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Final report: sharing subsidies for low and moderate income housing: the case of Old Bridge.

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SHARING SUBSIDIES FOR LOW- AND MODERATE-INCOME HOUSING: THE CASE OF OLD BRIDGE, NEW JERSEY

(Final Report)

Research Organization

Rutgers University
Center for Urban Policy Research

Sponsoring Agency

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INTRODUCTION AND SUMMARY OF FINDINGS

BACKGROUND

The purpose of the reports which follow is to discuss the implications of Mount Laurel housing development in moderate-growth, working class communities such as Old Bridge, New Jersey. These are communities in which: (1) land prices are moderate; (2) housing prices are keyed to the lower middle-class market; (3) property taxes are reasonably high to support past development; (4) the burden of future infrastructure provision is thrust on new rather than existing development; (5) development competition is fierce and the niche in the housing market is narrow; (6) subdivision approval procedures are slow and complicated often to dampen the pace of growth; and (7) the socioeconomic profile of the host community is not significantly different from the group for whom subsidy is being sought.

There are a large number of these communities in New Jersey's growth belt. They require far different housing development strategies than might be implemented in affluent communities such as Bedminster, New Jersey. In this latter category of communities (1) land prices are high allowing density increases to have real impact on housing costs; (2) real estate prices reflect an affluent upper-income market affording significant differences in the price of subsidized and nonsubsidized housing deliveries; (3) equalized property tax rates are lower than average reflecting the value of existing properties; (4) the burden of new development can often be more easily shared between future and existing residents; (5) development is less price-sensitive and more concerned with development quality and amenities than most markets; (6) the subdivision process may be slow, but much of the housing is custom built and few, if any, developments must quickly move speculatively built offerings; and (7) the socioeconomic profile of the community is significantly different from the development segment for whom subsidy is being sought. The status of the community is assured, and is not noticeably changed by the subsidized portion of the community.

The nature of this difference in development environments has yet to be actively considered in proposed Mount Laurel solutions. Yet the differences are so potent that many of the classic or "first generation" Mount

Laurel solutions are not applicable in a working-class community. For instance, the density bonus to the developer, when tempered by market absorption rate, may mean little in reducing the costs of housing. In related fashion, if the developer cannot significantly change his profit position with an allowance for additional units, he must look to partners in subsidy (the municipality and/or the state, the business and industrial sectors) to alter his cash flow. Partners in subsidy must be financially able to help, and relatively complex approaches must be developed to specify the nature and extent of their participation.

If shared subsidy still cannot render the development situation financially practicable, the developer may have to employ less severe tests of feasibility. He further might have to build market units below the normal local price structure to capture a larger market and enhance buildout. Finally, in response to this "least-cost" housing effort on the part of the developer, the share of Mount Laurel units which are directed to low- as opposed to moderate-income families may have to be altered.

ORGANIZATION

These are the kinds of issues which are explored in the five reports which follow. In Report I -- The Fiscal Profile of Old Bridge, New Jersey -- federal, state, and local municipal fiscal indicators are viewed to assess the fiscal position of a local working-class community. In the event that shared subsidies are called for, is the municipality of Old Bridge able to participate in them without jeopardizing its fiscal position? How does the community compare to other similarly sized and growing communities in terms of three critical dimensions: (1) resources to be drawn upon; (2) committed obligations; and (3) recognized indicators of fiscal solvency?

Report II -- Community Actions to Promote Lower-Income Housing -- inventories and analyzes possible community actions to promote lower-income housing. These include revision of land-use regulations to limit development requirements for infrastructure and community facility provisions, in lieu fiscal contributions, and mandatory development fees. They also include positive fiscal strategies such as using CDBG, HoDAG, tax-exempt mortgages, tax abatement, nonresidential development contributions, and trust funds to encourage lower-income development.

Report III -- Local Site Plan Approval Procedures -- discusses local subdivision/site plan approval requirements/timing and how they can impact on the costs of a development. An analysis is undertaken of the specific Olympia & York filing in terms of a summary calendar.

Report IV -- The Affordability and the Feasibility of the Olympia & York, Old Bridge Development Project -- deals with development feasibility related to: (1) historical processing experience at the development site; (2) the costs of delivering private-market housing in a particular geographic locale; and (3) the necessity to provide a significant share of the development in low- and moderate-income housing. Sunk costs to date, the realities of the local market, and monies contributed to subsidize below-market housing all contribute to development alternatives. It views the necessary concessions by the developer, municipality, and the courts to make housing affordable to the low-income sector of the market.

Report V — The Socioeconomic Profile of Old Bridge, New Jersey -- views the socioeconomic profile of this community within the context of other communities in the same general housing-market area. As one of 90 communities in a three-county area (Mercer, Middlesex, Monmouth), Old Bridge is found to belong to a group of lower middle-class communities. This group is much different from the more-affluent community, the middle-income grouping, and different also from the grouping of very poor communities. There is an attempt here to view Old Bridge within the context of socioeconomic balance. Can the community introduce significant numbers of the poor and still maintain its own diverse identity? Is there a balance here which must be monitored to assure the success of the project? Failure will yield no housing -- and be harmful not only to the developer but the entire Mount Laurel process.

The findings of each of these reports are summarized in the Exhibits and text which follow.

REPORT I - INDICATORS OF MUNICIPAL FISCAL CAPACITY -- THE RELATIVE POSITION OF OLD BRIDGE, NEW JERSEY

Fiscal capacity must be viewed by looking at both community resources and community obligations. Fiscal capacity is also determined by the scale of a community and the direction and pace of its growth. Large and very small communities spend more than middle-size communities; declining communities and very fast-growing communities spend more than moderate-growth communities. Old Bridge is a reasonably sized, moderate-growth community. It would have a tendency to spend in accord with its size and yet also spend less because of its positive and steady growth.

While all community spending patterns are slightly different, those communities like Old Bridge, i.e., those with sustained, positive growth, also display basically similar fiscal patterns. Old Bridge is much more similar to Middletown Township, for instance, than to either Long Branch or Deal.

Twelve communities in New Jersey were chosen as potentially fiscally comparable to Old Bridge, New Jersey. These were selected according to scale of population (40,000 - 90,000) as well as direction of population growth (positive). The towns chosen were Brick, Cherry Hill, Dover, Edison, Gloucester, Hamilton, Lakewood, Middletown, Parsippany-Troy Hills, Piscataway, Willingboro and Woodbridge Townships. In terms of rank order, the mid-position of the thirteen communities, including Old Bridge, is 7.

Exhibit 1 profiles sources of fiscal resources for communities in this grouping. This includes equalized property valuation, median household income, nonresidential ratables per capita, nonresidential ratable valuation change, bond ratings and tax collection rates. Across these six resource indices, Old Bridge ranks from sixth to tenth; it ranks for the most part, slightly below the middle of the distribution of these comparative cities. Although Old Bridge falls below average in the categories of nonresidential ratables per capita and in growth of nonresidential ratables (both of which contribute to less than average equalized valuation per capita), it is

EXHIBIT 1

RANKING OF COMMUNITY RESOURCES FOR COMPARABLE MUNICIPALITIES 1982

MUNICIPALITY	Population* 1980	State Equalized Valuation (Per Capita)	1980 Median Household Income	Nonresidential Ratables 1982 (Per Capita)	Decade Nonresidential Ratable Change, 1972-1982	Bond Rating	Tax Levy Collected (Percent)
Woodbridge Township	90,074	25,103 (8)	24,054 (7)	8,866 (4)	22.0 (8)	Aa (1)	96.63 (5)
Hamilton Township (Mercer)	82,801	18,922 (9)	21,100 (10)	3,163 (6)	18.0 (11)	A-1 (5)	95.84 (8)
Edison Township	70,193	30,655 (4)	25,206 (5)	11,432 (2)	21.9 (9)	Aa (2)	97.64 (3)
Cherry Hill Township	68,785	27,866 (5)	32,708 (1)	2.752 (8)	2.6 (13)	Aa (3)	96.49 (7)
Dover Township	64,455	30,946 (3)	21,104 (9)	5,589 (5)	40.4 (4)	A-1 (6)	94.23 (12)
Middletown Township	62,574	25,853 (7)	26,631 (3)	2,024 (10)	22.6 (7)	A (10)	94.69 (10)
Brick Township	53,629	27,511 (6)	20,370 (12)	2,552 (9)	31.6 (5)	Baa-1 (12)	94.35 (11)
Parsippany-Troy Hills Township	49,868	31,342 (1)	27,154 (2)	9,653 (3)	52.7 (1)	A-1 (7)	98.59 (1)
Gloucester Township	45,156	17,092 (12)	20,652 (11)	1,464 (12)	43.8 (3)	A (9)	92.60 (13)
Piscataway Township	42,223	31,282 (2)	24,636 (6)	12,900 (1)	46.9 (2)	Aa (4)	97.85 (2)
Willingboro Township	39,912	13,540 (13)	25,269 (4)	814 (13)	6.9 (12)	Baa-1 (13)	97.07 (4)
Lakewood Township	38,464	18,178 (11)	14,703 (13)	3,088 (7)	27.9 (6)	Baa-1 (11)	94.72 (9)
Old Bridge Township	51,515	18,343 (10)	23,222 (8)	1,729 (11)	18.6 (10)	A (8)	96.59 (6)

*Note: Population is in descending order from highest to lowest. In all other columns 1 denotes highest value, 13 the lowest value, and 7 is the median of all values.

Source: U.S. Census of Population, 1980; Statement of Financial Condition of Counties and Municipalities, 1982; The New Jersey Municipal Data Book, 1983.

solidly in the middle of the distribution in median household income and community bond rating and above the group average in its tax collection percentage. It is definitely not as well off as Parsippany-Troy Hills or Piscataway Township nor as poorly fiscally situated as Willingboro or Gloucester Townships.

Exhibit 2 presents a similar ranking of comparable communities relative to their fiscal obligations. In this case again, Old Bridge's position tends toward the middle of the distribution. Where the midpoint is seven, across seven indices, the fiscal obligation of Old Bridge's average ranking is approximately 7.5. Old Bridge shows a very strong position in terms of low municipal expenditures, total tax levy and gross debt. It shows higher obligations in terms of larger unemployment rates, statutory expenditures and tax levies abated. Again, its fiscal obligations are not nearly as high as those of Dover Township or Edison nor are they as low as those of Parsippany-Troy Hills or Gloucester. Old Bridge has both a reasonable resource base to fund expenditures, and its local fiscal policies have its expenditures under control.

No more evident is this conclusion than in the fiscal solvency summary presented in Exhibit 3. The New Jersey Division of local Government Services provides a six-criteria check for the presence of unsound financial conditions within a local community. These are summarized in Exhibit 3 and include whether the community has: (1) defaulted on any outstanding financial obligation; (2) unpaid payments to other units of government; (3) a cash deficit in excess of 4 percent of its tax levy; (4) collected less than 70 percent of its tax levy; (5) debt service in excess of 25 percent of its operating budget; or (6) had a judicial determination of failure to comply with the local bond law. On any one of the six criteria for the last two audits, Old Bridge has not come close to being viewed as insolvent. In fact, its position is better today than it was two years ago. Debt service costs are down as a percent of total expenditures, and the tax collection rate is up. By any measure, the Township of Old Bridge is fiscally stable with more than sufficient economic resources to cover a controlled level of fiscal obligations.

REPORT II — COMMUNITY ACTIONS TO PROMOTE LOWER-INCOME HOUSING

There is a definite role for municipalities in meeting the Mount Laurel mandate. This has been defined by the New Jersey Supreme Court as involving two areas of community activities: eliminating unnecessary cost-producing requirements and restrictions, and adopting affirmative measures to provide for low-cost housing delivery.

The first of these entails revision of local land-use regulations to remove all excessive fees and exactions hindering the construction of lower-income housing. By requiring excessive infrastructure contributions, by imposing excessive fees, and by expecting developers to provide public facilities or make in lieu fiscal contributions, municipalities increase development costs which tend to preclude the delivery of affordable housing. Unrestrained, these exactions impose costs on the developer of the

EXHIBIT 2

RANKING OF COMMUNITY OBLIGATIONS FOR COMPARABLE MUNICIPALITIES

MUNICIPALITY	Population* 1980	Total Unemployment Rate	Per Capita Municipal Expenditures	Per Capita Statutory Expenditures	Per Capita Gross Debt	Per Capita Debt Service	Per Capita Total Tax Levy	Tax Levy Abated (Percent)
Woodbridge Township	90,074	5.1 (9)	338 (2)	25.82 (6)	547 (7)	47 (2)	653 (6)	.12 (8)
Hamilton Township (Mercer)	82,801	4.8 (10)	283 (5)	25.37 (7)	817 (2)	29 (8)	558 (9)	.27 (5)
Edison Township	70,193	4.6 (11)	425 (1)	45.41 (1)	584 (6)	67 (1)	728 (3)	.89 (1)
Cherry Hill Township	68,785	5.1 (8)	242 (10)	19.99 (9)	699 (5)	39 (5)	895 (1)	.41 (3)
Dover Township	64,455	7.8 (4)	317 (3)	30.64 (2)	785 (3)	42 (3)	746 (2)	.06 (11)
Middletown Township	62,574	5.2 (7)	257 (6)	13.19 (13)	485 (9)	40 (4)	639 (7)	—
Brick Township	53,629	7.9 (3)	252 (7)	23.03 (8)	543 (8)	31 (6)	566 (8)	.24 (6)
Parsippany-Troy Hills Township	49,868	3.6 (13)	248 (9)	14.04 (12)	1,887 (1)	23 (11)	713 (4)	.11 (9)
Gloucester Township	45,156	7.0 (5)	197 (13)	16.69 (11)	318 (13)	13 (13)	509 (11)	.46 (2)
Piscataway Township	42,223	4.5 (12)	250 (8)	27.16 (5)	729 (4)	22 (12)	704 (5)	.10 (10)
Willingboro Township	39,912	8.8 (2)	212 (12)	17.03 (10)	387 (12)	24 (10)	420 (13)	.23 (7)
Lakewood Township	38,464	10.3 (1)	286 (4)	29.94 (3)	440 (11)	27 (9)	465 (12)	.03 (12)
Old Bridge Township	51,515	5.8 (6)	233 (11)	27.38 (4)	445 (10)	30 (7)	549 (10)	.36 (4)

*Note: Population is in descending order from highest to lowest. In all other columns 1 denotes highest value, 13 the lowest value, and 7 is the median of all values.

Source: U.S. Census of Population, 1980; Statement of Financial Condition of Counties and Municipalities, 1982; The New Jersey Municipal Data Book, 1983.

EXHIBIT 3

SIX BASIC INDICATORS USED TO TEST FOR THE PRESENCE OF UNSOUND FINANCIAL CONDITIONS WITHIN A COMMUNITY — FISCAL SOLVENCY OF OLD BRIDGE, NEW JERSEY

STATE INDICATORS	INDICATORS								
	(1)	(2)	(3)		(4)	(5)			(6)
	Default on Obligation Exists	Unpaid Payments to Other Units of Government	Appropriation for Cash Deficit in Excess of 4% of Levy		Less than 70% of Tax Levy Collected	Appropriation to Liquidate Scheduled Debt Service Exceeds 25% of Operating Budget			Judicial Determination of Failure to Comply with Local Bond Law
OLD BRIDGE RECORD ON STATE INDICATORS			(Deficit)	(4% of Levy)		(Total Debt Service)	(Operating Budget)	(Debt Service as a % of Operating Budget)	
1982	No	None	0	$1,164,206	96.59%	$1,592,537	$11,103,376	14.3%	No
1983	No	None	0	$1,591,147	96.72%	$1,351,234	$11,790,315	11.5%	No

Source: New Jersey Division of Local Government Services, Department of Community Affairs, "Financial Statements and Audited Budget for Old Bridge," 1982, 1983.

following magnitude: infrastructure improvements add approximately $7,600 to the cost per unit of low- and moderate-income housing; public facilities or in lieu payments add $850 per unit; and fees add as much as $2,400.

In response to a general recognition of the lack of affordablility of new housing, prompted also by state housing policy or specific court decisions, numerous communities in New Jersey and throughout the United States are revising land-use regulations and working with developers to reduce housing costs. Exhibit 4 summarizes some of these activities. Communities that are waiving, or are considering waiving, fees for lower-income housing units, for example, include several California communities and the New Jersey communities of Cherry Hill, East Brunswick, Florham Park, Hanover, Lincoln Park, etc. Areas that have reduced or are attempting to reduce developers' infrastructure costs by using federal subsidies include cities in Florida, New York and California as well as the New Jersey communities of Bernards, Branchburg, Bridgewater, Deptford, East Brunswick, and Holmdel, among others.

The second key area of municipal involvement to reduce housing costs is the adoption of various affirmative measures. These include seeking federal and state subsidies such as CDBG funds, HoDAG funds, use of tax-exempt mortgages, and employing techniques such as creation of housing trust funds and seeking contributions by developers of nonresidential projects. The possible use of tax abatement to lower housing costs is also explored. Again, Exhibit 4 details proposed or enacted affirmative measures in the State of New Jersey and elsewhere to deliver affordable housing. Use of federal subsidies to write down costs of infrastructure and/or land acquisition and pre-construction surveys, for example, has been proposed or enacted in California cities and the New Jersey communities of Bergen County, Bernards, Branchburg, Bridgewater, Cherry Hill, Deptford, East Brunswick, etc. Low-interest financing to reduce mortgage costs has been a strategy in numerous national locations and in the New Jersey communities of Bedminster, Cherry Hill, Holmdel, Hopewell, and Plainsboro. In addition, Holmdel and Hopewell, New Jersey, are considering creating a housing fund through contributions by developers of nonresidential projects. What is certainly clear from this report, is that spurred on by Mount Laurel compliance, communities in New Jersey are leading the way in inclusionary zoning efforts.

This background leads to recommendations for a strategy of balanced housing in Old Bridge. The strategy, following the above partition, is two-pronged, combining the elimination of unnecessary cost-producing requirements and the adoption of affirmative measures. It emphasizes the need for every segment of the community to be involved: present community residents may help pay for infrastructure or other costs; nonresidential developers may make contributions or donate land; the municipality could build lower-income housing itself or through a non-profit entity. Only through multiple local approaches and a municipal recognition of responsibility in subsidy provision will the goal of affordable housing be met.

SUMMARY OF PROPOSED OR ENACTED ACTIVITIES TO PROMOTE AFFORDABLE HOUSING*
(Partial List)

LOCATIONS	STRATEGIES							
	Developer		Public					
	Inclusionary Req.[1]	Non-Resid. Devel. Contrib.[2]	Fee Waivers[3]	CDBG Infrast. Contrib.[4]	Other CDBG Write-downs[5]	Low-Interest Financing[6]	Housing Funds[7]	Tax Abatement[8]
NEW JERSEY								
Bedminster	X					X		
Bergen County					X			
Bernards	X			X	X			
Branchburg				X	X			
Bridgewater	X			X				
Cherry Hill	X		X		X	X		
Deptford				X				
East Brunswick	X		X	X	X			
East Windsor	X							
Florham Park	X		X					
Hanover	X		X					
Highland Park					X			
Holmdel		X		X		X	X	
Hopewell		X		X		X	X	
Lincoln Park	X		X					
Mahwah			X	X				
Montville	X		X					
Morris Township	X		X					
Mount Laurel	X			X				
Pequannock	X		X					
Plainsboro					X	X		
Princeton				X			X	
Ramsey					X			
Rockaway	X		X					
Roxbury	X		X					
South Brunswick	X				X			
South Plainfield				X				

SUMMARY OF PROPOSED OR ENACTED ACTIVITIES TO PROMOTE AFFORDABLE HOUSING*
(Partial List)
(continued)

LOCATIONS	STRATEGIES							
	Developer		Public					
	Inclusionary Req.[1]	Non-Resid. Devel. Contrib.[2]	Fee Waivers[3]	CDBG Infrast. Contrib.[4]	Other CDBG Write-downs[5]	Low-Interest Financing[6]	Housing Funds[7]	Tax Abatement[8]
NATIONAL EXAMPLES								
Alaska, State of								X
Boston, Massachusetts		X				X	X	
Chicago, Illinois		X				X	X	
Colorado, State of								X
Colorado Springs, Colorado				X				
Concord, California		X			X	X	X	
Corvallis, Oregon					X	X	X	
Cupertino, California			X					
Denver, Colorado		X				X	X	
Florida, State of						X	X	
Hartford, Connecticut		X				X	X	
Honolulu, Hawaii		X				X	X	
Illinois, State of								X
Livermore, California			X	X	X			
Miami, Florida		X		X	X	X	X	
Missouri, State of								X
Montgomery County, Maryland						X	X	
New Haven, Connecticut				X				
New Jersey, State of			X	X		X		X
New York City		X				X	X	X
New York, State of				X		X		X
Oakland, California				X		X	X	
Orlando, Florida		X				X	X	
Petaluma, California		X			X	X	X	
Rhode Island, State of								X
San Francisco, California		X		X	X	X	X	
San Mateo, California				X	X			

SUMMARY OF PROPOSED OR ENACTED ACTIVITIES TO PROMOTE AFFORDABLE HOUSING*
(Partial List)
(continued)

LOCATIONS	STRATEGIES							
	Developer		Public					
	Inclusionary Req.[1]	Non-Resid. Devel. Contrib.[2]	Fee Waivers[3]	CDBG Infrast. Contrib.[4]	Other CDBG Write-downs[5]	Low-Interest Financing[6]	Housing Funds[7]	Tax Abatement[8]
NATIONAL EXAMPLES								
Santa Monica, California		X				X	X	
Seattle, Washington		X				X	X	
Virginia, State of								X
Wisconsin, State of								X

*In some cases, activities are in the draft ordinance stage. See text for details.

Notes:

1. Inclusionary requirements set aside a certain portion of a residential development for affordable housing units.
2. Non-residential developers' contributions include donations of land, infrastructure, and/or in-lieu fees to help provide affordable housing.
3. Fee waivers include waivers of various developers' fees such as subdivision and site plan application fees, building permit fees, certificate of occupancy fees, and engineering fees.
4. CDBG infrastructure contributions are the use of CDBG funds to write down infrastructure costs such as real construction and water and sewer lines.
5. Other CDBG write-downs refer to the use of CDBG funds for land acquisition, pre-construction surveys and plans, etc.
6. Low-interest financing refers to low-interest mortgage loans for homebuyers and/or construction loans for developers.
7. Housing funds are pools of funds from various sources used for lower-income housing.
8. Tax abatements waive taxes for homeowners who rehabilitate their residences. Proposed legislation would allow abatement on new, lower-income housing units.

Source: Center for Urban Policy Research interviews.

REPORT III — LOCAL SITE PLAN APPROVAL PROCEDURES: THE IMPACTS OF MUNICIPAL DELAY

In the past decade there has been growing recognition that costs of housing are influenced not only by the physical standards to which it must be built, but also by the approval process through which it must proceed. Studies by the Amercian Planning Association, Department of Housing and Urban Development, National Association of Home Builders, Urban Land Institute, and other groups have documented that land-use processing has become protracted and extremely costly.

Municipal response to the Olympia & York Old Bridge development exemplifies this problem. In 1974, Olympia & York acquired approximately 2,000 acres in Old Bridge Township. In 1979, it unveiled plans to develop its Old Bridge acreage for residential, commercial, and industrial uses. Five years later it has still not prevailed in obtaining development approval (see Exhibit 5).

The five-year delay occurred for numerous reasons. Old Bridge Township required a repeated cycle of most demanding negotiations and presentations. From 1979 through 1984, there were close to 100 Olympia & York meetings, hearings, and testimony before a variety of Old Bridge public bodies. Another contributing factor was numerous cancelled meetings and procedural snafus (e.g., with reference to public notice, ordinance forms, etc.) on the part of Old Bridge Township. While it is not unheard of for some procedural oversights to occur in the consideration of complicated land-use matters, these scheduling and other errors occurred with considerable frequency in Old Bridge.

Exhibit 6 indicates the costs incurred by Olympia & York with respect to its Old Bridge development since its initial involvement in 1974 through August 1984. Approximately $55 million has thus far been spent. This total figure can be broken down into five components: (1) land assembly costs — $19.921 million; (2) administrative expenses — $1.035 million; (3) development expenses — $3.606 million; (4) carrying costs — $30.069 million; and (5) project development — $.094 million.

The sum of all five components is shown on a yearly and cumulative basis in Exhibit 6. Annual charges range from $2.2 to $8.0 million. Yearly carrying costs are currently running at roughly $6.5 million (see Exhibit 6) — an amount which translates into carrying costs of approximately $540,000 monthly, $125,000 weekly, and $18,000 daily.

Change is possible. Numerous state, county, and local jurisdictions have enacted substantive and procedural reforms to expedite land-use processing. To cite some examples, Connecticut has a model ordinance for "One-Stop" processing; Fairfax County (Virginia) provides maximum times for development review; while Freemont (California) utilizes a consolidated development application-review form.

There are numerous examples of New Jersey courts and communities effecting multiple changes to expedite and assure development. Scores of New Jersey communities (e.g., Florham Park, Lincoln Park, Morris Township)

EXHIBIT 5

OLYMPIA & YORK OLD BRIDGE DEVELOPMENT: TIME DELAYS

TIME PERIOD	TIME ELAPSED	CUMULATIVE TIME ELAPSED	ACTIVITY/EVENT
May 14, 1979	Start	Start	O & Y formally requests a procedural amendment to the Old Bridge Land Development Ordinance so an application for development can be filed.
March 1980	10 months later	10 months later	Old Bridge drafts Ordinance Amendment.
June 2, 1980	3 months later	13 months later	Ordinance Amendment tabled before Old Bridge Council because the Amendment is not drawn on proper forms.
Oct. 6, 1980	4 months later	17 months later	Old Bridge Township Council approves an amendment to the Land Development Ordinance leaving out procedures allowing for a General Development Plan.
Feb. 18, 1981	4 months later	21 months later	O & Y files suit.
August 1981	6 months later	27 months later	Negotiations between O & Y and Old Bridge resume.
May 3, 1982	9 months later	36 months later	Old Bridge Township Council passes a resolution directing that the Land Development Ordinance be amended to allow for O & Y development.
Apr. 5, 1983	11 months later	47 months later	Old Bridge Township Council enacts a Land Development Ordinance with provisions to allow O & Y to proceed with a development application.
May 22, 1983	1 month later	48 months later	In accordance with provisions of the new Land Development Ordinance, O & Y files an application for General Development Plan Approval.

EXHIBIT 5

OLYMPIA & YORK OLD BRIDGE DEVELOPMENT: TIME DELAYS
[continued]

TIME PERIOD	TIME ELAPSED	CUMULATIVE TIME ELAPSED	ACTIVITY/EVENT
Aug. 8, 1983	3 months later	51 months later	O & Y General Development Plan is declared complete.
Oct. 18, 1983	2 months later	53 months later	O & Y begins a series of presentations before the Old Bridge Planning Board in the application process for General Development Plan Approval.
Dec. 14, 1983	2 months later	55 months later	Old Bridge Planning Board rejects the O & Y development Plan after developer refuses to extend hearings on the application into 1984. O & Y attorneys indicate deadline extension is unacceptable since the current board will be dissolved when a change in municipal government occurs, Jan. 1, 1984.
January 1984	1 month later	56 months later	O & Y institutes lawsuits against Old Bridge.
July 1984	6 months later	62 months later	O & Y reaches agreement with Old Bridge Sewage Authority.

Note: Olympia & York's carrying costs for the Old Bridge Development are currently approximately $540,000 per month (see Exhibit 3).

Source: Center for Urban Policy Research interviews with Olympia & York, July and August 1984.

EXHIBIT 6

OLYMPIA & YORK OLD BRIDGE DEVELOPMENT: SCHEDULE OF INCURRED COSTS

COST COMPONENT	TIME PERIOD Cumulative 1974 to June 30 1978	June 30 1979	June 30 1980	June 30 1981	June 30 1982	June 30 1983	August 30 1984	Total Costs
A. Land Assembly Costs								
Acquisition Costs	$16,581,569.00	$ 631,081.00	$ 516,401.00	$ 473,594.00	$ 343,136.00	$ 285,610.00	$ 444,302.00	$19,275,693
Surveys	-0-	27,494.00	36,630.00	72,302.00	11,637.00	22,285.00	35,015.00	205,363
Legal and Closing	-0-	89,149.00	24,150.00	69,671.00	27,431.00	42,137.00	44,316.00	296,854
Real Estate Com.	-0-	23,868.00	2,650.00	46,034.00	-0-	-0-	2,330.00	74,882
Title Insurance	11,750.00	8,857.00	9,724.00	7,756.00	-0-	-0-	1,275.00	39,362
Miscellaneous Land Costs	-0-	17,409.00	80.00	-0-	-0-	-0-	11,048.00	28,537
Sub-Total A	$16,593,319.00	$ 797,858.00	$ 589,635.00	$ 669,357.00	$ 382,204.00	$ 350,032.00	$ 538,286.00	$19,920,691
B. Administrative Expenses								
Payroll and Office Expenses	$ 61,355.00	33,100.00	53,950.00	98,404.00	182,240.00	247,663.00	324,325.00	$ 1,001,037
Miscellaneous Adm.	-0-	5,102.00	7,952.00	13,703.00	6,710.00	-0-	166.00	33,633
Sub-Total B	$ 61,355.00	38,202.00	61,902.00	112,107.00	188,950.00	247,663.00	324,491.00	$ 1,034,670
C. Development Expense								
Planning Consultants	$ -0-	54,564.00	36,729.00	90,056.00	177,003.00	322,159.00	146,587.00	$ 827,098
Land Use Attorneys	-0-	14,329.00	15,298.00	106,239.00	152,005.00	74,284.00	95,764.00	458,919
Municipal Utilities-Eng.	-0-	5,170.00	27,913.00	51,791.00	255,520.00	337,550.00	59,564.00	737,508
Municipal Utilities-Legal	-0-	-0-	-0-	-0-	22,338.00	52,413.00	174,617.00	249,368
Traffic Engineers	-0-	16,720.00	51,605.00	116,682.00	80,428.00	124,511.00	140,211.00	530,157
Soils Engineers	-0-	25,777.00	16,062.00	14,039.00	-0-	2,805.00	36,453.00	95,136
Groundwater Hydrologists	-0-	-0-	-0-	45,573.00	51.350.00	17,620.00	26,680.00	141,223
Surface Water Analysis	-0-	-0-	-0-	2,761.00	12,889.00	15,723.00	15,258.00	46,631
Environmental Reports	-0-	28,439.00	51,720.00	17,861.00	-0-	-0-	-0-	98,020
Market & Financial Studies	-0-	$ 5,800.00	$ 32,480.00	$ 28,746.00	$ 10,000.00	-0-	$ 50,024.00	$ 127,050
Product Development	-0-	-0-	-0-	-0-	-0-	-0-	11,832.00	11,832
Municipal Fees	-0-	-0-	-0-	-0-	2,362.00	$ 102,600.00	-0-	104,962
Misc. Development Expense	-0-	15,038.00	43,185.00	23,588.00	81,482.00	-0-	14,440.00	178,093
Sub-Total C	-0-	$ 165,837.00	274,992.00	497,336.00	846,377.00	$1,049,665.00	$ 771,430.00	$3,605,637
D. Carrying Costs								
Interest	$ 747,646.00	952,510.00	2,136,962.00	6,163,739.00	5,938,526.00	5,240,518.00	6,048,575.00	$27,228,476
Municipal Realty Taxes	190,862.00	233,622.00	324,294.00	391,992.00	419,045.00	549,790.00	553,711.00	2,663,316
Municipal Tax Appeals	-0-	1,011.00	-0-	-0-	-0-	21,031.00	16,912.00	38,954
Appraisals	-0-	1,000.00	6,998.00	-0-	6,500.00	6,000.00	4,500.00	24,998
Misc. Carrying Costs	-0-	-0-	112,878.00	-0-	-0-	-0-	-0-	112,878
Sub-Total D	938,508.00	$1,188,143.00	2,581,132.00	6,555,731.00	6,364,071.00	5,817,339.00	6,623,698.00	$30,068,622
E. Project Development	-0-	-0-	-0-	-0-	-0-	-0-	93,500.00	93,500
(A,B,C,D,E)	$17,593,182.00	$2,190,040.00	$3,507,661.00	$7,834.531.00	$8,351,405.00	$7,464,699.00	$6,717,198.00	$54,723,120

Source: Center for Urban Policy Research interviews with Olympia & York, July and August, 1984.

have agreed to accelerate the processing of Mount Laurel housing. Mount Laurel solutions in northern and central New Jersey communities have vested development permission such that large-scale infrastructure commitments could be made.

These reforms suggest the changes to be made in Old Bridge's development process. The Old Bridge ordinance currently requires three stages of submission and review: 1. General Development Plan (GDP); 2. Plan; and 3. Subdivision Review. The land-use process would be enhanced if the following substantive and procedural changes were adopted:

1. Reduce the Submission Stages. There is little reason for injecting a Plan stage between the GDP and Subdivision steps. The Old Bridge Plan requirement should be deleted, to be replaced by a two-stage process of first, GDP, to be followed by Subdivision approval.

2. Eliminate Inappropriate Submission Items. Under the current Old Bridge ordinance, there is excessive and often misplaced detail with reference to the required impact studies and other reports. For instance, given the concept nature of the General Development Plan, it is unnecessary for the GDP to be accompanied by detailed impact analyses.

3. Accelerate Timing Deadlines. The Old Bridge ordinance specifies time periods for the submission and review of the different land-use stages, which cumulatively take 600 days for the entire process (see Exhibit 7). Processing can be expedited by eliminating superfluous submission stages and shortening the current review periods. The combination of these two reforms results in a dramatic processing acceleration. As indicated in the above Exhibit, the combined effect of both changes permits processing from GDP to Final Subdivision in a total of 165 days -- a fraction of the 600-day span under the current ordinance.

These substantive and procedural changes in the Old Bridge approval process provide significant cost savings. By requiring fewer review stages, calling for appropriate submission items at the remaining stages, and expediting the review process, Olympia & York's development, submission, and review costs could be reduced from $11.420 million under the current ordinance to $3.245 million under a revised ordinance (Exhibit 7). Most of these savings would be the result of an expedited processing schedule -- comprising 165 as compared to 600 days -- which would cut the sunk-cost carrying charges to less than one-third of what they currently are.

REPORT IV -- THE AFFORDABILITY AND THE FEASIBILITY OF THE OLYMPIA & YORK, OLD BRIDGE DEVELOPMENT PROJECT

The Olympia & York Old Bridge development is a large, mixed-use development spanning several thousand acres as well as several decades of

EXHIBIT 7

CURRENT OLD BRIDGE LAND USE ORDINANCE VERSUS RECOMMENDED PROCEDURES:
COMPARISON OF DEVELOPMENT PROCESSING TIMES AND COSTS FOR OLYMPIA & YORK PROJECT

CURRENT ORDINANCE[1]					RECOMMENDED PROCEDURE[1]				
Step	Submission Time[2]	Submission Cost[3]			Step	Submission Time[2]	Submission Cost[3]		
		Report Preparation	Carrying[4] Cost	Total Cost			Report Preparation	Carrying[4] Costs	Total Costs
General Development Plan	45 days completion[6] 95 days reaction[7] 140 days	$150,000	$2,520,000	$2,670,000	General Development Plan	-completion[6] -reaction[7] 45 days	$25,000	$810,000	$835,000
Preliminary Plan	45 days completion 95 days reaction 140 days	$120,000	$2,520,000	$2,640,000	Preliminary Subdivision	-completion -reaction 60 days	$100,000	$1,080,000	$1,180,000
Final Plan	45 days completion 45 days reaction 90 days	$100,000	$1,620,000	$1,720,000	Final Subdivision	-completion -reaction 60 days	$150,000	$1,080,000	$1,230,000
Preliminary Subdivision[5]	45 days completion 95 days reaction 140 days	$150,000	$2,520,000	$2,670,000					
Final Sub-Subdivision[5]	45 days completion 45 days reaction 90 days	$100,000	$1,620,000	$1,720,000					
Total	600 days	$620,000	$10,800,000	$11,420,000		165 days	$275,000	$2,970,000	$3,245,000

1. See text for details.
2. Assumes developer is not asked to extend deadlines.
3. Estimated.
4. Equals submission time multiplied by $18,000 daily Olympia & York carrying cost.
5. Assumes site plan approval is combined with subdivision.
6. Development application declared complete.
7. Township approves or denies development application.

Source: Center for Urban Policy Research analysis.

financial responsibility and risk. In addition, an unprecedented level of development restrictions constrain the builder's options. With total investments approaching one-half billion dollars, the complexity of the project mandates the use of financial models. These models quantify normal market risks as well as the consequences of public-policy restrictions.

The CUPR Affordable Housing Model is one of the means which may be utilized to test the feasibility of alternative development configuations and subsidies. It calculates the present value of revenue and expense flows as well as changes in the net worth of the project under a variety of scenarios. These changes result from zoning and subdivision constraints, Mount Laurel housing requirements, and various public sector subsidies used to share responsibility with the developer of the Mount Laurel low- and moderate-housing commitment.

Three scenarios have been constructed. Each represents an alternative that might be faced by the developer. The developer waives both profits and contingency costs on the Mount Laurel low-income component of all models. stock. The profit sectors that remain are, for the most part, the market housing and the commercial components of the development. In addition, the State of New Jersey subsidizes all Mount Laurel mortgages to the 10 percent interest rate level. Finally, housing costs across all economic sectors cannot be more than 28 percent of income. The scenarios are Developer Subsidy, Shared Subsidy, and Least-Cost Housing. In essence, the Developer Subsidy scenario requires a 20 percent Mount Laurel commitment by the developer equally distributed between low and moderate units with no direct support from the municipality to fund this commitment. The developer is left to the vagaries of the market and locational advantages of the site to support the entire project.

The second, or Shared Subsidy, scenario advances several municipal subsidies to support the developer in his bid to provide housing for those who cannot afford local market offerings. Property taxes during construction are held at the unimproved value of the land; tract subdivision improvements for the low- and moderate-income housing share of the development are funded by the municipality; increased builder densities granted; and streamlined subdivision permit processing is enacted.

The final scenario is the Least-Cost alternative. It is a modification of the Shared Subsidy scenario. On one side, this scenario continues the municipal subsidies just outlined. On the other, the developer reduces the price of market housing to produce Least-Cost housing at an average of $59,990 for a single-family home. With the vast proportion of his units at Least-Cost housing or below, he develops his below-market share at 20 percent of total units, but reduces the low-income portion to 4 percent. When selling prices are reduced, the annual demand for housing rises, permitting a shortened buildout period.

Across all scenarios, the business component is a significant profit center for the project. The business component is modeled as being built out beginning in the third year of the project and being completed at the end of the residential project. The property is leased to tenants with return from rentals flowing over an 18-year period. Finally, all models contemplate an average annual inflation rate of 5 percent on all current

expenses and buyer purchasing power. We have assumed the improvement in permitting procedures outlined in Report III.

The specifics of each scenario are summarized in Exhibits 8, 9, and 10; the complete computer printouts may be found in the Appendix of Report IV. Each dwelling unit is required to sell at prices affordable to a particular class of homebuyers. Market units are targeted to those of household income from $35,571 to $40,583; moderate-income units are targeted to those whose income is between 70 and 72 percent of regional median income, and low-income units are targeted to households whose income is approximately 45 percent of the regional median. Purchaser incomes and affordability, the latter based on 28 percent of income, largely determine the price structure of most units.

Prices are set such that the permanent mortgages for the below-market segment will be picked up by the New Jersey HMFA. Even with this subsidy, the developer finds that in several cases, revenues do not meet total costs (which include minimal profits).

The level of subsidy varies from scenario to scenario. In the Developer Subsidy scenario with no municipal assistance and a full commitment of low-income units, there is a loss of 3.0 percent on investment for the development. The first year's units will be subsidized to the level of $10,208 and $20,782 for the regular- and low-income component of the project, respectively. Only the hypothesized 5 percent inflation rate brings the regular-market segment into a gross-profit position by project buildout. It is clearly too little too late. That is, in spite of the ultimate generation of profits and market selling prices of $70,000 per unit, the heavy front-end commitments produce no rate of return on total investment.

The Shared-Subsidy scenario performs somewhat better for the developer. Land acquisition costs are reduced significantly. However, a drop in selling price in order to access the local market better removes much of the advantage. This results in a rate of return on investment of 1.1 percent. Thus with full Mount Laurel commitment, after a variety of municipal subsidies, the development is still "no go" from the developer's perspective.

Finally, the Least-Cost scenario focuses attention upon the financial consequences of rapid buildout after price cuts. Contingent upon the sales of approximately eight hundred units per year and a reduced low-income share of the total Mount Laurel commitment, the developer is able to show still a rate of return of only 5.7 percent.

REPORT V — THE SOCIOECONOMIC PROFILE OF OLD BRIDGE, NEW JERSEY

As indicated in the introduction to this summary, the Mount Laurel battle will not, for the most part, be fought on the fields of Bedminster and Colts Neck, New Jersey. Rather, it is the lower middle-income community with developable land which will bear the brunt of Mount Laurel settlements. These are the areas that are desperately fighting for middle-class

EXHIBIT 8

AFFORDABLE HOUSING MODEL: BASE DATA

BASIC DATA	Market Segmentation by Income								
	DEVELOPER-SUBSIDY MODEL			SHARED-SUBSIDY MODEL			LEAST-COST MODEL		
	Regular	Moderate	Low	Regular	Moderate	Low	Regular	Moderate	Low
Number of Units in Total Project [1]	8,208	1,026	1,026	9,295	1,162	1,162	9,295	1,859	465
Units Constructed Per Acre [2]	6	12	12	6	12	12	6	12	12
Floor Area Per Unit [3]	1,000	790	790	1,000	790	790	900	790	790
Construction Cost Per Square Foot [4]	$28	$30	$30	$28	$30	$30	$28	$30	$30
Years to Project Buildout [5]	20	20	20	18	18	18	15	15	15
Desired Percent Profit [6]	10.0%	10.0%	0%	10.0%	10.0%	0%	10.0%	10.0%	0%
Target Household Income [7]	$40,582	$24,955	$15,597	$37,268	$24,955	$15,597	$35,571	$24,275	$15,597

Source: Center for Urban Policy Research analysis.

1. Settlement Memorandum, p. 5.
2. Settlement Memorandum, p. 5.
3. Olympia & York Memorandum, 1984.
4. Olympia & York Memorandum, 1984.
5. Olympia & York Memorandum, 1984.
6. Olympia & York Memorandum, 1984.
7. HUD, 1984.

EXHIBIT 9

AFFORDABLE HOUSING MODEL: DEVELOPER SUBSIDY, SHARED SUBSIDY, AND LEAST COST HOUSING DELIVERY COSTS

COST COMPONENT	Market Segmentation by Income								
	DEVELOPER-SUBSIDY MODEL			SHARED-SUBSIDY MODEL			LEAST-COST HOUSING MODEL		
	Regular	Moderate	Low	Regular	Moderate	Low	Regular	Moderate	Low
DEVELOPMENT									
Land (Purchase, Holding)	$19,825	$ 8,390	$ 8,390	$14,170	$ 5,997	$ 5,997	$12,306	$ 5,787	$ 5,787
Interim Financing/Fees/Soft Costs	6,151	4,879	4,819	4,989	1,976	1,923	4,843	1,972	1,919
Total Development	$25,976	$13,269	$13,209	$19,159	$ 7,973	$ 7,920	$17,149	$ 7,759	$ 7,706
CONSTRUCTION									
Unit Construction	$28,000	$23,700	$23,700	$28,000	$23,700	$23,700	$25,200	$23,700	$23,700
Development Improvements	10,307	7,620	7,620	9,691	5,649	5,649	9,513	5,649	5,649
Total Construction	$38,307	$31,320	$31,320	$37,691	$29,349	$29,349	$34,713	$29,349	$29,349
DELIVERY									
Development Costs	$25,976	$13,269	$13,209	$19,159	$ 7,973	$ 7,920	$17,149	$ 7,759	$ 7,706
Construction Costs	38,307	31,320	31,320	37,691	29,349	29,349	34,713	29,349	29,349
Contingency	2,005	1,615	0	1,923	1,492	0	1,773	1,492	0
Overhead	6,629	4,620	4,453	5,877	3,881	3,727	5,363	3,860	3,706
Profit	7,290	5,083	0	6,465	4,270	0	5,900	4,246	0
Total Delivery Cost	$80,208	$55,908	$48,982	$71,116	$46,965	$40,996	$64,898	$46,706	$40,761
Constrained Price	$70,000	$48,000	$28,200	$64,000	$46,945	$28,200	$59,990	$46,756	$28,200

Source: Center for Urban Policy Research Analysis

EXHIBIT 10

AFFORDABLE HOUSING MODEL: DEVELOPER-SUBSIDY, SHARED-SUBSIDY, AND LEAST-COST SCENARIOS — OCCUPANCY COSTS, AFFORDABILITY, AND PROJECT ECONOMICS

PROJECT PARAMETERS	Market Segmentation by Income								
	DEVELOPER-SUBSIDY MODEL			SHARED-SUBSIDY MODEL			LEAST-COST MODEL		
	Regular	Moderate	Low	Regular	Moderate	Low	Regular	Moderate	Low
MONTHLY OCCUPANCY COST									
Principal and Interest	$ 705	$ 400	$ 235	$ 645	$ 391	$ 235	$ 604	$ 390	$ 235
Property Taxes	176	120	71	161	118	71	163	117	71
Maintenance	50	50	50	50	50	50	50	50	50
Insurance	16	10	10	14	9	8	13	9	8
Total Monthly Cost	$ 947	$ 581	$ 366	$ 869	$ 569	$ 364	830	$ 566	364
AFFORDABILITY									
Total Annual Payment	$11,359	$ 6,981	$ 4,388	$10,432	$6,822	$ 4,368	$ 9,959	$6,797	$4,367
Shelter-Paying Capacity (28 Percent of Income)	$11,363	$ 6,987	$ 4,367	$10,435	$6,987	$ 4,367	$ 9,960	$6,797	$4,367
PROJECT ECONOMICS									
Subsidy Per Dwelling Unit	$10,208	$ 7,908	$20,782	$ 7,116	$ 20	$12,796	$ 4,908	0	$12,561
Return on Investment	**********	-2.92%	**********	**********	1.05%	**********	**********	5.72%	**********
Developer Subsidy as Percent of Total Subsidy	**********	81.6%	**********	**********	58.4%	**********	**********	40.1%	**********
Municipal Subsidy as Percent of Total Subsidy	**********	0.00%	**********	**********	28.2%	**********	**********	30.7%	**********

Source: Center for Urban Policy Research analysis.

status. These are also the locations whose residents have once been central-city dwellers and who have homesteaded a new and different life in the outer suburbs. In these locations, perhaps as in no other, community balance in terms of socioeconomic characteristics becomes very important. The entire housing market of the community hangs on movement towards rather than away from middle class.

In this context, Old Bridge, as a prototypical community, presents a crucial decision point to the long-range, constructive viability of the Mount Laurel philosophy. This is a community of relatively modest-priced housing, occupied disproportionately by blue-collar workers. Its average house value lags the community mean within the three-county area of Mercer, Middlesex, and Monmouth, by over 10 percent (see Exhibit 11). Only some 15 percent of its residents are college graduates as compared with nearly half again as high a proportion within its neighboring municipalities.

Its overall socioeconomic status rank -- 63rd on a base of 90 communities -- summarizes its fragility, and the necessity of a very careful rethinking of its Mount Laurel delivery system (Exhibit 12).

It is largely a white, working-class community which provides a desirable way of life for those with modest resources with which to acquire housing. The capacity of the community, however, to absorb low-income households while preserving its relatively fragile integrity is clearly limited.

It therefore behooves all of the principals involved in its future, to carefully consider the limitations of its low-income absorptive capacity. And this holds true not only for developers, the present citizenry, as well as municipal officials -- but for housing seekers and the courts as well.

EXHIBIT 11

SOCIOLOGICAL STATISTICS:
90 MUNICIPALITIES AND OLD BRIDGE TOWNSHIP

Variable Set	Total: 90 Municipalities Mean	Standard Deviation	Old Bridge
Median Family Income	$25,561	$ 5,931	$25,280
% Population: College Graduate	21.5%	11.5%	15.0%
% Population: H.S. Graduate	76.1	9.6	74.9
% Labor Force: Female	42.1	3.4	40.8
% Labor Force: Craftsman or Operatives	17.6	7.1	21.2
% Labor Force: Professional Managerial	30.4	11.0	23.0
Unemployment Rate	5.8	2.0	5.8
% Population: Labor Force	49.4	4.8	50.9
Persons Per Household	2.89	0.39	3.11
% Population: Under 5 Years Old	7.0	1.7	8.3
% Population: Over 65 Years Old	11.9	4.8	6.7
Elementary School Enrollment	47.9	8.2	51.7
% Population: Foreign Born	.06	.03	.07
% Population: Black	5.9	8.3	2.0
% Population: Hispanic	2.6	4.5	3.2
Median Gross Rent	$310	$51	$324
% Units: Single Family Units	71.6%	19.3%	64.2%
Median House Value	$67,818	$23,542	$61,000
% Units: Lacking or Sharing Plumbing	1.06%	1.05%	1.0%
% Units: 1.01 or More Persons Per Room	2.06	1.57	3.0

Source: U.S. Bureau of the Census, 1980 Census of Population and Housing.

EXHIBIT 12

OLD BRIDGE AND COMPARABLE COMMUNITIES

GROUP 1

A	B	C
Middlesex	**Middlesex**	**Middlesex**
Cranbury	Dunellen	Carteret
East Brunswick	Edison	Sayreville
Metuchen	Middlesex	South River
North Brunswick	Milltown	Spotswood
	Old Bridge	
Mercer	Piscataway	**Monmouth**
Hopewell (Borough)	South Brunswick	Freehold (Borough)
Lawrence	South Plainfield	Howell
	Woodbridge	Upper Freehold
	Monmouth	
	Aberdeen	
	Allentown	
	Eatontown	
	Farmingdale	
	Freehold (Township)	
	Hazlet	
	Manalapan	
	Matawan	
	Middletown	
	Millstone	
	Ocean	
	Oceanport	
	Shrewsbury (Township)	
	Tinton Falls	
	West Long Branch	
	Mercer	
	East Windsor	
	Ewing	
	Hamilton	
	Hightstown	
	Washington	

(continued)

EXHIBIT 12

OLD BRIDGE AND COMPARABLE COMMUNITIES

GROUP 1

A	B	C
Middlesex	**Middlesex**	**Middlesex**
Cranbury	Dunellen	Carteret
East Brunswick	Edison	Sayreville
Metuchen	Middlesex	South River
North Brunswick	Milltown	Spotswood
	Old Bridge	
Mercer	Piscataway	**Monmouth**
	South Brunswick	
Hopewell (Borough)	South Plainfield	Freehold (Borough)
Lawrence	Woodbridge	Howell
		Upper Freehold
	Monmouth	
	Aberdeen	
	Allentown	
	Eatontown	
	Farmingdale	
	Freehold (Township)	
	Hazlet	
	Manalapan	
	Matawan	
	Middletown	
	Millstone	
	Ocean	
	Oceanport	
	Shrewsbury (Township)	
	Tinton Falls	
	West Long Branch	
	Mercer	
	East Windsor	
	Ewing	
	Hamilton	
	Hightstown	
	Washington	

(continued)

EXHIBIT 12 (cont'd)

OLD BRIDGE AND COMPARABLE COMMUNITIES

GROUP 2

Monmouth

Allenhurst
Deal
Fairhaven
Interlaken
Little Silver
Loch Arbour
Monmouth Beach
Roosevelt
Rumson
Sea Girt

Mercer

Hopewell (Township)
Pennington
West Windsor

GROUP 3

Mercer

Princeton (Borough)
Princeton (Township)

GROUP 4

Middlesex

Helmetta
Jamesburg
South Amboy

Monmouth

Englishtown
Keansburg
Keyport
Union Beach

GROUP 5

Middlesex

Highland Park
Plainsboro

Monmouth

Sea Bright

(continued)

EXHIBIT 12 (cont'd)

OLD BRIDGE AND COMPARABLE COMMUNITIES

GROUP 6	GROUP 7 & 8
Middlesex	**Middlesex**
Monroe	New Brunswick
	Perth Amboy
Monmouth	
Atlantic Highlands	
Avon-by-the-Sea	
Belmar	
Brielle	
Highlands	
Manasquan	
Neptune City	
South Belmar	
Spring Lake	
Spring Lake Heights	
Wall	

GROUP 9	GROUP 10
Monmouth	**Monmouth**
Asbury Park	Colts Neck
Bradley Beach	Holmdel
Long Branch	Marlboro
Neptune	
Red Bank	
Shrewsbury	

Source: Center for Urban Policy Research analysis; see Report V.

REPORT I

THE FISCAL PROFILE OF OLD BRIDGE, NEW JERSEY

INTRODUCTION

Communities raise money by taxing their residents and spend money for the delivery of public services. In so doing, a series of procedures and decisions are involved which ultimately shape their fiscal health. If spending decisions are prudent and if the outcome of that spending as well as the future of the community are viewed as beneficial by those who seek residence in the region, the local property-tax base will grow and increased tax revenues may be garnered from this taxing base. Municipal revenues are thus determined by the initial and recurring growth of the resident population (both households and business) expressed in the strength of the tax base.

The fiscal health of a community is interpreted through several economic indicators. These indicators, reflecting individual wealth, tax levies, and local assets/debts, signal the economic durability and resiliency of a community. This provides an estimate of the potential "give" of a community in terms of the extension of public services. This "give" potential will be examined for the community of Old Bridge as well as comparable communities across a variety of local, state and federal indicators. Within this analysis, estimates of the local fiscal health of Old Bridge will emerge through the employment of federal and state measures of fiscal solvency. Both resources (wealth, tax collection rates, bond ratings, tax abatements, etc.) and obligation expenditures (debt service, capital facilities, etc.) will be examined.

THE DETERMINANTS OF FISCAL PROFILES IN LOCAL COMMUNITIES

Two consistant classificatory devices determining the extent and emphasis of community spending are a community's size and direction of population change. Classic studies by economists Brazer, Booms, Gabler and Weicher have indicated that the prime determinant of community expenditures is population size. Larger communities (in excess of 100,000 population) and smaller communities (less than 20,000 population) spend more than the band of mid-size communities which fall between these two size ranges. Further, emphasis of spending for government administration and public

works versus public safety and recreation also varies according to population size. Larger communities spend more on public safety and recreation; smaller communities spend heavily on public works. Finally, mid-size communities spend significant amounts on government administration and evenly distribute public safety and public works expenditures.

Another factor explaining expenditure patterns and thus the fiscal profile of a community is the direction of population growth. Declining and stable communities spend more in the aggregate than do growing communities. This is due to both the absolute level of spending in the former group of communities as well as a diminishing population base over which to distribute expenditures. Spending emphases also differ according to growth. Growth communities spend more on government administration and public works; non-growth communities usually spend more on public safety and health/welfare.

These differences have caused analysts to group communities by population size and growth rate or direction (positive or negative) when viewing their expenditure patterns. Thus, communities in the same size range which are experiencing the same type of growth influence* should have reasonably similar fiscal profiles. Fiscal resources and obligations should be balanced in essentially similar ways. This grouping mechanism will be employed in the study which follows. It takes into account similar size communities as the community being viewed, as well as similar directions of population growth. The specific city comparisons will be explained in more detail in a subsequent section. First, a brief overview of fiscal indicators is required.

SOCIAL INDICATORS AS A SOURCE OF INFORMATION ON FISCAL STABILITY

Interest in measuring the level of city distress or hardship heightened during the late 1960s and 1970s. In part, this effort was fueled by the idea that public support as a replacement for private disinvestment was at least the short-run answer to the problems of urban areas, and the major question was only how to best pair money and need. The resultant hardship measures, while differing in substantive focus (social, economic, or fiscal), data selection (i.e., specifically which economic, social, housing, or municipal expenditure variables were referred to), and statistical treatment of their data inputs (deriving a simple average versus utilizing a more sophisticated statistical treatment) had a basic conceptual kinship -- the quantitative ranking of distress. Perhaps more importantly, the measures shared a similarity of results -- city distress ranks accorded by the different approaches were found to be in reasonably close agreement, and city hardship was deemed to be largely independent of the mechanism from which it was determined.

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*Standardizing for a similar national geographic location, i.e., locations affected by the geographic priorities and legal structure of a single state.

Currently there is a particularly rich array of indicators used to index the quality of life in modern society as well as to pinpoint locations and degrees of difficulty faced in certain units of government. The study of social indicators has been significantly influenced by the social benefits and costs seen to be flowing from the suburbanization of the American population. Central city-suburban disparities brought about by technological change, stage of development, and racial and ethnic patterns have been relatively simple to recognize and measure (Oakland, 1979). Indices such as the Brookings Institution Hardship Index focus attention upon central city-suburban disparities on a composite index of social and economic characteristics (Nathan and Adams, 1976). The current range of federal programs used to aid distresed cities use indicators that focus upon the large, central city (Burchell, et al., 1981). Differences across suburban communities, while recognized for many years, are less well treated in the social indicators literature. From the point of view of fiscal federalism, the identification of community stress in these locations is strongly influenced by basic economic indicators of the local area. It is to a review of these indices that we now turn. This is done in relation to both federal and state programs.

The first set of indicators listed in this report are found in the qualification or allocation criteria associated with federal community and economic development programs. In the State and Local Fiscal Assistance Act of 1973 and the metropolitan cities component of CDBG, the indicators are formal mechanisms entitling the municipality to a grant. In the case of the small cities CDBG and the Urban Development Action Grants program, the indicators are advisory in that additional actions must be initiated by the local unit of government in order to receive the grant. For our purposes, however, the focus of interest is in the indicator as an index of municipal fiscal stress.

FISCAL STRESS INDICATORS -- FEDERAL STATUTES

State and Local Fiscal Assistance Act of 1972 (Revenue Sharing)

Three indicators of community need are incorporated in the Revenue Sharing program administered by the U.S. Department of the Treasury. These are population, tax effort and relative income. From the point of view of fiscal stress, tax effort and relative income are the most significant factors adjusting for the intensity of the fiscal problem. Tax effort is determined by comparing all local taxes raised by general purpose government (exclusive of education) to the total personal income of the jurisdiction. The greater the ratio of taxes raised locally (property, sales, income etc.) to local income, the greater the need for federal Revenue Sharing as defined in the allocation formula. Relative income is measured by the ratio of local per capita income to the county per capita income for the county in which the municipality is located. This index is one of relative household budget constraint. The higher the index of relative income, the lower the level of funding through the Revenue Sharing program.

U.S. Department of Housing and Urban Development

Fiscal stress of local government is entered only indirectly into the U.S. Department of Housing and Urban Development (HUD) program of Community Development Block Grants. The purpose of the program is to support communities facing a broader range of economic distress. The characteristics used for this purpose include population, persons below the poverty level, overcrowded housing, population decline, and housing age. Similar indicators are used in HUD's Urban Development Action Grant program. Eligibility to apply for a Community Development Block Grant is based upon scores on indicators such as age of housing stock, change in per capita income, poverty level, population loss, and unemployment. Many of these indices are linked to fiscal stress, but none of them directly measure it.

Congressional Budget Office -- Urban Need Indices

More direct use of fiscal need factors is made in the Congressional Budget Office's Urban Need Indices (Subcommittee on the City, 1978). Fiscal need exhibited by cities is partitioned into short-run factors such as liquidity, debt burden, tax effort and statutory payments. Conceptually, long-term stress occurs where service needs exceed the fiscal capacity of the jurisdiction. The measurement of long-term stress is recognized by the CBO to be an unsolved research problem. However, the ability of local units of government to export their tax base to other jurisdictions is used as one example of an index of fiscal strength.

FEDERAL INDICATORS OF FISCAL STRESS -- THE RANKING OF OLD BRIDGE

Twelve suburban New Jersey municipalities that are growing at a moderate level and fall within the population range of 38,000 to 90,000 are used for the purpose of comparison with the Township of Old Bridge. (The size and growth criteria, earlier discussed, make this categorization essential.) Exhibit 1 displays several socioeconomic indices used by the Revenue Sharing, CDBG and UDAG programs to qualify or allocate resources to needy cities. The first two indices represent local tax effort and personal income. The average property tax levy per household in Old Bridge is the third highest for the set of cities; its median household income level is ranked eighth. Three indices related to HUD programs complete the Exhibit. The unemployment rate, a qualifier for UDAG, for Old Bridge is 5.8 percent (as of the 1980 Census), which is the sixth highest value; Old Bridge has the sixth highest level of housing units that are overcrowded and the seventh or median level of units lacking complete plumbing. Old Bridge, among other comparably sized and similarly growing cities statewide, ranks close to the median value on most federal fiscal stress indices.

The Congressional Budget Office presents two separate sets of fiscal stress indicators. Exhibit 2 displays indicators used to assess short-run municipal liquidity. There are two expenditure variables -- statutory and debt service -- which take precedence over other local expenditure terms. Old Bridge has the fourth highest levels of statutory expenditures, well above the median, for pension, fringe benefit, and Social Security-type expenditures.

EXHIBIT 1

INDICATORS OF FISCAL STRESS USED BY THE DEPARTMENTS OF THE TREASURY AND HOUSING AND URBAN DEVELOPMENT

City	Total Property Tax Levy Per Household (1982)	Median † Household Income	Total † Unemployment Rate	Percent of Housing Units Overcrowded*	Percent of Occupied Housing Units Lacking Complete Plumbing for Exclusive Use
Woodbridge	$1,351 (10)	24,054 (7)	5.1 (9)	1.96% (6)	0.63% (2)
Hamilton	1,415 (8)	21,100 (10)	4.8 (10)	1.63 (9)	0.53 (4)
Edison	1,544 (6)	25,206 (5)	4.6 (11)	1.93 (7)	0.59 (3)
Cherry Hill	2,016 (1)	32,708 (1)	5.1 (8)	0.91 (13)	0.42 (8)
Dover Twp.	1,306 (11)	21,104 (9)	7.8 (4)	1.43 (12)	0.25 (11)
Middletown	1,841 (2)	26,631 (3)	5.2 (7)	1.47 (11)	0.30 (10)
Brick	1,121 (12)	20,370 (12)	7.9 (3)	1.98 (5)	0.23 (12)
Parsippany-Troy Hills	1,690 (4)	27,154 (2)	3.6 (13)	1.61 (10)	0.50 (6)
Gloucester Twp.	1,497 (7)	20,652 (11)	7.0 (5)	1.70 (8)	0.36 (9)
Piscataway	1,554 (5)	24,636 (6)	4.5 (12)	3.27 (2)	0.52 (5)
Willingboro	1,410 (9)	25,269 (4)	8.8 (2)	2.73 (3)	0.04 (13)
Lakewood	1,101 (13)	14,703 (13)	10.3 (1)	4.61 (1)	1.02 (1)
Old Bridge	1,706 (3)	23,222 (8)	5.8 (6)	2.62 (4)	0.47 (7)

Note: In all columns, 1 denotes the highest value, 13 the lowest value, and 7 the median of all values.

†Source: U.S. Census, 1980. Parentheses represent rank of city on fiscal stress index.

*Overcrowded is defined as a housing unit with more than 1.01 persons per room.

EXHIBIT 2

CBO LIQUIDITY FACTORS RELATED TO FISCAL STRESS

City	Per Capita Surplus	Per Capita Statutory Expenditures	Per Capita Net Debt	Per Capita Debt Service Expenditures
Woodbridge	29.54 (10)	25.82 (6)	443 (2)	47 (2)
Hamilton	77.26 (2)	25.37 (7)	359 (3)	29 (8)
Edison	38.74 (8)	45.41 (1)	342 (6)	67 (1)
Cherry Hill	86.46 (1)	19.99 (9)	339 (7)	39 (5)
Dover	62.48 (4)	30.64 (2)	351 (5)	42 (3)
Middletown	63.60 (3)	13.19 (13)	356 (4)	40 (4)
Brick	40.50 (5)	23.03 (8)	289 (9)	31 (6)
Parsippany	40.44 (6)	14.04 (12)	687 (1)	23 (11)
Gloucester	12.80 (12)	16.69 (11)	153 (12)	13 (13)
Piscataway	30.04 (9)	27.16 (5)	305 (8)	22 (12)
Willingboro	26.97 (11)	17.03 (10)	94 (13)	24 (10)
Lakewood	40.32 (7)	29.94 (3)	235 (10)	27 (9)
Old Bridge	12.04 (13)	27.38 (4)	211 (11)	30 (7)

Note: In all columns 1 denotes the highest value, 13 the lowest value, and 7 the median of all values.

Source: Annual Report (1982), Division of Local Government Services, New Jersey Department of Community Affairs.

Net debt is the total debt outstanding for municipal as opposed to that issued by school district or special districts. Old Bridge has a relatively low level of municipal debt at $211 per capita or the eleventh of the thirteen cities compared. Lastly, the per capita surplus represents the unappropriated savings of the municipality. These are resources that can be used by the municipality without altering the tax rate (subject to municipal budget caps). The per capita surplus in Old Bridge was $12.04 for 1982. This was the lowest value among the thirteen size/growth-related comparable cities.

The indicators of long-term fiscal strength used by CBO are included in Exhibit 3. These indices represent the exportability of the local tax base, due to the presence of commercial or industrial property. Old Bridge is shown to have the tenth highest rating for the growth rate of commercial and industrial property valuations and the eleventh highest level of per capita business ratables in 1982.

In summary, the fiscal stress indices used by the CBO show Old Bridge to be a municipal corporation facing slightly above average fiscal stress both in the short-run liquidity factors and in the long-run tax base exportability factor.

FISCAL STRESS INDICATORS — NEW JERSEY STATUTES

Two forms of fiscal stress indicators are used in New Jersey statutes. One set of indicators legally defines the situations under which local fiscal conditions trigger a state review of and intervention in local government operations. The second set of indicators defines relative need and prescribes the intergovernmental process for redistributing state-collected revenue. Each of these types of fiscal stress indicators will be used to examine the fiscal conditions of Old Bridge, New Jersey.

Indicators Used to Define Unsound Financial Conditions

One set of fiscal stress criteria legally defines municipalities as being in unsound financial condition (NJSA:27BB-55). Six provisions exist in the law; if any one condition is judged present, the municipality's financial capacity is reviewed by the New Jersey Local Finance Board (NJSA:27BB-81). The six conditions are as follows:

(1) A default exists in the payment of bonded obligations or notes for which no funds or insufficient funds are on hand or segregated in a special trust fund.

(2) Payment is due and owing the state, county, school district, or special district, or any of them are unpaid for the year just closed and the year next preceding that year.

(3) An appropriation for "cash deficit of preceding year" in an amount in excess of 4 percent of the total amount of taxes levied upon real and

EXHIBIT 3

CBO LONG-TERM FISCAL STRENGTH INDICATORS

COMMERCIAL AND INDUSTRIAL RATABLES 1970 TO 1982

City	Equalized Valuation 1970 (000)	Equalized Valuation 1983 (000)	Average Annual Percent Change	Per Capita C+I Ratables 1982
Woodbridge	219,398 (2)	798,626 (2)	22.0% (8)	8,866 (4)
Hamilton	82,761 (4)	261,942 (6)	18.0 (11)	3,163 (6)
Edison	220,583 (1)	802,560 (1)	21.9 (9)	11,432 (2)
Cherry Hill	143,468 (3)	189,277 (7)	2.6 (13)	2,752 (8)
Dover	61,512 (7)	359,950 (5)	40.4 (4)	5,589 (5)
Middletown	34,137 (8)	126,683 (9)	22.6 (7)	2,024 (10)
Brick	28,538 (9)	136,856 (8)	31.6 (5)	2,552 (9)
Parsippany	65,691 (6)	481,311 (4)	52.7 (1)	9,653 (3)
Gloucester	10,564 (13)	66,136 (12)	43.8 (3)	1,464 (12)
Piscataway	82,075 (5)	544,656 (3)	46.9 (2)	12,900 (1)
Willingboro	17,786 (12)	31,511 (13)	6.9 (12)	814 (13)
Lakewood	27,272 (11)	118,783 (10)	27.9 (6)	3,088 (7)
Old Bridge	28,372 (10)	91,739 (11)	18.6 (10)	1,729 (11)

Note: In all columns 1 denotes the highest value, 13 the lowest value, and 7 the median of all values.

Source: Annual Reports (1970; 1983), Division of Local Government Services, New Jersey Department of Community Affairs.

personal property for all purposes in such preceding year, is required to be included in the budget for the year just closed.

(4) Less than 70 percent of the total amount of taxes levied for all purposes upon real and personal property in the taxing district, for the year just closed and for the prior year, were collected during the year of levy.

(5) The appropriation required to be included in the next regular budget for the liquidation of all bonded obligations or notes exceeds 25 percent of the total of appropriations for operating purposes in the budget for the year just ended.

(6) Judicial determination exists of gross failure of the local unit to comply with provisions of the "Local Bond Law," the "Local Budget Law," or the "Local Fiscal Affairs Law," such that the fiscal integrity of the municipality is substantially jeopardized.

The information required to test a municipality's fiscal condition is available for the most part from unpublished reports held by the New Jersey Department of Community Affairs. These are the Financial Statement of the unit of government, and the audited Local Municipal Budget.

The documents for Old Bridge have been reviewed by CUPR for the local fiscal years 1982 and 1983. In no case was Old Bridge in danger of triggering review by the Local Finance Board. Exhibit 4 displays the values of Old Bridge on each of the financial condition variables. Columns 1 and 2 show that no bond defaults exist and no payments are due to other units of government. Column 3 shows that no deficit exists and that a cushion of over $1 million of deficit could exist prior to the triggering of a review by the Board. Column 4 shows that tax collections are 25 percent above the review threshold; while Column 5 shows that the debt service is less than half the level required to trigger inquiry. Finally, as is shown in the last column, no judicial reviews indicating failure to comply with State law have occurred. In conclusion, Old Bridge as of 1983, across a variety of indices, cannot qualify as being in an unsound financial condition.

Indicators Used to Redistribute State Income

New Jersey, as well as other states, has established numerous state programs whose goals are to lessen the fiscal disparities found among local governments. The state redistributes income to local units of government through many agencies. The most important agencies are the Departments of Treasury, Community Affairs, Commerce and Economic Development, and Education. These policies are operationally defined through the use of fiscal stress indicators which are combined in algebraic formulae. They perform in the aggregate to demonstrate the level of resource distribution a qualified community should enjoy.

In the sections to follow, the legal criteria for judging the absolute and relative fiscal strength of units of local government in general, and their application to Old Bridge, in particular, will be examined.

EXHIBIT 4

SIX BASIC INDICATORS USED TO TEST FOR THE PRESENCE OF UNSOUND FINANCIAL CONDITIONS WITHIN A COMMUNITY
-- FISCAL SOLVENCY OF OLD BRIDGE, N.J. --

	INDICATORS								
	(1)	(2)	(3)		(4)	(5)			(6)
STATE INDICATORS	Default on Obligation Exists	Unpaid Payments to Other Units of Government	Appropriation for Cash Deficit in Excess of 4% of Levy		Less than 70% of Tax Levy Collected	Appropriation to Liquidate Scheduled Debt Service Exceeds 25% of Operating Budget			Judicial Determination of Failure to Comply with Local Bond Law
OLD BRIDGE RECORD ON STATE INDICATORS			(Deficit)	(4% of Levy)		(Total Debt Service)	(Operating Budget)	(Debt Service as a % of Operating Budget)	
1982	No	None	0	$1,164,206	96.59%	$1,592,537	$11,103,376	14.3%	No
1983	No	None	0	$1,591,147	96.72%	$1,351,234	$11,790,315	11.5%	No

Source: New Jersey Division of Local Government Services, Department of Community Affairs, "Financial Statements and Audited Budget for Old Bridge," 1982, 1983.

New Jersey Department of Treasury

The Department of Treasury redistributes income to municipalities through two separate programs: Revenue Sharing and the Municipal Purposes Tax Assistance Act of 1980. Each of these programs will now be reviewed and the position of Old Bridge, on the various eligibility and distribution formulae, examined.

State Revenue Sharing. The State Revenue Sharing Act of 1976 is one component within a broad package of state fiscal reform measures that brought with it the Gross Income Tax Act and the Homestead Rebate (NJSA 54:4-3.80). A fund has been created with the State Treasury from the proceeds of the Gross Income Tax and is, in turn, allocated to the municipalities of the state. Qualification to receive Revenue Sharing is based upon a single criterion. All municipalities with a total effective tax rate in excess of $1.00 per $100 of equalized real property valuation qualify for aid. Disbursement from the fund is then made in direct proportion to the ratio of the municipality's population to the total population of all qualifying municipalities.

The effective tax rate is the sum of the equalized tax rates applied to local property for municipal, school district, and county purposes. It is one measure of the tax price paid by local citizens for public services (Bergstrom and Goodwin, 1973). When used as a fiscal stress indicator, the threshold value defining stress (i.e., $1.00 per $100 of equalized valuation) is the critical factor. Exhibit 5 shows the effective tax rate of Old Bridge for the years 1978 to 1982, as well as the number and percent of New Jersey municipalities eligible for Revenue Sharing under this statute. In each of the five years, Old Bridge has exceeded the threshold value for Revenue Sharing. However, the threshold value is set sufficiently low that over 97 percent of all New Jersey municipalities also qualify. It is clear that the discriminatory power of this legislation has little meaning in terms of relative need. To say a city is needy based upon state Revenue Sharing is to say that almost all cities are needy.

Municipal Purposes Tax Assistance. The second program administered by the New Jersey Department of Treasury for the purpose of redistributing public wealth is the Municipal Purposes Tax Assistance Act of 1980. Established to aid needy municipalities, a pool of money is set up from revenues acquired through the Gross Receipts and Franchise Tax as well as with supplemental appropriations of the legislature. Based upon a set of objective criteria, municipalities are qualified for assistance and redistribution levels are determined (NJSA 54:1-45-54).

Two levels of municipalities are established. A qualifying municipality is one whose municipal equalized real property tax rate is not less than the state average and whose per capita equalized assessed valuation is less than 90 percent of the state average. A participating municipality is one whose tax rate is above one-half the state average and has a per capita equalized assessed value of less than twice the state's average. Qualifying municipalities clearly exhibit a higher tax price for municipal goods than

EXHIBIT 5

EQUALIZED TAX RATE FOR OLD BRIDGE
AND NUMBER AND PERCENT OF ALL NEW JERSEY MUNICIPALITIES
QUALIFYING FOR REVENUE SHARING

Year	Old Bridge Tax Rate	Number of Municipalities Qualifying	Total Number of Municipalities Qualifying
1978	3.24	564	99.47
1979	3.16	563	99.29
1980	3.03	555	97.88
1981	3.10	553	97.53
1982	2.87	552	97.35

Source: Annual Reports (for years indicated), Division of Local Government Services, New Jersey Department of Community Affairs.

do participating municipalities. The higher tax rate indicates a greater willingness to charge for services, while the lower tax base shows that a higher burden exists in the raising of local revenue.

The distinction between the two types of municipalities is reflected in the pool of resources to be redistributed within each. Qualifying municipalities are allocated 23/27ths of the fund; while participating municipalities are allocated the remainder. The redistribution mechanism is the same in both cases. Aid is apportioned in direct proportion to population and inversely to the ratio of the municipal-to-state per capita equalized assessed valuation of real property (NJSA 54:1-49). Exhibit 6 shows the status of the thirteen size-comparable cities with respect to the Municipal Purposes Tax Assistance program. Two cities are in the set of "qualifying" cities, an additional six are "participating." Old Bridge fails to meet the tax rate threshold requirement for a "qualifying" city. However, both tax rate and tax base requirements enable Old Bridge to be categorized as a participating city. It clearly is set apart from those communities requiring substantial subsidy.

Indicators Used by Department of Community Affairs

The Department of Community Affairs (DCA) administers several redistribution programs. These include the Urban Aid program, which is an entitlement;* the Safe and Clean Neighborhoods program, which qualifies cities and determines grant size via a formula, but distributes aid on the basis of a formal application process; and programs such as Neighborhood Preservation, which possess subjective qualifying criteria and distribute aid on the basis of application.

Two aid programs administered through DCA use the same eligibility requirements. These will therefore be treated as a unit. The Safe and Clean Neighborhoods Act of 1979 is an income-redistribution program designed to aid needy cities, to improve the services of the police and fire departments, as well as other approved municipal programs related to safe and clean neighborhoods. The program requires a dollar-for-dollar matching of resources out of the local treasury. It further requires the local government to apply for aid and to submit a program showing its use related to current municipal needs.

Another program, State Aid to Municipalities for Services and to Offset Property Taxes, is commonly called the Urban Aid program. This is an entitlement program which redistributes state income on the basis of the same formula as that for the Safe and Clean Neighborhoods program. The eligibility requirements for the program are the following:

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*Entitlement -- Once a community meets threshold criteria, it qualifies for a basic grant which is not further enhanced or lessened by severity of stress.

EXHIBIT 6

FISCAL STRESS INDICATORS USED TO DETERMINE MUNICIPAL ELIGIBILITY FOR MUNICIPAL PURPOSES TAX ASSISTANCE: 1984

City	Equalized Municipal Purposes Tax Rate	Per Capita Equalized Valuation	Threshold Values for Eligibility as Participating Municipality: Equalized Tax Rate Greater than	Threshold Values for Eligibility as Participating Municipality: Per Capita Equalized Tax Base Less than	Threshold Values for Eligibility as a Qualifying Municipality: Equalized Tax Rate Greater than	Threshold Values for Eligibility as a Qualifying Municipality: Per Capita Equalized Tax Base Less than	Participating Municipality	Qualifying Municipality
Woodbridge	.138	30,853	.295	52,036	.591	23,416		
Hamilton	.316	19,514	"	"	"	"	x	
Edison	.149	33,922	"	"	"	"		
Cherry Hill	.271	28,225	"	"	"	"		
Dover Twp.	.370	30,818	"	"	"	"	x	
Middletown	.456	26,448	"	"	"	"	x	
Brick	.418	27,294	"	"	"	"	x	
Parsippany-Troy Hills	.483	36,358	"	"	"	"	x	
Gloucester Twp.	.386	13,374	"	"	"	"		
Piscataway	.277	32,632	"	"	"	"		
Willingboro	.611	13,760	"	"	"	"		x
Lakewood	.715	18,269	"	"	"	"		x
Old Bridge	.562	20,092	"	"	"	"	x	

Total Statewide Number of:
Participating Municipalities 241
Qualifying Municipalities 94

Source: Memo, New Jersey Department of the Treasury, Division of Taxation, Local Property and Public Utility Branch, 9 August 1984.

1. The municipal population must exceed 15,000, or the municipality must have a population density in excess of 10,000 per square mile;

2. The municipality must have at least one (1) publicly financed dwelling unit for low-income families;

3. The municipality must have at least two hundred fifty-one resident children enrolled in school, the families of whom participate in the Aid to Families of Dependent Children Program. If population exceeds 20,000, population density exceeds 7,000 per square mile, and municipal equalized valuation per capita is at least $4,500 lower than the state equalized valuation per capita, this requirement does not apply;

4. The municipal equalized real estate tax rate must exceed that of the State of New Jersey. If population exceeds 25,000, and municipal equalized valuation per capita is at least $2,000 lower than the state equalized valuation per capita, this requirement does not apply; and

5. The municipal equalized real estate valuation per capita must be less than that of the State of New Jersey. If the municipality's equalized tax rate exceeds the state equalized tax rate by $0.75 or more, this requirement does not apply.

Qualifications for aid under either of these programs require the use of an algebraic equation and include the grandfathering of early qualifiers to the programs. Exhibit 7 displays the values of the need indices for the thirteen comparable cities set. Population size qualifies all cities on the list even though population density is below the threshold in all cases. The number of AFDC children qualifies all but one of the thirteen cities; the exception is Parsippany-Troy Hills. Similarly, Old Bridge qualifies on the basis of size of tax base. Six of the thirteen cities qualify for aid as of FY 1985; Old Bridge's award in Urban Aid is about the middle and is near last in Safe and Clean Aid within the set of comparable cities.

In summary, the fiscal stress indices used by DCA for key support programs show Old Bridge, along with five other comparable size cities, to be in some need of state aid to help maintain public services. The most significant factor separating qualifying from non-qualifying cities is the size of the city's tax base. Therefore, efforts to increase the tax base will, by statutory definition, lessen the fiscal stress found in Old Bridge. Given that Old Bridge has the lowest population density of any of the cities, the economies of scale promoted by growth might well ease the fiscal problems identified in this set of programs.

EXHIBIT 7

RANKING OF CITIES IN THE COMPARABLE DATA SET ON FISCAL STRESS INDICATORS USED FOR THE URBAN AID AND SAFE AND CLEAN NEIGHBORHOOD PROGRAMS

City	Population (1980)	Population Density	Number of AFDC Children January '83	Per Capita Equalized Valuation is less than $24,018	Municipal Tax Rate Exceeds State Average	Qualifer for Urban Aid	Urban Aid (1985)	Safe and Clean Neighborhoods Aid (1985)
Woodbridge	90,074 (1)	3,899 (2)	433 (8)	no	no	yes	69,840 (6)	546,560 (2)
Hamilton	82,801 (2)	2,103 (6)	501 (6)	yes	no	yes	116,640 (4)	600,718 (1)
Edison	70,193 (3)	2,290 (4)	313 (10)	no	no	no		
Cherry Hill	68,785 (4)	2,845 (3)	307 (11)	no	no			
Dover	64,455 (5)	1,549 (11)	814 (3)	no	no			
Middletown	62,574 (6)	1,523 (12)	323 (9)	no	no			
Brick	53,629 (7)	2,031 (8)	506 (5)	no	no			
Parsippany Troy-Hills	49,868 (9)	2,052 (7)	52 (13)	no	no			
Gloucester Twp.	45,156 (10)	1,951 (9)	512 (4)	yes	no	yes	85,860 (5)	78,267 (6)
Piscataway	42,223 (11)	2,234 (5)	291 (12)	no	no	no		
Willingboro	39,912 (12)	5,252 (1)	838 (2)	yes	yes	yes	207,000 (2)	204,828 (4)
Lakewood	38,464 (13)	1,576 (10)	1,435 (1)	yes	yes	yes	263,499 (1)	282,522 (3)
Old Bridge	51,515 (8)	1,345 (13)	476 (7)	yes	no	yes	167,040 (3)	165,239 (5)

Source: Memo, Frank Haines Jr., Division of Local Government Services, New Jersey Department of Community Affairs, August 1984.

Special Urban Aid

Most recently, state aid to needy municipalities has been expanded through a program identified by the Department of Community Affairs as the Special Urban Aid/Special Public Safety Aid program. Passed in 1983 as P.L. 1983 c. 451, the supplemental state aid program qualifies cities for specific funding levels based upon population size. The funds are to be exclusively used to improve or expand the services of the police and fire departments. To receive funds, municipalities must apply to DCA and justify the aid on the basis of fiscal need. The specific criteria are cash deficits, shortfalls in revenue, personnel reductions, tax collection failings, equalized valuation per capita, and general fiscal well-being of the municipality. Old Bridge qualified on the basis of population for a grant of $110,000. However, the Director of the Division of Local Government Services rejected the application on the basis of insufficient need demonstrated by the municipality.

Programs Where Municipalities Reveal Their Status as Needy

In addition to the several entitlement and block grant programs, there are additional programs available for local use that give insight as to the fiscal strength of a jurisdiction.

Tax Abatements and Exemptions as Indices of Need

New development or rehabilitation can benefit a municipality by directly increasing the local tax base. In turn, improvements in one parcel may trigger improvements in others. In recognition of beneficial neighborhood effects, legislation has enabled municipalities to offer tax abatements and exemptions to property owners.

Under the Home Improvement Tax Cut Act of 1981, municipalities can abate some portion of a homeowner's tax assessment. This occurs when the owner improves his or her dwelling unit. In addition, up to $15,000 of the value of the improvement may be exempted from real property taxation. The annual amount of the abatement cannot exceed 30 percent of the annual amount of the exemption. To qualify for the abatement and exemption provisions of this act, the county planning board must determine that the municipality's residential neighborhoods are in need of rehabilitation (NJSA 54:43-3.74). The criteria to be used are the existence of areas within the municipality that have previously been declared blighted; deterioration in housing maintenance; age of housing stock; and arrearage in real property taxes due on residential properties. The municipality must in turn enact an ordinance providing for the exemptions and abatements for specific neighborhoods for the city as a whole. Exemptions of improvements can be created for five years following an improvement (NJSA 54-:4-3.75a). Real property, prior to the improvement, can have its assessed valuation reduced by up to 30 percent of the exemption, also for a period of five years (NJSA 54: 4-3.75b). Similar provisions are available for commercial and industrial properties under NJSA 54:4-3.96.

Old Bridge has not enacted a residential tax abatement program. Old Bridge has passed an ordinance under the commercial-industrial abatement program. Currently only 17 parcels or less than 5 percent of total commercial-industrial properties are taxed at reduced rates under the provision of the law.

Neighborhood Preservation
Status as an Index of Need

Under the broad powers given the state to promote the health, safety, and welfare of its citizens, the Department of Community Affairs has been empowered to aid in the restoration of threatened but still viable neighborhoods through grants to local units of government. Neighborhood preservation is supported by the Department in the form of grants to help finance intensive code enforcement action, the rehabilitation, clearance, demolition and removal of building and improvements for related public services, acquisition of real property exerting a blighting influence on a neighborhood, the acquisition, construction, or installation of public works, the disposition of real property acquired through the act, and for neighborhood planning programs (NJSA 52: 27D-146). To be eligible for this program, the municipality must establish a neighborhood preservation agency and apply to the Department of Community Affairs describing the activities to be performed by the agency for which the grant is required.

The rehabilitation of privately owned property is permitted through the Neighborhood Preservation Housing Rehabilitation Loan and Grant Act of 1975. The Housing Rehabilitation Program of the Department of Community Affairs is a revolving loan and grant fund designed to be operated by agencies of municipal government for the purposes of improving privately owned residential housing. Municipalities are qualified on the basis of judgments as opposed to discrete census information. Once qualified, the municipal neighborhood preservation agency administers a local fund supplied with revenues from the state as well as the U.S. Department of Housing and Urban Development.

To qualify for these revenues, a municipality must establish that:

1) deteriorating conditions have substantially reduced the incentive for private investment and reinvestment,

2) dilapidation, deterioration and obsolescence will become prevalent without governmental aid,

3) deteriorating conditions can be reversed, and

4) the rehabilitation of housing is necessary in the interest of the public health, safety, and welfare (NJSA 52:27D-159).

Old Bridge applied to DCA for Neighborhood Preservation status in April of 1983 and was rejected. It resubmitted its application in July of 1984 and, as yet, has not had a decision rendered by the Department.

Fiscal Stress: The Schools

The inequitable distribution of school district resources across cities and suburbs became the focus of policy during the 1960s and early 1970s. The New Jersey Supreme Court in Robinson v. Cahill (1973) required a major overhaul in the manner of supporting public education. A new package of state aid programs and an expenditure cap law sought to break the dependence of the local district upon its local property tax base. In so doing, the local fiscal incentives restricting land development have been greatly diminished. Decisions to build or not to build can be based upon criteria other than tax base.

In New Jersey, the state aid to education program has been altered in such a way as to ease local dependency on the property tax base. Under the Public School Education Act of 1975, much of the fiscal burden for the support of public education has shifted to the state with income redistribution accomplished through state revenue derived from the Gross Income Tax.

Two major programs accomplished most of this task; these are the Current Expense Equalization Aid and the Debt Service and Capital Outlay Equalization Aid programs. Both programs were enacted as a result of the State Supreme Court's decision in Robinson v. Cahill (Reock, 1982). Both programs approach the disparity in local taxable wealth among communities by the partial funding of locally enacted educational policies. The percent of the local educational budget, both operating and capital, supported with Department of Education funds is determined by the use of one fiscal stress index: the size of the local equalized valuation per pupil in relation to the state average equalized valuation per pupil.

The results of this program can be seen in Exhibit 8. School district tax rates which were stable-to-growing prior to the act have fallen significantly over the seven years following enactment. While a drop in enrollment certainly contributed to the declines, expenditure caps and state aid have contributed to both lowering the average tax burden from a high in the thirteen comparable cities in 1971 of $2.27 per $100 to $1.50 in 1982. Furthermore, the burden is becoming more evenly spread. In 1971 the spread in tax rates among these schools was from a low of $1.83 to a high (which was Old Bridge) of $3.28. In 1982, the spread is from $0.94 to $1.94 with Old Bridge no longer experiencing the highest rate. The standard deviation scores shown in the final row of the Exhibit show a consistent evening of the burden over the years 1971 to 1982, thus confirming the preceding analysis.

In general, the following formula determines the fraction of operating and capital expenditures that will be supported by the state:

$$\text{State Aid Fraction} = 1.00 - \frac{\text{Local Equalized Valuation Per Pupil}}{\text{Guaranteed State Equalized Valuation Per Pupil}}$$

EXHIBIT 8

EQUALIZED SCHOOL DISTRICT TAX RATES
(ANNUAL MEANS AND STANDARD DEVIATIONS)
FOR THREE YEARS PRIOR TO AND THREE YEARS FOLLOWING
ENACTMENT OF THE 1975 PUBLIC SCHOOL EDUCATION ACT

School District	1969	1971	1973	1977	1979	1982
Woodbridge	1.86	1.86	1.85	1.79	1.72	1.62
Hamilton	2.00	2.08	1.87	1.62	1.53	1.57
Edison	1.79	1.03	1.67	1.87	1.73	1.48
Cherry Hill	2.40	2.47	2.51	2.30	1.96	1.73
Dover Twp.	1.87	2.19	1.85	1.54	1.66	1.56
Middletown	2.14	2.23	1.84	1.55	1.46	1.43
Brick Twp.	2.37	2.34	1.90	1.48	1.49	1.25
Parsippany-Troy Hills	2.17	2.17	2.22	1.89	1.57	1.44
Gloucester	1.62	1.83	1.50	1.09	.98	.94
Piscataway	2.31	2.33	2.16	2.18	1.97	1.40
Willingboro Twp.	2.98	3.04	2.78	2.06	2.06	1.94
Lakewood Twp.	2.30	2.43	2.19	1.86	1.70	1.42
Old Bridge	2.83	3.28	2.75	2.18	1.92	1.73
Mean	2.20	2.27	2.08	1.80	1.67	1.50
Standard Deviation	0.379	0.534	0.382	0.327	.274	.236

Source: Annual Reports (for years indicated), Division of Local Government Services, New Jersey Department of Community Affairs.

The guaranteed valuation is a multiple of the state average equalized assessed valuation per pupil. The multiplier for fiscal year 1983-84 was 1.344. As shown in Exhibit 9 this produces a guaranteed valuation for support of local education of $223,920 per pupil of the 1984-85 budget year.

Exhibit 9. Equalized Valuation Per Pupil, 1983-84.

State Average	$166,235
Guaranteed Valuation	223,920
Old Bridge	119,242

In the case of Old Bridge, the per pupil equalized valuation for the current budget year is $119,242. The state will support (up to a maximum) local educational policies as if Old Bridge had a tax base at the guaranteed level. The equalization aid formulas, therefore, provide state funding for 46.75 percent of both the net current expense budget as well as the capital and debt service budget. However, given that Old Bridge's current expense budget exceeds the upper limit supported by the state equalization program, a somewhat smaller fractional share of the budget is actually supported by the state. This is shown in Exhibit 10.

Exhibit 10. Old Bridge School District Budget and State Equalization Aid for Fiscal Year 1984-85.

Net Current Expense Budget (NCEB)	$31,718,174
Maximum Support Budget	30,552,150
State Equalization Aid	14,283,130
Capital Outlay Aid	181,066
Debt Service Aid	482,960
NCEB/Pupil	3,594
Maximum Support	3,462

Thus, while Old Bridge has a below-average equalized assessed valuation per pupil, the effect of the equalization aid program is to give Old Bridge a tax base of approximately 33 percent above average. Further, Old Bridge has through its own decision-making apparatus chosen to exceed the support level by $1,166,024. In total, when compared with the 61 school districts of the same type throughout the three counties closest to Old Bridge -- Middlesex, Mercer, and Monmouth -- Old Bridge has the 18th highest per pupil expenditure level.

Budget Caps

The second mechanism designed by the state to lessen fiscal disparities among school districts is the budget cap law. The cap law limits the growth in what is termed the net current expense budget per pupil to 75 percent of the annual growth rate in the state's aggregate equalized valuation of taxable property. The fiscal stress index used to adjust the local expenditure level is the ratio of the state average expenditures per

pupil to the local district's expenditure per pupil. For school districts whose per pupil expenditures are above the state average, the expenditure base from which the cap is calculated is the district's own expenditure level. For school districts with below-average expenditures, the base is raised to the state average value. This permits them a larger rate of growth in expenditures than that permitted the higher spending districts. Since local revenues are leveraged with state aid, the price of a marginal aid dollar is reduced for the poorer district.

The rate at which a district is willing to increase expenditures in relation to its budget cap is a measure of its willingness to spend and its fiscal strength given the state aid package. Exhibit 11 displays the net current expenditure budgets and enrollments needed to show the rate at which the local school board chose to raise school expenditures as of school year 1982-83. Old Bridge is shown to have the fourth highest per pupil expenditure level, 46 percent of which was derived from state aid. Its allowed rate of increase was 7.69 percent which was the 8th highest value out of the eleven comparable school districts. This reflects both its current desire for high expenditures as well as its relatively sound fiscal condition. Lastly, the percent of the permitted cap income actually used was 84 percent. This is also the fourth highest rate of growth in expenditures found within the set of local school districts.

The school aid program, combined with the expenditure cap law, has provided Old Bridge a mechanism for maintaining a relatively high level of expenditures while raising only 56 percent of the expenditure budget locally. This has significantly diminished the tax price of public education for property owners in Old Bridge, and therefore minimizes its use as an argument against land use development.

CONCLUSION

Fiscal stress -- in terms of unmet demands for municipal and educational services -- is a fact facing all who operate in the local fiscal arena. Demands for services are met with expenditures constrained by the level of state aid, by the local voters' willingness to be taxed, and by the state's willingness to see them taxed. Within the many unique local conditions, generalities have been shown to emerge. These are exemplified in the use of population size and growth rate as indicators of service need and expenditure. The set of comparable cities has been established for the purpose of holding the major influence constant, thus permitting Old Bridge's unique position to be revealed. Throughout numerous fiscal indicators, Old Bridge has been shown to be strong on some, weak in others, and in the middle on most. This can be seen in Exhibit 12 where Old Bridge ranks high in tax effort and relatively average in terms of poor housing conditions. Similarly, in Exhibit 13, an average expenditure level is contrasted with relatively low level of debt. This information strongly underscores that Old Bridge is a fiscally average municipality. This conclusion is supported when examining indicators defined by the state to show fiscal need.

EXHIBIT 11

LOCAL SCHOOL DISTRICT BUDGETS AND EXPENDITURE INCREASES PERMITTED UNDER THE CAP LAW

School District	Enrollment 9/30/82	NCEB[1] Per Pupil 1982-83	Type[2] District	Enrollment 9/30/83	Base Budget NCEB 1982-83	Maximum Permitted NCEB 1983-84	Actual 1983-84 NCEB	% Increase Allowed	% Increase Taken	Rate of Use of Cap Increment
Woodbridge	11,396	3,316 (3)[3]	3	11,261	39,448,364	42,417,844	41,381,053	7.52	4.90	65.2% (8)
Hamilton	11,340	2,860 (7)	3	11,064	32,431,211	35,261,902	35,377,725	8.73	9.08	104.0 (2)
Edison	10,381	3,388 (2)	3	10,144	35,173,585	37,765,015	36,928,325	7.37	4.98	67.6 (7)
Cherry Hill	11,846	3,393 (1)	3	11,341	40,360,165	43,329,645	42,119,671	7.35	4.36	59.3 (9)
Middletown Twp.	10,473	2,526 (10)	3	10,484	27,086,366	29,935,231	30,103,186	10.52	11.14	105.9 (1)
Brick Twp.	9,653	2,241 (11)	3	9,406	21,636,297	24,666,277	22,948,457	14.00	6.06	43.3 (11)
Parsippany Twp.	9,224	2,829 (8)	3	9,306	26,095,074	28,397,569	28,434,139	8.82	8.96	101.6 (3)
Piscataway	6,189	3,028 (6)	3	6,041	18,737,346	20,282,244	19,845,607	8.25	5.91	71.6 (6)
Willingboro Twp.	8,385	3,128 (5)	3	8,026	26,232,469	28,325,658	27,398,031	7.97	4.44	55.7 (10)
Lakewood Twp.	5,054	2,642 (9)	3	5,180	13,355,439	14,701,200	14,371,652	10.07	7.61	75.6 (5)
Old Bridge	9,135	3,245 (4)	3	8,823	29,640,327	31,920,606	31,560,174	7.69	6.48	84.3 (4)

Notes:
1. NCEB = Net Current Expense Budget; State NCEB per pupil for Type 3 school districts, FY 1984-85 is $3,110.
2. Type 3 school districts are responsible for all grades, kindergarten through 12th grade.
3. In listed columns, 1 denotes the highest value, 11 the lowest value and 5 is the median of all values.

Source: New Jersey School Budgets and Property Taxes, Bureau of Government Research, Rutgers University, New Brunswick, N.J., January, 1983.

EXHIBIT 12

RANKING OF COMMUNITY RESOURCES FOR COMPARABLE MUNICIPALITIES 1982

MUNICIPALITY	Population* 1980	State Equalized Valuation (Per Capita)	1980 Median Household Income	Nonresidential Ratables 1982 (Per Capita)	Decade Nonresidential Ratable Change, 1972-1982	Bond Rating	Tax Levy Collected (Percent)
Woodbridge Township	90,074	25,103 (8)	24,054 (7)	8,866 (4)	22.0 (8)	Aa (1)	96.63 (5)
Hamilton Township (Mercer)	82,801	18,922 (9)	21,100 (10)	3,163 (6)	18.0 (11)	A-1 (5)	95.84 (8)
Edison Township	70,193	30,655 (4)	25,206 (5)	11,432 (2)	21.9 (9)	Aa (2)	97.64 (3)
Cherry Hill Township	68,785	27,866 (5)	32,708 (1)	2.752 (8)	2.6 (13)	Aa (3)	96.49 (7)
Dover Township	64,455	30,946 (3)	21,104 (9)	5,589 (5)	40.4 (4)	A-1 (6)	94.23 (12)
Middletown Township	62,574	25,853 (7)	26,631 (3)	2,024 (10)	22.6 (7)	A (10)	94.69 (10)
Brick Township	53,629	27,511 (6)	20,370 (12)	2,552 (9)	31.6 (5)	Baa-1 (12)	94.35 (11)
Parsippany-Troy Hills Township	49,868	31,342 (1)	27,154 (2)	9,653 (3)	52.7 (1)	A-1 (7)	98.59 (1)
Gloucester Township	45,156	17,092 (12)	20,652 (11)	1,464 (12)	43.8 (3)	A (9)	92.60 (13)
Piscataway Township	42,223	31,282 (2)	24,636 (6)	12,900 (1)	46.9 (2)	Aa (4)	97.85 (2)
Willingboro Township	39,912	13,540 (13)	25,269 (4)	814 (13)	6.9 (12)	Baa-1 (13)	97.07 (4)
Lakewood Township	38,464	18,178 (11)	14,703 (13)	3,088 (7)	27.9 (6)	Baa-1 (11)	94.72 (9)
Old Bridge Township	51,515	18,343 (10)	23,222 (8)	1,729 (11)	18.6 (10)	A (8)	96.59 (6)

*Note: Population is in descending order from highest to lowest. In all other columns 1 denotes highest value, 13 the lowest value, and 7 is the median of all values.

Source: U.S. Census of Population, 1980; Statement of Financial Condition of Counties and Municipalities, 1982; The New Jersey Municipal Data Book, 1983.

EXHIBIT 13

RANKING OF COMMUNITY OBLIGATIONS FOR COMPARABLE MUNICIPALITIES

MUNICIPALITY	Population* 1980	Total Unemployment Rate	Municipal Expenditures (Per Capita)	Statutory Expenditures (Per Capita)	Gross Debt (Per Capita)	Debt Service (Per Capita)	Total Tax Levy (Per Capita)	Tax Levy Abated (Percent)
Woodbridge Township	90,074	5.1 (9)	338 (2)	25.82 (6)	547 (7)	47 (2)	653 (6)	.12 (8)
Hamilton Township (Mercer)	82,801	4.8 (10)	283 (5)	25.37 (7)	817 (2)	29 (8)	558 (9)	.27 (5)
Edison Township	70,193	4.6 (11)	425 (1)	45.41 (1)	584 (6)	67 (1)	728 (3)	.89 (1)
Cherry Hill Township	68,785	5.1 (8)	242 (10)	19.99 (9)	699 (5)	39 (5)	895 (1)	.41 (3)
Dover Township	64,455	7.8 (4)	317 (3)	30.64 (2)	785 (3)	42 (3)	746 (2)	.06 (11)
Middletown Township	62,574	5.2 (7)	257 (6)	13.19 (13)	485 (9)	40 (4)	639 (7)	—
Brick Township	53,629	7.9 (3)	252 (7)	23.03 (8)	543 (8)	31 (6)	566 (8)	.24 (6)
Parsippany-Troy Hills Township	49,868	3.6 (13)	248 (9)	14.04 (12)	1,887 (1)	23 (11)	713 (4)	.11 (9)
Gloucester Township	45,156	7.0 (5)	197 (13)	16.69 (11)	318 (13)	13 (13)	509 (11)	.46 (2)
Piscataway Township	42,223	4.5 (12)	250 (8)	27.16 (5)	729 (4)	22 (12)	704 (5)	.10 (10)
Willingboro Township	39,912	8.8 (2)	212 (12)	17.03 (10)	387 (12)	24 (10)	420 (13)	.23 (7)
Lakewood Township	38,464	10.3 (1)	286 (4)	29.94 (3)	440 (11)	27 (9)	465 (12)	.03 (12)
Old Bridge Township	51,515	5.8 (6)	233 (11)	27.38 (4)	445 (10)	30 (7)	549 (10)	.36 (4)

*Note: Population is in descending order from highest to lowest. In all other columns 1 denotes highest value, 13 the lowest value, and 7 is the median of all values.

Source: U.S. Census of Population, 1980; Statement of Financial Condition of Counties and Municipalities, 1982; The New Jersey Municipal Data Book, 1983.

Municipal fiscal need has been shown to be operationally defined by the state through its budget audit and grant programs. Through these definitions, Old Bridge must be viewed as possessing an average fiscal position. This is based upon its strong showing in the annual audit reports, its failure to meet the state's requirement to be a qualifying municipality for Municipal Purpose Tax Assistance, and its failure to be judged sufficiently needy to qualify for Special Urban Aid. On the other hand, Old Bridge has recognized its need to encourage redevelopment by utilizing programs such as tax abatement and has also applied for Neighborhood Preservation status. However, the state has not yet verified the existence of conditions necessary to trigger the implementation of the projects flowing out of this legislation.

Lastly, it has been shown that state educational aid programs are succeeding in equalizing both expenditures and lowering the school tax burden across cities. These programs have reduced the justification for the use of fiscal conditions to encourage exclusionary development patterns. In this case, Old Bridge has been shown to posssess higher than average expenditure levels per pupil, a strong steady growth rate in these expenditures, but a relatively low level when compared to what its budget cap growth rate would allow.

Old Bridge emerges as a community well in touch with its fiscal limitation and the service demands of its residents. It is, as are most municipalities in the state, relatively average in the fiscal stress placed upon its public sector and the service levels provided to its residents.

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REPORT II

COMMUNITY ACTIONS TO PROMOTE LOWER-INCOME HOUSING

INTRODUCTION

The Nature of the Problem: How Does a Community Assist in Reducing Local Housing Costs?

In meeting the Mount Laurel mandate to provide housing for lower-income households, the role of municipalities in reducing local housing costs was defined by the New Jersey Supreme Court. In the language of the Court:

> The municipal obligation to provide a realistic opportunity for construction of its fair share of low- and moderate-income housing may require more than the elimination of unnecessary cost-producing requirements and restrictions. Affirmative governmental devices should be used to make that opportunity realistic, including lower-income density bonuses and mandatory set-asides. Furthermore, the municipality should cooperate with the developer's attempts to obtain federal subsidies.[1]

The role of municipalities in reducing local housing costs may thus be grouped into two categories: 1) the elimination of requirements that add unnecessary costs to the construction of low- and moderate income housing, and 2) the adoption of affirmative measures.

The first of these activities, the elimination of excessive exactions, is a key area of municipal involvement. By imposing excessive fees and development requirements -- such as expecting builders to provide public facilities, dedicate land for facilities, or provide payments in lieu of land dedication — municipalities can increase costs which preclude the construction of housing for lower-income households.[2] A study of new developments near San Francisco, for example, showed that local fees, primarily for utility hookups and "growth impact," had risen from $800 per unit in 1966 to over $7,000 per unit by 1982.[3] Therefore, the first area of involvement for municipalities in meeting their Mount Laurel mandate is

to remove all excessive fees and exactions hindering the construction of lower-income housing.

A second category of activities is the adoption of affirmative measures which provide a realistic possibility for the construction of low- and moderate-income housing. Affirmative measures include seeking federal and state subsidies and using various techniques such as density bonuses, inclusionary housing ordinances, creation of housing trust funds, or abatement to encourage construction of affordable housing.[4]

Numerous communities in and outside New Jersey are, in fact, assisting developers by adopting measures which will reduce housing costs and make the opportunity for lower-income housing realistic. (See Exhibit 1.) Even before the Mount Laurel II decision was handed down by the New Jersey Supreme Court, some suburban municipalities had already adopted ordinances which set aside areas for low- and moderate-income housing. Townships with mandatory set-aside ordinances in effect for a number of years include South Brunswick, East Windsor, Cherry Hill, Bedminster and Bridgewater. In Cherry Hill, 50 units of lower- income housing have been built since the mid-1970s, and 150 more units are in the planning stages.[5] In East Brunswick, the municipality contributed to the construction of a moderate-income development by waiving fees and facilitating the permitting process to meet funding deadlines.[6] In Bedminster, construction on 260 low- and moderate-income units began in 1983 with low interest mortgages being made available by the New Jersey Mortgage Finance Agency.[7] Mount Laurel Township and Deptford Township sought federal subsidies for municipal contributions to the infrastructure needs of lower-income housing developments.[8] Other suburban municipalities, such as Princeton, South Brunswick, Voorhees, Plainsboro, and South Plainfield have assisted in various ways in the delivery of affordable housing.[9]

Clearly, a record of municipal involvement to provide affordable housing is evolving in the state of New Jersey. This presentation explores each one of these key areas of municipal involvement -- first, examining the revision of land use regulations to eliminate excessive exactions for infrastructure and community facilities and to waive certain development fees; and second, detailing affirmative measures including the use of government subsidies such as Community Development Block Grant funds and Housing Development Action Grants, use of tax-exempt mortgage financing, granting of tax abatements, seeking of contributions from developers of non-residential developments, the creation of housing trust funds, and the exploration of various innovative programs to help meet the challenge of delivering low- and moderate-income housing. Examples of the New Jersey and, where appropriate, the national experience are given in each area, and reference made to the impact of municipal involvement on housing costs. Against this record of state and national actions to provide affordable housing, specific recommendations to the Township of Old Bridge for a balanced housing program conclude the report.

REVISION OF LAND USE REGULATIONS -- INFRASTRUCTURE CONTRIBUTIONS

Resumption by the public sector of its responsibility for infrastructure has been called the most important contribution municipalities can

SUMMARY OF PROPOSED OR ENACTED ACTIVITIES TO PROMOTE AFFORDABLE HOUSING*
(Partial List)

LOCATIONS	STRATEGIES							
	Developer		Public					
	Inclusionary Req.[1]	Non-Resid. Devel. Contrib.[2]	Fee Waivers[3]	CDBG Infrast. Contrib.[4]	Other CDBG Write-downs[5]	Low-Interest Financing[6]	Housing Funds[7]	Tax Abatement[8]
NEW JERSEY								
Bedminster	X					X		
Bergen County					X			
Bernards	X			X	X			
Branchburg				X	X			
Bridgewater	X			X				
Cherry Hill	X		X		X	X		
Deptford				X				
East Brunswick	X		X	X	X			
East Windsor	X							
Florham Park	X		X					
Hanover	X		X					
Highland Park					X			
Holmdel		X		X		X	X	
Hopewell		X		X		X	X	
Lincoln Park	X		X					
Mahwah			X	X				
Montville	X		X					
Morris Township	X		X					
Mount Laurel	X			X				
Pequannock	X		X					
Plainsboro					X	X		
Princeton				X			X	
Ramsey					X			
Rockaway	X		X					
Roxbury	X		X					
South Brunswick	X				X			
South Plainfield				X				

EXHIBIT 1

SUMMARY OF PROPOSED OR ENACTED ACTIVITIES TO PROMOTE AFFORDABLE HOUSING*
(Partial List)
(continued)

LOCATIONS	STRATEGIES							
	Developer		Public					
	Inclusionary Req.[1]	Non-Resid. Devel. Contrib.[2]	Fee Waivers[3]	CDBG Infrast. Contrib.[4]	Other CDBG Write-downs[5]	Low-Interest Financing[6]	Housing Funds[7]	Tax Abatement[8]
NATIONAL EXAMPLES								
Alaska, State of								X
Boston, Massachusetts		X				X	X	
Chicago, Illinois		X				X	X	
Colorado, State of								X
Colorado Springs, Colorado				X				
Concord, California		X			X	X	X	
Corvallis, Oregon					X	X	X	
Cupertino, California			X					
Denver, Colorado		X				X	X	
Florida, State of						X	X	
Hartford, Connecticut		X				X	X	
Honolulu, Hawaii		X				X	X	
Illinois, State of								X
Livermore, California			X	X	X			
Miami, Florida		X		X	X	X	X	
Missouri, State of								X
Montgomery County, Maryland						X	X	
New Haven, Connecticut				X				
New Jersey, State of			X	X		X		X
New York City		X				X	X	X
New York, State of				X		X		X
Oakland, California				X		X	X	
Orlando, Florida		X				X	X	
Petaluma, California		X			X	X	X	
Rhode Island, State of								X
San Francisco, California		X		X	X	X	X	
San Mateo, California				X	X			

EXH. 1

SUMMARY OF PROPOSED OR ENACTED ACTIVITIES TO PROMOTE AFFORDABLE HOUSING*
(Partial List)
(continued)

LOCATIONS	STRATEGIES							
	Developer		Public					
	Inclusionary Req.[1]	Non-Resid. Devel. Contrib.[2]	Fee Waivers[3]	CDBG Infrast. Contrib.[4]	Other CDBG Write-downs[5]	Low-Interest Financing[6]	Housing Funds[7]	Tax Abatement[8]
NATIONAL EXAMPLES								
Santa Monica, California		X				X	X	
Seattle, Washington		X				X	X	
Virginia, State of								X
Wisconsin, State of								X

*In some cases, activities are in the draft ordinance stage. See text for details.

Notes:

1. Inclusionary requirements set aside a certain portion of a residential development for affordable housing units.
2. Non-residential developers' contributions include donations of land, infrastructure, and/or in-lieu fees to help provide affordable housing.
3. Fee waivers include waivers of various developers' fees such as subdivision and site plan application fees, building permit fees, certificate of occupancy fees, and engineering fees.
4. CDBG infrastructure contributions are the use of CDBG funds to write down infrastructure costs such as real construction and water and sewer lines.
5. Other CDBG write-downs refer to the use of CDBG funds for land acquisition, pre-construction surveys and plans, etc.
6. Low-interest financing refers to low-interest mortgage loans for homebuyers and/or construction loans for developers.
7. Housing funds are pools of funds from various sources used for lower-income housing.
8. Tax abatements waive taxes for homeowners who rehabilitate their residences. Proposed legislation would allow abatement on new, lower-income housing units.

Source: Center for Urban Policy Research interviews.

make to the realization of Mount Laurel housing.[10] It is only in recent years that because of the high cost of infrastructure and citizen resistance to higher taxes that there has been an increasing tendency to shift more and more of the burden of paying for infrastructure to the developer.[11] Traditionally, the cost of various infrastructure improvements such as road connections and extending utility systems has been regarded as a municipal obligation.[12] Since development is considered to benefit an entire community,[13] municipalities have shared in the cost of supporting it. Even if municipalities have at times felt that their financial burden is too heavy, the courts have ruled that a municipality cannot reject development for that reason.[14]

The transfer of much of the cost of infrastructure from the public sector to the private sector during the last decade has obviously played a role in the rising cost of new housing. Developers typically pass on the costs of land improvements to the home purchaser as part of the amortized housing package. Thus, excessive exactions by municipalities for infrastructure improvements result in higher housing costs -- precluding the delivery of affordable housing. It is for this reason that the New Jersey Supreme Court zeroed in on removing exessive exactions as a key municipal contribution to providing low- and moderate-income housing:

> . . . to the extent necessary to meet their prospective fair share . . . municipalities must remove zoning and subdivision restrictions and exactions that are not necessary to protect health and safety.[15]

Municipal exactions for infrastructure must be closely examined, for they may be excessive on at least two counts: 1) builders are often assessed costs for infrastructure which lies beyond the boundaries of their developments and which sometimes bears only a tangential relationship to servicing their developments;[16] and 2) assessments for service needs may be excessive.[7] Fiscal impact studies are often used for evaluating land development proposals and estimating the cost of services versus predicted tax revenue. Despite their general acceptance, it has been pointed out that fiscal impact studies do not always provide a reliable assessment of future service costs and tax revenues.[18] A common problem in particular is a tendency to arrive at "worst-case" scenarios to protect existing residents from tax increases that might result from new development.

Redressing the imbalance between municipalities and developers in bearing infrastructure costs is a key area of municipal involvement to reduce housing costs. Removing excessive infrastructure exactions from developers would lower construction costs, making delivery of Mount Laurel housing more realistic. Various sources of financial assistance to help pay for infrastructure improvements are available to municipalities; they are detailed later in this presentation. Numerous New Jersey communities are availing themselves of these sources.

New Jersey Experience — Infrastructure Contributions

In New Jersey, the courts have held that developers can be required to bear only that share of the cost of off-site improvements attributable to their developments. In Longridge Builders, Inc. v. Planning Board of Twp. of Princeton, the court ruled that the developer "could be compelled only to bear that portion of the cost which bears a rational nexus to the needs created by, and the benefits conferred upon, the subdivision."[19] Determining the precise share of the total cost of infrastructure improvements to be paid by the developer has been and continues to be the subject of negotiation in New Jersey. Working out appropriate contributions by the municipality and the developer in providing infrastructure for developments that include lower-income housing is merely a continuation of this process. Numerous New Jersey municipalities have accepted that they have a role to play in helping to provide infrastructure to developments with Mount Laurel units:

- In Branchburg, a developer is presently negotiating with the township to have the municipality provide a trunk facility and widen a town road to a lower-income development. The cost reduction will enable the builder to lower construction density.[20]

- East Brunswick provided financial assistance for sewers and other infrastructure improvements for a lower-income housing development built in the early 1980s.[21]

- Mount Laurel is making a contribution towards the construction of water lines for a lower-income mobile home development.[22]

- Deptford assisted in road construction to a senior citizens' project.[23]

- Bridgewater, Bernards, Mahwah, Branchburg, and Ramsey are all in the process of arranging for financial assistance in providing infrastructure (water, sewer, roads) for housing projects with Mount Laurel units.[24]

National Experience — Infrastructure Contributions

- Livermore, California's inclusionary plan seeks contributions to off-site infrastructure improvements for developments containing lower-income housing.[25]

- San Mateo, California helped provide infrastructure for lower-income housing developments.[26]

- Oakland, California provided roads and public facilities for lower-income housing projects.[27]

- Petaluma, California provided parks and infrastructure such as water, sewer, and storm drainage for the low- and moderate-income portion of housing developments.[28]

- Colorado Springs, Colorado pays for extensive site development, including roads and infrastructure, for its low-income housing developments.[29]

- New Haven, Connecticut provides financial assistance for such items as roads, sidewalks and landscaping for its lower-income projects.[30]

- Miami, Florida assists developments with lower-income units by providing infrastructure such as water lines for projects in areas without main hookups.[31]

Cost of Infrastructure

In-depth interviews with developers and municipal engineers show that a low estimate of the cost of infrastructure improvements (for streets, utilities, and lighting) is approximately $6,000 per unit of a $50,000, 1000 ft.^{2} garden apartment condominium.[32] However, infrastructure costs are typically higher. Builders Leon and Sandelsky, for example, testified before a New Jersey Senate Committee that standard infrastructure requirements cost developers $7,527 (in 1975 dollars) per 75' by 100' lot.[33] In Olympia & York's development at Old Bridge, infrastructure costs are expected to amount to approximately $7,600 per unit of housing constructed for low- and moderate-income homebuyers (16 units per acre, 870 ft.^{2} units).[34]

REVISION OF LAND USE REGULATIONS — CONTRIBUTIONS OF COMMUNITY FACILITIES

Exactions that require developers to provide community facilities such as schools, community centers, parks, etc., or to dedicate land or require monetary payments in lieu of land represent a shift from local government financing of public facilities to private financing by developers.[35] Attempts by municipalities to shift the burden have given rise to an extensive body of case law in an effort to delineate the distinctions between permissible and impermissible exactions.

While the general principle is that for an exaction to be permissible, it must bear a reasonable relationship to the needs or costs generated by the development,[36] states vary in their interpretation of this principle. New Jersey takes a narrow view of permissible exactions.

The New Jersey Position-Community Facilities

In New Jersey there is no statutory authority that grants municipalities the right to require that a developer provide public facilities; in fact, the New Jersey Municipal Land Use Law specifically prohibits municipalities from requiring the exaction of public areas as a condition for approval of development projects:

> . . . the ordinance shall not require, as a condition of the approval of a planned development, that land proposed to be

> set aside for common open space be dedicated or made available to public use.[37] (emphasis added.)

Thus, the exaction of public areas as a condition of approval is not legal in New Jersey.

However, the Municipal Land Use Law also states that there is nothing to prevent municipalities from accepting donations of land, construction of various public facilities, or payments in lieu of dedications:

> . . . the municipality or other governmental agency may, at any time and from time to time, accept the dedication of land or interest therein for public use and maintenance. . . .[38]

Therefore, although municipalities may not legally require developers to provide public areas in return for granting approval, it has become a common practice in many New Jersey municipalities to favor proposals that include such contributions and to reject those that do not. Developers have often gone along and agreed to provide various public facilities because of the far greater cost and delay in challenging and litigating such exactions.[39]

Cost of Community Facilities

There is no question that contributions of public facilities or in lieu payments raise housing costs. In the 1970s, studies in California showed the following in lieu payments were required: an average of $220 a unit (in 1975 dollars) for schools in six communities,[40] an average of $317 a unit (in 1972 dollars) for land dedication and other in lieu fees,[41] and $846 per unit (in 1978 dollars) for "public facilities."[42] Developers, of course, pass on costs of development to buyers in the form of higher purchase prices. Expecting developers to provide public facilities is inconsistent with the goal of affordable housing. It is an example of unnecessary subdivision exactions that the New Jersey Supreme Court ordered municipalities to remove in meeting their Mount Laurel obligation.[43]

REVISION OF LAND USE REGULATIONS — FEE WAIVERS OR REMISSIONS

Fees exacted by municipalities on developers include such items as fees for site plan review and inspection, building permit fees, and sewer and water connection fees. These charges are supposed to reflect costs incurred as a result of new development (e.g. staffing expanding departments or the expense of extending a sewer or water line). In some cases, however, they have gone beyond cost recovery and have served as a special tax or exclusionary mechanism.[44] Rather than covering only the actual cost of extending needed services to new residents, they may subsidize the existing population by overcharging newcomers.[45]

In the Mount Laurel decision, the State Supreme Court pointed at developers' fees charged by municipalities as an area where housing costs could be reduced:

> . . . In order to meet their Mount Laurel obligations, municipalities, at the very least, must remove . . . zoning and subdivision restrictions and exactions that are not necessary to protect health and safety.[46]

The focus of the Court in the reduction or waiver of fees was to reduce the cost of housing for Mount Laurel families. Reductions, therefore, need not be applied to non-Mount Laurel units, although they can be at the discretion of the local community.[47]

New Jersey and National Experience - Fee Waivers

Numerous New Jersey municipalities are including fee waivers and remissions as part of their strategy to reduce housing costs — most making such waivers specifically applicable to Mount Laurel units. New Jersey municipalities granting fee waivers or remissions include the following:

- East Brunswick waived fees in a moderate-income townhouse development built under the Section 235 mortgage interest subsidy program in 1980-81.[48]

- Morris Township adopted an ordinance which authorizes the waiver of the following fees for every low-income housing unit in a development: subdivision and site plan application fees; building permit fees; certificate of occupancy fees; sewer connection and application fees; and engineering fees.[49]

- Mahwah's ordinance authorizes the waiver of developers' fees for the Mount Laurel portion of a development (e.g. if 20 percent of a development is lower-income housing, 20 percent of the fees will be waived.[50]

- Cherry Hill's ordinance permits the waiver of sewer connection fees for the development of low- and moderate-income housing.[51]

- Morris County Townships. Morris County municipalities involved in Mount Laurel litigation, have reached agreement and are adopting ordinances which include provisions for fee waivers for low- and moderate-income housing.[52]

- Florham Park agreed to waive the following fees for the low- and moderate-income units in affordable housing developments: subdivision and site plan application fees on a pro-rata basis based on the percentage of low- and moderate-income housing in the development; building permit fees, except state fees; certificate of occupancy fees; and engineering fees on a pro-rata basis based on the percentage of low- and moderate-income housing in the development.[53]

- Hanover agreed to waive the following fees to foster development of units affordable to low- and moderate-households: subdivision and site plan application fees on a pro-rata basis based upon the percentage of low- and moderate-income housing in the development; building permit fees, except state fees; certificate of occupancy fees; and engineering fees on a pro-rata basis based upon the percentage of low- and moderate-income housing in the development.[54]

- Montville agreed to waive the following fees of the low- and moderate-income units in affordable housing developments: subdivision and site plan application fees on a pro-rata basis based on the percentage of low- and moderate-income housing in the development; building permit fees, except state fees; certificate of occupancy fees; engineering fees in excess of 2 1/2% of improvement costs, on a pro-rata basis based on the percentage of low- and moderate-income housing in the development.[55]

- Lincoln Park agreed to waive the following fees of the low- and moderate-income units in affordable housing developments: subdivision and site plan application fees on a pro- rata basis based on the percentage of low- and moderate-income housing in the development; building permit fees, except state fees; certificate of occupancy fees; engineering fees in excess of 2 1/2% of improvement costs, on a pro-rata basis based on the percentage of low- and moderate-income housing in the development.[56]

- Pequannock agreed to waive the following fees of the low- and moderate-income units in affordable housing developments: subdivision and site plan application fees on a pro- rata basis based on the percentage of low- and moderate-income housing in the development; building permit fees, except state fees; certificate of occupancy fees; engineering fees in excess of 2 1/2% of improvement costs, on a pro-rata basis based on the percentage of low- and moderate-income housing in the development.[57]

- Roxbury agreed to waive the following fees of the low- and moderate-income units in affordable housing developments: subdivision and site plan application fees on a pro-rata basis based on the percentage of low- and moderate-income housing in the development; building permit fees, except state fees; certificate of occupancy fees; engineering fees in excess of 2 1/2% of improvement costs, on a pro-rata basis based on the percentage of low- and moderate-income housing in the development.[58]

- Rockaway agreed to waive the following fees on a pro-rata basis based upon the percentage of low- and moderate-income units in the development, (except to the extent such fees are paid by the Township to outside consultants for plan review)--

inspection or similar services: subdivision and site plan application fees; building per unit fees, except state fees, certificate of occupancy fees; and engineering fees.[59]

Municipalities outside New Jersey granting fee waivers or remission include:

- Cupertino, (California) waives various fees including those for inspection and park dedication as an incentive to construct lower-income housing.[60]
- Petaluma, (California) waives subdivision and site plan fees and various processing fees for the low- and moderate-income units in housing developments.[61]
- Orlando, (Florida) waives planning and zoning fees as well as subdivision application fees on a case-by-case basis.[62]

Cost of Fees

Just how much housing costs are reduced by waiving fees varies according to the size of the development under consideration since the fees extracted by municipalities generally depend on the size of the development or value of improvements.[63] In New Jersey, interviews conducted by the Center for Urban Policy Research with New Jersey developers indicated that the lowest fees on a modest, 700 ft.^{2} garden apartment condominium, built at density of 8 units per acre, would amount to approximately $2,500 per unit.[64] These fees include:

Sewer and water tap-in	$1400
Building permit fee	300
Inspection fee (equal to 6 percent of $8,000 bondable improvement - 130 percent of $6,000 subdivision cost)	500
Performance bond (equal to 3 percent of bondable amount, or .03 x $8,000)	250
	$2450

Fees for Olympia & York's development in Old Bridge will add approximately $2,400 to the unit costs of housing built for the lower-income market (1000 ft.^{2}, 6 units per acre):[65]

Sewer/water tap-in fees	$1835
Miscellaneous building fees	602
	$2437

The cost of fees has been escalating in New Jersey and nationwide. In California, a study showed that after Proposition 13, fees in some cities added as much as $2,200 per unit on top of fees already assessed at between $1,000 and $3,000.[66] Another study of fees exacted by California municipalities showed that various fees which cost $314 per home in 1968 had risen to $1,880 by 1976.[67]

AFFIRMATIVE MEASURES --DIRECT MUNICIPAL CONTRIBUTIONS

The New Jersey Supreme Court directed municipalities to employ affirmative measures to make the provision of Mount Laurel units realistic. Some of these measures, like the use of Community Block Grant (CDBG) funds to write down costs, have been in practice for years. Others, like seeking contributions from non-residential developers, are relatively new. And some, like using revenues from an increase in the realty transfer tax to help finance low- and moderate-income housing, might be allowed in one state but pending legislative approval in others. The section that follows details many of these creative, affirmative measures as they are being practiced and explored in New Jersey and across the country. Together they comprise examples of direct contributions by municipalities to achieve the goal of affordable housing.

AFFIRMATIVE MEASURES -- APPLYING FEDERAL SUBSIDIES -- COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) FUNDS

The Community Development Block Grant (CDBG), a federal intergovernmental transfer available to communities and counties distributed by the Department of Housing and Urban Development (HUD), can be used by municipalities and non- profit groups to defray many costs of constructing low- and moderate-income housing units. CDBG regulations expressly single out low- and moderate-income housing as being exempt from the usual restrictions for use of CDBG funds in support of new construction:

> §570:207(b)(3) New housing construction. Assistance may not be used for the construction of new permanent residential structures or for any program to subsidize or finance such new construction . . . . For the purpose of this paragraph, activities in support of the development of low- or moderate income housing including clearance, site assemblage, provision of site improvements and provision of public improvements and certain housing pre-construction costs . . . are not considered activities to subsidize or finance new residential construction.[68]

Thus, CDBG funds may be used by non-profit groups constructing new lower-income housing to reduce costs arising from the following:

land acquisition
site clearance
provision of site improvements
provision of public improvements including water and sewer

CDBG funds can also be applied to cover:

preconstruction surveys
market analyses
site and utility plans
preliminary cost estimates
sketch drawings[69]

And finally, CDBG funds can be used to finance low-interest construction and mortgage loans.

Until 1980, Old Bridge was joined with 19 other communities in Middlesex County to form an "urban community" for the purpose of applying for CDBG funds. CDBG funds were pooled in a Housing Support Activity Fund and allocated to each of the participating communities according to a funding formula.[70] In 1980, Old Bridge substantiated that its population was more than 50,000, and the municipality qualified to become an entitlement area. As such, it no longer needed to apply to the county for an allocation of CDBG funds, but could apply on its own for the CDBG monies which flow directly between HUD and the entitlement cities. The state's approval is required only if CDBG funds are used for water and sewer related activities.[71]

Old Bridge has applied every year for CDBG funds and received $398,000 in the last CDBG funding year.[72] Funds since 1981 have been used in low- and moderate-income neighborhoods for projects including curbing, drainage, recreation facilities, a first aid building, park cleanup, and a fitness course. Funds have also been used to provide interest-free loans for rehabilitation of existing housing, for such things as plumbing, electrical and roofing work. Old Bridge is therefore familar with the procedures in applying for CDBG funds and could use these proceeds to help meet its Mount Laurel obligations.

Other New Jersey municipalities are using or have applied for CDBG funds to help write down the costs of building low- and moderate-income housing. Examples of the use of CDBG funds for affordable housing follow:

Preconstruction surveys, analyses, site and utility plans

- Highland Park applied for and was granted funds for two feasibility studies: $15,000 to determine if a site would be suitable for a townhouse development, 20 percent of which would be lower-income units, and $5,000 for a senior citizens' continuous care project.[73]

- Branchburg applied for CDBG funds for engineering plans needed in connection with a low- and moderate-income housing development. The engineering plans for which Branchburg is requesting funds include preliminary subdivision plans (boundary and topographic surveys, alternate sketch plans, lot layout, roadway and utility plans and profiles, and stormwater management plans) and final subdivision plat and construction plans.[74]

Land Acquisition

- Bergen County's Affordable Ownership Housing Program (AOHP) has since the late 1970s been using CDBG funds to write down a portion (usually 50 percent) of the land aquisition cost of sites for lower-income housing.[75]

- In Somerset County, 19 municipalities are applying for CDBG funding to help defray certain costs -- including land acquisition -- associated with provision of lower-income housing. A decision on the disposition of the funds is expected soon.[76]

- Bernards applied for CDBG funds to help defray the cost of acquiring land for the construction of low- and moderate-income housing. The township has asked for $100,000 in CDBG funds and would contribute $100,000 from its capital budget for a total of $200,000. The housing would be built and managed by a non-profit organization, a housing authority, or possibly, a private developer.[77] A decision on this application is expected soon.

- Branchburg applied for CDBG funds to help defray the cost of acquiring land for the construction of between 100 and 130 low- and moderate-income housing units. Branchburg estimates that the granting of CDBG funds for this project would result in savings of $750 to $1000 per unit to be passed to future homeowners.[78]

Provision of Public Improvements

- East Brunswick was allocated CDBG funds from the Middlesex County Housing Support Activity Fund to provide sewers and other infrastructure improvements for a lower-income housing development built in the early 1980s.[79] The grant was for the amount of $120,000 or $8,000 per unit.[80]

- Mount Laurel has a commitment of $300,000 in CDBG funds for water lines for a lower-income mobile home development.[81]

- Deptford received CDBG funds for construction of a road to a senior citizens' project and has received funding for other infrastructure projects.[82]

- Bridgewater, Bernards, Mahwah and Ramsey are all in the process of applying for CDBG funding for infrastructure improvements (water, sewer, roads) for housing projects which include Mount Laurel units.[83] A total of 19 municipalities in in Somerset County have applied for CDBG funds for provision of public improvements in residential developments, and a decision is expected soon on amounts to be allocated.[84]

- Branchburg applied for CDBG funds for the design and construction of a sanitary sewer extension to service a development for between 100 and 130 low- and moderate-income families. The township estimates that the award of CDBG funds for this project would result in savings of $150 to $200 per unit for future homeowners.[85]

- Branchburg has also applied for CDBG funds for the design and construction of a 30-foot wide access road to service 250 to 300 lower-income housing units to be built on approximately 50 acres of land. Decisions on all pending applications are expected soon.[86]

- Cherry Hill received $100,000 in CDBG funds last year and has applied for $125,000 for next year to subsidize construction of lower-income housing units. The town is debating what form of non-profit entity will receive the subsidy and develop the housing projects. Cherry Hill plans to use the grants to subsidize 20 percent of the total cost of each unit.[87]

A representative sample of out-of-state experience with CDBG funds for lower-income housing includes:

- Livermore's (California) inclusionary plan encourages the use of CDBG funds for off-site improvements and development fees. The city is also pursuing a land banking program using CDBG funds to purchase sites for multi-family housing developments.[88]

- Concord (California) is using its $900,000 grant in a below-market mortgage pool to assist lower-inome households in purchasing condominiums.[89]

- Petaluma (California) applied CDBG funds to write down the cost of land for low- and moderate-income housing developments.[90]

- San Mateo (California) also utilized CDBG funds to write down land costs.[91]

- Orlando (Florida) used CDBG funds to provide construction loans of multi-family, low-income housing at 11 1/2 percent.[92]

- Corvallis (Oregon) also uses CDBG funds for a low-interest loan program for lower-income homebuyers.[93]

AFFIRMATIVE MEASURES -- APPLYING FEDERAL DEVELOPMENT GRANT PROGRAM (HoDAG) FUNDS[94]

The Housing Development Grant Program (HoDAG), authorized by Section 17 of the United States Housing Act of 1937, is a new program administered by the Department of Housing and Urban Development (HUD) to promote the construction of low-income housing. Under HoDAG, HUD provides grants to eligible areas to be used for up to 50 percent of the total development costs of constructing low-income housing. At least 20 percent of the units in a project assisted under HoDAG must be rental units leased to lower-income families for a period of 20 years or cooperatives with a restrictive resale structure to maintain affordability.

A municipality may use the grants to make loans or grants to defray project costs including acquisition, demolition, relocation, site improvements, construction costs and related soft costs; to make interest reduction payments; or for other forms of comparable activities approved by HUD.

HUD has been authorized to spend $200 million in HoDAG funds during FY84 and an additional $115 million in FY85. The application deadline for the FY84 funds was August 14, 1984; the deadline for 1985 funds has yet to be announced.

To qualify for the program, a city must be designated by HUD as an eligible area. Old Bridge has not been so designated, but projects that "meet special housing needs" will also be considered for grants. While it is still unclear whether low-income housing mandated by Mount Laurel will qualify as meeting a "special need," initial reaction from HUD appears favorable.[95]

AFFIRMATIVE MEASURES - ISSUING TAX-EXEMPT MORTGAGES

The financing of housing units is the single most important factor affecting affordability: to make lower-income housing affordable, it is imperative to secure favorable financing.[96] The affordability of a unit at a given cost can be substantially boosted by the use of lower interest rate mortgages provided by the sale of tax-exempt securites. The availability of tax-exempt financing varies from state to state.

New York State was the first state to issue tax-exempt revenue bonds and use the proceeds for mortgages to finance low- and moderate-income housing.[97] By the late 1960s, similar statutes had been adopted by most major industrial states; by the end of the 1970s, nearly every state had an authority or other entity created for the purpose of issuing tax-exempt bonds for home mortgages, rental project financing, or both.[98] Under New Jersey state law, a municipality cannot issue tax-exempt bonds for housing, but can guarantee rental housing revenue bonds issued by a county improvement authority.[99] In Middlesex County no such authority has been established, but one could be.[100] Municipalities must look to the state to provide financing to assist Mount Laurel households.

Two public agencies have been in the forefront of helping to finance housing in the state: the New Jersey Housing Finance Agency, which has issued tax-exempt bonds for financing multifamily rental developments, and the New Jersey Mortgage Finance Agency, which issues bonds to finance mort-

gages for single-family housing. (The granting of low-interest loans for the construction of owner-occupied units is not permitted by federal law.) These two agencies were merged in 1984 into a single agency, the New Jersey Housing and Mortgage Finance Agency (NJHMFA). This agency has expressed its commitment to increasing the supply of affordable housing for lower-income families and to continue working with the private sector in meeting New Jersey's housing needs.[101]

For most of 1984, however, NJHMFA has been hampered in this effort by the expiration of authority as of December 31, 1983, to issue tax-exempt mortgage revenue bonds. The United States Congress recently passed an amendment which reauthorized the issuance of tax-exempt bonds. The NJHMFA will have available $330 million annually for mortgages for multifamily and single family housing through 1987.[102]

Single Family Housing

The Agency planned to issue bonds in the early fall* to finance mortgages for existing and newly constructed single-family housing -- some in targeted areas (defined as areas where at least 20 percent of the families have incomes 80 percent or less of the statewide median[103]) and others statewide. The NJHMFA Board has adopted certain income restrictions for use of tax-exempt mortgage financing for existing housing: $37,500 will be the income limit in Middlesex County in general; however, targeted areas will have no income limits.[104]

Over the next several months, the NJHMFA Board will be meeting and discussing programs to promote the goal of increasing housing opportunities for lower-income households. One suggestion is that a developers' program be created in municipalities, with set-asides of mortgages for units meeting the Mount Laurel criteria.[105] A development would have to meet certain criteria in order to qualify for NJHMFA loans: all approvals would have to be secured, a model would have to be on the site, and other conditions met during various phases of the construction. The Agency would target certain developments and set aside funds through participating lending institutions for low-interest mortgages.

Such a program is already in effect on a limited basis, and interviews with officials at the NJHMFA indicate that the Agency would be receptive to making low-interest mortgages available to homebuyers in a development such as Olympia & York's in Old Bridge.[106] However, priority will be given to developments that have municipal support and are part of the municipality's plan for meeting its Mount Laurel obligation.** A commitment from the Agency would be limited to approximately three years rather than to the time period of the buildout of the entire project because of the uncertainties of the bond market and the expiration of the Agency's authorization from Congress.[107] The present mortgage rate being offered is 10.65 percent over a 30-year term with the buyer paying a minimum of 5 percent down and usually 3 points.

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*4,000 low-interest mortgages were made available to first-time homebuyers on September 17, 1984.

**Interview with Connie Gibson, Deputy Director, NJHMFA, October 9, 1984.

New Jersey Experience - Tax-Exempt Financing

The use of tax-exempt mortgage financing for single-family, newly constructed lower-income units was pioneered in a development in Bedminster-The Hills. Tax-exempt mortgage financing at 11 percent was approved by the New Jersey Mortgage Finance Agency for 260 lower-income units in this project. A buydown of 1 1/2 percent was provided by the developer to set the first year interest rate at 9 1/2 percent on the basis of which prospective buyers would qualify for the units. (The rate increases 1/2 percent each year subsequently until it reaches 11 percent.)

It should be pointed out, however, that certain factors unique to Bedminster contributed to the success of this project. These factors include an unusually low local property tax rate and the strong demand and exceptional market in that particular area for expensive housing.[108] This latter factor enabled the developer to charge an average selling price of $175,000 for the remaining units -- a price which covered the development costs of the lower-income units.[109] Municipalities where these favorable conditions do not exist will be obligated to take more affirmative measures in order to provide a realistic opportunity for the construction of lower-income housing.

Multifamily Rental Housing

Although financing through the sale of mortgage revenue bonds is available for construction of multifamily rental housing, the amount of red tape and aggravation in meeting all the requirements to secure it are discouraging to most developers except those who are used to dealing with the government. Another problem which arises in constructing rental housing is the difficulty in meeting the NJHMFA statutory requirement that projects built with tax-exempt bond financing must be built under the "prevailing wage" standards: applying this standard can raise development costs to levels well in excess of the savings resulting from the tax-exempt bond financing.[110] Finally, most private developers are not interested in long-term management; they want to sell units rather than take on a 20-year rental commitment. Thus, the construction of multifamily housing under all the constraints imposed by tax-exempt financing was not considered an option most private developers would be interested in pursuing.

AFFIRMATIVE MEASURES — PROVIDING TAX ABATEMENTS

If preferred property tax treatment could be secured, property taxes on developments containing Mount Laurel housing could be moderated which would in turn reduce housing costs. Most state statutes, however -- and New Jersey is no exception -- tend to restrict tax abatement to rental developments in urban locations financed with public funds or being undertaken in conjunction with urban renewal projects.[111] At the present time, none of New Jersey's tax abatement programs apply to most new Mount Laurel construction which consists of owner-occupied units in suburban areas.

New Jersey's programs include the following:

Housing Finance Agency Law (N.T.S.A. 55: 14J-1 et seq.) allows a municipality to offer tax abatement to rental developments. A payment in lieu of taxes (PILOT) is set by the municipality at a percentage from zero to twenty percent of the gross annual revenue of the project.[112]

Limited-Dividend Non-Profit Housing Corporations or Associations Law (N.J.S.A. 55: 16-1 et seq.) provides for a flat rate PILOT at 15 percent of gross revenue.[113]

A developer wishing to take advantage of either of these abatement programs for rental developments could create a separate corporation for rental units, thereby structuring ownership to conform to the applicable statutes. Although historically more urban than suburban communities have granted these abatements, there is nothing preventing suburban communities from doing so.[114]

Other New Jersey programs include:

Fox Lance Program (N.J.S.A. 55C-4D et seq.) offers property tax concessions on new construction under specific conditions -- i.e., where a "blighted area" is being "redeveloped" according to a "redevelopment plan" by a "redevelopment agency." For a period of 35 years the "project" is allowed an annual in lieu payment equal to either 15 percent of the property's annual revenue or an escalating share (from 20 to 80 percent) of the nominal tax obligation over the term of the abatement, whichever is greater.[115] Fox Lance is presently applicable only in certain legally defined areas.

Tax Exemption and Abatement for Improvements to Residential Buildings and Conversion of Non-Residential Buildings to Use as Multiple Dwellings (P.L. 1975, C.104. As amended and P.L. 1979, C.233) enables municipalities to grant tax relief to owners of existing residential buildings. Municipalities must adopt a resolution requesting certification from the county planning board in order to qualify for this program.[116]

Tax Exemptions and Abatements on Commercial and Industrial Structures (P.L. 1977, C.12) provides exemptions and abatements on commercial and industrial structures in certain qualified areas for five years. Old Bridge is one of the Middlesex County municipalities qualified under the Act.

Other states have the following programs:

New York City's Mitchell-Lama Program during the 1960s abated 50 percent of the taxes on new middle-income housing projects.[117]

Massachusetts Chapter 121A Program protects the municipalities granting tax abatements: those entities receiving abatements make payments to the state which then returns the amount to the municipality.[118]

Numerous states have adopted statutes or passed legislation enabling municipalities to grant tax abatements to homeowners who rehabilitate their residences. Rehabilitation is also a part of the Mount Laurel mandate and is a prime source of housing for low- and moderate-income families. Among the states authorizing tax abatements to owners of rehabilitated housing are Alaska (increase in property value due to rehabilitation abated for four years); Colorado (increase in value abated for five years); Illinois (abatement for four years; Missouri (property owned by an urban redevelopent corporation is assessed at value of land only, exclusive of improvements, frozen at this level for ten years, and assessed at one-half of full value for next 15 years; New York (12-year abatement on increased value due to improvements on multifamily dwellings; Rhode Island (five-year abatement on residence in city of Providence); Virginia (abatement for up to ten years); and Wisconsin (five-year partial abatement on improvements).[119]

(California has not been a forerunner in the area of granting tax abatements to developers, presumably because the adoption of Proposition 13 limited property taxes to 1 percent of market value, thus defusing pressure which might have otherwise built up for legislative relief in this area.[120])

Most planning experts in New Jersey tend to agree that new legislation will be required to enable municipalities to grant tax relief specifically to new Mount Laurel development, particularly for owner-occupied units in suburban communities.[121] Assemblywoman Cooper introduced a bill in January 1984 which would amend P.L. 1977, c.12 to include abatements on new, affordable, multiple-dwelling structures. The definition of "multiple-dwelling" structures covers condominiums as well as apartment houses. The bill authorizes a municipality to pass an ordinance to grant an abatement on new projects for up to five years. The abatement agreement can use one of three approaches:

1) that the applicant pay in lieu of property tax an annual amount equal to 2 percent of the project cost; or

2) 15 percent of its annual gross revenue (this would apply to rental projects, not condominiums); or

3) that the applicant pay gradually increasing proportions of the property tax, until in the sixth year he is paying 100 percent.[122]

Since an abatement is tied to a piece of property, an abatement could be granted to a developer which would continue in effect when the property was sold to a private homeowner.[123] This bill would enable a municipality to grant an abatement to a developer of Mount Laurel units. The abatement would be passed on to low- or moderate-income homebuyers as long as the five-year time period had not run out.

Assemblywoman Cooper's bill was sent to the Revenue, Finance and Appropriations Committee on February 27, 1984, where it is still awaiting action. She has requested in writing that the chairperson put the bill on the committee's agenda, but as of September 1984, there has been no action on the bill.

AFFIRMATIVE MEASURES -- REQUIRING CONTRIBUTIONS BY NON-RESIDENTIAL DEVELOPERS

In order to help finance and make the construction of low- and moderate-income housing realistic, a number of municipalities have been exploring ways of involving more participants in the process. Some of these communities are finding developers of commercial and industrial projects a promising source of contributions. Non-residential developers can be tapped for land and/or infrastructure improvements for lower-income housing developments as well as for in lieu cash payments to housing funds.

The imposition of these various exactions on non-residential developers is generally justified by three considerations:

1) the growing awareness that commercial and residential development generates jobs which creates the need for housing, and

2) if only the purchasers of new market rate housing are bearing the costs of low-income units in their development, then only a small group of people are paying for something which is the responsibility of all, and

3) the desire to take advantage of a major source of private investment in view of the drastic reduction in the traditional source of funds for that purpose -- the federal government.

New Jersey Experience - Contributions by Non-Residential Developers

A number of New Jersey municipalities are exploring various contributions which can be made by developers of non-residential projects to help meet their Mount Laurel obligation. Among them are the following:

- Hopewell Township adopted an interim ordinance recommending zoning changes and regulations to conform to the requirements of Mount Laurel. Among its provisions, the interim ordinance set up a housing trust fund which offers developers of non-

residential projects several options. The developer can dedicate a portion of the tract (at least 5 acres but a maximum of 15 acres or 5 percent of the tract) to either the township or to a public agency responsible for residential development. As part of the development of the non-residential portion of the land, the developer is to extend water and sewer service to the dedicated residential site. Thus the municipality will have a site where housing can be constructed at no land costs and with at least some infrastructure in place. In exchange, the developer is given credit when calculating the permitted amount of gross floor area and the percent of lot coverage allowed.

If the dedicated acreage is inappropriate for a variety of reasons, in lieu of land dedication, a non-residential developer can contribute a fee ($1 per square foot of gross floor area of new construction) to the township for lower-income housing purposes. Use of the money is limited to either producing a higher ratio of lower-income units in a given project and/or a reduction in their cost to be passed on to the purchaser or tenant of a unit. In addition, the funds can be used for the direct construction of lower-income units. In exchange, the non-residential developer is allowed to increase the building height to achieve more gross floor area.

In a third option, a developer of an industrial or commercial development can contribute the infrastructure to serve the lower-income housing project. The value of the infrastructure is to be equal to the in lieu payment, and in exchange the developer is allowed to increase the building height of his non-residential project.[124]

- Holmdel's draft ordinance to comply with the Mount Laurel mandate contains a similar provision for developers of commercial and industrial projects to contribute land, in lieu fees, or make other contributions serving construction of lower-income housing projects.[125]

National Experience --
Contributions by Non-Residential Developers

- San Francisco (California). The ordinances setting up housing trust funds are modelled on the San Francisco Office/Housing Production Program. In this program, developers of office and commercial projects are required to make contributions to assist in the development of affordable housing.[126] They have the option of building housing, providing financial aid to a specific housing project built by others, or participating in a city mortgage write-down program. The number of units that must be provided is based on a formula derived from the following assumptions: (1) one worker is added for every 250 square feet of office space; (2) 40 percent of office

employees live in San Francisco; and (3) 1.8 working adults occupy each housing unit. Based on these assumptons, the housing requirement is as follows:

gross square feet of office space/250 x 0.22 = housing requirement.

The requirement applies to housing generally, but the program does provide substantial incentives to direct investment to lower-income housing:

1) a two-for-one credit given for facilitating the construction of lower-income housing under governmental subsidy programs;
2) a three-for-one credit for moderate-income units built without subsidies; or
3) a four-to-one credit for low-income units built without subsidies.

The San Francisco program was initiated informally in 1981 and within roughly a year and a half, the city had secured nearly $19 million in housing investments. Most of the funds have gone to support lower-income housing developments. Investments tend to fall into three categories:

1) rehabilitation of substandard public housing units by the San Francisco Housing Authority;
2) subsidies in order to bring Section 8 and rehabilitation projects within HUD cost limits; and
3) contributions to the citywide, shared appreciation mortgage investment pool. A contribution of $6000 into the pool has been established by the city as being equivalent to one credit, or unit, of the housing requirement.

The last program is administered in conjunction with tax-exempt mortgage revenue bonds issued by the city. The funds in the investment pool are used to write down the interest rate on mortgage loans to homebuyers who cannot afford to buy homes even at a lower interest rate provided by the tax-exempt bonds. At the end of the term of the mortgage (30 years) or when the property is sold, the investors in the pool receive the investment back with accrued interest or half the appreciation on the property, whichever is less.

Under the program, by the end of 1983, a total of 2,586 units had been constructed or rehabilitated, or made affordable by the mortgage pool to lower-income households.

. Seattle's (Washington) proposed housing trust fund program would require developers to either build housing or pay an in lieu fee to a housing trust fund. The proposed formula is that developers of all downtown office and commercial projects

would provide 300 square feet of housing for every 1,000 square feet of commercial space or pay a fee of $5 per square foot of commercial space.[127] The city projects that from 4,000 to 5,000 units (principally in the moderate-income range) will be created by the program over the next 20 years.

- Boston's proposed program would require a fee of $5 per square foot paid over a 12-year period by developers of downtown office and commercial projects larger than 100,000 square feet and of large industrial and residential developments reducing the supply of low- and moderate-income housing.[128] An estimated $37 to $52 million would be raised over a ten-year period to be directed to a Neighborhood Housing Trust charged with expanding the supply of affordable housing.

- New York City's proposal would create a $200 million housing trust fund financed from a wide variety of exactions on both commercial and residential developers of luxury units with additional public support. The funds would be directed to lower-income housing development and rehabilitation and targeted to low-income neighborhoods.[129]

- Miami developers of commercial projects are given the option of paying into a low- and moderate-income housing fund in exchange for which they receive additional square footage of commercial space for their properties.[130]

Other cities exploring the possibility of establishing a program exacting contributions from non-residential developers include Honolulu, Santa Monica, Chicago, Hartford and Denver.

As is evident from the communities which have utilized this approach, a very strong non-residential demand base is required. It is most suitable in "one of a kind" communities rather than those in the direct line of competition from equivalent sites outside the specific municipality's aegis.

AFFIRMATIVE MEASURES — CREATING HOUSING TRUST FUNDS

The use of housing trust funds to help subsidize low- and moderate-income housing has been gaining wide attention. In the basic inclusionary housing program, developers construct lower-income housing as part of a larger development built for the private market; in the housing trust fund program, developers make payments into a fund -- often called a housing fund -- which can be used by the public sector to further the objective of providing affordable housing. This fund's versatility makes it an attractive resource for municipalities trying to deliver Mount Laurel housing. Monies from housing trust funds can be used for a variety of purposes: e.g. direct construction of units, reducing the cost of units, or creating below-market mortgage pools. The problem has been where to find sources of

revenue for the funds -- a problem which has given rise to several creative possibilities. Some of the sources of housing trust funds -- and their uses -- are detailed below:

Contributions by non-residential developers

This is a method being considered in Hopewell and Holmdel and numerous communities nationwide. Use of the housing trust funds created by this method has already been described.

Levy on property transactions

- Florida passed a state law in June 1983 enabling the levy of an extra tax on commercial property transactions to finance housing. Dade County was the first to take advantage of this provision for more affordable housing and enacted an ordinance in December 1983 increasing the transfer tax from $4.50 to $9.00 per $1,000 of the sales price of a property. During the first three months after the tax was increased, the County raised $1.5 million.[132] This money has been earmarked for below-market mortgage pool, through which the County offers from 3 to 9 percent loans to low-income homebuyers, depending on a purchaser's income, plus a $10,000 grant towards a down-payment.[133]

- New Jersey is considering a similar approach. A bill has been introduced by Assemblyman David Schwartz which would increase the realty transfer tax from $1.75 to $2.25, creating a pool of funds to be used by the counties for "housing related activities."[134] This bill, however, is likely to run into opposition by realtors and others, and chances for passage are unclear.[135]

Surplus contributions by developers to the park maintenance fund

- Concord (California) allocates funds remaining at the year's end to low- and moderate-income housing projects to reduce costs and thus lower sales prices.[136]

Fees exacted for subdivision plan review

- Petaluma (California) directs these fees into a low- and moderate-income housing fund. Fees are exacted on developers of residential projects based on a sliding scale of the value of the housing units. Funds from the housing fund are used to finance zero or low interest loans to non-profit developers of low- and moderate-income units.[137]

Sale of revenue bonds

- Oakland (California) uses revenues from bond sales to offer deferred and partially deferred loan programs to developers of low- and moderate-income projects with interest rates varying according to the project.[138]

- Hartford (Connecticut) also uses revenue bonds for a housing trust fund which provides zero to low interest loans for the construction of low- and moderate-income housing projects. The city also assists homebuyers with a downpayment of up to $10,000 for low- and moderate-income units. The loan is repayed upon the sale of the unit.[139]

- Orlando (Florida) uses proceeds from revenue bonds to purchase land for low- and moderate-income housing; the local Housing Finance Agency grants 3 percent loans to developers for this purpose. Long-term loans for construction of low-income units are also granted to developers at 10 1/2 percent interest and to homebuyers at 11 1/2 percent interest for 30 years. Closing costs for low-income homebuyers are also paid.[140]

CDBG funds

- Miami (Florida) and Corvallis, (Oregon) use CDBG funds as a revenue source for low-interest construction loans. Corvallis requires that the loan be repaid over a 20-year period into a revolving loan fund.[141]

Tax on the sale of converted condominiums and cooperative units

- Montgomery County (Maryland) assesses a 4 percent tax on the sale of units which were formerly rental units to finance a subsidy program for low- and moderate-income housing.[142]

The contribution in some cases of 20 percent of rents on an annual basis

- Oakland (California) uses this revenue source for its housing rehab fund.[143]

Appropriating local funds

This method to subsidize construction of low- and moderate-income housing units or to provide direct mortgage or rent subsidies would be authorized by a New Jersey bill introduced recently by Assemblyman David C. Schwartz. The legislation would exempt such appropriations from the Municipal Cap Law.[144]

OTHER INNOVATIVE ALTERNATIVES TO ACHIEVE AFFORDABLE HOUSING

Across the state, New Jersey municipalities are taking responsibility and exploring a number of creative ways to meet their Mount Laurel mandate:

- Plainsboro approved the conversion of a rental complex to condominiums which will be purchased by low- and moderate-income buyers with low-interest mortgages available from the Farmers Home Administration.[145]

- Cherry Hill received HUD approval to grant CDBG funds to a private neighborhood-based, non-profit organization which will use the funds to make a downpayment on modest-priced units developed under the Township's modest-priced housing regulations. The downpayment will be large enough to lower the mortgage balance, thus reducing the monthly rental and enabling low- and moderate-income persons to rent the units. Cherry Hill is still exploring two possible approaches for the non-profit entity: 1) for the entity to be formed under the auspices of the Township; or 2) for the developer of the project to form his own non-profit organization. In either case, the non-profit entity will manage the units, renting them to income-eligible persons.[146]

- Cherry Hill is also exploring another approach by which it would grant CDBG funds to a neighborhood-based, non-profit organization which then in turn would transfer the CDBG funds to a private entity. The private entity -- which could be an individual or a syndicate of investors -- would use the CDBG funds to purchase units developed under the Township's modest-priced housing regulations. The private entity would manage the units, renting them to low- and moderate-income families.[147]

- Branchburg is exploring various approaches to meeting its Mount Laurel mandate. The municipality is presently inclined to cluster its lower-income housing in separate developments and to build the units itself rather than creating a housing authority or casting the responsibility on a developer of market-price units. While Branchburg is still in the process of drafting a new ordinance addressing the Mount Laurel issue, it has applied for CDBG funds to help reduce construction costs in two lower-income housing developments.[148]

- Mahwah's ordinance legalizes accessory apartments for occupancy by low- and moderate-income households in all residential zones to help achieve compliance with Mount Laurel.[149]

  The Township is also, in a cooperative agreement with the Bergen County Housing Authority, planning the construction of rental units for low-income households, and owner-occupied units for moderate-income households. Funding is from HUD.[150]

In addition, the Township, through the Bergen County Home Improvement Program, offers financial assistance for rehabilitation of units to lower-income households in the form of low interest or deferred payment loans. Any units salvaged through rehabilitation while remaining affordable are credited against the Township's fair share obligation.[151]

- Other New Jersey municipalities are working on ordinances which would require garden apartment complexes to designate units as low and moderate as they become vacant until up to 20 percent in the complex are under controlled occupancy. This approach uses an existing resource to create new units, thus taking the burden off the developer of new units.[152]

CONCLUSION

Recommendations to Old Bridge of a Strategy to Provide Balanced Housing

The Mount Laurel mandate to provide housing for lower-income households requires municipalities to play an active role in reducing housing costs. Eliminating unnecessary cost-producing requirements and restrictions was seen by the New Jersey Supreme Court as one area of involvement; in addition, the Court required municipalities to take affirmative action to make the construction of Mount Laurel housing realistic. Accordingly, recommendations for Old Bridge of a strategy to provide balanced housing include both of these approaches.

1. Since Old Bridge has an obligation to provide low- and moderate-income housing, in order to make its construction realistic, a developer should not be expected to bear the cost of infrastructure to service it; Old Bridge should reimburse developers for its cost. This calls for municipalities to resume their traditional role of contributing to costs of servicing new development.

   Old Bridge can look to various funding sources to help subsidize its contribution. Some of the sources which were detailed in this report include CDBG funds, housing trust funds, HoDAG money, etc.

2. For Old Bridge to expect developers to make contributions of public facilities such as libraries, parks, schools, police stations, fire stations or any other similar facility is not compatible with constructing least-cost housing and contradictory to the town's obligation to provide balanced housing. It is true that municipalities often seek such contributions from builders; providing public facilities has become part of doing business in New Jersey. However, providing such facilities raises costs for developers, making delivery of low- and moderate-income housing extremely difficult, if not impossible, to achieve. Besides, municipalities are specifically restricted by the Municipal Land Use Law from requiring contributions of public facilities as a condition of approval

of development projects. Thus, Old Bridge cannot entertain any expectations that developers building Mount Laurel units will also make contributions of public facilities.

3. Another factor adding to the cost of housing are fees charged to developers. In order to provide balanced housing and reduce the construction costs of low- and moderate-income units, Old Bridge must waive fees charged to developers. The reasonableness of this recommendation is demonstrated by its inclusion in all of the agreements negotiated with the Morris County municipalities involved in Mount Laurel litigation. Old Bridge should remit subdivision and site plan application fees, building permit fees, certificate of occupancy fees, and engineering fees.

4. The Mount Laurel obligation to provide affordable housing applies to municipalities -- not to builders of large, residential developments. Therefore, a balanced housing strategy requires that municipalities involve every segment of the community in the delivery of low- and moderate-income units: present community residents, developers of commercial and industrial projects, and developers of small, single-family housing projects. Other developers may donate land or make in lieu payments, and community residents may help pay for infrastructure costs or other costs associated with the construction of lower-income units. Old Bridge should explore the possibility of building lower-income housing itself, or through a housing authority or non-profit corporation. The latter option offers financial advantages: for example, tax-exempt financing and tax abatement for rental units.

   Whatever the solution, it should encompass participation by all segments of the community, for the provision of Mount Laurel housing is an obligation of the entire town.

5. Old Bridge should lend its support to legislation that would make the delivery of lower-cost housing more realistic. Such legislation includes tax abatements for the developers of new, owner-occupied, lower-income units and creation of sources of funds which could be used to construct Mount Laurel units or to provide mortgage and/or rent subsidies.

In sum, if Old Bridge is to meet its housing mandate, a combination of approaches is required. The municipality, charged with the obligation of providing low- and moderate-income units, must ensure that costs are shared by all segments of the community. Old Bridge must remove excessive exactions from developers, contribute to servicing costs, and adopt other affirmative measures which involve the entire community in the delivery of affordable housing.

NOTES

1. Southern Burlington County NAACP v. The Township of Mount Laurel, 92 N.J. 158, 456A. 2d 390 (1983) (Mount Laurel II), p. 30.

2. Housing Choice (New York: Suburban Action Institute), p. 109.

3. Gary Hack and Otis Ornoza, "Private and Public Responsibilities in Housing Site Development," Joint Center for Urban Studies, 1982, cited in "Homeownership and Housing Affordability in the United States 1963-1983," Joint Center for Urban Studies of the Massachusetts Institute of Technology and Harvard University, p. 5.

4. Municipalities were instructed by the court to cooperate with attempts by developers to obtain government subsides, Mount Laurel II, p. 107.

5. Interview with Jim Bourey, Director of Community Development, Cherry Hill, August 24, 1984.

6. Interview with Shirley Bishop, Office of Middlesex County Department of Housing and Community Development, July 20, 1984; and Betty Richter, East Brunswick Planning Department, August 24, 1984.

7. Interview with Feather O'Connor, Executive Director, New Jersey Housing and Mortgage Finance Agency, July 20, 1984; and Thomas Hall, Esq., September 5, 1984.

8. Mount Laurel applied for $300,000 in Community Development Block Grant (CDBG) funds for water and sewer construction of a mobile home housing project. The application was approved by the State Department of Community Affairs. Interview with Philip Caton, Planning Consultant, July 20, 1984.

Deptford applied for CDBG funds to build an access road to a lower-income housing development. The grant was approved and the road built. Ibid., and interview with Alan Mallach, Planning Consultant, July 18, 1984.

9. Mallach, July 18, 1984.

10. Interview with Stewart Hutt, Esq., August 29, 1984.

11. Carol E. Soble, "Infrastructure Financing Trends and Alternatives," in Housing Supply and Affordability, edited by Frank Schnidman and Jane A. Silverman, (Washington, D.C.: the Urban Land Institute), 1983, p. 187.

12. Robert W. Burchell, Planned Unit Development (New Brunswick, NJ: Center for Urban Policy Research, 1972), p. 26. Also, Soble, p. 193.

13. Soble, p. 193.

14. E.M. Yokley, The Law of Subdivisions (Nashville, TN: The Michie Co., 1963), p. 131.

15. Mount Laurel II, at 97.

16. Alan Mallach, Inclusionary Housing Programs (New Brunswick, NJ: Center for Urban Policy Research, Rutgers University, 1984), p. 62.

17. Bernard J. Frieden, "Allocating the Public Service Costs of New Housing," in Housing Supply and Affordability, edited by Frank Schnidman and Jane A. Silverman, (Washington, D.C.: The Urban Land Institute, 1983), p. 115.

18. Ibid., p. 114.

19. Longridge Builders, Inc. v. Planning Board of Twp. of Princeton, 52 NJ 348, 245 A.2d 336 (1968), at 337.

20. Hutt, August 29, 1984.

21. Richter, August 24, 1984. East Brunswick used CDBG funds for this purpose.

22. Caton, July 20, 1984.

23. Ibid. CDBG funds were used to help finance this project.

24. Interview with Pat Clark, Planning Department, Somerset County, July 24, 1984.

25. "Background Report for the Proposed Inclusionary Zoning Ordinance as an Amendment to Marin County Code," Lynn Sedway and Associates, September 1979, p. 18.

26. Interview with Susan Wolfson, City of San Mateo, California, August 30, 1984.

27. Interview with Steve Belcher, City of Oakland, August 30, 1984.

28. Interview with Greg Freitas, City of Petaluma, California, September 5, 1984.

29. Interview with Eric Swab, City of Colorado Springs, Colorado, August 30, 1984.

30. Interview with Geraldo Canto, City of New Haven, Connecticut, September 5, 1984.

31. Interview with Jeff Hepburn, Dade County, Florida, September 4, 1984.

32. Robert W. Burchell et al., Mount Laurel II: Challenge and Delivery of Low-Cost Housing (New Brunswick, NJ: Center for Urban Policy Research, Rutgers University, 1983), p. 321.

33. Stephen R. Seidel, Housing Costs and Government Regulations: Confronting the Regulatory Maze (New Brunswick, NJ: Center for Urban Policy Research, Rutgers University, 1978), p. 153.

34. CUPR cost data analysis.

35. Frieden, "Allocating the Public Service Costs," p. 111.

36. Mallach, Inclusionary Housing Programs, p. 168.

37. N.J. Stat. Ann. 40:55D-43.

38. Ibid.

39. Mallach, August 28, 1984; Hutt, August 29, 1984; and Philip Cocuzza, New Jersey Homebuilders Association, August 30, 1984.

40. Frieden, "Allocating the Public Service Costs," p. 112.

41. Ibid.

42. Ibid., p. 113.

43. Mount Laurel II, at 97.

44. Robert W. Burchell, et al., Mount Laurel II, p. 334. See also, Bernard J. Frieden, The Environmental Protection Hustle (Cambridge, MA: MIT Press, 1979); and National Association of Homebuilders, "Infrastructure Financing Trends and Alternatives" (1983).

45. National Association of Homebuilders, Building Affordable Homes, p. 5.

46. Mount Laurel II, p. 97.

47. Burchell, et al., Mount Laurel II, p. 325. The Mount Laurel II decision reads: "Once a municipality has revised its land use regulations and taken other steps affirmatively to provide a realistic opportunity for the construction of its fair share of lower income housing, the Mount Laurel doctrine requires it to do no more. . . ." Mount Laurel II, p. 98.

48. Bishop, July 20, 1984.

49. Township of Morris, Ordinance #3-84, "An Ordinance to Amend the Code of the Township of Morris, and in particular Chapter 95, there entitled 'Zoning'."

50. Caton, July 20, 1984.

51. Bourey, August 24, 1984.

52. Interview with Allen Herbert, Township Engineer, Township of Morris, July 18, 1984.

53. Agreement of settlement with the Borough of Florham Park.

54. Agreement of settlement with the Township of Hanover.

55. Agreement of settlement with the Township of Montville.

56. Agreement of settlement with the Township of Lincoln Park.

57. Agreement of settlement with the Township of Pequannock.

58. Agreement of settlement with the Township of Roxbury.

59. Agreement of settlement with the Township of Rockaway.

60. "Housing Choice," (New York: Suburban Action Institute), p. 125. Also, "Background Report for the Proposed Inclusionary Zoning Ordinance," Lynn Sedway & Associates, p. 22.

61. Freitas, September 5, 1984.

62. Interview with Rick Bernhardt, City of Orlando, Florida, September 6, 1984.

63. Herbert, July 18, 1984.

64. Burchell, et al., Mount Laurel II, p. 322.

65. CUPR fiscal data analysis.

66. The Affordable Housing Book, Office of Appropriate Technology, State of California, 1982, p. 43.

67. Friedin, "Allocating the Public Service Costs," p. 112.

68. 24 C.F.R. §570.207 (b)(3)(1983).

69. 24 C.F.R. §570.206 (g)(1983).

70. Bishop, July 20, 1984.

71. Interview with Nelson Silver, Division of Local Government Services, Department of Community Affairs, July 24, 1984.

72. Old Bridge Planning Department, July 24, 1984.

73. Bishop, July 20, 1984.

74. County of Somerset CDBG Program, Program Year 1984 Application Form, Township of Branchburg.

75. Burchell, et al., Mount Laurel II, p. 330.

76. Clark, July 24, 1984.

77. County of Somerset CDBG Program, Program Year 1984 Application Form, Township of Bernards.

78. County of Somerset CDBG Program, Program Year 1984 Application Form, Township of Branchburg.

79. Bishop, July 20, 1984.

80. Richter, August 24, 1984.

81. Caton, July 20, 1984.

82. Ibid.

83. Ibid.

84. Clark, July 24, 1984.

85. County of Somerset CDBG Program, Program Year 1984 Application Forms, Township of Branchburg.

86. Ibid.

87. Bourey, August 24, 1984.

88. "Background Report for the Proposed Inclusionary Zoning Ordinance," Lynn Sedway and Associates, p. 18.

89. Interview with John Woodbury, Concord, California, August 30, 1984.

90. Freitas, September 5, 1984.

91. Wolfson, August 30, 1984.

92. Bernhardt, September 65, 1984.

93. Interview with Leon Laptoor, Corvallis, Oregon, September 4, 1984.

94. Section 17 of the United States Housing Act of 1937 is authorized by Section 301 of the Housing and Urban-Rural Recovery Act of 1983, Public Law 98-181, 97 Stat. 1196, November 30, 1983.

95. Bishop, July 20, 1984.

96. Burchell, et al., Mount Laurel II, p. 342.

97. Mallach, Inclusionary Housing Programs, p. 118. The New York Finance Agency was created in 1959; its tax-exempt bond program to finance low-income housing was known as the Mitchell-Lama Program.

98. Ibid.

99. County Improvement Authorities Law, N.J.S.A. 40: 37A-44 et seq., 40:37A-79; Mallach, Inclusionary Housing Programs, p. 130.

100. Mallach, July 18, 1984.

101. O'Connor, July 23, 1984; and interview with Connie Gibson, Assistant Executive Director, New Jersey Housing and Mortgage Finance Agency, September 5, 1984.

102. O'Connor, July 23, 1984.

103. Burchell, et al., Mount Laurel II, p. 344.

104. O'Connor, July 23, 1984.

105. Ibid.

106. Gibson, September 5, 1984.

107. Ibid. The Agency's present authorization extends through December 1986.

108. Mallach, Inclusionary Housing Programs, p. 247 and 252.

109. Ibid., p. 250.

110. Ibid., p. 263, n. 126; also, O'Connor, July 23, 1984.

111. Mallach, Inclusionary Housing Programs, pp. 120-121, 130-131.

112. Housing Finance Agency Act, Sec. 30 (b).

113. Mallach, Inclusionary Housing Programs, p. 131.

114. Ibid., p. 121, and Mallach, July 18, 1984.

115. N.J.S.A. 40: 55C-65. See Burchell, et al., Mount Laurel II, p. 345 for explanation of this program.

116. Bishop; and interview with Anthony Marchetta, Middlesex County Department of Housing and Community Development, July 20, 1984.

117. Mallach, Inclusionary Housing Programs, p. 131.

118. Ibid.

119. David Listokin, Landmarks Preservation and the Property Tax (New Brunswick, NJ: Center for Urban Policy Research, 1982), pp. 194-214.

120. Mallach, Inclusionary Housing Programs, p. 141.

121. Interviews include (among others) those with Bishop and Marchetta; Harvey Moskowitz, Planning Consultant, July 19, 1984; Herbert, July 18, 1984; and Mallach, July 18, 1984.

122. Assembly No. 753, An Act to amend P.L. 1977, C.12, p. 4.

123. Interview with John Lee, Legislative Aide, Assembly Housing and Urban Policy Committee, September 6, 1984.

124. An Interim Ordinance adopted in accordance with R.S. 40: 55D-90 for the Township of Hopewell Land Use and Develpoment Ordinance, pp. 8-9. This interim ordinance expired in July 1984 at which time it was tabled. It is due to come up for vote in September 1984. A revised ordinance is presently being prepared. Interview with James Davy, Township Administrator, September, 1984.

125. Interview with William Queale, Planning Consultant, July 20, 1984.

126. Mallach, Inclusionary Housing Programs, pp. 179-182.

127. Ibid., p. 186.

128. Ibid., p. 185.

129. Ibid., p. 186.

130. Hepburn, September 4, 1984.

131. Mallach, Inclusionary Housing Programs, pp. 179 and 183.

132. Builder, National Association of Home Builders, June, 1984.

133. Hepburn, September 4, 1984.

134. A 2169 is presently in the Assembly Revenue, Finance, and Appropriations Committee.

135. Interview with Jack Trafford, New Jersey League of Municipalities, August 30, 1984.

136. Woodbury, August 30, 1984.

137. Freitas, September 5, 1984.

138. Belcher, August 30, 1984.

139. Interview with Patricia Williams, Hartford, Connecticut, August 31, 1984.

140. Bernhardt, September 6.

141. Interview with Sonia Figarella, Miami, Florida, September 4, 1984; and Laptoor, September 4, 1984.

142. Mallach, Inclusionary Housing Programs, p. 124.

143. Belcher, August 30, 1984.

144. The Home News, September 7, 1984, p. B3.

145. Mallach, July 17, 1984.

146. Cherry Hill, Proposal #1, Recommendations for the Use of Community Block Grant Funds, Approved by HUD; interview with and correspondence from James M. Bourey, Director, Community Development, August 30, 1984.

147. Cherry Hill, Proposal #2, tentatively approved by HUD, but still being reviewed, Ibid.

148. Interview with Mark Anderson, Esq., August 24, 1984, and Marianne Rotunno, Esq., September 6, 1984, attorneys for Branchburg Township.

149. Opinion on Mount Laurel Proceedings, Superior Court of New Jersey Law Division - Bergen County Docket No. L-17112-71, decided August 1, 1984, p. 11.

150. Ibid., pp. 14-15.

151. Ibid., p. 18.

152. Mallach, July 17, 1984.

REPORT III

LOCAL SITE PLAN APPROVAL PROCEDURES: THE IMPACTS OF MUNICIPAL DELAY

INTRODUCTION

The previous report explored the basis and experience of numerous community actions to provide lower-income housing. It concentrated on substantive areas of municipal involvement including direct fiscal contributions, infrastructure contributions, provision of community facilities, and fee waivers or remissions. While all of these substantive municipal inputs are critical for the delivery of lower-cost housing, a further dimension of intervention — the processing of land-use applications — also must be explored. This process is defined to include the submissions and approvals which must be obtained before a developer can commence construction. It is a critical dimension because affordable housing cannot be provided if a builder is saddled with a time-consuming and in other ways flawed development processing.

This report examines land-use approval requirements and procedures. The national literature on this subject, considering the nature of the problem and its consequences, is briefly reviewed. This is followed by a detailed analysis of the chronology of the Olympia & York development submission in Old Bridge Township, New Jersey. The submission process in the Old Bridge case was extremely protracted, resulting in millions of dollars in costs incurred by Olympia & York. With the processing problem defined and illustrated, the report explores various avenues of relief. The national literature recommending procedural and substantive changes to expedite development is highlighted. With this as background, the specific Old Bridge case is again considered and recommendations made to expedite the Olympia & York project.

LAND USE APPROVAL PROCEDURES — NATIONAL LITERATURE

The last decade has witnessed growing interest in the provision of lower-cost housing. This concern has taken many forms. Numerous legislatures have enacted/authorized "anti-snob" zoning laws (Massachusetts),[1] development authorities with local zoning override powers (New York),[2] and municipal planning requirements to "meet the housing needs of all economic segments" (California).[3] The judiciary has also intervened by

requiring higher density, mobile homes, and other land-use changes in order to make available affordable housing.[4] In its two Mount Laurel decisions, the New Jersey State Supreme Court personified this activist judicial thrust.[5]

Interest in the issue of lower-cost housing is also reflected in a growing body of planning literature.[6] The focus of concern has been on "bricks and mortar" -- house size, lot size, building materials, etc. Such emphasis on the physical dimension of housing is evidenced from the following titles of some of the more prominent literature on low-cost housing delivery: Changing Development Standards for Affordable Housing (American Planning Association),[7] Building Affordable Homes: A Cost Savings Construction Guide for Builder/Developers (National Homebuilders Association),[8] and Improving Design Standards in Fringe Communities (Rutgers University Center for Urban Policy Research).[9] Focus on the physical "bricks and mortar" is also reflected in numerous demonstration studies conducted by HUD, the National Association of Homebuilders (NAHB), and others to show how affordable housing can be delivered. HUD and NAHB have developed "Optimum Value Engineering," a procedure of comparing alternative materials and methods to determine the least costly combination that will result in an acceptable product.[10] OVE is just one of a series of recent efforts to demonstrate construction cost-savings. Others include the "Cost-Buster Demonstration,"[11] "Building Value into Housing,"[12] "Approach 80,"[13] "Housing Costs Reduction Demonstration,"[14] and the techniques considered by the Joint Venture for Affordable Housing.[15]

While much attention has been paid to the physical standard character of housing and the changes needed in these standards to provide for lower-cost dwellings, there is growing recognition that reform in just this one area is inadequate. Housing costs are influenced by not only the physical standards to which it must be built, but also by the approval process through which it must proceed. Given the highly leveraged financial nature of most development ventures, coupled with today's steep financing charges, the time elapsed in securing development approval has significant monetary implications. Higher-density lot size, technologically advanced construction techniques, and other frequently turned-to remedies for providing lower-cost housing, will not suffice in the face of a protracted development process.

The issue of process has begun to receive the recognition it deserves. A 1978 HUD Task Force on Housing Costs observed that "the American developer is confronted with a bewildering and time-consuming proliferation of development approval regulations at virtually every level of government. These costs are passed through to the consumer in the form of higher housing costs."[16] Builder associations have also voiced their concern. A 1980 statement by the Urban Land Institute declared that "local and state governments should simplify and clarify the development review and permitting process in order to reduce the delays, uncertainty, and risk to which the housing production process is exposed."[17] The travails of securing development approval were graphically summarized in a recent State of California study concerning the delivery of affordable housing:

> From the builder's point of view, obtaining permission to build is like traveling along a toll road. They must make the journey or they cannot build. Stops along the turnpike are frequent, the tolls are high, especially for bridges over water or for those near the sea, toll collectors are exacting and demanding for right change, and the road is poorly maintained.[18]

The land-use approval process encountered by Olympia & York in Old Bridge proved to be a travail along a most long and expensive toll road (see Exhibit 1).

CHRONOLOGY OF THE OLYMPIA & YORK OLD BRIDGE DEVELOPMENT

In 1974, Olympia & York, a Canadian-based development company, acquired approximately 2,000 acres in Old Bridge Township, New Jersey. In November of that year, Olympia & York unveiled plans to develop its Old Bridge acreage for residential, commercial, and industrial uses. There was little follow-up action or reaction to this proposal by either Old Bridge Township or Olympia & York for the next five years, however.

In 1979, Olympia & York began a concerted effort to obtain development approval. Before describing its efforts in this regard, it is important first to briefly review the subdivision approval requirements then prevailing in Old Bridge Township. Subdivision entails "the division of a lot, tract, or parcel of land into two or more lots, tracts, parcels, or other divisions of land for sale or development.[19] Before it could proceed on its project, Olympia & York therefore had to secure subdivision approval. Old Bridge's 1979 subdivision requirements encompassed a two-stage process -- Preliminary followed by Final Subdivision approval. At both stages the developer was required to submit fully engineered plans and other detailed technical studies. The level of detail is indicated by the following excerpt from the then-prevailing ordinance regarding just some of the Preliminary Subdivision submission requirements:[20]

> (b) Utilities: 1. Plans of proposed utility layouts (sewers, water, gas and electricity) showing feasible connections to existing or any proposed utility system; 2. If any on-site sewerage disposl system and/or private well is proposed, whether they should be temporary or permanent, percolation tests shall be required and results of same noted on the plat.
>
> (c) Storm Drainage: 1. The natural flow of surface drainage (indicated with arrows and the final disposal of surface waters); 2. The location of existing and proposed water courses, culverts, bridges, drain pipes, lakes and ponds, detention or retention ponds; 3. The tentative location of storm drain inlets with the drainage areas tributary to each outlined and the area and discharge shown calculated for a twenty-five year storm; with inlets numbered and invert and grade elevations shown. . . .

EXHIBIT 1

OLYMPIA & YORK OLD BRIDGE DEVELOPMENT: CHRONOLOGY

DATE	ACTIVITY/EVENT
Early 1974	Olympia & York (O&Y) acquires 2,000 acres in Old Bridge Township, New Jersey.
Nov. 7, 1974	O & Y unveils plans to develop its Old Bridge acreage for residential, commercial and industrial uses.
Jan. 31, 1979	O & Y contacts E. Fletcher Davis, Old Bridge planning director, to review project development plans.
Mar. 21, 1979	O & Y meets with Old Bridge Sewage Authority.
Apr. 4, 1979	O & Y meets with Old Bridge Sewage Authority.
Apr. 27, 1979	O & Y meets with Old Bridge Sewage Authority.
May 14, 1979	(2 p.m.) O & Y meets with Old Bridge Planning Department staff.
May 14, 1979	(8 p.m.) Formal request by O & Y to Old Bridge Planning Board for procedural change in land use ordinance (see August 9 for details). Planning Board rejects request.
June 11, 1979	Old Bridge Planning Board meeting on O & Y development cancelled by Old Bridge.
July 9, 1979	Old Bridge Planning Board meeting on O & Y development cancelled by Old Bridge because of lack of quorum.
Aug. 9, 1979	O & Y appears before Old Bridge Planning Board to formally request a change to the application procedures as provided in the Old Bridge Land Development Ordinance. The Old Bridge Ordinance requires fully engineered plans to be submitted for Preliminary Approval. This procedural requirement precludes application for a large development of the size of Olympia because it would take at least a couple of years and cost several million dollars to engineer the required drawings which would probably be scrapped upon Planning Board review. Further, it is not possible to proceed with the engineering of such a project without first having an understanding with the municipality with regard to (a) the total number of residential units, (b) major traffic patterns, and (c) the size and location of designated land uses. O & Y

DATE	ACTIVITY/EVENT
	recommends a procedural change to the Ordinance allowing for the submission and approval of an overall concept plan which would "lock in" these three elements. O & Y proposed they would subsequently apply for Preliminary and Final Subdivision Approvals for parts of their development, which would be fully in accordance with the existing provisions of the Land Development Ordinance and also be consistent with the approved concept development plan. O & Y emphasized they were not asking for a substantive change to Ordinance requirements but only a change to the procedural provisions of the application process. Old Bridge Planning Board instructs the Township Planner and Planning Board Attorney to work with O & Y to draft amendments to the Land Use Ordinance to permit a General Development Plan.
Sept.27,1979	O & Y meets with E. Fletcher Davis and other Old Bridge officials re drafting amendment to Ordinance for General Development Plan.
Oct. 15,1979	O & Y meets with Old Bridge officials re drafting of General Development Plan Ordinance Amendment.
Nov. 27, 1979	O & Y meets with Old Bridge officials, re Ordinance Amendment.
Dec. 11, 1979	Ordinance Amendment to go before Old Bridge Planning Board.
Dec. 17, 1979	Rescheduling of vote on Ordinance Amendment.
Jan. 7, 1980	Formal submission of Ordinance Amendment to Planning Board. The following schedule is adopted: Jan. 15 - workshop - for discussion only Jan. 24 - formal Planning Board approval Feb. 1 - first reading Feb. 2 - second reading - appeal period 45 days from date of publication
Jan. 29, 1980	Copies of Ordinance Amendment given out to new members of Planning Board. New Schedule: Feb. 11 - Planning Board workshop Feb. 26 - Planning Board formal meeting Feb. 28 - Council Agenda meeting Mar. 3 - to Council Mar. 17 - first reading

DATE	ACTIVITY/EVENT
Feb. 26, 1980	Planning Board Meeting of 26th went to 11 p.m. curfew because of four controversial items. Ordinance Amendment should go to formal Planning Board meeting on March 10th and to Council March 17th.
March 1980	Old Bridge drafts an amendment to its municipal land use ordinance allowing for a General Development Plan. Township planner, E. Fletcher Davis, states that the "amendment is a more convenient vehicle for the planning board and an applicant to agree on the basic framework of a large tract of land. It's incredibly complicated for the planning board to sit down and grant preliminary approval for 1,000 acres and it's a bloody waste of time for the developer to go into engineering details on such a vast tract of land." Under the proposed amendment, developers would receive approval of a general development plan and go for a preliminary and final approval one section at a time.
Mar. 10, 1980	Ordinance Amendment submitted to Planning Board workshop — reception favorable — should now go to formal meeting of Planning Board on March 27th and go to Council April 7th.
Mar. 13, 1980	E. Fletcher Davis indicates Ordinance Amendment scheduled to go before new Council Agenda meeting on March 25th.
Mar. 26, 1980	Planning Board has only four members - no quorum; Ordinance Amendment will have to go to another Planning Board workshop on April 15th.
Apr. 15, 1980	Ordinance Amendment will go before Planning Board again on April 22nd.
Apr. 22, 1980	Planning Board lacks quorum; Ordinance Amendment reschudeled to next meeting on May 12.
May 13, 1980	Planning Board passes Ordinance Amendment unanimously without changes - will now go to formal Planning Board approval on May 22nd and Council June 2nd.
May 14, 1980	Old Bridge Planner, E. Fletcher Davis, indicates that Ordinance Amendment did not pass as written - two codicils added: deeds to 25 percent of Public Open Space must be given at time of Development Plan Approval; deeds to major and minor arterial roads to be given at time of plan approval. O & Y contacts Old Bridge Planning Board attorney and indicates impossibility of giving deed to

DATE	ACTIVITY/EVENT
	roads at time of plan approval. Compromise is reached — deeds within one year of date of approval of General Development Plan or forfeit approval.
June 2, 1980	Ordinance Amendment tabled before Old Bridge Council because the Amendment is not drawn on proper forms. All Ordinance Amendments to be typed on special forms.
June 11, 1980	O & Y meets with the Old Bridge Board of Education to discuss the school demands engendered by the proposed project.
June 16, 1980	Ordinance Amendment tabled by Old Bridge Township Council because Council Attorney has not reviewed Ordinance Amendment
July 21, 1980	Ordinance Amendment not on Council Agenda (omitted by Old Bridge)
Aug. 18, 1980	Ordinance Amendment is tabled for discussion at next Council Workshop on Sept. 2nd.
Sept. 8, 1980	Old Bridge Mayor directs E. Fletcher Davis to re-write proposed Ordinance Amendment.
Sept. 8, 1980	Meeting between O & Y attorneys and Old Bridge re Ordinance Amendment.
Sept. 9, 1980	Planning Board Workshop — re drafting of Ordinance Amendment.
Sept. 15,1980	Ordinance Amendment passes first reading 6 yes, 1 no. O&Y indicates that revised wording of Ordinance Amendment would reduce land value by about $10,000,000.
Oct. 3, 1980	O & Y writes Old Bridge Mayor and Council, advising of inequities that had been incorporated into the Ordinance Amendment during the re-write.
Oct. 6, 1980	The Old Bridge Township Council approves an amendment to the land development ordinance leaving out procedures allowing for a General Development Plan.
Oct. 6, 1980	Old Bridge Township Council directs that the Ordinance Amendment concerning the General Development Plan be tabled and re-written again.
Dec. 15, 1980	Proposed Amendment as re-written the second time placed on Council Agenda at a Council Agenda meeting. Township Planner is in favor; others oppose amendment.

DATE	ACTIVITY/EVENT
Feb. 18, 1981	O & Y Old Bridge Development Corp. files a complaint in lieu of prerogative writ in the Law Division of Superior Court, Middlesex County, New Jersey, Docket No. L-32516-80. This case involves a challenge to Old Bridge Township's land use regulations and the fee schedules of Old Bridge Township's Municipal Utilities Authority and Sewerage Authority. Also at issue in the case is the failure of the Municipal Utilities Authority and Sewerage Authority to plan for future water supply and sewer needs for property in the southwest quadrant of Old Bridge Township including the property of O & Y Old Bridge Development Corp.
Mar. 11, 1981	Old Bridge Township Council, Municipal Utilities Authority, and Township Planning Board each file a $10,000,000 countersuit against O&Y charging that the developer has libeled them.
Aug. 14, 1981	Township Council decides to explore the possibility of a settlement with O & Y.
Sept. 22,1981	Negotiations between Old Bridge and O&Y continue.
Oct. 1, 1981	Workshop — Old Bridge Township planner and engineer, and O & Y consultants.
October 1981	O & Y - Old Bridge litigation suspended by Order of Judge Harding on the understanding that the litigants would proceed with an expeditious settlement.
Oct. 20,1981	O & Y suspends negotiations with Old Bridge, charging the development has become an election issue and further negotiations would not be fruitful in an "atmosphere of political rhetoric." (Elections to be held in November).
Nov. 12, 1981	In letter to Judge Harding and copies to all parties, O & Y indicates it would be interested in pursuing settlement negotiations with newly elected governmental officials.
Jan. 25, 1982	Informal Discussions - Old Bridge Township planner and O & Y consultants.
Jan. 26, 1982	O & Y plans to present its project before the Old Bridge Township Council.
Feb. 5, 1982	Informal Discussions - Old Bridge Township planner and O & Y consultants.

DATE	ACTIVITY/EVENT
Feb. 11, 1982	Workshop - Old Bridge Township planner and O & Y consultants.
Feb. 16, 1982	Old Bridge seeks an extension of the court-ordered stay in the land use suit filed by O & Y.
Feb. 18, 1982	Council Workshop - Old Bridge Township Council and O & Y consultants.
Feb. 24, 1982	Workshop - Old Bridge Township Council and O & Y consultants.
Mar. 4, 1982	Workshop - Old Bridge Township planner and O & Y consultants.
Mar. 4, 1982	Council Workshop - Old Bridge Township Council and O & Y consultants.
Mar. 11, 1982	Informal Discussions - Old Bridge Township planner and O & Y consultants.
Mar. 18, 1982	Council Workshop - Old Bridge Township Council and O & Y consultants.
Mar. 22, 1982	Council Workshop - Old Bridge Township Council and O & Y consultants.
Mar. 30, 1982	Workshop - Old Bridge Township planner and O & Y consultants.
Apr. 1, 1982	Council Workshop - Old Bridge Township Council and O & Y consultants.
Apr. 5, 1982	Workshop - Old Bridge Township planner and O & Y consultants.
Apr. 6, 1982	Planning Board Work Session - Old Bridge Township Planning Board and O & Y consultants.
Apr. 13, 1982	Workshop - Old Bridge Township planner, attorney, and O & Y consultants.
Apr. 21, 1982	After a breakdown of negotiations, O & Y proceeds with litigation against Old Bridge Township.
Apr. 24, 1982	O & Y reconvenes negotiations with Old Bridge.
May 3, 1982	Old Bridge Township Council unanimously passes a resolution approving the O & Y development project (agreement in principle).

DATE	ACTIVITY/EVENT
May 3, 1982 [continued]	The project is scaled down from 13,000 to 10,260 units. A General Development Plan, which will fix the broader outlines of the proposed development, will be incorporated into the Ordinance.
May 5, 1982	Workshop - Old Bridge Township planner, attorney, and O & Y consultants.
May 12, 1982	Old Bridge Township prepares amendments to the Township's Land Development Ordinance and Master Plan to allow for the O & Y development.
May 17, 1982	Workshop - Old Bridge Township planner, and O & Y consultants.
May 19, 1982	Workshop - Old Bridge Township planner, attorney, and O & Y consultants.
May 24, 1982	A petition drive begins to change the Old Bridge municipal form of government to include a mayor elected by the voters and a council ward system. (The Township's extant form of government consists of seven council members who elect one of their own to serve as mayor.)
June 9, 1982	Workshop - Old Bridge Township planner, attorney, and O & Y consultants.
June 10,1982	Draft proposed land use amendments which would allow for the O & Y development are unveiled by the Planning Board.
June 23,1982	Workshop - Old Bridge Township planner, attorney, and O & Y consultants.
June 30,1982	Planning Board Work Session - Old Bridge Township Planning Board and O & Y consultants.
July 7,1982	Workshop - Old Bridge Township planner, and O & Y consultants.
July 19,1982	Counsel for O & Y advises Township, via letter, of O & Y's concern regarding apparent inaction on adoption of land use ordinance amendments.
July 20,1982	Workshop - Old Bridge Township planner, attorney, and O & & consultants.
Aug. 1, 1982	Amendments to the Township's land use ordinance, originally due to be completed by August 1, are delayed at least another month.

DATE	ACTIVITY/EVENT
Aug. 5,1982	Informal discussions - Old Bridge Township planner, attorney, and O & Y consultants.
Aug. 12,1982	Workshop - Old Bridge Township planner, attorney, and O & Y consultants.
Aug. 25,1982	Workshop - Old Bridge Township planner, attorney, and O & Y consultants.
Aug. 25,1982	Old Bridge Planning Board postpones its vote on amendments to the Land Development Ordinance because of disagreements with O & Y concerning residential-nonresidential staging and other matters.
Aug. 26,1982	Planning Board Meeting - Old Bridge Township Planning Board and O & Y consultants.
Sept. 14,1982	Planning Board Work Session - Old Bridge Township Planning Board and O & Y consultants.
Sept. 15,1982	Old Bridge Planning Board approves a new Municipal Master Plan.
Sept. 20,1982	Planning Board votes to send to the Township Council proposed amendments to the municipal Land Development Ordinance which would permit development of the O & Y project.
Sept. 22,1982	The Planning Board continues until (October 14), the public hearing on the proposed amendments to the municipal Land Development Ordinance.
Sept. 23,1982	Planning Board Work Session - Old Bridge Township Planning Board and O & Y consultants.
Sept. 24,1982	The Old Bridge Planning Board will have to vote again on revisions to the Land Use Map of the Official Plans to avoid potential legal challenges that could void the original vote. (The Board originally adopted the Land Use Map — without the written Master Plan text at its meeting of Sept. 15th.)
Oct. 14,1982	Workshop - Old Bridge Township planner, engineer, and O & Y consultants.
Nov. 24,1982	Informal Discussions - Old Bridge Township planner, and O & Y consultants.
Nov. 29,1982	Township Council Meeting - Old Bridge Township Council, and O & Y consultants.

DATE	ACTIVITY/EVENT
Dec. 15,1982	Council Workshop - Old Bridge Township Council, and O & Y consultants.
Dec. 22,1982	Workshop - Old Bridge Township planner, and O & Y consultants.
Jan. 6,1983	Informal Discussions - Old Bridge Township planner, and O & Y consultants.
Jan. 10,1983	Council Workshop - Old Bridge Township Council, and O & Y consultants.
Jan. 12,1983	O & Y indicates its displeasure with numerous provisions required in the Master Plan approved by the Planning Board. These include provisions prohibiting mid-rise apartments, setting minimum room sizes, requiring fiscal impact statements, and mandating staging. (Staging requires that developers of large planned developments build a section of industrial or commercial ratables each time they build housing.)
Jan. 18,1983	The Land Development Ordinance and Master Plan amendments are introduced in the Old Bridge Township Council.
Jan. 25,1983	Informal Discussions - Old Bridge Township planner, and O & Y consultants.
Feb. 7,1983	Council Workshop - Old Bridge Township Council and O & Y consultants. Township Council delays its final vote on land use revisions.
Feb. 22,1983	Public hearing on Old Bridge Land Development Ordinance. Ordinance deferred to March 7, 1983 because of improper public notice of the meeting.
Mar. 7,1983	The Township Council's final vote on the Land Development Ordinance is again delayed.
Apr. 5,1983	Township Council passes a resolution adopting a new Land Development Ordinance which would make it possible to develop the O & Y project.
Apr. 6,1983	Township Planner advised O & Y that the Planning Department will not accept O & Y application until expiration of 45-day Ordinance appeal period.
May 22,1983	O & Y submits a $102,600 filing fee and a General Development Plan. The Plan establishes basic parameters of the project,

DATE	ACTIVITY/EVENT
	outlining locations and sizes of various development areas. Specific site planning and detailing for all parcels will be presented at the preliminary approval level.
June 30,1983	Completion Check List from E. Fletcher Davis (Old Bridge Planner) deficient — Excerpt. Environmental Impact Statement "Put existing W.S. Zoning district lines on proposed Floodplain Map and show acreages of decreases and in creases as appropriate for resultant W.S. and Gross Project Area of P.D."
July 8,1983	Letter, Sullivan Arfaa (O & Y planners) to E. Fletcher Davis. Excerpt "Perhaps this error was made because of confusion that resulted from your discussions with our office concerning this map. O & Y Old Bridge Develpoment Corp. has no interest in creating an issue in this regard except they are concerned that the completion check list stands as a matter of record stating that the application is incomplete, which is not the case. In the interest of cooperation and expediency, we are forwarding to you with this letter twenty (20) copies of the map you have requested."
July 22,1983	Letter dated July 22, 1983 to E. Fletcher Davis from Sullivan Arfaa. Re: O & Y Old Bridge Development Corp. Application #45-83P, Completion of "The purpose of this letter is to re-cap what has transpired relative to the determination of completion for the above captioned General Development Plan Application. At your request, this office forwarded to you twenty (20) copies of a map which overlays the present WS zone with that being proposed in the application. These maps were delivered along with a letter to the Planning Department on July 8, 1983. During a telephone conversation with Andy Sullivan (Sullivan Arfaa) on Friday, July 15, 1983, you indicated that the maps complied with what you were looking for. You also questioned the supply of information regarding groundwater recharge. In response to this, Geraghty & Miller, Inc. forwarded to you a report entitled, "Feasibility of Artificial Recharge at the Olympia & York Site, Old Bridge, New Jersey, July 1983." In a telephone conversation with Andy Sullivan on Tuesday, July 19, 1983, you indicated that this

DATE	ACTIVITY/EVENT
	report complied with your request and that fifteen (15) additional copies be sent to the Planning Commission. You said that the application is complete and would be issued on Tuesday, July 26, 1983. I think that is an accurate representation of what has transpired over the last few weeks."
Aug. 8,1983	O & Y's General Development Plan application is declared complete. The Township delayed the formal declaration for the maximum period provided by state statute.
Aug. 16,1983	Township Council approves a recommendation by the Planning Board to hire consulting firms to consider the impact of the proposed O & Y development.
Sept. 14,1983	Counsel for O & Y advises Township of its concern regarding scheduling of public hearings.
Oct. 18,1983	Hearings begin on the O & Y development. Testimony by Andrew T. Sullivan and Kenneth J. Mizerny of Sullivan Arfaa (planning) and Rees Jones (golf course architect).
Oct. 25,1983	Hearings continue on O & Y development. Testimony by numerous O & Y expert consultants — Frits Van Der Leeden (geologist), Michael McEachern (ground-water hydrology), Peter Homack (hydrolic and sanitary engineering), and James Kohen (water supply.
Nov. 10,1983	Hearings continue on O & Y development. Testimony by numerous O & Y consultants — Raymond Ferrara (water quality), Gary Salzman (geotechnical engineering), and Michael McEachern (ground-water hydrology).
Nov. 29, 1983	Hearings continue on O & Y development. Testimony by numerous O & Y expert consultants — George Sternlieb (market analysis), Kenneth Mizerny (planning-open space), Robert Rodgers (traffic engineering), and Gary Davis (traffic engineering).
Dec. 6,1983	Hearings continue on O & Y development. Testimony by numerous O & Y expert consultants — Andrew T. Sullivan (planning) and Paul S. Tischler (fiscal impact consultant: note Mr. Tischler was hired by Old Bridge Township).
Dec. 7,1983	Old Bridge Planning Board votes <u>not</u> to hold further hearings in December on the O & Y plan and seeks a January continuation.

DATE	ACTIVITY/EVENT
Dec. 14,1983	Old Bridge Planning Board rejects the O & Y development plan after the developer refuses to extend hearings on the application into 1984. The denial is made "without prejudice" so the application can be resubmitted. Attorneys for O & Y indicate that the deadline extension into 1984 is unacceptable since the current board will be disolved when a change in municipal government occurs January 1, 1984.
Dec. 22,1983	O & Y notifies Old Bridge officials that it will legally challenge the Planning Board's denial of its proposed development.
Jan. 8, 1984	O & Y reinstitutes its 1981 lawsuits.
Feb. 22,1984	O & Y files a new lawsuit against Old Bridge on Mount Laurel grounds; balance of matters — court record.
July 18,1984	Public meeting held by Old Bridge Sewage Authority; resolution passed authorizing chairman to execute sewage agreement. This agreement, now finalized, assures a sewage system not only for all of the O & Y project, but entire southwest quadrant of Old Bridge Township.

Source: Center for Urban Policy Research interviews with Olympia & York July and August, 1984.

(d) Vehicular & Pedestrian Facilities: 1. The low and high points of all roads as well as changes in grade shown in plan with percent of grade; 2. Location, type and size of curbs, sidewalks and bikeways.

(e) Landscaping . . . 1. Location of existing generally wooded areas and exact location of existing trees with a caliper of (12) inches or more; 2. Location, description, and general landscaping treatment of common open space areas; 3. The proposed system to be used in preventing erosion and silting of both the property being developed as well as downstream facilities.

After reviewing the 1979 Old Bridge subdivision process, Olympia & York realized that these requirements were unworkable with respect to its project. The difficulty stemmed from the ordinance requiring fully engineered plans to be submitted for Preliminary Subdivision approval. This procedural requirement precluded application for a large development the size of Olympia & York because it would take at least two years and cost approximately $4 million to engineer the required drawings, which would probably be scrapped upon Planning Board review. Further, it would not be possible to proceed with the engineering of such a project without first having an understanding with the municipality with regard to basic development parameters — (a) the total number of residential units, (b) major traffic patterns, and (c) the size and location of designated land uses.

Olympia & York met with Old Bridge municipal and planning officials throughout the first half of 1979 and discussed the nature of its project and the difficulties of pursuing it given the Township's subdivision requirements. On May 14, 1979 as well as August 9th of the same year, Olympia & York appeared before the Old Bridge Planning Board to formally request a change to the application procedures as provided in the Old Bridge land development ordinance. Olympia & York sought a procedural revision to permit the subdivision and approval of an overall Concept or Development Plan which would lock in essential project parameters (e.g., total residential units, major traffic patterns, and size and location of designated land uses). Olympia & York proposed that subsequent to approval of the General Development Plan, they would apply for Preliminary and Final Subdivision approval in a manner fully in accordance with the agreed upon Development Plan as well as other prevailing municipal land-use standards (e.g. building and plumbing codes, landscape requirements, etc.). Olympia & York emphasized that it was not asking for a substantive change to Old Bridge's land-use ordinance, but only a change to the procedural provisions of the application process (see Exhibit 2).

Following Olympia & York's presentation on August 9, 1979, the Old Bridge Planning Board instructed the Township Planner and Planning Board attorney to work with the developer to draft amendments to the land-use ordinance to permit a General Development Plan. The professional staff voiced support for the change. Township Planner, E. Fletcher Davis, stated that the General Development Plan amendment "is a more convenient vehicle for the Planning Board and an applicant to agree on the basic framework

EXHIBIT 2

OLYMPIA & YORK OLD BRIDGE DEVELOPMENT: TIME DELAYS

TIME PERIOD	TIME ELAPSED	CUMULATIVE TIME ELAPSED	ACTIVITY/EVENT
May 14, 1979	Start	Start	O & Y formally requests a procedural amendment to the Old Bridge Land Development Ordinance so an application for development can be filed.
March 1980	10 months later	10 months later	Old Bridge drafts Ordinance Amendment.
June 2, 1980	3 months later	13 months later	Ordinance Amendment tabled before Old Bridge Council because the Amendment is not drawn on proper forms.
Oct. 6, 1980	4 months later	17 months later	Old Bridge Township Council approves an amendment to the Land Development Ordinance leaving out procedures allowing for a General Development Plan.
Feb. 18, 1981	4 months later	21 months later	O & Y files suit.
August 1981	6 months later	27 months later	Negotiations between O & Y and Old Bridge resume.
May 3, 1982	9 months later	36 months later	Old Bridge Township Council passes a resolution directing that the Land Development Ordinance be amended to allow for O & Y development.
Apr. 5, 1983	11 months later	47 months later	Old Bridge Township Council enacts a Land Development Ordinance with provisions to allow O & Y to proceed with a development application.
May 22, 1983	1 month later	48 months later	In accordance with provisions of the new Land Development Ordinance, O & Y files an application for General Development Plan Approval.

EXHIBIT 2

OLYMPIA & YORK OLD BRIDGE DEVELOPMENT: TIME DELAYS
[continued]

TIME PERIOD	TIME ELAPSED	CUMULATIVE TIME ELAPSED	ACTIVITY/EVENT
Aug. 8, 1983	3 months later	51 months later	O & Y General Development Plan is declared complete.
Oct. 18, 1983	2 months later	53 months later	O & Y begins a series of presentations before the Old Bridge Planning Board in the application process for General Development Plan Approval.
Dec. 14, 1983	2 months later	55 months later	Old Bridge Planning Board rejects the O & Y development Plan after developer refuses to extend hearings on the application into 1984. O & Y attorneys indicate deadline extension is unacceptable since the current board will be dissolved when a change in municipal government occurs, Jan. 1, 1984.
January 1984	1 month later	56 months later	O & Y institutes lawsuits against Old Bridge.
July 1984	6 months later	62 months later	O & Y reaches agreement with Old Bridge Sewage Authority.

Note: Olympia & York's carrying costs for the Old Bridge Development are currently approximately $540,000 per month (see Exhibit 3).

Source: Center for Urban Policy Research interviews with Olympia & York, July and August 1984.

with a large tract of land. It's incredibly complicated for the Planning Board to sit down and grant preliminary approval for 1,000 acres, and it's a bloody waste of time for the developer to go into engineering details on such a vast tract of land."[21]

Despite these and similar statements of support it was to be a long travail — until April 5, 1983 — before the General Development Plan amendment would be adopted. Repeated meetings, public hearings, general work sessions, executive board sessions, and other developer-township negotiations took place during this period. Litigation also ensued. The details of all this activity are described in Exhibit 1. Events over this period can be summarized as follows:

March 1980 - Old Bridge drafts an ordinance amendment allowing for a General Development Plan

Oct. 1980 - Old Bridge approves changes to land-use ordinance but does not adopt procedures allowing for a General Development Plan

Feb. 1981 - Olympia & York files suit

March 1981 - Old Bridge countersues

Aug. 1981 - Settlement negotiations begin

Oct. 1981 - Settlement negotiations break down

Nov. 1981 - Settlement negotiations reconvene

May 1982 - Old Bridge Township Council passes a resolution directing that the land development ordinance be amended to allow for Olympia & York's development.

April 1983 - Old Bridge Township Council enacts a land-development ordinance with provisions to allow Olympia & York to proceed with a development application.

Following the April 1983 adoption of the land development ordinance, Olympia & York proceeded to obtain approval for its project. On May 22, 1983, in accordance with provisions of the new ordinance, Olympia & York submitted a $103,000 filing fee and a General Development Plan. It took until August 8, 1983, however, before the developer's application was declared complete. Following this, Olympia & York gave a number of presentations before the Old Bridge Planning Board, detailing the findings of the traffic, engineering, environmental, and other reports contained within the General Development Plan submission. These hearings took place throughout October and December 1983 (October 18, and 25; November 10 and 29; December 6) at which time numerous experts retained by the developer testified at length.)

All this work was for naught. On December 7, 1983 the Old Bridge Planning Board voted not to hold further hearings in December on the

Olympia & York submission and instead would seek a January continuation. A week later the Planning Board rejected the Olympia & York development plan after the developer refused to extend hearings on the application into 1984. Olympia & York attorneys indicated that a deadline extension was unacceptable because the current Old Bridge Planning Board would be dissolved when a change in municipal government occurred on January 31, 1984. Subsequent to this action, Olympia & York recommenced legal action against Old Bridge Township in order to obtain development approval. Its suits are currently pending.

In sum, Olympia & York has been involved in Old Bridge for a decade from 1974 to 1984. It has actively sought development approval from 1979 onward. Its almost daily involvement in this regard is detailed in Exhibit 1. The most significant legislative, legal, and other milestone activities from 1979 onward are summarized in Exhibit 2. This summary also indicates the time delays ensuing from this protracted process. From Olympia & York's first request for a procedural change on May 14, 1979 to the current period more than midway through 1984 (as of the time of this writing), over 60 months have passed.

Why did the delays occur? While this issue cannot be answered definitively, we can point to a number of contributing factors. Given the size of the Olympia & York project, it is understandable that Old Bridge Township would carefully examine the developer's proposals. Yet this perusal was most deliberate. From 1979 through 1984, there were close to 100 Olympia & York meetings, hearings, and testimony before a variety of Old Bridge public bodies such as the Old Bridge Sewage Authority, the Township Planning Board, the Township Municipal Council, and staff from these various entities. Just a partial list, yet one pointing to the multiplicity of these meetings, hearings, etc., is indicated below:

	Date	Olympia & York Meeting, Hearing, Testimony Before:
1979	Jan. 31, 1979	Municipal Planning Officials
	March 21, 1979	Old Bridge Sewage Authority
	April 4, 1979	Old Bridge Sewage Authority
	April 27, 1979	Old Bridge Sewage Authority
	May 14, 1979	Township Planning Board
	August 9, 1979	Township Planning Board
	Sept. 27, 1979	Municipal Planning Officials
	Oct. 15, 1979	Municipal Planning Officials
	Nov. 27, 1979	Municipal Planning Officials
	Dec. 11, 1979	Township Planning Board
1980	Jan. 7, 1980	Township Planning Board
	March 10, 1980	Township Planning Board
	May 13, 1980	Township Planning Board
	June 11, 1980	Board of Education
	Sept. 8, 1980	Municipal Planning Officials
	Sept. 9, 1980	Township Planning Board
	Sept. 25, 1980	Township Planning Board
	Oct. 3, 1980	Mayor and Township Council

	Date	Olympia & York Meeting, Hearing, Testimony Before:
1980	Oct. 6, 1980	Township Council
	Dec. 15, 1980	Township Council Agenda Meeting
1981	Aug. 14, 1981	Township Council
	Sept. 22, 1981	Municipal Planning Officials
	Oct. 1, 1981	Township Planning Officials
	Oct. 20, 1981	Municipal Planning Officials
1982	Jan. 25, 1982	Township Planning Officials
	Jan. 26, 1982	Township Council
	Feb. 5, 1982	Township Planning Officials
	Feb. 11, 1982	Township Planning Officials
	Feb. 18, 1982	Township Council
	Feb. 24, 1982	Township Planning Officials
	March 4, 1982	Township Planning Officials
	March 4, 1982	Township Council
	March 11, 1982	Township Planning Officials
	March 18, 1982	Township Council
	March 22, 1982	Township Council
	March 30, 1982	Township Planning Officials
	April 1, 1982	Township Council
	April 5, 1982	Township Planning Officials
	April 6, 1982	Township Planning Board
	April 13, 1982	Township Planning Officials
	May 3, 1982	Township Planning Board
	May 12, 1982	Township Planning Board
	May 17, 1982	Township Planning Officials
	May 19, 1982	Township Planning Officials
	June 9, 1982	Township Planning Officials
	June 10, 1982	Township Planning Board
	June 23, 1982	Township Planning Officials
	June 30, 1982	Township Planning Board
	July 7, 1982	Township Planning Officials
	July 20, 1982	Township Planning Officials
	Aug. 5, 1982	Township Planning Officials
	Aug. 12, 1982	Township Planning Officials
	Aug. 25, 1982	Township Planning Officials
	Aug. 26, 1982	Township Planning Board
	Sept. 14, 1982	Township Planning Board
	Sept. 20, 1982	Township Planning Board & Council
	Sept. 23, 1982	Township Planning Board
	Oct. 14, 1982	Township Planning Officials
	Nov. 24, 1982	Township Planning Officials
	Nov. 29, 1982	Township Council
	Dec. 15, 1982	Township Council
	Dec. 22, 1982	Township Planning Officials
1983	Jan. 6, 1983	Township Planning Officials
	Jan. 10, 1983	Township Council
	Jan. 18, 1983	Township Council
	Jan. 25, 1983	Township Planning Officials
	Feb. 7, 1983	Township Council
	April 5, 1983	Township Planning Board

	Date	Olympia & York Meeting, Hearing, Testimony Before:
1983	Oct. 18, 1983	Township Planning Board
	Oct. 25, 1983	Township Planning Board
	Nov. 10, 1983	Township Planning Board
	Nov. 29, 1983	Township Planning Board
	Dec. 6, 1983	Township Planning Board
	Dec. 7, 1983	Township Planning Board

Another factor contributing to the multi-year time delays in the Old Bridge case was numerous cancelled meetings and technical snafus (e.g., with reference to public notice, ordinance forms, etc.) on the part of Old Bridge Township. The following examples are illustrative.

Date	Rescheduled-Cancelled Meetings and Technical Problems (Partial List)
June 11, 1979	Planning Board meeting cancelled
July 9, 1979	Planning Board meeting cancelled because of lack of quorum
Dec. 17, 1979	Planning Board vote rescheduled
Jan. 29, 1980	Planning Board vote rescheduled
May 14, 1980	Ordinance amendment not passed as written
June 2, 1980	Ordinance amendment tabled before Township Council because not reviewed by municipal attorney
June 16, 1980	Ordinance amendment tabled before Township Council because not reviewed by municipal attorney
July 21, 1980	Ordinance amendment not on Township Council Agenda
Aug. 18, 1980	Ordinance amendment tabled before Township Council
Aug. 1, 1982	Ordinance amendment draft delayed
Aug. 25, 1982	Planning Board postpones vote on ordinance amendment
Sept. 24, 1982	Planning Board has to vote again on ordinance revisions because vote taken without written Master Plan text

Date	Rescheduled-Cancelled Meetings and Technical Problems (Partial List)
Feb. 8, 1983	Township Council delays vote on ordinance amendment
Feb. 22, 1983	Hearing deferred because of improper public notice
Mar. 7, 1983	Township Council's vote on ordinance amendment delayed

While it is not unheard of for some procedural oversights to occur in the consideration of complicated land-use matters, these occurred with considerable frequency in regard to the Olympia & York Old Bridge project.

THE CONSEQUENCES OF DELAY

Exhibit 3 indicates the costs incurred by Olympia & York with respect to its Old Bridge development since its initial involvement in 1974 through August 1984. Approximately $55 million has thus far been spent. This total figure can be broken down into five different components: (1) land assembly costs, (2) administrative expenses, (3) development expenses, (4) carrying costs, and (5) project development.

The first component encompasses the purchase price for the roughly 2,000 acres in Old Bridge Township by Olympia & York and attendant outlays for surveys, real estate commissions, title insurance and related items. The sum of all these subcomponents amounts to $19.921 million for land assembly.

Olympia & York has also incurred administrative expenses for payroll and the like over the 1974 through 1984 period. These amount to a total of $1.035 million (see Exhibit 3).

Besides an in-house staff, the process of securing development approval also requires outside technical and legal assistance. Examples include the hiring of planners, land use attorneys, civil, traffic, soil, and other engineers, hydrologists, environmentalists, economists, etc. The sum of all these development expenses incurred by Olympia & York in its Old Bridge project is a cumulative $3.606 million over the 1974 to 1984 period.

Carrying costs are a fourth and most significant component. One such item is property taxes incurred on the land being held and related costs (e.g. for municipal tax appeals, appraisals, etc.). Carrying costs also encompass interest payments — the time charge for the money borrowed to pay for the above-mentioned land assembly, administrative, and development expenses. As these three components have themselves been quite costly, the developer has borne considerable interest payment — $27.228 million. The sum of all carrying charges — property taxes, municipal tax appeals, appraisals, interest, etc. — has been most significant: from 1974 through August 1984 Olympia & York has spent $30.069 million in this regard.

EXHIBIT 3

OLYMPIA & YORK OLD BRIDGE DEVELOPMENT: SCHEDULE OF INCURRED COSTS

COST COMPONENT	TIME PERIOD Cumulative 1974 to June 30 1978	June 30 1979	June 30 1980	June 30 1981	June 30 1982	June 30 1983	August 30 1984	Total Costs
A. Land Assembly Costs								
Acquisition Costs	$16,581,569.00	$ 631,081.00	$ 516,401.00	$ 473,594.00	$ 343,136.00	$ 285,610.00	$ 444,302.00	$19,275,693
Surveys	-0-	27,494.00	36,630.00	72,302.00	11,637.00	22,285.00	35,015.00	205,363
Legal and Closing	-0-	89,149.00	24,150.00	69,671.00	27,431.00	42,137.00	44,316.00	296,854
Real Estate Com.	-0-	23,868.00	2,650.00	46,034.00	-0-	-0-	2,330.00	74,882
Title Insurance	11,750.00	8,857.00	9,724.00	7,756.00	-0-	-0-	1,275.00	39,362
Miscellaneous Land Costs	-0-	17,409.00	80.00	-0-	-0-	-0-	11,048.00	28,537
Sub-Total A	$16,593,319.00	$ 797,858.00	$ 589,635.00	$ 669,357.00	$ 382,204.00	$ 350,032.00	$ 538,286.00	$19,920,691
B. Administrative Expenses								
Payroll and Office Expenses	$ 61,355.00	33,100.00	53,950.00	98,404.00	182,240.00	247,663.00	324,325.00	$ 1,001,037
Miscellaneous Adm.	-0-	5,102.00	7,952.00	13,703.00	6,710.00	-0-	166.00	33,633
Sub-Total B	$ 61,355.00	38,202.00	61,902.00	112,107.00	188,950.00	247,663.00	324,491.00	$ 1,034,670
C. Development Expense								
Planning Consultants	$ -0-	54,564.00	36,729.00	90,056.00	177,003.00	322,159.00	146,587.00	$ 827,098
Land Use Attorneys	-0-	14,329.00	15,298.00	106,239.00	153,005.00	74,284.00	95,764.00	458,919
Municipal Utilities-Eng.	-0-	5,170.00	27,913.00	51,791.00	255,520.00	337,550.00	59,564.00	737,508
Municipal Utilities-Legal	-0-	-0-	-0-	-0-	22,338.00	52,413.00	174,617.00	249,368
Traffic Engineers	-0-	16,720.00	51,605.00	116,682.00	80,428.00	124,511.00	140,211.00	530,157
Soils Engineers	-0-	25,777.00	16,062.00	14,039.00	-0-	2,805.00	36,453.00	95,136
Groundwater Hydrologists	-0-	-0-	-0-	45,573.00	51.350.00	17,620.00	26,680.00	141,223
Surface Water Analysis	-0-	-0-	-0-	2,761.00	12,889.00	15,723.00	15,258.00	46,631
Environmental Reports	-0-	28,439.00	51,720.00	17,861.00	-0-	-0-	-0-	98,020
Market & Financial Studies	-0-	$ 5,800.00	$ 32,480.00	$ 28,746.00	$ 10,000.00	-0-	$ 50,024.00	$ 127,050
Product Development	-0-	-0-	-0-	-0-	-0-	-0-	11,832.00	11,832
Municipal Fees	-0-	-0-	-0-	-0-	2,362.00	$ 102,600.00	-0-	104,962
Misc. Development Expense	-0-	15,038.00	43,185.00	23,588.00	81,482.00	-0-	14,440.00	178,093
Sub-Total C	-0-	$ 165,837.00	274,992.00	497,336.00	846,377.00	$1,049,665.00	$ 771,430.00	$3,605,637
D. Carrying Costs								
Interest	$ 747,646.00	952,510.00	2,136,962.00	6,163,739.00	5,938,526.00	5,240,518.00	6,048,575.00	$27,228,476
Municipal Realty Taxes	190,862.00	233,622.00	324,294.00	391,992.00	419,045.00	549,790.00	553,711.00	2,663,316
Municipal Tax Appeals	-0-	1,011.00	-0-	-0-	-0-	21,031.00	16,912.00	38,954
Appraisals	-0-	1,000.00	6,998.00	-0-	6,500.00	6,000.00	4,500.00	24,998
Misc. Carrying Costs	-0-	-0-	112,878.00	-0-	-0-	-0-	-0-	112,878
Sub-Total D	938,508.00	$1,188,143.00	2,581,132.00	6,555,731.00	6,364,071.00	5,817,339.00	6,623,698.00	$30,068,622
E. Project Development	-0-	-0-	-0-	-0-	-0-	-0-	93,500.00	93,500
(A,B,C,D,E)	$17,593,182.00	$2,190,040.00	$3,507,661.00	$7,834.531.00	$8,351,405.00	$7,464,699.00	$6,717,198.00	$54,723,120

Source: Center for Urban Policy Research interviews with Olympia & York, July and August, 1984.

A fifth and final expense component is project development. As approval for the project has not yet been received, very little has been spent for this item. The only expenditure has been $93,500 paid to confirm a sewerage agreement between Olympia & York and the Old Bridge Sewage Authority.

The sum of all five components — land assembly, administrative, development, carrying, and project development — is shown on a yearly and cumulative basis in Exhibit 3. Annual charges range from $2.2 to over $8.0 million. (Difference are due to varying interest rates, levels of activity to secure approvals, and so on.) From 1974 through August 1984, the cumulative cost incurred by Olympia & York with refrence to its Old Bridge project is $54.723 million.

Our intention in presenting these figures is twofold. The first is to indicate the considerable expense — almost $55 million already incurred by Olympia & York in Old Bridge. Such a considerable up-front expenditure has significant bearing on project profitability and the need for special municipal intervention if the goal of lower-cost housing provision is to be met. This dynamic is discussed in detail in the following report.

A second and related highlight is the huge carrying cost burden of the Olympia & York Old Bridge development. Carrying costs are currently running at roughly $6.5 million annually (see Exhibit 3) — an amount which will grow year-by-year as cumulative project expenses increase and therefore interest charges mount. The enormity of Olympia & York's carrying costs in Old Bridge must be understood. A $6.5 million annual carrying expense translates into carrying costs of approximately $18,000 daily, $125,000 weekly and $540,000 monthly. These figures give a cost consequence to the extremely protracted approval process incurred by Olympia & York in Old Bridge Township. The almost daily log of negotiations, meetings, presentations and so on indicated in Exhibit 1 should be viewed as having a cost of $18,000 per day. The sequential time delays noted in Exhibit 2 also have significant cost implications. For instance, this exhibit notes that on May 3, 1982, the Old Bridge Township Council passed a resolution directing that its land development ordinance be amended to allow for the Olympia & York project. This amendment was not passed until April 5 of the following year — a span of approximately eleven months. Since the Olympia & York carrying cost "meter" amounts to roughly $540,000 monthly, the deliberation on the land use amendments had a $5,940,000 cost consequence to the developer.

Other delays had smaller but nonetheless still significant cost implications. On May 22, 1983, Olympia & York filed an application for a General Development Plan; it took until August 8 of the same year for its application to be declared complete — a period of approximately two and one-half months. At a carrying cost charge of $540,000 monthly, the 2.5 month period for the development application to be declared complete cost the developer roughly $1,350,000.

In sum, Olympia & York has and will continue to confront high carrying expenses in its Old Bridge project. Given this, the ability of this development to provide affordable housing must include attention to expediting the development process to moderate the carrying charge burden. The section now turns to this consideration; first, on the national basis, then, focusing on the specific Old Bridge case.

SUBSTANTIVE AND PROCEDURAL CHANGES TO EXPEDITE DEVELOPMENT — NATIONAL EXPERIENCE

The growing complexity of land-use development has induced calls for reform. The following recommendation from an Urban Land Institute Task Force is reflective of such concern:

> American developers of housing must deal with an expanding array of regulations at every level of government. Unreasonable regulations on development inevitably inflate paperwork required for a project and intensify the complexity of data, analysis, and review procedures for both public and private sectors. Ultimately, the delay caused by the regulatory maze produces higher-cost housing through holding costs, increased expenses due to risk, uncertainty, overhead, and inflated costs of labor and materials, and other more hidden costs. Actions to improve the predictability and continuity of requirements and procedures can reduce these costs. . . .[22]

Numerous task forces and studies have examined specific avenues of land-use processing reform. Some notable examples include Streamlining Local Regulations: A Handbook for Reducing Housing/Development Costs (International City Management Association,[23] Affordable Housing: How Local Regulatory Improvements Help (HUD),[24] Streamlining Your Local Development Process (National League of Cities),[25] and Streamlining Land Use Regulation — A Guidebook for Local Governments (American Planning Association).[26] The recommendations made by these and sister investigations focus on both substantive and procedural changes. The former encompass the materials which must be prepared for development review. These include applications and supporting technical documents such as engineering, architectural, traffic, and other studies. The attempt is to limit these materials to only that which is essential to protect the public's welfare through proper planning and deliberation. Attention is also being directed to procedure — that review of the submission items should be processed in as expeditious a fashion as possible.

Many substantive and procedural changes to expedite development have been recommended. Substantive reforms include:[27]

- Codify/simplify local land-use regulations. Many communities are overdue for such revision as their current land-use regulations are dispersed, vague, and sometimes contradictory.

- Prepare a permit register. This may consist of a directory of all permits required, information about departments and regulations, and/or a manual or instruction sheet(s) on steps for obtaining approvals.

- Standardize application forms. Good forms are tools for increasing efficiency.

- Limit preparation of impact studies to instances of need (e.g., an EIS would be required only for development planned on environmentally fragile lands).

- Prepare an areawide impact statement/data base. These materials, to be prepared by the municipality or other governmental body, would be drawn upon by developers. This change would eliminate the need for each developer to start from scratch in preparing EISs and similar reports.

- Allow approval by right. Allowing approvals of applications unless specific deficiencies are cited for disapproval has the advantage of making the process positive rather than negative. Plans can be approved without further ado, much as in zoning "by right," except when explicit findings are made citing problems, in which case, alternative solutions would also be suggested.

Numerous recomendations have also been made to expedite development submission and review procedures. Examples from the national literature include:[28]

- Allow preliminary informal conferences/general concept approval. Pre-application meetings provide an opportunity to iron out difficulties with the planning or other staffs before the developer has prepared expensive technical materials. Allowing for general concept or development plan approval has a similar beneficial effect.

- Consolidate or eliminate commission review. If the professional staff has done its homework, expedited review by planning/other boards should suffice.

- Form a joint review committee. Typically, applications are routed through departments separately, with individual sign-offs or comments assembled at the end by the planning department or another lead agency. An alternative is to institute a joint departmental review committee to meet regularly to discuss proposals.

- Provide for a dual-track system. A dual track separates projects with very minor impacts and processes them through an abbreviated approval process.

- Allow simultaneous permit processing. There are areas that lend themselves to simultaneous consideration. One example might be applications requiring zoning and variance board review.

- Provide processing deadlines. Many phases of the approval process are legislatively mandated, some at the state level. However, overruns are common. One widespread practice,

frequently an abuse, is for communities to ask developers to waive adherence to deadlines. Realistic deadlines should be given and adhered to in practice.

- Eliminate or consolidate multiple public hearings. Unless required by state law or dictated by major revisions in development plans, in general, one public hearing per project should suffice.

- Improve public hearing procedures. Much time at public hearings is lost in wrangling over misunderstandings and non-substantive procedural questions. This could be avoided by adopting fair and consistent rules about who is heard, when and for how long, and how decisions are to be made.

- Improve the scheduling cycle. Infrequent board meetings in communities with a high volume of development result in delays just in getting onto the agenda. The obvious solution is to hold more frequent meetings.

- Provide "one-step" permitting, such as a centralized department or office which accepts and processes applications and maintains central files.

- Appoint a neutral third party to hear and expedite land-use applications. Examples include appointment of a Hearing Examiner, Ombudsman, Planning "Expert," or Planning "Master." Appointment of such neutral and knowledgeable third parties could expedite development processing.

Numerous jurisdictions have enacted many of the substantive and procedural reforms discussed above. The following state actions, affecting both their own development review and that of local jurisdictions, are illustrative:

- Connecticut has developed a Model Ordinance and Model Procedure for "One-Stop" Applications for the Development of Land.[29]

- Florida's Administrative Procedures Act (APA) requires strict accountability for all state agency rules. APA offers much greater predictability with respect to the state's environmental permitting system.[30]

- Pennsylvania has acted to control third party challenges to development proposals (Pennsylvania Stat. Ann. Title 53§11005-b).

- Vermont uses a number of procedures to expedite state environmental and land-use review. These include pre-hearing conferences to define areas of agreement or disagreement among the parties. This allows the identification of issues before public hearings are conducted. Another expediting strategy is

to consolidate five state programs into one application and permit process.[31]

- Washington provides a centralized and coordinated processing of all applications for state environmental protection and natural resource management permits which a developer is required to obtain before initiating a project.[32]

Numerous counties have also enacted substantive and procedural changes to expedite development processing:

- Dade County (Florida) has a development impact committee which brings together departments of planning, public works, parks, recreation, etc., to jointly consider development applications.[33]

- Fairfax County (Virginia) provides one-step land-use "shopping." Under this system, an applicant files all permit applications with the building department which in turn circulates the application to other departments for approval. Fairfax County employs another version of the one-stop permit with an expediter who obtains application comments from as many of eight permitting agencies.[34]

- Los Angeles County (California) created a Land Development Coordinating Center where builders' applications are considered and reviewed on a one-stop basis.[35]

- Montgomery and Arundel (Maryland) established the position of zoning/hearing officer. This officer first reviews the evidence presented by affected parties in land-use matters and then submits a written recommendation to the planning agency or local legislative body.[36]

- Orange County (California) provided numerous avenues to expedite lower-cost housing under its inclusionary provisions:

  The county has taken several steps to reduce processing time: the general plan land-use element has been modified to eliminate unnecessary amendments which can now be handled at the zone change level; revisions in the site plan approval process now allow many subdivisions to be approved administratively rather than by the planning commission; and tentative map approval authority has been

> transferred from the planning commission to a subdivision committee, an act which reduces processing time by three weeks. Perhaps more important is the pending streamlining of the Environmental Impact Report (EIR) process through utilization of a master environmental assessment. A further step taken by the county . . . is the establishment of a project coordinator for affordable housing projects. The coordinator monitors projects, assists developers in completing documents and in getting through the development process, and if necessary, acts as a developers' advocate within the government. The coordinator has direct lines of access to the planning director and all agency heads and is able to obtain a quick cooperation by staff on assisted projects.[37]

Numerous municipalities have also enacted development submission and processing reforms.

- Breckenridge (Colorado) has received national attention for its land-use innovations. These include one-stop shopping for an inclusive permit, the reduction of notification requirements, and the elimination of land-use submission "dry-runs." The latter were deleted because it was felt they served little purpose:

  > It generally requires a long lead time for notice and full attendance for volunteer members of the [planning] board; complete presentations by staff, the developer, and concerned citizens; elaborate findings; and conditions on approval. But following all of this, nothing happens. The governing body then calls another hearing, again with long lead time for notice, and full attendance is required; complete presentations are made by staff, the developer, and concerned citizens; elaborate findings are made and conditions are drafted up; after which the actual decision is made on the proposal. If all the participants in the process — staff, developer, citizens and officials — have done their homework, there is no need to hold two sets of hearings.[38]

- Freemont (California) has developed a consolidated development application form. This form contains all relevant information of local regulatory significance.[39]

- Rochester (New York) promulgated specified standards for site plan disapproval. That is, its planning commission cannot disapprove a site plan except on the basis of specific written findings directed to one or more of the included standards.[40]

- Windsor (Connecticut) employs a permit review team bringing together the many governmental agencies directed to consider land-use applications.[41]

SUBSTANTIVE AND PROCEDURAL CHANGES TO EXPEDITE DEVELOPMENT — NEW JERSEY EXPERIENCE

There are numerous examples of New Jersey courts and communities considering effecting substantive and procedural changes to expedite development. Appointment of a "Master" is a prominent example. In 1979, the New Jersey Superior Court, in Bedminster Township v. Allan-Deane Corp.,[42] required Bedminster Township to rezone to provide for higher-density housing. To facilitate the effectuation of its order, the Court appointed a planning expert as Master to act as "witness, consultant, and advisor."[43] The Master was directed to:

> (1) attend . . . and, if he chooses, participate in all . . . meetings . . . of the Township Committee, Planning Board or other special committee. . . .
>
> (2) report to the Court whether the ordinance which the Township drafted was in compliance with the Court's opinions and orders and in substantial conformity with the regional planning for the area, and
>
> (3) observe and monitor the application process by the plaintiff . . . through at least the preliminary approval stage; and to report to the Court if any dispute arose in that process.[44]

Appointment of a Master in Bedminster proved useful in expediting numerous land-use changes so as to allow for the construction of higher-density housing:

> Where the issue is complex, as in the case of Allan Deane's 457-acre, 1,800-unit development, or where an assessment of the effectiveness of the local response to the court's mandate requires painstakingly detailed analyses of the feasibility of development under the proposed regulations . . . simple remedies are unavailable. Nor, short of retaining jurisdiction and being prepared to respond to frequent appeals for arbitration of minor disputes, can a court protect a developer against harassment during the period when his application runs

> the gauntlet of the multiple reviews which most applications for significant development must now undergo. While the use of a planning Master in no way guarantees a successful resolution of such cases . . . Allan-Deane suggests that perhaps the presence of a Master can help reduce crowding of court calendars and contribute to a speedier unfolding of the court-mandated process.[45]

In its landmark Mount Laurel II decision, the New Jersey Supreme Court described the appointment of a "Special Master" as one means of realizing the goal of affordable housing:

> To facilitate this revision, the trial court may appoint a Special Master to assist municipal officials in developing constitutional zoning and land-use regulations. . . . While the appointment of a Master is discretionary, we believe that such appointment is desirable in many cases where the court orders a revision of the land-use regulations, especially if that revision is substantial. . . . The point here is that we intend that the appointment of Masters be viewed by the court as a readily available device, one to be liberally used. In our view the Master is of potential help to all concerned: to the municipality, to the plaintiffs, to the court and counsel.[46]

In the wake of the Mount Laurel II decision, numerous Masters have been appointed to guide and expedite land-use changes so as to provide housing for low- and moderate-income families. A partial list includes Masters working in such municipalities as Mahwah, Bernards, and Bedminster; Masters may shortly be appointed in Florham Park, Hanover, Montville, Rockaway, Roxbury, and Pequannock.

A recent Superior Court decision, Urban League of Essex County v. Township of Mahwah,[47] spoke of the merits of both a Master as well as a Professional Technical Review Group (PTRG). As envisioned by the Court, the PTRG would have the following composition and mandate:

(1) An independent professional technical review group (PTRG) shall be created to review and process all mandatory set-aside development applications. The PTRG shall consist of 3 members: an engineer, a planner and an architect . . .

(2) The Master . . . shall appoint members of the PTRG for each individual application. The Master may, in his discretion, serve as a member of the PTRG for one or more application; he may also appoint the same PTRG member or members to serve on more than one application.

(3) The PTRG shall prepare an application form with instructions and a checklist setting forth the requirement for all mandatory set-aside developments. In the event of any conflict between the PTRG application and the Planning Board application, the PTRG requirements shall prevail.

(4) The PTRG may, in its discretion, approve design standards and construction techniques not permitted under present Mahwah regulations.

(5) Within 2 weeks following submission, the PTRG shall provide the developer with written determination as to whether its application is complete. If the application is considered incomplete, the applicant shall be notifed in writing as to the additional materials required. The PTRG may, in its discretion, hold a preliminary design meeting with the applicant.

(6) Within 3 weeks from the date an application is deemed complete: (A) the PTRG shall file its report with the Planning Board recommending approval, denial or approval on condition; (B) interested municipal agencies shall file their reports with the Planning Board. Failure to file a report shall be deemed approval of the application by a municipal agency; (C) all documentation filed with the Planning Board shall be made available to the public at least 14 days in advance of a public hearing.[48]

In sum, the PTRG is both of and in addition to the Master. The PTRG serves numerous functions with respect to the provision of inclusionary Mount Laurel housing. It establishes an application form and checklist so as to clearly specify requisite developer submissions. If it views the municipality's design and construction standards as excessive, the PTRG may impose its own requirements. Finally, the PTRG acts as an oversight body with respect to the municipal review of development applications.

Other actions besides the appointment-creation of Masters and PTRGs have been taken in response to Mount Laurel II to expedite housing delivery. This report previously described the merits of a General Development Plan as a means for the builder and municipality to agree on basic project parameters before the former would proceed on expensive engineering work. Numerous New Jersey municipalities are considering or have opted for a General Development Plan approach. To illustrate, on December 14, 1983, Morris Township enacted an ordinance allowing for a "General Development Plan (GDP) as part of a planned development application."[49]

The GDP is a specific expediting mechanism. Scores of New Jersey communities have more generally agreed to accelerate processing of Mount Laurel housing. The following provisions from agreements settling Mount Laurel litigation are illustrative:

- Florham Park. "Expedited disposition of site plan applications and municipal approvals to low- and moderate-income households."[50]

- Hanover. "Expedited disposition of site plan applications and municipal approvals in the affordable housing zones."[51]

- Lincoln Park. "The Municipality . . . will use its best efforts to expedite disposition of complete applications and municipal approvals by a developer in the affordable housing zone.[52]

- Morris Township. "Expedited disposition of site-plan applications and municipal approvals in the affordable housing zone."[53]

- Roxbury, Rockaway, and Montville have agreed to similar commitments to expedite processing of Mount Laurel housing applications.[54]

How could the commitment to accelerate processing be satisfied? Morris Township has shortened its review period for affordable housing development from its generally prevailing 95-day span to 60 days.[55] Princeton Township is considering a similar revision as well as other expediting techniques such as according priority review status to Mount Laurel applications. Princeton's draft Affordable Housing Ordinance includes the following provisions:

> When hearing development applications, the planning board shall give priority to the following classes of applications, in the order set forth, over applications not made under this division unless the time limits for hearing applications imposed by the Municipal Land Use Law make such priorities impossible to effect: applications by the Princeton Housing Trust; applications otherwise including lower-income units; applications under Section 10B-197.6(a)(2). In no event, however, shall the planning board decide applications which include lower-income housing (including applications by the Princeton Housing Trust) more than 45 days after they are deemed complete and decide applications under Section 10B-197.6(a)(2) more than 65 days after they are deemed complete.[56]

The previously described Urban League of Essex County v. Township of Mahwah[57] decision considered numerous means to expedite development review. The Professional Technical Review Group (PTRG) would act as an oversight body with respect to this process. Numerous other changes were examined. The Court spoke critically of unnecessary submission requirements such as with respect to Environmental Impact Statements:

> Mahwah Code §145-24 requires developers submit a copy of their application to the Mahwah Environmental Commission. Within 15 days from receipt of the application, the Commission must notify the developer whether it must furnish an Environmental Impact Statement. This statement requires extensive information, involves large expenditures and, in some instances, calls for long open-ended studies. Mount Laurel II invalidated an ordinance provision calling for this type of exhaustive study by developers in this context. See 92 N.J. at 304,

n. 54. In addition, the sites involved in this litigation have been subjected to thorough scrutiny, much of the data which would normally be required by an Environmental Impact Statement has already been furnished. If the Mahwah Environmental Commission is to be involved in the approval process, the burden should be upon it to ask for specific environmental protective measures in a timely manner. Mahwah Code §145-24 as applied to Mount Laurel II developments is unreasonable.[58]

In addition, the Urban League of Essex County v. Township of Mahwah decision spoke of an accelerated review schedule whereby a Mount Laurel II development application would be granted or denied within a total of 95 days from the time of application.[59] During the 95 days, the Professional Technical Review Group (PTRG) would play an active role so as to ensure prompt consideration by the municipality. As envisioned by the Court, the process from day 1 to day 95 would proceed as follows:[60]

ACTIVITY	TIMETABLE
Application made to PTRG.	start
PTRG provides developer with written determination as to whether application is complete.	day 14
Developer furnishes PTRG with required additional material. Planning Board forwards copy of applications to municipal agencies. Application is deemed complete.	day 28
PTRG and interested municipal agencies file their reports with the Planning Board. All documentation is made available to the public.	day 49
Planning Board holds public hearing.	day 63-77
The Planning Board grants or denies preliminary approval.	day 95
Total Time	95 days

The foregoing review of the many substantive and procedural means through which development processing is expedited, both nationally and in New Jersey, provides the necessary background for recommending how this goal can be realized in Old Bridge.

SUBSTANTIVE AND PROCEDURAL CHANGES TO EXPEDITE DEVELOPMENT — OLD BRIDGE TOWNSHIP

Under the currently governing Old Bridge land-use ordinance enacted April 5, 1983, the Olympia & York project would proceed in the following manner. First, General Development Plan (GDP) approval would be attained. Pursuant to this step, a series of detailed project plans and impact analyses would be submitted as indicated by the following ordinance excerpt:

> The General Development Plan shall: Contain such information . . . and set forth in written form and with maps and drawings, as applicable:
>
> (a) A Land Use Plan at a scale of 1 inch = 600 feet indicating the tract area and locations of land areas to be devoted to the proposed Land Uses. . . . (b) Traffic and Circulation Plans for the proposed development indicating proposed major vehicular and pedestrian circulation systems, and proposed improvements. . . . (c) An Open Space Plan indicating the major areas to be devoted to open space, conservation and recreational purposes and a description of the intended improvements within said areas; (d) a Utility Plan indicating existing and proposed major sewerage and water lines and facilities; (e) a Drainage Plan indicating the proposed method of controlling and draining surficial water on and from the site and including supportive calculations; (f) An Environmental Impact Statement including an Environmental Synthesis Plan. . . . (g) a Community Facility Plan, which by graphic representation and written reports, describes the scope and type of supporting community structures. . . . (h) Qualifying Criteria Density Benefits: The applicant may provide such data as required to determine compliance with the PD [Planned Development] qualifying criteria and/or density benefits. . . . (i) Extended Vesting Report: The applicant may submit a report projecting the time period under which the development is projected to take place. . . . (j) Fiscal Impact Report: The applicant shall submit a report analyzing and describing the impact of the total development on Township services, the projected cash flow for property-tax purposes for the various parcels that collectively constitute the GPD and the schedule of assessed valuation of nonresidential uses. . . .[61]

Following the GDP, the Old Bridge ordinance stipulates preparation of a Preliminary Plan and then a Final Plan. To obtain these approvals, the developer must submit a most detailed series of descriptive materials and

impact analyses. Just a partial list includes:[62] (a) location map, (b) site characteristics map, (c) site development plan, (d) traffic and circulation plan, (e) open space analysis, (f) community facility plan, (g) sewerage and water analysis, (h) drainage plan, (i) covenants, standards, and easements report, (j) density benefit review, (k) fiscal impact report update, (l) expended vesting report, (m) off-track improvement schedule, and (n) a staging performance plan.

Following the GDP and Plan stages, Old Bridge requires Preliminary and then Final Subdivision Review. The series of items to be prepared and submitted at this last stage includes detailed reports on:[63] (a) site characteristics, (b) plan characteristics, (c) utilities, (d) storm drainage, (e) vehicular and pedestrian facilities, (f) landscaping and recreation facilities, (g) encumbrances, and finally, (h) a detailed environmental impact assessment.

In sum, the Old Bridge ordinance currently requires repeated stages of review — GDP, Plan and Subdivision — each of which is characterized by a most encompassing and detailed series of submission items. There is a real question why so many stages are needed. The land-use process would be less cumbersome and would proceed faster if the following substantive and procedural changes would be adopted. These recommendations are based on the national and New Jersey literature-case examples cited earlier.

Substantive Reforms — Reduce the Submission Stages

There is little reason for injecting a Plan stage between the GDP and Subdivision steps. As things stand now, the Plan is almost a carbon copy of the GDP. Submission requirements for both are almost identical, as is the objective of the exercises — to describe and review the proposed development before the Subdivision stage. Given this, the Plan requirement should be deleted, to be replaced by a two-stage process of first, GDP, to be followed by Subdivision approval. This change is in spirit with the national and New Jersey studies-case examples emphasizing the need for a streamlined review process with review stages introduced in an as-necessary fashion.

Substantive Reforms — Eliminate Inappropriate Submission Items

Under the current Old Bridge ordinance, there is excessive and often misplaced detail with reference to the required impact studies and other reports. For instance, the concept of a General Development Plan is to allow the developer and municipality to reach some agreement as to overall project parameters — size and location of land uses, total number of residential units, total nonresidential square footage, etc. Given this intent it is unnecessary for the GDP to be accompanied by detailed impact analyses. Surely, the community should be given the opportunity to consider a project at length, but this should occur later in the review process (e.g., at the Subdivision stage), and not at the initial General Development Plan. Yet, the Old Bridge ordinance requires a very detailed series of submission items in order to secure General Development Plan approval. To give a specific example, Old Bridge calls for the preparation of traffic and drainage studies as part of the GDP package. Given the concept nature

of the GDP, should this level of detail be considered at this point? Instead of a report, a statement by a licensed engineer that traffic load and drainage can be accommodated should suffice at the GDP deliberation. Detailed reports on these issues would follow at the Subdivision stage.

There is similar misplaced submission detail at the Preliminary Subdivision step. The Ordinance currently requires that detailed engineering and a score of impact studies accompany the Preliminary Subdivision application. Following the latter's approval, the developer must repeat much of the process during the Final Subdivision stage. Why the costly repetition? The submission items for Preliminary Subdivision should reflect the tentative nature of this step; final and complete engineered drawings, impact analyses, and the like are more appropriate at the end stage of Final Subdivision. In short, submission requirements should reflect the nature of the development process with the least detail at GDP, a greater level at Preliminary Subdivision, and the fullest detail at Final Subdivision.

Certain reports currently required by Old Bridge are questionable at any point. Is it necessary to prepare an EIS if the area slated for development is not environmentally fragile? And if an EIS is necessary, should not Old Bridge assist its preparation by making available areawide data bases? These recommendations reflect the national and New Jersey literature-case studies with reference to affordable housing delivery. It also mirrors the Court's finding in the recent Urban League of Essex County a Township of Mahwah decision.[64]

There is also a question with respect to the fiscal impact analysis. The Township requires that the economic effects of the project be projected; Old Bridge's linkage of the pace of residential to non-residential construction also has a fiscal underpinning, namely that development should result in a financial gain. It is very questionable whether these requirements are allowable given numerous decisions by the New Jersey courts questioning the validity of fiscal zoning.[65]

Procedural Reforms — Accelerate Timing Deadlines

The Old Bridge ordinance specifies time periods for the submission and review of the different land-use stages — GDP, Preliminary Plan, Final Plan, Preliminary Subdivision, and Final Subdivision. For the GDP, Preliminary Plan, and Preliminary Subdivision steps, the following deadlines are indicated. A maximum of forty-five days is allowed for an application to be declared complete. Following this, the application must be "granted or denied within ninety-five days of the date of such submission or within further time as may be consented to by the applicant."[66]

For the Final Plan and Final Subdivision stages, a slightly different timing clause is indicated. The Old Bridge ordinance indicates that "Final approval shall be granted or denied within forty-five (45) days after submission of a complete application to the Administrative Officer, or within such further time as may be consented to by the applicant."[67] On a practical basis, this specification would have the following effect. Forty-five days would first be allowed for the application for Final Plan or Final

Subdivision to be found complete. Following this, the community would have another forty-five-day period to respond unless extended by the developer.

The forty-five- and ninety-five-day periods are taken from the New Jersey Municipal Land Use Law which specifies maximum time spans for municipal reaction. Yet, the application of these time frames in Old Bridge will result in quite protracted development application processing. Since the municipality requires so many review stages, the cumulative effect of the time periods mounts. Even if a developer proceeded directly from GDP to Plan and finally Subdivision, and secured approvals in the time frames indicated by municipal statute, it would still take 600 days for the entire process, as follows:

Step	Municipal Action	Elapsed Time
GDP	Application completion	45 days
	Review/action	95 days
Preliminary Plan	Application completion	45 days
	Review/action	95 days
Final Plan	Application completion	45 days
	Review/action	45 days
Preliminary Subdivision	Application completion	45 days
	Review/action	95 days
Final Subdivision	Application completion	45 days
	Review/action	45 days
		600 days

The 600-day span is likely an understatement because its calculation assumes that Old Bridge will react to the respective submissions within the specified time periods and will not request developer extensions. Yet, the record is not supportive of this optimistic assumption. Olympia & York's GDP application is illustrative of likely delays. On May 22, 1983, Olympia & York submitted a General Development Plan. It was not declared complete until August 8 for the same year — almost 80 days from submission, not the 45 days suggested by the ordinance. The review period by the municipality in theory should have been started following the August 8 date to proceed for 95 days. In actuality, Old Bridge did not begin hearings on the matter until October 18; two months later they were not completed (see Exhibit 1). In sum, under the current Old Bridge ordinance a major development application such as Olympia & York's will likely take much longer than the 600-day period cited above.

How can processing be expedited? If superfluous submission stages were not required, processing would be faster. Deleting the Preliminary and Final Plan steps would eliminate the following: 45 days for completion of the Preliminary Plan, and 95 days for a decision, followed by 45 days for completion of the Final Plan and 45 days for a municipal acceptance or denial. In sum, a total of 230 days would be saved.

In addition, the current review maximums can be shortened from the 45- and 95-day spans currently in the ordinance. A shorter span, say a total of 45 days for application submission and review, could suffice for the GDP given its abbreviated and concept nature. A slightly longer period — 30 days for completion and 30 days for municipal decision — would apply to the Preliminary and Final Subdivision steps. The latter 60-day span is similar to what other New Jersey municipalities are allowing with respect to Mount Laurel housing. The combination of these two reforms — deleting unnecessary steps and allowing the remaining stages to proceed faster — results in a dramatic processing acceleration. As indicated in Exhibit 4, the combined effect of both changes permits processing from GDP to Final Subdivision in a total of 165 days — a fraction of the 600-day span under the current ordinance (see Exhibit 4).

It is additionally important that the shortened processing periods cited above be adhered to; requests for developer extensions should be limited to exceptional cases. To this end, the following municipal actions can expedite matters:

1. Codify/simplify local land-use regulations. The submission and review requirements of a project the size of Olympia & York's are currently interspersed throughout the Old Bridge municipal land use ordinance. Pertinent provisions are found in Sections 7-5, 7-7, and so on. Ordinance simplification and consolidation are in order.

2. A joint interdepartmental review committee should be formed as opposed to serial department-by-department analysis and comment on development applications.

3. Improve planning/other board scheduling. In the deliberation over the GDP concept during the 1979 through 1982 period, much time was lost because of difficulties of this matter getting on the agenda (see Exhibit 1). Review of the Olympia & York application will likely confront similar scheduling problems. More frequent planning/other board meetings will alleviate the agenda bottleneck.

4. Improve public hearing procedures. These meetings can be made more productive if fair and consistent rules are adopted concerning who is heard, when, and for how long.

5. Appoint a Master. This procedure proved effective in Bedminster and other New Jersey communities. A Master could expedite the review and processing of large-scale development applications such as Olympia & York's. He or she could serve as a knowledgeable, neutral third party with reference to issues ranging from when an application is "complete," to the reasonableness of submission items and stages required by Old Bridge.

6. Appoint a Professional and Technical Review Group (PTRG). The PTRG builds on the concept of the Master; it has precedent

EXHIBIT 4

CURRENT OLD BRIDGE LAND USE ORDINANCE VERSUS RECOMMENDED PROCEDURES:
COMPARISON OF DEVELOPMENT PROCESSING TIMES AND COSTS FOR OLYMPIA & YORK PROJECT

CURRENT ORDINANCE[1]				RECOMMENDED PROCEDURE[1]			
Step	Submission Time[2]	Submission Cost[3]			Submission Time[2]	Submission Cost[3]		
		Report Preparation	Carrying[4] Cost	Total Cost		Report Preparation	Carrying[4] Costs	Total Costs
General Development Plan	45 days completion[6] 95 days reaction[7] 140 days	$150,000	$2,520,000	$2,670,000	General Development Plan -completion[6] -reaction[7] 45 days	$25,000	$810,000	$835,000
Preliminary Plan	45 days completion 95 days reaction 140 days	$120,000	$2,520,000	$2,640,000	Preliminary Subdivision -completion -reaction 60 days	$100,000	$1,080,000	$1,180,000
Final Plan	45 days completion 45 days reaction 90 days	$100,000	$1,620,000	$1,720,000	Final Subdivision -completion -reaction 60 days	$150,000	$1,080,000	$1,230,000
Preliminary Subdivision[5]	45 days completion 95 days reaction 140 days	$150,000	$2,520,000	$2,670,000				
Final Sub-Subdivision[5]	45 days completion 45 days reaction 90 days	$100,000	$1,620,000	$1,720,000				
Total	600 days	$620,000	$10,800,000	$11,420,000	165 days	$275,000	$2,970,000	$3,245,000

1. See text for details.
2. Assumes developer is not asked to extend deadlines.
3. Estimated.
4. Equals submission time multiplied by $18,000 daily Olympia & York carrying cost.
5. Assumes site plan approval is combined with subdivision.
6. Development application declared complete.
7. Township approves or denies development application.

Source: Center for Urban Policy Research analysis.

in the Urban League of Essex County v. Township of Mahwah[68] decision. The PTRG could serve many roles ranging from evaluating Old Bridge's substantive development and construction requirements to expediting the review of developers' applications.

CONCLUSION

In sum, this section has considered numerous substantive and procedural changes to expedite development review and processing in Old Bridge. The recommendations, based on the national and New Jersey experience, yield significant savings. Exhibit 4 shows a side-by-side comparison of Olympia & York's submission and review costs under the current ordinances versus that with the procedures recommended by this section. Under the latter, $11.420 million is incurred — $.620 million for the preparation of the many impact analyses and $10.800 million for carrying expenses. The carrying cost is so high because the current proceedings are very protracted — taking 600 days — and Olympia & York incurs a steep daily carrying expense of $18,000.

To provide affordable housing, Olympia & York's submission and review expenses must be drastically reduced. The recommendations in this section show the way. By requiring fewer review stages (e.g., eliminating the Preliminary and Final Plans), calling for appropriate submission items at the remaining stages (e.g., less detail at the GDP), and expediting the review process through various means (e.g., accelerating the time deadlines, appointing a Master, etc.), Olympia & York's development, submission and review costs can be reduced from $11.420 million under the current ordinance to $3.245 million. Most of this drastic savings is the result of an expedited processing schedule — comprising 165 as compared to 600 days — which drastically lowers the carrying charges (from $10.800 to $2.970 million; see Exhibit 4). The Olympia & York project personifies the adage that "time is money." The project cannot proceed and surely cannot provide Mount Laurel housing unless the processing reforms discussed in this section are implemented.

NOTES

1. Mass. Gen. Laws Ann. 40B, Secs. 30-23 (Supp. 1973), inserted by Statute 1969, Ch. 774. See "Massachusetts Zoning Appeals Law," Boston University Law Review, Vol. 54, No. 1 (January 1974), pp. 47-48.

2. William R. Reilly and Sy Schulman, "The New York State Urban Development Corporation: New York Innovation," Urban Lawyer, No. 1 (Summer 1969), pp. 129-34.

3. California Government Code, Section 6530(c). This policy mandate language was moved to California Government Code section 65583 by Assembly Bill 2853 (1980), Chapter 1143 of the Statutes of 1980, in a virtually unchanged fashion. Cited in Seymour I. Schwartz and Robert A. Johnston, "Inclusionary Housing Programs," Journal of the American Planning Association, Vol. 49, No. 1 (Winter 1983), p. 20.

4. See Board of County Supervisors of Fairfax County v. Carper, 200 Va. 653, 197. S.E. 2d 390 (1959); National Land and Investment Co. v. Kohn, 419 Pa. 504, 215 A.2d 597 (1965); Appeal of Kit-Mar Builders, 439 Pa. 466, 268 A.2d 765 (1971); Appeal of Girsh, 437 Pa. 237, 263 A. 2d 395 (1970); Oakwood at Madison Inc. v. Township of Madison, 117 N.J. Super. 11, 283 A. 2d 353 (1972).

5. Southern Burlington County NAACP v. The Township of Mount Laurel, 67 N.J. 151, 336 A. 2d 713, Appeal Dismissed and Cert. Denied, 423 U.S. 808 (1975) (Mount Laurel I); Southern Burlington County NAACP v. The Township of Mount Laurel, 92 N.J. 158, 456 A. 2d 390 (1983) (Mount Laurel II).

6. See Stephen R. Seidel, Housing Costs and Government Regulation (New Brunswick, NJ: Center for Urban Policy Research, 1978); Robert W. Burchell and David Listokin, "The Impact of Local Government Regulations on Housing Costs and Potential Avenues of State Meliorative Measures," in George Sternlieb and James W. Hughes, America's Housing (New Brunswick, NJ: Center for Urban Policy Research, 1980), p. 313; State of Connecticut, Department of Housing, Housing and Land Use: Community Options for Lowering Housing Costs (Hartford, CT); California Building Industry Association, Manual for Reducing Housing Costs (Sacramento, CA: California Building Industry Association, 1979). Report prepared by the Affordable Housing Task Force, Orange County Chapter, California Building Association.

7. Wilford Sanders and David Mosena, Changing Development Standards for Affordable Housing (Chicago, IL: American Planning Association, 1982), report prepared for the Joint Venture for Affordable Housing.

8. National Homebuilders Association Research Foundation, Inc., Building Affordable Homes: A Cost Savings Guide for Builder/Developers (Washington, D.C.: NAHB, 1982). Report prepared for the U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

9. Robert W. Burchell and David Listokin, "Improving Design Standards in Fringe Communities: Local and State Initiatives," in U.S. Department of Housing and Urban Development, Reducing the Development Costs of Housing: Actions for State and Local Government (Washington, D.C.: U.S. Government Printing Office, 1979), p. 15.

10. U.S. Department of Housing and Urban Development, Reducing Homebuilding Costs with OVE Design and Construction, Guideline 5 (Washington, D.C.: U.S. Government Printing Office, 1981).

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50. Settlement agreement between Florham Park (Hanover, Lincoln Park, Morris Township, Roxbury, Rockaway, and Montville) and the Morris County Branch of the National Association for the Advancement of Colored People; the Morris County Fair Housing Council; and Joseph H. Rodriguez, Public Advocate of the State of New Jersey.

51. Ibid.

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53. Ibid.

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55. See note 47.

56. Princeton Township Affordable Housing Ordinance, Planning Board-approved draft May 22, 1983, p. 15.

57. Urban League of Essex County v. Township of Mahwah — Mount Laurel Proceedings on Remand from the Supreme Court. Superior Court of New Jersey, Law Division, Bergen County, Docket No. L-17112-71.

58. Ibid., p. 58.

59. Ibid., p. 67.

60. Ibid.

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REPORT IV

THE AFFORDABILITY AND THE FEASIBILITY OF THE OLYMPIA & YORK OLD BRIDGE DEVELOPMENT PROJECT

INTRODUCTION

The Olympia & York planned development in Old Bridge, New Jersey is a large mixed-use development consisting of both market and below-market residential uses as well as nonresidential uses. Several alternative development plans have been prepared; each contemplates the construction of over ten thousand units of housing and two million square feet of office and commercial improvements. Current development approvals are contingent upon the satisfaction of a housing mix which includes a portion of housing for low- and moderate-income households. The financial difficulty faced by Olympia & York in meeting these constraints has been generally stated in the Settlement Memo between the developer and the municipality. The precise level of difficulty is quantified in this report.

The fiscal consequences of three Mount Laurel-type development alternatives are examined in the analysis that follows. The Developer-Subsidy Model requires a full 20 percent low- and moderate-income housing commitment (10 percent each) with little in the way of municipal subsidy. Only below-market interest rates through the state HMFA are used to support the low- and moderate-income housing of the development. The second alternative, the Shared-Subsidy Model, increases the number of units, reduces development fees, streamlines the permit process, and provides for municipal funding of the Mount Laurel share of tract improvements. A third model, the Least-Cost Housing Model, examines the consequences to the Shared-Subsidy Model of reducing market selling prices to least-cost housing prices based on a full commitment to Mount Laurel units but altering the allocation from 10 percent moderate, 10 percent low to 16 percent moderate, 4 percent low. The share of below-market units assumed by Olympia & York in this case is above what would be assigned as a proportional share of future growth, taking into account development filings elsewhere in the Township.

The results of this analysis are outlined in the Executive Summary and displayed in Exhibit 1. Following this, a detailed account of the three development scenarios is given. Finally, the Appendix contains the full computer displays for the models as well as a complete definition of terms and equations used within the models.

EXHIBIT 1

THE FISCAL CONSEQUENCES OF ALTERNATIVE DEVELOPMENT SCENARIOS
FOR OLD BRIDGE, NEW JERSEY

	MARKET SEGMENTATION BY INCOME								
	DEVELOPER-SUBSIDY MODEL			SHARED-SUBSIDY MODEL			LEAST-COST HOUSING MODEL		
	Regular	Moderate	Low	Regular	Moderate	Low	Regular	Moderate	Low
Number of Units	8,208	1,026	1,026	9,295	1,162	1,162	9,295	1,859	465
Price of Housing	$70,000	$48,000	$28,200	$64,000	$46,945	$28,200	$59,990	$46,756	$28,200
Target Income	$40,582	$24,955	$15,597	$37,268	$24,955	$15,597	$35,571	$24,275	$15,597
Monthly Housing Payments for Loan Calculation	$ 946	$ 581	$ 366	$ 869	$ 569	$ 366	$ 829	$ 566	$ 366
Developer Subsidy Per Unit, Current $	$10,208[1]	$ 7,908	$20,782	$ 7,070	$ 0	$12,779	$ 4,915	$ 0	$12,563
Rate of Return on Investment	*********	-2.97%[2]	**********	**********	1.15%	**********	**********	5.71%	**********
Developer Subsidy As % of Investment	*********	8.77%[3]	**********	**********	6.05%	**********	**********	3.60%	**********

Source: CUPR Affordable Housing Model

1. See p. 4-34, variable Y30 for definition.
2. See p. 4-34, variable Y32 for definition.
3. See p. 4-34, variable Y33 for definition.

SUMMARY

The three scenarios each represent conceptually different approaches to meet the requirements of the Mount Laurel II court decision. In the first case, the developer is left unaided by local efforts and must assume the entire burden of building Mount Laurel housing; in the second, the host municipality shares the cost of below-market units with the developer, mostly through foregone revenues. In the third case, the developer introduces least-cost housing for a reduced low-income share of a 20 percent Mount Laurel development commitment. In all cases, Mount Laurel households receive below-market interest rate subsidies on their mortgages as well as reduced down-payment requirements.

Exhibit 1 shows the Developer-Subsidy Model on the left, the Shared-Subsidy Model in the middle, and the Least-Cost Housing Model on the right. In the first case, 2,052 units of Mount Laurel housing are proposed; while, in the latter two scenarios, 2,324 units are planned.* In the Developer Model, housing prices range from $28,200 to $70,000; in the Shared Model, the range is from $28,200 to $64,000; while in the Least-Cost Model, the range is from $28,200 to $59,990.

In all cases, the developer must ultimately subsidize the sale of the low-income units out of desired profits on the market segment of the residential units and the nonresidential sector. Desired profit in each scenario is 10 percent return on investment. However, in all cases no profit or contingency costs are taken on low-income Mount Laurel units. The subsidy is sufficiently deep within the Developer-Subsidy Model to render a 2.3 percent loss for the development as a whole. The Shared-Subsidy Model permits the developer a 1.1 percent profit, whereas the Least-Cost Housing Model enables the project to generate a 5.7 percent rate of return. The profit returns specified here are not being generated exclusively by the residential sector of the development but rather by the inclusion of nonresidential space as well. Actually, only 50-60 percent of the profits specified above come from the residential sector.

The three scenarios clearly show the tenuous position for the developer who attempts to satisfy the housing policy goals formulated within Mount Laurel II, if the site of development is a lower middle-income community where land prices are comparatively low, thus reducing the impact of any density bonus. Given the risk associated with the required cash flows, in all cases an acceptable rate of return on total investment is not received. Further, any failure to maintain the flow of revenues as scheduled in the models worsens the developer's situation. The reason for this is that the developer's costs are clearly impacted by time, which relates to

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*The increase in units reflects a somewhat different interpretation of the density provision of the General Development Plan in Old Bridge, New Jersey. This is outlined in a Settlement Memo which was submitted by Olympia & York to the Township of Old Bridge in September 1984.

which relates to the rate of project buildout. Pricing and delivery schedules are critical to maintain even these low levels of profit. Finally, a combination of municipal subsidies and current state interest rate subsidies is essential to the economics of Mount Laurel housing delivery. At best, the development is a considerable risk, with only modest levels of return. Even this scenario is predicated on full municipal and state subsidy participation. At worst, the development is a "no go" situation. Sunk costs to date, largely reflective of a burdensome permitting process and development obligations reflecting Mount Laurel II compliance, make it infeasible to proceed.

BACKGROUND

Olympia & York and the municipality of Old Bridge, New Jersey are currently involved in negotiations regarding the development of approximately 2,600* acres. Three alternative development scenarios have been advanced. The investment consequences of each to Olympia & York is the subject of this report. The analysis will proceed through five stages. First, the assumptions and conditions surrounding each alternative will be described. Second, the cost of delivering housing units will be estimated; third, the ability of various income groups to purchase their units will be examined. Fourth, the financial feasibility of the development under the three scenarios will be explored; and lastly, the full cost of the various subsidies will be quantified. In all cases, where the imposition of a cost to the developer occurs during a year different from that during which revenue from the sale of a unit or receipt of rental income occurs, the discounted time cost of money will be integrated within the estimates.

BASIC DATA INPUTS — SPECIFYING THE ASSUMPTIONS

The Developer-Subsidy Model is a 20-year program designed to construct 10,260 housing units — 20 percent of which are affordable by Mount Laurel low- and moderate-income families — and two million square feet of commercial and office space. No direct subsidies are provided to the developer. Only below-market interest rates and reduced down-payment requirements support the project, and these measures are targeted to the Mount Laurel households. The regular market segment of the proposed housing (80 percent of the total), reflective of local development conditions, is focused towards households approximately 17 percent above regional median income. The remaining 20 percent of the proposed housing is split equally between low- and moderate-income households. The overall development parameters are displayed in Exhibit 2.

In contrast to the above, the Shared-Subsidy Model shortens the development period to 18 years (based on a shorter absorption schedule associated with less-expensive units), increases the number of units built to 11,619, maintains the Mount Laurel share of 20 percent, streamlines the subdivision process, waives most municipal fees, provides for full municipal subsidy of infrastructure for the Mount Laurel units, and maintains the

*The residential share is approximately 1,750 acres.

EXHIBIT 2

AFFORDABLE HOUSING MODEL: BASE DATA

BASIC DATA	Market Segmentation by Income								
	DEVELOPER-SUBSIDY MODEL			SHARED-SUBSIDY MODEL			LEAST-COST MODEL		
	Regular	Moderate	Low	Regular	Moderate	Low	Regular	Moderate	Low
Number of Units in Total Project [1]	8,208	1,026	1,026	9,295	1,162	1,162	9,295	1,859	465
Units Constructed Per Acre [2]	6	12	12	6	12	12	6	12	12
Floor Area Per Unit [3]	1,000	790	790	1,000	790	790	900	790	790
Construction Cost Per Square Foot [4]	$28	$30	$30	$28	$30	$30	$28	$30	$30
Years to Project Buildout [5]	20	20	20	18	18	18	15	15	15
Desired Percent Profit [6]	10.0%	10.0%	0%	10.0%	10.0%	0%	10.0%	10.0%	0%
Target Household Income [7]	$40,582	$24,955	$15,597	$37,268	$24,955	$15,597	$35,571	$24,275	$15,597

Source: Center for Urban Policy Research analysis.

1. Settlement Memorandum, p. 5.
2. Settlement Memorandum, p. 5.
3. Olympia & York Memorandum, 1984.
4. Olympia & York Memorandum, 1984.
5. Olympia & York Memorandum, 1984.
6. Olympia & York Memorandum, 1984.
7. HUD, 1984.

assessed value of property at its unapproved or unimproved pre-development level until unit occupancy. At occupancy, all units pay full taxes based on sales price and the equalized tax rate.

The Least-Cost Housing Model* modifies the Shared-Subsidy scenario by placing a lowered price ceiling on smaller, regular market housing units and assumes an absorption rate sufficient to build out the project in fifteen years. A full 2,324 units of Mount Laurel housing will be built; however, 16 of 20 percent will be for moderate-income households, the remainder for low-income units. Because of the lowered price ceiling on market units, the profit contributed by the residential sector to total prices is approximately 10 percent less in this versus the other two alternatives.

Underlying all three models is the assumption of a constant rate of five percent annual inflation on both sides of the cost-revenue equation.

HOUSING COST DETERMINATION

The assumptions identified in the preceding section contain all of the information needed to calculate the cost in terms of present value of a dwelling unit. There are seven line items that account for all costs experienced by the Olympia & York corporation. These are:

1) land assembly;

2) land improvements;

3) construction;

4) interim financing;

5) contingency (only on market residential units and the nonresidential component);

6) overhead; and

7) profit (only on market residential units and the nonresidential component).

Each of these items will now be discussed.

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*Least-Cost Housing is the most inexpensive housing which can be delivered in a local housing market taking into account the elimination of excessive government regulations. See Appendix B for details.

Land Assembly

Land assembly includes all costs experienced by the developer prior to the time actual construction begins. To this is added the present value of all carrying charges experienced by the developer in holding unsold land during the buildout period. The cost per unit will vary by the fraction of the total project that is residential in nature, the number of units built per year for each market segment, and the relative value of each class of dwelling units. The allocation algorithm is described in Appendix A. Exhibit 3 displays the per-unit land assembly costs. The highest value is found for the regular income segment in the Developer-Subsidized Model; while, the lowest value is found for the Mount Laurel units in the Least-Cost Housing Model.

EXHIBIT 3

LAND ASSEMBLY COSTS PER RESIDENTIAL UNIT
FOR EACH DEVELOPMENT SCENARIO

Model	Regular Income	Moderate Income	Low Income
Developer Subsidy	$19,825	$8,390	$8,390
Shared Subsidy	$14,171	$5,997	$5,997
Least-Cost Housing	$12,308	$5,787	$5,787

Source: CUPR Affordable Housing Subsidy Model

Land Improvements

Once development permits have been acquired, the improvement of land will begin. From a cost allocation perspective, two components of land improvements exist: on-site and tract improvements. On-site improvements are treated in a rather straightforward fashion. Costs for paving, roadway earthwork, building-lot preparation, and hookups for water, sanitary, and stormwater sewers are assumed to be experienced during the year of the sale of the dwelling; therefore, no long-term financing is required. Tract improvements for system-wide entities such as water ($3,570,000), sewer ($4,972,500), storm drainage ($8,035,530), and roads ($18,843,030) are experienced during the first two-thirds of the project buildout period. The sum of these two improvements is displayed in Exhibit 4.

Construction

The costs associated with the construction of the dwelling unit are brick/mortar, and labor costs. This can be summarized as the product of cost-per-square-foot and the number of square feet being built per unit.

These values are displayed in Exhibit 5. All other site-related and out-of-pocket costs are incorporated in the interim financing and contingency line items.

EXHIBIT 4

LAND IMPROVEMENT COSTS PER RESIDENTIAL UNIT
FOR EACH DEVELOPMENT SCENARIO

Model	Regular Income	Moderate Income	Low Income
Developer Subsidy	$10,307	$ 7,620	$ 7,620
Shared Subsidy	$ 9,691	$ 5,649	$ 5,649
Least-Cost Housing	$ 9,513	$ 5,649	$ 5,649

Source: CUPR Affordable Housing Subsidy Model

EXHIBIT 5

HOUSING CONSTRUCTION COSTS PER RESIDENTIAL UNIT
FOR EACH DEVELOPMENT SCENARIO

Model	Regular Income	Moderate Income	Low Income
Developer Subsidy	$28,000	$23,700	$23,700
Shared Subsidy	$28,000	$23,700	$23,700
Least-Cost Housing	$25,200	$23,700	$23,700

Source: CUPR Affordable Housing Subsidy Model

Interim Financing and Residential Construction Period Costs

Interim financing and residual construction-period costs refer to public fees and performance bonds, out-of-pocket professional costs faced by the developer, as well as contingency and other short-term interest costs associated with the completion of the residential improvements. A major component of these costs is associated with property taxes on land held by the developer throughout the buildout period. These costs, as well as the financing charges, are displayed in Exhibit 6. The interest on these costs is potentially subject to reduction due to the public-purpose nature of the Mount Laurel housing. However, due to current operating procedures of the New Jersey Housing and Mortgage Finance Agency, which pays

EXHIBIT 6

INTERIM-FINANCING AND RESIDUAL CONSTRUCTION-PERIOD COSTS PER RESIDENTIAL UNIT FOR EACH DEVELOPMENT SCENARIO

Model	Regular Income	Moderate Income	Low Income
Developer Subsidy			
1. Total Residual Costs	$8,156	$6,494	$4,819
2. Taxes During Construction	$1,074	$ 454	$ 454
3. Interim Financing Costs	$1,679	$1,479	$1,355
Shared Subsidy			
1. Total Residual Costs	$6,912	$3,468	$1,923
2. Taxes During Construction	$ 235	$ 99	$ 99
3. Interim Financing Costs	$1,534	$1,222	$1,114
Least-Cost Housing			
1. Total Residual Costs	$6,616	$3,464	$1,919
2. Taxes During Construction	$ 204	$ 96	$ 96
3. Interim Financing Costs	$1,422	$1,222	$1,114

Source: CUPR Affordable Housing Subsidy Model

market rates for construction financing, this option has not been used in these models.

Contingency

The contingency cost is a residual factor designed to support unanticipated costs that occur during buildout. This is taken to be 5 percent of all land improvements and construction costs. These values are displayed in Exhibit 7. The developer is assumed to reserve no revenues for contingency purposes related to the low-income Mount Laurel component of any model.

EXHIBIT 7

CONTINGENCY COSTS PER RESIDENTIAL UNIT
FOR EACH DEVELOPMENT SCENARIO

Model	Regular Income	Moderate Income	Low Income
Developer Subsidy	$2,005	$1,615	$ 0
Shared Subsidy	$1,923	$1,492	$ 0
Least-Cost Housing	$1,773	$1,492	$ 0

Source: CUPR Affordable Housing Subsidy Model

Overhead

The overhead cost item is used to account for all off-site administrative costs associated with the project. This ranges from the establishment of an in-state presence for the corporation to the project's share for the central office corporation's in-house operational costs. This value is set as 10 percent of all of the preceding costs and applies to all units, both market and non-market. Exhibit 8 displays the values.

EXHIBIT 8

OVERHEAD COSTS PER RESIDENTIAL UNIT
FOR EACH DEVELOPMENT SCENARIO

Model	Regular Income	Moderate Income	Low Income
Developer Subsidy	$6,629	$4,620	$4,453
Shared Subsidy	$5,877	$3,881	$3,727
Least-Cost Housing	$5,363	$3,860	$3,706

Source: CUPR Affordable Housing Subsidy Model

Profits

Developer profit is viewed as a cost item. It is defined as the return to be expected for the application of a total package of resources to a project. As in the case of contingency costs, profits will not be generated on the low-income Mount Laurel portions of any of the three models.

The preceding cost items represent the real consumption of resources. Had they not been consumed in the project, it is to be assumed that at minimum on an annualized basis they could be invested in corporate or government bonds and earn a rate of return of 10 percent. For this reason, the conservative desired rate of profit is assumed to be 10 percent. Exhibit 9 displays the desired profit for each market segment by development scenario.

EXHIBIT 9

DESIRED PROFIT PER RESIDENTIAL UNIT
BY DEVELOPMENT SCENARIO

Model	Regular Income	Moderate Income	Low Income
Developer Subsidy	$7,290	$5,083	$ 0
Shared Subsidy	$6,465	$4,270	$ 0
Least-Cost Housing	$5,900	$4,246	$ 0

Source: CUPR Affordable Housing Subsidy Model

Total Housing Costs

The total value of the residential component of the Old Bridge project is the sum of the seven individual cost items. These costs are displayed in Exhibit 10.

All subsidies whether state- or locally-originated that directly offset corporate development costs are incorporated within these figures. An additional constraint has been placed on both models for the purpose of realistically viewing the local market. As distinct from delivery costs, the selling price of the regular market segment has been required to be only what the market will bear using local comparative sales as an index. Exhibit 11 shows the permitted selling prices for the units whose developer costs are displayed in Exhibit 10. For moderate- and low-income units, HUD Section 8 income requirements for a household size of three have been used. These are .72 and 45 percent of regional median income, respectively.

EXHIBIT 10

AFFORDABLE HOUSING MODEL: DEVELOPER SUBSIDY, SHARED SUBSIDY, AND LEAST COST HOUSING DELIVERY COSTS

COST COMPONENT	Market Segmentation by Income								
	DEVELOPER-SUBSIDY MODEL			SHARED-SUBSIDY MODEL			LEAST-COST HOUSING MODEL		
	Regular	Moderate	Low	Regular	Moderate	Low	Regular	Moderate	Low
DEVELOPMENT									
Land (Purchase, Holding)	$19,825	$ 8,390	$ 8,390	$14,170	$ 5,997	$ 5,997	$12,306	$ 5,787	$ 5,787
Interim Financing/Fees/Soft Costs	6,151	4,879	4,819	4,989	1,976	1,923	4,843	1,972	1,919
Total Development	$25,976	$13,269	$13,209	$19,159	$ 7,973	$ 7,920	$17,149	$ 7,759	$ 7,706
CONSTRUCTION									
Unit Construction	$28,000	$23,700	$23,700	$28,000	$23,700	$23,700	$25,200	$23,700	$23,700
Development Improvements	10,307	7,620	7,620	9,691	5,649	5,649	9,513	5,649	5,649
Total Construction	$38,307	$31,320	$31,320	$37,691	$29,349	$29,349	$34,713	$29,349	$29,349
DELIVERY									
Development Costs	$25,976	$13,269	$13,209	$19,159	$ 7,973	$ 7,920	$17,149	$ 7,759	$ 7,706
Construction Costs	38,307	31,320	31,320	37,691	29,349	29,349	34,713	29,349	29,349
Contingency	2,005	1,615	0	1,923	1,492	0	1,773	1,492	0
Overhead	6,629	4,620	4,453	5,877	3,881	3,727	5,363	3,860	3,706
Profit	7,290	5,083	0	6,465	4,270	0	5,900	4,246	0
Total Delivery Cost	$80,208	$55,908	$48,982	$71,116	$46,965	$40,996	$64,898	$46,706	$40,761
Constrained Price	$70,000	$48,000	$28,200	$64,000	$46,945	$28,200	$59,990	$46,756	$28,200

Source: Center for Urban Policy Research Analysis

EXHIBIT 11

SELLING PRICES OF HOUSING UNITS IN THE
OLYMPIA & YORK OLD BRIDGE PROJECT
BY DEVELOPMENT SCENARIO

Model	Regular Income	Moderate Income	Low Income
Developer Subsidy	$70,000	$48,000	$28,200
Shared Subsidy	$64,000	$46,945	$28,200
Least-Cost Housing	$59,900	$46,756	$28,200

Source: CUPR Affordable Housing Subsidy Model

BUYER'S ABILITY TO PURCHASE

The demand side of the CUPR Affordable Housing Model is incorporated in the "Buyer's Ability to Purchase" section. An absorption schedule which varies from 20 years for the Developer-Subsidy Model to 15 years for the Least-Cost Model is the basis for residential development sellout. From the point of view of the micro housing market, the demand for housing in each of the three market segments is assumed to be infintely elastic; that is, consumers will purchase all units offered at the given market price according to the absorption schedule. While simplifying the operation of the CUPR Affordable Housing Model, this assumption makes imperative the existence of realistic demand analyses from which the model's assumptions and outcomes can be compared.

The "Ability-to-Purchase" component of the model is composed of the down payment and monthly payment requirements established by the relevant permanent lending institution for the target income levels shown in the assumptions section. It concludes with a comparison of the necessary annual payment to meet the price of the housing unit and the buyer's ability to pay. Where a subsidy is made necessary to close the buyer's gap, this will be indicated in the section to follow.

The buyer's ability to purchase a unit is conditional upon the target income level specified in Section A of the model (see Appendix A). This has been derived from previous local competitive surveys for the market segment as well as public policy vis-à-vis the Mount Laurel segment. In the case of the Mount Laurel units, maximum income levels are established at 80 percent and 50 percent of regional median income for the moderate- and low-income housing components, respectively. The subsidized portion of the development is modeled as seeking to build units that, on average, meet the income capacities of a household of three. This is 72 percent of the median for moderate-income households and 45 percent of median for low-income households.

The ability to purchase a unit has two components: down payment and annual carrying charges. The percent of the purchaser's income in a down payment is usually framed by the requirements of the permanent lending agency; it does not enter the model as a constraining factor other than to reduce the principal repayment obligation by that amount. In this model, market units are assumed to be equally distributed between private (20%) and insured (10%) down payment requirements. An average 15 percent down-payment is used. Below market units are assumed to require 5 percent down-payment.

Ability to purchase is limited by the carrying charges associated with monthly payments towards mortgage, taxes, maintenance and utilities, and insurance. The components of monthly carrying charges are displayed in Exhibit 12. The major cost to the buyer is the monthly mortgage, ranging from a high of $705 in the market units to a low of $235 in the low-income subsidized units. All three scenarios entail a below-market interest rate of 10 percent for the use of low- and moderate-income homebuyers. Market units are assumed to have permanent financing (30 year) at 14 percent (including one percent for insurance).

Following the mortgage payment in size is the property tax. The monthly property tax includes exactions for municipal, school district, and county purposes. The aggregate (municipal, school, county) equalized tax rate is $3.01 per $100. Other special district assessments have not been incorporated in the model, and are not considered a significant factor in the analysis. The tax payment ranges from $176 to $71 a month depending upon model and market segment. These calculations are based on the assumption that a market value will be placed upon the selling price of the dwelling unit. A subsidy not currently available to Mount Laurel-type buyers is tax abatement. Current state-enabling legislation requires the use of residential tax abatement in cases of neighborhood redevelopment districts, and specifically to projects directed to the improvement of existing multiple dwellings (NJSA 54:4-3.121). A change in the enabling legislation to incorporate low- and moderate-income housing as a valid public purpose for tax abatement would permit a greater portion of the income of low- and moderate-income households to be directed toward mortgage payments. In turn, this would lessen the level of the developer's subsidy on these units.

A second alternative use of the property tax could occur through Tax Increment Financing enabling legislation. This mechanism permits the municipality to finance project-related public improvements through the dedication of incremental tax receipts to the repayment of municipal bonds. This would be an additional source of aid to Mount Laurel homeowners in that developer costs could be further reduced from the levels currently envisioned in the Shared-Subsidy model.

The final cost component is the monthly household insurance payment. This item enters the model as a parameter, and not in itself a focus of a subsidy policy.

EXHIBIT 12

MONTHLY HOUSING PAYMENTS FOR BUYER BY
RESIDENTIAL TYPE AND DWELLING SCENARIO

Model	Regular Income	Moderate Income	Low Income
Developer Subsidy			
1. Mortgage	$705	$400	$235
2. Property Tax	$176	$120	$ 71
3. Insurance	$ 16	$ 10	$ 10
Shared Subsidy			
1. Mortgage	$655	$391	$235
2. Property Tax	$161	$118	$ 71
3. Insurance	$ 14	$ 9	$ 8
Least Cost			
1. Mortgage	$604	$390	$235
2. Property Tax	$163	$117	$ 71
3. Insurance	$ 13	$ 9	$ 8

Source: CUPR Affordable Housing Subsidy Model

Conclusion

The buyer's ability to pay for a housing unit has been defined in all models. The difference between real costs and Mount Laurel price must be made up through a subsidy mechanism. In one case, the developer would be responsible for the bulk of the subsidy; in the second and third cases, the local municipality would share a portion of the necessary subsidy. It is to the ability of the developer to meet these subsidies this report now turns.

DEVELOPMENT FEASIBILITY

This section examines the profitability of Old Bridge development from the point of view of the developer. Elements from the "Housing Cost" and "Buyer's Ability to Pay" sections are incorporated in this analysis to estimate a rate of return on investment for the entire development. It must be noted again that the lengthy buildout period, with its lagged revenue and heavy front-end costs, are the dominant factors in the analysis.

The feasibility of the project depends upon Olympia & York being able to get a satisfactory rate of return on its investment. Its desired rate of profit on all investment items is assumed to be 10 percent. The investment to be made by Olympia & York over the buildout period is shown in Exhibit 13. These values reflect time discounting of future investment as well as the present value of holding sunk costs over the buildout period.

EXHIBIT 13

TIME-DISCOUNTED OLYMPIA & YORK INVESTMENT IN
OLD BRIDGE MIXED-USE PROJECT
(In Thousands of Dollars)

	Land*	Residential Investment	Business Investment	Total Invesment
Developer Subsidy	$64,000	$343,170	$47,615	$390,785
Shared Subsidy	$56,000	$368,082	$52,843	$420,925
Least-Cost Housing	$57,968	$378,482	$66,054	$444,536

*Land costs are included in the residential and business-investment columns based upon the fractional allocation procedure described in Appendix A.

Source: CUPR Affordable Housing Subsidy Model

For the three models, the present value of the total investment ranges from $391 million to $444 million. Assuming a ten percent profit per year expressed in present-value terms, the profit from such a development should range from $39 million to $44 million.

Given this profit standard, how close do the development scenarios theoretically come to meeting it? Exhibit 14 shows the components of gross profit* for the various types of development.

EXHIBIT 14

COMPONENTS OF GROSS PROFIT IN PRESENT VALUES
FOR THE OLYMPIA & YORK, OLD BRIDGE PROJECT
(In Thousands of Dollars)

MODEL	BUSINESS	RESIDENTIAL			
		Regular Income	Moderate Income	Low Income	Total
Developer Subsidy	$10,778	$11,883	$ 204	$ 0	$22,865
Shared Subsidy	$11,962	$14,693	$3,467	$ 0	$30,121
Least-Cost Housing	$14,952	$20,582	$5,868	$ 0	$41,402

Source: CUPR Affordable Housing Model

Each of the models show the importance of the business development to the project. In all cases $11 million or more of present-value profit is obtained by the developer from the nonresidential sector. In the case of

*Gross profit is the sum of all profits before developer subsidies are calculated. It is the value-producing components of the project before their respective subsidies are taken into account. This is not to be confused with net profit, which will be discussed subsequently.

EXHIBIT 15

DEVELOPER SUBSIDIES TO THE RESIDENTIAL SECTOR
OF THE OLD BRIDGE PROJECT

Model	Regular Income	Moderate Income	Low Income
Developer Subsidy			
1. Unit Subsidy	$10,208	$7,908	$20,782
2. Present Value of Market-Segment Subsidy (x1000)	$22,538	$2,997	$ 9,748
Shared Subsidy			
1. Unit Subsidy	$ 7,116	$ 20	$12,796
2. Present Value of Market-Segment Subsidy (x1000)	$18,533	$ 0	$ 7,149
Least Cost			
1. Unit Subsidy	$ 4,908	$ 0	$12,561
2. Present Value of Market-Segment Subsidy (x1000)	$12,833	$ 0	$ 3,141

Source: CUPR Affordable Housing Subsidy Model

the residential component, the exhibit reflects the gross profit levels prior to the deduction of subsidies by the developer to homeowners. Profits are not built into the cost calculations for the low-income component. Contrasting the three models, the Least-Cost Model yields the highest level of total profits.

The developer's subsidy to the homeowner is the cause of the losses shown in the project. The depth of these subsidies is shown in Exhibit 15. In the Developer-Subsidy Model, the subsidy per unit at selling time ranges from close to $21,000 for the low-income unit to over $10,000 for the regular-income unit. In the case of the Shared Subsidy Model, the segment needing a subsidy to lower the purchasing price is the low-income, at approximately $12,800 per unit.

The rate of return on investment requires estimates of both profits and investments in terms of present values. The aggregate investment and profit figures for the project as a whole are shown in Exhibit 16.

EXHIBIT 16

PROJECT PROFITABILITY ESTIMATES BY DEVELOPMENT SCENARIO
(In Thousands of Dollars)

Model	Total Project Net Profit	Total Project Investment	Rate of Return on Investment	Developer Subsidy as Percent of Investment
Developer Subsidy	-$11,417	$390,785	-2.92%	8.77%
Shared Subsidy	$ 4,439	$420,925	1.05%	6.10%
Least-Cost Housing	$25,428	$444,536	5.72%	3.54%

Source: CUPR Affordable Housing Subsidy Model

The results show that the Developer-Subsidy scenario will result in a net loss for the corporation; the Shared Subsidy Model fares somewhat better at 1.1 percent gain; while the Least-Cost Model is best, with a return on investment of close to 5.7 percent. These conclusions are summarized in Exhibit 17.

Improvements can, on paper, be made on both sides of the market. On the cost side, any shortening of the buildout period will reduce the time costs of holding assets in raw land and tract improvements. The application of municipal or state funds to aid in the write-down of front-end costs to the developer would likewise help towards the success of the project. As

EXHIBIT 17

AFFORDABLE HOUSING MODEL: DEVELOPER-SUBSIDY, SHARED-SUBSIDY, AND LEAST-COST SCENARIOS — OCCUPANCY COSTS, AFFORDABILITY, AND PROJECT ECONOMICS

PROJECT PARAMETERS	Market Segmentation by Income								
	DEVELOPER-SUBSIDY MODEL			SHARED-SUBSIDY MODEL			LEAST-COST MODEL		
	Regular	Moderate	Low	Regular	Moderate	Low	Regular	Moderate	Low
MONTHLY OCCUPANCY COST									
Principal and Interest	$ 705	$ 400	$ 235	$ 645	$ 391	$ 235	$ 604	$ 390	$ 235
Property Taxes	176	120	71	161	118	71	163	117	71
Maintenance	50	50	50	50	50	50	50	50	50
Insurance	16	10	10	14	9	8	13	9	8
Total Monthly Cost	$ 947	$ 581	$ 366	$ 869	$ 569	$ 364	830	$ 566	364
AFFORDABILITY									
Total Annual Payment	$11,359	$ 6,981	$ 4,388	$10,432	$6,822	$ 4,368	$ 9,959	$6,797	$4,367
Shelter-Paying Capacity (28 Percent of Income)	$11,363	$ 6,987	$ 4,367	$10,435	$6,987	$ 4,367	$ 9,960	$6,797	$4,367
PROJECT ECONOMICS									
Subsidy Per Dwelling Unit	$10,208	$ 7,908	$20,782	$ 7,116	$ 20	$12,796	$ 4,908	0	$12,561
Return on Investment	**********	-2.92%	**********	**********	1.05%	**********	**********	5.72%	**********
Developer Subsidy as Percent of Total Subsidy	**********	81.6%	**********	**********	58.4%	**********	**********	40.1%	**********
Municipal Subsidy as Percent of Total Subsidy	**********	0.00%	**********	**********	28.2%	**********	**********	30.7%	**********

Source: Center for Urban Policy Research analysis.

earlier noted, proceeds from municipal bonds supported by tax increments dedicated to the support of tract-wide residential infrastructure or Industrial Development Bonds for the business component would further aid the project. On the demand side, it must be recognized that the interest rates for all Mount Laurel-type households across both scenarios are being subsidized through the state HMFA. Additional buyer support may be had through a tax abatement on all Mount Laurel housing.

DETERMINATION OF THE TOTAL SUBSIDY COST

Each of the suggested subsidy mechanisms must be supported by either the developer or the public sector. It has already been shown that the developer's subsidy to the project is, at times, greater than his profit. In this section, the magnitude of each subsidy will be examined and the cost of the Mount Laurel inclusionary housing policy discussed. Exhibit 18 places all subsidies in the context of the three development scenarios. The subsidies listed include the developer's identified losses, foregone profits and contingency costs for low-income Mount Laurel housing in the Least Cost Model, the state's reduction of the mortgage interest rate to low- and moderate-income buyers, and the municipality's forgiveness of fees, construction property taxes, and direct support for tract-related subdivision costs to the Mount Laurel component of the project.

The Developer Subsidy

The developer's profit is considered a legitimate cost item. A conservative return of 10 percent on investment has been put forth as the desired level of profit from the residential component of the Old Bridge project. Profits from the residential component less than this will represent a subsidy by the developer to the permanent occupants of the development.

The developer is modeled in the three scenarios as channeling two types of subsidies to the Old Bridge project. First, there is a hidden subsidy in that contingency and profit cost items are foregone for the all low-income units. Covert subsidies range from $3.7 million to $1.7 million. Second, in addition to these covert subsidies, there are both market and below-market segments where cost levels exceed revenues. These subsidies are termed "overt." The overt subsidies range in value from $31 million to $16 million across the three scenarios. In all cases, the developer's subsidization of the project exceeds $18 million in terms of present value.

State Interest Rate Subsidy

The interest rate charged to low- and moderate-income households is shown to be reduced in both models from its current estimated rate of 14 percent to 10 percent. Exhibit 18 shows that the present value of this subsidy at market rates ranges from $6.7 million to $12.8 million across the three scenarios. That is, the state must set aside the equivalent purchasing power of from $6.7 to $12.8 million in order to ensure an annual fund sufficient in size to meet these interest subsidies. These figures

EXHIBIT 18

SUMMARY OF SUBSIDIES TO RESIDENTIAL SECTOR

SOURCE OF SUBSIDIES	DEVELOPER-SUBSIDY MODEL	SHARED-SUBSIDY MODEL	LEAST-COST MODEL
DEVELOPER			
Overt	$34,281,980	$25,680,000	$15,974,000
Covert			
Profit and Contingency	3,631,360	3,773,000	1,655,000
	$37,913,340	$29,453,000	$17,629,000
STATE			
BMIR	$ 8,562,555	$ 6,744,457	$12,830,134
	$ 8,562,555	$ 6,744,457	$12,830,134
MUNICIPALITY			
Fees	$ 0	$ 2,518,000	$ 2,290,000
Financing Charges	0	1,621,000	1,474,222
Subdivision	0	2,844,000	3,355,000
Construction Property Taxes	0	7,244,844	6,372,815
Construction Interest-Rate Reduction	0	0	0
Property Tax Abatements	$ 0	0	0
	$ 0	$14,227,844	$13,492,037
TOTAL	$46,475,895	$50,425,301	$43,951,171

Sharing the Burden

In the current scenarios, the subsidies needed to support the Mount Laurel court mandate are derived from three sources: the developer, the state, and various units of local government. Exhibit 19 shows the distribution of the burden for both development scenarios. In the Developer-Subsidy Model, almost the entire subsidy comes from the developer where the delivery cost/sales price ratios are consistently in excess of one. The developer's share of the $46 million subsidy is 82 percent. The Shared Subsidy Model increases the needed subsidy and broadens the range of participants. The developer is still the principal source of the necessary subsidies. The total subsidy needed has risen to $50 million, and the developer's share has dropped to approximately 58 percent of that figure. Local government is shown to support 28 percent, while the state's share is 13 percent of the subsidy.

EXHIBIT 19

THE SHARE BY SOURCE FOR SUBSIDIES
TO THE OLYMPIA & YORK HOUSING PROJECT

	Developer-Subsidy Model	Shared-Subsidy Model	Least-Cost Model
Developer	81.6%	58.4%	40.1%
State	18.4%	13.4%	29.2%
Local Government	0.0%	28.2%	30.7%

Source: CUPR Affordable Housing Subsidy Model

The Least-Cost Model presents a case where a maximum effort to promote the efficiency of this project is made. Here, the developer's subsidy has dropped to 40 percent of the total, the state interest-rate financing has grown to 29 percent due to the larger number of moderate-income dwelling units,* and Old Bridge's share rises to 29 percent of the total.

CONCLUSION

Three financial models representing realistic conditions surrounding the Old Bridge development have been constructed. Each incorporates current cost estimates and current financial conditions into its initial assumptions. What varies in each scenario are the local regulations modifying

*reflecting the change from 10/10 distribution of low- and moderate-income units in the Shared Subsidy Model to 16/4 in the Least Cost Housing Model.

both the density of development and subdivision processing times, and state- and local-government subsidies for the public-purpose components of the project.

In the first case, the developer is on his own in financing the project while being constrained to build over 2,000 units of low- and moderate-income housing. While some gross profit occurs, the subsidies are sufficiently great to yield an overall loss of -3.0 percent as the rate of return on investment.

In the second scenario, the municipality shares a part of the financial burden of the project. In addition, the number of units to be built in the project has been increased. However, to gain these benefits, the developer has shifted downward the selling prices of regular- and moderate-income units. The result to the developer is a 1.1 percent rate of return on investment over an 18-year buildout period.

In the final scenario, no additional subsidies are granted. However, the distribution of Mount Laurel units has shifted to favor the construction of moderate-income units over low-income units at a rate of 4 to 1. Prices are again dropped for the purpose of shortening the financing charges associated with the buildout period. The buildout period is reduced by three years. This combination of strategies is successful in raising project-wide profits to a level that generates an approximate 5.7 percent rate of return.

As with most real estate projects of significant size, the Old Bridge development is faced with the heavy front-end commitment of the developer's resources. In addition, the rules of the development game have shifted to require the fulfillment of housing subsidies for lower-income households with the curtailment of profits from the units dedicated to these households; thus, the focus of attention for project feasibility must shift to the regular-market segment of the project as well as the nonresidential component. The profits acquired from these two components must be sufficient to outweigh the below-market residential losses. Here the projection of the demand side of the market is critical. A failure to maintain working capital in the face of heavy debt-financing charges could quickly smother the project and provide the developer a not-inconsiderable loss. On the other hand, if demand arises sufficient to build out over a 15-year period, modest before-tax returns may be likely.

APPENDIX A

AFFORDABLE HOUSING SUBSIDY MODEL

The CUPR Affordable Housing Subsidy Model is a computerized financial model used to combine relevant development parameters and governmental subsidies into an index of development feasibility. Its primary purpose is to show the feasibility of producing low- and moderate-income housing under subsidized conditions. Where business development is contingent upon meeting certain housing goals, the model must be augmented with the appropriate cost and profit parameters associated with the business development. The model adjusts all dollar figures for the cost of money held over time; in addition, all future costs and revenues are inflated at a 5 percent annual rate.

Staging of development results in multi-year flows of revenues and costs. This is treated in the model by spreading the flows evenly throughout the relevant time spans. That is, business investment is spread evenly over the sixth to tenth years, inclusive. However, in leasing these improvements, the developer receives profits over the physical life of the project (assumed to be 24 years). Tract improvements are spread evenly over the first two-thirds of the residential buildout period. Lastly, residential construction is spread evenly over a given scenario's buildout period.

Residential development starts when a building permit is granted. Front-end sunk costs vary across the three models depending upon the delays encountered by the developer. Inflation affects only post-permit costs and revenues. Prices are allowed to grow as if future market-clearing demand will be driven by demand-side forces. This assumption maximizes the opportunity for the developer to experience profits throughout the buildout period. Finally, all future values of revenues derived from sales and costs are discounted to present value using a discount rate of 14 percent.

This model is oriented toward the supply side of the housing production market. Demand is taken as a given; that is, market clearing prices are assumed to be the delivery prices adjusted by subsidies, if present, and displayed in the output generated by the model.

The residential component of the planned development project is partitioned into three market segments. The market segments consist of dwelling units built or priced for three separate income levels: units selling to households with incomes sufficient in size to purchase without state or local subsidy, units selling to households with incomes at 80 percent of the region's median income (moderate incomes), and units selling to households with incomes at 50 percent of the regional median. The latter two market segments will commonly require a subsidy to complete a transaction.

The computer printout derived from the running of a particular development scenario unfolds in four stages (see this Appendix after symbol definitions); a fifth stage, not displayed, is used to construct the descriptive materials in the text. The first stage displays the physical and financial parameters surrounding the planned development project. These are the inputs that can be varied to construct new development scenarios.

The second stage combines cost and quantity parameters in such a way that total delivery costs per unit by market segment, either with or without developer subsidies are calculated. The third stage of the model examines the carrying costs facing the buyer and compares these with borrowing limits based upon household income levels. The fourth stage of the model establishes the market clearing subsidy conditions facing the developer for each market segment and for the total project. Development feasibility is indexed by an estimate of the rate of return on the developer's investment. The final stage of the model calculates the costs of the subsidies from state or local government needed to bring the project to market. Each of these stages will now be described.

A. Basic Data Inputs

The basic data inputs can be grouped into three categories: (1) timing, size, and scope of total project; (2) external fiscal parameters facing the project, and (3) internal cost parameters. Each input parameter is given a symbol adjacent to its description. Since all of the variables included in the first stage are given outside of the model, they are symbolized in the general form as (Xi) where the "i" stands for a particular variable.

The list shown in Exhibit A-1 completes the model's parameters. The second stage shows the use of these parameters to determine the delivery costs of housing units.

B. Housing Delivery Costs

Housing costs are determined by summing land acquisition, land improvement, construction, contingency, overhead and profit terms together, discounting, where appropriate, where the cost of holding money is a factor for the developer. At this stage of the model, the exogenous inputs from Stage A will be combined to calculate what are termed the values of endogenous variables. In addition, endogenous variables will also be used on occasion to calculate the values of other endogenous variables. The special nature of endogenous variables suggests that they be given a distinctive symbol. The general form of the symbol for an endogenous variable will be: (Yj) where j represents the endogenous variable.

The time cost of money must be incorporated in several housing-cost determining equations. Two financial factors are used when appropriate -- the net present value of an annual flow (NPV), and the regular payment required to fund a principal (PMT). Both values require the use of an interest rate for discounting purposes and a time period to denote the term of the relevant financial instrument. The formulas used in both cases are incorporated in the equation defining each variable.

EXHIBIT A-1

LIST OF PARAMETERS FOR THE CUPR AFFORDABLE HOUSING MODEL

Symbol	Description
X1	Number of dwelling units in project by market segment
X2	Number of square feet of business development
X3	Average value of a square foot of business development
X4	Years required to build out complete project
X5	Years to complete tract improvements
X6	Gross residential density (units/acre)
X7	Total land acquisition and holding costs up to development
X8	Total tract improvement costs (water, sewer, storm drainage, roads, etc.); current costs only -- no time discounting
X9	Per unit on-site subdivision improvement costs
X10	Residential construction costs per square foot
X11	Residential floor area
X12	Unit sewer/water public fees
X13	Unit building permit fees (planning, subdivision, county)
X14	Unit professional fees
X15	Unit advertising costs
X16	Unit association fees
X17	Contingency percent
X18	Overhead percent
X19	Profit percent
X20	Months to hold construction loan
X21	Interest rate on construction loan
X22	Average fraction of construction loan outstanding
X24	Percent down payment required of buyer
X25	Interest rate on mortgage by market segment (if subsidized)
X26	Mortgage term in years
X27	Interest rate to developer to carry land assembly and tract improvements
X28	Fraction of tract improvement costs subsidized by government for a market segment
X29	Equalized tax rate: local purposes, schools, and county
X30	Annual property taxes paid on raw land by developers
X31	Annual property taxes paid on land by developer after development is approved by municipality
X32	Annual profit per square foot of business development
X33	Unsubsidized interest rate on home mortgages
X34	Domestic Municipal Bond yields
X35	Allowed price of average unit within a market segment

Symbol	Description

Y1 Market segment specific weight used to allocate residential component of project-wide land assembly and tract improvement costs.

Y1 = (X1/X6)(X11)(X10)

Y2 Land assembly and carrying costs per residential unit. Land acquisition costs (X7) are first partitioned between residential and business components of the project by the fraction of total value associated with both components. Second, each market segment is allocated a portion of the residential share according to its weight (Y1). Third, each unit within a segment is allocated a portion of the residential share according to its weight (Y1). Third, each unit within a segment is allocated its share when built. It is assumed that units will be built at equal annual increments, thus forcing the developer to continue to finance a portion of land costs up to the end of the buildout period. Unit land costs are, therefore, a regular payment based on units (X1), buildout period (X4), interest rates (X27) applied to a principal (X7) as partitioned by business value (X2, X3), an estimate of total residential value, and market segment weight Y1.

Y2 = (X7)[Y30/((X2)(X3) + Y30)]

[(X27)/(1-((X27 + 1)†-(X4)))](Y1/Sum Y1)/(X1/X4)

† = Exponentiation function

Y3 Land improvement (site and tract) costs less any subsidy. Land improvement costs are treated in two ways depending upon holding costs faced by the developer. On-site improvements are assumed to enter the cost stream during the sale year of the dwelling unit. The associated short-term time costs are considered elsewhere as a part of interim financing. On the other hand, tract improvements must be in place long before the last unit is constructed and sold. The model acknowledges this by phasing in tract improvements over a short time period (X5) at equal annual increments. The allocation of tract improvement costs must take into consideration both the fraction of the total development allocated to residential development as well as the share of the tract improvements associated with each segment of the rsidential comoponent of the development.

Y3= [[(X27)(1-X28)(X8/X5)[Y30/((X2)(X3) + Y30)(Y1/Sum Y1)](1/X27)

[1-(1/((1+X27)†X5))]/(1-((X27+1)†-(X4)))]/(X1/X4) + 5649

Symbol	Description

Y4 Interim finance factor

$$Y4 = [X21(X20/12)(X22)]$$

Y5 Construction costs per unit. These are essentially brick-and-mortar and labor costs associated with the dwelling unit as opposed to land improvement.

$$Y5 = [(X10)(X11]$$

Y6 Property taxes during construction. Prior to the issuance of a certificate of occupancy by the municipality, the developer is required to pay property taxes on the value of the land. Prior to the issuance of building permits, the land will be valued at the level of raw land. After issuance, valuation will be made on its basis as developable land. The amount of land held by the developer will be incremented downward to reflect annual sales. The net present value of the series of annual construction period tax bills (NPV) is allocated to each unit sufficient to support the total project-wide tax over the buildout period. The formula used to do this is equivalent to that used in equation Y2 to allocate land assembly and carrying costs.

$$Y6 = NPV(X30)[Y30/((X2)(X3) + Y30)](Y1/Sum\ Y1)/X1$$

Y7 Soft costs. Soft costs are variable costs associated with the purchase of professional services outside the firm, advertising costs for the support of sales, and property taxes.

$$Y7 = (X14 + X15 + Y6)$$

Y8 Bondable improvements. Land improvement costs plus a thirty percent cushion for underestimates.

$$Y8 = [1.3\ (Y3)]$$

Y9 Performance bond. One percent of bondable improvements.

$$Y9 = [0.01\ (Y8)]$$

Y10 Contingency. A fund set up to protect the developer against unanticipated costs. The normal size of the fund is set at five percent of land, land improvement, construction and soft costs. Contingency does not apply to low-income units.

$$Y10 = [0.05\ (Y5 + Y7 + Y14)]$$

Symbol	Description

Y11 Interim financing costs and residual costs associated with period of construction. This is an intermediate calculation used to accumulate interim finance costs, public fees, soft costs and bonds and contingency set-aside.

$$Y11 = [(Y4(Y3 + Y5 + X12 + X13 + Y7 + Y9 + Y10)) + X12 + X13 + Y7 + Y9 + Y10]$$

Y12 Interim finance costs. As used in Y11, the interim finance factor is used to calculate time-dependent construction costs.

$$Y12 = [Y4(Y3 + Y5 + X12 + X13 + Y7 + Y9 + Y10)]$$

Y13 Total land development costs per unit. This is an intermediate calculation used within the program.

$$Y13 = (Y11 + Y2)$$

Y14 Construction and land improvements per unit. This is the cost to the developer for providing all improvements to the project allocated on a per unit basis. It excludes interim financing costs and public fees.

$$Y14 = [(X10)(X11) + Y3]$$

Y15 Overhead costs per unit. This budget item identifies central office administrative contributions to the construction of a unit of housing. It is currently set at 10 percent of land and construction costs.

$$Y15 = [X18(Y13 + Y14 + Y10)]$$

Y16 Desired profit per unit. This is the planned excess of net revenues at the time of sale over the total time-discounted costs experienced by the developer. No profit is taken on low-income units.

$$Y16 = [X19(Y13 + Y14 + Y10 + Y15)]$$

Y18 Total delivery costs per unit. The sum of all costs, direct and indirect, used to support the construction of a dwelling unit within the project.

$$Y18 = (Y13 + Y10 + Y14 + Y15 + Y16)$$

******Allowable Price: A price ceiling placed on the average value of a market segment's housing in a project.*

*This is an exogenous variable, the value of which corresponds to housing payments (mortgage, taxes and insurance) that are then used to calculate the minimum income required by mortgage lending agencies to accept a mortgage application. Where this is not a constraint, comparable sales of similar housing constrains price.

Symbol	Description

C. Buyer's Ability to Purchase

The target price for each class of dwelling unit has been set as an exogenous variable. What remains is to determine the buyer's income level necessary to purchase a unit. The income level derived for the regular market segment is adjusted such that shelter paying capacity (defined as 28 percent of income) equals annual payments. For Mount Laurel households, income is defined as the 72 percent or 45 percent of regional median family incomes (family size of three). In some cases, the Mount Laurel income capacity would permit a selling price in excess of net cost; in this case price will be defined as cost. This usually happens in the case of moderate income units.

In other cases, the full income capacity of the Mount Laurel household will not be used for housing payment purposes. This is caused by the parameterization of income at the 80 and 50 percent of median while price is parameterized for purchase somewhat below that ceiling level.

Each unit requires a

down payment -- 15 percent for regular market buyers, and 5 percent for Mount Laurel buyers. The remainder of the price is financed through a 30-year mortgage, whose interest rates also vary by the status of the buyer. Regular market buyers are charged 14 percent, while Mount Laurel buyers have a 10 percent interest rate. The latter is subsidized by the New Jersey Housing Mortgage Financy Agency. In addition to the mortgage, carying charges include property taxes assessed on the full purchase price of the unit and a fixed monthly homeowners' association fee. Changes in the terms of the mortgage, taxes, or fees change the minimum income level necessary to purchase a unit.

Y19 Required down payment. The fraction of the asset value of the property that must be transferred by the permanent house owner to the mortgage holder. An average of 15 percent for market units; 5 percent for below-market units.

Y19 = (X24)(Y18)

Y20 Monthly mortgage. This is the monthly payment made by the house owner for the purpose of repaying principal and interest. It is calculated as the regular monthly payment needed to repay principal at a given interest rate over a term of years.

Y20 = ((Y18)(1-X24)(X25/12)/(1-(((X25/12) + 1)↑-12(X26))))

Symbol	Description

Y21 Monthly property tax. The monthly property tax is one-twelfth of the annual property tax. This is based on the selling price of the residential unit determined by the market for unsubsidized units or as specified in the deed-restricted selling price for the subsidized units, and the equalized total property tax rate facing property in the jurisdiction.

Y21 = (X29(Y18**/100)/12)

Y22 Monthly maintenance cost. This is the monthly neighborhood association fee.

Y22 = $50.00

Y23 Monthly insurance cost. This is an estimate of the insurance costs faced by the homeowner. It is currently set at two ten-thousandths of one percent of value.

Y23 = (0.0002(Y18))

Y24 Total monthly payment. This is the sum of the various payments required to service and protect the aset value of the dwelling unit.

Y24 = (Y20 + Y21 + Y22 + Y23)

Y24a Target household income is derived after determining the necessary annual payments needed to purchase a dwelling unit. Based upon current mortgage market conditions, the total annual payment must not exceed 28 percent of household income. The model takes the income level derived from this criteria and defines it as the target income level.

D. Development Feasibility

This section brings together the cost and revenue stages of the model. Regular-market units sold at a price that meets costs and provides the developer with profits. When sold below cost, the developer subsidizes the unit to the extent of the difference. Mount Laurel units are constructed under the assumption that profits and contingency costs are waived. Thus, subsidy occurs only when revenues are less than net cost (net cost equals full cost minus desired profits).

Revenues derived from the sale of units as well as all variable costs associated with the project grow at an annual compounded rate of 5 percent. The effect of this is to reduce the importance of the initial sunk costs for land assembly. Where revenues exceed net costs, the developer is modeled as taking inflation-based profits.

Symbol	Description

Project feasibility is quantified by combining all profits expressed in terms of present values, deducting developer subsidies and expressing this as the numerator of a ratio with total project investment as the denominator. Lastly, the weight of the subsidy is quantified as a ratio of total developer subsidy to total developer investment.

Y25 Shelter-paying capacity. Under current secondary mortgage-market conditions, the maximum percent of household income to be spent servicing one's mortgage is 28 percent.

Y25 = (0.28(Y24a))

Y26 Subsidy at sale of unit. This is the difference between the construction cost of a unit and its ceiling price; if negative, it is zero.

Y26 = [Y18-Y18**]

Y27 Profit net of subsidy per unit in current dollars. This is the positive difference between the desired profit level and the developer's subsidy per unit. Residential profits are also expressed in terms of market segment in current dollars as well as in present value.

Y27 = (Y16-Y26)

Y28 Total profit by market type. This is the product of the number of units constructed in a given market segment over the project buildout period times the net profit expressed as a present value and adjusted for inflation-induced profits.

Y28 = ((X1/X4)(Y27)((1/X27)(1-(1/((1 + X27)↑X4)))))

Y29 Total project profit. This is the sum of the present values of all residential profits as well as business profits for 18 years expressed in present value terms.

Y29 = (Sum Y28 + [[(X2)(X32)/X5][(1/X25)(1-(1/((1+X25)↑18)))]

[1/X25(1-(1/((1+X25)↑6)))]

Symbol	Description

Y30 Total investment by market segment expressed in terms of present values. This is the inflation-adjusted sum of land, construction, contingency, and overhead items.

Y30 = ((Y2)(X1) + ((Y3-5649)(X1)) + ((X1/X4)[[(Y11 + (X10)(X11)]

+ 5649 + Y10 + Y15][(1/X27)(1-(1/((1 + X27)↑X4)))]

Y31 Total project investment. This is the sum of the present values of residential and business costs experienced during construction and buildout.

Y31 = (Sum Y30)

Y32 Rate of return on developer's investment. This is the ratio of total net profit over total project investment expressed as a percentage.

Y32 = (Y29/Y31)*100

Y33 Developer subsidy as a percent of total investment.

Y33 = [[Sum(X1)(Y16-Y27)]/Y31]]100

E. Project Subsidies

The summation of subsidies associated with this project is a manual set of calculations. These calculations identify the present value of the project burden to each source of subsidy. The state provides a subsidy through its mortgage interest-rate reduction. The municipality is associated with three active sources of subsidy. These are: first, the foregone property taxes during construction for the increment to property values obtained due to the release of a builders' permit for the project; second, the reduction of fees for sewer and water hookups, as well as municipal and county fees for planning and subdivision reviews and inspections; and third, the municipal assumumpton of the full tract-related subdivision improvement costs associated with the share of the project allocated to Mount Laurel-type housing units.

The final source of subsidies for this project is the O & Y corporation. This subsidy is defined in the previous section as the difference between costs and revenues with the Mount Laurel unit treated as accumulating neither contingency costs nor profits for the developer.

Symbol	Description

Calculation Performed But Not Reported on Computer Runs:

Determination of Total Subsidy Costs for State and Local Governments in Terms of Out-of-Pocket Costs As Well as Omitted Future Revenues

Y35 Subsidy derived from construction interest reduction per unit. This is the difference in costs to the developer for short-term construction loans at market rates versus loans at a lower interest rate. Adjustments are made for inflation annually decreasing developer liability due to unit sales and time costs of money.

Y36 Present value of total project-wide construction interest subsidy. This is the sum of all construction-period across-market segments and units.

Y36 = [Sum (X1/X4)(Y35)](1-(1/((1 + X21)↑X4)))

Y37 Annual mortgage interest subsidy to householder.

Y37 = [(X33/12)(1-X24)(Y18)]/(1-(((X33/12 + 1)

↑-(12*X26))))-[(Y20)(12)]

Y38 Present value of mortgage interest subsidy per unit.

Y38 = (Y37/X25)(1-(1/((1 + X25)↑X26)))

Y39 Present value of market segment interest subsidy as it occurs during buildout period.

Y39 = [(X1/X4)(Y38)][(1-/((1+X25)↑X4))))]

Y40 Municipal fee subsidy. In terms of present values based upon time within buildout period, the fee was forgiven.

Y40 = [(Delta X12)(X1/X4) + (Delta X13)(X1/X4)]

(1-(1/((1 + X25)↑X4)))

Delta represents the difference between the unsubsidized market segment and a subsidized segment.

Symbol	Description

Y41 Present value of total municipal fee subsidy for project including municipal borrowing costs.

Y41 = ((Sum Y40) + ((((Sum Y40)((1 + X34)↑X5))-(Sum Y40)/

((1 + X34)↑X5))))/1000

Y42 Annual property tax abated per unit. This is a single year's value of the local purpose, school district, and county property taxes abated for a given unit within the project.

Y42 = [(X29)Y18**/100]-[(Y21)(12)]

Y43 Annual value of property taxes abated over each year of proposed buildout.

Y43 = (Sum Y42)(X1/X4)

Y44' Present value of tax abatements staged over the buildout period and flowing for the term of the householder's mortgage including municipal borrowing costs.

Y44 = [(Y43)(1/X25)(1-(1/((1 + X25)↑X26)))]/

[(X25)((1-(1-/(1 + X25)↑X4))))]

Y44' = (Y44 + (((Y44((1 + X34)↑X4))-Y44)/((1+X34)↑X4)))

Y45 Present value of municipal subdivision subsidy. Subsidy is assumed to occur on an annual basis during each year of the buildout period.

Y45 = [(X1/Sum X1)((X28)(X8/X5))(Y1/Sum Y1)(1/X25)

(1-(1/((1 + X25)↑X4))))]

Y46 Present value of all indirect municipal subsidies. This represents foregone revenues as opposed to current cash or in-kind payments to the developer.

Y46 = (Y41 + Y44')

Y47 Present value of indirect state interest subsidies.

Y47 = (Y36 + Sum Y39)

Symbol	Description
Y48	Real municipal subsidies as a percent of tax revenues generated by project. This is the ratio of the present value of subdivision subsidies over the present value of the flow of staged tax revenues received over a 30-year period by local jurisdictions.

```
Y48 = Y45/[[Sum(Y21-15.49)(12)][(1/X25)(1-(1/((1 + X25)
      †X26)))] + [((X29)((2000000)(65)/X5)(1/X27)
      (1-(1/((1 + X27)†X5)))/100]](100)
```

CUPR AFFORDABLE HOUSING SUBSIDY MODEL:
OLYMPIA YORK, OLD BRIDGE NEW JERSEY (DEVELOPER SUBSIDY MODEL)
(all percentages are expressed as decimal fractions)

1. Calculates housing delivery costs, purchaser affordability and developer feasibility, and state/municipal subsidies.
2. Permits analysis of three housing market segments: unsubsidized. moderate, and low income households.
3. Dynamic version (all results presented in current (1984) dollars however, all future costs and revenues inflate at 5% annually.

Assumptions:

1. Middle income home purchaser.
2. Full Mt. Laurel commitment (20%,10%/10%).
3. Developer absorbs all subsidies.
4. Density as indicated on O&Y Settlement Memo.
5. Normal subdivision process
6. Below market interest rates given for low and moderate income units.
7. Twenty year buildout at 513 units per year, total=10260.
8. Land assembly and carrying costs sunk at beginning of the project is $64,000,000. This covers both residential and nonresidial development. This value is allocated to each form of land use in direct proportion to estimated property value after development. The residential fraction is treated as a lump sum debt to be financed and retired through the sales of the units over a 20 year buildout period. Each unit will share this expense according to its land area and construction/improvement cost.

A. Basic data input from Olympia York study

DEVELOPER SUBSIDY MODEL

		Market Segments			
		Regular Income	Moderate Income	low Income	Comments
X1	Number of units in Total Project	8208.00	1026.00	1026.00	10260.00 S.M. p 5
X6	Units constructed per acre	6.00	12.00	12.00	S.M. p 5
X12	Sewer/water tap-in fees	1934.00	1835.00	1835.00	IAFE p.3
X13	Building permit fee	620.00	602.00	602.00	S.M. p 7
X14	Professional fees	560.00	522.00	522.00	IAFE p.1
X11	Floor Area per unit	1000.00	790.00	790.00	IAFE p.1
X10	Construction cost per sq.ft	28.00	30.00	30.00	IAFE p.1
X20	Average months to hold construction loan	6.00	6.00	6.00	CUPR 322
X21	Interest rate on construction loan	0.15	0.15	0.15	MFA 1984

X4	Years to project buildout	20.00	20.00	20.00	DY Memo
X5	Years to complete tract imp	13	13	13	
X22	Average fraction of loan outstanding	0.50	0.50	0.50	CUPR 322
X15	Unit advertising costs	150.00	0.00	0.00	CUPR 322
X29	Equalized tax rate	3.01	3.01	3.01	OB Clerk
X18	Percent overhead	0.10	0.10	0.10	D&Y 1984
X19	Percent profit (desired)	0.10	0.10	0.00	D&Y 1984
X23	Target household income	40582.00	24955.20	15597.00	HUD 1984
X24	Percent downpayment	0.15	0.05	0.05	HUD 1984
X25	Mortgage interest rate	0.14	0.10	0.10	S.M. p 7
X27	Interest on land costs	0.14	0.14	0.14	
X26	Mortgage Term (years)	30.00	30.00	30.00	HUD 1984
X28	Tract subsidy rate	0.00	0.00	0.00	S.M.p 7
	Resid fraction of project	0.91			

B. Housing delivery costs based on listed assumptions

Y1	Market Segment wgt	38304000	2026350	2026350	42356700
Y2	Land assembly and carrying costs per unit	19825	8390	8390	L. Ex 4
Y3	Land improvement per unit less subsidy	10307	7620	7620	IAFE p2 S.M. p 8
	Intermediate calculations				
Y4	Interim finance factor	0.04	0.04	0.04	CUPR 322
Y5	Construction costs per unit	28000	23700	23700	Calc. S.M. p 8
Y6	Property taxes during construction	1074	454	454	S.M. p 9
Y7	Soft costs	1784	976	976	Calc.
Y8	Bondable improvements	13399	9906	9906	Calc.
Y9	Performance bond	134	99	99	S.M. p 7
Y10	Contingency	2005	1615	0	Calc.
Y11	Interim financing and residual const. period$	8156	6494	4819	L. Ex 4.
Y12	Interim finance costs	1679	1479	1355	Calc.
Y13	Total land development costs per unit,no impats.	27981	14885	13209	Calc.

Y14	Total construction and improvement costs	38307	31320	31320	Calc.
Y15	Overhead costs per unit	6629	4620	4453	Calc.
Y16	Desired profit per unit	7292	5083	0	Calc.
Y18	Total delivery costs per unit	80208	55908	48982	Calc.
******	Allowable price	70000	48000	28200	

C. Buyer's ability to purchase unit

Y19	Required downpayment	10500	2400	1410	Calc.
Y20	Monthly mortgage	705.00	400.17	235.10	Calc.
Y21	Monthly property tax	175.58	120.40	70.74	Calc.
Y22	Monthly maintenance cost	50.00	50.00	50.00	Calc.
Y23	Monthly insurance cost	16.04	11.18	9.80	Calc.
Y24	Total monthly payment	946.62	581.75	365.63	Calc.
	Total annual payment	11359	6981	4388	Calc.
	(12 * Y24) P/I =	1.72	1.92	1.81	
	% aed=	117.05%	71.93%	45.21%	
Y25	Shelter paying capacity	11363	6987	4367	IAFE

D. Development fesibility

Y26	Current subsidy per D.U.	10208	7908	20782	Calc.
Y27	Profit net of subsidy per unit in current dollars	0	0	0	Calc.
	** by market segment(Cur th	0.00	0.00	0.00	
	** " " Pres.Valu (X1000)	11883.07	204.22	0.00	
				Res prof=12087.29	
Y28	Total subsidy (pres. value) by market type (X 1000)	21537.66	2996.77	9747.55	Calc.
Y29	Total Subsidy (X1000)	34281.98		*****	Calc.
				Netresprf -22195	
Y30	Present value investment by market type (X 1000)	292275.4	25931.0	24964.7	Calc.
Y31	Total investment (X 1000) (Bus+Res,present value)	390785		Bus Prof=10777.96	Calc.
Y32	Rate of return on developer investment as a percent	-2.92 %		*****	Calc.
Y33	Developer subsidy as a percent of investment	8.77 %			

CUPR AFFORDABLE HOUSING SUBSIDY MODEL:
OLYMPIA YORK, OLD BRIDGE NEW JERSEY (Shared subsidy model)
(all percentages are expressed as decimal fractions;

1. Calculates housing delivery costs, purchaser affordability and developer feasibility, and state/municipal subsidies.
2. Permits analysis of three housing market segments: unsubsidized, moderate, and low income households.
3. Dynamic version (all results presented in current (1984) dollars however, all future costs and revenues inflate at 5% annually.

Assumptions:

1. Middle income home purchaser.
2. Full Mt. Laurel commitment
3. Developer/municipality share development subsidies as indicated in the O&Y settlement memo.
4. Density as indicated on O&Y Settlement Memo.
5. Streamlined subdivision regulations enacted.
6. Below market interest rates given for low and moderate income units.
7. Eighteen year buildout at 645 units per year, total=11619.
8. Land assembly and carrying costs sunk at beginning of the project is $56,000,000. This covers both residential and nonresidial development. This value is allocated to each form of land use in direct proportion to estimated property value after development. The residential fraction is treated as a lump sum debt to be financed and retired through the sales of the units over a 18 year buildout period. Each unit will share this expense according to its land area and construction/improvement cost.

A. Basic data input from Olympia York study

SHARED SUBSIDY MODEL

		Market Segments				
		Regular Income	Moderate Income	low Income		Comments
X1	Number of units in Total Project	9295	1162	1162	11619	S.M. p 5
X6	Units constructed per acre	6	12	12		S.M. p 5
X12	Sewer/water tap-in fees	1934	285	285		IAFE p.3
X13	Building permit fee	620	$0.00	$0.00		S.M. p 7
X14	Professional fees	389	389	389		IAFE p.1
X11	Floor Area per unit	1000	790	790		IAFE p.1
X10	Construction cost per sq.ft	28	30	30		IAFE p.1
X20	Average months to hold construction loan	5.7	5.7	5.7		CUPR 322
X21	Interest rate on construction loan	0.15	0.15	0.15		MFA 1984

X4	Years to project buildout	18	18	18	OY Memo
X5	Years to complete tract imp	12	12	12	
X22	Average fraction of loan outstanding	0.5	0.5	0.5	CUPR 322
X15	Unit advertising costs	150	0	0	CUPR 322
X29	Equalized tax rate	3.01	3.01	3.01	OB Clerk
X18	Percent overhead	0.1	0.1	0.1	O&Y 1984
X19	Percent profit (desired)	0.1	0.1	0	O&Y 1984
X23	Target household income	37268	24955.2	15597	HUD 1984
X24	Percent downpayment	0.15	0.05	0.05	HUD 1984
X25	Mortgage interest rate	0.14	0.1	0.1	S.M. p 7
X27	Interest on land costs	0.14	0.14	0.14	
X26	Mortgage Term (years)	30	30	30	HUD 1984
X28	Tract subsidy rate	0.00	1.00	1.00	S.M.p 7

B. Housing delivery costs based on listed assumptions

Y1	Market Segment wgt	43376666	2294950	2294950 47966566	
Y2	Land assembly and carrying costs per unit	14170.74	5997.26	5997.26	L. Ex 4
Y3	Land improvement per unit less subsidy	9691.16	5649.00	5649.00	IAFE p2 S.M. p 8
	Intermediate calculations				
Y4	Interim finance factor	0.04	0.04	0.04	CUPR 322
Y5	Construction costs per unit	28000	23700	23700	Calc. S.M. p 8
Y6	Property taxes during construction	235	99	99	S.M. p 9
Y7	Soft costs	774	488	488	Calc.
Y8	Bondable improvements	12599	7344	7344	Calc.
Y9	Performance bond	126	73	73	S.M. p 7
Y10	Contingency	1923	1492	0	Calc.
Y11	Interim financing and residual const. period$	6912	3468	1923	L. Ex 4.
Y12	Interim finance costs	1534	1222	1114	Calc.

Y13	Total land developaent costs per unit,no inputs.	21082	9465	7920	Calc.
Y14	Total construction and improveaent costs	37691	29349	29349	Calc.
Y15	Overhead costs per unit	5877	3881	3727	Calc.
Y16	Desired profit per unit	6465	4270	0	Calc.
Y18	Total delivery costs per unit	71116	46965	40996	Calc.
******	Allowable price	64000	46945	28200	

C. Buyer's ability to purchase unit

Y19	Required downpayaent	9600.00	2347.25	1410.00	Calc.
Y20	Monthly aortgage	644.57	391.38	235.10	Calc.
Y21	Monthly property tax	160.53	117.75	70.74	Calc.
Y22	Monthly aaintenance cost	50.00	50.00	50.00	Calc.
Y23	Monthly insurance cost	14.22	9.39	8.20	Calc.
Y24	Total aonthly payaent	869.33	568.52	364.04	Calc.
	Total annual payaent (12 * Y24)	10431.92	6822.29	4368.43	Calc.
	%Med I=	107.49%	70.30%	45.01%	
Y25	Shelter paying capacity	10435	6987	4367	IAFE

D. Developaent fesibility

Y26	Current subsidy per D.U.	7116	20	12796	Calc.
Y27	Profit per unit in current dollars	0	4250	0	Calc.
	** by aarket segaent(Cur th	0	4938	0	
	** " " Pres.Valu (X1000)	14693	3467	0	
				Res prof=18159.62	
Y28	Total subsidy (pres. value) by aarket type (X 1000)	18533	1	7148	Calc.
Y29	Total Subsidy (X1000)	25682		*****	Calc.
			Net Resid profit= -7522.81		
Y30	Present value investaent by aarket type (X 1000)	316314	26421	25347	Calc.
Y31	Total investaent (X 1000) (Bus+Res,present value)	420925		Bus Prof=11961.64	Calc.
Y32	Rate of return on developer investaent as a percent	1.05	%	*****	Calc.
Y33	Developer subsidy as a percent of investaent	6.10	%		

CUPR AFFORDABLE HOUSING SUBSIDY MODEL:
OLYMPIA YORK, OLD BRIDGE NEW JERSEY (Least Cost Model)
(all percentages are expressed as decimal fractions)

1. Calculates housing delivery costs, purchaser affordability and developer feasibility, and state/municipal subsidies.

2. Permits analysis of three housing market segments: unsubsidized, moderate, and low income households.

3. Dynamic version (all results presented in current (1984) dollars however, all future costs and revenues inflate at 5% annually.

Assumptions:

1. Middle income home purchaser.

2. Full Mt. Laurel commitment (16% moderate, 4% low)

3. Developer/municipality share development subsidies as indicated in the O&Y settlement memo.
4. Density as indicated on O&Y Settlement Memo.

5. Streamlined subdivision regulations enacted.

6. Below market interest rates given for low and moderate income units.
7. Fifteen year buildout at 774 units per year, total=11619.

8. Land assembly and carrying costs sunk at beginning of the project is $57,968,120. This excludes all carrying costs on the original cost. This value is allocated to each form of land use in direct proportion to estimated property value after development. The residential fraction is treated as a lump sum debt to be financed and retired through the sales of the units over a 15 year buildout period. Each unit will share this expense according to its land area and construction/improvement cost.

A. Basic data input from Olympia York study
Least cost model****

		Market Segments				
		Regular Income	Moderate Income	low Income		Comments
X1	Number of units in Total Project	9295	1859	465	11619	S.M. p 5
X6	Units constructed per acre	6	12	12		S.M. p 5
X12	Sewer/water tap-in fees	1934	285	285		IAFE p.3
X13	Building permit fee	620.00	0.00	0.00		S.M. p 7
X14	Professional fees	389	389	389		IAFE p.1
X11	Floor Area per unit	900	790	790		IAFE p.1
X10	Construction cost per sq.ft	28	30	30		IAFE p.1
X20	Average months to hold construction loan	5.7	5.7	5.7		CUPR 322
X21	Interest rate on construction loan	0.15	0.15	0.15		MFA 1984

X4	Years to project buildout	15	15	15	OY Memo
X5	Years to complete tract imp	10	10	10	
X22	Average fraction of loan outstanding	0.5	0.5	0.5	CUPR 322
X15	Unit advertising costs	150	0	0	CUPR 322
X29	Equalized tax rate	3.01	3.01	3.01	OB Clerk
X18	Percent overhead	0.1	0.1	0.1	O&Y 1984
X19	Percent profit (desired)	0.1	0.1	0	O&Y 1984
X23	TARGET HOUSEHOLD INCOME	35571	24275	15597	HUD 1984
X24	Percent downpayment	0.15	0.05	0.05	HUD 1984
X25	Mortgage interest rate	0.14	0.1	0.1	S.M. p 7
X27	Interest on land costs	0.14	0.14	0.14	
X26	Mortgage Term (years)	30	30	30	HUD 1984
X28	Tract subsidy rate	0.00	1.00	1.00	S.M.p 7

B. Housing delivery costs based on listed assumptions

Y1	Market Segment wgt	39039000	3671525	918375 43628900	
Y2	Land assembly and carrying costs per unit	12306	5787	5787	L. Ex 4
Y3	Land improvement per unit less subsidy	9513	5649	5649	IAFE p2 S.M. p 8
	Intermediate calculations				
Y4	Interim finance factor	0.04	0.04	0.04	CUPR 322
Y5	Construction costs per unit	25200	23700	23700	Calc. S.M. p 8
Y6	Property taxes during construction	204	96	96	S.M. p 9
Y7	Soft costs	743	485	485	Calc.
Y8	Bondable improvements	12367	7344	7344	Calc.
Y9	Performance bond	124	73	73	S.M. p 7
Y10	Contingency	1773	1492	0	Calc.
Y11	Interim financing and residual const. period$	6616	3464	1919	L. Ex 4.
Y12	Interim finance costs	1422	1222	1114	Calc.

Y13	Total land development costs per unit,no impts.	18922	9251	7706	Calc.
Y14	Total construction and improvement costs	34713	29349	29349	Calc.
Y15	Overhead costs per unit	5363	3860	3706	Calc.
Y16	Desired profit per unit	5900	4246	0	Calc.
Y18	Total delivery costs per unit	64898	46706	40761	Calc.
******	Allowable price	59990	46756	28200	

C. Buyer's ability to purchase unit

Y19	Required downpayment	8998.50	2337.80	1410.00	Calc.
Y20	Monthly mortgage	604.18	389.80	235.10	Calc.
Y21	Monthly property tax	162.79	117.28	70.74	Calc.
Y22	Monthly maintenance cost	50.00	50.00	50.00	Calc.
Y23	Monthly insurance cost	12.98	9.34	8.15	Calc.
Y24	Total monthly payment	829.95	566.42	363.99	Calc.
	Total annual payment (12 * Y24)	9959.39	6797.07	4367.86	Calc.
	% Med I=	102.62%	70.04%	45.01%	
Y25	Shelter paying capacity	9959.88	6797.00	4367.16	IAFE

D. Development fesibility

Y26	Current subsidy per D.U.	4908	0	12561	Calc.
Y27	Profit net of subsidy per unit in current dollars	992	4246	0	Calc.
	** by market segment(Cur th	9220	7893	0	
	** " " Pres.Valu (X1000)	20582	5868	0	
			Gross	Res prof=26450.46	
Y28	Total subsidy (pres. value) by market type (X 1000)	12833	0	3141	Calc.
Y29	Total Subsidy (X1000)	15974		*****	Calc.
				NetResP= 10476.04	
Y30	Present value investment by market type (X 1000)	320771	46542	11169	Calc.
				BusInv= 66054.39	
Y31	Total investment (X 1000) (Bus+Res,present value)	444536			Calc.
				Bus Prof=14952.05	
Y32	Rate of return on developer investment as a percent	5.72	%	*****	Calc.
Y33	Developer subsidy as a percent of investment	3.59	%		

APPENDIX B

LEAST COST HOUSING MODEL

The Least Cost Model takes its name from the concept of the same name derived from the Mount Laurel II court decision (1983). In that decision least cost housing is recognized as representing a legally valid attempt to provide housing to households presently priced out of the regional housing market, but whose income levels exceed HUD Section 8 standards. There are several attributes that must be present in order to characterize housing as least cost. First, it represents the most efficient housing that current technology acting within governmental regulations, is capable of producing. Second, it is produced with the cooperation of local government in that all excessively protective land use, health, and building restrictions are removed. Lastly, it is housing that has been constructed with the help of most available subsidy devices.

In the sequence of the three development models presented in this report, the current best estimates of developer's costs have been employed to construct housing at a cost capable of being purchased by the lowest income level in the unaided market. All extra profits, other than the desired threshold level, are foregone.

The three models presented in this report represent, in the order of declining housing cost: 1) housing built under technological and regulatory parameters normal to central New Jersey; 2) housing built under reduced regulatory requirements and containing most available subsidies, and 3) housing built under the conditions of maximum production efficiency. This progression towards least cost housing can be seen in an examination of the production cost per unit versus the household income levels targeted to purchase the units.

In the case of the Developer Subsidy Model, the regular income market segment is supplied with units costing the developer $80,208 per unit to build. The corresponding income level to purchase is $40,582 per household. The ratio of these two terms is 1.98. Under the condition defined in the Shared Subsidy Model, the cost to the developer for comparable housing is $71,116 while the target income of the prospective purchaser is $37,268 yielding a ratio of 1.91.

In the final scenario, the developer through maximizing production processes and developing a smaller unit, reduces unit costs to $64,898 and targets these units to households whose income is not less than $35,571. This provides a cost to income ratio of 1.82.

The improvement in the cost-to-income ratio from the point of view of the definition of the least cost housing consumer can be seen when the normal ratio (Developer Subsidy Model) is applied to the housing price targeted for least cost housing. Where the developer's ingenuity and subsidy has reduced price to a level of $59,990, the normal ratio (1.98- representing standard building practices) would reduce the "effective" affordable income to $30,297. This effective affordable income is at 88 percent of the regional median income. What do we mean by this? We are saying through combined developer and municipal subsidies which results in a reduction of the affordability ratio of 15 percent (1.98 to 1.69), we are providing 15 percent "more house" for a buyer whose income is at 103 percent of median income. Alternatively, if the standard market ratio was in effect, housing at the selected selling price ($59,990) would be available to those at 88 percent of median. We have reduced the "effective" income of the housing purchaser to approximately $30,000 or below 90 percent of median.

REPORT V

THE SOCIOECONOMIC PROFILE OF OLD BRIDGE, NEW JERSEY

INTRODUCTION

The Need for Socioeconomic Analysis

One of the few clear-cut rules of socioeconomic analysis is that the rich tend to be much more secure than those of moderate income. One has only to look at the adoption of enabling statutes for the conversion of one-family housing into rental units (or to add accessory apartments) to have a measurement of this; such enabling statutes have been adopted or are under serious consideration in communities of affluence such as Princeton and Bedminster in New Jersey and Greenwich and Westport in Connecticut. Despite the proven reality of illegal conversions into multiple tenancies in towns such as Babylon, Long Island, and Stamford, Connecticut, as well as Levittown -- the political pressures against accepting and perfecting the reality have been overwhelming.

Security of status is only one dimension of importance here. One of the elements which made for the initial success of inclusionary zoning in Orange County, California, and certainly has been most significant in Bernards Township -- in a most constructive agreement under the aegis of Mount Laurel -- has been the comparative value not only of land but of housing upon it. Thus the developer in either of the two locations, given the value of an additional building site -- currently between $40,00 and $80,000 per site -- is in a position to support Mount Laurel units. The marginal incremental value of additional building sites in most areas is substantially lower. Much of the basic row-housing taking place in central New Jersey in areas competitive to Old Bridge, for example, is predicated upon building sites at under $10,000 per unit.

Similarly, affluence within the community permits a relatively easier absorption of the socioeconomic stress induced by shifts in demographic characteristics. In addition, the prospective homebuyer in Bedminster can warm to new townhouse units priced, thanks to Mount Laurel, at $135,000-$165,000 in the context of a community in which the sales price of single-family homes on large lots had moved much higher.

The situation is quite different however, in more modestly priced communities. Not uncommonly the broad core of their population, in terms of

income and socioeconomic characteristics, is in a much more marginal position. The gap between current resident characteristics and a decline in community status which will wipe out investment is simply too precarious to provide the psychological security blanket available to the elite.

Even more important, however, is the relative modesty of land values and housing prices. Thus as described elsewhere in this study, the median resale value of one-family houses in Cranbury in 1982 was $115,000. This was nearly double the equivalent for Old Bridge. In the latter community only 25 percent of the resales were at $75,500 or above.

To the most fortunate of our society, a house literally can be afforded as a home, i.e., whose values are solely as dwelling place and environment. To the homebuyer in more modest locales, it must also, by very necessity, serve as a unique focal point for savings. Study after study has indicated that for all but the top five percent of Americans it is equity through homeownership which is the largest single source of capital accumulation. The pressures and fears, therefore, of the homebuyers of more modest means have much more weight behind them than holds true for those members of our society who may be fortified by a line of stock holdings, alternate real estate investments, and the like.

For the proposed Olympia & York Development to be a success; for the present and future occupants of Old Bridge to have housing investments which are, at the very least, stable; and most importantly, for the mandate of Mount Laurel to be observed -- and to be successful, not only in the short-run but over the lifetime of the community -- an honest and hard-nosed appraisal of the socioeconomic characteristics of the community is required. And these are measurements and insights which are of importance to all of the participants in the development -- producers, consumers, and government officials as well.

Placing Old Bridge in Context

In order to provide a full measure of comparison and to enhance an understanding of the role and place of the community of Old Bridge, we have undertaken a full-scale, three-county, 90-community analysis. The three counties are Middlesex, Monmouth, and Mercer. They represent a contiguous grouping of economic high-growth counties whose vigor combines both residential development and nonresidential as well.

Indeed, it is the rapidity of growth of the latter which may well determine the future market success of Old Bridge, as New Jersey's center of gravity -- in terms of its employment locus -- swings from north to center. All of the constitutent municipalities of the counties are included with the exception of Trenton whose big-city characteristics provide a different market context. The 90 communities encompassed in the analysis represent markets which are or could be competitive to that of Old Bridge.

Methodology

In order to provide a dispassionate arms-length ranking, we have utilized 21 principal census variables which represent common parameters for comparative analysis. The very complexity of a matrix of 90 communities by 21 variables, incorporating as it does nearly 2,000 numerical parameters, can be self-defeating. For this reason, factor analysis techniques have been employed. These procedures, when used in conjunction with a high-speed computer, permit the linking of related variables for ease of comprehension and provide simple handholds for multiple measurements and comparisons. Thus, as described later in this report, such parameters as income, education, and occupation, which clearly have varying levels of interlinkage, can be clarified and brought under a single statistical, verifiable factor measurement.

The factors derived from the initial variable sets are then followed by equivalent methodologies for grouping communities within the computer designated linkage procedure which we refer to here as cluster analysis.

The sum of this methodology permits not merely a ranking, but a grouping of communities in order to give insight into the role, status, and future of Old Bridge.

ANALYTICAL OVERVIEW -- GENERAL

The pattern of Old Bridge which emerges is one of a below middle range community, particularly in socioeconomic measurements, with a ranking of 63rd on a base of 90 communities. Its median house value lags the overall mean by over 10 percent. It is underrepresented in professional-managerial occupational levels and equivalently overrepresented in the craftsmen-operative group. Thus it tends to be more "blue collar" and less "white collar" than average. And this is a picture which is reinforced by its educational attainment level with only 15 percent of its residents college graduates as compared to 21.5 percent for the average of all the other municipal observations.

Despite these limitations, its overall ranking is within the middle sector of the municipalities in the three-county arena. But its negative socioeconomic ranking indicates its fragile position within this middle group. Cranbury, with a median housing resale price of $115,000, is well fortified against the future, but Old Bridge must be wary of changes which will precipitate radical decline. Its absorptive capacity is, at best, limited. Very careful planning is required in order to ensure future stability. This is particularly the case given the very rapid rates of growth which are predicted for the community.

ANALYATICAL OVERVIEW -- SPECIFIC

1. Ninety municipal observations in Middlesex, Mercer and Monmouth Counties serve as the competitive arena for evaluating the social, economic and demographic parameters of Old Bridge Township.

2. For each of these municipalities, a 21-variable profile was constructed. These variables fully describe the social, economic, racial, ethnic, and demographic attributes of the communities. While Old Bridge has a median family income ($25,280) close to the mean ($25,561) for all 90 municipalities, it lags considerably in terms of other important characteristics:

Variable	Old Bridge	Mean (Average) 90 Municipalities
Median Family Income	$25,280	$25,561
% Population: College Graduates	15.0%	21.5%
% Population: High School Graduates	74.9%	76.1%
% Labor Force: Profession-Managerial	23.0%	30.4%
% Labor Force: Craft-Operative	21.2%	17.6%
Median House Value	$61,000	$67,800

3. The application of a principal components factor analysis served to reduce the 21 variables to three major underlying dimensions (or factors), i.e., the 21 variables are replaced by three principal components of community structure. These factors, derived from the computer-based analysis, are defined as follows:

   A. Socioeconomic Status (SES) -- This factor incorporates such attributes as income, house value, educational attainment, and occupational status and gauges socioeconomic character.

   B. Race and Ethnicity (R&E) -- This singular dimension indexes the racial and ethnic character of a community as revealed by racial, ethnic and foreign-born population shares.

   C. Stage in Life Cycle (SLC) -- The third factor reflects measures of the population age distribution, household format, female labor force participation and dwelling unit type. It thus serves to reveal family status by phase of the household life cycle.

4. Each municipality in the analysis is characterized by measures, known as factor scores, of the three dimensions (instead of individual measures on 21 separate variables). Factor scores are statistically presented as standard deviation units, i.e., reflecting a distribution with a mean of zero and a standard deviation of one.

5. The most significant factor serving to differentiate the communities in the analysis is Socioeconomic Status. When the municipalities are ranked according to factor scores, Old Bridge places 63rd out of 90 with a score of -0.49. This stands in contrast to the top-rated community, Princeton Township (with a score of 2.68), the 15th-rated community, Holmdel (a factor score of 1.16), and the 25th-ranked municipality, Metuchen (with a score of 0.53). Old Bridge thus falls into the bottom of the municipal array -- just outside of the middle third -- strongly suggesting a fragile socioeconomic condition, and limited opportunities for adjusting market housing prices.

6. A hierarchical grouping analysis was performed to classify the 90 municipalities into distinct community types based upon their profile of factor scores. The resulting typology comprised 10 community clusters. Old Bridge fell into a broad middle classification labeled Group 1. This cluster of municipalities resulted from statistical rankings which tended toward the averages reflected by the entire spectrum of community observations.

7. This grouping represents prototypical mass-market central New Jersey suburbia. The constitutents are not affluent communities, nor are they poor, distressed municipalities. An average group factor score on the Socioeconomic Status factor (-0.14) reveals that Group 1 municipalities are minimally below average in terms of income levels, educational achievement and occupational structure.

   A factor score of 0.02 on the Race and Ethnicity dimension indicates average proportions of minority group representation. Thus they are not exclusionary white-only municipalities, nor are they areas of heavy black and Hispanic concentration. And their modest score (0.31) on the Stage in Life Cycle factor indicates a very slight tendency toward larger household sizes.

8. But within this large "average" group, Old Bridge's economic, occupational and educational parameters (revealed by a factor score of -0.49) are not only below the mean of the entire three-county arena (0.0) but also below the overall Group 1 mean (-0.14). Thus Old Bridge is generally in the "bottom" middle, and has only a tenuous lock on a lower central class ranking. It is in a far less secure position than the bulk of its group and the range of communities incorporated in this analysis.

   Housing consumers in the broader market arena, therefore, have an array of higher-status communities as alternative residential settings, inhibiting pricing flexibility within Old Bridge itself.*

*A previous study has shown that it is socioeconomic characteristics of the community, holding construction factors constant, which is the most significant factor linked to housing price. See Lynne Sagalyn and George Sternlieb, Zoning and Housing Costs (New Brunswick, Center for Urban Policy Research, 1973).

GENERAL ANALYSIS

The following sections of this report present the detailed analytical steps undertaken to derive clusters of homogeneous communities and to isolate the position of Old Bridge Township within the resulting typology of communities. The broad approach is to select a range of census variables which describe the social, economic, demographic and racial character of the municipal observations, and to reduce these variables to a more manageable number of individual factors or dimensions which capture the main patterns of concomitant variation.

These factors are then used in a hierarchical cluster (or grouping) analysis, which segments the municipal observations into groups of homogeneous community types. The cluster procedure links together individual municipalities according to the similarities of their factor score profiles. An appendix to this report provides a generalized description of the grouping methodology.

The following sections describe the variable sets, a brief evaluation of Old Bridge in the context of these parameters, the factor analysis results, the factor score outputs, and the hierarchical grouping analysis. Exhibit 1 lists the municipalities included in the overall evaluation.

The Variable Sets

The input variable set to the overall analysis is presented in Exhibit 2, along with the summary statistics for the 90 municipalities included in the analysis. In addition, the profile data for Old Bridge are also presented in the far right column of the exhibit.

The variables reflect a range of characteristics of the resident populace of each of the municipalities. Median family income, median gross rent, median house value, and the unemployment rate serve to measure economic well-being. Educational attainment levels are gauged by proportions of the population that are college graduates and high school graduates. Proportions of the labor force that are in craftsman-operative (blue collar) and professional-managerial (white collar) classifications reflect occupational status, while foreign-born, black and Hispanic shares of total population serve to index racial and ethnic character.

Demographic composition is revealed by a number of distinct variables: persons per household (average household size), labor force composition (overall labor force and female labor force participation), age distribution (shares of the population below 5 years of age and over 65 years old) and elementary school enrollment. These characteristics, along with the share of dwelling units concentrated in single family formats, help illuminate a community's tendencies toward a specific stage in the family life cycle.

EXHIBIT 1

MUNICIPALITIES INCLUDED IN THE ANALYSIS

MIDDLESEX COUNTY
Carteret
Cranbury
Dunellen
East Brunswick
Edison
Helmetta
Highland Park
Jamesburg
Metuchen
Middlesex
Milltown
Monroe
New Brunswick
North Brunswick
Old Bridge
Perth Amboy
Piscataway
Plainsboro
Sayreville
South Amboy
South Brunswick
South Plainfield
South River
Spotswood
Woodbridge

MERCER COUNTY
East Windsor
Ewing
Hamilton
Hightstown
Hopewell Borough
Hopewell Township
Lawrence
Pennington
Princeton Borough
Princeton Township
Washington
West Windsor

MONMOUTH COUNTY
Aberdeen
Allenhurst
Allentown
Asbury Park
Atlantic Highlands
Avon-by-the Sea
Belmar
Bradley Beach
Brielle
Colts Neck
Deal
Eatontown
Englishtown
Fair Haven
Farmingdale
Freehold Borough
Freehold Township
Hazlet
Highlands
Holmdel
Howell
Interlaken
Keansburg
Keyport
Little Silver
Loch Arbour
Long Branch
Manalapan
Manasquan
Marlboro
Matawan
Middletown
Millstone
Monmouth Beach
Neptune
Neptune City
Ocean
Oceanport
Red Bank
Roosevelt
Rumson
Sea Bright
Sea Girt
Shrewsbury Borough
Shrewsbury Township
South Belmar
Spring Lake
Spring Lake Heights
Tinton Falls
Union Beach
Upper Freehold
Wall
West Long Branch

EXHIBIT 2

VARIABLE SET AND SUMMARY STATISTICS:
90 MUNICIPALITIES AND OLD BRIDGE TOWNSHIP

Variable Set	Total: 90 Municipalities Mean	Standard Deviation	Old Bridge
Median Family Income	$25,561	$ 5,931	$25,280
% Population: College Graduate	21.5	11.5	15.0
% Population: H.S. Graduate	76.1	9.6	74.9
% Labor Force: Female	42.1	3.4	40.8
% Labor Force: Craftsman or Operatives	17.6	7.1	21.2
% Labor Force: Professional Managerial	30.4	11.0	23.0
Unemployment Rate	5.8	2.0	5.8
% Population: Labor Force	49.4	4.8	50.9
Persons Per Household	2.89	0.39	3.11
% Population: Under 5 Years Old	7.0	1.7	8.3
% Population: Over 65 Years Old	11.9	4.8	6.7
Elementary School Enrollment	47.9	8.2	51.7
% Population: Foreign Born	.06	.03	.07
% Population: Black	5.9	8.3	2.0
% Population: Hispanic	2.6	4.5	3.2
Median Gross Rent	$310	$51	$324
% Units: Single Family Units	71.6	19.3	64.2
Median House Value	$67,818	$23,542	$61,000
% Units: Lacking or Sharing Plumbing	1.06	1.05	1.0
% Units: 1.01 or More Persons Per Room	2.06	1.57	3.0

Source: U.S. Bureau of the Census, 1980 Census of Population and Housing.

Finally, measurements of inadequate housing -- lacking or sharing some or all plumbing facilities (a surrogate of physical condition) and 1.01 or more persons per room (overcrowding) -- assist in isolating the presence of economic distress in any of the observations.

The selection of these parameters to describe the municipal attributes was based on the literature of social area analysis and the construction of municipal typologies.[1] It should be noted that several additional variables were employed in the earlier stages of this analysis but were ultimately deleted due to problems of intercorrelation.[2] Particularly significant in this regard were income distribution measures, i.e., proportions of households with incomes below $10,000 and $30,000 and over. The latter were found to have extremely high correlations with median family income and were subsequently eliminated in order to clarify the factor structures. In the computer printouts -- presented in the later stages of this chapter -- these variables remain so as to provide an additional informational resource.

Old Bridge In Context

As a preliminary base on which to view Old Bridge Township, Exhibit 2 also presents the overall means and standard deviations for each variable for the 90 municipalities in the analysis and the corresponding statistics for Old Bridge. For all measurements, Old Bridge is well within one standard deviation of the mean of the entire municipal set. And in many cases, Old Bridge closely approximates the mean. For example, the overall (average) median family income stands at $25,561; the median family income for Old Bridge ($25,280) is less than $300 below that level.

The general pattern which emerges is a township that is substantially typical of suburban central New Jersey; though Old Bridge is a middle range community, it tends to rank slightly below the central middle in a number of socioeconomic measurements. While its income level, as noted above, is prototypical, its median house value ($61,000) lags the overall mean ($67,818) by over $6,800. Its professional-managerial occupational level (23.0 percent) falls below the mean (30.4 percent) while its craftsman-operative occupational level (21.2 percent) exceeds the overall average (17.6 percent). Thus it tends to be slightly more "blue collar" and less "white collar" than average. This picture is reinforced by its educational attainment level: 15 percent of the residents of Old Bridge are college graduates as compared to a 21.5 percent average for all the municipal observations.

Other characteristics demonstrate moderate variations, but within a distinctly central range. Old Bridge has a slightly younger population, somewhat larger households, fewer blacks and more Hispanics relative to all of the communities of Middlesex, Mercer and Monmouth Counties. Thus Old Bridge is not an economically elite community, nor is it one which reflects an economically struggling population. While its income resources are

strongly average, its educational and occupational profiles and lagging house values place it in a less secure range than many other municipalities. This pattern is found to be strongly replicated in the subsequent hierarchical cluster analysis.

FACTOR ANALYSIS

The use of 21 individual variables to describe the fundamental attributes of 90 municipalities provides a complex and cumbersome basis upon which to delineate a distinct set of community types. Also problematical is the presence of covariation -- sets of variables may be interrelated and add redundancy and multiple weighting to the analysis. Whenever several variables display a uniform pattern of concomitant variation, it is desirable to eliminate the redundancies, isolate the pattern, and employ it (the pattern) in the analysis in place of the several variables.[3] Thus factor analysis has been used to reduce the 21 individual variables into a smaller number of underlying dimensions (or factors) which capture or define the clusters of concomitant variation.

Specifically, this has been accomplished in this study by the use of a principal components factor analysis with rotation according to the varimax criterion. An orthogonal solution has been chosen, which insures that the derived factors are not correlated with one another.

The results of the computer analysis are detailed in Exhibit 3. The 21 variables define -- and have been replaced by -- three statistically independent factors (or dimensions). These factors represent the set of attributes defining the municipalities and serve as the basis for the derivation of differentiated community clusters. Before this task is undertaken, however, it is essential to define the individual factors.

Factor 1 is a grouping of variables chosen by the computer utilizing the Statistical Package for the Social Sciences (SPSS).[4] The factor incorporates elements which typically define the socioeconomic character of a population -- income resources, educational attainment, and occupational achievement. Thus we have designated it to be the Socioeconomic Status dimension or SES. Those variables with the highest positive factor loadings are median family income, percentage of college and high school graduates, percentage of professional and managerial occupations, unemployment rate, percentage of the population under 5 years of age, elementary school enrollment and overcrowding (1.01 persons or more per room).

In general, these variables all tend to measure some aspect of the socioeconomic character of a community or subpopulation. The only variation from the classical definition of this concept is the moderately high negative loadings on this factor of elementary school enrollment and population below 5 years of age. These two variables had been considered to be independent of socioeconomic measurements, but the demographic revolution of the 1970s has forged a linkage between the economic character of an area and young children, e.g., highly affluent communities tend to be older (income is a function of age) and therefore have fewer children.

EXHIBIT 3

ROTATED FACTOR LOADINGS
(Numbers are rounded)

Variable	Factor 1	Factor 2	Factor 3
Median Family Income	.73		.54
% Population: College Graduate	.91		
% Population: H.S. Graduate	.90		
% Labor Force: Female		.51	-.56
% Labor Force: Craftsman or Operatives	-.88		
% Labor Force: Professional Managerial	.91		
Unemployment Rate	-.66		
% Population: Labor Force			
Persons Per Household			.85
% Population: Under 5 Years Old	-.68		
% Population: Over 65 Years Old			-.70
Elementary School Enrollment	-.67		
% Population: Foreign Born		.77	
% Population: Black		.51	
% Population: Hispanic		.68	
Median Gross Rent	.50		
% Units: Single Family Units		-.70	.52
Median House Value	.76		
% Units: Lacking or Sharing Plumbing		.58	
% Units: 1.01 or More Persons Per Room	-.67	.63	

Source: See text.

These variables all measure some aspect of an underlying dimension -- Socioeconomic Status -- and are replaced by this singular factor. Each observation (municipality) receives a score on this factor defined in terms of standard scores -- i.e., a mean of zero and standard deviation of one. In general, a score of 1 would indicate a strong positive rating (one standard deviation above the mean) while a score of -1 would indicate a strong negative rating (one standard deviation below the mean). A score of 0 would rate a municipality at the mean or average for all the municipalities.

Communities with a high positive score on this dimension would tend to have high incomes, high levels of educational attainment, high proportions of the labor force in professional-managerial occupations and high house values and rents. Concurrently, they would also tend to have low proportions of the labor force in craftsman-operative occupations, low unemployment rates, low proportions of their housing units with 1.01 persons or more per room, and low proportions of young children.

Municipalities scoring negatively on this factor would have the exact opposite characteristics, while those with moderate scores, i.e., close to zero, tend to reflect the average of the total observation set.

Factor 2 is composed of a set of variables which serve to gauge the racial and ethnic character of a municipality; therefore, it is labeled Race and Ethnicity or R & E. Variables with high positive loadings on this factor are proportion of the population that is foreign born, proportion of the population that is black, proportion of the population that is Hispanic, proportion of housing units that are deficient (lacking or sharing plumbing facilities), proportion of housing units that are overcrowded (1.01 or more persons per room) and proportion of the labor force that is female. The proportion of housing units that are single family is the only major negative loading.

Municipalities scoring positively on this dimension would have a concentrated presence of minorities and foreign born, crowded or deficient housing units, and a below average proportion of single family units. Municipalities with negative factor scores on this dimension would have a relative absence of minorities and undesirable housing conditions, while those with scores close to zero would approach the mean of all municipalities under analysis.

Factor 3 is defined strongly by household size (persons per household) which exhibits a high positive loading. Also loading positively are the median family income and single family unit parameters. Loading negatively are the variables measuring the proportion of females in the labor force and the elderly (over 65 years old). This set of parameters tends to define stage in the family life cycle.

Municipalities with high positive scores on this dimension would tend to have large households, high proportions of single family units, above average incomes, below average female labor force participation and an absence of the elderly. This would tend to indicate a municipality characterized by the family period of the Stage in Life Cycle (SLC). Communities scoring negatively on this dimension would be characterized by more varied

household formats, higher proportions of the elderly, and greater proportions of working women. Again it should be stressed that these partitions are derived objectively by the standard factor analysis computer program rather than representing subjective choice.

Factor Scores

The three dimensions of the rotated factor matrix represent three independent (zero-correlation) and unrelated variables. These three factors thus replace 21 intercorrelated variables; each municipality is statistically summarized by an individual measurement (factor score) on each of the three factors rather than by 21 measurements on the original variable set. Thus, a 90 (municipality) by 21 (original variable) matrix is replaced by a 90 by three (factor score) matrix. It is upon this new matrix that the hierarchical grouping procedure is performed.

As noted previously, factor scores take the form of standard scores (i.e., a distribution whose mean equals zero and whose standard deviation equals one). Before the formal grouping procedure is presented, it is possible to secure a brief statistical portrait of Old Bridge based on its three factor scores.

Old Bridge exhibits the following scores on each of the three factors:

Factor 1 — Socioeconomic Status:	-0.49391
Factor 2 — Race and Ethnicity:	0.08161
Factor 3 — Stage in Life Cycle:	0.67277

On the Socioeconomic Status dimension, Old Bridge's moderately negative factor score indicates that it is somewhat below average in its overall socioeconomic condition. As noted previously, its median family income was almost identical to the overall municipal average, but its educational attainment and occupational profile deviated negatively from the municipal average, as did its median house value. Thus the computerized factor score of -0.49, summarizing all of these individual measurements in a single statistic, assesses Old Bridge Township's socioeconomic condition as being slightly below the overall mean.

The positive factor score of .08 on the Race and Ethnicity dimension is so small as to be indistinguishable from the overall mean of zero. Again, as analyzed previously in terms of the original variable set, the below-average presence of blacks in Old Bridge is offset by the above-average presence of Hispanics. Thus the town exhibits no overall tendency, relative to the 90 municipalities in the analysis, toward unusual racial-ethnic variations.

The factor score on the Stage in Life Cycle dimension (0.67) indicates a moderate tendency toward the intermediate stages of the family life cycle. This conclusion replicates that determined previously during the analysis of the original 21 variables.

In general, the evaluation of the factor scores for Old Bridge indicate that its overall position is within the middle sector of the municipalities in the three-county arena. Its negative socioeconomic ranking,

however, indicates its fragile position within this middle array. This condition is further accentuated in Exhibit 4, which ranks the 90 municipalities according to factor scores on the Socioeconomic Status factor. As is evident in the Exhibit, Old Bridge ranks 63rd and actually falls into the bottom one-third of the socioeconomic spectrum. While 27 municipalities rank below Old Bridge, 62 rate above it. Adverse development trends in the township could conceivably threaten this precarious position.

HIERARCHICAL GROUPING ANALYSIS

A detailed description and simplified example of the grouping (or cluster) procedure is provided in an appendix to this report. In brief, the analysis begins with 90 separate groups (i.e., each municipality forms a separate cluster) and step by step, the computer program combines the two groups which exhibit the highest degree of similarity across their factor score profiles; 89 steps later there is only one group remaining. (The horizontal icicle plot contained in an appendix to this report permits a graphic viewing of this overall process.)

In this analysis, the ten-group solution was selected; beyond that point (i.e, fewer than ten clusters), the groups exhibited too strong a tendency to become overly heterogeneous. Before that point, there were too many small-member groups whose dissimilarities were only minor, thereby obscuring the overall analysis.

Exhibit 5 presents the municipal composition of each of the ten groups, while Exhibit 6 provides the overall average factor scores for each of the groups. As can be seen from the latter Exhibit, each group has a unique average factor score profile; this provides the basic rationale for the existence of each cluster. The following individual group evaluations are made in reference to these two Exhibits. In addition, the average factor scores for each group are presented at the end of each discussion. (And, to highlight the relative position of Old Bridge, the latter's scores are also detailed.)

Group 1

Group 1 is the largest cluster which emerged from the hierarchical cluster analysis, consisting of 42 municipalities geographically spread throughout Middlesex, Mercer and Monmouth Counties. In general, this grouping represents prototypical mass-market central New Jersey suburbia. Its scores on the three major factors are close to zero, indicating that the group in its entirety closely replicates the average for the entire set of communities included in the analysis.

The factor score on the Socioeconomic Status Dimension (-0.14) reveals that Group 1 municipalities are very minimally below average in terms of income levels, educational achievement, and occupational structure. Thus they are not affluent communities, nor are they poor, distressed municipalities. The weak score (0.02) on the Race and Ethnicity dimension indicates average proportions of minority group representation. Thus they are not

EXHIBIT 4

MUNICIPAL RANKING ON SOCIOECONOMIC STATUS FACTOR
(Factor Score)

Municipality	Factor Score	Munincipality	Factor Score	Municipality	Factor Score
Princeton Twp.	2.68	Piscataway	0.37	Wall	-0.48
Princeton Bor.	2.61	Brielle	0.36	South Plainfield	-0.49
Plainsboro	2.55	East Windsor	0.34	Old Bridge	-0.49
Sea Girt	1.58	West Long Branch	0.27	Middlesex	-0.52
Pennington	1.48	South Brunswick	0.26	Dunellen	-0.56
Interlaken	1.45	Edison	0.21	Farmingdale	-0.58
West Windsor	1.43	Avon-by-the-Sea	0.15	Millstone	-0.60
Deal	1.36	Oceanport	0.14	Neptune City	-0.62
Monmouth Beach	1.27	Eatontown	0.10	South Belmar	-0.63
Sea Bright	1.27	Manalapan	0.09	Hazlet	-0.64
Highland Park	1.23	Washington	0.04	South River	-0.65
Rumson	1.19	Freehold Twp.	0.02	Sayreville	-0.69
Little Silver	1.17	Shrewsbury	0.01	Neptune	-0.73
Lawrence	1.17	Marlboro	-0.06	Long Branch	-0.81
Holmdel	1.16	Red Bank	-0.08	Upper Freehold	-0.82
Loch Arbour	0.96	Tinton Falls	-0.12	Spotswood	-0.87
Allenhurst	0.90	Matawan	-0.13	Bradley Beach	-0.88
Hopewell Twp.	0.83	Manasquan	-0.16	Freehold Bor.	-0.89
Colts Neck	0.73	Atlantic Hghlds.	-0.19	Carteret	-0.90
Fair Haven	0.69	Milltown	-0.21	Howell	-1.02
Cranbury	0.67	Middletown	-0.24	South Amboy	-1.19
North Brunswick	0.65	New Brunswick	-0.28	Shrewsbury	-1.30
Roosevelt	0.59	Woodbridge	-0.30	Keyport	-1.33
Hopewell Bor.	0.55	Hightstown	-0.34	Jamesburg	-1.37
Metuchen	0.53	Belmar	-0.35	Asbury Park	-1.51
Spring Lake Hgts.	0.47	Allentown	-0.35	Perth Amboy	-1.70
Spring Lake	0.40	Aberdeen	-0.38	Helmetta	-1.72
East Brunswick	0.39	Highlands	-0.40	Englishtown	-1.82
Ocean	0.38	Hamilton	-0.43	Union Beach	-2.30
Ewing	0.37	Monroe	-0.44	Keansburg	-2.41

Source: See text

EXHIBIT 5

HIERARCHICAL CLUSTER ANALYSIS: FINAL GROUPINGS

GROUP 1

A	B	C
Middlesex	**Middlesex**	**Middlesex**
Cranbury	Dunellen	Carteret
East Brunswick	Edison	Sayreville
Metuchen	Middlesex	South River
North Brunswick	Milltown	Spotswood
	Old Bridge	
Mercer	Piscataway	**Monmouth**
Hopewell (Borough)	South Brunswick	Freehold (Borough)
Lawrence	South Plainfield	Howell
	Woodbridge	Upper Freehold
	Monmouth	
	Aberdeen	
	Allentown	
	Eatontown	
	Farmingdale	
	Freehold (Township)	
	Hazlet	
	Manalapan	
	Matawan	
	Middletown	
	Millstone	
	Ocean	
	Oceanport	
	Shrewsbury (Township)	
	Tinton Falls	
	West Long Branch	
	Mercer	
	East Windsor	
	Ewing	
	Hamilton	
	Hightstown	
	Washington	

(continued)

EXHIBIT 5 (cont'd)

HIERARCHICAL CLUSTER ANALYSIS: FINAL GROUPINGS

GROUP 2

Monmouth

Allenhurst
Deal
Fairhaven
Interlaken
Little Silver
Loch Arbour
Monmouth Beach
Roosevelt
Rumson
Sea Girt

Mercer

Hopewell (Township)
Pennington
West Windsor

GROUP 3

Mercer

Princeton (Borough)
Princeton (Township)

GROUP 4

Middlesex

Helmetta
Jamesburg
South Amboy

Monmouth

Englishtown
Keansburg
Keyport
Union Beach

GROUP 5

Middlesex

Highland Park
Plainsboro

Monmouth

Sea Bright

(continued)

EXHIBIT 5 (cont'd)

HIERARCHICAL CLUSTER ANALYSIS: FINAL GROUPINGS

GROUP 6	GROUP 7 & 8
Middlesex	**Middlesex**
Monroe	New Brunswick
	Perth Amboy
Monmouth	
Atlantic Highlands	
Avon-by-the-Sea	
Belmar	
Brielle	
Highlands	
Manasquan	
Neptune City	
South Belmar	
Spring Lake	
Spring Lake Heights	
Wall	

GROUP 9	GROUP 10
Monmouth	**Monmouth**
Asbury Park	Colts Neck
Bradley Beach	Holmdel
Long Branch	Marlboro
Neptune	
Red Bank	
Shrewsbury	

Source: See text

EXHIBIT 6

FACTOR SCORE PATTERNS FOR INDIVIDUAL GROUPS
(Numbers are rounded)

Group	Factor 1 SES	Factor 2 R & E	Factor 3 SLC
1	-0.1356	0.0167	0.3129
2	1.1464	-0.6300	0.1962
3	2.6418	1.9462	0.6259
4	-1.7377	-0.3795	0.2230
5	1.6803	1.2114	-1.4553
6	-0.1589	-0.8538	-1.2047
7	-0.2821	3.7732	-0.0181
8	-1.7038	4.4705	1.6852
9	-0.8843	1.0555	-1.2814
10	0.6098	-0.5703	2.1125

Source: See text

exclusionary white-only municipalities, nor are they areas of heavy black and Hispanic concentration. And their modest score (0.31) on the Stage in Life Cycle factor indicates only a very slight tendency toward larger household sizes and/or absences of the elderly (i.e., toward pure family-raising suburbia). This large cluster of undifferentiated communities is therefore based upon statistical rankings which tend toward the averages reflected by the entire spectrum of municipal observations.

In order to further partition this group, the relative positionings of the municipalities on the Socioeconomic Status factor were utilized. For the group as a whole, the mean score on this dimension was -0.1355857, with a standard deviation of .5156703. Those municipalities with a factor score one standard deviation greater than the mean, (i.e., +0.3800846), were segmented into the A subgroup of elites as depicted in Exhibit 5. Those municipalities with a factor score one standard deviation below the mean, (-0.6512560) i.e., of relatively low socioeconomic status, were placed in the C subgroup. The remaining observations in the center were placed in B subgroup.

Thus subgroup A, typified by Cranbury in Middlesex County and Lawrence in Mercer County, represents the more economically and educationally well-endowed municipalities of Group 1. Subgroup B -- with such communities as Old Bridge and South Plainfield in Middlesex County, Matawan and Millstone in Monmouth County, and Ewing and Hamilton in Mercer County -- reflects the "middle" character of this broad grouping. Subgroup C, represented by South River (Middlesex County) and Howell (Monmouth County), isolates the lower tier communities on the socioeconomic spectrum. The individual factor score noted earlier for Old Bridge (-0.49) shows that it almost fell into this latter sector.

Old Bridge, classified in the central subcluster of this broad average group, stands accentuated as a typically average municipality. But its residents' financial, occupational, and educational attainments tend to be not only below the average of the entire three-county arena but also below the overall Group 1 average and far below that of the upper-tier (subcluster A) municipalities of Group 1.

GROUP 1 SUMMARY PROFILE

Factor	Average Factor Score	Old Bridge Factor Score
1 SES	-0.1356	-0.4939
2 R&E	0.0167	0.0816
3 SLC	0.3129	0.6728

Group 2

Group 2 consists of a cluster of three Mercer County and ten Monmouth County communities. They all rate high on the Socioeconomic Status (SES) dimension, with the mean for the group standing at 1.15. The 13 municipalities can generally be ranked as affluent, with high levels of income and educational achievement, and high proportions of their labor force engaged in the more prestigious occupations. The deviation from Old Bridge on this dimension is clear.

The group also demonstrates a strong negative factor score (-.63) on the Race and Ethnicity factor, indicating a distinct absence of black, Hispanic and foreign-born subpopulations. The factor score on the third dimension, Stage in Life Cycle, approaches only .20, indicating an average quite close to that of all the municipalities included in the study, i.e., the resident households and families are dispersed throughout the family life cycle.

Thus Group 2 municipalities can be generally described as affluent and/or highly educated and prestigious suburban communities, with a marked absence of minority inroads. Deal and Rumson in Monmouth County, and Hopewell Township in Mercer County, easily portray the visual image that is documented by the formal statistical profile.

GROUP 2 SUMMARY PROFILE

Factor Score	Average Factor Score	Old Bridge Factor Score
1 SES	1.1464	-0.4931
2 R&E	-0.6300	0.0816
3 SLC	0.1962	0.6728

Group 3

The name of Princeton -- and the two communities it encompasses -- uniquely stands out in the spectrum of New Jersey communities. Thus it is not surprising that the Borough of Princeton and the Township of Princeton cluster into a group — Group 3 -- encompassing only themselves. What differentiates Group 3 from Group 2 is more than the greater levels of affluence and education mirrored by a factor score of 2.64 on the Socioeconomic Status dimension, more than double that evidenced by Group 2. Equally significant is the substantial average factor score on the Race and Ethnicity dimension -- 1.95 — which indicates a much higher than average presence of minorities in the context of the 90 municipal observations. Only the New Brunswick-Perth Amboy grouping scores higher on this factor.

On the Stage in Life Cycle dimension, the Princeton cluster has an average score of .63, indicating a moderate tendency toward larger household sizes, higher proportions of single family homes, and a below average elderly presence.

If the Princetons were combined with the municipalities in Group 2, the bulk of the "super-affluents" in the three-county zone would be captured. And these are far different from Old Bridge.

GROUP 3 SUMMARY PROFILE

Factor	Average Factor Score	Old Bridge Factor Score
1 SES	2.6418	-0.4939
2 R&E	1.9462	0.0816
3 SLC	0.6259	0.6728

Group 4

This unique cluster of small communities is composed of three municipalities in Middlesex County (Helmetta, Jamesburg and South Amboy) and four in Monmouth County (Englishtown, Keansburg, Keyport and Union Beach). It has the lowest score (-1.74) of any grouping on the Socioeconomic Status dimension, which reflects the following characteristics of the member communities: below average median family incomes, below average levels of educational attainment, below average proportions of the labor force in professional-managerial occupations and above average proportions of the labor force in craft-operative occupations. This profile is one of blue-collar dominated municipalities.

These communities are also characterized by a small minority presence (indicated by a factor score of -0.38 on the Race and Ethnicity dimension) and a household size which ranks average among the communities (the low score [0.22] on the Stage in Life Cycle factor indicates an average dispersion across the array of family life stages).

The Group 4 cluster, then, can be defined as small, white, working-class communities dispersed as distinct older nodes throughout Middlesex and Monmouth Counties. Old Bridge, while also low in SES, has a more substantial minority factor score.

GROUP 4 SUMMARY PROFILE

Factor	Average Factor Score	Old Bridge Factor Score
1 SES	-1.7377	-0.4939
2 R&E	-0.3795	0.0816
3 SLC	0.2230	0.6728

Group 5

Highland Park and Plainsboro (Middlesex County), and Sea Bright (Monmouth County) appear, at first blush, to comprise an inexplicable grouping -- an old university-related town, a rapidly developing farmland community, and a shore resort. But they are related by a strong pattern of factor scores across the three principal components: Socioeconomic Status (1.68), Race and Ethnicity (1.21) and Stage in Life Cycle (-1.46). Particularly significant is the latter factor, whose primary factor loading is household size. The average household size for the 90 municipal observations stands at 2.9 persons. The average household size for Plainsboro and Sea Bright is below 2.0 persons while that of Highland Park is just above 2.0 persons. These unusually small household sizes underlie the similarity of scores on the Stage in Life Cycle dimension, and the strong linkage among the three communities.

When this unique pattern is matched by generally above average socioeconomic parameters and high positive Race and Ethnicity scores, a geographically dispersed cluster emerges with little comparability to Old Bridge.

GROUP 5 SUMMARY PROFILE

Factor	Average Factor Score	Old Bridge Factor Score
1 SES	1.6803	-0.4939
2 R&E	1.2114	0.0816
3 SLC	-1.4553	0.6728

Group 6

Eleven Monmouth County municipalities and one Middlesex County (Monroe) municipality segment themselves into Group 6, a broad swath of suburban communities reflecting generally negative scores across the three major factors. This cluster falls considerably below the affluent status of Groups 2, 3 and 5; its Socioeconomic Status factor score of -.16 closely approximates that of Group 1 (which includes Old Bridge).

While similar in income, educational and occupational profile to the latter, Group 6 differentiates itself strongly by the highest average negative factor score (-.85) on the second dimension, Race and Ethnicity. Thus a major characteristic binding together this group is the general absence -- or a distinctly below average presence -- of minority subpopulations.

Group 6 is also distinguished by a high negative average factor score (-1.20) on the Stage in Life Cycle dimension, which also serves to partition it from the Group 1 observations. This reflects a tendency toward below average household sizes -- considerably under the 2.9 person per household average for all 90 municipalities -- and a greater presence of the elderly (65 years of age and over).

Thus the Group 6 municipalities replicate the average overall socioeconomic character of Old Bridge and the Group 1 constitutents; nonetheless, they represent a distinctive cluster due to the relative absence of minorities, small household sizes and larger elderly subpopulations.

GROUP 6 SUMMARY PROFILE

Factor	Average Factor Score	Old Bridge Factor Score
1 SES	-0.1589	-0.4939
2 R&E	-0.8538	0.0816
3 SLC	-1.2047	0.6728

Groups 7 and 8

The two major central cities of the 90 municipalities included in this analysis each separated out into a distinctive single member group. New Brunswick and Perth Amboy are clearly unique and singular communities, both in the broader analytical context and between themselves. The two exhibit the highest positive factor scores on the Race and Ethnicity dimension (New Brunswick: 3.77; Perth Amboy: 4.47) which measures the minority group concentrations in both cities. But in terms of the other two dimensions, they differ markedly.

New Brunswick's socioeconomic status appears considerably higher than that of Perth Amboy. The respective factor scores on the Socioeconomic Status factor, -.28 and -1.70, are not the result of income differences, but the white collar occupational and educational attainment parameters of New Brunswick. The latter are probably due to the presence of Rutgers University and its influence on the city. The university impact also underlies the differential factor scores on the Stage in Life Cycle dimension. New Brunswick's average rating (-0.02) is in marked contrast to that of Perth Amboy (1.69). Nonetheless, the two central cities are clearly isolated from the balance of the communties in the analysis.

GROUPS 7-8 SUMMARY PROFILE

	Average Factor Score		
Factor	New Brunswick	Perth Amboy	Old Bridge Factor Score
1 SES	-0.2821	-1.7038	-0.4939
2 R&E	3.7732	4.4705	0.0816
3 SLC	-0.0181	1.6852	0.6728

Group 9

The older shore communities of Asbury Park, Bradley Beach, Long Branch, Neptune, Red Bank and Shrewsbury make up Group 9. These are municipalities of generally low Socioeconomic Status (an average factor score of -0.88) standing intermediate between the affluent members of Group 2 and the poorer Monmouth County communities of Group 4.

The positive factor score (1.06) on the Race and Ethnicity dimension is indicative of a stong minority presence, while a negative factor score (-1.28) on the Stage in Life Cycle dimension reflects smaller household configurations.

GROUP 9 SUMMARY PROFILE

Factor	Average Factor Score	Old Bridge Factor Score
1 SES	-0.8843	-0.4939
2 R&E	1.0555	0.0816
3 SLC	-1.2814	0.6728

Group 10

Group 10 consists of only three municipalities -- Colts Neck, Holmdel and Marlboro -- in Monmouth County. They are principally distinguished from their Group 2 counterparts by an extremely high average factor score (2.11) on the Stage in Life Cycle dimension. This results from a comparatively large household size (approaching 3.8 persons) and reflects the low density family-raising character of these suburbs. In other respects, however, the statistical profile is roughly comparable to the affluent Group 2 communities -- a positive rating on the Socioeconomic Status dimension substantially above that of Old Bridge, and a negative score on the Race and Ethnicity dimension.

GROUP 10 SUMMARY PROFILE

Factor	Average Factor Score	Old Bridge Factor Score
1 SES	0.6098	-0.4939
2 R&E	-0.5703	0.0816
3 SLC	2.1125	0.6728

SUMMARY

In summary, Old Bridge is a lower middle-income group community. It contains relatively modest-priced housing, occupied disproportionately by blue-collar workers. Its median house value lags the community mean within the three-county area of Mercer, Middlesex, and Monmouth by over 10 percent. Only some 15 percent of its residents are college graduates as compared with nearly half again as high a proportion within its neighboring municipalities.

Old Bridge's overall socioeconomic status rank -- 63rd on a base of 90 communities -- summarizes its fragility and the necessity of a careful application of its Mount Laurel mandate.

It is largely a child-rearing, relatively youthful community, providing a desirable way of life for those with modest resources with which to acquire housing. The capacity of the community, however, to absorb low-income households while preserving its relatively fragile integrity is clearly limited.

NOTES

1. See James W. Hughes, Urban Indicators (New Brunswick: Center for Urban Policy Research, 1972).

2. When independent variables are highly intercorrelated, there are difficulties in overlapping explained variance and ambiguity in causal interpretations; redundancy can add multiple weighting in the subsequent grouping analysis, distorting the final results.

3. Harry Harmon, Modern Factor Analysis (Chicago: University of Chicago Press, 1967).

4. SPSS, Inc., Statistical Package for the Social Sciences (New York: McGraw-Hill, 1983).

APPENDIX A

SUPPORT DOCUMENTATION

This appendix contains the support documentation for the preceding analyses in terms of the formal computer printouts. The first set of exhibits presents the rotated factor matrix, the factor score profiles for the 10 groupings, and the detailed group membership tabulations along with the factor scores for each municipality.

The second set of exhibits provides a multi-page graphic portrayal of the hierarchical cluster analysis -- a horizontal icicle plot using average linkages between groups. This enables the group formation process to be fully viewed.

The final set of exhibits provides a detailed summary of the input variables, both on an individual municipal basis as well as a tabulation of summary statistics.

EXHIBIT A

ROTATED FACTOR MATRIX

- - - - FACTOR ANALYSIS - - - -

VARIMAX ROTATION

ROTATED FACTOR MATRIX:

	FACTOR 1	FACTOR 2	FACTOR 3
T74	.72840	-.28346	.54491
POPCOL	.91050	-.06171	.16068
POPHS	.89595	-.25200	.11948
FLF	-.16988	.50804	-.55724
LFCO	-.88268	.12423	.00465
LFPM	.90767	-.14074	.14565
LFCL	-.32707	.18455	-.11461
UNEMP	-.65763	.21790	-.23273
PILF	.38632	.29783	-.19168
PPH	-.00927	-.06911	.85264
PU5	-.68016	.05429	.30961
PO65	-.04794	-.18657	-.70256
ESE	-.66755	-.38629	.18655
FORBORN	.13688	.77358	.22040
PCBLACK	-.18315	.51883	-.26041
PCHISP	-.30350	.68240	.15676
T127	.49581	-.26554	.00375
SFU	.14685	-.69725	.52482
T39	.75946	-.18566	.41757
PLUMB	-.43987	.58486	-.05002
CROWD	-.67220	.62827	-.02538

Note: See Exhibit E (which follows) for full variable names.

AVERAGE FACTOR SCORES FOR EACH GROUP

CRITERION VARIABLE FACT1 REGR FACTOR SCORE 1 FOR ANALYSIS 1
BROKEN DOWN BY TRY310

VARIABLE	VALUE	LABEL	MEAN	STD DEV	CASES
FOR ENTIRE POPULATION				1.0000000	90
TRY310	1		-.1355857	.5156703	42
TRY310	2		1.1463876	.3242032	13
TRY310	3		2.6418429	.0492096	2
TRY310	4		-1.7377398	.4819482	7
TRY310	5		1.6802962	.7509713	3
TRY310	6		-.1588757	.4027692	12
TRY310	7		-.2820585	.0000000	1
TRY310	8		-1.7038047	.0000000	1
TRY310	9		-.8843014	.4994051	6
TRY310	10		.6097822	.6180838	3

TOTAL CASES = 90

CRITERION VARIABLE FACT2 REGR FACTOR SCORE 2 FOR ANALYSIS 1
BROKEN DOWN BY TRY310

VARIABLE	VALUE	LABEL	MEAN	STD DEV	CASES
FOR ENTIRE POPULATION				1.0000000	90
TRY310	1		.0166622	.5330647	42
TRY310	2		-.6299906	.5234078	13
TRY310	3		1.9461630	.2822003	2
TRY310	4		-.3794745	.3196002	7
TRY310	5		1.2113775	.6570069	3
TRY310	6		-.8538110	.4430587	12
TRY310	7		3.7731821	.0000000	1
TRY310	8		4.4705088	.0000000	1
TRY310	9		1.0554725	.5354066	6
TRY310	10		-.5702890	.2519009	3

TOTAL CASES = 90

CRITERION VARIABLE FACT3 REGR FACTOR SCORE 3 FOR ANALYSIS 1
BROKEN DOWN BY TRY310

VARIABLE	VALUE	LABEL	MEAN	STD DEV	CASES
FOR ENTIRE POPULATION				1.0000000	90
TRY310	1		.3129061	.6011588	42
TRY310	2		.1961900	.7677212	13
TRY310	3		.6258746	.2919197	2
TRY310	4		.2230294	.6998286	7
TRY310	5		-1.4553457	.6355225	3
TRY310	6		-1.2046579	.7729621	12
TRY310	7		-.0180836	.0000000	1
TRY310	8		1.6852314	.0000000	1
TRY310	9		-1.2813692	.4402133	6
TRY310	10		2.1125064	.2692131	3

TOTAL CASES = 90

EXHIBIT C

GROUP COMPOSITION

TRY310: 1

TRY310	AREANAME	FACT1	FACT2	FACT3
1	EAST WINDSOR	.34239	.41687	.36470
1	EWING	.37176	.37860	-.79021
1	HAMILTON	-.42939	-.13629	-.42040
1	HIGHTSTOWN	-.34329	-.08463	-.66727
1	HOPEWELL	.54845	-.19789	-.60033
1	LAWRENCE	1.16670	.68410	-.19256
1	WASHINGTON	.04132	-.15188	-.18324
1	CRANBURY	.66587	-.39574	-.29223
1	DUNELLEN	-.56386	.33698	-.12199
1	EAST BRUNSWICK	.39066	-.02113	1.25777
1	EDISON	.21434	.48615	.31743
1	METUCHEN	.52585	.04010	-.31211
1	MIDDLESEX	-.51818	-.20359	.20769
1	MILLTOWN	-.21493	-.48354	.28429
1	NORTH BRUNSWICK	.64482	.74726	-.02015
1	OLD BRIDGE	-.49391	.08161	.67277
1	SAYREVILLE	-.69208	-.63375	.36583
1	SOUTH BRUNSWICK	.26405	.47101	1.06232
1	SOUTH PLAINFIELD	-.49309	-.37913	.84814
1	SPOTSWOOD	-.87196	-.44518	.64297
1	WOODBRIDGE	-.29960	.08834	.24671
1	ABERDEEN	-.38466	.06373	.80604
1	ALLENTOWN	-.34690	-.13510	.24794
1	EATONTOWN	.09733	.73484	-.52861
1	FARMINGDALE	-.57529	-.35836	-.45484
1	FREEHOLD	-.89432	.39857	-.48091
1	FREEHOLD	.02102	-.00921	1.40729
1	HAZLET	-.64956	-.47287	1.03264
1	HOWELL	-1.01828	-.37186	.93047
1	MANALAPAN	.09465	-.46867	1.16119
1	MATAWAN	-.12802	-.15102	-.16018
1	MIDDLETOWN	-.23961	-.85786	.95228
1	MILLSTONE	-.59524	-.21561	1.21183
1	OCEAN	.37975	-.06160	.11960
1	OCEANPORT	.13875	-.29820	.20086
1	SHREWSBURY	.01204	-.92807	.57810
1	TINTON FALLS	-.12097	.42195	.82086
1	UPPER FREEHOLD	-.81771	-.71631	.85796
1	WEST LONG BRANCH	.26767	-.10879	.20705
1	CARTERET	-.90323	1.21332	.55200
1	PISCATAWAY	.36587	1.50008	.98370
1	SOUTH RIVER	-.65382	.92259	.02667

NUMBER OF CASES READ = 42 NUMBER OF CASES LISTED = 42

(continued)

EXHIBIT C (continued)

GROUP COMPOSITION

TRY310: 2

TRY310	AREANAME	FACT1	FACT2	FACT3
2	HOPEWELL	.83067	-.51807	.52782
2	WEST WINDSOR	1.43386	.48171	1.20812
2	DEAL	1.35946	-.37551	1.36369
2	FAIR HAVEN	.68619	-1.00275	.56807
2	LITTLE SILVER	1.17226	-.88571	.48394
2	LOCH ARBOUR	.96240	-1.28826	.45651
2	ROOSEVELT	.58614	-.56189	.40971
2	RUMSON	1.18593	-.66740	.70887
2	PENNINGTON	1.48425	-.40818	-.05621
2	ALLENHURST	.89896	-.17800	-.99585
2	INTERLAKEN	1.45334	-1.14248	-.59742
2	MONMOUTH BEACH	1.27112	-.21299	-.65756
2	SEA GIRT	1.57846	-1.43035	-.86920

NUMBER OF CASES READ = 13 NUMBER OF CASES LISTED = 13

TRY310: 3

TRY310	AREANAME	FACT1	FACT2	FACT3
3	PRINCETON	2.60705	2.14571	.41946
3	PRINCETON	2.67664	1.74662	.83229

NUMBER OF CASES READ = 2 NUMBER OF CASES LISTED = 2

TRY310: 4

TRY310	AREANAME	FACT1	FACT2	FACT3
4	HELMETTA	-1.72898	-.53056	1.16911
4	KEANSBURG	-2.41793	-.65880	.38954
4	UNION BEACH	-2.30471	-.87901	.94922
4	JAMESBURG	-1.36546	-.10449	.24271
4	SOUTH AMBOY	-1.19406	-.23629	-.16883
4	ENGLISHTOWN	-1.82480	-.25665	-.15040
4	KEYPORT	-1.32823	.00947	-.87015

NUMBER OF CASES READ = 7 NUMBER OF CASES LISTED = 7

(continued)

GROUP COMPOSITION

TRY310: 5

TRY310	AREANAME	FACT1	FACT2	FACT3
5	HIGHLAND PARK	1.22774	1.50632	-1.08562
5	PLAINSBORO	2.54716	1.66923	-1.09124
5	SEA BRIGHT	1.26598	.45858	-2.18918

NUMBER OF CASES READ = 3 NUMBER OF CASES LISTED = 3

TRY310: 6

TRY310	AREANAME	FACT1	FACT2	FACT3
6	MONROE	-.43825	-1.07290	-.29847
6	ATLANTIC HIGHLANDS	-.19287	-.77937	-.40756
6	BRIELLE	.35549	-1.30640	-.46738
6	SPRING LAKE	.40046	-1.49305	-.70638
6	WALL	-.47726	-1.31072	-.29005
6	AVON-BY-THE-SEA	.14606	-1.15726	-2.24355
6	BELMAR	-.34584	-.25428	-2.18471
6	HIGHLANDS	-.40959	-.51303	-1.17132
6	MANASQUAN	-.16077	-1.03445	-1.19825
6	NEPTUNE CITY	-.62251	-.31795	-1.41638
6	SOUTH BELMAR	-.63229	-.22911	-1.93728
6	SPRING LAKE HEIGHTS	.47086	-.77721	-2.13457

NUMBER OF CASES READ = 12 NUMBER OF CASES LISTED = 12

TRY310: 7

TRY310	AREANAME	FACT1	FACT2	FACT3
7	NEW BRUNSWICK	-.28206	3.77318	-.01808

NUMBER OF CASES READ = 1 NUMBER OF CASES LISTED = 1

TRY310: 8

TRY310	AREANAME	FACT1	FACT2	FACT3
8	PERTH AMBOY	-1.70380	4.47051	1.68523

NUMBER OF CASES READ = 1 NUMBER OF CASES LISTED = 1

(continued)

GROUP COMPOSITION

TRY310: 9

TRY310	AREANAME	FACT1	FACT2	FACT3
9	ASBURY PARK	-1.51430	1.97049	-1.53470
9	BRADLEY BEACH	-.87872	.78927	-.89934
9	LONG BRANCH	-.80592	1.31201	-.82135
9	NEPTUNE	-.72503	.40748	-1.02438
9	RED BANK	-.08109	.87045	-1.95276
9	SHREWSBURY	-1.30076	.98313	-1.45569

NUMBER OF CASES READ = 6 NUMBER OF CASES LISTED = 6

TRY310: 10

TRY310	AREANAME	FACT1	FACT2	FACT3
10	COLTS NECK	.72987	-.85245	1.80954
10	HOLMDEL	1.15901	-.49038	2.20372
10	MARLBORO	-.05953	-.36804	2.32426

NUMBER OF CASES READ = 3 NUMBER OF CASES LISTED = 3

EXHIBIT D

HORIZONTAL ICICLE PLOT

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* * * * * * * * * * * * * * * * * * * * H I E R A R C H I C A L   C L U S T E R   A N A L Y S I S * * * * * * * * * * * * * * * * *

HORIZONTAL ICICLE PLOT USING AVERAGE LINKAGE (BETWEEN GROUPS)

                                           NUMBER OF CLUSTERS

                                    11111111112222222222333333333344444444445555555555666666666677777777778888888888
        C A S E                     12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789
  LABEL                  SEQ        +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

  PERTH AMBOY             28        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXXXXXX
                                    XXXXXXX
  NEW BRUNSWICK            25        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    X
                                    X
  SEA BRIGHT              79        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXXXXXXXXX
                                    XXXXXXXXXX
  PLAINSBORO              30        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXXXXXXXXXXXXXXXXXX
                                    XXXXXXXXXXXXXXXXXXX
  HIGHLAND PARK           19        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXXX
                                    XXXX
  PRINCETON               10        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
  PRINCETON                9        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XX
                                    XX
  MARLBORO                67        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXXXXXXXXXXXXXXXXXXXXXXXX
  HOLMDEL                 57        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
  COLTS NECK              47        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXX
                                    XXX
  RED BANK                76        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXXXXXXXXXXXXXXXXXXX
                                    XXXXXXXXXXXXXXXXXXXX
  SHREWSBURY              82        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
  LONG BRANCH             64        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
  NEPTUNE                 72        XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
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(cont'd)

EXHIBIT (continued)

HORIZONTAL ICICLE PLOT

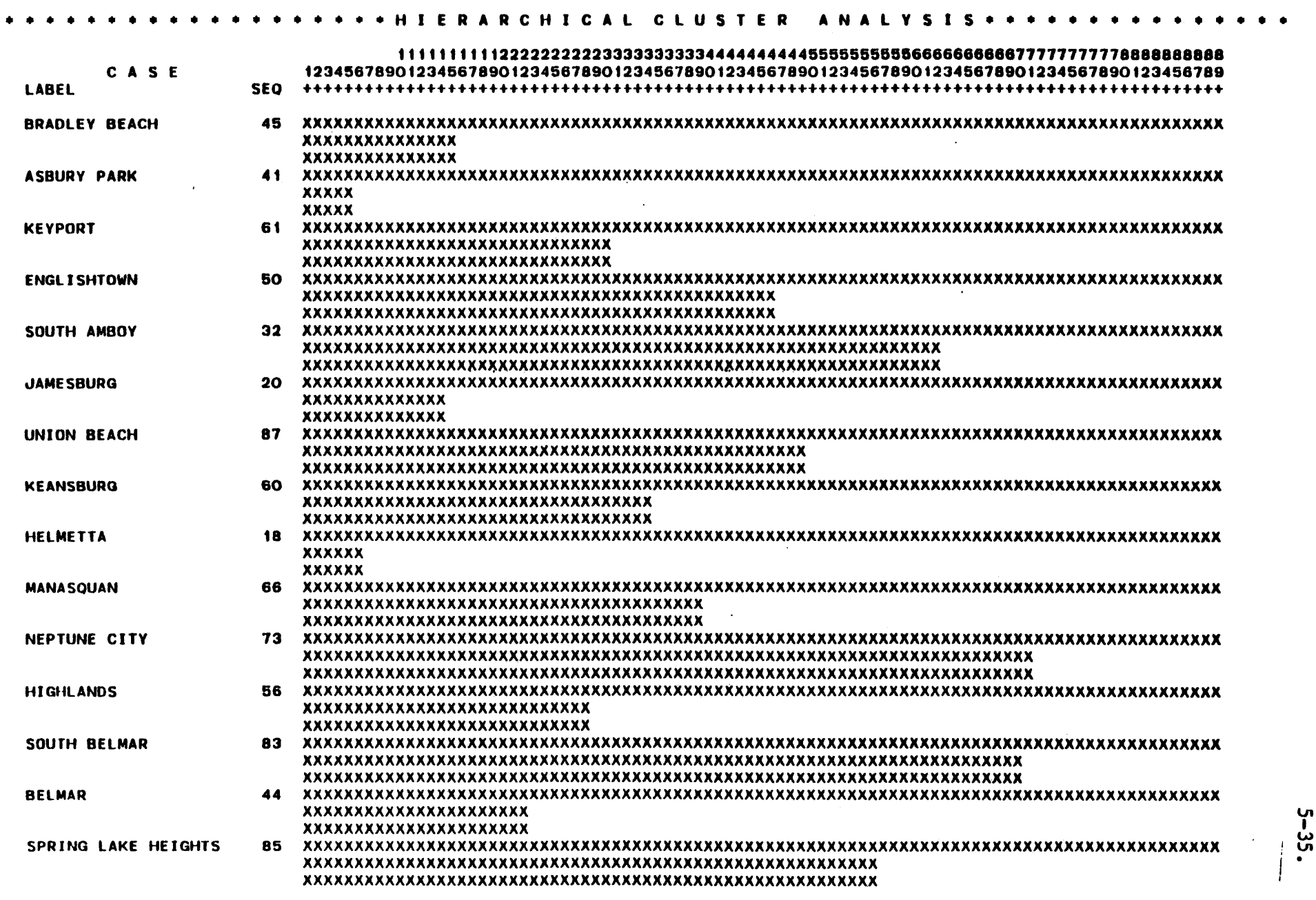
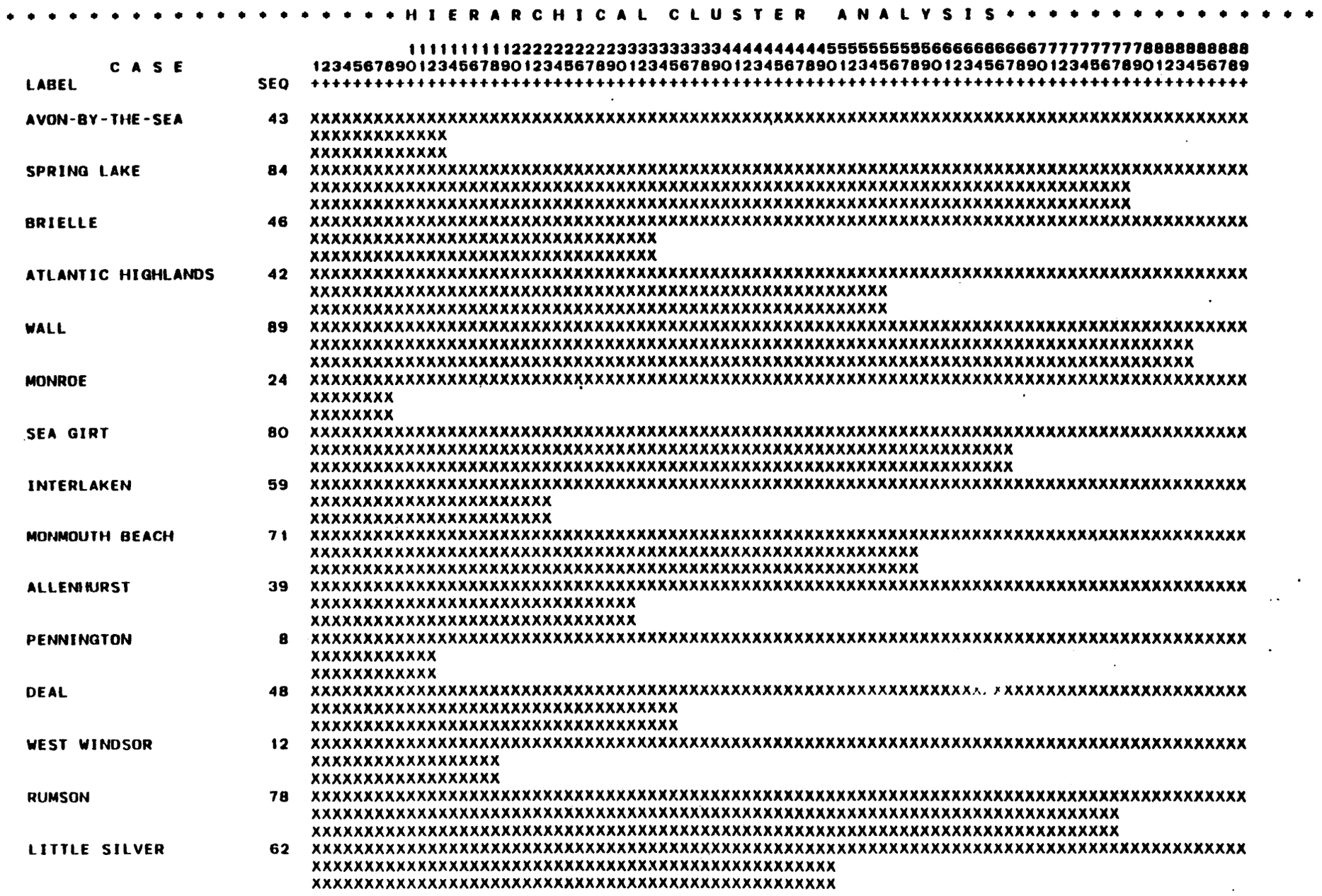


EXHIBIT (continued)

HORIZONTAL ICICLE PLOT



EXHIB [illegible] (continued)

HORIZONTAL ICICLE PLOT

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* * * * * * * * * * * * * * * * * * * * H I E R A R C H I C A L   C L U S T E R   A N A L Y S I S * * * * * * * * * * * * * * *

                                 111111111122222222223333333333444444444455555555556666666666777777777788888888888
        C A S E                  12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789
   LABEL                  SEQ    +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++

   LOCH ARBOUR             63    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
   FAIR HAVEN              51    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
   ROOSEVELT               77    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
   HOPEWELL                 6    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXX
                                 XXXXXXXXX
   PISCATAWAY              29    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXX
   SOUTH RIVER             35    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
   CARTERET                13    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXX
                                 XXXXXXXXXXX
   OCEANPORT               75    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
   WEST LONG BRANCH        90    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
   OCEAN                   74    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
   MATAWAN                 68    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
   WASHINGTON              11    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
   CRANBURY                14    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
   METUCHEN                21    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
   HOPEWELL                 5    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXX
                                 XXXXXXXXXXXXXXXXXXXXXXXXXX
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EXHIBI (continued)

HORIZONTAL ICICLE PLOT

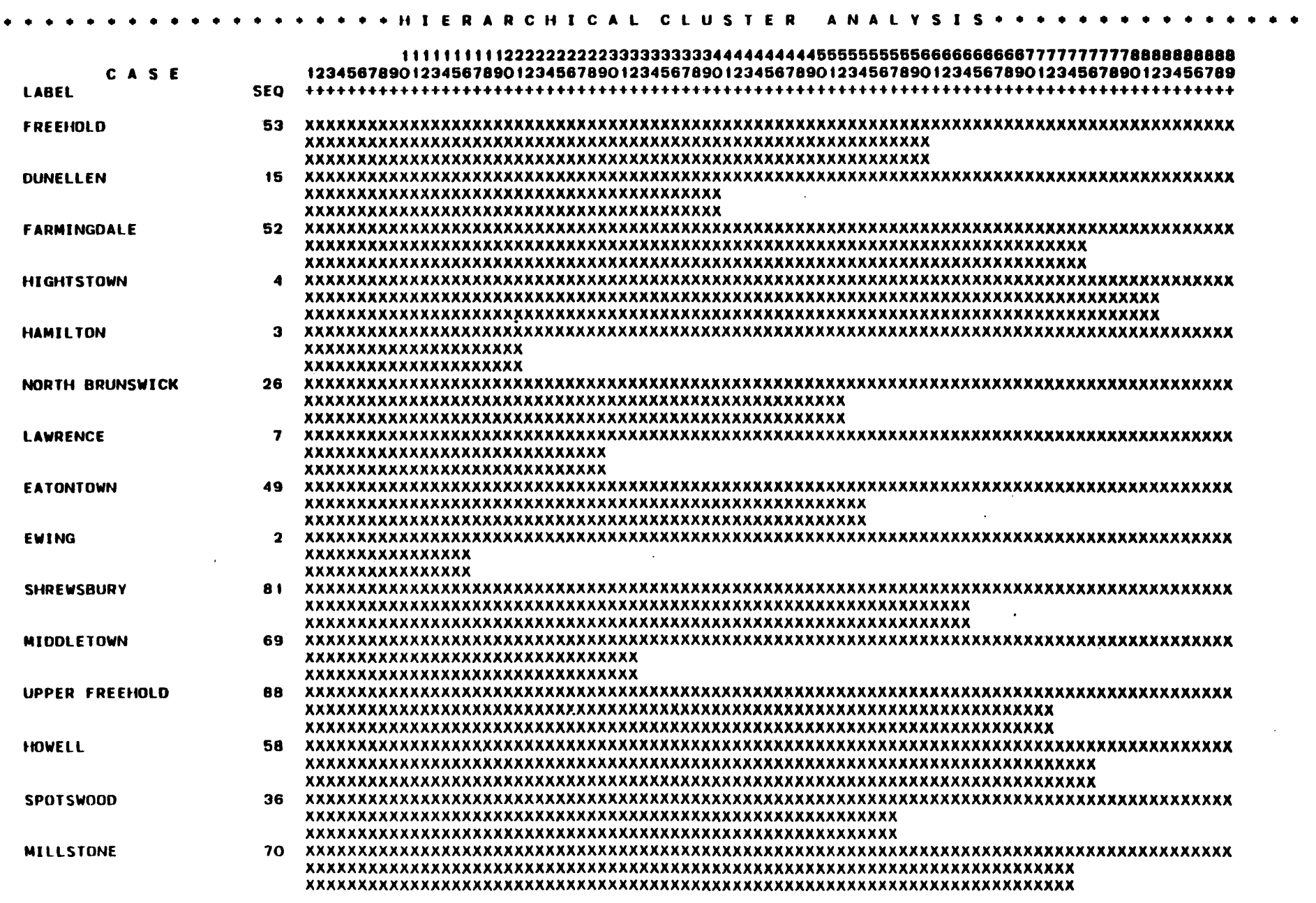

EXHIBIT (continued)

HORIZONTAL ICICLE PLOT

* H I E R A R C H I C A L C L U S T E R A N A L Y S I S * * * * * * * * * * * * * * * * *

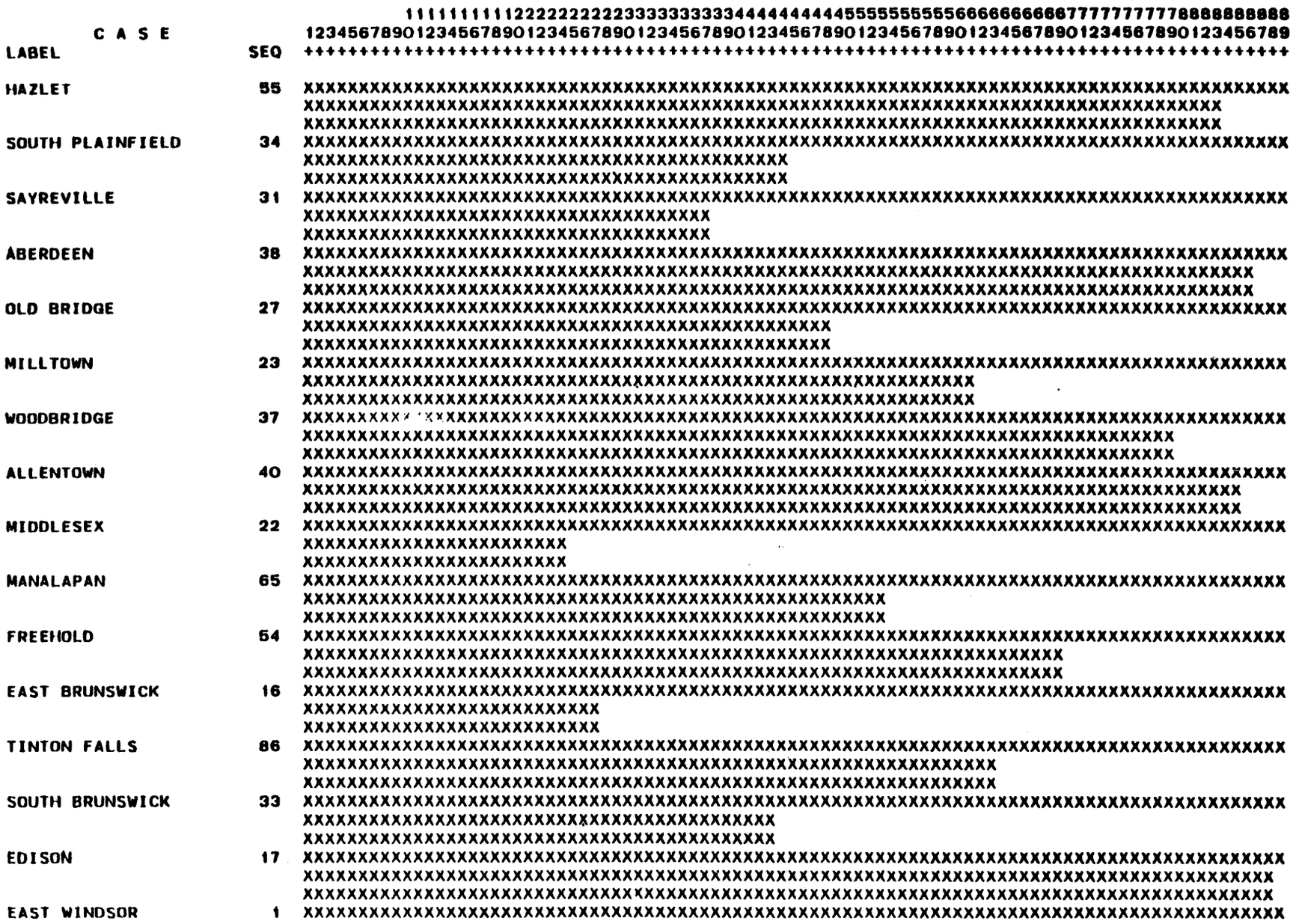

EXHIBIT E

VARIABLE SUMMARY STATISTICS

NUMBER OF VALID OBSERVATIONS (LISTWISE) = 90.00

VARIABLE	MEAN	STD DEV	MINIMUM	MAXIMUM	VALID N	LABEL
I74	25561.033	5931.763	11719.000	41651.000	90	MEDIAN FAMILY INCOME
HIB10	19.198	9.028	6.250	50.230	90	% HOUSEHOLDS WITH INCOME OF LESS THAN $10 000
HIA30	31.811	13.533	6.890	68.070	90	% HOUSEHOLDS WITH INCOME OF $30,000 OR M
POPCOL	21.519	11.508	2.840	57.950	90	% POP COLLEGE GRADUATES
POPHS	76.100	9.578	48.280	92.630	90	% POP HIGH SCHOOL GRADS
FLF	42.130	3.424	31.420	51.350	90	% OF LABOR FORCE FEMALE
LFCO	17.555	7.128	3.210	36.220	90	% OF LABOR FORCE CRAFTSMAN OR OPERATIVES
LFPM	30.422	11.028	9.980	59.730	90	% OF LABOR FORCE PROFESSIONAL OR MANAGER
LFCL	17.865	3.322	11.080	25.840	90	% OF TOTAL LABOR FORCE CLERICAL
UNEMP	5.778	2.028	2.180	11.960	90	UNEMPLOYMENT RATE
PLLF	49.405	4.808	40.270	72.930	90	% OF TOTAL POPULATION IN LABOR FORCE
PPH	2.897	.385	1.820	3.860	90	PERSONS PER HOUSEHOLD
PU5	6.963	1.682	2.470	10.680	90	% POPULATION UNDER 5 YEARS OLD
PO65	11.860	4.752	3.190	27.170	90	% OF POPULATION OVER 65
ESE	47.944	8.151	8.300	59.900	90	% OF CHILDREN IN ELEMENTARY SCHOOL
MARRY	57.932	8.059	26.350	71.230	90	% OF POP MARRIED
FORBORN	.064	.029	.020	.180	90	% OF POP FOREIGN BORN
PCBLACK	5.908	8.308	.000	50.160	90	% OF POPULATION BLACK
PCHISP	2.621	4.488	.000	40.610	90	% OF POPULATION HISPANIC
I127	310.311	50.733	225.000	494.000	90	MEDIAN GROSS RENT
SFU	71.645	19.306	21.530	100.000	90	
I39	67817.778	23542.014	18400.000	160500.000	90	MEDIAN HOUSE VALUE
PLUMB	1.058	1.049	.000	5.930	90	% OF UNITS LACKING OR SHARING PLUMBING
CROWD	2.060	1.565	.000	8.040	90	% OF UNITS WITH 1 01 PERSONS PER ROOM

VARIABLE LISTING BY MUNICIPALITY

COUNTY	MCD	AREANAME	T74	HIB10	HIA30	POPCOL	POPHS	FLF	LFCO	LFPM	LFCL
21	5	EAST WINDSOR	26284	12.74	31.62	32.48	84.34	44.93	12.13	39.99	19.76
21	10	EWING	25974	15.51	31.92	18.37	76.25	47.25	15.74	26.64	25.41
21	15	HAMILTON	23740	18.64	24.85	12.42	68.95	44.67	20.57	22.69	25.84
21	20	HIGHTSTOWN	21770	19.32	25.41	17.54	74.52	46.70	16.63	28.84	17.33
21	25	HOPEWELL	24612	20.46	25.90	32.11	79.74	43.52	17.40	34.71	15.99
21	30	HOPEWELL	32631	7.73	51.42	33.40	84.87	40.73	13.28	40.74	17.83
21	35	LAWRENCE	28558	14.65	39.44	26.57	82.30	45.18	12.12	38.26	19.23
21	40	PENNINGTON	32969	11.75	50.33	48.50	90.29	41.04	9.66	53.30	15.88
21	45	PRINCETON	29599	20.92	34.98	39.06	92.63	45.44	3.21	46.39	15.55
21	50	PRINCETON	38998	16.18	52.31	57.95	90.12	43.19	4.50	59.73	13.69
21	60	WASHINGTON	25996	16.43	32.71	16.77	73.13	40.12	17.51	25.49	21.39
21	65	WEST WINDSOR	35142	8.50	55.60	46.37	89.54	41.49	9.72	48.60	16.59
23	5	CARTERET	23633	23.24	26.04	7.49	62.22	42.49	26.18	14.46	24.64
23	10	CRANBURY	29408	14.97	41.51	28.24	74.71	41.46	13.18	37.32	13.48
23	15	DUNELLEN	23353	18.82	23.06	11.06	69.64	40.51	23.16	19.74	24.02
23	20	EAST BRUNSWICK	31909	7.98	51.51	27.36	82.82	41.38	16.44	34.06	18.34
23	25	EDISON	27431	11.18	36.79	19.55	76.64	42.79	18.69	27.47	22.37
23	30	HELMETTA	22232	19.10	20.06	6.38	60.77	37.21	35.96	14.47	15.57
23	35	HIGHLAND PARK	24925	25.40	25.65	34.77	80.15	46.02	13.32	39.56	18.66
23	40	JAMESBURG	20300	23.07	19.66	9.85	65.09	42.22	26.21	14.77	20.49
23	50	METUCHEN	29375	15.66	39.29	25.60	81.64	43.94	15.25	34.62	21.58
23	55	MIDDLESEX	25078	14.52	28.30	12.39	71.85	43.49	27.07	20.38	24.32
23	60	MILLTOWN	27594	18.63	33.86	15.24	74.09	41.14	20.08	22.82	18.58
23	65	MONROE	26741	13.15	35.00	18.83	75.50	39.00	21.07	26.48	20.26
23	70	NEW BRUNSWICK	17083	37.21	14.19	13.73	70.60	47.49	18.42	22.95	18.82
23	75	NORTH BRUNSWICK	27729	12.91	38.41	21.22	79.47	43.27	16.88	29.89	19.42
23	77	OLD BRIDGE	25280	14.67	30.64	14.95	74.92	40.76	21.15	23.04	22.68
23	80	PERTH AMBOY	17298	35.92	13.80	7.35	48.28	43.61	32.65	14.13	16.28
23	85	PISCATAWAY	26778	12.20	33.64	19.52	82.48	43.23	20.08	25.35	21.22
23	90	PLAINSBORO	27337	9.50	25.86	54.25	91.68	41.90	9.58	48.56	15.12
23	95	SAYREVILLE	26253	14.37	34.92	10.61	70.94	40.90	26.56	18.12	21.69
23	100	SOUTH AMBOY	20824	22.66	18.65	7.33	64.86	42.31	28.76	16.09	17.75
23	105	SOUTH BRUNSWICK	28233	11.84	38.92	26.68	80.98	42.10	16.00	32.86	20.16
23	110	SOUTH PLAINFIELD	26247	9.66	37.07	13.48	75.62	40.82	24.57	23.10	20.54
23	115	SOUTH RIVER	23425	20.38	25.83	9.96	60.86	43.75	30.37	17.64	18.45
23	120	SPOTSWOOD	25270	14.31	30.03	9.86	72.29	41.32	25.34	20.13	20.44
23	125	WOODBRIDGE	26217	14.46	33.36	11.51	70.66	41.78	22.90	19.44	22.65
25	3	ABERDEEN	24948	12.60	33.22	20.22	75.04	40.59	18.85	27.08	19.23
25	5	ALLENHURST	29219	18.86	38.05	30.79	86.04	47.40	9.97	31.82	22.32
25	10	ALLENTOWN	25000	13.09	28.12	21.17	77.65	43.02	17.07	29.42	22.94
25	15	ASBURY PARK	11719	50.23	7.05	8.31	57.67	46.85	23.81	18.40	15.07
25	25	ATLANTIC HIGHLANDS	22286	21.35	25.15	18.99	78.82	39.32	15.46	31.37	17.41
25	30	AVON-BY-THE-SEA	21042	26.86	21.89	19.44	75.17	45.14	12.51	33.11	15.53
25	35	BELMAR	17493	34.65	13.40	14.90	71.96	44.08	18.82	24.44	16.56
25	40	BRADLEY BEACH	16310	39.85	10.31	11.56	66.53	44.94	16.01	25.92	18.04
25	45	BRIELLE	27917	17.47	37.87	27.60	81.15	39.57	14.91	36.30	13.50
25	47	COLTS NECK	39832	7.20	63.82	32.70	85.12	36.47	9.60	44.43	12.87
25	50	DEAL	40751	16.79	52.82	26.32	81.29	31.65	9.01	44.70	11.08
25	55	EATONTOWN	19433	23.40	19.51	20.94	79.47	46.48	16.64	31.40	17.73
25	60	ENGLISHTOWN	14868	35.32	9.58	5.32	55.04	45.62	34.86	11.23	15.59
25	65	FAIR HAVEN	31995	12.68	48.94	35.57	84.35	38.56	8.13	47.05	13.70

EXHIBIT F (continued)

VARIABLE LISTING BY MUNICIPALITY

COUNTY	MCD	AREANAME	174	HIB10	HIA30	POPCOL	POPHS	FLF	LFCO	LFPM	LFCL
25	70	FARMINGDALE	20571	20.38	14.03	14.73	78.91	42.69	25.53	24.77	14.58
25	75	FREEHOLD	20065	28.85	18.05	13.05	65.71	46.03	20.17	24.02	17.90
25	80	FREEHOLD	30187	10.72	45.26	26.99	81.20	39.35	14.57	36.88	16.73
25	82	HAZLET	27018	15.21	35.47	13.17	71.96	40.52	18.89	24.43	19.79
25	85	HIGHLANDS	18559	24.43	19.50	16.04	67.46	40.56	17.86	26.61	16.84
25	90	HOLMDEL	41651	6.25	68.07	37.34	84.32	39.06	10.21	49.64	12.49
25	95	HOWELL	23155	19.51	25.92	12.20	69.87	39.67	24.53	22.79	16.24
25	100	INTERLAKEN	33088	14.06	52.08	36.58	89.41	40.11	8.38	50.30	13.08
25	105	KEANSBURG	17768	35.14	14.14	3.69	52.59	40.26	30.72	10.96	17.49
25	110	KEYPORT	19509	39.21	13.97	7.26	63.13	44.05	27.91	16.66	18.74
25	115	LITTLE SILVER	35077	7.36	54.03	40.72	90.19	40.37	10.85	46.41	13.06
25	120	LOCH ARBOUR	30000	10.94	44.52	34.27	89.75	31.42	4.70	51.17	14.11
25	125	LONG BRANCH	15949	36.38	14.15	14.38	66.44	46.56	17.45	24.54	17.83
25	130	MANALAPAN	30018	12.23	45.60	24.38	81.87	36.61	10.83	39.94	18.16
25	135	MANASQUAN	20645	26.30	21.19	18.14	82.15	42.31	14.73	26.47	17.44
25	140	MARLBORO	32749	8.08	56.02	28.09	80.55	38.61	11.35	40.79	15.41
25	145	MATAWAN	25378	16.68	29.23	19.21	77.85	42.82	16.61	31.61	20.48
25	155	MIDDLETOWN	28487	13.82	41.63	21.68	78.15	38.87	16.24	32.86	17.26
25	160	MILLSTONE	24517	18.22	32.71	20.04	69.65	40.01	19.71	27.59	13.79
25	165	MONMOUTH BEACH	27962	12.87	40.93	31.83	85.71	37.87	11.41	45.49	14.25
25	170	NEPTUNE	20719	28.51	19.27	11.90	69.02	46.84	17.34	24.05	19.60
25	172	NEPTUNE CITY	20125	28.90	16.23	10.83	66.68	44.84	22.88	20.97	18.62
25	185	OCEAN	26422	14.76	33.84	26.94	83.19	42.25	12.62	36.34	18.38
25	190	OCEANPORT	25577	17.36	36.90	20.06	80.83	43.91	11.91	31.70	19.57
25	200	RED BANK	20005	31.63	18.50	17.28	69.11	48.08	16.99	25.22	17.99
25	205	ROOSEVELT	24792	12.05	32.62	37.97	85.92	38.46	12.43	46.09	12.19
25	210	RUMSON	36170	11.23	54.68	38.95	88.82	39.46	8.29	43.29	11.70
25	215	SEA BRIGHT	22772	25.65	25.13	24.12	82.81	41.26	12.11	39.08	14.31
25	220	SEA GIRT	32551	14.69	46.73	33.38	91.02	40.08	7.80	42.10	11.61
25	225	SHREWSBURY	28877	13.23	42.42	28.81	85.61	39.61	14.87	33.55	19.11
25	230	SHREWSBURY	14464	38.17	6.89	4.19	65.35	51.35	26.75	16.22	21.71
25	235	SOUTH BELMAR	17283	36.17	11.24	13.62	63.22	48.53	22.07	21.62	18.22
25	240	SPRING LAKE	26437	18.13	36.88	25.87	83.55	39.51	10.98	33.23	17.76
25	245	SPRING LAKE HEIGHTS	23197	20.19	23.51	19.45	79.81	44.92	15.64	32.33	20.25
25	247	TINTON FALLS	26563	9.16	37.79	25.51	81.42	44.99	14.57	31.77	16.99
25	250	UNION BEACH	19758	24.82	17.68	2.84	58.36	40.67	36.22	9.98	15.53
25	255	UPPER FREEHOLD	22632	19.28	27.75	12.70	69.88	34.84	21.49	18.23	15.93
25	260	WALL	23128	21.55	25.78	18.41	76.11	41.89	20.33	27.94	16.91
25	265	WEST LONG BRANCH	27629	16.71	40.37	17.54	80.72	43.59	14.03	30.83	22.23

VARIBALE LISTING BY MUNICIPALITY

COUNTY	MCD	AREANAME	UNEMP	PILF	PPH	PU5	P065	ESE	MARRY	FORBORN
21	5	EAST WINDSOR	4.56	51.77	2.80	10.57	5.84	54.53	63.96	.07
21	10	EWING	4.62	52.47	3.00	5.42	13.00	35.53	54.58	.06
21	15	HAMILTON	4.81	53.04	2.81	6.79	11.64	50.41	59.94	.07
21	20	HIGHTSTOWN	4.32	51.97	2.70	8.55	13.03	55.20	59.37	.03
21	25	HOPEWELL	3.01	54.77	2.59	7.04	12.29	45.94	60.02	.04
21	30	HOPEWELL	2.92	51.56	3.09	5.31	9.37	48.64	65.08	.05
21	35	LAWRENCE	4.21	52.37	3.21	4.82	11.06	27.88	51.30	.08
21	40	PENNINGTON	4.04	51.63	2.78	6.73	13.51	41.11	65.87	.05
21	45	PRINCETON	3.08	52.03	3.86	2.47	10.81	8.30	26.35	.11
21	50	PRINCETON	3.00	51.87	2.79	4.88	11.24	33.67	57.79	.17
21	60	WASHINGTON	6.20	53.59	2.80	5.36	10.26	46.00	63.16	.06
21	65	WEST WINDSOR	2.65	51.66	3.17	6.26	6.82	45.92	64.76	.09
23	5	CARTERET	7.08	51.27	3.00	6.94	9.78	50.97	58.80	.12
23	10	CRANBURY	2.18	51.55	2.79	4.49	14.05	50.76	60.79	.04
23	15	DUNELLEN	4.68	52.07	2.68	7.06	11.78	49.16	55.57	.07
23	20	EAST BRUNSWICK	5.11	51.55	3.36	7.22	5.07	50.07	65.08	.08
23	25	EDISON	4.58	53.93	3.00	6.61	8.02	46.25	60.92	.09
23	30	HELMETTA	5.19	50.36	3.04	10.68	10.15	54.54	64.01	.07
23	35	HIGHLAND PARK	5.53	57.58	2.37	5.67	12.80	36.83	50.19	.12
23	40	JAMESBURG	6.12	48.00	2.98	10.64	9.38	52.23	57.33	.04
23	50	METUCHEN	4.68	53.72	2.76	6.04	11.66	46.27	61.52	.06
23	55	MIDDLESEX	3.98	52.49	3.02	7.47	8.92	49.15	61.35	.06
23	60	MILLTOWN	3.84	50.64	2.92	7.14	11.57	50.46	64.16	.07
23	65	MONROE	4.40	40.49	2.74	7.20	21.78	55.19	67.91	.07
23	70	NEW BRUNSWICK	8.13	46.76	3.11	6.63	8.99	25.04	31.75	.10
23	75	NORTH BRUNSWICK	4.87	53.88	2.94	6.28	8.68	38.14	55.54	.09
23	77	OLD BRIDGE	5.82	50.93	3.11	8.26	6.69	51.69	61.59	.07
23	80	PERTH AMBOY	10.12	46.70	2.88	8.57	13.68	54.97	51.74	.18
23	85	PISCATAWAY	4.54	54.10	3.42	7.39	4.42	33.17	52.88	.11
23	90	PLAINSBORO	2.45	72.93	1.82	5.57	3.19	35.97	46.73	.08
23	95	SAYREVILLE	5.24	51.59	3.17	6.09	8.70	51.23	60.04	.04
23	100	SOUTH AMBOY	6.53	46.49	2.90	7.39	13.62	51.49	54.90	.05
23	105	SOUTH BRUNSWICK	4.47	51.90	3.11	8.76	6.28	50.78	62.82	.11
23	110	SOUTH PLAINFIELD	5.20	53.03	3.26	7.57	6.94	52.51	64.56	.06
23	115	SOUTH RIVER	5.96	51.94	2.80	6.55	13.09	47.22	58.43	.13
23	120	SPOTSWOOD	5.70	51.60	3.14	7.64	6.31	53.72	65.40	.04
23	125	WOODBRIDGE	5.07	52.83	3.06	5.87	8.39	45.34	59.33	.07
25	3	ABERDEEN	6.34	48.95	3.19	8.40	6.04	48.36	62.08	.06
25	5	ALLENHURST	4.96	49.44	2.81	4.91	17.85	36.97	51.25	.04
25	10	ALLENTOWN	4.51	51.88	2.91	9.02	7.39	53.48	64.18	.04
25	15	ASBURY PARK	9.82	40.32	2.39	8.90	19.89	53.13	35.49	.08
25	25	ATLANTIC HIGHLANDS	6.82	47.79	2.80	7.37	13.19	48.77	60.35	.03
25	30	AVON-BY-THE-SEA	7.20	43.38	2.32	5.43	27.17	47.23	50.05	.04
25	35	BELMAR	9.75	49.20	2.23	5.34	21.32	47.12	46.85	.05
25	40	BRADLEY BEACH	10.87	46.39	2.33	8.34	17.70	55.64	53.21	12
25	45	BRIELLE	5.76	42.67	2.75	6.29	17.20	49.85	64.87	.04
25	47	COLTS NECK	7.70	46.60	3.62	5.40	7.17	52.67	64.13	.04
25	50	DEAL	4.08	43.95	2.98	4.50	15.26	41.26	62.28	.10
25	55	EATONTOWN	5.70	53.77	2.53	9.17	8.21	50.06	56.76	.08
25	60	ENGLISHTOWN	7.03	48.25	2.92	9.01	12.39	58.92	54.30	.05
25	65	FAIR HAVEN	5.20	46.61	3.07	7.04	10.01	48.29	67.46	.03

EXHIBIT F (continued)

VARIABLE LISTING BY MUNICIPALITY

COUNTY	MCD	AREANAME	UNEMP	PILF	PPH	PU5	P065	ESE	MARRY	FORBORN
25	70	FARMINGDALE	8.48	53.33	2.59	9.94	8.01	45.67	58.93	.03
25	75	FREEHOLD	7.53	47.62	2.78	8.54	13.41	53.67	54.20	.05
25	80	FREEHOLD	5.60	45.28	3.44	7.65	8.56	55.78	67.23	.07
25	82	HAZLET	7.05	46.87	3.47	7.86	7.96	49.95	60.44	.06
25	85	HIGHLANDS	5.38	52.16	2.32	6.20	12.35	55.40	49.27	.04
25	90	HOLMDEL	4.50	45.38	3.81	6.06	5.50	48.97	65.85	.06
25	95	HOWELL	7.16	45.06	3.18	8.07	10.25	56.18	64.74	.08
25	100	INTERLAKEN	3.35	49.08	2.70	5.11	20.15	45.57	66.12	.05
25	105	KEANSBURG	11.88	40.27	3.07	9.62	11.65	59.05	50.82	.04
25	110	KEYPORT	7.23	45.47	2.51	7.28	16.21	56.13	55.23	.04
25	115	LITTLE SILVER	5.25	48.28	2.98	7.15	11.31	46.83	67.53	.06
25	120	LOCH ARBOUR	2.85	45.45	2.81	5.71	11.42	42.59	50.96	.02
25	125	LONG BRANCH	9.18	45.61	2.55	8.29	13.99	51.07	46.60	.08
25	130	MANALAPAN	5.88	41.22	3.35	7.48	10.42	53.02	68.78	.07
25	135	MANASQUAN	6.87	45.42	2.51	5.62	18.71	49.95	54.35	.04
25	140	MARLBORO	5.10	41.17	3.85	8.43	6.04	59.90	66.06	.06
25	145	MATAWAN	6.51	51.57	2.80	7.85	9.44	51.84	61.62	.05
25	155	MIDDLETOWN	5.22	46.24	3.30	7.73	9.00	51.79	63.39	.04
25	160	MILLSTONE	5.84	46.66	3.32	8.68	9.67	53.99	64.65	.06
25	165	MONMOUTH BEACH	4.42	51.08	2.45	5.03	11.96	41.17	55.89	.07
25	170	NEPTUNE	8.54	45.84	2.82	6.68	16.29	50.53	51.07	.05
25	172	NEPTUNE CITY	6.71	51.25	2.35	6.29	17.89	53.48	56.73	.06
25	185	OCEAN	4.58	50.67	2.80	8.50	9.33	49.16	62.94	.07
25	190	OCEANPORT	6.45	53.29	3.26	6.25	9.08	50.23	61.75	.05
25	200	RED BANK	7.72	49.64	2.45	5.39	22.38	49.51	42.81	.09
25	205	ROOSEVELT	7.23	52.49	2.98	8.55	10.33	50.00	64.66	.08
25	210	RUMSON	4.35	45.80	3.09	5.33	10.42	43.64	60.78	.05
25	215	SEA BRIGHT	6.67	64.51	1.90	3.36	12.41	38.10	42.96	.05
25	220	SEA GIRT	3.58	44.33	2.70	3.92	21.54	89.04	56.24	.03
25	225	SHREWSBURY	5.05	49.23	2.96	7.53	11.72	59.21	71.23	.06
25	230	SHREWSBURY	11.96	50.58	2.52	9.08	10.54	44.08	47.44	.07
25	235	SOUTH BELMAR	5.85	45.78	2.37	6.25	21.32	45.97	48.00	.05
25	240	SPRING LAKE	6.50	44.12	2.82	5.12	19.66	45.83	55.86	.02
25	245	SPRING LAKE HEIGHTS	5.64	48.34	2.30	4.01	22.47	43.27	54.90	.05
25	247	TINTON FALLS	5.73	48.12	3.31	9.56	7.26	50.47	65.59	.06
25	250	UNION BEACH	9.66	43.95	3.23	9.89	8.84	58.40	59.81	.03
25	255	UPPER FREEHOLD	3.00	47.39	3.05	7.03	10.71	58.25	64.48	.06
25	260	WALL	5.32	45.58	2.91	7.08	13.72	53.59	60.71	.02
25	265	WEST LONG BRANCH	5.59	46.02	3.33	5.47	11.88	35.61	54.47	.07

VARIABLE LISTING BY MUNICIPALITY

COUNTY	MCD	AREANAME	PCBLACK	PCHISP	T127	SFU	T39	PLUMB	CROWD
21	5	EAST WINDSOR	5.59	2.79	324	48.89	70600	.44	1.64
21	10	EWING	13.64	1.35	318	75.08	54100	.58	1.49
21	15	HAMILTON	3.56	1.13	291	74.77	48600	.56	1.56
21	20	HIGHTSTOWN	9.99	3.95	278	60.12	56000	.95	2.65
21	25	HOPEWELL	2.09	.74	339	71.90	68200	2.17	.65
21	30	HOPEWELL	.64	.15	315	92.31	83700	.91	.59
21	35	LAWRENCE	8.80	1.45	348	76.69	67600	.50	1.35
21	40	PENNINGTON	2.89	.56	360	88.48	86100	.52	.39
21	45	PRINCETON	8.67	2.85	339	56.82	117800	1.07	1.95
21	50	PRINCETON	7.62	1.67	288	76.93	132100	.63	.98
21	60	WASHINGTON	1.37	1.46	326	72.06	71000	.84	1.86
21	65	WEST WINDSOR	1.35	3.07	296	81.63	100500	.43	1.18
23	5	CARTERET	4.28	8.18	267	57.21	54200	1.78	3.19
23	10	CRANBURY	11.19	.25	304	83.18	86100	1.49	1.59
23	15	DUNELLEN	.39	2.54	298	61.22	57100	3.59	1.90
23	20	EAST BRUNSWICK	1.38	1.67	353	85.42	80200	.33	1.37
23	25	EDISON	2.96	2.60	328	64.99	68700	.59	1.90
23	30	HELMETTA	1.04	.62	229	94.42	46200	1.85	3.19
23	35	HIGHLAND PARK	6.83	3.13	314	40.53	62500	.87	1.94
23	40	JAMESBURG	12.85	.68	290	61.52	52200	1.02	4.29
23	50	METUCHEN	6.00	3.08	326	77.40	65900	.59	1.41
23	55	MIDDLESEX	1.66	1.08	317	74.26	62600	.55	2.03
23	60	MILLTOWN	.18	1.38	292	83.29	67300	.57	1.24
23	65	MONROE	3.61	1.60	335	83.24	65300	.93	1.57
23	70	NEW BRUNSWICK	28.62	11.47	267	25.45	42600	5.93	7.86
23	75	NORTH BRUNSWICK	4.40	2.04	359	54.99	71200	1.12	1.37
23	77	OLD BRIDGE	2.04	3.17	324	63.55	61000	.50	2.57
23	80	PERTH AMBOY	8.29	40.61	256	31.55	41800	4.80	8.04
23	85	PISCATAWAY	14.57	3.14	300	66.90	64200	.54	3.19
23	90	PLAINSBORO	5.18	3.56	354	21.53	96000	.41	.81
23	95	SAYREVILLE	.35	1.17	285	79.96	61900	.49	1.95
23	100	SOUTH AMBOY	.00	3.23	277	62.34	48800	1.96	3.19
23	105	SOUTH BRUNSWICK	3.97	2.07	346	78.83	71200	.76	1.69
23	110	SOUTH PLAINFIELD	4.77	2.51	336	91.16	61800	.38	1.83
23	115	SOUTH RIVER	4.97	2.06	285	67.50	52600	2.25	3.02
23	120	SPOTSWOOD	.00	2.00	290	78.56	56100	.66	3.00
23	125	WOODBRIDGE	3.37	2.64	309	74.34	60300	.67	1.95
25	3	ABERDEEN	9.74	2.29	324	78.02	60400	.75	2.85
25	5	ALLENHURST	.00	2.45	243	73.72	91300	.55	.30
25	10	ALLENTOWN	10.90	1.32	297	76.41	56000	.87	2.56
25	15	ASBURY PARK	50.16	5.70	237	23.34	32300	4.35	6.61
25	25	ATLANTIC HIGHLANDS	2.38	1.15	331	68.44	61300	1.07	1.52
25	30	AVON-BY-THE-SEA	.08	.00	293	62.17	72500	.81	.29
25	35	BELMAR	5.68	.17	277	46.78	50500	2.01	1.82
25	40	BRADLEY BEACH	1.46	5.65	275	52.41	41900	2.58	3.52
25	45	BRIELLE	7.69	.00	424	86.57	76900	.12	1.14
25	47	COLTS NECK	.65	.43	294	96.31	129100	.54	.55
25	50	DEAL	.25	1.33	277	86.15	160500	.52	.46
25	55	EATONTOWN	9.52	3.19	288	40.19	66900	.66	1.67
25	60	ENGLISHTOWN	2.76	2.76	297	69.82	44900	2.58	3.24
25	65	FAIR HAVEN	7.78	1.03	339	100.00	75400	.10	.58

EXHIBIT F (continued)

VARIABLE LISTING BY MUNICIPALITY

COUNTY	MCD	AREANAME	PCBLACK	PCHISP	T127	SFU	T39	PLUMB	CROWD
25	70	FARMINGDALE	1.78	2.07	298	53.21	51400	.55	1.34
25	75	FREEHOLD	19.55	5.86	284	61.90	49800	1.09	4.14
25	80	FREEHOLD	2.35	2.08	293	76.78	86500	2.82	1.02
25	82	HAZLET	.43	2.16	286	84.40	62600	.17	1.86
25	85	HIGHLANDS	.13	1.77	321	48.56	38000	1.09	2.16
25	90	HOLMDEL	.07	1.78	405	97.95	125500	.26	.80
25	95	HOWELL	2.82	3.61	277	87.92	57800	.67	2.88
25	100	INTERLAKEN	.00	.77	440	95.17	87700	.25	.25
25	105	KEANSBURG	.02	3.30	274	67.52	36200	1.26	5.30
25	110	KEYPORT	7.01	6.15	239	49.00	45600	2.51	3.17
25	115	LITTLE SILVER	.00	.70	480	98.54	81900	.16	.32
25	120	LOCH ARBOUR	2.33	1.03	225	93.33	83500	.00	.00
25	125	LONG BRANCH	20.11	8.39	273	38.60	46000	1.90	5.02
25	130	MANALAPAN	5.15	1.27	306	75.20	84700	.68	1.57
25	135	MANASQUAN	.00	.00	294	82.26	61400	1.44	1.27
25	140	MARLBORO	3.98	2.72	314	93.50	96400	2.54	.77
25	145	MATAWAN	6.04	.78	305	62.20	66000	.68	2.04
25	155	MIDDLETOWN	1.40	1.73	285	90.52	69900	.32	1.44
25	160	MILLSTONE	7.56	3.38	314	94.17	81100	1.59	3.05
25	165	MONMOUTH BEACH	.00	.18	407	53.01	74100	.44	.89
25	170	NEPTUNE	32.64	2.08	243	70.50	46400	1.71	3.36
25	172	NEPTUNE CITY	1.55	3.94	292	58.71	43600	.87	1.99
25	185	OCEAN	3.43	1.28	298	64.48	71000	.48	.79
25	190	OCEANPORT	3.88	2.10	264	84.06	70400	.16	.73
25	200	RED BANK	25.63	4.08	288	44.64	47300	1.41	2.75
25	205	ROOSEVELT	4.03	.23	473	99.67	49200	.00	2.12
25	210	RUMSON	.18	.56	329	92.22	99900	.23	.91
25	215	SEA BRIGHT	4.69	.88	342	34.25	58600	.89	1.70
25	220	SEA GIRT	.07	.30	494	93.10	112700	.33	.30
25	225	SHREWSBURY	1.15	1.67	277	98.15	71300	.00	1.10
25	230	SHREWSBURY	12.10	1.36	303	36.40	18400	.94	5.50
25	235	SOUTH BELMAR	21.77	1.85	277	79.65	37000	.92	2.59
25	240	SPRING LAKE	.35	.00	340	90.95	97000	.23	.81
25	245	SPRING LAKE HEIGHTS	.00	.36	340	63.50	58800	.24	.89
25	247	TINTON FALLS	25.96	2.95	278	84.49	67200	.33	2.89
25	250	UNION BEACH	.33	4.39	309	93.14	39100	1.22	4.77
25	255	UPPER FREEHOLD	3.39	1.38	272	87.76	63100	2.29	1.79
25	260	WALL	1.06	.82	299	84.52	61400	.51	.96
25	265	WEST LONG BRANCH	.58	.79	231	84.74	71100	.30	.71

APPENDIX B:
GENERAL METHODOLOGY: CLUSTER ANALYSIS

The basic classification or grouping procedure is to establish the relevant properties of the objects (municipalities) to be classified and then, to use these properties to assign the objects (municipalities) into classes. More specifically, classification, in the sense used here, is undertaken in reference to measurements made on the property rather than by reference to the existence or nonexistence of the property per se. Thus we are not grouping, for example, on the basis of a yes-no presence of a black population, but on the percent of the total population which is black. In general, then, to group objects on a quantitative base we require:

1. A set of objects, k_1, k_2, ... k_n, to be grouped.
2. A set of relevant attributes or properties, P_1, P_2, ... P_m.
3. A set of measures, x_{ij}, on the properties of the objects.[1]

We then have an n by m matrix, X, made up the x_{ij}'s:

	P	P	. . . . .	P_m
k_1	x_{11}	x_{12}	. . . . .	x_{1m}
k_2	x_{21}	. . . . .		
.	. . . . .			
Objects .	. . . . .			
.	. . . . .			
.	. . . . .			
k_n	x_{n1}	. . . . .		

The basic problem of quantitative classification involves searching this matrix for measures of appropriate groupings. The procedure most commonly employed is the minimization of within-group variance on the measures and the maximization of between-group variance.

In order to follow this procedure, it is necessary to estimate the distance -- often termed the taxonomic distance -- between two objects as they are measured on the m variables. Conceptually, the m variables we are using to classify form an m dimensional space in which each object is located. What is required, then, for classification is a measure of the distance between the objects as they are located in that m dimensional space. This is a problem of multidimensional scaling.[2]

The specific grouping algorithm employed in this study uses a generalized distance function based on within-group variance. For each possible pairing of objects, the means for each of the attributes are calculated and the sum of the squared deviations from the means computed. The pairing of objects which has the minimum value on this latter calculation is assumed to form a class. If, for example, we have the following situation of four objects (k) with measures on each of three properties (p),

		Properties		
		P_1	P_2	P_3
	k_1	2	3	4
	k_2	3	4	3
Objects	k_3	4	3	3
	k_4	4	3	2

a first step would involve pairing objects k_1 and k_2 and computing the means and squared deviations for each of the properties.

	Properties		
	P_1	P_2	P_3
$k_1 - k_2$ mean value	2.5	3.5	3.5
$k_1 - k_2$ squared deviation	.25(.5)	.25 (.5)	.25(.5) = .75

This procedure is repeated for all possible pairings (groups).

pairing	sum of squared deviations
$k_1 - k_2$	.75
$k_2 - k_3$	.50
$k_3 - k_4$	.25
$k_2 - K_4$	.75
$k_1 - k_4$	2.00
$k_1 - k_3$	1.25

In this sample, k_3, and k_4, have the most similar variable profiles as measured by the sum of squared deviations and therefore are clustered together to form a homogeneous group, defined by the mean values of the pairing. The procedure is then repeated with K-1 objects using this new pairing as a new object, and the procedure is repeated until only one object or group remains.

In general, the grouping procedures is a large area comprising n smaller areas which are the units of observation. For each of these n areas, m variables are recorded, describing the relevant properties. In certain cases, particularly when $n \geq 2m$, it is possible to refine the procedure to offset the possibility that the patterns of covariation in the m variables will overlap. Thus "when several variables display a single pattern of concomitant variation, it is desirable to eliminate the redundancies, isolate this pattern and use it in the analysis instead of the several variables. m variables may contain several such patterns, say r, and the analysis is greatly simplified by reducing the dimensions of variation of the n areas from m variables to the more fundamental r basic patterns."[3] This can be accomplished through the use of a principal component factor analysis with rotation according to the varimax criterion. The varimax rotation does not affect the hierarchy of groups, which will be yielded from the grouping algorithm.

The overall analytical scheme is presented in Exhibit G, from raw data input to output clusters.

EXHIBIT G

OVERALL ANALYTICAL SCHEME

DATA FLOW	PRINTED OUTPUT	SUMMARY: COMPUTATIONAL PROCEDURE
1. Data Sources		m socioeconomic attributes of n spatial units formed into n x m raw data matrix.
2. Coded Raw Data		n x m raw data matrix on tape.
3. Transgeneration Program	Input Data	Transgeneration program: converts size data to percentages. Output both printed and entered on tape.
4. Principal Components Factor Analysis Program	Means and Standard Deviations Correlation Matrix Eigenvalues and Eigenvectors Factor Matrix Orthogonal-rotated Factor Matrix Factor Scores	Factor Analysis Program Data input via tape of transgenerated data: The means and standard deviations are a by-product of the computation of the correlation matrix. From this m x m matrix, the program performs a principal component solution. The resulting m x r factor matrix is rotated via the varimax criterion so that each factor is stated in terms of those few variables with which it is most highly correlated. The measure of each factor on each spatial area is computed and presented as an n x r factor score matrix, which is employed in the grouping analysis program.
5. Hierarchical Grouping Analysis Program	Successive Groupings of Spatial Units. From n groups to 1 group	Given a set of n spatial areas measured on r or m different characteristics this grouping procedure, on the basis of profile similarity, utilizes the total within-groups variation as the function to be minimized.

Source: CUPR Grouping.

NOTES

1. David Harvey, Explanation in Geography (New York: St. Martin's Press, 1969), p. 339.

2. Ibid.

3. Brian Berry, "A Method for Deriving Multi-Factor Uniform Regions," Prezglad Geograficzny, t. xxxiii A, 2 (1961), 263.