropped through-block arcades as a bonusable amenity. However, in the long blocks west of Fifth Avenue (920 feet between Fifth and Sixth, and 800 feet between Sixth and Seventh) it makes sense to continue the existing through-block pedestrian networks that have developed through a combination of planning and happenstance. Accordingly, we are requiring that through-block buildings within three mapped areas provide at least simple passageways, either inside or out, to continue an existing network.

Curb-cut Prohibitions

Curb-cuts for vehicular access are ordinarily prohibited on the avenues and wide crosstown streets in order to minimize friction between vehicles and pedestrians.

THE NEW BULK REGULATIONS

It is not only the total size or bulk of a building that determines its impact, it is also how that bulk is arranged on its site. The disposition of bulk on the site is governed by the technical bulk regulations. New York's pioneering 1916 zoning, brought about in large part in reaction to 120 Broadway which rose 540 feet straight up from its lot line, dealt with bulk purely in terms of its disposition—that is with height and setback rules, tower coverage and the like. There was no other regulation on the size of the building.

The 1961 zoning added the element of floor area ratio (FAR) which set the floor area of a building as a multiple of lot size. FAR is as closely related to the size of a building as it is to its density of population, if not more so. But the FAR of a building, by itself, cannot measure its impact on its surroundings, or how it is perceived by the person in the street.

The breakdown of the bulk regulations and their increasingly frequent waiver and the growing reliance on FAR alone threw the system out of balance and led to the widespread concerns that were a major factor in bringing about this rezoning effort.

The two-tiered performance and prescriptive system initially developed by our architectural consultants—Davis, Brody in association with Kwartler/Jones—as presented in the draft report gave rise to much comment. In part, that was because of the new daylighting idiom in which it was couched.

The daylight evaluation chart, the so-called Waldram

diagram, which was at the heart of the performance system, provided an objective way to measure how much sky or daylight a building blocked when viewed from a given vantage point on the street. This “pedestrian's eye view” of a building when plotted on the chart, however, seemed strange and distorted compared to the “bird's eye view” of the normal architect's rendering or isometric. The first Mercator projection of the globe undoubtedly seemed as strange and got the same reaction before it proved an indispensable tool for mapping and navigation.

The street district, while a valid concept, established a different set of rules for street walls than those set forth in our planning and urban design standards. The prescriptive tier requested by the Department, while perceptually based, proved to be too restrictive. Above all, there had not been time to sufficiently test the system prior to release of the draft report. Our bulk consultant's perceptive analysis of the historical development of Midtown under the pioneering 1916 zoning resolution and the major 1961 revision provided a solid foundation for their recommendations and for the work that they and we have done since the draft report. It revealed the consistent set of values that underlay the zoning governing more than half a century of Midtown development; namely, the arrangement of building bulk so that it would not excessively block daylight from the streets or from neighboring buildings.

Their analysis also provided the means for establishing the standards and criteria of an objective system; it was not based on arbitrary or abstract values but on the degree of daylight or openness that reasonably can be expected under the actual conditions of Midtown's historic dense development. But when the draft report was released, the proposed performance system still had some rough edges and needed additional fine tuning.

Much time and energy has been devoted to improvement of the proposed system. In this we have been aided not only by the continued technical advice of our consultants, but by generous help from the professional development community.

In particular, we are indebted to the special zoning committee established by the New York Chapter of the American Institute of Architects. It met almost on a weekly basis for more than three months. There was an ongoing exchange of views with our professional staff and zoning consultants, who were invited to participate in most of these meetings. And some of the busiest and most distinguished architectural firms in the City tested the system in detail on projects they had on the drawing boards in their own shops. There is no price that can be put on this practical

expertise that the AIA marshalled for us.

Based on this work, evaluation, advice and criticism we have made major changes in the proposed bulk regulation system.

- The prescriptive tier has been scrapped.
- A new "Daylight Compensation" tier has been devised which utilizes the basic daylight curve developed by our consultants for the prescriptive tier. It is largely the work of Patrick Ping-Tze Too and Michael Parley of our staff and is based on a straightforward set of rules for compensating for portions of a building that extend beyond the daylight curve in some places by pulling it behind the curve in other places.
- The performance tier has been simplified by focusing it on the essential and new element it brings to the bulk regulations: an objective measure of daylight, of how much of the sky as viewed from the street will be cut off and how much left open by a building. The profile zone penalty has been revised to make it less restrictive. The option of getting a small addition to the daylight score by improving a building's reflectivity through the use of a light rather than a dark exterior is retained.
- The rules governing required street wall continuity in the basic planning and urban design regulations provide a common contextual basis for both tiers.

In this new two-tier system, the tiers complement each other. They are closely coordinated. Both are based on equivalent standards of daylighting, that is the degree to which streets of Midtown must be kept open to the sky. In turn, these standards are derived from existing conditions in Midtown. They again reflect the values that two trail-blazing zoning resolutions helped to create in over a half-century of high density development.

Both tiers offer design flexibility in meeting the basic standards. They recognize the requirements of modern office buildings and the realities of available site sizes. There has been some concern expressed because they make it easier to develop small sites within the as-of-right regulations. What they permit on small sites are small buildings with practical floor sizes. We have seen that when as-of-right regulations do not permit the practical development of small sites, variances and special permits do. And too often with large buildings, not small ones.

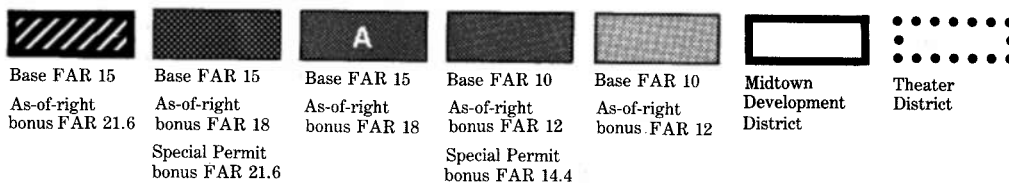
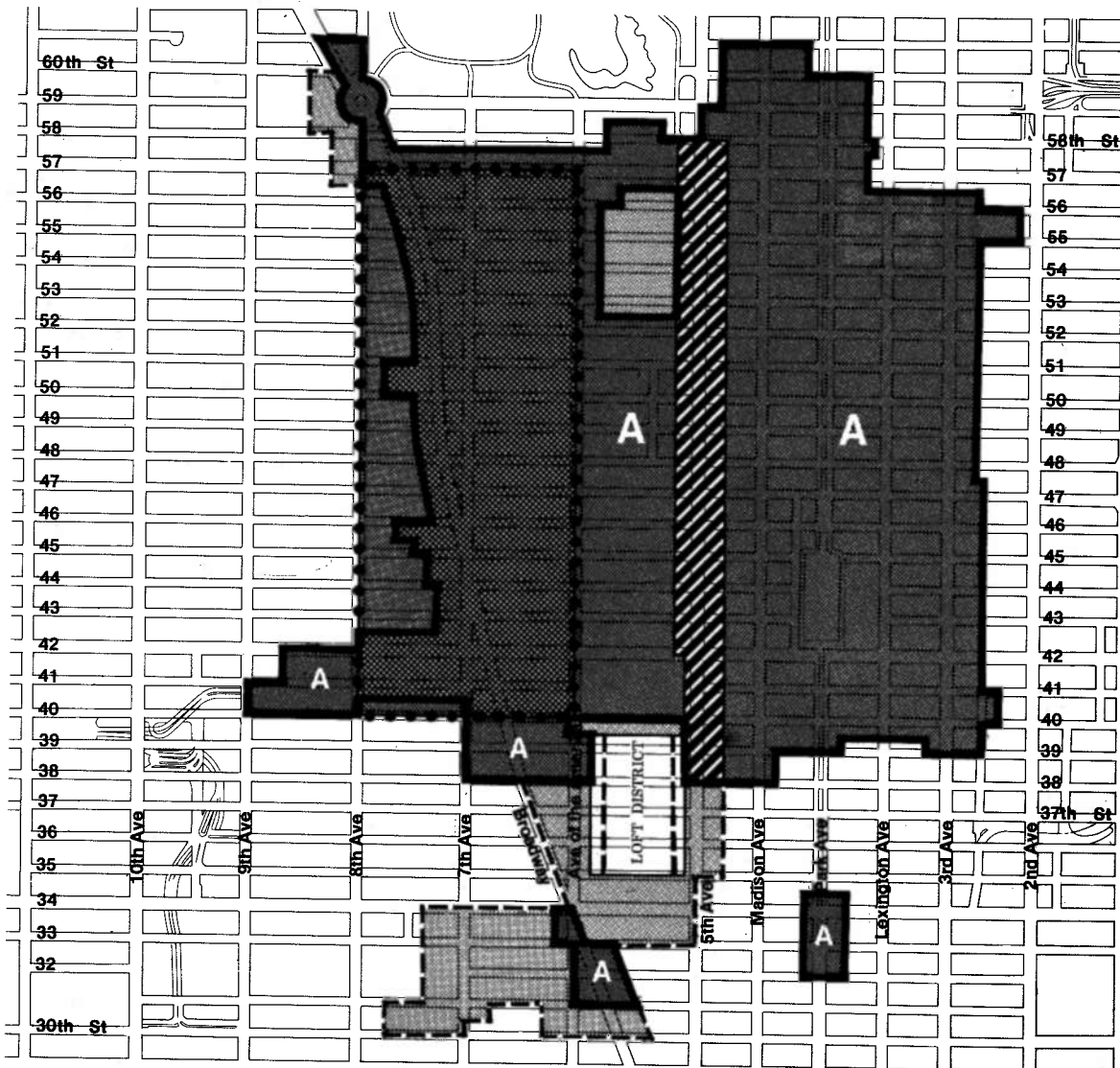
Neither system is based on a preconceived or ideal building for the architect. The daylight evaluation chart is not, as has been suggested, biased in favor of

low, fat buildings. Tall, slim towers score just as well. Variations in between will depend on the developer's program and the architect's creativity. What the system will not allow are buildings both tall and fat, rising straight up from the lot line, turning the street into a dark canyon.

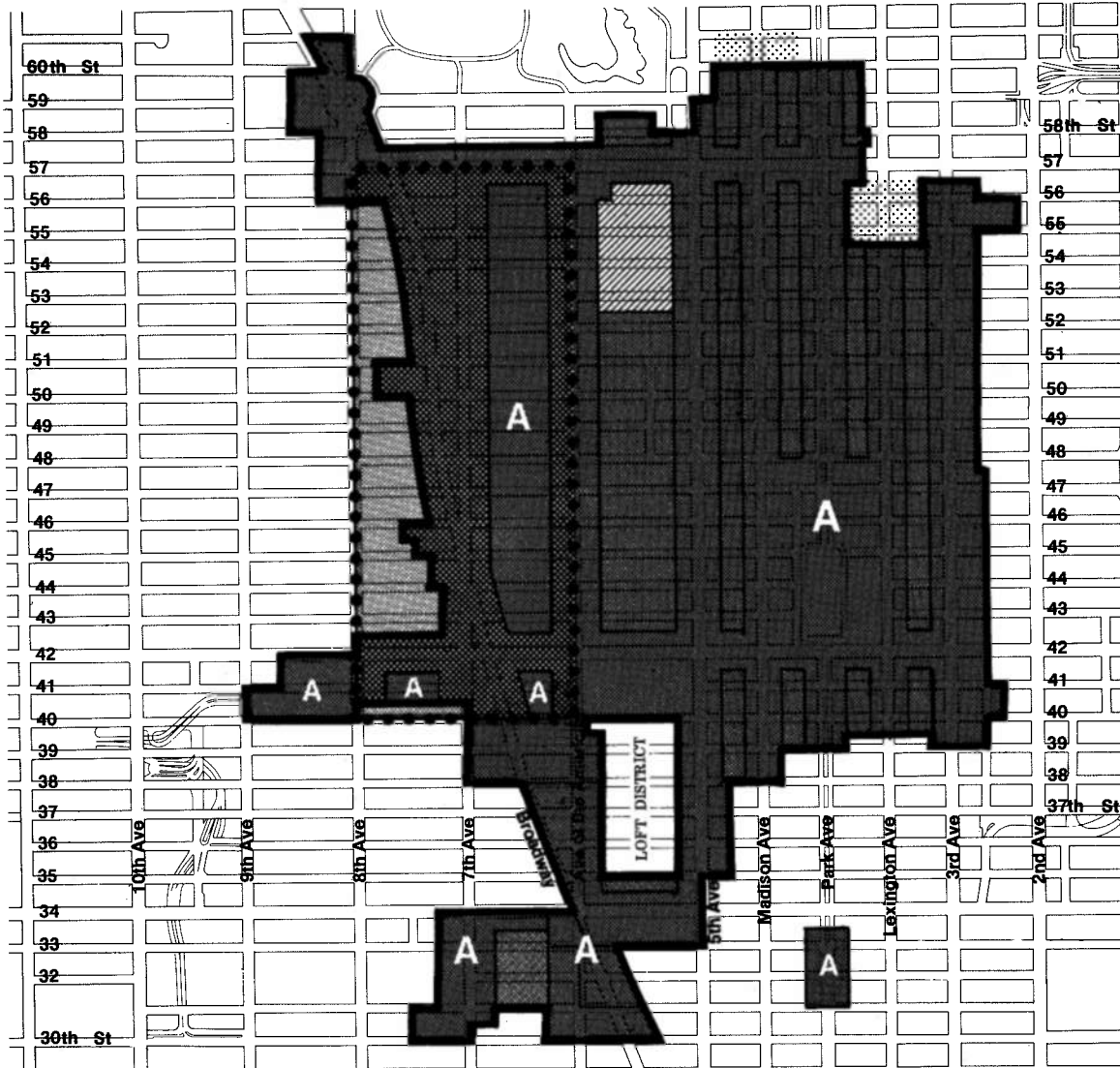
The first, or daylight compensation tier, offers the architect and client regulations in a familiar vocabulary. Its rules provide flexibility through a number of trade-offs. But they also have limits which may make them initially more comfortable to work with. The daylight evaluation chart is new. It has no fixed rules except to require a passing daylight score. Buildings appear distorted when plotted on it. But because its perspective is how a building is perceived from the street, it may prove a powerful tool when architects become familiar with it, stimulating new design creativity.

The choice of which tier to use is left to the builder and his architect. Because the two-tier system is based on objective standards and gives great flexibility and choice, it offers few valid reasons for exceptions or variances. In light of recent history this is a significant consideration.

EXISTING ZONING BULK (FAR) LIMITS



PROPOSED ZONING BULK (FAR) LIMITS



Base FAR 18	Base FAR 15	Base FAR 12	Base FAR 10	Base FAR 8	Not included in Midtown District zoning	Midtown Development District	Theater District
As-of-right bonus FAR 19	As-of-right bonus FAR 16	As-of-right bonus FAR 13	As-of-right bonus FAR 11				
Special Permit bonus FAR 21.6	Special Permit bonus FAR 18	Special Permit FAR 14.4	Special Permit bonus 14.4				

ZONING: Planning and Urban Design Controls

Introduction

The changes in the planning and urban design controls reflect both our evaluation and views expressed by the public about the value of amenities provided in new developments since 1961.

The Mandated Planning and Urban Design Features are the amenities, some of which were formerly bonused, that experience has shown should be provided by every development. These mandated features provide pedestrian circulation space and include: sidewalk widenings, corner arcades, corner circulation spaces and through-block connections. In addition, we believe that a new development adjacent to an existing subway station sidewalk entrance should relocate the entrance within the building line of the new development. To emphasize our view that the streets of Midtown are its most valuable public amenity, street wall and retail continuity is required on specified avenues and streets. These features provide basic pedestrian circulation improvements at grade and maintain basic land uses, valued architecture and urban design relationships in Midtown.

The related Bonusable Amenities are those we believe, in light of our experience with the wide range of bonusable amenities now allowed, provide substantial public benefit. *Urban Plazas* must meet dimensional, locational, proportional and area standards which will assure their usefulness as passive recreation spaces; they must be either open to the sky or sky-lighted. *Urban Parks* are modelled on the very successful private parks, Paley Park and Greenacre Park, with similar standards. *Subway Station Improvements* are based on experience gained in Citi-corp, 560 Lexington Avenue and 875 Third Avenue. The *Through-Block Galleria* represents a sky-lighted equivalent of the Galleria in Milan, Italy.

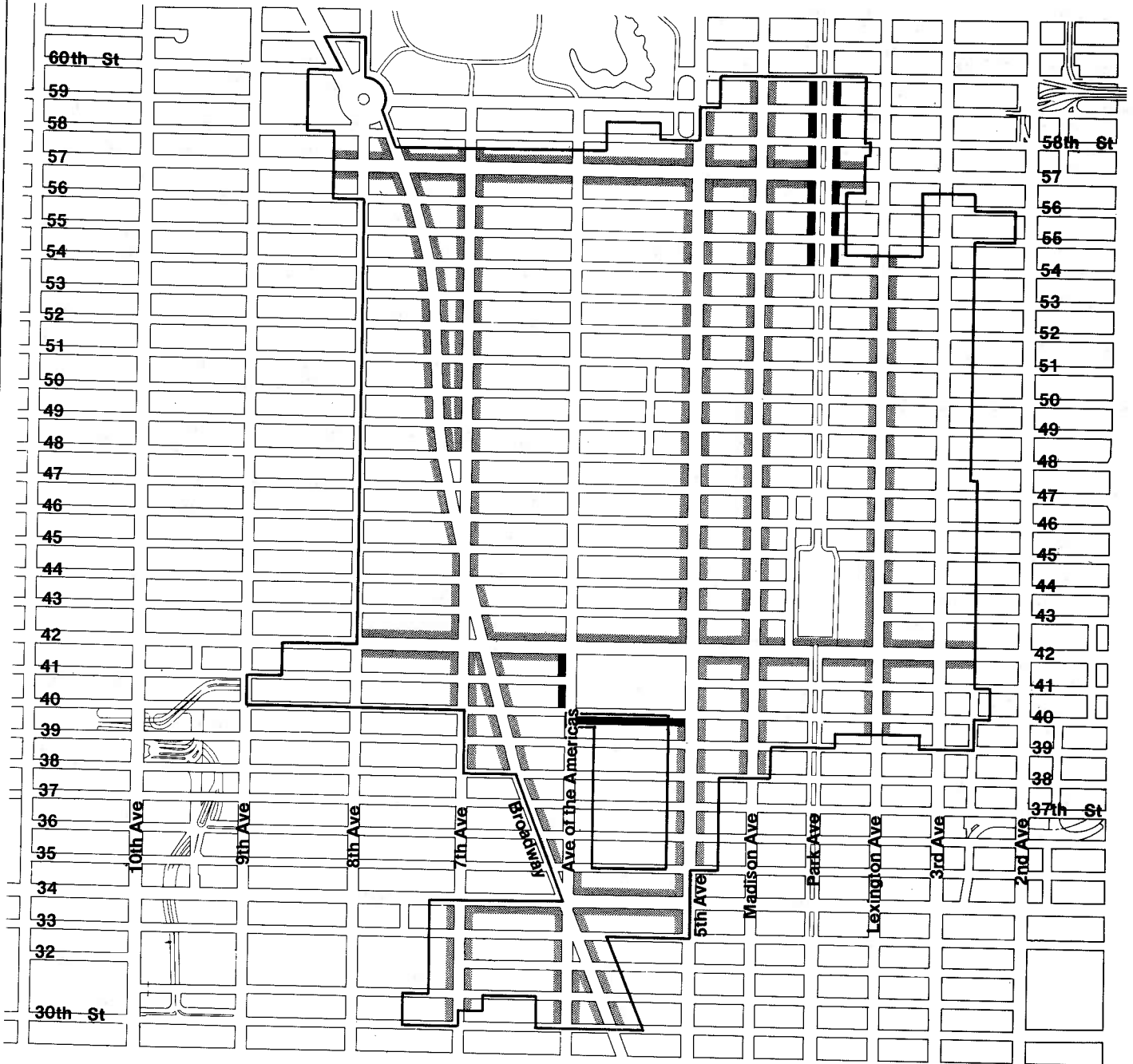
Through-Block Arcades and Covered Pedestrian Spaces would both be eliminated as bonusable amenities.

Through-Block Arcades were originally proposed to improve midblock pedestrian circulation and to allow groupings of shops to line the passageway. The model of the original legislation was The Burlington Arcade in London. However, pedestrian passageways were most useful if extended over many city blocks in a right-of-way like a street. The irregular sizes of development sites, the problem of existing buildings and other obstacles made the continuous right-of-way impossible. In some areas of the City, particularly between the Avenue of the Americas and 7th Avenue, a series of private through plazas, bonused Through-Block Plazas, and even through-block lobbies, provided a useful but irregular system. In the remainder of the City, random Through-Block Arcades did not provide substantial improvement to circulation nor did any of the existing examples approach the shopping quality of the Burlington Arcade. When Through-Block Arcades were enclosed with the only access by revolving doors, the circulation improvements became even more marginal. Psychologically the Through-Block Arcade became part of the building lobby rather than an extension of the public sidewalk. The bonus had become a means to maximize building size without resulting public benefit and will be eliminated.

Covered Pedestrian Spaces combine the pedestrian circulation requirements of a Through-Block Arcade, with climate controlled space, greater heights and larger dimensions, moveable public seating, music, public displays and performances, multilevel retail with escalator access, and direct connections to existing subway stations. The bonus range for this amenity is extremely high and from our experience is only successful when the corporate owner or developer and the architect understand and consciously try to meet the intent of the regulations. Unfortunately, in some cases these amenities have become little more than grand lobbies for the building with little or no public benefit even though they technically meet the existing regulations. For these reasons the bonus for this amenity has also been eliminated.

The Special Theater District has been modified to place much more emphasis on the preservation of existing theaters, both designated landmarks and others. Additional use and sign regulations have been added to further the special character of the Theater District. The Fifth Avenue Special District has been extended southward to 34th Street and simplified while maintaining the special use and bulk controls in modified form.

Retail and Street Wall Continuity



- Retail and Street Wall Continuity Required
- Street Wall Continuity Only Required

Mandated Planning and Urban Design Features

Retail Continuity

Designated Streets

- Fifth Avenue
(from 34th Street to 59th Street)
- Madison Avenue
(from 38th Street to 60th Street)
- Lexington Avenue
(from 40th Street to 54th Street)
- Avenue of the Americas
(from 30th Street to 34th Street)
- Seventh Avenue
(from 30th Street to 34th Street; 38th Street to 58th Street)
- Broadway
(from 30th Street to 58th Street)
- 57th Street
(from Lexington Avenue to 8th Avenue)
- 42nd Street
(from 3rd Avenue to 8th Avenue)
- 34th Street
(from 5th Avenue to 8th Avenue)

On these designated streets, where there are important existing retail frontages, new developments will be required to provide ground floor space for occupancy by retail, personal service, and amusement uses as permitted by the existing zoning district. The one exception is Fifth Avenue, which will maintain its special use controls. In these new developments, the frontage must be occupied by required uses except for building lobbies and entrances which will be limited to the greater of 35 feet or 25 percent of the retail frontage.

All the streets mandated for *Retail Continuity* are also designated for *Street Wall Continuity*. This strong complementary relationship between retail uses and existing buildings is necessary to maintain and reinforce the attractive street character and successful retail activity, and contribute to the exciting quality and atmosphere of Midtown Manhattan streets. Fifth Avenue exemplifies the rich relationship between street, retail use and building. It is known worldwide as the City's premier retail boulevard, but is special in many other ways. Therefore, the current regional retail uses (Use Group "F") permitted along Fifth Avenue in the Special District will be continued. The special use controls have proved successful in helping to maintain and enhance the Avenue's unique ambiance.

Street Wall Continuity

Designated Streets

- Fifth Avenue
(from 34th Street to 59th Street)
- Madison Avenue
(from 38th Street to 60th Street)
- Park Avenue
(from 54th Street to 60th Street)
- Lexington Avenue
(from 40th Street to 54th Street)
- Avenue of the Americas
(from 30th Street to 34th Street and from 40th Street to 42nd Street)
- Seventh Avenue
(from 30th Street to 34th Street; 38th Street to 58th Street)
- Broadway
(from 30th Street to 58th Street)
- 57th Street
(from 3rd Avenue to 8th Avenue)
- 42nd Street
(from 3rd Avenue to 8th Avenue)
- 40th Street
(from 5th Avenue to Avenue of the Americas)
- 34th Street
(from 5th Avenue to 7th Avenue)

On designated streets, where existing buildings maintain the street wall, new developments are required to have their building walls within ten feet of the street line. On 57th Street, 42nd Street, 34th Street and Fifth Avenue, however, not even the ten foot street level setback would be permitted.

Requirements

The *minimum height* of the street wall is as follows: four stories or 50 feet (whichever is less) for a lot line up to 50 feet long; and six stories or 85 feet (whichever is less) for a lot line more than 50 feet long.

On the designated streets, within the street wall elevation from grade to the *minimum height*, 70 percent area of the wall of the development must hold the street wall. The remaining 30 percent allows recesses and other architectural treatment. The length of the street wall must be at least 80 percent of the lot line length along designated streets.

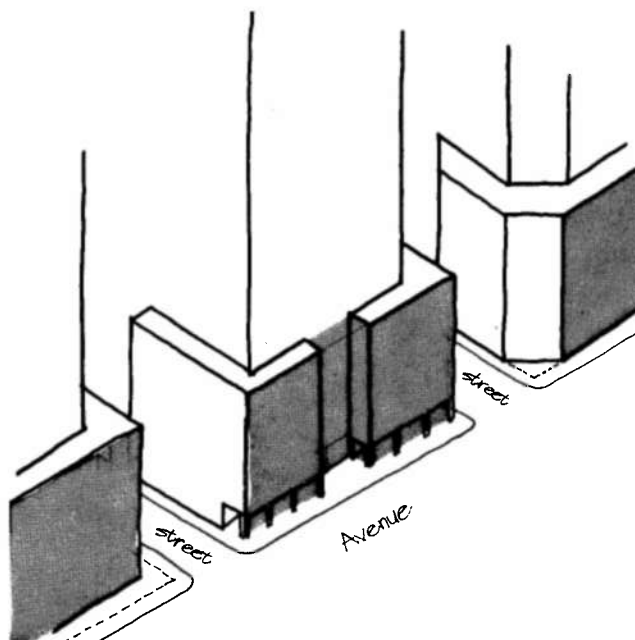
Developments not more than two stories in height ("taxpayers") are exempt from these requirements.

The *maximum* street wall height is established by the bulk regulations. It permits a maximum street wall height of $1\frac{1}{2}$ times the width of the street up to 150 feet. However, the maximum street wall height on Fifth Avenue is limited to 125 feet.

In the area between the minimum required street wall height and the maximum allowable street wall height, recesses or architectural treatment are restricted only by the bulk controls.

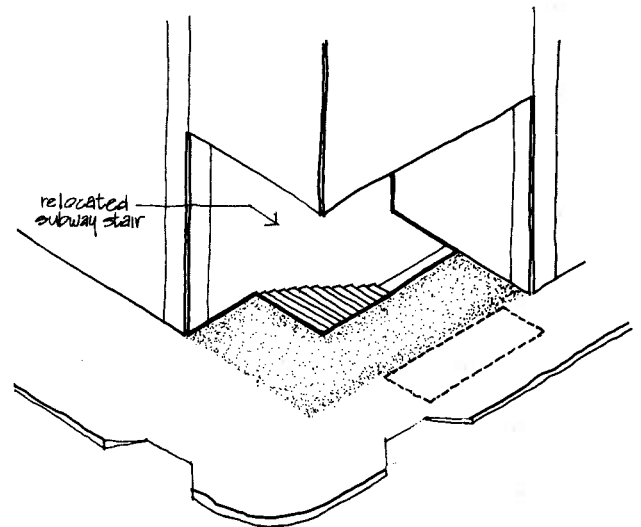
For Fifth Avenue the minimum required street wall will be 85 feet and the maximum allowable street wall height is 125 feet. Above the maximum allowable street wall height, a new development must set back at least 10 feet.

Exemptions to the mandatory street wall requirement will be by special permit. The Planning Commission will be required to find the need for open space in the immediate area outweighs the loss of street wall and street retail continuity. Where a special permit is granted, no open space within 40 feet of the street line may be counted for bonus purposes.



Off-Street Relocation of Subway Stair

Where a development site adjoins a subway stair entrance located in the sidewalk of the public street, the relocation of the stairway entrance within the development's property line is required. It may not be located within a required sidewalk widening or arcade. The new stair must meet at least the minimum standards established by the Transit Authority for width of run, queuing space, landing, riser/tread relationship and handrails. The Transit Authority will review, process and approve applications which meet Transit Authority submission requirements within 8 to 14 weeks.



Curb-Cut Restrictions

Designated Streets

- All avenues in Midtown
- 59th, 57th, 53rd, 47th, 42nd and 34th Streets.

On designated streets there are to be no driveway curb cuts for parking or loading bays. This restriction reflects the concern for the disruptive and potentially dangerous conflict between pedestrians and vehicles at the sidewalk of these important Midtown streets. Exceptions may be made, with the concurrence of the New York City Department of Transportation, where site configuration or other extenuating conditions preclude curb cuts on alternate streets bordering a development site. These requirements shall be in addition to any other City rules or regulations concerning driveway curb cuts.

Alleviating Sidewalk Congestion

All new developments in Midtown, except those located on wide streets which require a building to be built to the property line, must provide a minimum amount of pedestrian circulation space of one or more of the following types: sidewalk widening, arcade, corner arcade, corner circulation spaces or through-block connections. For a development on a zoning lot of 10,000 square feet, a minimum square footage of qualifying pedestrian circulation space of 500 square feet is required. An additional 50 square feet of pedestrian circulation space is required for each 1,000 square feet of increase in zoning lot area. Where new developments are required to be built to the property line, minimum pedestrian circulation space must be provided on a narrow street. Corner arcades or corner spaces increase critically needed circulation space where the pedestrian congestion is greatest at the corner and have been added to sidewalk widenings, arcades and through-block passageways as available options for developers. These mandated circulation improvements are required to insure adequate levels of pedestrian circulation.

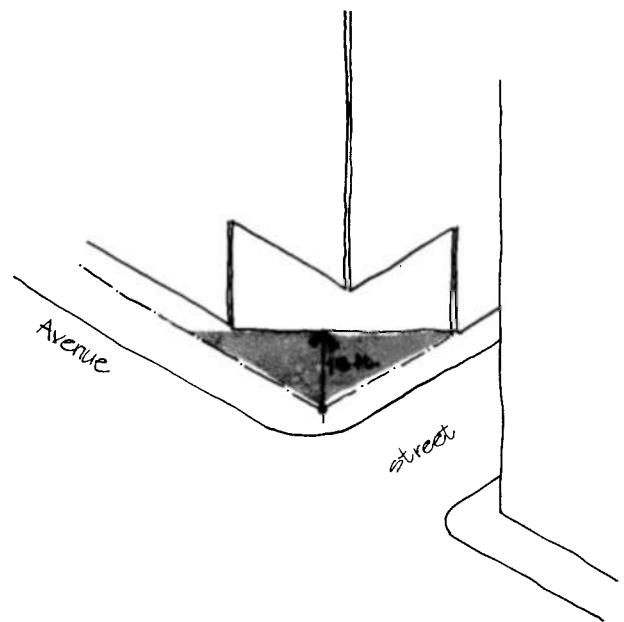
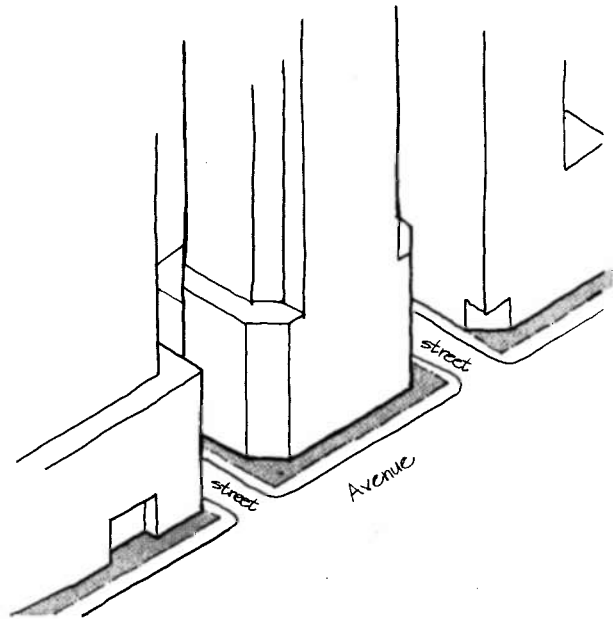
Requirements

All pedestrian circulation spaces must be at the same level as adjacent sidewalks throughout their length or, in the case of a through-block connection, must be level with the sidewalk at the property line and without steps through their length. For arcades, the minimum depth is 15 feet with columns and 10 feet if space is column free with a minimum height of 12 feet.

For corner arcades and corner circulation spaces the minimum distance is 15 feet measured along the line bisecting the angle of intersection of the street lines.

Through-block passageways must be a minimum of 15 feet wide along the same line from property line to property line, and if covered must have a minimum height of 15 feet.

All pedestrian spaces must be free of obstructions and cannot be used for vehicular circulation.



Continuing Through Block Pedestrian Network

In certain areas where there are parts of a north-south through-block pedestrian system, a continuation of the system is mandated in blocks where no through circulation space exists. Through-block circulation systems in a new development must align with existing systems as nearly as possible, but in no case can a new connection be located within 100 feet of a north-south wide street. In a block where a qualifying through-block connection already exists, an additional connection is optional.

The through-block circulation systems are mandated to improve circulation by extending existing systems on the 800 foot long blocks located west of Fifth Avenue.

Designated Areas




The designated areas, as shown on facing map, are the midblocks between: 7th and 8th Avenues, from 40th-45th Streets; Broadway and 8th Avenue, from 40th-52nd Streets; Avenue of the Americas and Broadway, from 40th-45th Streets; Avenue of the Americas and 7th Avenue, from 45th-58th Streets; and Fifth Avenue and Avenue of the Americas, from 42nd-53rd Streets and 56th-58th Streets.

CONTINUING THROUGH- BLOCK PEDESTRIAN NETWORKS



In the three through-block corridors in the long blocks west of Fifth Avenue, new development with frontage on two sidestreets will be required to provide at least a minimal through-block passageway to continue existing networks.

Only in the Special Theatre District, however, will such passageways, if built to the standards of a through-block galleria, be eligible for a bonus, up to FAR 1.

-  Through Block Corridor
-  Public Pedestrian Passageway
-  Private Pedestrian Passageway

Bonusable Amenities

Urban Plazas

A Plaza can provide an attractive, quiet, landscaped seating area. In the past, the attempt to make plazas also serve to facilitate pedestrian circulation has resulted in failure to accomplish either purpose very well. Even with recently imposed requirements, urban plazas have sometimes been a means to maximize building size rather than provide a useful public space. The requirements for a plaza bonus have been simplified and emphasize passive recreation. The bonus has been reduced to six square feet of floor area for each square foot of plaza up to a maximum of one FAR.

An Urban Plaza may be either an open area or a glass-enclosed area which fronts upon a street and is accessible to the public at all times.

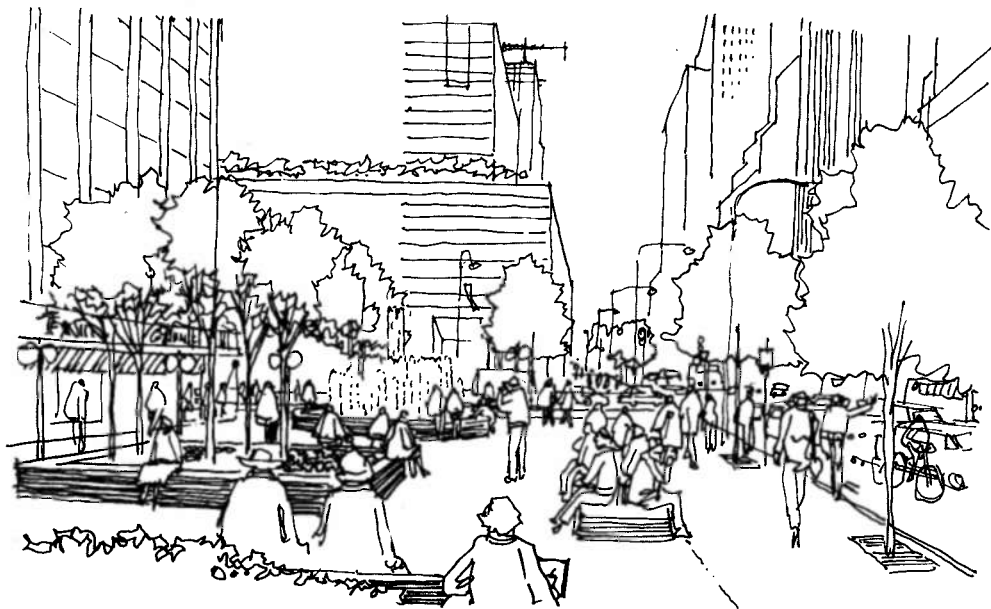
Requirements

An Urban Plaza must have a minimum area of 1600 square feet and a minimum dimension of not less than 40 feet for at least 70 percent of the required area. If the Urban Plaza is glass-enclosed a minimum of at least 75 percent of street walls and 75 percent of the roof area must be clear, untinted, uncoated glass. The minimum clear height must be at least 30 feet. An Urban Plaza must have a southern exposure and the major portion of an Urban Plaza must have a ratio of frontage along the street line to depth or depth to frontage of at least 3:1.

Access

An open Urban Plaza shall be accessible to the public through at least 50 percent of the frontage along a public sidewalk at all times. A glass-enclosed Urban Plaza or an Urban Plaza meeting all the requirements of the Urban Park must be accessible to the public from at least 25 percent of the frontage along a public sidewalk and must be open to the public during daylight hours with the exception of certain holidays. Standards for access to the handicapped will remain the same as under the current Urban Open Space legislation.

The maximum area of permitted obstruction will be 38 percent for an Urban Plaza of under 5,000 square feet; 40 percent for an Urban Plaza between 5,000 square feet and 10,000 square feet; and 50 percent for an Urban Plaza larger than 10,000 square feet. An open air cafe and kiosk can occupy 25 percent of an Urban Plaza area without a Special Permit. Four trees are required for Urban Plazas between 1600 square feet and 5,000 square feet; and six trees for Urban Plazas above 5,000 square feet. There is a public seating requirement of one linear foot of seating for each 30 square feet of Urban Plaza area. Each moveable seat is equivalent to 1.5 linear feet of required seating.



Maintenance

A maintenance plan requirement, a plaque and a performance bond are required for an Urban Park or Plaza.

Existing Plazas

Existing plazas that meet tree planting, public seating, maintenance, access, and retail continuity requirements may have as an allowable obstruction an open air cafe and kiosk occupying up to 25 percent of the Urban Plaza by Certification by the City Planning Commission. Existing plazas that cannot meet area or orientation requirements can be modified by Special Permit.

Bonus

An Urban Plaza will receive a bonus of six square feet of floor area for each qualifying square foot of bonus area. The maximum amount of bonus that can be generated by an Urban Plaza is 1 FAR. This bonus must be certified for compliance with requirements.

Urban Park

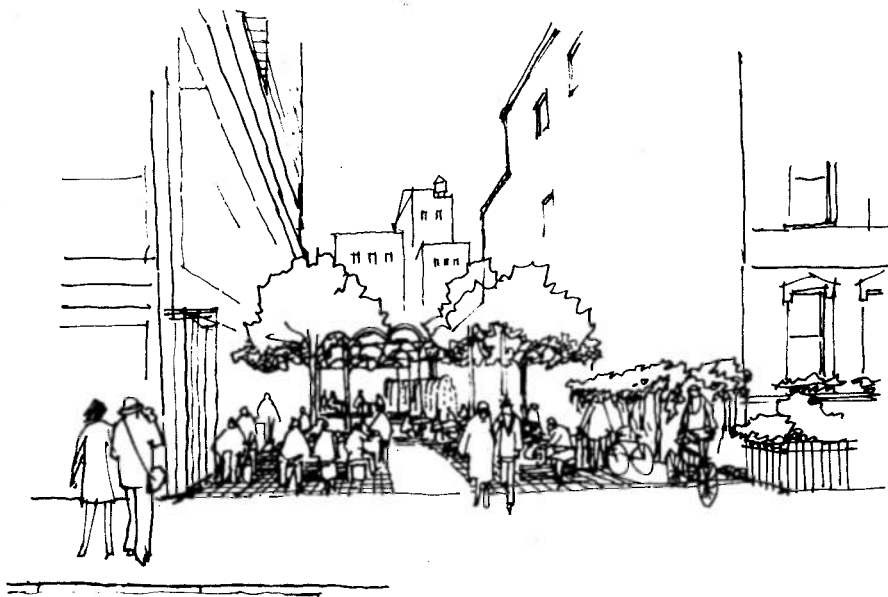
An Urban Park is a landscaped "vest pocket" park designed for passive recreation, with trees, landscaping and moveable seating accessible to the public during daylight hours. This bonusable amenity is based on the successful Paley and Greenacre Parks. A Special Permit will be required.

Requirements for Special Permit

An Urban Park must be located on a narrow street at least 100 feet from a wide street within a 1,000 foot radius of the receiving site. In addition, it must be at least 4,000 square feet in area, at least 40 feet wide and at least 60 feet deep. Sixty percent of the area must be accessible to the handicapped. The Urban Park must be open and accessible to the public during daylight hours with the exception of certain legal holidays. A maintenance plan and performance bond for permanent maintenance are also required.

Development Rights Transfer

The maximum amount of floor area transferable to a receiving lot is a function of the area of the Urban Park and the allowable base FAR of the zoning district in which it is located, subject to a maximum of 20 percent of the allowable base FAR on the site being developed.



Through-Block Galleria

A Through-Block Galleria is a covered urban space which can be used to satisfy the mandatory requirements in blocks mapped for continuation of through-block pedestrian networks. *However, it is only bonusable within the Special Theater District.*

Requirements

A Through-Block Galleria must be a minimum of 20 feet wide throughout its length and must have a minimum clear height of 20 feet. If the length of the Through-Block Galleria is greater than 150 feet, the width and height must be increased to a minimum of 25 feet. At least 75 percent of the area must be skylighted. It must be obstruction free throughout its length and accessible to the handicapped. It must be open and accessible to the public during daylight hours except for certain legal holidays. Both sides along its length must be transparent and lined as much as possible with display windows, lobbies, or other uses allowable within the zoning district.

Bonus

In the area where a Through-Block Galleria is bonusable, qualifying area will generate a bonus of 6 square feet of floor area for each square foot of Through-Block Galleria up to a maximum of 1 FAR for the zoning lot.

Special Subway Entrance

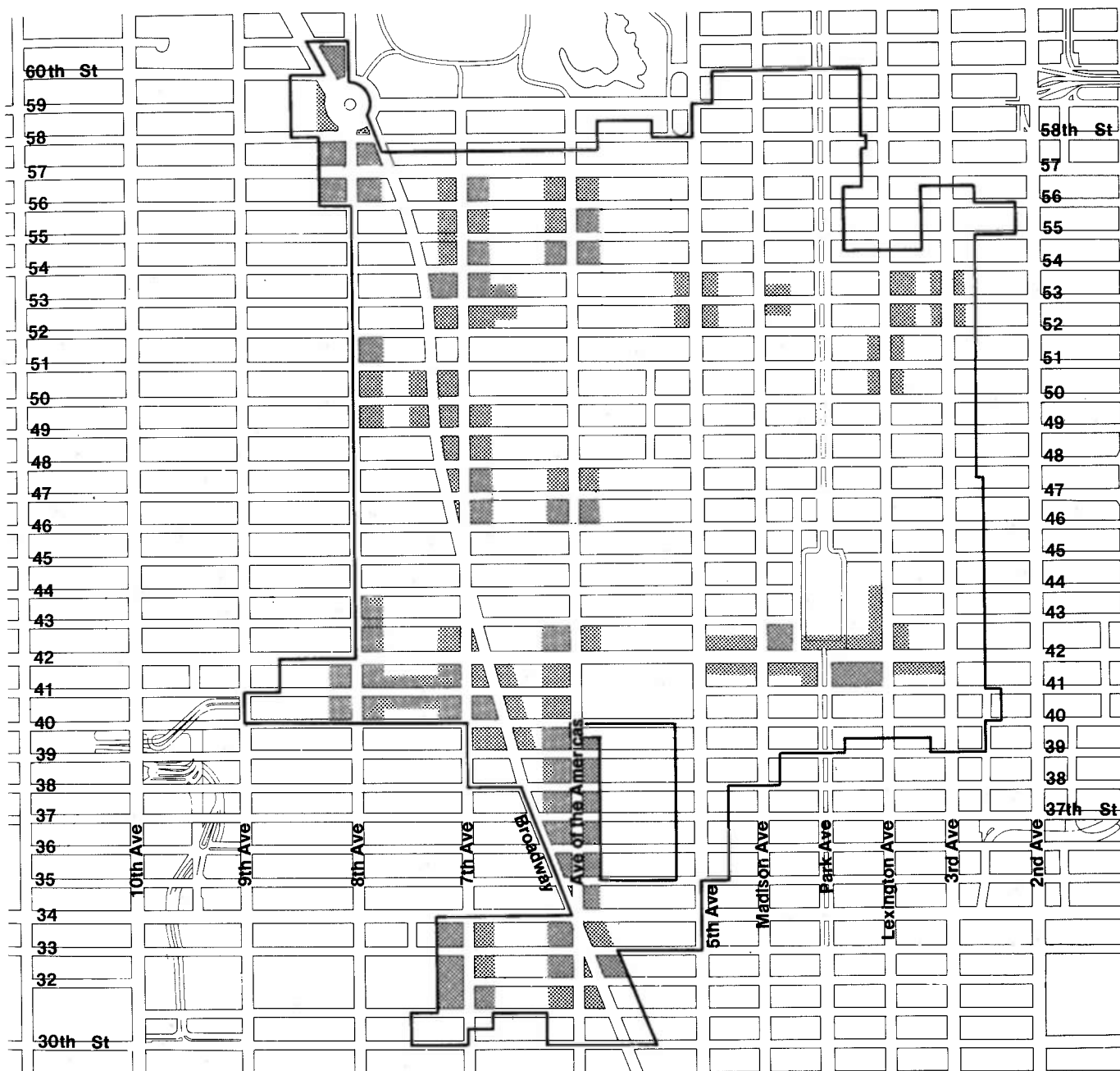
Major improvements of access to Midtown's subway stations, which not only permit easier and more direct movement of the surge of riders who use these stations at rush hour, but open the stations to light and air, are highly desirable. Indeed, the Regional Plan Association gives them a top priority in its comments on the draft report, in which we had suggested a range of improvements that new buildings within designated transit improvement zones would be required to make. Most would earn a floor area bonus.

While we received support for this in principle, two reservations were expressed: one, that it might be contrary to current operating policy of the Transit Authority; and two, that it would require detailed specifications, cost estimates and procedures worked out in advance.

The first is not a problem. Both the MTA and the Transit Authority support the requirement of such improvements. But the second is valid. A developer cannot reasonably be required to do something which is open-ended as to cost and time. We have agreed with the T. A. to undertake a joint planning and engineering study over the next year, with Federal funds already in hand to detail these major station improvements.

Meanwhile, however, we would hope to encourage such improvements being made for any building which may be planned in the designated transit improvement zones. A major subway entrance improvement can benefit the building as well as the public. To encourage this, we will sanction a floor area bonus up to 20 percent of base FAR, depending upon the nature and cost of the station improvement. Prior to the study, the amount of bonus cannot be spelled out. It will have to be negotiated and it will require a special permit.

SUBWAY STATION IMPROVEMENT AREA



Special Districts

Special Theatre District

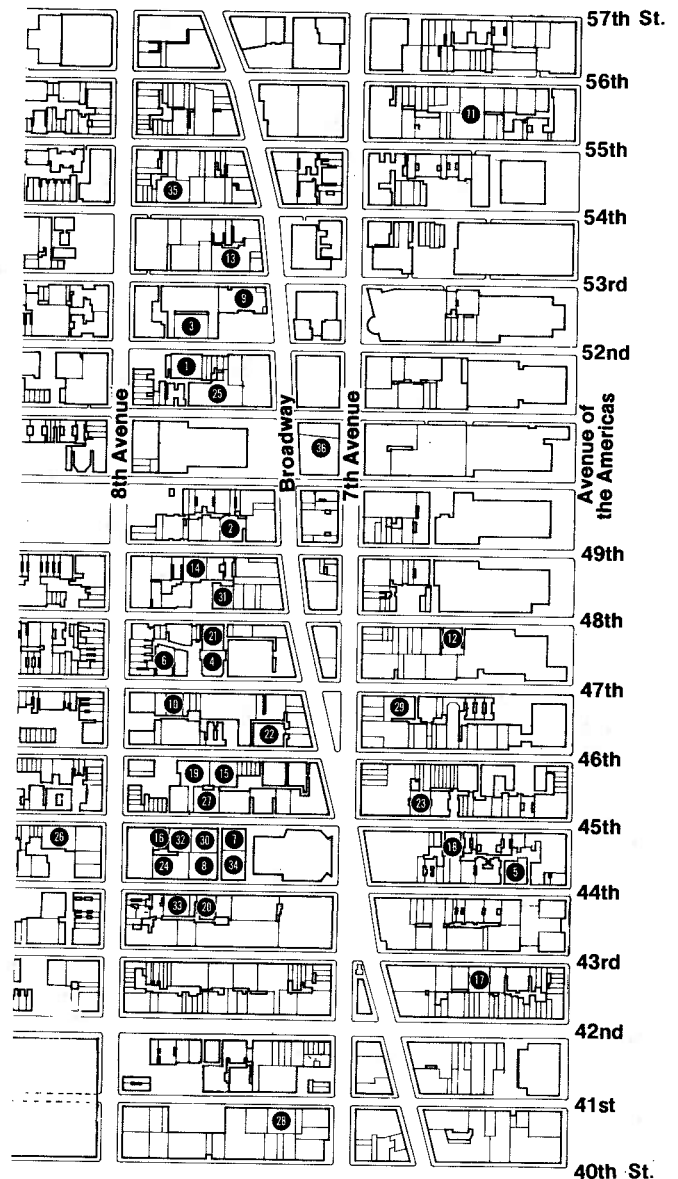
The Broadway theatres are a key element in the City's economy and in the mixture of uses that makes Midtown an exciting place. For these reasons, encouraging the preservation and rehabilitation of existing legitimate theatres in the Special Theatre District through the use of appropriate zoning incentives is a major planning objective of the Midtown Study.

As the centerpiece of this effort, we propose to list 36 free-standing Broadway theatres in the Zoning Resolution. Demolition of listed theatres would be allowed only with a special permit from the City Planning Commission and, in the case of landmarks, with the permission of the Landmarks Preservation Commission. Listed theatres that meet defined standards would also be eligible for new preservation-oriented bonuses for substantial interior rehabilitation or restoration.

Substantial rehabilitation would include such work as expanding stage wings, reraking the orchestra, or increasing rehearsal, dressing room or lobby space. It would also include reconversion to legitimate theater use of an original Broadway theater currently in other use. It would not include normal theater maintenance, painting or improvements to mechanical systems.

DESIGNATED THEATRES

- | | |
|---------------------|--------------------|
| 1. Alvin | 19. Imperial |
| 2. Ambassador | 20. Little Theatre |
| 3. ANTA | 21. Longacre |
| 4. Barrymore | 22. Lunt-Fontanne |
| 5. Belasco | 23. Lyceum |
| 6. Biltmore | 24. Majestic |
| 7. Booth | 25. Mark Hellinger |
| 8. Broadhurst | 26. Martin Beck |
| 9. Broadway | 27. Music Box |
| 10. Brooks Atkinson | 28. Nederlander |
| 11. City Center | 29. Palace |
| 12. Cort | 30. Plymouth |
| 13. Ed Sullivan | 31. RFK |
| 14. Eugene O'Neill | 32. Royale |
| 15. 46th Street | 33. St. James |
| 16. Golden | 34. Shubert |
| 17. Henry Miller | 35. Studio 54 |
| 18. Hudson | 36. Winter Garden |



These theatres will be eligible for a bonus for renovation; transfer of their unused development rights to adjacent avenue sites will be facilitated; and they cannot be demolished without a special permit from the City Planning Commission.

Listed Theatres

a. Listed theaters—whether landmarks or not—which merge their zoning lots with contiguous development sites would be permitted to shift unused development rights across zoning district boundaries up to 20 percent over the receiving district's base FAR, subject to a certification by the Chairman of the City Planning Commission.

In order to be eligible for a rehabilitation bonus, the development site must be contiguous with the zoning lot of the theatre if the theatre is not a landmark. The bonus would be tied to the number of seats in the theatres. A developer would be granted additional floor area on a sliding scale between 37 and 49 square feet per seat saved. The maximum bonus would be 20% over the base FAR on the theatre site. As the number of seats increases, the square foot/seat bonus would decrease. The following chart outlines the suggested bonus structure:

SEATS IN THEATRE ADD'L S.F./ SEAT (not to exceed in sq. ft.)	300-499	500-999	1000-1399	1400-1599	1600 +
	48	44	40	38	37
	22,000	40,000	53,000	59,000	65,000

Landmark Theatres

b. For theatres that are designated landmarks, current law permits transfer of unused development rights by zoning special permit. This privilege is conditional upon a preservation plan acceptable to the Landmarks Preservation Commission and approved by the Planning Commission. Typically such plans concern themselves with the exterior of the landmark. We propose, in addition, other incentives to preserve landmark theatres: First, we propose to liberalize current development rights transfer provisions for designated landmarks. Under current zoning in 15-18 FAR zones, transfers are permitted from designated landmarks not only to sites adjacent to or across the street from the landmark, but also across intersections and to any lot in a chain of common ownership extending across streets from the landmark's zoning lot. These provisions now apply in the C6-7 area of the Special Theatre District, but not in the lower density C6-5 portion which comprises much of the western part of the district. Proposed changes to the Zoning Resolution would:

- Permit transfers through a chain of common ownership throughout the District—C6-5 as well as C6-7 zones;
- Grant the same privileges to structures designated as "interior" landmarks that buildings with

exterior designations now receive; and

- Grant receiving lot privileges to mixed-use development as well as commercial buildings.

Second, any new development would be eligible for a floor area bonus for substantial rehabilitation of a listed landmark theatre if the landmark theatre is either adjacent to or across the street from the site being developed.

Conditions

c. The special permit granting a rehabilitation bonus and the certification approving a waiver of the split lot restrictions would verify 1) the amount of development rights transferred; 2) the extent to which a theatre rehabilitation or restoration bonus is awarded; 3) the existence of a legal commitment to continuance of legitimate theatre use; and 4) the existence of a signed lease from a prospective theatre operator with acceptable credentials.

New Theatres

d. We also propose that the existing bonus of up to 20% of the base FAR of the district be maintained for the inclusion of a new theatre in new development in the Special Theatre District. In addition to the findings presently required by the Zoning Resolution, however, the following conditions would also have to be met:

- The developer must have a signed lease from a prospective theatre operator with acceptable credentials; and
- There must be a net increase in the number of theatres on the site. Thus, no bonus would be granted if a new theatre were built to replace one that had been demolished for the purpose of developing this site.

Total Theatres

In addition to the 36 theatres that will be protected from demolition by being listed, most of the other theatres will be saved in other ways. Many of the 10 theatres on 42nd Street, for example, will be preserved as part of the 42nd Street Redevelopment Project. Four theatres built under the current Special Theatre District legislation—the Uris, Minskoff, Circle in the Square and American Place—are tied to the life of the developments they occupy, and three or four others will most likely remain as part of existing hotels. Thus, the Theatre District should be assured a minimum stock in excess of 50 Broadway theatres.

Times Square Regulations

There is a basic, recognizable character in Times Square which gives the area its vitality and promotes the special quality and excitement of the Theater District. Certain specific regulations are proposed to remedy problems at ground level related to signage and use of ground level frontages and business establishments. The regulations apply to the frontages located in the area bounded by 41st Street, 51st Street, west side of Avenue of the Americas, and east side of Eighth Avenue. The regulations acknowledge the differences between narrow and wide streets and the retail characteristics of each.

Use Restrictions

A specific list of allowable uses, Use Group "T," will be established for the area, restricting problem uses such as blood banks, pawn shops, loan offices, billiard parlors, and liquor stores, and providing tighter administrative control over listed uses.

A certification procedure will be required for eating and drinking establishments to ensure compliance with regulations (1) banning open store fronts or open store windows designed to serve customers outside the building; (2) requiring waiter service for outdoor cafes; and (3) requiring on-premises sanitation storage.

On wide streets, 80 percent of frontage would be required to be Use Group "T" with a further restriction of a maximum of 15 percent of the frontage allowable for banks and travel uses. A maximum frontage of 40 feet is allowed for any one use, with 10 feet the minimum frontage permitted.

Signage and Transparency Regulations

These regulations limit and control exterior signs, pennants, and displays at grade level which at the present time give existing shops a blighted, cluttered and unattractive appearance.

A minimum of 50 percent of the storefront must be glazed with transparent material. Not more than 50 percent of the transparent material may be painted.

All signs on storefronts must be located behind glass and may not occupy more than $33\frac{1}{3}$ percent of the transparent area.

No merchandise displays are allowed beyond the storefront. Banners, pennants and canopies are all prohibited.

Mandated Super Signs

A super sign is a large, illuminated, advertising sign located above the level of existing marquees and ground level businesses. The concentration of super signs on buildings from 43rd Street to 48th Street is unique to Times Square and is a key element in its special sense of place. All new developments fronting Times Square from 43rd Street to 48th Street would be required to provide a lighted super sign, 35 square feet in area for each foot of frontage.

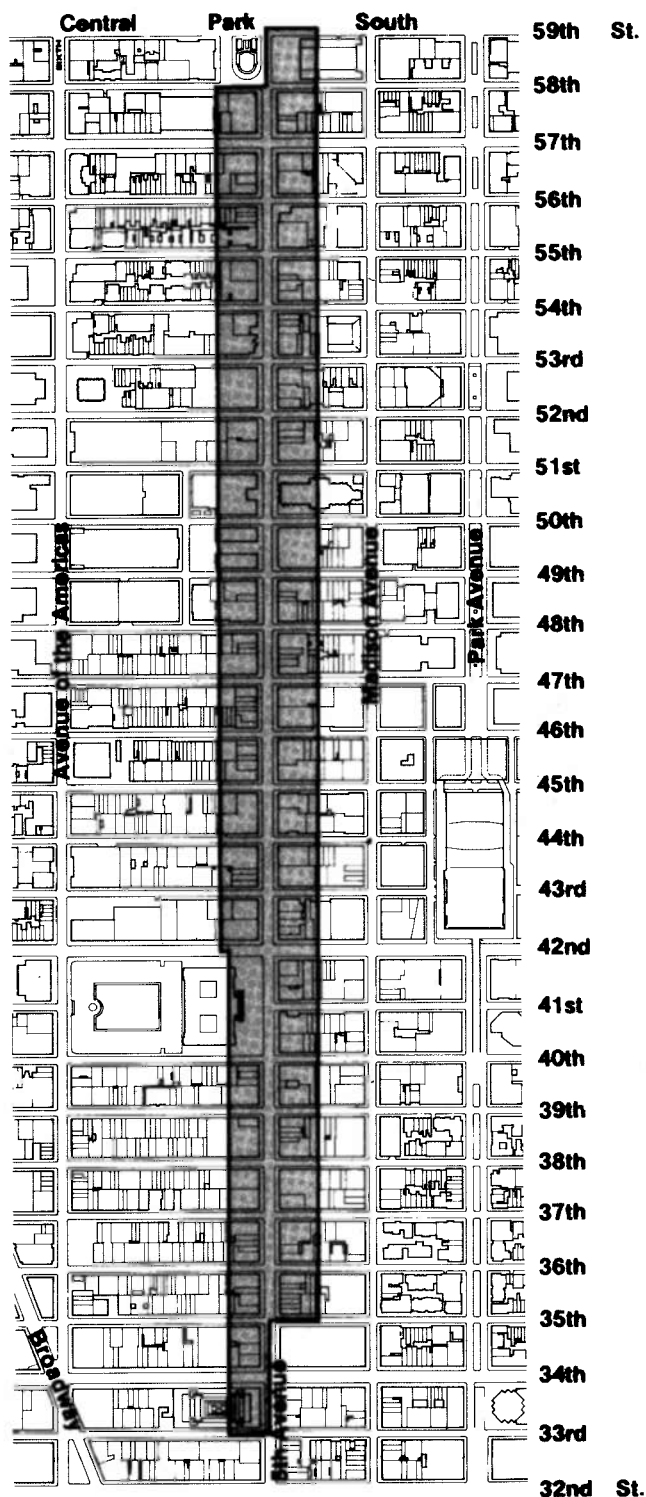
Fifth Avenue Special District

The Fifth Avenue Special District will be extended to 34th Street from its present southern boundary of 38th Street. The new section will be mapped C5-3. The special retail use group developed for Fifth Avenue, Use Group "F," will be continued and retail continuity emphasized to protect the Avenue's character as a prime shopping boulevard. The requirement for retail frontage will be .75 FAR at grade devoted to Use Group "F" without further incentive to be given for additional retail. The bulk regulations will be virtually the same as the rest of Midtown, with some slight modification described previously in the street wall continuity section.

The Fifth Avenue street wall requirements do not permit 10 foot setbacks from the streetline. The minimum required street wall will be 85 feet and the maximum allowable street wall height will be 125 feet. Above the maximum allowable street wall height, a new development must set back at least 10 feet.

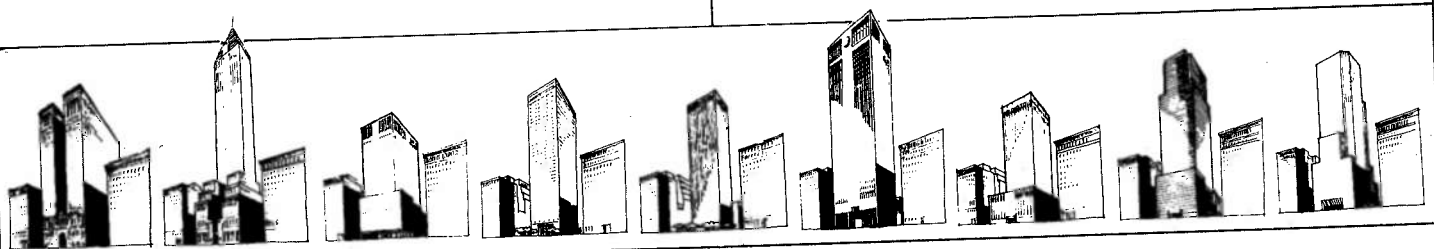
We recommend that new developments select their facade materials with great care to make these developments compatible with the existing architectural character rather than placing a new facade material requirement in the Special Fifth Avenue District.

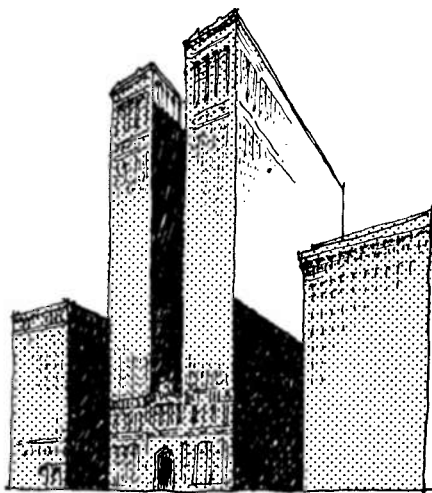
In summary, the Fifth Avenue Special District will be greatly simplified, retaining only the most successful parts of the original legislation. With minor exceptions, the area requirements will be the same as the remainder of the Stabilization Area.



ZONING: Bulk Regulations

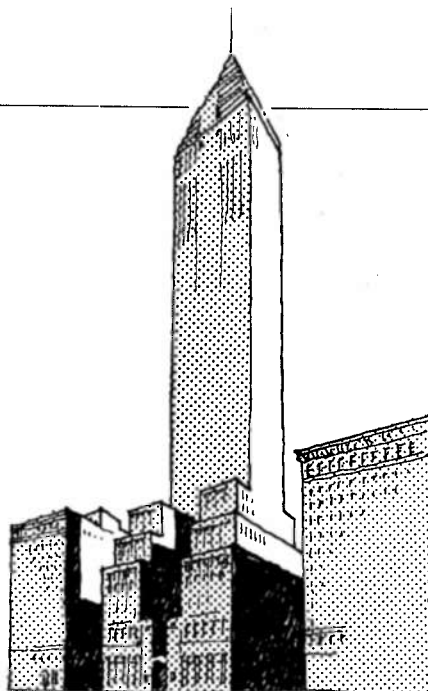
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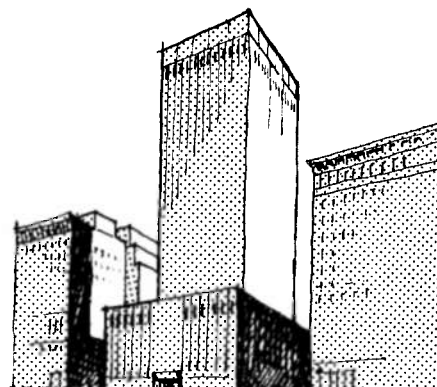


1. New York City's pioneering 1916 zoning resolution, the first in the nation, was in large part a response to such new buildings as the Equitable Building, 120 Broadway, which rose 540 feet straight up from its lot line without setback.

2. To protect the streets and avenues from being turned into dark canyons, the 1916 regulations established height districts. These limited the height a building could rise, in proportion to the width of the street it fronted on, until it had to set back. For each foot

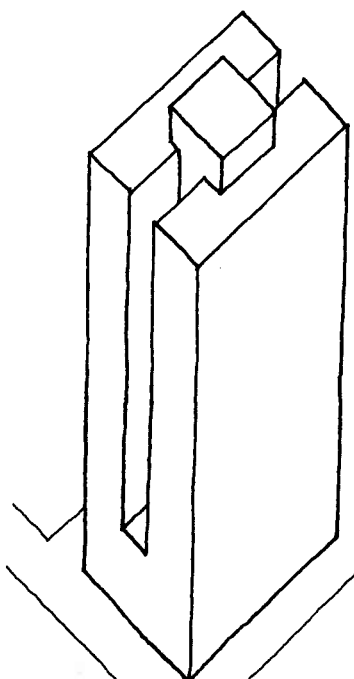


it set back it could rise "x" additional feet, the ratio depending on its height district. The two most commonly mapped height districts in Midtown had rise-to-setback ratios of $2\frac{1}{2}:1$ and $3:1$, equal to sky angle planes of 68.3° and 71.6° or an average of 70° . A tower rule permitted a portion of the building, up to 25 percent of the lot area, to rise without setbacks provided it was a distance from the street. There were no other limitations on height or bulk.

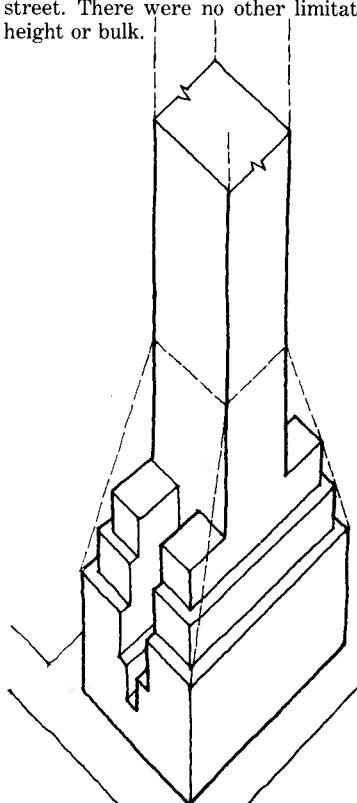


3. In reaction to the "wedding cake" shape of much of New York's skyline built to the 1916 zoning envelope, and to meet other needs, zoning was completely revised in 1961. A "sky exposure plane" replaced height districts to govern setbacks. To meet the need for larger office floors, the tower that could penetrate the plane was increased from 25 to 40 percent. A new tool to govern bulk was introduced, the floor area ratio (FAR). The basic floor area for the largest office building was set at 15 times the lot area, or FAR 15.

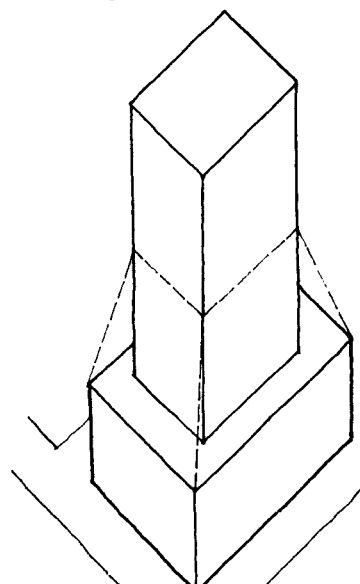
Note: dotted lines represent maximum zoning envelope



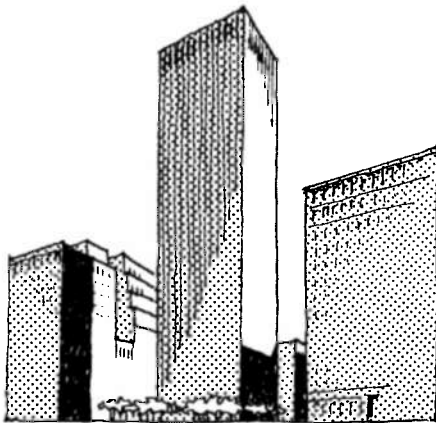
1. Pre-1916 building, 120 Broadway



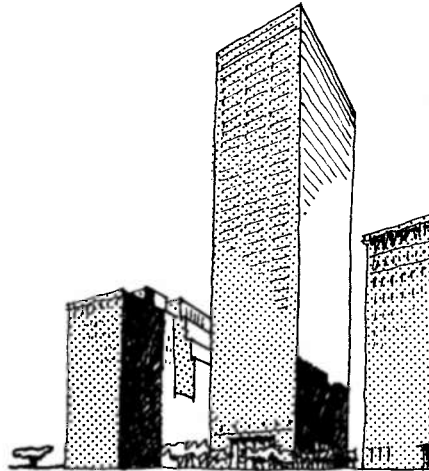
2. Typical 1916 "wedding cake" building



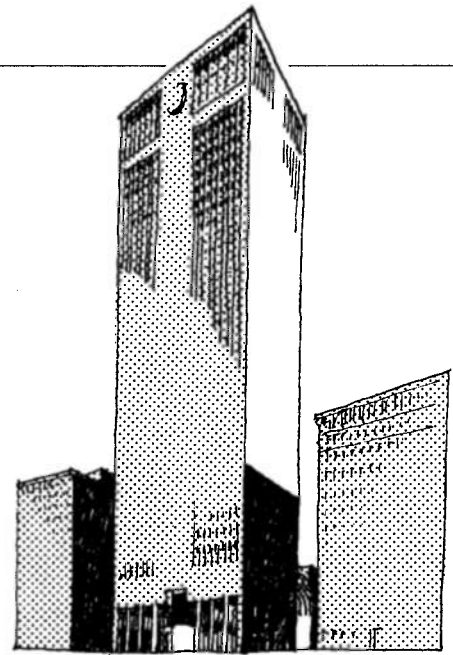
3. 1961 tower on base, FAR 15



4. and 5. Another major goal of the 1961 zoning was to get more open space around new buildings. The "tower in a plaza" epitomized by the elegant new Seagram Building—actually a 25 percent tower conforming

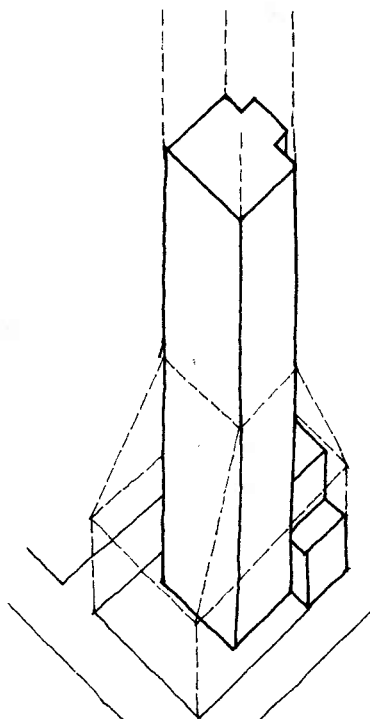


to the 1916 regulations—was the model. A 20 percent floor area bonus was offered to a building with a plaza, raising the largest building to FAR 18. It was the start of incentive zoning.

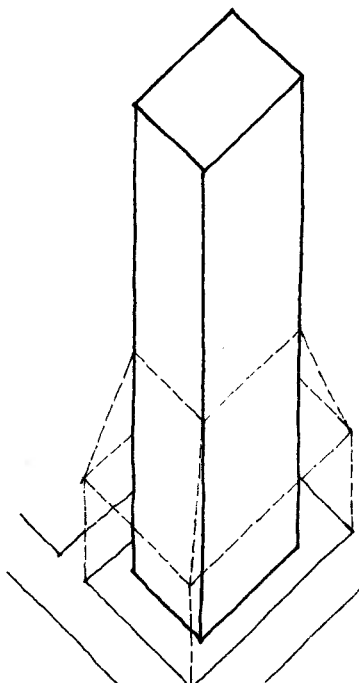


6. To meet other needs and to keep the continuity and vitality of avenues like Fifth and Madison from being destroyed by plazas, the incentive system was expanded. Bonuses were offered for interior spaces and sometimes compounded, bringing FAR up to 21.6. Combined with the restrictions of the tower regulations on the smaller lots left in the core area and the increasing use of "air rights," these interior bonuses put great pressure on regulations meant to protect the openness of the streets.

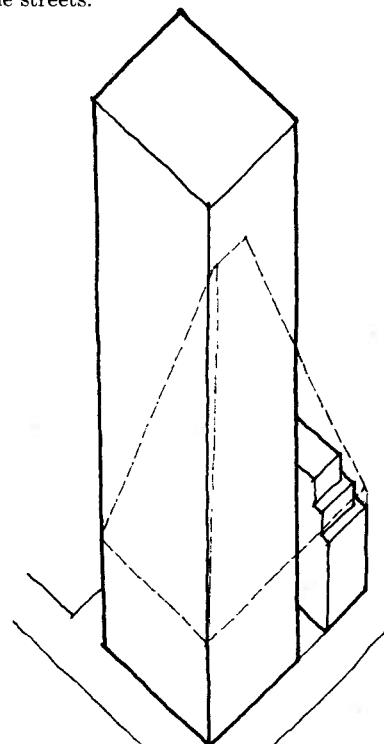
Note: dotted lines represent maximum zoning envelope



4. Seagram Building

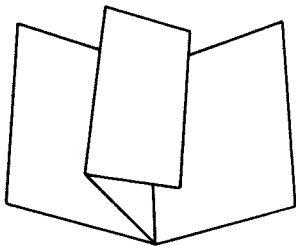


5. 1961 tower with bonusable plaza, FAR 18



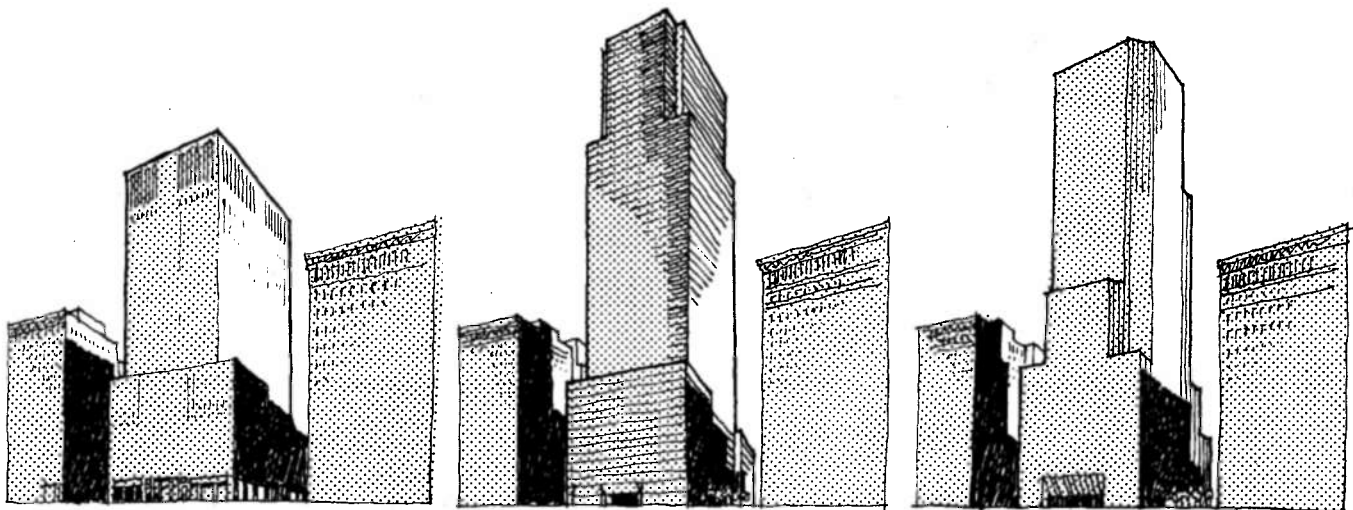
6. Special Permit building

Fold Line



FOLD THIS PAGE AS SHOWN
IN DIAGRAM TO VIEW
DRAWINGS AS A CONTINUOUS
PICTURE

old Line

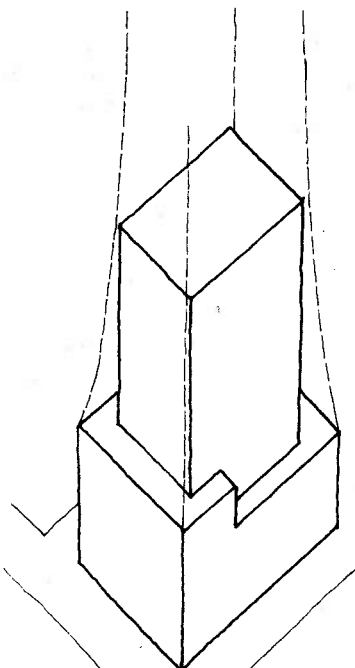


7, 8 and 9. To return to zoning's basic principles, our architectural consultants examined how Midtown had developed under more than a half century of zoning. It is that actual development which defines the public expectation of daylight and helps set the standards for the new regulations. The 1916 and 1961

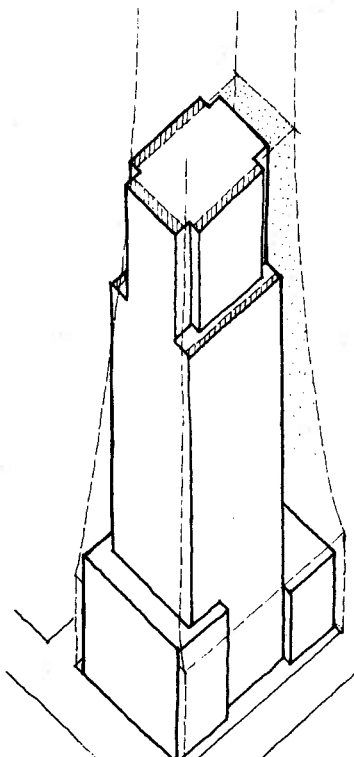
regulations recognized that the farther a building's mass sets back from the street the higher it can go; they allowed towers to pierce the sky exposure plane. But the plane and regulations still tended to prescribe a fixed building envelope. The new regulations are based on an actual standard of daylight and

openness for the streets of Midtown, measured either against a daylight curve (first tier) or the percentage of unblocked sky (second tier). Both are derived from actual conditions resulting from Midtown's historic development. They give great flexibility in building design so long as the daylight standard is achieved.

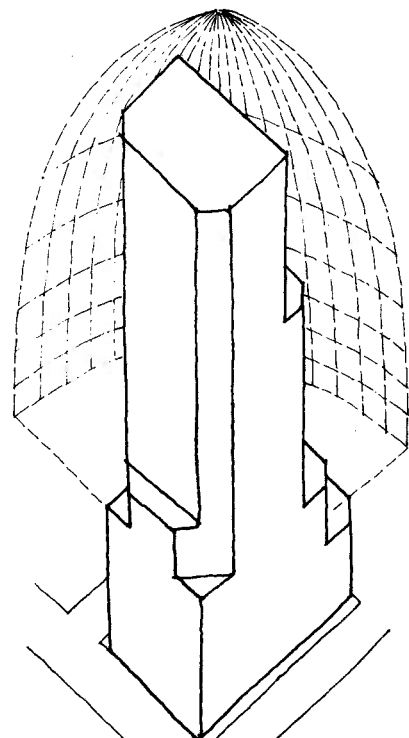
Note: "daylight squares" in last drawing represent equal portions of the sky on the Daylight Evaluation Chart.



7. Building to new Daylight Curve tier, FAR 15



8. Building to new Daylight Curve tier, FAR 18



9. Building to new Daylight Chart tier, FAR 18

FIRST TIER—DAYLIGHT COMPENSATION RULES

General Description and Summary

The first tier of the proposed new bulk regulations guides the placement of buildings on their sites, establishing daylight requirements within "sky exposure curves" for new buildings. These curves are similar in theory to the sky exposure planes of the existing zoning, but will apply to all parts of the building above the maximum streetwall height. The planes in the present regulations do not apply to towers (a tower, as defined by the zoning resolution, is that portion of a building allowed to penetrate the planes).

There is a separate sky exposure curve for each of three street widths in Midtown Manhattan, 60 feet, 80 feet and 100 feet; streets wider than 100' are governed by the 100' curve. These curves slope inward and upward from the street line starting at 90 feet in height fronting on a 60 foot wide street, 120 feet in height on an 80 foot wide street and 150 in height on a 100 foot (or wider) street. The 90, 120 and 150 foot heights are the maximum heights that a building can rise straight up from the street line, before the curves start and the building must set back. If the building is already set back from the ground all the way up, it does not have to set back further at the maximum street wall height. Under such conditions, sheer towers would be permitted.

If a building stays within the sky exposure curves, it complies fully with the bulk regulations. A building may, however, penetrate the curve and still be complying if it compensates for the encroachment beyond the curve by setting back or receding from the curve in another area on the lot. In other words, if a building projects beyond the curve, it must provide other areas on the site of free and unobstructed daylight equal to or greater than the areas of encroachment.

Although the regular provisions permit flexible disposition of bulk on a site, once it comes too close to the street line a special provision (Encroachment by Length & Height Rules) must be used. These rules prescribe that as a portion of a building comes closer to a street line, it must become narrower or lower or both. This is accomplished by limiting the width and height of the projection of a building beyond the sky exposure curve as a function of its distance from the street line. This rule is necessary to prevent buildings from being placed entirely up against a street line, overwhelming the adjacent street.

BASIC PROVISIONS

1.0 ESTABLISHMENT OF THE MAXIMUM STREET WALL HEIGHT.

1.1 Maximum street wall height

A building may rise uninterrupted from the street line to a maximum height of $1\frac{1}{2}$ times the width of the street on which it fronts. There are three maximum street heights—90, 120 and 150 feet,—based upon three street widths, 60, 80 and 100 feet, in Midtown. The maximum street wall height for streets greater than 100 feet in width is 150 feet. At the maximum street wall height, the sky exposure curves begin, as described in Sect. 2.0, Establishment of Sky Exposure Curves and Regulations. *fig. 1*

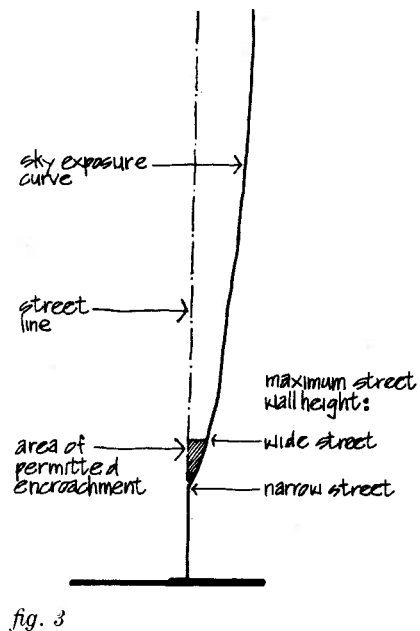
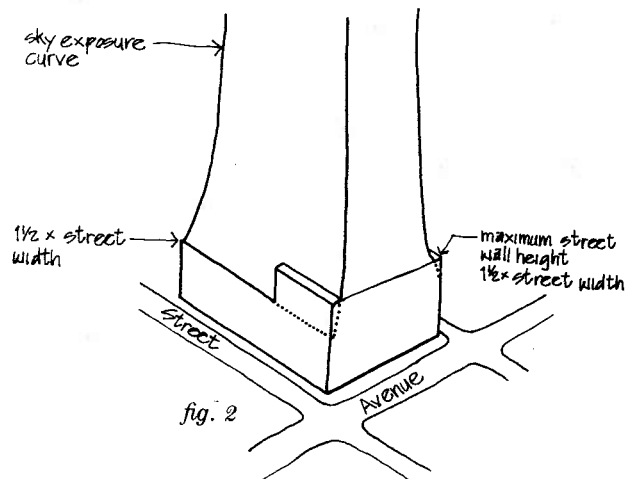
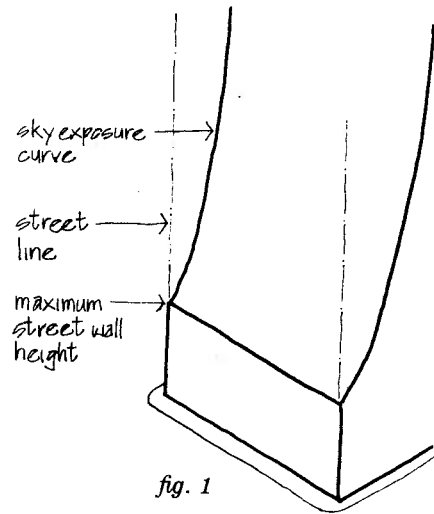
It is not mandatory that buildings achieve the *maximum* permitted street wall height, but on certain streets, such as on Fifth Avenue, where urban design controls require a street wall, there is a *minimum* street wall height that a building must reach.

1.2 Maximum street wall heights for corner lots

For a corner lot with frontage on both a wide and narrow street the maximum street wall height of the wide street may be carried around the corner into the narrow street for a distance of 100 feet. Beyond that distance the maximum street wall height permitted on the narrow street takes effect.

An alternative method for determining maximum street wall heights on narrow streets permits the street wall height on the narrow street to be the average of the wide street wraparound height and the 90 foot height permitted on the narrow street. This rule is described in detail in Sect. 4.0. The 100 foot wrap around and the averaged maximum street wall height may not be used together. *fig. 2*

The penetration of the narrow street's sky exposure curve by a streetwall that follows these rules is a permissible encroachment, and is explained more fully under Sect. 3.0, Compensation of Daylight by Area Rules. *fig. 3*



FIRST TIER. DAYLIGHT COMPENSATION RULES

2.0 ESTABLISHMENT OF SKY EXPOSURE CURVES AND REGULATIONS

2.1 Establishment of sky exposure curves

Sky exposure curves derived from Midtown's historic development set a standard from which the daylight around the site can be measured. There are three sky exposure curves, one for each of three street widths, as illustrated. *fig. 4*

The curves start at the maximum street wall height for each width of street. On each street frontage, the curve runs the entire length of the street property line.

2.2 Full compliance

A new building must stay entirely behind the sky exposure curve or provide compensating daylight and observe other requirements as stipulated in Sect. 3.0.

Where a building fits entirely within the envelope set by the maximum street wall height and the sky exposure curve, no further computations are necessary and the architect would be able to stop here and disregard all further regulations. However, where the architect wished the building to penetrate the curves, the resulting encroachment must be measured, and the additional measuring curve, the "1/2d" curve, must be developed. *fig. 5*

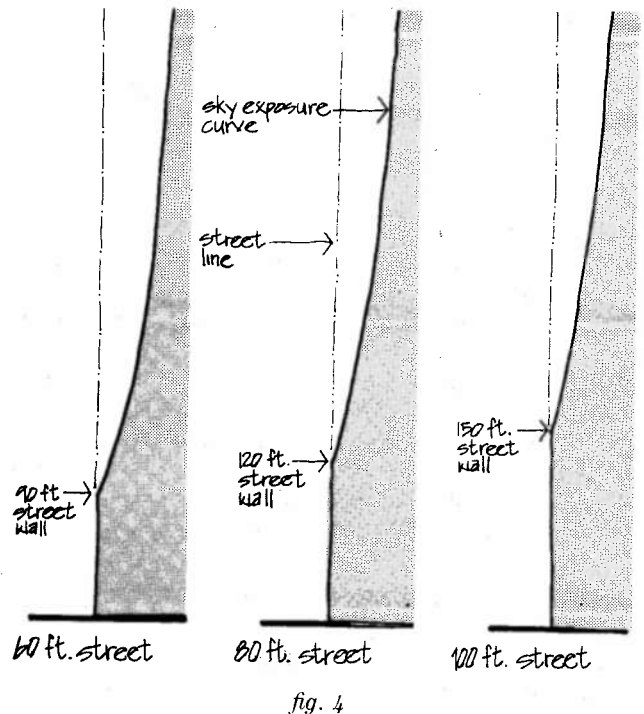


fig. 4

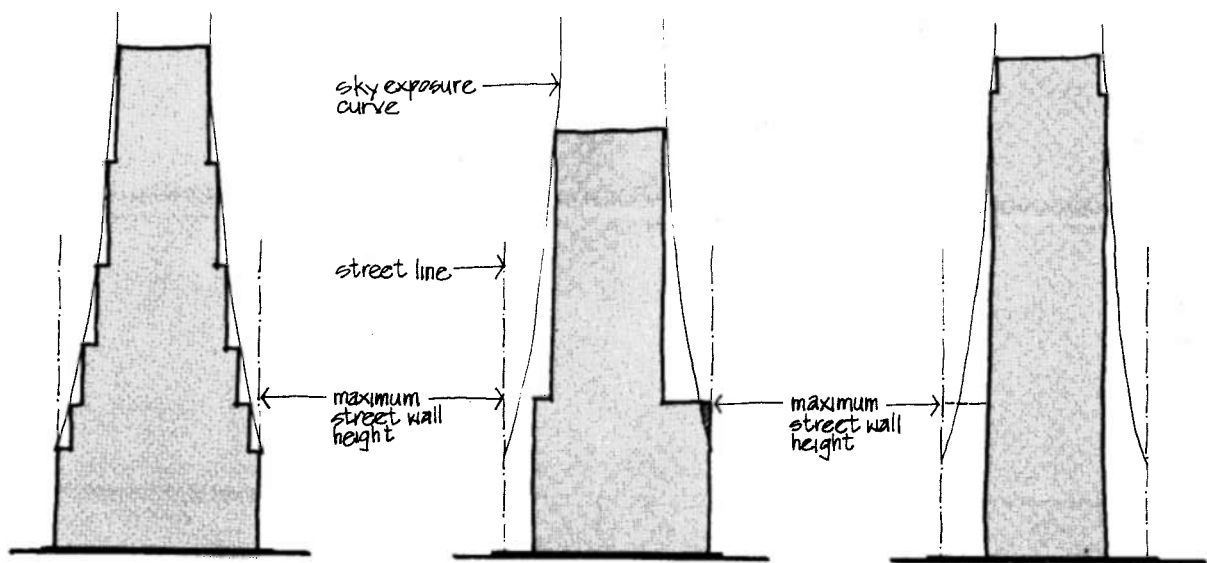


fig. 5

FIRST TIER. DAYLIGHT COMPENSATION RULES

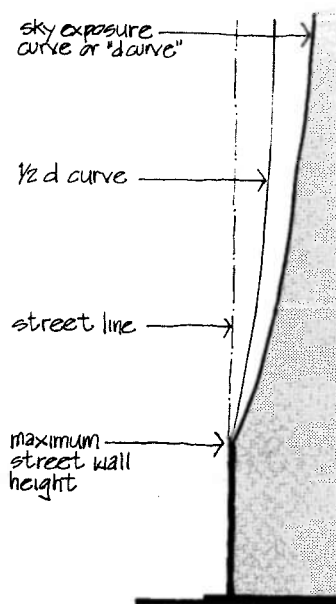


fig. 6

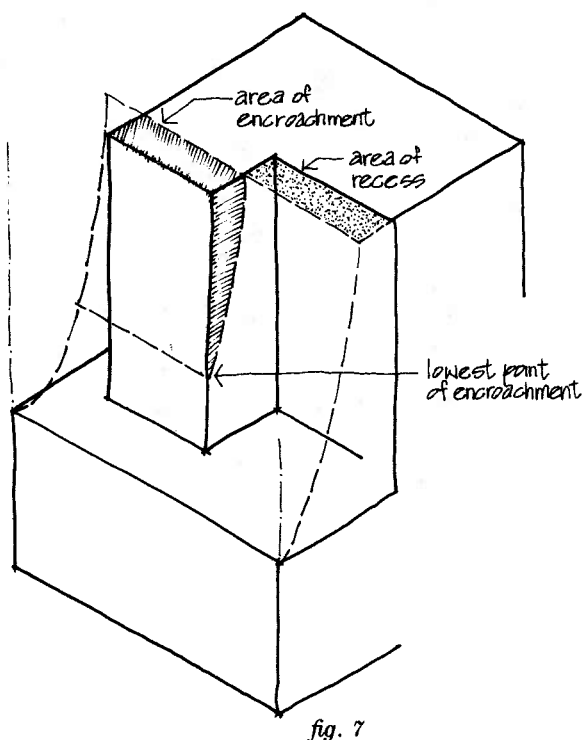


fig. 7

2.3 Establishment of the " $\frac{1}{2}d$ " curve

To assist in the measurement of bulk and daylight of buildings that penetrate the sky exposure curves, a second curve is established. This second curve is located exactly one-half the distance from the sky exposure curve to the street line, and is called the " $\frac{1}{2}d$ curve." It is a measurement device that further defines permissible encroachment by a new building.

fig. 6

(see Sky Exposure Curve Charts, next page)

3.0 COMPENSATION OF DAYLIGHT BY AREA RULES *fig. 7*

If the sky exposure curve is penetrated anywhere above the maximum street wall height, the area of encroachment beyond the curve must be compensated by areas of recess from the sky exposure curve, as illustrated. This rule which defines the amount and location of required compensation is detailed in the following sections. Where a building penetrates the sky exposure curve but does not penetrate the $\frac{1}{2}d$ curve, these daylight compensation regulations are the final regulations that need be considered. Where, however, the design of the building dictates penetrating the $\frac{1}{2}d$ curve as well, then the requirements of Sect. 5.0, Encroachment Limitations by Length and Height Rules, will apply.

3.1 Establishing areas of encroachment

In order to measure the areas of encroachment beyond the sky exposure curve and areas that compensate by providing increased daylighting, the following measurement procedures are to be followed:

FIRST TIER. DAYLIGHT COMPENSATION RULES

SKY EXPOSURE CURVE DEPTH/HEIGHT CHART

60 FOOT WIDE STREET

Depth of sky exposure curve from street line at stated heights above curb level. All dimensions are in feet. Depths may be converted to the nearest foot. Depth of 1/2d curve is 1/2 of depth figures below.

Height	Depth	Height	Depth
90	0.00		
100	2.00	400	40.25
110	4.00	410	41.00
120	6.00	420	41.75
130	8.00	430	42.25
140	10.00	440	43.00
150	12.00	450	43.50
160	13.75	460	44.25
170	15.25	470	44.75
180	16.75	480	45.50
190	18.50	490	46.00
200	20.00	500	46.50
210	21.25	510	47.00
220	22.50	520	47.50
230	24.00	530	48.00
240	25.25	540	48.50
250	26.50	550	49.00
260	27.50	560	49.50
270	28.75	570	50.00
280	30.00	580	50.50
290	30.75	590	51.00
300	31.75	600	51.50
310	32.75	610	52.00
320	33.75	620	52.25
330	34.75	630	52.75
340	35.50	640	53.00
350	36.25	650	53.50
360	37.25	660	53.75
370	38.00	670	54.25
380	38.75	680	54.50
390	39.50	690	55.00

700 55.25
710 55.75
(above) *

*for every 10 feet increase of height the depth shall increase by 1 foot.

SKY EXPOSURE CURVE DEPTH/HEIGHT CHART

80 FOOT WIDE STREET

Depth of sky exposure curve from street line at stated heights above curb level. All dimensions are in feet. Depths may be converted to the nearest foot. Depth of 1/2d curve is 1/2 of depth figures below.

Height	Depth	Height	Depth
		400	36.25
		410	37.00
120	0.00	420	37.75
130	1.50	430	38.25
140	3.50	440	39.00
150	5.50	450	39.75
160	7.50	460	40.50
170	9.25	470	41.00
180	11.00	480	41.75
190	12.75	490	42.50
200	14.25	500	43.00
210	15.75	510	43.50
220	17.25	520	44.00
230	18.75	530	44.75
240	20.00	540	45.25
250	21.25	550	45.75
260	22.50	560	46.25
270	23.75	570	46.75
280	24.75	580	47.25
290	26.00	590	47.75
300	27.00	600	48.25
310	28.00	610	48.75
320	29.00	620	49.00
330	30.00	630	49.50
340	31.00	640	50.00
350	32.00	650	50.50
360	32.75	660	50.75
370	33.75	670	51.25
380	34.50	680	51.75
390	35.50	690	52.00

700 52.50
710 53.00
(above) *

*for every 10 feet increase of height the depth shall increase by 1 foot.

FIRST TIER. DAYLIGHT COMPENSATION RULES

SKY EXPOSURE CURVE DEPTH/HEIGHT
CHART

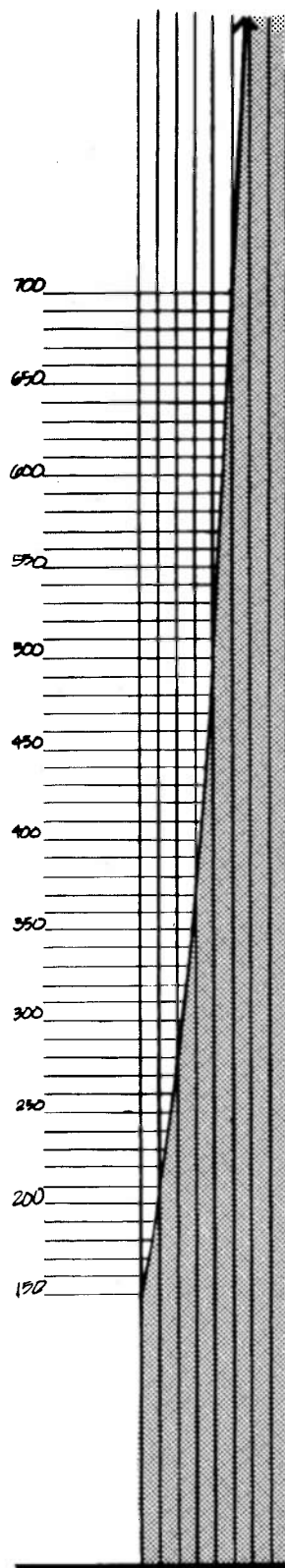
100 FOOT WIDE STREET

Depth of sky exposure curve from street line at stated heights above curb level. All dimensions are in feet. Depths may be converted to the nearest foot. Depth of 1/2d curve is 1/2 of depth figures below.

Height Depth Height Depth

		400	32.00
		410	33.00
		420	33.75
		430	34.50
		440	35.25
150	0.00	450	36.00
160	1.50	460	36.75
170	3.00	470	37.25
180	5.00	480	38.00
190	6.75	490	38.75
200	8.50	500	39.25
210	10.25	510	40.00
220	11.75	520	40.50
230	13.25	530	41.25
240	14.75	540	41.75
250	16.00	550	42.25
260	17.25	560	42.75
270	18.75	570	43.50
280	20.00	580	44.00
290	21.00	590	44.50
300	22.25	600	45.00
310	23.50	610	45.50
320	24.50	620	46.00
330	25.50	630	46.50
340	26.50	640	47.00
350	27.75	650	47.50
360	28.50	660	47.75
370	29.50	670	48.25
380	30.25	680	48.75
390	31.25	690	49.25
		700	49.50
		710	50.00
		(above)	*

*for every 10 feet increase of height the depth shall increase by 1 foot.



FIRST TIER. DAYLIGHT COMPENSATION RULES

3.11 Measure in plan

Although the encroachment beyond the curve can be illustrated in elevation or section, computations of area of encroachment are executed in plan view. The accurately scaled sections of the sky exposure and $\frac{1}{2}d$ curves that have been included can be redrawn in plan, superimposed on the site for any particular height. It is then possible to measure the areas outside and inside the sky exposure curve. The curves are drawn over the entire zoning lot, including existing buildings remaining on the lot. *fig. 8*

3.12 Encroachment grid

The bulk analysis of every building will necessitate setting up one or more simple grids which represent, in plan, the location of the sky exposure and $\frac{1}{2}d$ curves superimposed over the site. For a simply shaped building (for example, a tower of uniform floor size above a low base) only one grid may need to be constructed. For a complex building where the floor plan varies in size from floor to floor and the building penetrates the sky exposure curves in several different places, additional grids may have to be constructed to check how much area of the building is outside the curves at each level where the building penetrates a curve. Computations will, however, usually be based on only one diagram: the height at which encroachment is greatest, which is usually the top of the building. This is explained further in Section 3.2 (Compensation by Area).

The grid is constructed as illustrated. *fig. 9*

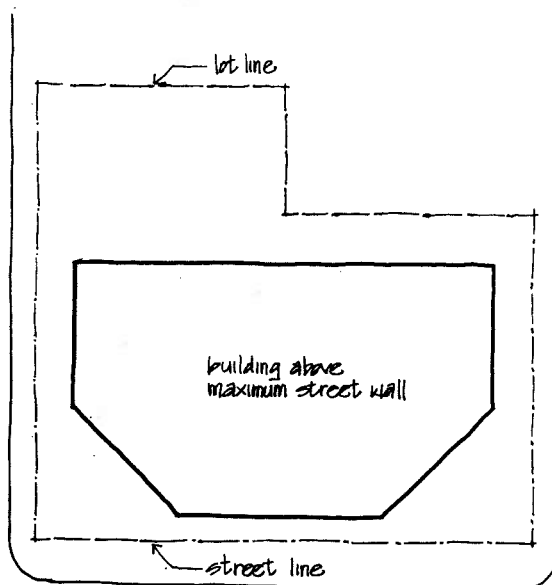
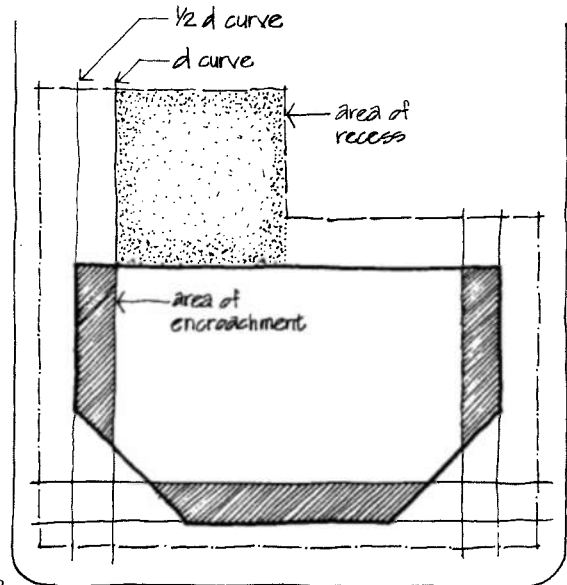
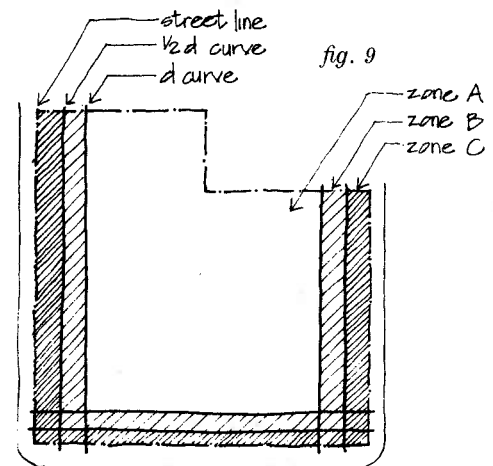
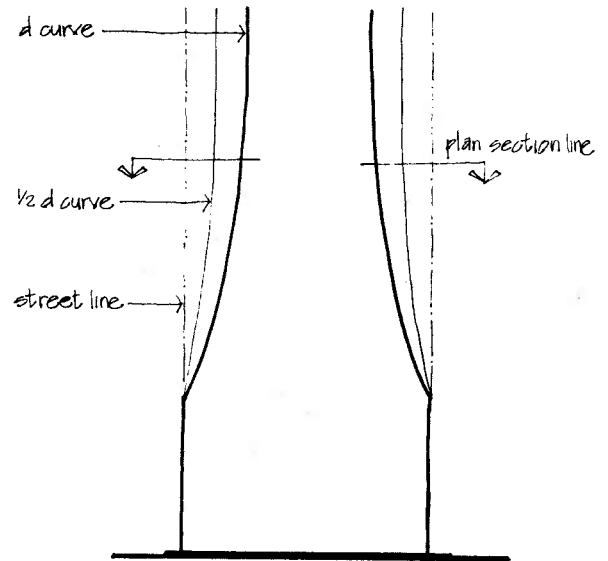


fig. 8



FIRST TIER. DAYLIGHT COMPENSATION RULES

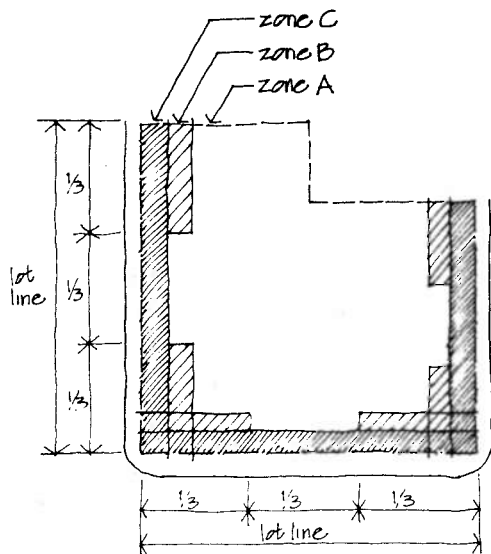


fig. 10

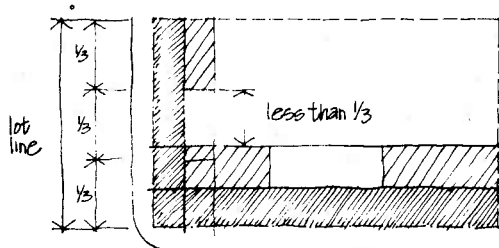


fig. 11

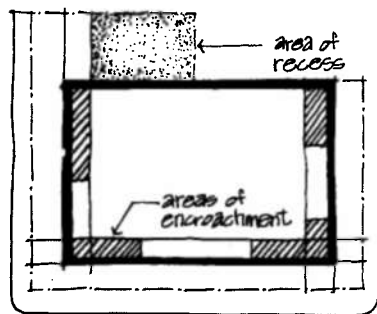


fig. 12

3.13 Extending the "free" zone—the 1/3 Rule.

The daylighting analysis shows that permitting a building to "bulge" modestly in the middle is a negligible encroachment on daylighting standards. Therefore Zone A may be extended from the sky exposure curve to the 1/2d curve for the middle 1/3 of the lot line length only.

Three "zones" are then established to guide development. *fig. 10*

Zone A—The "free" zone

Zone B—Outside the sky exposure curve, but inside 1/2d curve.

Zone C—Outside both the sky exposure curve and the 1/2d curve.

Areas that are encroached upon by new construction in Zones B and C must be compensated for with unencroached area within Zone A.

Thus, the "free" area of Zone A is extended and a building may be constructed within this area with no daylight compensation necessary.

For lots with small street frontages, the situation may arise at certain heights where the 1/3 area could theoretically extend into the corner of the lot, as illustrated. However, the 1/3 extension may *not* penetrate the corner, and for these cases the 1/3 extension will be shortened as necessary. *fig. 11*

3.2 Compensation by Area

3.21 Trade-off rule for compensating daylight.

The general principle, "all area of a building which penetrates the sky exposure curve must be compensated for," is stated specifically as follows:

3.211 At every height above maximum street wall height, the area within the permitted "free" Zone A which is unencroached by building bulk must, in the aggregate, equal or exceed the aggregate area outside Zone A (that is, in Zones B and C) that is encroached with building bulk; *fig. 12*

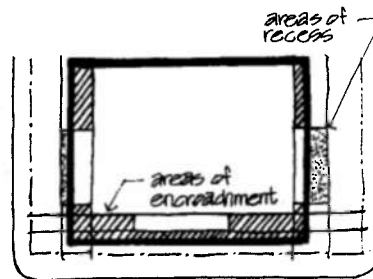


fig. 12

FIRST TIER. DAYLIGHT COMPENSATION RULES

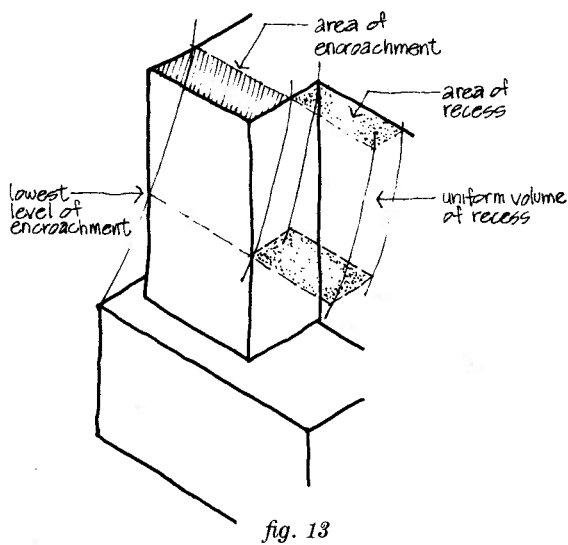


fig. 13

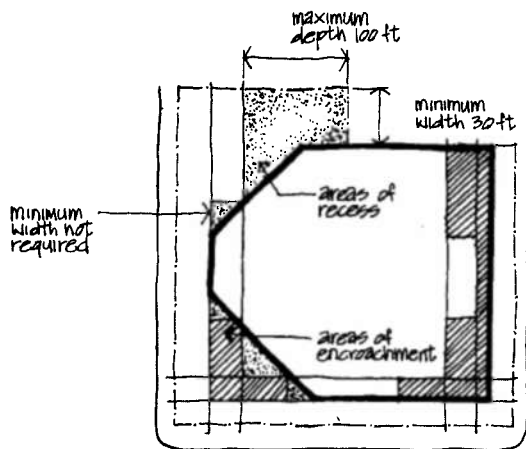


fig. 14

3.212 The aggregate area within Zone A in the amount necessary to compensate for encroachment of Zones B or C, at the height where encroachment of Zones B or C is greatest, are to be:

- Carried downward, unencumbered, at least in uniform sections along the sky exposure curve, or in greater area, at least to the point at which the first encroachment of zones B or C occurs;
- Projected straight upward to the sky, perpendicular to a horizontal ground plane. *fig. 13*

3.22 Qualifying recesses

3.221 Visibility

Only those portions of building recesses which would be visible when viewed in plan perpendicularly from a street adjacent to the zoning lot qualify for daylight compensation. *fig. 14*

3.222 Minimum length of recess

The minimum length of a recess behind the sky exposure curve, measured parallel to the street line, is 30 feet. The minimum length does not apply to portions of Zone A allowed by the $\frac{1}{3}$ rule, nor does it apply at a corner, where a recess is located at the intersection of two sky exposures curves.

3.223 Maximum depth of recess from street

Only those portions of a recess within Zone A extending to a point 100 feet from the street line may be counted for compensation. *fig. 15*

3.23 Existing buildings on the zoning lot

Parts of the zoning lot that are occupied by existing buildings not more than 150 feet in height do not

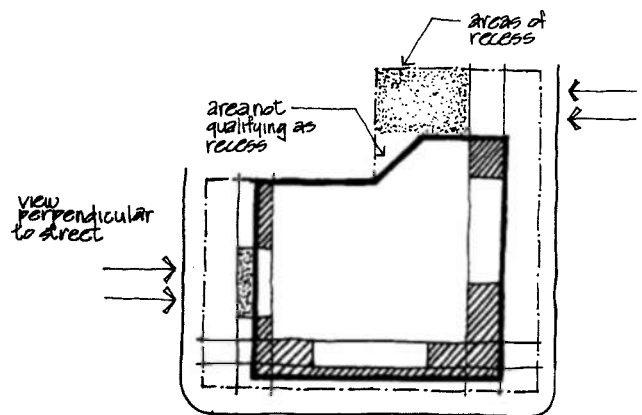


fig. 15

FIRST TIER. DAYLIGHT COMPENSATION RULES

have to be compensated for if such existing buildings penetrate the sky exposure curve; similarly, existing buildings not more than 150 feet in height that penetrate the $\frac{1}{2}d$ curve do not necessitate the use of the Sect. 5.0 (Encroachment Limitations by Length and Height Rules). The space above such buildings, where it is behind the sky exposure curve, may be used for daylight compensation for new construction on the lot. Such existing buildings are not, however, to be considered invisible, and the space actually occupied by their volume may not be used as compensating area for new construction.

Existing buildings remaining on the lot that are greater than 150 feet in height and that penetrate the sky exposure curve must be compensated for in unencroached daylight as if they were new buildings. Where an existing building greater than 150 in height penetrates the $\frac{1}{2}d$ curve, however, it necessitates using Sect. 5.0 only if the new construction also penetrates the $\frac{1}{2}d$ curve along the same street. *fig. 16*

3.24 Exceptions for projections beyond sky exposure curve within permitted maximum street wall length *fig. 17*

Where the maximum street wall height for a site is averaged on a narrow street or brought 100 feet around the corner onto a narrow street, the maximum permitted street wall height on that narrow street will be at a higher elevation than where the sky exposure curve starts, as illustrated. This encroachment requires no daylighting compensation.

3.3 Special Note For Existing Buildings

A new structure replacing or enlarging an existing building on the zoning lot must conform in all respects to the first tier bulk regulations.

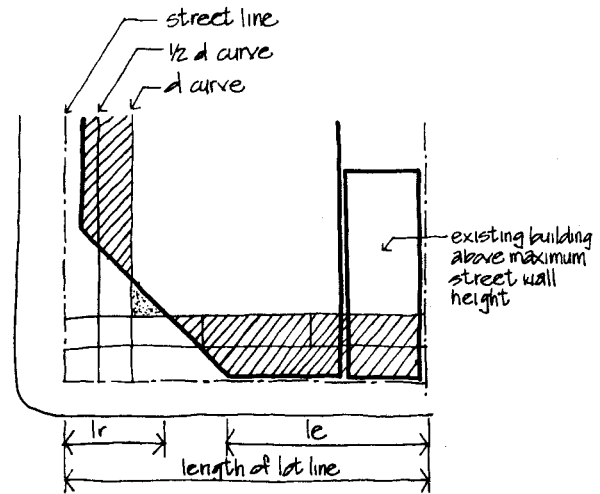


fig. 16

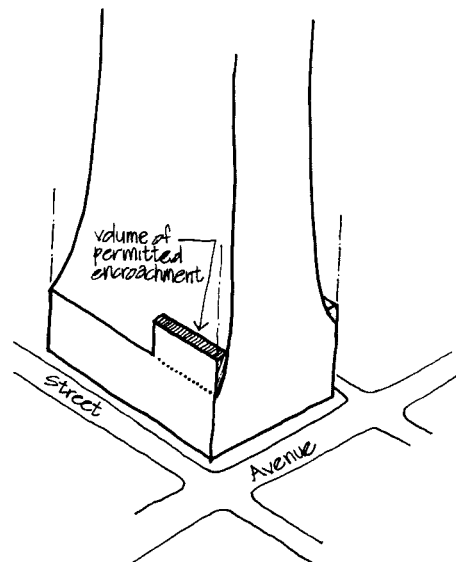


fig. 17

SPECIAL PROVISIONS

4.0 AVERAGING MAXIMUM STREET WALL HEIGHTS

At the intersection of a wide street and a narrow street, the maximum street wall heights will differ by 60 or 30 feet (150 or 120 feet on the wide street and 90 feet on the narrow street). The practicality of building requires the accommodation of three-dimensional geometry and, therefore, as previously explained, a wraparound of the wide street maximum street wall height for a distance of 100 feet down the narrow street is permitted.

Where the street line of the lot is 100 feet or less along the narrow street, the 100 foot wraparound will suffice, but since few lots are limited to this dimension, the regulations permit the averaging of street wall heights within acceptable daylighting levels. There are two alternative methods. *fig. 18*

4.1 INCREMENT REDUCTION METHOD

For a distance not exceeding 200 feet from the corner, the street wall on the narrow street may be held at a constant height that decreases from 150 feet or 120 feet by one foot for every five feet of narrow street line length beyond 100 feet.

Thus, for a narrow street line length of 105 feet, the maximum street wall height is 149 feet over the entire narrow street line length (where the wide street is 100 feet wide); and for a narrow street line length of 200 feet, the maximum street wall height is 130 feet over the entire 200 foot length. *fig. 19*

4.2 AVERAGING METHOD

For any length of narrow street frontage, the maximum street wall height may be averaged according to the following formula. *fig. 20*

$$\text{AVERAGE MAXIMUM STREET WALL HEIGHT} = \frac{[(150 \text{ or } 120) \times 100] + 90 \times (\text{total narrow street line length} - 100)}{\text{total narrow street line length}}$$

* For wide street either 100 or 80 feet in width, respectively.

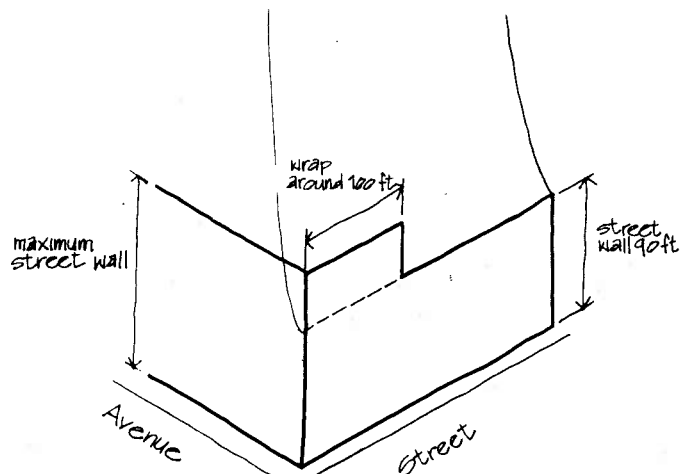


fig. 18

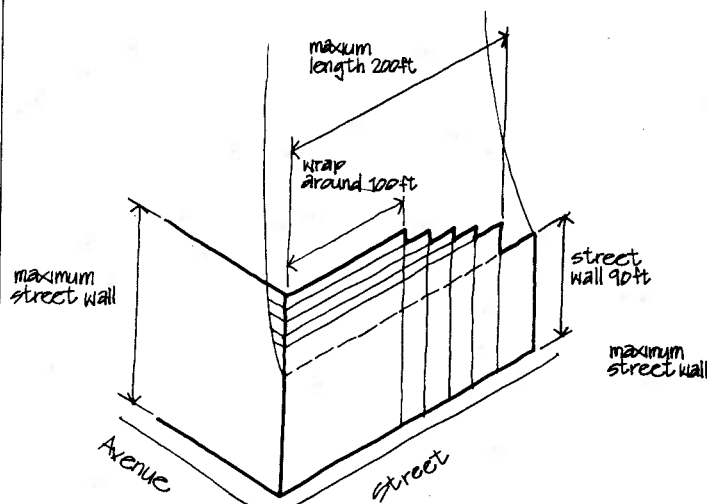


fig. 19

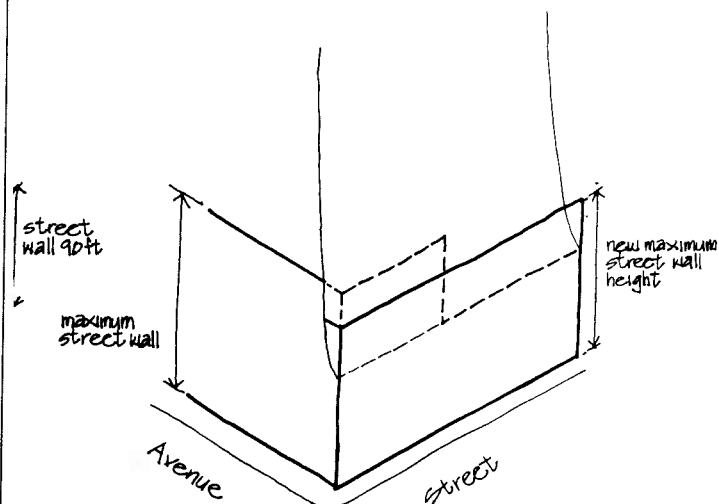


fig. 20

FIRST TIER. DAYLIGHT COMPENSATION RULES

4.3 SPECIAL FIFTH AVENUE SETBACK

The special maximum street wall height on Fifth Avenue is 125 feet. The minimum street wall height is 85 feet. The sky exposure curve will nonetheless start at 150 feet in height. For the purpose of calculating averaged street wall heights along the narrow streets connecting to Fifth Avenue, the Fifth Avenue street wall height and wraparound are to be considered 150 feet. This will permit a uniform base up to approximately 125 feet in height around the entire site. Under no circumstances, however, may the street wall of a building with frontage along both Fifth Avenue and a narrow street exceed 125 feet in height on either street.

5.0 ENCROACHMENT LIMITATIONS BY LENGTH AND HEIGHT RULES

[Note: this provision applies only to those buildings and portions of buildings that project beyond the $\frac{1}{2}d$ curve.] *fig. 21*

The rules for daylight compensation will assure that the overall levels of daylighting around the site will remain consistently high. Not permitting penetration of the $\frac{1}{2}d$ curve assures that no street will be favored with daylight at the expense of another; where the architect wishes to articulate the building form, however, by sculpting the shape so that it has projections or prows, it may be architecturally desirable for the building to penetrate the $\frac{1}{2}d$ curve. This is acceptable—provided the building will not overwhelm one or more streets with too much bulk. These regulations for portions of buildings outside the $\frac{1}{2}d$ curve are directed towards achieving that end: allowing creativity and architectural expression while lim-

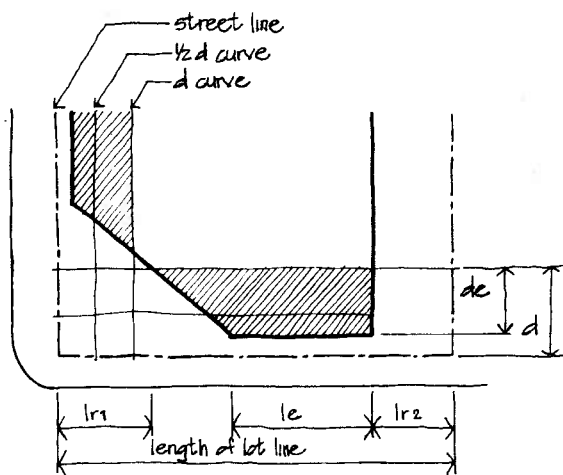


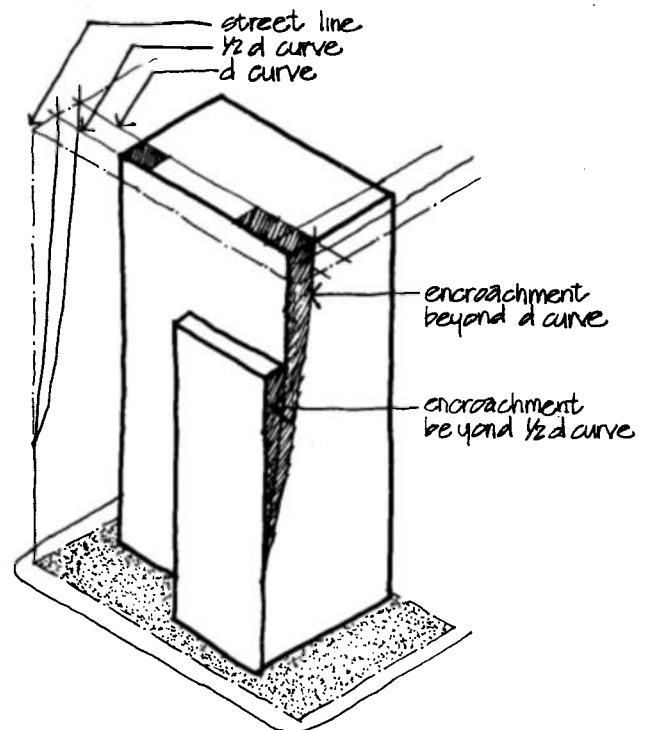
fig. 21

iting the encroachment by the profile of a building and assuring that streets are not plunged into darkness.

The price paid for penetrating the $\frac{1}{2}d$ curve is two-fold. The first is in building form. The rules force a portion of a building penetrating $\frac{1}{2}d$ to be narrower and/or shorter as it comes closer to the property line. Thus, staying behind the $\frac{1}{2}d$ curve will minimize building perimeter.

The second price is in terms of ease of regulation. The length rules for $\frac{1}{2}d$ penetration are more complex and take time to manipulate.

5.1 Establishing depth, length and height relationships. Where portions of new buildings penetrate the $\frac{1}{2}d$ curve, it is necessary to establish and measure relationships of the depth of penetration to the length of penetration, lengths of recesses, and areas of recess. The relationships between these factors are described below.



FIRST TIER. DAYLIGHT COMPENSATION RULES

5.11 Establish the depth of penetration beyond $\frac{1}{2}d$

$$\frac{de}{d} = \frac{\text{depth of penetration beyond sky exposure curve}}{\text{depth of sky exposure curve from the street line}}$$

5.12 Establish the length of penetration as a function of total length street frontage, and as a function of length of sky exposure curve that is left unencroached by building.

$$\frac{le}{L} = \frac{\text{length of encroachment beyond } \frac{1}{2}d}{\text{length of street frontage on this street}}$$

$$\frac{le}{lr(\text{total})} = \frac{\text{length of encroachment beyond } \frac{1}{2}d}{\text{lengths of sky exposure curve unencroached by building.}}$$

5.13 Establish the height of penetration as a function of lot line length.

$$\frac{H}{L} = \frac{\text{Height of penetration above curb level}}{\text{Length of street frontage on this street}}$$

5.14 Establish the relationship of the areas of recess to areas of encroachment.

$$\frac{Ar}{Ae} = \frac{\text{Areas of qualifying recesses along this street frontage}}{\text{Areas of encroachment along this street frontage}}$$

[Note: Areas of recess and encroachment along any street frontage are measured up to a point 100 feet back from the street line. Where there is encroachment beyond $\frac{1}{2}d$ on two street frontages, areas of encroachment and recess may be measured twice, if needed.]

5.15 Special limitations

In the above relationships: *fig. 22 fig. 23*

5.151 No encroachment beyond $\frac{1}{2}d$ may be within 30 feet of a side lot line that intersects a narrow street; and

5.152 The maximum length of L (lot line length) that may be used is 300 feet, irrespective of actual lot line length.

5.2 Depth, length, height and area relationships

Projections of new buildings beyond the $\frac{1}{2}d$ curve are regulated by the following rule which is expressed in two ways. First, the charts express simply the *maximum* relationships which may result. The formula from which the chart was derived is more complicated, but allows more flexibility than the chart. Either the charts or the formula may be used.

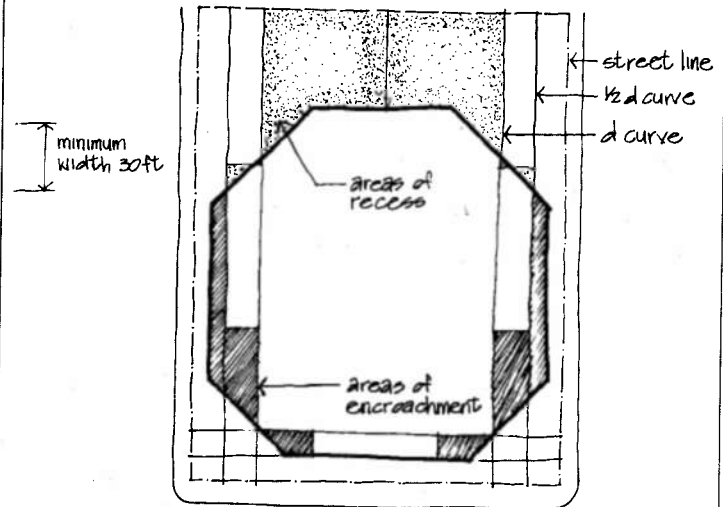


fig. 22

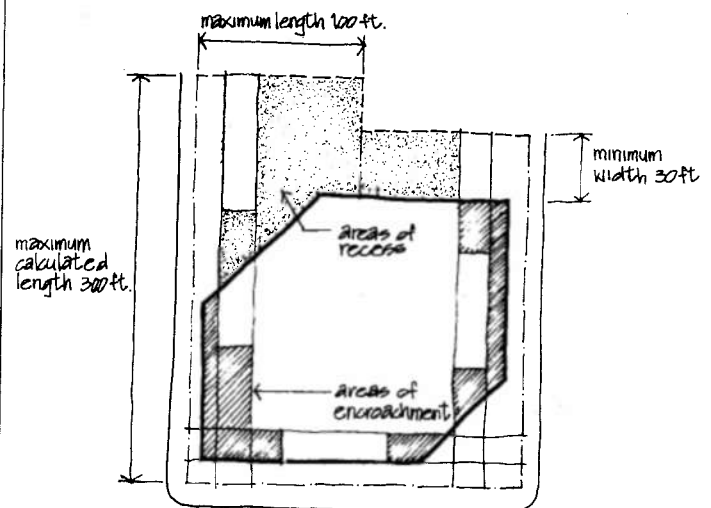


fig. 23

FIRST TIER. DAYLIGHT COMPENSATION RULES

THE CHARTS

Chart 1: Maximum H/L

de/d le/L	0-10%	10-20%	20-30%	30-40%	40-50%	50-60%	60-70%
90 to 100%	1.25	1.00	0	0	0	0	0
80 to 90%	1.50	1.25	1.00	1.00	1.00	0	0
70 to 80%	2.00	1.75	1.50	1.25	1.00	0	0
60 to 70%	2.50	2.25	2.00	1.75	1.50	1.25	1.00
50 to 60%	3.27	3.00	2.75	2.50	2.25	2.00	1.75

Chart 2: Maximum le/lr

le/L	0-10%	10-20%	20-30%	30-40%	40-50%	50-60%	60-70%
Maximum le/lr	.25	.50	1.00	1.25	1.50	2.00	2.50

Use of Charts

In the first chart three key relationships are plotted against each other: depth of encroachment as a function of depth of sky exposure curve (de/d); length of encroachment as a function of lot line length on that side of building (le/L); and height of encroachment as function of lot line length (H/L). If one of these is fixed as key to an architect's design or program needs (e.g., the height of a "prow" that penetrates the 1/2d line) he can find the range of combinations that would be permitted for the other two. Or if two were fixed they would determine the maximum value of the third.

THE FORMULAS

Formula 1: Maximum H/L = $F_1 \times F_2 \times F_3$

$$F_1 = 5.5 - 4 \frac{de}{d} - 2.5 (le/L)$$

$$F_2^* = 2 - L/200^*$$

*an F_2 that falls below one (1) may be assumed to be one (1).

$$F_3^* = 1 + \frac{Ar}{Ae} 15^*$$

*an F_3 that falls below one (1) may be assumed to be one (1)

Formula 2: Maximum le/lr

$$\text{Maximum le/lr} = \frac{le}{(le/L \times 3.75) 0.125}$$

Use of formulas

The maximum H/L of the projection is primarily set by F_1 which plots H/L against de/d and le/L just as the chart does. With the formula, F_2 and F_3 only work to the advantage of the architect by *increasing* the permitted H/L if (with F_2) the lot line length is less than 200 feet, or (with F_3) there are sizable areas of recess on this street frontage. For F_2 and F_3 , where the values would fall below one (1), the value is assumed to be one (1). Here too a check of le/lr must be made with formula 2.

5.3 Points at which the length, depth and height rules must be checked. Depending upon the geometric form of the projections beyond 1/2d, the charts or formulas will have to be applied at several points—at certain heights and depths.

5.31 Heights

5.311 Where projections are discontinuous:

Where the projections along one street frontage are not connected or do not touch outside the curved plane of 1/2d, each discrete projection must be measured as explained below.

5.312 Where projections are continuous:

5.3121 Where the length of projection is uniform for the projection's entire height, the projection must be checked only at the height where de/d is greatest.

5.3122 Where the length of projection is not uniform, the projection must be checked where de/d is greatest and where le is greatest. At every height that the projection must be checked, the projection is to be measured at each depth from the street line as indicated below.

5.32 Depths

At each of the heights to be checked:

5.321 Where de/d does not exceed 70%:

The charts or formulas are to be checked at the projection's leading edge and at a point immediately outside 1/2d.

5.322 Where de/d exceeds 70%:

The charts and formulas are to be checked at the projection's leading edge, the point immediately outside 1/2d and the point midway between the two.

FIRST TIER. DAYLIGHT COMPENSATION RULES

5.4 Existing buildings

The rules in this special provision shall apply to lots with existing buildings remaining on the lot as follows:

5.41 Existing buildings less than 150 feet in height:

Such buildings need not be considered except that the area occupied by such buildings shall be calculated in computations of Ar/Ae when used in the formula for F_3 .

5.42 Existing buildings 150 feet or more in height.

Where new construction will penetrate $\frac{1}{2}d$, existing buildings on the lot that are 150 feet or more in height shall be incorporated into the computations for le/L , le/lr , and Ar/Ae , only as these calculations concern the projection of the new construction or enlargement beyond $\frac{1}{2}d$.

5.43 Existing buildings, where new construction or enlargement does not penetrate $\frac{1}{2}d$:

Along a street where new construction or new enlargement does not penetrate the $\frac{1}{2}d$ curve, but an existing building on the lot of any height does, these length rules do not apply.

EXAMPLE - Tier 1 Building

Building Site: Full block front West Side development, fronting on 100 foot wide avenue and 60 foot wide streets. FAR 18 as-of-right.

Lot Size: 40,000 square feet.

Assumptions: Required tower floor size between 18,500 and 20,000 square feet. Plaza bonus to maximum FAR 1 (40,000 square feet) requires minimum plaza of 6,667 square feet.

Floor Area Calculations:

Basic floor area (18 x 40,000 sq. ft.)	720,000 sq. ft.
Plaza bonus (1 x 40,000 sq. ft.)	40,000
Estimate mechanical floor area @ 6% of 720,000	45,600
Total	805,600 sq. ft.

STEP 1 *fig. 1*

Determine area of building at base.

Set back 40 feet from south street line for plaza.

Set back 10 feet from avenue and north side street lines for sidewalk widening.

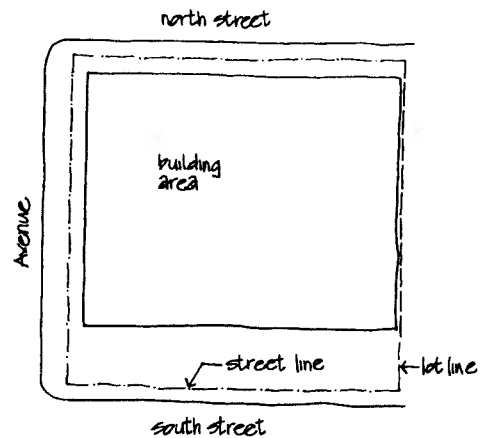


fig. 1

FIRST TIER. DAYLIGHT COMPENSATION RULES

STEP 2

Determine maximum street wall heights.

Because the building is set back from the street line, the 150 foot and 90 foot maximum street wall heights are not applicable.

Instead building is subject to sky exposure curves.

STEP 3

Estimate height of building.

Total allowed floor area: 805,600 square feet

Assume 20,000 square foot floor size:

$$\frac{805,600}{20,000} = 40.28 \text{ say 41 floors}$$

$$41 \times 12.5 \text{ (height per floor)} = 512.5 \text{ feet}$$

STEP 4 fig. 2

Determine the required depths of curves.

Use charts for 100 foot wide and 60 foot wide streets to find required depths (d) at 520 feet.

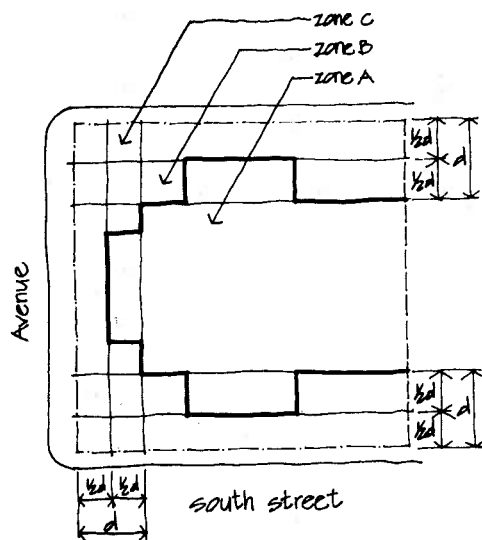


fig. 2

STEP 5 fig. 3

Determine area of encroachment and required compensating areas of recess.

Place desired building plan on grid (fig. 2).

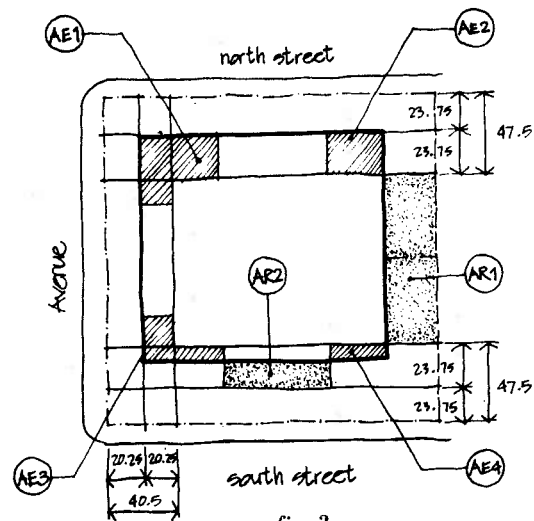


fig. 3

Tower is 136.25 ft. x 147 ft. = 20,029 sq. ft.

Compensation of Area of Encroachment

Encroachment	Recess
$Ae_1 = 1,492 \text{ sq. ft.}$	$Ar_1 = 3,438.75$
$Ae_2 = 801.6$	$Ar_2 = 1,117.23$
$Ae_3 = 737.2$	
$Ae_4 = 253.1$	
$Ae = 3,283.9 \text{ sq. ft.}$	$Ar = 4,555.98$

Since entire building is behind 1/2d curve, the special provision (Sect. 5.0) is not applicable.

STEP 6 fig. 4

Adjustment: A base occupying the rear of the building area up to 85 feet in height (6 floors) may be provided without affecting the building's compliance with the bulk regulations. This would provide a larger floor area for the first six floors and lower the total height of the building.

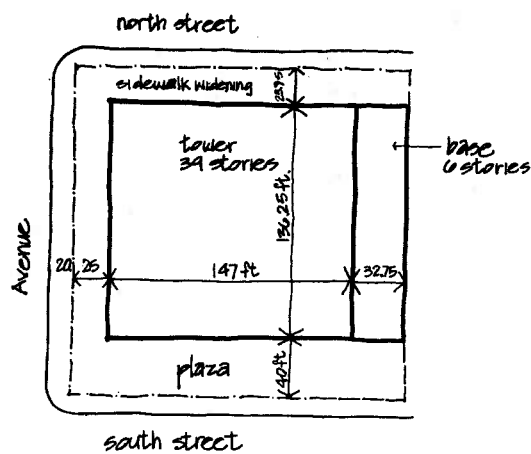


fig. 4

STEP 7 fig. 5

Actual Building

Floor area: 1-2 floors	-	2	x	23,338*	=	46,676
3-6 floors	-	4	x	24,491	=	97,964
7-39 floors	-	33	x	20,029	=	660,957

Total 805,597

*allows for entrance arcade

Since 805,597 is less than 805,600, building area qualifies.

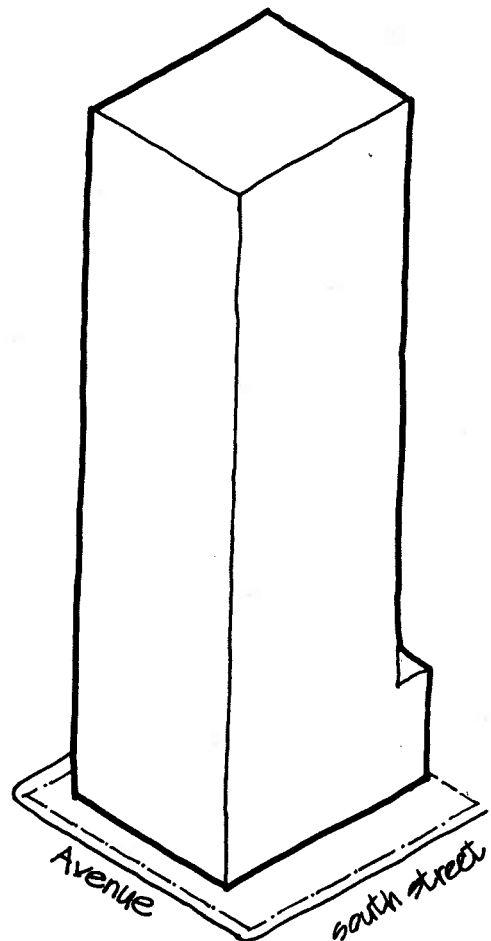
Building height:	Base =	85 feet
	Tower (31 x 12) =	372 feet
	Mechanical floors (2 x 30) =	60 feet
	Total	517 feet

Since 517 feet is less than 520 feet building height is okay.

Plaza: 40 ft. x 179.75 = 7,190 sq. ft.
This exceeds the required 6,667 sq. ft.

Sidewalk widening:	20.25 ft. x 200 ft.	=	4,050 sq. ft.
	23.75 x 179.75	=	4,269
	Total		8,319 sq. ft.

Exceeds the minimum required to alleviate sidewalk congestion for a 40,000 sq. ft. site.



Actual Building fig. 5

Second Tier—Daylight Evaluation Chart

General Description and Summary

The Daylight Evaluation Chart (DEC) permits objective measurements of daylight from defined points at street level. The DEC for Midtown is based upon a viewing or vantage point at the centerline of the street at a distance of 250 feet from the far lot line of a proposed development, a point at which pedestrians would be aware of the effect of a building on daylight and on the openness of the street which the development faces.

The sky exposure planes of the 1916 zoning ordinance were all generated from the centerlines of streets, reflecting concern for the impact of a development on the street. And the field of view at a point 250 feet from the far property line represents a common perceptual field of a typical New York avenue block plus street width. A pedestrian farther away from a building might be aware of its profile, but would be beyond its impact on daylight. Similarly, a pedestrian standing immediately in front of a building and looking directly at it would perceive its impact on daylight but could not see how it affected the street's profile.

Buildings that are not symmetrical appear differently and have a different impact on street openness and daylight when viewed from different directions. For this reason, the DEC would be applied to each side lot line in every street in which the development is located. For each street frontage, the average of the two views (up and down the street) constitutes the daylight score on that street. The overall score is a weighted average of the various street scores.

Evaluation of a proposed development on the DEC requires drawing the proposed and retained buildings and open spaces on the DEC and then scoring the development from each required vantage point. The geometry used to plot the building on the diagram is similar to that used in surveying and mapping, as well as in one method of drawing perspectives. In geometry, or in our field of vision, any point can be located by establishing its coordinates. These in turn can be expressed as vertical and horizontal angles. When all the points that constitute the corners of a building are plotted, they can be connected by lines. The resulting drawing will be the image translated to a graph or chart.

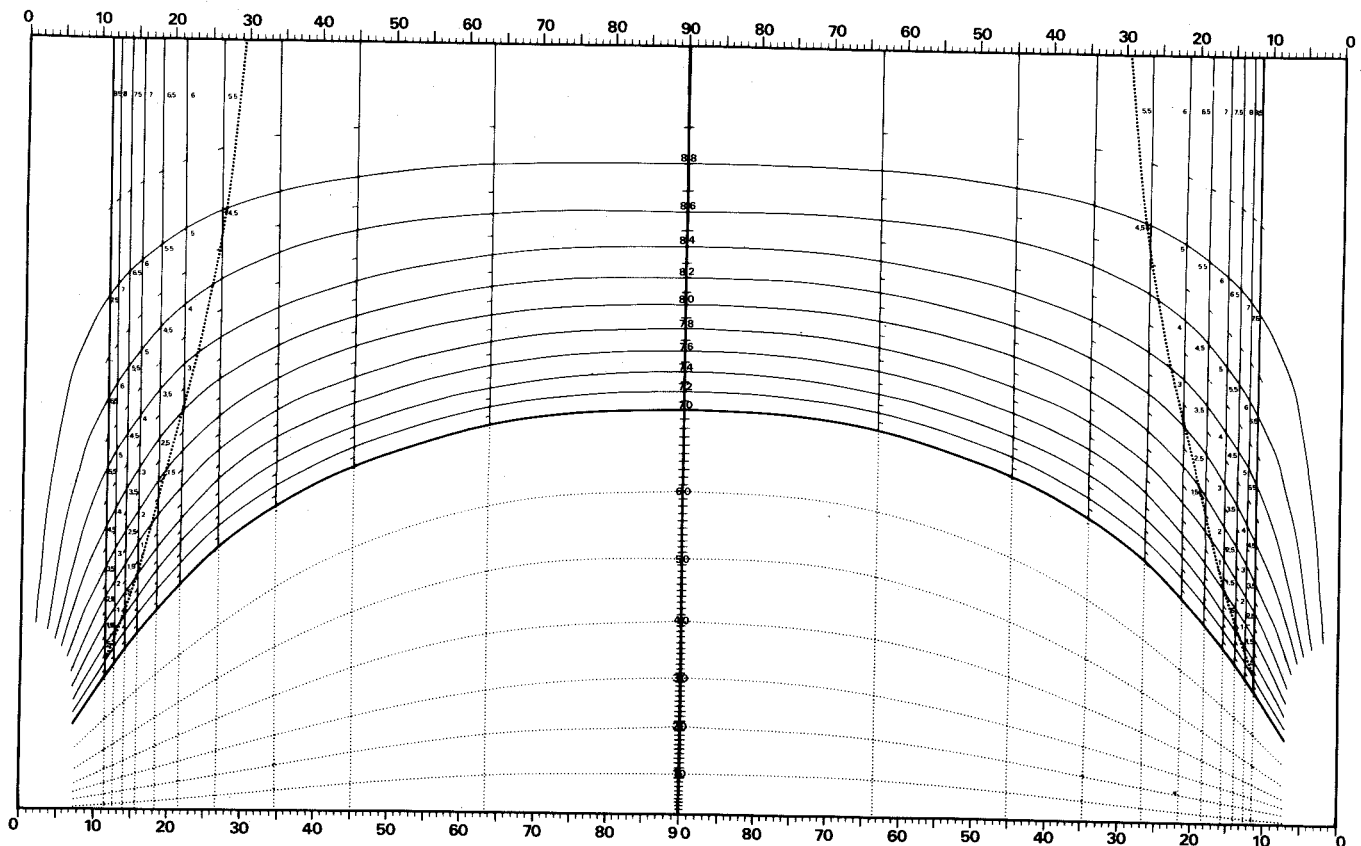
A photograph of a building from the centerline of the street 250 feet away from its far lot line using a 180° lens with parallax correction would produce an image almost identical to the image of the building as drawn on a DEC.

For plotting buildings on the DEC, a table is made indicating the distance (as seen in plan) of each corner to the centerline of the street as measured from the corner along a line that intersects the street center line at a right angle. Only two additional measurements are needed to find the coordinates used to locate a particular corner on the DEC: in plan, the distance along the street centerline back to the vantage point; and in section, the height of the corner (i.e., its distance straight down to the ground).

The Daylight Evaluation Chart is divided into squares representing equal amounts of sky, the "daylight squares." Once the building is drawn on the chart, a vertical line is drawn representing the intersection of

the near lot line and the block midpoint (100 feet into the property, or point "g" in the example). This vertical line represents one boundary of the potential sky area as seen on the DEC that the building could block. The other boundary is the far property line. The area bounded by these lines and above 70° as seen on the chart will then demarcate the number of daylight squares available to the site on that street.

Each square represents two vertical degrees of sky and 25 feet of lot frontage at the street line, so that for a site occupying 250 feet of street line length, a full 100 available daylight squares would become the basis for evaluating daylight performance. For the site in our example, which is only 170 feet long, 89.9 daylight squares are available.



Daylight Evaluation Chart for a 100 foot street. There are separate DEC's for each midtown street width. Working DEC's will be larger to permit accurate plotting.

A building is scored by determining the number and the value of the squares of sky it blocks compared to the total number of daylight squares available to its site.

The *first step* in determining a building's score is to count the number of squares blocked above 70° to the nearest tenth and assign a negative sign to the number. As an average 70° is the angle above which Midtown's buildings are set back, and slabs and towers occupy space in the sky above street walls. *Next*, the number of squares below 70° not blocked by the building are counted, multiplied by their value (.3), and assigned a positive sign. These squares carry less weight because the quality of daylight below the street wall is affected by surrounding buildings.

Third, the impact of the building upon the profile looking down the street is determined by multiplying all the squares in the weighted profile zone by their value and assigning them a negative sign. Because encroachments into the profile zone represent a perceptual squeezing of the street space, they are weighted to discourage excessive penetration and to insure that compensating daylight at greater than a one-to-one ratio is provided to offset minor incursions.

The sum of these three numbers compared to the total available daylight squares is the daylight score for the proposed building from that viewpoint. In the example, the building is symmetrical, so that its viewpoint score from the other direction would be identical and the street score is the same as the viewpoint score. Some other examples are given with their street scores and overall scores. Where a building fronts on only one street, the street score is the overall score, but for buildings with several street frontages, the overall score is the weighted average of the street scores.

Developments must average 75 percent to pass, with no street frontage scoring less than 66 percent. If a

development fronts on only one street, it will of course have to meet the passing score of 75 percent.

Reflectivity

The brightness of a street among the big buildings of Midtown is determined in part by direct daylight on that street and in part by daylight reflected from the buildings facing it. Buildings with a light face obviously reflect more daylight than buildings with a dark face. Accordingly, the reflectivity component in the DEC tier permits a modest improvement in the daylight score of a building which reflects more light than a medium gray or all glass building. Its use is optional and not necessary to pass, but it would offer somewhat more design flexibility to a light colored building than to a dark colored one. In the example building, the assumed reflectivity would increase its daylight score by 4.14 percent.

Reflectivity has two components: the *reflectance* of the surface material and the *orientation* of the material to the sun. Building materials range in their reflectance value from a rough dull black paint finish, at .06, to white enamel paint or polished aluminum which are over .80. These reflectance ratings indicate how much light on a range of .0 to 1.0, or 0% to 100%, is reflected from a surface.

Most common building materials have a reflectance rating certified by a manufacturer or institute of standards. We propose that the Board of Standards and Appeals approve or certify officially acceptable reflectance ratings. Current interest in energy efficient buildings has led to extremely detailed evaluation for heat absorptance and the sum of heat absorptance and visible light reflectance is always equal to 1.00. For instance, if the light reflectance value of a polished light marble building is .45, the heat absorptance for the building is .55, together equalling 1.00.

$$\text{REFLECTIVITY COMPONENT} = \frac{\text{BUILDING FACE ORIENTATION}}{\text{ABOVE AVERAGE BUILDING REFLECTANCE}} \times \text{AMOUNT OF SKY BLOCKED}$$

$$\text{Reflectivity} = 0.15 \times \text{Squares Blocked Above } 70^\circ$$

Some materials produce a diffuse reflectivity, such as limestone, while others are more concentrated, such as reflective glass, although the actual amount of reflected daylight from limestone is greater than that from reflective glass. A building of several surface materials will have a reflectance value determined by the sum of the individual reflectances times their percentage of the elevation. For example, a building that is 60 percent limestone and 40 percent clear glass would have a reflectance of $.60 \times .45$ (limestone reflectance) plus $.40 \times .15$ (glass reflectance) which is a .33 overall reflectance.

The value of the medium gray or all glass building in Midtown is .15, so that a building of .33 reflectance would be increasing the expected reflectance by .33 minus .15 which equals .18.

Building reflectivity is greatest facing true south, and diminishes to about one-sixth of that value facing true north. An orientation value which compares the amount of light reflected from surfaces at various orientations in relation to true south, is multiplied by the reflectance of a surface to ascertain the amount of daylight reflectivity.

In general the greatest reflectivity comes from the upper portions of buildings, so the value of reflected light is credited against the amount of daylight blocked by the portions of a building above 70°. Using the daylight evaluation diagram, the reflectivity component of daylight can be found by multiplying the number of squares of sky blocked by a building by the orientation value and the comparative reflectance value.

REFLECTIVITY CHART

	ORIENTATION BASED ON TRUE NORTH	RATIO TO MAXIMUM ORIENTATION VALUE
(N)	0°	.09
	22.5°	.15
	45.0°	.22
	67.5°	.40
(E)	90.0°	.57
	112.5°	.72
	135.0°	.87
	157.5°	.93
(S)	180.0°	1.00
	157.5°	.93
	135.0°	.87
	112.5°	.72
(W)	90.0°	.57
	67.5°	.40
	45.0°	.22
	22.5°	.15
(N)	0°	.09

SOME COMMON BUILDING MATERIALS REFLECTANCE VALUES

White plaster or paint or glaze	.80 to .90
Aluminum paint	.55
Green paint	.50
Red paint	.26
Light gray paint	.25
Flat Black paint	.06
Polished aluminum, stainless steel	.85
Polished light marble	.40 to .50
Light granite, limestone	.45
Copper, brass, lead	.60 to .80
Smooth concrete	.45 +
Rough concrete	.40-
Asbestos cement	.31
Light buff brick	.48
Dark buff brick	.40
Light red brick	.45
Dark red glazed brick	.30
Dark red brick	.12
Slate	.11
Wood	.22 ±
Glass: double glazing with reflective coating*	
Solarcool ^r bronze or gray	.35 to .36
Solarban ^r clear	.36 to .44
Solarban ^r bronze	.18
Solarban ^r gray	.14
Glass: tinted double glazing	
Gray	.08
Bronze	.09
Solex ^r (green or blue)	.12
Glass: clear double glazing	.15
Glass clear single glazing	.08

*reflectance varies according to which layer the reflective coating is placed on, but can be precisely determined for each position

Sources:

Anderson, *Solar Home Book*
 Callender, *Time Saver Standards*
 PPG Industries, *Architectural Glass Products*
 U.S. Dept. of Energy, *DOE - 2 Reference Manual*

DAYLIGHT EVALUATION CHART EXAMPLE

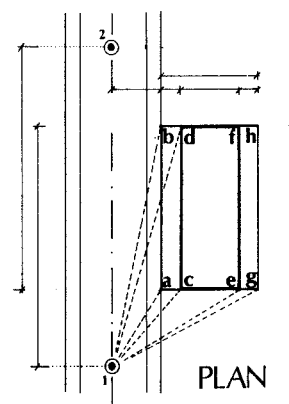
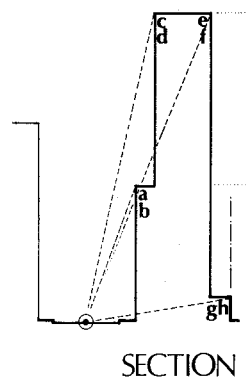
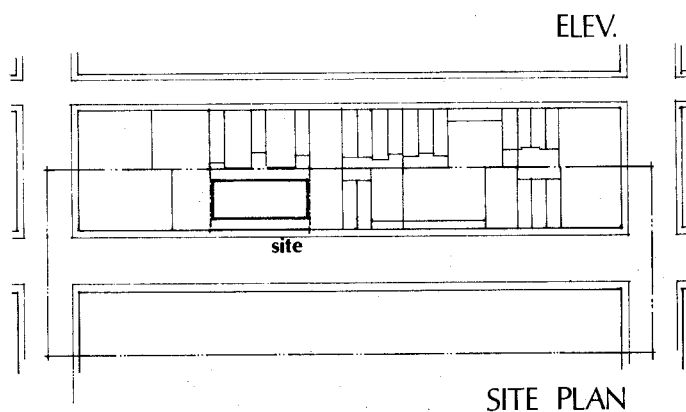
A proposed building fronts on a 100 foot wide street, occupying a site 170 feet long by 100 feet deep. The building shape is symmetrical resulting in identical daylight scores from the two required viewpoints. In this case, only one daylight score needs to be calculated; if it is 75 percent or greater, the building will pass.

Drawing the Building

To determine the daylight score for the proposed building, the building is first drawn on the Daylight Evaluation Chart.

Step One: Plan and Section

The building is drawn in plan and section and the corners of the building are labeled (points "a" through "g").



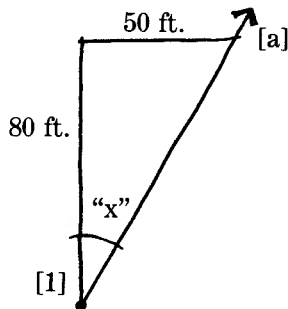
Step Two: Viewpoints

The viewpoints are established at the centerline of the street at a distance of 250 feet from each property line (points 1 and 2). Each viewpoint will have its own DEC.

Step Three: Plan Angles

To determine the plan angle from the viewpoint to each building corner, the most accurate method is to compute the angle using simple geometry. For instance, at viewpoint [1] the tangent of the angle formed by corner [a] and the street centerline can be computed by dividing the perpendicular distance to the centerline from corner [a], which is 50 feet, by the distance from where the perpendicular intersects the centerline to viewpoint [1], which is 80 feet.

A pocket calculator or a tangent table can be used to find the angle after the tangent has been calculated. Record the calculations and angles. The plan angles are plotted along the horizontal axis of the DEC.



find angle "x" to point [a]
tangent angle "x" = $\frac{\text{opposite}}{\text{adjacent}} = \frac{50}{80} = .63$

angle table .63 = 32.0°

Step Four: Section Angles

To determine the sectional angle from the viewpoint to each building corner, a similar method is used. The sectional tangent can be computed between viewpoint 1 and point [a], for instance, by dividing point [a]'s vertical height by point [a]'s perpendicular distance from the street centerline. Use a calculator or tangent table to convert the tangent number to section angles and record them. The section angles are plotted on the vertical axis of the DEC.

Step Five: Plotting Points

Each point now has both plan angle and section angle coordinates. These are used to plot the point on the DEC (point [a] is determined by the intersection of plan angle 32° with section angle 70.3°). After all the points are plotted, they are connected to show the building as it would be perceived from viewpoint [1].

The Daylight Score

To score the building, the number and value of daylight squares it blocks above 70° (or leaves open below 70°) are calculated and compared to its potential for full daylight.

Step Six: Available Daylight

The number of available daylight squares is determined by counting all squares above 70° and bounded by the vertical lines b and g, which define the boundaries of the lot viewed from point [1]. This is 89.9. [Note] A larger, more detailed DEC will be used to facilitate the counting of squares.

Step Seven: Daylight Blockage

The total number of squares blocked by the building are counted and given a negative value, in this case -20.5.

Step Eight: Unblocked Daylight Credit

Credit is given for unblocked squares that can be seen on the street line (between [a] & [b]) below 70°. In the example there are none.

Step Nine: Profile Daylight Blockage

The number and value of squares blocked in the profile zone, the area that is on the other side of the dotted shaped line, are determined. In this case, slight encroachments into squares with a value of 1.5 and 1 are calculated:

$$.1(1.5) + .25(1) = 0.15 + 0.25 = 0.40.$$

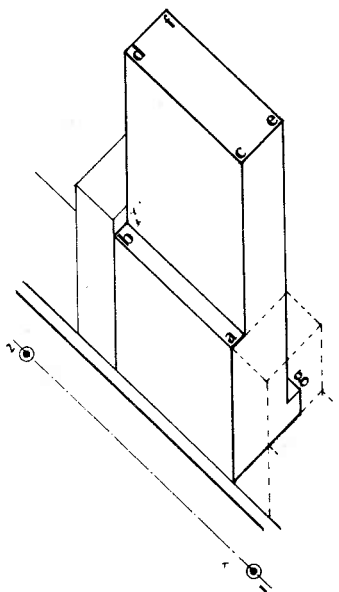
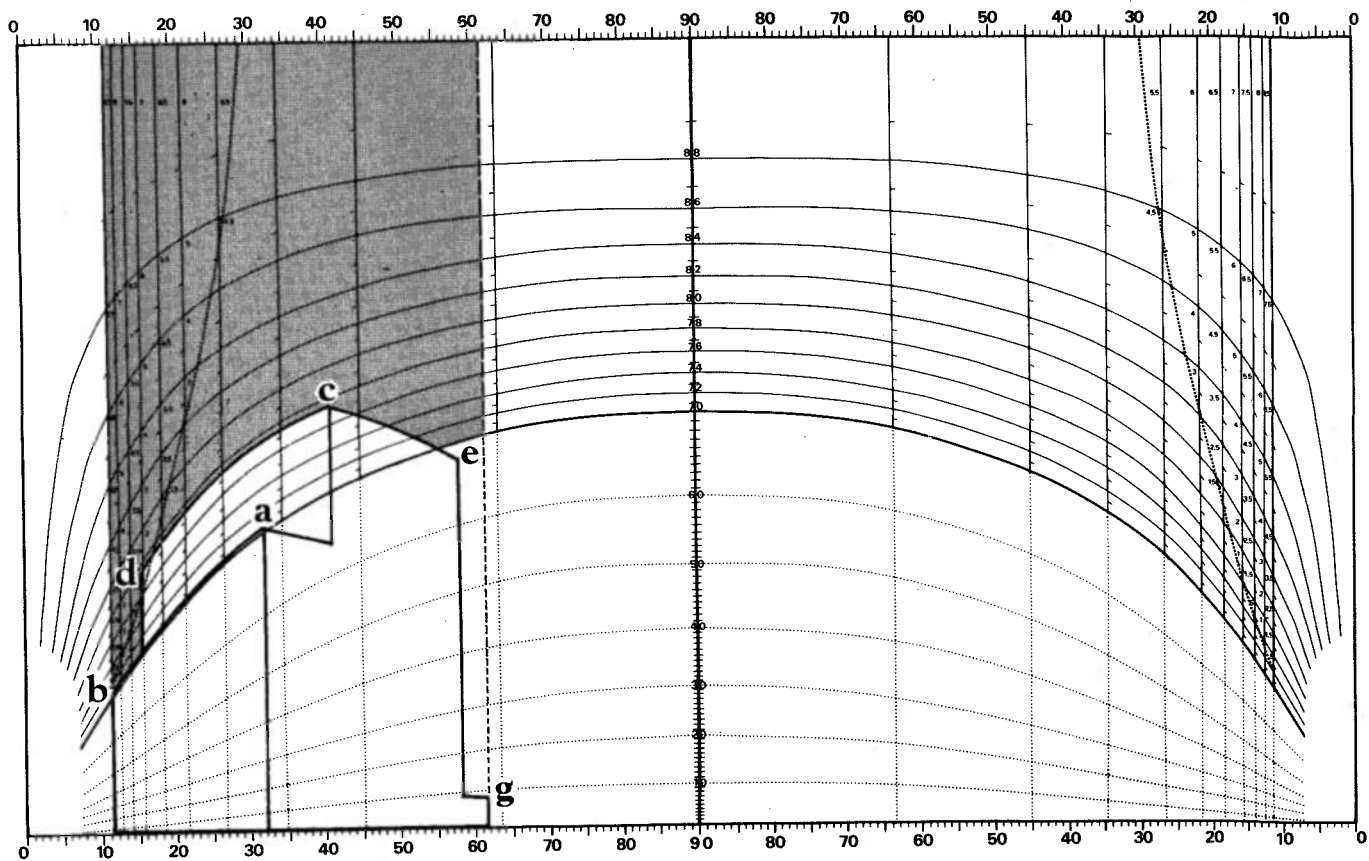
This sum is also given a negative value, -0.40.

Step Ten: Daylight Remaining

The daylight remaining is calculated by adding the results of steps 1-4. This equals 69.0.

Step Eleven: Daylight Percentage

The daylight remaining is then expressed as a percentage of the amount actually available. The percentage is calculated by dividing the daylight remaining by the available daylight. For example, viewpoint [1]'s score equals $69.0 \div 89.9 = 76.75\%$. Since the building is symmetrical, viewpoint [2] scores the same percentage. The average is 76.75%; the building passes.



The example building should be scored as follows:

AVAILABLE DAYLIGHT SQUARES 89.9

SQUARES BLOCKED TIMES VALUE

Squares above 70° blocked -20.5

Squares below 70° open +0.

Profile Encroachment

$.1 \times 1.5 =$ -0.4

$.25 \times 1$

Total blockage -20.9

DAYLIGHT SCORE

$\frac{89.9 - 20.9}{89.9} = .7675 = 76.75\%$

REFLECTIVITY EXAMPLE

The proposed building in the DEC example faces south on the Manhattan street grid, which is 157.5° true. The building facade is 50 percent light granite and 50 percent clear glass.

Step 1

The overall reflectance value (R_y) of the building facade is calculated. The reflectance values of the materials (as certified by the manufacturer and subject to acceptance by the N.Y.C. Board of Standards & Appeals) is: light granite - .55; clear double pane glass - .15; overall building reflectance is thus:

$$R_y = 50\% \times .55 (\text{granite}) + 50\% \times .15 (\text{glass}) = .35$$

Step 2

The difference between this R_y and a gray building is the comparative reflectance.

$$(R_y - .15) = .20$$

Step 3 The number of blocked squares for each building orientation is counted from viewpoint [1]:

18.3 blocked squares face 157.5° true;

2.2 blocked squares face 67.5° true.

The orientation value (O_v) for each is found on the orientation value table, respectively .93 and .72.

Step 4

The reflectivity for each orientation is calculated and then added for the total building reflectivity.

$R_y - O_v \times (R_y - .15) \times \text{blocked squares}$

Grid South $R_y - .93 \times .20 \times 18.3 = 3.4$

Grid East $R_y = .72 \times .20 \times 2.2 = .32$

Building Reflectivity = $\quad\quad\quad + 3.72$

Step 5

The building reflectivity is then added to the daylight score with a plus sign. The adjusted score for the example building from viewpoint [1] would be:

Daylight Equivalency Percentage

$$\frac{89.9 - 20.9}{89.9} + \text{reflectivity} = \frac{89.9 - 20.9}{89.9} + 3.72 = 80.89\%$$

Although in this example the proposed building did not require the reflectivity option to pass, it would offer additional flexibility in examining other design solutions.

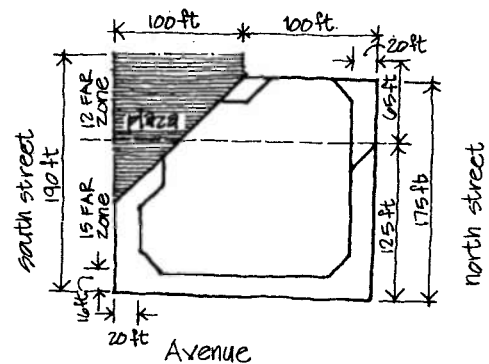
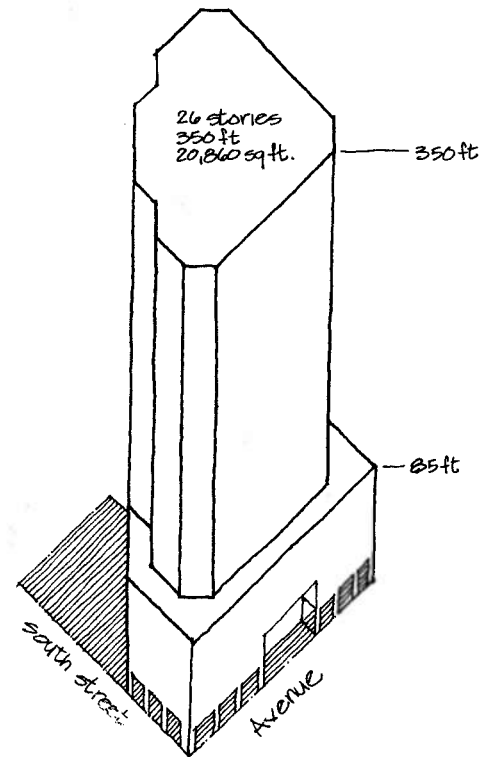
APPENDIX

CASE NO. 1

	<i>Square Feet</i>
Lot Size	36,500
(FAR 15 Zone)	(25,000)
(FAR 12 Zone)	(11,500)
Basic Floor Area	513,000
Bonus Floor Area	36,500
Total Allowable Floor Area	549,500
Density (FAR):	(15.0)
Allowed Mechanical Floor Area	32,970
Total Allowable Gross Floor Area	582,470

ACTUAL BUILDING — FIRST TIER.

Base:		<i>Square Feet</i>
1-2 floors	2 × 20,515	= 41,030
3-6 floors	4 × 28,360	= 113,440
7-12 floors	6 × 22,660	= 135,960
Tower:		
13-26 floors	14 × 20,860	= 292,040
Total		582,470
Height of Building:	350 feet	
Number of		
Stories:	26 (including mechanical)	
Tower Size:	20,860	



ACTUAL BUILDING — SECOND TIER

Base: Square Feet
 1-8 floors $8 \times 24,600$ = 196,800

Tower:
 9-29 floors $21 \times 18,365$ = 385,670

Total 582,470

Height of Building: 365 feet

Number of

Stories: 29 (including mechanical)

Tower Size: 18,365

OVERALL SCORE

Score on N. Street

Score on S. Street

Score on Avenue

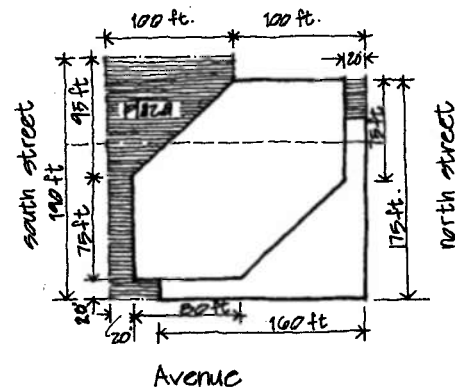
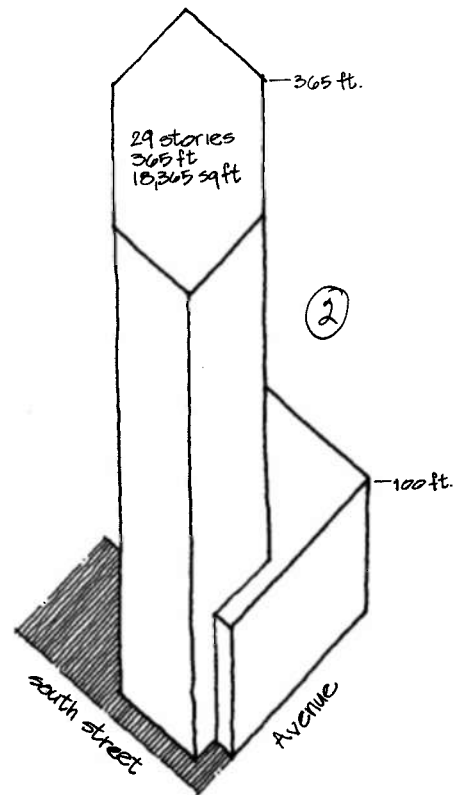
Percent

77.78

68.32

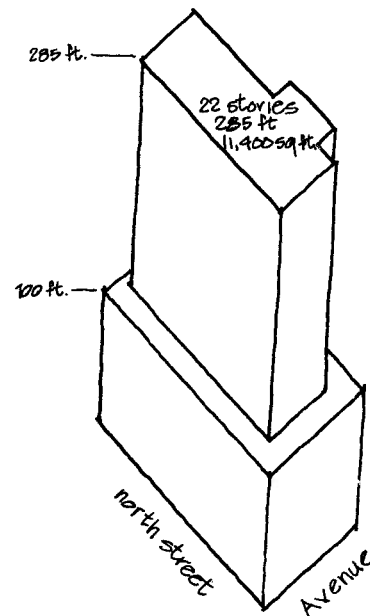
83.73

80.42



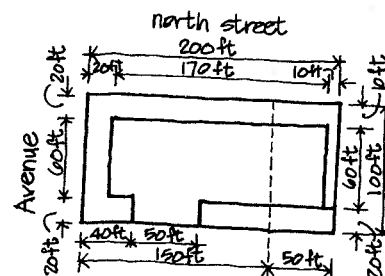
CASE NO. 2

Lot Size	<i>Square Feet</i>
(FAR 15 Zone)	20,000
(FAR 12 Zone)	(15,000)
Basic Floor Area	(5,000)
Bonus Floor Area	285,000
	-0-
Total Allowable Floor Area	285,000
Density (FAR)	(14.25)
Allowed Mechanical Floor Area	17,100
Total Allowable Gross Floor Area	302,100



ACTUAL BUILDING — FIRST TIER.

Base:		<i>Square Feet</i>
1-10 floors	$10 \times 18,000$	= 180,000
Tower:		
11-13 floors	$3 \times 12,518$	= 37,554
14-21 floors	$8 \times 10,568$	= 84,544
Total:		302,098
Height of Building:	265 feet	
Number of		
Stories:	21 (including mechanical)	
Tower Size:		10,568



Base: Square Feet

Tower Size: 11,200

265 ft.

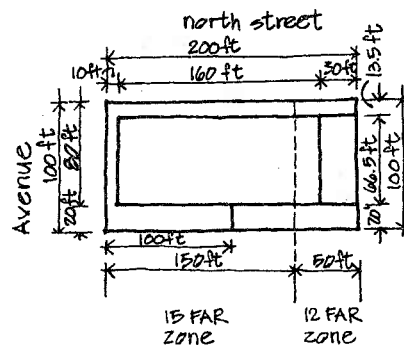
165 ft.

125 ft.

21 stories
265 ft.
10,568 sq ft.

North Street

Avenue

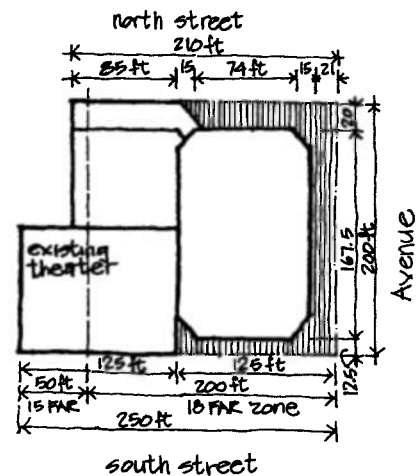
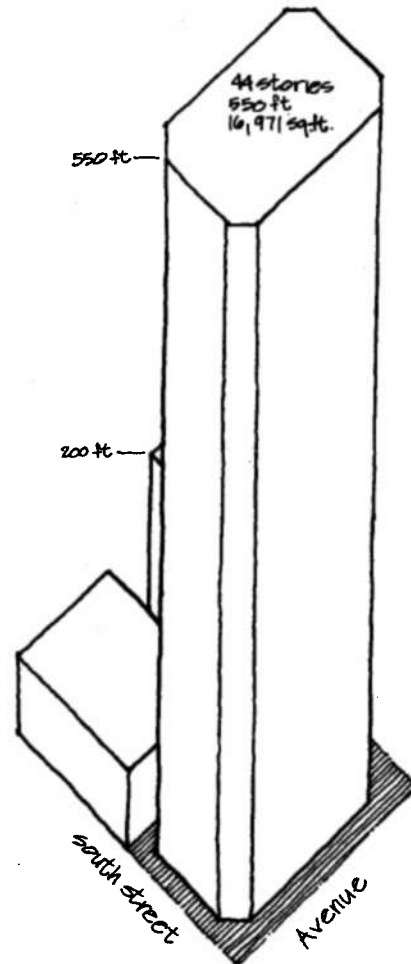


CASE NO. 3

	<i>Square Feet</i>
Lot Size	46,000
(FAR 18 Zone)	(40,000)
(FAR 15 Zone)	(6,000)
Basic Floor Area	810,000
Bonus Floor Area— Theater Renovation	<u>45,000</u>
Total Allowable Floor Area	855,000
Density (FAR):	(18.6)
Existing Building	37,500
Allowable Floor Area in New Building	<u>817,500</u>
Allowable Mechanical Floor Area	<u>49,050</u>
Total Gross Floor Area in New Building	866,550

FIRST TIER.

ACTUAL BUILDING		<i>Square Feet</i>
1-6 floors	6 × 25,509	= 153,054
7-16 floors	10 × 23,831	= 238,310
17-44 floors	28 × 16,971	= 475,188
Total		866,552
Height of Building: 550 feet		
Number of Stories: 44 (including mechanical)		
Tower Size:		
Low portion		23,831
High portion		16,971

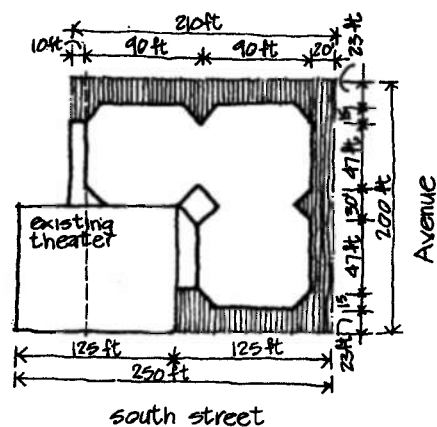
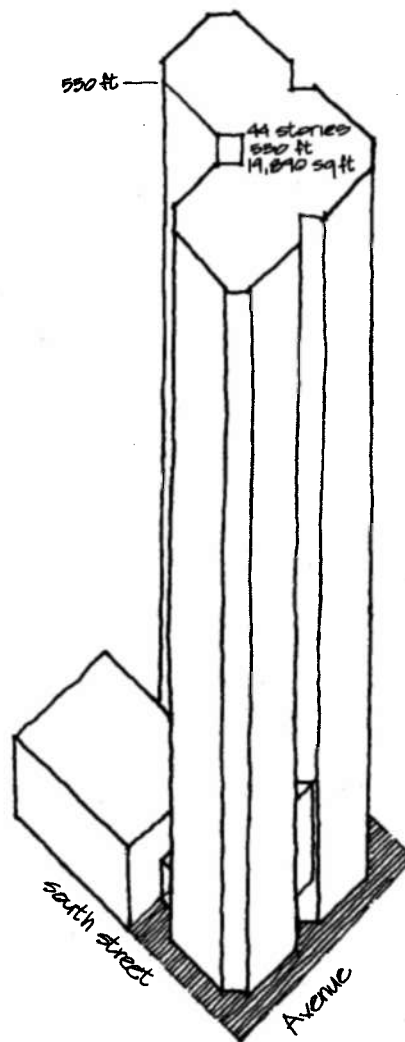


SECOND TIER.

ACTUAL BUILDING		Square Feet
1-2 floors	2 × 21,390	= 42,780
3-43 floors	41 × 19,890	= 815,490
Top Mech. Floor	1 × 8,280	= 8,280
Total		866,550
Height of Building: 550 feet		
Number of Stories: 44 (including mechanical)		
Tower Size:		19,890

OVERALL SCORE

	Percent
Score on N. Street	76.09
Score on S. Street	68.30
Score on Avenue	83.75
	74.70



Lot Size	Square Feet
(FAR 18 Zone)	67,500
(FAR 15 Zone)	(27,500)
	(40,000)
Basic Floor Area	1,095,000
Bonus Floor Area	67,500
	<hr/>
Total Allowable Floor Area	1,162,500
Density (FAR)	(17.2)
Allowed Mechanical Floor Area	69,750
	<hr/>
Total Allowed Gross Floor Area	1,232,250

Base:		<i>Square Feet</i>
1-6 floors	$6 \times 42,729$	= 256,374
Tower:		
17-43 floors	$37 \times 26,375$	= <u>975,875</u>
Total:		1,232,249
Height of Building:	550 feet	
Number of		
Stories:	44 (including mechanical)	
Tower Size:		26,375



ACTUAL BUILDING - SECOND TIER.

Base: *Square Feet*

1-6 floors $6 \times 30,700 = 184,200$

7-8 floors $2 \times 7,500 = 15,000$

Tower:

7-44 floors $38 \times 27,060 = 1,028,280$

Total: $1,227,480$

Height of Building: 560 feet

Number of

Stories: 44 (including mechanical)

Tower Size: $27,060$

OVERALL SCORE

Percent

Score on N. Street

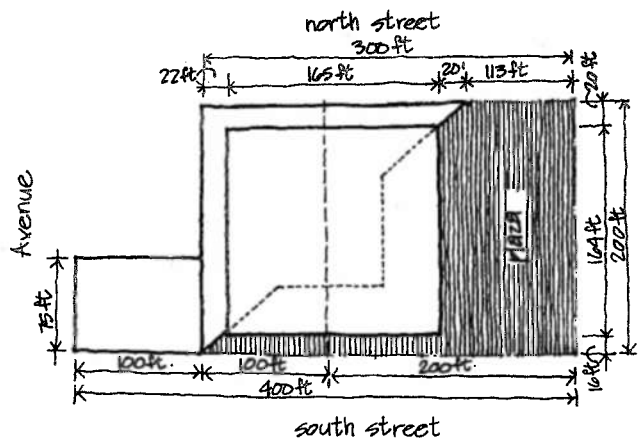
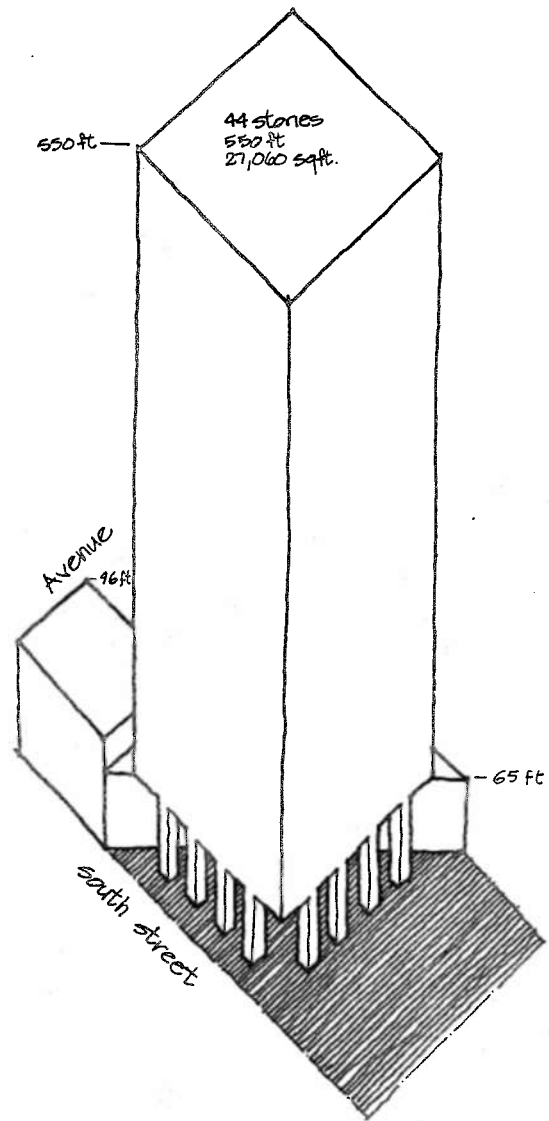
81.38

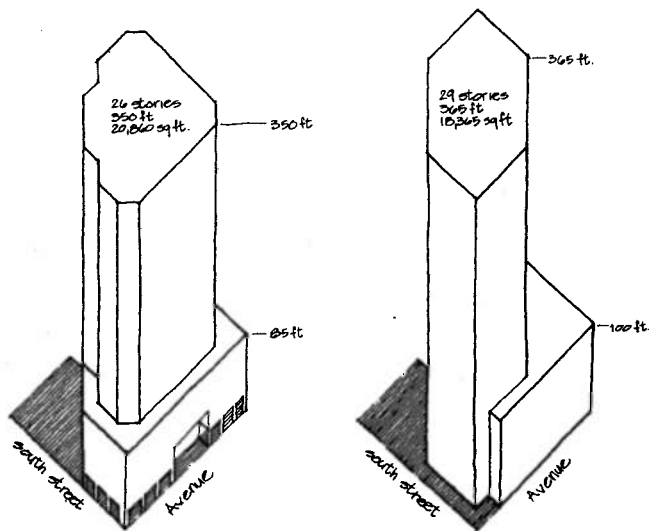
Score on S. Street

72.50

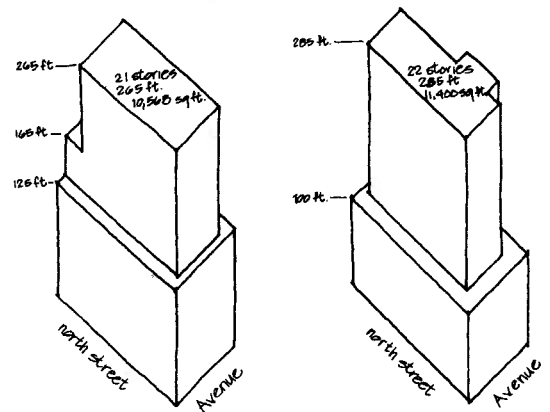
Score on Avenue

84.60

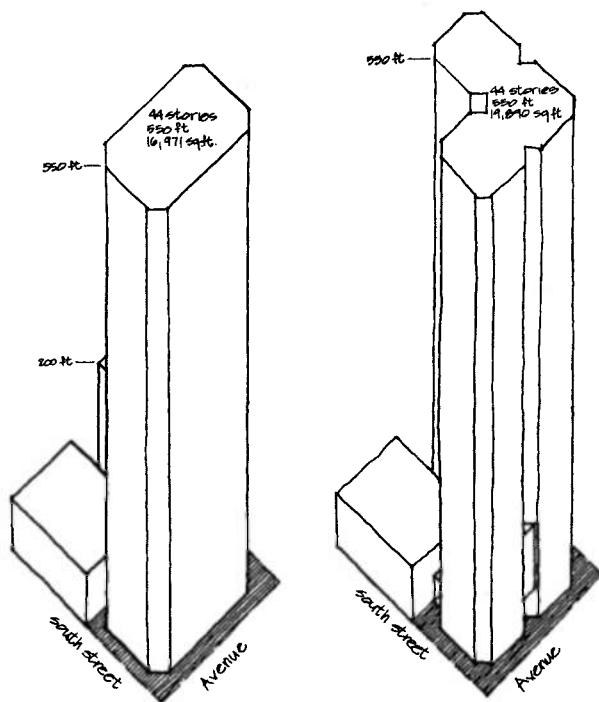




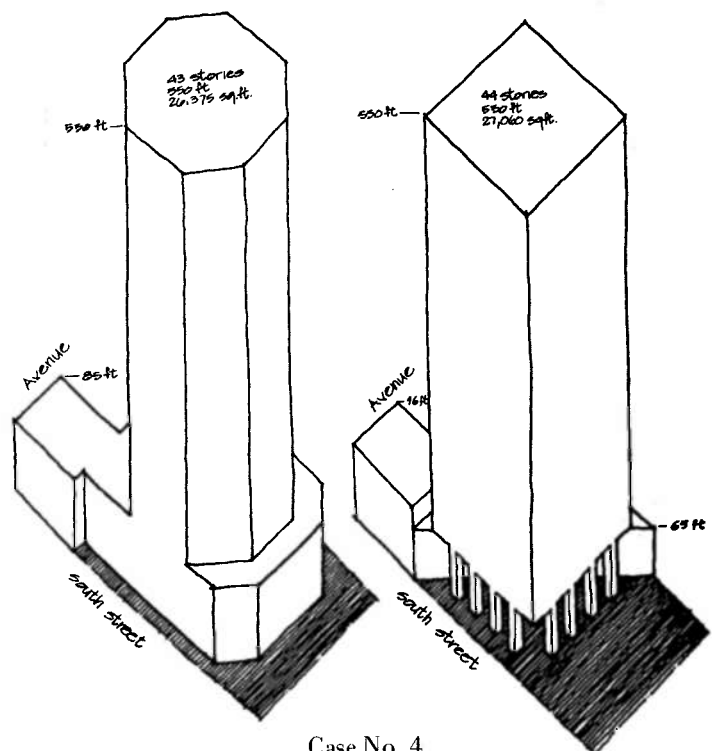
Case No. 1



Case No. 2



Case No. 3



Case No. 4

*Reprinted from:
Midtown Development Project Draft Report/June 1980*

The Setting Purpose

Midtown Manhattan is the engine that drives our economy—increasingly so as we move into the “post-industrial” era and New York strengthens its status as a world city. Every New Yorker has a stake in midtown’s economic health and strength.

That does not mean that a strong, well-functioning midtown can by itself solve the social, economic and physical problems that New York must address. But when midtown functions poorly, when the economic engine sputters and gasps as it did in the mid-seventies, then the City’s other problems are magnified. A healthy, strong and prosperous midtown is a prerequisite to the well-being of the entire City.

The development and functioning of midtown are primarily dependent upon private initiative and private investment. The role of municipal government is essentially to provide the framework of policy, ground rules and regulations that help guide development in the public interest; and to provide and maintain the basic public infrastructure and services.

New York has historically been innovative and aggressive in its approach to the role of municipal government. It pioneered zoning in 1916; it used tax incentives to help stimulate the biggest housing boom the City has known in the 1920’s; it stimulated and encouraged advances in mass transportation and ultimately helped build and weld together the greatest mass transportation system ever developed in terms of number of people moved regularly, swiftly and safely; it creatively broadened the use of the “police power” for regulation and development in the public interest.

In the mid-seventies, the City faced a crisis. The great, unprecedented and astonishingly sustained post-World War II office building boom came to a crashing halt. Under the weight of the deepest and broadest post-war national recession, exacerbated by the sharp increase in energy costs brought on by the Arab oil embargo and the first energy crisis, new construction virtually stopped. The City government teetered on the edge of municipal bankruptcy.

Its resources and options severely limited, the City took what steps it could to restart and accelerate the development engine at the heart of its economy. Tax incentives were formulated and applied to midtown. Zoning incentives were broadened, modified and granted with the goal of stimulating construction, a key and often decisive goal.

Development of major commercial buildings did resume, essentially in the past two-and-a-half to three years. Resumption of building brought with it new problems and concerns—and revived some old ones. They were brought about by a combination of causes: operation of the private market place, astonishing increases in costs and rents, and, in many cases, unforeseen and unintended consequences of the public incentives.

There was growing concern with the problems and consequences of the concentration of development in a limited area, excessive bulk on building sites, threats to the character and scale of well-developed and valuable areas and of mid-blocks, destruction of good and serviceable buildings, congestion of sidewalks and subway platforms.

Critics complained that the City was giving away too much in the way of floor area bonuses and bulk modifications for ill-conceived, poorly designed and inadequately executed amenities which returned too little to the public. Developers complained of endless rounds of negotiations with planners and community boards, and of the high cost of long delays. Both complained of the uncertainty and changing rules of the game.

These problems of development and growth are of a different order than the earlier problems of stagnation. In a way there are problems of success. The danger is that they could lead to failure. They could impair the proper functioning of midtown; they could make it a less desirable place to locate and do business in or to visit; they could create opposition to and discourage new development.

It is not in the City's interest to halt or even slow new midtown development. It is in the City's interest to help guide and direct it, within the constraints of the market place, to where it can best be absorbed and will be of maximum benefit. The midtown development issue is *how and where* development should take place.

It is to this issue that the Midtown Project is aimed. Its purpose is to lay out a planning framework and strategy for midtown Manhattan in the 1980's and to make specific proposals in tax incentive policy, zoning, capital investment strategy and public services to best carry it out.

Area of Project

The basic area of the project is from 34th to 60th Streets, Third Avenue to Eighth Avenue. This includes the approximately half-square mile East Side core area (40th to 60th Streets, Third Avenue to Avenue of the Americas) with the world's greatest concentration of office space and most expensive real estate.

It includes Times Square, the Theatre District, Herald Square, and the 34th, 42nd and 57th Street corridors, each with a different character and function.

The project does not deal with the special problems of the Clinton residential area to its west or the United Nations and residential areas to its east. Neither does it deal with the special problems of the garment district which penetrates its southern flank.

It does, however, deal with the edges, and with the special problems that result from the friction between fundamentally different uses.

Functional Requisites of Midtown

The focus of this project is development: where and how it should take place. But development is not an end in itself. It is a measure. It is a measure of demand for space which in turn is a reflection of how well the area and the market are functioning. Like the shadows in Plato's cave it needs cautious interpretation; it can present a distorted view of the real world outside.

By meeting the demand for space, new development can aid the functioning of the area. The quality and impact of a new building, its relationship to its surroundings, the features and special characteristics it provides—these can all enhance the area's functioning.

So too can new buildings impair or threaten the proper functioning of midtown—by themselves or in their cumulative impact.

If the proper concern of city planning for midtown is its successful functioning as the heart of the City's economy, then we have to examine the conditions that enable it to function well. What are these conditions or attributes, midtown's functional requisites as it were?

There are a half-dozen that are worth examining:

Accessibility: Above all, as the nation's and the world's preeminent "downtown", midtown must be accessible. It must be accessible to its workers, managers and executives. It must be accessible to its customers; to its visitors—whether business travelers coming from the airports, tourists from abroad or other parts of the country, shoppers drawn by the elegance of Fifth Avenue or the variety of Herald Square, or New Yorkers "on the town."

Ease of Face-to-Face Communication: At one time it was thought that revolutionary developments in communications technology—from jet planes and television to the growing ability of computers to digest, analyze and exchange information, and of

satellite systems to transmit it world-wide—would radically diminish the need for face-to-face communication. There is little evidence that this has happened—at least at the sophisticated and high level of decision making that characterizes so much business activity in midtown Manhattan. Indeed, the explosion of information and its increased complexity appear to have made face-to-face meetings more desirable and necessary—whether around the conference table or over the lunch table.

Relative Compactness: This attribute is related to the two preceding ones and is self-evident; yet it contains some of the built-in contradictions that frequently characterize the midtown function. Obviously if development is too spread out or off good lines of travel (time is as important as distance and they are not always closely correlated) face-to-face contact is discouraged. But if development is too compact and crowded, the congestion of sidewalks and subway platforms and the competition for space in restaurants and public facilities can also be discouraging.

Rich Mix and Variety of Uses: The dominance of the midtown skyline by its agglomeration of tall office towers mirrors its dominant function: national and international business management and finance. New York's preeminence as a national and international center of business and finance in turn is supported by—and helps support—a wide variety of other functions: professional and business services of all kinds; a market place of ideas; an international center of arts and culture; home of renowned educational, medical and religious institutions; a shopping bazaar with an unsurpassed variety of goods and services; an entertainment "smorgasbord" offering everything from Broadway theatre to honky-tonk; a popular and growing center of tourism, hotels and restaurants. All these and more exist in a symbiotic whole. Its mass and motion produce an urban field of gravity which attracts more of the same and by general consensus makes New York the most exciting city in the world.

Accommodation of differences: This mix of uses requires that the frictions and differences be accommodated in the interest of the area's overall functioning. Protecting smaller or economically weaker uses, which nevertheless enrich the whole, from being swallowed up by the stronger uses is a major and sensitive role of government.

Style and Ambience: The quality of midtown that defines it as a place, its unique and urbane character, is more than the sum and variety of its parts. It flows from the style and ambience of its avenues, streets and places: Fifth Avenue with its

stately limestone buildings, elegant department stores and shops, great churches; Rockefeller Center; the Broadway Theatre District, particularly just before curtain time; the sculpture garden of the Museum of Modern Art and the quality and scale of the midblocks to the immediate north of it; restaurant row; the sweep of Park Avenue—these are a few of the parts whose special qualities and differences contribute so much to the exciting whole.

This combination of attributes helps keep midtown Manhattan functioning as the economic heart of New York City. It is workplace for more than 600,000 people, almost one out of every four jobs in the entire City, the greatest concentration of jobs and productive wealth on earth.

*Reprinted from:
Midtown Development Project Draft Report/June 1980*

A Development Strategy

Planning Framework for Development

A "development strategy" is nothing more than a planning framework relating land use objectives for geographical areas to current and anticipated development trends. It provides a means to promulgate and test public development policies, programs, laws and regulations for consistency and effectiveness in helping to achieve agreed upon goals. The fundamental goal of the Midtown Development Project is to protect and enhance the function of midtown by easing problems that stem from the high concentration of buildings in a limited part of the area, and to encourage a shift in new construction to the west and south. A development strategy cannot in the context of midtown achieve this goal by itself. It cannot foster private development in the absence of basic market forces; it cannot force private development to move against the logic of those market forces.

But it can help to break the log jams that artificially dam the flow of market forces; it can facilitate and accelerate development; and it can help to make sure development contributes rather than does violence to the broader public interest.

Westward and Southward

The expansion of midtown development westward and southward is more than planners' logic. As building sites become scarcer and more expensive in the prime east side core area, developers seek sites at the edges. With expansion to the north and east blocked for the most part by strong residential areas, it is to the west and south that the areas most available for expansion are found. This movement is—or should be—further encouraged because the west side is better served by mass transportation than the east side.

In fact, this was the direction midtown development was moving when the long sustained post-World War II office boom crashed early in the last decade. Not only had developers assembled sites for future development on the west side, they had already started to build there.

The four years 1969–1972 witnessed the greatest burst of office construction in the history of this or any other city (Table II-1). Almost one-quarter of all of Manhattan's present office space was built in those four years, two-thirds in midtown. Half of the midtown output, almost 18.8 million square feet, was built on or west of the Avenue of the Americas (Sixth Avenue).

SUMMARY OF OFFICE BUILDING COMPLETION 1960-1979

YEAR	DOWNTOWN		MIDTOWN		MAN. TOTAL	
	No. of Buildings	rentable s.f.	No. of Buildings	rentable s.f.	No. of Buildings	rentable s.f.
1960	1	900,000	7	3,659,000	8	4,559,000
1961	3	2,595,000	13	5,108,000	16	7,703,000
1962	3	1,227,000	8	3,546,000	11	4,773,000
1963	3	912,000	15	6,708,000	18	7,620,000
1964	2	131,000	13	5,148,000	15	5,279,000
1965	3	1,616,000	12	2,432,000	15	4,048,000
1966	1	1,000,000	3	927,000	4	1,927,000
1967	3	604,000	6	3,526,000	9	4,130,000
1968	4	3,329,000	2	1,778,000	6	5,107,000
1969	3	3,211,000	14	11,375,000	17	14,586,000
1970	8	4,405,000	9	4,753,000	17	9,158,000
1971	5	5,434,000	13	8,142,000	18	13,576,000
1972	5	7,132,000	12	12,260,000	17	19,392,000
1973	1	2,550,000	5	2,583,000	6	5,133,000
1974	1	2,700,000	3	1,665,000	4	4,365,000
1975	1	1,400,000	3	1,460,000	4	2,860,000
1976	1	170,000	1	350,000	2	520,000
1977	1	430,000	1	1,300,000	2	1,730,000
1978	1	49,000	2	385,000	3	434,000
1979	—	—	2	110,000	2	110,000

MANHATTAN OFFICE MARKET 1960-1979

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
NEW CONSTRUCTION	4.599	7.703	4.773	7.620	5.279	4.408	1.927	4.130	5.107	14.506
DEMOLITION	.665	.770	1.014	.406	.283	.143	.049	.752	.483	1.710
TOTAL OFFICE SPACE	123.861	130.794	134.553	141.767	146.763	150.668	152.546	155.924	160.548	173.424
VACANCY RATE	2.4	2.8	2.9	4.4	3.5	4.8	1.8	.5	.5	1.0
VACANT SPACE	2.973	3.662	3.902	6.230	5.137	7.232	2.746	.779	.803	1.734
OCCUPIED SPACE	120.888	127.132	130.651	135.529	141.626	143.436	149.800	155.145	159.745	171.690
ABSORPTION	3.888	6.244	3.519	4.878	6.097	1.810	6.364	5.345	4.600	11.945

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
NEW CONSTRUCTION	9.158	13.576	19.392	5.133	4.365	2.860	.520	1.730	.434	.110
DEMOLITION	.280	.214	.112	.175	.554	.082				
TOTAL OFFICE SPACE	182.302	195.664	214.944	219.902	223.713	226.491	227.011	228.741	229.175	229.285
VACANCY RATE	6.0	14.2	14.8	13.7	12.8	11.6	10.3	7.7	4.4	
VACANT SPACE	10.977	27.784	31.790	30.120	28.610	26.261	23.304	17.525	10.084	
OCCUPIED SPACE	171.325	167.880	183.154	189.782	195.103	200.230	203.707	211.216	219.091	
ABSORPTION	-.365	-3.445	15.274	6.628	5.321	5.127	3.477	7.509	7.875	6.4

All figures in million sq. ft.

For the better part of two decades—the 1950's and 1960's—new office construction had remained strong and on a remarkably even keel. Except for 1951, '52 and '53, the three years after the start of the Korean War, and the year 1966, annual output never dipped below two million square feet in the fifties or four million square feet in the sixties.

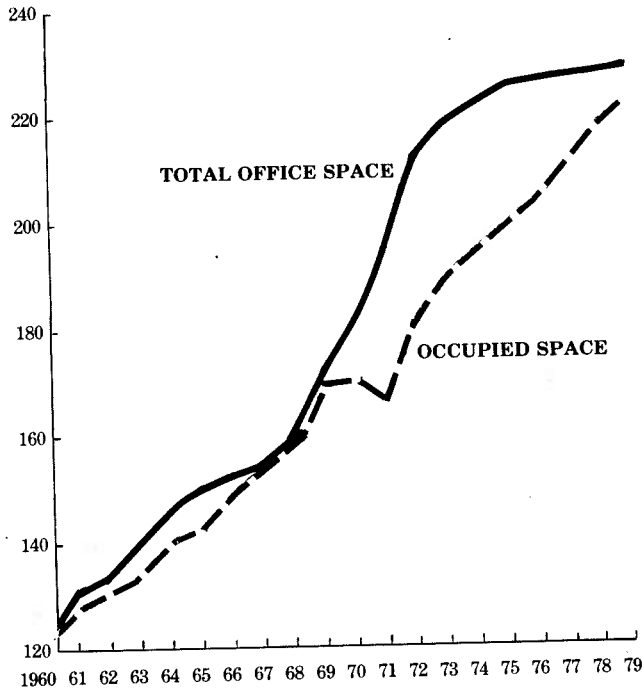
This was a period of seemingly strong economic expansion for the City. Although industrial blue collar jobs were declining, there was a net growth in total jobs. The City's job mix seemed particularly resilient. In the post-war economic recessions, New York City went in last and came out first.

The shift taking place to a white collar, service economy helped to rapidly absorb the new office space. By 1966 the vacancy rate dipped below two percent and then in 1967 and 1968 to an incredibly tight one-half percent. The development community responded to this space shortage and the general feeling that demand for office space would continue to grow with the burst of activity that produced 14.6 million square feet in 1969, 9.2 million in 1970, 13.6 million in 1971, and 19.4 million in 1972.

Meanwhile, although not then generally recognized, the City's economy went into decline. New York

TOTAL AND OCCUPIED OFFICE SPACE 1960-1978

Millions of
Square Feet

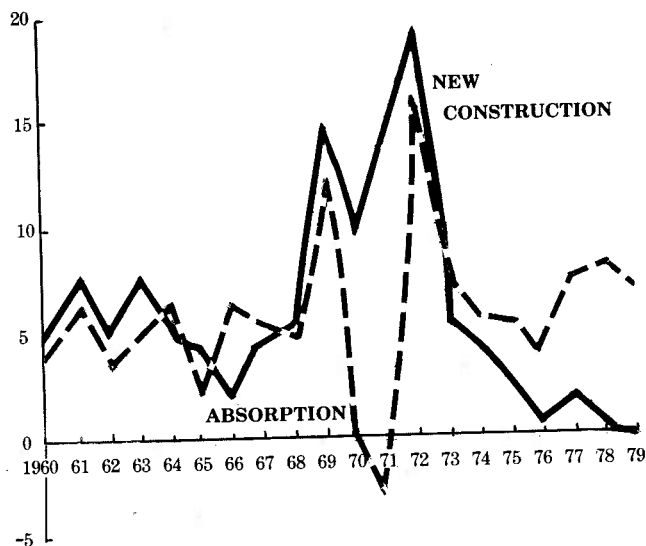


VACANCY RATE

2.4 2.8 2.9 4.4 3.5 4.8 1.8 .5 1.0 6.0 14.2 14.8 13.7 12.8 11.6 10.3 7.7 4.4 2.1

ANNUAL CONSTRUCTION AND ABSORPTION OF OFFICE SPACE

Millions of
Square Feet



slipped into the 1969-70 recession ahead of the rest of the country and never fully emerged. The severe 1973-74 recession and the "stagflation" that followed exposed the structural weaknesses not only in the City's economy, but in that of the metropolitan region and the entire Northeast.

The City suffered a net loss of more than 600,000 jobs in the first seven years of the decade. The office vacancy rate which had started to climb in 1970 when it reached six percent soared to 14.2 percent in 1971 and to almost 15 percent (14.8) in 1972. By the middle of the decade the severe financial weakness of our City government became fully exposed and it came perilously close to bankruptcy as the normal credit markets were closed to it.

Little wonder that development virtually came to a halt. There was a severe crisis of confidence in the City; in the perception of many, business was fleeing—not just manufacturing now but national companies, white-collar business. In the last five years of the decade, 1975-79, only 5.654 million square feet were built in total, 30 percent less than the *annual* average for the preceding ten years.

But these figures can be misleading—the paucity of new office space coming on the market as we entered the eighties reflected the need to digest the huge bulge produced at the beginning of the seventies and the lag-time of new development cycles more than it reflected office market conditions. Office space has, in fact, been absorbed at a relatively high rate for the past several years. (See Figures II-1 and II-2); according to industry surveys, the midtown vacancy rate at the end of 1979 was down to 2.05 percent. (Table II-2 is a revealing abstract of the office market in the '60's and '70's).

Virtually all of the new office space scheduled to come on the market in the next two years (1.8 million square feet in 1980 and 5.7 million in 1981) will be on the east side. This results from a combination of factors: the corporate nature of a number of the new buildings; the conservatism of developers and lenders at the start of a new development cycle; and the rapidly rising trend in rents.

Growing scarcity of development sites, astronomical land costs and increasing opposition to the grant of liberal bonuses and exceptions for bulky buildings will impede east side office development. If office building construction is to continue on a substantial scale, builders will have to look to the West Side again. There are already indications that they are doing so. A well founded and implemented development strategy can encourage and speed this westward movement.

Basic Forces

New York's painful economic problems and severe recession in the seventies magnified and accelerated some long-term trends of decline and temporarily interrupted and disguised some long-term growth trends. The decline in manufacturing and production jobs which had been taking place for some three decades sharply accelerated in the early seventies before levelling off, at least temporarily, in 1977-79.

The loss of white-collar office jobs appears to have represented a shake-out of a strong long-term up-trend: the shift of the City's economy from producing goods to producing paper, or more formally to managing knowledge, information and finance. This trend is part of a world-wide shift in the function of urban areas, and it is one for which New York has special strengths.

Perhaps most important is New York's growing role as an international headquarters city; or what has been characterized in this era of increasing global interdependence and the multi-national corporation as a world city.

Both the Twentieth Century Fund and the Regional Plan Association emphasize this role in recent reports.

"The Task Force believes that (the City's) assets present New York with the opportunity to become a true world capital. One major reason the city is currently thriving is because it is a magnet for foreigners and foreign investment. Looking ahead to the next decade, we are convinced that the city by building on its present strengths as a great international metropolis, can become the global marketplace for business, finance, communications, the professions, and the arts."

*Report of the Twentieth Century Fund
Task Force on the Future of New York
September, 1979*

In similar vein, RPA's report on "The Future of Manhattan" issued in February 1980, states "... It is unlikely that the primacy of Manhattan as a World City will be fundamentally challenged in the foreseeable future." In pointing out that another source of recent growth in the Central Business District (CBD) is foreign investment, the report cites the following:

"In 1978, there were 144 foreign banks in Manhattan with assets over \$60 billion, up from 47 banks with assets of \$10 billion (current dollars) in 1970. Some 35 percent of the world's 500 largest foreign firms had subsidiaries located in Manhattan... Manhattan also remains the locus of the international operations of corporations that have left the City or were never headquartered here."

It is consistent with these statistics that the report states:

"Business management and finance at the national and international level is the CBD's major function, accounting for some 45 percent of its employment, and for a still larger share of its economic output," and elsewhere, "... that the Manhattan CBD is far advanced into the post-industrial economy."

After the bi-centennial in July 1976 the City emerged once more as a great tourist attraction from its temporary depression, media badmouthing, and exaggeration of urban problems.

Tourism has boomed. Its rapidly increasing foreign component is related both to New York's role as an international center, and the favorable rates of exchange which make it a good buy for foreigners. In 1979, a record number of tourists, 17.5 million, visited the City. They spent \$2.25 billion and generated \$180 million in direct tax revenues for the City government. Hotel occupancy reached an all time high rate of 83 percent. Half-a-dozen major hotels were being built or expanded. (See Table II-3)

Table II-3

MAJOR HOTEL PROJECTS — MIDTOWN

	# Rooms	Cost. Est.
1. Grand Hyatt New York 42nd Street and Lexington Avenue	1,400	\$100,000,000
2. Palace Hotel Madison between 50th-51st Streets	1,050	78,000,000
3. Harley Hotel 42nd Street between Second and Third Avenues	793	41,000,000
4. Parker Meriden Hotel 56th Street and Sixth Avenue	600	60,000,000
5. New York Hilton Hotel Addition 1335 Sixth Avenue	834	70,000,000
6. Milford Plaza (formerly Royal Manhattan) 401 Seventh Avenue	1,310	14,000,000
Proposed		
7. Portman Hotel Broadway between 54th-46th Streets	2,020	250,000,000

Major Renovations

Hotels that have undergone or are undergoing major renovations include: The Barclay, Berkshire Place, Biltmore, Drake, Mayfair Regent, New York Statler, Plaza, Roosevelt, Sheraton Centre (formerly The Americana), Sheraton City Squire Inn (formerly The City Squire), St. Regis-Sheraton, Summit, Taft, and the Warwick.

The national and international function of the City generates business services—legal, accounting, advertising among the most important. Tourism and the hotel and restaurant industries that it helps to support in turn generate blue collar services and help to fill the gap in the job market left by the decline of manufacturing. The symbiotic relationship of the arts, culture and entertainment to both the City's business and finance headquarters function and to tourism need not be belabored. Neither should it be underestimated. The arts-culture-entertainment function is an important industry in its own right. It contributes, according to a study by Professor Dick Netzer, some three percent of the City's gross domestic product—as much as the securities industry. It also helps bind together and reinforce the vast constellation of disparate activities that make up New York's CBD. For the eighties, then, we can expect at least a continued moderate increase in demand for office and hotel space, fueled by the City's growth industries. This CBD growth can be expected even if the City's population and manufacturing continue to decline.

The Problems of Growth

If demand for Manhattan office space is strong and growing, if the vacancy rate has shrunk to the point where space is again at a premium, and if developers are already looking at the west side, why then the need for a development strategy and incentives and programs to make it work? Why won't it work by itself?

"Location, location, location" was the formula a prominent developer once gave for success in real estate. The East Side is the prime area in part because that is where the key office buildings and activities are already clustered; in part it is a matter of fashion and reputation—Park Avenue and Fifth Avenue having great prestige; in part it is more convenient for corporate executives who live on the Upper East Side—or in Westchester or Connecticut and use Grand Central Station.

In any case, the disparity between the East and West Sides as desirable locations has probably increased in the past ten years rather than diminished. When the move of office development to Broadway and the Times Square area was aborted by the economic slump at the beginning of the last decade it left a real estate vacuum.

"Massage parlors," "adult book-stores," peep shows, X-rated movie houses, live sex shows and topless bars dominated the image of the entire area. Old established restaurants and retail stores closed and were replaced by fast-food stores, penny arcades,

fly-by-night souvenir shops and other varieties of "shlock" stores. There were deep rooted problems of welfare hotels, releases from mental institutions, alcoholism and drug abuse, and the parole center. Street crime rose—as indeed it did in both cities and suburbia in the last decade. The atmosphere in either its reality or perception was not conducive to new office construction.

Recently there has been evidence of improvement. A strong Broadway theater industry, aided by the upsurge in tourism and by effective improvements in management and marketing, has now had a succession of good seasons. Public programs responsive to the Mayor's Times Square Action Plan are demonstrating that the worst uses can be shut down. There has been a visible decrease in the most offensive adult uses; there has been a sustained effort to keep the streets cleaner.

All of this helps. It is a step in the right direction. But is it enough? Probably not. The perception lingers that the area is still not safe enough or clean enough to command rents sufficient to support new office construction. There is a chicken and egg proposition. Which comes first—major new development to bring about a dramatic change in the area, or a dramatic change to induce new development? It seems likely that a clear cut development strategy backed by supportable incentives and programs is necessary to change the nature of the question and help break the impasse.

Our basic strategy is to divide midtown into three kinds of areas: growth areas, stabilization areas and preservation areas. The purpose of these areas is to provide a planning framework in which broad goals can be established and development policies evaluated. It is not to lay out a detailed prescription of treatment. Even within the three types of areas actual conditions vary considerably. The specific mix of measures and programs has to be formulated and prescribed accordingly.

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