

PN-ACB-785

PADCO, INC.

Planning and Development Collaborative International

**ANALYSIS OF SURVEY RESULTS
TO ESTIMATE EFFECTIVE DEMAND FOR HOUSING IN SZCZECIN**

PREPARED FOR

THE UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT
OFFICE OF HOUSING AND URBAN PROGRAMS

Contract No. EUR 0034-C-004029-00, RFS 40

BY

REGINA ARMSTRONG
MARTHA SICKLES-GRABOWSKA
MARIUSZ CZEPCZYNSKI

SEPTEMBER 1997

PADCO, Inc.

1025 Thomas Jefferson St., NW, Suite 170, Washington DC 20007, USA

Table of Contents

PREFACE	5
PART I: THE DEMAND FOR HOUSING IN SZCZECIN	8
1.0 Introduction	8
2.0 Survey of Housing Needs, Preferences & Ability to Pay	9
2.1 Housing Need	9
2.2. Housing Preferences	11
2.3 Household Ability to Pay	13
2.4 Nature of Demand: Effective Demand vs Non-Market Demand	21
2.5 Demand for Renovation	22
3.0 Extrapolation of Results to the Universe of Households in Szczecin	24
PART II: LOCAL HOUSING SUPPLY OPTIONS	31
1. Szczecin's Housing System - Overview	31
1.1 Housing Stock by Ownership	32
2. Existing Housing : Rental Housing	34
2.1 Communal Rental Unit Costs	34
2.2 Private Market Rental Housing	36
2.3 Cooperatives	36
2.4 Enterprise Housing	37
3. City Supported Programs for Housing and Community Improvement	37
3.1 Small Improvement Program	37
3.2 Our House Program	39
3.3 The Local Initiatives Program for Neighborhood and Infrastructure Improvements	41
4. New Development	41
4.1 Cooperative Housing	43
4.2 TBS: New Construction and Renovation	45
5. Funding and Financing Sources	47
5.1 Housing Allowances	47

Table of Contents

5.2	Contract Savings System	50
5.3	Mortgage Finance Products	51
5.4	Tax Benefits	51
PART III: AN EXAMINATION OF HOUSEHOLD INCOME IN SZCZECIN		53
1.	Introduction and Objective	53
2.	Household Income Findings from Habitat Survey	53
3.	Method of Analysis	54
4.	Tax Method	54
5.	Economic Aggregates Method	56
ANNEX 1: Worksheets: Tax, population and employment data used to extrapolate incomes and verify the survey results.		59
ANNEX 2: Draft, Indicators to Monitor Housing Conditions and Progress in Attaining Housing Strategy Goals		67

PREFACE

Under the sponsorship of the Gmina Housing Partnership, funded by the United States Agency for International Development, technical assistance in the area of housing was delivered to the City of Szczecin over the past year and a half in two phases. During the first phase, assistance was provided in the development and preparation of a housing policy and strategy document which was approved by the City Council on December 2, 1996. Work during the second phase focused on the development of an implementation plan for the housing policy with assistance being targeted to the following four programmatic areas.

- (1) Assistance in the formation of a TBS and in project development.
- (2) Development of strategies to monitor and improve management of the communal housing stock.
- (3) Technical assistance and training on public-private partnership strategies in housing development, rehabilitation and revitalization.
- (4) Assessment of the effective demand for housing and housing services and identification of housing indicators.

The overall approach guiding this assistance was to assist the city officials and staff in carrying out organizational, program and project restructuring and development by providing both tools designed to meet Szczecin's specific needs and best practice adapted to the local conditions.

The work was carried out in close cooperation with City staff by a team led by Martha Sickles-Grabowska, PADCO resident advisor and Director of Urbecon, Sp.zo.o. The team included local consultants and consulting firms: Marcin Szpak of DS Consultants, Mariusz Czepczynski, Dr. Marek Majchrzak, Dr. Tomasz Zelawski, Jerzy Fiszler and Zofia Pindor of Habitat, Sopot Center for Social Research; and PADCO short term consultants: Regina Armstrong of Urbanomics, as well as John Driscoll, Mona Serageldin and David Jones of the Harvard Unit for Housing and Urbanization (HUHU).

Vice President Piotr Mync was the City leader directly responsible for this program, with coordination and cooperation provided by Szczecin City Board Member Janusz Szewczuk. The interdisciplinary nature of the work resulted in cooperation with 14 city departments and other entities: the Renovation Team, Housing Department, Housing Policy Group, Bureau of City Development and Coordination, Architecture and Building Inspection Department, the Urban Planning Studio and the communal housing management companies. As the Szczecin TBS formed, its leadership became close counterparts. Staff and overall project coordination was carried out by Aleksandra Piskorska who was recently replaced by Katarzyna Stachowiak-Bongwa.

The fourth programmatic area is addressed in this report. It is focused primarily on an assessment of the effective demand for housing in Szczecin, and includes identification of housing indicators which meet the monitoring needs of Polish cities.

Effective Demand for Housing

This project originated from review of the extensive assessment of local housing conditions conducted by the Szczecin Housing Policy Group as background for the preparation of the city's local housing policy. A glaring deficiency in their thorough research was a lack of information on household income and housing expenditure, data which is essential to developing an effective housing policy and strategy. In the absence such data on local income, a three-phase effort evolved to develop a baseline information on local income.

During the initial phase, local research firms, Habitat and the Sopot Social Research Center (SSRC), were commissioned to conduct a field survey of 1,000 families selected to be representative of the Szczecin city population. The survey instrument was designed with input from the city and PADCO team. The initial survey results were analyzed and summarized by Habitat in a report officially published by the City as part of its housing policy analysis.¹ The reader is referred to that document to obtain a more detailed explanation of the purpose of the survey, the methodology and a comprehensive summary of survey results. Training of Szczecin City staff on the use of the data generated by the survey was also provided by Habitat in order to enable the staff to carry out additional analysis, as suggested by many participants engaged in the various segments of the local housing system.

The Habitat/SSRC report generated many questions, comments and requests for more extensive analysis. Addressing the issues of real effective demand and housing preference was the subject of Phase 3.

The second phase of effort to develop local income data included the empirical examination of local household income based on administrative records of the Tax Offices and statistical data from the Statistical Offices to verify the the Habitat/SSRC survey findings. Part 3 of this report contains a summary of the analyses of these two alternative data sources - tax records and economic aggregates.

The initial first phase report on the Habitat/SSRC survey generated many questions, comments and requests for more extensive analysis. Once the survey findings were positively verified in phase 2, a more in-depth third phase analysis was conducted to (a) examine supply side options and (b) tabulate further correlations in response to specific questions on effective demand and housing preference posed by the city team. These results of this analysis are included found in Parts 1 and 2 of this report.

¹ "Opinions, Needs and Housing Preferences: Survey Results" (published informally by Habitat Consulting Office and City of Szczecin, May 1997).

Housing Indicators

Throughout the program, emphasis was placed on the importance of identifying measures for monitoring key conditions in the housing sector and progress in attaining housing policy goals. One objective of this project was to create a data base of indicators to monitor both the local housing system and the progress of housing strategy implementation. The indicator data base, included in Annex 1 to the present Report (Polish translation only), was developed in conjunction with the Housing Policy Group. It reflects existing data as well as some indicators for which data must still be generated. Many of the indicators may be used to monitor goal attainment of the housing policy. This is very much a "work in progress" since the City of Szczecin has not as yet developed an action plan for implementing its housing policy due to recent reorganization of housing functions. The new manager of the Housing Policy Group has expressed his commitment to implementing the indicator system and completing the strategy for housing policy implementation.

PART I

THE DEMAND FOR HOUSING IN SZCZECIN

1.0 Introduction

In a market economy, effective housing demand reflects not only needs and preferences, but also *ability to pay*. Moreover, satisfaction can be an imperfect indicator of need. Need is best defined by measurement against acceptable standards of housing condition, such as household occupancy, housing size, and physical condition. Preferences are typically gauged by desired changes in housing condition, when comparing existing housing characteristics like building stock, type of ownership, interior quality and neighborhood location to new or other housing preferences. While need and preference are an indication of housing demand, ability to pay is the ultimate criteria of effective demand for housing. Ability to pay is largely determined by whether housing costs associated with housing preferences represent an affordable percentage of household income, and if households have access to requisite capital when opting for home ownership.

The Habitat/Sopot Social Research Center Survey of 998 households in Szczecin elicited responses to many, but not all, of these housing demand indicators. The questionnaire used for the survey will be discussed with recommended improvements in a later section. However, as a large, quite representative sample capturing nearly one percent of all residents, it provides the basis for estimating effective demand for various types of housing, in relation to respondent incomes and housing expenditures, and for comparing household survey characteristics to the universe of households in Szczecin. This extrapolation of survey results to City residents as a whole will provide the gmina with quantified guidance as it develops policy options to meet housing demand in the future.

2.0 Survey of Housing Needs, Preferences & Ability to Pay

The following results are drawn from a household survey conducted in January 1997 by Habitat and the Sopot Social Research Center Survey.

2.1 Housing Need

2.1.1 Household Occupancy

Fully 1,175 households occupy the 998 surveyed dwellings, with 847 households living alone and 328 households, or 27.9 percent, sharing housing units. In 67 of these cases, three or more households share a single dwelling unit. Although the majority of shared housing occupancies are with family relatives, „doubling-up” creates decidedly larger households and can contribute to conditions of overcrowding. Single household dwellings average 2.98 persons per dwelling unit, while multiple household dwellings average 5.57 persons per unit.

Compared to an ideal occupancy standard of one household per housing unit, at 1.18 households per unit recorded by the survey, an additional 177 dwellings would be needed for every 1,000 units occupied. Without information on housing preference and income for each household sharing, it is not possible to determine the extent to which additional dwelling units would actually be required or each household's ability to pay. Clearly, an unknown proportion of doubling-up is voluntary and would continue even with adequate housing and financial resources.

2.1.2 Dwelling Size

The dwellings surveyed averaged 57.42 m² in size, ranging from less than 45 m² in private rentals and enterprise flats to more than 100 m² in privately-owned single family houses. Typically, owner-occupied cooperative and communal flats are larger than rental counterparts, with, owned housing averaging 66.22 m² in size and rental housing averaging 50.10 m². In terms of rooms per housing unit, the average dwelling measured 2.6 rooms, with owner occupied units containing 3.0 rooms on average, and renter units, 2.3 rooms. The survey indicates that housing size is directly correlated with household income and the portion of income allocated to housing expenditures, rising with increases in either of these instances.

Relative to accepted spatial standards, and given the reported occupancy conditions, a major portion of the housing units surveyed are considered to be overcrowded. Measured against a norm of one person per room, the surveyed housing averages 1.3 persons per room, or 17.0 m² per capita, in comparison to the national average of 18.5 m². Units occupied by one or two persons are adequately sized, however, for the average household size in Szczecin of 2.86 persons/units, the number of occupants already exceed unit capacities as measured in rooms or in square meters. In households of more than five persons, overcrowding increases on average

from 2 to more than 5 persons per room depending upon total occupant size. Compared to modest spatial standards of 25 m² per capita, roughly midway between the Central European average of 19.6 m² and the Western European average of 32.3 m² (reported by Building on Progress, Appendix A), the housing stock surveyed in Szczecin reflects deficiency of more than 30 percent in spatial capacity for its present occupants.

Fully 530 of 998 surveyed dwellings, or 53.1 percent, do not meet the modest 25 m² per capita standard for their existing occupants. Less overcrowding is evident among privately owned single family and owner occupied communal housing, where less than one third of units are overcrowded. More overcrowding occurs among renter occupants of privately owned, cooperative and communal housing, with more than 60 percent of households overcrowded. Survey results further indicate that satisfaction with current housing is strongly correlated with average unit size. Satisfied households average 1.1 persons per room while dissatisfied households reported 1.7 persons per room.

2.1.3 Physical Condition

Among all types of dwelling units surveyed, only enterprise housing was fully furnished with all utilities, i.e., heat and hot water, drainage, electricity and gas, toilet and bath. In general, however, households deficient in each of these essential installations, were relatively few. Less than 5 percent of all households were without one or more basic utilities, except for bath and toilet facilities in which 11.4% and 14.5% of households were deficient. After enterprise housing, owner- and renter-occupied *cooperative* housing was the best furnished, with less than 3% of these units lacking some bath and toilet installations. By contrast, owner-occupied *communal* housing was considerably more deficient with 6% of units lacking toilet, 22% lacking bath facilities and 6% lacking sewage facilities as well. However, privately-owned single family housing and renter-occupied communal housing accounted for the bulk of deficient units. Single family housing in particular, lacks sewage and gas connections (30% and 12%), while renter occupied communal housing lacks hot water, bath and toilet facilities (19%, 35% and 45% of units respectively). Communal housing also accounts for the overwhelming share of coal fired housing units reported by the survey, which collectively constitute 10.5 percent of all dwelling units.

The physical deficiencies in surveyed housing are significant only with respect to communal stock. Presumably, essential facilities will be added to private housing when funds become available, but the condition of communal stock requires public action. Given spatial constraints in these units, which average 51.5 m² in size, their extent of overcrowding (15.2 m² per capita), the prevalence of coal fired furnaces for heating, and the absence of hot water, bath and toilet facilities, there is clear evidence of the need for some rehabilitation of communal structures. Yet the apparent superior physical condition of *owner-occupied* communal units would indicate that structures differ in quality and that more deficient units may be concentrated in select buildings. Deficiencies reported by the survey data suggest that three in every ten occupants of communal stock are in need of improvements to their present housing.

2.2. Housing Preferences

Roughly one in four respondents (27.7%) expressed a preference for new or other housing. Besides being strongly related to a dissatisfaction with their current housing condition, the desire to relocate was positively correlated with high rent and housing expenditures as percent of household income, low Floor space per occupant, high levels of overcrowding and location in selected neighborhoods of the City. Indeed, when asked to rank various factors as significant in importance to their choice of housing, three principle causative factors emerged.

- **Price.** Respondents desiring to relocate their housing rated price as the most significant factor influencing this choice by a margin of 1.5:1 over Floor space, the next significant factor. Currently, these same households tend to spend a lower percentage of their net household income than average on monthly housing expenditures. Forty-seven percent of households desiring to relocate spend less than 20% of monthly income on housing costs compared to 30% spent on average by households having no preference for new or other housing. However, the actual level of housing expenditures (including utilities) per square meter of usable space by respondents preferring to relocate, 4.9 PLN/m², was marginally greater than the monthly average of 4.6 PLN/m² for all households. One necessarily concludes that households preferring to relocate are cost conscious with respect to housing value; though they appear to have the financial resources to afford more housing. The desire to optimize the effective cost per square meter of usable space may be the driving factor in their choice.
- **Floor space & Number of Rooms.** Floor space is the second most significant factor influencing those households preferring new or other accommodations, followed closely by the number of rooms. Both overcrowding and low space per occupant ratios are noted among survey respondents as a whole. However, fully 75 percent of all households wanting new or other housing were overcrowded, at more than one occupant per room, and 80 percent had fewer than 20 m² per occupant. This compares to an overcrowding rate of 45 percent among households not wanting to relocate, of which only 53 percent occupied space at fewer than 20 m² per occupant.
- **Location.** The third most significant factor in housing choice recorded by all households wanting to relocate was the location of new or other housing within the City of Szczecin. Although location was only half as significant as price, it ranked closely behind Floor space in importance. Viewed on a neighborhood basis, the greatest disparity in housing preference was concentrated in four districts of Szczecin. Bukowo, in the north, and on the right bank, Pionia-Smierdnica-Jezierzyce, Majowe-Kijewo, and Wielgowo-Slawociesz reported more than half of all surveyed households wanting new or other housing.

Assuming these threet factors to be the most significant attributes sought in new or other housing, the following housing options emerge in the demand profile emerging from the survey.

2.2.1 Housing Stock and Ownership

Among all households wanting new or other housing, renters of units provided by private individuals and in communal stock are the most interested in changing their housing, while occupants of enterprise housing are the least interested. The housing type preferred by households desiring change is overwhelmingly a private home with 42% citing this option. This was followed by ownership of cooperative housing, preferred by 25% of the households and rental of communal housing, preferred by 19%. However, among renters residing in communal stock the largest percentage preferred to upgrade within communal housing, and with a lower proportion preferring to own cooperative housing. In contrast, while renters of private units prefer primarily to own private homes, they are indifferent toward renting in either cooperative or communal housing.

According to the survey, the major source of demand for self owned homes stems from renter and owner occupants of cooperative housing. Forty eight percent of cooperative renters and 58 percent of cooperative housing owners expressed a preference for private home ownership. Because cooperative households represent half of all survey respondents, this preference accounts for 61 percent of the overall demand for private housing. No households expressed a preference for TBS housing, presumably reflecting the current lack of familiarity with this new housing concept. Alternatively, a proxy for TBS demand could be the preference for rental communal, cooperative and private rent regulated housing. Over 30% of households preferring to move, 83 of 277 households, want to relocate to such rental housing and their average net monthly income is roughly 1,000 PLN. The following table summarizes the types of housing stock preferred by the respondent households wanting to move to new or other housing.

Housing Type Preferred	No. of Households wanting New/Other Housing
Cooperative Rental	26
Cooperative Owner	73
Communal Rental	55
Private Rent Regulated	2
Self Owned Home	121
TOTAL	277

2.2.2 Housing Type

Given the major emphasis placed on home ownership, it follows that a majority of the revealed preference for new or other housing should be for single family units, especially detached single family houses. Fully 52% of all respondents seeking to relocate want to occupy single family housing, with three in every four preferring detached houses, and the remaining one quarter split one third for duplex houses and two thirds for attached or town houses. Multifamily housing is preferred by 38% of those seeking a change in housing, with virtually all respondents (93%) wanting small scale multifamily structures of one to four units. The remaining 10 percent of respondents prefer other forms of housing or express an indifference to the type of housing.

2.2.3 Housing Quality & Location

When asked why they prefer new or other housing, households desiring to relocate state first the need for larger living space (43% of such respondents), followed by the need for separate quarters to achieve independence from shared households (25%). Space needs are particularly acute for those currently living at less than 20 m² per capita: 85 percent of all households wanting larger or separate quarters currently live with those space constraints. Much smaller percentages, 9 and 6 percent respectively, cite the lack of physical installations or the desire for a different location as the primary reason for preferring change.

When these households were queried as to the optimum size preferred for new or other housing, or the number of rooms a new unit should have, most respondents cited more than 75 m² of usable area, with a mean value of 84 m², and an average of 3.5 rooms or one more room than currently. Questioned as to whether they would be interested in a renovated apartment of high standard in an old downtown building, fully 61 percent of those seeking to relocate responded in the affirmative. Other indications of preferred locations can be gleaned from the respondents' satisfaction with their current neighborhoods. The highest level of satisfaction was recorded for Glegokie-Pilchowo in the west, followed by several right bank neighborhoods, Bukowe-Kleskowo, Zalom, and Podjuchy.

2.3 Household Ability to Pay

In a market economy, the ultimate determinant of effective demand for housing is whether or not households preferring to relocate to new or other housing actually have the financial resources to afford the available housing. In Szczecin, the survey respondents wanting to move have a higher median income than average and a lower monthly net housing expenditure than average, including utility costs. Although this relationship suggests that the group as a whole has the potential to afford higher housing costs, and thus compete more effectively in the market, not all households with such preferences are in a position to do so.

2.3.1 Household Income

The median net household income of all surveyed households in Szczecin was 1100 PLN per month as of year end 1996. Households preferring new or other housing reported a median net monthly income of 1350 PLN, while those not preferring change, 1000 PLN per month. Higher income households express a much stronger preference for new or other housing than do households with lower incomes. As seen in the following table, although only 21% of those desiring to move have monthly incomes greater than 2000 PLN, over 44% of the households at this income level desire to move, in comparison with 27.8% and 18.5% of households with incomes of 900-1999 and < 900 PLN/month.

Net Monthly Income in PLN	As % of Group		As % of All Households	
	Want to Move	Do Not Want to Move	Want to Move	Do Not Want to Move
899 or less	30.1%	41.5%	18.5%	66.7%
900 - 1999	48.7%	48.3%	27.8%	72.2%
2000 or more	21.2%	10.2%	44.4%	55.6%
Total	100%	100%	27.8%	72.1%
Note: 6% of all households which did not indicate preferences were concentrated in lowest income category				

2.3.2 Housing Expenditures

The average monthly expenditure for housing, including utility costs, is 266 PLN per month according to the survey. At a net monthly income of 900 PLN, the average housing expense represents 30 percent of disposable income, a breakpoint at which higher shares of housing expenditure are typically regarded as unaffordable. At a net monthly income of 2000 PLN, however, the average housing expense represents only 13 percent of net household income. Under normal conditions, this clearly allows for additional household resources to be allocated to housing.

By income expenditure standards, the number of surveyed households preferring to move that can thus afford new or other housing reflects all those for whom housing expenses are currently 30 percent or less of net household income, and equal to or greater than the average

housing outlay. However, since the average housing outlay represents the existing pattern of housing stock and ownership, the average monthly expense of 266 PLN per unit is considered low by market standards. According to the survey, households owning single family dwellings – the preferred form of housing – currently expend 361 PLN per month on housing costs, while those owning cooperative housing spend 266 PLN and those renting from private individuals pay the most, or 465 PLN per month. (It should be noted that monthly housing expenditures, as reported by the survey, cover rent, electricity, garage and other payments. Although the survey is not fully clear on this issue, these expenditures probably do not include housing loan repayments by owner occupants.)

In addition to the variation in effective housing costs by stock and ownership preference, differences exist in the quality of housing purchased by housing outlays. Although imperfect as a measure, housing outlays per m² of usable space (PLN/m²) are the best available surrogate for approximating housing quality. According to survey data, monthly housing expenditures average 4.64 PLN per m² of all occupied space. At the highest priced end, households renting from private individuals pay 11.86 PLN/m², while those owning cooperative units pay 5.28 PLN/m² and communal units 3.91 PLN/m² of usable area. Partly as a reflection of size, single family owned houses are reported as the most cost effective, or 3.59 PLN/m². Arrayed by housing size, larger units as a whole emerge as the most cost saving, with average outlays of 2.74 PLN/m² in units of 100 m² or more, while the smallest units (under 30 m²) are the least cost effective at 7.00 PLN/m².

Accounting for differences in housing cost and quality, yet keeping affordability at 30 percent or less of net household income, the following tables divide the number of households wanting new or other housing into those that can and cannot effectively demand housing given their current income characteristics. Three examples of preferred housing options are considered in modeling alternative size and cost conditions:

- (1) new TBS or high quality communal rental housing of 50 m² at 7.12 PLN/m² (see appendix for cost assumptions) which is roughly equivalent to owner operating costs of single family housing of 100 m² at 3.6 PLN/m² (without the monthly capital costs of loan repayment) for a range of operating costs from 356-360 PLN per month;
- (2) small cooperative flat ownership housing of 50 m² at 5.3 PLN/m² for operating costs of 265 PLN per month, and;
- (3) large cooperative flat ownership housing of 80 m² at 5.3 PLN/m² for operating costs of 424 PLN per month.

It should be noted that market prices will differ from survey reported housing costs for these kinds of housing and that single family and cooperative owner costs do not reflect initial down payments or owner capital invested in the property. It is also likely that reported operating costs

do not include monthly loan repayments, particularly mortgage payments of the nature currently required by commercial bank mortgage lending terms and interest rates. These costs will be discussed in the next section and combined with operating cost assumptions.

Table 1.3 Survey Households with Effective Demand for New or Other Housing Housing Option: TBS or Communal Rental at 356 PLN/month and Single Family Ownership with Operating Cost at 360 PLN/month				
Net Monthly Household Income in PLN	Number with Preference to Relocate		Affordable Households	
	Affordable	Not Affordable	% of All Households with Preferences	% of All Households by Income Group
899 or less	0	96	0.0%	0.0%
900 - 1399	33	33	11.9%	12.5%
1400 - 1999	60	0	21.7%	31.7%
2000 or more	55	0	19.8%	44.4%
Total	148	129	53.4%	14.8%
Note: Single-family ownership operating costs do not include capital costs of loan repayment.				

Table 1.4 Survey Households with Effective Demand for New or Other Housing Housing Option: Cooperative Ownership, Operating Costs for a Small Flat = 265 PLN/month				
Net Monthly Household Income in PLN	Number with Preference to Relocate		Affordable Households	
	Affordable	Not Affordable	% of All Households with Preferences	% of All Households by Income Group
899 or less	0	96	0.0%	0.0%
900 - 1399	66	0	23.8%	25.0%
1400 - 1999	60	0	21.7%	31.7%
2000 or more	55	0	19.8%	44.4%
Total	181	96	65.3%	18.1%
Note: Cooperative housing operating costs do not include capital costs of loan repayment				

Table 1.5 Survey Households with Effective Demand for New or Other Housing Housing Option: Cooperative Ownership, Operating Costs for a Large Flat = 424 PLN/month				
Net Monthly Household Income in PLN	Number with Preference to Relocate		Affordable Households	
	Affordable	Not Affordable	% of All Households with Preferences	% of All Households by Income Group
899 or less	0	96	0.0%	0.0%
900 - 1399	0	66	0.0%	0.0%
1400 - 1999	60	0	21.7%	31.7%
2000 or more	55	0	19.8%	44.4%
Total	115	162	41.5%	11.5%
Note: Cooperative housing operating costs do not include capital costs of loan repayment				

As the tables show, once the market realities of cost and affordability ratios are introduced to the decision-making process, the number of households with effective demand for housing (i.e. those able to afford new or other housing) is substantially reduced from the number of those with preferences to relocate:

- Under the TBS or communal rental scenario, with monthly housing expenditures of 356 PLN, only 53.4% of households preferring new or other housing actually can afford the average flat of 50 m². These 148 households are 14.8% all surveyed households.
- Under the single family home ownership scenario, viewed only from an operating cost perspective, the same number of households with preferences for new or other housing can afford operating costs on the average single family house of 100 m² with average expenditures of 360 PLN per month.
- Under the small cooperative ownership scenario, a larger percentage of households display effective demand, with 65% of households desiring to relocate and able to afford small cooperative flats.
- The percentage of households displaying effective demand is less for large cooperative flats, with only 41.5% of households can afford the expenses associated with a large flat.
- As a share of all households surveyed (not only those desiring to relocate), only 18.1% and 11.5% would be able to afford the costs of small or large cooperative apartment ownership, considering only operating costs.

2.3.3 Housing Investment Resources

Cooperative or single family home ownership requires access to capital for an initial down payment or development cost, followed by periodic repayments of principal and interest, if financed on a loan or credit basis. If purchased in full from own savings or assets, such as the sale of real estate, no additional costs of capital are incurred for home or flat ownership, other than the opportunity costs of foregone earnings from more profitable forms of investment.

When asked how much they would be willing to invest in their housing, fully 75.1% or 208 of 277 surveyed households with preferences for new or other housing gave no response or „zero”, while 69 households were willing to state a financial commitment. In aggregate, they cited resources of 920,744 PLN or 13,344 PLN on average. Additional potential sources of financing, amounting to 482,949 PLN or 6,999 PLN on average, were identified by the 69 households, drawn primarily from additional credit (35.6% of funds), and own or relatives' savings (43.0% of funds). Although respondents could have misinterpreted these survey questions, it appears probable that 69 households or one quarter of those with relocation preferences expect to have financial resources of 20,343 PLN, on average per household, to apply to their housing investment.

In the following financing scenarios, the downpayment required under all housing options is greater than the average of 20,343 PLN reported as available financial resources, a greater level of capital commitment than the average of reported financial resources. This requirement, however, was not taken as a limiting factor in estimating the number of households that could afford to meet both operating and capital costs of home ownership on a monthly basis. The assumption is reasonable given the extent to which other sources of capital might be mobilized for a purchase, once the household qualifies for a housing loan.

Commercial banks in Szczecin currently offer housing mortgages with 20 to 40 percent cash down payment, financed at 23 to 25 percent interest annually over a 10 to 20 year repayment period. From a bank's perspective, the standard for housing affordability appears to be 25 times the monthly gross household income. Borrowers can choose to repay 1 percent or more of the loan and interest on a monthly basis, but the bank can require no more than 25 percent of the borrower's monthly gross income. Under these constraints, the median income household preferring new or other housing (annual net income of 16,200 PLN and gross income of 23,140 PLN) could not afford a bank mortgage. Assuming a household with 20,000 PLN in financial resources for a cash down payment, a loan of 50,000 PLN financed at 25.13 percent over 15 years would entail an initial monthly payment of 500 PLN for amortization, increasing yearly thereafter with inflation. Coupled with average monthly housing expenditures for operations, the median income household would expend more than half of its net monthly income of 1,350 PLN on housing costs.

Only households with a net monthly income of 3,500 PLN or more (equivalent to a gross annual income of at least 60,000 PLN), an affordable housing price of 180,000 and financial resources to apply a significant down payment, could afford a large cooperative apartment (80 m² at 144,000 PLN) or a market rate single family house (100 m² at 180,000 PLN). However, a household with a net monthly income of 2,400 PLN could easily afford a small cooperative apartment (50 m² at 90,000 PLN) if they commit to a 50 percent cash down payment. Under current financing assumptions (25.13% and 15 years), with a 50 percent down payment in any instance, the large cooperative purchasers would face monthly amortization costs of 720 PLN and the single family home buyers 900 PLN., while the small cooperative buyers would pay 450 PLN in monthly loan repayments. Adding in monthly operating costs of 424 PLN for a large cooperative apartment and 360 PLN for a single family house, an aggregate housing expenditure of 1,144 to 1,260 PLN would represent an affordable expense, i.e., roughly 30 percent or less of net monthly incomes of 3,500 PLN or more. For purchasers of small cooperative flats, the combined operating and capital costs would be 715 PLN per month, or exactly 30 percent of net monthly incomes of 2,400 PLN. With any allowable personal income tax deductions, these shares would become even more affordable. Although recently reduced, tax benefits for new construction of housing are still quite liberal. Taken over 3 years as a percentage of construction costs deducted directly from taxes owed, the benefits could serve as a reimbursement for down payments if short-term personal loans or bank credits can be obtained initially.

Table 1.6
Survey Households with Effective Demand for New or Other Housing
Based on Total Costs including Amortization and Operations

Housing Option:
 Large Cooperative Apartment at 1,144 PLN/month
 and Single Family Ownership at 1,260 PLN/month

Net Monthly Household Income in PLN	Number with Preference to Relocate		Affordable Households	
	Affordable	Not Affordable	% of All Households with Preferences	% of All Households by Income Group
899 or less	0	96	0.0%	0.0%
900 - 1399	0	66	0.0%	0.0%
1400 - 1999	0	60	0.0%	0.0%
2000 - 3499	0	43	0.0%	0.0%
3500 or more	12	0	4.3%	54.5%
Total	12	265	4.3%	1.2%

Table 1.7
Survey Households with Effective Demand for New or Other Housing
Based on Total Costs including Amortization and Operations

Housing Option:
 Small Cooperative Apartment at 715 PLN/month

Net Monthly Household Income in PLN	Number with Preference to Relocate		Affordable Households	
	Affordable	Not Affordable	% of All Households with Preferences	% of All Households by Income Group
899 or less	0	96	0.0%	0.0%
900 - 1399	0	66	0.0%	0.0%
1400 - 1999	0	60	0.0%	0.0%
2000 - 2399	0	14	0.0%	0.0%
2400 - 3499	29	0	10.5%	50.0%
3500 or more	12	0	4.3%	54.5%
Total	41	236	14.8%	4.1%

2.4 Nature of Demand: Effective Demand vs Non-Market Demand

Based upon the survey findings, a significant "need" exists for housing in Szczecin to overcome the existing housing deficit, comprised of inadequately housed families in overcrowded and substandard housing, and to address the current and future housing preferences for new or other units by existing residents. It should be noted that other housing demands will arise in the near term from the formation of future households through population aging, societal lifestyle changes, and in-migration. As has been expressed previously, however, not all demand is effective -- i.e. supportable in the market. Public policy must thus address the issue of allocating scarce resources to meet housing needs that are beyond the affordability of residents.

The following table summarizes the needs identified by survey responses and classifies them by segment of market affordable (effective demand), market subsidy (existing programs), and market deficiency (public investment options). The estimates by type of housing are smaller than those previously shown because they relate the affordability limitations to the income characteristics of only those households with a stated preference for the type of housing.

Table 1.8	
Summary of Housing Needs of Survey Respondents	
Source of Need	No. of Respondent Households in 1997
Market Affordable Demand:	
Effective Demand Preferences for New/Other Housing	
• Large Cooperative or Single Family Ownership	12
• If Option for Small Cooperative Ownership	+8
• TBS or Coop/Communal Renter (effective demand)	33
Market Subsidy Needs:	
Non-Effective Preferences for New/Other Housing	
• Cooperative or Single Family Ownership	174
(could become effective TBS demand if households reduce their expectations or preferences)	96
• TBS or Coop/Comm Renter Not Affordable	50
Market Deficiency:	
Deficit Indicators	
• Overcrowding (Statistical)	177
• Substandard	127
• Households with unaffordable housing costs	265

Given prevailing home ownership financing costs and income requirements, only 12 of 277 households expressing preference for new or other single family or cooperative housing can actually afford to buy a large cooperative apartment or a single family house at market prices. Currently developed at 1,800 PLN per square meter of floor space, an 80 m² apartment would cost 144,000 PLN and a 100 m² house 180,000 PLN. These costs limit effective demand to 4.3 percent of all households with preferences, which is equivalent to 1.2 percent of all surveyed households. Excluded for lack of effective demand are 67 households preferring a cooperative apartment or 115 households preferring a single family house. However, if households are willing to purchase a smaller cooperative apartment of 50 m² at 90,000 PLN, then another 8 households preferring a cooperative apartment can be satisfied. Of the 174 households that cannot afford to own, fully 96 have sufficient monthly income to rent a new but smaller TBS or top quality communal unit at 356 PLN/month. Shown above as needing a market subsidy, those households might be induced to downscale their preferences by a program that allows them to eventually purchase their unit.

Households with preferences for cooperative, communal or private rent regulated rentals numbered 83 in total. With an average net monthly household income of roughly 1,000 PLN, 33 households would have adequate resources to rent a new TBS or communal unit, while 50 households could not afford such housing without a subsidy. Thus collectively, among all households preferring new or other housing, 53 will be able to realize their preferences for owning or renting at asking prices, another 96 could acquire new housing if they changed their preferences from owning to renting, and 128 would not be able to relocate without a housing subsidy. At its maximum, effective demand comprises 53.8 percent of those with preferences for new or other housing and 14.9 percent of all households surveyed.

In addition, over 500 households are deficient in housing from a statistical overcrowding, substandard physical condition, or housing affordability perspective. Much double-counting undoubtedly exists in this category of housing need and an unduplicated number cannot be accurately determined from the survey data. Appropriate policy responses should include programs of renovation as well as new construction and housing rent subsidy.

2.5 Demand for Renovation

In addition to demand for new or other housing, a significant number of households, 313 or nearly one in every three surveyed, expressed a need for housing renovation. Of these, however, only 200 households currently spend less than 30 percent of their net monthly incomes on housing expenditures and thus can probably afford to incur additional expenses for renovation. Overall, they identified 666 improvements in their existing units, with the majority of these (513) required by households that prefer not to relocate. The need for housing renovation was characteristic of all income groups, with the group average income of 1,261 PLN slightly above the all-household net monthly income average. Households with incomes over 2,000 PLN had the highest incidence of expressed desire for renovation, or 38.7% of such households.

Renovations ranged from merely cosmetic to major capital improvements. While the majority were identified for the occupant's flat (88.2%), building capital improvements like roof and exterior wall repair were also cited by the respondents. Categorized by type of program for which the identified projects would qualify, the following table summarizes the renovation needs. Roughly one in every three projects would likely be eligible for public programs, Our House and Little Improvements. They entail expenditures for changing windows, insulating walls, or changing radiators. Complex renovation of capital systems fall largely outside the public programs.

Table 1.9
Renovation Projects Identified by Survey Respondents

Type of Renovation Project	Number of Projects		
	Total	by Households that Prefer to Move	by Households that Prefer Not to Move
"Little Improvements" Program	22	2	20
"Our House" Program	210	51	159
Capital Improvements (self-managed)	207	48	159
Cosmetic Repairs (self-managed)	227	52	175
Total	666	153	513

Although survey respondents were not asked to identify the source of funds for housing renovation, fully 204 households expressed a willingness to save for this purpose using a Housing Savings Fund. Of these households, 107 preferred to move, while the other 97 intended to remain in their existing units. Although applicable to housing purchase, loans provided by a Housing Savings Fund are perhaps more suitable for renovation investments. Typically, a contractual savings program requires the depositor to make monthly payments over a three year period, after which a multiple of savings and interest (1.5 times) will be lent at a low rate of interest repayment.

- Among all households expressing a willingness to participate in contractual savings, the average monthly savings intention was 194 PLN, or an annual deposit of 2,238 PLN. With cumulative interest earnings, after a three year period such savings could qualify for

a loan of more than 10,000 PLN.

- Among households intending to move, average annual savings intentions were greater than the average, at 3,000 PLN.
- Among households intending to remain in their existing units, average annual savings were lower, at 1,660 PLN. Even for this group of households desiring to remain in their units and renovate, the average level of savings could generate over 8,000 PLN for capital investment.

3.0 Extrapolation of Results to the Universe of Households in Szczecin

Survey results can be applied to the universe of households in Szczecin if the survey was based upon a representative sample of all inhabitants. Such determination can be made by a validation of relevant survey findings with citywide indicators. Although the sample size was large, covering nearly one percent of all households (see following table), it does not conform in every respect to the aggregate demographic indicators of Szczecin. It should be noted that aggregate indicator data, as provided by the Central Statistical Office of the Voivodship, is not always as current as the survey data.

Table 1.10
A Comparison of Survey and Aggregate Demographic Indicators for Szczecin

Indicator	1997 Survey	Aggregate Data	
		Value	Year
Average Household Size	2.86	2.72	1995
No. of Households per Occupied Dwelling	1.18	1.11	1995
Families as % of All Households	86.7%	80.7%	1988
1-Person Households as % of All Households	13.5%	21.1%	1988
Employed Persons as % of All Persons	38.6%	33.5%	1995
Unemployment Rate	10.7%	6.3%	1996
Unemployed & Retired Persons as % of Total Population	21.4%	ca 20%	1988 & 1996
Average Net Monthly Household Income	1,202 PLN	1,139 PLN	1996
Average % of Net Monthly Household Income Spent on Housing	21.7%	22.4% in Voivodship	1995
Average Size of Housing Unit	57.4 m ²	56.0 m ²	1996
% of Units in Multifamily Dwellings	85.4%	89.1%	1994
% of Population in Single Family Houses	14.6%	14.0%	1994
Average Rooms per Unit	2.6	3.4	1995
Average Usable Space per Person	17.0 m ²	18.9 m ²	1996
Average Number of Persons per Unit	3.37	2.97	1996
Average Persons per Room	1.29	0.87	1996
Cooperatives as % of All Units	51.0%	41.7%	1994
Communal as % of All Units	31.5%	38.7%	1995
Enterprise as % of All Units	1.2%	16.7%	1994
Private/Other as % of All Units	16.3%	7.5%	1995
Usable Space per Cooperative Unit	49.82 m ²	50.63 m ²	1994
Usable Space per Communal Unit	52.45 m ²	50.34 m ²	1995
Usable Space per Enterprise Unit	44.50 m ²	51.44 m ²	1994
Usable Space per Private/Other Unit	95.03 m ²	54.07 m ²	1995
Average Rooms per Cooperative Unit	2.43	3.17	1994
Average Rooms per Communal Unit	2.22	3.18	1994
Average Rooms per Enterprise Unit	2.83	3.27	1994
Average Rooms per Private/Other Unit	4.01	3.32	1994
% of Units Lacking Water Supply	0.7%	0.5%	1988
% of Units Lacking WC	15.2%	14.1%	1988
% of Units Lacking Bath	12.0%	18.0%	1988
% of Units Lacking Hot Running Water	5.5%	16.3%	1988
% of Units Lacking Gas	2.3%	3.1%	1988
% of Units with Coal Fired Heating	10.5%	23.8%	1988

While discrepancies can be observed in all indicators, the variance in statistical values of the survey and aggregate indicators is significant only in a few instances. These significant differences can be summarized as follows:

- Too many cooperatives and single family homes were surveyed to the exclusion of enterprise and communal housing. The privately owned housing, primarily single family, was considerably larger than all private stock in the city and the surveyed enterprise housing was smaller. It also appears, from indicators not shown, that the quality of communal housing surveyed was in poorer condition than average for citywide communal stock, accounting for the higher shares of units without WC installations.
- As a consequence of these housing type discrepancies, strong differences emerge in average household size and housing occupancy or independence (one household per housing unit). Relative to the citywide average, too many families were surveyed and too few 1-person households were captured in the sampling. The coupling of primary and secondary families in single family houses may be reflected in the high share of employed to resident population, which is also considerably higher for surveyed households. At the citywide level, overcrowding or double occupancy is less evident than in the sample, reflecting the higher proportion of small households in adequately sized units. These differences in turn are reflected in differences in average floor space per person.
- Lastly, the specification of rooms by survey respondents may not be an accurate expression of their current housing conditions. While the size of housing units (in m²) is quite comparable between citywide aggregates and the survey sample, sharp differences exist in the number of rooms per unit and the aggregate indicator of persons per room. On a stock specific basis, survey respondents report considerably fewer rooms per unit for cooperative, enterprise and communal housing, but more per unit for private housing. On a size of unit basis, (in m²), many of these differences disappear with the exception of private housing. While the survey confirms a qualitative deficiency exists in housing, the extent of deficiency may be exaggerated by sampling distribution of stock and not by the lack of rooms overall.

Given the importance of the type of housing stock in accounting for disparities in household independence, average floor space per occupant, and even the physical condition of housing, the extrapolation of survey findings to the universe of Szczecin households is best performed on a stock specific basis. Therefore, the following table represents the likely preferences for new or other housing and the ability to pay under alternative housing cost conditions for the city as a whole, segmented by existing housing stock occupied. This extrapolation was performed using the preference and income coefficients of survey respondents stratified by type of stock and ownership.

Table 1.11
Estimation of Effective Demand for Housing by the Universe of Households in Szczecin

Total (all households)	All Households Living in Existing Housing Stock				
	Total	Cooperative	Communal	Enterprise	Private
	150,000	60,242	59,268	17,762	12,728
Households Which Prefer to Relocate					
Total	38,255	15,502	17,091	1,480	4,182
• Want & Can Afford Single Family or Large Coop Flat	1,338	1,065	0	0	273
• If Opt, Could Afford Small Cooperative	1,113	592	339	0	182
• Want & Can Afford TBS or Communal Flat	5,088	355	4,278	0	455
• Could Afford TBS if Change Preferences	13,531	6,391	3,751	1,480	1,909
• Cannot Afford Single Family, Cooperative or TBS Without Subsidy	17,185	7,099	8,723	0	1,363
Households Which Prefer Not to Relocate (not cumulative)					
Total	111,745	44,740	42,177	16,282	8,546
• Need Subsidy to Afford	46,190	20,238	19,299	2,960	3,693
• Overcrowded	12,678	4,852	5,469	0	2,357
• Substandard	16,855	473	16,068	0	314
Households Which Want to Renovate					
• Prefer to Relocate & Can Afford Renovation	9,305	4,142	4,613	0	550
• Prefer Not to Relocate & Can Afford Renovation	22,901	8,166	6,300	5,921	2,514

Among 150,000 households currently residing in Szczecin, an estimated 38,255 households or 25.5 percent prefer to relocate to new or other housing. Of these, only an estimated 1,338 households (3.5%) can afford their preferences for single family or large cooperative apartment ownership, and an estimated 5,088 households (13.3%) want and can afford TBS or communal type rental units. Another 1,113 households (2.9%) wanting to own cooperative apartments (with an average preference for 84 m²) could afford cooperative units of 50 m², if they were willing to opt for smaller units. The bulk of new owner occupants would be drawn from existing cooperative apartments (now either owner-occupied or rented), while the majority of new renter occupants would be drawn from existing communal stock. The 7,539 combined households that have the financial means to realize their housing preferences (perhaps modified preferences) under market conditions account for only 5.0 percent of all households in Szczecin.

Of those households that prefer single family or cooperative housing, yet do not have the financial resources to afford even smaller cooperative units, fully 13,531 (35.4%) could relocate to new housing if they were willing to downscale their preferences from owning a house or apartment to renting a new TBS or communal flat. They comprise another 9.0 percent of all Szczecin households and are nearly equivalent in number to the statistical deficit of dependent households, now sharing housing units. While the inducement to move to a smaller rental flat might be made more attractive by a future option to buy their housing, it is unlikely that all 13,531 households would be willing to change their preferences. Assuming that half of these households effectively demand TBS or communal stock, then coupled with those that can afford single family and cooperative housing, nearly 10 percent of the city's households could be rehoused at current prices in new owner or rental housing. Under current conditions, however, an estimated 17,185 households preferring to relocate (44.9% of this group) will be unable to afford new or other housing, given current costs and their financial resources.

Of all Szczecin households, an estimated 111,745 (or 74.5%) prefer not to relocate to new or other housing, yet many of these households currently live under inadequate housing conditions. An estimated 46,190 households, primarily occupying cooperative and communal stock, spend more than 30 percent of their net monthly household income on housing expenses. Fully 12,678 households that prefer not to relocate currently live in shared dwelling units, in typically cooperative and communal stock, as doubled-up households. An estimated 16,855 households occupy substandard flats, primarily in communal stock, as measured by the lack of toilet facilities. While it is not possible to determine the unduplicated number of non-mover households that are inadequately housed, it is quite likely that at least half of all those who prefer not to relocate are living under problematic housing conditions.

Lastly, an estimated 32,206 citywide households want to undertake some form of housing renovation and are likely able to afford additional housing expenditures, for example, as monthly savings for a renovation loan. The bulk of these households currently occupy units in which they expect to remain, while roughly one in every three households wanting to renovate also prefer to

relocate to new or other housing. Housing renovation assistance for those that intend to remain in their current housing and can afford to participate in renovation investments would represent a significant step in alleviating the housing quality deficit of Szczecin.

PART II

LOCAL HOUSING SUPPLY OPTIONS

1. Szczecin's Housing System - Overview

With a vacancy rate close to zero, the current housing stock offers few options to those seeking new housing opportunities except in rare instances when an apartment is exchanged or vacated. The vacancy rate will increase as the ownership and tenure structure of the current housing stock continues to evolve and new housing opportunities arise on the market. However, as indicated above, new market rate housing opportunities are limited to a very small segment of the population. Most of the current housing stock built between World War II and 1989, was heavily subsidized. Of the 10,500 units built after 1990, a high portion of the cooperative units probably received interest rate buy-outs by the state. Even with these capital subsidies or a lack of debt service to be paid, many residents are still unable to cover the maintenance and operating costs required for adequate management and repairs of their units. As effective demand for new housing is explored, consideration must be given to those who are currently inadequately housed, living in substandard conditions or overextended in their housing costs.

Section 1 below outlines the current structure of Szczecin's housing stock, general rents or operating expenses, and income characteristics of inhabitants. The still high percentage of communal stock poses both threats and opportunities. Threats stem from its overall poor condition, and require attention in the very near term. Opportunities arise from the central location of much of the communal stock, which provides the city with a resource which could leverage external financing and funding under careful planning and strategic management. The resulting resources could be used to address local housing needs.

The City of Szczecin has a very pro-active housing policy. Extensive research preceded the drafting of the housing policy which guides the City in taking full advantage of current funding and financing sources available to support local housing strategies. The discussion presented in this section draws upon the research conducted by the Housing Policy Group, however its scope is limited to briefly outlining supply side options available to Szczecin's residents.

Szczecin's policy of setting rents to recover costs is described below in Section 2: "Existing Rental Housing."

Recognizing the difficulty for apartment owners and tenants to assume responsibility to renovate building suffering from long term neglect, the City has created incentive and support programs for improvement of the communal and housing association stock, and a program to support locally defined infrastructure and small neighborhood project development. These programs are briefly described in Section 3 below: "City Supported Programs for Housing and Community Improvement."

Section 4, "New Development," describes new construction trends and products.

Section 5, "Funding and Financing Sources," provides a description of financing and fiscal tools for housing development and renovation and support.

1.1 Housing Stock by Ownership

As indicated in the table below, Szczecin's housing stock includes a higher percentage of communal and cooperative housing when compared to the nation as a whole.

Table 2.1 Ownership of Housing Stock Survey Results and Statistical Data				
Form of Ownership	Data from Urząd Statystyczny		Szczecin Survey Results	National Averages, Polish Cities over 100,000 Population (GUS 1995)
	Units	Percent		
Cooperatives	56,700	42.1%	51.0%	34.4%
Communal or Housing Association	41,700	31%	31.6%	12.9%
Housing Association	10,200	7.6%		18.3%
Former Enterprise Converted to Coop	3,000	2.2%	1.2%	6.6%
Former Enterprise converted to Private	8,400	6.2%		
Privately owned	14,600	10.9%	12.7%	24.6%
Total	134,600	100%	96.5%	96.8%

Housing Policy Group, 1997 (Some rounding errors and missing data repeated from source materials.)

However, the communal housing is periodically being privatized to sitting tenants and now to newly forming TBS.

Year	No. of Units Sold to Tenants	Usable Area by m2	Total Sales Amount	Price per m2/PLN	Share of city revenues (%)
1992	1,095	60,300	3,100,000	51.5	4.16
1993	1,177	65,974	5,112,569	77.5	4.97
1994	1,009	57,792	4,650,558	80.5	2.83
1995	1,694	87,053	6,869,815	78.9	3.09

Housing Policy Unit, Szczecin 1996

Residents were surveyed concerning their income and housing expenditure levels. The following two tables summarize the average incomes and average housing cost expenditures by type of ownership and housing.

Form of Ownership	Average Household Income (Range) in PLN/month
Communal	901
Housing association or cooperative	1,000 - 1,100
Single family, rental cooperative or private rental	1,200 - 1,500

Survey

Type of stock	Average monthly housing expenses in PLN	Average Monthly Housing Expenses in PLN/m ²
Communal	217	4.53
Purchased communal (association)	238	3.95
Cooperative	265	5.60
Enterprise	321	5.70
Single family home	361	4.32

Survey

According to the Statistical Office (*Urzad Statystyczny*), the percentage of household budgets expended on housing has been rising constantly from 11.5% in 1990 to 15.8% in 1991 to 22.14% in 1994 and stabilizing, rising only to 22.40% in 1996.

2.0 Existing Housing : Rental Housing

2.1 Communal Rental Unit Costs

Szczecin's rent policy is geared to cost recovery, with one of the highest maximum rent levels in the country. The city rent policy intends an incremental increase in rent levels to achieve the allowable maximum of 3% of replacement cost in the year 2000. Base rent levels are now at 2.2% of replacement cost (1,462 PLN in 2nd quarter of 1997) and are adjusted semi-annually in January and in June. In the 3rd Quarter of 1997, because of the high increase in the replacement cost to 1,674 PLN/m², the City Council postponed the rent increase which was planned to rise to 2.6% of the replacement cost for the period of January to July, 1998.

Rents are allocated based on a point system, which reflects the quality of the rental unit. The system awards a maximum of 64 points, and minimum of 6 points, with 51 points representing the average base rent of 2.68 PLN/m². Rental rates range from 0.22 PLN for a low-standard „6 point” apartment, to 3.0 PLN for the near top-rated „58 point” apartments. The city is collecting information from the 7 housing management entities on the breakdown of number of apartments in the various rent categories. However, information on the condition of the communal stock indicates a high percentage of substandard units.

In 1995 the Renovation Team characterized the condition of the communal units as:

- approximately 80% of the 42,000 communal units are found in pre-war buildings;
- 2% of communal buildings were constructed prior to 1880, of which:
 - 30% of units lack toilets
 - 37% of units lack bathrooms
 - 50% of units have coal-fueled heating systems.

Typically, substandard stock costs more to manage, thus the housing management entities with more substandard stock will have less funding available for repairs, requiring greater subsidies from the city.

According to the Szczecin TBS, a "51 point" unit of 50 m² size would have the following estimated housing costs:

Component	Cost in PLN/month
Rent (2.2% of maximum) 50 m ² x 2.68 PLN	134
Water	12.4
Sewage	10
Garbage Removal	11.17
Heat	94
Hot Water	63
Total	324.6 (6.49 PLN/month/m ²)

At a rent level of 324.6 PLN/month, it is important to note that this 50 m² communal apartment of "good standard" is affordable to roughly 50% of Szczecin residents, (assuming housing expenditure at 30% of household income. In other words, it would be affordable to any household at or above the net mean income level of 1,100 PLN/month.

2.2 Private Market Rental Housing

The private rental market in Szczecin is not large, with one local broker turning over 20 to 30 apartments a week. Several brokers indicate that small apartments dominate the rental market both in terms of supply and demand with larger apartments staying on the market longer. Neighborhoods commanding the highest rents are the center city and outlying areas surrounding the city where there are high standard new units for rent. Renters pay the owner a rental fee and also cover all apartment expenses, including the basic rental charge which usually ranges from 100 to 160 PLN for small apartments, and from 180 to 210 PLN for apartments of 2 to 3 rooms. While heating charges are usually included in this amount, other utilities are additional to the rent. Based on this information, current asking rental rates may range from 15 to 28 PLN/m². (Rates obtained in the Survey are somewhat lower as the surveyed apartments were rented at least one year ago).

Type of Unit	Older Housing Stock	New Housing Stock
Studio (31 m ²)	500 – 700 PLN	500 - 700 PLN
2 room (40-50 m ²)	700 – 900 PLN	800 – 1000 PLN
3 room (50-70 m ²)	1000 – 1100 PLN	1000 – 1200 PLN

Field research

A relatively high-income of 2,300 PLN/month is required to afford the least expensive 2-room private rental unit. Thus the private rental market appears to serve primarily households with incomes in the top 10-15%.

2.3 Cooperatives

Information collected from the REGON company register and from the Statistical Office indicate that approximately 62 cooperative companies are active in the City of Szczecin. However, the 4 largest cooperatives have built and operate approximately 84% of the 52,600 cooperative units.

Under the Law on Cooperatives, apartments may either be purchased with ownership rights or obtained with a right to occupancy (lokatorskie). Today, no cooperatives are building apartments on a rental basis except those built under the TBS program. Research conducted in 1995 by the Housing Policy Group found that in 1994 of the 52.6 thousand cooperative units, 34.2 thousand units possessed ownership rights and 22 thousand units possessed leasing rights which may be passed on to their children. Monthly maintenance or rental costs are similar for

both ownership type within the same building. Changes in the Law on Cooperatives have clarified ownership rights and cooperative owners may rent their units for market prices.

2.4 Enterprise Housing

As described above, much of the housing built and managed by Szczecin companies has been or is in the process of being transformed into communal stock, housing associations or cooperatives as allowed under the Act on Transforming Enterprise Housing, October 1994 .

3.0 City Supported Programs for Housing and Community Improvement

To address the deteriorated state and substandard conditions in the communal stock, the city has created two rehabilitation assistance programs: "Small Improvement Program" and "Our House." These programs encourage tenants and owners in communal stock to upgrade both their units and buildings with co-financing from the city. A large proportion of tenants and owners are unable to pay either the higher rental rates attached to improved housing, or the higher cost of more substantial renovation. The City's renovation programs attempt to address some of these issues by subsidizing renovation costs and postponing increases in maintenance payments or rents due to the improved conditions. An additional source of co-financing, but one which is little used, is the contract savings system.

3.1 Small Improvement Program

The Small Improvement Program, an important part of the renovation strategy, provides grants to tenants and owners (only for group investments) in communal or mixed ownership stock to conduct specified repairs and types of moderate renovation. The program has been in successful operation since March 1994 under the administration of the Renovation Group and has provided grants to 1,034 participants. The majority of grants (956 out of 1,034) were for conversion of coal powered heating systems to gas (739) or electric (217). The second improvement was the installation of toilets and bathrooms (71). In the later years of the program, there have been some jointly funded improvements in common areas such as installation of building intercoms or more extensive repairs of common areas. The total expenditure for the program over the past three years was 1,816,934 PLN which in turn has leveraged additional investment of approximately 3,374,306 PLN for a total of 5,191,240 new investment in housing renovation.

Table 2.7
Small Improvement Program

Type of Improvement	1994			1995			1996		
	No. of Grants	Total PLN	average grant ----- avg. cost of repairs	No. of Grants	Total PLN	average grant ----- avg. cost of repairs	No. of Grants	Total PLN	average grant ----- avg. cost of repairs
Change to Gas Heat	245	427,780	1,746 ----- 4,988	237	407,286	1,718 ----- 4,908	257	555,412	2,161 ----- 6,174
Change to Electric Heat	94	182,255	1,938 ----- 5,539	86	107,170	1,246 ----- 3,560	37	33,466	904 ----- 2,584
Improve Bathroom/WC	42	28,903	688 ----- 1966	18	21,383	1,186 ----- 3,388	11	12,911	1,173 ----- 3,353
Improve Common Areas	0			1	852	852 ----- 1,704	6	39,551	6,591 ----- 13,183
Total	381	638,938		342	536,656		311	641,340	

Rehabilitation Group, Szczecin 1997

The Small Improvement Program is now operated through the housing management companies, (the ZBILK's) and the TBS and is funded at a city-wide annual level of 1,006,000 PLN in 1997, with an increase to 1,200,000 PLN anticipated for 1998. The program provides grants for the following renovation tasks:

Table 2.8			
Small Improvement Program Participation Criteria			
Task	Tenants		Owners
	Individuals	Groups	Only Groups
Replacement of coal heating systems with gas, oil, electric, or by connection to the city system.	35% of costs but not more than 2,700 PLN	50% of costs but not more than 3,850 PLN	30% but not more than 1,500 PLN
Development of toilets, bathrooms, kitchens in apartments currently without these facilities.	40% of costs but not more than 2,700 PLN	50% of costs but not more than 3,850 PLN	30% but not more than 1,500 PLN
Improvement of the common areas such as stairways, external wall/elevation, installation of outdoor fixtures such as garbage enclosure, benches, sandbox etc.	50% of the actual cost of improvement		

3.2 Our House Program

The "Our House" program was established to provide for more intensive renovation of entire buildings, to be carried out with owner participation and some tenant financial participation. This program is targeted to owners and tenants in city and TBS-owned stock to accomplish the following:

- to create incentives for purchase of communal units by sitting tenants
- to improve housing conditions to create a housing management market through initiating and financing training for future managers.

The program is now being pilot tested, but is envisioned to facilitate substantial renovation not to exceed 1,000 PLN/m². At this maximum level, renovation of a 50 m² apartment would result in a total cost of 50,000 PLN, to be split equally between the city and the owner, or 25,000 PLN to each.

The Our House program has been allocated a total of 2,000,000 PLN in the 1998 city budget, which is intended to fund the following:

Table 2.9				
Our House Program Participation Criteria				
Task	Tenants		Owners	
	Individuals	Groups	Individuals	Groups
Replacement of coal heating systems with gas, oil, electric, or by connection to the city system.	35% of costs but not more than 2,700 PLN	60% of costs but not more than 3,850 PLN (more than 50% of units)	n/a	30% but not more than 1,500 PLN
Installation of toilets, bathrooms, kitchens in apartments currently without these facilities.	40% of costs but not more than 2,700 PLN	60% of costs but not more than 3,850 PLN (more than 75% of units)	n/a	30% but not more than 1,500 PLN
Improvement of the common areas such as roofs, water pipes, chimneys, construction of balconies, exchange of doors and windows, stairways, external wall/elevation improvements, installation of technical infrastructure network, installation of outdoor fixtures such as garbage enclosure, benches, sandbox, etc.	60% of costs	75% of costs	60% of costs	75% of costs

These two programs are creative attempts to provide incentives for owner and tenant participation in moderate and substantial housing stock improvement. For some of the city's housing stock, these programs may provide a sufficient level of intervention or may be used to stem serious, immediate problems in anticipation of eventual capital renovation. The programs are most important in advancing the notion and that owners and tenants should invest in their housing and providing the mechanisms for them to do so. When combined with saving in the contract savings system (described above) and with the use of tax deductions (described below), these two programs could make participation in renovation affordable to a greater percentage of the population. Currently the programs are modestly funded. With anticipated increase in demand, the city could develop mechanisms to recoup contributions to renovation costs by placing liens on privately owned apartments to be payed at time of sale or to increase maintenance fees by a percentage of renovation costs.

3.3 The Local Initiatives Program for Neighborhood and Infrastructure Improvements

In 1996, the City funded the Local Initiatives Program at a level of 2,000,000 PLN to provide incentives for neighborhood groups and individuals to support the development of infrastructure, school, playgrounds, sport fields, roads, parking, housing related objects, green areas and street lights. The level of the city's participation ranges from 50 to 80% of the costs depending on the task. Last year, all funds were allocated to 25 projects in 6 areas, as follows:

- 7 water and sewer supply
- 6 local roads
- 4 installations of electrical lines
- 4 grants for project planning
- 2 playgrounds
- 2 schools.

In 1997, 27 applications have already been received for new projects. The budget allocation for 1998 has increased to 2.5 million PLN. This Local Initiatives Program is important in correcting infrastructure deficiencies in lower rise neighborhoods with predominantly privately-owned stock and to support the evolution of community-based neighborhood improvement efforts.

4.0 New Development

The use of cooperatives to develop new housing is declining somewhat, although rental cooperatives are eligible to receive credit from the National Housing Fund (if conforming to the TBS criteria). Most new rental stock will be built by TBS and offered at moderately higher rental levels than existing communal stock. Some replacement housing for tenants relocated due to renovation is being built by TBS (with rents to be regulated by the city).

Home ownership is growing, and cooperatives, the primary source of privately owned housing, continue to develop housing mostly with capital provided by the final purchaser. Individual households also continue to develop single family housing. Both types of development are aided by the increase in mortgage products and the introduction of the contract savings system.

Table 2.10 shows a breakdown of annual housing production, based on data from the Regional Statistical Office.

Table 2.10 Housing Production by Type of Owner/Developer								
Housing Completions	Number of Units Built							
	1990	1991	1992	1993	1994	1995	1996	Total
Total	2,013 100%	2,024 100%	2,261 100%	1,166 100%	1,068 100%	731 100%	1,175 100%	10,439 100%
including:								
Cooperatives	1,416 70%	1,704 84%	1,964 87%	882 76%	840 79%	497 68%	951 81%	8,254 79%
Enterprises	366 18%	93 5%	144 6%	99 8%	26 2%	6 1%	54 5%	788 8%
Communal	26 1%	47 2%	27 1%	33 3%	63 6%	133 18%	40 3%	369 4%
Private	205 10%	180 9%	126 6%	152 13%	140 13%	95 13%	130 11%	1,028 10%

Source: unpublished data from Regional Statistical Office, Szczecin, 4/16/97. Percent figures are rounded.

Table 2.10 includes information about cooperative, enterprises, communal and private investors. It is likely that the data does not fully capture the whole of private-sector construction, since private developers do not always respect their obligation to provide data to the Statistical Office.

Cooperatives remain the primary housing developer, with the private sector visibly increasing the number of completed units in 1996. Enterprises' share in housing construction is

marginal and decreasing. The communal share in local housing construction has increased from 1.3% in 1990 to 18.2% in 1995, decreasing to 4.6% in 1996. In total, from 1991-1997, 418 units were completed by communal investors, including 218 attic adaptations and 200 newly constructed units.

4.1 Cooperative Housing

Field Survey on Development Trends: Development and Maintenance Rates

In June 1997, four housing cooperatives responded to questionnaires and interviews intended to assess current housing development and maintenance costs. The cooperatives were asked to profile projects developed in 1997 or currently in progress. Information from this survey of coops is presented in Table 2.11

Table 2.11 Typical Cooperative Construction, Production and Average Unit Size, by Number of Rooms in Unit										
Name of Project	Date Completed	Total No. of Units	Unit Size (Number of Rooms)						Cost in PLN/m ²	Rent in PLN/m ²
			1 room	2 rooms	2+ rooms	3 rooms	4 rooms	5 rooms		
Cooperative: SM Kielnia										
Bohatera W-wy 11	07/97	44	5 units 39 m ²	24 57 m ²		9 74 m ²	5 90 m ²	1 107 m ²	1,800	1.23
ul Szarotki-Radogoska	07/97	68	32 36 m ²	32 49 m ²		4 63 m ²			1,800	2.9-3.26
Mierzyn	01/97	42	4 37 m ²	12 57 m ²		16 68 m ²	9 86 m ²	1 105 m ²	1,700	1.0
Cooperative: SM Politechnik										
ul. Bohatera W-wy 24	1/98	30	10 37 m ²	10 39 m ²	5 56 m ²	5 67 m ²			1,800	2.15
Cooperative: SM Warszawo										
ul. Zubrów 3	2/97	49	21 31.7 m ²	18 52 m ²		5 63.2 m ²	5 79.7 m ²		1,200	2.59
Zubrow Phase 2	12/97								1,600	
Cooperative: SM Dab										
Majowe	6/97	60	4 31.6 m ²	8 53 m ²	16 60 m ²	8 66 m ²	16 70 m ²	8 81 m ²	1,700 1,800	1.58
Total		293	76	104	21	47	35	10		
100%			26%	35%	7%	16%	12%	3%		

As indicated by Table 2.11, cooperatives building for the private market are developing approximately 70% of their units at 60 m² or less and more than 60% at 55 m² or less to meet the market demand for smaller or average sized units. Thus, despite the desire for larger units (85 m² and over) by survey respondents, examination of the actual market indicates the greatest effective demand is for smaller units in the range of 1 to 3 units.

Cooperative projects developed today have typically been financed with the capital of purchasers who made an initial payment of 20 to 30% of the development cost, then paid the remainder in installments during construction, with the balance due on completion. However, Józef Karbowniczyn, President of Dab S.M., suggested a marked increase in use of mortgages for unit purchased from 1995 to 1996, in his estimation an increase ranging from 5% to 30%. He further categorized his purchasers in three groups, and estimated the percentage of households in each:

- 30% to 40% are families with apartments who are interested in improving their housing conditions, and usually opt for apartments of 80 m² or larger.
- 20% to 30% are families purchasing units for their children or for tax benefits, usually buying smaller apartments to 50 m².
- 30% are first-time home buyers who may have several housing savings books

4.2 TBS: New Construction and Renovation

STBS, the first TBS in Szczecin, was established in the process of restructuring the city housing management entities. Since then STBS has assumed management of 4,719 housing units and 337 commercial units located in the city center. The City has also transferred to STBS the ownership of two blocks located in the city center, for which renovation plans have been prepared. These blocks include 626 housing and 15 commercial units. The City is now developing a second TBS by transforming another housing management entity.

Briefly, TBS are created to develop, rehabilitate and manage rental housing stock affordable to middle-income families. Below are the most recent TBS income qualification limits for the Szczecin voivodship.

Table 2.12 TBS Income Qualification Levels, Percent Increase Allowed over Average Gross Salary, and Maximum Income by Household		
Household Size (persons)	% to Adjust Average Gross Salary (1st Quarter 1997 AGS = 975 PLN)	Maximum Monthly Income (PLN)
1	1.2	1.170 (975 x 1.2 = 1170)
2	1.8	1,755
3	2.2	2,145

The Szczecin TBS is developing several rental housing projects through adaptation/completion of existing buildings (Ostrowska, Somosierry) new construction (Zupańskiego), and renovation. In 1997 it will complete 116 TBS units and 90 replacement units which will be rented at city-regulated rents. In 1998, STBS plans to complete approximately 300 units. For the most part, credit at 50% of the project cost is being obtained from the National Housing Fund (KFM Program of BGK) with the remaining development costs provided from the City budget, TBS own resources, or, as in the case of replacement housing for the Blocks 21 & 22, from the STR renovation company. A deposit of 10% will be collected from TBS tenants at the time of lease signing. With development costs ranging from 1,573 PLN to 1.700 PLN, the deposits will range from 7,868 PLN to 8,500 PLN for a 50 m2 unit.

Rental charges may range between 3% and 4% of replacement cost (estimated at 1,462 per square meter as of January 1997), depending on the quality of the unit. In Table 2.13 total monthly charges including utilities are estimated for a 50 m2 unit of relatively high quality, and one of lower quality.

Component	4% Unit (Higher Quality)	3% Unit (Lower Quality)
Rent	$50 \times (.04 \times 1462) / 12 = 243.5$	$50 \times (.03 \times 1462) / 12 = 182.7$
Water	12.4	12.4
Sewage	10.0	10.0
Garbage Removal	11.17	11.17
Heat	47.0 (estimated to include savings from energy efficient construction)	47.0 (estimated to include savings from energy efficient construction)
Hot Water	63.0	63.0
Total Monthly Charges:		
per Unit	387.07 PLN/month	326.37 PLN/month
per m2	7.74 PLN/m2/month	6.52 PLN/m2/month

5.0 Funding and Financing Sources

5.1 Housing Allowances

Tenants with incomes less than 1.5 times the current lowest social security level (currently 374.63 PLN per person), or less than 1.0 times this level for each member of the household (for households of more than 1 person), and who qualify by apartment size, may be eligible to receive housing assistance as shown in Table 2.14.

Household Size	% of Income Paid for Housing	Maximum Qualifying Income (PLN/month)
1 person	15%	561.94
2 - 4 persons	12%	749.26
		1,123.89
		1,489.52
5 - 6 persons	10%	1,873.15
		2,247.78

The percentage of households receiving housing allowances in Szczecin is higher than national rates for large cities. Of the 149,000 households in Szczecin, 10% or 14,858 received housing allowances in 1996. This appears to be significantly higher than the rate of 4.8% in sample cities researched in 1995 by the Housing Institute. It should be noted, however, that housing allowance utilization is increasing countrywide as people become familiar with the relatively new program. Table 2.15 provides an overview of major characteristics of the 1996 Housing Allowance Program in Szczecin.

Table 2.15
Housing Allowances Paid in Szczecin, 1996

	Number	%
I. NUMBER OF APPLICATIONS FOR HOUSING ALLOWANCE		
- submitted	15,772	
- approved	14,858	
- denied	848	
II. HOUSING ALLOWANCES BY HOUSEHOLD SIZE		
1 person	4,297	28.4%
2 person	2,436	16.1%
3 person	2,325	15.4%
4 person	3,384	22.3%
5 person	1,817	12.0%
6 or more person	887	5.9%
III. HOUSING ALLOWANCES BY TENURE AND OWNERSHIP		
A) TENANTS TOGETHER	8,847	58.4%
including:		
- in communal houses	8,234	54.4%
- in enterprise houses	359	2.4%
- in private houses	31	0.2%
- in other houses	223	1.5%
B) MEMBERS OF COOPERATIVES	5,774	38.1%
including:		
- with rental agreement	3,331	22.0%
- with full ownership rights	2,443	16.1%
C) OWNERS OF THE PRIVATISED STOCK	354	2.3%
D) OWNERS OF SINGLE FAMILY HOMES	15	0.1%
E) OTHERS	156	1.0%
IV. HOUSING ALLOWANCES BY AMOUNT TO HOUSEHOLDS		
- to 40 PLN/month	3,699	24.4%
- 40-60 PLN/month	3,053	20.2%
- 60-80 PLN/month	2,626	17.3%
- 80-100 PLN/month	2,010	13.3%
- 100-120 PLN/month	1,430	9.4%
- 120-150 PLN/month	1,262	8.3%
- more than 150 PLN/month	1,066	7.0%

	Number	%
V. NUMBER OF HOUSING ALLOWANCES PAID	86,890	
including:		
- users of communal housing	46,635	53.7%
- other	40,255	46.3%
among them: - cooperatives	33,963	39.1%
- enterprise houses	1,814	2.1%
- other	4,478	5.2%
	PLN	%
VI. TOTAL AMOUNT OF HOUSING ALLOWANCES	6,210,130	
from the total amount - have been paid to:		
- users of communal housing	3,073,070	49.5%
- other	3,137,060	50.5%
among them: - cooperatives	2,723,633	43.9%
- enterprise houses	143,315	2.3%
- other	270,112	4.3%
VII. THE AVERAGE AMOUNT OF MONTHLY HOUSING ALLOWANCE	71.47	
- communal housing	65.90	
- cooperative housing	80.19	
- enterprise housing	79.01	
- other	60.32	

Szczecin Housing Department, Oct. 1997

5.2 Contract Savings System

According to a recent report in the Rzeczpospolita (18/8/1997) currently there are 2 banks in Szczecin, PKO SA and Bank Slaski, which offer savings accounts in accordance with the regulations of the contract savings system. They offer preferential housing loans, with yearly interest rates of 12.25 and 10.025%. After at least 3 years of saving at an interest rate of 6.125%, an account holder may obtain a loan for up to 150% of total savings. The term of the loan offered by PKO SA is the same as the savings period (now 3 years). for Bank Slaski, the term is 1.5 times the length of the savings period. This type of savings program may be a source of funds enabling owners to participate in the City's renovation programs described previously in this Report.

5.3 Mortgage Finance Products

In the past year, several banks began offering mortgage products in the Szczecin area. A few banks were contacted to learn of their products. Housing mortgage loans can be obtained for terms ranging from 10 to 20 years (Bank Gdański and PKO SA, respectively). The total amount of the loan depends on the income level of the borrower and is usually equal to 20 to 25 times monthly income. The interest rate is similar in all the banks, ranging between 25-26% per year. Minimum required downpayments range from 20 to 40% of the total development cost. Better terms may be provided with a lower loan to value ratio. Often a minimal level of monthly income is required of the potential borrowers. For example Bank Gdanski requires minimum income equal to 150% of national average gross per capita earnings for a single person, and 200% of the national average for a two-earner household. PBK offers dual indexed mortgages under the Mortgage Fund, and currently offers the most advantageous terms (used in the above analysis).

5.4 Tax Benefits

5.4.1 Housing Purchase

Tax benefits are available for housing investments and are deducted from the amount of taxes owed. The deduction can be taken over a period of three years. At present, 19 % the following costs qualify as deductible investments:

- new construction (limited to 70 m² at the indicated cost per m² determined for housing savings books);
- land purchase or long term lease (no more than 350 m²)
- down payment to a housing cooperative;
- expansion of an apartment
- adaptation of non-residential space.

At a typical construction cost of 1,462 PLN per square meter, the maximum allowable deduction would be:

$70 \text{ m}^2 \times 1,462 = 102,340 \times 0.19 = 18,620$ over 3 years,
or 6,206 PLN deduction per year.

Table 2.16	
Tax Rates by Income Brackets	
Annual Income Bracket or Range (PLN)	Tax Rate
0 - 20,868	20% of taxable income minus 278.20 PLN
20,868 - 41,736	3,895.40 PLN +32% of income over 20,868 PLN
41,736 or more	10,573.16 PLN + 44% of income over 41,736 PLN

However, an annual income of approximately 28,000 PLN is needed for the taxpayer to take full advantage of this deduction, given the tax rates shown in Table 2.16. This total tax deduction, when added to the 13,344 PLN which is average amount of funds available for housing investment as cited by survey respondents, would nearly be sufficient for a 40% downpayment on a 50 m² flat costing 1,700 PLN/m² or 85,000 PLN.

5.4.2 Housing Renovation

Tax deductions for renovation are considerably lower than deductions for housing purchase. Up to 19% of renovation costs may be deducted from taxes for three years, but there are ceilings on the amount of the deduction. Deductions for renovation of a single-family home cannot exceed 3% of the price of a 70 m² unit, or 2.5% of that price for renovation of an apartment. At a replacement cost of 1,400 PLN/m², this would imply a maximum deduction of 2,940 PLN for a single-family unit and 2,450 for an apartment. If the gas system is modernized, the maximum deduction may be increased by 0.5%.

5.4.3 Rental Housing Investment

The most advantageous tax deduction may be taken by individuals investing in rental housing. A maximum of 81,000 PLN may be deducted from taxable income over a period of ten years for each apartment developed. Creative use of these credits could result in affordable rental housing.

PART III

AN EXAMINATION OF HOUSEHOLD INCOME IN SZCZECIN

1. Introduction and Objective

Part III of this Report contains the results of an empirical examination of household income in Szczecin, based on administrative records and statistical sources. It was undertaken for purposes of evaluating the representative character of responses to the survey of 998 households (less than 1% of all households), conducted in January 1997 by Habitat. One objective of the survey was to ascertain housing preferences and other information pertinent to assessing the effective demand for housing in Szczecin. The sample was randomly drawn within a sample frame weighted by neighborhood population and housing types. Because it was not possible to pre-select households by income level, the reported income characteristics of all respondents became an important indicator of sampling validity. In addition, insofar as household income is the major determinant of effective demand for housing, the accuracy of survey analysis and conclusions rested upon obtaining a reliable measure of aggregate household income.

Subsequently, it was determined that an independent examination of household income should be conducted for purposes of corroborating or challenging the survey results. If a statistically significant difference was determined to exist, a recommendation would be made to re-weight the survey results so to give greater importance to lower or higher income respondents in the sample's income distribution, and so to achieve a more accurate overall profile of all households in the City of Szczecin.

2. Household Income Findings from Habitat Survey

The Habitat survey reported an aggregate net monthly household income of 1,200,009 PLN for 998 households, or an average annual net income of 14,429 PLN per household. At effective tax rates, net income is 70 percent of gross income, thus the average annual gross household income of Szczecin would have been 20,613 PLN in 1996. Income was reported for work, unemployment, pension and disability, though income was not reported by individual source. Fully 735 households reported having adult workers, 138 households reported having income from unemployment compensation, and 412 from pension and disability sources. Households reported multiple sources of income.

3. Method of Analysis

A two-pronged approach was designed to estimate and evaluate gross and net annual household income of Szczecin inhabitants in 1996, independent of the Habitat survey findings. These approaches entailed:

- (1) Tax Method -- an analysis of Personal Income Tax (PIT) filings for Fiscal District 1 of Szczecin Voivodship, which includes approximately one-third of the City of Szczecin. Conducted on a limited geographic basis by extrapolating data available for 1993 - 1995 to the year 1996.
- (2) Economic Aggregates Method -- an analysis of aggregate income generated from employment, unemployment compensation, pension and disability payments to all workers and residents of the City of Szczecin. Utilized annual average data for the City's economy in 1995 and 1996.

Data were provided by the Voivodship Tax Office and the Central Statistical Office (WUS) in response to requests by the City of Szczecin.

Annex 1 to the present report contains worksheets showing tax, population and employment data used to extrapolate incomes and verify the survey results.

4. Tax Method

Fiscal District 1 is comprised of portions or all of three major districts in the City of Szczecin and four outlying municipalities to the northwest. Based on WUS data and current municipal population and household trends (see Annex 2), Fiscal District 1 is estimated to contain 72,500 households in 1996, as follows:

- Srodmiescie District -- 30,400 households or 49 percent of resident population from all or part of five neighborhoods;
- Polnoc District -- 17,800 households or 100 percent of resident population from all seven neighborhoods;
- Zachod District -- 5,500 households or 13 percent of resident population from all or parts of five neighborhoods;
- Outside Szczecin -- 18,800 households or 100 percent of resident population in Dobrej, Kolbaskawa, NW Warpno and Police

In Fiscal District 1, for tax year 1995, Personal Income Tax (PIT) returns were filed by 105,969 taxpayers with annual gross income or with retirement and disability pensions, and by

employers or ZUS, using PIT forms 30, 31, 32, 33, 34, 40 and 40A, which vary by single or joint income status, with or without deductions. In tax year 1994, PIT returns were filed by 102,271 persons. Nearly another 3,000 persons filed using tax charts in each year (see attached tables). Compared to the number of resident households in each year, taxfilers per household rose from 1.45 persons in 1994 to 1.50 persons per household in 1995. In 1996 it is estimated that 1.56 taxfilers will exist per household, or collectively 113,092 PIT returns and tax chart filings in Fiscal District 1.

Based on the annual gross income reported by income class for all PIT taxfilers in 1994, and 1995, aggregate gross income (in current PLN not adjusted for inflation) rose from 607.9 mPLN to 832.4 mPLN, exclusive of income reported by tax charts or deducted as the cost of getting to work. Average taxfiler income correspondingly increased from 5,944 in 1994 to 7,855 per annum in 1995 (see attached tables). This growth represents a gain of 32.2 percent compared to an annual rate of inflation of 27.8 percent between 1994 and 1995. Assuming that real income growth continued in a comparable relationship to inflation between 1995 and 1996, which averaged 19.9 percent, then average taxfiler income would have reached 9,739 in 1996 or 24 percent above 1995. Adjusted for annual gross income of taxpayers reporting by tax chart and for the deducted cost of getting to work, aggregate gross income would have been 1,132.8 mPLN in Fiscal District 1 in 1996. For 72,500 resident households, average annual gross household income was thus 15,624 PLN in 1996.

Although taxpayer data is believed to be comprehensive in coverage for the geographic area of households, it is unlikely that the data are complete in terms of annual income reporting. That is to say, taxpayers fail to report income earned in the "grey economy" -- these are economic activities for which other transaction data are unlikely to be available. Independent studies of the informal sector or grey economy in Poland suggest that substantial "moonlighting" occurs. According to the Gdansk Institute for Market Economics, about 30 percent of Polish labor has unregistered jobs. The National Labor Office estimates that about 50 percent of the unemployed actually moonlight, and that unreported wages and salaries account for three-quarters of their incomes. According to the Central Statistical Office (GUS), moonlighting could be costing the budget as much as 17 to 18 percent of GDP in lost tax receipts and unlawfully-claimed unemployment and welfare benefits. Using these estimates as guides, an assumption was made regarding a reasonable percentage of annual income not reported in Fiscal District for tax purposes.

Assuming 25% of annual gross income is not reported for taxfiling purposes in Fiscal District 1, then the average annual gross household income was 19,530 PLN in 1996 ($1.25 \times 15,624 = 19,530$), and the net household income was 13,671 PLN. Compared to the Habitat survey results for net household income, which exceeded the net income measure derived by the tax method, a variance of 5.5 percent exists. **This cannot be regarded as a statistically significant difference** (see Chart 1).

5. Economic Aggregates Method

Viewing the City of Szczecin in economic aggregate terms, the annual income of households is derived largely from three sources:

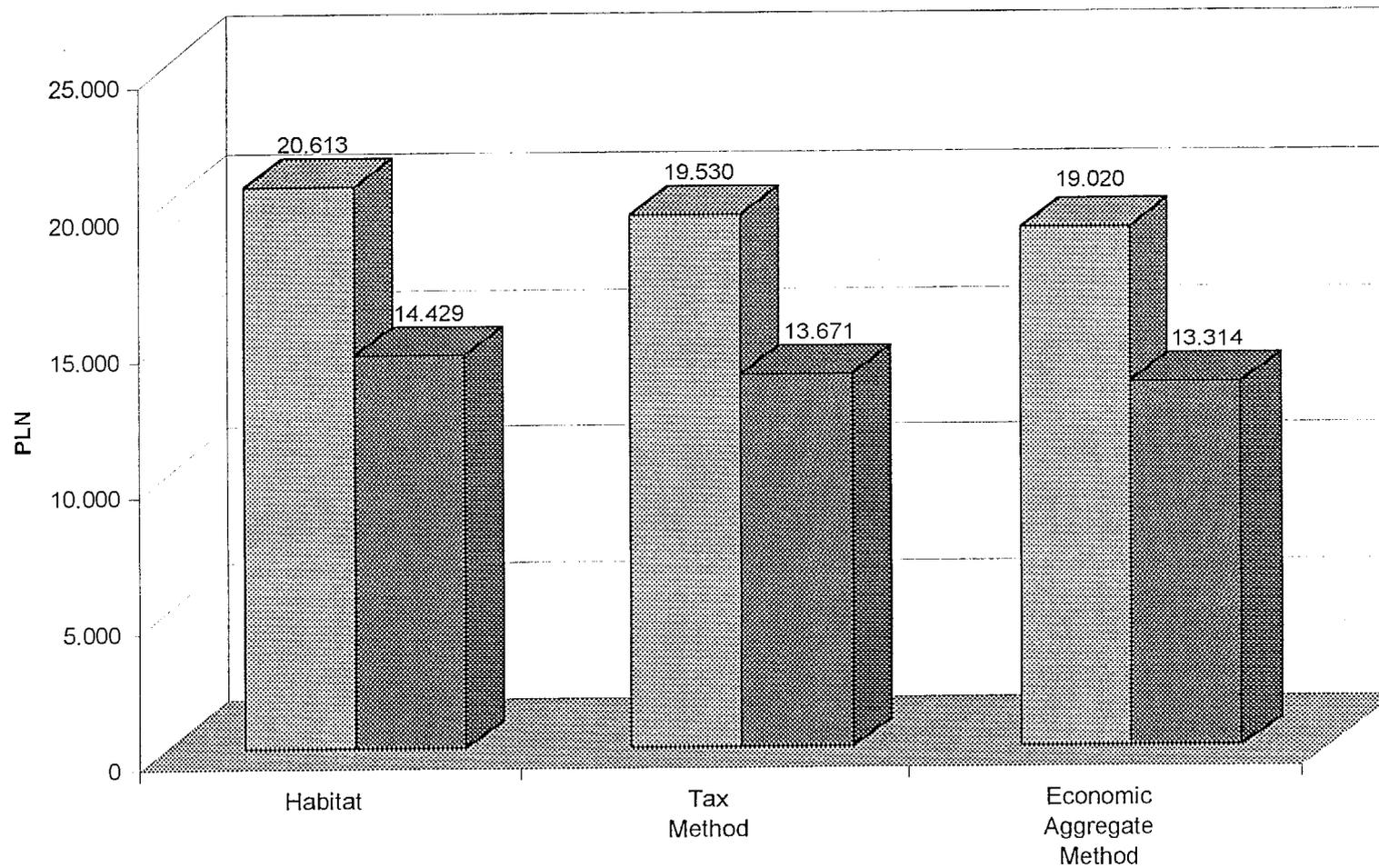
- (1) employment of resident labor force in the national economy;
- (2) unemployment compensation of residents;
- (3) disability and retirement benefits of residents.

In 1996, 140,062 residents of Szczecin, or 33 percent of all inhabitants, were employed in the national economy. Average monthly gross salaries ranged from 550 PLN per worker in Hotels and Restaurants, to 1,232 PLN per worker in Utilities. Applying GUS-reported average monthly gross salaries for Szczecin to employment by industry, and assuming 12 months of employment per worker, the aggregate annual gross earnings of salaried workers residing in Szczecin was 1,606.96 mPLN in 1996.

In addition to workers, 10,801 adults were officially reported as unemployed in 1996, and an estimated 72,099 residents were receiving disability and retirement pensions. Applying taxfiler-reported average annual gross income of pensioners, and an estimate of average unemployment compensation, it is estimated that an additional 598.6 mPLN and 59.8 mPLN in payments to the unemployed and pensioners should be included in the annual gross income of Szczecin residents in 1996. The aggregate economic earnings for all city residents were thus 2,265.4 mPLN, based on reported activity for 1996. Again assuming 25% of annual gross income is not reported as a result of moonlighting, unreported aggregate earnings were estimated at 566.4 mPLN in Szczecin in 1996. Combined reported and unreported economic activity generated 2,831.8 mPLN of aggregate gross income annually in the City in 1997, and average annual household income was 19,020 in gross terms or 13,314 in net terms for all residents of Szczecin.

Compared to the results of the Habitat survey for net household income, which exceeded the net income measure derived by the economic aggregates method, there appears to be a variance of 8.4 percent. **This cannot be regarded as a statistically significant difference.** (see Chart 1).

SZCZECIN
Comparison of Average Annual Incomes of Respondents vs
Filer



■ Gross Income
■ Net Income

57

ANNEX 1:

Worksheets

Tax, population and employment data used to extrapolate incomes and verify the survey results.

Szczecin Fiscal Office No. 1: Annual Income Taxes for 1993-1995
 Source: Tax Office

1993 by Filer Type		Annual Gross Income (PLN) by Income Class							
Taxpayers w/Annual Gross Income	# of Taxpayers	Under 2.400	2.400 4.794	4.794 7.200	7.200 9.600	9.600 12.000	12.000 14.400	14.400 & Over	
PIT-30 (person)	5171	1123	1382	1137	598	350	187	394	
PIT-31 (jt inc of couple)	7951	1205	1777	1626	1137	693	411	1102	
PIT-32 (pers no deduc'n)	19086	7662	5808	3765	1055	394	159	243	
PIT-33 (cple no deduc'c)	10297	2095	2599	2267	1753	760	381	442	
PIT-34 (sgle payer...)	1483	555	645	245	33	1	1	3	
Total	43988	12640	12211	9040	4576	2198	1139	2184	
Aggregate Income	228.254.967	15.168.000	43.922.967	54.212.880	38.438.400	23.738.400	15.034.800	37.739.520	
Average Income	5.189								
Distrib of Filers	100,00%	28,74%	27,76%	20,55%	10,40%	5,00%	2,59%	4,96%	
Distrib of Income	100,00%	6,65%	19,24%	23,75%	16,84%	10,40%	6,59%	16,53%	
Taxpayers Receiving Rtr or Disab Pensions									
	# of Taxpayers	Under 2.400	2.400 4.794	4.794 7.200	7.200 9.600	9.600 12.000	12.000 14.400	14.400 & Over	
PIT-30 (person)	1068	157	433	261	107	50	25	35	
PIT-31 (jt inc of couple)	1179	152	390	244	158	81	51	103	
PIT-32 (pers no deduc'n)	4501	564	2120	1415	264	80	23	35	
PIT-33 (cple no deduc'c)	2253	314	714	555	401	134	79	56	
PIT-34 (sgle payer...)	166	64	75	24	3	0	0	0	
Total	9167	1.251	3732	2499	933	345	178	229	
Aggregate Income	47.781.627	1.501.200	13.424.004	14.986.503	7.837.200	3.726.000	2.349.600	3.957.120	
Taxpayers Filing Under Other Forms									
	# of Taxpayers	Under 2.400	2.400 4.794	4.794 7.200	7.200 9.600	9.600 12.000	12.000 14.400	14.400 & Over	
PIT-40 (by Employers)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PIT-40A (Pensions by ZUS)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Tax Charts	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Aggregate Income	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
All Taxpayers in 1993 Combined									
	# of Taxpayers	Under 2.400	2.400- 4.794	4.794- 7.200	7.200- 9.600	9.600 12.000	12.000 14.400	14.400 & Over	
PIT-30 (person)	6239	1280	1815	1398	705	400	212	429	
PIT-31 (jt inc of couple)	9130	1357	2167	1870	1295	774	462	1205	
PIT-32 (pers no deduc'n)	23587	8226	7928	5180	1319	474	182	278	
PIT-33 (cple no deduc'c)	12550	2409	3313	2822	2154	894	460	498	
PIT-34 (sgle payer...)	1649	619	720	269	36	1	1	3	
PIT-40 (by Employers)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
PIT-40A (Pensions by ZUS)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Tax Charts	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Total	53155	13891	15943	11539	5509	2543	1317	2413	
Aggregate Income	276.036.594	16.669.200	57.346.971	69.199.383	46.275.600	27.464.400	17.384.400	41.696.640	
Average Income	5.193								
Distrib of Filers	100,00%	26,13%	29,99%	21,71%	10,36%	4,78%	2,48%	4,54%	
Distrib of Income	100,00%	6,04%	20,78%	25,07%	16,76%	9,95%	6,30%	15,11%	

Szczecin Fiscal Office No. 1: Annual Income Taxes for 1993-1995

Source: Tax Office

1994 by Filer Type

Taxpayers w/Annual Gross Income	# of Taxpayers	Annual Gross Income (PLN) by Income Class						
		Under 3.197	3.197 6.394	6.394 9.590	9.590 12.787	12.787 15.984	15.984 19.181	19.181 & Over
PIT-30 (person)	10262	2118	3419	2255	1015	582	291	582
PIT-31 (jt inc of couple)	13357	1974	3338	2913	2032	1127	661	1312
PIT-32 (pers no deduc'n)	19004	8438	5801	3332	821	299	144	169
PIT-33 (cple no deduc'c)	10500	2380	2852	2197	1758	703	304	306
PIT-34 (sgle payer...)	2555	880	934	481	162	45	20	33
Total	55678	15790	16344	11178	5788	2756	1420	2402
Aggregate Income	377.612.483	25.240.315	78.377.652	89.334.576	64.759.038	39.646.438	24.967.150	55.287.314
Average Income	6.782							
Distrib of Filers	100,00%	28,36%	29,35%	20,08%	10,40%	4,95%	2,55%	4,31%
Distrib of Income	100,00%	6,68%	20,76%	23,66%	17,15%	10,50%	6,61%	14,64%
Taxpayers Receiving Rtr or Disab Pensions	# of Taxpayers	Under 3.197	3.197 6.394	6.394 9.590	9.590 12.787	12.787 15.984	15.984 19.181	19.181 & Over
PIT-30 (person)	2882	484	1372	666	190	84	37	49
PIT-31 (jt inc of couple)	2553	332	841	599	377	165	98	141
PIT-32 (pers no deduc'n)	3984	481	1959	1233	228	43	21	19
PIT-33 (cple no deduc'c)	2259	315	755	563	416	130	43	37
PIT-34 (sgle payer...)	278	108	85	50	22	7	2	4
Total	11956	1.720	5.012	3.111	1.233	429	201	250
Aggregate Income	80.902.761	2.749.420	24.035.046	24.863.112	13.795.421	6.171.380	3.534.083	5.754.300
Taxpayers Filing Under Other Forms	# of Taxpayers	Under 3.197	3.197 6.394	6.394 9.590	9.590 12.787	12.787 15.984	15.984 19.181	19.181 & Over
PIT-40 (by Employers)	9941	1429	4770	2874	570	193	64	41
PIT-40A (Pensions by ZUS)	24696	10716	12250	1642	83	5	0	0
Tax Charts	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total	34637	12145	17020	4516	653	198	64	41
Aggregate Income	149.348.469	19.413.783	81.619.410	36.091.872	7.306.091	2.848.329	1.125.280	943.705
All Taxpayers in 1994 Combined	# of Taxpayers	Under 3.197	3.197 6.394	6.394 9.590	9.590 12.787	12.787 15.984	15.984 19.181	19.181 & Over
PIT-30 (person)	13144	2602	4791	2921	1205	666	328	631
PIT-31 (jt inc of couple)	15910	2306	4179	3512	2409	1292	759	1453
PIT-32 (pers no deduc'n)	22988	8919	7760	4565	1049	342	165	188
PIT-33 (cple no deduc'c)	12759	2695	3607	2760	2174	833	347	343
PIT-34 (sgle payer...)	2833	988	1019	531	184	52	22	37
PIT-40 (by Employers)	9941	1429	4770	2874	570	193	64	41
PIT-40A (Pensions by ZUS)	24696	10716	12250	1642	83	5	0	0
Tax Charts	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total	102271	29655	38376	18805	7674	3383	1685	2693
Aggregate Income	607.863.713	47.403.518	184.032.108	150.289.560	85.860.549	48.666.147	29.626.513	61.985.320
Average Income	5.944							
Distrib of Filers	100,00%	29,00%	37,52%	18,39%	7,50%	3,31%	1,65%	2,63%
Distrib of Income	100,00%	7,80%	30,28%	24,72%	14,12%	8,01%	4,87%	10,20%

Szczecin Fiscal Office No. 1: Annual Income Taxes for 1993-1995

Source: Tax Office

1995 by Filer Type

Taxpayers w/Annual Gross Income	# of Taxpayers	Annual Gross Income (PLN) by Income Class							
		Under 4,215,72	4,215,72 8,431,44	8,431,44 12,647,16	12,647,16 16,862,88	16,862,88 21,078,60	21,078,60 25,294,32	25,294,32 & Over	
PIT-30 (person)	17484	3383	6502	4359	1601	676	349	614	
PIT-31 (jt inc of couple)	23018	3864	6275	5092	3286	1687	984	1830	
PIT-32 (pers no deduc'n)	14035	7796	4001	1804	274	83	32	45	
PIT-33 (cple no deduc'c)	5596	1798	1644	1075	678	223	74	104	
PIT-34 (sgle payer...)	2589	956	899	465	156	55	26	32	
Total	62722	17797	19321	12795	5995	2724	1465	2625	
Aggregate Income	548.319.730	37.513.584	122.177.889	134.850.344	88.456.345	51.676.296	33.968.164	79.677.108	
Average Income	8.742								
Distrib of Filers	100,00%	28,37%	30,80%	20,40%	9,56%	4,34%	2,34%	4,19%	
Distrib of Income	100,00%	6,84%	22,28%	24,59%	16,13%	9,42%	6,19%	14,53%	

Taxpayers Receiving Rtr or Disab Pensions	# of Taxpayers	Annual Gross Income (PLN) by Income Class							
		Under 4,215,72	4,215,72 8,431,44	8,431,44 12,647,16	12,647,16 16,862,88	16,862,88 21,078,60	21,078,60 25,294,32	25,294,32 & Over	
PIT-30 (person)	5692	968	2832	1375	327	102	47	41	
PIT-31 (jt inc of couple)	4922	925	1954	1056	561	203	97	126	
PIT-32 (pers no deduc'n)	2779	438	1514	721	83	16	2	5	
PIT-33 (cple no deduc'c)	1426	289	538	337	202	42	8	10	
PIT-34 (sgle payer...)	300	103	108	61	23	4	0	1	
Total	15119	2723	6946	3550	1196	367	154	183	
Aggregate Income	120.812.417	5.739.703	43.923.587	37.414.515	17.647.004	6.962.262	3.570.715	5.554.633	

Taxpayers Filing Under Other Forms	# of Taxpayers	Annual Gross Income (PLN) by Income Class							
		Under 4,215,72	4,215,72 8,431,44	8,431,44 12,647,16	12,647,16 16,862,88	16,862,88 21,078,60	21,078,60 25,294,32	25,294,32 & Over	
PIT-40 (by Employers)	9363	1107	5082	2538	451	123	90	32	
PIT-40A (Pensions by ZUS)	18765	8119	9402	1176	59	7	1	1	
Tax Charts	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Total	28188	9226	14484	3714	510	130	91	33	
Aggregate Income	163.283.689	19.447.116	91.590.733	39.142.960	7.525.060	2.466.196	2.109.968	1.001.655	

All Taxpayers in 1995 Combined	# of Taxpayers	Annual Gross Income (PLN) by Income Class							
		Under 4,215,72	4,215,72 8,431,44	8,431,44 12,647,16	12,647,16 16,862,88	16,862,88 21,078,60	21,078,60 25,294,32	25,294,32 & Over	
PIT-30 (person)	23176	4351	9334	5734	1928	778	396	655	
PIT-31 (jt inc of couple)	27940	4789	8229	6148	3847	1890	1081	1956	
PIT-32 (pers no deduc'n)	16814	8234	5515	2525	357	99	34	50	
PIT-33 (cple no deduc'c)	7022	2087	2182	1412	880	265	82	114	
PIT-34 (sgle payer...)	2889	1059	1007	526	179	59	26	33	
PIT-40 (by Employers)	9363	1107	5082	2538	451	123	90	32	
PIT-40A (Pensions by ZUS)	18765	8119	9402	1176	59	7	1	1	
Tax Charts	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Total	105969	29746	40751	20059	7701	3221	1710	2841	
Aggregate Income	832.415.836	62.700.404	257.692.209	211.407.819	113.628.409	61.104.754	39.648.847	86.233.396	
Average Income	7.855								
Distrib of Filers	100,06%	28,07%	38,46%	18,93%	7,27%	3,04%	1,61%	2,68%	
Distrib of Income	100,00%	7,53%	30,96%	25,40%	13,65%	7,34%	4,76%	10,36%	

1996 by Filer Type

Annual Gross Income (PLN) by Income Class

	cpi	ave filer income							
Tax Grwth vs CPI 94-5	127,8	1,32							
Est 95-6	119,9	1,24							
Est 96 Agg, Ave Hsld & Filer	1.132.771.215	15624	9.739						
Est All Taxpayers in 1996 Combined	# of Taxpayers	Annual Gross Income (PLN) by Income Class							
		Under 5,480,44	5,480,44 10,960,87	10,960,87 16,441,31	16,441,31 21,921,74	21,921,74 27,402,18	27,402,18 32,882,62	32,882,62 & Over	
est distr of all filers incl tax cht	113092	27,14%	41,39%	18,47%	6,03%	2,77%	1,58%	2,62%	
est of all filers, incl tax charts:	113092	30698	46806	20889	6820	3134	1787	2962	
aggregate taxpayers income:	1132771215	84119786	384774030	286202338	130825762	77292350	53852402	115704547	
monthly filer income		457	913	1370	1827	2284	2740	3256	
est dostr pf all filer income	100,00%	7,43%	33,97%	25,27%	11,55%	6,82%	4,75%	10,21%	
cost of getting to work	31361000								
gross hslid @ 20%		net hslid income							
tax w/assms of underreptng:	19.530	13.671							
econ w/assms of underreptng:	19.020	13.314							
Fiszcz:		14.429							
difference		1.06 - 1.08							

Szczecin Neighborhood Population & Households
 Source: Andrzej Kurowski

In Fiscal District 1

Neighborhood	1994			1997			1994		1997	
	Population	Hsld Pop	Hslds	Hsld Pop	In FD1?	% Incl	Hsld Pop	Hsld	Hsld Pop	Hsld
Srodmiescie (Center)	159059	151125	60630	149018	pt		74.633	30.404	74.617	30398
Stare Miasto	6537	6303	2659	6102	y/n	80%				
Nowe Miasto	9344	8487	3464	8305	n					
Srodmiescie-Zachod	20490	20097	7850	19257	n					
Turzyn	24932	24300	9455	23580	n					
Centrum	31552	30287	12163	29531	y					
Srodmiescie-Polnoc	17641	15974	6797	15477	y/n	80%				
Lekno	4148	3908	1697	3879	y/n	50%				
Niebuszewo-Bolinko	26440	24570	9828	25883	y					
Drzetowo-Grabowo	16593	15703	6133	15791	n					
Wyspa Pucka	1382	1496	584	1213	n					
Polnoc (North)	51288	49869	17705	50061	y		49869	17705	50061	17773
Skolwin	3562	3470	1243	3486						
Stolczyn	5154	4539	1739	4537						
Bukowo	1927	1975	596	2080						
Golecino-Goclaw	3645	3861	1451	3731						
Warszewo	2347	2302	696	2218						
Niebuszewo	17222	15458	5704	18313						
Zelechowo	17431	18264	6276	15696						
Zachod (West)	127717	124357	44748	121344	pt		16.298	5.459	16.094	5391
Glegokie-Pilchowo	1467	1416	481	1401	y/n	0%				
Osow	1508	1344	411	1451	y					
Arkonskie-Niemierzyn	13367	12888	4296	12617	y					
Zawadzkiego-Klonowica	15629	16230	5321	15806	y/n	5%				
Krzekowo-Bezrzecze	2095	1673	539	1949	n					
Pogodno	26147	25093	9725	24722	y/n	5%				
Swierczewo	21831	20958	7566	20261	n					
Gumience	17641	18639	6517	17458	n					
Pomorzany	28032	26116	9892	25679	n					
Prawobrzeze (Right Bank)	80954	80270	25803	81862						
Zydowce-Klucz	2514	2539	991	2567						
Podjuchy	9302	9433	3073	9413						
Zdroje	9638	9408	3084	9265						
Dabie	12152	12251	4097	12187						
Zalom	3478	3662	1123	3912						
Wielgowo-Slawociesze	3226	3147	996	3172						
Pionia-Smierdnica-Jezierzyc	3729	3770	1182	3715						
Sloneczne	17724	17331	5251	17024						
Majowe-Kijewo	8925	9235	2740	10279						
Bukowe-Kieskowo	10266	9494	3266	10328						
Szczecin Total	12/31	419018	405621	148886	402285					
	1995	419800	406000	149300	147661					
	1994	419608	405000	148800						
	1993	417700	402700	148100						
	1990	413437								
	1988	410000	395000	144500						
In Szczecin:										
Fisc Dist 1	94	140.800	53.569	140.772	53.562					
	95		53749							Outside Szcz: 4 towns
	96		53655							18.815
										56636
										18.879
										18.846
Filers/HH	94		1.91		1.97					combined w/est of tax charts:
	95		1.97		2.03					1.50
	96		1.81		1.87					1.56
HH Income	94		8902							
	95		12149							
	96		15624							

Szczecin Employment and Earnings (according to EKD)

Source: WUS

Note: Column G,H from Ad 1, Second WUS request

Column J,K,M,N from Ad2, Second WUS request

Industry	Employees in National Economy						Employees of Enterprises		Ave Monthly Gross Salary		Ave Annual Gross Salary : National Economy		Ave Annual Gross Salary: Enterprises + Not Rept'd		
	1990	1991	1992	1993	1994	1995	1996	1995	1996	1995	1996	1995	1996	1995	1996
Total	185400	179400	176300	168000	152500	142582	140062	86956	90122	811,66	1010,96	1.331.255.393	1.606.951.018	1.341.842.789	1.622.824.038
Agric, Hunting, Forestry						786	601	279	26	706,85	671,15	6.667.009	4.840.334	2.366.534	209.399
Fishing						1818	1933	1586	1516	531,52	637,99	11.595.640	14.798.816	10.115.889	11.606.314
Mining						127	65	365	332	923,85	1016,69	1.407.947	793.018	4.046.463	4.050.493
Manufacturing Production	53700	49400		44400		36045	35224	39284	40059	873,92	1085,78	378.005.357	458.946.177	411.972.879	521.943.132
Utilities						3487	2520	2283	2371	999,64	1232,22	41.828.936	37.262.333	27.386.137	35.059.123
Construction	19400	17900		14800		11102	9755	11526	11804	753,06	947,24	100.325.665	110.883.914	104.157.235	134.174.652
Trade: Wholesale & Retail						15367	15562	11123	12877	678,06	842	125.036.976	157.238.448	90.504.737	130.109.208
Hotels & Restaurants						2584	2411	1466	1352	443,67	549,86	13.757.319	15.908.550	7.805.043	8.920.929
Transport	25800	23200		19800		23150	22608	11967	12462	859,31	1075,86	238.716.318	291.876.515	123.400.353	160.888.408
Financial Services						4929	5081					45.659.890	60.584.218		
Real Estate						6994	7317	5011	5310	771,96	993,64	64.789.059	87.245.567	46.419.499	63.314.741
Public Administration						4928	5339					41.319.506	52.916.965		
Education						12873	13023					107.935.471	129.076.162		
Health & Social Welfare						14000	14157					117.384.960	140.315.690		
Other Activities						4392	4466	2066	2013	698,72	825,95	36.825.339	44.264.312	17.322.666	19.951.648
check						142582	140062	86956	90122						
								36730	37600					312.299.827	382.893.035
								18896	12340					184.045.528	149.702.957
										average		9337	11473		
												#	PLN		
												Est All Working	140.062	1.606.951.018	
												Est Unemploy't	10801	59.817.143	5538
												Est Pensions	72.099	598.639.540	8303
												subttl		2.265.407.700	
												Est unreported		566.351.925	
												total		2.831.759.626	
												City households	148886		
												Average HH Inc		19.020	

64

Habitat Survey Results re Income

Q27: What is total current monthly net income of hshld?

In 1996:	Hslds	Anl Inc	Dist HHs	Dist Inc
< 300	38	68400	3,81%	0,47%
301-500	99	475794	9,92%	3,30%
501-700	120	864720	12,02%	6,00%
701-1000	250	2551500	25,05%	17,72%
1001-1200	113	1492278	11,32%	10,36%
1201-1400	75	1170450	7,52%	8,13%
1401-1700	121	2251326	12,12%	15,63%
1701-2000	87	1931922	8,72%	13,42%
2001-2500	34	918204	3,41%	6,38%
2500-3000	24	792144	2,40%	5,50%
>3000	28	1753509	2,81%	12,18%
missing	9	129861	0,90%	0,90%
	998	14400108	100,00%	100,00%
Average		14429		
Median		12000		

Tax Brackets

Tax Brackets

In 1996 Est	Dist Filers	Dist Inc	Filers	Agg Income
<457	11,12%	2,60%	111	31231
457-913	33,47%	20,24%	334	242916
913-1370	23,95%	22,58%	239	270995
1370-1827	15,23%	19,71%	152	236490
1827-2284	9,82%	16,29%	98	195500
2284-2740	1,60%	3,37%	16	40430
>2740	4,81%	15,20%	48	182447
	100,00%	100,00%	998	1200009

Q4 How many people in your household are adults 18+ with?

Jobs:	Hslds	#Pers Wrkg
0	263	0
1	275	275
2	374	748
3	68	204
4	18	72
	998	1299
Unemployment		
0	860	0
1	123	123
2	13	26
3	2	6
	998	155
Pensions:		
0	586	0
1	268	268
2	138	276
3	4	12
4	2	8
	998	564

National Consumer Price Indices

Dec of Yr	Anl Ave
1989	739,6
1990	349,3
1991	160,4
1992	144,3
1993	137,6
1994	129,5
1995	121,6
1996	118,5

Q33 Type of Work of Respondent:

Self Employed	54
Private Company	158
State Enterprise	221
Budget Instit	86
Working	519

Q34 Sector of Work of Respondent:

Agr, Htg, Forestry	6	546,15	39323
Fishing	6	526,26	37891
Mfg & Util	89	931,27	994596
Construction	47	762,15	429853
Trade & Repair	75	684,32	615888
Hotel & Restaur	13	460,98	71913
Transport	71	867,36	738991
Finance	15	791,83	142529
Real Estate	17	791,83	161533
Public Admin	54	676,7	438502
Education	58	676,7	470983
Health & Soc As	43	676,7	349177
Other	58	676,7	470983
Tot Respdnt	552		4962162
Tot Othr Adult	747		0
Est All Working	1299		4962162
Est Unemploy'm't	155	326,94	608108
Est Pensions	564	518,51	3509298
			9079569
			14400108

65

ANNEX 2:

Draft

Indicators to Monitor Housing Conditions and Progress in Attaining Housing Strategy Goals

MIESZKANIOWA BAZA DANYCH SZCZECINA I PROPONOWANE WSKAŹNIKI POPYTU I PODAŻY											
#	dane lub wskaźnik	źródło	1988	1990	1991	1992	1993	1994	1995	1996	ankieta
	powiązane z popytem										
P1	liczba ludności		409000	413400	414200	416400	417700	419600	418200		
	poza gosp. domowymi		14000				15000	15100	14200		
	<i>w gosp. domowych</i>		395000				402700	404500	404000		
	<15 lat							79455	76155		
	15-24							68251	69559		
	25-34							53206	51987		
	35-44							78695	76284		
	45-54							51275	54569		
	55-64							44853	43735		
	65 i >lat							43873	45867		
	urodzenia na 1000 ludności		12,3	11	10,8	9,9	9,8	10,2	9,3		
	zgony na 1000 ludności		9	9,5	9,9	9,4	10	9,7	10,1		
	roczne migracje		1597	800	470	1007	1414	1054	646		
P2	gospodarstwa domowe		144500				148100	148800	149300		
	<i>śred. wielkość gosp. dom.</i>		2,74				2,72	2,72	2,72		
	<i>gosp. dom. na 1 mieszkanie</i>		1,18		1,13	1,12	1,11	1,11	1,11		
	małżeństwa na 1000 lud.			6,3	5,1	5,1	5,1	5,3	5,2		
	rozwoły na 1000 lud.			2,3	2,6	2,1	1,6	1,8	1,8		
P3	<i>% gosp. dom. wg wieku głowy rodziny</i>										
	15-24										
	25-34										
	35-44										
	45-54										
	55-64										
	65 i >										
P4	typy gosp. dom. rodziny										
	małżeństwa										
	samotni ojcowie										
	samotne matki										

	osoby nie tworzące rodzin pojedyncze osoby osoby niespokrewnione										
P5	wielkość gosp. dom.										
	1-osobowe										
	2-osobowe										
	3-osobowe										
	4-osobowe										
	5-osobowe										
	6-cio i więcej osobowe										
P6	zatrudnienie										
	w gosp. narodowej	185400		176300	168000	142600	140100				
	zarejestrowani bezrobotni	5627		13063	13724	13756	12375	10801			
	stopa bezrobocia			7,4%	7,4%	7,7%	6,8%				
	śr. zartud. w zakładzie pracy						85 687	86 506			
	wg sektorów:										
	publiczny						34 440	34 328			
	prywatny						51 247	52 178			
	wg działów:										
	przemysł						39 079	38 844			
	budownictwo						11 045	11 081			
	trans. łączność i magaz.						12 261	12 520			
	handel i naprawy						10 831	11 993			
	inne usługi						10 165	10 144			
	przec. wynagrodzenie brutto						811,66	1010,96			
	przec. wynagrodzenie netto						653,4	818,04			
	osoby fizyczne prow. dział. gosp.			26482	30237	33297	34208	34351			
P7	śr. roczne deklarowane podatki dochodowe										
	śr. dochód roczny pracowników						8742				
	śr. dochód roczny emerytów i rencistów										
	śr. dochód roczny osób korzyst z ulg mieszk.				7433	8414	10647				
	śr. dochód roczny osób rozliczanych przez zakłady pracy										
	śr. dochód roczny emerytów i rencistów rozliczanych przez ZUS										
	wszyscy podatnicy wg grup dochodu (%)				53155	102271	106029				

	I						26,00%	29,00%	28,10%	
	II						30,00%	37,50%	38,40%	
	III						21,70%	18,40%	18,90%	
	IV						10,40%	7,50%	7,30%	
	V						4,80%	3,30%	3%	
	VI						2,50%	1,60%	1,60%	
	VII						4,50%	2,60%	2,70%	
P8	roczny dochód na gosp. dom.									
	śr. dochód brutto									
	śr. dochód netto									
	mediana dochodu brutto									
	mediana dochodu netto									
	gosp. dom. wg klas dochodu									
	I kwintyl									
	II kwintyl									
	III kwintyl									
	IV kwintyl									
	V kwintyl									
P9	gosp. dom. wg własności i kwintyli dochodu									
	właściciele mieszkań									
	I kwintyl									
	II kwintyl									
	III kwintyl									
	IV kwintyl									
	V kwintyl									
	wynajmujący mieszkanie									
	I kwintyl									
	II kwintyl									
	III kwintyl									
	IV kwintyl									
	V kwintyl									
P10	struktura miesięcznych wyd (wojew.)									
	mieszkanie								22,40%	
	żywność								36,10%	

	odzież							6,90%	
	zdrowie i higiena							5,90%	
	oświata, sport i kultura							9,60%	
	transport i pozostałe							9,80%	
P11	ludność wg typów i własności mieszkań								
	ludność mieszkająca w:	393940				405600			
	bud. jednorodzinne	53800				56800			
	bud. wielorodzinne	340140				348800			
	gosp. dom. posiadające mieszk.w:								
	domach jednorodzinnych								
	własnościowe spółdzielcze								
	gosp. dom. wynajmujące mieszk. w bud.:								
	spółdzielczych								
	zakładowych								
	komunalnych								
	prywatnych								
	powiązane z podażą								
H1	mieszkalnictwo								
	liczba mieszkań	122048	127786		133073	134018	134557		
	bud. jednorodzinne	108570				119448			
	bud. wielorodzinne	13474				14570			
	liczba pokoi		433753		454625	458494	460695		
	pow. użytkowa w m2		7041800		7405000	7476145	7522000		
	mieszkania wg rozmiarów								
	<20.0m2	1746							
	20.0-29.0	7429							
	30.0-34.0	8665							
	35.0-39.0	14054							
	40.0-49.0	32882							
	50.0-59.0	20474							
	60.0-69.0	15539							
	70.0-79.0	6330							
	80.0-89.0	4045							
	90.0-109.0	5719							
	110.0 i >	5690							

	<i>przec. pow. uż. w m2</i>										
	<i>na mieszkanie</i>	54,7	54,9	55,1	55,3	55,5	55,6	55,8	55,9		
	<i>na mieszkańca</i>	16,9	17,4	17,7	18	18,2	18,4	18,4	17,9		
	<i>przec. liczba osób</i>										
	<i>na mieszkanie</i>	3,23	3,15	3,12	3,07	3,04	3,03	3,02	3,02		
	<i>na izbę</i>	0,96	0,93	0,92	0,9	0,89	0,89	0,88	0,88		
H2	własność mieszkań										
	liczba mieszkań w zasobach										
	spółdzielczych						55899				
	<i>% mieszkań własnościowych</i>										
	zakładów pracy						22367				
	komunalnych	52742					51926	51958			
	<i>% wykupionych mieszkań kom</i>	5,44%						17,55%			
	<i>prywatnych</i>						9120				
	liczba izb na mieszkanie w zasob.										
	spółdzielczych						3,17				
	zakładowych						3,27				
	komunalnych						3,18				
	prywatnych						3,32				
	powierz. uż. w m2 wg zasobów										
	spółdzielczych						50,63				
	zakładowych						51,44				
	komunalnych	51,58					52,96	50,35			
	prywatnych						59,57				
H3	wiek budynków										
	liczba mieszkań										
	<1918	29116									
	1918-1944	21017									
	1945-1960	7425									
	1961-1970	19108									
	1971-1978	23174									
	1979-1988	22733									
	1989 i >										
	<i>powierz. uż na mieszkanie w m2</i>										
	<1918	55,87									

1918-1944	64,49								
1945-1960	50,35								
1961-1970	41,56								
1971-1978	50,9								
1979-1988	60,23								
1989 i >									
<i>liczba ludn. na mieszkanie</i>									
<1918	3,4								
1918-1944	3,45								
1945-1960	2,84								
1961-1970	2,65								
1971-1978	3,2								
1979-1988	3,44								
1989 i >									
H4 wyposaż. tech. mieszkań									
mieszk. z wodociągiem	121969								
sieć miejska	120428								
ujęcie lokalne	1541								
<i>brak</i>	604								
mieszk. ze splukiwanym ustępem	105412								
podłączone do sieci kanal.	99312								
z własnym szambem	6100								
<i>brak</i>	17161								
mieszk. z łazienką	122573								
posiadające	100595								
<i>brak</i>	21978								
mieszk. z ciepłą bieżącą wodą	102714								
ogrzewaną z zewnątrz	39057								
ogrzewaną w mieszkaniu	63657								
<i>brak</i>	19859								
mieszk. z gazem	118800								
sieciowym	117411								
butlowym	1389								
<i>brak</i>	3773								
metoda ogrzewania mieszk.	214066								
centralne ogrzewanie	91493								

BEST AVAILABLE COPY

	zbiorcze/etażowe	69490									
	indywidualne	22003									
	piece węglowe	29031									
	piece elektryczne	2049									
H5	budownictwo mieszkaniowe										
	przyrost netto mieszkań		2000	1988	2224	1075	987				
	wybudowane mieszkania		2013	2024	2261	1166	1069	609			
	na 1000 ludn.	6,37	4,87	4,89	5,43	2,79	2,54				
	spółdzielcze		1416	1704	1964	882	840				
	zakładowe		366	93	144	99	74				
	komunalne		26	47	27	33	15				
	firmy prywatne		205	180	126	152	140				
	budownictwo indywidualne										
	% prywatnych		10,18%	8,89%	5,57%	13,04%	13,10%				
	izby		7923	7851	8793	4835	4241				
	% prywatnych		13,85%	12,50%	7,85%	17,79%	18,06%				
	powierz. uż. w m2		136638	134504	150213	88830	77691	80100			
	% prywatnych		18,27%	16,98%	10,81%	23,60%	24,20%				
	domy jednorodzinne										
	śr. powierz. uż w m2		121,8	126,9	128,9	137,3	134,3				
	budynki wielorodzinne										
	śr. powierz. uż w m2		61,8	60,6	62,8	66,9	63,6				
H6	deficyt i potrzeby mieszkaniowe										
	mieszk. dla każdego gosp. dom.						14800				
	uropejskie standardy powierz.										
	renowacje										
	ogolem										
	komunalna					330					
	rozbiorczy							66			
	brak infrastruktury tech.										
	wg list oczekujących										
	spółdzielczych						18000				
	miejskich						6000				
	wg popytu efektywnego:										
	właściciele										

BEST AVAILABLE COPY

Sheet I

	< 50m2										
	50-80m2										
	80-100m2										
	100m2 i >										
H7	<i>wskaźnik cen konsumpcyjnych</i>										
	<i>średnie roczne zmiany</i>										
H8	<i>śr. cena m2 nowo wybudowanego miesz.</i>		152	345	485	515	642	745	1147		
H9	<i>śr. powierz. m2, nowo wybudowanego miesz. w cenie śr. rocznych zarobków</i>										
H10	<i>śr. czynsz na m2 w istniejących budynkach</i>										
	<i>miesz. spółdzielcze</i>										410
	<i>miesz. komunalne</i>										
	<i>miesz. zakładowe</i>										
	<i>miesz. na wolnym rynku</i>										

BEST AVAILABLE COPY

75