
Fiscal Impact Analysis of a North Brunswick Transit Village in North Brunswick, NJ: Summary of Findings

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PRESENTATION OUTLINE

Fiscal Impact Analysis

I. *Background*

- Definition and History
- Methodology
- Literature

II. *Fiscal Context of North Brunswick*

III. *Development Scenario Analysis*

- Development Scenario Description
- Demographics of Growth
- Development-Induced Costs
- Development-Generated Revenues
- Net Fiscal Impact: Summary of Findings
- Ongoing Investigations to Refine the Analysis

FISCAL IMPACT ANALYSIS (FIA): DEFINITION

Definition

- Comparison of the Public Cost Versus Public Revenues Generated by Development
- Costs Exceed Revenues = deficit
- Revenues Exceed Costs = surplus
- Provides an *estimate* of effects
- One of *many* impact assessments

FISCAL IMPACT ANALYSIS (FIA): HISTORY

- 1960s-70s—Project (e.g. garden apartment) FIA studies
- 1970s-1980s—Annexation studies (national)
- 1990s to date—Project, annexation and cost of growth FIA investigations

FISCAL IMPACT ANALYSIS (FIA): LITERATURE

1970s– *The Fiscal Impact Handbook*

1980s– *The Practitioners Guide to Fiscal
Impact Analysis*

1990s to Date– *Development Impact
Assessment Handbook (ULI)*
Demographic Multiplier studies-
“Who Lives in NJ Housing”
(2006)

NORTH BRUNSWICK FISCAL CONTEXT: PUBLIC COSTS AND PROPERTY TAXES (2005)

	New Jersey Average	Middlesex County Average	North Brunswick	South Brunswick	Plainsboro	East Brunswick
A. Public Expenditures						
Municipal (residential per capita)	\$984	\$810	\$753	\$863	\$670	\$1,055
School (general fund budget per pupil)	\$12,204	\$11,777	\$10,961	\$11,557	\$12,710	\$12,038
B. Property Tax Base						
Equalized valuation per capita	\$109,463	\$98,466	\$89,111	\$143,409	\$161,535	\$132,393
C. Equalized Property Tax Rate						
Pre-rebate	2.05	2.17	2.60	2.18	2.03	2.20
Post-rebate	1.92	2.03	2.48	2.11	1.98	2.09
D. Residential Property Taxes						
Per Household	\$4,644	\$4,229	\$2,705	\$5,374	\$4,595	\$6,367
% of Household Income	5.7	5.2	5.2	5.5	4.8	5.9

FISCAL CONTEXT: CURRENT SCHOOL ENROLLMENT VERSUS CAPACITY NORTH BRUNSWICK, NEW JERSEY

SCHOOL	CURRENT SCHOOL CAPACITY	CURRENT ENROLLMENT	DEFICIT (-) OR SURPLUS (+) CAPACITY \pm 50
A. North Brunswick Township H.S.	1,825	1,775	+50
B. Linwood M.S.	988	1,262	-274
John Adams E.S.	379	553	-174
Arthur M. Judd E.S.	461	680	-219
Livingston Park E.S.	429	577	-148
Parsons E.S.	331	606	-275
C. Elementary Subtotal	1,600	2,416	-816
D. School District Total	4,413	5,453	-1,040

FISCAL CONTEXT: FUTURE SCHOOL ENROLLMENT VERSUS CAPACITY NORTH BRUNSWICK, NEW JERSEY

SCHOOL	Projected Enrollment 2008-09	School Functional Capacity 2008-09 (With planned additions)	Deficit (-) or Surplus (+) Capacity as of 2008-2009 With Planned Additions
A. North Brunswick Township H.S.	1,904	1,825	-79
B. Linwood M.S.	1,349	1,325	-24
John Adams E.S.	642	627	-15
Arthur M. Judd E.S.	752	674	-78
Livingston Park E.S.	622	638	+16
Parsons E.S.	695	619	-76
C. Elementary Subtotal	2,711	2,558	-153
D. School District Total	5,964	5,708	-256

FISCAL IMPACT ANALYSIS: METHODOLOGY

Projecting Costs

- Per Capita Approach
- Employment Anticipation
- Case Study
- Other Techniques

Projecting Revenues

- Property Tax
- Other Revenues
- Other Effects (e.g. school aid)

NORTH BRUNSWICK DEVELOPMENT SCENARIOS

Development Scenario	Housing Units			Nonresidential ft ² (000's)			
	Market	CoAH	Total	Office	Retail	Other	Total
Proposed Project (TOD)							
Small A	1,697	327	2,024	1,509	350	220	2,079
Small B	2,725	342	3,077	610	350	220	1,180
Medium	3,662	441	4,103	720	350	300	1,370
Large	4,602	531	5,133	750	350	300	1,400
Existing Zoning		270	270	2,725	300	975	4,000

RESIDENTIAL AND NONRESIDENTIAL DEMOGRAPHICS: SOURCES

Residential

- American Housing Survey
- Decennial Census – Public Use Microdata Sample (PUMS)
- Case studies

Nonresidential

- Census of Retail Trade
- Commercial Buildings Energy Consumption Survey
- Other

RUTGERS NEW JERSEY STUDY

RESIDENTIAL DEMOGRAPHIC MULTIPLIERS STUDY

- Author: Center for Urban Policy Research (CUPR), Rutgers University
- Funders: NJDCA-OSG, NJ-NAIOP, ULI (Northern NJ District Council)
- Data: 2000 PUMS, U.S. Housing Constructed 1990-2000
- Geography: New Jersey Statewide and New Jersey Regions

RUTGERS NEW JERSEY STUDY

RESIDENTIAL DEMOGRAPHIC MULTIPLIERS: DATA FIELDS (I)

Multipliers comprise

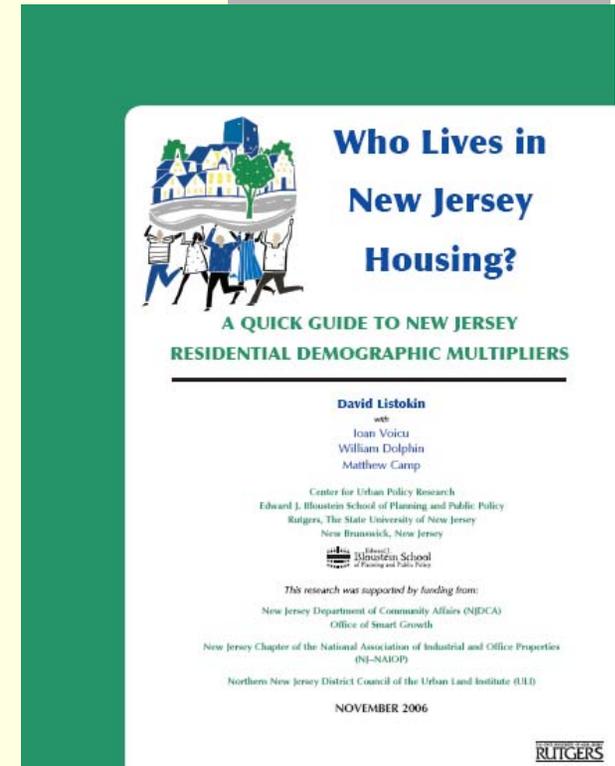
- *Household size (HS)* – Total persons per housing unit
- *Total school-age children (SAC)*
- *Total public school-age children (PSAC)*
 - SAC who attend public school

RUTGERS NEW JERSEY STUDY

RESIDENTIAL DEMOGRAPHIC MULTIPLIERS: DATA FIELDS (II)

Multipliers Differentiated by:

- Housing Type
 - Single-family detached
 - Single-family attached
 - 2-4 Unit
 - 5+ Unit
- Housing Size
 - 1-5 bedrooms
- Housing Price (updated to 2006)
 - All values
 - Below median, above median
- Housing Tenure
 - Ownership or rental



RUTGERS NEW JERSEY STUDY

RESIDENTIAL DEMOGRAPHIC MULTIPLIERS: SELECTED FINDINGS

Housing Type, Size, Value, and Tenure	N.J. Average	
	Household Size (HS)	Public School-Age Children (PSAC)
5+ Units <i>Own</i> , 1 Bedroom		
All Values	1.69	0.12
Below median	1.70	0.17
Above median	1.68	0.05
5+ Units <i>Rent</i> , 1 Bedroom		
All Values	1.51	0.06
Below median	1.37	0.07
Above median	1.64	0.05

- Conclusion: Variations in demographics associated with housing type, housing size, housing value, and housing tenure.

RUTGERS NEW JERSEY STUDY

RESIDENTIAL DEMOGRAPHIC MULTIPLIERS: SELECTED FINDINGS

Transit Oriented Development (TOD)

- Field investigation of 10 TODs with 2,200 housing units found they contained about 50 public school-age children (PSAC)—or a PSAC multiplier of 0.02 per housing unit
 - Application of standard residential multipliers (average 0.14 PSAC per unit) would have projected about 300 PSAC
- Conclusion: New Jersey TODs built to date have a low demographic yield

PROJECTING POPULATION FOR THE NORTH BRUNSWICK DEVELOPMENT SCENARIOS

- To be conservative, analysis essentially utilizes standard (not TOD) New Jersey demographic multipliers
- To be conservative: utilize school-age-children (SAC)—not public school children demographic multipliers

Example- Loft Flats

	<u>SAC</u>
1 Bedroom	0.07
2 Bedroom	0.11

- Field test of the multipliers in 2,350 built housing units in North Brunswick confirm their accuracy.

RESIDENTIAL DEMOGRAPHICS OF GROWTH: NORTH BRUNSWICK DEVELOPMENT SCENARIOS

Development Scenario	Development-Induced					
				% Increase to Current North Brunswick Population		
	<u>People</u>	<u>Pupils</u>	<u>Workers</u>	<u>People</u>	<u>Pupils</u>	<u>Workers</u>
Proposed Project (TOD)						
Small A	3,711	223	5,736	9	4	34
Small B	5,548	295	3,069	14	5	18
Medium	7,385	397	3,478	19	7	21
Large	9,223	497	3,599	23	9	21
Existing Zoning	461	46	10,032	1	1	59

VALUATION GENERATED BY GROWTH: NORTH BRUNSWICK DEVELOPMENT SCENARIOS

Development Scenario	Development-Induced Market and Assessed Value (\$ millions)		% Increase to North Brunswick Property Tax Base
Proposed Project (TOD)	<u>Market Value</u>	<u>Assessed Value</u>	
Small A	\$ 809	\$502	20%
Small B	\$ 944	\$586	24%
Medium	\$1,191	\$739	30%
Large	\$1,411	\$875	35%
Existing Zoning	\$ 422	\$262	11%

NORTH BRUNSWICK PER CAPITA COSTS

North Brunswick (2006)

- Municipal Budget: \$38.7 million
 - Residential Share: \$ 34.8 million ($\$38.7 \text{ million} \times .90$)
 - Nonresidential Share: \$ 3.9 million ($\$38.7 \text{ million} \times .10$)
 - Cost per Capita: \$ 870 ($\$34.8 \text{ million} / 40,000 \text{ residents}$)
 - Cost Per Worker \$ 230 = ($\$3.9 \text{ million} / 17,000 \text{ workers}$)

Apply costs of \$785 per capita ($\$870 \times .9$) and \$185 per worker ($\$230 \times .8$) because of case study insight.

- School Budget: \$77.7 million
 - Cost per Student: \$14,244 ($\$77.7 \text{ million} / 5,453 \text{ pupils}$)
 - Cost per Student with
\$5,000 Capital Reserve: \$19,250 ($\$14,244 + \$5,000$)

DEVELOPMENT-INDUCED COSTS (TOD— Small B example)

Municipal

Residential: 5,548 – development residents
x \$ 785 – per capita cost
\$4.3 million

Nonresidential:

3,069 – development workers
x \$ 185 – cost per worker
\$ 0.6 million

Total: \$4.9 million – Development-Induced Municipal Costs

School

Residential: 295 – development pupils
x \$19,250 – cost per pupil

Total: \$ 5.7 million – Development-Induced School Costs

SUMMARY OF DEVELOPMENT ANNUAL-INDUCED COSTS (TOD– Small B example)

Development Annual Public Service Costs	
North Brunswick:	Proposed Project
MUNICIPAL	(\$ millions)
SCHOOL	\$ 4.9
TOTAL	<u>\$ 5.7</u>
	\$10.6

DEVELOPMENT-INDUCED VALUATION (TOD—Small B example)

Development Valuation		
	Proposed Project	% Addition to North Brunswick (2006)
TOTAL PROJECT VALUE (in \$ millions)	\$944	
TOTAL ASSESSED VALUE (in \$ millions)	\$585	± 24%

DETAIL OF DEVELOPMENT-INDUCED REVENUES (TOD— Small B example)

	<u>Municipal</u>	<u>School</u>	<u>Total Local</u>
I. Property Tax			
- Total Assessed Value – \$585 million	\$585 million	\$585 million	\$585 million
-Property Tax Rate –	0.00864	0.02663	0.03527
 Total Property Taxes	 \$5.1 million	 \$15.6 million	 \$20.7 million
II. Other Revenues	<u>\$ 0.3 million</u>	<u>\$0.0 million</u>	<u>\$ 0.3 million</u>
Total	\$5.4 million	\$15.6 million	\$21.0 million

Net Fiscal Impact (TOD— Small B example)

	Proposed Project (in \$ millions)
Municipal: North Brunswick	
Costs	\$ 4.9
Revenues	<u>5.4</u>
Net Fiscal Impact	+\$0.5
School District: North Brunswick	
Costs	\$ 5.7
Revenues	<u>15.6</u>
Net Fiscal Impact	+\$ 9.9
Municipal and School District	
Costs	\$10.6
Revenues	<u>21.0</u>
Net Fiscal Impact	+\$10.4

NORTH BRUNSWICK DEVELOPMENT SCENARIOS: NET FISCAL IMPACT

Development Scenario	Net Fiscal Impact—Surplus* (\$ millions)			Net Fiscal Impact as % of Total Property Tax Levy
Proposed Project (TOD)	Municipal	School	Total Local	
	Small A	+\$ 9.1	+\$ 9.6	8.0%
	Small B	+\$ 9.9	+\$10.4	8.3%
	Medium	+\$12.0	+\$12.3	9.4%
	Large	+\$13.7	+\$13.8	10.2%
Existing Zoning	+\$0.6	+\$6.1	+\$6.3	5.6%

*Surplus=Development- generated public revenues exceed development-induced public costs

NORTH BRUNSWICK DEVELOPMENT SCENARIOS: FISCAL IMPACT SUMMARY

- All of the development scenarios (TOD under varying densities and Existing Zoning) generate a considerable fiscal impact surplus—public revenues exceed public costs.
- The fiscal impact of the TOD is incrementally superior to that of Existing Zoning.
- The fiscal impact of the TOD incrementally increases with greater density.

NORTH BRUNSWICK FISCAL IMPACT ANALYSIS (FIA): THE FUTURE

- Working with local municipal and school officials, Rutgers will continue to refine the FIA
- Rutgers will also consider financial consequences that go beyond the FIA, such as how a TOD enhances property values