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An Assessment Of The Impact Of The Federal Neighbourhood Improvement Program (NIP)

In Ottawa's Lowertown West From A 'Quality Of Life' Perspective

M.A. Thesis to be presented to the School of Graduate Studies, University of Ottawa, in partial completion of the requirements of the Master of Geography Program.

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Abstract

Since their implementation in June of 1973, both the Neighbourhood Improvement (NIP) and the Residential Rehabilitation Assistance Programs (RRAP) have benefited many Canadian urban neighbourhoods through projects funded under the former and units rehabilitated under the latter. The Ottawa community of Lowertown West, located to the north of the City's By-Ward Market area, was one such neighbourhood. This research provides a fundamental assessment of the NIP program's impact on the Lowertown West community from a 'quality of life' (QOL) perspective since the program's implementation in 1976. The current research applied both objective and subjective-social indicators to the task of assessing NIP's six specific program objectives and the program's success in recreating a close-knit family oriented residential community - Lowertown West's quality of life objective.

The research provides a review of social indicator literature and its application towards assessing NIP's longterm impact on Lowertown West from a quality of life perspective. This research, through its analysis of NIP program instruments - as opposed to those associated with the former federal Urban Renewal Program, provides a fundamental basis and framework upon which to rigorously assess NIP's six specific program objectives.

The general conclusion drawn from the assessment using 1971 and 1981 census data, 1975-1980 provincial property assessments and oral (subjective social indicator) sources, is that, while NIP did serve to aid in preserving and enhancing Lowertown West's physical environment and through experience or impact personally did benefit a number of incumbent and incoming residents, it did not for the most part succeed in preserving the neighbourhood's low-income tenant population nor did it create the desired close-knit family environment.
This program failing can be attributed to the neighbourhood's aged homeowner population (circa 1976), who, while benefiting personally from both NIP and RRAP increased resale values, moved out of the community. As well, gentrification (white painting) trends — drawing a transient/highly mobile housing market (DINKS — double incomes no kids households) which has no social commitment to the community at large other than its serving as an investment and dormitory — have contributed to NIP's inability to realize the desired living environment. This lends support to the conclusion that NIP's implementation — in view of the elaborated political circumstances centering on the area's land uses being stabilized prior to NIP's implementation — contributed little to the community's evolution other than enhancing the area's stock and socio-recreational facilities in conjunction with RRAP.

Thus, in sum, NIP made very little difference in the community's social evolution (succession) — other than perhaps accelerating what would have otherwise occurred under gentrification trends experienced by the City of Ottawa.

Tim Colfe
May 16, 1987
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Foreword

The Neighbourhood Improvement Program was implemented on June 30, 1973 through revisions made to Section 27.1 - 27.7 of the National Housing Act. The program sought to provide funds and planning expertise to urban neighbourhoods which showed signs of potential stability in terms of land use and were inhabited for the most part by low to moderate income people. Recipient neighbourhoods should have had existing problems which were potentially resolvable under NIP. The program was devised to foster community confidence, pride and preservation through neighbourhood based planning strategies. These goals were embodied in NIP's general program objective which sought "To Assist In The Improvement Of Living Conditions In Neighbourhoods" and through its six specific program objectives stated below.
SPECIFIC OBJECTIVES AND GUIDELINES

Specific Objective 1:

To improve those residential neighbourhoods which show evidence of need and of potential viability.

Guidelines:

To select neighbourhoods in which all the following characteristics are present:

(a) The area is predominantly residential land use.
(b) A significant proportion of the housing stock is in need of rehabilitation.
(c) Other elements of the physical environment are in need of rehabilitation.
(d) The area is inhabited for the most part by low to moderate income people.
(e) There are deficiencies in neighbourhood amenities.
(f) The area is potentially stable in terms of land use and densities.
Specific Objective 2:
To improve and maintain the quality of the physical environment of the neighbourhood.

Guidelines:
(a) To clear land which is being put to uses detrimental to a residential neighbourhood.
(b) To provide for the selective clearance of land for low and medium density social housing.
(c) To improve or provide municipal works and services and public utilities in the neighbourhood.
(d) To promote the physical improvement of commercial enterprises.
(e) To ensure the adoption and enforcement of local occupancy and building maintenance standards.
(f) To assist in stabilizing the neighbourhood in terms of residential land use and densities.

Specific Objective 3:
To improve the amenities of neighbourhoods.

Guidelines:
(a) To provide or improve neighbourhood recreational facilities.
(b) To provide or improve neighbourhood social facilities.
(c) To acquire and clear land which is to be used as public open-space or social recreational facilities.
Specific Objective 4:
To increase the effect of related programs.

Guidelines:
(a) To increase the impact of RRAP and to stimulate other forms of rehabilitation.
(b) To serve as a focus for programs whose aim is to improve the social fabric of the neighbourhood.

Specific Objective 5:
To improve the neighbourhoods in a manner which meets the aspirations of neighbourhood residents and the community at large.

Guidelines:
(a) To secure the participation of neighbourhood residents in the planning and implementation of improvements.
(b) To ensure that adequate compensation and relocation expenses be paid to those persons dispossessed of accommodation.
(c) To ensure that alternate accommodations within the means of dispossessed persons be made available.
Specific Objective 6:
To deliver the program in an effective manner.

Guidelines:
(a) To establish a selection, planning and implementation process which is efficient and flexible.
(b) To plan and implement improvements within the terms of pre-determined allocation to a given neighbourhood.
(c) To provide a level of funding in each neighbourhood sufficient to ensure its viability as a residential area.
1. Introduction

Two Canadian Federal Housing Programs reflected post-industrialism and its increasing quality of life orientation during the 1960s. The implementation of the Neighbourhood Improvement Program and the downfall of urban renewal reflected the quality of life concerns of the early 1970s. This research will provide an assessment of the federal Neighbourhood Improvement Program's (NIP) impact on Ottawa's Lowertown West from this 'quality of life' perspective. A review of social indicator literature will serve as the primary instrument applied to the operationalization of the NIP program's objectives and guidelines. A general assessment of NIP's program objectives, combined with both NIP's nationally and Lowertown West's 'quality of life' objectives will determine its longterm impact on the neighbourhood.

This research, while conscious of NIP's contribution towards the creation of a family environment and the associated Residential Rehabilitation Assistance Program's (RRAP) securing units from gentrification, will take the position that NIP was unable to preserve Lowertown West's low to moderate income population nor to create the desired family environment. This was partially due to NIP's creation of amenities in the neighbourhood, which enhanced its attractiveness - hence encouraging further gentrification by outsiders. While driving out the incumbent population through rehabilitations and increased rents, this market, often composed of young, childless urban professional and older empty nester households, contributed little to the creation of a family environment. Social trends of postponing marriage, family formation and having fewer children might also be listed as factors contributing to Lowertown West's present situation.
This research is justified as a source of informational feedback to key officials responsible for federal, provincial and municipal housing policy. As 'quality of life' and its enhancement has become a key political factor motivating social program initiatives, the measurement of outputs (expressed opinions) is essential toward the equitable distribution of finite budgetary resources in present day society.

The following sections conceptualize quality of life with respect to the underlying factors of post war prosperity, over optimism and technical advances. These are identified as the principal stimulus of social indicator research. This research provides an extensive review of social indicator literature with regard to its potential towards assessing quality of life gains. Their merits towards program assessment are applied to the Lowertown West Neighbourhood Improvement Program context. NIP's implementation is cited as a quality of life program in contrast to urban renewal. Three hypotheses are proposed within a framework, which operationalizes NIP's six specific program objectives, in order to assess the Neighbourhood Improvement Program's impact on the Lowertown West Community.

1.1 Quality of Life: An Operational Definition

'Quality of life' (QOL) is a very abstract concept. It reflects those aspects (often intangible and not easily measured) of individuals' lives which are important to them. It is often subject to personal (and highly subjective) interpretation. Since it represents those "personal" things that make life worth living, it is obviously reflective of a sense of internal psychological gratification: i.e. satisfaction with one's environment or some personal attribute be it health, education or other.
From an urban or community perspective Branch et al. relates:

"It is abundantly clear that there are many important qualities of life that are not captured in reports on the gross national product or distribution of personal income or wealth. Often these qualities are called "intangibles" because they are subjective and difficult to quantify. But at a personal level, they are a very real part of what makes life pleasurable and worth living. Among other things, these factors can include feeling a part of the community where you live; knowing where you stand in relationship to other people; having a sense that you and people in your community have control over the decisions that affect your future; knowing that your government strives to act in ways that benefit everyone equitably, rather than benefiting just a privileged few; living without undue fear of crime, personal attack, or environmental hazard; and feeling confident that your children will get a fair start in life." (Branch, K. et al., 1984, p 7)

Quality of life interests were stimulated by a variety of factors during the post-war period. These included a period of sustained economic growth spanning three decades, technical innovations such as the private automobile which permitted suburbanization as well as growing government interventions within the economy to provide social goods and services to its citizenry.

Economic prosperity coupled with increased expectations allowed a politicalized electorate to take on previously ignored problems. Concerns of urban blight, social injustice and income redistribution to the less fortunate coupled with post-war prosperity, allowed for liberalized spending to resolve these problems. Amidst this spirit of optimism, ambitious policy initiatives, such as the American war on poverty, were launched. It had for an ultimate goal the elimination of economic, educational, medical and social deprivation.

Western societies entering into the post-industrial era were now depicted in Sinden's words "as a goal seeking system which could be sufficiently described in terms of its goals and performance and the extent to which these goals were achieved." (Sinden, J.A. 1982, p 404) While these goals and priorities were more
dependent on contemporary national values, they traditionally included freedom, social justice, equity, progress and national unity. With the rise of the 'quality of life movement' to prominence during the 1960s, humanistic interests - not economic productivity - became the measure of government success or failure. Government (with its newly acquired responsibilities or burdens), and its citizenry soon came to realize that quality of life was no longer necessarily a simple function of material wealth.

Within the Canadian urban realm, Gray summarily states:

"As our urban areas grow and become older, the problems of indifference, urban blight and poverty are increasing while at the same time people are challenging all levels of government to help them enjoy that quality of life which they feel is their due. There is also a greater awareness that everyone is affected in one way or another by what happens in or to his community. It is a time for citizen participation and involvement in the decision making process." (Gray, L. 1971, p. 4)

1.2 From Urban Renewal To Neighbourhood Improvement: A Brief Review of NIP Quality of Life Objectives

During the late 1960s programs such as the Canadian federal Urban Renewal Program, implemented in 1964, came under severe public scrutiny. These federal programs were now rationalized with respect to their ability to enhance the 'quality of life' of society and individual citizens. Under this new criterion, urban renewal's comprehensive and technocratic designs came under fire by emerging community based citizens groups, program recipients and political interests. The program's apparent lack of success, political opposition, lethargic planning process and mounting costs, caused urban renewal activity to be curtailed by Cabinet order in December 1969.
Urban renewal's demise allowed for the implementation of the Neighbourhood Improvement Program. It capitalized on inflated market conditions that encouraged housing rehabilitation and community preservation through neighbourhood based planning. This program, implemented on June 30, 1973 along with a twinned program, the Residential Rehabilitation Assistance Program (RRAP), served to "assist in the improvement of living conditions in neighbourhoods" as a general program objective. Under implicit 'quality of life' designs it sought to: promote neighbourhood stability and confidence; improve living conditions; promote community (interest) based planning; and finally ensure community preservation (through individual NIP projects and RRAP rehabilitations). The program allowed a great scope of individual projects which NIP community residents could select in order to achieve the program's objectives as well as their own. These interests, articulated in the Ottawa Lowertown West Redevelopment Plan below, reflected 'quality of life' concerns which had an influence on the community's stability and perceived well-being.

1.3 The Lowertown West QOL Case Study: An Introduction To Community Based Concerns

Lowertown West was designated a NIP area by Ottawa City Council on May 17, 1976. The area was delineated by Boteler Street to the North, King Edward Avenue to the East, St. Patrick to the South and Sussex Drive to the West. (See Map A.) It covered approximately 60 acres and in 1971 had a population of approximately 4400. (Planning Branch, 1977)

Prior to implementing the Neighbourhood Improvement Program in Lowertown West, the neighbourhood was experiencing problems common to many Canadian inner
city areas. The loss of population to suburbanization during the post war period, left the area with an ageing and declining population. (Murray & Murray, 1974a) The decline in Lowertown West's population was in part attributed to inadequacies found in the area's housing stock. These inadequacies stemmed from the loss of stock north of litel Street, which had been expropriated during the early 1960s to make way for the new External Affairs Building, the MacDonald-Cartier Bridge and the King Edward Avenue intersection. In addition to the loss of some eight blocks of residential space, the remaining stock was assessed as being in critical condition in 1974. (Community Development Workshop, 1974, p 42) The number of family heads in the 25-54 year bracket was declining and falling behind the metropolitan average. In addition, average family income for Lowertown was steadily falling behind the metropolitan average from 19% in 1961 to 35% in 1971. Not surprisingly, a higher proportion of people were on welfare and unemployment than for the city as a whole. (Murray & Murray, 1974a)

The neighbourhood's central location, one half mile from Confederation Square, subjected it to redevelopment pressures from two quarters. Pressures for change came from the area being zoned for mainly R6, R7 and commercial uses. This had resulted in high rise apartment development scattered throughout the community. Higher density residential land uses called into question the adequacy of existing park space, parking and traffic congestion within the neighbourhood.

White painting also posed another threat to the community's socio-economic composition. Lowertown West was originally built on reclaimed swamp-land developed by Lt. Colonel John By to house the Irish immigrants working on the Rideau Canal. It soon attracted a large French Canadian population and has remained as such to the present. It has been a working class neighbourhood from the beginning. The houses are old, with some dating to 1850, and are generally
small and unpretentious in design. (Gray, L. 1971, Planning Branch, 1962) Lowertown West's convenient location and proximity to both public and government buildings made it a prime site for redevelopment. This process of natural redevelopment was reflected by more English speaking people establishing themselves in Lowertown West and hence altering the neighbourhood's predominantly French character. These concerns and residents' desires to maintain their neighbourhood's viability were reflected in NIP's projects which were aimed primarily towards enhancing the neighbourhood's image as a good family environment to thus encourage families to relocate within the community. The above 'quality of life' concerns were articulated by neighbourhood residents in their 1977 redevelopment plan.

"The Lowertown West NIP area comprises approximately 60 acres and had a 1971 population of about 4400. It is one of the oldest residential communities in Ottawa and has managed to retain a large stable population even though the number of transients "...(incomers)... is presumably increasing". Due to its location near the downtown and market area, close to two rivers and bounded by Ottawa's "Mile of History", Lowertown West might have been a prime area for "Chic" redevelopment or "White painting". The citizens of this community were opposed to this direction and their participation in the Development Plan resulted in clear support for a type of Neighbourhood Improvement geared to the present residents. The major objectives of the Plan were to strengthen the residential character of the neighbourhood particularly for families, and at the same time, preserve and enhance the heritage character of the neighbourhood." (Planning Branch, 1977)

A number of factors promoted emerging QOL concerns and this resulted in greater government accountability as exhibited by the demise of the Urban Renewal Program. The subsequent Neighbourhood Improvement Program, while pacifying contemporary political interests in the context of Ottawa's Lowertown West, built
on predominant trends and public feedback. It has received limited assessment with respect to achieving the stated objectives and goals both locally and nationally.

This research is equally justified by the fact that many latent effects, even if mildly apparent during the program's operation may increase over time (Salamon, L. 1976, p 261) Thus, certain values which NIP sought to promote or instill, i.e., community confidence and satisfaction, may have increased over time. The long term impacts of a program can be better assessed through presently available data covering the 1971-1981 census periods.

The following sub-section will provide a review of social indicator literature. It builds on the above stated historical circumstances, which promoted their development to aid in determining QOL gains made through government programs and interventions. This research should thus benefit from a review of social indicators, as they represent a primary evaluative instrument in terms of assessing NIP QOL gains made by Lowertown West. As well, they also serve to operationalize NIP's six specific program objectives which constitute the assessment framework of this thesis.

1.4 Social Indicators: A Review Of Literature And Definitional Matter

By the 1960s North American Society had attained post-industrialism and with it an over exuberant confidence, that was further fueled by economic prosperity, the near elimination of unemployment and inflation and the challenge of space. Governments were now expected to realize greater levels of quality living for their citizens through market interventions and public programs.

Although much money had been invested in such endeavours, both government and the public soon came to realize that such programs could not propel national
'quality of life' desires to greater levels by simple economic production manipulations or technocratic interventions such as in the case of urban renewal:

"There have been major attempts to meet obvious needs: a substantial flow of resources has been poured into housing, schools, hospitals, transportation improvements, and more recently into low-income housing and urban renewal. But these policies do not appear to have had any ameliorating effect, and the urban problems grow more serious." (Lithwick, N. 1970, p 14)

This stark realization that perhaps economics were not the answer, led to a greater public demand for data capable of measuring 'quality of life' gains made through federal initiatives. Key pieces of American literature reflecting such demands and needed research, in support of social indicators, were found in the 1966 Report Of The Commission On Technology, Automation And Economic Progress which stated "... while we have begun to perfect an economic reporting system and to establish economic indicators that measure national performance, we do not have a continuous charting of social changes, and we are ill-prepared to determine our needs, establish goals, and measure our performance...". It is therefore recommended .. "that ... government explore the creation of a 'system of social accounts' which would indicate the social benefits and social costs of investment and services and thus reflect the true costs of a product ...". (Land, K. 1975, p 6)

It was the first government panel to endorse the use of social indicators in an attempt to measure 'quality of life' gains made by society. Subsequent sources are found in Raymond Bauer's 1966 volume, entitled Social Indicators, which dealt with the problems and difficulties of anticipating the secondary effects of the space program on American society. It served to influence the development and orientation of the modern social indicator movement whose bulk of research efforts centre on measuring or conceptualizing 'quality of life'
concepts. The movement's optimal goal is to develop a theory which would satisfactorily encompass those key concepts which adequately reflect 'quality of life'.

Major political support for social indicator research came from the popularly coined Mondale Bill - Senate Bill 5843 of the 1967 Full Opportunity And Social Accounting Act. The Bill, through its promotion of general welfare, required "an annual Social Report of the President to be transmitted by March 20 of each year". (Land, K. 1975, p 9). It also required the President ... "to report annually on the nation's social status including education, health, housing, alienation, political participation, personnel security, and social mobility". (Murphy, P. 1980, p xviii)

Paradoxically to economic indicators' lacking ability to measure 'quality of life' interests and the subsequent promotion of social accounts; its many characteristic uses and residues were, at times controversially, applied to potential social indicator uses. These were reflected in Bertram Gross' 1967 support of the establishment of social accounts, paralleling the American system of national economic accounts, through his editing of two volumes, the May and September editions of the Annals Of The American Academy Of Political And Social Science, which contained essays on various aspects of American social life. (Land, K. 1975, p 9)

Economic indicators were far more developed than social indicators, and their relative success in directing federal economic policy inspired the creation of social indicators. Social indicators lacked a basic unit (e.g. monetary) by which to measure 'quality of life' gains. As such, social indicators were preferably quantifiable and aggregatable to a desired areal level of comparison. Quantitative techniques also needed to be developed to approach any form of methodological rigour.
These concerns were articulately expressed in 1968 by Wilbur Cohen (then Secretary of the U.S. Department of Health, Education and Welfare) at the annual conference of the American Statistical Association. He appealed to the Association for help in the development of social statistics to (1) clearly and precisely present conditions (to establish where we are) and (2) give an indication of the cost effectiveness of alternative means of resolving these problems. (Land, K. 1975, p 10) The latter objective expressed the potential benefit/cost applications of applying and ranking alternative social initiatives (based on social indicators) to the effective rationalization, if not the directing of both decision making and planning processes.

The Presidential reports required under the Mondale Bill were further supported by the Department of Health, Education and Welfare in its release of Toward A Social Report in January 1969. It sought to further promote social indicator research as it stressed to the President the imperative need for continued resource allocation ... "to prepare a comprehensive social report, to develop social indicators to measure social change, and to 'be useful in establishing social goals' ... and ... provide 'insight into how different measures of national well-being are changing". (Land, K. 1975, p 10) Presently Carley (1981, p 3) states: "One of the most recognized forms of social indicator effort involves the assembly or collection of social measures. The best-known of these collections are the national social reports now issued by no fewer than 30 countries. 'These social reports, like "... Perspective Canada ..." and Social Indicators in the U.S.A., are usually large compendia of tables, charts and textual material designed to tell, in a broad way, what is happening to social conditions in a country at the national level".
Social indicators were a product of North America's coming into the post-industrial era. Its purpose of measuring 'quality of life' gains were both paradoxically designed as a reaction to the inadequacy of economic indicators in assessing these gains while providing an exuberant focus for at times poorly reflected social indicator applications due to their success. The weaknesses regarding economic indicator's ability to assess 'quality of life' gains, lay in their theoretical inflexibility. The prevailing economic paradigm viewed economic measures, such as GNP, as a production function while welfare or well-being was viewed as a function of consumption. Thus, such irreconcilable theoretical extremes prevented economic indicators from being adjusted to adequately assess 'quality of life' gains.

While federal economic policy during the sustained post war boom resulted in the apparent victory over both unemployment and inflation, its success inspired many proposed social indicator applications. Beyond, societal monitoring (through appropriate social accounts) and assessing 'quality of life' gains via program evaluation, social indicators were stated to be able to guide policy and provide a means to rank proposed programs according to their perceived and assessed effectiveness in solving problems (similar to benefit/cost analysis) as well as having forecasting applications.

Before proceeding with a detailed discussion of social indicator research's merits towards the tasks of social monitoring and program assessment an operational definition of social indicators and characteristics is necessary to fully appreciate their applicability to the above stated tasks.

Raymond Bauer (1966, p 1) defined social indicators as: "... - statistics, statistical series, and all other forms of evidence - that enable us to assess where we stand and are going with respect to our values and goals, and to evaluate specific programs and determine their impact".
This definition relates social indicators as being statistics and thus preferably quantifiable which allow for repeated measurement of selected QOL variables over time. This allows for the creation of accounts as well as a basis by which to compare pertinent program variables over time for assessment purposes.

In 1969, Mancur Olson characterized a social indicator as: "a statistic of direct normative interest which facilitates concise, comprehensive and balanced judgments about the condition of major aspects of society. It is, in all cases, a direct measure of welfare and is subject to the interpretation that if it changes in the 'right' direction, while other things remain equal, things have gotten better, or people are better off. Thus, statistics on the number of doctors or policemen could not be social indicators, whereas figures on health or crime rates could be". (Land, K. 1983, p 4)

In this context, social indicators also comprise a normative value (s) which reflects a temporal benchmark (or yardstick) from and by which comparisons can be made, (i.e.) have things improved or deteriorated? Such normative values, (i.e.) changes in the conditions of a delimited area such as the Lowertown West area or on a national basis, entail personal interpretation of such events and inevitably biases.

As well, social indicators strive to measure outputs produced by government interventions, policy and programs which influence national levels of well being. For example, a nation's producing more doctors as a national policy could be reflected by an improvement in national health expressed through indicators such as lower mortality rates, a decrease in certain debilitating diseases or an increase in life expectancy. Thus, while being 'quality of life' outputs, social indicators are comprised of surrogates which serve as quantifiable outputs of particular societal concerns as relayed through the health example above. The
selection of such surrogate(s) is largely based upon existing social theory appropriate to the society in question. Theory permits the identification of potential causal agents (programs) and respective instruments which allowed or impeded 'quality of life' gains in specific societal areas.

Olson's definition also alludes to two primary types of social indicators, objective and subjective. Objective indicators are countable behavioural outputs of a policy endeavour. They can encompass a reduced crime rate due to increased police surveillance or increased home repair investments due to federal home rehabilitation initiatives in insulation, gas heating, etc. Subjective indicators reflect personal attitudes, biases and opinions of events and current conditions. Unlike replicable objective indicators, subjective indicators are not primarily concerned, with the opinion's rationale, deliberation or sources, they simply reflect a personally felt opinion regarding one's environment or some personal attribute be it health, education or other.

Social indicators should also be malleable for disaggregation purposes which provide either contextual information regarding personal attributes such as unemployment by race, age, sex, etc., or allow for the distinguishing and areal delimitation of social deprivation. In the latter instance, disaggregation would allow for the identification of those areas experiencing neighbourhood decline and would potentially benefit from positive discrimination practices under NIP.

As measures of output, social indicators allow for the establishing of social accounts (determined by specified information appropriate to evaluation needs) to allow for comparisons over time or through time series data. Social accounts and their composing indicators ultimately seek to ascertain 'quality of life' gains and should hold no reference to how they have been traditionally labelled, other than the concept, i.e. health, they have been selected to represent.
1.5 Social Indicators: A Discussion of Program Assessment Potential

The above discussion related social indicators' beginnings, rationale and applications toward creating social accounts capable of assessing QOL gains accrued through government programs and interventions. The ensuing discussion is twofold. It will first provide a discussion of social indicators' relevance towards assessing NIP's impact on Ottawa's Lowertown West in terms of stated 'quality of life' concerns. Secondly, it will provide a research framework by and through which social indicators, reflecting operationalized NIP objectives and guidelines, may be applied to assess this research's three central hypotheses (stated below).

Raymond Bauer's definition of social indicators, as "statistics, statistical series and all other forms of evidence - that enable us to assess where we stand and are going with respect to our values and goals"... provides a genuine indication of social indicators' worth towards assessing a program's impact. Since programs ultimately produce measurable outputs, social indicators by definition are essential to any form of program assessment containing or espousing QOL objectives.

The major stumbling block of any form of assessment is the task of identifying which sources of information or indicators are most appropriate for assessing the goals and objectives of the program(s) under examination. While this may seem trite it should be recognized that, in Biderman's words, ..."various attempts toward formulating statements of goals and purposes for American society have been accomplished with considerably greater ease and met with greater consensus than have efforts to match these goal statements with acceptable statistical indicators of how the nation is doing with regard to these goals". (Biderman, A.D. 1966, p 86) This problem obviously bears no limitations to program scope or scale as ..."In the final analysis, social trends and social
policy have their direct impacts upon individuals in the form of local manifestations". (Hempel, D.J., Tucker, L.R. 1979, p 401)

To overcome this problem social indicators are often selected from existing theory appropriate to the society or social context in question. This research's choice of social indicators drew from property value, gentrification and incumbent upgrading theory to operationalize NIP's national and Lowertown West's stated program objectives and goals. Another major criticism associated with social indicators is their perceived inability to effectively control for extraneous (polluting) variables which might be responsible for assessed program outcomes (impacts). Despite Sheldon and Freedman's (1970) concern for the above, this research believes that a controlled research design would best serve to assess NIP's longterm 'quality of life' impact on Lowertown West.

The controlled research design would serve to assess NIP's impacts according to the three central working hypotheses stated below. If one considers that NIP was intended, in the case of Lowertown West, to promote a family environment through its creation of park, recreational and municipal infrastructure, this research therefore hypothesizes that:

\[ H_1 \] The implementation of NIP and RRAP programs and projects served to increase Lowertown West's property values (an indicator of neighbourhood attractiveness) over the 1975-1980 period.

\[ H_2 \] Increased property values and ongoing gentrification served to displace Lowertown West's low to moderate income population and in turn alter the neighbourhood's family character over the 1971-1981 census period.

\[ H_3 \] The degree of NIP's success or failure, with regard to the above, has had an impact on personal perceptions relating to the community's stability, confidence and living conditions expressed by informed incumbent Lowertown West community members, politicians and other officials.

The first two working hypotheses would be best assessed as intermediate program outputs by objective indicators which are countable outputs of a policy or program endeavour such as NIP (see top box, Section 3, in Figure 1). These two
outputs being residential property value changes and socio-demographic changes attributed to gentrification processes for working hypotheses one and two respectively are schematically tied to their inputs (NIP program projects effected in Lowertown West) as shown in the top box of Section 2. NIP program inputs (projects) were inevitably determined through municipal consultation with the Lowertown West residents and directed by national program objectives and guidelines. The third working hypothesis would be best assessed via subjective indicators which reflect personally felt opinions of informed longtime neighbourhood residents, civic officials and elected representatives regarding their satisfaction with their living environment in terms of NIP's ability to meet their aspirations. (Shown in the top box of Section IV.) From this point a cycle is completed through which informational feedback to concerned citizens and decision makers may be transmitted. The assessment framework is restricted to the Lowertown West NIP area, which schematically represents NIP's national and local (Lowertown West) objectives and goals respectively. The framework also constitutes the organizational basis of this thesis.

This section has operationally defined both NIP's national and Lowertown West 'quality of life' objectives as articulated in the NIP delivery handbook and Lowertown West redevelopment plan respectively. An historical review of social indicator research and pertinent applications were discussed as were their application towards social monitoring and NIP program assessment (via operationalized program objectives). These 'quality of life' objectives encompass the first section of the proposed evaluative framework (see the boxes for Section 1, Fig 1).
The second section of this report provides an historical review of the federal Urban Renewal Program as a means of introduction and comparison of NIP's program instruments, which were promoted through criticisms of the former program. NIP's program instruments and associated Lowertown West projects implemented through NIP, are discussed as program inputs vying to stimulate desired behavioral outputs.

The third section provides a review of NIP's problem context as it related to Lowertown West's (circa 1974) housing conditions and socio-recreational facilities. Listed are NIP's program inputs and their impact in enhancing the neighbourhood's attractiveness as a living environment. The above was assessed through the operationalizing of NIP's specific program objectives 2 and 3 by means of a property value study using 1975-1980 provincial property assessment data. A statistical socio-economic population study is provided - using 1971-1981 census tract data - to objectively assess (through objective social indicators) gentrification's impact upon the community's ability to maintain its incumbent population and realize its objective to create a desired family environment.

The fourth and concluding section of this report applies subjective social indicators to the task of operationalizing NIP's specific program objectives 5 and 6. A series of interviews with key actors - politicians, the NIP program coordinator for Lowertown West as well as informed former NIP committee members allowed for a wealth of contextual information to supplement the assessment process. Nonetheless, these stated opinions - subjective social indicators - allow for a greater understanding of NIP's longterm impacts as they pertain to stated program objectives and the inevitable successes and failings attached to Lowertown West's situation, thus completing the process of informational feedback.
Assessment Framework of NIP Program Instruments and QOL Impacts in Ottawa's Lower Town West

Political/Program Informational Feedback

NIP "Quality Of Life" Objectives

National

- Promote neighbourhood confidence and stability
- Ensure community preservation (through NIP projects & RAP)
- Promote interest based planning
- Improve living conditions

Lower Town West (LW)

- Counter Centrification
- Promote a family environment

NIP Projects

(As Stated in LW's Redevelopment Plan)

- Create green space
- Re-equip parks
- Improve lighting
- Renovate & convert a vacant fire hall into a recreation centre
- Building of Routier school gym
- Landscape
- RAP

(Objective Indicators)

NIP Objectives

1. Improve viable neighbourhoods
2. Improve and maintain the quality of the physical environment
3. Improve neighbourhood amenities
4. Increase the effect of related programs

(Subjective Indicators)

1. Effect improvement which meets residents' aspirations
2. Delivery of program in an effective manner

Measure of Success in Realizing QOL Objectives

Interpretation of NIP Instruments (Behavioral Impact)

1. Interest Based Planning
   - Required responsible citizen input
   - They had to accept the program
   - Define and prioritize redevelopment plan and projects
   - Plan within a budget
2. Funding under NIP & RAP
3. Continuous planning
4. Access to Municipal planning expertise and exposure to local government
5. Tenure
   - Historical residential
   - 35' height restrictions

Optimal

1. Decision to remain in the neighbourhood
2. Incental upgrading via RAP or personal funds or both
3. Formation of Effective Citizen's Groups
4. Perhaps Municipal involvement in politics
5. Residential displacement or owner mobility
6. Future deterioration occurring due to negative perception of the program

RDA ORSA Experienced Through NIP

- Longtime residents perceived satisfaction with the neighbourhood
- NIP's ability to resolve or alleviate QOL concerns expressed in Lower Town West redevelopment plan

(Fig. 1)
2. NIP: An Introduction To Program Instruments

NIP's implementation in June of 1973 reflected a greater community based federal planning/program effort aimed at preserving and assisting in the improvement of living conditions in Canadian urban neighbourhoods of over 2,500. NIP presented a polarized view in terms of planning, funding, program instruments and associated emphasis. Ottawa's Lowertown West, one of the biggest City communities to have undergone an urban renewal study, was selected as a NIP area.\(^1\) The area reflects the contrasting program goals, prerogatives and end products of urban renewal and NIP. This section will review the Urban Renewal Program's history and experience, in terms of program funding, instruments and motivational concerns, which led to its creation in 1964 and its termination in December of 1969. The review provides a contextual background relating to the dynamic factors which led to NIP's implementation. It also serves as a comparison of both urban renewal and NIP's program instruments and rationale.

The Neighbourhood Improvement Program will first be presented as the central program of this thesis. Canada's national urban renewal experience will then be presented through the Urban Renewal Program to provide background and to rationalize NIP's program instruments. Specific reference to both programs' influence on Lowertown West, with respect to their scope and approach towards resolving the neighbourhood's problems, will be related.

2.1 The Neighbourhood Improvement Program: 1973-1978

The Neighbourhood Improvement Program was introduced in June of 1973 with a four year (1974-1977) operating mandate. Federal program funding consisted of a

\(^1\)The Lowertown West NIP area encompassed a portion of the Lowertown West urban renewal study area.
300 million dollar budget for grants and loans. A total of $200 million was disbursed in the form of a contribution for 50% of the cost of constructing, acquiring or improving social and recreational facilities and 25% of the cost of improving municipal and public utility services. Loans covered up to 75% of the Municipal capital costs. NIP was operated on the basis of annual CMHC-provincial agreements. These agreements entailed the allocation of yearly federal/provincial program budgets and subsequent disbursements of funds to provincially designated (CMHC approved) municipalities. NIP neighbourhoods were selected by the municipality subject to provincial and CMHC approval.

The program's implementation involved three fundamental stages: neighbourhood selection, planning and project(s) implementation. While all three stages were not mandatory, proper preparation was required prior to the granting of a certificate of eligibility allowing the neighbourhood to proceed to the next stage.

NIP funds of 2% were allotted to municipalities for the purpose of selecting potential NIP neighbourhood(s). Program guidelines placed particular emphasis on the composition and dynamics of the selected area. Neighbourhoods had to be potentially stable in terms of land use, with a minimum of 50% residential land use of which not more than a maximum of 20% was vacant. At least 25% of the owner occupied and rental stock had to be in need of repair. To receive NIP assistance the neighbourhood also had to be predominantly occupied by low to moderate income residents.

To be eligible for selection and to benefit from NIP program contributions potential neighbourhoods had to exhibit deficiencies in amenities and land uses. By providing or improving municipal social-recreational facilities, area residents benefited from NIP contributions. Site Clearance Program provisions served to remove blighted land uses which had a negative effect on the community.
Eight percent of NIP contributions was allocated to the formulation of preliminary plans. Although a detailed plan of action was not required, priorities were set according to a project budget and a general course of action was determined to effectively achieve the desired ends. Thus, neighbourhood plans started where the neighbourhood "was" in terms of priorities, problems and concerns and evolved from "there" with the community. At this point the neighbourhood became eligible for RRAP funding to homeowners and landlords.

Once a conceptual plan was developed and the implementation of projects was approved, the balance of the federal grant and loan was disbursed. Together with the provincial and municipal contribution, NIP allowed for the improvement of specific neighbourhood conditions through project(s) implementation. Ideally, from the planning stage onward, both NIP and RRAP also sought to promote neighbourhood improvements through private reinvestment. Thus NIP served as a residual lender to promote market and neighbourhood confidence within inner city areas.

Normally a project's life span was four years. This included two six month periods for the neighbourhood selection and planning stages and three years for the project completion. While no applications were accepted in 1978, previous commitments were honoured until 1984. This allowed for the completion of all initiated projects extending past the program's sunset date of March 31, 1978.

2.2 The Urban Renewal Program: 1964-1969

The Urban Renewal Program developed from extensive amendments made to the National Housing Act of 1954. These amendments, introduced in 1964, expanded slum clearance provisions to virtually all aspects of urban renewal. Thus, it built on 1956 revisions which had extended legislative assistance to municipalities for the funding and formulation of urban renewal studies and the wider use of land for
purposes other than public housing after slum clearance. Under the new program, funding was open ended with no time limits placed on federal grant contributions towards 50% of the cost of planning project studies and program implementation undertaken by the municipalities. Program regulations required approval by all three levels of government.

The program sought to address Canada's accumulated substandard stock of one million units built prior to 1920 and another million built before the Great Depression. (P.P.D., Vol. 4, 1972, p. 23) These units were inhabited by older people of lower income and often lacked in basic amenities such as running water and central heating. Their blighted condition and concentrations in older inner city areas aroused fears among the public and social welfare profession of social unrest, contagion, epidemics and fire. Such older stocks were considered wasteful, as they were hard to heat and potentially redevelopable under current growth pressures felt throughout urban Canada. Thus, urban renewal materialized through the above stated 'quality of life' concerns and economic opportunities.

Urban renewal was supported by the prevalent comprehensive planning paradigm or style which emerged during the 1950s and 1960s. It was largely technocratic in design and often produced extensive redevelopment plans which included everything that should be done. Funding was open ended and thus represented a "one best plan" concept.

This concept or planning paradigm allowed for large urban renewal area designations. Similar to informal bank redlining practices, though not as extensive, area designations covering several hundred acres were not uncommon. (Crenna, C. 1973) This combined with urban renewal's orderly process, involving careful planning (by contemporary standards) and subsequent feasibility studies, made it a slow paper weighted process. It also proved disastrous to designated neighbourhoods. While plans remained "just plans", doubts of renewal designations
resulted in the further deterioration of these (designated) areas, with minimum health and safety standards often being neglected over the months or years prior to project implementation.

As a technocratic exercise, urban renewal sought to provide a new environment for area residents. This was felt to be beneficial, as it would give the disadvantaged a "leg up" in society and inevitably allow for their integration within society. In areas such as Lowertown West, even though urban renewal never reached the study stage, high density inner city neighbourhoods had limited open space and were covered by dilapidated outbuildings etc. (Planning Branch, 1962) Thus, while some older neighbourhoods encompassed developed social ecosystems or urban villages, contemporary housing standards (building codes) often could not be met through existing densities or stock. Urban renewal projects, though exaggerated in the Canadian context, resulted in displacement. In many instances, program compensation (under federal expropriation powers) did not provide older residents with "a home for a home" under inflated short supply market conditions.

Additional complaints centered on replacement housing provided, at times, through adjunct public housing projects. Pre 1968 housing production was principally geared to single detached homeowner markets and as such contemporary market conditions allowed for the beginnings of burgeoning apartments and less than generally accepted row housing units. (Hellyer, P. 1969)

Public housing projects served to further stigmatize the poor through the provision of less than socially (market) acceptable housing. These projects, often suburban in location, shattered vital social links. They proved to be unacceptable as a family environment due to a lack of social and recreational infrastructure.
The program's building on contemporary "highest and best use" market principles also resulted in program abuses. These took the form of massive areal designations under redevelopment and renewal plans which were often developed and funded despite their unlikelihood of being implemented. Though unstated, Federal across the board funding also promoted abuses. Program funding tended to reward municipalities for engaging in urban renewal. This was particularly notable as it represented an additional source of municipal funding to be had through at times ingenious program applications. (P.P.D. Vol. 3, 1972)

Program complaints of basic operating principles centered on municipally strengthened expropriation powers under the National Housing Act. Displacement and "highest and best use" projects which occurred and were implemented under the auspices of urban renewal resulted in many repercussions. Most notable of these was the emergence of community based citizens groups. These groups, whose membership comprised all income levels, questioned the program's motives and actual need. Initially their complaints fell on deaf ears as the program and planning design provided only limited opportunity for such input. Input under these circumstances was restricted to public relation functions for those residents, merchants, politicians, etc. who were concerned with specific urban renewal projects. The program slowed as political pressures mounted, through these groups airing their complaints of blatant program abuses. Initial efforts resulted in negative successes where only 60 of 600 acres had been cleared over a 10 year period. These endeavours contributed to daily mounting program costs. These mounting costs - attributed to land acquisition, public housing construction, program administration - and other criticisms were highlighted in the Hellyer Task Force Report On Housing And Urban Development in May of 1969. In December of 1969 urban renewal activity was curtailed due to severe criticism, limited visible results, persistent inflation and increasing operating costs.
2.3 NIP And Urban Renewal: A Comparison Of Program Instruments

NIP materialized as a polarized housing policy/program in June of 1973, amidst the complaints of urban renewal's excesses, planning style, lack of sensitive redevelopment and mounting costs. This sub-section will compare both the urban renewal and the NIP program in order to fully appreciate NIP's program instruments and operating principles.

Both urban renewal and NIP were products of their time. Urban renewal criticisms historically fit into the 1960s context of growing public concerns regarding social equity and social justice (which led to shelter becoming a right in 1969). While these concerns were reflected through its projects and comprehensive planning principles (paradigm), NIP offered a polarized view. (Hellyer, P. 1969) NIP built on prevalent social trends. These encompassed public participation, interest based planning, controlled (preset) program funding and housing rehabilitation through RRAP as well as program accountability (expected results or return on investment). Despite NIP's incorporation of past political feedback, both programs used similar instruments to achieve their respective contemporary objectives.

Urban renewal was based on the comprehensive planning style which encompassed development studies and, at times, extensive redevelopment schemes over large inner city areas. The process was characterized as being lethargic. The preparation of feasibility studies and other administrative practices, at times involving 5-20 year federal redevelopment plans and commitments in designated areas, took years to follow through to completion.² Under the comprehensive planning paradigm, the neighbourhood's socio-demographic, infrastructural and existing services were studied. The latter cases' development

²As of 1986, 28 urban renewal projects were still open (Mr. H.L. Nylund, CMHC National Office).
potential were considered in area renewal studies such as Ottawa's Lowertown West:

"Major Services: The water facilities in Lowertown West could serve a considerably larger population. Similarly, the sewer, part of a combined sanitary and storm sewer system, would permit increased development in the study area." (Planning Branch, 1967, p 119)

NIP was based on the interest based planning paradigm which emerged during the late 1960s. It allowed for public input which had been previously limited under urban renewal. NIP's promotion of community based planning, involving continued interaction and consultation between planners and residents, allowed local residents to exercise a degree of control over what was happening in their community. Hence, program lethargy was avoided. The program's three stage planning process and sunset date also served to force decisions. Such strategies also placed potential zoning and planning expertise at the community's disposal to allow for a type of development geared to present (circa 1976) NIP area residents.

As opposed to urban renewal's past area designations, associated stigma and inherent devastations; NIP sought to promote confidence. Only those areas which were stable in terms of land use and densities were offered the opportunity to participate in NIP. Upon acceptance a NIP concept plan was developed in conjunction with municipal planning authorities respecting an established budget. This budget gave community residents the means to establish goals and projects which they felt would potentially resolve problems affecting their neighbourhood. The budget required residents to prioritize community projects. NIP provided a framework or public medium through which problems, concerns and conflicts could be equitably expressed and resolved with respect to the above tasks. Thus, through NIP and RRAP, community confidence could be bolstered and solidarity preserved as a means to ensure community stability and viability.
2.4 NIP Program Inputs: The Lowertown West Redevelopment Plan

NIP program inputs or projects represented a total program cost of $894,405.55. Though no priority rating was attached to those projects listed in Appendix A, they represent initiatives which Lowertown West's residents felt would aid in developing their community to suit their (circa 1976) needs. NIP projects were therefore selected in the hope of promoting a family environment while limiting white painting.

In addition to the program's projects, the desire of the area residents to maintain the historical character of the neighbourhood was secured through proposed historical residential zoning regulation. This meant that only infill development, conforming 35' height limits and surrounding set backs, was permitted in the residential zones (see Map B). The list's emphasis on developing green space, equipping parks and a community centre through the conversion and renovation of a vacant fire hall were rationalized as follows. While Lowertown West is surrounded by passive green space on its western and northern periphery, it was especially difficult for children to access due to the Sussex Drive and King Edward Street arterials. As well: "As a typical older, established inner City neighbourhood, Lowertown West experiences a shortage of open space and recreational facilities according to the current open space standards for the City as indicated by the Recreation and Parks Branch (4 acres per 1,000 people). There presently exist 4 acres of parks and open space for a population of approximately 4,600 residents". (Murray and Murray, 1976, p 24)

3 The historical residential zoning changes, the first of their kind in Ontario, were conceived and implemented in Lowertown West by Mr. George Bédard in fulfillment of a 1974 election promise. This promise entailed Bédard's rezoning all the By-St. George Ward to halt highrise development west of the Rideau Canal and within the Ward's communities of Sandy Hill and Lowertown. The zoning also served to revitalize the By-Ward Market. (George Bédard 27/04/87)
The traffic plan was considered a worthwhile NIP project as its funding remained uncertain under Municipal and Regional authorities. Its potential reduction of traffic within Lowertown West's boundaries would also serve to reinforce the residential family environment local residents sought to promote.

The Lowertown West Redevelopment Plan thus outlined NIP's input(s) into the neighbourhood. NIP's associated program instruments: interest based planning, program budget, requisite community participation and responsibility, continuous ongoing planning, zoning, municipal planning assistance and RRAP; all served to promote community confidence, viability and long term stability.

This Section has provided an historical review of the federal Urban Renewal Program as a means of introduction and comparison to NIP's program instruments, which were promoted through criticism of the former program. NIP's program instruments and associated Lowertown West projects implemented through NIP, were presented as program inputs vying to stimulate the above stated behavioral outputs.

Further as program inputs, these projects and associated program instruments served to potentially promote and realize stated program goals. These will be assessed through behavioral changes monitored through operationalized program objectives stated in the next section. The following section will provide a review of pertinent property value, rehabilitation and gentrification literature. These support the proposed set of social indicators applied to the task of operationalizing and monitoring behavioral changes with regard to NIP's first four stated program objectives.

"In the final analysis, social trends and social policy have their direct impacts upon individuals in the form of local manifestations." (Hempel, D.J., Tucker, L.R. 1979, p 401)

Impacts reflect "the power of an event, idea, etc., to produce changes, move feelings" or alter behavior. (Guralnik, D.B. 1980, p 703) NIP's building upon housing rehabilitation and emerging community based citizens groups reflected these manifestations or impacts. This section will develop an assessment framework of NIP impacts encompassing the program's first four objectives (stated below). These objectives and articulated administrative guidelines (with theoretical support) will serve to assess the program's impacts in Ottawa's Lowertown West.

These four objectives and their guidelines will be divided into two separate studies, socio-demographic and property value in order to assess NIP's impact on Lowertown West. The socio-demographic study will encompass specific objectives 1 and 4. Objective one served to identify Lowertown West as a potential NIP area in terms of its potential stability and preservation. Objective 4 represents a point of contention between NIP's national and Lowertown West's program objectives. While Lowertown West residents sought to promote incumbent upgrading through rehabilitations effected under RRAP, national objectives sought to promote other forms of rehabilitation which might encompass trendy redevelopment in the community."

"1976 RRAP program changes, eliminating income restrictions (previously set at $11,000) provided universal eligibility of RRAP funds to all NIP and specially designed area residents, regardless of income, lent greater support to NIP's national objective to promote other forms of rehabilitation, contrary to local (Lowertown West) program objectives. (CMHC, 1983, p 15)"
A selective literature review of housing rehabilitation, gentrification, incumbent upgrading and property value theory will strive to determine those behavioral manifestations attributed to NIP. These might encompass privately initiated home reinvestment (repairs) or homeowner decisions to remain in the neighbourhood. Objective indicators, as surrogates of these manifestations, serve to assess both NIP's national and Lowertown West 'quality of life' objectives.

These program objectives will be assessed through a study of NIP's ability to maintain Lowertown West's low to moderate income francophone population and promote a family environment through neighbourhood based projects. This research has adopted a controlled before and after research design to assess NIP's social impact over the 1971-1981 census period.

Objectives 2 and 3 deal with effectively improving and maintaining the neighbourhood's physical environment through NIP program inputs (see Figure 1, page 27). This could be best assessed through property value changes experienced by Lowertown West over the 1975-1980 period. This study - while assuming that property values are an indicator or a surrogate of the area's attractiveness as a living environment, elaborated below — has equally adopted a controlled research design. Both studies are complementary and serve to test the below stated hypothesis.

$H_1$ Should NIP have maintained Lowertown West's socio-demographic composition and perhaps contributed to the community's acquiring a greater number of family households accompanied by increased property values, attributed to NIP's implementation in the area, the program could be viewed as a success.

3.1 Lowertown West: A Statement of Conditions Circa 1974

Prior to receiving its NIP designation in May of 1977, Ottawa's Lowertown West was classified as a second priority area in the city-wide study of potential NIP/RRAP/OHPR areas. According to Murray and Murray, Architects and Planning
Consultants (1974 (b) p 21): "It was not designated a first priority area because the stability of the area was in doubt in the absence of an updated Official Plan". This same report (C.D.W. 1974, p 43), stated that the area was "under considerable pressure for change as it was zoned mainly for R7 high density apartment residential, office and commercial land uses". These concerns were arrested prior to Lowertown West's NIP designation in May of 1976. Amendments made to the official plan under City of Ottawa By-Law Number 43-76, instituted Historical Residential (HR) zoning designations throughout large portions of Lowertown West in February of 1978. This action served to consolidate the residential stock over contiguous areas and redirect higher density redevelopment towards the community's periphery.

Historical residential zoning changes allowed for the stabilization of neighbourhood land uses and densities to promote confidence; a prime factor in accelerating community improvements through private home rehabilitations. In reference to the above, and private urban renewal in the American context, Zeitz (1979, p 104) states:

"Gaining control over zoning is ... clearly important to the long-term rehabilitation of the area, because it does allow the community to decide the course of its future. Moreover, if Historical Preservation status can be obtained, an area is virtually free of outside intervention" ... as ... "zoning is an exclusionary device."

Thus, the stabilization of Lowertown West's land uses allowed neighbourhood residents to confidently identify and address neighbourhood based problems and concerns. This was accomplished through NIP's program framework of objectives and guidelines which are partially encompassed in objectives 1 and 4 listed below. NIP's neighbourhood selection guidelines, stated in specific objective 1, also provided a basis or benchmark by which to assess NIP's impact on Lowertown West's socio-demographic structure over the 1971-1981 census period.
Specific Objective 1:

To improve those residential neighbourhoods which show evidence of need and of potential viability.

Guidelines:

To select neighbourhoods in which all the following characteristics are present:

(a) The area is predominantly residential in land use.
(b) A significant proportion of the housing stock is in need of rehabilitation.
(c) Other elements of the physical environment are in need of rehabilitation.
(d) The area is inhabited for the most part by low and moderate income people.
(e) There are deficiencies in neighbourhood amenities.
(f) The area is potentially stable in terms of land use and densities.

Specific Objective 4:

To increase the effect of related programs.

Guidelines:

(a) To increase the impact of RRAP and to stimulate other forms of rehabilitation.
(b) To serve as a focus for programs whose aim is to improve the social fabric of the neighbourhood. (CMHC, 1977, B-1, B-3)
With respect to Objective one's selection guidelines, Lowertown West's land uses were broken down as follows:

Table 1 - Lowertown West's Land Use Breakdown

<table>
<thead>
<tr>
<th>Type</th>
<th>Area (In Square Feet)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>1,508,875</td>
<td>30</td>
</tr>
<tr>
<td>Commercial</td>
<td>258,300</td>
<td>5</td>
</tr>
<tr>
<td>Institutional</td>
<td>361,000</td>
<td>7</td>
</tr>
<tr>
<td>Office</td>
<td>570,300</td>
<td>12</td>
</tr>
<tr>
<td>Open Space</td>
<td>2,275,000</td>
<td>46</td>
</tr>
</tbody>
</table>


NIP program requirements stipulated that neighbourhoods be potentially stable in terms of land use, with a minimum of 50% encompassing residential land use of which not more than a maximum of 20% was vacant. Murray and Murray's compilations encompassed the area north of Boteler Street which had been expropriated during the early 1960s to make way for the new External Affairs Building, the MacDonald-Cartier Bridge and the King Edward Avenue intersection. Thus, the vastness of open (green) space to the north and west of the neighbourhood accounted for Lowertown West's residential land use component's falling below NIP's 50% program requirement (see Table 1).
The neighbourhood's housing stock comprised 1195 units in 1971. Thirty-four percent of these units (405) were owner occupied and the remaining 785 units were rented. An updated windshield survey conducted in 1974, adopted the three categories divided by the City of Ottawa's Building Inspection Branch.

Good - Buildings in sound condition requiring only minor repairs.
Fair - Buildings requiring rehabilitation
Poor - Buildings in bad condition, beyond repair.


It determined that 23.3% of the housing stock was in poor condition, 33.6% in fair condition and 43.1% were assessed to be in good state. The assessors also found no clear pattern of building conditions in the area. (Murray and Murray, 1974(b), p 21) Based on the 1971 stock figures it was estimated that 401 units fell into the fair-repairable category. Between December 8, 1977 and October 29, 1985, 121 RRAP loans were processed. Fifty of these were homeowner loans. Working with the above figures of residential units in fair condition which were potentially rehabilitate under RRAP, approximately 136 owner occupied dwellings and 263 rental units made up the estimated 1974 stock eligible for RRAP

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5Total stock counts for Ottawa's Lowertown West NIP area are drawn from 1971, census tract 55, series A, census data and adjoining enumeration areas 109, 122 and 169, which provide complete NIP area coverage.


Statistics Canada (1971 Census of Canada) Historical Census Documentation, Ottawa, Canada.

6Marcel Cole, City of Ottawa, Residential Rehabilitation Assistance Program (RRAP) Delivery Agent. (June 4, 1986)
RRAP take up within the above parameters represented repairs made to 37% of the owned stock and 27% of the rented stock. The latter figure most probably included loans made to multiple unit tenements and apartments, thus representing a greater level of RRAP take up than stated.\(^7\)

RRAP take up and its stimulation of other forms of housing rehabilitation, might also be measured through 1981 census tract housing statistics. Since no clear pattern of concentrated building conditions or deterioration was detected during the 1974 housing survey, a change of Lower Town West's housing stock conditions might be measured through 1981 census tract data. Unfortunately, the revised 1981 enumeration area boundaries, did not provide complete NIP area coverage. If Statistics Canada's variables on housing conditions, are an accurate measure of units in need of major and minor repairs or those stocks being in poor-fair and good condition respectively, then NIP and RRAP did serve to improve the neighbourhood's housing stock. This statement is supported by the fact that only 30 and 155 dwellings out of census tract 55's total 1981 stock of 885 private

\(^7\)The estimates evidently assume that stock conditions were similarly distributed between the neighbourhood's homeowner and rental occupied units. They are derived from calculations multiplying both Lower Town West's (405) 1971 owner occupied and (785) rental units by the 33.6% figure attributed to the neighbourhood's 1974 stock being considered in fair conditions. These units encompass the RRAP program's target group of units which were considered rehabilitable within the program's budget.

\(^8\)"According to a study by the City Community Development Department a total of 344 RRAP loans covering 1014 rental units were issued between 1975 and November 1980. The majority of these loans were for dwellings in Centertown (55%) and Lower Town (33%)." (Peter Barnard Associates et al., 1984, p 2.9) Working with these figures, approximately 335 Lower Town West apartment units were RRAP'd (rehabilitated under the program) up to November 1980. This statistic, if accurate, would attest RRAP's success in delivering the program beyond Lower Town West's 1971 estimated number of rehabilitable rental units.
occupied dwellings were in need of major and minor repairs respectively. These figures reflect a 30.2% decline of units classified as being in fair condition down from 33.6% in 1974 to 3.4% in 1981. The figures do not include the 23.3% of the 1974 stock considered to be in poor condition, representing 274 units based on 1971 census figures. These units were judged to be beyond repair under RRAP assistance and were either privately rehabilitated, an action which might have been stimulated by NIP, or demolished and replaced by new units. The percentage of stock classified as being in good condition rose from 43% in 1974 to 96.6% in 1981, representing a 53% increase for that category over the seven year period. Thus, NIP and RRAP did potentially have a beneficial impact on the neighbourhood's housing stock.

Lowertown West had largely been a French working class community since its foundation in the 1830s. As an older community, an urban village, it was experiencing many problems associated with many Canadian inner city neighbourhoods. It lacked park space as well as other social recreational facilities. These problems were addressed in the 1977 Lowertown West NIP neighbourhood redevelopment plan.

Prior to receiving NIP, Lowertown West was experiencing profound demographic changes which community residents felt NIP might be able to reverse. A 1974 report of existing conditions for the whole Lowertown Area reported that between 1961 and 1971 the area's household structure had changed from larger

---

9 "Condition of Dwelling. Refers to whether, in the judgment of the respondent, the dwelling requires any repairs (excluding desirable remodelling or additions). Minor repairs refers to missing or loose floor tiles, bricks, or shingles, defective steps, railing or siding, etc. Major repairs refers to defective plumbing or electrical wiring, structural repairs to walls, floors or ceilings, etc." (Statistics Canada, 1983, pp XIII-XIV)

Census tract 55's housing stock of 885 private occupied dwelling units represented 74% of the estimated NIP area stock in 1971.
households to smaller ones. (Murray and Murray 1974(b), p 7) The average household size had declined from 3.8 to 2.9 persons per household. The older segment of the population, over 55 years of age, had increased between 1961 and 1971. Murray and Murray (1974(b), p 7) interpreted this trend as - "a reluctance on the part of older persons to leave the neighbourhood. As well, there has also been an outflow of families from the area in search of suitable housing".

Average family incomes in Lowertown fell further behind the City average between 1961 and 1971. In 1961 average family incomes were reported as being 19% behind the City average as opposed to 35% in 1971. (Ibid) The consultant's report also made reference to the fact that "more English speaking people were establishing themselves in Lowertown; hence altering the neighbourhood's predominantly French character". (Murray and Murray 1974(a)) In sum, Lowertown West had been experiencing major social changes stemming from the neighbourhood's inadequacies as a family environment and the influx of newcomers (gentrifiers).

This section has highlighted Lowertown West's social problems and concerns (circa 1974), which combined with its population's income status, rationalized its selection as a NIP area. These problems and concerns, articulated in the 1977 Lowertown West NIP redevelopment plan, will be assessed as outputs of both NIP and RRAP program inputs. A controlled study of Lowertown West's social changes, and those which NIP sought to promote, will be conducted. A review of incumbent upgrading and gentrification literature will serve to both introduce these processes and identify associated characteristics (objective indicators) which form the basis of this study. Lowertown West's (1971-1981) social changes will be assessed with regard to NIP's ability/success to/in maintain(ing) the community's incumbent low to moderate income population and attract more family households. This review also serves to justify the use of social area analysis techniques.
The technique, when applied to 1971 census tract variables, permitted the selection of a control area appropriate for the assessment of Lowertown West's ongoing socio-demographic changes.

3.2 Gentrification and Incumbent Upgrading: A Theoretical Investigation of Potential Social Impact

Gentrification is often attributed to young, childless, professional households who seek to satisfy professional and personal social-recreational needs through the rehabilitation of older inner city stocks. This brief definition highlights the major differences existing between this market and Lowertown West's community objectives. Gentrification, as a process of neighbourhood succession, poses a threat to this community's predominantly French family oriented status. Provided below is a theoretical review of both incumbent upgrading and gentrification processes. This review serves to compare and contrast both processes with respect to their promotion of community preservation under NIP and their potential ability to alter Lowertown West's social composition respectively.

**Incumbent Upgrading**

Incumbent upgrading encompasses a variety of socio-economic groups. This research has identified three distinct groups. The first group is often poor in income and social status and lacks the financial means to effect appropriate repairs to their dwelling units. They are often apolitical in neighbourhood organization. These declining neighbourhoods are subjected to conversions as evident by the high incidence of absentee landlord proprietorship. In view of their dismal state, this group is often targeted for government programs and
assistance. The second, intermediary, group comprises lower income, upwardly mobile immigrants. This group is characterized by the Italian, Portuguese and other ethnic groups who undertake and finance repairs and renovations through informal extended family and friend networks. Toronto's Harbord Street neighbourhood is a vivid example of this. The neighbourhood, often termed "teeming" with newcomers, has been the home of working class Scots-Irish, Jewish, Italian and Portuguese communities since its construction during the 1880s and '90s. In spite of having experienced numerous successions due to these communities subsequent acquisition of status and mobility, Harbord Street has notably "... remained solid working-class, never decaying into a slum ...". (Weier, L., 1986, p 31) The third group is often characterized by higher income households controlled by situation and circumstance. As an actor of circumstance, the homeowner might have inherited a dwelling occupied by two or three previous generations. Tied by tradition or a genuine desire to live in his/her childhood neighbourhood, he may do so despite the fact that he has risen above his forebears in wealth and status. (London, B. 1980) Another circumstance might entail a household which has gained in income and status, but chooses to upgrade its present dwelling to suit its needs due to the high cost of alternative housing. Thus, under these circumstances, the owner simply upgrades without mobility. (Levenson, R. 1979)

Despite the prevalent array of dichotomy exhibited among all three groups, they are similar with respect to their desire to upgrade their dwellings to better accommodate their present needs. Though operations undertaken by the three groups may differ substantially in scale and expense, all can be termed incumbent upgraders. The poorer upgraders, who reside in neighbourhoods experiencing revitalization (gentrification), might well choose to benefit from increased resale values or succumb to peer pressure and upgrade their homes provided they
can afford the expense and the subsequent property assessments. (Henig, J.R. 1982) Upgrading neighbourhoods generally comprise an architectural mixture of housing units and cover much larger areas than gentrifying neighbourhoods. (Clay, P.L. 1980)

**Gentrification**

Gentrification is most often associated with young, educated professional couples (under 45), who, through the renovation of older inner city stocks, have remained in the inner cities they previously inhabited as renters. (Clay, P.L. 1980) In the later stages of gentrification, empty nester households have also been noted as a significant ingredient of this market. (Ley, D. 1985) Characteristically, gentrifiers are well educated, professional types, often two wage earner couples, with few or no children. The inner city, which held a wide attraction to this group during their twenties as renters, has become their home during their thirties due to the lack of stock affordability as well as the time and energy costs associated with commuting to and from suburban locations. Gentrifiers favour the proximity to work, entertainment and friends an inner city location provides. They also appreciate the pleasant densities, mature trees, the stable grid patterned streets, as well as the specialized services associated with inner city living. Older stylistic and venacular inner city stocks, located close to anchors, such as parks, rivers and universities, have served as a medium of expression of this generation's status and individuality.

Gentrification often occurs only in certain inner city neighbourhoods, having a similar, appealing architectural design which are located within two miles of the central business district. (Clay, P.L. 1980) Such stocks, subject—in some cases—to the availability of a large stock of single detached dwellings, prove even more attractive if located near scenic anchors. Gentrified
neighbourhoods rarely exceed 500 units or a several block radius. (Ibid, Black, J.T. 1980) Renovation activities often encompass older stocks, built prior to 1900 and as such are restricted to the availability of similar architecturally attractive units. (Clay, P.L. 1980) As a market oriented process, the displacement of long time renters often occurs, as units are deconverted to accommodate incoming residents. Gentrifiers often come into conflict with older (incumbent) residents, as their demands differ radically from those of established residents. Gentrifiers, being more endowed financially and politically, possess the means to politically secure their demands, of additional police protection, road and sidewalk repairs, gas street lamps and often street closing. (Ibid. Henig, J.R. 1982) In contrast, long time residents may demand additional park space for their children and public housing for the poor and elderly. (Clay, P.L. 1980) Public officials are often caught in an impasse as gentrifiers often secure their demands at a deficit to contributed tax revenues. (Henig, J.R. 1982) Thus, gentrifiers seek, by whatever means, to secure and appreciate their investment, often at the expense of poorer residents.

In comparison, incumbent upgrading and gentrification theory provide a base by which to distinguish the two activities in Lowertown West. Gentrification, within the context of Lowertown West, would promote an influx of anglophones who are often characterized as having a higher socio-economic status. (Provancher, N. 1986 p 16) Thus, gentrification activity would be evident as Lowertown West is predominantly French in character. Gentrification activities would also be reflected in the area's population as: (1) gentrifiers often displace lower income tenants, (2) they possess smaller families, (3) and/or local residents (property owners), sensing a market opportunity, might potentially sell out to newcomers and move to a perceived better neighbourhood. A gentrifying area would also be characterized by a rise in socio-economic status (income, education and occupation).
Incumbent upgrading would optimally leave the neighbourhood's low to moderate francophone income socio-economic status unchanged. The latter group (encompassing higher status socio-economic generations or personal gains) would potentially parallel gentrification, with respect to population loss, assuming they have smaller families and cause limited displacement. This phenomenon would also entail a rise in socio-economic (not ethnic) status, thus preserving Lowertown West's predominantly French character.

3.3 Social Area Analysis and Its Application To Delimiting a Control

This research has adopted a controlled research design to assess NIP's impact in relation to its ability to preserve Lowertown West's population and realize stated community objectives. The choice of a control for Lowertown West was governed by the social concerns articulated through reports of Lowertown's existing conditions (1974), The Lowertown West Development Plan (1976) and the Lowertown West NIP Redevelopment Plan (1977). These Reports and above stated concerns, centering on NIP's promotion of a family environment and the countering of gentrification trends through RRAP rehabilitations, justified the use of 'social area analysis' procedures to select a control.

Social area analysis' main strengths lie in its ability to organize and summarize several important aspects of the social geography of an area. It is an approach used to stratify and organize urban populations into homogeneous social units according to three separate dimensions (social rank, urbanization and segregation).

The approach was developed by Shevky, Bell and Williams (Shevky and Williams 1949, Bell 1952 and Shevky and Bell 1955). It was based on their separate studies of the Los Angeles and San Francisco Bay areas. (Smith, D. 1973) Using 1940 census tracts as a basis of measurement, they (and others) found that
census variables could be classified (or grouped), in terms of economic, family and ethnic characteristics. (Bell, W., 1959, p 68) Bell reasoned that census tracts provided a sound unit of study as: "The boundaries of census tracts, initially at least, were established after consideration was given to the homogeneity of social characteristics, types of housing, land use, topography or a combination of these factors." This made comparative studies of neighbourhoods and the measurement of social change (through selected variables) possible.

In replicating Shevky and Bell's social area analysis and its three indexes, eleven 1971 census variables were inputed in the data matrix below:

<table>
<thead>
<tr>
<th>SERVICE (Occupational classification)</th>
<th>LABOUR</th>
<th>Social Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED9</td>
<td>ED13</td>
<td>Index I</td>
</tr>
<tr>
<td>(Educational achievement of less than grade 9)</td>
<td>(Education between grades 9 and 13)</td>
<td>Social Rank</td>
</tr>
<tr>
<td>POSTSEC (Some or post secondary degree or certificate)</td>
<td>AVERLAT (Gross Monthly Rent)</td>
<td>Urbanization</td>
</tr>
<tr>
<td>FERT1544 (Fertility rate for women ever married between the ages of 15 and 44, measured by the number of children per 1,000 women in that age group.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WPARATE (Percentage of women participating in the workforce)</td>
<td></td>
<td>Segregation</td>
</tr>
<tr>
<td>SINGDET (Number of single detached housing units found in the census tract)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGLISH (Mother tongue identified)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRENCH</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Among the criteria used by Statistics Canada (to create census tracts) stated are its efforts to delineate ... "an area as homogeneous as possible in terms of economic status and living conditions" ... bounded by ... "permanent and easily recognizable geographic features." ...

The index variables were drawn from the 1971 census bulletins for the Ottawa-Hull census metropolitan area.\textsuperscript{11} The analysis encompassed 67 census tracts representing both the cities of Ottawa and Vanier. The 'social area analysis' was operationalized through the SAS (Statistical Analysis System) varimax rotation factor analysis program.

The factor analysis extracted four factors from the data matrix using .05 as the minimum percentage of variance. The first factor explained approximately 32\% of the variance (see Figure 2) It definitely describes a factor of social rank with high loadings on ENGLISH (.71038), SINGDET (.68236), POSTSEC (.92431), AVERAGE (.80503) and SERVICE (.79565).

The second factor explained approximately 31\% of the total variance. It equally represents an index of social rank, perhaps lower, being working class in comparison to the first, with high loadings on ED9 (.89267), ED13 (.80519), LABOUR \textsuperscript{t}(.94510). It does, however, load only moderately on AVERAGE.

The third factor supports the urbanization index on two of three expected index variables. It explains approximately 17\% of the variance. Both FERTL544 (.89089) and WPRATE (-.89540) loaded on this bipolar factor while single detached housing (SINGDET) did not. The fourth factor explained approximately 12\% of the variance and loaded on the French (.88652) variable, thus making it an adequate measure of francophone areas or concentrations (segregation index). These four factors were plotted by standard deviation increments shown below (see Maps 1-4).

A control area of similar social rank, urbanization and segregation characteristics to Lowertown West was drawn from both the cities of Ottawa and Vanier's census tracts. It was selected through the stratification of social

\textsuperscript{11}Statistics Canada (1971 Census of Canada) Population and Housing Characteristics by Census Tracts: Ottawa-Hull, Minister of Supply and Services, Ottawa, Canada, April 1973

Statistics Canada (1971 Census of Canada) Population and Housing Characteristics by Census Tracts: Ottawa-Hull, Minister of Supply and Services, Ottawa, Canada, July 1974
SAS

**ROTATION METHOD:** VARIMAX

**ROTATED FACTOR PATTERN**

<table>
<thead>
<tr>
<th></th>
<th>FACTOR1</th>
<th>FACTOR2</th>
<th>FACTOR3</th>
<th>FACTOR4</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>0.71038</td>
<td>0.59401</td>
<td>0.06065</td>
<td>0.32966</td>
</tr>
<tr>
<td>FRENCH</td>
<td>-0.17892</td>
<td>0.32087</td>
<td>0.08399</td>
<td>0.88652</td>
</tr>
<tr>
<td>SINGDET</td>
<td>0.68236</td>
<td>0.41120</td>
<td>0.35007</td>
<td>-0.33617</td>
</tr>
<tr>
<td>ED9</td>
<td>0.00380</td>
<td>0.89267</td>
<td>0.28472</td>
<td>0.26301</td>
</tr>
<tr>
<td>ED13</td>
<td>0.52637</td>
<td>0.80519</td>
<td>-0.01320</td>
<td>0.09553</td>
</tr>
<tr>
<td>POSTSEC</td>
<td>0.92431</td>
<td>0.17391</td>
<td>-0.09364</td>
<td>0.09611</td>
</tr>
<tr>
<td>AVERENT</td>
<td>0.80503</td>
<td>-0.12889</td>
<td>0.08972</td>
<td>-0.31148</td>
</tr>
<tr>
<td>SERVICE</td>
<td>0.79565</td>
<td>0.53874</td>
<td>-0.17046</td>
<td>0.05571</td>
</tr>
<tr>
<td>LABOUR</td>
<td>0.17264</td>
<td>0.94510</td>
<td>-0.01615</td>
<td>0.13306</td>
</tr>
<tr>
<td>FERT1544</td>
<td>-0.13557</td>
<td>0.22166</td>
<td>0.89089</td>
<td>-0.15420</td>
</tr>
<tr>
<td>WPRATE</td>
<td>-0.13607</td>
<td>0.08161</td>
<td>-0.89540</td>
<td>-0.22759</td>
</tr>
</tbody>
</table>

**VARIANCE EXPLAINED BY EACH FACTOR**

<table>
<thead>
<tr>
<th></th>
<th>FACTOR1</th>
<th>FACTOR2</th>
<th>FACTOR3</th>
<th>FACTOR4</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>3.481530</td>
<td>3.356188</td>
<td>1.856076</td>
<td>1.288549</td>
</tr>
</tbody>
</table>

**FINAL COMMUNITY ESTIMATES:** TOTAL = 9.982342

<table>
<thead>
<tr>
<th></th>
<th>ENGLISH</th>
<th>FRENCH</th>
<th>SINGDET</th>
<th>ED9</th>
<th>ED13</th>
<th>POSTSEC</th>
<th>AVERENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.969849</td>
<td>0.927951</td>
<td>0.870253</td>
<td>0.947114</td>
<td>0.934686</td>
<td>0.902593</td>
<td>0.769758</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>LABOUR</th>
<th>FERT1544</th>
<th>WPRATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.955472</td>
<td>0.940901</td>
<td>0.884968</td>
<td>0.878718</td>
</tr>
</tbody>
</table>

**FIGURE 2**
MAP 1  High Social Rank for the Ottawa-Vanier Area (1971)


MAP 2  Working Class Social Rank for the Ottawa--Vanier Area (1971)

Scale
-1 SD <
-1 SD - O
O -1 SD
> 1 SD


MAP 4  Segregation Index for the Ottawa-Vanier Area (1971)

Scale
-1 SD <
-1 SD - 0
0 -1 SD
> 1 SD


indexes via maps and grid scatter diagrams. The control was then selected by
process of elimination, through the superimposition of mapped indexes of
standardized scores for each census tract (see Appendix B).

Census tract 101 proved most comparable to Lowertown West (CT55) along all
three indexes. While CT101 did rank one class higher than CT55 along a social
(high) rank, it did share three identical social areas out of the six possible
combinations of all four factors plotted on grid scatter diagrams (see Appendix
B). In the other three instances, CT101 fell in the same range (row or column)
for one of the factors, while being located in an adjoining social area. These
facts justify the choice of CT101 as a control, as it allows for the assessment of
NIP's social impact, in view of its ability to promote a family environment and
counter gentrification in Lowertown West. (see Map C).

3.4 Population and Household Formation Trends: An Analysis of Social Mobility
Within CT55 and CT101

For reasons of comparability, only population estimates will be provided
for the whole Lowertown West NIP area. Other social indicators and data will be
restricted to 1971-1981 census tract data to assess social changes within
Lowertown West (CT55). The most notable impact of any form of gentrification
would be a loss- or displacement of low and moderate income neighbourhood
population, through deconversions effected to the rental stock. In 1971, the
Lowertown West NIP area had a total population of 4,745.12 Census tract 101 had a
West lost approximately 1,329 persons or 28% of its population.13 CT101

12This statistic represents the combined populations of CT55 and enumeration areas
109, 122 and 169, drawn from the 1971 census.
13These figures are based on Lowertown West having an estimated 1981 population of
3,409 people. (See Appendix C for estimate procedures.)
Source: Statistics Canada (1981 Census of Canada) Census Tract:
population, occupied private dwellings, private households, census
families in private households. Selected characteristics:
Ottawa-Hull, Minister of Supply and Services Canada, Ottawa,
March, October 1982.
experienced a 3.2% loss in population representing 110 people. Overall the City's population declined by only 2.4% over this same period, while the inner city's population (Zone A) declined by 19% or 17,834 people between 1971 and 1981¹⁴ (see Map D).

In contrast, the population loss for CT55 - Lowertown West, was only 9.1% or 230 people. The discrepancy in population losses registered between the census tract and the NIP area is attributed to the fact that in 1971 CT55 represented only 51.6% of the NIP area's population. Therefore, while population losses might not have been significant at the census tract level, enumeration area 169 had a population of 865 people in 1971 and the identical 1981 enumeration area, EA304, registered a total population of 165 people. This radical loss of population, if experienced to a similar degree by the other NIP area subdivisions, thus makes CT55 all the more valid as a unit of study reflecting the social changes experienced by the Lowertown West NIP area over the 1971-1981 census period.

While census tract 55 only experienced a minimal loss of population between 1971 and 1981, it did undergo notable social changes. The tract lost 20% of its francophone population, while it gained 17% more residents whose stated mother tongue was English. It also made a 3% gain in residents whose mother tongue was other than English or French. Census tract 101 managed to maintain its proportion of francophones at 56% while losing approximately 3% of its anglophone population to other linguistic groups (see Table 2).

¹⁴Zone A tabulations regarding 1981 innercity population estimates were drawn from. Peter Barnard Associates et al. City of Ottawa Strategic Housing Study: Phase I Report, Ottawa, Canada, April 1984 (Exhibit 1.6). Zone A statistics for 1971 were drawn from census tracts 14-19, 36-42 and 47-56.*

### Table 2

**Population Change by Mother Tongue**

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>55 (Lowertown West)</th>
<th>101</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2,455</td>
<td>2,225</td>
</tr>
<tr>
<td>French</td>
<td>2,035</td>
<td>1,395</td>
</tr>
<tr>
<td>English</td>
<td>345</td>
<td>680</td>
</tr>
<tr>
<td>Other</td>
<td>75</td>
<td>135</td>
</tr>
</tbody>
</table>


**Note:** Percentages were rounded to two decimal points and multiplied by 100.

Census tract 55's shift in population had no significant influence on tenure patterns. While the percentage of owned dwelling units decreased by 3%, the percentage of rental units equally rose by 3% between 1971 and 1981. The decline in ownership could be attributed to the 310 new units added to the tract's stock over this period. These were principally geared to a rental market. (Statistics Canada, 1983, p 1-63) In real numbers, the tract's owner occupied stock increased by 15 units while the rental stock increased by 195 units.
In contrast, CT101's rate of ownership rose by 17% (395 units) while the rental stock declined by 18% of the tract's total stock (see Table 3). The tract's stock increased by 485 units between 1971 and 1981. (Ibid. p 1-73)

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Survey of Housing Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CT55</td>
</tr>
<tr>
<td>Tenure</td>
<td>#</td>
</tr>
<tr>
<td>Owned</td>
<td>125</td>
</tr>
<tr>
<td>Rented</td>
<td>530</td>
</tr>
<tr>
<td>Total</td>
<td>660</td>
</tr>
</tbody>
</table>


Note: Discrepancies in unit and percentage totals are attributed to sampling errors. Percentages were rounded to two decimal points and multiplied by 100.

Both census tracts 55 and 101 lost in single detached units (5 units) and 55-20 single attached units respectively, while gaining in apartment (rental) units. Therefore a succession in homeowner tenureship has occurred in CT55's low density stock. (Statistics Canada, 1973; 1982, p 1-21, 1-25) This statement is based on the assumption that high density condominium development has not occurred
in CT55 since census tract statistics indicate that most stock additions made between 1971 and 1981 were rentals. This coupled with the tract's loss of 20% of its French population and a 16% increase in English speaking residents indicate that a shift in Lowertown West's homeowner market has occurred. The fact that the area's low density stock has declined while the number of homeowners has increased also lends support to this argument.

In the case of CT101, this research would have to assume that while the tract's low density stock has declined, it is difficult to conclude that ownership changes have occurred within the older stock. A more reasonable assumption is that perhaps condominium or medium density row or garden home development has occurred in the area, which would account for the sudden rise of 405 owner occupied units.

Demographic changes experienced by CT55 over both census have had a profound impact on the area's family formation trends. CT55 gained 200 households between 1971 and 1981. This gain represented an increase of 295 one person households and 70 two person households. The number of family households decreased from 475 in 1971 to 375 in 1981. CT101 gained 410 households, 35 of which were family households. A partial explanation of CT101's gain in family households might be found in the September 1985 edition of the "Le Reveil" (page 8). It stated that a number of displaced Lowertown families had re-established themselves in more affordable areas such as Vanier. Aside from CT101's rise in total number of families, from 825 in 1971 to 860 in 1981, the tract also gained 355 and 185 one and two person households respectively (see Table 4).
Table 4

Changes in CT55 and CT101's Household Composition 1971-1981

<table>
<thead>
<tr>
<th></th>
<th>CT55</th>
<th></th>
<th>CT101</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>665</td>
<td>865</td>
<td>1,150</td>
<td>1,555</td>
</tr>
<tr>
<td>Family</td>
<td>475</td>
<td>370</td>
<td>825</td>
<td>860</td>
</tr>
<tr>
<td>One Person</td>
<td>115</td>
<td>410</td>
<td>225</td>
<td>580</td>
</tr>
<tr>
<td>Two Person</td>
<td>205</td>
<td>275</td>
<td>385</td>
<td>570</td>
</tr>
</tbody>
</table>


The City of Ottawa and its inner city equally experienced a decline in the number of family households while experiencing an increase in non-family households between 1971 and 1981 (see Table 5).
Table 5
Distribution of Households

<table>
<thead>
<tr>
<th>City of Ottawa</th>
<th>Family Households</th>
<th>Non-Family Households</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total City</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>73,280</td>
<td>48,435</td>
</tr>
<tr>
<td>% Total Households</td>
<td>62.2%</td>
<td>39.5%</td>
</tr>
<tr>
<td>1971</td>
<td>68,955</td>
<td>24,635</td>
</tr>
<tr>
<td>% Total Households</td>
<td>73.7%</td>
<td>26.3%</td>
</tr>
<tr>
<td>1981 vs 1971</td>
<td>-11.5%</td>
<td>+13.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Zone A (Ottawa's Inner city)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>16,250</td>
<td>21,485</td>
</tr>
<tr>
<td>% Total Households</td>
<td>43.1%</td>
<td>56.9%</td>
</tr>
<tr>
<td>1971</td>
<td>20,155</td>
<td>15,925</td>
</tr>
<tr>
<td>% Total Households</td>
<td>55.9%</td>
<td>44.1%</td>
</tr>
<tr>
<td>1981 vs 1971</td>
<td>-12.8%</td>
<td>+12.8%</td>
</tr>
</tbody>
</table>

Source: Peter Bernard Associates et al., City of Ottawa Strategic Housing Study; Phase 1 Report, Ottawa, Canada, April 1984 (Exhibit 1.5).

In Table 5 non-family households accounted for nearly all the household growth in Ottawa between 1971 and 1981. The number of inner city family households (Zone A) decreased by 12.8% while non-family households increased by the same amount.

Between 1971 and 1981, both Lowertown West and CT101 gained in population for the 25-34 age group. CT55's high score for females in the over 70 age group for both 1971 and 1981 could be explained by the old General Hospital’s being located within the census tract. The hospital is now a palliative care unit. CT101, with the exception of the 45-54 age group, gained in population for all age groups over 25 between 1971 and 1981. Both census tracts lost population in the under 25 age groups over this same period (see Diagrams 1-4).
DIAGRAM 1: CT 55's 1971 POPULATION DISTRIBUTION BY AGE GROUP

FEMALES

MALES

STATISTICS CANADA (1971 CENSUS OF CANADA) CATALOGUE 92-715
DIAGRAM 2  CT 55's 1981 POPULATION DISTRIBUTION BY AGE GROUP

STATISTICS CANADA (1981 CENSUS OF CANADA) CATALOGUE 95-923
DIAGRAM 4 CT101's 1981 POPULATION DISTRIBUTION BY AGE GROUP

FEMALES

MALES

STATISTICS CANADA (1981 CENSUS OF CANADA) CATALOGUE 95-221
Peter Barnard Associates et al., in their 1984 strategic housing study of the City of Ottawa, found that, between 1976 and 1981, the City's population under 25 had declined by 16% while the 25-34 age group had increased by 11%. Both the 55-64 and the 65 plus age groups also increased by 6 and 19% respectively. Within the Ottawa inner city (Zone A), Barnard Associates et al also reported a 20% decrease in the under 25 age group, accompanied by a 13 and 16% increase for the 25-34 and 35-44 age groups respectively (see Diagram 5).

They interpreted these results as follows:

"The changing character of the City's population is not entirely due to the aging of the population and attendant lifestyle changes. The mobility of the population, and Ottawa's attractiveness as a destination for job-seeking migrants have also influenced its population character. Over the five-year period ending June 1981, some 53% of Ottawa residents had moved at least once ... Within the City, the highest area of turn-over is Zone A (61%). This is probably due largely to the high rental component within Zone A (75%) and the mobility of non-family persons who predominate in this area." (Peter Barnard Associates et al, 1984, p. 1.8)

The above analysis has provided an insight into Lowertown West's (CT55) general demographic - population, linguistic, household formation and age distribution - changes in contrast to both those of its control CT101 and the City of Ottawa's. The following section will analyze these processes further as they pertain to NIP's promotion of a family environment and the countering of gentrification in Lowertown West.
AGE DISTRIBUTION IN CITY OF OTTAWA

<table>
<thead>
<tr>
<th>Total City</th>
<th>Age Group</th>
<th>1981 Population</th>
<th>1981</th>
<th>VS. 1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 25</td>
<td>55,320</td>
<td>-16%</td>
<td>+11%</td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>33,105</td>
<td>+6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td>32,285</td>
<td>-12%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45-54</td>
<td>33,460</td>
<td>+6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55-64</td>
<td>36,820</td>
<td>+19%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 25</td>
<td>24,090</td>
<td>-20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>18,800</td>
<td>+13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td>8,645</td>
<td>+16%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45-54</td>
<td>7,320</td>
<td>-17%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55-64</td>
<td>8,115</td>
<td>-12%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65+</td>
<td>12,155</td>
<td>+1%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 25</td>
<td>20,680</td>
<td>-21%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>11,020</td>
<td>+8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td>6,690</td>
<td>+13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45-54</td>
<td>6,215</td>
<td>+3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55-64</td>
<td>7,310</td>
<td>+19%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65+</td>
<td>9,335</td>
<td>-9%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 25</td>
<td>59,245</td>
<td>-13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-34</td>
<td>25,465</td>
<td>+10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35-44</td>
<td>17,790</td>
<td>+3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45-54</td>
<td>18,290</td>
<td>-9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55-64</td>
<td>18,045</td>
<td>+27%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65+</td>
<td>15,330</td>
<td>+47%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Peter Barnard Associates et al., City of Ottawa Strategic Housing Study: Phase I Report, Ottawa, Canada, April 1984, EXHIBIT 1.6
3.5 Family Formation versus Gentrification: A Statistical Study of Community Evolution

Lowertown West's demographic changes experienced over the 1971-1981 census period provide only general insights of gentrification's impact on the community and its family environment. Gentrification is most often associated with young, educated, professional couples (under 45) who have few or no children. An elaboration of this definition constitutes the next step in assessing this process' social impact on Ottawa's Lowertown West.

Gentrifiers are often well-educated professionals, who are more capable of commanding higher salaries than their low to moderate income neighbours. An influx of young, urban professionals with their higher salaries would potentially be an indicator of gentrification activities in Lowertown West. Between 1961 and 1971, average family income for the Lowertown area fell from 19 to 35% below the City average. (Murray and Murray, 1974(a)) Average family incomes for CT55 rose by 11% from being 30% below the City average in 1971 to being 19% below the 1981 City average. In view of the evident social changes Lowertown West, CT101 and the City of Ottawa have experienced between 1971 and 1981 with regard to household formation trends, this research has adopted the variable of median household income for assessment purposes. The use of median household income is also justified as average family income can be affected by a small number or percentage of high or low salary observations. Therefore, median household income was selected as the more reliable indicator of income change within Lowertown West and CT101.

In 1971, Lowertown West was 24% below the City level of median household income. Between 1971 and 1981 the tract's median household income level fell to 27% below the City median representing a 3% loss for the tract. Census tract 101 also fell from 13 to 16% below the City level of median household income over the same period. This tends to show that Lowertown West has received only a small
percentage of higher income households as their incomes did not inflate the census tract's median level of household income. CT101's decline in median income could be attributed to the number of low to moderate income family households which have relocated in that census tract. The tract, CT101, gained 145 low to moderate income family households between 1971 and 1981 from 130 (15%) earning less than $5,000 in 1971 to 275 (31%) family households earning less than $15,000 in 1981. Lowertown West, CT55, also gained 25 low to moderate income family households over this period, increasing from 125 (26%) family households earning less than $5,000 in 1971 to 150 representing 45% of all Lowertown West family households earning less than $15,000 in 1981.

Extending these figures to both tracts' predominance of one and two person households, only a small proportion of higher income households appear to have established themselves in Lowertown West and CT101.

Another characteristic, often attributed to areas' undergoing/experiencing gentrification, is a rise in education. Listed below are CT55 (Lowertown West) and CT101's education profiles for both 1971 and 1981 (see Table 6).

---

15 Percentage figures appearing with low to moderate income family household statistics represent the percentage of family households falling below low income ranges set at $5,000 for 1971 and $15,000 for 1981.

Figures regarding low income thresholds for family households were based on the tract's average number of persons per family and the corresponding low income cut off ranges listed on page XXXVII of 1981 Census of Canada, Census Tract Bulletin, Series B Data, for the Ottawa-Hull Census Metropolitan Area. (Statistics Canada, 1983, p XXXVII)

1971 low income family thresholds were drawn from Murray and Murray's (1974(b), p 12) low income classification of family household's earning less than $5,000 per year.
Table 6
Education

<table>
<thead>
<tr>
<th></th>
<th>CT55 1971</th>
<th>CT55 1981</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>Less than Grade 9</td>
<td>1,115 47</td>
<td>380 20</td>
<td>-28</td>
</tr>
<tr>
<td>Grade 9-13</td>
<td>1,040 43</td>
<td>525 28</td>
<td>-17</td>
</tr>
<tr>
<td>Post Secondary</td>
<td>290 12</td>
<td>995 52</td>
<td>+40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>CT101 1971</th>
<th>CT101 1981</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>Less than Grade 9</td>
<td>1,215 38</td>
<td>535 18</td>
<td>-20%</td>
</tr>
<tr>
<td>Grade 9-13</td>
<td>1,660 52</td>
<td>1,140 39</td>
<td>-13%</td>
</tr>
<tr>
<td>Post Secondary</td>
<td>320 10</td>
<td>1,230 42</td>
<td>+32</td>
</tr>
</tbody>
</table>

Note: Education divisions 'between grade 9-13' and post secondary education, include other training for 1971 tabulations. Post secondary education encompasses trade certificates, diploma as well as other non-university education in its 1981 tabulation. Percentages may not total 100% due to the rounding procedure applied to the census tract's education divisions for 1971 and 1981.


These figures reflect a rise in educational status for both tracts. Most remarkable is the 40 and 32% rise in post secondary education for CT55 and CT101 respectively. This increase might be partially due to the definitional changes made in educational achievement classifications over the 1971-1981 census (highlighted below). The significant losses in the less than grade 9 education achievement category add support to the argument that both CT55 and CT101 have risen in social status. Census tracts 55 and 101 lost 28 and 20% of their population in this category respectively. Both tracts also lost 17 and 13% in
the grade 9-13 education classification. The rise in post secondary educated people experienced by both census tracts, 40% for CT55 and 32% for CT101 between 1971 and 1981 cannot be solely attributed to post secondary students as they account for only a minor segment of each tract's population. In 1981, Lowertown West had only 135 students over 15 years of age attending school on a full time basis. This figure represented only 7.1% of the population over 15 years of age. Census tract 101's 1981 student population represented 11.3% of the over 15 age group. These figures undoubtedly encompass a number of high school students as children are legally compelled to attend school until their sixteenth birthday. The decennial census is also conducted around June of every census year, so post secondary student concentrations do not bias these findings. Both tracts have obviously gained in younger, more educated population. Their youth or pre-professional status is probably the chief factor contributing to the decline in median household incomes experienced by both census tracts 55 and 101 between 1971 and 1981. Their increased level of education, should be reflected in their career pursuits, even though census tract median household incomes do not reflect this. Occupations, listed by division for both CT55 and 101 for the 1971 and 1981 census years are presented in Table 7.
### Table 7

**Occupational Divisions, 1971 and 1981**

<table>
<thead>
<tr>
<th></th>
<th>City of Ottawa</th>
<th>CT55</th>
<th>CT101</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial</td>
<td>12,920</td>
<td>10</td>
<td>21,850</td>
</tr>
<tr>
<td>Professional</td>
<td>26,180</td>
<td>20</td>
<td>38,145</td>
</tr>
<tr>
<td>Clerical</td>
<td>38,160</td>
<td>29</td>
<td>43,055</td>
</tr>
<tr>
<td>Labour</td>
<td>52,750</td>
<td>41</td>
<td>57,235</td>
</tr>
<tr>
<td>Total</td>
<td>130,010</td>
<td>100</td>
<td>160,285</td>
</tr>
</tbody>
</table>

**Note:** Tabulations include both sexes. Professional classifications include occupational groups 27, 31, 21, 23 and 33 of the 1971 census and their 1981 census equivalents. The labour classification encompasses all other work divisions not mentioned.

**Source:**
- Statistics Canada (1981 Census of Canada) Census metropolitan areas with components: Population, occupied private dwellings, private households and census and economic families in private households; selected social and economic characteristics, Minister of Supply and Services, August 1983, p.1-166.
- Statistics Canada (1981 Census of Canada) Census Tracts; population, occupied private dwellings, private households, census families in private households; Selected Characteristics; Ottawa-Hull, Minister of Supply and Services, October 1983, p 1-65, 1-75.

Over the 1971-1981 census period, both CT55 and CT101 gained in professional (white collar) occupational status. Both census tracts, with the exception of the clerical division, led over City trends in all other occupational divisions. The above statement that younger in-migrants had not reached their income potential, is supported by the negative median household income changes experienced by CT55 and CT101 between 1971 and 1981. CT55 gained 120 managerial and 185 professional residents representing 8.8 and 13.1% gains respectively for each division over the 1971-1981 census period. CT101 also gained 115 managerial...
and 160 professional residents representing 5.6 and 6.9% gains for each division respectively. These figures reflect a 5.2 and 2% rise over the City's 3.6% increase in managerial population between 1971 and 1981 for CT55 and CT101 respectively. Over this same period, CT55 and CT101 also made 9.3 and 3.1% gains over the City's 3.8% increase in professionally classified (occupied) residents respectively. Lowertown West (CT55)'s workforce gained 3.6% more clerical personnel while CT101 and the City registered 4.6 and 2.1% losses respectively over the same period. Most significant was the loss of people engaged in labour occupations residing in Lowertown West. Over the 1971-1981 census period, CT55 lost 255 workers from this division representing a 25.5% decline in labour's contribution to the tract's workforce. This division experienced a 7.9% decline in its representation of CT101's workforce as well as experiencing a 5.3% decline at the City level. CT101's loss in this division represented a loss of only five workers. CT55's decline in its labour occupied workforce, being 23.1% higher than the City's rate of decline, lends a great deal more support to the fact that Lowertown West has indeed experienced gentrification. CT55 has experienced this to a greater extent than CT101, with respect to gains made in educational and occupational status. This has been to the detriment of CT55's low to moderate income population. CT101, on the other hand, appears to have potentially benefited from the resettlement of some displaced Lowertown residents. If viewed in terms of Lowertown West's NIP objectives to retain the Francophone, family and labour occupational elements of its population CT101 has realized these objectives. (Dionne, P., 1985; p 8)

Ley lends support to the above statement through his 1985 study of gentrification patterns in six Canadian inner-cities.16 He similarly states

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16 Ley, D. Gentrification In Canadian Inner Cities: Patterns, Analysis, Impacts And Policy, Canada Mortgage and Housing Corporation, Ottawa, Canada, October 1985, 210 pages.
that, for the purpose of identifying neighbourhoods undergoing gentrification, income is a poor indicator. This, Ley reasons, is due to the fact that income increases can be tied to union membership and pre-professional status, e.g. younger workers who have not achieved their earning potential. (Ley, D. 1985, p 8) For Ley, social status or revitalization is better reflected in education and occupation changes experienced at the census tract level. Ley's study of social status gains highlights Ottawa as one of the six investigated Canadian inner city areas. In view of CT55 and CT101's proven similarity, in terms of the social area analysis' index of working class social rank, Lowertown West has experienced greater gains in social status than CT101 over the 1971-1981 census period (see Map E).

Ley's index of revitalization, indicated by standardized score changes in census tracts' social status (defined above) between 1971 and 1981, placed CT55 into the top fourth quintile (14.1 to 18.5 range) while CT101's rise in social status was restricted to the third quintile (6.5 to 13.6) which is one quintile below Lowertown West. (Ley, D. 1985, p 8, 76).

Gentrification has carried a major impact on Lowertown West's family environment. The influx of 295 one person and 70 two person households aged between 25-34 has had very little impact on the neighbourhood's marital status percentage wise. They only contributed to raising the number of single persons over 15 years of age by 3% between 1971 and 1981. In 1971, 37% of CT55's population was reported as single and over 15 while in 1981 40% of the census tract's population was not married. The proportion of married people rose from 37 to 39% of the tract's population between 1971 and 1981 respectively.

Census tract 101's household structure also experienced increases in one person (350) and two person (185) households over the 1971-1981 census period. While it did make a small gain in its total number of family households, the
MAP E

Inner city revitalization in Ottawa-Hull, 1971-81

Index change by Quintile, 1971-81

- CBD peak land value

-8.8 to 29.2
14.1 to 18.5
6.5 to 13.6
2.5 to 6.1
-0.8 to 1.8

Source: Ley, D., Gentrification in Canadian Inner Cities: Patterns, Analysis, Impacts and Policy, Canada Mortgage and Housing Corporation, Ottawa, Canada, October 1985, page 76.
percentage of married persons remained constant at 47% and the percentage of single persons over 15 increased from 26 to 29% over this same period.

CT101's stability and Lowertown West's slight percentage rise in the number of married people did not result in increased fertility rates. This is reflected by declining primary school enrolments registered from 1970 to 1986 for Routier, Lowertown West's French primary school and Baribeau, Claude and Assumption, CT101's two French and English primary schools respectively (see Table 8).
TABLE 8

PRIMARY SCHOOL ENROLMENTS 1970-1986

<table>
<thead>
<tr>
<th></th>
<th>Routier</th>
<th>Baribeau</th>
<th>Glaude</th>
<th>Assumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970:</td>
<td>430</td>
<td>413</td>
<td>391</td>
<td>303</td>
</tr>
<tr>
<td>1971:</td>
<td>411</td>
<td>360</td>
<td>423</td>
<td>300</td>
</tr>
<tr>
<td>1972:</td>
<td>323</td>
<td>369</td>
<td>391</td>
<td>291</td>
</tr>
<tr>
<td>1973:</td>
<td>270</td>
<td>332</td>
<td>367</td>
<td>271</td>
</tr>
<tr>
<td>1974:</td>
<td>274</td>
<td>299</td>
<td>379</td>
<td>277</td>
</tr>
<tr>
<td>1975:</td>
<td>222</td>
<td>298</td>
<td>396</td>
<td>278</td>
</tr>
<tr>
<td>1976:</td>
<td>205</td>
<td>263</td>
<td>402</td>
<td>273</td>
</tr>
<tr>
<td>1977:</td>
<td>191</td>
<td>232</td>
<td>335</td>
<td>284</td>
</tr>
<tr>
<td>1978:</td>
<td>136</td>
<td>217</td>
<td>310</td>
<td>286</td>
</tr>
<tr>
<td>1979:</td>
<td>224</td>
<td>230</td>
<td>266</td>
<td>275</td>
</tr>
<tr>
<td>1980:</td>
<td>193</td>
<td>198</td>
<td>239</td>
<td>267</td>
</tr>
<tr>
<td>1981:</td>
<td>186</td>
<td>176</td>
<td>234</td>
<td>267</td>
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<tr>
<td>1982:</td>
<td>187</td>
<td>183</td>
<td>232</td>
<td>239</td>
</tr>
<tr>
<td>1983:</td>
<td>238</td>
<td>162</td>
<td>222</td>
<td>269</td>
</tr>
<tr>
<td>1984:</td>
<td>199</td>
<td>253</td>
<td>218</td>
<td>271</td>
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<tr>
<td>1985:</td>
<td>163</td>
<td>220</td>
<td>202</td>
<td>232</td>
</tr>
<tr>
<td>1986:</td>
<td>151</td>
<td>232</td>
<td>181</td>
<td>274</td>
</tr>
</tbody>
</table>

Note: Enrolment figures include kindergarten through to grade 6. Enrolment increases circa 1983-1984 are attributed to the Ottawa Roman Catholic Separate School Board's closing ten of its primary schools due to declining enrolments. Routier primary school became coeducational in 1970. It is the only primary school serving the Lowertown West area. The school serves the French community and is therefore indicative of the neighbourhood's ability to attract and maintain a francophone family oriented population. While CT101 has no primary schools located within its boundaries, the tract does contribute to half of both Baribeau and Glaude's, French primary schools, enrolments as well as to a quarter of Assumption's, Vanier's only English separate school, enrolments.

Cautionary Note: While primary school enrolments proved to be adequate measures of both Lowertown West and CT101's fertility rates, upon consultation with the Ottawa Separate School Board, it was determined that School Board policy can inevitably bias similar sources. Certain School Boards permit cross-boundary transfer of students for various reasons. As well, limited resources e.g. a limited number of French primary schools within a Board can also result in large enrolment shifts. This source is further biased at the secondary level as adolescents are more mobile.

Source: Mrs. Pauline Brecher, Ottawa Roman Catholic Separate Board of Education. (December 23, 1987)
Routier's declining enrolments reflect Lowertown West's inability to create a family environment capable of attracting family households through NIP. The census tract's decline in family status is also reflected through a decreasing family household size down from 3.4 persons with 1.5 children in 1971 to 2.7 persons with .9 children per family in 1981. CT101's three primary schools, Baribeau, Glaude and Assumption, to which it contributed \( \frac{1}{4}, \frac{1}{4} \) and \( \frac{1}{2} \) of their enrolments respectively, also showed declining enrolments between 1970 and 1986. CT101 also experienced a decline in average family size from 3.2 persons with 1.3 children in 1971 to 2.7 persons with .9 children in 1981. This compares with national trends of having smaller families which are in part due to the postponing of marriage and the use of contraceptives. This has resulted in a national decline in fertility rates. In Wilk's words "from almost four births per woman at the height of the postwar baby boom, the fertility rate has fallen to an all time low of 1.7 births. Couples now tend to have children later in life and more may forego parenting altogether".\(^{17}\) Therefore, national fertility trends have equally hampered NIP's success in promoting a family environment in Ottawa's Lowertown West.

3.6 NIP's Social Impact on Ottawa's Lowertown West: Summary and Conclusions

This research has established that Lowertown West has experienced a great deal more gentrification, in relation to the process' social impact, than its control CT101, over the 1971-1981 census period. In review, Lowertown West in contrast to CT101 lost considerably more population, 28.0 to 3.2% respectively, which was also reflected through its census tract's (CT55's) loss of 20% of its

French speaking population. This population was principally replaced by incoming English speaking residents. During this period, CT101 managed to maintain a consistent 56% share of the tract's total French population. Gentrification was principally stimulated in Lowertown West by an influx of younger, 25-34 age group, one and two person households. CT101 made gains in this group and the over 45 age groups. This influx did not drastically alter Lowertown West's tenure patterns with regard to the percentage of owned and rented stocks. It did however result in a 17% increase of owner occupied units and an almost equal decline (18%) in rented units for CT101. Both Lowertown West (CT55) and 101 gained 210 and 410 units respectively between 1971 and 1981 to accommodate new (mostly non-family) household growth. This influx had little impact on both tracts' marital status as it actually increased their married populations. These incoming populations were more educated as is evident by their increasing Lowertown West (CT55) and CT101's post secondary percentage scores by 44 and 32% respectively. While median household income figures did not reflect the impact of these pre-professionals at the census tract level their career pursuits did. Median household income for both tracts declined between 1971 and 1981 in comparison to City median household income levels. Between 1971 and 1981 Lowertown West (CT55) gained in all higher ranking occupational classifications while losing a substantial portion of its labour classified workforce. CT101, in comparison, gained in administrative and professional categories, and managed to retain most of its clerical and labour occupied population with only slight declines in percentage figures. These were recalibrated by increases in higher status professions. This influx of young professionals was to the detriment of Lowertown West's family environment as it lost 100 families over the 1971-1981 census period. CT101 referred to as a more affordable area, received 35 additional families over this same period. Lowertown
West's loss of 28% of its less than grade nine educated population and 25.5% of its labour classified workforce, contributed little to the area's family environment. Lowertown West (CT55) did receive 25 additional low income families between 1971 and 1981. This, coupled with a decreasing number of family households, served to increase their percentage from 26% (125) to 45% (150) of Lowertown West's total number of family households. CT101 also experienced an increase in lower income family households representing 15% (130) of the tract's total number of family households in 1971 to 31% (275) in 1981. With the addition of new units to both census tracts' housing stocks displacement has occurred. This statement is supported by Lowertown West's having experienced a 53% increase in housing stock classified as being in good condition. As well, Peter Barnard Associates et al (1984, p 2.9) also quoted a City report stating that 32% of the rental RRAP rehabilitations led to displacement after rehabilitation.

Thus, the above and national trends of delaying marriage and postponing family formation equally served to counter MP's impact of producing a family environment. This is also evident by the declining enrolment levels experienced by both Lowertown West and CT101's primary schools. Nonetheless, CT101's ability to maintain its incumbent French, low to moderate income family population might be explained by or attributed to its location, as in 1971 it was similar to Lowertown West in every other social aspect. CT101's less central location, or lower level of accessibility, exposed it to fewer redevelopment and rehabilitation pressures. This resulted in fewer displacements and hence explains CT101's ability to maintain its francophone population and attract 35 additional family households. This latter instance might be attributed to a number of displaced Lowertown households reestablishing themselves in Vanier and thus, in part, contributing to CT101's present situation.
In conclusion, Lowertown West's central location made it a more popular site for gentrification activities than did CT101's. As well, under the adopted controlled research design, this research could hardly assume that had Lowertown West not received NIP assistance it would have evolved in a manner similar to CT101. Despite its central location, NIP, RRAP and their associated program instruments (e.g. zoning), did serve to improve the neighbourhood's (Lowertown West) housing conditions and realize objective four's goal to promote other forms of rehabilitation. But what of the program's impact on the area's attractiveness as a living environment? Provided below is a review of NIP program objectives 2 and 3 which will be operationalized via a controlled property value study. This study will serve to assess neighbourhood gains made in terms of Lowertown West's attractiveness as a living environment. This study will also allow for a conclusive assessment of NIP's long term impact on the neighbourhood with regard to its ability to enhance Lowertown West's living environment while maintaining the neighbourhood's incumbent population.

3.7 NIP: An Assessment of Program Inputs and Impacts on Lowertown West's Property Values Between 1975 and 1980

'A property is an integral part of its neighborhood. It cannot be treated as an entity separate or apart from its environment. And its environment is the result of the interplay of a multiplicity of economic, social and civic forces. The value of real property is not intrinsic. It does not reside exclusively in the physical characteristics of the property but flows into the property from the enironing forces.' (Kuchnle, K.R. 1964, p 84)

Property values are derived from the surrounding environment and can serve to assess a program(s)' impact on a targeted area. Within the above stated context, a property value study of a controlled research design would serve to assess NIP (and RRAP)'s impact on the Lowertown West NIP area's property values.
This impact (reflected in increased property values) would potentially take the form of an enhanced living environment which benefited the area's low to moderate income population. A controlled study of NIP's impacts on Lowertown West's property values as reflected through provincially assessed 1975 and 1980 residential property values in provided below. The assessed property values, within a social indicator context, serve to operationalize NIP's specific program objectives 2 and 3. As program outputs, stimulated by implemented NIP projects and RRAP sponsored area rehabilitations, property values serve as surrogates of the neighbourhood's gains or losses in terms of its desirability and attractiveness as a living environment.

Objectives 2 and 3 sought 'to improve and maintain the quality of the physical environment of the neighbourhood' and 'to improve the amenities of neighbourhoods'.

**Specific Objective 2:**

To improve and maintain the quality of the physical environment of the neighbourhood.

**Guidelines:**

(a) To clear land which is being put to uses detrimental to a residential neighbourhood.

(b) To provide for the selective clearance of land for low and medium density social housing.

(c) To improve and or provide municipal works and services and public utilities in the neighbourhood.

(d) To promote the physical improvement of commercial enterprises.

(e) To ensure the adoption and enforcement of local occupancy and building maintenance standards.

(f) To assist in stabilizing the neighbourhood in terms of residential land use and densities.
Specific Objective 3:

To improve the amenities of neighbourhoods.

Guidelines:

(a) To provide or improve neighbourhood recreational facilities.
(b) To provide or improve neighbourhood social facilities.
(c) To acquire and clear land which is to be used as public open-space or social and recreational facilities.

Both objectives reflect NIP initiatives (program inputs) to improve the neighbourhood's environment. While their guidelines are of limited assessment potential, their impact on Lowertown West's property values are beneficial. NIP's improvement and creation of amenities and its subsequent promotion of neighbourhood confidence could be assessed through increases or decreases in the neighbourhood's property values.

Theoretically, "property values are influenced by housing quality, which in turn is influenced by the physical condition of the building and yards and amenities included in the house". (MacKnight, H.A. 1980, p 7) To this Pyncoos,

18 Many of objectives 2 and 3's set guidelines are reflected in selected Lowertown West NIP improvement projects listed in Appendix A. Historical residential zoning designations, implemented through amendments made to the neighbourhood's official plan in February of 1976, appear to have had an impact on the neighbourhood's housing conditions. Information confidentiality however prevented this research's ability to determine whether RRAP rehabilitated units had been maintained. Nonetheless, the significant improvement made by the neighbourhood's housing stock between 1974 and 1981, coupled with the fact that the City of Ottawa had adopted RRAP's prescribed Maintenance and Occupancy By-Laws does provide some indication that dwellings rehabilitated under RRAP have remained in a good state of repair. The area's RRAP delivery agent also collaborated this fact. (Marcel Cole, private interview conducted on June 4, 1986.)
Schafer and Hartman generally add that:

"It is more accurate to think of housing as a bundle of attributes, such as: square feet of living space, number of rooms, structure type (single-family detached, town houses, garden-style apartments, multifamily apartment buildings), accessibility to various activities (employment, recreation, shopping), the quality and quantity of various public and quasi-public services (schools, police, garbage collection, fire protection), type of neighbors (class, life-style, race, education) and neighborhood environment and design." (Michelos, A.C. 1981, Vol. 4, p 250)

The above choices and considerations encompassed in buying a housing unit in a particular locality or neighbourhood, are further organized by Hughes, into packages of attributes:

"Housing" ... it can argued ..." is really a bundle of three packages - a shelter package, consisting of the physical structure alone, a utility package, including access to such services as police and fire protection, recreation and health and social services, and a social package, determined by the quality of the neighbourhood environment." (MacKnight, H.A. 1980, p 7)

The cumulative decisions of individual households and a neighbourhood's varying ability to furnish these three packages will inevitably determine its marketability as a potential living environment. Property values could therefore adequately encompass the variety of market choices and those considerations, enhanced through NIP's projects, which have carried a beneficial impact on Lowertown West's property values. This research therefore hypothesizes that:

H₁ - A positive relationship exists between NIP's implementation in Ottawa's Lowertown West and increased assessed property values over the 1975-1980 provincial assessment periods.

The research design was limited to determining the average change in property values experienced by the neighbourhood over the (1975-1980) portion of the program period. This was preferable to studying those changes experienced by specific properties which were rehabilitated under RRAP, for the following
reasons.\(^\text{19}\)

1. The NIP projects were distributed throughout the NIP area as were the RRAP loans.

2. This circumstance makes it difficult to determine conclusively if an increase in property value was solely attributed to dwelling rehabilitations financed under RRAP and/or NIP projects undertaken in the area.

3. RRAP loan confidentiality stipulations prevented the conclusive determination of any specific property value increases being directly attributed to the program.

The peg years of 1975 and 1980 were selected as study parameters for reasons of date and availability (discussed below) and study significance. The previous social study has shown that Lowertown West is undergoing gentrification. This process is often accompanied by inflated property values which might inhibit the conclusiveness of research findings. A study based on 1986 property values and their availability would have been conclusively limited to proving Lowertown West's temporal market attractiveness over another's.

3.8 Lowertown West's Property Control: A Review of Selection Procedures

The control area for the Lowertown West property study was derived from a cluster analysis procedure. This procedure simply determined the shortest distance between the five factors extracted from a standardized matrix of 1971 census variables for CT55\(^\text{20}\) and those equally drawn for all 67 1971 Ottawa-Vanier census tracts.

\(^{19}\)The above stated research restrictions were drawn and paraphrased from Heather Anne MacKnight's (1980) study of The Effect of the Neighbourhood Improvement Program (NIP) on Residential Property Values in the Kingston 'North End', p 8.

\(^{20}\)Census tract 55 provides only a partial coverage of the Lowertown West NIP area. While CT55 in addition to three enumeration areas did provide total NIP area coverage in 1971, variables selected for the factor analysis, such as median property value did not readily allow for compilation procedures. This should not disregard the fact that 1975 and 1980 provincially assessed property values for the whole Lowertown West NIP area were applied in the later stages of the research.
five factors were extracted from the varimax rotation data matrix using .05 as a minimum percentage of variance. The matrix comprised eleven 1971 census variables, selected for their relevance towards describing the general physical and economical characteristics of each tract's housing stock. These variables included single detached (SINGDET), single attached (SINGATTI) and apartments (APTMENTS) stock classifications. Median value (MDVALUE)\textsuperscript{21} and average monthly rent (AVERENT) reflected the stock's 1971 marketability or desirability. Median length of occupancy (MDOCC) served as an indicator of the market's stability with respect to its suitability as a living environment. Mortgages (MORTGAGE) coupled with (PRE1946) and (POST1960) periods of construction indicated tenure and reinvestment patterns within the neighbourhood. The owner to renter ratio (OWRENRO) reflected the neighbourhood's (census tract) stability in terms of tenure. The density variable (DENSQKIL) represented the number of units per square kilometer. This variable served to distinguish areas (census tracts) with comparable densities as well as tracts encompassing stocks of similar design, composition, height, lot size, spacing setbacks, etc.

The varimax rotation factor analysis, under the clustering procedure, served primarily to regroup the eleven variables under a collapsed matrix format encompassing five extracted factors. While the interpretation of these factors is not crucial to the cluster procedure, an analysis of each factor should aid in understanding the rationale and interpretability of the results (see Figure 3).

The first extracted factor explained approximately 23\% of the total variance. It describes an older high density neighbourhood. The factor had high loadings on APTMENTS (.84341) PRE1946 (.89071) and DENSQKIL (.89193). The second factor equally explained approximately 23\% of the total variance. It describes a

\textsuperscript{21}The 1971 Ottawa-Hull Census Tract Bulletin defines median value as: ... 'value' ... related ... 'to single, detached owner occupied non farm dwellings only. The dwelling value is based on the amount expected, if the dwelling were to be sold to a willing buyer'. (Statistics Canada, July 1974)
ROTATION METHOD: VARIMAX

ROTATED FACTOR PATTERN

<table>
<thead>
<tr>
<th></th>
<th>FACTOR1</th>
<th>FACTOR2</th>
<th>FACTOR3</th>
<th>FACTOR4</th>
<th>FACTOR5</th>
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</thead>
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<tr>
<td>MDCC</td>
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<tr>
<td>POST1960</td>
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<td>0.93070</td>
<td>0.11270</td>
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<tr>
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<td>-0.05620</td>
</tr>
</tbody>
</table>

VARIANCE EXPLAINED BY EACH FACTOR

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<tr>
<th>FACTOR1</th>
<th>FACTOR2</th>
<th>FACTOR3</th>
<th>FACTOR4</th>
<th>FACTOR5</th>
</tr>
</thead>
<tbody>
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<td>2.530793</td>
<td>2.520991</td>
<td>1.750545</td>
<td>1.738317</td>
<td>1.161547</td>
</tr>
</tbody>
</table>

FINAL COMMUNALITY ESTIMATES: TOTAL = 9.710193

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<th>SINGDET</th>
<th>SINGATT</th>
<th>APARTMENTS</th>
<th>MDVALUE</th>
<th>AVERAGE</th>
<th>MDCC</th>
<th>PRE1946</th>
<th>POST1960</th>
<th>MORTGAGE</th>
<th>Ondernro</th>
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<td>0.913055</td>
<td>0.878118</td>
<td>0.793289</td>
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<td>0.742525</td>
<td>0.870117</td>
</tr>
</tbody>
</table>

FIGURE 3
stable residential market which is largely made up of single detached units (SINGDET = .87189) accompanied by high loadings on median length of occupancy (MDOCC = .86166) and Mortgage (.74853). The third factor accounted for approximately 16% of total variance. It loaded highly on median property value (MDVALUE = .91027) and to a lesser extent on average monthly rent (AVERENT = .65040). The fourth factor accounted for approximately 16% of the total variance. It loaded highly on POST1960 (.93070). The fifth factor accounted for approximately 11% of the total variance. It loaded highly on single attached dwellings (SINGATT = .96883).

3.9 The Cluster Analysis Procedure

The cluster analysis procedure determined which census tract was most similar to the NIP area (census tract 55's) with regard to the above defined factors. Each of the 67 census tracts' five factors were summed and each sum was subtracted from CT55's (-3.0941). This procedure provided a distance variable, by which each census tract might be assessed, in terms of its 1971 housing stock's comparability to CT55's. The cluster procedure, by which other census tracts were ranked according to the proximity to CT55 in either positive or negative standard units, left CT55 with a base score of zero (see Appendix D). Each potential control area (census tract) was then scrutinized as the cluster procedure had only encompassed a limited number of housing stock characteristics. Other factors such as accessibility, stock densities and composition as well as architectural styles were also recognized as key considerations in selecting an appropriate property value control for study.
CT50 had the shortest distance between itself and CT55. It had a distance of .0457 standard units. Unfortunately CT50's location, being the site of the University of Ottawa, prohibited its further consideration as a control to Lowertown West. Both CT102 and CT54 almost tied for the second smallest calculated distance with scores of -.2307 and -.2385 standard units respectively. In view of their similar distance scores, CT54 was chosen over CT102 for reasons of accessibility (see Map F). Accessibility, as was seen in the previous study is a critical determinant of the program's impact. The above social impact study had identified accessibility as a key consideration of neighbourhood transition and stability vis à vis development pressures. Such considerations are primary to any satisfactory property value study. Thus, CT54's strengths lay in its sharing a common census tract boundary - "St. Patrick Street" with CT55. Both tracts were characterized by a similar French Canadian architectural style which attests to their similar periods of development. This also ideally subjected them to similar redevelopment pressures and extraneous influences stemming from the Urban Renewal Program which was implemented in the neighbouring Lowertown East community during the early 1970s.22 These factors and those of CT54 and CT55's similar stock densities of 1212.77 and 1269.23 units per square kilometer respectively, made CT54 the superior control.23

The only major notable difference between Lowertown West and CT54, aside from the MIP projects implemented in the area, was that of Historical Residential

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22Dickson, L. and Oberlander, J., "Influences: The French-Canadian Impact Reflects Ottawa's Early Years", The Ottawa Citizen, Saturday, November 1, 1986, p D1.

23Despite the fact that census tract data was used to identify CT55 (Lowertown West's) control, the adopted data source - 1975 and 1980 provincial market value assessment base years for residential properties permitted full areal coverage beyond the census tract's boundaries of Lowertown West and its control (hereafter referred to as CT54).
zoning designations, implemented through amendments made to Lowertown West's neighborhood plan in February of 1976 (By-Laws, 1976, pp 443-446). These designations placed a height restriction of 35 feet on all new construction. In addition, high density development was restricted to the neighbourhood's periphery so as to not threaten the community's stability. Prior to this, the Lowertown West NIP area had been zoned mainly R6-R7 (medium and high density apartment) and commercial. CT54 was and had remained largely zoned for residential office and commercial land uses until 1985. In that year the north eastern portion of the tract's (along St. Patrick Street) zoning was amended from R7 (2.0) to Central Area Historical under By-Law Number 65-85. Other zoning amendments made under By-Law Number 22-85 served to organize an array of zoning classifications under the general headings of Central Area Historical, R5-X, Residential Office and Commercial (C2-X) land uses. (See Appendix E)

Within the scope of this research, the 1985 zoning amendments had little impact on CT54's property values as transactions were drawn for the years 1975 and 1980. These amendments also had a limited impact on provincially assessed property values, discussed below, as 1975 and 1980 equally constituted the base years for provincial-residential property assessments.

3.10 Provincial Property Assessments and Market Transactions: A Study of Data Comparability

An initial sample of property transactions was drawn from data compiled on TEELA Reality Sales cards for the years 1972 and 1979. These two years represented one full year prior to the announcement of NIP and its national introduction in 1973 and one full year after the program's termination or sunset date, 1978, after which no further applications for loan commitments were accepted. The sample yielded only three and nine transactions for CT54 for 1972 and 1979 respectively and 15 and 14 transactions for CT55. This limited number of
observations prevented any findings of significance, therefore another sample was drawn from the same source for 1975 and 1980. A number of factors rationalized the choice of these years. The choice was based on the fact that both 1975 and 1980 were provincial assessment base years, an important consideration under the above circumstances. The two assessment years were also well placed since many of the program's projects - streetlighting, street and landscaping, the Rudolph Brunet Park and the Armand Pagé Community Centre had been completed prior to 1980. Nonetheless, a sample of 1975-1980 TEELA property transactions for the combined CT55 and CT54 area yielded only 17 and 14 acceptable transactions respectively.

In view of the equally limited number of observations for 1975 and 1980, which also prevented any findings of significance, provincially assessed property values were adopted as a data base. This decision was based on the fact that, The Ontario Assessment Act states: "The market value of land assessed is the amount that the land might be expected to realize if sold in the open market by a willing seller and willing buyer." (R.S.O., 1970, Sc. 27(2)) To this, Finnis (1979, p 76) equally adds that: "Assessments have been prepared at 'market' value, based on 1975 values, on the premise that market value is the amount that the land might be expected to realize if sold in the open market by a willing seller to a willing buyer."
The 1975 provincial assessment was the first full assessment undertaken by the Province of Ontario in approximately 35 years. Prior to 1969, assessments were undertaken by federal authorities and in 1979 the 1975 provincial assessments had not been implemented; a situation which resulted in many properties still being assessed at 1940 value levels. (Finnis, F.H. 1979, p 3, 37) If one also considers that the market value of all property should be determined through the application of uniform principles and that the provinces demand that assessments be carried out through guidelines prescribed in mandatory provincially prepared manuals, a standardized procedure of assessment is potentially achievable. This uniformity is crucial as: "The result of an assessment determines which properties will provide the base for local tax levies and the share of taxation that each property owner will bear. Accordingly the purpose of assessment must be to provide an equitable means of valuing property so that the property tax may be levied and distributed as evenly as possible." (Finnis, F.H. 1979, page 1) The Lowertown West area underwent total assessments in 1975 and 1980 using a similar methodology. Assessors scrutinized property transactions, building permits and carried out site inspections to determine the area's and the City's market values for both assessment years. Provincial property assessments are theoretically compatible indicators of a property's market value, when conducted by an unbiased third party. This research will, having ascertained the above, now assess this source's merit as a surrogate to Lowertown West's 1975 and 1980 market transactions (property sales) through a number of regression procedures designed to test the following null hypothesis:

\[ H_0: \text{There is no significant difference between independently (provincially)} \]

\[ \text{assessed property values and market determined housing prices.} \]
Sixteen 1975 and fourteen 1980 residential unit transactions, encompassed in both the Lowertown West NIP and control areas, were correlated with their 1975 and 1980 assessed market values. The analysis used SAS' (Statistical Analysis System) programs of procedure correlation and of general linear model to determine their comparability. The regression procedure found both price (1975 property transactions) and 1975 assessed property values (N=16) to be highly correlated with an r value of .91403, with assessed values accounting for .835452 (R²) of the variance found in price. The same procedure was then repeated using 1980 property sales (N=14) and their 1980 assessed values. The regression procedure established that both variables correlated moderately with an r value of .66400. Both the 1975 and 1980 correlations' confidence levels of .0001 and .0096 justified the further consideration of provincial residential property assessments as surrogates of Lowertown West's 1975 and 1980 residential property values.

Another regression analysis was undertaken using a larger sample of 1975 and 1980 property transactions and assessed values. These transactions were randomly selected from a list of 1975 and 1980 property transactions compiled for the Ottawa housing market.27 The sample encompassed inner city residential property transactions which were later compared with their assessed values. Ninety-six properties, which had retained their residential unit (R.U.) status as listed in the 1986 assessment roles (assessed at 1975 market base year prices), were included in the sample. Both housing prices and assessed values were found to be notably correlated with an r value of .80715 of which assessed values explained .651494% (R²) of price's total variance. The correlation also had a

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Teela Market Surveys, Regional Municipality of Ottawa-Carleton Annual 1980 (Volumes 82-93) Toronto, Canada.
significance level of .0001. While these results were significant, a collapsed sample – obtained through the deletion of 16 atypical observations – resulted in a more significant correlation of .93066 (N=80). The correlation had a significance level of .0001 of which .866136% of price's variance was explained by assessed values.

A sample of 104, 1980 property transactions was equally scrutinized for residential unit (R.U.) classification status as listed in the 1987 Municipal Assessment Roles (assessed at 1980 market base year prices). Both housing prices and assessed values were found to be notably correlated with an r value of .74164 and a confidence interval of .0001. Assessed property values also served to explain .550025% (R²) of price's variance. A revised sample (N=89), produced by deleting 15 atypical (see footnote 28) observations, provided a more notable correlation of .87584. It was equally supported by a confidence interval of .0001 with assessed values explaining .767097% (R²) of the variance found in housing prices.

While this correlation and that of 1980 assessed property values for the Lowertown West area might not be as significant as those using 1975 data, one must recall that the City of Ottawa had only recently implemented (February 1987) the 1980 market base year for municipal property tax purposes. Despite the triteness of this statement, it should be noted that the 1975 market base year had been in place and subject to public scrutiny for the past seven years. This space of time

28 The atypicalness of these 16 observations can be attributed to a number of discriminatory practices and anomalies within the market. These practices may be tied to speculation. Speculation encompasses multiple transactions involving unprecedented property value gains over a short period of time. Transactions of mutual love and affection, involving nominal transactions between family and friends, and chattels also constitute market anomalies. Chattels are items of tangible personal property that are sold and included as part of the transaction price. Market anomalies can also result from a buyer's assuming a lower than current market rate mortgage by his/her paying a higher price in exchange for a lower rate of interest. (MacKnight, H.A. 1980, pp 31-32)
had allowed the 1975 market base year to become more reflective of 1975 market values through the considerable revisions made through appeals and civil actions. In view of the relative rewness of the data and its resultant weaker correlation for the 1980 Lowertown West sample this research would have to accept the null hypothesis. Therefore no significant difference exists between 1975 and 1980 provincially assessed residential property values and 1975 and 1980 residential property transactions. This statement is based on the significant correlation observed between Lowertown West's 1975 assessed property values and housing prices. The City's 1975 and 1980 correlations for the above variables support this statement.

3.11 Lowertown West: A Study of Changing Property Values Between 1975 and 1980

'Residential neighbourhoods assume many of the characteristics of the individuals who live in them'.
(Kuchnle, K.R. 1964, p 85)

.... 'Real estate activities mirror sociological changes.'
(Pearson, K.G., 1973, p 12)

The next step in this research involved the compilation of 1975 and 1980 assessed property values for both Lowertown West and its control. This allowed for the scrutinization of the variables of frontage, depth and area's impact on both the NIP and its control's provincially assessed property values in real and constant (1975) dollars.

Three hundred and forty-four observations for the Lowertown West NIP area and seventy-five observations its control area were drawn from the City of Ottawa's 1986 municipal assessment roles. These properties were assessed at 1975

29 It should be noted that the 1975 and 1980 Lowertown West samples were not large enough to support any findings of significance.
market values (the 1975 market value base year). Both samples encompassed low to medium density, single detached, duplex, triplex, two and three unit row housing. These observations were all zoned residential units (RU) according to the 1986 assessment rolls. An on site inspection determined whether the properties fell within the above stated housing categories. This was necessary as the purpose of this research was to determine NIP's impact on residential property values. Under this definition this research stipulated that all properties should be potentially purchasable and affordable by an individual private household. Thus, demolished units, low rise apartments and row housing, in excess of three units (except where subdivided into single units - as stated in their legal description) were deleted. Newer dwellings, built after 1975, were also deleted as discounted assessments were not considered to be reflective of 1975 assessed property values. The above sample was then compared with their subsequent 1980 assessed property values.

Provided below is a general analysis of frontage, depth and area's impact on both Ottawa's Lowertown West NIP area and its control's 1975 and 1980 assessed property values. Each of the above variables (frontage, depth and area) was correlated with both 1975 and 1980 provincially assessed property values for both areas. These correlations served to test the null hypothesis that: "The variables of frontage, depth and area had no influence on Lowertown West or its control's 1975 or 1980 assessed property values". (See Table 9.)

Generally, a notable relationship exists between frontage and both areas' 1975 and 1980 assessed values. This was evident in the case of the control's 1975 and 1980 correlations, which were more notable than Lowertown West's 1975 and 1980 correlations respectively. The general correlation between assessed property values and frontage could be explained by the data source's constitution. That is, the procedures used by provincial assessors to assess Ontario residential properties. If one considers that, in Ian Mac F. Rogers' (1977, p 82) words that:
Table 9

<table>
<thead>
<tr>
<th>NIP AREA</th>
<th>Control Area</th>
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<tbody>
<tr>
<td></td>
<td>r 1975</td>
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<tr>
<td></td>
<td>R^2</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Market Value – Versus Frontage</td>
<td>0.38818</td>
</tr>
<tr>
<td></td>
<td>0.0001</td>
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<tr>
<td></td>
<td>0.150680</td>
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<td></td>
<td>334</td>
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<tr>
<td></td>
<td>337</td>
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<tr>
<td>Market Value – Versus Depth</td>
<td>0.04270</td>
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<tr>
<td></td>
<td>0.4347</td>
</tr>
<tr>
<td></td>
<td>0.001823</td>
</tr>
<tr>
<td></td>
<td>337</td>
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<tr>
<td>Market Value – Versus Area</td>
<td>0.36682</td>
</tr>
<tr>
<td></td>
<td>0.0001</td>
</tr>
<tr>
<td></td>
<td>0.134556</td>
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<tr>
<td></td>
<td>337</td>
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<td>337</td>
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<tr>
<td></td>
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<tr>
<td>Market Value – Versus Frontage</td>
<td>0.30685</td>
</tr>
<tr>
<td></td>
<td>0.0001</td>
</tr>
<tr>
<td></td>
<td>0.094154</td>
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<tr>
<td></td>
<td>341</td>
</tr>
<tr>
<td></td>
<td>334</td>
</tr>
<tr>
<td>Market Value – Versus Depth</td>
<td>-0.02280</td>
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<tr>
<td></td>
<td>0.6780</td>
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<tr>
<td></td>
<td>0.000520</td>
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<td></td>
<td>334</td>
</tr>
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<td></td>
<td>337</td>
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<tr>
<td>Market Value – Versus Area</td>
<td>0.26219</td>
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<tr>
<td></td>
<td>0.0001</td>
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<td></td>
<td>0.068743</td>
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<td></td>
<td>334</td>
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</tr>
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</table>
"In the case of real property" ... (assessment) ...., "a uniform rate is levied according to its value or according to the linear measurement of its frontage as in the case of local improvement charges"; it is understandable that frontage might potentially correlate with assessed property values. Thus municipal improvements, as is evident by the correlations, had been effected in both areas. The notable difference in the significance of these correlations (for the Lowertown West NIP area and the control in both 1975 and 1980) might be attributed to the fact the Lowertown West NIP neighbourhood encompassed a far greater area than its control. It would explain Lowertown West's lower correlation for frontage and assessed property values, as municipal repair costs - to recipient blocks and other associated areal concentrations - could potentially be offset. The end result would be a weakened correlation by the lower or non-existent municipal repair costs attributed to the area's remaining blocks. This argument is also supported by the fact that Lowertown West's median value for property frontage was 29.06 feet. It is approximately 1.83 feet longer than the median score for its control. In both cases the frontage and assessed property value correlations did decrease over the 1975 and 1980 assessment periods. The correlations were down from .38818 to .30685 and from .45715 to .37063 for the NIP and the control area respectively. The decline in correlations is probably due to the combined effect of the City's implementing the 1980 market base year, which increased the tax base, as well as the amortization of municipal debts incurred by the blocks having received municipal improvements. While the variable of depth recorded no notable correlations of significance with assessed property values, the area variable did. This was most evident in the control's correlations between 1975 and 1980 assessed property values and area respectively. Each correlation was more notable than those registered for 1975 and 1980 assessed
property values and frontage respectively. The foregoing statement could be attributed in part to area's constituent variable - frontage. Frontage correlated significantly with both the NIP and control areas' 1975 and 1980 area variable with scores of .82948 and .84243 respectively. Both correlations were equally supported by confidence intervals of .0001. These correlations represented frontage's explaining .688033 and .709689% of the variance found in the NIP area and the control's area variable respectively.

Combined both frontage and area explained .157666 and .097240% of the variance found in the NIP area's 1975 and 1980 provincially assessed property values. Frontage and area also accounted for .230622 and .155149% of the variance found in the control area's 1975 and 1980 assessed values respectively. Despite the significance of all four statistics being that of .0001, this research will take the position that provincial property assessments are an acceptable surrogate of (housing) market prices. This research, while supporting the above statement, can hardly accept the null hypothesis that the variables of frontage and area had no significant influence on assessed property values. The above position, relating to property assessments' acceptability as a surrogate of housing prices, is based on the strengths of both the 1975 and 1980 city-wide sample correlations. The variables of frontage and area which combined, explained at best only a minor proportion of the control area's 1975 assessed values also lend support to this argument.

Both Lowertown West and its control's median 1975 and 1980 assessed property values were drawn from the above data source. A comparison of property value changes - experienced by both areas between 1975 and 1980, was made and measured in current and constant 1975 dollars. (See Table 10.)
Table 10

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<tbody>
<tr>
<td>NIP</td>
<td>38296.35</td>
<td>45650.17</td>
<td>53044.91</td>
<td>14748.56</td>
<td>7353.82</td>
</tr>
<tr>
<td>Control</td>
<td>37308.01</td>
<td>43444.77</td>
<td>50482.26</td>
<td>13174.25</td>
<td>6136.76</td>
</tr>
</tbody>
</table>

The above constant 1975 dollar figures were obtained by the following discounting procedure. Both median 1980 assessed property values for the NIP and the control area were discounted to 1975 dollars by multiplying the medians by a factor of 92.6 (representing 1975 inflation costs where 1976 = 100). This figure was drawn from the February 1981 monthly bulletin of construction price statistics. The product was then divided by 107.6 (representing 1980 inflated costs) (shown below).

\[
\text{Discounted Market Value ($1975) = \frac{1980 \text{ Assessed Median Market Values} \times 92.6}{107.6}}
\]

The selection of The Construction Price Statistics Index for the discounting procedure was governed by the fact that it reflected the replacement cost of a structure over the 1975-1980 assessment period. The index was based on the composite cost of a single family structure and the land upon which it was built. The index strives to "measure changes in selling prices of new houses constructed by large and medium volume builders in metropolitan areas" (such as Ottawa-Hull). Since the above definition makes no reference to location, be it suburban, inner city or of an infill nature; the source was deemed acceptable for discounting procedures for both the NIP and control area.

Both areas' assessed property values have increased in value over the 1975-1980 assessment period. The Lowertown West NIP area increased more in current and constant dollars than its control. These gains are reflected by its gaining $1574.31 and $1217.06 more than its control over the 1975-1980 assessment period in current and constant dollars respectively. Therefore, in view of the fact that Lowertown West's control was selected on the strength of its similar housing market, locational and architectural characteristics this research would have to conclude that: The NIP area's increase in property values (attractiveness) over and above its control, as measured in current and constant dollars, can potentially be attributed to the neighbourhood's receiving NIP and RRAP assistance over the 1975-1980 period. The increases in property values made by the NIP area could attest to the area's housing market's having gained in attractiveness as a living environment as a result of NIP's implementation. In addition, if one considers that provincial assessors also take home improvements (building permits) into account when revising assessment roles, local improvements made on the part of Lowertown West, to the point of their surpassing those of the control should also be noted. In 1974, the Community Development Workshop found both areas' housing stocks to be in similar - critical condition. Over the intervening seven years, Lowertown West's housing stock improved to the point (96.6%) that it surpassed the control's improved conditions (88.2%) with 8.4% more of its units being considered in good condition (see page 46). Therefore, this figure should also prove indicative of Lowertown West's gains in attractiveness as a living/residential environment.31 While these enhanced conditions were potentially brought about by NIP and RRAP's promotion of confidence and stability

31 While these figures are notalbe, one should recall that the 1981 census tract boundaries did not provide total NIP or control area coverage. Despite this fact and that of CT54's boundaries extending south past Rideau Street, it should be noted that both census tracts provide a large sample of Lowertown West and the controls' stock conditions. As well in the latter case, the census tract (54) covers in part the only substantial concentration of residential units which is located south of St. Patrick Street.
in the area due to program projects, rehabilitations and zoning amendments; they (the improved neighbourhood conditions) also promoted further gentrification in the neighbourhood. In spite of the fact that this was not contrary to NIP's national program objective, it did prove to be a point of contention within the Lowertown West program context. Based on the above quantitative research, this research will tentatively conclude that:

1) While the implementation of NIP and RRAP's associated program projects and rehabilitations did serve to increase Lowertown West's attractiveness as a living environment, it did serve to promote further gentrification and subsequent displacement within the community. This, in turn, limited the program's benefits to the neighbourhood's low to moderate income population.

2) In view of the neighbourhood's aging incumbent population and the tendency of younger incoming couples to postpone marriage and family formation, NIP was unable to realize its objective to promote a family environment.

Although the above statements appear harsh - quantification without qualification would constitute a major assessment oversight of NIP's potential benefits to the area. The concluding chapter of this research will build on the above findings and provide greater context and insight through which a fuller subjective program might be ascertained to best assess NIP's impacts felt on a personal level.

Personal insights regarding NIP's success in realizing national and local (circa 1976) program objectives would be forthcoming from informed incumbent residents i.e. former NIP committee members, program coordinator and politicians (Aldermen). From this cross section, NIP's long-term impacts will optimally be assessed as they pertain to NIP's provision of benefits to the neighbourhood's general populus over the past eleven years.
4. MIP: A Subjective Assessment of the Lowertown West Program's Inputs and Long-term Quality of Life Outputs

The most enduring test of any program is to subject it to an examination of results against expectations. An examination of this nature is not always without its biases. These, as they pertain to this research, are found in its application of subjective social indicators to the task of operationalizing MIP's specific program objectives 5 and 6 (stated below).

Specific Objective 5:

To improve the neighbourhoods in a manner which meets the aspirations of neighbourhood residents and the community at large.

Guidelines:
(a) To secure the participation of neighbourhood residents in the planning and implementation of improvements.
(b) To ensure that adequate compensation and relocation expenses be paid to those persons dispossessed of accommodation.
(c) To ensure that alternate accommodations within the means of dispossessed persons be made available.

Specific Objective 6:

To deliver the program in an effective manner.

Guidelines:
(a) To establish a selection, planning and implementation process which is efficient and flexible.
(b) To plan and implement improvements within the terms of pre-determined allocation to a given neighbourhood.
(c) To provide a level of funding in each neighbourhood sufficient to ensure its viability as a residential area.
These two program objectives focused upon NIP's ability to 'improve the neighbourhoods in a manner which meets the aspirations of neighbourhood residents and the community at large' as well as to 'deliver the program in an effective manner'. Thus, their proper assessment naturally drew from oral sources - subjective social indicators. Subjective indicators by definition encompass the perception(s) one or many collectively attach(es) to an aspect of his/their environment or personal attribute(s) be it health education or other. They also provide a fundamental basis for the assessment of NIP's longterm impact(s) on the Lowertown West community from a quality of life perspective. While these indicators are organized around specific objectives 5 and 6 - certain clarifications must be made.

Despite its earlier assertion in Chapter one, this research and the ensuing assessment cannot accept the basic clarification that subjective indicators do not encompass the opinion's source, rationale, logic or constitution. Although these stipulations might well apply to a large sample concerning one's opinion regarding a market product's taste, colour, etc., they do not in this context.

The program's history is based on opinions articulated by key informants regarding the program's funding, projects and implementation as well as political and historical constraints. It represents/constitutes subjective social indicators which, to the best of the author's knowledge, reflect the reality of NIP's impact on Ottawa's Lowertown West. The oral sources were compiled from a host of quarters which included interviews with elected officials (Municipal Aldermen), the NIP program coordinator for Lowertown West and former NIP committee members. Their input was compared and scrutinized with respect to their role and involvement with the program. Where possible, their statements have been supported by other documentation to allow for the most accurate assessment
possible. The ensuing account was structured from a basic interview with asides made to allow for additional input provided from other sources. While this account might appear to be restricted to one source's comments, it should rather be taken as a compendium of quality of life responses.

The following subsections apply subjective social indicators to the task of operationalizing NIP's two remaining program objectives. The subjective indicators provide an oral compendium which serve to both clarify the Lowertown West program context circa 1976 and NIP's role in the community's evolution. This account contributes a human dimension to the statistical analysis and completes the process of informational feedback (see Figure 1, page 27).

4.1 A Statement of Lowertown West's Problem Context and NIP Stabilization Endeavours

Contrary to this research's original conception - the Neighbourhood Improvement Program did not provide the original stimulus for community organization in Lowertown West. The initial stimulus came from fears harboured by a group of concerned citizens who started to meet on a quarterly basis, circa 1973-1974, to discuss the survival of their neighbourhood. The group comprised a core four men who, while still in their early to mid thirties, had grown up in Lowertown West and had perceived urban renewal's threat to the community. This threat was justified as the group (and the Lowertown West community) had seen the expropriation of land north of Boteler St. during the early 1960s to make way for the MacDonald-Cartier bridge in 1962-1964 and the new External Affairs Building in 1972-1973. As well, prior to the City's enlarging the King Edward arterial from two to four lanes in 1975, Lowertown had known no areal (east-west) distinctions.

32 A list of key contacts is provided in Appendix F.

33 The original group consisted of Mr. Henri Mathieu, Mr. Roger Scott, Mr. Robert de Grandmont as well as Mr. J. Pierre Robert.
other than St. Anne's parish to the east of Rose Street and Notre Dame parish to the west. With the enlargement of the King Edward Boulevard, the Lowertown community was split in half. Prior to this and the implementing of the urban renewal project in Lowertown East in 1968 the whole of Lowertown had been considered a francophone urban village by its inhabitants. The area's residents, descendants (great-grandchildren) of the early By-Town inhabitants, knew everyone (families) on each side of them on the whole block (often ten houses down on each side). Despite the fact that the area's residents were for the most part poor - Lowertown had always maintained a mixed income due to the community's attractive flavour and a limited number of stately homes located on Wurtemburg and St. Patrick Streets. Lowertown was an organized social ecosystem. The village had everything anyone could want - everyone shopped in the market. The churches, Saint Anne and Notre Dame, provided services to the poor so that no one starved. La Société Saint-Vincent de Paul was also there to provide financial and moral support in times of unemployment and personal tragedy. Lowertown was an urban village with everything: "Everything was there, you didn't have to go past Rideau" ... this was true to the point that one respondent, George Bédard, also stated that with the Gauthier Funeral Home located on St. Patrick Street: "You didn't have to go out of Lowertown to die". This situation obviously suited many older residents. However their children were forced to leave Lowertown during the 1950s and 1960s to establish homes in Gatineau and Hull due to stock limitations brought on by their parents' resistance to leaving the area. Day to day interaction meant that even the greatest social recluse was guaranteed a funeral with 150 to 200 people in attendance.

At the time of the Urban Renewal Program in Lowertown East one longtime resident stated:

'You know, I haven't been out of Lower Town for three years. I can get everything I want here. We have the church and all its activities. We know everybody. It's like living in a small town. You hardly know the City is there.' (Gray, L. 1971 p 14)

These events and others were the stimulus for this group's realization that, although Lowertown West's stock was similar and in better condition than Lowertown East's, had it undergone urban renewal first the community would not have survived. Thus, the group began to meet (circa 1973) in an attempt to preserve their community from urban renewal. While the group initially had no real focus other than preserving the community - with the very least option centering on leaving Lowertown West as it was - they realized that organization was the key. They had observed the Sandy Hill community group's success as a planning body. This group later succeeded in halting the four lane expansion of King Edward Avenue at Rideau Street.

Initially, the group took the area west and east of King Edward and Sussex and north and south of Rideau and Boteler as their planning area. They soon came to realize that they had no business in the market. About this time (circa 1973) George Gédard, who had lost his 1972 bid for Alderman in By-St. George Ward - based on an anti-urban renewal platform, joined the group to help them fight urban
renewal in Lowertown West. Bédard won the next election in 1974 and through his efforts came upon the Neighbourhood Improvement and Residential Rehabilitation Assistance Programs as a means to allow the Lowertown West residents to preserve their community.

Therefore, while NIP was not the stimulus for community organization, it was most certainly an organizational focus through which Lowertown West residents could identify and potentially realize their goals. These goals, elaborated below, encompassed the creation of a family environment which was not necessarily francophone but rather family oriented. The creation of a family environment was promoted in the hope that the incoming families would become attached to the community. This nostalgically, would allow for the re-creation of a close knit residential community where everyone knew everyone. These objectives called for the physical improvement of Lowertown West to achieve this goal.

Projects were selected via a questionnaire sent out to the general population. It stated that the NIP Citizens Committee for Planning in Lowertown West had a budget of $1.3 million: so "Dream with us! How do you want to see your community develop?" From this solicited response, a shopping list of

35 George Bédard was the former chairman of the Sandy Hill Citizen Committee (The Ottawa Citizen, November 29, 1974, page 79). His 1972 Aldermanic platform emphasized "... citizen participation in government, saying urban renewal in Lowertown - where he was raised - created turmoil, uncertainty and a feeling of powerlessness among the residents" (ibid, Dec. 1, 1972, page 65). Bédard's 1974 win in By-St. George Ward, by a comfortable 200 vote margin over the incumbent Jules Morin, who had beaten him by 900 votes in 1972, represented in part a latent backlash on the part of Lowertown's residents against urban renewal's excesses (ibid, Dec. 3, 1974, page 22). This statement is based on the the fact that in the past (prior to the 1970's) - constituents left decision making to the Alderman (politician) and if they did not like what he was doing or had done, he was not re-elected. Therefore, in view of the fact that Jules Morin - a 30 year veteran alderman - was defeated, it was "... perhaps ..." in paraphrasing Bédard's words, due to the fact that "... people were ready for change" (ibid).

36 Mr. J. Pierre Robert, private interview conducted May 7, 1987.
projects was developed for implementation under the NIP program. The major emphasis of these projects centred on socio-recreational infrastructure. They focussed on principally creating and reequipping needed neighbourhood parks (see Appendix A) due to their relative ease of implementation. The Armand-Pagé Community Centre was also created through the conversion and renovation of a vacant fire hall. Other projects such as the traffic plan and the building of the Routier School Gym did prove frustrating to the planning committee as did the planning process initially.

NIP's initial reception had understandably been one of skepticism, as the Urban Renewal Program in Lowertown East had already left a negative impression with the neighbourhood's residents. In view of this the city planners were viewed, at least during the initial NIP planning stages, as intimidating by some committee members. This was particularly due to the historical circumstances specific to the Ottawa planning scene during the early 1970s.

Prior to NIP, the City had already established a planning process through neighbourhood plans established in the Pinecrest Queensway and Sandy Hill (Fall 1971) and Centertown (circa 1973) neighbourhoods. These neighbourhoods especially Sandy Hill - had neighbourhood committees made up of individuals with expertise in architecture, law, etc.. The group members were therefore more than capable of articulating their desires and of intimidating the City's planners - to secure their wishes. The NIP program fitted well into the City of Ottawa's planning process. The City saw NIP as a means to stabilize Lowertown West and

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37 References made to the discussion group - Lowertown West Residents' (Coordinating) Committee for Planning etc., are used interchangeably throughout the text. All refer to the same planning body which sought to improve the Lowertown West community's situation either through discussion, dialog, planning and programs such as NIP and RRAP. Changes made to the group's title serve to chronicle this body's evolution.
consolidate francophone services in Lowertown. NIP also represented a means for the City to do better by Lowertown West than it had under the Urban Renewal Program in Lowertown East. NIP also highlighted the City's political ambiguity in its efforts to preserve (rehabilitate) stocks without social clearing.\(^3\) Therefore under the contemporary (circa 1976) mode of reactionary planning—that encompassed responding (reacting to citizens demands)—the planning process proved intimidating. This feeling was shared, at least initially, by most committee members who were naturally apprehensive of City Hall and at times had difficulties articulating their wishes to the planners and consultants.\(^3\) Thus, in the end, one former NIP committee member stated that 'the planning process resulted in the planners suggesting little and imposing a great deal'. This was apparent during the initial program planning stages as the City simply appointed a consulting firm 'Murray and Murray' to the NIP planning process without consulting the residents' planning committee.

The planning process involved weekly meetings held between sub-committee members responsible for the provision of 1. Social Services and Recreation 2. Information and Public Relations 3. Circulation and Physical Environment and 4. Housing and Heritage. These committees reported to each other, the planners and consultants and the NIP Coordinating Committee at monthly meetings. The NIP Coordinating Committee or the Lowertown West Citizens' Committee for Planning in turn approached City Council for project funding approval under NIP.

\(^3\)The above discussion and comments regarding the City of Ottawa's planning scene were drawn from a private interview conducted with Mrs. Caroline Andrew (Associate Professor Political Science, University of Ottawa and former Lowertown West NIP Committee member) on April 16, 1987.

\(^3\)To many older Lowertown residents, who were francophone and felt isolated from the English (language) run City Hall and whose Aldermen they never called, increased access to City Hall or other government programs such as NIP or RRAP were almost inconceivable. Therefore for many older residents—who had always left the decision making to the politicians—whose local favour (support) was determined at the municipal polls, free ride programs (putting tax money to work for them) could only be viewed through longterm repercussions. These repercussions were viewed as NIP's being either or both an Urban Renewal Program and/or the cause of increased property taxes, etc.
These sub-committees formed a representative cross-section of the community's population. The committee members had either been approached to assure this end or were complemented by other interested residents who volunteered to participate in the NIP planning process. With time the residents became effective in combining their expertise with that of the consultants. The planning and implementation stages were accomplished without haste. Bédard had started meeting with the Lowertown West residents, with a NIP format (focus) in 1975 and in conjunction with Murray and Murray Architects and Planning Consultants produced the Lowertown Development Plan in 1976. They also produced the Neighbourhood Improvement Program: Redevelopment Plan Lowertown West in 1977 with the same consulting firm. The plan outlined the basic rationale of projects selected to be implemented under NIP. The planning stage took about six months and it took another six years to implement all specified NIP projects. The $250,000 Routier School Gym project was given the least priority as the Planning Committee encountered difficulties in securing the Ottawa Roman Catholic Separate School Board's approval of the project. The major point of contention was the traffic plan, which remains unresolved to this day.

The traffic plan proved to be a major problem as it never got past the trial stage. The plan's rationale was to allow residents with an easy means of exiting the community while sealing off the neighbourhood to outside or through fare traffic. The trial plan, implemented at a cost of $30,000 - $40,000, was implemented in November of 1978 with the City's closing a number of streets and its changing some one way streets into two way streets. While this action had a marked impact on the traffic flow, it also had an impact on the area's residents.

40 This representiveness also stemmed further as all NIP project proposals were subject to an open public vote prior to project submissions made to City Council for funding (Mr. J. Pierre Robert 7/5/87).

To some older residents who forever saw NIP as a form of urban renewal, the traffic plan was viewed as the first step of urban renewal similar to what had occurred in Lowertown East when the City had changed Old St. Patrick Street. While residents wanted to potentially reduce the flow of traffic, they could not understand why this should affect them. The outcome resulted in many residents feeling trapped in their neighbourhood. One source also pointed out that the residents liked to watch cars go by from their porches during the summer months, rather than spend time in their backyards. As well, the neighbourhood's streets were too narrow to accommodate two way arteries with snow banks during the winter months and this contributed to further traffic congestion. The end result of this trial, of which approximately 80% of the plan's changes remain intact, was Bédard's fighting an election over the traffic plan in 1978 and losing all political support in Lowertown West. (The Ottawa Citizen, Nov. 14, 1978 p 63)

4.2 An Assessment of NIP's Two Remaining Quality of Life Objectives

With the above background information, this research now finds itself in a position to assess NIP's specific objectives 5 and 6.

**Specific Objective 5:**

To improve the neighbourhoods in a manner which meets the aspirations of neighbourhood residents and the community at large.

Guidelines:

(a) To secure the participation of neighbourhood residents in the planning and implementation of improvements.

(b) To ensure that adequate compensation and relocation expenses be paid to those persons dispossessed of accommodation.

(c) To ensure that alternate accommodations within the means of dispossessed persons be made available.
NIP did succeed in improving the neighbourhood in a manner which met, if not exceed the aspirations of the neighbourhood residents and the community at large. This was principally due to the program's guidelines which required NIP's acceptance and input by/from the community prior to implementation. In Lowertown West — with its previous experience with federal housing programs such as the Urban Renewal Program — NIP had to sell itself. In the words of many respondents, they were very fortunate to have gotten NIP and RRAP when they did. Bédard had managed to convince City Council during the mid 1970s (circa 1975) to place a moratorium on urban renewal. He also revised all the zoning within his Ward (By-St.-George) in fulfilling his 1974 and 1976 elections promise. These zoning revisions called for the implementation of Historical Residential zoning in the Lowertown West Community — the first zoning of this type in Ontario. It placed height and setback restrictions on new developments in the area while channelling high density development to the neighbourhood's periphery. This action and that of NIP's projects being implemented did secure Lowertown West's urban morphology based on zoning restrictions supporting high density development without height.

With regard to guideline (a) NIP and the associated committee did prove to be very representative of the community. All decisions made regarding NIP project proposals were subject to residents' scrutiny and open votes at public meetings. Guidelines (b) and (c) are not applicable to the Lowertown West NIP program, as the NIP was not directly responsible for any displacement through the implementation of projects. However, the neighbourhood's subsequent gains in attractiveness brought about displacement. Lowertown West had been a prime site for white painting since the mid-1970s. This was due to new housing demands, the energy crisis and a host of other socio-economic factors. These combined with Lowertown West's being one of the City's last available inner city housing markets, made it attractive to white painters. Prior to this, such neighbourhoods
as the Glebe and Mechanicsville etc., had filled the demand. During the early 1980s, with the depletion of rehabilitable stocks in these neighbourhoods, speculators converged on Lowertown West - doubling the area's housing prices within a couple of years.\textsuperscript{42} This situation proved beneficial to some of the neighbourhood's older homeowners, especially those who were willing to sell and stood to gain through increased resale values\textsuperscript{43}. It also carried many repercussions such as displacement.

Many of Ottawa's inner city neighbourhoods had managed to maintain their populations through local employment opportunities during the 1950s and 1960s. In communities such as Lowertown West the Old General Hospital which closed in 1978, the Royal Canadian Mint and a host of private enterprises and services such as labourers, milkmen, vendors, etc., had comprised the mainstay of employment. The centralization of these services resulted in a decline in the neighbourhood's tenant population. As well, with ongoing gentrification it was conceivable (as related through one source) that an incoming owner household or small family of three could displace 11 roomers. This case multiplied by 50-100 instances (units) could well explain Lowertown West's loss of population (1329) between the 1971 and 1981 census periods. Unfortunately, public housing was not readily accepted by the Lowertown West community as a viable option to retain the neighbourhood's low income population. This was due to the substantial number of rent-to-income

\textsuperscript{42} The above statements were drawn from a private interview conducted with Mr. Marc Laviolette, Alderman for By-Rideau Ward, on May 8, 1987.

\textsuperscript{43} Mr. Bédard recounted that in some instances some people had used RRAP funds to effect repairs - i.e. installing a new washroom - which enhanced their homes resale value considerably. While this was not widespread, RRAP funds did (in contravention to the program's objectives) financial benefit certain homeowners. Some managed to realize a $3,000 return on a $1,000 investment in repairs, such as stated above, after repaying the RRAP loan and grant.
cooperative and public housing units already located in Lowertown East. Despite community opposition, the Cathcart-Bruyère St. City Living rent to income complex was built in 1982-1983. It provides low cost accommodation with priority given to Lowertown West residents, who wish to remain in Notre Dame parish. The complex, which accommodates 37 families and 34 units for seniors, was built on land acquired from the Grey Nuns with NIP funds. It represents a highly demanded resource which has allowed residents to remain in Notre-Dame parish. This obviously represents a considerable improvement over the scattering of Lowertown East families, throughout the City’s rent to income stock, which took place during the early 1970s.

**Specific Objective 6:**

To deliver the program in an effective manner.

Guidelines:

(a) To establish a selection, planning and implementation process which is efficient and flexible.

(b) To plan and implement improvements within the terms of pre-determined allocation to a given neighbourhood.

(c) To provide a level of funding in each neighbourhood sufficient to ensure its viability as a residential area.

The responses rating the NIP program ranged from fair to excellent with the majority stating that it was a good program. The speed of the program’s planning (six months) and implementation (six years) of its projects drew one positive complaint. This complaint aside from the initial apprehensions and lack of articulateness felt on the part of the residents towards the planners and consultants, was that: (in Bédard's words) "Once they got a taste of it they could not get enough of it." This statement relates to the fact that the Planning Committee was often impatient for the City's quarters (contributions) to implement
the approved NIP projects. This wait for the City's annual budgets, slowed the program's pace and inevitably resulted in residents complaining that the NIP projects were not being implemented quickly enough.

With respect to guidelines (b) and (c) the program's funding was sufficient to realize and satisfy the residents' desires to upgrade their neighbourhood. The program's funding, which consisted of a $1.3 million dollar budget, was a considerable improvement over the total lack of funds the initial discussion group started out with and their simple demands for City funding for waste receptacles in 1973. Lowertown West received such a lion's share of the City's recreation budget (circa 1978) that City Councillors stated: "Why don't we give the whole recreation budget to Bédard". (G. Bedard, April 27, 1987) This huge concentration of municipal resources in Lowertown West prevented Bédard from securing NIP funding for Sandy Hill. Therefore, in view of the relative ease in implementing the recreational projects over others such as the traffic plan, a major portion of the NIP budget was spent on creating and upgrading the neighbourhood's parks.

The planning process appears to have been flexible under guideline (a) as was apparent through stated accounts describing numerous revisions made to the area's park plans, their layouts and landscaping. The Routier School Gym is another example of NIP's flexibility as reflected through its eventual implementation.

44The City funding quarters refers to NIP's funding arrangement under which the program's costs were split 50%, 25% and 25% among Federal, Provincial and City (Municipal) authorities respectively.

45While this research appreciates the inaccuracy of the above figure, especially when compared with those of the final budget cost statement for the NIP program, the above figure was retained for the following reasons. In view of the fact that NIP was very flexible in terms of program projects (their revision) implementation and funding, it is obvious that the $1.3 million figure might very well have represented the program's original budget. The figure might have also realistically represented the residual amount of program funding made available for planning to community residents after the $200,000 consultants' fee had been deducted. Therefore, on the strengths of the above statements and those associated with the subjective nature of this research, the above figure was retained.
5. **NIP's Quality of Life Impact: A Summary Statement and Conclusions**

The NIP program succeeded in creating a neighbourhood environment which was tailored to its residents' desires through its creation and installation of green space and quaint coach style street lights. The street-lighting made the neighbourhood safer as did RRAP through its cleaning up of certain areas of decay. The program did benefit many people by its instilling renewed faith (hope) and confidence in the community's viability as a living environment. This was also reflected by many former NIP committee members approaching the City to have their homes rehabilitated under RRAP. NIP and RRAP also benefited many people personally through increased housing prices brought on by NIP's making Lowertown West a more attractive living environment. NIP seems to have benefited the incoming residents most as they had no previous attachment to the area and were attracted to its newer high density (town house) stocks. These stocks are stylistically disagreeable to the incumbent residents and/or beyond their price range. Thus, NIP has served to re-equilibrate the neighbourhood's ratio of wealthy to poor residents. NIP proved to be beneficial to those who participated in the NIP planning process as NIP committee members. In one instance, it promoted greater political involvement on the part of one former NIP committee member. Despite these accomplishments this research cannot state that NIP

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46 Despite the Planning Committee's advertising the availability of RRAP funding at the public planning meetings the program was hampered by numerous circumstances. The chief circumstance which hindered RRAP take up was the difficulties experienced on the part of older residents in conceiving the program. Many older homeowners had trouble conceiving their tax dollars being put to work to benefit them under RRAP without repercussions such as increased property assessments. As well, when secured in same circumstances some homeowners were unwilling to effect repairs beyond the amount covered by the program's grant portion. This, at times, hampered RRAP's potential benefits to the client.

47 Mr. J. Pierre Robert's dealings with NIP allowed him to gain community recognition while serving as the President of the NIP Committee in Lowertown West. This support led him to consider entering the 1980 municipal by-election as an aldermanic candidate for the By-Rideau Ward. As well, this support base and experience allowed him to successfully block the construction of the Saudi Arabian embassy, which threatened to level a neighbourhood block (Sussex, Cathcart, Bolton and Parent Streets) in 1978.
achieved Lowertown West's quality of life objectives. This statement relates to NIP's inability to create a tight knit family oriented community. The new comers (DINKS - Double Incomes No Kids Households) are increasing and exhibit no attachment to the community other than protecting the area's property values and trendy heritage status. NIP has thus served to speed the gentrification process which would have inevitably occurred in Lowertown West as it has elsewhere in other neighbourhoods such as Sandy Hill and the Glebe. This is in part attributed to the 1976 zoning changes which Bédard effected to stabilize the area's land uses. Therefore, NIP obviously had little impact in preserving the area's incumbent population or promoting the area's desired family environment.

'L'on déplore toutefois la baisse des inscriptions dû en grande partie au coût des loyers. Les loyers ayant augmentés de façon effarante un foyer à revenue moyen ne peut plus se permettre de vivre en Basse-Ville, d'où exode vers Alta-Vista, Overbrook ou Vanier, la nouvelle politique de logement de la Ville pourra-t'elle arrêter l'hémorragie?'


In recalling, the third research hypothesis, which this research has tested through subjective (oral) indicator sources and its relation to:

The degree of NIP's success or failure, with regard to its ability to improve Lowertown West's family oriented neighbourhood and retain the incumbent population, has had an impact on personal perceptions relating to the community's stability, confidence and living conditions expressed by informed incumbent Lowertown West community members, politicians and other officials. (See page 24 for all three working hypotheses.)

The informed sources all felt that NIP served to enhance the area's physical environment even though many factors such as the neighbourhood's location, rehabilitable stock demands and social trends worked against its ability to
achieve locally stated quality of life objectives. Both NIP and RRAP did allow some residents to benefit, at least in the short term, by living under improved (rehabilitated) living conditions within a more attractive neighbourhood. While this research believes that NIP and RRAP made a great difference by their enhancing Lowertown West's many assets, in doing so they stimulated gentrification and accelerated displacement. Despite this, many remaining residents still maintain that Lowertown is still a great place to live with the market, theatres, restaurants, etc., all within reasonable walking distance.48 Other sources also expressed interest in securing additional RRAP loans (second loans) to improve their homes should they become available. Nonetheless, in spite of these drawbacks and with the exception of one complaint associated with RRAP,49 NIP and RRAP both served to instil a renewed confidence in Lowertown West's viability as a living environment. NIP can boast the accomplishment of having provided many local residents with the means and opportunity to realize their dreams in creating a new, improved living environment.

In conclusion, drawing from Harold Kelman's subjective summary of Lowertown's past, present and future situation, this research would have to state that NIP came as a mixed blessing, if not a paradox. Through NIP's enhancing Lowertown West's living environment it unfortunately promoted social changes which local residents sought to halt. Aside from NIP's falling short of these quality of life objectives, NIP did succeed in inspiring a renewed hope and confidence in Lowertown West's viability as a living environment. Thus, in keeping with the

48 This statement was drawn from an interview conducted with Mr. J. Bingham on April 13, 1987. During the interview Bingham indirectly related that Lowertown is and always has been home stemming back to his great grandfather's having taken up residence in By-Town during the 1840s.

49 One source recounted how she had secured RRAP assistance to renovate two apartment units. In compliance with the program rules she had kept the rents to reasonable (affordable) levels for her tenants despite a CMHC official's persistent urgings to increase the rents because she was losing money.
subjective social indicator theme of this research, this research would have to conclude that:

"When Ottawa became the national capital, Lower Town continued to develop in its own way, almost independently of the government town. Civil servants chose to live in Centretown or Sandy Hill, and the working people remained here. The civil servants' avoidance of the area lasted until the present decade, when the new Lester B. Pearson Building brought members of the foreign service into the area.

Recent years have also seen many other changes. The improvement of Sussex Drive and the building of the MacDonald-Cartier Bridge eradicated the northern edge of Lower Town, and the new Lower Town East redevelopment project did much the same to the area east of King Edward Avenue. The heart of Lower Town has remained physically intact, but has seen a massive 'gentrification' as professionals and civil servants found the historic area attractive and moved into the neighbourhood they once shunned. The new face of Lower Town is particularly visible in the By Ward Market area, where the preponderance of kitchenware shops, chic restaurants, and wine bars tell the story. The 'natives' of Lower Town, great-grandchildren of the nineteenth century pioneers, mostly lower income and French-speaking, still form the majority, but one can only wonder for how long." (Kalman, H. and Roef, J., 1983, pp 26-27)
Appendix A

Revised Lowertown West Redevelopment Plan

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Social And Recreational Facilities

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<td>Renovations 130 King Edward</td>
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<td>Bingham Park Development</td>
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<tr>
<td>Sub Total</td>
<td>894,405.55</td>
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(Planning Branch, Department of Community Development, 1983)
Appendix B

The social area analysis indexes of social rank, urbanization and segregation were instrumental in selecting a control comparable to Lowertown West's 1971 socio-economic composition. The approach's ability to stratify and organize urban populations into homogeneous social units (social areas) according to the above stated indexes was applied to 67 1971 Ottawa-Vanier census tracts. These tracts were then stratified via maps and grid scatter diagrams and the control was selected by process of elimination, through the superimposition of mapped indexes of standardized scores for each census tract.

Map one shows Lowertown West (census tract 55) as being more than one standard deviation (SD) below the mean in terms of factor one's high social rank index. Map two shows Lowertown West as approaching the mean, being within one SD below the mean, with respect to the working class social rank index (factor II). The standardized scores for each census tract, with respect to both factor indexes, is plotted on a scattered diagram divided by a grid. The grid, divided by one standard deviation (SD) intervals over a 2 SD area for each factor, serves as the area of analysis. Such a boundary can be theoretically justified as it normally encompasses 95% of the observations. Each grid division (square) represents a stratified social area (or the superimposition of two indexes) by which census tracts of common social dimensions may be identified. Within the social rank diagram (Diagram 1 Working Class Social Rank vs High Social Rank) census tract (CT) 55 falls in a social area of its own (C-1). The potential control area to be analyzed (CT101) does occupy the same range (RDW C) as CT55 in terms of Factor 2 (working class social rank) but ranks slightly higher in Factor I (the High Social Rank) as shown by its position in square C-2.
MAP 1 High Social Rank for the Ottawa-Vanier Area (1971)

Scale
-1 SD <
-1 SD -0
0 -1 SD
> 1 SD


MAP 2 Working Class Social Rank for the Ottawa-Yanier Area (1971)

Scale
-1 SD <
-1 SD - 0
0 - 1 SD
> 1 SD


Note: The first digit of each number represents the census tract observation's exact spatial location.
Map three shows Lowertown West (CT55) as being within one SD below the mean. While CT55 and CT101 occupy the same range with respect to urbanization (ROW C); CT101, as stated above, does score higher in terms of high social rank (square C-2). Census tract 55's social area (Diagram 2 Urbanization vs High Social Rank), shown in square C-1, is also occupied by census tracts 39, 40 and 42. The first two of which were neglected as they, combined, provided full statistical coverage of Ottawa's Neighbourhood Improvement (Program or NIP) Areas 3 and 4.

With respect to the Urbanization vs Working Class Social Rank diagram (Diagram 3), CT55 occupies the social area C-2 with census tracts 29, 31, 15, 3 and 101. It should be noted that CT29 was excluded as it encompassed Ottawa's Belltown NIP area. This social area (C-2) could be described as being within one standard deviation below the mean with respect to both factors.

Map four of the segregation index or prevalence (degree) of francophonie attributed to a census tract. Lowertown West (CT55) and CT101 both fall within the same range, being within one SD above the mean.

This is equally reflected by their occupying row B (for segregation) in the Segregation vs High Social Rank diagram (Diagram 4). Within Lowertown West's social space B-1, CT54 becomes a consideration while 46 may be neglected as it received NIP assistance. Building on this research's argument of CT101's being a compatible control area, the Segregation vs Working Class Social Rank diagram (Diagram 5) supports this by CT55 and CT101's sole occupation of the social area B-2. This reflects CT101's compatibility with Lowertown West in terms of their both being within one SD above the mean in terms of segregation, as well as being within one SD below the mean in terms of working class social rank.50

50This ranking, with respect to working class social rank's similarity, reflects both census tracts' fulfilling one requirement of NIP selection criteria - Objective 1, guideline (d) - that: "The area is inhabited for the most part by low and moderate income people". (CMHC, 1977, B-1).

Diagram 3

Urbanization versus Highest Class Social Strata

Plot of Factors 1*Factors 2

Legend: A = 1 obs, B = 2 obs, etc.

Note: With the exception of census tract 164, the first digit of each number represents the census tract observation's exact spatial location.

The Segregation vs Urbanization diagram (Diagram 6) demonstrates Lowertown West and CT101's compatibility along family life cycle and francophone lines, as is evident by their sharing a common social space (square B-2); with both observations being located within one SD above the mean and one below the mean for segregation and urbanization respectively.

Therefore CT101 proved most comparable to Lowertown West (CT55) along three of social areas analysis' indexes of working class social rank, urbanization and segregation. While CT101 did rank one class higher than CT55 along the high social rank, it did share three identical social areas out of six possible combinations of mapped indexes for all four factors. In the other three instances, it fell in the same range for one of the factors, as well as being located in an adjoining social area. Within the parameters of this social analysis, CT101 is thus rationalized as being the best choice of a control area for Lowertown West.
DIAGRAM 6

ORGANIZATION VERSUS HIGH SOCIAL FAIR

PLOT OF FACTORS

LEGEND: A = 1 US$, B = 2 US$, ETC.

Note: The first digit of each number represents the census tract observation's exact spatial location.
Appendix C

A basic cross multiplication procedure was used to estimate Lowertown West's 1981 NIP area population. This estimate was necessitated by the fact that revisions made to the 1981 enumeration area (EA) boundaries no longer provided complete NIP area coverage as had previously existed under the combined 1971 census divisions of CT 55, EAs 109, 122 and 169. These revisions left only EA 169, now EA 304 intact for study purposes. Working with the above 1971 census subdivisions, CT 55 and each enumeration area's population and percentage proportion of Lowertown West's total population were calculated below.

Lowertown West (NIP Area)'s 1971 Population by Census Subdivision

<table>
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<tr>
<th>Census Subdivision</th>
<th>Population</th>
<th>Percentage of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT 55</td>
<td>2,455</td>
<td>51.74</td>
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<tr>
<td>EA109</td>
<td>785</td>
<td>16.54</td>
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<tr>
<td>EA122</td>
<td>640</td>
<td>13.49</td>
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<tr>
<td>EA169</td>
<td>865</td>
<td>18.23</td>
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<tr>
<td>NIP AREA</td>
<td>4,745</td>
<td>100</td>
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Using the combined percentages of CT 55 and EA 169, the NIP area's 1971 population was calculated through the cross multiplication procedure and repeated using CT 55 and EA 304 figures to estimate the NIP area's 1981 population. This procedure obviously assumes that the area's population distribution and proportions (percentages) have remained constant for all census (1971) subdivisions between 1971 and 1981.
In 1971 EA 169 plus CT 55 contained 3,320 people, representing approximately 70% of Lowertown West's total population (4,745). To test the cross multiplication procedure's accuracy in estimating the area's 1981 population, the procedure was first applied to the 1971 data.

\[
CT55 + EA169 \rightarrow \frac{3320}{.6996838} = \frac{x}{1}
\]

\[
x = \frac{3320}{.6996838}
\]

\[x = 4745.0005\] Lowertown West's 1971 population

This procedure was then repeated with 1981 census data to estimate the area's 1981 population.

- EA 304 (165 persons) + CT 55 (2,225 persons) \(\rightarrow\) \(\frac{2390}{.6996838} = \frac{x}{1}\)

\[
x = \frac{2390}{.6996838}
\]

\[x = 3416\]

Therefore, Lowertown West's NIP area had an estimated 1981 population of approximately 3,416 people.\(^{51}\)

\(^{51}\)This figure becomes all the more plausible when considered in conjunction with elaborations made in section 4. References made to displacement under gentrification are found on page 122.
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<tr>
<th>OBS</th>
<th>FACTOR1</th>
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Appendix E

In 1974, prior to receiving NIP assistance, Lowertown West (north of St. Patrick Street) was zoned mainly for R6-R7 and Commercial land uses. (C.D.W. pp 42-43, 1974) Amendments made to the Neighbourhood Plan under By-Law Number 43-76 provided Lowertown West with HR (Historical Residential) zoning to ensure the stock's preservation as recommended by the 1976 Lowertown West Development Plan. The neighbourhood's zoning has remained unchanged to the present. (See Plan No. PBSK-213)

In 1974, the control area, south of St. Patrick Street, was zoned R7, R0 and commercial. (C.D.W. pp 42-43, 1974) Minor zoning classification amendments were implemented in September of 1979 under By-Law Number 249-79. The By-Law amended zoning classifications pertaining to commercial, residential, office and residential land uses. In the latter case, high density apartment R7 and R7 (2.5) zoning classifications were amended to R7-x zoning under the By-Law. Important amendments were implemented in 1985 through By-Laws 22-85 and 69-85. 'Residential policies, intended to help preserve, encourage and enhance the residential function of the central area'\textsuperscript{52} were stated as the rationale behind areas 3, 4, 5 and 6 receiving CAH-x (Central Area Historical) zoning (see Map 4494-82-2). Elsewhere, sector 6's zoning was amended to R5-x (3.0), permitting lower density apartment development in the area (see Map 4494-82-2). This amendment also permitted greater floor space with the residential zoning classification amended from R7 (2.5) to R5 (3.0). Sector 9 was also amended from R0 (2.5) and R7 (2.5) to R7 (5.0).

\textsuperscript{52} Community Development, Planning Branch, Central Area Study: Northeast Quadrant Byward Market/Sussex Drive Sub-Area, Final Development Plan, (Revised February 26, 1985), Corporation of the City of Ottawa, 1985, page 8.
The above zoning amendments have had little bearing on this research for the following reasons. First, the scope of this research is restricted to property value changes experienced over the 1975-1980 period. Thus, the impact of zoning amendments experienced over this period is minimal and of little significance to neighbourhood property values in both the NIP and control areas. Secondly, the use of provincial property assessments as surrogates to final residential property transactions (prices) in both areas are not influenced by zoning changes. This refers to the fact that a property's zoning classification, be it residential, commercial, office or other, is subject to assessment methods specific to each type of land use. Therefore zoning changes made within the residential classification would not be assessed any differently in terms of the property's total market value.\textsuperscript{53}

\textsuperscript{53}Mr. Jetze J. Falkena, Valuation Manager, Ontario Ministry of Revenue – February 9, 1987.
Area affected by suggested change is by-law:

1. From C2(3.0), C2(2.0), C2(1.0) To CAM-4
2. From C2-E (4.0) To CAM-4
3. From C2-E, C2(2.0), C2(1.0), C2(4.0) To CAM-4
4. From C2 (2.0) To CAM-4 (4.0)
5. From R7(2.0) To CAM-4
6. From R7(2.0), C2(4.0), C2(2.0) To CAM-4
7. From C2(1.0) To CAM-4

KEY MAP - CARTE D'EMPLACEMENT

Ottawa

MAYOR - LE MAIRE

CITY COUNCIL

SEE ABOVE

LAND AFFECTED BY BYLAW = TERRAIN AFFECTE PAR L'ARRÊTÉ MUNICIPAL
AND REZONED FROM = ET REZONE DE
TO = A

THIS IS ATTACHED = ANNEXE
TO BYLAW NUMBER = À L'ARRÊTÉ MUNICIPAL NO.
PASSED THE = PUSU LE
19/3/45
Appendix F

Key Contacts

Marcel Colé
Former Lowertown West NIP Program Coordinator - Ottawa
RRAP Delivery Agent

Lynda Vanderlee
Armand Page Community Centre Coordinator

Caroline Andrew
Former Lowertown West NIP Committee Member

J. Bingham

J. Pierre Robert

Jacques & Cécile Emond
Members

George Bédard
By-St. George Ward Alderman 1974-1980

Marc Laviolette
By-Rideau Ward Alderman since 1980


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