COMMERCIAL DEVELOPMENT AT A NEW DUDLEY SQUARE MBTA TRANSIT STATION IN ROXBURY

A Theory of the Use of Mass Transportation to Stimulate Economic Development

The Application of Project Investment Analysis to Community Economic Development

Volume I: A Market Feasibility Analysis

by

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ABSTRACT

COMMERCIAL DEVELOPMENT AT A NEW DUDLEY SQUARE MBTA TRANSIT STATION IN ROXBURY
by: Brian Yoneoka

This thesis contributes to four levels of analysis. First, a theory of ghetto economic development is presented, called the "transportation-commercial development model". This is a special case of the more general "Social Overhead Capital (SOC)- Directly Productive Activity (DPA) Process" of development theory. Second, a development program of transportation, of commercial, and of land development for Roxbury's Dudley Square is formulated. The heart of the transportation plan is a new transit line and a pedestrian-bus mall; that of the commercial program is a new supermarket/junior department store and an automobile dealer retail complex plus a food wholesale store. The transportation and commercial programs are united in a joint land development program. Third, three techniques of analysis are proposed for the formulation of any ghetto economic development program: these are marketing, financial and cost-benefit analyses. Only the marketing analysis is made in volume I of the markets of transportation, commercial enterprise and land. Fourth, three development institutions are proposed for generating ghetto economic development. These are backward integrated economic structures, land banks or land trusts, and development banks. Only the market institution of backward intedgrated economic structures is examined in volume I.

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I could not have done this thesis without working at Circle, Inc. I wish to thank Chuck Turner, Exec. Dir., who provided me the means of returning to the urban expressway issue at this later stage of economic

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BACKGROUND HISTORY: The Urban Transportation Issue in Roxbury

Activism of Roxbury Community Organizations

By January, 1972, the Southwest Corridor Land Development Coalition (SWCLDC) was well underway. This unusual coalition of community organizations and agencies from black Roxbury and white Irish Jamaica Plain, was formed for three reasons:

(1) in opposition to the construction of a 6-lane Southwest Expressway through their respective communities,

(2) in support of the construction of the new orange line mass transit facility, and

(3) in advocacy of the development, both interim and long-range, of the cleared land of the proposed expressway route.

In June of 1972, the SWCLDC published it Report which outlined specific recommendations of transit and of land use projects. These included:

(1) the construction of a circumferential transit line from the new orange line at Ruggles Street to Dudley Station,

(2) the renewal of the Dudley Station shopping area, and

(3) the use of the cleared land near Dudley Station for commercial use.[1]

The Cities, Inc. report was staffed by a consultant, Keerock Rook, the planner of Donald Stull Associates, David Lee, graduate students from the Harvard Graduate School of Design and MIT Urban Systems Laboratory, with help from an architect of the Greater London Council of the Thamesmead.

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[1]Dimancescu, Daniel, et al. Report of the SW Corridor Land Development Cities, Inc. June 1974 Cambridge, Massachusetts

Gubernatorial Policy

On November 30, 1972, Governor Francis W. Sargent, in response to the communities of the SWCLDC among others, declared that the Southwest Expressway (I-95 South) would be cancelled, thereby putting an end to further urban expressway construction in Roxbury.

Further, he declared that,

> "...with the relocation of the Orange Line form the Washington Street Elevated to the cleared land corridor," (i.e., the corridor of the cancelled Southwest Expressway) "it is clear that a replacement service must be provided for the South End, Roxbury, Dorchester, and Mattapan."

This began a new era of mass transportation development in Roxbury.

And finally, the Governor called for the implementation of,

> "...a program for the sound and sensitive redevelopment of the cleared land in the corridor".[2]

In order to formulate a development program, the Governor declared that he would appoint a Southwest Corridor Development Coordinator to manage interim land use, relocation of hardship cases, design of the arterial street to be constructed instead of the urban expressway, supervision of an inter-agency planning process and design of the transportation and land development program.

The Development Coordinator would work closely with the Office of the Governor and the Mayor of Boston. The major agencies would work with the Coordinator. These agencies include the Department of Public Works, the Massachusetts Bay Transportation Authority, the Metropolitan District Commission and the Boston Redevelopment Authority.

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[2]Sargent, Governor Francis W. Policy Statement on Transportation in the Boston Region, Office of the Governor, Commonwealth of Massachusetts, November 30, 1972

Finally, a Community Advisory Council would be appointed. All these parties would be represented on a Steering Group to review the work of the development staff and the consultant, and advise the Development Coordinator on the formulation of the development program. In August of 1973, Anthony Pangaro, a planner of the NY Urban Development Corporation, was appointed Development Coordinator by the Governor. Pangaro chose the land use and mass transit plans of the SWCLDC to serve as a basis for subsequent planning. No Community Advisory Council has been appointed.

That same month, the U.S. Congress passed the Federal Highway Act of 1973, which tapped the Highway Trust Fund for Mass Transit, making the funds allocated to the cancelled urban expressway system inside Route 128 available for substitute mass transit construction.[3] Governor Sargent's Secretary of Transportation and Construction, Alan Altshuler, is credited with the effective lobbying of the amendment to the act in the office of powerful Congressman, Jennings Randolph, chairman of the Senate Committee of Public Works.

On May 24, 1974, Urban Mass Transportation Administration head, Frank C. Herringer and new Federal Highway Administrator, Norbert T. Tieman, granted approval of the conversion of transportation funds to Massachusetts in the vicinity of Six hundred sixty-five million to six hundred seventy million dollars.

On September 4, 1974, acting on the recommendations of Alan Altshuler and Tony Pangaro, the Governor announced that in addition to the Roxbury replacement service, there will be,

> "...a new crosstown transit system...planned to tie the Green, Red & Orange Lines together outside Boston".

3Public Laws 93-87, 93rd Congress, S502, August 13, 1973. See also Section 142 of Title 23, (c) "United States Code".

and,

> "...the funds for these projects will be made available as a result of Interstate Transfer of Federal Funds".

Therefore, between August 1973 and September 1974, the crucial federal funding that is 90% of the total cost of construction of mass transit lines, was committed by executive declaration. Transportation development took its next critical step toward realization. The state matching grant of 10% is still pending legislative passage of a bond issue.

Governor Sargent went further on his land development policy:

> "...new private development will utilize the cleared land, new commercial complexes...are included".

In particular, there are,

> "...fourteen acres (600,000 square feet) for major commercial retail development (at) transit stations".[4]

As of December 1974, this enlightened urban economic development policy recognizes four major components of a state strategy:

(1) the use of the construction of mass transit facilities for economic development in low income communities;

(2) the use of land cleared for a transportation facility for commercial development;

(3) the prime opportunity for retail development around a transit station; and,

(4) the possible need for public control over that development to insure that the benefits of that transit station will accrue to the local community.

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[4] Release #4/SR/2, Governor's Press Office, State House, Boston. For release, Wednesday, September 4, 1974

In Steps Circle, Inc.

In November, 1972, the chairman of the Southwest Corridor Land Development Coalition became the Executive Director of Circle, Inc. Circle is a community development corporation (CDC) funded under the Special Impact Program of the Office of Economic Opportunity. Circle's mandate is to provide local economic development for the black community of Roxbury.

What is significant about the overlap in leadership is that now Roxbury has the local instrument to effect the commercial development tied to transit construction and arterial street improvement. Circle now supplements the political base formed by the Southwest Corridor Land Development Coalition.

Circle, Inc., under the new leadership of Charles T. Turner, is now considering major investment into commercial development in Dudley Square tied to the replacement mass transit facility to be built in Roxbury.

Summary

In this background history, we have reviewed how the conception of economic development evolved from the development of cleared land in reaction to the devastation of the impending construction of an urban expressway to the development of built-up land in anticipation of the fought-for construction of a mass transit facility. Later in this thesis, we shall examine more sophisticated design and use of several mass transit facilities to increase the stimulus to commercial development.

As the conception changed, so has the organization of community institutions, from a political coalition, to a community development corporation, to a land holding instrument. This, too, we shall explore in this work.

Third, economic development has become possible only through government policy and its use of public resources. First, the expressway was cancelled in favor of mass transit; then, funding (at least Federal funding) was secured for mass transit. Land development of the cleared land was declared of high priority. And the opportunity for commercial development around transit stations was recognized. This policy, too, must progress further. And resources are needed for development projects to be realized.

And, finally, the progressive policy of economic development arose out of a political process. The decision of the Governor to cancel all but one major urban expressway planned inside Route 128 was the end of a ten year political battle. The decision to develop the cleared land was a result, in part, of the efforts of the Southwest Corridor Land Development Coalition. The decision to construct replacement mass transit service to Roxbury was, in part, a result of the efforts of the

SWCLDC and of Circle. Further progress of policy on economic development will depend on further successful outcomes of the politics of economic development.

In this work we shall concentrate our focus solely on the economics of urban development in Roxbury.

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CHAPTER I:

An Economic Development Program for the Roxbury Community: A Joint Transportation/Commercial Development Model

Introduction

During the last decade and a half, Roxbury had no major comprehensive economic development programs. The opportunity for structuring an economic development program during this period lay in public investment programs. But they failed to focus on the problems of the ghetto economy, and to organize any economic development programs on sound and simple economic development principles.[5]

The proposed program contained in this work and in work related to it, is an effort to structure such a major economic development program for Roxbury. This formulation defines development goals and instruments based on an analysis of the ghetto economy, applying fundamental economic development principles to its construction, rationalizing the public investment necessary to effect the economic development program recommended.

In this chapter, we shall analyze the goals of economic development and the particular strategy of economic development that are advanced by Circle, Inc. Out of this analysis we shall derive a more explicit set of objectives of community economic development. Useable for explanation of a strategy. This strategy establishes the bounds of the program. Second, we will derive a statement of the development theory underlying the strategy of economic development. This set of principles comprises a more general theory for economic development that seeks to fulfill most,

[5] This historical analysis is not attempted here. Such work is worthwhile and undone. It would make a good student paper.

if not all of the explicit objectives. Note that it represents only one possible model usable in the current political economy of Roxbury.

Next we will present the "how" of formulating an explicit development program based on the theory of economic development. In short, we will present the essential tools of analysis. The sum of these tools is called project investment analysis. In addition, we reflect on the known precedence of use of the techniques of project investment analysis in programs of economic development in other ghettoes in the U.S. We conclude with a consideration of the impact of the investment project on the political economy of the Roxbury ghetto.

PART I: The Program

The Goals of Circle, Inc.

The creator and first Director of Circle, Inc. stated four CDC goals of economic development. The immediate goals are:

(1) "Generation of surplus earnings for viability, reinvestment and distribution to community foundations,

(2) Provision of a vehicle for community comprehensive economic development planning and research,

(3) Delivery of high quality and relevant services to the community particularly those of an economic development and educational nature".

The ultimate goal of the Circle program is:

(4) "The creation of a sub-economy in the target community which achieves the capacity to realize growth on a self-sustaining basis". [6]

This statement remains the only formal statement of Circle, Inc. goals (short of OEO refunding proposals). It is now four years old, and two administrations past. We neither fault the present administration for its lack of a new statement, nor the first administration for a statement of the prevailing wisdom of that time. That wisdom viewed the CDC as a profitable economic enterprise which returned earnings from ventures invested in by the CDC. These earnings, in turn, were distributed back to ghetto residents through social services. Professor Johnson adds his own twist by also creating a consulting subsidiary to conduct further research in ghetto economic development and to provide further funds for distribution through consultant

6 Johnson, Willard - The Circle Complex Annual Report of 1970 Circle, Inc., Boston, 1970

awards.

Unfortunately, under the first administration no new ventures were started. While the service component secured funding from outside sources, the consulting firm earned funds but researched projects of usually secondary importance to ghetto development. The consultant firm has since folded. Not until the present administration were new ventures started.

The chief failing of the original Circle goals was not in its implementation but in its lack of understanding of what the content of economic development is. To rectify this failing, five objectives are proposed which we suggest are central to all ghetto economic development.

The Objectives of Community Economic Development

It is crucial to establish the objectives of economic development in order to fromulate and to evaluate a development program. For a low income community, there are five primary objectives of its economic development.

Objective (1): the establishment of community institutions for the economic development, the political empowerment and the social evolvement of the ghetto community.

The aim of creating community institutions is to provide a vehicle for local control over the allocation and use of resources to meet local needs. Institutions are required to sustain the development effort over some 10-20 years, long enough to see results. The goals of these institutions are of three types. Primary is the economic development of the community. This, in turn, cannot occur without increased political power with both government and business over their resources. Political development, in turn, cannot mature until the members of a community get themselves together to say that they want a community, to marshall its latent resources, and to define their institutions. This we call social development.

Objective (2): the generation and redistribution of income for and to community residents through community-based economic activity.

The first aim of the support of enterprises by community institutions is the generation of new income to community residents. The distribution of this income would be profits through cash dividends of a CDC investor, or wages paid by the enterprise to community residents, or lower prices of commodities or service of the enterprise. The aim of influencing public programs is the redistribution of income of government taxes to community residents. The distribution of this income would be increased and improved government services.

Objective (3): the development and redistribution of capital and of ownership of community-based economic activity for and to community residents.

The primary control over private enterprises may be, in the long run, only possible through community ownership of private enterprises within its boundaries. Ultimately, that ownership should be in the hands of the residents of the community.

But ghettoes are capital poor as well as income poor. Therefore, capital must be developed, both through the investment in local enterprises, and the pressured investment of government capital into the ghetto community.

Objective (4): the development of human capital through the development of internal labor markets of skills training, entrepreneurial development and management responsibility of community residents in community economic and political activity,

The capacity to manage community institutions and to run enterprises is a crucial lack in ghettoes. The learned aptitude to work at skilled jobs is also lacking. The ability to manage the political and economic negotiation to form community institutions is most lacking. Only through the creation of internal ladders for skill development, entrepreneurial experiment and increasing managerial responsibility

in the building and operating of community institutions can supply this needed management/labor development occur.

Objective (5): the development of ownership of land and control over its use within (and adjacent to) the boundaries of the ghetto community.

The hard work of establishing community institutions, starting new ventures, creating new jobs, and developing management skills would be undercut severely if the ghetto lost its land.

Migration of the ghetto within a city is a pattern of last century. It follows the declining housing stock and is scattered out of the demolishing of a deteriorated housing stock.

Therefore, to control land in the long-run, the ghetto community must own it. To support economic development, it must control the land use of the community.

Finally, community institutions must recognize the potential asset of the ownership of inner city land particularly where the housing structures are townhouses or brownstones.

The sum aim of these economic objectives is greater self-help and self-determination of the ghetto community within its political-economic subsystem. The emphasis is on greater self-determination within the constraints of the wider government and private economy. For community economic development is ultimately limited by the greater powers outside the ghetto.

The Circle Strategy of Economic Development

Under the new administration, Circle, Inc. has developed a strategy for economic development. This strategy has five elements:

(1) transit capital construction of a link between two nodes, supplemented by service development to and from the nodes;

(2) large scale commercial development of the ghetto economy at each transit node of major size;

(3) small scale spine development along the transit link between the major transit nodes;

(4) land banking around the major transit nodes; and,

(5) development banking to finance the ventures at the nodes.

We shall review each strategy element with the reasoning that led to the formulation of each stategy element.

(1) Transit Construction: Transit construction is a perfect stimulus for commercial activity. Major commercial centers can form at highly travelled transit stations. Neighborhood commercial centers tend to be attracted to the stations in between the two major commercial centers or poles. Housing density may tend to increase also near these transit stations.

The selection of the mode of mass transportation included consideration of three possible modes: subways, trolleys and buses. The criteria of selection were based on size of capital invested, area coverage, and minimum disruption to the local neighborhood.

First, let us consider capital investment as a criterion. Subways require the greatest capital of the three modes. Subways, like trolleys, would likely operate with bus feeders. A decison on mainly buses, however, would exclude the possible investment in subways and in trolleys. Therefore, buses were rejected as the main mode. Second, let us consider service as a criterion. Trolleys tend to cover a greater area having more stops per mile than subways. But buses could compensate for

loss in stops of subways. Therefore, subways (with buses) and trolleys (with buses) are equal in area coverage. Subways have a higher volume capacity than trolleys have. But the edge in volume capacity means less since shopping trips are under 10% of the total patronage. Therefore, subways and trolleys are about equal in service provided. Third, let us consider disruption as a criterion. Subways would take about 1½ to 2 times as long to construct as trolleys. Therefore, disruption during construction is greater for subways than for trolleys. Once constructed, however, trolleys would interfere with auto and pedestrian traffic; subways would not. Since the total time of expected use of either facility is greater than the longest expected time of construction of one, the mode with the lesser amount of disruption during operation has the greater value. On this ground, subways have less disruption.

Therefore, on the grounds of greater capital invested, and lesser disruption over the use of the facility, the mode selected was: subway.

(2) Commercial Development at the Major Nodes: The choice of what sector of the Roxbury economy to invest in seems determined by the mode of transportation selected. That is, use of an urban expressway spur is most important for a manufacturing plant in a mini-industrial park. The spur provides a means for shipment of raw materials and finished goods by truck. The use of mass transit is most important for a retail business in a commercial center. The transit provides a means for shoppers to travel to and to carry purchases back from the retail businesses shopped at.

Circle seems to have selected developing commercial enterprise somewhat by default. The Boston Model Cities CDC took initiative to manage industrial development in the cleared land near the Southeast Expressway (Route 3). Circle was left to "choose" commercial develop-

ment at Dudley. Therefore, commercial development was selected as the sector for investment.

The choice of what locations to choose for development was constrained by the limited amount of venture capital available for development. Therefore, the site of existing commercial centers constituted the set of alternatives. The strategy was to take the limited capital funds and invest in an expanded commercial center, making the most out of few funds. A transit station would be located in the commercial center.

The criteria for selection were size[7], and central location in the Black community. The two community scale centers are Dudley Square and Uphams Corner. A third site has three neighborhood-scale centers at Grove Hall, one on Blue Hill Avenue and two on Columbia Road. Dudley Square is the transportation center of Roxbury. It has a transit station now and should have a new one. Grove Hall, while smaller than Uphams Corner, is more central in Roxbury. Therefore, the two commercial centers chosen were Dudley Square and Grove Hall.

Circle also won the site somewhat by default. At present, the Masons and the Black Muslims are developing projects at Grove Hall. No organization is yet focusing on Dudley Square seriously. Therefore, Circle "won" Dudley Square.

7 Hoyt, Homer "Classification and Significant Characteristics of Shopping Centers" in Mayer, Harold and Kohn, Clyde, ed. Readings in Urban Geography, U. of Chicago Press, 1969 Size is measured by scales: regional 250,000-1 million sq. ft. 35-100 acres
community 100-400,000 sq. ft. 15-40 acres
neighborhood 10-100,000 sq. ft. 5-20 acres

(3) Spine Development Along the Transit Link: Smaller, neighborhood scale retail development can occur at smaller stations between Grove Hall and Dudley Square. Therefore, the location of the transit link can tend to focus commercial development in particular neighborhoods of Roxbury. This is called spine development.

The selection of the route of the transit link was based on the criteria of high traffic volume, the level of development of the neighborhoods adjacent to the links, and the central location in Roxbury. Four streets had daily volumes of over 4,000 per direction or 8,000 vehicles per day in both directions. These are Columbus Avenue to Seaver Street, Warren Street, Blue Hill Avenue, and Columbia Road to Dudley Street. Two of these streets are on the border of Roxbury Columbus Avenue to Seaver Street and Columbia Road to Dudley Street. Therefore, the choice was reduced to Warren Street and Blue Hill Avenue. Warren Street, however, is on the east border of the Washington Park urban renewal project area. Consequently, it is now relatively well developed in housing, commercial and arterial street development. Blue Hill Avenue, the location of many of Roxbury's community organizations, is relatively undeveloped. Therefore, Circle chose Blue Hill Avenue as its transit link and spine for development.

(4) Land Bank Around the Major Transit Nodes: Land surrounding a new transit station is a prime opportunity for land development. An expanded customer market provides a chance for new retail enterpriese. A rise in potential business income increases the value of land around the station, which in turn provides a chance for real estate operators. These constitute potential secondary benefits(that is benefits aside from increased transportation service).

Unfortunately, land markets in ghettoes operate to funnel potential increased income flows out of the local community. Absentee landlords, who dominate land ownership in a ghetto, force tneant businesses to leave, and sell to non-community owned businesses, or keep the local tenant business and reaise rents. Speculation and a rise of rents is high. And new ownership is often non-community based.

To counter the land market and thereby retain benefits in the local community, a government-sponsored or controlled land-holding instrument is needed to intervene in the market. One such mechanism is a land bank. A land bank is a public or quasi-public instrument of land holding which "banks" land lots in a changing market. The land bank earns its operating funds from profits it makes in the buying and selling of land. It undercuts the speculator by asking for a low profit margin. It undercuts non-community businessmen by selling to local entrepreneurs.[8] One site for a land bank is the Dudley Square commercial area.

The SWCLDC is currently considering the use of another mechanism called a land trust, a public land-holding instrument that continues to "own" its land. The use of land is determined by residents of the community whose land is held "in trust". Onessite for the land trust would be the cleared land. This site could also be used for a joint development project with a transit station.

(5) Development Bank: Finance must be provided for new ventures. This development finance cannot be secured from the existing private capital market in and outside of the ghetto economy, given the current letal constraints and policies of the financial institutions.

[8] Faux, Geoffrey "Reclaiming America" in Working Papers for a New Society Vol. I, No. 2, Sept. 1973; Cambridge Policy Studies Institute, Inc. Cambridge, Ma.

The crucial venture capital is lacking from private investors in the ghetto. Commercial banks are prohibited from investment of its saving into venture capital funds. These same banks choose not, on the whole, to supply commercial loans at interest rates profitable to new enterprises. Unfortunately, defaults and bankruptcies are high.

To provide this necessary finance, a new public institution is needed, called a development banking system. This system would provide venture capital, guarantee commercial loans, and perform other vital financial functions.

A development banking system has most or all of six primary functions:

(1) mobilization of capital - it seeks to mobilize local and "foreign", public and private capital where the private capital market does not now go.

(2) investment of capital - it makes the decision to invest in what kind of economic projects and in which particular ventures. As an investor of capital, it must consider what investment criteria to use to decide on projects to be invested in.

(3) ownership and management of projects - it may choose to own and/or manage particular projects in which it invests.

(4) promotion of projects - it seeks to promote viable and worthy projects for investment. In this way, the development bank seeks to fill the shortage good, well thought, well-organized projects.

(5) advisement on projects - it seeks to advise both those projects it promotes, and those projects it invests in. This advice is in the business and other economic aspects of management and role in economic development.

(6) establishment of new institutions - it seeks to build new institutions of development in its client areas.[9]

The SWCLDC, together with the Massachusetts Legislative Black Caucus, is proposing the creation of a state development bank operating at the Boston regional level, to supply the $3-500 million needed to develop the cleared land. If this development bank were formed, it could provide the necessary finance for the commercial development

project.[10]

We shall call this strategy, the mass transportation-commercial development strategy of community economic development. (see map I.1)

These five strategy elements contain the specifics of a more general theory of economic development. Let us step back from the strategy a moment to make clearer what principles of economic development underline the Circle strategy. We shall return back to the strategy after this exposition.

9 Talk by Professor J. Daniel Hyhart, MIT, at Harvard Graduate School of Design, October 15, 1974

10 Daniels, Belden - "An Act Creating the Mass Business and Community Development Corporation" Draft,Office of Representative Mel King, September, 1974

MAP I.1

CIRCLE STRATEGY OF ECONOMIC DEVELOPMENT

Key

= Roxbury boundary

= transit line

= community commercial center

= transit station

PART II: The Theory

A. Theory of Economic Development: SOC-DPA Process

It is crucial to identify the set of principles that govern a development program in order to understand how that program will work to fulfill its objectives. We can, then, formulate a program, know how it must work to succeed, and make it work better.

We propose five principles of economic development which relate directly to the five strategy elements of Circle's programs. These are:

Principle I: That social overhead capital (SOC) should be invested in projects that will induce directly productive activity (DPA) investment.

Social overhead capital is defined as "these basic services without which primary, secondary and tertiary productive activities cannot function".

These services follow four conditions:

"1. The services...facilitate, or are in some sense basic to, the carrying on of a great variety of economic activities.

2. The services are provided...by public agencies or by private agencies subject to public control; they are provided free of charge or at rates regulated by public agencies.

3. The services cannot be imported.

4. the investment needed to provide the services is characterized by "lumpiness" (technical indivisibilities) as well as by a high capital out put ratio (provided the output is at all measurable)."

Clearly, both urban expresswasy and mass transit facilities satisfy the conditions of this definition for SOC. The crucial importance of investment in SOC is that it "induces" DPA investment to follow.

Joint development is the most direct "inducement mechanism". Joint development is the combination of SOC and DPA into one distinct investment project. There must be at least one DPA which would not

locate in the project area without the SOC. Inversely, no SOC investment might occur unless a potential SOC-dependent DPA considers location in the project area. An example of joint development is the construction of an expressway spur to the site of a new industrial park.

A special case of joint development is the added subsidization of direct costs of contruction and/or operation of the DPA. An example of this pecial case is the construction of a mass transit station which houses a retail complex. This is a form of transit node development.

SOC investment may also represent future DPA investment in addition to the immediate DPA investment represented by joint development. This is particularly true if added complementary SOC and/or complementary DPA can take place. An example of this is the spine development along the new transit line between community commercial centers. Another example is further commercial development in conjunction with an extension of the new transit line.

Directly productive activities are defined as those economic organizations which produce goods and services for the consumption of or for the investment in the economy. Modifying this definition to fit the economy of ghettoes, DPA's are eco-nomic organizations which either produces or distributed goods and services for personal or institutional consumption or for investment in land and venture development.

Six distinct sectors of DPA in the ghetto are:

(a) light consumption industry,
(b) wholesale,
(c) retail,
(d) real estate,
(e) finance, and
(f) health, education and welfare services.

Commercial activities comprise (b) and (c), land banks and trusts are in (d), development banks are in (e).

[11] Hirschman, Albert O., The Strategy of Economic Development, Chapter 5 Yale University Press, New Haven Conn., 1973

Principle II: Investment must capture consumer expenditures for reinvestment or distribution back into the ghetto economy.

The major source of income that is most easily captured by ghetto DPA's (though not the only source) is that of the earnings of labor and government income transfers that is spent or "disposed of" on consumption. The major categories of expenditure of disposable income are on retail goods, housing, services, gambling and savings. The greatest consumer expenditure by far is on retail expenditures (about 54 % of the ghetto family budget).

Note that the capture of disposable income is potential gross corporate income for DPA's. Clearly this is the target of investment in DPA's of the commercial sector.

Other strategies focus mainly on housing (low and moderate housing development), services (for example, neighborhood health centers), and gambling (for example, state lotteries), these, however, are not considered in this theory.

Principle III: DPA investment must be aimed at import substitution and at backward linkage.

An unfinished study of the income flows of Roxbury demonstrates that income "leaks out" of the community. Most of the disposable income is spent in businesses owned by non-community residents. Further most of the goods and services are distributed by businesses outside the ghetto. And finally, most of the goods are produced by manufacturing plants located and owned outside the ghetto. The magnitude of this leakage is about 2.6% of total income and 5 % of retail expenditures.[12]

DPA investment should be aimed at capturing this lost income (rather than in competing for already captured personal income). Such a strategy is called import substitution. Import substitution is the

[12] Aylward, Ann, et.al., "A Comparison of the Economic Structure of Two Neighborhoods-An Inflow=Outflow Model for Charlestown and Rpxbury" MIT Fall 1973

investment in DPA's that will produce (distribute) goods and services that can be substituted for goods and services now imported into the ghetto. Clearly the choice of which goods and services to produce will depend on what industries the ghetto and the enterprise have a "comparative advantage" to "foreign industries" located outside the ghetto.

The expanding market for goods and services distributed to the ghetto residents induces further investment into DPA's that provide inputs into the production of thsoe goods and services. This effect is called backward linkage. That is, this input-provision, a derived demand, or backward linkage effects means that every non primary economic activity will induce attempts to supply through ghetto production the inputs needed in that ectivity. In the case of commercial development, backward linkage is from retail stores to wholesale stores, and from wholesale stores into manufacturing.[13]

Note that the potential to control the retail business sector increases as the ghetto gains control of the linked wholesale sector. Similarly, as linkage develops, this public version of vertical integration of the ghetto economy increases.

The sum effect of these two strategies is to increase the economic control of the ghetto economic organizations that implement these strategies.

Principle IV: Both private and public investment and public subsidy must be tied to place.

Neither income nor capital can be generated in a ghetto without public subsidy. Market ventures tend to produce businesses with low corporate net income, low personal wages, and low value consumer goods in ghettoes. Market capital tends to produce a low rate of return on capital that is invested in the ghetto.

See Schaeffer, Richard Income Flows in Urban Poverty Areas, Lexington Books, D.C. Heath & Co., 1973

13 Hirschman, op.cit., Chapter 6

Thus, the income of ghetto residents must be subsidized to reach above poverty level income. The income of ghetto businesses requires subsidy to yield a better than breakeven profit rate that is closer to the market profit rate outside the ghetto. And capital must be subsidized in order to start new ventures (or expand existing ones), and to continue that finance.

Secondly, this public subsidy must be tied to place. That is, income poverty and capital poverty are, in this nation, bound to land and space. A ghetto is a distinct geographical area. Residents in it tend to be poor; businesses within it tend to be poor; and capital ownership within it tends to be poor. Therefore, subsidy must be tied to residence of person and business in a ghetto. Only in this manner will ghettoes be developed.

Principle V: First, land development, and second, capital formation, are used as a trigger for a sequence of investment.

Land development of a selected site in a ghetto is the prime trigger for investment. Land development is the organization of a set of ventures and government services for a planned land use of a site.

First, that land use must have a major impact on the community, (for example, the construction of the only mass transit facility). Second, the process of development of the land requires a political dynamics to secure public finance. Third, land development induces the discovering, promotion and packaging of new ventures.

A land bank or a land trust are community institutions which can stimulate land development.

Land formation should be linked to retail development,possibly back to housing development.

The process of capital formation is an inducement to further investment. That very process of forming capital is a trigger for further development of new ventures. Second, it can encourage public capital to be invested. And third, it can attract private capital to combine with venture and public capital.[14]

Capital formation should be linked from retail development backward to wholesale. A development bank is an institution that continues the capital formation process.

We shall call this the SOC-DPA Process.

The Theory of Economic Development As A Means to Fulfill the Objectives of Community Economic Development.

We can now review the theory of economic development proposed above in terms of its capacity to fulfill the objectives of development (if the theory is correct and if a program can be formulated from the theory that can be implemented). Each objective is covered by at least one of the principles.

Let us examine the relationship starting from each objective.

Community Institutions

Two types of community institutions created by the theory are: development institutions, and business structures.

The development institutions are the land development institution, for example, the land bank; and the capital development institution, for example, the development bank. (Principle 5)

The business structures are the industries that are located in the ghetto and that are integrated vertically. We have called this import substitution and backward linkage (Principle 3).

Income Distribution

These are two sources of income to be distributed:

14 - Hirschman, op.cit. chapter 6

public (SOC and subsidy) and private (DPA).

The SOC investment is an income transfer of tax revenues if there are limited revenues and an unequal allocation of SOC funds (Principle 1). The income subsidy is an income transfer to poorer residents. This subsidy would be indirect. That is, the subsidy would go first to ventures, then the decision would be up to the ventures to pass the income along to residents and to determine how much and to how many. At one extreme, the venture might take all of the subsidy out in profit. If the venture is locally owned, the distribution is large, but to a few people. At the other extreme, the subsidy might be passed on to lower prices of goods and services sold. Then the distribution is small but to many people (Principle 3).

The DPA will generate income through profits disbursed to owners, through wages paid to workers, and through prices of goods and services to customers (Principle 1).

Capital Distribution

Capital distribution derives from the capital formation of the capital development institutions. Capital is distributed through equity grants for investment and through the increased ownership of ventures (Principle 5).

Capital subsidy can increase capital formation by attracting new private sources. Therefore, the potential of capital distribution increases (Principle 4).

Note that the decision of distribution depends on the capital development institutions.

Human Capital Development

The two types of human capital development are labor and management.

Labor skills and career ladders can be developed in the DPA, although we did not discuss this. Part of the advisory function of development institutions is to supervise this labor development (Principle 1).

Management skills can be developed in the DPA, encouraged by the development institutions. They are clearly lacking at present in land development and development finance (Principle 5).

Land Ownership & Control

Land ownership and control will increase through two ways: land development and subsidy tied to land.

Land development will increase control over the use of land through the success of control over its development - primarily through intensification of present use. Secondly, through prevention of the transition to an unwanted use; and thirdly, through the acceleration of the trend to a new use. Land ownership by community residents or institutions can increase through the promotion and selection of community residents and/or institutions as the owners of the land upon completion of development (Principle 5).

Subsidy tied to land can increase the potential for land development, and therefore, of ownership and control (Principle 3).

Approach To "Proving" This Theory

There are three choices to proving this theory of economic development. First, we could develop a mathematical model of the theory. The inputs of the model would be the essential economic facts or parameters of the ghetto economy. The model itself

would develop "production functions" based on each of the five principles. The output of the model would be measured objectives of community economic development. The goal of the model would be growth along the output objectives. Proof, in this case, would be the demonstration that all the production functions-principlesacting together would achieve growth along the output-objectives. Thismodelling is not attempted.

Second, we could develop a statistical simulation analysis of ghetto economic development. The data used would be historical and current economic data of a sample of major urban ghettos. The experience analyzed would be of those experiments and programs of parts of the economic development model which have succeeded. Use of a statistical technique, "regression analysis" would seek to isolate the impact of each development program element and the impact of a simulated development program containing all the elements. The result of this simulation would be the impact of the program on fulfilling the objectives of community economic development. "Proof", in this case, would be the demonstration of positive impacts by the simulated program. This statistical sumulation is not attempted here.

As a third choice, we could formulate a development program based on the theory. Program elements would be derived from each principle of the theory. The program would be analyzed for use in one ghetto. "Proof" in this case would be the demonstration of net economic benefits from one program. In addition, we must demonstrate that this program is feasible in the given ghetto political economy. This last demonstration is what is attempted here.

Let us now turn to the techniques of analysis for use in the formulation of our program.

PART III: The Techniques of Analysis

The Application of Project Investment Analysis

The term "project investment analysis" in the context of its application to community economic development means the set of methods used to present the choice between competing uses of resources in a logical and comprehensive manner. The use of the methods aid in both the formulation and evaluation of the comparative investment choices. The result of the analysis is a decision on what project to choose.

There are three major methods of analysis: (1) market analysis; (2) financial analysis; and (3)cost benefit analysis.

Market analysis is a study of a market for a new project of a particular industry to locate in a given area. A market study defines a geographic trading area, then analyzes the total disposable income in the particular industry (here, retail business) of residents living in that area. This is the total potential market. The consumer behavior of residents of the particular market segment of the particular income is particularly crucial to analyze. A market may objectively exist, but because of behavior, consumers chose not to shop in that area or business. Competition decreases the potential market share of the prospective business. Finally, transportation access must be studied in order for potential customers to get to and from the potential site of the new business. The result of a market analysis will demonstrate market feasibility (or lack of it) and a potential site of the identified investment package of projects.[15]

15 - Smith, Paul E.-"Prescription For A Successful Shopping Center" in Philip David Urban Land Development - Richard D. Irwin, Inc. - Homewood, Ill. 1970

Financial analysis is a study that identifies the money profit from a project accruing to the project-operating entity. This analysis must estimate the return on the investment of the cash flow in the project, and compare the returns to those of competing projects. To do this, the analysis will estimate construction costs, operating costs, and gross income to derive the financial requirements of the project. Crucial trade-offs of equity versus debt finance, and of profit versus operating cost of the project are derived. Analysis can further examine the subsidy necessary to make the project commercially feasible. The result of the financial analysis will demonstrate the financial feasibility (or lack of it) and a finance plan of the new projects of the package.[16]

Cost/benefit analysis is a study that identifies the social profit of the project that benefits the fundamental objectives of ghetto economic development. Cost/benefit analysis assesses the benefits and costs of a project and reduces them to a common denominator. A set of social accounting or shadow prices are used to adjust market prices to include account of non-financial economic costs and benefits. These shadow prices are used in the financial analysis to derive the social profit. This rate is compared to that of other projects. If the social profit is high, the project is accepted; if the social profit is low, the project is rejected. The result of the cost/benefit analysis will determine the net economic benefit (or cost) of a project.[17]

The first two methods are commercial analyses. They operate well in market economies like the Central Business District or

16 - Smith, Paul op.cit.
17 - Van der Tak, H.G. and L. Squire Economic Analysis of Projects June, 1973

the suburbs. They are insufficient methods for use in the ghetto. Commercial enterprises require subsidy to operate in the ghetto. Subsidy requires the welfare justification of the expenditure of public funds. This is the economic analysis. To put this another way, commercial analysis are fine to aid the allocation of scarce private resources; but economic analysis are essential to determine the allocation of scarce public resources.

Unfortunately, CDC's are forced to invest in profitable (i.e., above break-even on costs) ventures, therefore, the most logical local institution that should use cost/benefit analysis uses only commercial analysis to determine project investment. If the two methods are used strictly, the power of cost/benefit analysis is that it will accept projects that commercial analysis reject, and reject projects which commercial analysis accepts. Under the current institutional constraints (for example, of OEO) then, project investment analysis must compromise and use both set of methods. We shall use this to an advantage; we can focus on a key trade-off by using both: the trade-off of profits versus other economic benefits in a project investment.

Up to now, we have talked about the use of these methods for analysis of projects. Now, let us examine the use of these methods for the analysis of new institutions. As we have discussed, there are three new institutions; a development bank, a land trust or bank, and a backward linked economy (possibly organized by a holding company).

The development bank has received the greatest analytic attention. The chief financial analysis is a study of the development banking system proposed under the Community Self Determination

Act of 1968. This study estimated financial projections of the primary development bank under varying assumptions. The assumptions relied on estimates of size of equity, loans, etc. of the sponsoring agency, the Bureau of the Budget and OEO. This study was a success.[18] The only economic analysis is a study of the same system. This study simulated the venture and employment of local CDC's financed by the primary bank, the study did not rely on the variations of the financial analysis. Further, the benefits and costs estimated were limited. This study was a limited success.[19] No work, to the author's knowledge, has analyzed a sub-national development bank.

The land bank has received a great deal of literary attention. But, neither commercial analysis nor cost/benefit analysis have been made, again to the author's knowledge, on either a national or a sub-national level.

The backward linked economy suffers from its lack of sex appeal as an institution in the community economic development movement. Yet it is important as one of the operational goals of the work of the development institutions. The only evidence of a commercial and a financial analysis exists at the ghetto level - in a development project of the Harlem Commonwealth Council.[20]

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18 - Nyhart, J. Daniel "Urban Development Banking in the United States-An Initial Feasibility Study Based on Simulated Financial Statement Projections" MIT, August, 1969

19 - Edel, Matthew "A Simulation of Some Possible Outcomes of the Proposed CSDA" Lab for Environmental Studies MIT April, 1969

20 -Vietorisz, Thomas and Bennett Harrison, The Economic Development of Harlem, Praeger, 1970

Certainly, the record of the use of the combination of these techniques is poor. They should become standard tools of analysis in which cost/benefit analysis dominates for CDC and CDC-related projects.

Now let us turn to the use of these techniques in the present work. Given the almost predominant reliance on market analysis by Circle, Inc., we sall use a comparative approach to demonstrate the power of these techniques. In volume I, we will make a conventional market analysis to define an investment package and extended to a general transportation plan and initial site analysis. The analysis is expanded to identify potential linkages and to evaluate non-profit benefits. Power relations are given. No investment decision is recommended. In volume II, we will make a cost/benefit analysis. The investment package will be revised, using the market analysis as a contribution, but expanding the linkage analysis and the power analysis. Finally, a financial analysis will be made to cost out the different investment packages. Then the commercial and the economic analyses will be compared. A final investment recommendation will be made.

The Impact of theCircle Development Program on the local Political Economy

Just as we provided an understanding of the interal workings of this theory of economic development, we must also understand the external workings of the local political economy that operate to inhibit ghetto economic development.

This present thesis focuses on the limited analysis of the impact of the development program on the local political economy. This study has three elements that involve the local political economy. First, the politics of implementation require some dealings with the locally dominant institutions. These dealings involve the conflict over economic power in order to gain greater local

community control over development. Establishment of the development program requires the mobilization of unused or untapped economic resources in order to increase local economic power. The conflict involves competition over scarce public resources and their alllocation. In short, this study element must examine the "economic politics" of a development program.

Second, the development program makes (or should make if the economic politics are successful for the local ghetto) an intermediate short-run impact on the structure of the local market economy -- through the start of new ventures in the project. At present, the ghetto economy is a dualistic economy. That is, relatively few businesses control the more profitable segments of a given sector: this is called"the primary segment". Relatively many businesses compete for the less profitable segments of that sector: this is called the "secondary segment". Similarly, relatively few banks control the more profitable private capital market (enough to choose not to invest in the ghetto economy). Those less capital-rich institutions and individuals of the ghetto are forced to invest in less profitable capital markets in the ghetto. The establishment of new ventures that are community-owned and/or controlled as well as supported by government power and finance introduce new forces that can compete successfully with the upper or primary segment of the dualistic market.

Finally, the development program can make a long-run change on the institutional framework of the local political economy - through the establishment of community development and directly productive institutions. At present, the ghetto economy lacks an institutional basis for development (there are only three operating at present: Circle, Lower Roxbury Community Corporation, and Roxbury Action Program). Only through the establishment of these institutions will there be any continued economic development.

Volume I of this work will focus on the impact on the dualistic structure[21] an the formation of the backward integrated institution.

Summary

In this chapter, economic development as defined by Circle, Inc. was analyzed.

Through an examination of one development institution (that of Circle, Inc., a CDC), we derived a general theory of community economic development, called the SOC-DPA Process. Further, we selected the necessary techniques of project analysis to use to apply this theory in the formulation of a development program.

The application of the theory will generate a specific economic development program for Circle, Inc.: commercial development at a transit station of a new transit line. Further, the application will generate specific development program elements that will be evaluated based on the goals of community economic development derived from our analysis of Circle, Inc. Moreover, the development program will be evaluated on its impact on the local political economy, that is, on its capacity to generate further development in the fulfillment of these goals.

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[21] Fusfeld, Daniel R., The Basic Economics of the Urban Racial Crisis, Chap. 4,7; Holt, Rinehard & Winston, Inc. 1973

CHAPTER II:

Mass Transportation as a Stimulus to Commercial and Land Development: A Mass Transportation Plan

The Application of Principle I:

" That social overhead capital (SOC) should be invested in projects that will induce directly productive activity (DPA) investment".

Introduction

In this chapter, we shall explore the application of Principle I. That is, we shall examine how the use of SOC, in this case, mass transportation, can be used to induce DPA, in this case, commercial and land development. To do this, we shall take three steps. First, we will enumerate the means by which transportation can develop markets in the commercial and land sectors. Second, we will examine how the choice of means will affect the fulfillment of our basic objectives of community economic development in the present Dudley Square transportation/commercial complex. Finally, we will derive a transportation plan for each mode in Dudley Square based on our consideration of means to achieve our ends.

PART I: The Theory

Mass Transportation as Commercial Market Development

In the context of commercial development, transportation is the linkage of the market of buyers to the stores of goods. But our treatment of transportation here turns the standard transportation systems analysis on its side. In the latter, the transportation system is an equilibrium of transportation flows in the "market" of the supply of activities (here retail business), and the demand of users for those activities (here the buyers). That is, the market is given and the transportation system follows. In our view, the transportation system can be used to define the market demand for this activity, and therefore the supply of the activity required to meet demand. The market is not equilibrated, but is restructured.

Let us consider this new view in several steps. The first point

That is, the provision of new or improved mass transportation can expand our potential market of buyers by expanding the trading area.

Transportation can discriminate different segments of the market. First, let us consider the choice of areas. The potential trading area is a collection of neighborhoods, each with their own consumer characteristics. Some may be black, some white, some elderly, and some young. Some less poor than others. Since a given transportation route can service only a limited number of neighborhoods, then the choice of neighborhoods will determine whether the potential market is black, white, elderly or young (or some mixture of these segments). That is, the choice of routes of the transportation system will determine (in part) the potential market segments within the trading area.

Second, let us consider the choice of mode. Different segments of the market favor different modes of transportation for shopping. The middle income may favor automobiles, using city streets. The very poor may favor taxis and mass transit. Therefore, the choice of transportation mode will determine (in part) the potential market segments within the trading area that will be attracted to new commercial development.

The total demand for retail goods may increase. Greater transit availability may induce a change in consumer behavior to spend a greater share of his income on a larger consumption basket of retail goods . If, however, total demand remains constant , then the sales of retail goods in a new commercial center (or an expanded one) can increase at the loss to a competing commercial center, due to improved transportation service. If total demand decreases, then the success of the new or expanded commercial center will result in a loss to the general welfare of the community of both commercial centers. If the area receiveing the benefits of an expanded trading area is a ghetto community, and the

area losing is a non-ghetto area, then the effect of this redistribution of market is positive. Therefore, the choice of the central commercial center for the main transportation mode will determine (in part) the community potentially benefiting from the expanded trading area.

The mass transportation system also has an effect on the distribution of benefits to stores within the selected market area. The choice of the route of the transportation system will favor stores located at stops along the route (rather than those in between). This choice of stops is particularly crucial for a market area that is fragmented in "design" and where some stores are near a major transportation stop, and others are far away. This is the case of Dudley Square.

Second, the choice of modes of transportation tend to favor one store over another. This is true in the case where each of two competing stores within a commercial area are close to a different mode. Another case of this is where a store will depend on a mode to reach its clientele (for example, an automobile dealer).

So far we have made clear how a new transportation system can develop a commercial market in a particular commercial area. Also realize that the lack of a sufficient transportation system can be a barrier to commercial development in an area.

Mass Transportation as Land Market Development

Given the expanded commercial market, there is also a stimulus to the land market. The potential for a more intensive use of land for retail businesses will cause entrepreneurs to bid up the price of land. Similarily, with a higher income of the user of land, rent of land will increase.

Clearly, the closer to a transportation node, the higher the rise of land price and rent. Similarily, the greater the transportation flow of potential consumers at the ode, the higher the rise of land price and rent. Therefore, mass transportation can stimulate land development.

The choice of the location of the transportation mode within or outside of the present commercial area will benefit some land owners, and not others. If the location is at an existing concentration of retail businesses, then the benefits will accrue to old land owners. If the location is at an underdeveloped or vacant site, benefits will accrue to landowners who have not received much of the benefits of the location of the existing commercial center.

Further, the choice of a transportation mode will tend to concentrate or to spread the potential land development. High-capacity transportation, (like mass transit) will concentrate development at its stations. Low-capacity transportation, (like busses) may spread development over its greater number of bus stops.

And location of the route between major modes may tend to concentrate secondary retail development at already developed areas, or spread this development to less developed areas. Note, however, that with a limited amount of commercial development possible, the choice of concentrating development at a transportation mode may limit the amount of secondary or neighborhood development that can be spread.

Similar to commercial development, the lack of transportation facilities may limit land development in an area. This is true in the sense of a lost opportunity.

The physical nature of a transportation mode has a special effect on land development. The location of the transportation system inside a commercial area can act as a physical barrier to commercial movement and land development expansion. Or, the location of the transportation system may stimulate commercial movement and land development. Finally, if the location is at the boundary of the current commercial area, it can expand the potential land for development and spread its effects. Conflicting land use, like housing, can be pushed back to free up more land for commercial development.

Regional Mass Transportation as a Reinforcement of Ghettoes

Public investment in transportation is viewed above in terms of its positive effect on the ghetto economy. The ghetto economy, however, is a part of the wider regional economy. The effect of transportation on the ghetto relative to the regional economy has a negative effect. For a moment, we will pause to examine retail and land market development in this regional perspective.

The linkage of trade neighborhoods to ghetto commercial centers may have a dual effect. If the transportation system is only local, then the linkage of trade areas can only benefit the ghetto businesses. The transportation system, however, is also a regional service. The trade areas are, then also linked to commercial centers outside the ghetto. If those outside businesses exhibit better economies of scale (more variety of products at higher quality, possibly at lower prices) then con-

sumers will shop outside the ghetto rather than inside. Further, wholesale integration has a greater market potential outside the ghetto.

Fortunately, the regional economics of commercial enterprise have dramatically turned to the favor of ghetto retail development. Mass distribution, now a fact of commercial sectors, permit ghetto retail stores to sell low prices, high variety of goods at high discount. Therefore, the poor will shop at ghetto retail stores (particularly in food stores) at the sacrifice of quality, variety and the cost of credit. Retail stores may make less profit contribution per unit product, and make a profit only at high volume of sales, credit charges and income transfers (through food stamps).

The middle class shopper, however, will travel outside the ghetto to buy variety and quality. Regional transportation for the ghetto, can increase competition between non-community (for example, the American Legion Highway shopping center) and community commercial centers.[22]

Therefore, regional transportation can further segment that ghetto consumer market to limit the poorer shoppers to the poorer retail stores and to draw the middle-class shoppers to the better non-community stores. If, however, public investment in joint development with regional transportation is a subsidy of the poorer income class, this is a more efficient solution.

A similar phenomenon occurs with the impact of the location of transportation facilities on land development. If the transportation facility is solely local, then the effect on land

22-Conversation with Stephen Star, Associate Professor of Marketing, Harvard Business School, October 30, 1974

development in the ghetto is likely to be positive. If the facility is regional, then the effect on land development may be dual. If the land economics outside the ghetto are effected adversely, the middle-class may seek to purchase good housing structures in the ghetto (as in the South End), thereby indicating the poor consumers trade base of the ghetto retailers.[23]

Inside the retail centers, absentee landlords may speculate to sell land to non-community businessmen at prices that few equity-poor ghetto businessmen could afford.[24]

Therefore, regional transportation can further push out the poor consumer-resident from the ghetto, and can prevent ghetto business development by the entreprenuer-resident. The resultant land development in the private market can further depress and disrupt the ghetto economy. If, however, the public authority moved to control the land development process, the regionally-induced benefits could be captured to subsidize the poorer ghetto businessman and resident.

In both cases, transportation can induce a subsidy, and can capture benefits, if the allocation process of benefits is government controlled and determined equitably.

Let us now apply this theory of the affect of transportation on commercial development to the Dudley Square trade area.

The Potential Affect of Mass Transportation on the Commercial Development of Dudley Sq.: An Inductive Analysis

By the analysis of the transportation pattern of current shopping behavior, we can infer the effect of adding new transportation links on new behavior and therefore on potential commercial development and transportation needs.

23-Edel, Matthew "Planning, Market or Warfare?-Recent Land Use conflict in American Cities" in Edeland Rothenberg, ed, Readings in Urban Economics - Macmillan Co, NY 1972

Below, a first cut effort is made. The analysis is in four main steps:first, the potential trading area is segmented by area and income; each mode is segmented by area and income; third, the potentially new transportation system, defined as a set of modes, is derived based on target penetration of each area, each mode selected is used significantly by the poor; and fourth, the potential increase in disposable income for all retail expenditures is derived. The date used is based on special mobility study made by Circle, Inc., for the BTPR. Grocery shopping behavior is used as an indicator of shopping behavior in all retail shopping.

(1) The potential trading area by area and income.

The potential trading area can be divided into six neighborhoods (see Map II.I for a definition of the boundaries based on Census tracts). Ranking the neighborhoods by income (annual average for each household), we have the following:

TABLE II.I

Income Distribution of Trading Neighborhoods

	Percentage in Income Bracket					
Neighborhood	Less than $3,000	$3000 5999	$6000 9999	$10000 14999	$15000 or more	average income
Roxbury-North	37	33	16	12	2	$5,100
"Over sample area"-South	25	34	29	8	4	5,700
Roxbury-West	38	17	21	18	6	6,300
"Oversample Area"-North	27	28	26	10	9	6,400
Roxbury-South	24	29	24	18	5	6,500
South-End	28	18	26	15	13	7,300
Wider Roxbury Average	24	26	27	15	8	6,900

SOURCE: Circle Special Mobility Study, BTPR, 1972 - In fact, the five (5) poorest neighborhoods of all Roxbury, border on the Dudley Square commercial area.

24-Wellman, David & Danny Beagle, Al Haber, "Rapid Transit: the Case of BART" and Britain Willard" Metro & Rapid Transit for Suburban Washington" in Gordon, David, ed. Problems in Political Economy - An Urban Perspective D.C. Heath & Co., Lexington, MA 1971

Of these six bordering neighborhoods, the percentage of black population is as follows:

TABLE II.2

Racial Distribution of the Trading Neighborhoods in Area

Neighborhood	#of blacks	#of whites	Total Pop	%of blacks
Roxbury North	15,438	3,122	19,000	81%
Over Sample Area So	7,422	650	8,165	91%
Roxbury West	4,980	13,656	19,144	26%
Census tract 808 (includes Whittier St Mission Hill Extension Public Housing Projects)	1,251	1,575	2,864	44%
Census tract 812 (includes Bromley Heath Public Housing Projects)	2,927	2,071	5,048	58%
Over Sample Area No	4,948	7,863	13,110	38%
Census tract 905	1,282	1,078	2,395	54%
Roxbury South	17,375	2,533	20,205	86%
South End	3,233	11,877	19,136	17%
Census tract 912 (includes South End Tenants' Council turf)	1,091	1,025	2,247	49%

SOURCE: Summary Data of the 1970 Census of Population and Housing, United Communiyt Services, Research Dept., Boston, Ma 1972

Note that the South End is heavily white. Several blocks within Roxbury West are black dominated even though that neighborhood is predominantly white.

Finally, let us look at the estimated retail disposable income of each neighborhood. The estimate is about 60% of total income.

TABLE II.3

Estimated Disposable Income of Each Trading Neighborhood

Neighborhood	Population	Total Income	Retail Disposable Income
Roxbury North	4,240	$22,484,000	$13,490,000
Over Sample Area So.	1,880	11,967,000	7,180,000
Roxbury West	3,820	26,215,000	15,729,000
Census Tracts 808-812	1,730	7,338,828	4,403,000
Over Sample Area No.	2,990	18,696,000	11,217,000
Census Tract 905	490	2,445,000	1,467,000
Roxbury South	4,800	34,349,000	20,609,000
South End	3,200	22,484,000	13,490,000
Census Tract 712	2,247	2,444,000	1,466,000

SOURCE: Summary Data of the 1970 Census of Population and Housing United Community Services, Research Department, Boston, MA 1972

Next, we examine the present shopping behavior within each area. The intra-area origin-to-destination grocery shopping shows the following:

TABLE II.4
Intra-area Grocery Shopping

Area	% of Shopping Done Within the Area
Roxbury No.	30
Roxbury W.	40
Roxbury So.	7
Over Sample No.	28
Over Sample So.	52

SOURCE: Circle Special Mobility Study, BTRP, Uncompiled, 1972.

These figures suggest that substantial shopping trips are made within these neighborhoods of Roxbury. The trade area around Uphams Corner (Over Sample South) has the greatest percentage of intra-area grocery trips (over 50%). Dudley Square (Roxbury North) has only 3/10 the percentage of intra-area grocery trips (30%). This suggests that the Dudley Square area is not capturing as much of the consumer market as it should.

Next, let us examine the current shopping behavior to Dudley Square from surrounding areas. Taking the major grocery store in Dudley, Blairs, we have:

TABLE II.5
Inter-Area Patronage of Dudley Square

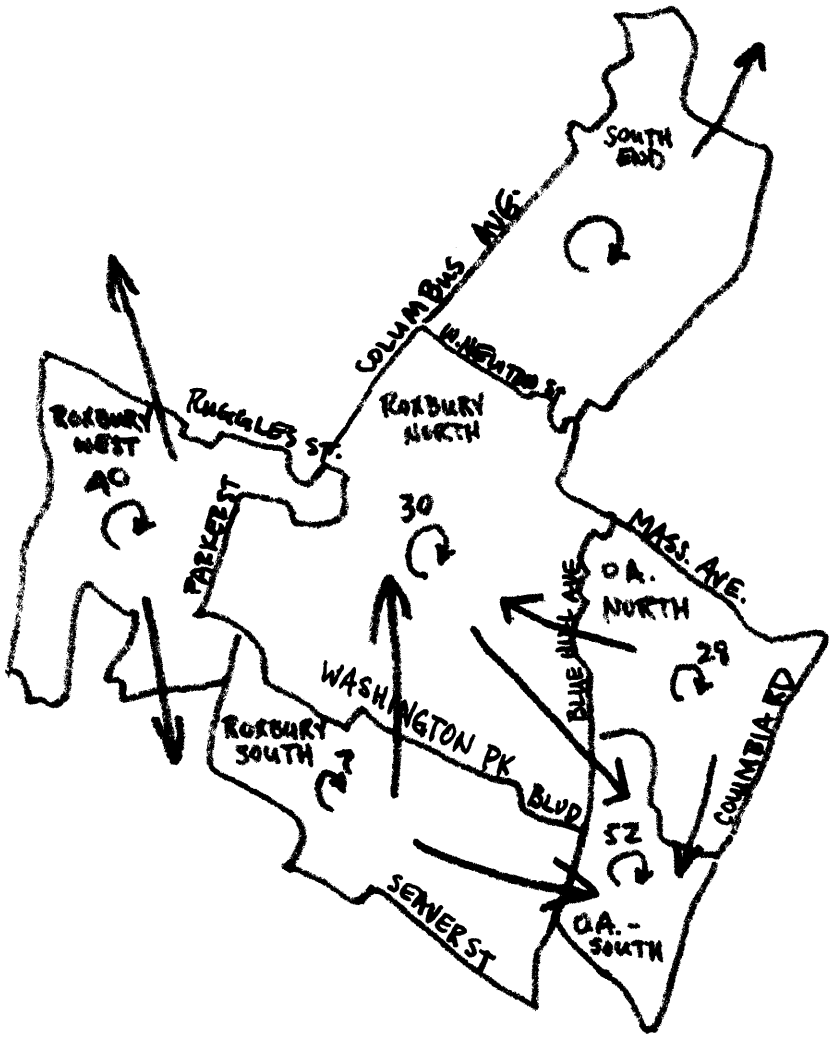
Store	So. End	Roxbury No.	Roxbury W.	Roxbury So.	A-No	No.Dor.	No.Dor	Matt.
Blairs	4%	47%	1%	25%	20%	1%	1%	1%

SOURCE: Circle Special Mobility Study, BTPR, 1972

Therefore, Roxbury North is highly penetrated, and Roxbury South and Over Sample Area North are well penetrated. We can infer, then, that the present market penetration of Dudley Square as a whole, is high in Roxbury North, is medium in Roxbury South and Over Sample Area North, and is low in Roxbury West. The key potential area of market penetration seems to be Roxbury West and Roxbury South. (see maps II.1 and II.2)

2. Modal dependence by area and income

Let us turn to a consideration of the modal dependence of shoppers. Over several neighborhoods, the distribution of modes used by residents called the "modal split," will vary. Since our choice of neighborhoods to route mass transportation requires the selection of the mode, we should consider this relationship.

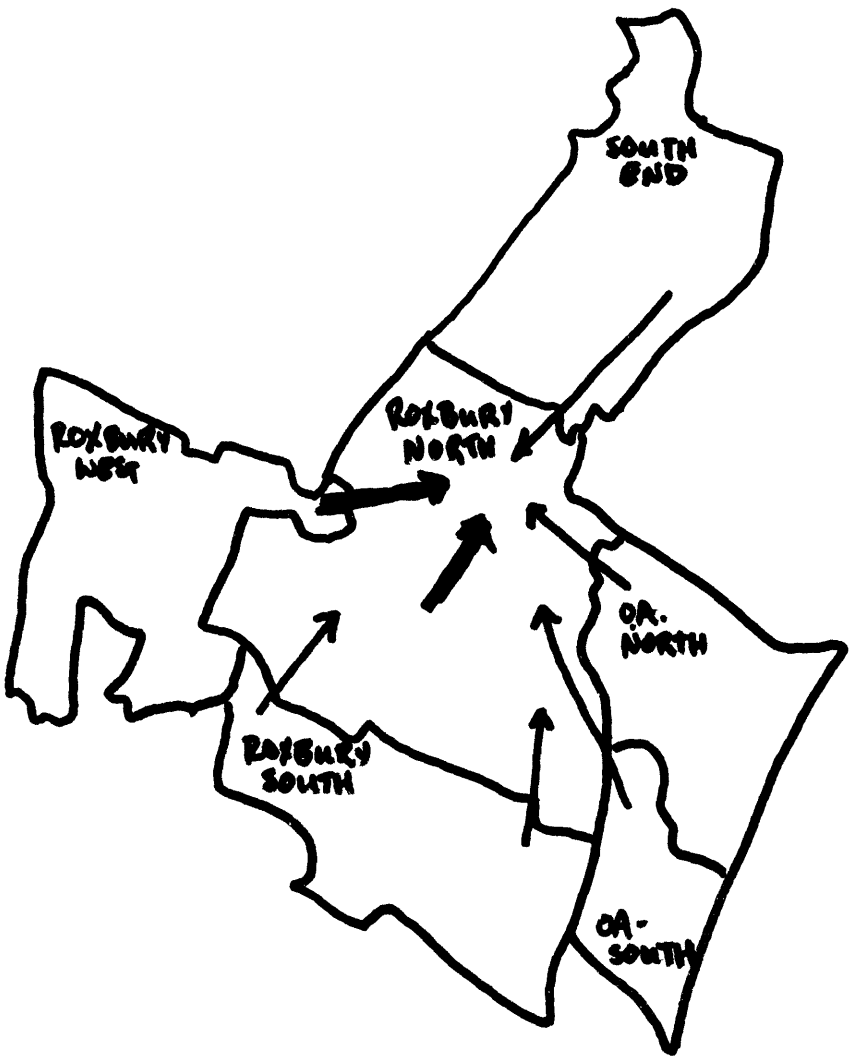


MAP II.1

INTER-AREA, INTRA-AREA

GROCERY TRIP-MAKING PATTERNS

SOURCE: CIRCLE SPECIAL MOBILITY STUDY, BTPR 1972



MAP II.2

POTENTIALLY INCREASED INTER-AREA, INTRA-AREA GROCERY TRIP-MAKING PATTERNS

The modes used for shopping based on the residential origin from the trade area to Dudley Square is as follows:

TABLE II.6

Modes Used for Grocery Shopping from Neighborhood

per cent by each mode

Area	Transit	Car	Taxi	Walk	Other
Roxbury No.	22	48	6	24	-
Roxbury West	11	42	1	45	1
Roxbury South	21	54	8	12	5
Over Sample N.	31	39	3	23	4
Over Sample S.	15	41	7	34	3
Wider Roxbury	17	47	5	29	2

SOURCE: Circle Special Mobility Study, BTPR, uncompiled, 1972

The primary mode of transportation used is car (almost 50%). Transit is only the third most used mode (almost 20%). Therefore, mass transit is an under-used mode for shopping. In particular, the most "under-serviced" neighborhoods by transit are: Roxbury West and Over Sample Area North. These are, therefore, prime areas for transit location. Note that this analysis makes a simplifying assumption that each mode is a perfect substitute for shopping.

The distribution of modes used varies by income bracket Therefore, the public investment in one mode may tend to favor one income bracket over another. In shopping, we would like poorer income brackets to be serviced.

The distribution of use by mode within each income level in Roxbury is as follows:

TABLE II.7

Modal Split Within Income Levels
"mode to/mode from" grocery store of major shopping

Class	Income	Transit	Car	Taxi	Walk
Very Poor	less than $3000	18/10	19/20	6/24	56/46
Poor	$3000-5999	21/11	32/21	41/41	32/27
ModerateInc	$6000-9999	20/ 8	53/54	5/19	25/19
Middle Inc	$10,000-14,999	9/ 8	60/61	6/18	24/14
UpperMiddle	$15,000+	2/ 1	19/16	77/77	2/ 6

SOURCE: Circle Special Mobility Study, BTPR, uncompiled, 1972

The very poor are very dependent on walking (about 50%). These are moderately dependent on transit (about 15%). And they are very dependent on taxis for their return trips (about 25%). Therefore, sidewalks and well-controlled traffic intersections are the most important mode to the very poor and are essential to their service needs (about 30%). A publicly subsidized service equivalent to taxis, like mini-busses, would be very important to the ppor, and important to the very poor for their return trip. Mass transit would be a little less important than taxi service for the poor and very poor.

The income split within each mode is a follows:

TABLE II.8

Income Split Within Modes
"mode to/mode from" grocery store of major shopping

Class	Income	Transit	Car	Taxi	Walk
Very Poor	less than $3000	27/27	39/43	10/10	26/26
Poor	$3000-5999	33/32	23/21	22/22	28/32
ModerateInc	$6000-9999	29/26	20/20	32/32	23/25
Middle Inc	$10,000-14,999	10/14	13/10	23/23	20/15
UpperMiddle	$15,000+	1/ 0	5/10	14/14	3/ 2

SOURCE: Circle Special Mobility Study, BTPR, uncompiled, 1972

This suggests that public investment in pedestrian walk improvement would benefit all income brackets equally (except for the upper middle income class). Public investment in mass transit would benefit the very poor through the moderate income class. Public investment in mini-busses (a mode which tends to substitute for taxis) may benefit the moderate and middle income brackets more than the poor and very

poor if the higher income brackets donot switch. A differential bus fare with a "sliding Scale" by income could compensate for this potential inequity. That is, a higher fare for those with incomes of say, above $10,000 per year, could be a subsidy/lower fares for those with lower incomes.

Finally, the distribution of the use of modes varies according to competing stores. The modes used for shopping based on the major shopping destinations in the trade area of Dudley Square reveals the following:

TABLE II.9

Modal Split by Major Grocery Stores
Percent by Each Mode

Store	Transit	Car	Taxi	Walk
Folsom's	10	19	14	57
Blair's	42	27	13	18
First National (i.e., Fainast)	23	40	2	35
Stop & Shop	29	38	12	22
Av. of All Stores	16	47	6	32

SOURCE: Circle Special Mobility Study, BTPR, uncompiled, 1972

Mass transit investment will tend to benefit Dudley Square most. Mini-busses could benefit Folsom's and Dudley Square overall about equally. Improved pedestrian travel could benefit Dudley Square the least.

These figures on modal split underscore:

(a) the current transit-dependency of the Dudley Square commercial area; and,
(b) the prime potential for the expansion of the mass transportation system to benefit the commercial stores of the Dudley Square area.[24]

[24] For an operational discussion of mini-busses, see Roos, Daniel Operational Experience with Demand Responsive Transportation Systems, Dept. of Civil Engineering, MIT, Jan 1972

Lastly, let us examine the variation of shopping over time. This helps to estimate the capacity of each planned mode.

The variance of grocery shopping over hour of the day follows:

TABLE II.10
Time of the Day Shopping is Done (% by area)

Area	before 10 AM	10 AM 12 AM	12AM- 4PM	4PM- 6PM	after 6PM
Roxbury No.	9	30	26	22	13
Roxbury W.	6	32	41	17	3
Roxbury So.	4	31	35	17	13
Over-Sample N.	7	34	29	14	15
Over-Sample S.	4	31	28	21	15
Average	7	26	36	20	11

SOURCE: Circle Special Mobility Study, BTPR, uncompiled 1972.

The greatest number of shopping trips are taken during the mid-day period (62% during 10AM-4PM).

The time variance of grocery shopping over day of the week follows:

TABLE II.11
Day of the Week Shopping is Done (% by area)

Area	Weekdays	Weekends	Both
Roxbury No.	40	43	17
Roxbury W.	46	47	8
Roxbury So.	35	53	12
Over-Sample No.	38	53	9
Over-Sample So.	33	61	35
Average	40	49	11

SOURCE: Circle Special Mobility Study, BTPR, uncompiled, 1972

The shopping trips are slightly biased toward weekends.

Therefore the capacity of a mode should be 9%/hr. (¼ of 36%) of the total shopping trips per day. And the capacity of a mode should be 60%/day of the total shopping per week for Saturdays; and 10%/day (= 1/5 of 51%) for weekdays.

(3) The additional transportation system.

We can now estimate (a) the potential increase in volume of shoppers by mode; (b) the potential increase in volume of shoppers from trading areas; and, (c) the potential increase in disposable income due to these two increases in penetration.

We can derive the base figures of shoppers by mode by taking the same modal distribution for Blair's (Table II.9) and multiplying by the total number of shoppers. Transit shoppers constitute the largest share: 4,800 per week.

We can estimate the potential increase of shoppers by mode by targeting the increase in usership by transit, car,, and mini-bus (see Table II.10). Transit shoppers, for example, increase by 1000 per week.

TABLE II.12

Estimated Modal Distribution of New Shoppers

Mode	Shopping Day	Present Share (trips/day)	Old % Distribution	Increase/ (Decrease)	Projected Load	New % Distrib
Transit	Weekend	2.4k	42%	1.5k	3.9k	50%
	Weekday	.49k		.30k	.79k	
Car	Weekend	1.5k	27%	.5k	2.0k	26%
	Weekday	.31k		.10k	.41k	
Taxi	Weekend	.75k	13%	(.37k)	.38k	5%
	Weekday	.15k		(.07k)	.08k	
Walk	Weekend	1.04k	18%	(.35k)	.69k	9%
	Weekday	.21k		(.07k)	.14k	
Mini-bus	Weekend		0	.72k	.72k	9%
	Weekday			.14k	.14k	
	Total per wk	11.5k	100%	4.0 k	15.5k	100%

The increase in total penetration of the market is from 23% to 35% (see Table II.13). Trips made by walk and taxi decrease by 33 1/3% and by 50%, respectively. Their trips are captured by the new mini-busses. Auto traffic and transit increase to absorb the extra 12% of new shoppers. The marginal transportation system is 50% transit, 26%

automobile, and 9% bus and mini-bus service.

We can extimate the increase of the total penetration of the market by area by assuming the current maximum penetration of all trading neighborhoods, particularly for the nder penetrated neighborhoods of Roxbury West, Roxbury North, Over Sample Area North and the South End. We assume a total of 31% of transit usage of each area, multiply the household population times this figure to estimate the total penetration. This gives a total increase of penetration of from 1900 households/week to 3800 households/week, a marked increase! (Table II.13)

TABLE II.13

Estimated Areal Distribution of New Shoppers

Area	Rox. No.	Rox. W.	Rox. So.	OA-No.	So. End
Present # of shoppers by household	1.16k	.02k	.62k	.05k	.02k
Old % Dist	47%	1%	25%	2%	1%
Inc shoppers by household	.08k	.52k	0	.63k	.65k
Total # of shoppers	1.24k	.54k	.62k	.68k	.67k
New % Dist	33%	14%	17%	18%	18%

(4) Potential Increase in Disposable Income

The increase in disposable income due to this increase penetration is $8.5 million. The number of increased household shoppers times the average disposable income per household gives the increase of disposable income by area. (Table II.14).

TABLE II.14

Estimated Increase in Disposable Income Captured in the Dudley Square Commercial Area by Area

	Rox. No.	Rox. W.	Rox. So.	OA-No.	So. End
Inc Shoppers	1.24k	.53k	.62k	.68k	.67k
Av. Hhd DI	$2910/yr	$3060/yr	$3900/yr	$3840/yr	$2700/yr
Inc DI	$227k	$1590k	$2420k	$2410k	$1810k
Present DI	$3430k	$6k	$2420k	$192k	$27k
Total Inc DI	$8.46m				

We have defined now the basic elements of an additional transportation system. This marginal system is highly mass transit dependent; it provides additional capacity for automobile (and truck) traffic; it provides additional bus service to support shopping; and, it cleans up barriers to pedestrian travel (viewed here as a captive usership that cannot be easily discouraged by physical barriers).

We shall next derive a transportation plan for Dudley Square. The heart of the plan is a new transit station at Dudley Square, and the conversion of the square to a pedestrian-bus mall supported by a mini=bus service.

PART II: The Methodology and the Plan

Introduction

The methodology of this mass transportation analysis seeks to serve three primary criteria:

first, to increase the consumer market through increased transportation access over all priority modes;

second, to reduce conflict between transportation modes; and,

third, to provide for the minimum amount of excess transportation capacity to support the expanded retail development (analyzed in Chapter III).

Five modes plus one storage of a mode are considered sequentially in Part II. These are: mass transit subway, automobile, parking, pedestrian travel, bus service and mini-bus service (a type of public taxi-bus service). We will produce a six part general transportation plan.

In the following, each mode plus the storage are considered individually by a methodology which elaborates on the three criteria defined above.

Unlike all other modes, transit will consider additional but only a preliminary cost/benefit analysis. Further, the transit section will also consider its background politics leading up to the present period (one which has changed actors, but not structure). This underscores the centrality of mass transit above all other modes in this development program.

Community View of a Regional Mass Transit Plan in Roxbury

(1) Methodology:

For mass transit, we will review each of the major policy alternatives for mass transit facilities in Roxbury. Second, we will judge these alternatives on the critieria of linkage of under-pene-

trated trade neighborhoods by transit to the Dudley Square area. Third, we will compare the capital costs of construction of each transit facility to the potential increase of disposable income captured for expenditure in Dudley Square.

(2) The Plan:

The current regional mass transit plan of the Joint Regional Transportation Committee/JRCC[24] is a four-phase plan for Roxbury:

Table II.14
Present Mass Transit Plan in Roxbury

Phase I - Construction of the relocated Orange line from Essex Station along the Back Bay railroad bed through Roxbury and Jamaica Plain, to Norwood,

Phase 2 - Dismantling of the Washington Street elevated from Forest Hills, Jamaica Plain to Dudley Station, Roxbury;[2]

Phase 3 - Construction of the "adequate replacement service" through Roxbury and the South End,[3]

Phase 4 - Dismantling of the Washington Street elevated from Dudley Station to Essex Station.[4]

SOURCES:

1. Eastern Massachusetts Regional Planning Project Guides for Progress: Development Opportunities for Metropolitan Boston, 1968 Recommended Highway and Transit Plan DPW & MBTA 1968

   Program for Mass Transportation MBTA 1966
   Staff Supplemental to a Program for Mass Transportation MBTA 1968
   Revised Program for Mass Transportation MBTA 1969
   Funds for Transit Report to the Governor & General Court MBTA 1970
   Chapter 563 of Acts of 1964, Commonwealth of Massachusetts, 1964

2. BTPR Southwest Preliminary Location Report, Program Package Evaluation Report, Executive Office of Transportation & Construction 1972

3. Governor Francis W. Sargent "Policy Statement on Transportation in the Boston Region". Office of the Governor, Commonwealth of Massachusetts, November 30, 1972

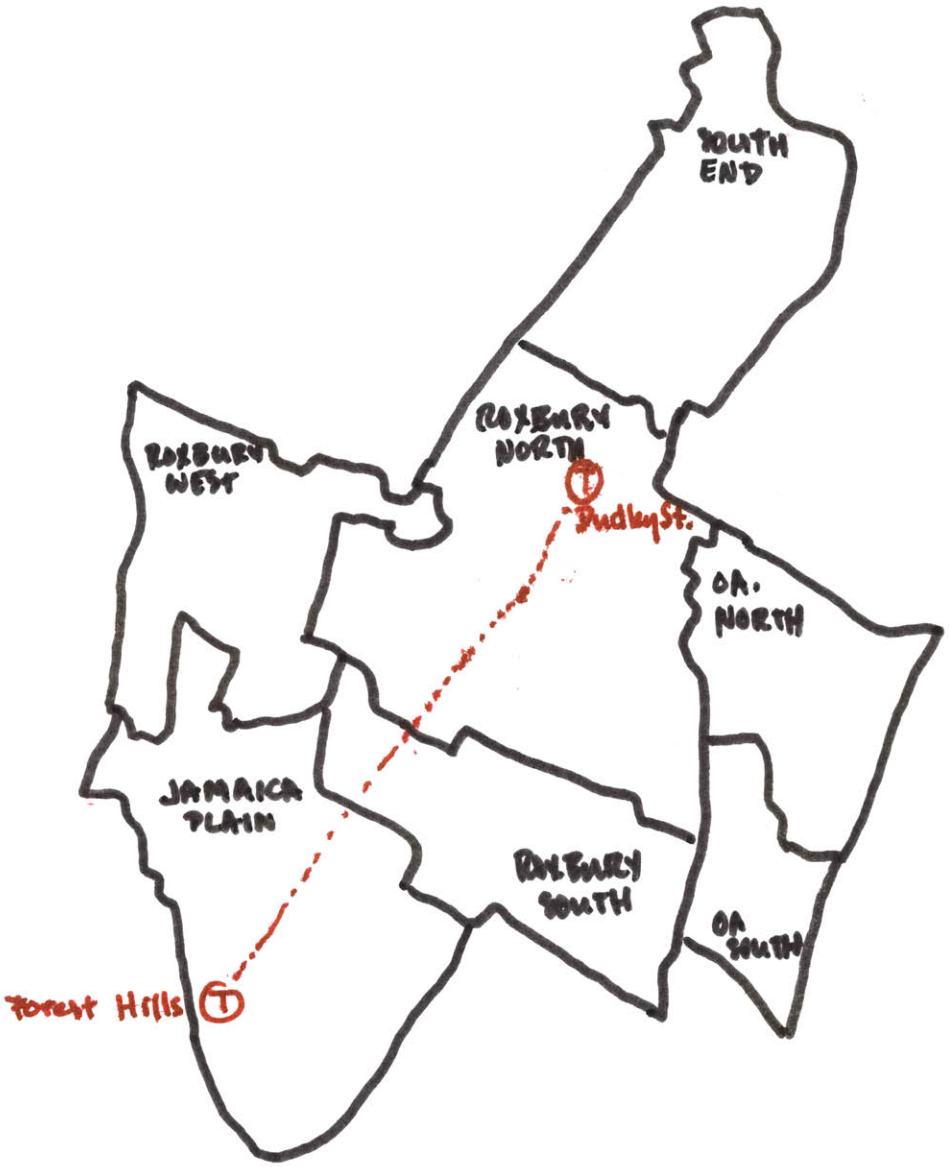
4. Chapter 563 of Acts of 1964, Commonwealth of Massachusetts 1964

24. The JRTC is a metropolitan Boston advisory planning board operating directly out of the State Dept. of Public Works (DPW) in coordination with the Mass. Bay Transportation Authority (MBTA), under the direction of the Executive Office of Transportation and construction (EOT). The responsibility of the JRTC is the integrated planning of a regional urban expressway and mass transit network in metropolitan Boston. The findings of the JRTC are submitted to the Governor, who will make the final decision about capital investment and plan of each expressway and transit link.

MAP II. 3

PHASE I: RELOCATED MBTA ORANGE LINE TO PENN CENTRAL BACK BAY RR TRACKS

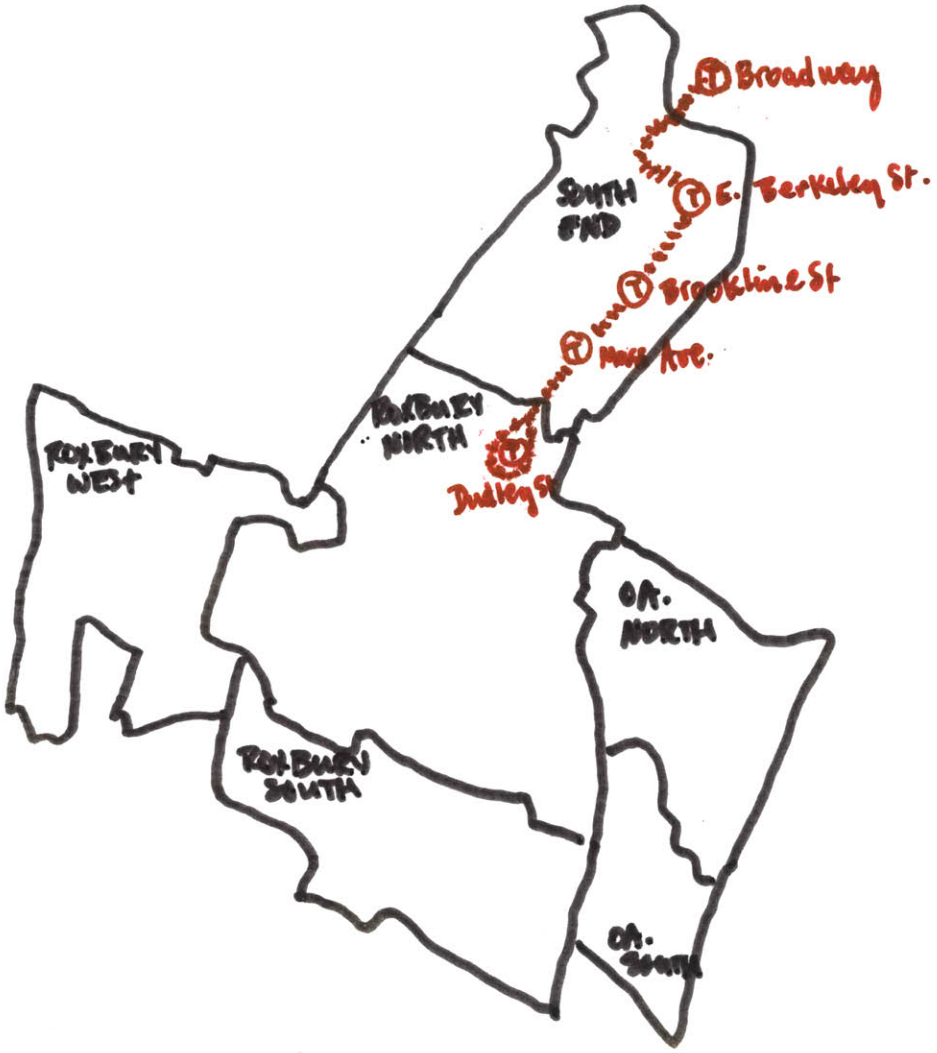
SOURCE: BTPR, 1972



MAP II.4

PHASE II: DISMANTLING OF THE WASHINGTON ST. ELEVATED FOREST HILLS TO DUDLEY STATION

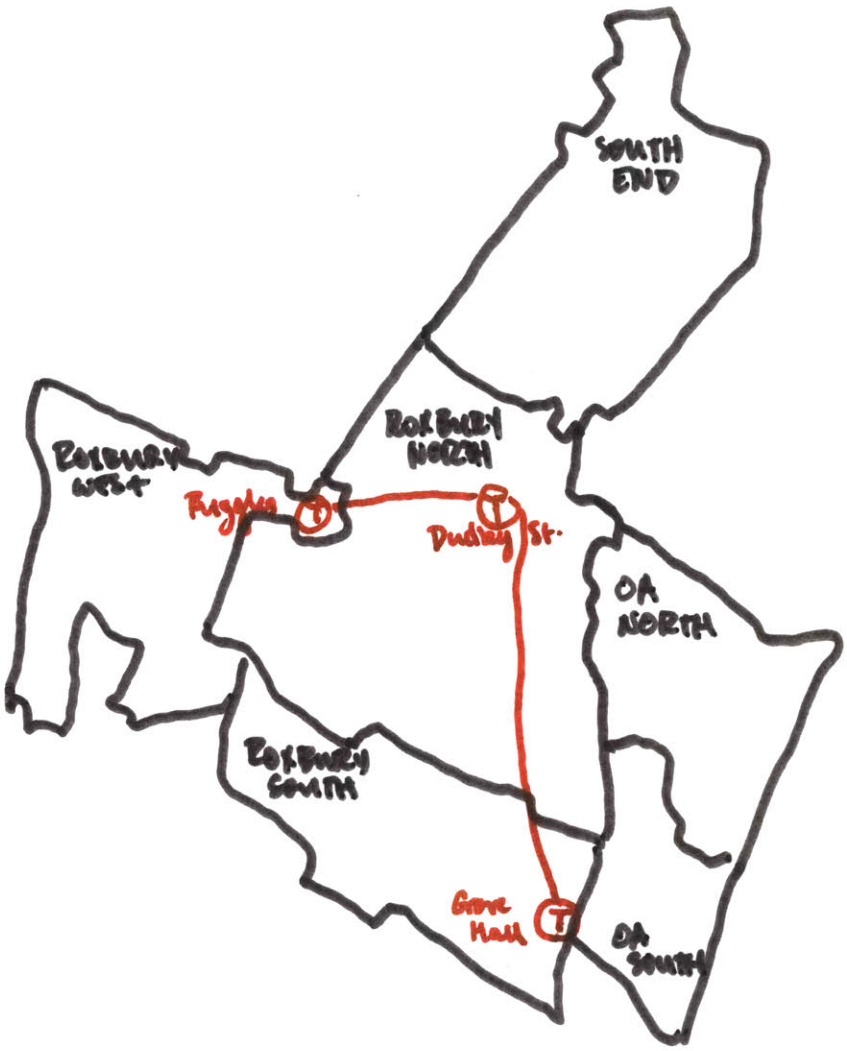
SOURCE: BTPR, 1972



MAP II.5

PHASE III: SOUTH END REPLACEMENT SERVICE STREET TROLLEY ALONG WASHINGTON ST. TO DUDLEY STATION

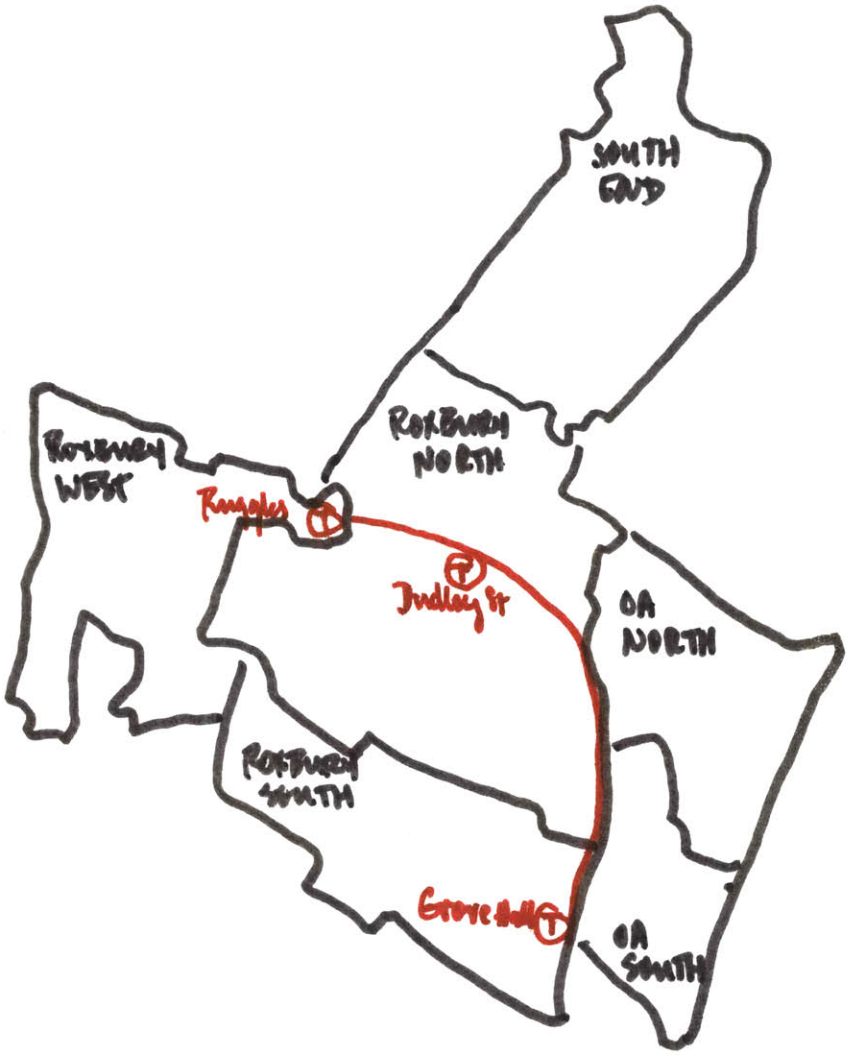
SOURCE: DEVELOPMENT COORDINATOR'S OFFICE



MAP II.b

PHASE III: ROXBURY REPLACEMENT SERVICE
WARREN STREET ROUTE - SUBWAY
RUGGLES ST. TO GROVE HALL

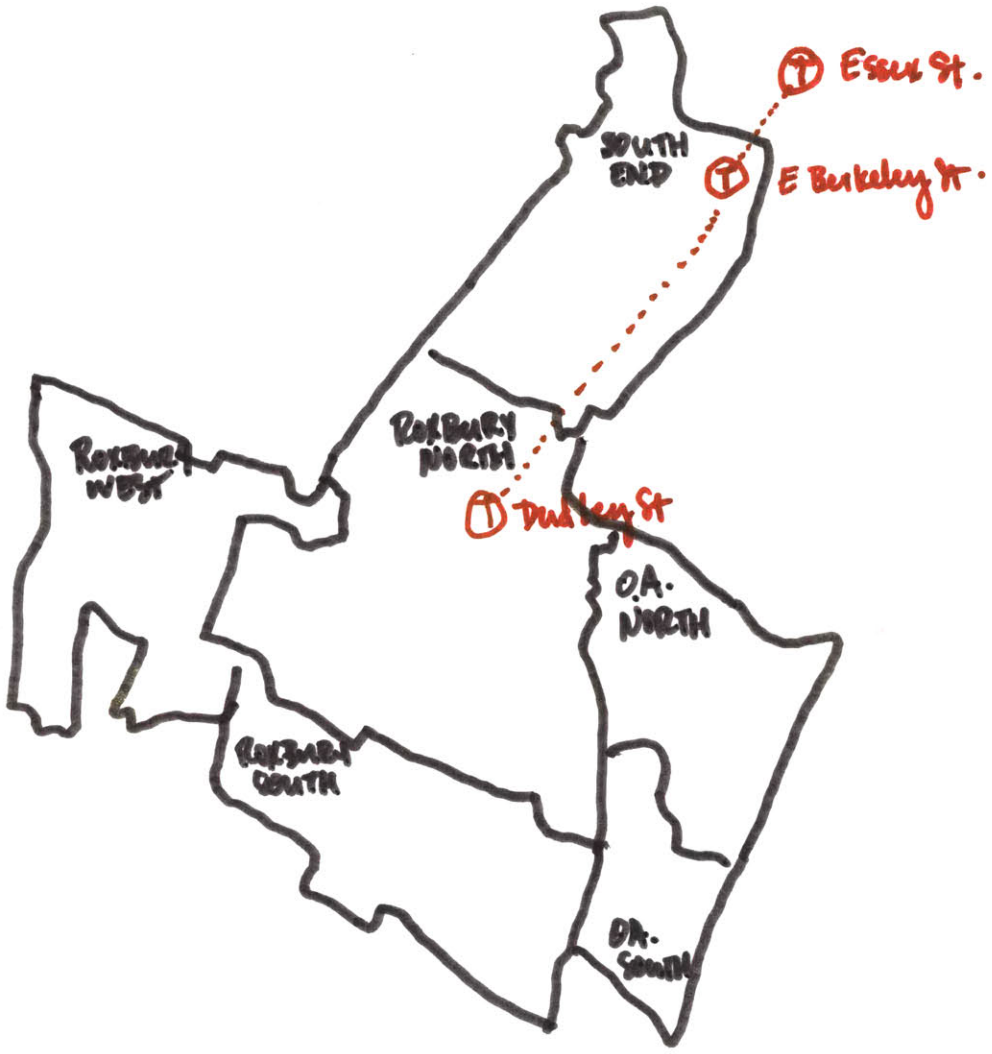
SOURCE: BTPR 1972



MAP II.1

PHASE III : ROXBURY REPLACEMENT SERVICE
BLUE HILL AVE ROUTE - SUBWAY
RUGGLES TO GROVE HALL

SOURCE : S.W. LAND DEVELOPMENT COALITION



MAP II.9

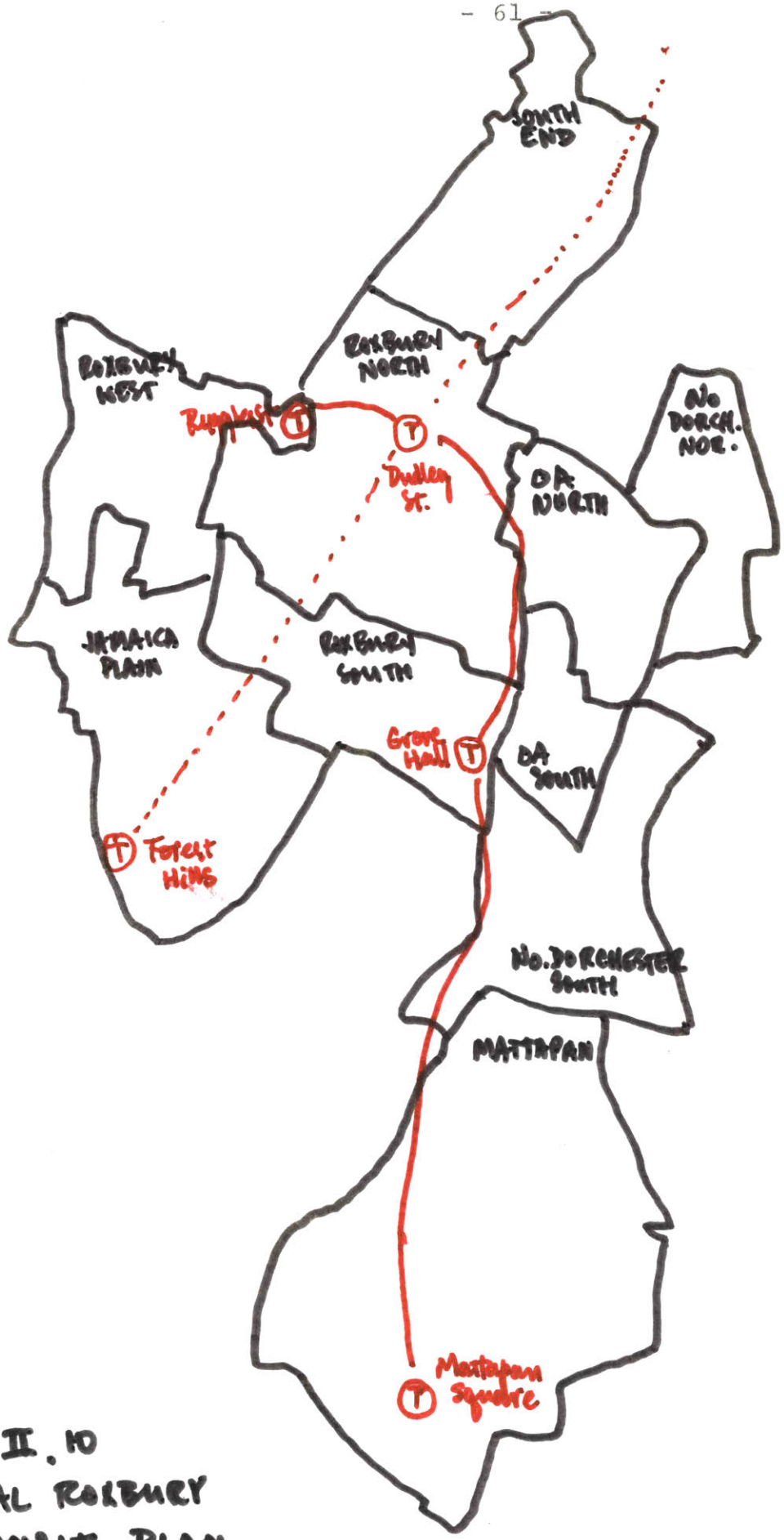
PHASE III: DISMANTLE WASHINGTON ST. EL DUDLEY STATION TO E. BERKELEY AND ESSEX ST.

SOURCE : BTPR, 1972

MAP II.9

PHASE II: MATTAPAN SQUARE TRANSIT EXTENSION

SOURCE: S.W. LAND DEVELOPMENT COALITION



MAP II. 10
FINAL ROXBURY
TRANSIT PLAN.

(see Map II.3-II.8)

The decision of what facility and what alignment of the replacement facility is pending. There are different positions on the alternatives. First, are positions for the routes through Dudley Square (i.e., Phase III). Second, are positions for the routes leading to Mattapan Square (a possible Phase V). Let us review the alternatives for Phase III (see Maps II.6-II.7).

Table II.15

Phase III: Policy Alternatives of the Washington Elevated Replacement Transit Service

facility	alignment	supporter
South End Replacement Service		
a. No facility - use buses instead	no alignment- use routes along the present elevated from Dudley Station to the Boston Common	Mayor White's Transportation Advisor, Frederick Salvucci.
b. Street Trolley	alignment across the Turnpike to Washington Street, from the old Broadway Station to Dudley Station, and back again.	Executive Secretary Transportation and Construction, Alan Altshuler, and South End Transportation[2] Committee.
Roxbury Replacement Service		
c. Subway 1. radial	alignment along Shawmut Avenue, Washington Street, or Harrison Avenue from the Essex Station to Dudley Station, then along Warren Street to Grove Hall.	BTPR option [3]
2. circumferential transit -radial	alignment from New Mission Hill Station along the Boston Inner Belt Route, through new Dudley Station, turn south along Blue Hill Avenue to Grove Hall.	Circle, Inc., and Southwest Corridor Land Development Coalition.[4]

SOURCES:
1. Transportation Advisor to the Mayor, Office of the Mayor of Boston
2. Executive Office of Transportation and Construction
3. BTPR Southwest Preliminary Location Report Program Package Evaluation Report, Executive Office of Transportation and Construction, Commonwealth of Mass 1972
4. Southwest Corridor Land Development Coalition

The present alternatives forPhase V are only two (see Map II.9). At present, however, fiscal constraints do not allow for the state committment to a mass transit extension to Mattapan Square. The funding available from the federal government (UMTA) is limited and the present committment of Massachusetts' share to other mass transit projects leaves now new funds for committment to Phase V.

TABLE II.16

Phase V: Tentative Alternatives of the Extension of the Roxbury Replacement Mass Transit Service to Mattapan Square

facility	alternative	route
subway	1	FromGrove Hall along Blue Hill Avenue to Mattapan Square
	2	From Grove Hall along Washington St. (Dorchester) and the Penn Central Midlands Branch rr bed to Mattapan Square

SOURCE: BTPR Southwest Preliminary Location Report Program Package Evaluation Report,Executive Office of Transportation and Construction, Commonwealth of Massachusetts 1972

Let us turn to a consideration of the policy alternatives of the key phase, Phase III. First, we will consider the benefits, but only those of an increase in the retail sales in Dudley Square.

Alternative I (trolley between Shawmut Avenue and Harrison Avenue) links the South End to Dudley Square while the other alternatives do not. The South End, however, is only 17% black, although the SETC block area (census tract 912) is 49% black. The potential addition of disposable income is only $1.5 million.

Alternative 2 (subway along Warren St.) links Roxbury West to

Dudley Square, while alternative 1 does not. Roxbury West's only 26 % black, but the public housing area is 44% black (i.e., Mission Hill Extension and Whittier Street projects), and 58% black (i.e., Bromley Heath project). The potential addition of disposable income is $5.9 million.

Alternatvie 3 (subway along Blue Hill Avenue) links not only Roxbury West, but also Over Sample Areas, to Dudley Square. Over Sample Area No. is 38% black; Over Sample Area So. is 91% black. The potential addition of disposable income is $5.9 + $7.1 million = $13.0 million.

The estimates of potential additional disposable income captured for the Dudley Square area estimates little penetration at present of the South End, Roxbury West and Over Sample Area So. Penetration is high in Over Sample Area North (see Table II.5).

Therefore, Alternative 3 presents the greatest potential commercial benefits.

Next let us look at the costs of the alternatives. Only the limited costs of construction are examined. The costs of construction of the transit facilities are considered.

TABLE II.17

Phase III:Estimated Costs of Construction of Alternatives 1972 prices

facility	alignment	estimated cost
Trolley	1.a. Essex Station to Dudley Station over Turnpike	$19 million
	b. Essex Station to Dudley Station under Turnpike	$40 million
	minimum	$19 million
	maximum	$40 million
Subway	1. Orange line thru Inner Belt route to Wash.St.	$20 million
	2.a. Dudley Station along Warren St. to Grove Hall	$88 million
	b. Dudley Station along Blue Hill Av-Grove Hall	$107-$120 million
	minimum	$108 million
	maximum	$140 million

SOURCE: BTPR Southwest Report, 1972

Taking our maximum extimates of both our limited costs and benefits, we have the following. The investment of $40 million for the trolley could generate $1.5 million in extra sales per year. The investment of $108 million for the Warren Street subway could generate $5.9 million in extra sales per year. The investment of $140 million for the Blue Hill Avenue subway could generate $13 million in extra sales per year. Therefore, from this very preliminary cost/benefit sketch, the third alternative of the Blue Hill Avenue subway yields the greatest net benefit of all alternatives. The Blue Hill Avenue subway can "pay off" the initial investment in under 11 years assuming some moderate growth.

TABLE II.18

PhaseIII:Comparative Costs and Increase in Potential Sales 1972 prices

Alternative	Max Est Cost	Max Est Sales
So End trolley	$40 million	$1.5 million/year
Warren St. subway	$108 million	$5.9 million/year
Blue Hill Av subway	$140 million	$13 million/year

Since the development program is an investment plan, the time frame of investment is critical to the development of a work plan. Time estimates will be used to estimate the time value of money (i.e., a dollar invested now is worth more now than a dollar invested ten years from now). This may alter the ranking of the alternatives. The next section yields a likely schedule of development.

We must make very clear at this point that there are far more costs and benefits to be considered to do a final analysis. These include benefits of linkage, of other economic criteria such as employment, and costs of housing a retail complex(see vol II).

Schedule of Mass Transit Construction

The assumptions of the time estimates of the schedule follows. The estimates of design and construction are taken from similar projects in the Boston area.

Table II.9
The Time Estimate of Design and Construction of Mass Transit

Task	Project	Time Estimate
Planning	Haymarket North	One Year
Engineering Initial & Final	Haymarket North	One Year
Trolley Construction	Green Line	Four to Six Years
Subway Construction	Haymarket North	Six to Eight Years

SOURCE: MBTA, Planning Department

The contingencies for phasing follow.

The starting time of capital construction depends on the securing of the capital grants from the Massachusetts Great and General Court to match that of the committment of the Federal Urban Mass Transportation Administration. Only the state bond committment is wanting (and the state bond committment is nearing its upper limit set by federal legislation).[26] It takes at least one session for the state legislature to pass a bond issue.

The design of the mass transit facilities could proceed the two year prior to capital committment. In fact, state capital committment to a Grove Hall link in Roxbury may depend on completion of the early design phases.

The resultant schedule for transit construction is shown in Table II.4. Four phases of transportation development which can overlap in order to collapse the total time for completion.

26. Conversation with Rep. Mel King, September, 1973

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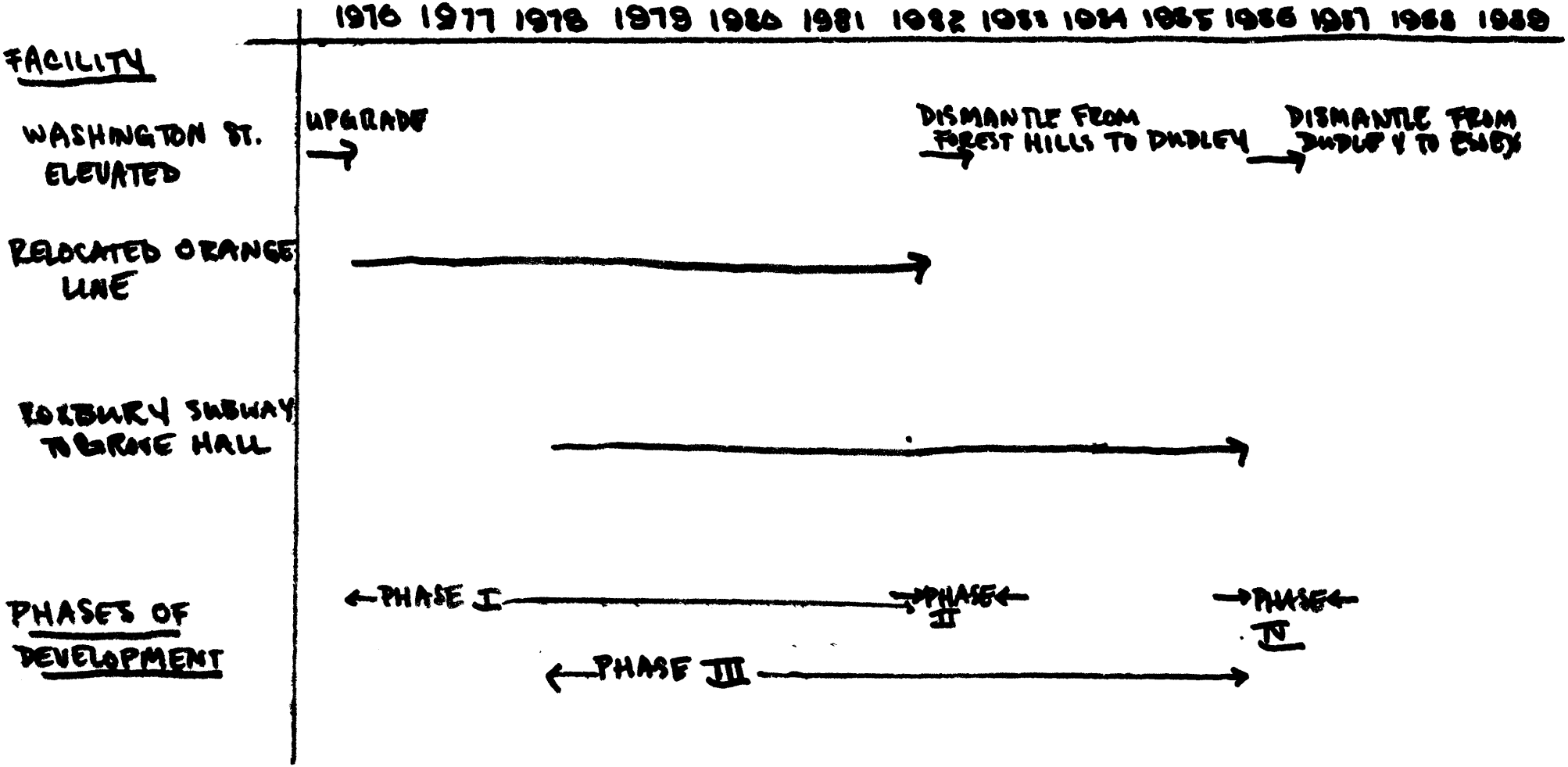
TABLE II-20

APPROXIMATE SCHEDULE OF ROXBURY TRANSIT CONSTRUCTION AND DEMOLITION



To put this another way, the critical path[27] is the gubernatorial policy decision and the legislative land committment to the community mass transit circumferential and radial lines. However, we can expect the time it takes to be much longer given the slowness of the transportation bureaucracy and the reluctance of the state legislature to spend money.

Delays in policy, budget, administrative and construction decisions would lengthen the time frame of development. The total time for the completion of the transit development program under optimistic assumptions is 12 years.[28] (See Table II.20).

The final mass transit plan is recapitulated at the end of the chapter.

Automobile Traffic Circulation:

1. Methodology - 3 Design Problems:

The network of streets to support private automobiles that seek to shop in Dudley Square is more than adequate. Each neighborhood within the trading area is connected to Dudley by streets with sufficient capacity. The design problem is three fold. First, the construction of the arterial street as an alternative to the I-95 South/Boston Inner Belt should insure that no through commuter traffic pass through an already congested Dudley Square. Second, the present through traffic in Dudley Square should be diverted around the

27. Kelley, James E., Jr. and Morgan R. Walker "Critical Path Planning and Scheduling" Proceedings of the Eastern Joint Computer Conference . Boston December, 1959. See also: Kelley, James E, Jr. "Critical Path Planning and Scheduling:Mathematical Bases" Operations Research May-June, 1961.

28. Conversation with Robert Sloane, formerly MBTA Assistant Planner and BTRP community technical assistance team member, June 11, 1974.

Dudley Square should be controlled so that it minimizes conflict with pedestrian travel. Third, the street system should have enough capacity to support the new traffic generated by the new retailstores.

2. The Plan:

The first design problem can be solved only through the proper design of the arterial. The travel time of the arterial must be less than that of the possible paths through Dudley Square. Therefore, the capacity of the arterial must be great enough to carry the expected commuter traffic. And a minimum of stops of arterial traffic must be achieved.

Unfortunately, little potential exists to prevent through arterial traffic out of the Dudley Square commercial area. There is no way to limit exits and entrances of the arterial street. And some auto traffic will cross the arterial street to get to and from Dudley Square.

Some of the arterial traffic may choose to cut through Dudley Square. If this is a small volume, the solution to the second design problem can handle this added use.

The second problem could be solved through the redirection of the vehicle traffic which now passes through Dudley Square around its boundary. That is, traffic along Washington Street and Warren Street in the Dudley Square area should be redirected along Harrison and Shawmut Avenues.

The traffic on the boundary of Dudley Square could be routed in a circular one-way loop, travelling counter-clockwise. This recommendation was made by the Southwest Corridor Land Development Coalition.[29] (See Map II.11).

A recalculation of the traffic flow of the six main streets show that this new traffic pattern is possible if:

29. Report, op.cit.

(1) Warren St. and Shawmut Avenue are widened one lane;

(2) bus traffic is routed to minimize conflict with vehicle traffic;

(3) delivery trucks arrive during off peak hours.

(4) no on-street parking is permitted during the peak hours of 7:30-8:30 am; 12:30 - 3:00 pm and 3:30- 6:30 pm., and

(5) no significant amount of additional commuter traffic passes.

Some congestion may occur, most likely on Shawmut Avenue. and Warren Street. The result of the traffic analysis appears in Map II.11.[30]

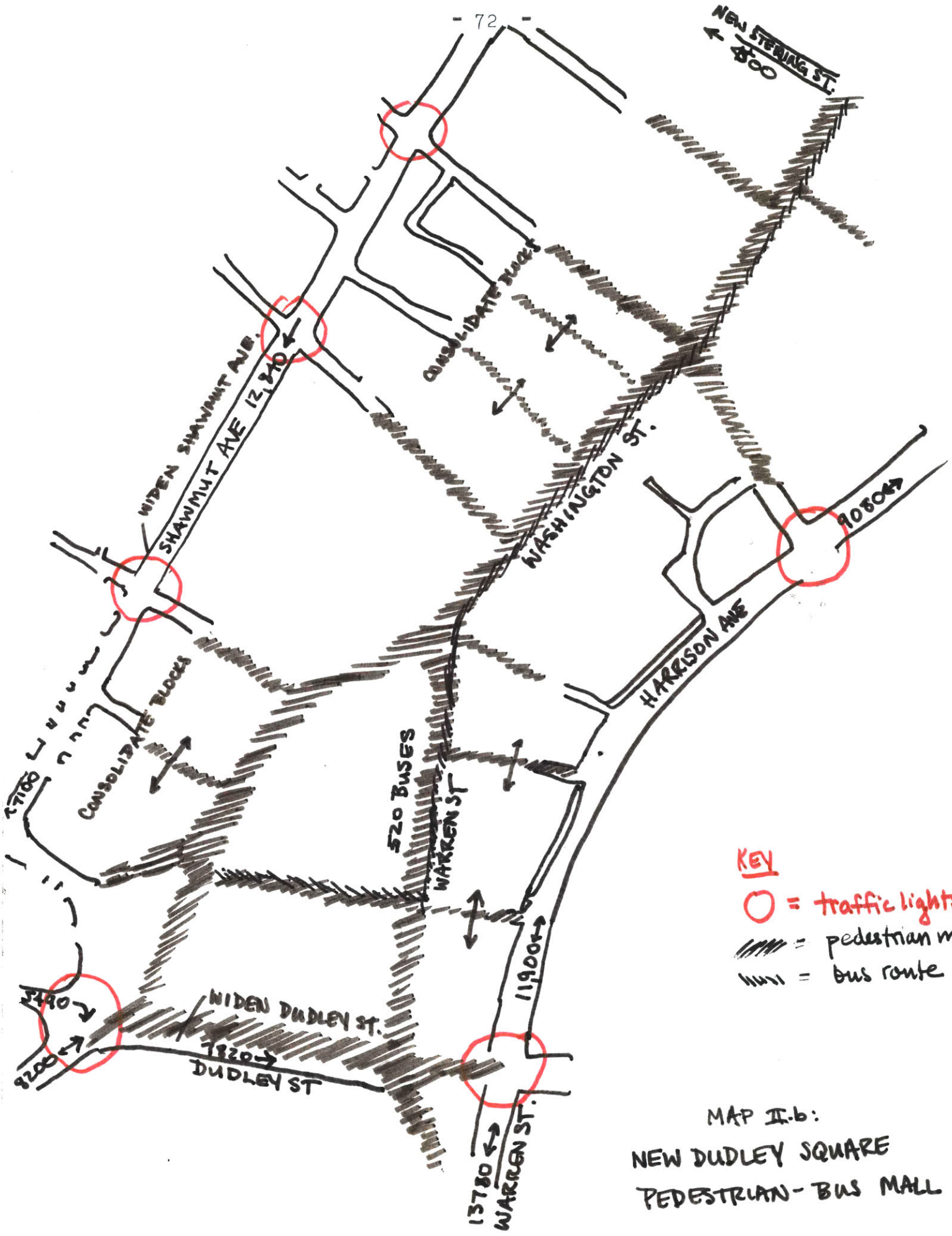
The amount of auto traffic generated will be limited by the economies of the new retail stores. Some of the disposable income available for a given retail category is not enough to support a retail store. Therefore, the contribution to the auto travel will be less than the potential travel.

The impact of the shopping center investment proposed in the marketing analysis requests a peak volume of 315 cars. This is not enough to overload the new traffic loop.

Therefore, the loop is a feasible traffic solution.

The third problem could be solved through the use of traffic lights at key pedestrian-street intersections. The essential trading neighborhoods of RAP, Whittier Street and Mission HIll Extension public housing projects, ROXSE, Camfield-Lenox public housing and Orchard Park public housing must be linked by pedestrian walks to Dudley Square. Using existing streets, we can pinpoint the key

30. The current vehicle loadings are taking from: Segal, Murray-Dudley Terminal TOPICS Proposal-City of Boston, May, 1971.



MAP II.b:
NEW DUDLEY SQUARE
PEDESTRIAN-BUS MALL

intersections lacking traffic lights. These are:
Shawmut Avenue at Sterling St., Ruggles St., Vernon St., Dudley St. at Washington St. and Harrison Ave.; and, Harrison Ave at Eustis Street and Sterling Street.

Parking Requirements

1. Methodology - demand pedestrian conflict & design interior:

No service parking demand in Dudley Square exists at present. Only First National Bank and National Shawmut Banks, which provide drive-in services need extra parking.

Parking entrances could be located off the major pedestrian interchange, thereby reducing conflict.

2. The Plan:

The parking requirement of the new shopping center is 315 spaces. This is 57k gross leasable area x 5.5 parking spaces/1k GLA = 315 parking spaces. (This is the Urban Land Institutes' standard formula). This is the design capacity of the parking.

The Pedestrian Bus Mall

1. Methodology - conflict and design criteria:

The chief conflict in the Dudley Square commercial area is that of cars, buses and pedestrians. Vehicle traffic can be pushed to the boundary. Bus traffic cannot be if the main bus terminal remains at Dudley Square. We will here assume that some major bus service will remain in Dudley Square. The pedestrian mall, reserved bus lan emerges as the most feasible solution to reducing conflict.

2. The Plan:

Aside from the new transit station, the heart of the transportation plan for the Dudley Square area is the pedestrian-bus mall. (see Map II.11) This alternative is feasible in terms of traffic load, circulation, and (on-street) storage. Under this traffic

plan:

(1) Washington St. is turned into a pedestrian mall, possibly at sidewalk level, from Dudley St. to Sterling St.;

(2) Reserved bus lanes are constructed along Washington St., Warren St. and Ziegler Street, perhaps one-way clockwise around Ferdinand's. This reserved bus lane is narrower than the street, therefore, permitting the widening of the sidewalk.;

(3) Buses running along Washington St. could carry shoppers from Dudley bus terminal to the new transit station and shopping center site, possibly at a reduced fare.

(4) Trucks delivering and cars parking would be diverted into the side streets off Shawmut Avenue and Harrison Avenue. Parking would be provided at these side streets. These side streets would be dead-ends at Washington St. and Warren Street.

(5) Synchronized traffic lights would be placed at key pedestrian corners and bus intersections. These key intersections include Shawmut Ave. at Sterling St., Ruggles St., Vernon St,; Dudley St. at Washington St. and Harrison Ave.; and, Harrison Ave. at Eustis Street and Sterling St.

This pedestrian-bus mall would:

(1) eliminate the traffic conflict between buses and autos, and between autos and pedestrians in the mall; and

(2) regulate the traffic conflict between pedestrians and autos at the boundaries of the mall.

As noted earlier, the present boundary streets (except Sterling Street) could carry the redistributed traffic loads.

New Bus Route

(1) Methodology - Service and Conflict Design Criteria:

Two major problems are the insufficiency of service to potential trading areas, and conflict of buses with vehicle traffic. The only major trading neighborhoods not serviced by bus service are the eastern edge of Roxbury West and the northern edge of Roxbury North. This area could be serviced by either: (a) a new or modified bus route such as the experimental route now running along the proposed transit circumferential alignments; or (b) a

mini-bus service. A possible routing of the bus appears in Map II.12.

2. The Plan:

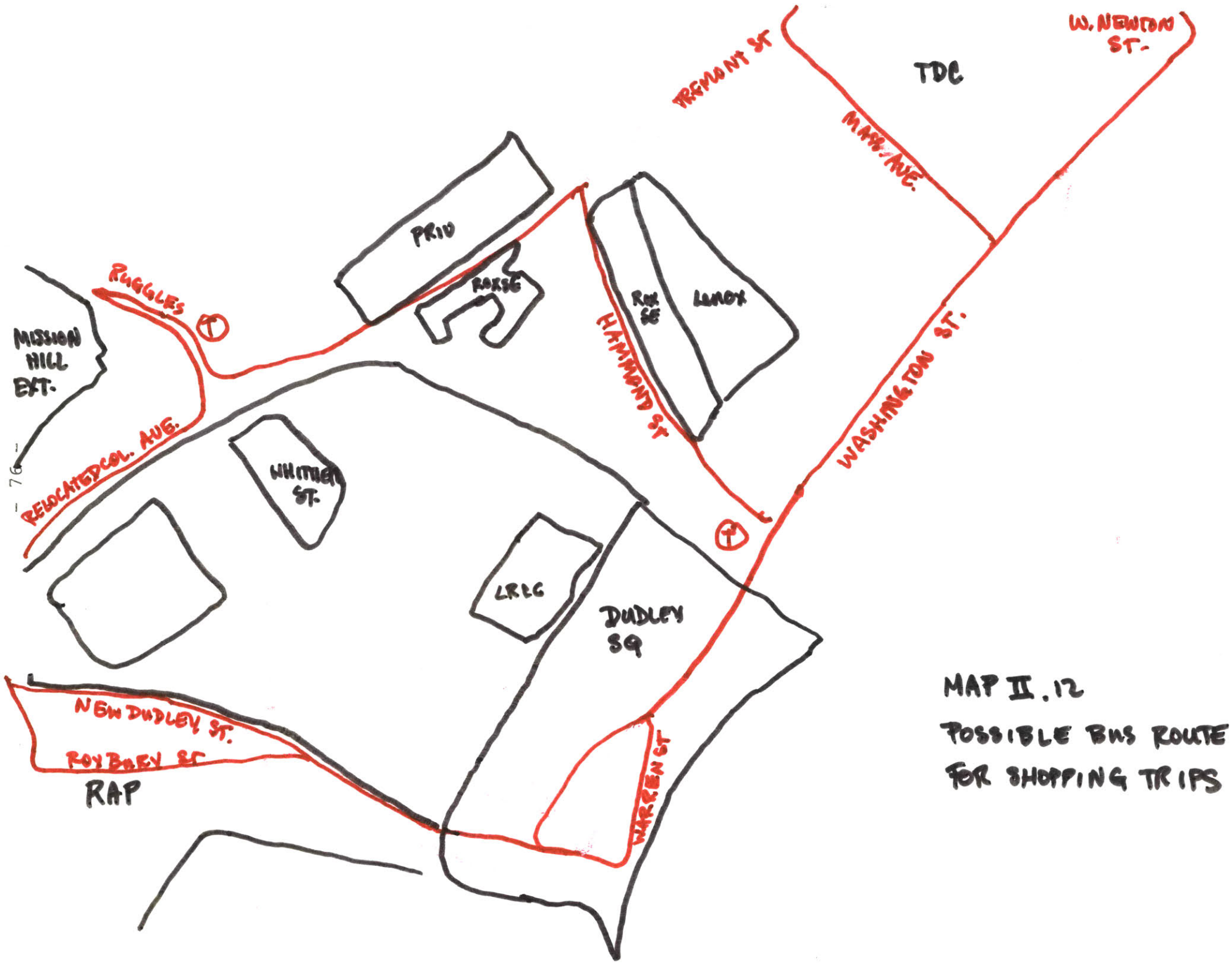
The plan of the bus routing is to pass through (a) Mission Hill Extension Projects, (b) Lower Roxbury Community Corporation; (c) Lenox-Camfield Projects; (d) South End Tenants' Development Corporation, and (e) RAP.

Experimental Mini-Bus Service:

1. Methodology:

Previous methods of analysis examined new service or reducing the conflict of existing usage of modes. In this last part, we examine meeting existing service in order to provide savings in travel costs (mainly taxi fares). We are forced to do this because the demand generated by the new shopping will not likely support a mini-bus service alone. Therefore, the service will be provided to all of Dudley Square.

Again, as an indicator of demand, we take only food trips (a limit of the data). First, the total grocery trips are derived, and then broken down to daily loadings. Then the daily trips by grocery store is derived by the market share of each store. The mini-bus will be a substitute for the modes of taxi and walk. Then a target capture of the taxi and walk trips gives the estimate of daily trips by mini-bus to each store. The result is a trip demand that will support several mini-buses of average ridership.



MAP II.12

POSSIBLE BUS ROUTE FOR SHOPPING TRIPS

Table II.21
Estimated Grocery Demand for Demand Responsive Transportation

Grocery trips per month = household population in trading area x average grocery trips per month

= 10,700 x 6.5 = 69,000

Major shopping/weekend = $\frac{\text{share of major trips}}{\text{all grocery trips}}$ x $\frac{\text{week}}{\text{month}}$

x $\frac{\text{shoppers on weekend}}{\text{shoppers all week}}$ x $\frac{\text{grocery trips}}{\text{month}}$

= 2/3 x ¼ x 69.6k = 5.8 trips/Saturday

Major shopping weekday = $\frac{\text{share of trips/weekday}}{\text{share of trips/weekend}}$ x $\frac{\text{major shopping trips}}{\text{weekend}}$

= 1/5 x 5.8k = 1.2k trips/weekday

Total grocery trips/store= $\frac{\text{market share of store}}{\text{total market}}$ x $\frac{\text{major shopping}}{\text{weekend or weekday}}$

Shopping Market Share	Major Shopping/Weekend	Major Shopping Weekday
15%	.870	.180
3%	175	30

Target Capture = % of taxi trips x $\frac{\text{taxi trips}}{\text{all trips}}$ + %of walks x $\frac{\text{walk trips}}{\text{all trips}}$

= 50%(0%) + 33 1/3% (24%) = 11% of all trips.

Mini-bus trip/day = major shopping/weekend or weekday x target capture by store

For shopping market share	weekend	weekday
15%	96	20
3%	19	4

Mini-bus trip/½ hour = ½ x $\frac{\text{1 day}}{\text{number of shopping hrs/day}}$ x $\frac{\text{mini-bus trips}}{\#\ \text{days}}$

For shopping market share	trips/½ hr weekend	trips ½ hr weekday
15%	6	1.25
3%	1.2	.25

Mini-bus Service	For Shopping Market	Trip/½hr Weekend	Trips/hr Weekday
many-to-one	1 15% store	6	1
many-to-few	10 3% stores	12	3

Therefore, Dudley Square can support one mini-bus servicing 1 15% store (called many-to-one) on Saturday, and at least one or more mini-busses servicing 10 3% share stores each (called many-to-one).

More work is needed to recheck whether there is sufficient unmet demand that would change consumer behavior to use this new type of transportation mode.

Summary Program Recommendations for Transportation Construction and Service Development

In summary, the following recommendations are made:

Program recommendation 1: That a mass transit subway be constructed from the Ruggles St. Station of the New Orange Line along the cleared land of the rejected Boston Inner Belt with a station at Dudley Square, then turn south along Blue Hill Avenue to Grove Hall.

Program recommendation 2: That a TOPICS[31] program be instituted that would convert the Dudley Square commercial area into a pedestrian-bus mall. Washington St. and Warren St. would be closed off to cars and trucks between Dudley St. and Sterling St. Sterling St. would be widened to handle one land two-way traffic. All side streets leading into Washington St. and Warren St. would be dead-ended. Traffic lights would be put in at key pedestrian-auto interchanges.

Program recommendation 3: That a demand-responsive transportation system be instituted on an experimental basis with a mini-bus fleet of at least 1 many-to-one and at lease 1 many-to-few types.

31. TOPICS is a municipal program that provides funds for improving traffic flows and pedestrian safety.
see also, Policy and Procedure Memorandum 21-18, "Urban Traffic Operations Program to Increase Capacity and Safety" U.S.DOT 1969

CHAPTER III:

Expanded Commercial Development: A Retail and Wholesale Investment Package

The Application of Principle II:

"Investment must capture consumer expenditures for reinvestment or distribution back into the ghetto economy";

of Principle III:

"DPA investment must be aimed at import substitution and at backward linkage";

and of Principle IV:

"Both private and public investment and public subsidy must be tied to place".

Introduction

In this chapter, we analyze the implications of principle 2 (capturing of consumer expenditures) and principle 3 (backward linkage into wholesale). This first principle is expanded in terms of the disposable income of residents of the trade area as indicated by housing. Then it is examined in terms of the market assumptions of the retail sector. The second principle is examined also in terms of its market assumptions of the wholesale sector. Finally, commercial development is related to principle 4 (public subsidy).

PART I: Theory

In the preceding chapter, we examined the relationship of transportation mode to area and disposable income of residents in that area. However, we have no data that relates transportation mode to retail category of consumer expenditure. Through the former relationship, we inductively derived a transportation plan to support commercial development in general. To analyze what specific type of commercial development we will have to use another approach.

In this second approach, we will relate trade area directly to retail expenditures by category. This is a deductive approach to market analysis. The transportation system is assumed to be adequate to support commercial development. New housing development in the trade area may increase the potential for commercial development through the increase of disposable income available within the trade area. At this stage of the Circle program, however, housing development is not a major program element. (This is now changing.)

Given the trade area, then, the next aim is to maximize commercial development. The approach is to analyze the uncaptured retail expenditures to derive market feasible retail stores. The purchase of these retail stores may support wholesale enterprise. Time is introduced to forecast future sales potential on which to base future commercial development.

Finally, public support of ghetto commercial development is reviewed as a subsidy program.

The Interdependency Between Housing and Commercial Development

The housing in the trading area can determine the family income of potential shoppers. Therefore, it can effect the potential for new commercial development. In this trading area, this dependency is particularly important. There is a large amount of federally-subsidized low and moderate income housing. Family income levels of eligible tenants are fixed within set income ranges to insure that this housing will be used by the clients intended to benefit from this housing subsidy. These eligibility requirements limit the total potential disposable income in the trading area.

In summary, if housing is either below standard or subsidized, the disposable income will tend to be low per structure. If housing is above standard or privately rehabilitated or constructed, the disposable income will tend to be high per structure. Increased density of households per structure per unit land may increase disposable income,and therefore tend to offset low disposable income of poorer households. But in general, for the same structure per unit land, total disposable income will be lower for poorer housing.

An investment program that includes housing development as well as commercial development could do either of two things. First, the investor could build or renovate housing that would attract the household income levels that fit the existing market penetration of stores owned by the investor. Second, the investor could aim new commercial enterprises at the customer market segment that is the target of the new commercial enterprises. In this case, the investor would construct or renovate housing at the level that would fit the planned market segment. At this point in time, Circle is not considering such an investment program. Therefore, we will drop consideration of direct housing investment.

On the other hand, improved commercial development may attract private tenants of higher household income to fill current vacancies or to replace tenants of lower household income or new homeowners may decide to buy substandard housing and invest in its rehabilitation. In these cases, commercial development stimulates housing development. Further, the disposable income per structure increases, therefore increasing further commercial expansion.

These inter-relationships of housing and commercial development are called"interdependencies." Federal low and moderate income housing development in Lower Roxbury, has provided a stimulus to commercial development in Dudley Square.

<u>This low and moderate income housing is the key untapped trading neighborhood in the Dudley Square trading area.</u>

Ghetto Commercial Development in an Imperfect Market

Commercial development in the ghetto in this conventional market analysis is predicated on the imperfection of the market. That is, gaps in retail categories are viewed as opportunities for development based on the lack of finance and entrepreneurship. Finance may be lacking and entrepreneurs may be sparse. Thus, "the market does not choose" to fill the current gaps. And public action to support retail development is an effort to correct for market imperfections.

No effort is made to promote active competition with existing commercial enterprises in the trading area. Such an effort would require finance, entrepreneurship and management capabilities beyond the present ability of development institutions. This may be a future goal of ghetto economic development. That is, primary dualistic commercial enterprises which dominate a retail segment and exploit ghetto dwellers may be prime targets of competition supported by ghetto development institutions.

If any competition is promoted, it is with existing commercial enterprises located outside the trading area. Such an effort yields a comparative advantage in favor of commercial enterprises within the trading area. That comparative advantage is the reduced transportation cost of the shopping trip to the shopper.

Further, for trading areas within the client ghetto, an effort is made to avoid competition. This will succeed if the economies of scale of commercial enterprise allow it. For retail business, the economies of scale do. Given this, the avoidance of competition provides ample opportunity to spread effects of development investment through the development of several comm-

ercial centers through the ghetto. This will work for community-scale centers.

Backward linkage into the wholesale sector can also avoid competition. To the extent that sufficient community-controlled retail stores in a given category exist, wholesale development can be supported. Again, the lack of finance, entrepreneurs and managers will constrain wholesale development.

The regional development of mass distribution of wholesalers in most retail categories will be strong competition to wholesale development. Only the savings of the wholesaler's discount will permit the ghetto wholesalers to be close to competitive. Competition and finances of wholesale operation must be analyzed carefully.

Publicly Supported Commercial Development As Subsidy

Commerce in a ghetto is often a low profit operation for the owner, or a cheap buy for the customer. Often, the owner must sell low unit contribution goods, absorb theft, risk fire. If the owner chooses to turn a higher profit, it is at the expense of the worker's pay and the customers' goods. The customer often must buy cheap quality goods, with no warranty, sometimes on credit with high interest rates.

Commercial development is then, a losing proposition in several ways. It can work if public finance supports its operation. In conventional ways, public finance can lessen capital costs and overhead expenses of building, land and property taxes. In non-conventional ways, public finance can grant equity and subsidize debt through capital investment and subsidize mortgage interest rates. In sum, public support of commercial development in a

ghetto must subsidize its finances.

We shall turn next to the analysis of a market feasible investment package in commercial development. "Market feasible" means that ventures that are organized in conventional manner in a market where consumer behavior does not change significantly in pattern and under prevailing costs in that industry and area can operate with prevailing profit rates. The heart of this package is a junior department store-supermarket complex, an automobile dealer-gas station complex, and a food and automobile wholesaler.

PART II: Methodology

There are six steps to this analysis:

first, we examine the impact of the new low and moderate income housing on the trading area of commercial business;

second, we make projections of future markets within the same geographical trading area;

third, we estimate market sales not serviced by present retail businesses in Dudley Square;

fourth, we identify retail businesses that can be supported by the increase in market sales projected;

fifth, we analyze the impact of investment in community scale retail businesses in Dudley Square (i.e., the potential for nodal development) on neighborhood retail business (i.e., the potential for spine development); and,

sixth, we examine potential investment in wholesale business due to the expected purchases of the proposed retail development (i.e., the potential for backward linkage).

The result of this analysis is a market feasible investment package for the Dudley Square commercial area. (Note again that this is not the final investment package to be recommended.)

The sequence of calculations of this analysis follows eleven steps as follows:

first, the increase in housing in each neighborhood of the trading area is used to derive a factor for the increase in population of each neighborhood. The income distribution is assumed to remain the same.

Therefore, the income of each neighborhood is derived by multiplying by that same factor.;

second, the percentage amount of disposable income spent on each retail category according to income brackets of $3000 is used from the results of the Bureau of Labor Statistics last consumer survey (1962);

third, the disposable income for each neighborhood is then derived by multiplying the consumer expenditure factors of the BLS survey times the total income projected for each neighborhood;

fourth, the market characteristics of each neighborhood is analyzed based on the results of the 1970 U.S. Census. No effort is made to adjust these figures. Now the market is defined by area, by income, by race and by age. Note that the factors of consumer expenditure may vary by race and by age (perhaps even by area). However, no account of this is taken due to lack of information.;

fifth, the present Dudley Square market share of the total market of retail expenditures is derived from dividing the total sales of each retail category of Standard Industrial Classification as reported by the Dun and Bradstreet Market Indicators, a census of businesses, by the total retail expenditures of each retail category by Bureau of Labor Statistics as calculated in step three;

sixth, the neglected market share of the total market of retail expenditures is derived by subtacting the total present sales from the total estimated present retail expenditures in each category;

seventh, the potential market sales of each neglected or underpentrated retail category is derived by multiplying a large, usually not maximum market share in a given retail category by BLS or by SIC code, and never exceeding a 15% market share for one store, times the total retail expenditures in those neglected or underpenetrated retail categories. The base of the multiplication are the future sales, while the multiplier is based on present market penetration. Therefore, the result of this multiplication is an estimate of future sales.;

eighth, the criterion for the evaluation of these figures for projected market sales is based on the comparison of the size of these projections to the size of present retail stores in community scale commercial centers. This criterion is the sales/square feet, derived in a survey of shopping centers in the nation by the Urban Land Institute. The latest such survey is 1972.;

ninth, the evaluation of the potential market for retail stores is based on whether the projected size of the retail stores are larger or smaller than the medium range for community scale retail stores.

The range of retail stores is also broken down by the type of organization: national chain, local chain, or independent. Conditional acceptance depends on the subsidy of costs and/ or the non-profit operation of the retail stores.;

tenth, the recapture of consumer income flows is estimated by dividing the total of the accepted retail stores of step nine by the total disposable income in retail consumption for the Dudley Square commercial trading area;

eleventh, the same market analysis done for a community scale commercial center is done for a neighborhood scale commercial center. Instead, a different set of retail stores, though they overlap somewhat, appear nationally in neighborhood scale commercial centers. Similarly, the medium range of sizesof retail stores are smaller than those of community scale commercial centers.; and,

twelfth, the potential for wholesale development through backward linkage is estimated by selecting those large market sales projections by retail category and comparing them to the range of size by sales for wholesale operations in the wider Roxbury and bordering communities. If these market sales projected are a large fraction of the total sales of these wholesale operations, then these wholesale operations appear to be good prospects for further analysis to determine their feasibility. (This requires, in particular, an estimate of retail purchases by category of wholesale goods.).

We now turn to the definition of the Dudley Square trading area.

Dudley Square Commercial Trade Area

The trade area is differentiated into a primary area, where most shoppers per resident come from (i.e., Roxbury North and black Roxbury West) and a secondary area, where fewer shoppers per resident come from. The neighborhoods of the secondary area are those that immediately bound the primary trade area (i.e., black South End, Roxbury West, Roxbury West, Roxbury South, Over Sample Area North and Over Sample Area South). Only predominatly black neighborhoods are included (therefore, white South End and white Roxbury West are excluded). Outside of the bounds of the secondary area, there are few Dudley Square shoppers. Therefore, no tertiary area is defined.

The boundary of the secondary area is further defined so that there is no competition with the other Roxbury community scale commercial centers of Uphams Corner and Grove Hall (therefore, much of Over Sample Area South is excluded).

The primary trade areaof the Dudley Square Commercial Area is defined as:

(1) public housing: Orchard Park Project, Mission Hill Extension, Whittier St. Projects, Lenox-Camden Projects;

(2) public subsidized housing (Roxbury): Warren Gardens; Marksdale, Lower Roxbury Community Corporation, and Roxbury Action Program, et.al.;

(3) public subsidized housing (South End): ROXSE),Camfield Gardens, Grant AME, et.al.; and,

(4) private single-family housing: southeast of Circle, Inc.

With the exception of the Whittier St. and Mission Hill Extension Projects, all these housing areas lie within the conventional half-a-mile radius of Dudley Square.

The secondary trade area of the Dudley Square Commercial Area is defined as:

(1) public subsidized housing (Roxbury): Academy Homes, Charlame;

(2) public subsidized housing (South End): Tenants Development Corporation, South End Community Development, et.al.;

(3) private housing (Fenway): near Northeastern University;

(4) private housing (North Dorchester): west of the Penn Central Railroad tracks;

(5) private housing (Roxbury): between Warren Street and Blue Hill Ave. south of Dunreath and Moreland Sts.;

All these housing areas lie within the conventional half-a-mile to a mile radius of Dudley Square.

The tertiary trade area of the Dudley Square Commercial Area is insignificant. (See Map III.1 for the trade area definition by Census Tracts).

This definition of the trade area agrees well with the results of the Circle Special Mobility Study.

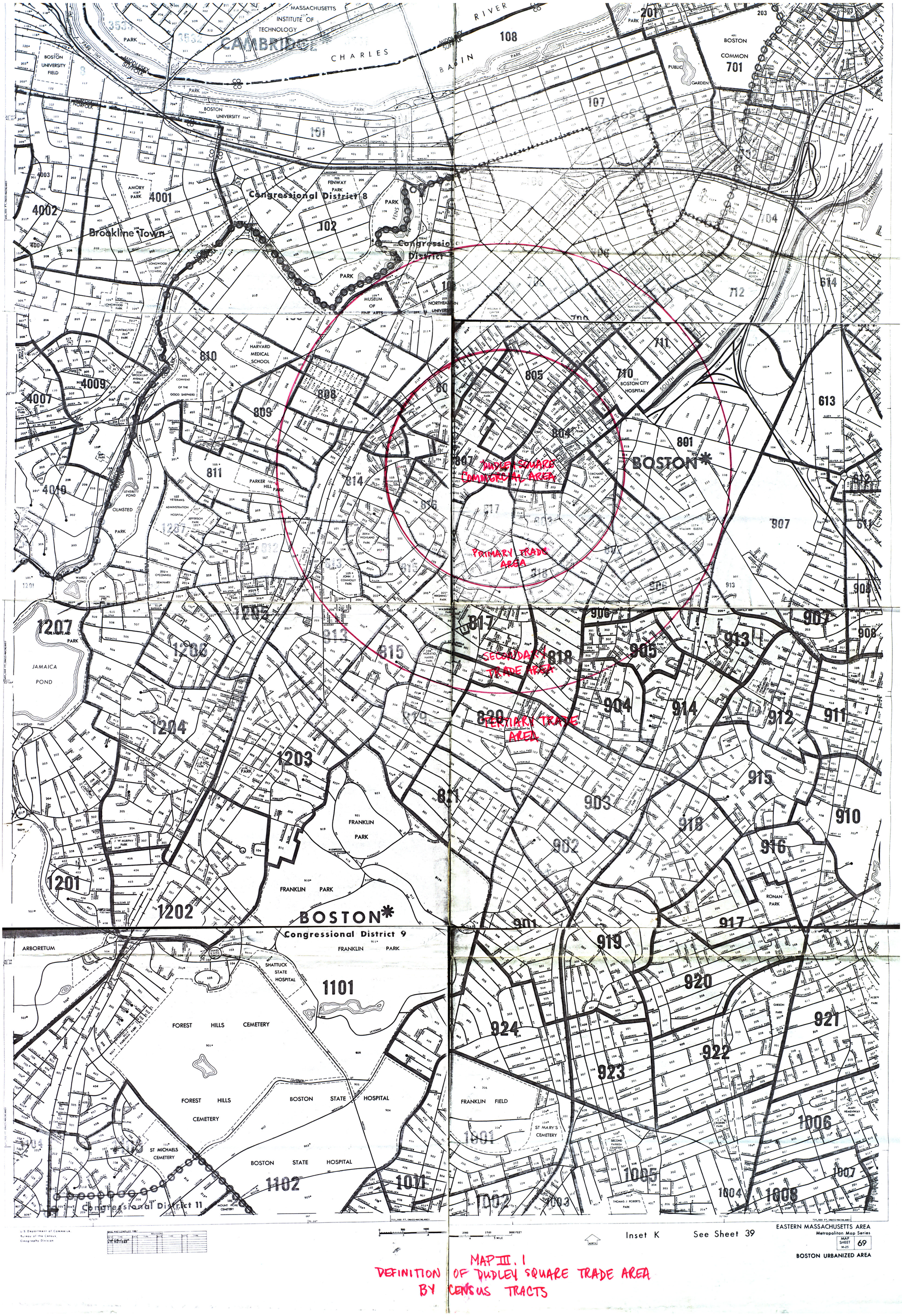
Table III.1
Distribution of Patronage of Major Grocery Stores
Among Areas (greater than 2%)

	SoEnd	RoxNo	RoxW	RoxSo	JP	OANo	OASo	NoDorNo	Mat
Blair's	9	34	13	17	-	14	-	9	-

SOURCE: Circle Special Mobility Study, BTPR, 1972

If most of the patronage from Roxbury West is from the Mission Hill Extension and Whittier Street Projects, then the sum of Roxbury North and Roxbury West is just a little larger than our defined primary trade area. Therefore, about 47% of the patronage is from the primary trade area. The remaining areas of South End, Roxbury South, Over Sample Area North, and North Dorchester North are all areas within our defined secondary trade area. Therefore, about 49% of the patronage is from the secondary trade area. The last three areas of Jamaica Plain, Over Sample Area South and Mattapan are areas in our"defined"tertiary trade area. Therefore, about 4% of the patronage is from the tertiary trade area.

To demonstrate the difference between the two trade areas, the population count of the two areas compiled in the next section shows that the primary trade area contains only 33% of the total population, while the secondary trade area contains 67%. Therefore, the primary trade area is twice as dense in shoppers (47/33=1.4) as the secondary trade area (49/67=.73).



DEFINITION OF DUDLEY SQUARE TRADE AREA BY CENSUS TRACTS MAP III. 1

The primary change in the population and income of the trade area over the last and the future decade is the result of the demolition and new construction of low and moderate income housing under the urban renewal program. The effect of this housing is as follows:

Table III.2
New Construction Under Urban Renewal (as of 1970)

Washington Park Urban Renewal Project (north of Townsend St.)

Marksdale I	82 dwelling units	completed
Charlame I	92 d u	"
Marksdale II	84 d u	"
Marksdale III	12 d u	"
Charlame II	38 d u	"
Warren Gardens	228 d u	
St. Joseph's	136 d u	"

Campus High School Project: Lower Roxbury Community Corporation

Smith House	132 d u	underway
Hayes House	131 d u	"
Town Houses	120 d u	

Roxbury Action Program

Rap, Inc.	17 d u	underway
Rap-Up I	33 d u	planned
Rap-Up IIA	140 d u	"
Rap-Up IIB	51 d u	"
Rap-Up III	96 d u	(to be redesigned to increase d u)

South End Urban Renewal Project (south of West Newton St.)

Camfield Gardens	136 d u	"
ROXSE	364 d u	"
Brightmore Terrace (Grant AME)	180 d u	"
Westminister and Willard Place	270 d u	"
Mass Housing	44 d u	"
Headstart Housing	145 d u	planned
South End Building Systems	62 d u	planned
Kenwood Development Corporation	16 d u	

SOURCES: Washington Park Urban Renewal Project Final Report LRCC, RAP design programs. Housing in the So. End, BRA April 1, 1974

Or, to put this another way, we have:

Table III.3
Effect of Subsidized Federal Housing on Population

	1970	1900
South End (700's)	-	1226 (1 du=1 household)
Roxbury (800's)	308 du	953

SOURCES: Washington Park Urban Renewal Project Final Report, LRCC, RAP design programs. Housing in the South End, BRA April 1, 1974

Therefore, the 1970-1980 effect of the new construction of subsidized housing in the South End is an increase of 1226 dwelling units, and in Roxbury is an increase of 845 dwelling units. Further, North Dorchester, Parker Hill Fenway and the Black Mission Hill received no public housing investment funds for new construction.

Trading Area Projections

Three major futures are forecasted: pessimistic, moderate and optimistic. These are:"Core Decline"based on the decline of the Central Business District and the ending of the Federal low-income housing production program:"Trends Extended"based on the steady state of the Central Business District and the completion of federal housing projects now planned; and"Core Intensive"based on the building and business boom of the Central Business District and the start-up of the federal housing subsidy programs with housing allowances tied to housing production.

The future projections were made on a ten year forecast from 1970 figures, since Roxbury doubled to its present size in the ten years before 1970. Readjusted future projects should be made on another ten year basis in 1980 with the new Census Data.

Potential investment may occur as early as 1977, if Circle decides not to wait for the construction of the new transit station, or as late as 1986 (if not later), if Circle decides to

wait and the construction is on time. If no updated Census Data is available, then the ten year forecasts should be interpolated or extrapolated.

To make each forecast; a constant factor is derived to multiply the base figures for 1970. Each factor is based on assumptions for each future. The equivalent zip codes are in parentheses below.

The assumptions of the population projections follows:

(1) 1980 Decline: Back Bay (100's) is the most sensitive community to CBD growth and decline. The BTPR used the average of 5% for its ten year projections. This figure was adopted for the decline projection.

South End (700's) is one of the two most sensitive communities to Federal housing subsidy policy. The South End urban renewal project has completed only 1003 dwelling units to date. Only these units were considered as increasing the South End population. (1003/6519=15.4%). Factors decreasing the population were an additional 10% vacancy rate in both the newly constructed subsidized housing and in the existing public housing (15-10=5%).

Roxbury (800's) is the other sensitive community to Federal housing subsidy policy. Roxbury complete housing is only 857 dwelling units. Only these were considered as increasing the Roxbury population (857/31,327= 2.7%). Migration was considered as negative for the first time in a decade. The vacancy rate increased at an assumed 5%, resulting in a decrease in population (2%-5%=3%).

North Dorchester is the most sensitive community to intra-community migration (post-urban renewal). North Dorchester was assumed to increase slightly in Black population to

The result of these projections produces the following matrix of likely futures.

TableIII.4
Population and Income Projections Under Varying Assumptions

Primary Trade Area	Pop.	#fam	less 2999	3000 5999	6000 8999	9000 11999	12,000 14,999	15,000 Over
1970	17393	3884	915	1258	721	507	254	229
1980 Decline	17010	1798	895	1230	705	496	248	224
1980 Trends Extended	17482	3904	920	1264	725	510	255	230
1980 Intensive	17917	4006	942	1296	743	527	262	236
Secondary Trade Area:								
1970	32736	5905	1019	1691	1340	885	497	473
1980 Decline	34774	5476	986	1411	1292	854	480	453
1980 Trends Extended	36843	6035	1040	1734	1370	901	507	483
1980 Intensive	43001	6711	1129	1944	1526	1005	567	540
TOTAL								
1970	53131	9789	1934	2949	2061	1392	751	702
1980 Decline	51784	9274	1881	2641	1997	1350	728	677
1980 Trends Extended	54325	9939	1960	2998	2095	1411	762	713
1980 Intensive	60918	10717	2071	3240	2269	1532	829	776

SOURCE: United Community Services, 1970 Census of Population and Housing Summary Data, UCS, Research Department, 14 Somerset St., Boston, 1971

With these population forecasts, we can now estimate the total disposable income by each neighborhood (i.e., by census tract). The Bureau of Labor Statistics survey of consumption expenditure patterns in cities (1961-1962) provides a set of factors of expenditure for retail category by income. These factors are presented in Table III.5.

(Note that while the Bureau of Labor Statistics has updated its consumption survey in 1972, the results of that survey are still under analysis. No BLS publication of these findings are expected until 1975-1976.)

to in turn increase total population by 1%, but to decrease overall by 5% (1%-5%=4%).

(2) 1980 Trends Extended: Back Bay is assumed to shift to condominiums, with a growth rate of 5%.

South End remains constant in the completion of low-income and moderate income housing, but the vacancy rate decreases.

Roxbury remains fixed in the completion of low and moderate income housing. The vacancy rate decreases by 4%. North Dorchester also decreases its vacancy rate 1%.

(3) 1980 Core Intensive: Back Bay is assumed to shift to both condominiums and to high-rise apartment construction. The growth rate hits 11%.

South End achieves completion of all urban renewal projects under processing and planned (1226/6519 = 18.8%). Housing allowances are introduced and induce a low 1% rehabilitation rate of vacant structures.

Roxbury suceeds in completion of the RAP-UP later phased projects (97/31,327 = 0.3%). Housing allowances are introduced and used to fund rehabilitation of vacant structures provided by Boston's urban homesteading program. (+2%)

North Dorchester takes advantage of a newly created 7 year rehabilitation construction/mortgage finance pro-fr m of the state (3%). Some increased density of Black population is developed from some moderate influx of Blacks.

Table III.5
Retail Category Expenditure Factors by Income

Retail Categories	Average	Under $3000	3000-5999	6000-8999	9000-11999	12000-14999	15000 and +
Convenience Goods							
Drug Stores							
Pharmaceutical drug stores	0.97	1.48	1.19	0.93	0.84	0.67	0.42
Drug stores w traditional lines	1.78	2.71	2.37	1.71	1.47	1.23	0.77
Self-service, multi-line drug stores (excluding liquor)	2.90	4.42	3.55	2.75	2.40	1.99	1.25
Supermarkets and Food Stores							
Supermarkets w limited nonfoods	12.69	21.45	15.57	12.67	10.72	8.83	5.58
Supermarkets with expanded nonfoods	15.23	25.74	18.68	15.21	12.87	10.59	6.70
Discount supermarkets with expanded nonfoods	15.74	26.60	19.31	15.72	13.32	10.95	6.93
Specialty Food Stores							
Delicatessens (fast foods)	0.80	1.35	0.98	0.80	0.71	0.56	0.35
Meat markets	0.70	1.18	0.86	0.70	0.59	0.50	0.31
Fish and seafood markets	0.06	0.10	0.07	0.06	0.06	0.05	0.03
Fruit stores, vegetable markets	0.15	0.25	0.18	0.16	0.13	0.10	0.07
Candy, nut, confectionery stores	0.11	0.19	0.14	0.11	0.10	0.07	0.05
Bakeries	0.23	0.39	0.28	0.23	0.20	0.16	0.10
Liquor stores	1.08	1.02	1.17	1.11	1.07	1.02	0.78
Hardware Stores							
Hardware stores w limited lines (traditional)	0.55	0.54	0.61	0.59	0.53	0.48	0.37
Multi-line hardware stores (but not including extensive plumb-ing, heating, and lumber supplies)	0.72	0.71	0.79	0.77	0.70	0.63	0.49
Convenience Services							
Barber shops	0.38	0.48	0.45	0.40	0.34	0.28	0.18
Beauty shops	0.55	0.77	0.60	0.50	0.53	0.54	0.42
Dry cleaners	0.33	0.50	0.40	0.30	0.29	0.28	0.25
Laundromats (washing, drying only; no dry cleaning)	0.22	0.33	0.27	0.20	0.20	0.19	0.17
Shoe repair shops	0.07	0.11	0.08	0.06	0.06	0.06	0.05
Primary Shoppers Goods							
General Merchandise Stores							
Full-line traditional department stores	7.00	6.65	7.34	7.18	7.18	6.80	5.46
Limited-line traditional department stores emphasizing soft good	5.08	4.83	5.33	5.21	5.21	4.95	3.96
Full-line discount department stores	6.74	6.40	7.07	6.85	6.87	6.49	5.26
Limited-line discount department stores	5.21	4.95	5.47	5.35	5.36	5.06	4.06
Full-line traditional variety stores w limited apparel	1.09	1.04	1.15	1.15	1.12	1.05	0.85
Super variety stores with expanded apparel	1.36	1.29	1.43	1.40	1.40	1.32	1.06

Retail Categories	Average	Under $3000	3000-$5999	6000-$8999	9000-11999	12000-14999	15000 and +
Variety stores, limited price and limited lines	0.81	0.77	0.85	0.83	0.83	0.79	0.63
Major Apparel Stores							
Men's clothing and furnishings stores	0.61	0.45	0.63	0.63	0.63	0.60	0.54
Women's clothing and furnishings stores	1.21	1.48	1.28	1.14	1.22	1.22	1.06
Children's and infants' clothing stores	0.10	0.12	0.11	0.09	0.10	0.11	0.09
Family clothing stores	0.59	0.48	0.62	0.65	0.61	0.52	0.34
Women's shoe stores	0.51	0.57	0.53	0.52	0.52	0.50	0.36
Men's and boys' shoe stores	0.40	0.30	0.41	0.42	0.41	0.39	0.35
Family shoe stores	0.37	0.35	0.39	0.38	0.38	0.36	0.29
Other Specialty Stores							
Book and Stationery stores	0.16	0.17	0.16	0.17	0.16	0.15	0.13
Camera and photographic supply stores	0.08	0.09	0.08	0.08	0.08	0.08	0.07
Cigar stores and stands	0.06	0.06	0.07	0.06	0.06	0.06	0.04
Gift, novelty and souvenir shops	0.09	0.10	0.09	0.09	0.09	0.09	0.07
Hosiery and lingerie shops	0.12	0.10	0.13	0.13	0.13	0.11	0.07
Jewelry stores	0.34	0.38	0.36	0.35	0.35	0.33	0.24
Luggage and leather goods store	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Millinery shops	0.03	0.02	0.03	0.03	0.03	0.03	0.02
Music stores	0.16	0.17	0.16	0.17	0.16	0.15	0.13
Sporting goods stores	0.15	0.16	0.15	0.16	0.15	0.14	0.12
Florist shops	0.17	0.18	0.17	0.18	0.17	0.17	0.14
Optical goods stores	0.12	0.13	0.12	0.13	0.12	0.12	0.10
Toy and hobby stores	0.06	0.06	0.06	0.06	0.06	0.06	0.05
Secondary Shoppers Goods							
Furniture and household furnishings stores	1.24	1.01	1.42	1.31	1.25	1.08	0.73
Household appliances, television and radio stores	1.00	1.02	1.21	1.14	0.87	0.65	0.52
Floor coverings stores	0.21	0.23	0.21	0.22	0.21	0.21	0.17
Passenger car dealers	8.76	10.37	10.30	9.60	8.59	7.21	4.29
Tire, battery and accessory stores	0.47	0.56	0.56	0.51	0.46	0.39	0.23
Paint, glass and wallpaper stores	0.19	0.19	0.21	0.21	0.19	0.17	0.13
Other Goods and Services							
Gasoline service stations, with limited accessories	3.94	4.83	4.80	4.40	3.73	3.02	1.54
Eating and drinking places	3.01	4.00	3.20	2.89	3.01	2.91	2.41

Source: Bureau of Labor Statistics, 1961 Consumer Survey, U. S. Dept.of Labor

We multiply the projections by the factors of consumption expenditure to get the disposable income by trade area:

Table III.6
Disposable Income Projections Under Varying Assumptions
(in 000's of 1970 $s)

	under $2999	$3000 5999	$6000 8999	$9000 11999	$12000 14999	$15000 and +	TOTAL
Primary Trade Area:							
1970	$1372	$5661	$5407	$5323	$3429	$4007	22,001
1980 Decl	1372	5535	5287	5208	3348	3920	24,671
1980 Ext	1380	5688	5437	5355	3442	4025	25,328
1980 Int	1413	5832	5572	5533	3537	4130	26,018
Secondary Trade Area:							
1970	$2901	$13270	$15457	$14616	$10138	$12285	$68,668
1980 Decl	2821	11884	14977	14175	9828	11847	65,534
1980 Ext	2940	13491	15713	14815	10287	12477	69,724
1980 Int	3106	14500	17017	16086	11191	13580	89,061
Sub Total:							
1970	$4273	$18931	$10865	$19939	$13567	$16292	$93,869
1980 Decl	4194	17419	20265	19383	13176	15767	80,204
1980 Ext	4320	19179	21150	20170	13729	16502	95,052
1980 Int	4519	20332	22590	21619	14728	17710	101,499

Total:

1970	$68,668
1980 Decl	65,534
1980 Ext	69,724
1980 Int	75,561

SOURCE: United Community Services, 1970 Census of Population and Housing Summary Data, UCS, Research Dept., Boston, 1971

The total disposable income decreases by 4.6% for the 1980 Core Decline projection; it increases by 1.5% for the 1980 Trends Extended projection; and, it increases by 10.0% for the 1980 Core Intensive projection.

The Market Segmentation of the Trading Area

The racial distribution of the trade area is as follows:

Table III.7
Racial Distribution of Trade Area (1970)

Community	Population	Black	White	% of Black
Primary Trade Area				
Roxbury	17,395	13,944	3,192	80.2
Secondary Trade Area				
Back Bay	15,739	1,993	13,315	12.7
South End	6,519	3,942	2,296	60.5
Mission Hill/ Parker Hill	13,932	9,908	3,779	71.1
No Dorchester	2,602	956	1,547	36.7
Subtotal	38,792	16,799	20,964	43.3
TOTAL	56,187	30,743	24,156	54.7

SOURCE: United Community Services, 1970 Census of Population and Housing Summary Data, UCS Research Dept., Boston, 1971

In the secondary trade area, 40.6% of its population is less than 13% Black; 47.2% has less than 37% Black. The secondary trade area as a whole, has only 43.3% Black population, compared to 80.2% Black population of the primary trade area. This is a difference of factor 2.

Table III.8
Age Distribution of Trade Area (1970)

Primary Trade	Pop.	5 and under	6-20	21-64	64+	% of 21-64	% of 64 +
Roxbury	17,395	2547	5727	7167	4286	41.2	11.2
Secondary Trade							
Back Bay	15,739	426	6715	7013	1578	44.6	10.0
South End	6,519	455	1075	4082	907	62.6	13.9
Mission Hill/ Parker Hill	13,932	1766	3926	6714	1526	48.2	11.0
No Dorchester	2,602	367	772	1188	275	45.7	10.6
subtotal	38,782	3,014	12,488	16,621	4,286	42.9	11.1
TOTAL	56,177	5,561	18,215	23,788	6,236	42.3	11.1

SOURCE: United Community Services, 1970 Census of Population and Housing Summary Data, UCS Research Dept., Boston, 1971

The neighborhoods within the trade area are remarkably constant over age distribution, with the exception of the South End. This latter neighborhood has relatively more adults vs. an average of

42.3% for the whole trade area. The primary trade area has almost the same age distribution as the secondary trade area, with 41.2% adults, 11.1% elderly vs. 42.9% adult and 11.1% elderly, respectively.

The Similarity of Black and White Consumption Patterns

A market survey made in Roxbury in 1967 developed a composite consumer expenditure pattern by race, (i.e., for blacks) but not by income:

Table III.10
Roxbury Consumer Expenditure Distribution

Food	20.0	
Eating & Drinking Establishments	5.0	
Drugs	2.5	
Furniture & Appliances	3.0	
Automobile	7.5	
Automobile Services	3.5	
Apparel	4.0	
Shoes	2.0	
Hardware, Building Materials	2.5	
General Merchandise	10.0	
Other Goods and Services	5.0	65%
Rent	20	
Taxes, Savings, Etc.	15	
TOTAL		35%
		100%

SOURCE: Miller, Melvin, Consumer Attitudes and Practices Survey, Urban Research Inc., Boston, 1969. Market Statistisc, Inc., Arithmetics of Negro Spending, Bernard Howard Co., 1964. [32]

This expenditure pattern, however, fails to break down retail categories into well-defined retail stores suitable for a market feasibility study.

A more detailed consumer expenditure pattern for urban families was calculated from a national survey of urban families in all major cities by the Bureau of Labor Statistics in 1962. The results of this consumer expenditure pattern vary according to income but not race (see Table III.5).[33]

[32] Miller, Melvin, Center City Business and Investment Opportunities in Central Boston, Urban Research, inc., Roxbury, Mass, Sept 1973

[33] This analysis should be rechecked with the results of that 1972 survey.

For a given income, black and white consumption patterns are similar. The median household income of Roxbury in 1967 in the Center City Profile was $4,672 per year. Compare this with the consumer expenditure factors of the $3000-$5,999 income bracket of the Bureau of Labor Statistics survey. Variance of consumer expenditures due to race can be almost completely explained by variance due to income alone.

(Black and white consumption patterns do vary, but we are assuming that they vary by too little to make a substantial difference in our analysis.)

Current Market Penetration of Retail Consumption in the Trade Area

The market share of Dudley Square business in the retail sector of the trade area of Dudley Square is calculated using data from the Dun and Bradstreet's Market Indicators (see Table III.10). "Market share" is defined as the ration of present sales of a given business or set of businesses over the total sales for all businesses (here estimated as total retail expenditures) in a given industrial category (here retail). The set of business are those located in Dudley Square commercial area. The retail categories with the most market share of local businesses have the least potential for new investment (see Appendix I-9 for a list of overcrowded or nearly fully penetrated retail categories). These retail categories are ignored. The retail categories with the least market share have the greatest potential for new investment. These high potential stores include: supermarkets and food stores at .28 market share; drug stores at .27 market share; junior department stores at .10 market share, gasoline service stations at .06 market share; and passenger car dealers at .01 market share. Two others have potential, but no information: hardware stores(.18) &specialty(.11).

Table III.11

Dudley Square Market Share of Retail Consumption by BLS Code

Retail Category	Sales[1]	Sales Potential[2]	Market Share
Drug Stores	600,000	2,247,373	0.27
Supermarkets and Food Stores	3030,000	9,717,175	0.31
Specialty Food Stores[3]	144,045	1,277,189	0.11
Meat and fish and seafood markets	50,000	472,739	0.11
Fruit stores and vegetable markets[4]	94,045	94,045	1.00
Candy, hut and confectionery stores	-	69,269	0.0
Bakeries	-	142,418	0.0
(Delicatessens	-	498,718	0.0)
Liquor	700,000	715,350	0.98
Hardware Stores	83,400	473,017	0.18
Convenience Services	-	1,007,088	0.00
Primary Shopper Goods	7,000	5,058,645	0.001
Full-line discount department stores	7,000	4,513,907	0.002
Limited-line discount department stores	7,000	3,508,857	0.002
Variety stores, limited price and limited lines	-	544,738	0.0
Major Apparel Stores	1,627,354	2,134,668	0.71
Men's clothing and furnishings stores	415,201	415,201	1.00
Women's clothing and furnishings stores	534,400	825,018	0.65
Children's and infants' wear stores	-	69,133	0.0
Family clothing stores	377,753	377,753	1.00
Women's, men's and boy's shoe stores	300,000	717,563	0.42
Other Specialty Stores	175,667	1,048,239	0.17
Book and stationery stores	-	106,418	0.0
Camera and photographic supply stores	-	54,246	0.0
Cigar stores and stands	-	40,257	0.0
Gift, novelty and souvenir shops	54,000	59,910	0.90
Jewelry stores	111,667	229,087	0.49
Luggage and leather stores	-	13,947	0.0
Millinery shops	19,171	19,171	1.0
Music stores	10,000	107,502	0.92
Sporting goods stores	-	100,602	0.0
Florists	-	115,417	0.0
Optical goods stores	-	82,158	0.0
Toy and hobby stores	-	40,159	0.0
Hosiery and lingerie shops	-	79,365	0.0

Retail Category	Sales	Sales Potential	Market Share
Household appliance, television & radio stores	275,000	626,224	0.44
Floor covering stores	50,000	142,069	0.35
Passenger car dealers	40,000	5,691,359	0.007
Tire, battery, & accessories	159,000	305,832	0.52
Paint, glass & wallpaper store	127,404	127,404	1.0
Other Goods & Services			
Gasoline service stations w limited accessories	140,000	2,439,361	0.06
Eating & drinking places	1,365,000	1,957,749	0.70
Miscellaneous retail stores not elsewhere classified	230,000		
TOTAL	13,656,511	6,770,876	.243

SOURCE: Market Indicators, Dun & Bradstreet, Dec., 1973 Summary

1. Sales figures are from the Dun & Bradstreet Market Identifiers, Dec., 1973.
   All retail categories with a total sales of businesses of that category exceeding that of the sales potential within the trade area are listed only at 100% market share.

2. Sales potential figures are interpolated between the 1970 and the 1980 Trends Extended Estimate.

3. This is the total market share.

Characteristics of Present Grocery Store Patronage: The Neglected Market Segments

Let us define the income brackets as:"very poor" under $3000 per year:"moderate" between $3000/year - $9999/year; and"middle class" over $10,000/year.

The income distribution of grocery store patronage follows:

Table III.I2
Income Distribution of Major Store Patronage
(as a percentage of each store)

Stores	Under $3000	$3000 5999	$6000 9999	$10,000 14,999	$15,000 and +	No Answer
Dudley Square						
Blair's	15	27	33	14	4	6
Finast	26	30	29	9	1	5
Folsom's	27	29	32	6	0	6
Average all 79 str	21	22	25	16	8	8

SOURCE: Circle Special Mobility Study, BTPR,1972

The results of the survey demonstrate that the major grocery stores of the trading area serve primarily the moderate income class of the trade area. Those major stores that do serve these extremes of income are outside the trade area.

Folsom's has the greatest percentage of poor patrons of all major Roxbury grocery stores at 27%. Folsom's also has the greatest percentage of moderate income patrons at 61%. Blair's has the lowest percentage of poor patrons at 15%. Supermarket has 20% of middle income patrons.

The racial composition of the patrons of the major stores of the Dudley Square area is as follows:

Table III.13
Racial Composition of Major Store Patronage

Store	White	Black	Other	No Answer
Blair's	5	69	4	17
Finast	-	99	-	1
Folsom's	-	49	6	45 [1]
AVERAGE	35	53	5	6

SOURCE: Circle Special Mobility Study, BTPR,1974

The survey demonstrates that Finast has the greatest black patronage at 99%, and Blair's at only 69%. Folsom's has only a 49% black patronage. Folsom's has a lower percentage of black patrons than the average of 53%, and a higher percentage of white patrons than the average of 35%. This is due to the large number of white patrons that live in this part of the South End.

The age distribution of major stores of the Dudley Square area is as follows:

1 No explanation is given in the survey results for this high "no answer" result.

Table III.14
Age Distribution of Major Store Patronage

Store	17-24	25-34	35-54	55-64	64-+
Blair's	13	30	36	8	14
Finast	9	45	37	8	2
Folsom's	7	41	36	9	7
Average	16	33	33	9	9

SOURCE: Circle Special Mobility Study, BTPR,1974. Blair's is the only store with a large elderly patronage at 22%.

No store has a large youth patronage. Both Finast and Folsom's have a large middle age patronage, the former at 82% and the latter at 77%.

Therefore, the key neglected market segments are the youth and the very poor. This should be key target market segments for a new shopping center.

Projected Sales Potential Under Varying Assumptions

We can now project the 10 year spending forecas of the trading area. The projected disposable income (Table III.5) times the consumer expenditure factor (Table III.9) yields the projected retail expenditure for each category (Table III.15). These projections are based on the three alternative futures of Roxbury.

Next, we can estimate potential market penetration of each retail category based on past behavior.

Utilizing the present market share estimates of the Dudley Square trade area by BLS Code (see Table III.10) and by SIC Code (See Appendix), we estimate the sales potential of stores of like retail subsector of the same major retail grouping. The BLS market shares tend to produce lower estimates of potential market share than does the SIC market shares. The sales forecast is for store or stores. The results appear in Table III.15.

Table III.15
Projected Sales of Potential Retail Stores
Under Varying Assumptions (in 1980)

Store	Market Share	Core Decline	Trends Extended	Core Intensive
Drug Stores	.15	246,354	263,586	284,784
	.11 (net)	180,660	193,296	208,842
Supermarkets	.17 (SIC)	1,561,483	1,669,702	1,803,810
	.15 (SnS)	1,377,779	1,473,267	1,591,597
	.11 (ret)	1,010,371	1,080,396	1,167,171
Specialty Food Stores				
Meat and fish Market	.17 (SIC)	45,082	48,206	52,078
	.11 (ret)	28,689	30,676	33,141
Candy, nut and confectionery	.11 (ret)	7,134	7,701	8,319
	.07 (SIC)	4,540	4,901	5,294
Bakeries	.11 (ret)	14,812	15,834	17,106
	.07 (SIC)	9,426	10,076	10,886
Convenience Services				
Dry cleaners	.115 (½Ret)	23,554	25,159	27,890
	.27 (ret)	55,304	59,067	65,481
	.23 (Ret)	47,116	50,316	55,780
Laundromats	.115 (½Ret)	14,607	17,014	18,395
	.27 (ret)	34,295	39,946	43,189
	.23 (Ret)	29,215	34,029	36,791
Shoe repair	.115 (½Ret)	4,821	5,147	5,565
	.27 (ret)	11,319	12,084	13,064
	.23 (Ret)	9,643	10,294	11,129
Primary Shoppers Goods				
Department stores	.15 (sns)	642,243	684,012	740,311
	.115 (½Ret)	492,386	524,409	567,572
	.23 (Ret)	984,773	1,048,820	1,135,144
Variety store	.15 (sns)	105,137	111,965	121,179
	.115 (½Ret)	80,606	85,839	92,904
	.23 (Ret)	161,210	171,679	185,809
Major Apparel Stores				
Children's and infants clothing stores	.23 (Ret)	15,086	16,059	17,391
	.50	32,795	34,911	37,807
	.71 (ret)	46,569	49,513	53,685
Women's shoe stores	.29 (Δret)	93,512	99,575	107,747
	.23 (Ret)	74,165	78,973	85,454
Men's and boys' shoe stores	.29 (Δret)	74,823	79,652	86,238
	.23 (Ret)	59,342	63,172	68,396
Other Specialty Stores				
Books and stationery stores	.09 (1ret)	9,189	9,779	10,583
	.17 (ret)	17,357	18,471	19,990
	.41 (SIC)	41,860	44,458	48,212
Camera and photographic supply stores	.09 (1ret)	4,637	4,934	5,340
	.17 (ret)	8,759	9,320	10,087
	.41 (SIC)	21,125	22,478	24,328
Cigar stores and stands	.17 (ret)	6,102	6,917	7,484
	.23 (Ret)	8,491	9,358	10,126

Store	Market Share	Core Decline	Trends Extended	Core Intensive
Hosieryand lingerie shops	.17(ret)	12,797	13,637	14,757
	.23(Ret)	17,313	18,449	19,966
Luggage and leather goods stores	.17(ret)	2,228	2,456	2,566
	.23(Ret)	3,015	3,322	3,472
Sporting goods stores	.17(ret)	16,242	17,286	18,707
	.23(Ret)	21,975	23,386	25,309
Florists	.17(ret)	19,142	19,831	21,464
	.23(Ret)	25,898	26,830	29,039
Optical goods stores	.17(ret)	13,269	14,117	15,279
	.23(Ret)	17,952	19,099	20,671
Toy and hobby stores	.17(ret)	6,196	6,900	7,468
	.23(Ret)	8,383	9,336	10,104
Other Goods and Services				
Passenger car dealers	.23(Ret)	1,234,755	1,323,081	1,435,798
	.28	1,508,927	1,610,708	1,747,920
	.35(ped)	1,886,158	2,013,384	2,184,950
Gasoline service stations	.23(Ret)	545,958	583,368	630,646
	.28	664,644	710,187	767,742
	.35(ped)	830,806	887,733	959,678

Key to Market Share Assumptions

"ret" = market share for retail subsector
"SIC" = market share for SIC category
"RET" = market share for all retail sector
"½RET" = ½ of market share for all retail sector
"SnS" = market share of largest grocery store, Stop & Shop for retail subsector of supermarkets
"Δret" = market share of the difference between that average for the retail subsector and that captured for the particular category
"1ret" = market share of lowest category in the particular retail subsector.

Now that we have estimated those retail categories with substantial sales potential, we need to identify those retail categories with potential financial feasibility. To do this, we estimate the size of the potential retail enterprise and compare this size to the empirical size of like retail enterprises in other community shopping centers. The unit of this comparison is gross leasable area in square feet (GLA).

The factor of annual sales volume in dollars per GLA in square feet appears in Table III.16. The median square footage and the middle range of that GLA for a given retail category appears in Table III.17. This range is for market level profit rates, ~~and other~~

Table III.16

Average Sales Volume/Square Feet for Community Scale Shopping Centers

Store	Organization	Av Sales/Sq Ft
Drug Store	national chain	69.74
	local chain	63.28
	independent	66.67
Supermarket	national chain	105.11
	local chain	139.67
	independent	157.89
Specialty Food Stores		
Meat and fish markets	national chain	no information
	local chain	97.46
	independent	57.38
Candy, nut and confectionery	national chain	76.34
	local chain	53.13
	independent	60.08
Bakeries	national chain	no information
	local chain	61.62
	independent	42.88
Delicatessens	national chain	no information
	local chain	no information
	independent	53.92
Convenience Services		
Dry cleaners	national chain	26.91
	local chain	35.79
	independent	29.66
Laundromats	national chain	no information
	local chain	16.67
	independent	26.23
Shoe Repair	national chain	no information
	local chain	34.87
	indepndent	47.57
Primary Shoppers Goods		
Department stores	national chain	51.99
	local chain	49.90
	independent	40.65
Variety stores	national chain	32.37
	local chain	36.97
	independent	38.75
Major Apparel Stores		
Children's and infants' clothing stores	national chain	no information
	local chain	37.64
	independent	81.48
Women's shoe stores	national chain	54.45
	local chain	63.37
	independent	42.00
Men's and boys' shoe stores	national chain	no information
	local chain	no information
	independent	54.98

Store	Organization	Av Sales/Sq Ft
Other Specialty Stores		
Boo ks and stationery stores	national chain	no information
	local chain	63.37
	independent	52.20
Camera and photographic supply stores	national chain	no information
	local chain	54.37
	independent	76.25
Cigar stores and stands	national chain	no information
	local chain	no information
	independent	56.78
Hosiery and lingerie stores	national chain	33.45
	local chain	58.35
	independent	55.06
Luggage and leather goods stores	no information available	
Sporting goods stores	national chain	no information
	local chain	39.95
	independent	53.51
Florists	national chain	no information
	local chain	42.13
	independent	46.90
Optical goods stores	national chain	no information
	local chain	44.74
	independent	53.35
Toys and hobby stores	national chain	no information
	local chain	no information
	independent	46.30
Other Goods and Service		
Passenger car dealers	national chain	43.08
	local chain	40.00
	independent	53.79
Gasoline service stations	no information available	

SOURCE: The Dollars and Cents of Shopping Centers, 1972
Urban Land Institute, 1972

We can now evaluate our market feasible investment package. By dividing this simple conversion factor (from Table III.16) into the projected sales under varying assumptions (from Table III.15), we get an estimated gross leasable area (see Table III.17). We compare the converted retail expenditures (now in square feet) to the medium range of existing stores. Those of sufficient size are accepted. Those of marginal size are conditionally accepted based on sufficient subsidy and/or non-profit operation. Those of too small a size are rejected.

Table III.17
Projected Areal Size of Retail Stores Under Varying Assumptions

Store		Range:Median & Middle Range	Core Decline	Trends Extended	Core Intensive	Evaluation
Drug Store	nat	10,060 7200-12,800	2590	2772	2995	reject
	loc	9,100 1800-12,077	2855	3055	3300	reject
	ind	5832 4004-8084	2710	2899	3132	reject
Supermarket	nat	19,600 16,455-23,980	13,108	14,016	15,142	reject
	loc	20,395 16,500-24,845	9,865	10,548	11,395	reject
	ind	18,000 8,199-24,877	8,726	9,330	10,080	accept
Specialty Food Stores						
Meat & Fish Markets	loc	2,069 1900-2237	462	495	534	reject
	ind	1200 755-1470	786	840	908	accept
Candy, nut & confection.	nat	750 599-849				
	loc	902 604-1200	85	92	100	reject
	ind	750 540-1170	76	82	88	reject
Bakeries	loc	1111 833-1347	153	165	177	reject
	ind	1170 1200-2288	220	225	254	reject
Convenience Services						
Dry cleaners	nat	1500 1250-1500				
	loc	1800 1219-2500	1316	1406	1559	accept
	ind	2000 1236-2425	1589	1696	1881	accept

Laundromats	loc 1200 807-1809	1753	2041	2207	accept
	ind 1709 1200-2200	1114	1297	1403	accept
Shoe repair	loc 674 600-700	277	295	319	reject
	ind 620 471-764	203	216	234	reject
Primary Shoppers Goods Junior dept. stores	nat 50,100 17565-70000	12,353	13,157	22,941	on condition of population
	loc 27,786 17391-39495	12,871	13,707	20,025	accept
	ind 20,542 15750-29365	15,789	16,827	19,105	accept
Variety Stores	nat 20,000 12850-26756	3,248	3,459	3,744	reject
	loc 9,000 4000-14577	2,844	3,029	3,278	reject
	ind 4,079 3359-4624	2,713	2,889	3,127	on condition
Major Apparel Stores Childrens & Infants clothing	ind 1,200 1101-1239	402	428	464	reject
Women's shoe store	nat 4,755 2910-5000	1362	1450	1569	reject
	loc 3,000 1921-3191	1170	1246	1340	reject
	ind 2375 1570-2688	1766	1880	2035	accept
Men & Boys shoe store	ind 1,390 1235-2147	1079	1149	1244	accept

Stores	Range:Median &MiddleRange	Core Decline	Trends Extended	Core Intensive	Evaluation
Other Specialty Stores					
Books and stationery stores	local:4540 1145-4824	271	288	408	reject
	indep:1200 750-2801	332	354	496	reject
Camera and photographic supply stores	local:2000 1350-2200	161	171	186	reject
	indep:1200 713-1495	115	122	132	reject
Cigar stores and stands	indep: 804 305,1074	85	122	132	reject
Hosiery and lingerie stores[1]	nat: 3375 2200-5719	383	408	441	reject
	local:3737 2345-6435	219	234	253	reject
	indep:2200 1467-3253	232	248	268	reject
Luggage and leather sporting goods	no information available				
Sporting goods stores	local:5000 2181-6064	406	433	468	reject
	indep:2608 1703-3240	304	323	350	reject
Florists	local:1264 300-2296	454	471	509	accept
	indep: 991 627-1407	408	423	458	reject
Optical goods stor (ie,optometrist)	local:1061 825-1462	297	316	342	reject
	indep: 715 588-1096	249	265	287	reject
Toy and hobby shop[2]	local:2928 995-3900	141	158	171	reject
	indep:2448 948-5978	142	158	171	reject
Secondary Shoppers Goods					
Passenger car dealers	nat: 7000 6000-7956	35,026	37,389	40,574	accept
	local:6903 4850-7477	37,723	40,268	43,698	accept
	indep:3200 2255-6800	28,052	29,944	32,495	accept
Other Goods and Services					
Gasoline service stations	no information available				

Source: The Dollars and Cents of Shopping Centers: 1972

1. "Ladies specialty stores" used for estimation of "hosiery and lingerie stores" sales volume/square feet, and areal size range.

2. Average of $43.75 sales volume/square feet for estimation of areal size of local chain "toy and hobby shops" under varying assumptions of future sales.

Now , for stores in ghettoes, GLA of a slightly lower square footage corresponding to a lower profit rate and lower prices may be feasible. The potential GLA is estimated by several market shares of each retail expenditure forecast by the sale per square foot. The market share chosen for this estimate was, in the case of three possible market shares, the middle estimate; and in the case of two possible market shares, the lower estimate. The results appear in Table III.17.

Estimates of the feasibility of retail categories are made for the three major types of organization: national chain,local chain and independent.

The results of this initial identification lead to the acceptance of 10 retail categories, and a rejection of the remaining 13. All ten retail stores can be independents, stores most likely to be lack-owned and managed. Two retail stores are accepted on condition of favorable futures.

Direct Recapture of Income Leakage in the Retail Sector

The total feasible market capture of the retail sector estimated in Table III.15 is $3,551,171 (this assumes total penetration of the potential sales market identified in Table III.17, and a maximum of 15% market share per store). The total sales potential of the Dudley Square retail market, using the figure of Table III.5 is $69,724.000. This yields a potential recapture of about 5.0%. The total of the income of retail business lost to leakage according to Table III.10 is .76 x the total disposable income in 1980 (from Table III.5) is $52,990,240. Therefore, the potential recapture of the income lost due to leakage is 6.7%. The 5% gain is substantial compared to the present market capture of 23%.

Impact of Development of Dudley Square on Neighborhood Retail Development

The development of the community scale commercial center in Dudley Square will severely limit the retail development of neighborhood centers in the primary trade area.

We use the same methodology for analyzing the market feasibility of neighborhood retail development as that used for analyzing community retail development. The trade area is that of the primary trade area of the community scale retail area. A different set of retail stores "agglomerate" for a neighborhood center than for a community center. And a different, smaller size of retail stores will survive in a neighborhood scale center than in a community scale one. The retail stores, along with the sales per square foot,appear in Table III.18. The evaluation appears in Table III.19.

Based on this evaluation, only the following stores are market feasible: bakeries, possibly a junior department store (assuming that none is built in Dudley), a men's and boy's shoe store, and an automobile supplies store, a book store and a coin operated laundry.

Location of these retail stores is made more difficult by the splitting of the prime market neighborhoods on opposite sides of Dudley Square, for example, the public housing projects.

Just as Dudley Square commercial center would suck away potential development in the primary trade area, so would development of Grove Hall. Spine development along the proposed Blue Hill Avenue would be, therefore, undercut by node development at the transit stations of the subway.

Table III.18
Average Sales Volume/Square Feet for Neighborhood Shopping Centers

STORE	ORGANIZATION	AV.SALES/SQ.FEET
Meat, Poultry, Fish	Local Chain	no information
	Independent	146.68
Speciality Food	National Chain	no information
	Local Chain	62.86
	Independent	54.05
Bakeries	National Chain	no information
	Local Chain	no information
	Independent	47.05
Candy, nuts	Local Chain	no information
	Independent	56.35
Junior Dept. Store	National Chain	38.24
	Local Chain	
	Independent	no information
Children's Wear	Local Chain	59.57
	Independent	50.34
Men's & Boy's Shoes	National Chain	no information
	Independent	no information
Automobile	National Chain	41.17
	Local Chain	38.47
Books & Stationery	National Chain	no information
	Local Chain	no information
	Independent	34.85
Hobby Shop	National Chain	no information
	Local Chain	no information
	Independent	28.58
Tobacco	National Chain	no information
	Local Chain	no information
	Average	38.20
Sporting Goods	Local Chain	no information
	Independent	39.36
Camera	National Chain	no information
	Local Chain	no information
	Independent	45.06
Optometrist	Independent	58.81
Ladies Specialty	National Chain	22.14
	Local Chain	no information
	Independent	60.46

SOURCE: The Dollars and Cents of Shopping Centers, 1972 Urban Land Institute, 1972

Table III.19
Neighborhood Retail Development:Primary Trade Area

Retail Category	Organization	Core 1980 Dec.	Trends 1980 Ext.	Core 1980 Ext.	Evaluation
Meat, Poultry Fish:	Independent 1088-1968	1211	1124	1152	reject
Specialty Food:	Local Chain 930-2649	419	420	430	reject
	Independent 690-1475	487	488	500	reject
Bakeries:	Local Chain 900-1400	1342	1345	1379	accept
	Independent 998-1800	1149	1152	1180	unlikely conditional on subsidy
Candy,nuts:	Independent 608-1550	468	469	480	reject
Jr. Dept. Store:	National Chain	-0-	-0-	-0-	
	556,312,615	-0-	-0-	-0-	
	Local Chain 7313-36,789	6175	7307	8469	accept on condition of population forecast
Childrens Wear:	Local Chain 2083-2822	418	429	441	reject
	Independent 1392-2517	495	508	522	reject
Men&Boy's shoes:	Average	2476	2531	2600	accept
Auto:	National Chain 6000-7385	43,124	44,557	45,862	accept
	Local Chain 4000-5409	46,150	47,577	49,081	accept
Books & Stationery:	Independent 1005-1750	1108	1138	1169	accept
Tobacco:	(average) 1005-1750	381	392	402	accept
Hobby Shop:	Independent	504	517	532	reject
Flowers:	Independent 685-1530	516	542	509	reject
Sporting Goods:	Independent 1070-1950	919	943	969	reject

Camera:	Independent 980-1211	431	443	456	reject
Coin Laundry:	Local Chain 1458-1500	2037	2044	2124	accept
	Independent 1260-1800	1460	1468	1564	accept
Optometrist:	Independent 832-1084	501	516	529	reject
Ladies Spec.:	National Chain 3036-3175	1294	1329	1365	reject
	Independent 1080-2200	473	486	500	reject

SOURCE: Dollars and Cents of Shopping Centers: 1972
Urban Land Institute, 1972

Potential Wholesale Development

1. Methodology: In a menner like that of the analysis of potential retail development, we can analyze the potential for wholesale development. The purchase of goods by the new retail stores may provide a substantial, if not a total, guaranteed market for the sale of goods of new wholesale stores. If this guaranteed market is large enough, new wholesale development is feasible.

To calculate this potential, the projected sales of new retail stores is categorized by those over $1 million. The sales of existing wholesale stores is summed by the same categories. The data source is the Dun & Bradstreet census: see Table III.20-21). The wholesale stores are broken down for total market sales, range and average size.

The results show that automobile supplies, of average size of $135k compared to a sales projection of auto sales of $1.3m, and food distributors, of a small size of $250kcompared to a sales projection of $1.5m, are strong candidates. The former may survive through just the one auto dealership; the latter would require several shopping markets of large sales volume to support adequate sales.

Further research is required.

Table III.20
Size of Automotive Supply and Services by Sales (SIC 75)

Size	Number	Average Sales
0-$100k	13	
$101k-200k	3	
$201k-300k	3	
$301k-400k	2	
Total Sales $2828k	÷ 21	= 135k

SOURCE: Dun & Bradstreet Market Indicators, December, 1973

Similarly, for grocery wholesale, we have:

Table III.21
Size of Grocery Wholesale Stores by Sales (SIC 514)

Size	Number	Average Sales
$10k-250k	7	
$251k-500k	-0-	
$501k-1m	6	
$1m-5m	8	
$5m-50m	4	
Total Sales 115 m	÷ 25	=46m

SOURCE: Dun & Bradstreet Market Indicators, December, 1973

2. The Plan: The plan for wholesale development, then, is for the investment into an automobile supplies wholesale store of size around $100k in sales, and into a grocery wholesale store of size around $250k in annual sales. There may be more than one such store in each category. Type of supplies and type of grocery is yet to be determined.

Summary Program Recommendations for Commercial Investment

In summary, the following recommendations are made:

Program Recommendation 1: That Circle Venture Capital Fund consider seriously invesment into the following community-scale retail stores: a large size passenger car dealership(s), a medium size supermarket, meat market, junior department store, women's shoe store, men's and boy's shoe store, dry cleaners, laundromat, and a gasoline service station.

Program Recommendation 2: That Circle Venture Capital Fund conduct futher market research into the follwoing wholesale stores as potential investments: food wholesale, and automobile supplies wholesale.

Further cost/benfit analysis is required of this intermediate investment package.

CHAPTER IV:

Joint Development: A Preliminary Site Analysis

The Application of Principle IV:

"Both private and public investment and public subsidy must be tied to place";

and of Principle V:

"First, land development, and second, capital formation, are used as a trigger for a sequence of investment".

Introduction

In the last chapter, we examined the implications of the theory for commercial development. The result was an intermediate set of recommendations for a commercial investment package. In this chapter, we will examine the implications of the theory for land development. The result will be recommendations for alternative land sites for the retail investment package.

PART I: The Theory

This chapter applies principle 4 (i.e., public investment in place) and parts of principle 5 (i.e., land development as a trigger for a sequence of investment) to land development.

Land Development in the Ghetto

Land development is perceived as the key trigger mechanism to spur ghetto economic development. It is the means of defining what the "turf" of the ghetto community is. From the boundary definition we turn next to the need for increased residential ownership of its occupants as well as increased commercial ownership and development of the goods and services to provide to its occupants. Both residential and commercial development (as well as service and industrial development) require land development of the community.

Land use formation should be under a meaningful degree of control by the organizations and institutions of the community's residents.

Unfortunately, there are few means and few programs established (or remaining) which provide a tool for land development and its influence by community institutions, particularly in the private land market (of this we will say more in Chapter V). The one major actor to whom ghetto community development institutions can turn to and

influence to intervene in the private land market is the government.

The government affects the ghetto land market in a number of ways, but for our purposes, we shall look at one specific type of intervention due to public capital construction.

External Economies of Public Capital Construction

Public investment is particularly capital construction provides external economies, which are often lost to the disbenefit of ghetto residents. The benfits are the potential increase in land values, the assembly of linked commercial (and other industrial) enterprises of agglomeration economies and the control over the ownership of businesses to be located on the land on which the capital investment is made. While these benefits are not lost to the wider community that is governed, it is lost to the community which most needs it. That is, there is an inequity of the distribution of these external benefits. Increasing land values accrue to non-residents landowners; the commercial enterprises that purchase the land are often those that lack the present or potential linkages to the locally-owned enterprises of the ghetto community; and, the new businesses may be owned by non-residents who choose to take profits out of the ghetto community rather than to distribute or to reinvest that profit into further ghetto development. In sum, the private land market in the ghetto operates to divert the potential benefits of external economies of public capital investment out of the ghetto economy.

Similarly, the costs of land development including the cost of land acquisition, working capital start-up or expansion costs, and the operating expenses of ghetto enterprises are greater than that outside the ghetto. That is, the operation of the private land market in the ghetto provides in part a cost barrier to entry by

new ghetto enterprises, particularly those that are community-controlled or community-supported.

Public capital investment could provide a subsidy of this increased marginal cost of land development to support ghetto land development by community institutions.

Thus, by the combination of public intervention in the land market to capture external benefits of capital investment and of public subsidy to lower the higher marginal costs, public action can induce land development in the ghetto for the benefit of its residents.

To put this theme in terms of our theory of ghetto economic development, we effectuate principle I (i.e., SOC-DPA process) only to subvert principle II (i.e., re-capture of consumer expenditures), and the creation of community institutions (i.e., backward linkages and a land bank or land trust). And we lose the chance to effect principle IV (i.e., subsidy tied to place).

Instead, the government must work to effectuate both principles I and IV, and to establish the community institutions.

Joint Development as Public Intervention into the Land Market

Public intervention into the land market is required in order to insure that the land development process operates to the net benefit of the ghetto residents. Land owned by absentee land owners of that around a new transit station must be reallocated by government at controlled prices to entrepreneurs or community-controlled enterprises who will use the land to the benefit of the ghetto residents. This reallocation may best be done within a community land development or land holding institution.

Government powers for use in this intervention process are

several. They include the powers of eminent domain, tax write-down, long-term leasing or transfer of ownership and land use regulation.

In effect, when the government invests in a capital project in the ghetto, it is stimulating the land market. We are asking that it control that intervention and its effects on the welfare of those who live and work in that market.

Land development of one public capital project in particular, mass transit capital construction, should be tied together in a project in order to capture these benefits and to lower these costs. This holds to a lesser extent for old capital facilities, like an old transit station, that may be salvage so that the building can be written down and the land leased or sold at a writedown to a community institution or a ghetto enterprise. Therefore, land sites for development should considerlocation of transit facilities. Further, government should consider the associated development of transit facilities. This type of development is called joint development.

Our task in the next section, then, is to identify the potential for joint development of commercial development in concert with transit station development. While the analysis of commercial development has encompasses part of the benefits of these external economies, the analysis of joint development in its entirety (see volume II) will encompass mainly the costs of land development and the operation of new ventures.

PART II - The Plan

Introduction In this short but important section, we examine the opportunity for joint land development of the commercial complex with the new transit or the new bus station. There are five site criteria established. Three prime sites are established. Finally a schedule of land development is estimated based on the site selected.

Methodology

There are five initial site criteria for site selection. These are:

(1) the minimization of conflicting land use within each parcel of commercial development. Some collections of retail stores fit well together. Others do not. Conflict can tend to reduce the total percentage of retail stores;

(2) sufficient land available in the parcel to fully develop the commercial package. Insufficeint land may result in either forced increase in costs of construction, or in the construction of a business with decreased economies of scale;

(3) sufficient transportation access of the dominant modes used by prospective customers to the new commercial enterprises;

(4) potential for joint development with a transportation capital facility. Joint development could result in the transportation authority paying for land and building of the commercial facility. Both the commercial and transportation facility would be housed in the same structure; and,

(5) minimal relocation of existing businesses within the parcel. Clearly, a community-based development institution would like no relocation of community businesses at all. However, the limit of available land may call for some minimal relocation for site assembly.

The result of the application of these site criteria to Dudley Square is three sites. The first is a site with no transportation facility at all. This is our standard to compare the value of the other sites against. The second is the site of the new transit stations. And the third, is the site of the proposed new bus

terminal.

Area Required for the Commercial Expansion

There are two parcels needed for development. One is non-auto related, the other is:

Table V.I
Store Area of Proposed Commercial Center:Non-Auto Related Uses

Store	Area in Square Feet
Supermarket	9330
Junior Dept. Store	1 flight 27,786; 2 flights, 14,893
Variety Store	4079
Women's Shoe Store	2375
Dry Cleaners	2000
Laundromats	1709
Men's & Boy's Shoe Store	1390
Florist	1246
Meat & Fish Market	1200
TOTAL	1 flt: 51,130; 2 flights: 37,237

Auto Related Uses

Store	Area in Square Feet
Gas Station	8214
Passenger Car Dealer	7000
TOTAL	15,214

We can convert this store area to total parcel size required if we assume the conversion factor, the floor-to-area ratio (FAR), to be between ½ and 2, then we have:

Table V.2
Total Land Needed for Proposed Commercial Center:Junior Dept. Store
(in square feet)

1 FLIGHT DEPT. STORE	2 FLIGHT DEPT. STORE
maximum FAR - 51,130	37,237
minimum FAR - 102,260	74,474

AUTO DEALER (in square feet)

maximum FAR - 15,214
minimum FAR - 30,428

Examining the area of the three site categories, we have the following:

Table V.3
Area of the Alternative Sites for Development

Site		Area (in square feet)
Site 1a		53,314
Site 1b		81,111
Site 1c		65,321
	TOTAL	219,746
Site 2:		156,009
Site 3:		72,922

Given a maximum FAR, all sites can satisfy the area need. Given a minimum FAR, site 3 cannot satisfy the space requirements. Therefore, joint development is market feasible.

Alternative Sites for Development:

There are three major site categories for development of the proposed commercial expansion. These are:

Site 1: the existing commercial land

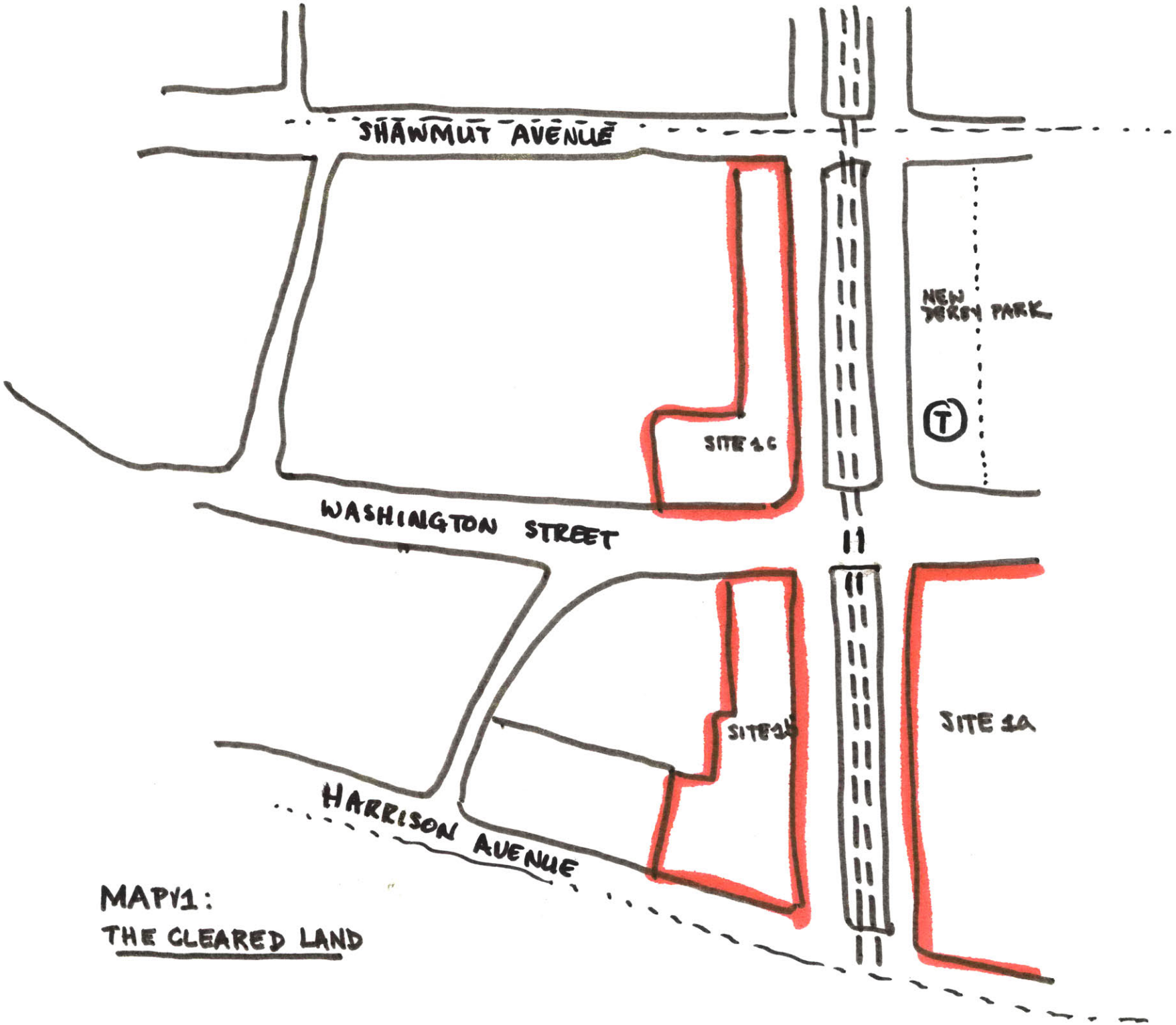
This site is bounded by Shawmut Ave., Ruggles St., Washington St. and Williams St. Two small alleys, Dade and Gary Streets cut through the site. Both small businesses and housing exist on the site. But there are much fewer and much smaller than on other possible sites. (see MAP V.1)

Site 2: the cleared land

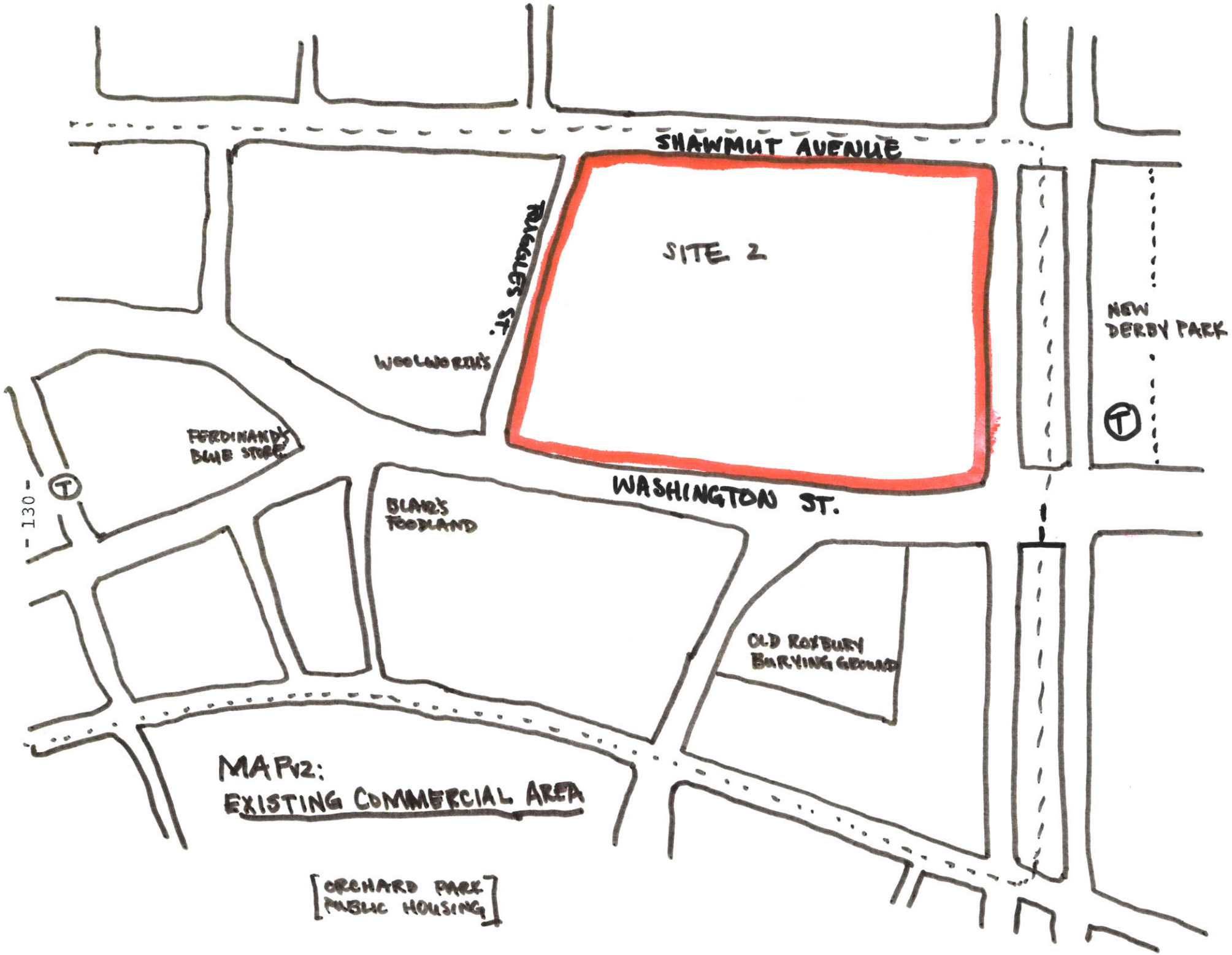
This site is bounded by the intersection of Washington St and the new Sterling St. At the center of this intersection is the site of the new Dudley Station. One of the two parcels of cleared land is designated for the New Derby Park. The other is now up for sale for commercial use (site 1a). The remaining two subsites are on partially used land. Very few businesses remain on these subsites (see MAP V.2).

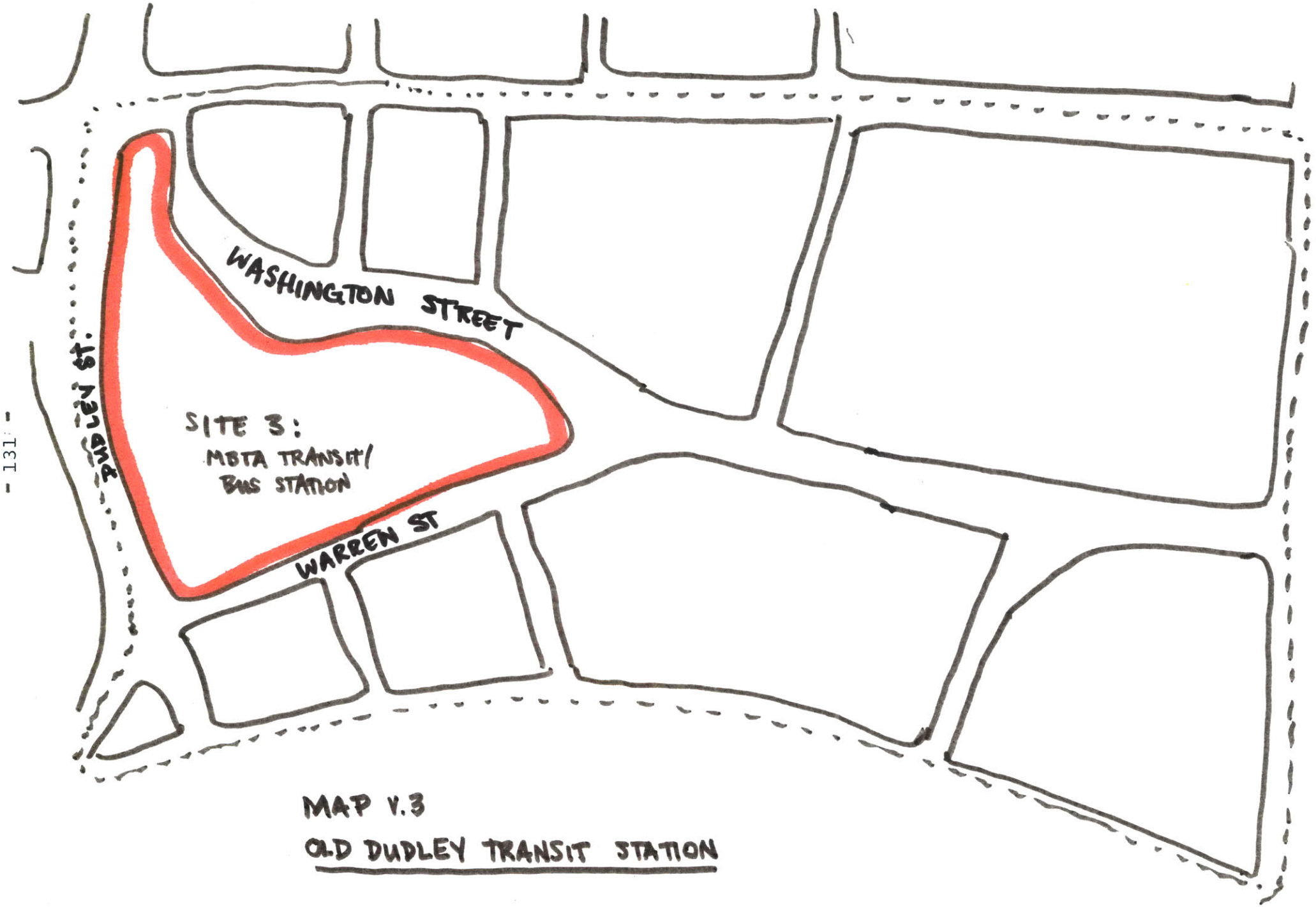
Site 3: the present Dudley Station site

This triangular site is bounded by Washington St., Dudley St. and Warren St. This site is the location of the present MBTA Dudley Station, a two level bus terminal, and several stores both large and small, most notably including, First National Bank, Ferdinand's Furniture Store, and A Nubian Notion. (see MAP V.3)



MAP #1:
THE CLEARED LAND


SHAWMUT AVENUE
RUGGLES ST.
SITE 2
NEW DERBY PARK
WOOLWORTH'S
FERDINAND'S BLUE STORE
WASHINGTON ST.
BLAIR'S FOODLAND
OLD ROXBURY BURYING GROUND
- 130 -
MAP #2:
EXISTING COMMERCIAL AREA
[ORCHARD PARK PUBLIC HOUSING]



MAP V.3

OLD DUDLEY TRANSIT STATION

All these sites contain sufficient square footage for the development of the commercial stores, and either are next to the site of the new transit station or take advantage of the move out of the old transit station.

We next turn our attention to the time frame for land development.

Schedule for Land Development of the Commercial Center

The approximate schedule of land development is shown in Table V.16. The assumptions of time estimates are: community participation 1-2 years; construction 2-1 years. Clearly, the time frame is shorter for market development. Joint development with the new transit station will take an added two or more years. Joint development with the old Dudley terminal will take an extra four years over that for the new station.

Need for a New Land Development Institution

Given the need for public intervention into the ghetto land market, a new land development and land holding institution is required. This new institution should lower the costs of land development, it should control its use for the benefit of the ghetto community, and it should maintain ownership in community hands.

There are two main kinds of such land instruments: a land bank, whereby land remains in the private land market, and a land trust, whereby land is take out of the private market and kept in government hands. If the former is financially feasible, the land bank would likely be the more politically acceptable solution, since it would generate tax revenue and profit through gains on sale. If it is not feasible, or if change in land ownership and/or businesses on that land is likely, then the land trust would be the better community solution. (This awaits further cost/benefit analysis

TABLE V.4

APPROXIMATE SCHEDULE OF LAND DEVELOPMENT AT DUDLEY SQUARE

NOT TIED TO TRANSIT STATION DEVELOPMENT:

	YEAR 1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
LOCATION OF COMMERCIAL CENTER													
OPTION 2 : SITE 2 MARKET DEVELOPMENT	MINIMUM →											MAXIMUM →	

TIED TO TRANSIT STATION DEVELOPMENT:

OPTION 1: SITE 1 JOINT DEVELOPMENT CLEARED LAND	MINIMUM →											MAXIMUM →	
OPTION 3: SITE 3 JOINT DEVELOPMENT OLD DUDLEY STATION							MINIMUM →					MAXIMUM →	

Summary Program Recommendations for Land Development

Program Recommendation: That Circle Venture Capital Fund, Inc. consider the following alternative sites for the retail development, in order of their decreasing preference:

Site 1: site of the new Dudley Square transit station

Site 2: site bounded by Shawmut Ave. Ruggles St., Washington St., and Sterling St. (or the New Crosstown Street).

Site 3: site of the old Dudley Station.

CHAPTER V:

Impact of the Proposed Development Program on the Political Economy of Dudley Square

Part I - The Theory

The theory of the political economy of Dudley Square is a theory of the market structure of the commercial and land economy. This theory of the market is that it is an dualistic structure. That is, a market where the ownership of the most valuable land is in the hands of a few large owners. Few means under 20.

The public market of land is in the hands of the city and a few public agencies. This is due to the municipal urban renewal project on the border of the Square, and the transit station and bus yard nearby.

The private market is owned by prior ethnic residents of the community-the Jewish. Retail stores in Dudley Square are predominantly Jewish; wholesale stores particularly in nearby New Market Square in South Boston (mostly food wholesale) is Jewish. And, the landowners in Dudley Square are mostly Jewish.

Remember the dominant black population of Roxbury is less than a decade and a half old. Black ownership of retail, wholesale and land lags far behind black residence.

This market structure is a dual one. There are two segments. The segment of stores of greater sales and thus greater profit, are Jewish. The segment of stores of lesser sales and lesser profit are black. The more profitable segment tends to be undercrowded; the less profitable segment tends to be overcrowded .

Similar dualism exists in the land market. The segment of parcels of greater value and rent is owned by the Jewish (and institutions). The segment of parcels of lesser value and rent

is owned by lack. The more valued segment is undercrowded (with mainly residential ownership).[34]

Ghetto economic development, then, must aim to break this dualistic structure. To do this, the investment program must purchase, expand or start-up commercial ventures of the higher profitability (or sales), and purchase parcels of greater value (or rent).

34 Aldrich, Howard & Albert Reiss, "The Effect of Civil Disorders on Small Businesses in the Inner City" Journal of Social Issues, VOL 26 Nov.,1970

Aldrich, Howard, "Employment Opportunities for Blacks in the Black Ghetto;the role of White Owned Businesses" the American Journal of Sociology, May, 1973

Introduction

We can now judge the market impact of the development program on the economic structure of Dudley Square. In this treatment, only the change in the economic structure is examined. No effort is made to analyze the change in the institutional structure. This awaits the institutional analysis of Part II.

This market impact examines two sectors of the economic structure: that of retail business, and that of land development. If the development program is to have a significant impact, then community developed and owned retail business and land should appear in a high value position in both the retail and land structure.

PART II$_A$. Impact on the Retail Business Structure

Retail Business Structure

A listing of the retail businesses interviewed for the Dun and Bradstreet Market Indicators appears in the Appendix 2. Note that this list is only about 70% complete.[59] A partial list of businesses not listed also appears in the appendix.

A complete listing of businesses awaits a survey and an interview to estimate sales and to identify ownership. Such a survey was not undertaken by the present work, in part due to the limit in time. However, care was taken to make sure that the incompleteness of the Dun & Bradstreet census did not affect the investment recommendations of the marketing analysis.

Clearly, such estimates made as the total market penetration of the retail expenditures of the Dudley Square area are understated, but by much less than the 30% of the businesses not interveiwed, since almost all of the major scale businesses were interviewed with only a few exceptions (see the Appendix).

Recognizing the sample limitation of the survey, however, we have still felt that it would be valuable to analyze the retail business structure with the data available without adjustments. These adjustments are to be made at a later date. The results appear in this chapter.

The retail business structure is as follows:

Table V.1
Retail Business Structure in Dudley Square

SIC	Groupings	No. of Businesses
52	Building materials, hardware garden supply	3
53	General merchandise stores	1
54	Food stores	5
55	Automotive dealers & gasoline service stations	6
56	Apparel & accessory stores	23
57	Furniture, home furnishings & equipment stores	8
58	Eating & drinking places	20
59	Miscellaneous retail	11
	TOTAL	77

SOURCE: Dun & Bradstreet, Market Indicators, December, 1973

The rank of retail categories by 4-digit SIC numbers over sales volume as follows:

Table V.2
Ranking of Retail Categories by Sales (over $½ million)

SIC	Retail Categories	Estimated Sales
5411	Supermarket & food stores	$3,030,000
5651	Family clothing stores	1,900,000
5231	Paint, glass & wallpaper Stores	1,675,000
5812	Eating places	1,200,000
5921	Liquor stores	975,000
5611	Men's & boy's clothing & furnishing stores	858,900
5912	Drug stores & proprietary stores	600,000

SOURCE: Dun & Bradstreet, Market Indicators, December, 1973

Food, clothing and cheap housing decoration materials rank high. Unfortunately, liquor ranks higher than drugs and other medicines.

The rank of indiviudal retail businesses by sales volume follows:

Table V.3

Ranking of Retail Businesses by Sales (over $300,000)

Store	Estimated Sales	Trading Area Market Capture
Blair's Supermarket, Inc.	$2,000,000	.66
B&D Wallpaper, Co., Inc.	1,600,000	.96
L&S Department Stores, Inc.	1,500,000	.79
Bello L & Sons	500,000	.17
Dudley Liquor Store	500,000	.51
Clinton Provision Inc.	450,000	.15
Tropical Foods, Inc.	440,000	.15
Ferdinand Frank, Inc.	436,000	
Palcalco Corp.	350,000	.29
Venus Cosmetic Store	300,000	

SOURCE: Dun & Bradstreet, Market Indicators, December, 1973

Again, a supermarket tops the sales ranking, followed by a wallpaper store, and a family clothing store (not a department store at all). These three mark the $1 million annual sales retail stores. In the next layer are a liquor store, three food stores, a furniture store, an eating place, and a cosmetic store. To a large extent, the retail stores with the highest sales captured the huge buld of the total sales for the retail category. Wallpaper, major apparel stores, furniture, cosmetics seem to be monopolistic. Food is [illegible]dualistic, but dominated by one store. Similarily for liquor and eating places. Drinking places, for example, appear to be highly competitive and of roughly the same size, measured by sales volume.

Capital Structure of Retail Sector

The capital structure of the retail sector based on the assets on each interviewed business is as follows:

Table V.4
Retail Businesses by Capital Invested

SIC	Grouping	Capital
52	Building materials, hardware & garden supply	$244,600
53	General merchandise stores	1,000
54	Food stores	53,900
55	Automotive dealers & gasoline service stations	60,000
56	Apparel & accessory stores	857,000
57	Furniture, home furnishings & equipment	437,000
58	Eating & drinking places	65,000
59	Miscellaneous	218,000
	TOTAL	$1,938,370

SOURCE: Dun & Bradstreet, Market Indicators, December, 1973

SIC 56 has the largest capital investment at $857,280; SIC 57 is second at $857,000; followed by SIC 52 at $244,600 and SIC 59 at $218,000.

The distribution of capital per business by SIC major grouping is as follows:

Table V.5
Capital Distribution in the Retail Sector

SIC	less $5000	5000-9999	10,000-24,999	25,000-49,000	50,000-74,999	75,000-124,000	125,000-499,000	"?"
52	-0-	-0-	-0-	-0-	1	-0-	1	1
53	1	-0-	-0-	-0-	-0-	-0-	-0-	-0-
54	1	1	2	-0-	-0-	-0-	-0-	2
55	-0-	-0-	-0-	2	-0-	-0-	-0-	1
56	1	1	5	2	2	4	2	5
57	-0-	-0-	2	1	3	-0-	1	1
58	3	1	2	-0-	-0-	-0-	-0-	10
59	1	-0-	5	1	-0-	1	-0-	3
TOTAL	7	3	16	6	6	5	4	23

SOURCE: Dun & Bradstreet, Market Indicators, December, 1973

The ranking of individual retail stores by estimated assets is as follows:

Table V.6
Ranking of Retail Businesses by Assets (over $50,000.00)

Store	Estimated Assets
B&D Wallpaper Co., Inc.	$225,000
L&B Department Stores, Inc.	194,000
Ferdinand, Frank, Inc.	163,000
Norwood Shoe Store, INc.	108,000
Kornfields A., Inc.	92,900
Callahans Men's Shop	79,500
Samal, Inc.	78,800
Terminal Hardware Co.	68,700
National Radio & T.V. Co.	51,000

SOURCE: Dun & Bradstreet, Market Indicators, December, 1973

Blair's is not listed since no estimate of assets is made by the Dun & Bradstreet census. Furniture, wall paper and apparel have the greatest amount of assets. Hardware, and radio and televison follow.

None of the top ranked retail businesses, whether by sales or by assets, are black owned, let alone community-controlled.

The Ownership Patterns of Retail Sector

The ownership pattern of the retail sector show the prdominance of proprietorships, at 52% of the total number of businesses, followed by ownership, at 32%. This reflects the large number of mom and pop stores (mostly not black owned).

Table V.8

Ownership Pattern of Retail Sector by SIC Groupings

SIC	Owner	Proprietorship	Partnership	Principal
52	1	1	0	0
53	1	0	0	0
54	2	3	1	0
55	1	1	0	1
56	3	12	0	1
57	5	4	0	0
58	3	10	1	0
59	3	6	0	0
Total	20	38	2	2
% of row	32%	52%	3%	3%

SOURCE: Dun & Bradstreet, Market Indicators, December, 1973

Strikingly few of the total number of retail stores in Dudley Square are part of corporations whose headquarters are located outside of Roxbury (about 5%).

Table V.9

Retail Stores with Headquarters Located Outside Roxbury

Store	Sales	Employment in Roxbury	Employment Total
B&D Wallpaper Co.	$225,000	12	52
L&S Department Store	$194,000	28	52
Venus Cosmetic Shop	$300,000	5	12
Royce Specialty Shop	$ 93,400	4	6
Totals	$812,400	49	122

SOURCE: Dun & Bradstreet, Market Indicators, December 1973

This is only 5.2% of the businesses, 4.8% of the sales, and 7.8% of the jobs. This estimate, however, understates the penetration by outside corporations. The census does not record such well known national chains such as Woolworth's, Thomas McCann, Freddie Parker's, Joe & Nemo's, as well as a well-know local chain, Ugi's (see Appendix A II-22 for list of missing businesses). The first two stores are of large sales volume. The revised eistimate would be about one and a half times the initial one made here.

Table V.9 lists the chains. Therefore, the remainder of the businesses are independents (according to the classification of the Urban Land Institute). Our unrevised estimates are that these account for 94.8% of the number of businesses, 95.2% of the sales and 92.2% of the jobs.

The number of non-white owned retail businesses is equally small:

Table V.10
Non-white Owned Retail Businesses in Dudley Square

Store X	Owner	Sales	Assets
A Nubian Notion[1]	M. Abdal Khallaq	$108,000	$20,900
Calyp-Soul Foods	John V. Lewis	$150,000	?
Calvey Jewelers	Charles J. Calvey	$ 70,000	$35,300
Elites Restaurant[2]	Charles J. Calvey	?	?
Limbo (not listed in Dun & Bradstreet)[3]			
Our Fish Market (Warren Fish Market)	Ralph Frazer	$ 50,000	$ 500
Total for black owned		$378,000	$56,700
Joe's Steak & Sub	Jose Fidverda	$150,000	?
Tropical Foods, Inc.	Jose Hernandes	$440,000	$17,500
Total for Spanish-speaking		$590,000	$17,500
Cho Buk H. Co, Inc.	Duk A Cho	$ 80,000	$ 7,480
Peking House	Song Ping	$ 50,000	?
Total for Oriental owned		$590,000	$17,500
Total for Non-white owned Retail Businesses		$1,448,000	$81,680

1 These figures include sales for the Humboldt Ave. Store
2 This owner was listed as black by Goria Fox, Model Cities Community Organizer, July 15, 1974
3 Identified by Gloria Fox

Black ownership is 9.2% of sales, but only 4.2% of the capital investment "Black"here includes all non-white).

Age of Retail Sector

The age of the retail sector is almost all under 33 years of age.

Table V. 11

Age of Retail Business Over Sales Volume

Sales	Pre-1929	1929 1940	1941 1959	1960 1968	1969 and later
$1-2,000,000	-0-	-0-	2	-0-	1
500-999,999	-0-	2	-0-	-0-	-0-
300-499,999	-0-	1	1	2	2
100-299,999	-0-	1	11	10	1
20-99,999	-0-	-0-	5	5	7
0-19,999	-0-	-0-	-0-	1	2
Total	-0-	4	19	18	13

SOURCE: Dun & Bradstreet, Market Indicators, December, 1973

Let us call "old business" 14 years or older: "middle age business", as 5-13 years of age; and "young business" as 4 years or younger.

The age of firms is almost evenly distributed during these three age groups. More than a third of these businesses are middle age: more than a third are old suggesting fair longevity after 5 years. Under a third are young, suggesting high turnover. If businesses stabilize, the young businesses have a chance to exceed the record number of businesses created in the fourth period. Most of these businesses are in the low sales volume category and will likely turnover. Therefore, redirection of investment in business aimed at larger sales volume and higher market share is supported by present gaps of investment.

Employment Structure of Retail Business

A ranking of the retail business according to employment demonstrate a wide distribution of jobs. High is 131, followed by 96. Middle sectors follow at 66,60,53 and 40. Low sectors are at 13 and 1, respectively. Total employment is at 626.

Table V.12
Ranking of Retail Businesses by Employment

SIC	Groupings	Employment
56	Apparel and accessory stores	131
54	Food stores	96
58	Eating & drinking places	66
55	Automotive dealers & gasoline stations	60
59	Miscellaneous retail	53
57	Furniture, home furnishings & equipment stores	40
52	Building materials, hardware, garden supply	13
53	General merchandise stores	1
	Total	626

SOURCE: Dun & Bradstreet, Market Indicators, December, 1973

A ranking of 4-digit SIC numbered retail businesses by employment produces the following:

Table V.13
Ranking of Retail Categories by Employment (over 10)

SIC	Groupings	Employment
5411	Grocery stores	82
5812	Eating places	53
5651	Family clothing stores	38
5231	Paint, glass & Wallpaper	25
5712	Furniture stores	23
5611	Men's & boy's clothing & furnishing stores	22
5631	Women's accessory & speciality stores	16
5921	Liquor stores	16
5813	Drinking places	11
5912	Drug stores	11
5223	Meat & fish (seafood markets)	11
5431	Fruit stores & vegetable markets	11
	Total	359

SOURCE: Dun & Bradstreet, Market Indicators, December, 1973

Food stores and eating places exceed the employment levels of the other stores. Paint, glass and wallpaper, furniture and clothing stores follow from 38 to 16. Liquor and drinking places are third at 16 and 11. Meat and fish and fruit stores and vegetable markets are last. The order of employment roughly follows the order of sales.

A ranking of individual retail businesses by employment reveals a dramatic difference. The data, however, is from a holiday month. This difference is, therefore, likely overstated for the year.

Table V.14

Ranking of Retail Businesses by Employment (over 7 jobs)

Store	Employment
Blair's Supermarket	65
L&S Department Store	28
Palcalco Corporation	22
Ferdinand Frank	15
Dudley Liquor Store	14
B&D Wallpaper Co.	12
Venus Cosmetic Store, Inc.	12
Bello L & Sons	11
H & F Inc.	11
Kornfield A.	8
Tropical Foods	8
Total	206

SOURCE: Dun & Bradstreet, Market Indicators, December 1973

The biggest emplyer by far is Blair's Supermarket. In second and trhird place are L&S Department Store and Palcalco Corporation (a blck firm) followed by Ferdinand Frank.

The majority of retail stores, however, have 7 or less employees, about 86%. Retail, with a few key exceptions (like supermarkets) tend not to be large employment generators.

Employment Impact of the Retail Investment Package

We can now roughly estimate the employment impact of the intermediate retail investment package. To do this we rely on figures for the current employment level per sales volume for each BLS retail category. Multiplying this factor by the projected sales per retail store yields the estimated employment per store. The total employment impact of the retail investment package is significant. Though possibly overstated, the results are indicative. The total impact is over 200 new jobs,almost one-third of the present retail employment of Dudley Square(possibly one-fourth of the present retail employment if the figures are re-adjusted for missing businesses).

(Unfortunately, no data seems to exist about wage levels and about internal career ladders for Dudley Square retail businesses.)

Table V.15

Estimated Employment Impact of Retail Package

Store	Employment
supermarket	48
passenger car dealer	28
junior department store	99
gasoline service station	15
variety store	12
shoe stores	4
meat market	1
dry cleaners	2
laundromats	1
Total employment impact	210

Ranking of Investment Package in the Retail Business Structure

Using the ranking of retail businesses of Table V.2, a revised ranking of the new retail business structure including the new retail investment package would yield the following:

Table V.16

Ranking of Retail Businesses in the Investment Package by Sales

Store	Est Sales	Rank in All Retail	Rank in BLS Category
Supermarket	$1,473,267	#3	#2 out of 4
Passenger car dealer	$ 862,878	#5	#1 out of 1
Junior dept store	$ 684,012	#6	#1 out of 1
Gas service station	$ 380,457	#12	#1 out of 3
Variety store	$ 85,839		
Men's & boys' shoe store	$ 41,199		
Women's shoe store	$ 31,939		
Meat market	$ 30,673		#1 out of 1
Dry cleaner	$ 25,159		#2 out of 3
Laundromat	$ 17,014		#1 out of 1

The largest stores with the largest projected sales volume make a major impact on the retail business structure. Two of these, the passenger car dealership and the junior department store, form a"monopoly" of business in their respective retail categories. The other two, a supermarket and a gas station, are of large enough size to compete with the existing large size stores in their respective retail categories. Therefore, the impact of the investment package on the retail structure of Dudley is significant!

PART IIB: Impact on the Real Property Structure

Real Property Structure

A listing of the land ownership of the real property of Dudley Square (including residential and public ownership) is taken from the Assessor's List of Property from the Boston Municipal Tax Bureau and appears in Appendix II Part II. This list should be 100% complete.

A list of final owners awaits an in-depth investigation into the corporate records of the Secretary of State as well as the tax records of the Municipal Tax Assessor's Office. No such in-depth survey was undertaken for the purposes of this work. This may tend to understate the ownership of absentee landlords, and of interlocking landlord families.

Recognizing this limitation, however, the results still produce a dramatic profile of the real estate structure of Dudley Square.

Summary Valuation of Land, Building and Taxes

The summary valuation of land, buildings and tax assessment is as follows:

Table V.16

Summary Value of Land, Buildings with Taxes

Land	Building	Total	Taxes
$2,897,300	$3,532,700	$6,4300,000	$382,750.53

SOURCE: Assessor's List of Property, City of Boston 1974

Total assessed value of land and buildings is less than $6½ million. Total taxes on the assessed value are less than $400,000 per annum. No effort was made to adjust for under-valuation.

The summary of the total square footage of Dudley Square Commercial Area yields the following. Again, this summary includes not only commercial area, but also residential and government owned land inside the periphery of Dudley (it does not include the cleared land of the now cancelled Boston Inner Belt).

Table V.18
Summary of Size of the Dudley Square Commercial Area

Block Number	Number of Square Feet
4161	14,328
4162	67,335
4216	78,540
4214	44,018
4215	41,374
4267	155,416
4268	64,369
4269	58,425
4220	33,215
4219	134,515
4218	32,401
4217	45,452
4163	53,821
4078	6,626
4109 (part of)	33,485
4164 (part of)	35,690
4043 (part of)	40,465
(no block number: street address nos.) 2436,2440 Washington St.	5,297
4076 (part of)	9,734
4075 (part of)	48,217
4108 (part of)	22,715
4160 (part of)	176,448
4213 (part of)	94,990
4266 (part of)	35,129
4395 (part of)	10,745
4396 (part of)	9,694
4270	109,641
TOTAL	$1,446,835

SOURCE: Topographic and Planimetric Survey
City of Boston, 1961 April

Therefore, the total square footage of the Dudley Square Commercial Area is a little less than 1.5 million square feet. The average cost of land for the total area is therefore, $2,897,300 divided by 1,446,835 square feet or $2.00 per square foot by assessed valuation.

The area contains a total of 236 parcels (the units of assessment of the City of Boston's Assessor's Office). The average ownership is therefore 236 divided by 112 or 2.1 parcels per landlord. There are a total of 112 landlords of the area.

Ownership Structure of Real Property

The ranking of ownership can be defined by class, as follows:

Table V.19
Ranking of Ownership of Real Property by Class

Class	Assessed Valuation
Public Agencies	$2,289,700
Realty Trusts	1,745,300
Individuals	820,100
Non-retail Companies	420,500
Commercial Banks	337,766
Social Service Agencies	194,200

SOURCE: Assessor's List of Property
City of Boston, 1974

Public agencies own the largest share, at 36%. Realty trusts follow at 27%. Individuals are third at 13%. Non-retail companies own 7%; commercial bands own 5%; and social service agencies own a measly 3%.

The breakdown within each class follows. First, the public agencies:

Table V.20
Ranking of Ownership of Public Agencies

Agency	Assessed Valuation
City of Boston	$1,201,400
Massachusetts Bay Transportation Authority	959,700
Boston Redevelopment Authority	128,600
Department of Public Works	800

SOURCE: Assessor's List of Property, City of Boston, 1974

The BRA is not the largest landlord -- rather, the City of Boston is with 19% of the total assessed value. The MBTA is second with 15% of the total assessed value.

The structure of the realty trusts is as follows:

Table V.2$_1$
Ranking of Ownership of Realty Investment Trusts (over $20,000)

Realty	Assessed Valuation
Weinstein, Saul Trusts	$265,000
Dudley Realty Trusts	208,500
Green Milton Trusts	190,000
Chase, Theodore Trusts	182,000
Rees, Lillie G. Trustee	165,000
Saltzberg, Harry M.	148,000
Perry, Helen M. Trust	140,000
Shaffer, Abraham Trust	102,000
Berwick Realty Corp.	90,000
Blue Hill Avenue Association	84,000
American Realty Syndicate	53,300
Hershenson, David N. Trusts	40,000
Tab Associates	29,500
Rink Realty, Inc.	25,400
Morris Maria Trust	22,000

SOURCE: Assessor's List of Property
City of Boston, 1974

Each of seven realty trusts own more than the BRA. However, the largest landlord of commercial property only tops $250,000. The range of realty trust holdings is evenly distributed.

The holdings of individuals follows:

Table V.2$_2$
Ranking of Ownership of Individuals (over $20,000)

Individual	Assessed Valuation
Levin, Henry	$88,200
Lieberman, Shirley	88,200
Rosengard, Helen	65,000
Schuurman, Gerrit	60,300
Popper, Helene G.	55,900
Swett, Herbert C.	50,000
Golden, Harold	45,000
Cavallini, Anthony	43,300
Barrett, Thomas	41,000
Barron, Etta F.	37,000
Kent, Herbert	34,000
Goldstein, Julius & Louis	32,000
Calvey, Charles J.	30,000
Cohen, Joseph	27,000
Rothenbert, Suzanne etal	27,000
Calianos, Theodore	25,000
Cunningham, John etal	25,000
Horowitz, Harold L. etal	25,000
Brecher, Murray	21,200

SOURCE: Assessor's List of Property, City of Boston, 1974

The predominance of Jewish landholders reflect the past history of a Jewish Roxbury. Very little of this land has been sold to blacks in the present black Roxbury. The landlord with the largest holdings does not top $90,000. The average holding of landlords is $43,163, compared to an average holding of landlords -- all in the over $20,000 bracket.

The ownership of non-retail companies is as follows:

Table V.23
Ranking of Ownership of Non-retail Companies

Non-retail Companies	Assessed Value
Webster Atlas Bldg. Corp.	$209,000
Walcott Corporation	88,200
High Voltage Engineering Corp.	50,000
American Oil Company	32,000
Circle Supply Company	20,300

SOURCE: Assessor's List of Property
City of Boston, 1974

The non-retail company with the largest holding is far above the others at $200,000 plus. Very few manufacturing firms own their own land and building. Similarily, very few retail firms own their own land and building. Rather, most of this land is owned by realty trusts and individuals.

The holdings of the commercial banks follows:

Table V.24
Ranking of Ownership of Commercial Banks

Commercial Bank	Assessed Value
First National Bank	$129,800
Eliot Savings Bank	95,900
National Shawmut Bank	91,500
Boston Five Cents Saving Bank/ State Street Bank	20,566*

SOURCE: Assessor's List of Property, City of Boston, 1974

*NOTE: both banks are housed in the same building. Both the building and land, in turn, are owned not by the banks, but by Webster Atlas Building Corporation.

The holdings of the social service agencies are as follows:

Table V.25
Ranking of Ownership of Social Service Agencies

Social Service Agency	Assessed Value
Boy's Club	$123,500
Opportunities Industrialization Center	40,000
Salvation Army	30,700

SOURCE: Assessor's List of Property
City of Boston, 1974

The Boy's Club of Roxbury leads the land holdings far and away above the other social service agencies at almost $125,000.

The holdings of the top landlords regardless of class follows:

Table V.26
Ranking of Top Land Owners by Assessed Value (above $100,000)

Land Owner	Assessed Value
City of Boston	$1,201,400
MBTA	959,700
Weinstein, Saul Trusts	265,000
Webster Atlas Bldg. Corp.	209,000
Dudley Realty Trusts	208,500
Green Milton Trusts	190,000
Chase, Theodore Trust	182,000
Rees, Lillie G. etal	165,000
Saltzberg, Harry M.	148,000
Perry, Helen M. Trust	140,000
First National Bank	129,800
BRA	128,600
Boy's Club	123,500
Shaffer, Abraham Trust	102,600

SOURCE: Assessor's List of Property
City of Boston, 1974

We see that Saul Weinstein Trusts is the largest private landlord in the Dudley Square commercial area. Webster Atlas Bldg. Corp. and Dudley Realty Trust are just about tied for second.

Land Ownership of Retail Business: Absentee Ownership

Only the following stores can be identified as businesses which are owned by the same individual who owns the land and building:

Table V.27
Retail Businesses With the Same Owners as the Land

Business	Owner of Business	Owner of the Land
Brown, Herbert	Brown, Herbert	Brown, Herbert
Don Mar Co.	Aronson, Marv	Aronson, Samuel
National Radio & T.V.	Cohen, Joseph	Cohen, Joseph
Roxbury Tavern	Abreu, Joseph	Abreu, Joseph
THC	Cohen, Paul	Cohen, Paul

SOURCE: Dun and Bradstreet, Market Indicators, Dec., 1973
Assessor's List of Property, City of Boston, 1974

This list is tenuous. It represents a survey of only 27 businesses which could be matched up with land addresses. 40 businesses could not be matched (the cataloging system is mismatched). However, the results are indicative. No major retail store seems owned by the same party which owns the land and building of the store. (with the identifiable exception of National Radio and T.V., a store with an annual sales volume of $125,000). Blair's Supermarket, for example, is owned by Alfonzo Clarke, but its land and building is owned by Dudley Realty Trust. In short, absentee ownership is overwhelmingly dominant.

Ranking of Land Value

A ranking of only the land according to its assessed value reveals the following:

Table V.28
Ranking of Land by Assessed Value (in Parcels) (over $50,000

Parcel	Assessed Value
25 Warren St.	$265,000
135 Dudley St.	202,000
2343,2345 Washington St.	110,500
130 Dudley St.	101,700
2120 Ruggles St. + 2201,2209 Washington St.	84,700
2301 Washington St.	80,000
2261,2275 Washington St.	71,400
2315,2337 Washington St.	68,100
1,15 Warren St.	66,000
2249,2259 Washington St.	63,500
2109,2115 Washington St.	62,000
2173,2181 Washington St.	59,900
2121,2131 Washington St. + No Cor Dade	54,200
2235,2241 Washington St.	53,900

SOURCE: Assessor's List of Property
City of Boston, 1974

No valuation of the impact of the new investment project on the land ownership is made. This is because neither costing, of building construction, nor of the potential market rents was made. Therefore, no estimates of the land value was derived.

Summary:

If the business meets our projections, the investment package will establish #4,#5,#6, and #12 businesses in the existing retail sector (by sales). This constitutes a major impact of the retail sector.

No cost data has been made yet to analyze the lan value ranking.

CHAPTER VI:

Conclusions to Volume I:

An Evaluation of:

Principles,
Objectives,
Strategies, and
Methodlogy

Introduction While our analysis is only half done, our work so far has produced some substantial results. Let us review our findings at this point. Clearly some assertions and questions must await the second half of the analysis to arrive at final conclusions.

PART I:

Intermediate Results of the Application of the Theory

Our strongest results are in the marketing principle 2. The public intervention principles of one (1) and five (5) are strong, but await further results.

Principle I: That social overhead capital ( ) should be invested in projects that will induce directly productive actively (DPA) investment.

We have identified a potentially viable -DPA process of joint development of the transportation plan with retail development. The transportation plan, however, has not been fully costed. We do not have the estimates for street widening, traffic lights and mini-bus operation. Further, we do not know if joint development is financially feasible as well as market feasible. This awaits Volume II.

Principle II: Investment must capture consumer expenditures for reinvestment or distribution back into the ghetto economy.

The market analysis clearly demonstrates the substantial recapture potential of consumer expenditures now leaking out of the community. This potential is about 8.7% of a total of $52,990,240.00 projected for 1980.

Principle III: DPA investment must be aimed at import substitution at backward linkage.

Backward linkage into food and auto supplies wholesale appears feasible if retailers other than those in the investment pa age are recruited as buyers.

Principle IV: Both private and public investment and public subsidy must be tied to place.

The potential for subsidy is clearly established for the joint development project. The costing of the subsidy, and the determination of the financial feasibility of the proposed commercial enterprises awaits the financial analysis.

Principle V: First, land development, and second, capital formation, are used as a trigger for a sequence of investments.

Aside from the new transit station, land development is a possible project. Costing of the land assembly awaits the financial analysis. Capital formation is to be analyzed in Volume II.

Fulfillment of the Objectives of Community Economy Development

Objective I: The establishment of community institutions for the economic development, the political empowerment and the social evolvement of the ghetto community.

The community institution of backward integration appears to be market feasible.

Objective II: The generation and redistribution of income for and to community residents through community-based economic activity.

No determination of business profits, wages or commodity prices is yet made. The first two will be determined in the financial analysis.

Objective III: The development and redistribution of capital and of ownership of community based economic activity for and community residents.

No determination of equity requirement is made. See vol II.

Objective IV: The development of human capital through the development of internal labour markets of skills training entrepreneurial development and management responsibility of community residents in community economic and political activity.

Entrepreneurship,management, and labour will all be needed in varying mixes in the new investment package. No determination of these factors have been made(except for the estimated 210 jobs).

Objective V: The development of ownership of land and control over its use within (and adjacent to) the boundaries of the ghetto community.

The total area of the two proposed land development projects are 52,450 - 66,345 square feet. The site is a prime site for development and of strategic important as a community commercial center.

PART II: Intermediate Evaluation of the Circle Strategy

Strategy Element 1: Use of transit construction to stimulate commercial development.

Transit construction appears feasible. Adequate transit finance is available, but for the state matching grant.

Strategy Element 2: Commercial development at the transit nodes.

Commercial development at the new Dudley Square Transit station is market feasible.

Strategy Element 3: Spine development along the transit line.

Neighborhood retail development is severly limited by commercial development at Dudley. Greater potential may exist closer to Grove Hall.

Strategy Element 4: Land bank or land trust at a transit node.

This awaits a financial analysis.

Strategy Element 5: Debt bank to finance the commercial development.

This awaits financial analysis.

PART II: Market Feasible Development Program

The market feasible development program is recapitulated below:

Program Recommendation 1: That a mass transit subway be constructed from the Ruggles St. station of the new orange line along the cleared land of the rejected Boston Inner Belt with a station at Dudley Square, then turn South along Blue Hill Avenue to Grove Hall.

Program Recommendation 2: That a TOPICS program be instituted that would convert the Dudley Square commercial area into a pedestrian bus mall. Washington St. and Warren St. would be closed off to cars and trucks between Dudley St. and Sterling St. Sterling St. would be widened to handle two-way traffic. All side streets

leading into Washington St. and Warren St. would be dead-ended.

Program Recommendation 3: That a demand responsive transportation system be instituted on an experim ental basis with a mini-bus fleet of at least 1 many0to-one and at least 1 many-to-few types.

Program Recommendation 4: That Circle Venture Capital Fund, Inc. consider seriously investment into the following community scale retail stores: of large size - passenger car dealer (s); of medium size - upermarket, meat market, drug store, junior department store, women's shoe store, men's and boy's shoe store, dry cleaners, laundromat and a gasoline service station.

Program Recommendation 5: That Circle Venture Capital Fund, Inc. conduct further market research into the following wholesale stores as potential investment: food distribution and authomobile and auto supplies wholesalers.

Program Recommendation 6: That Circle Venture Capital Fund, Inc. consider the following alternative sites for the retail development, in order of their decreasing preference:

site 1: site of the new Dudley Square Transit Station,

site 2: site bounded by Shawmut Ave., Ruggles St., Washington St. and Sterling St. (or the New Crosstown Street),

site 3: site of the old Dudley Station terminal.

PART III: Criticism of the Methodology of the Study

We shall separate the criticism of the methodology of this study into two sections. The first will deal solely with the market analysis on its own grounds. The criticism will therefore be sharp but limited in scope. The second section will deal with the more fundamental criticism of the market assumptions underlying the market analysis which serve to undermine the fulfillment of the objectives of community economic development as well as that of market development. The criticism is therefore deeper and broader in scope.

A. Criticism of the Market Anslysis on its own Grounds

The following five areas of the market study need further methodological study:

(1) Special mobility study - It would be valuable to conduct further survey work to secure data that links mode of shopping used directly to retail category. Further, some basis is needed to estimate increase in shipping by mode, area, and income. These are key demand elasticities that were mission from the transportation marketing study.

The linkage of other retail shopping to grocery shopping by trip and by area is also missiong data. Finally, key trading neighborhoods that supply shoppers to Dudley Square were not included in the survey data. Noteworthy among these is Columbia Point, supplying shoppers due to the failure of John Hancock Life Insurance Co.'s Bay Side Mall.

(2) Consumer study - No survey was made of consumer buying havits due to the limit on time and budget for the study. Circle needs a consumer study to double check the results of those used in this study. Is black consumption the same as white consumption

across retail category and income? This study has assumed it is. What are the special black tastes that would require new retail categories or an altered consumption of present retail categories? Would Black nationalism or a community-controlled retail store tend to increase its potential market?

Further changes have occured in the income effects of consumer buying habits since the BLS survey of 1962. The key change is due to inflation and the energy crisis, which have increased expenditures on food and gas, particularly among the poor. This in turn has decreased expenditure on luxury items. We have assumed no long-term (i.e., 6-8 years) significance can be attached to the inflation of commodity prices of a few categories in the context of future projections. Any number of factors can change that make the formulation of a dynamic model of consumer growth difficult. Still a consumer survey is needed to double check our results.

(3) Competition Study - No direct study was made of the affect of competition on the market feasibility of the investment project. That is, what affect will competition have of the Fenway, Waltham Supermarket, the VFW Shopping Mall, Columbia Point Bayside Mall, Grove Hall and Uphams Corner commercial centers have on Dudley Station commercial center? We have defined our trading area small enough to tend to minimize this competitive affect. This should, however, be checked.

Another competition question is local. That is, what would be the impast on existing small businesses within the primary trade area caused by the establishment of the new shopping center? We have assumed that this impact is small, yet it may be larger than expected.

Thirdly, what will the competitive effect of the increased transportation service? That is, will consumers choose to shop outside of Roxbury due to the better transportation service?

(4) Investment Package - The investment package tends to be a conservative estimate of the market potential of commercial development in Dudley Square. No significant account is taken of the potential to take advantage of the black population of its trading area.

To go even further, no effort is made to market to both black and white consumers, as does the VFW Highway shopping center. What would be the market feasible investment package for both these cases?

(5) Impact of Finance on Market Feasibility - This study has made a sharp bias in favor of independents and away from chains. Enough data exists for an objective analysis of both within this study. However, the trade-off, for example, of Triple A prime tenants with independents has not been directly studied. The example of Progress Plaza, a CDC owned shopping center in Philadelphia, is a model of the use of independents as prime tenant that succeeded in turning a profit. Will this work in Roxbury? We have agreed that it will.

Further, the possibility of subsidy of costs may make several more retail stores feasible that could not survive without it in the current market. We have assumed that subsidy is enough to make a low-profit enterprise appealing to entrepreneurs, but not enough to make a below marginal business sound.

Third, can non-profit operations make other retail stores that are not market feasible as profit-making operations feasible?

B. Criticism of the Market Analysis on the Grounds of Community Economic Development

Volume I to a large degree has used market analysis as the central technique in project investment analysis. In effect, we have tried to start from a market analysis of commercially feasible retail investments and back into a cost/benefit analysis of broad economic merits of that investment package. Vis-a-vis mass transportation, mass transit facilities were analyzed to compare the increase in retail sales from the location of the routes of the transit line with the capital costs of construction of that transit line. Vis-a-vis commercial development, retail stores were analyzed to derive an estimate of the benefit of employment by retail category. Both of these analyses are preliminary. Further, the analytic framework for a cost/benefit analysis in a more full-blown treatment was introduced. Volume II, then, would use cost/benefit analysis as the central technique of project investment analysis as a sharp contrast to Volume I.

The economic assumptions underlying the market analysis, however, undermine the basic objectives of community economic development. These assumptions include the fixed state of consumer behavior, of the cost curves of retail firms, of pricing of goods, capital equipment, building and land, and of profit margins of retail businesses. In effect, they assume that the basic institutions governing the ghetto economy, such as the financial institutions, the real estate market and the retail market, remain the same.

The role of the CDC and of government into the commercial market in the ghetto are restricted to market actions. No newly created markets, for example of capital and of land, are generated. Similarly, no new organizations of Directly Productive Activities are undertaken and supported by the actions of the CDC and of the government.

The result of the static nature of the political economy of this CDC/government intervention into the ghetto economy implies that all action and organization operate within it. The power relations of

the institutions that govern the allocation of resources remain the same. The political economy, while it accomodates the CDC retail investment package, does not change after this intervention. These are serious criticisms.

In terms of the use of techniques for project investment analysis, several techniques are not used, or are given too low a priority in their governance of the investment analysis. Market analysis ignores linkage analysis, which may in fact increase the profit to DPA's through growth. Power analysis is ignored, which may reduce costs, perhaps increase profits of the DPAs. Economic benefits analysis of those benefits of DPAs other than profit is ignored. Benefits, such as manpower characteristics, may tend to weight the choice of DPA investments toward a DPA of less profitability that a market analysis would dictate choosing. DPAs themselves are not analyzed. No new organizations of production are analyzed which may increase the set of benefits to the ghetto community for a given unit of capital invested. Indeed, the market analysis as a technique fails to identify the objectives of community economic benefit and to analyze possible DPAs based on these objectives.

In view of this criticism, we strongly urge that Circle, Inc., and Circle Venture Capital Fund, Inc. take the results of the market analysis as only one part of a project analysis: one that identifies profitable retail investments only. More work on the identification of the final investment analysis is required.

In Volume II, we propose to turn around the priority of techniques in the project investment analysis, as well as expand the set of techniques to include those not used in Volume I. In effect, we will strive to convert the theory of cost/benefit analysis into a usable method. First, the objectives of community economic development outlined in Chapter I will be translated into a quantititative welfare function. The

different DPAs under analysis would be the object of several social discounted cash flows using shadow prices for underutilized resources. The social rate of return of this investment would be an indicator of acceptability of the DPA based on its total community economic benefits. The final set of acceptable DPAs would be the final investment package recommended.

Candidates for DPAs would be derived using all the four techniques described earlier. The market analysis which derived those DPAs with the consumer market and costs as they are that could generate a profit potential supportive of the new venture. The linkage analysis would examine those linked ventures in retail, wholesale and manufacturing that could increase profit and/or decrease consumer cost of purchased goods by decreasing costs and providing for future growth of sales. The power analysis would examine the pricing policy of institutions that could, if affected, increase benefits and decrease costs of the DPAs. In particular, new institutions supported by the CDC and by government that would establish new power relationships which, in turn, would increase net benefits to the ghetto community will be analyzed. Both the linkage analysis (horizontal as well as backward) and the power analysis could reduce scale economies markedly, in turn necessary for entry into the ghetto economy. Finally, the benefit analysis of DPA categories would define the benefits, particularly other than that of profit, that could accrue to the residents of the ghetto.

At the third stage of analysis, the financial analysis would show how much each DPA and the investment package as a whole would cost to finance. In particular, the financial analysis would show how much subsidy is required in order to make the new ventures feasible.

These three stages, then, comprise a true project investment analysis: identification of the investment package through market analysis,

linkage analysis, power analysis and benefits analysis as well as a study of new organizations of production; analysis of what to produce or to invest in through a cost/benefit analysis; and, and analysis of how much it will cost to finance and to subsidize through a financial analysis.

As a result of making both of the analyses of Volume I and of Volume II, we can then contrast the results and the ultimate usefulness of these two approaches. Such a comparison is essential for the introduction of a new set of techniques for use in a project investment analysis for work on such a large scale project as that of commercial development of Dudley Square. The theme for such a comparison will be to show that the hard results of a market analysis, though marked for the level of investment of CDC's, is not enough. Not only is market analysis and the investment package recommended by a market analysis not enough, but it tends to ignore meeting the non-profit oriented economic objectives of community economic development. To a certain extent, the problems which have created the ghetto economy would tend to be perpetuated by the investment into commercial enterprises alone.

PART IV: Next Step of Analysis in Volume II - Other Work

In Volume II, as we said in the last Part, we will make a financial analysis and cost/benefit analysis of the investment package in addition to others. Since the financial analysis and the cost/benefit analysis are so crucial to a new institutional analysis, we will turn to a short discussion about their use.

The financialanalysis will first estimate development costs and operating expenses of each investment. Their financial projections for the life of the commercial project are made. These are all at market prices. Then, the two key trade-offs of equity vs debt, and of profit vs mortgage interst rate are analyzed. The judgment of the financial feasibility (or lack of it) is based on the capacity of the DPAs to operate in the black given these trade-offs. The output of these analyses will be the equity and debt finance required, the expected profit rate and mortgage interest rates necessary to finance the investments. Without the subsidy, the rate of return may likely be below market. Next, those below market investments are analyzed to identify the amount of subsidy necessary to given these investments the amount of profit (which could be zero for non-profit operations) needed to pay the entrepreneurs and/or owners (which may be a CDC in part who may require no return). Then with this subsidy, normally below market investments are made feasible.

Then, the investment package of DPAs becomes the portfolio of a development bank. The more profitable businesses may support the less profitable ones in order to make the institution operationally feasible and to increase the amount of benefits that accrue to the ghetto community. Additional subsidy for overhead of the bank may be required.

Similarly, the investment package of parcels of land required

for the establishment of the new DPAs also becomes the portfolio for a land bank. In a manner similar to the financial analysis of the development bank, we can analyze the finances of the land bank. Again, additional subsidy may be required. If a land bank fails to be feasible, then a land trust may be the best solution. A land trust would make no profit from the sale of parcels of land, and therefore all of its overhead would have to be paid out of the DPAs if the land trust demands below market rents and/or by the government.

The cost/benefit analysis will substititue "shadow prices" for market prices in order to utilize underused resources. This has the effect of weighing the selection of investments in favor of those that meet the objectives of community economic development. These new prices will be substituted into the financial projections to derive the social rate of return. The, the institution as a whole can be evaluated on the social bases as well as the financial (and presumably the social evaluation will dominate). Different combinations of the DPAs of the investment package can produce different portfolios for the development bank and for the land bank. One portfolio will very likely be more attractive than another. The key trade-off of profit and of other economic benefits can be analyzed in a manner similar to that for individual DPAs. Instead of DPAs, however, we will be analyzing portfolios. The outcome of this analysis would be to determine the net economic benefit to development banking and land banking or a land trust based on their investment into portfolios of DPAs and of land, respectively. The selection of these investments, however, will be constrained to those in the commercial development of Dudley Square.

Finally, the five areas of theory, technique, objectives, strategy and program will be reviewed in a manner like that of this concluding

chapter in order to make final conclusions based on the data available and the analyses made herein.

APPENDICES I-III

The Numbers and Census that Support the Analyses of Volume I

APPENDIX I: Market Analysis

Introduction

In Appendix I, Part I, we include the detailed analysis of market area characteristics by census tracts. The most important output of this analysis is the estimation of the future total disposable income of the trade area under varying assumptions (AI-4, I-5).

Several additional tables are included.

In Part II, we include the detailed analysis of the retail market by trade area segments. This most important output is also an estimation of the future retail expenditures under varying assumptions.

PART I: Market Area Characteristics

Population and Income: 1970

Primary trade area Census tract	pop	total families under $2999	$3000-$5999	$6000-$8999	$9000-$11,999	$12,000-$14,999	$15,000 and +	median fam inc.
803	3,285	148	243	109	110	62	39	$5,532
804	1,626	100	157	60	49	4	3	$4,388
805	1,427	100	102	52	41	10	7	$4,850
806	1,889	132	149	108	31	26	15	$4,849
807	528	35	18	11	5	8	13	$5,272
808	2,864	165	261	84	59	30	41	$4,473
816	1,049	38	32	67	48	9	17	$7,574
817	4.727	197	296	230	164	105	94	$6,625
Subtot	17,395	915	1258	721	507	254	229	= 3884
Secondary trade area								
103[1]	3,056	73	81	47	26	10	13	$4,647
104	9,627	52	289	221	157	105	86	$7,347
708	2,305	110	107	76	68	32	28	$5,824
709	2,120	37	163	81	32	-	19	$5,468
710	1,369	24	42	55	6	19	12	$6,464
711	725	11	16	11	8	7	13	$7,545
801	748	35	53	31	27	11	20	$6,083
813	4,048	144	236	193	154	104	59	$6,851
814	2,419	122	114	97	84	36	29	$6,075
815	2,906	87	149	151	83	68	77	$7,437
818	3,811	156	259	155	151	53	82	$6,276
906	2,602	168	182	122	89	52	35	$5,720
Subtot	35,736	1019	1691	1340	885	497	473	
TOTAL	53,131	1934	2949	2061	1392	751	702	= 9789

Source: United Community Services, 1970 Census of Population and Housing Summary Data, UCS Research Department, 14 Somerset St. Boston

[1] Half of the census tract.

Population and Income Projections: 1980 Core Decline (1970 $s)

Factors: 100's 51,300/54,000 = .95
700's 22,900/21,700 =1.05
800's 61,300/63,000 = .97
900's 86,800/90,800 = .96

Primary trade area

Census tract	pop	under $2999	$3000-$5999	$6000-$8999	$9000-$11,999	$12,000-$14,999	$15,000 and +	average fam inc
803	3,196	144	236	106	107	60	38	
804	1,582	97	153	58	48	4	3	
805	1,388	97	99	51	40	10	7	
806	1,838	128	145	105	30	25	15	
807	514	34	18	11	5	8	13	
808	2,787	161	254	82	57	29	40	
816	1,021	37	31	65	47	9	17	
817	4,599	192	288	224	160	102	91	
Subtot	17,010	895	1230	705	496	248	224	$6,291

Secondary trade area

103	2,903	69	77	45	25	10	12	
104	9,146	49	49	210	149	100	82	
708	2,189	105	101	72	64	30	26	
709	2,014	35	154	76	30	-	18	
710	1,098	23	39	52	5	18	11	
711	1,300	10	15	10	8	6	12	
801	732	34	52	30	26	11	19	
813	3,958	141	231	286	151	102	57	
814	2,365	120	119	94	82	35	28	
815	2,842	85	146	148	81	66	75	
818	3,727	153	253	152	148	52	80	
906	2,500	162	175	117	85	50	33	
Subtot	34,774	986	1411	1292	854	480	453	$7,467
TOTAL	51,784	1881	2641	1997	1350	728	677	$7,014

Population and Income Projections: 1980 Trends Extended (1970 $s)

Factors: 100's 56,700/54,000 = 1.05
700's 23,090/21,700 = 1.06
800's 63,300/63,000 = 1.01
900's 88,000/90,800 = .97

Primary trade area

Census tract	pop	under $2999	$3000-$5999	$6000-$8999	$9000-$11,999	$12,000-$14,999	$15,000 and +	average fam inc
803	3,301	149	244	110	111	62	39	
804	1,634	100	158	60	49	4	3	
805	1,434	100	103	52	41	10	7	
806	1,898	133	150	109	31	26	15	
807	531	35	18	11	5	8	13	
808	2,878	166	262	84	59	30	41	
816	1,054	38	32	67	48	9	17	
817	4,751	198	297	231	165	106	95	
Subtot	17,482	920	1264	725	510	255	230	$6,487

Secondary trade area

103	3,209	76	85	49	27	11	14	
104	10,108	55	303	232	164	110	90	
708	2,443	117	113	81	72	34	30	
709	2,247	39	173	86	34	-	20	
710	1,451	25	45	58	6	20	13	
711	768	12	17	12	8	7	14	
801	752	35	53	31	27	11	20	
813	4,068	145	237	294	155	105	59	
814	2,431	123	115	97	84	36	29	
815	2,921	87	150	152	83	68	77	
818	3,830	157	260	156	152	53	82	
906	2,615	169	183	122	89	52	35	
Subtot	36,843	1040	1734	1370	901	507	483	$7,356
TOTAL	54,325	1960	2998	2095	1411	762	713	$7,015

Population and Income Projections: 1980 Core Intensive (1970 $s)

Factors: 100's 59,400/54,000 = 1.11
700's 7889/6519 = 1.21
800's 65,000/63,300 = 1.03
900's 92,000/90,800 = 1.01

Primary trade area

Census tract	pop	under $2999	$3000-$5999	$6000-$8999	$9000-$11,999	$12,000-$14,999	$15,000 and +	average fam inc
803	3,384	152	250	112	113	64	40	
804	1,675	103	162	62	51	4	3	
805	1,470	103	105	54	42	10	7	
806	1,946	136	153	111	32	27	15	
807	544	36	19	11	5	8	13	
808	2,950	170	269	87	61	31	42	
816	1,080	39	33	69	49	9	17	
817	4,869	203	305	237	169	108	97	
Subtot	17,917	942	1296	743	527	262	236	$6,469

Secondary trade area

103	4,370	104	116	67	37	14	19	
104	13,767	74	413	316	225	150	123	
708	2,789	133	129	92	82	39	34	
709	2,565	45	197	98	39	-	23	
710	1,656	29	51	67	7	23	15	
711	877	13	19	13	10	8	16	
801	770	36	55	32	28	11	21	
813	4,169	148	243	302	159	107	61	
814	2,492	126	117	100	87	37	30	
815	2,993	90	153	156	85	70	79	
818	3,925	161	267	160	156	55	84	
906	2,628	170	184	123	90	53	35	
Subtot	43,001	1129	1944	1526	1005	567	540	$7,382
TOTAL	60,918	2071	3240	2269	1532	829	776	$7,050

Total Disposable Income: 1970

Primary trade area

Community	under $2999	$3000-$5999	$6000-$8999	$9000-$11,900	$12,000-$14,999	$15,000 and +
Roxbury	1,372,500	5,661,000	5,407,500	5,323,500	5,429,000	4,007,500
Secondary trade area						
Back Bay	187,500	1,665,000	2,010,000	1,921,500	1,552,500	1,732,500
South End	273,000	1,476,000	1,672,500	1,197,000	783,000	1,260,000
Mission Hill /Parker Hill	816,000	3,649,500	5,452,500	5,239,500	3,672,000	4,672,500
North Dorchester	252,000	819,000	915,000	934,500	702,000	612,500
Subtotal: sec	1,528,500	7,609,500	10050 000	9,292,500	6,709,500	8,277,500
Subtotal: whl	2,901,000	13270 000	15457 500	14616 000	10138 500	12285 000

TOTAL $68,668,500

Total Disposable Income: 1980 Core Decline

Primary trade area

Community	under $2999	$3000-$5999	$6000-$8999	$9000-$11,900	$12,000-$14,999	$15,000 and +
Roxbury	1,372,500	5,535,000	5,287,500	5,208,000	3,348,000	3,920,000
Secondary trade area						
Back Bay	177,000	567,000	1,912,500	1,827,000	1,485,000	1,645,000
South End	259,500	1,390,500	1,575,000	1,123,500	729,000	1,172,500
Mission Hill /Parker Hill	799,500	3,604,500	5,325,000	5,325,000	5,124,000	3,591,000
North Dorchester	243,000	787,500	877,500	892,500	675,000	577,500
Subtotal: sec	1,479,000	6,349,500	9,690,000	9,168,000	8,013,000	6,986,000
Subtotal: whl	2,821,500	11884 500	14977 500	14175 000	9,828,000	11847 500

TOTAL $65,534,000

Total Disposable Income: 1980 Trends Extended

Primary trade area

Community	under $2999	$3000-$5999	$6000-$8999	$9000-$11,999	$12,000-$14,999	$15,000- and +
Roxbury	1,380,000	5,688,000	5,437,500	5,355,000	3,442,500	4,025,000

Secondary trade area

Back Bay	196,500	1,746,000	2,107,500	2,005,500	1,633,500	1,820,000
South End	289,500	1,566,000	1,777,500	1,260,000	823,500	1,347,500
Mission Hill/ Parker Hill	820,500	3,667,500	5,475,500	5,260,500	3,685,000	4,672,500
North Dorchester	253,500	823,500	915,000	934,500	702,000	612,500
Subtotal:sec	1,560,000	7,803,000	10275 500	9,460,500	6,844,000	8,452,500
Subtotal:whl	2,940,000	13,491,000	15713 000	14815 500	10287 000	12477 500

TOTAL $69,724,000

Total Disposable Income: 1980 Core Intensive

Primary trade area

Community	under $2999	$3000-$5999	$6000-$8999	$9000-$11,999	$12,000-$14,999	$15,000 and +
Roxbury	1,413,000	5,832,000	5,572,500	5,533,500	3,537,000	4,130,000

Secondary trade area

Back Bay	267,000	2,380,500	2,872,500	2,751,000	2,214,000	2,485,000
South End	330,000	1,782,000	2,025,000	1,449,000	945,000	1,540,000
Mission Hill /Parker Hill	841,500	3,757,500	5,625,000	5,407,500	3,780,000	4,812,500
North Dorchester	255,000	828,000	922,500	945,000	715,500	612,500
Subtotal:sec	1,693,500	8,748,000	11,445,000	10552 500	7,654,500	9,450,000
Subtotal:wh	3,106,500	14,500,000	17,017,500	16086 000	11191 000	13580 000

TOTAL $75,561,500

Race Distribution (as percentage of area): 1970

Primary trade area

Census tract	pop	black	white	% black
803	3,285	2,552	700	77.7
804	1,626	1,504	75	92.5
805	1,427	1,354	56	94.9
806	1,889	1,703	133	90.2
807	528	309	211	58.5
808	2,864	1,251	1,575	43.6
816	1,049	852	185	81.2
817	4,727	4,419	257	93.5
Subtotal	17,395	13,944	3,192	80.2

Secondary trade area

103	6,112	1,340	4,709	22.1
104	9,627	653	8,606	6.8
708	2,305	1,930	310	83.7
709	2,120	1,653	407	78.0
710	1,369	257	999	18.8
711	725	102	580	14.1
801	748	261	468	34.9
813	4,048	2,795	1,161	69.0
814	2,419	1,225	1,153	50.6
815	2,906	2,287	582	78.7
818	3,811	3,340	415	87.6
906	2,602	956	1,574	36.7
Subtotal	38,792	16,799	20,964	43.3
TOTAL	56,187	30,743	24,156	54.7

Age Distribution (as percentage of area): 1970

Primary trade area

Census tract	pop	5 and under	6-20	21-64	64+	%21-64	%64+
803	3285	565	1135	1365	219	41.6	6.7
804	1626	337	679	517	92	31.8	5.7
805	1427	99	368	614	345	43.0	24.2
806	1889	294	657	752	186	39.8	9.8
807	528	39	96	274	118	51.9	22.3
808	2864	431	842	1129	462	39.4	16.1
816	1049	128	318	512	91	48.8	8.7
817	4727	654	1632	2004	437	42.4	9.2
Subtot	17395	2547	5727	7167	1950	41.2	11.2

Secondary trade area

103	6112	252	3189	2428	240	39.7	3.9
104	9627	174	3526	4585	1338	47.6	13.9
708	2305	227	393	1378	307	59.8	13.3
709	2120	170	237	1434	279	67.6	13.2
710	1369	41	305	803	220	58.7	16.1
711	725	17	140	467	101	64.4	13.9
801	748	132	233	322	61	43.0	8.2
813	4048	565	1194	1924	365	47.5	9.0
814	2419	277	546	1251	345	51.7	14.3
815	2906	342	829	1349	386	46.4	13.3
818	3811	450	1124	1868	369	49.0	9.7
906	2602	367	772	1188	275	45.7	10.6
Subtot	38782	3014	12488	16621	4286	42.9	11.1
TOTAL	56177	5561	18215	23788	6236	42.3	11.1

Market Share of Retail Consumption by SIC Categories

Major Groupings	Market Share
52	.34
53	.00
54	.07
55	.04
56	.51
57	.65
58	.71
59	.41

Overcrowded and Saturated Retail Categories

Store	Present Market Share
Fruit stores and vegetable markets	1,00
Men's clothing and furnishings stores	1.00
Family clothing stores	1.00
Gift, novelty and souvenir shops	.90
Millinery shops	1.00
Furniture stores	.95
Paint, glass and wallpaper stores	1.00

Source: Dun and Bradstreet, Market Indicators, Dec. 1973 and Table III.10

Note: a market share of 1.00 means that the total sales estimated by Dun and Bradstreet exceeded the estimates of the total retail expenditures for the primary and secondary trade area. This means that the tertiary trade area is very important to these stores. Sometimes a store sold 3 to 4 times the sales limit of the Dudley Square trade area.

PART II: Retail Market Projections

RETAIL CATEGORY EXPENDITURES BY INCOME

Primary Trade Area: 1980 - Core Decline

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000 and over	Total
Convenience Goods							
Drug Stores							
Pharmaceutical drug stores	20,424	67,687	50,569	44,982	23,065	16,905	223,632
Drug stores with traditional lines	37,398	134,806	92,981	25,169	42,343	30,993	363,690
Self-service, multi-line drug stores (excluding liquor)	60,996	201,924	149,531	128,520	68,506	50,313	659,790
Supermarkets and Food Stores							
Supermarkets with limited nonfoods	296,010	885,622	688,931	574,056	303,973	224,595	2,973,187
Supermarkets with expanded nonfoods	355,212	1,062,518	827,044	689,189	364,561	269,675	3,568,199
Discount supermarkets with expanded nonfoods	367,080	1,098,353	854,775	713,286	376,561	278,933	3,689,381
Specialty Food Stores							
Delicatessens	18,630	55,742	43,500	38,021	19,278	14,088	189,259
Meat Markets	16,284	48,917	38,063	31,595	17,213	12,478	164,550
Fish and seafood markets	1,380	3,982	3,263	3,212	1,721	1,208	14,767
Fruit stores, vegetable markets	3,450	10,238	8,700	6,962	3,443	2,816	35,611
Candy, nut, confectionery stores	2,622	7,963	5,981	5,355	2,410	2,013	26,344
Bakeries	5,382	15,926	12,506	10,710	5,508	4,025	54,057
Liquor Stores	14,076	66,550	60,356	57,299	35,114	31,395	264,790
Hardware Stores							
Hardware stores with limited lines (traditional)	7,452	34,697	32,081	28,382	16,524	14,893	134,029
Multi-line hardware stores (but not including extensive Plumbing, heating, and lumber supplies)	9,798	44,935	41,869	37,485	21,688	19,723	175,498
Convenience Services							
Barber shops	6,624	25,596	21,750	18,207	9,639	7,245	89,061
Beauty shops	10,626	34,128	27,188	28,382	18,590	16,905	135,819
Dry cleaners	6,900	22,752	16,313	15,530	9,639	10,063	81,197
Laundromats (washing, drying only-no dry cleaning	4,554	15,358	10,875	10,710	6,541	6,843	54,881
Shoe repair	1,518	4,550	3,263	3,213	2,066	2,013	16,623

Primary Trade Area - 1980 Core Decline
(continued)

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000 and over	Total
Primary Shoppers Goods							
General Merchandise Stores							
Full-line traditional department stores	91,271	406,269	379,643	373,970	227,664	214,032	1,692,849
Limited-line traditional department stores emphasizing soft goods	66,292	295,016	275,479	271,363	165,726	155,232	1,229,108
Full-line discount department stores	87,840	391,325	362,194	357,824	217,285	206,192	1,622,660
Limited-line discount department stores	67,939	302,765	282,881	279,149	169,409	159,152	1,261,295
Full-line traditional variety stores with limited apparel	14,274	63,653	60,806	58,330	35,154	33,320	265,537
Super variety stores with expanded apparel	17,705	79,151	74,025	72,912	44,194	41,552	329,539
Variety stores, limited price and limited lines	10,568	47,048	43,886	43,226	26,449	24,696	195,873
Major Apparel Stores							
Men's clothing and furnishings stores	6,176	34,871	33,311	32,810	20,088	21,168	148,424
Women's clothing and furnishings stores	20,313	70,848	60,278	63,538	40,846	41,552	297,375
Children's and infants' clothing stores	1,647	6,089	4,759	5,208	3,683	3,528	24,914
Family clothing stores	6,588	34,317	34,369	31,764	17,410	13,328	139,781
Women's shoe stores	7,823	29,336	27,495	27,082	16,740	14,112	122,588
Men's and boys' shoe stores	4,118	22,694	22,208	21,353	13,057	13,720	97,150
Family shoe stores	4,804	21,587	20,093	19,790	12,053	11,368	89,695
Other Specialty Stores							
Book and stationery stores	2,333	8,856	8,989	8,333	5,022	5,096	38,629
Camera and photographic supply stores	1,235	4,423	4,230	4,116	2,678	2,744	19,426
Cigar stores and stands	824	3,875	3,173	3,125	2,009	1,568	14,574
Gift, novelty and souvenir shops	1,373	4,982	4,759	4,687	3,013	2,744	21,558
Hosiery and lingerie shops	1,373	7,196	6,874	6,770	3,683	2,744	28,640
Jewelry stores	5,216	19,926	18,506	18,228	11,048	9,408	82,332
Luggage and leather goods stores	275	1,107	1,058	1,042	670	784	4,936

PRIMARY TRADE AREA 1980 - CORE DECLINE
(continued)

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000- and over	Total
Other Specialty Stores (continued)							
Millinery shops	275	1,661	1,586	1,562	1,004	784	6,872
Music stores	2,333	8,856	8,989	8,333	5,022	5,096	38,629
Sporting goods stores	2,196	8,303	8,460	7,812	4,687	4,704	36,162
Florist shops	2,471	9,410	9,518	8,854	5,692	5,488	41,433
Optical goods stores	1,784	6,642	6,874	6,250	4,018	3,920	29,488
Toy and hobby stores	824	3,321	3,173	3,125	2,009	1,960	14,412
Secondary Shoppers Goods							
Furniture and household furnishings stores	13,862	78,597	69,266	65,100	36,158	28,616	291,599
Household applicances, television and radio stores	14,000	66,974	60,278	45,310	21,762	20,384	228,708
Floor coverings stores	3,157	11,624	11,633	10,937	7,031	6,664	51,046
Passenger car dealers	142,328	570,105	507,600	447,367	241,391	168,168	2,076,959
Tire, battery and accessory stores	7,686	30,996	26,966	23,957	13,057	9,016	111,678
Paint, glass and wallpaper stores	2,608	11,624	11,104	9,895	5,692	5,096	46,019
Other Goods and Services							
Gasoline service stations, with limited accessories	66,292	265,680	232,650	194,258	101,110	60,368	920,358
Eating and drinking places	54,900	177,120	152,809	156,761	97,472	94,472	733,489

RETAIL CATEGORY EXPENDITURES BY INCOME
Primary Trade Area 1980 Trends Extended

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000 and over	Total
Convenience Goods							
Drug Stores							
Pharmaceutical drug stores	20,912	67,687	50,569	44,982	23,065	16,905	224,120
Drug stores with traditional lines	38,292	134,806	92,981	78,719	42,343	30,993	418,134
Self-service, multi-line drug stores (excluding liquor)	62,455	201,924	149,531	128,520	68,506	50,313	661,249
Supermarkets and Food Stores							
Supermarkets with limited nonfoods	303,089	885,622	688,931	574,056	303,973	224,595	2,980,266
Supermarkets with expanded nonfoods	363,706	1,062,518	827,044	689,189	364,561	269,675	3,576,693
Discount supermarkets with expanded nonfoods	375,858	1,097,784	854,775	713,286	376,954	278,933	3,697,590
Specialty Food Stores							
Delicatessens	19,076	58,742	43,500	38,024	19,278	14,088	192,708
Meat markets	16,673	48,917	38,063	31,597	17,213	12,478	164,941
Fish and seafood markets	1,413	3,982	3,563	3,123	1,721	1,208	15,100
Fruit stores, vegetable markets	3,533	10,238	8,700	6,962	3,443	2,818	35,694
Candy, nut, confectionery stores	2,685	7,963	5,981	5,355	2,410	2,013	26,407
Bakeries	5,511	15,926	12,506	10,710	5,508	4,025	54,186
Liquor Stores	14,413	66,550	60,356	57,299	35,114	31,395	265,127
Hardware Stores							
Hardware stores with limited lines (traditional)	7,630	34,697	32,081	28,382	16,524	14,893	134,207
Multi-line hardware stores (but not including extensive plumbing, heating, and lumber supplies)	10,032	44,935	41,869	37,485	21,688	19,723	175,732
Convenience Services							
Barber shops	6,782	25,596	21,750	18,207	9,639	7,245	89,219
Beauty shops	10,880	34,128	27,188	28,382	18,590	16,905	136,073
Dry cleaners	7,065	22,752	16,313	15,530	9,639	10,063	81,362
Laundromats (washing, drying only-no dry cleaning)	4,663	15,358	10,875	10,710	6,541	6,843	54,990
Shoe repair shops	1,554	4,550	3,563	3,213	2,066	2,012	16,958

PRIMARY TRADE AREA : 1980 - TRENDS EXTENDED

(continued)

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000 and over	Total
Primary Shoppers Goods							
General Merchandise Stores							
Full-line traditional department stores	91,770	417,499	390,413	384,489	234,090	219,765	1,738,026
Limited-line traditional department stores emphasizing soft goods	66,654	303,170	283,924	278,996	170,404	159,390	1,261,908
Full-line discount department stores	88,320	402,142	372,469	367,889	223,418	211,715	1,665,953
Limited-line discount department stores	68,310	311,134	290,906	287,028	174,191	163,415	1,294,984
Full-line traditional variety stores with limited apparel	14,352	65,412	62,531	59,976	36,146	34,213	272,630
Super variety stores with expanded apparel	17,802	81,338	76,125	74,970	45,441	42,665	338,341
Variety stores, limited price and limited lines	10,626	48,348	45,131	44,447	27,196	25,358	201,106
Major Apparel Stores							
Men's clothing and furnishings stores	6,210	35,834	34,256	33,737	20,655	21,735	152,427
Women's clothing and furnishings stores	20,424	72,806	61,988	65,331	41,999	42,665	305,213
Children's and infants' clothing stores	1,656	6,257	4,894	5,355	3,787	3,623	25,572
Family clothing stores	6,624	35,266	35,344	32,666	17,901	13,685	141,486
Women's shoe stores	7,866	30,146	28,275	27,846	17,213	14,490	125,836
Men's and boys' shoe stores	4,140	23,321	22,838	21,956	13,426	14,088	99,769
Family shoe stores	4,830	22,183	20,663	20,349	12,393	11,673	92,091
Other Specialty Stores							
Book and stationery stores	2,346	9,101	9,244	8,568	5,164	5,233	39,656
Camera and photographic supply stores	1,242	4,550	4,350	4,284	2,754	2,818	19,998
Cigar stores and stands	828	3,982	3,263	3,213	2,066	1,610	14,962
Gift, novelty and souvenir shops	1,380	5,119	4,894	4,820	3,098	2,818	22,129
Hosiery and lingerie shops	1,380	7,394	7,069	6,962	3,787	2,818	29,410
Jewelry shops	5,244	20,477	19,031	18,743	11,360	9,660	84,515
Luggage and leather goods stores	276	1,138	1,087	1,071	689	805	5,066

Primary Trade Area 1980 TRENDS EXTENDED
(continued)

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000- and over	Total
Other Specialty Stores (continued)							
Millinery shops	276	1,706	1,631	1,607	1,033	805	7,058
Music stores	2,346	9,101	9,244	8,568	5,164	5,233	39,656
Sporting goods stores	2,220	8,532	8,700	8,033	4,820	4,830	37,135
Florist shops	2,484	9,670	9,788	9,104	5,852	5,635	42,533
Optical goods stores	1,794	6,826	7,069	6,426	4,131	4,025	30,371
Toy and hobby stores	828	3,413	3,263	3,213	2,062	2,012	14,791
Secondary Shoppers Goods							
Furniture and household furnishings stores	13,938	80,770	71,231	66,938	37,179	29,383	299,439
Household applicanes, television and radio stores	14,076	68,825	61,988	46,589	22,376	20,930	234,784
Floor coverings stores	3,174	11,945	11,963	11,246	7,229	6,843	52,400
Passenger car dealers	143,106	585,864	522,000	459,995	248,204	172,673	2,131,842
Tire, battery and accessory stores	7,728	31,853	27,731	24,633	13,426	9,258	114,629
Paint, glass and wallpaper stores	2,622	11,945	11,419	10,175	5,852	5,233	47,246
Other Goods and Services							
Gasoline service stations, with limited accessories	54,372	273,024	239,250	199,742	103,964	61,985	932,337
Eating and drinking places	41,538	182,016	157,144	161,186	100,177	97,003	739,064

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RETAIL CATEGORY EXPENDITURES BY INCOMES

PRIMARY TRADE AREA 1980 - CORE INTENSIVE

RETAIL CATEGORIES	UNDER $3,000	$3,000-5,999	$6,000-8,999	$9,000-11,999	$12,000-14,999	$15,000- and Over	TOTAL
Convenience Goods							
Drug Stores							
Pharmaceutical drugs	20,912	69,401	51,824	46,481	23,698	17,346	229,662
Drug stores with traditional lines	38,292	138,218	95,290	81,342	43,505	31,801	428,448
Self-service, multi line drug stores (excluding liquor)	62,455	207,036	153,244	132,804	70,386	51,625	677,550
Supermarkets & Foodstores							
Supermarkets with limited nonfoods	303,089	908,042	706,036	593,191	312,317	230,454	3,053,129
Discount supermarkets with expanded nonfoods	375,858	1,126,159	875,997	737,062	387,302	286,209	3,788,587
Speciality Food Stores							194,360
Delicatessens	19,076	57,154	44,580	39,288	19,807	14,455	168,972
Meat markets	16,673	50,155	39,008	32,648	17,685	12,803	15,187
Fish & seafood	1,413	4,082	3,344	3,320	1,769	1,239	36,570
Fruit & vegatables	3,533	10,498	8,916	7,194	3,538	2,891	27,055
Candy,Nut,Confectionery	2,685	8,165	6,130	5,534	2,476	2,065	55,514
Bakeries	5,511	16,330	12,817	11,067	5,659	4,130	272,001
Liquor Stores							
Hardware Stores	14,413	68,234	61,855	59,208	36,077	32,214	137,670
with limited lines	7,630	35,575	32,878	29,328	16,978	15,281	182,037
Multi-lines (but not including extensive plumbing heating and lumber supp.	10,032	46,073	42,908	38,735	24,052	20,237	91,468
CONVENIENCE SERVICES							
Barber shops	6,782	26,244	22,290	18,814	9,904	7,434	91,468
Beauty shops	10,880	34,992	27,863	29,328	19,100	17,346	139,509
Dry cleansers	7,065	23,328	16,718	16,047	9,904	10,325	83,387
Laundromats	4,663	15,746	11,145	11,067	6,720	7,021	56,362
Shoe repair shops	1,554	4,666	3,344	3,320	2,122	2,065	17,071

RETAIL CATEGORIES	PRIMARY TRADE AREA - 1980 CORE INTENSIVE UNDER $3,000	$3,000 5,999	$6,000 8,999	$9,000 11,000	$12,000 14,999	15,000 OVER	TOTAL
Primary Shoppers Goods							
General merchandise stores							
Full-line traditional dept. stores	93,935	428,069	400,106	397,305	240,516	225,498	1,785,429
Limited-line traditional dept. store (emphasizing soft goods)	68,248	310,846	290,327	288,295	175,082	163,548	1,296,346
Full-line discount dept. stores	90,432	412,322	381,71 7	380,151	229,551	217,238	1,711,410
Limited-line discount dept. stores	69,944	319,010	298,129	296,596	178,972	167,678	1,330,329
Full-line traditional variety stores with limited apparel	14,695	67,068	64,084	61,975	37,139	35,105	280,066
Super variety stores with expanded apparel	18,228	83,398	78,015	77,469	46,688	43,778	347.576
Variety stores, limited price and limited lines	10,880	49,572	46,252	45,928	27,942	26,019	206,593
Major Apparel Stores							
Men's clothing & furnishings stores	6,359	36,742	35,107	34,861	21,222	22,302	156,302
Women's clothing & furnishing stores	20,912	74,650	63,527	67,509	43,151	43,778	313,527
Children's & infants clothing stores	1,696	6,415	5,015	5,534	3,891	3,717	26,268
Family clothing stores	6,782	36,158	36,221	33,754	18,392	14,402	145,349
Women's shoe stores	8,054	30,910	28,977	28,774	17,685	14,868	129,268
Men's & boy's shoe stores	4,239	23,911	23,405	22,687	13,794	14,455	102,491
Family shoe stores	4,946	22,745	21,176	21,027	12,733	11,977	94,604
Other Specialty Stores							
Book & stationery stores	2,402	9,331	9,473	8,854	5,306	5,369	40,735
Camera & photography supply stores	1,272	4,665	4,458	4,427	2,830	2,891	20,543
Cigar stores & stands	848	4,082	3,344	3,320	2,122	1,652	15,368
Gift, novelty & souvenir shops	1,413	5,299	5,015	4,980	3,183	2,891	22,781
Hosiery & lingerie shops	1,413	7,582	7,244	7,194	3,891	2,891	30,215
Jewelry stores	5,369	20,995	19,504	19,367	11,673	9,912	86,820
Luggage & leather goods stores	283	1,166	1,114	1,107	707	826	5,203

PRIMARY TRADE AREA - 1980 CORE INTENSIVE

RETAIL CATEGORIES	Under 3,000	3,000 5,999	6,000 8,999	9,000 11,999	12,000 14,999	15,000 Over	TOTAL
Other Specialty Stores (cont)							
Milinery shops	283	1,750	1,672	1,660	1,061	826	7,252
Music stores	2,402	9,351	9,473	8,854	5,306	5,369	40,735
Sporting goods stores	2,261	8,748	8,916	8,300	4,952	4,956	38,133
Florist shops	2,543	9,914	10,031	9,407	6,013	5,782	43,690
Optical goods stores	1,837	6,998	7,244	6,640	4,244	4,130	31,093
Toy & hobby shops	848	3,499	3,344	3,320	2,122	2,065	15,198
SECONDARY SHOPPERS GOODS							
Furniture & household furnishing stores	14,271	82,814	73,000	69,169	38,200	30,149	307,603
Household appliances, television & radio stores	14,413	70,567	63,527	48,141	22,991	21,476	241,115
Floor covering stores	3,250	12,247	12,260	11,620	7,428	7,021	53,826
Passenger car dealers	146,528	600,696	534,960	475,328	255,018	177,177	2,189,707
Tire, battery & accessory stores	7,913	32,659	28,420	25.454	13.794	9.499	117,739
Paint, glass & wallpaper stores	2,685	12,247	11,702	10,514	6,013	5,369	48,530
OTHER GOODS & SERVICES							
Gasoline service stations, with limited accessories	68,248	279,936	245,190	206,400	106,817	63,602	970,193
Eating & drinking places	56,520	186,624	161,045	166.558	102,927	99,533	773,207

RETAIL CATEGORY EXPENDITURES BY INCOME
Primary Trade Area 1970

Retail Categories	Under $3,000	3000-5999	$6000 $8999	$9000 $11,999	$12,000 $14,999	$15,000 and over	Total
Convenience Goods							
Drug Stores							
Pharmaceutical drug stores	20,313	67,366	50,290	44,717	22,974	16,832	222,492
Drug stores with traditional lines	37,195	134,166	92,468	78,255	42,177	30,858	415,119
Self-service, multi-line drug stores (excluding liquor)	60,665	200,966	148,706	127,764	68,237	50,094	656,432
Supermarkets and Food Stores							
Supermarkets with limited nonfoods	294,401	881,418	685,130	570,679	302,781	223.619	2,958,028
Supermarkets with expanded nonfoods	353,281	1,087,475	822,481	685,134	363,131	268,503	3,580,005
Discount supermarkets with expanded nonfoods	365,085	1,093,139	850,059	709,090	375,476	277,720	3,670,569
Specialty Food Stores	18,529	55,478	43,260	37,797	19,202	14,026	188,292
Delicatessens	16,196	48,685	37,853	31,409	17,145	12,423	163,711
Meat markets	1,372	3,963	3,245	3,194	1,715	1,202	14,691
Fish and seafood markets	3,431	10,190	8,852	6,921	3,429	2,805	35,628
Fruit stores, vegetable markets	2,608	7,925	5,948	5,324	3,400	2,004	27,209
Candy, nut, confectionery stores	5,353	15,851	12,437	10,647	5,486	4,008	53,782
Bakeries	14,000	66,334	60,023	56,961	34,976	31,259	263,553
Liquor Stores							
Hardware Stores							
Hardware stores with limited lines (traditional)	7,412	34,532	31,904	28,215	16,459	14,828	133,350
Multi-line hardware stores (but not including extensive plumbing, heating, and lumber supplies)	9,745	44,722	41,638	37,265	21,603	19,637	174,610
Convenience Services							
Barber shops	6,588	25,475	21,630	18,100	9,601	7,214	88,608
Beauty shops	10,568	33,966	27,038	28,215	18,517	16,832	135,136
Dry cleaners	6,865	22,644	16,223	15,438	9,601	10,019	80,788
Laundromats (washing, drying only-no dry cleaning)	4,529	15,285	10,815	10,647	6,515	6,813	54,604
Shoe repair shops	1,510	4,529	3,245	3,194	2,057	2,004	16,539

Primary Trade Area 1970

(continued)

Retail Categories	Income						Total
	Under $3,000	$3000-5999	$6000-$8999	$9000 $11,999	$12,000 $14,999	$15,000 and over	
Primary Shoppers Goods							
General Merchandise Stores							
Full-line traditional department stores	91,271	415,517	388,259	382,227	233,172	218,810	1,729,256
Limited-line traditional department stores emphasizing soft goods	66,292	301,731	281,731	277,354	169,736	158,697	1,255,541
Full-line discount department stores	87,840	400,233	370,414	365,724	222,542	210,795	1,657,548
Limited-line discount department stores	67,939	309,657	289,301	285,340	173,507	162,705	1,288,449
Full-line traditional variety stores with limited apparel	14,274	65,102	62,186	59,623	36,005	34,064	271,254
Super variety stores with expanded apparel	17,705	80,952	75,705	74,529	45,263	42,480	336,634
Variety stores, limited price and limited lines	10,568	48,119	44,882	44,185	27,089	25,247	200,090
Major Apparel Stores							
Men's clothing and furnishings stores	6,176	35,664	34,067	33,538	20,574	21,641	151,660
Women's clothing and furnishings stores	20,313	72,461	61,646	64,947	41,834	42,480	303,681
Children's and infants' clothing stores	1,647	6,227	4,867	5,324	3,772	3,607	25,444
Family clothing stores	6,588	35,098	35,149	32,473	17,831	13,626	140,765
Women's shoe stores	7,823	30,003	28,119	27,682	17,145	14,427	125,119
Men's and boys' shoe stores	4,118	23,210	22,712	21,826	13,373	14,026	99,265
Family shoe stores	4,804	22,078	20,549	20,229	12,344	11,622	91,626
Other Specialty Stores							
Book and stationery stores	2,333	9,058	9,193	8,518	5,144	5,210	39,456
Camera and Photgraphic supply stores	1,235	4,529	4,326	4,259	2,743	2,805	19,897
Cigar stores and stands	824	3,963	3,245	3,194	2,057	1,603	14,886
Gift, novelty and souvenir shops	1,373	5,095	4,867	4,791	3,086	2,805	22,017
Hosiery and lingerie shops	1,373	7,359	7,030	6,921	3,772	2,805	29,260
Jewelry stores	5,216	20,380	18,926	18,632	11,316	9,618	84,088
Luggage and leather goods stores	275	1,132	1,082	1,065	686	802	5,042

Primary Trade Area 1970

(continued)

Retail Categories	Under $3,000	$3,000 -5,999	$6,000 $8,999	$9,000 $11,999	$12,000 $14,999	$15,000 and over	Total
Other Specialty Stores (continued)							
Millinery shops	275	1,698	1,622	1,597	1,029	802	7,023
Music stores	2,333	9,058	9,193	8,518	5,144	5,210	39,456
Sporting foods stores	2,196	8,492	8,652	7,985	4,801	4,809	36,935
Florist shops	2,471	9,624	9,734	9,050	5,829	5,611	42,319
Optical goods stores	1,784	6,793	7,030	6,388	4,115	4,008	30,118
Toy and hobby stores	824	3,397	3,245	3,194	2,057	2,004	14,721
Secondary Shoppers Goods							
Furniture and household furnishings stores	13,862	80,386	70,838	66,544	37,033	29,255	297,918
Household appliances, television and radio stores	14,000	68,498	61,646	46,314	22,289	20,839	233,586
Floor coverings stores	3,157	11,888	11,897	11,179	7,201	6,813	52,135
Passenger car dealers	142,328	583,083	519,120	457,289	247,231	171,922	2,120,973
Tire, battery and accessory stores	7,686	31,702	27,578	24,488	13,373	9,217	114,044
Paint, glass and wallpaper stores	2,608,	11,888	11,356	10,115	5,829	5,210	47,006
Other Goods and Services							
Gasoline service stations, with limited accessories	54,077	271,728	237,950	198,567	103,556	61,716	927,574
Eating and drinking places	41,312	181,152	156,277	160,237	99,784	96,581	735, 343

RETAIL CATEGORY EXPENDITURES BY INCOME
SECONDARY TRADE AREA - 1970

	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000 and over	
Convenience Goods							
Drug Stores							
Pharmaceutical drug stores	22,622	90,553	93,465	78,057	44,954	34,766	364,417
Drug stores with traditional lines	41,422	180,345	171,855	136,600	82,527	63,737	676,486
Self-service, multi-line drug stores (excluding liquor)	67,560	270,137	276,375	223,020	133,519	103,469	1,074,080
Supermarkets and Food Stores							
Supermarkets with limited nonfoods	327,863	1,184,799	1,273,335	996,156	592,449	461,885	4,836,487
Supermarkets with expanded nonfoods	393,456	1,421,455	1,528,605	1,195,945	710,536	554,593	5,804,590
Discount supermarkets with expanded nonfoods	406,581	1,469,394	1,579,860	1,237,761	734,690	573,631	6,001,917
Specialty Food Stores							
Delicatessens	20,635	74,573	80,400	65,977	37,573	28,971	308,129
Meat markets	18,036	65,442	70,350	54,826	33,548	25,660	267,862
Fish and seafood markets	1,529	5,327	6,030	5,576	3,355	2,483	24,300
Fruit stores, vegetable markets	3,821	13,697	16,080	12,080	6,710	5,794	58,191
Candy, nut, confectionery stores	2,904	10,653	11,055	9,293	4,697	4,139	42,741
Bakeries	5,691	21,307	23,115	18,585	10,735	8,277	87,980
Liquor Stores	15,591	89,031	111,555	99,430	68,437	64,565	448,609
Hardware Stores							
Hardware stores with limited lines (traditional)	8,254	46,418	59,295	49,250	32,206	30,627	226,050
Multi-line hardware stores (but not including extensive plumbing, heating, and lumber supplies)	10,852	60,115	77,385	65,048	42,270	40,560	296,230
Convenience Services							
Barber shops	7,337	34,243	40,200	31,595	18,787	14,900	147,062
Beauty shops	11,769	45,657	50,250	49.250	36,231	34,766	227,923
Dry cleaners	7,643	30,438	30,150	26,948	18,787	20,694	134,660
Laundromats (washing, drying only-no dry cleaning)	5,044	20,546	20,100	18,585	12,748	14,072	91,095
Shoe repair	1,681	6,088	6.030	5.376	4.026	4.139	27.340

SECONDARY TRADE AREA - 1970

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000 and over	Total
Primary Shoppers Goods							
General Merchandise Stores							
Full-line traditional department stores	101,645	558,537	721,590	667,202	456,246	451,952	2,957,172
Limited-line traditional department stores emphasizing soft goods	73,827	405,586	523,605	484,139	332,120	327,789	2,147,066
Full-line discount department stores	97,824	537,992	688,425	638,395	435,447	435,397	2,833,480
Limited-line discount department stores	75,661	416,240	537,675	498,078	339,501	336,067	2,203,222
Full-line traditional variety stores with limited apparel	15,896	87,509	115,575	104,076	70,450	70,359	463,865
Super variety stores with expanded apparel	19,717	108,816	140,700	130,095	88,565	87,742	517,562
Variety stores, limited price and limited lines	11,769	64,681	83,415	77,128	53,005	52,148	342,146
Major Apparel Stores							
Men's clothing and furnishings stores	6,878	47,940	63,315	58,543	40,257	44,699	261,632
Women's clothing and furnishings stores	22,623	97,402	114,570	113,369	81,856	87,742	517,562
Children's and infants' clothing stores	1,834	8,370	9,045	9,293	7,380	7,450	43,372
Family clothing stores	7,337	47,179	65,325	56,684	34,889	28,144	239,558
Women's shoe stores	8,712	40,330	52,260	48,321	33,548	29,799	212,970
Men's and boys' shoe stores	4,586	31,199	42,210	38,099	26,167	28,971	171,232
Family shoe stores	5,350	29,677	38,190	35,312	24,154	24,005	156,688
Other Specialty Stores							
Book and stationery stores	2,598	12,175	17,085	14,868	10,064	10,761	67,551
Camera and photographic supply stores	1,376	6,088	8,040	7,434	5,368	5,794	34,100
Cigar stores and stands	917	5,327	6,030	5,576	4,026	3,311	25,187
Gift, novelty and souvenir shops	1,529	6,849	9,045	8,363	6,039	5,794	37,619
Hosiery and lingerie shops	1,529	9,892	13,065	12,080	7,380	5,794	49,740
Jewelry shops	5,808	27,394	35,175	35,524	22,141	19,866	142,908
Luggage and leather goods stores	306	1,522	2,010	1,859	1,342	1,656	8,695

SECONDARY TRADE AREA - 1970

	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000- and over	TOTAL
Other Specialty Stores (continued)							
Millinery shops	306	2,283	3,015	2,788	2,013	1,656	12,061
Music stores	2,598	12,175	17,085	14,868	10,064	10,761	67,551
Sporting goods stores	2,446	11,414	16,080	13,939	9,393	9,933	63,205
Florist shops	2,751	12,936	18,090	15,797	11,406	11,589	72,569
Optical goods stores	1,987	9,131	13,065	11,151	8,051	8,278	51,663
Toy and hobby stores	917	4,566	6,030	5,576	4,026	4,139	25,254
Secondary Shoppers Goods							
Furniture and household furnishings stores	15,438	108,055	131,655	116,156	72,463	60,246	504,193
Household applicanes, television and radio stores	15,591	92,075	114,570	80,845	43,612	43,043	389,736
Floor coverings stores	3,516	15,980	22,110	19,514	14,090	14,072	89,282
Passenger car dealers	158,505	783,779	964,800	798,226	483,755	355,105	3,544,170
Tire, battery and accessory stores	8,560	42,613	51,255	42,746	26,167	19,038	190,379
Paint, glass and wallpaper stores	2,914	15,980	21,105	17,656	11,406	10,701	79,822
Other Goods and Services							
Gasoline service stations, with limited accessories	73,827	365,256	442,200	346,610	202,627	127,474	1,557,994
Eating and drinking places	61,140	243,504	290,445	279,704	195,246	199,488	1,269,527

RETAIL CATEGORY EXPENDITURES BY INCOME
SECONDARY TRADE AREA - 1980 CORE DECLINE

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000 and over	Total
Convenience Goods							
Drug Stores							
Pharmaceutical drug stores	221,889	75,559	90,117	75,323	43,416	33,296	339,600
Drug stores with traditional lines	40,081	150,483	165,699	131,815	79,704	61,042	628,824
Self-service, multi-line drug stores (excluding liquor)	65,372	225,407	266,475	215,208	128,952	99,094	1,000,508
Supermarkets and Food Stores							
Supermarkets with limited nonfoods	317,246	988,617	1,227,723	961,262	572,184	442,355	4,509,387
Supermarkets with expanded nonfoods	380,695	1,186,087	1,143,849	1,154,053	686,232	531,143	5,412,059
Discount supermarkets with expanded nonfoods	393,414	1,226,088	1,523,268	1,194,404	709,560	549,376	5,596,110
Specialty Food Stores							
Delicatessens	19,967	62,225	77,520	63,666	36,288	27,746	287,412
Meat markets	10,353	54,606	67,830	52,905	32,400	24,575	242,669
Fish and seafood markets	887	4,445	5,814	5,380	3,240	2,378	22,144
Fruit stores, vegetable markets	2,219	11,429	15,504	11,657	6,480	5,549	52,838
Candy, nut, confectionery stores	1,627	8,889	10,659	8,967	4,536	3,964	38,642
Bakeries	3,402	17,779	22,287	17,934	10,368	7,988	79,758
Liquor Stores	15,086	74,289	107,559	95,947	66,096	61,835	420,812
Hardware Stores							
Hardware stores with limited lines (traditional)	7,987	38,732	57,171	47,525	31,104	29,332	211,851
Multi-line hardware stores (but not including extensive plumbing, heating, and lumber supplies)	10,501	50,161	74,613	62,769	40,824	38,845	277,713
Convenience Services							
Barber shops	7,099	28,573	38,760	30,488	18,144	14,270	137,334
Beauty shops	11,388	30,097	48,450	47,525	34,992	33,296	205,748
Dry cleaners	7,395	25,398	29,070	26,004	18,144	19,819	125,830
Laundromats (washing, drying only-no dry cleaning)	4,881	17,144	19,380	17,934	12,312	13,477	85,128
Shoe repair	1,627	5,080	5,814	5,380	3,888	3,964	25,753

SECONDARY TRADE AREA - 1980 CORE DECLINE
(continued)

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000 and over	Total
Primary Shoppers Goods							
General Merchandise Stores	98,354	466,053	695,742	643,831	440,640	432,842	2,777,462
Full-line traditional department stores	71,436	338,428	504,849	467,181	320,760	313,929	2,016,583
Limited-line traditional department stores emphasizing soft goods	94,656	448,910	663,765	616,033	420,552	416,987	2,660,903
Full-line discount department stores	73,211	347,318	518,415	480,631	327,888	321,857	2,069,320
Limited-limited discount department stores	15,382	73,019	111,435	100,430	68,040	67,384	435,690
Full-line traditional variety stores with limited apparel	19,079	90,798	135,660	125,538	85,536	84,032	540,643
Super variety stores with expanded apparel	11,388	53,971	80,427	74,426	51,192	49,943	321,347
Variety stores, limited price and limited lines							
Major Apparel Stores	6,656	40,002	61,047	56,492	38,880	42,809	245,886
Men's clothing and furnishings stores	21,889	81,274	110,466	109,397	79,056	84,032	486,114
Women's clothing and furnishings stores	1,775	6,984	8,721	8,967	7,128	7,135	40,710
Children's and infants' clothing stores	7,099	39,367	62,985	54,699	33,696	26,953	224,799
Family clothing stores	8,430	33,652	50,388	46,628	32,400	28,539	200,037
Women's shoe stores	4,437	26,033	40,698	36,765	25,272	27,746	160,951
Men's and boys' shoe stores	5,177	24,763	36,822	34,075	23,328	22,990	147,155
Family shoe stores							
Other Specialty Stores	2,514	10,159	16,473	14,347	9,720	10,306	63,519
Book and stationery stores	1,331	5,080	7,752	7,174	5,184	5,549	32,070
Camera and photographic supply stores	887	4,445	5,814	5,380	3,888	3,171	23,585
Cigar stores and stands	1,479	5,715	8,721	8,070	5,832	5,549	35,366
Gift, novelty and souvenir shops	1,479	8,254	12,597	11,657	7,128	5,549	46,664
Hosiery and lingerie shops	5,620	22,858	33,915	31,385	21,384	19,026	134,188
Jewelry stores	296	1,270	1,938	1,793	1,296	1,586	8,179
Luggage and leather goods stores							

	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000- and over	TOTAL
Other Specialty Stores (continued)							
Millinery shops	296	1,905	2,907	2,960	1,944	1,586	11,328
Music stores	2,514	10,160	16,473	14,347	9,720	10,306	63,520
Sporting goods stores	2,366	9,524	15,504	13,451	9,072	9,513	59,430
Florist shops	2,662	10,794	17,442	15,244	11,906	11,099	68,257
Optical goods stores	1,923	7,610	12,597	10,760	7,776	7,928	48,594
Toy and hobby stores	887	3,810	5,814	5,380	3,888	3,964	23,743
Secondary Shoppers Goods							
Furniture and household furnishings stores	14,938	90,163	126,939	112,088	69,984	57,871	471,983
Household applicanes, television and radio stores	15,086	76,829	110,466	78,013	42,120	41,223	363,737
Floor coverings stores	3,402	13,334	21,318	18,831	13,608	13,477	83,970
Passenger car dealers	153,372	653,999	930,240	770,265	467,208	340,090	3,315,174
Tire, battery and accessory stores	8,282	35,557	49,419	41,248	25,272	18,233	178,011
Paint, glass and wallpaper stores	2,810	13,334	20,349	17,037	11,016	10,306	74,852
Other Goods and Services							
Gasoline service stations, with limited accessories	71,436	304,776	426,360	334,469	195,696	122,084	1,454,821
Eating and drinking places	59,160	203,184	280,041	269,907	188,568	191,053	1,191,913

RETAIL CATEGORY EXPENDITURES BY INCOME
Secondary Trade Area - 1980 Trends Extended

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000 and over	Total
Convenience Goods							
Drug Stores							
Pharmaceutical drug stores	23,088	92,856	95,562	79,468	45,855	35,501	372,330
Drug stores with traditional lines	42,276	184,931	175,711	139,069	84,181	65,084	691,252
Self-service, multi-line drug stores (excluding liquor)	68,952	277,007	282,576	227,052	136,196	105,656	1,097,439
Supermarkets and Food Stores							
Supermarkets with limited nonfoods	334,620	1,214,927	1,301,906	1,014,166	604,325	471,650	4,951,594
Supermarkets with expanded nonfoods	401,544	1,214,927	1,562,904	1,217,566	724,780	566,318	5,930,712
Discount supermarkets with expanded nonfoods	414,960	1,506,759	1,615,309	1,260,139	749,418	585,758	6,132,343
Specialty Food Stores							
Delicatessens	21,060	76,469	82,204	67,170	38,326	29,584	314,813
Meat markets	18,408	67,106	71,929	55,817	34,220	26,203	273,683
Fish and seafood markets	1,560	5,462	6,165	5,676	3,422	2,536	24,821
Fruit stores, vegetalbe markets	3,900	14,045	16,441	12,299	6,844	5,917	59,446
Candy, nut, confectionery stores	2,964	10,924	11,303	9,461	4,791	4,226	43,669
Bakeries	6,084	21,848	23,634	18,921	10,950	8,453	89,890
Liquor Stores	15,912	91,295	114,058	101,227	69,809	65,930	458,231
Hardware Stores							
Hardware stores with limited lines (traditional)	8,424	47,598	60,625	50,141	32,851	31,274	230,913
Multi-line hardware stores (but not including extensive plumbing, heating and lumber supplies)	11,076	61,644	79,121	66,224	43,117	41,417	302,599
Convenience Services							
Barber shops	7,488	35,114	41,102	32,166	19,163	15,215	150,248
Beauty shops	12,012	46,818	51,378	50,141	56,988	35,501	232,836
Dry cleaners	7,800	31,212	30,827	27,435	19,163	21,131	137,568
Laundromats (washing, drying only-no dry cleaning)	5,148	21,068	20,551	18,921	13,004	14,369	93,061
Shoe repair	1,716	6,242	6,165	5,676	4,106	4,226	28,131

SECONDARY TRADE AREA - 1980 TRENDS EXTENDED

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000 and over	Total
Primary Shoppers Goods							
General Merchandise Stores	103,740	572,740	737,781	679,264	465,392	461,507	3,020,424
Full-line traditional department stores	75,348	415,900	535,354	492,892	338,778	334,719	2,192,991
Limited-line traditional department stores emphasizing soft goods	99,840	551,672	703,872	649,936	444,176	444,602	2,894,098
Full-line discount department stores	77,220	426,824	549,739	507,083	346,306	343,172	2,250,344
Limited-line discount department stores							
Full-line traditional variety stores with limited apparel	16,224	89,735	118,168	105,958	71,862	71,846	473,793
Super variety stores with expanded apparel	20,124	111,583	143,857	132,447	90,341	89,597	587,949
Variety stores, limited price and limited lines	12,012	66,326	85,287	78,522	54,068	53,251	349,466
Major Apparel Stores							
Men's clothing and furnishings stores	7,020	49,159	64,736	59,601	41,064	45,644	267,224
Women's clothing and furnishings stores	23,088	99,878	117,141	115,418	83,497	89,597	528,619
Children's and infants' clothing stores	1,872	8,583	9,248	9,461	7,528	7,607	44,299
Family clothing stores	7,488	48,379	66,791	57,709	35,589	28,739	244,695
Women's shoe stores	8,892	41,356	53,433	49,195	34,220	30,429	217,525
Men's and boys' shoe stores	4,680	31,992	43,157	38,788	26,692	29,584	174,893
Family shoe stores	5,460	30,432	39,047	35,950	24,638	24,512	160,039
Other Specialty Stores							
Book and stationery stores	2,652	12,485	17,468	15,137	10,266	10,988	68,996
Camera and photographic supply stores	1,404	6,242	8,220	7,568	5,475	5,917	34,826
Cigar stores and stands	936	5,462	6,165	5,676	4,106	3,381	25,726
Gift, novelty and souvenir shops	1,560	2,023	9,248	8,514	6,160	5,917	33,422
Hosiery and lingerie shops	1,560	10,144	13,358	12,299	7,528	5,917	50,806
Jewelry shops	5,928	28,091	35,964	33,112	22,585	20,286	145,966
Luggage and leather goods stores	312	1,561	2,055	1,892	1,369	1,691	8,880

SECONDARY TRADE AREA - 1980 TRENDS EXTENDED

	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000- and over	TOTAL
Other Specialty Stores (continued)							
Millinery shops	312	2,341	3,083	2,838	2,053	1,691	12,318
Music stores	2,652	12,485	17,468	15,137	10,266	10,988	69,296
Sporting goods stores	2,496	11,705	16,441	14,191	9,582	10,143	64,358
Florist shops	2,808	13,265	18,496	16,083	11,635	11,834	74,121
Optical goods stores	2,028	9,364	13,358	11,353	8,213	8,453	52,769
Toy and hobby stores	936	4,682	6,165	5,676	4,106	4,226	25,791
Secondary Shoppers Goods							
Furniture and household furnishings stores	15,756	110,803	134,609	118,256	73,915	61,703	515,042
Household applicanes, television and radio stores	15,912	94,416	144,885	82,306	44,486	43,953	425,958
Floor coverings stores	3,588	16,386	22,606	19,867	14,372	14,369	91,188
Passenger car dealers	161,772	803,709	986,448	812,657	493,452	362,612	3,620,650
Tire, battery and accessory stores	8,736	43,697	52,405	43,518	26,692	19,441	194,489
Paint, glass and wallpaper stores	2,964	16,386	21,579	17,975	11,635	10,988	81,527
Other Goods and Services							
Gasoline service stations, with limited accessories	75,348	374,544	452,122	352,877	206,689	130,169	1,591,749
Eating and drinking places	62,400	249,696	296,962	284,761	199,160	203,705	1,296,684

RETAIL CATEGORY EXPENDITURES BY INCOME
Secondary Trade Area - 1980 Core Intensive

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000 and over	Total
Convenience Goods							
Drug Stores							
Pharmaceutical drug stores	25,064	104,101	106,439	88,641	51,282	39,690	415,217
Drug stores with traditional lines	45,894	207,328	195,710	155,122	94,144	72,765	770,963
Self-service, multi-line drug stores (excluding liquor)	74,853	310,554	314,738	253,260	152,315	118,125	1,223,845
Supermarkets and Food Stores							
Supermarkets with limited nonfoods	363,256	1,362,064	1,450,082	1,131,228	675,848	527,310	5,509,788
Supermarkets with expanded nonfoods	435,907	1,634,126	1,740,785	1,358,107	810,559	633,150	6,612,634
Discount supermarkets with expanded nonfoods	50,471	1,689,239	1,797,154	1,405,593	838,113	654,885	6,837,455
Specialty Food Stores							
Delicatessens	22,862	85,730	91,560	74,923	42,862	33,075	351,012
Meat markets	19,983	75,233	80,115	62,260	38,270	29,295	205,156
Fish and seafood markets	1,694	6,124	6,867	6,332	6,827	2,835	27,679
Fruit stores, vegetalbe markets	4,234	15,746	18,312	13,718	7,654	6,615	66,279
Candy, nut, confectionery stores	3,218	12,247	12,590	10,553	5,358	4,725	48,691
Bakeries	6,605	24,494	26,324	21,105	12,246	9,450	100,224
Liquor Stores	17,274	102,352	127,040	112,912	78,071	73,710	511,359
Hardware Stores							
Hardware stores with limited lines (traditional)	9,145	53,363	67,526	55,928	36,739	34,965	257,666
Multi-line hardware stores (but not including extensive plumbing, heating and lumber supplies)	12,024	69,109	88,127	73,868	48,220	46,305	337,653
Convenience Services							
Barber shops	8,129	39,366	45,780	35,879	21,431	17,010	167,595
Beauty shops	13,040	52,488	57,225	55,928	41,332	39,690	259,703
Dry cleaners	8,468	34,992	34,335	30,602	21,431	23,625	153,453
Laundromats (washing, drying only-no dry cleaning)	5,589	23,620	22,890	21,105	14,543	16,065	103,812
Shoe repair	1,863	6,998	6,867	6,332	4,592	4,725	31,377

SECONDARY TRADE AREA - 1980 CORE INTENSIVE
(continued)

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000 and over	Total
Primary Shoppers Goods							
General Merchandise Stores							
Full-line traditional department stores	112,618	642,103	821,751	757,670	520,472	515,970	3,370,584
Limited-line traditional department stores emphasizing soft goods	81,796	466,268	596,285	549,785	378,873	374,220	2,447,227
Full-line discount department stores	103,384	618,484	783,983	724,957	496,745	497,070	3,229,623
Limited-limited discount department stores	83,828	478,516	612,308	565,614	387,292	383,670	2,511,228
Full-line traditional variety stores with limited apparel	17,612	100,602	131,618	118,188	80,367	80,325	528,712
Super variety stores with expanded apparel	21,846	125,096	160,230	147,735	101,033	100,170	656,110
Variety stores, limited price and limited lines	13,040	74,358	94,994	87,586	60,467	59,535	389,980
Major Apparel Stores							
Men's clothing and furnishings stores	7,621	55,112	72,104	66,481	45,924	51,030	298,272
Women's clothing and furnishings stores	25,064	111,974	130,473	128,741	93,379	100,170	589,801
Children's and infants' clothing stores	2,032	9,623	10,301	10,553	8,419	8,505	49,433
Family clothing stores	8,129	54,238	74,393	64,370	39,801	32,130	273,061
Women's shoe stores	9,653	46,364	59,514	54,873	38,720	34,020	242,694
Men's and boys' shoe stores	5,081	35,867	48,069	43,265	29,851	33,075	195,208
Family shoe stores	5,927	34,117	43,491	40,100	27,554	27,405	178,594
Other Specialty Stores							
Book and stationery stores	2,879	13,997	19,457	16,884	11,481	12,285	76,983
Camera and photographic supply stores	1,524	6,998	9,156	8,442	6,123	6,615	38,858
Cigar stores and stands	1,016	6,124	6,867	6,332	4,592	3,780	28,711
Gift, novelty and souvenir shops	1,694	7,873	10,301	9,497	6,889	6,615	42,869
Hosiery and lingerie shops	1,694	11,372	14,879	13,718	8,419	6,615	56,697
Jewelry stores	6,435	31,493	40,058	36,934	25,258	22,680	162,858
Luggage and leather goods stores	339	1,750	2,289	2,111	1,531	1,890	9,910

SECONDARY TRADE AREA - 1980 CORE INTENSIVE
(continued)

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000- and over	Total
Other Specialty Stores (continued)							
Millinery shops	339	2,624	3,434	3,166	2,296	1,890	13,749
Music stores	2,879	13,997	19,457	16,884	11,481	12,285	76,983
Sporting goods stores	2,710	13,122	18,312	15,829	10,716	11,340	72,029
Florist shops	3,048	14,879	12,663	17,939	13,012	13,230	82,702
Optical goods stores	2,202	10,498	14,879	12,663	9,148	9,450	58,840
Toy and hobby stores	1,016	5,249	6,867	6,332	4,574	4,725	28,763
Secondary Shoppers Goods							
Furniture and household furnishings stores	17,104	124,222	149,930	131,906	82,663	68,985	574,810
Household appliances, television and radio stores	17,274	105,851	130,473	91,807	49,751	49,140	444,296
Floor coverings stores	3,895	18,371	25,179	22,160	16,073	16,065	101,743
Passenger car dealers	175,616	901,044	1,098,720	906,460	551,853	405,405	4,039,098
Tire, battery and accessory stores	9,484	48,989	58,370	48,542	29,851	21,735	216,971
Paint, glass and wallpaper stores	3,218	18,371	24,035	20,050	13,012	12,285	90,971
Other Goods and Services							
Gasoline service stations, with limited accessories	81,796	419,904	503,580	393,608	231,151	145,530	1,775,569
Eating and drinking places	67,740	279,936	330,761	317,630	222,731	227,745	1,446,543

RETAIL CATEGORY EXPENDITURES BY INCOME
The Whole Trade Area - 1970

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000 and over	Total
Convenience Goods							
Drug Stores	42,935	157,919	143,755	122,774	67,928	51,597	586,908
Pharmaceutical drug stores	42,935	157,919	143,755	122,774	67,928	51,597	586,908
Drug stores with traditional lines	78,617	314,511	264,323	214,855	124,704	94,595	1,091,605
Self-service, multi-line drug stores (excluding liquor)	12,822	471,103	425,081	350,784	201,756	153,563	1,615,109
Supermarkets and Food Stores							
Supermarkets with limited nonfoods	622,265	2,066,217	1,958,465	1,566,835	895,230	685,503	7,794,505
Supermarkets with expanded nonfoods	746,717	2,478,929	2,351,086	1,881,079	1,073,667	823,095	9,354,573
Discount supermarkets with expanded nonfoods	771,666	2,562,534	2,429,919	1,946,851	1,110,166	851,351	9,672,487
Specialty Food Stores							
Delicatessens	39,164	130,051	123,660	103,774	56,776	42,998	496,423
Meat markets	34,232	114,126	108,203	86,234	50,693	38,084	431,572
Fish and seafood markets	2,901	9,289	9,275	8,770	5,069	3,686	38,990
Fruit stores, vegetable markets	7,253	23,887	24,732	19,001	10,138	8,600	93,611
Candy, nut, confectionery stores	5,512	18,579	17,003	14,616	7,097	6,143	68,950
Bakeries	11,314	37,157	35,552	29,232	16,222	12,285	141,762
Liquor Stores	29,590	155,265	171,578	156,391	103,413	95,823	712,060
Hardware Stores							
Hardware stores with limited lines (traditional)	15,665	80,950	91,199	77,465	48,665	45,455	359,399
Multi-line hardware stores (but not including extensive plumbing, heating, and lumber supplies)	20,597	104,837	119,023	102,312	63,873	60,197	470,839
Convenience Services							
Barber shops	13,925	59,717	61,830	49,694	28,388	22,113	235,667
Beauty shops	22,338	79,623	77,288	77,465	54,750	51,597	363,061
Dry cleaners	14,505	53,082	46,373	42,386	28,388	30,713	215,447
Laundromats (washing, drying only-no dry cleaning)	9,573	35,830	30,915	29,232	19,263	20,885	145,698
Shoe repair	3,191	10,616	9,295	8,770	6,083	6,143	44,078

THE WHOLE TRADE AREA - 1970
(continued)

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,000	$15,000- and over	Total
Primary Shoppers Goods							
General Merchandise Stores							
Full-line traditional department stores	192,917	974,055	1,109,848	1,049,429	689,418	670,761	4,686,428
Limited-line traditional department stores emphasizing soft goods	140,118	707,318	805,336	761,494	501,856	486,486	3,402,608
Full-line discount department stores	185,664	938,224	1,061,930	1,004,119	657,989	646,191	4,494,117
Limited-line discount department stores	143,600	725,896	828,522	783,418	513,008	498,771	3,493,215
Full-line traditional variety stores with limited apparel	30,170	152,611	173,124	163,699	106,454	104,423	730,481
Super variety stores with expanded apparel	37,423	189,768	216,405	204,624	133,828	130,221	912,269
Variety stores, limited price and limited lines	22,338	112,799	128,297	121,313	80,094	77,396	542,237
Major Apparel Stores							
Mens clothing and furnishings stores	13,055	83,604	97,383	92,081	60,831	66,339	413,293
Women's clothing and furnishings stores	42,935	169,862	176,216	178,315	123,690	130,221	821,239
Children's and infants' clothing stores	3,481	14,598	13,812	14,616	11,152	11,057	68,816
Family clothing stores	13,925	82,277	94,291	89,158	52,720	41,769	374,140
Women's shoe stores	16,536	70,334	80,379	76,003	50,693	44,226	338,171
Men's and boys' shoe stores	8,703	54,409	63,376	59,926	39,540	42,998	268,952
Family shoe stores	10,154	51,755	58,739	55,541	36,499	35,627	248,815
Other Specialty Stores							
Book and stationery stores	4,932	21,233	24,732	23,386	15,208	15,971	105,462
Camera and photographic supply stores	2,611	10,617	12,366	11,693	8,111	8,600	53,998
Cigar stores and stands	1,741	9,289	9,275	8,770	6,082	4,914	20,072
Gift, novelty and souvenir shops	2,901	11,943	13,912	13,154	9,125	8,600	59,635
Hosiery and lingerie shops	2,901	17,252	20,095	19,001	11,152	8,600	79,001
Jewelry stores	9,863	50,428	54,101	51,156	33,457	29,484	228,489
Luggage and leather goods stores	580	2,654	3,092	2,923	2,028	2,457	13,734

THE WHOLE TRADE AREA- 1970
(continued)

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000-and over	Total
Other Specialty Stores (continued)							
Millinery shops	580	3,981	4,637	4,385	3,042	2,457	19,082
Music stores	4,932	21,233	26,278	23,386	15,208	15,971	107,008
Sporting goods stores	4,642	19,906	24,732	21,924	14,194	14,792	100,140
Florist shops	5,222	22,560	27,824	24,847	17,235	17,199	114,887
Optical goods stores	3,771	15,925	20,095	17,539	12,166	12,285	81,781
Toy and hobby stores	17,41	7,962	9,275	8,770	6,083	6,143	39,974
Secondary Shoppers Goods							
Furniture and household furnishings stores	29,300	188,441	202,493	182,200	109,496	89,681	802,111
Household appliances, television and radio stores	29,590	160,573	176,216	127,159	65,900	63,882	623,320
Floor coverings stores	6,672	27,868	34,007	30,694	21,291	20,885	141,417
Passenger car dealers	300,834	1,366,862	1,483,920	1,255,514	730,986	527,027	5,665,143
Tire, battery and accessory stores	16,246	74,315	78,833	67,234	39,540	28,256	304,424
Paint, glass and wallpaper stores	5,512	27,868	32,461	27,770	17,735	15,971	126,817
Other Goods and Services							
Gasoline service stations, with limited accessories	140,118	636,984	680,130	545,177	306,183	189,189	2,397,781
Eating and drinking places	116,040	424,656	446,722	439,942	295,030	296,069	1,918,459

RETAIL CATEGORY EXPENDITURES BY INCOME
The Whole Trade Area - 1980 Core Decline

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000 and over	Total
Convenience Goods							
Drug Stores							
Pharmaceutical drug stores	41,758	141,426	139,291	119,070	65,848	49,760	557,153
Drug stores with traditional lines	78,463	281,663	256,115	208,372	120,884	91,226	1,036,723
Self-service, multi-line drug stores (excluding liquor)	124,710	421,900	411,881	340,200	195,577	148,094	1,642,362
Supermarkets and Food Stores							
Supermarkets with limited nonfoods	605,212	1,852,794	1,897,649	1,519,560	867,812	661,091	7,404,118
Supermarkets with expanded nonfoods	725,254	2,220,025	2,278,078	1,824,322	1,040,785	793,783	8,883,247
Discount supermarkets with expanded nonfoods	750,519	2,294,897	2,354,468	1,888,110	1,076,166	821,032	9,185,192
Specialty Food Stores							
Delicatessens	38,090	116,468	119,820	100,642	55,037	41,466	471,523
Meat markets	33,294	102,207	104,842	83,632	49,140	36,721	409,836
Fish and seafood markets	2,822	8,319	8,987	8,505	4,914	3,554	37,101
Fruit stores, vegetable markets	7,054	21,392	23,964	18,428	9,828	8,293	88,959
Candy, nut, confectionery stores	5,361	16,638	16,475	14,175	6,880	5,924	65,453
Bakeries	11,004	33,276	34,448	28,350	15,725	11,848	134,651
Liquor Stores	28,779	139,049	166,250	151,673	100,246	92,411	678,408
Hardware Stores							
Hardware stores with limited lines (traditional)	15,236	72,495	88,367	75,128	47,174	43,836	342,236
Multi-line hardware stores (but not including extensive plumbing heating, and lumber supplies)	20,033	93,888	115,327	99,225	61,916	58,053	448,442
Convenience Services							
Barber shops	13,543	53,480	59,910	48,195	27,518	21,326	223,922
Beauty shops	21,726	71,807	74,888	75,128	53,071	49,760	345,880
Dry cleaners	14,108	47,538	44,933	41,108	27,518	29,619	204,824
Laundromats (washing drying only - no dry cleaning)	9,311	32,088	28,455	28,350	18,673	20,141	137,018
Shoe repair shops	3,104	9,508	8,987	8,505	5,896	5,924	41,924

THE WHOLE TRADE AREA - 1980 CORE INTENSIVE

(continued)

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000 $11,999	$12,000 $14,999	$15,000 and over	Total
Primary Shoppers Goods							
General Merchandise Stores							
Full-line traditional department stores	187,630	872,322	1,075,385	1,017,765	668,304	646,874	4,468,280
Limited-line traditional department stores emphazising soft goods	136,278	633,443	780,328	738,518	486,486	469,161	3,244,214
Full-line discount department stores	180,576	840,234	1,025,959	973,823	637,837	623,179	4,281,608
Limited-line discount department stores	139,664	650,082	801,296	759,780	497,297	481,009	3,329,128
Full-line traditional variety stores with limited apparel	29,344	136,672	172,241	158,760	103,194	100,704	700,915
Super variety stores with expanded apparel	36,397	169,948	209,685	198,450	129,730	125,584	869,794
Variety stores, limited price and limited lines	21,726	101,018	124,313	117,653	77,641	74,639	516,990
Major Apparel Stores							
Men's clothing and furnishings stores	12,697	74,872	94,358	89,303	58,968	63,977	394,175
Women's clothing and furnishings stores	41,758	152,122	170,744	172,935	119,902	125,584	783,045
Children's and infants' clothing stores	3,386	13,073	13,480	14,175	10,811	10,663	655,907
Family clothing stores	13,543	73,684	97,354	86,468	51,106	40,282	362,437
Women's shoe stores	16,083	62,988	77,883	73,710	49,140	42,651	322,455
Men's and boys' shoe stores	8,465	98,726	62,906	58,118	38,329	41,466	258,010
Family shoe stores	9,875	46,350	56,915	53,865	35,381	34,358	236,744
Other Specialty Stores							
Book and stationery stores	4,797	19,015	25,462	22,680	14,742	75,402	102,098
Camera and photographic supply stores	2,539	9,508	11,982	11,340	7,862	8,293	51,524
Cigar stores and stands	1,693	8,319	8,987	8,505	5,897	4,739	38,140
Gift, novelty and souvenir shops	2,822	10,696	13,480	12,758	8,845	8,293	56,894
Hosiery and lingerie shops	2,822	15,450	19,471	18,428	10,811	8,293	75,275
Jewelry shops	10,722	42,784	52,421	49,613	32,432	28,434	216,406
Luggage and leather goods stores	564	2,377	2,996	2,834	1,966	2,370	13,100

THE WHOLE TRADE AREA - 1980 CORE DECLINE

(continued)

Retail Categories	Under $3,000	$3,000-$5,999	$6,000 $8,999	$9,000 $11,999	$12,000-$13,999	$15,000 and over	Total
Other Specialty Stores (continued)							
Millinery shops	564	3565	4,493	4,253	2,948	2,370	18,193
Music stores	4,797	19,015	25,462	22,680	14,742	15,402	102,098
Sporting goods stores	4,514	17,827	23,964	21,263	13,759	14,217	95,544
Florist shops	4,797	21,392	25,462	24,098	16,708	20,141	112,598
Optical goods stores	3,668	14,261	19,471	17,010	11,794	11,848	78,052
Toy and hobby stores	1,693	7,136	8,987	8,505	5,897	5,924	38,142
Secondary Shoppers Goods							
Furniture and household furnishings stores	28,497	168,760	196,205	177,188	106,142	86,487	763,279
Household appliances, television and radio stores	28,779	143,802	170,744	123,323	63,882	61,607	592,137
Floor coverings stores	6,489	24,957	32,951	29,768	20,639	20,141	134,945
Passenger car dealers	292,590	1,224,104	1,437,840	1,217,633	708,599	508,258	5,389,024
Tire, battery and accessory stores	15,800	66,553	76,385	65,705	38,329	27,249	289,521
Paint, glass and wallpaper stores	5,361	24,957	31,453	26,933	16,708	15,402	120,814
Other Goods Services							
Gasoline service stations, with limited accessories	136,278	570,456	659,010	528,728	296,806	182,452	2,373,730
Eating and drinking places	112,860	380,304	432,850	426,668	285,995	285,825	1,924,502

RETAIL CATEGORY EXPENDITURES BY INCOME
The Whole Trade Area - 1980 Trends Extension

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000- and over	Total
Convenience Goods							
Drug stores							
Pharmaceutical drug stores	43,512	160,543	146,131	124,450	68,923	52,406	595,965
Drug stores with traditional lines	79,674	319,737	268,692	217,788	126,530	96,077	1,108,498
Self-service, multi-line drug stores (excluding liquor	129,948	478,931	432,108	355,572	204,711	155,969	1,757,239
Supermarkets and Food Stores							
Supermarkets with limited nonfoods	630,630	2,100,549	1,990,837	1,588,222	908,342	696,245	7,914,825
Supermarkets with expanded nonfoods	756,756	2,520,119	2,389,947	1,906,755	1,089,393	835,993	9,498,963
Discount supermarkets with expanded nonfoods	782,040	2,005,112	2,470,084	1,973,425	1,126,427	864,691	9,821,779
Specialty Food Stores							
Delicatessens	39,690	132,212	125,704	105,190	57,607	43,671	504,074
Meat Markets	34,692	116,023	109,991	87,411	51,435	38,680	438,232
Fish and seafood markets	2,940	9,444	9,428	8,889	5,144	3,743	39,588
Fruit stores, vegetable markets	7,350	24,284	25,141	19,260	10,287	8,734	95,056
Candy, nut, confectionery stores	5,586	18,887	17,284	14,816	7,201	6,239	70,013
Bakeries	11,466	37,775	36,140	29,631	16,459	12,477	143,948
Liquor Stores	29,988	157,845	174,414	158,526	104,927	97,325	723,025
Hardware Stores							
Hardware stores with limited lines (traditional)	15,876	82,295	92,707	78,522	49,378	46,167	344,945
Nulti-line hardware stores (but not including extensive plumbing, heating, and lumber supplies)	20,874	106,579	120,990	103,709	64,808	61,140	478,100
Convenience Services							
Barber shops	14,112	60,710	62,852	50,373	28,804	22,460	239,311
Beauty shops	22,638	80,946	78,565	78,522	55,550	52,406	1 368,627
Dry cleaners	14,700	53,969	47,139	42,965	28,804	31,194	218,766
Laundromats (washing, drying only- no dry cleaning)	9,702	36,426	31,426	29,631	19,545	21,218	147,948
Shoe repair shops	3,234	10,793	9,428	8,889	6,172	6,239	44,755

The Whole Trade Area-1980 Trends Extended
(continued)

Retail Categories	Under $3,000	$3,000 $5,999	$6,000- $8,999	$9,000- $11,999	$12,000- $14,999	$15,000- and over	Total
Primary Shoppers Goods							
General Merchandise Stores							
Full-line traditional department stores	195,510	990,239	1,128,193	1,063,753	699,516	681,272	4,758,483
Limited-line traditional department stores emphasizing soft goods	142,002	719,070	818,647	771,888	509,207	494,109	3,454,923
Full-line discount department stores	188,160	953,814	1,076,341	1,017,825	667,626	656,317	4,560,083
Limited-line discount department stores	145,530	737,958	840,646	794,111	520,532	506,587	3,545,354
Full-line traditional variety stores with limited apparel	30,576	155,147	180,700	165,934	108,014	106,059	746,430
Super variety stores with expanded apparel	37,926	192,921	219,982	207,417	135,788	132,262	926,296
Variety stores, limited price and limited lines	22,638	114,674	130,418	122,969	81,267	78,608	550,574
Major Apparel Stores							
Men's clothing and furnishings stores	13,230	84,993	98,992	93,338	61,722	67,379	419,654
Women's clothing and furnishings stores	43,512	172,685	179,128	180,749	125,501	132,262	833,837
Children's and infants' clothing stores	3,528	14,840	14,142	14,816	11,316	11,230	69,872
Family clothing stores	14,112	83,664	102,135	90,375	53,492	42,424	386,182
Women's shoe stores	16,758	71,502	81,708	77,794	51,435	44,915	343,363
Mens' and boys' shoe stores	8,820	55,313	65,995	60,794	40,435	43,671	274,662
Family shoe stores	10,290	52,615	59,709	56,299	37,033	36,185	252,131
Other Specialty Stores							
Book and stationery stores	4,998	21,586	26,712	23,705	15,431	16,221	108,653
Camera and photographic supply stores	2,646	10,793	12,570	11,852	8,230	8,734	54,825
Cigar stores and stands	1,764	9,444	9,428	8,889	6,172	4,991	40,688
Gift, novelty and souvenir shops	2,940	12,142	14,142	13,334	9,258	8,734	60,550
Hosiery and lingerie shops	2,940	17,538	20,427	19,260	11,316	8,734	80,215
Jewelry stores	11,172	48,568	54,996	51,854	33,947	29,946	230,483
Luggage and leather goods stores	588	2,698	3,143	2,963	2,057	2,996	14,445

The Whole Trade Area - 1980 Trends Extended
(continued)

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000 and over	Total
Other Specialty Stores (continued)							
Millinery shops	588	4,047	4,714	4,447	3,086	2,496	19,378
Music stores	4,998	21,586	26,712	23,705	15,431	16,221	108,653
Sporting goods stores	4,704	20,237	25,141	22,223	14,402	14,973	101,680
Florist shops	5,292	22,935	28,283	25,186	17,488	17,469	116,653
Optical goods stores	3,822	16,189	20,427	17,779	12,344	12,478	83,039
Toy and hobby stores	1,764	8,099	9,428	8,889	6,172	6,239	40,591
Secondary Shoppers Goods							
Furniture and household furnishings stores	29,694	191,572	205,840	185,194	111,100	91,086	633,001
Household appliances, television and radio stores	29,988	163,241	179,128	128,895	66,866	64,883	633,001
Floor coverings stores	6,762	28,331	34,569	31,113	21,603	21,212	143,590
Passenger car dealers	304,878	1,389,573	1,508,448	1,272,651	741,693	535,285	5,752,528
Tire, battery and accessory stores	16,464	75,550	80,136	68,151	40,119	28,698	309,118
Paint, glass and wallpaper stores	5,586	28,331	32,997	28,149	17,488	16,221	128,772
Other Goods and Services							
Gasoline service stations, with limited accessories	142,002	647,568	691,372	552,618	310,667	192,154	2,536,381
Eating and drinking places	117,600	431,712	454,106	445,947	299,352	300,708	2,049,425

RETAIL CATEGORY EXPENDITURES BY INCOME
Whole Trade Area - 1980 Core Intensive

Retail Categories	Under $ 3,000	$3,000 $5,999	$6,000 $8,999	$9,000 $11,999	$12,000 $14,999	$15,000 and over	Total
Convenience Goods							
Drug Stores							
Pharmaceutical drug stores	45,976	172,500	158,263	135,122	74,983	57,036	643,880
Drug stores with traditional lines	84,186	343,650	290,999	236,464	137,655	104,566	1,197,520
Self-service, multi-line drug stores (excluding liquor)	137,307	514,750	467,981	386,064	222,711	169,750	1,898,563
Supermarkets and Food Stores							
Supermarkets with Limited nonfoods	666,344	2,257,650	2,156,117	1,724,419	988,209	757,764	8,550,503
Supermarkets with expanded nonfoods	799,613	2,708,600	2,588,362	2,070,268	1,185,180	909,860	10,261,883
Discount supermarkets with expanded nonfoods	826,329	2,799,950	2,675,151	2,142,655	1,125,469	941,094	10,610,648
Specialty Food Stores							
Delicatessens	41,938	142,100	136,140	114,211	62,672	47,530	544,591
Meat markets	36,657	124,700	119,123	94,907	55,958	42,098	473,443
Fish and seafood markets	3,107	10,150	10,211	9,652	5,596	4,074	42,790
Fruit stores, vegetable markets	7,766	26,100	27,228	20,912	10,191	9,506	101,703
Candy, nut, confectionery stores	5,902	20,300	18,719	16,086	7,834	6,790	75,631
Bakeries	12,115	40,600	39,140	32,172	17,906	13,580	155,513
Liquor Stores	31,686	169,650	188,894	172,120	114,153	105,924	782,427
Hardware Stores							
Hardware stores with limited lines (traditional)	16,775	88,450	100,403	85,256	53,719	50,246	394,849
Multi-line hardware stores (but not including extensive plumbing, heating, and lumber supplies)	22,056	114,550	131,035	112,602	70,506	66,542	517,291
Convenience Services							
Barber shops	14,911	65,250	68,070	54,692	31,336	24,444	258,703
Beauty shops	23,920	87,000	85,088	85,256	60,434	57,036	398,734
Dry cleaners	15,533	58,000	51,053	46,649	31,336	33,950	236,566
Laundromats (washing, drying only-no dry cleaning)	10,251	39,150	34,035	32,172	21,264	23,086	159,958
Shoe repair shops	3,417	11,600	10,211	9,652	6,715	6,790	48,385

THE WHOLE TRADE AREA - 1980 CORE INTENSIVE

(continued)

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000 and over	Total
Primary Shoppers Goods							
General Merchandise Stores							
Full-line traditional department stores	206,582	1,064,300	1,221,857	1,154,975	761,022	741,468	5,150,204
Limited-line traditional department stores emphasizing soft goods	150,044	772,850	886,612	838,081	553,979	537,768	3,739,334
Full-line discount department stores	198,816	1,025,150	1,165,699	1,105,108	726,328	714,508	4,935,409
Limited-line discount department stores	153,772	793,150	910,436	862,210	566,290	551,348	3,837,206
Full-line traditional variety stores limited apparel	32,308	166,750	195,701	180,163	117,511	115,430	807,863
Super variety stores with expanded apparel	40,074	207,350	238,245	225,204	147,728	143,948	1,002,549
Variety stores, limited price and limited lines	23,920	123,250	141,245	133,514	88,413	85,554	595,896
Major Apperal Stores							
Men's clothing and furnishings stores	13,979	91,350	107,210	101,342	67,149	73,332	454,362
Women's clothing and furnishings stores	45,976	185,600	194,000	196,249	136,536	143,948	902,309
Children's and infants' clothing stores	3,728	15,950	15,316	16,086	12,311	12,222	75,613
Family clothing stores	14,911	89,900	110,614	98,125	58,196	46,172	417,918
Women's shoe stores	17,707	76,850	88,491	83,647	55,958	48,888	371,541
Men's and boys' shoe stores	9,320	59,450	71,474	65,953	43,647	47,530	297,374
Family shoe stores	10,873	56,550	64,667	61,127	40,289	39,382	272,888
Other Specialty Stores							
Book and stationery stores	5,281	23,200	28,930	25,738	16,787	17,654	117,590
Camera and photographic supply stores	2,796	11,600	13,614	12,868	8,953	9,506	59,337
Cigar stores and stands	1,864	10,150	10,211	9,652	6,715	5,432	44,024
Gift, novelty and souvenir shops	3,107	13,050	15,316	14,477	10,072	9,506	65,528
Hosiery and lingerie shops	3,107	18,850	22,123	20,912	12,311	9,506	86,809
Jewelry stores	11,805	52,200	59,561	56,301	36,932	32,592	249,391
Luggage and leather goods stores	621	2,900	3,403	3,217	2,238	2,716	15,095

THE WHOLE TRADE AREA - 1980 CORE INTENSIVE

(continued)

Retail Categories	Under $3,000	$3,000-$5,999	$6,000-$8,999	$9,000-$11,999	$12,000-$14,999	$15,000 and over	Total
Other Specialty Stores (continued)							
Millinery shops	621	4,350	5,105	4,826	3,357	2,716	20,975
Music stores	5,281	23,200	28,930	25,738	16,787	17,654	117,590
Sporting goods stores	4,970	21,750	27,228	24,129	15,668	16,296	110,041
Florist shops	5,592	24,650	30,632	27,346	19,026	19,012	126,258
Optical goods stores	4,038	17,400	22,123	19,303	13,430	13,580	89,874
Toy and hobby stores	1,864	8,700	10,211	9,652	6,715	6,790	43,932
Secondary Shoppers Goods							
Furniture and household furnishings stores	31,376	205,900	222,929	201,075	120,868	99,134	881,282
Household appliances, television and radio stores	31,686	175,450	194,000	139,948	72,745	70,616	684,445
Floor coverings stores	7,145	30,450	37,439	33,781	23,502	23,096	155,413
Passenger car dealers	322,144	1,495,500	1,655,680	1,381,787	806,907	582,582	6,242,600
Tire, battery and accessory stores	17,396	81,200	86,789	73,996	43,697	31,234	334,262
Paint, glass and wallpaper stores	5,902	30,450	35,737	30,563	19,026	17,654	139,332
Other Goods and Services							
Gasoline service stations, with limited accessories	150,044	696,000	748,770	600,008	337,983	209,132	2,741,937
Eating and drinking place	124,260	464,000	491,806	484,189	325,673	327,278	2,227,206

PART I: Census of Retail Industry of the Dudley Square Commercial Area

SOURCE: Dun & Bradstreet, Market Indicators, December 1973

CODE:

HEADING

SIC NUMBER
Firm Name Adress
Year of Acquisition Owner's Name and Status
Line of Credit
Sales
Yearly Income
Worth of Business
Number of Employees

Key:

" <$5,000" = $ 0 - $4,999
" <10,000" = $ 5,000 - $9,999
" <20,000" = $10,000 - 19,999
" < 35,000" = $20,000 - 34,999
" < 50,000" = $35,000 - 49,999
" < 75,000" = $50,000 - 74,999
"<125,000" = $75,000 -124,999
"<500,000" = 125,000 -499,999

SIC NUMBER	SIC CLASSIFICATION
5231	PAINT, GLASS & WALLPAPER STORES:

B&D Wallpaper Co., Inc. 2164-68 Washington St.
1941 Al Dulman - PR
<$500,000
good
$1.6 million dollars
$225,000
Employs twelve (12)

5251 HARDWARE STORES:

W. Bowman Cutter, Inc. 2739 Washington St.
1969 Frederick Lee - PR
?
good
$83,400
?
Employs four (4)

5311 DEPARTMENT STORES:

Wrenn's Curiosity Shop 2087 Washington St.
1960 William Wrenn, Owner
<$5,000
fair
$7,000
$1000
Employs seven (7)

5331 VARIETY STORES:

5399 MISCELLANEOUS GENERAL MERCHANDISE:

see 5611 Afram
see 5651 Eastern

5411 GROCERY STORES:

Blair's Supermarket, Inc. 2214-2224 Washington St.
1969 Alfonzo Clarke, PR
?
fair
$ 2 million
?
Employs sixty five (65)

Brown, Herbert 194 Dudley Street
1962 Herbert Brown, Owner
<$20,000
good
$140,000
$11,190
Employs two (2)

Clinton Provisions, Inc. 2105 Washington St.
1945 Arthur Fiedman, PR
<$20,000
Fair
$450,000
$ 10,300
Employs seven (7)

Tropical Foods, Inc. 2101 Washington St.
1966 Jose Hernandes, PR
?
Fair
$440,000
$ 17,500
Employs eight (8)

5421 FREEZER & LOCKER MEAT PROVISIONS:

5423 MEAT & FISH:

Warren Fish Market 16 Warren St.
1960 Ralph Frazer, Owner
<$10,000
Fair
$50,000
$ 5,000
Employs eleven (11)

5431 FRUIT STORES & VEGETABLE MARKETS:

Bello L. & Sons 2214 Washington St.
1935 Anthony Bello, PR
<$20,000
Good
$500,000
$ 10,000
Employs eleven (11)

5441 CANDY, NUT & CONFECTIONERY STORES:

5462 RETAIL BAKERIES - BAKING & SELLING:

5463 RETAIL BAKERIES - SELLING ONLY:

5499

5499 MISCELLANEOUS FOOD STORES:

5511 MOTOR VEHICLE DEALERS - NEW AND USED:

5521 MOTOR VEHICLE DEALERS - USED ONLY:

Awtort Motors, Inc. 1149 Harrison Avenue
1970 Donald Hoy, Principal
?
Fair
$40,000
?
Employs two

APPENDIX II: Roxbury Business Structure

Introduction

In this appendix, Part I is a compilation of the retail businesses in Dudley Square.

Part II is a compilation of the non-retail businesses in Dudley Square. Wholesale businesses are included in this compilation.

Attached to this appendix are several notes including a list of missing businesses and a list of competitive stores in the key areas of automobile and grocery wholesale. A map of the competitive commercial centers to Dudley Square commercial area completes Appendix II.

5531 AUTO HOME AND SUPPLY STORES:

Grant's Auto Supply 10-12 Warren Street
1966 William Darren, Jr. PR.
<$35,000
good
$159,000
$ 31,900
Employs three (3)

5541 GAS & SERVICE STATIONS:

Nesto Ferrer 34 Roxbury Street
1945 Ferrer Nesto, Owner
<$35,000
Good
$140,000
$ 28,400
Employs three (3)

5611 MENS & BOYS CLOTHING FURNISHINGS STORES:

Afram Products, Corporation 2276 Washington Street
1971 J.C. Ajene PR
Store is presently for sale.

Callahan's Men's Shop 155 Dudley Street
1967 Paul Callahan, PR
<$125,000
Fair
$250,000
$ 3,000
Employs two (2)

Hat Shop 58 Warren Street
1968 M. Goldstein Owner
<$5,000
Fair
$250,000
$ 3,000
Employs one (1)

Samal, Inc. 2277 Washington Street
1957 Samuel Kaplan, PR
<$125,000
High
$195,000
$ 78,000
Employs six (6)

5621
5136
5137 Window to Watch 2276 Washington Street
1969 James Ajimi, Owner
?
Fair
$110,000
$ 14,800
Employs two (2)

Woody's Mens Store 2313 Washington St.
1942 Samuel Sochen, Owner
<$50,000
High
$96,400
$37,300
Employs three (3)

5621 WOMEN'S READY TO WEAR:

see 5611 Afram

Lord's, Inc. 2219 - 2221 Washington St.
1950 F. Horowitz, PR
<$35,000
Good
$180,000
$ 28,000
Employs three (3)

Royce Speciality Shops, Inc. 2225 Washington St.
1967 Daniel Finkle, PR
<$20,000
Good
$ 93,400
$ 10,800
Employs four (4)

See Window to Watch

5631 WOMEN'S ACCESSORIES & SPECIALITY STORES: (see 5137 Davis Millinery)

H & F Hosiery, Inc. 2275 Washington St.
1962 Mrs. F. Doris, PR
?
High
$136,000
?
Employs five (5)

5641 CHILDREN'S AND INFANTS WEAR:

5651 FAMILY CLOTHING STORES:

Eastern Bargain Spot, Inc. 2170 Washington St.
1948 Abraham Spiegel, PR
<$35,000

Good
$140,000
$ 20,000
Employs four (4)

L & M Bargain Store 2103 Washington St.
1952 Louis Salzberg, Owner
<$75,000
Good
$140,000
$ 52,000
Employs three (3)

L & S Department Store, Inc. 2275 Washington St.
1950 Saul Oshry, PR
<$500,000
Good
$1.5 million
$194,000
Employs twenty eight (28)

Rubin's Department Store 2251 Washington St.
1944 Samuel Borishoff, Owner
<$125,000
Good
$110,000
$ 80,000
Employs three (3)

5661 SHOE STORES:

Bartons of Roxbury, Inc. 2224 Washington St.
1972 Darrell Johnson, PR
?
Fair
$50,000
?
Employs two (2)

Factory Shoe Outlet 2163 Washington St.
1964 Harry Alterman, PR
<$35,000
Good
$80,000
$21,500
Employs two (2)

Norwood Shoe Store, Inc. 2231 Washington St.
1940 Harry Alterman, PR
<$125,000
High
$120,000
$108,000
Employs six (6)

Shep & John, Inc. 2224 Washington St.
1971 John Shepard, Principal
?
Fair
?
Employs two (2)

5699 MISCELLANEOUS APPAREL AND ACCESSORY STORES:

Cho Duk H. Co., Inc. 2173 Washington St.
1970 Duk A Cho, PR
?
Good
$80,000
$ 7,480
Employs four (4)

5712 FURNITURE STORES:

(2514) Don Mar Co., Inc. 2326 Washington St.
1964 Marvin Aronson PR
<$50,000
Fair
$200,000
$ 46,000
Employs three (3)

Ferdinand Frank, Inc. 2260 Washington St.
1971 Hugh R. Allen, PR
<$500,000
Good
$436,000
$163,000
Employs fifteen (15)

Highland Furniture Co. 2321 Washington St.
1944 Nathan Snyder, Owner
<$75,000
Fair
$130,000
$ 75,000
Employs five (5)

5713 FLOOR COVERING STORES:

Roxbury Bargain Store 2208 Washington St.
1963 C. Garbedian, Owner
<$20,000
Good
$50,000
$18,000
Employs one (1)

5719 MISCELLANEOUS HOME FURNISHINGS STORES:

see 5231 Terminal Hardware

5722 HOUSEHOLD SUPPLIES STORES:

Avenue Plumbing & Heating Supply Co. 23-27 Eustis Street
1972 H. Friedman, PR
?
High
$150,000
$ 16,000
Employs two (2)

5732 RADIO & T.V.:

National Radio & T.V. Co. 2167 Washington St.
1958 H. Cohen, Owner
<$75,000
Good
$125,000
$ 51,000
Employs four (4)

5773 MUSIC STORES:

I AM Records 4 Guild Row
1972 Dleve Reynolds, Owner
?
High
$10,000
?
Employs one (1)

5812 EATING PLACES:

Bag-full-of-Goodies 110-112 Dudley Street
1966 Clarence Jackson, PR
?
High
$200,000
?
Employs two (2)

Bell Foods, Inc. 2345 Washington St.
1956 Edward R. Levey, PR
?
Good
$100,000
?
Employs six (6)

Boss Bird, Inc. 2214 Washington St.
1969 Robert Burg, PR
<$10,000
Fair
$200,000
$ 9,140
Employs four (4)

Calyp-Soul Foods, Inc. 2337 Washington St.
1970 John V. Lewis, PR
?
Good
$150,000
?
Employs seven (7)

Frances Ann, Inc. 49 Warren St.
1971 A.F. Patterson, PR
?
Fair
$50,000
?
Employs three (3)

Palcalco Corporation 38 Warren St.
1969 Charles J. Calvey, PR
?
High
$350,000
?
Employs twenty-two (22)

Peking House 56 Warren Street
1970 Song Ping, Owner
?
High
$350,000
?
Employs two (2)

Rosalie & Kathie's Lunch Box 2835 Washington St.
1954 Vasco V. Pires, Owner
$5,000
Good
$23,400
$ 3,000
Employs (?)

Roxy Diner, Inc. 67 Roxbury St.
1962 Sam Gerstle, PR
?
Fair
$26,000
$25,000
Employs three (3)

Silver Slipper Restaurant 2387 Washington St.
1972 L. Matthews, Owner
?
Fair
$15,000
?
Employs three (3)

5813 DRINKING PLACES:

McKerr's, Inc. 2360 Washington St.
1965 Joseph I. Kelley, PR
<$35,000
Good
$100,000
$ 22,200
Employs six (6)

New Clock Cafe, Inc. 40 Warren St.
1948 Nora D. Greeley, PR
?
Fair
?
?
Employs three (3)

Roxbury Blue Moon Restaurant 2028 Washington St.
1937 George DiCole
?
Good
$1,250 ?
?
Employs (?)

Roxbury Tavern, Inc. 304 Warren St.
1949 Joseph Abrew, PR
<$10,000
Good
$50,000
$ 5,000
Employs one (1)

Steve's Tavern, Inc. 304 Warren St.
1949 Stephen Bandis , PR
<$10,000
Good
$50,000
$ 3,000
Employs two (2)

5912 DRUG STORES & PROPRIETARY STORES:

Best Health & Beauty Aids 2275 Washington St.
1973 Roger T. Gariun, Owner
<$5,000
Fair
$150,000
$ 3,000
Employs one (1)

Dudley Drug, Inc. 2220 Washington St.
1959 Leo S. Sheldon, PR
<$20,000
Good
$150,000
$ 18,000
Employs four (4)

Kornfield A. Inc. 2121 Washington St.
1939 Henry Shapiro, PR
<$125,000
Good
$300,000
$ 92,000
Employs eight (8)

5921 LIQUOR STORES:

Dudley Liquors Co., Inc. 150 Dudley St.
1936 Lee Golden PR
?
Good
$50,000
?
Employs fourteen (14)

Golden Wine, Inc. 16 Roxbury St.
1964 Marinburg Freema, PR
?
Good
$200,000
?
Employs two (2)

5931 USED MERCHANDISE STORES:

5941 SPORTING GOODS STORES & BICYCLE STORES: (see 5611 THC)

5942 BOOK STORES:

5943 STATIONERY STORES:

5944 JEWELRY STORES:

Venus Cosmetics Store, Inc. 2283 Washington St.
1964 Saul Cooper, PR
< $20,000
Good
$300,000
$15,000
Employs five (5)

Calvey Jewelers 34 Warren St.
1948 C.J. Calvey, Owner
< $50,000
Good
$70,000
$35,000
Employs five (5)

5945 HOBBY, TOY & GAME SHOPS: (see 5651 Eastern)

5946 CAMERA & PHOTOGRAPHY SUPPLY STORES:

5947 GIFT, NOVELTY & SOUVENIR SHOPS: (see 5812 Bagg-Full-of-Goodies)

(3099-3999) A Nubian Notion, Inc. 67 Humboldt Avenue
1968 M Abdal Khallar, PR
<$35,000
Fair
$108,000
$ 20,900
Employs three (3)

5948 LUGGAGE & LEATHER GOODS STORES:

5949 SEWING, NEEDLEWORK & PEICE GOODS STORES:

5992 FLORISTS:

5993 CIGAR STORES & STANDS:

5999 MISCELLANEOUS RETAIL STORES NOT ELSEWHERE CLASSIFIED:

Ruby, Norman I. 50½ Warren St.
1952 Dr. Norman I. Ruby, Owner
<$35,000
Good
$100,000
$ 20,000
Employs one (1)

see 5944 Venus Cosmetic Store

PART II: Census of Non-Retail Industries of the Dudley Square Commercial Area

based on Dudn & Bradstreet, December 1974

CODE:

HEADING

SIC NUMBER

Firm Name Address
Year of Acquisition Owner's Name & Status
Line of Credit
Sales
Yearly Income
Worth of Business
Number of Employees

KEY:

" <$5,000" = $ 0 - $4,999
" <10,000" = $ 5,000 - $9,999
" <20,000" = $10,000 - 19,000
" <35,000" = $20,000 - 34,999
" <50,000" = $35,000 - 49,999
" <75,000" = $50,000 - 74,999
"<125,000" = $75,000 -124,999
"<500,000" = 125,000 -499,999

17 CONSTRUCTION - SPECIAL TRADE CONTRACTORS:

1711 Plumbing, Heating (except electric) and Air Conditioning:

Barrett Assoc., Inc. 25 Ruggles St.
1953 T.F. Barrett, PR
$75,000
Fair
$700,000
$ 52,000
Employs eight (8)

20 FOOD & KINDRED PRODUCTS 205 BAKERY PRODUCTS:

2051 Bread & Other Bakery Products Except Cookies & Crackers:

Berwick Cake Co., The 24 Palmer St.
1875 W.F. Goodale, Jr. PR
Good
$500,000
Employs eighteen (18)

23 APPAREL AND OTHER FINISHED PRODUCTS MADE FROM FABRICS & SIMILAR:

2311 Men's Youth's and Boy's Shirts (except work shirts) & Nightwear, Maternity:

Best Coat Co., Inc. 9 Williams St.
1946 Sumner Press PR
1 million
High
$2,500,000
$ 770,000
Employs one hundred and seventy-three (173)

2087 FLAVORING EXTRACTS AND FLAVORING SYRUPS, NOT ELSEWHERE CLASSIFIES:

Eastern Sprcialty Products, Inc. 83 Zeigler St.
1938 Donald Alcaide, PR
$500,000
High
$1.75 million
$159,000
Employs one hundred and twenty-five (125)

23 APPAREL & OTHER FINISHED PRODUCTS MADE FROM FABRICS & SIMILAR MATERIALS:

2335 WOMEN'S MISSES' AND JUNIOR'S DRESSES:

MacKenzie Sportswear, Inc. 2285 Washington St.
1950 Benjamin Alter, PR
High
$200,000
Employs ten (10)

2391 CURTAINS & DRAPERIES:

Amaechi Manufacturing Corporation 2307 Washington St.
1971 Ekughu J. Amaechi, PR
?
Good
$400,000
$400,000
Employs twenty-five (25)

Auburn Curtain Co., Inc. 8-10 Williams St.
1933 Abraham Shaffer, PR
1 million
High
$ 3 million
$1,090,000
Employs one hundred and fifty (150)

24 LUMBER & WOOD PRODUCTS, EXCEPT FURNITURE:

2499 WOOD PRODUCTS, NOT ELSEWHERE CLASSIFIED:

Central Awning Co. 827 Shawmut Avenue
1932 Ralph Squelta, Owner
?
High
?
Employs one (1)

25 FURNITURE AND FIXTURES:

2512 WOOD HOUSEHOLD FURNITURE, UNUPHOLSTERED:

Hub Woodworks, Inc. 827 Shawmut Avenue
1949 Carrillini, PR
$50,000
Fair
$400,000
$ 45,000
Employs twenty-five (25)

27 PRINTING, PUBLISHING & PRINTING INDUSTRIES:

2711 NEWSPAPERS: PUBLISHING, PUBLISHING & PRINTING:

34 FABRICATED METAL PRODUCTS, EXCEPT MACHINERY & TRANSPORTATION EQUIPMENT:

3471 ELECTRO-PLATING, PLATING, POLISHING, ANODIZING & COLOURING:

Modern Electro Plating Co., Inc. 2430 Washington St.
1932 Harry Saltzberg, PR
$500,000
Fair
$625,000
$430,000
Employs forty (40)

5093 SCRAP & WASTE MATERIALS:

Atlantic Junk 1020 Harrison Avenue
1955 A.G. Berman, Owner
?
Fair
$500,000
?
Employs two (2)

51 WHOLESALE TRADE - NON DURABLE GOODS:

5113 INDUSTRIAL & PERSONAL SERVICE PAPER:

Mass Corrigated Box, Inc. 12 Dade St.
1935 George Chiparas, PR
$5,000
Good
$150,000
$4,270 (?)
Employs five (5)

5136 MEN'S & BOYS CLOTHINGS & FURNISHINGS:

See 5611 - Window to Watch

5137 Davis Millinery, Inc. 2111 Washington St.
1961 F.R. Dans, PR
?
Fair
$30,000
?
Employs two (2)

5139 FOOTWEAR:

Franklin Footwear, Inc. 960 Harrison Avenue
1965 K. Kelegian, PR - Boston
?
Fair
$1 million
?
Employs four (4)

5147 MEAT & MEAT PRODUCTS:

Circle Supply Co., Inc. 2407-2411 Washington St.
Gerald Kay, Mgr. Watertown, MA
?
High
0(?)
0(?)
Employs fifteen (15)

3479 COATING, ENGRAVING, & ANODIZING SERVICES NOT ELSEWHERE CLASSIFIED:

Modern Enameling Corp. 2340 Washington St.
1951 Leo Satlzberg, PR
<$500,000
Good
$750,000
$376,000
Employs forty (40)

38 MEASURING, ANALYZING, & CONTROLLING INSTRUMENTS, PHOTOGRAPHIC, MEDICAL & OPTICAL GOODS - WATCHES & CLOCKS:

3811 ENGINEERING, LABORATORY, SCIENTIFIC & RESEARCH INSTRUMENTS & ASSOCIATED EQUIPMENT:

Lyn R. Narins , Mgr. 37 Williams St.
Narins Lyn, Mgr. Burlington, MA

?
Good
?
?
Employs one hundred and twenty (120)

41 LOCAL & SUBURAN TRANSIT AND INTER URBAN HIGHWAY PASSENGER TRANSPORTATION:

4119 LOCAL PASSENGER TRANSPORTATION NOT ELSEWHERE CLASSIFIED:

Brewster Ambulance Service 91 Roxbury St.
1963 Mrs. M. Brewster, Owner
?
Good
$50,000
?
Employs three (3)

42 MOTOR FREIGHT TRANSPORTATION & WAREHOUSING:

4212 LOCAL TRUCKING WITHOUT STORAGE:

Wallace, Charles J. 2085 Washington St.
C.J. Wallace, Owner
?
Fair
$50,000
?
Employs three (3)

5063 ELECTRICAL APPARATUS & EQUIPMENT, WIRING SUPPLIES & CONSTRUCTION MATERIALS:

See 5074 - Circle Supply

5074 PLUMBING & HEATING EQUIPMENT & SUPPLIES:

(Hydronics)
Circle Supply Co., Inc. 2407-2411 Washington St.
1940 David Kaye, PR
<$500,000
High
$1,25 million
$206,000 Employs sixteen (16)

5149 GROCERIES & RELATED PRODUCTS, NOT ELSEWHERE CLASSIFIED:

Consolidated Bakeries Co. 109 Roxbury St.
1945 Michael Kushner, Owner
?
Fair
$750,000
?
Employs forty (40)

5199 NON DURABLE GOODS - NOT ELSEWHERE CLASSIFIED:

Ralco Decalco 102 Dudley St.
1952 Maurice B. Alter PR
$20,000
Good
$115,000
$ 13,500
Employs three (3)

65 REAL ESTATE:

6512 OPERATORS OF NONRESIDENTIAL BUILDINGS:

Owner's Incorporated 2275 Washington St.
1967 Lester Oshry, PR
?
High
$300,000
$ 26,600
Employs five (5)

72 PERSONAL SERVICES:

7221 PHOTOGRAPHIC STUDIOS, PORTRAITS:

Walker, Samuel E. 2308 Washington St.
1956 Samuel E. Walker, Owner
$10,000
Fair
$20,000
$25,000
Employs one (1)

73 BUSINESS SERVICES:

7311 ADVERTISING AGENCIES:

A & K Advertising, Inc. 40 Warren St.
1972 Ernest D. Artin, PR
?
Fair
$30,000
?
Employs three (3)

7392 MANAGEMENT, CONSULTING & PUBLIC RELATIONS SERVICES:

Small Business Development Corporation 90 Warren St.
1968 Bill Davis, PR
?
Fair
$141,000
?
Employs eight (8)

75 AUTOMOTIVE REPAIR, SERVICES & GARAGES:

7531 TOP & BODY REPAIR SHOPS:

R & F Auto Body 814 Shawmut Avenue
1968 J.T. Ridley, Owner
?
Good
$45,000
?
Employs one (1)

76 MISCELLANEOUS REPAIR SERVICES:

7641 REUPHOSTERY AND FURNITURE REPAIR:

Caristi, Frank & Sons 195 Dudley St.
1955 Frank D. Caristi, PR
<$50,000
Good
$90,000
$40,000
Employs nineteen (19)

7699 REPAIR SHOPS AND RELATED SERVICES, NOT ELSEWHERE CLASSIFIED:

Brummit & Kelley Co., Inc. 33 Roxbury St.
1946 George T. Kelley PR
?
Good
$30,000
$ 3,090
Employs four (4)

Additional Tables

List of Stores Missing from the Dun & Bradstreet Census (unfinished)

Amco Gasoline Station
Carroll's
Drain's House Style
Edison

Freddie Parker's
Highland Tap
Joe and Nemo's
Kims Kaps
Norman Daniel's Bail Bonds
National
One Hour Martinizing
Patio Lounge
Paul's Army and Navy Store
Robbell's
ShoeShelf
Skippy White's Records
Thom McCann Shoe Store
Trapp and Bro thers Dry Cleaning
Ugi's Submarine Shop
Woolworth's
Wynotte

Automotive Supply and Services in Roxbury

	Sales
A-1 Transmission Service	100k
ATZ Auto Service	?
Bay State Auto Body	75k
Boston Auto Radiator Co.	95k
Ca Motors	25k
Columbia Car Corp.	225k
Columbus Auto Body, Inc.	150k
Dave's Oil Shop	18k
Dudley Auto & Repair, Inc.	300k
Eustis Auto Body	?
Grayline, Inc.	200k
Hawey Tire & Rubber Co.	100k
Heritage Leasing Corp.	?
Imperial Auto Body	30k
King Automatic Transmission	30k
L & L Auto Body	60k
Mass Motor Service, Inc.	100k
Merit Auto Body Repair	50k
Muffler Mart, Inc.	200k
Production at Body & Paint Co.	400k
R & F Auto Body	45k
Savage Auto Service, Inc.	400k
Uphams Corner Auto, Co.	85k

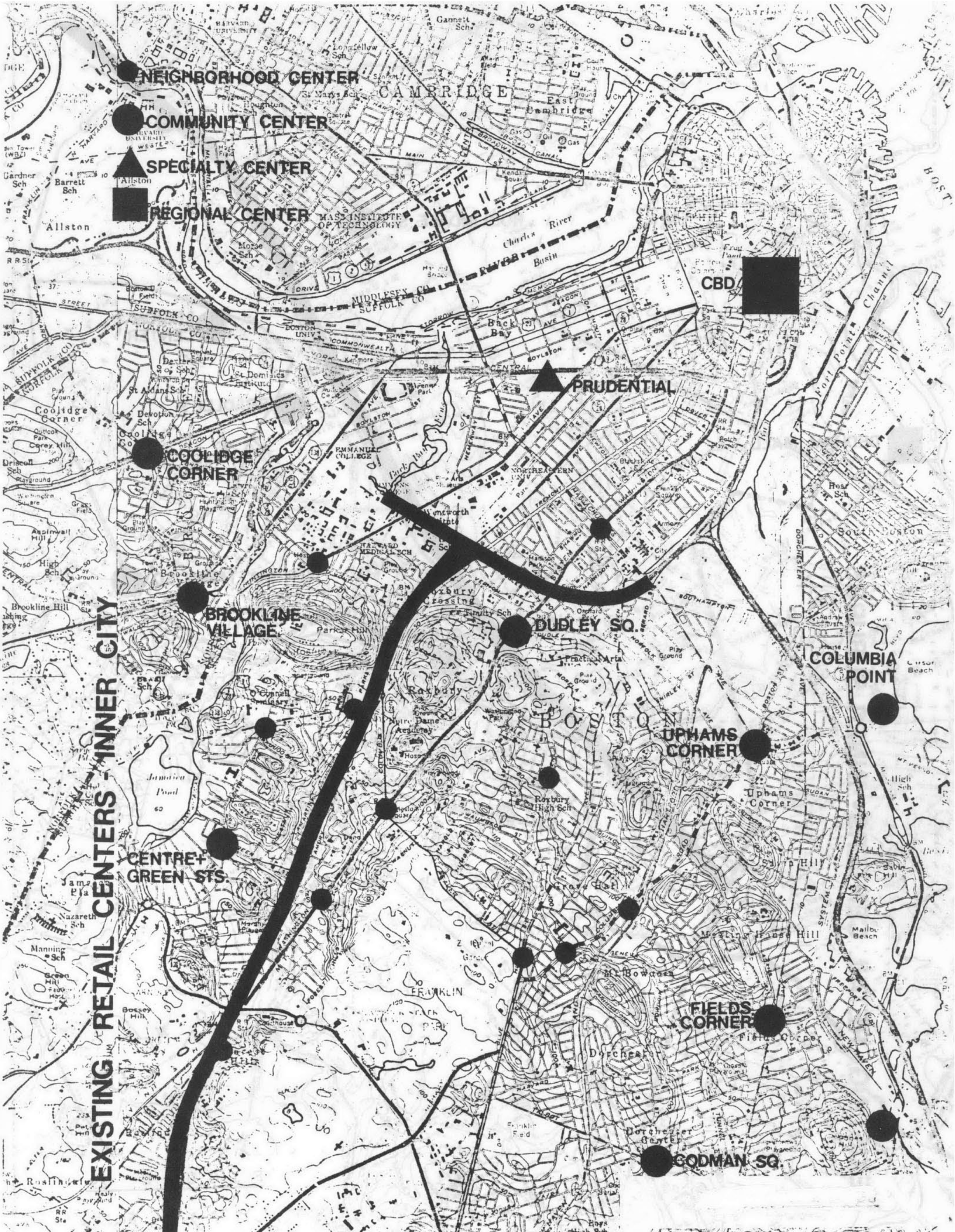
SOURCE: Dun & Bradstreet, Market Indicators, December, 1973

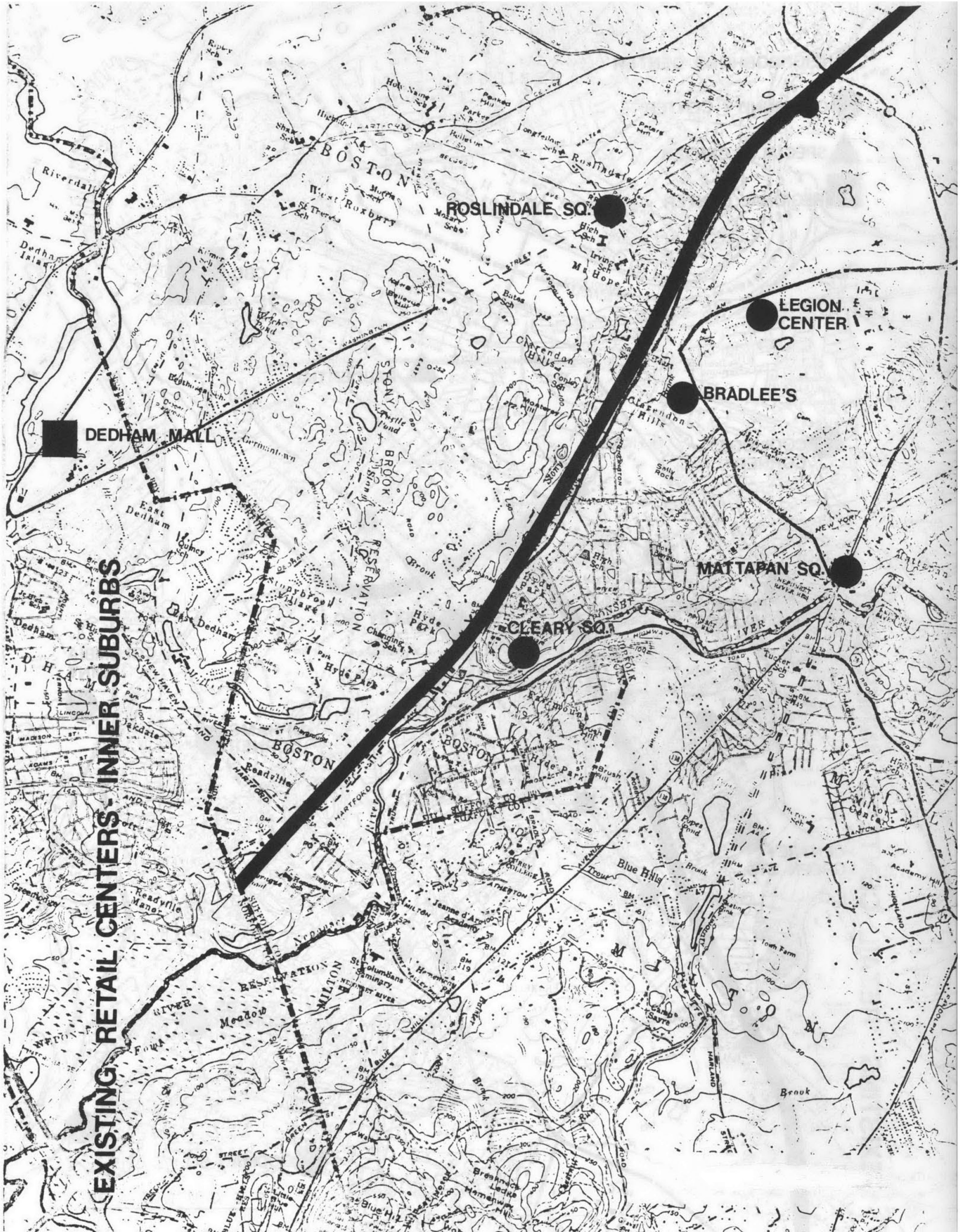
Grocery Wholesale in Roxbury

	Sales
Adam's Chapman Co.	5 m
All State Beef Co.	200k
Apotheker, Melvin M.	200k
Associated Meat Packers	3 m
Belles Wholesale Fruit & Produce	150k
Bennett, S. Co., Inc.	35 m
Bolton Smart Co., Inc.	7.3m
Celita Importing Co.	?
Consolidated Bakers Co.	750k
Cunningham, A.J. Packing Corp.	42m
Ebony Market, Inc.	229k
Festival Foods, Inc.	?
Fruit Co. Donald J	30,000
Fleishman J & Co.	950k
GLT, Inc.	?
Handy Pax, Inc.	1400k
Iowa Beef Co., Inc.	2000k
Kaye, Milton	150k
McCall, James	?
Morse Fish Co.	20k
National Royal Beef Corp.	6500k
New Boston Packing Corp.	550k
Old Colony Cha-Pac, Inc.	7000k
Prime Poultry Corp.	100k

Rothstein B & Co. Inc.	1000k
Roxbury Wholesale Grocery, Inc.	1120k
Siegel Egg Co.	1100k
Stewart Donald Auto Body	50k
Swift & Co.	?

SOURCE: Dun & Bradstreet, Market Indicators, December, 1973


EXISTING RETAIL CENTERS - INNER CITY
NEIGHBORHOOD CENTER
COMMUNITY CENTER
SPECIALTY CENTER
REGIONAL CENTER
CBD
PRUDENTIAL
COOLIDGE CORNER
BROOKLINE VILLAGE
DUDLEY SQ.
COLUMBIA POINT
UPHAMS CORNER
CENTRE+ GREEN STS.
FIELDS CORNER
CODMAN SQ.
CAMBRIDGE
BOSTON
Charles River Basin
Back Bay
Roxbury
Dorchester
Jamaica Pond
South Boston


EXISTING RETAIL CENTERS - INNER SUBURBS
ROSLINDALE SQ.
LEGION CENTER
BRADLEE'S
DEDHAM MALL
MATTAPAN SQ.
CLEARY SQ.

APPENDIX III: Real Property Structure

Introduction

In Appendix III, a compilation of land ownership in Dudley Square is presented.

Streets of the Dudley Square Commerical Area

Dade	0 - 28	
Dudley	38 - 195	
Eustis	0 - 30	
Gary	0 - 8	
Guild Row	4 - 20	
Harrison Ave.	985 -1201	
Marvin	all	
Palmer	4 - 24	
Renfrew	all	
Roxbury	2 - 118	
Ruggles	2 - 56	
Shawmut	~700 - 840	
Sterling	0 - ~50	
Taber	3 - 16	
Vernon	1 - 40	(but not 39)
Warren	6 - 78	
Washington	~1900 -2501	
Williams	0 - ~60	
Ziegler	0 - ~50	

Census of Land Ownership of Dudley Square Commercial Area

by Land Owner 1974

Source: Assessor's List of Property
City of Boston 1974

Owner & Address	Property(ies)	Land	Bldg.	Total	Tax
Abren, Joseph, et.al Dorothy I. Abren 37 Roxbury Street	37,51 Roxbury Street	19,400	7,600	27,000	2656.80
American Oil Co. Maryland	Guild Row No. Corner 34 Roxbury St.	16,400	15,600	32,000	3148.80
American Realty Syndicat c/o Rosenberg 180 Beacon Street	50 Roxbury St.	30,300	23,000	53,300	5244.72
Aronson, Samuel 2326 Washington St.	2326, 2328 Washington Street	7,500	6,500	14,000	1377.60
Balerna, Alfred Trust of Morm Balerna Realty Trust 11 Roxbury St.	11, 29 Roxbury St.	39,500	10,500	50,000	4920.00
Barrett, Thomas F. & Associates 9 Ruggles St.	9, 15, 25 Ruggles St.	14,600	29,300	41,100	5028.24
Barron, Etta F. 11 Worthington St.	2304 Washington St.	27,000	10,000	37,000	3640.80
Berwick Realty Corp. 1127 Harrison Ave.	14, 26 Palmer St.	35,500	54,500	90,000	8856.00
Bethel Tabernacle Choir, Inc. 714 Shawmut Ave.	714, 716, 716A Shawmut Ave.	5,300	5,000	10,300	1013.52
Blue Hill Ave. Assoc. c/o Primack 113 W 4th Cincinnati 45202	138, 148 Dudley St.	24,000	60,000	84,000	8265.00
Boy's Club 115 Warren St.	32, Frm[1] 68R Dudley St	53,500	70,000	123,500	Exempt
Brayboy, Robert L Jr etal Adelaide Brayboy 69 Dudley St.	69 Dudley St. 1,3 Kenilworth*	1,600	4,400	6,000	590.40
Brecher, Murray 153 Jordan Road	1 Taber 22, 26 Warren	6,600	16,400	21,200	2066.40
Brown, Herbert 194 Dudley St.	194, 196R Dudley St.	4,900	3,600	8,500	836.40
Boston Redevelopment Authority 1 City Hall Plaza	Frm 81, 82, 83, 85, 87, 107 Roxbury St. 763, 769, 777, 779, 781, 793, 795, 817, Shawmut Ave. Frm 3, 39 Vernon St.	74,200	54,400	128,600	Exempt
Butner, Ernest E. Sr. 794 Shawmut Ave.	794 Shawmut Ave.	2,500	2,000	4,500	442.80
Bynoe, John L. & Edna V. 30 Williams St.	28, 30 Williams St.	2,800	5,000	7,800	767.58
Calianos, Theodore	4A, 6 Guild Row 10, 16 Roxbury Street	12,000	13,000	25,000	2460.00
Calvey, Charles J. 34 Warren St.	46 Ziegler St. 32A, 34A, 36, 38 Warren St.	10,700	19,300	30,000	2952.00

Owner & Address	Property	Land	Bldg	Total	Tax
Capuzzo, Fiore 67 Dudley St.	Frm 63,Frm 65, 67 Dudley St.	3,900	1,100	5,000	512.00
Cassie, Alexander 24 Williams St.	24 Williams St.	1,400	2,500	3,900	383.76
Cavallini, Anthony 827 Shawmut Ave.	827, 833 Shawmut Ave.	29,700	13,600	43,300	4260.72
Chase, Theodore Trust of Frank Ferdinand, Inc 2260 Washington St.	1, 15, 17, 19 Warren Street 2260, 2262, 2286, 2302 Washington Street	127,400	54,600	182,000	17908.80
Christian Mission 45 Vernon Street	45 Vernon Street	2,000	1,000	3,000	295.20
Circle Supply Co. 2407 Washington St.	2451, 2452 Washington Street	13,300	7,000	20,300	1997.57
City of Boston 1 City Hall Plaza	Municipal Court House Frm 14, 20, 22, Frm 26, 28 Dade Street 46, 55, 61, 135 Dudley Street Frm 6, __, Gary Street 82 Roxbury Street 766A,772, 787, 789 Shawmut Ave. 2121, 2131 Washington Street W Corner Ziegler St.	285,000	916,400	1201,400	Exempt
Cohen, Joseph 2167 Washington St.	2167, 2171 Washington Street SWS Gary Street	16,500	10,500	27,000	2656.80
Cohen, Paul et.al. Haskell Weiner, Albert T. Cohen Trusts	6 Roxbury Street 2359 Washington Street	10,600	3,400	14,000	1377.60
Commonwealth Lodge 19 IBPO, Elks of the World 720 Shawmut Ave.	720, 720A Shawmut Ave	3,500	500	4,000	393.60
Conroy, Marion 95 Roxbury Street	89, 95 Roxbury Street	4,000	2,500	6,500	639.60
Cunningham, John A. etal Timothy G. Melvin, Lena E. Kelly	2360A, 2362A Washington Street	22,500	2,500	25,000	2460.00
Dixon, Charles, et.al. Carolyn Dixon 58 Dudley Street	54, 56, 58 Dudley St.	5,100	2,900	8,000	787.20
Douglass, Mary Evelyn 137 W 10th Claremont, Ca. 91711	31, 33, 35 Roxbury St	4,400	800	5,200	511.68
Department of Public Works 100 Nashua Street	Frm 40 Sterling St.	800	-	800	Exempt
Dudley Realty Corp. 2220 Washington St.	1119, 1135 Harrison Av 12 Palmer Street Frm 2-4, WS Renfrew Frm 2148, 2178B, 2196, 2212, 2214, 2220, 2222 2224 Washington St.	85,700	113,500	208,500	17229.84
Dunn, Albert 19A Palmer Street	19 A Palmer Street	3,900	7,500	11,400	1021.76

Owner & Address	Property	Land	Bldg	Total	Tax
Dyer, Joseph 18 Williams Street	18 Williams Street	1,500	1,300	2,800	275.52
Eaves, Jay H. 59 Dudley Street	59 Dudley Street	1,200	2,600	3,800	373.92
Ellcock, Harry et.al. Marvin L. Sayles 171 Dudley Street	171, 179 A Dudley St	3,000	10,000	13,000	1279.20
Eliot Savings Bank 165 Dudley St.	S, SWS, 165 Dudley St 1208, Frm 1214 Harrison Ave. 2 Warren Place	30,700	70,000	95,700	9908.88
Ethridge, Noah 14 Taber	14 Taber	2,200	800	3,000	295.20
Filips, Stephan & Anna 104 Roxbury Street	104 Roxbury Street	2,300	1,000	3,300	324.72
First National Bank 114 Dudley Street	114, Frm 122, 144 Dudley Street 2374 Washington St	76,600	53,600	129,800	12772.32
Flowers, Johnnie 118 Roxbury Street	118 Roxbury Street	1,700	3,000	4,700	462.48
Freedman, Edwin 31 Eustis Street	29, 31 Eustis Street 1105 Harrison Ave.	2,200	6,800	9,000	885.60
Garcia, Luis, Marta 57 Dudley Street	57 Dudley Street	1,200	2,600	3,800	373.92
George Washington Carver Grand Lodge, Inc Ancient Free & Accepted Masons, 23 Kenilworth St.	51 Dudley Street	7,500	10,200	17,700	exempt
Golden, Harold W. 150 Dudley Street	152, 156 Dudley St. 50, 58 Warren Street	25,400	19,600	45,000	4428.00
Goldstein, Louis Julius Goldstein Trust of the Meyerann Trust, c/o Goldstein 108 Dudley Street	95, 97, 104, 112 Dudley Street 19, 23 Guild Row	96,800	15,200	32,000	3148.80
Gonzales, Reyes Luis E. 48 Dudley Street	2 Dudley Place 48 Dudley Street	1,500	2,500	4,000	393.60
Gordon, Mary I. 718 A Shawmut Ave.	718, 718 A Shawmut Ave	2,000	3,000	5,000	492.00
Gould, Annie 792 R Shawmut Ave.	792 R Shawmut Ave.	1,000	200	1,700	167.28
Green Milton Trusts Leonard Kaplan, David Greenberg Trusts of Green Brothers Realty Trust 1330 Beacon Street	2235, 2241, 2315, 2337 Washington St.	122,000	68,000	190,000	18696.00
Hansel, Cecil W. et.al Barbara I. Hansel 34 Williams Street	34 Williams Street	1,400	2,500	3,900	383.76
Hershenson, David M.Trst Jerold M. Hershenson Trusts of Hershenson Realty Trust 803 Shawmut Avenue	803, 815 Shawmut Ave.	19,800	20,200	40,000	3936.00

Owner & Address	Property	Land	Bldg	Total	Tax
High Voltage Engineering Corporation 37 Williams Street	37 Williams Street	15,500	34,500	50,000	4920.00
Highland Tap 2128 Washington Street	3 Eustis Street 2128, 2130 Washington Street	9,500	11,500	21,000	2066.40
Holt, Kenneth 190 Dudley Street	190, 192 Dudley Street	4,400	4,000	8,400	826.56
Horowitz, Harold L. etal France P. Horowitz 2219 Washington Street	2219 Washington St.	13,200	11,800	25,000	2460.00
Kaye, David Trust of Weinstein, Saul Trust Evelyn Weinstein of Shep Realty	2407, 2413, 2445 Washington Street	8,800	6,400	15,200	1495.68
Kelly, Paul 770 Shawmut Avenue	770 Shawmut Avenue	2,800	1,200	4,000	393.60
Kent, Henry K. Marilyn C. Kent 39 Warren Street	39, 47 Warren Street	25,600	8,400	34,000	3345.60
Koplow, Martin etal. 50R Dudley Street	50 Dudley Street	2,200	6,200	8,400	826.56
Larosa, Donald A. Josephine B. Larosa 671 Concord Ave.	72, 74 Roxbury St.	5,000	5,000	10,000	984.00
Levin, Frannie 42 Cambridge	SWS Dade St.	500	-	500	49.20
Levin, Henry Trust 175 Tremont Street	2101, 2107, 2109, 2115 Washington St.	62,000	28,000	90,000	8856.00
Lewis, Charles H. etal. Susie E. Lewis 40 Williams St.	40 Williams Street	1,600	3,400	5,000	492.00
Lieberman, Shirley c/o N. David Lieberman 1368 Beacon Street	2249, 2259 Washington Street	63,500	24,700	88,200	8678.88
Lower Roxbury Community Corporation 85 Vernon Street	725 Shawmut Avenue	(not listed)			
Marando, John T. 14 Mark	38, 67 Dudley Street	2,600	3,200	4,800	570.72
May Clement W. Trusts William J. Manseau Trst of Open Ear Association 53 Dudley Street	53 Dudley Street	1,200	3,600	4,800	exempt
Massachusetts Bay Transportation Authority Forest Hills	130 Dudley Street 25 Shawmut Avenue	366,700	592,800	959,700	exempt
Morris Maria Trust Irene M. Antonion, Peter J. Morris Trustees of Jo Marip Realty Trust 70 Waldeck	6, 8 Taber 18, 20 Warren Street	13,700	8,300	22,000	2164,80
Most Worshipful GWCarver 39 Dudley Street	39, 45 Dudley Street	3,300	-	3,300	324.72

Owner & Address	Property	Land	Bldg	Total	Tax
National Shawmut Bank 160 Dudley Street	160, 162, 170 Dudley Street 1181, 1185 Harrison Avenue	42,600	48,900	91,500	9003.
New Hope Church of Jesus Christ, Inc. 724 Shawmut Ave.	722A, 724 Shawmut Ave	4,800	4,200	9,000	885.60
Novick, Simon Millis, Ma 02054	758 Shawmut Avenue	2,400	5,300	7,700	757.68
Opportunities Industrial Center 186 Dudley Street	182, 186 A Dudley St	9,000	31,000	40,000	3936.00
Perry, Helen M. Trust Sylvia Ackerman Trusts, Green Dept. Stores, 1330 Washington St.	2301, 2311 Washington Street	80,000	60,000	140,000	13776.00
Pitts, Marie J. 794 R Shawmut Ave.	794 R Shawmut Ave.	100	500	1,500	147.60
Popper, Helene F. Joseph Feldman	2221, 2225 Washington Street	29,100	26,800	55,900	5500.56
Rabufetti, Francis etal Augusto G. Rabufetti	2363, 2365 Washington Street	9,000	5,000	14,000	1377.60
Ralco Decalco Co. 102 Dudley Street	102 Dudley Street	3,800	4,200	8,000	787.20
Re Nancy 106 Roxbury Street	106 Roxbury Street	4,400	1,000	5,400	531.36
Reed, Lillian 780R Shawmut Ave.	780R, 782 Shawmut Ave	2,100	2,100	4,200	413.28
Rees, Lillie G. Etal Eleanor F. Rees, William G. Rees Trustee 31 Milk Street	2, 20 Ruggles Street 2201, 2209 Washington Street	84,700	80,300	165,000	16236.00
Ridley, John T. Jr. 808 Shawmut Ave.	Cor Marvin Street 808, 814 Shawmut Ave	9,100	4,900	14,000	1377.60
Rink Realty Inc. 17 Williams Street	17, 25 Williams Street South Service Drive	9,100	16,300	25,400	2499.36
Rivers, Leah 799 Shawmut Ave.	799 Shawmut Avenue	3,300	1,000	4,300	423.12
Robinson, Benjamin F. Jr 788 Shawmut Avenue.	788 Shawmut Avenue	3,000	800	3,800	373.92
Rosengard, Helen etal Bessie G. Waldman Trust of Fritz Trust c/o Fritz 15 Gibbs	2173, 2181 Washington Street	59,900	5,100	65,000	6396.00
Rothenberg, Suzanne etal Lucy Sagalyn 28 Foster Street	8, 18 Guild Row 2385, 2391 Washington Street	14,300	12,700	27,000	2656.80
Roxbury Dental and Medical 26 Warren Street	Frm 179-181, 183, 187, 187A, 189, 193, 195 Shawmut Avenue	13,700	6,000	19,700	1938.48
Saltzberg, Harry M Trst Frances H. Saltzberg, Julius Stone Trsts of Saltzberg Realty Trusts	2430 Washington St.	61,600	86,400	148,000	14563.20

Owner & Address	Property	Land	Bldg	Total	Tax
Salvation Army 147 Berkeley Street	NES, Cor, 23, Frm 27 29 Vernon Street	10,700	20,000	30,700	exempt
Schuurman, Gerrit George Heinbegner 2159 Washington St	SES Dade 2159, 2163 Ballinger*	49,300	11,000	60,300	5933.52
Sephus Osborn Trust 60 R Dudley Street	60 R Dudley Street	800	600	1,400	137.76
Schaffer, Abraham Trust 8 Williams Street	No Cor Dade Street 2121, 2131 Washington Street 8, Frm 20, 22 Williams Street	56,800	45,800	102,600	10095.84
Silva, Claudia c/o Ronald Rainer Box 1	2278, 2282 Washington Street	7,000	2,000	9,000	885.60
Smith, Michael Trusts Marvin H. Cohen Trusts of M&M Realty Trust 67 Roxbury Street	67 Roxbury Street	4,900	4,100	9,000	885.60
Smythwick, Nancy 40 Dudley Street	40 Dudley Street	1,500	2,100	3,600	354.24
Stan B & Co. 2093 Washington Street	2093, 2095 Washington Street	6,400	1,100	7,500	738.00
Swett, Herbert C. 53 Roxbury Street	53, 63 RoxburySt.	18,000	32,000	50,000	4920.00
Tab Associates 41 Ruggles Street	746, 750 Shawmut Av	16,900	12,600	29,500	2902.80
Thirza, James A.	26 Williams Street				
Walcott Corporation 824 Boylston Street	No Cor. Vernon St 2261, 2275, 2277, 2285 Washington St.	63,500	24,700	88,200	8678.88
W. Bowman Cutter,Inc. 2377 Washington St.	8, 10 Guild Row 2377 Washington St.	12,000	7,000	9,000	1869.60
Waters, Rosella 2147 Washington St.	2147, 2149 Washington Street Ballinger Place*	18,200	1,800	20,000	1968.00
Webster Atlas Building Corporation 225Franklin Street	2343, 2345 Washington Street	110,500	98,500	209,000	20565.60
Weinstein, Louis Trusts Saul Weinstein Trust, Mels Realty, c/o Weinstein 2401 Washington Street	99, 105 Dudley St. 2397, 2401, 2403 Washington Street.				
Weinstein, Saul Trusts Harold Weinstein Trusts of American National Realty 2401 Washington Street Evelyn Weinstein Trusts of Shep Realty 62, 78 Warren Street Louis Weinstein Trusts 1203 Harrison Ave.	Frm 75-79, Frm 83-85 Frm 87-89, 191 93, 99, 105, 155 Dudley Street 2371, 2397, 2401, 2403 Washington Street So. Corner Gurney St* 668, 670 Parker St.*	79,000	155,300	265,000	23055.12
White, Charles & Edith 38 Williams Street	38 Williams Street	1,500	3,000	4,500	442.80
White, Eula M. 36 Williams Street	36 Williams St.	1,500	2,500	4,000	393.60

Owner & Address	Property	Land	Bldg	Total	Tax
Women's Social Christian Service New England Conference Methodist Church, Inc. 32 Williams Street	711 Shawmut Avenue 32 Williams Street	1,400	5,500	6,900	678.96

Key "Frm" = **Formerly**
" * " = **Street address not within the Dudley Square Commercial Area**