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DAVID Nissen would be happy to hear from
you. I told him you would probably be in town

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ADDITIONAL HOUSES IN CRANBURY
IMPACT ON TOWNSHIP OUTLAY, REVENUE, AND TAXES

Presentation to the Cranbury Township Planning Board

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More residential development is never a good deal in straight economic terms.

Conservative estimates developed here are that an additional house imposes on Cranbury taxpayers a burden of \$5400/year which grows over time (page 2).

To avoid tax rate increases a developer would have to offer compensation to the township of \$180,000 per new house, or 18 million dollars to offset the burden of each additional 100 houses (page 5).

Absent such compensation, a typical homeowner will face additional tax bills of about \$1500/yr to \$2300/year if the town increases to 1500 or 2000 houses (page 3).

While landowners will certainly enjoy increased values, the typical current homeowner will incur property value losses from increased tax burdens of from 50 to 75 thousand dollars as the town increases to 1500 or 2000 houses (apart from the impact of such development on the quality of life) (page 5).

Key uncertainties are the number of school children per new house, the average value of new houses, and the rate of escalation of costs and values.

More children increase the burden significantly (page 3).

More expensive houses reduce but do not eliminate the burden (page 32).

An increase in cost escalation of 1%/yr increases the compensation required by half (page 4).

DN: 06/23/88

TAX IMPACTS ON TYPICAL HOUSE OF \$200,000 ASSESSED VALUE
 (approximately \$330,000 market value)

	Township Size (households)		
	<u>Current (1000)</u>	<u>1500</u>	<u>2000</u>
"Base Case"	\$4230(#1)	\$5685	\$6501
Increase vs current level	-	\$1456	\$2271
Percent increase	-	34%	54%
More students/house (1.5 vs 1.1)	\$4230	\$6504	\$7779
Increase vs current level	-	\$2274	\$3549
Percent change vs current level	-	54%	84%
Higher new house values (\$500K vs \$350K but 1.1 students/house)	\$4230	\$5158	\$5593
Increase vs current level	-	\$928	\$1363
Percent change vs current level	-	22%	32%

#1. At \$2.11/ \$100 assessed value marked up from current rate of \$2.03 to accommodate 1988-89 anticipated educational outlay.

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QUESTIONS:

What would the developer have to pay the township to defray the costs imposed by a new house?

What is the reduction in value of a taxpayer's house from the extra tax burden imposed by new houses?

ASSUMPTIONS

Township financing rate

8%/yr

Inflation rate for costs and housing value

5%/yr

ANSWER

Compensation for accepting a growing burden must accommodate its growth.

One dollar of compensation yields 8 cents per year of which 5 cents per year must be reinvested to keep up with the burden, freeing only 3 cents per year to pay the current burden charge.

Thus for every \$1/yr of burden we need a lump sum of \$33.33 to offset it. This is called the "capitalization factor."

The required capitalization factor with an 8%/yr financing rate and 5%/yr inflation is $1/(3\%)$ or 33.3 .

By the same logic, if costs and housing value escalated at 1%/yr faster than inflation, the capitalization factor would be $1/(2\%)$ or 50, an increase of half.

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Using the capitalization factor of 33.3, we can calculate the present value of the burden imposed on the township as a whole from one new house, the tax burden imposed on the current owner of a typical house.

	<u>Burden</u>	<u>Extra taxes on typical house</u>	
		<u>1500 vs 1000 houses</u>	<u>2000 vs 1000 houses</u>
First year cash flow	\$5,400/yr	\$1,456/yr	\$2,271/yr
Present value (1 yr cash flow x 33.3)	\$180,000	\$49,000	\$76,000

This says the township as a whole bears a burden presently worth \$180,000 for each additional house built, spread among existing tax payers. In other words,

to avoid any tax increase from the development of, say, 100 houses, the township must obtain compensation worth 18 million dollars.

Absent such compensation, for a typical house,

an increase in township size to 1500 houses (with no other changes) entails an additional tax burden starting at \$1456/yr compared with the current level, a burden which has a present value of \$49,000,

an increase in township size to 2000 houses (with no other changes) entails an additional tax burden starting at \$2271/yr compared with the current level, a burden which has a present value of \$76,000.

An increase in the rate of escalation of the burdens of 1%/yr increases their present value by half.

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Recognizing that residential development imposes significant costs on current taxpayers (apart from the impacts on quality of life), we should

develop a full understanding of the economic costs of residential development,

decide on the ultimate size and character of the township based on considerations of equity, political feasibility, and quality of life, as well as economics,

find alternative ways to acquire needed land and roads so the costs of developers' offers can be rationally confronted and compensation can be effectively negotiated.

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