DO KIDS MEAN TAXES?

DO FAMILIES WITH CHILDREN INCREASE PUBLIC EXPENSES?	
Do families with children:	**Or do they:**
Spend more locally on goods and services? **Strengthen the work force and feed the economy?** **Add to the diversity, vibrancy, and stability of our communities?**	**Increase school budgets?** **Result in higher property taxes?** **Increase public safety costs?**

A RESEARCH BRIEF

DO KIDS MEAN TAXES?

A balanced regional economy includes a broad range of industries, businesses, and institutions providing year-round, livable wage jobs, and a culturally and demographically diverse population ready to fill those jobs.

Many of the factors that help support the needed diversity of the labor supply, including affordable housing, quality schools, and public safety services, are paid for or supported by local tax dollars. With towns facing the choice of budget cuts or Proposition 2½ overrides to cover school and municipal operating budgets, funding for all of these services are up for debate. At the center of the budget debate are the schools, which typically constitute almost 40% of local expenditures.[1]

In response to these budget pressures, residents and local officials have focused on new family housing as the cause of rising school costs. Family housing development proposals have been actively blocked and communities increasingly support age-restricted housing through changes in zoning or other incentives.[2] Towns assume home buyers over 50 years of age will not have school age children and will therefore not increase municipal costs.[3] Yet there is evidence that these restrictions simply result in a turn-over of existing housing stock to younger buyers as older residents move into the restricted units and developments.[4]

DO NEW FAMILIES WITH SCHOOL-AGE CHILDREN NECESSARILY MEAN HIGHER TAXES?

In making these and other decisions, local and regional officials and citizens need to have a clear view of the roles families with children have on our regional economy, including local finances. Otherwise, decisions aimed at strengthening our economy and local communities may end up hurting them in the long run.

To establish the context the first section of this paper covers population trends and school financing on Cape Cod; the following sections analyze the impacts of families with children in three areas:

- Fiscal – impacts on spending on services and schools
- Economic – impacts on the labor market, consumer spending, and employee recruitment
- Community Character – impacts on civic engagement and community diversity

The information in each of these sections comes from national studies and studies conducted specifically for this region.

1 Massachusetts Department of Revenue, Division of Local Services, Municipal Data Bank/Local Aid Section, General Fund Expenditures, Fiscal Year 2000 - 2007 General Fund Expenditures.
2 Also called active adult housing or lifestyle housing, these developments are geared to individuals 55 years old and over.
3 Heudorfer, Bonnie, et al. Age Restricted Active Adult Housing in Massachusetts: A review of factors fueling its explosive growth and the public policy issues it raises. Prepared for Citizens' Housing and Planning Association, June 2005.
4 Ibid.

What is the larger context in which the debate about families, kids, and taxes is taking place?

The number of children on Cape Cod is growing at a slower pace than the overall population, and families with children account for a smaller share of all households here as compared to the state and the nation.

- From 1990 to 2007, the number of children on Cape Cod fell 17% while population grew 19%.[5]
- Based on 2007 US Census estimates, the population of children accounts for a smaller share of the Cape's total population (20%), compared to the state (25%) and the nation (27%).[6]
- Based on 2007 US Census estimates, family households with children declined 7.03% from 2000 to 2007.

Table 1- Barnstable County Household Counts (1990, 2000, 2007)

Barnstable County	1990 Census	2000 Census	2007 Estimate	% Change 90-00	%Change 00-07
All Households	77,586	94,822	97,560	22.22%	2.89%
Family Households	52,450	61,041	61,390	16.38%	0.57%
Family Households w/Own Children <18	20,928	23,071	21,449	10.24%	-7.03%

Source: US Census Bureau, American FactFinder

- Based on 2007 US Census estimates, only 22% of Cape Cod households have children under 18, down from 24% in 2000 and 27% in 1990. This compares with 30% of households with children in the state and 31% in the nation.[7]

School Enrollment and Expenditure Facts

Mirroring population trends, school enrollments are declining in towns across Cape Cod. With costs spread across fewer student the per-pupil expenditures are on the rise. School spending as a share of total local spending has stayed the same or declined slightly between 2000 and 2007.

- Cape Cod public school enrollment has declined 9% from 2003 to 2007, and declines were experienced in nearly all districts.[8]

5 US Census Bureau, American Factfinder. General Population and Housing Characteristics: 1990, Barnstable County, MA. ACS Demographic and Housing Estimates: 2007, Barnstable County, MA.
6 US Census Bureau, American FactFinder. http://factfinder.census.gov. 2007 Population Estimates 0-19 year olds
7 US Census Bureau, American FactFinder. http://factfinder.census.gov. 2007 1 Year Population Estimates
8 Enrollment increases occurred for the Cape's four charter schools and two technical high schools.

- During this period of declining enrollment, per-pupil spending in Cape Cod school districts has increased on average 40% from Fiscal Year 2003 (FY03) to Fiscal Year 2007 (FY07).[9]

Table 2 - Per Pupil Spending By District

District[10]	FY03	FY07	% Change
Barnstable	$7,489	$12,196	63%
Bourne	$7,776	$11,897	53
Brewster	$10,030	$14,103	41
Chatham	$10,827	$14,493	34
Eastham	$12,296	$15,318	25
Falmouth	$8,229	$12,147	48
Harwich	$9,619	$12,650	32
Mashpee	$7,579	$11,573	53
Orleans	$13,716	$18,768	37
Provincetown	$17,681	$25,099	42
Sandwich	$6,637	$9,560	44
Truro	$18,734	$18,187	-3
Wellfleet	$15,103	$19,363	28
Dennis-Yarmouth	$7,687	$11,736	53
Nauset Regional	$9,370	$13,219	41
Upper Cape Tech	$11,448	$17,656	54
Cape Cod Tech	$13,924	$18,616	37

Source: MA Department of Education

- From Fiscal Year 2005 (FY05) to Fiscal Year 2007 (FY07), total school expenditures among the Cape Cod districts increased nearly 10%, from $338 million to $371 million.[11]

- School spending as a percentage of total local spending stayed the same or declined for 11 Cape Cod towns from 2000 to 2007. On average school spending accounted for roughly 40% of total local expenditures for all towns during this period. School spending as a share of total spending ranged from a high of 53% in Barnstable to 23% in Provincetown, with most towns in the 35-45% range.[12]

School Financing Facts

Massachusetts towns receive state funding for education through Chapter 70 aid (The Chapter 70 program provides state aid to support school operations as well as establishes minimum spending requirements for each school district and minimum requirements for each municipality's share of school costs.).[13] In recent years state aid has declined, leaving more of the costs to be covered locally. As in many states, public schools are funded locally through property taxes.[14]

9 Per-pupil figures as reported by Massachusetts Department of Education. This figure does not account for changes in enrollments within and among districts or the creation of charter schools during this time.
10 Note that some districts serve different levels (high school, middle school, elementary) and some towns participate in regional districts as well as their own town district. Charter districts are not included.
11Compiled from Massachusetts Department of Education. Historical per-pupil and total expenditures by district, three-year summary. www.mass.gov.
12 Compiled from MA Department of Revenue, Division of Local Services, Municipal Data Bank/Local Aid Section, General Fund Expenditures, Fiscal Year 2000 - 2007 General Fund Expenditures.
13 O'Donnell. Note: Other state aid comes in the form of reimbursements and school building assistance.
14 O'Donnell.

- When adjusted for inflation, the roughly $3.5 billion in Chapter 70 aid distributed to towns in 2007; this was roughly the same amount as distributed in 1999.[15]

- The share of school funding covered with local property taxes rose from 55% in 2002 to 58% in 2006.[16]

- Cape Cod towns contribute roughly $328 million annually toward education (2007) and receive approximately $75 million (2008) in state education aid each year. This means towns spend a little more than $4 for every $1 they receive from the state.[17]

FISCAL IMPACT

So, would more children increase or reduce local fiscal pressure?

Increasingly towns are using fiscal impact assessments to determine what, if any, impact development projects that include family housing might have on the services covered by local property taxes. This tool attempts to project the direct and indirect fiscal costs of growth to a community. [18] The results of fiscal impact assessments will vary depending on the methodology used to estimate the cost of public services. The most frequently used methods are the average cost method and the marginal cost method. A detailed explanation of these two methods is included at the end of this paper.

Fiscal impacts of population increases, including families with children, often are evaluated based on average cost, while a method of looking at marginal costs takes into account how changes in population can be absorbed within system capacity. Studies using marginal cost analysis show that increases in expenditures do not always correlate with increases in population. In fact, population increases can help to lower per-capita costs.

A state-wide study used the marginal cost method to estimate fiscal impacts resulting from population growth in Massachusetts towns between 1990 and 2000 found that population growth associated with new housing was not inevitably followed by increased demand for services and higher municipal costs. Many of the fastest-growing communities experienced the slowest per-capita growth during the decade.[19] Many of the towns with the fastest growth in population experienced a reduction in per-capita local expenditures, as costs were spread over a larger population.[20]

Increases in school spending are not necessarily attributable to increases in population or enrollment. Between 1990 and 2000, overall municipal expenditures grew twice as fast (11%) as the population

15 O'Donnell. Note: Schools also receive reimbursements (circuit breaker funds for per-pupil special needs that exceed a threshold amount, transportation for regional schools, and charter school reimbursements,) as well as assistance from the school building assistance program, and federal grants.
16Massachusetts Department of Education. Office of Strategic Planning, Research and Evaluation. "Preliminary Report on Current Fiscal Conditions in Massachusetts School Districts." January 2008.
17 Massachusetts Department of Revenue. Calculated from historical cherry sheets.
18 Burchell, R W, "The Fiscal Impact Handbook." The Center for Urban Policy Research: New Brunswick, NJ, 1978.
19 Nakosteen, Robert, Palma, James R., et al. "The Fiscal Impact of New Housing Development in Massachusetts, A Critical Analysis." Prepared for Citizens' Housing and Planning Association by the University of Massachusetts Donahue Institute, February 2003.
20 Ibid.

(5.5%).[21] During this same period expenditures for education in the state increased 28%,[22] a rate faster than the rate of school enrollment.[23] Other factors resulting in expenditure increases include:

- Rising health care costs, energy costs, and consumer preferences are among the factors other than population growth that can increase local expenditures.[24]

- The need to increase teachers' salaries to compete with private employers, increase standards for school performance, and increase spending on special education services has led to higher school expenditures.[25]

- The largest percent change in district operating expenses across the state from fiscal years 2002 to 2006 was in insurance and retirement programs, which increased 58.6%.[26]

These findings show that more students may not reduce overall school expenditures, but they may not substantially increase them either.

On Cape Cod per-pupil expenditures have risen faster than total education expenditures because as school costs rise, expenses are spread over a shrinking number of students. The highest per-pupil expenditures tend to be for school districts with the smallest enrollments, while districts with the lowest per-pupil expenditures have among the largest enrollments.

Enrollment growth increases school costs when it affects school building capacity or the need for additional teachers. School construction, expansion, and modernization were among the factors that increased local expenditures from 1990 to 2000.[27] Capital costs and higher operating costs for new schools tend to increase per-pupil spending.[28]

The largest share of enrollment growth in most Massachusetts communities during the 1990s came from new single-family homes and turnover of existing single-family housing from older to younger households with children.[29] Barnstable, Yarmouth, and Falmouth were among the towns that experienced a large turnover of existing housing stock that went to families with children. This population growth boosted enrollment.[30]

School spending consumes a large share of local tax dollars on Cape Cod and elsewhere in the state. Over recent years, enrollments have declined among Cape Cod schools reflecting changes in the region's demographics. During roughly the same period, per-pupil (average) costs rose at four times the rate of total school spending. This suggests that factors other than enrollment, such as increases in costs for health insurance and energy, are accounting for increases in school expenditures, while declining enrollments are helping to further boost per-pupil costs.

21 Ibid
22 Ibid
23 Community Opportunities Group, Inc. "Housing the Commonwealth's School-Age Children." Prepared for Citizens' Housing and Planning Association, August 2003.
24Ibid.
25 Community Opportunities Group, Inc. and O'Donnell, Robert. "Current Trends in School Finance, Massachusetts School Districts Are at a Fiscal Cross Roads." Massachusetts Department of Education, Office of Strategic Planning, Research and Evaluation. September 2007.
26 O'Donnell.
27 Community Opportunities Group, Inc.
28 Ibid.
29 Ibid.
30 Ibid.

What does a loss or gain of families mean for the economy?

Household Spending

Families with children are an important source of spending in the regional economy. Families with children tend to be two-earner households and have a higher after-tax income than single or two-family households, which translates into a higher dollar amount of spending in the regional economy.[31]

- Households composed of a husband and wife with children spend about 80% of their after-tax income on household expenditures[32], the same as households composed of a husband and wife.[33]

- A household with a husband and wife with children spent $68,354 in annual household expenditures in 2006, $12,723 more than a husband-and-wife household and $34,357 more than a single-person household.[34]

Labor Supply

A diverse labor force is needed to fill the variety of jobs in a robust, balanced economy. Working-age adults, many of whom have families with children, are the backbone of Cape Cod's workforce. Cape Cod employers rely on residents to fill jobs. Cape Cod and the Islands have one of the most self-contained labor markets in the state, with 87% of residents working on the Cape. A small segment of the population commutes off Cape.[35]

The median age on Cape Cod is 45.7, one of the oldest in the nation.[36] As the work force ages, new workers will be needed to replace retiring, relocating, or dying workers. Although the population grew between 2000 and 2006 (estimated), Cape Cod experienced a loss in the people aged 35-44 (greater than 10%), and modest growth in the number of people aged 45-54 (<5%) and 55-64 (roughly 10%).[37] The Cape has above average growth in young adults, greater than 10% for 25-34 year olds from 2000-2006. However, unless those young people remain or return to work and raise their families here, Cape Cod towns, businesses and institutions may not find the workforce they need.[38]

31 Ibid.
32 US Department of Labor. Bureau of Labor, Statistics. Consumer Expenditure Survey 2006. Note: Expenditures include food, housing, transportation, apparel, personal care, health care, utilities, etc.
33 Consumer Expenditure Survey 2006.

34 Ibid.
35 Cape & Islands Workforce Investment Board. Cape and Islands Workforce Area LMI Bullet Point Summary. June 2005. 38 Op. cit.
36 Ibid.
37 Francese, Peter. "Challenges and Opportunities in Cape Demographics." Presentation to Cape Cod Chamber of Commerce Economic Summit. October 2007. (Citing US Bureau of Census)

Employment on the Cape and Islands increased 4.7% between 2001 and 2004. Most new jobs are in the critical clusters of health care, knowledge industries (education, professional business services, and high tech), retail, hospitality, and construction.[39] A number of growing industry clusters are showing signs of labor shortages. The number of job vacancies on the Cape and Islands exceeded the state average. Of those vacancies, 75% were in the health care, retail trade, and hospitality industries.[40] Teens and young adults are a source of labor for many Cape Cod businesses, particularly seasonal businesses such as seasonal retailers, ice cream shops, restaurants, inns, municipalities (lifeguards, beach attendants, etc), and landscapers, among others.

Employee Recruitment and Retention

"Quality of life" factors that are associated with families and children are increasingly important to firms and their employees, according to a number of national studies cited in a report by David Salveson of the Center for Urban and Regional Studies, University of North Carolina at Chapel Hill:[41]

- One study found that quality of education and environmental quality were the top two attributes firms believe are most important to their employees.[42]
- A survey of economic development professionals found that "Quality of Life" factors are often the tiebreaker when traditional factors are more or less equal. When "Quality of Life" does become important, economic development professionals consistently put quality of K-12 education at the top of the list.[43]
- Two studies from the 1980s found that highly skilled workers tend to weigh "Quality of Life" factors more heavily and tend to reinforce "Quality of Life" factors by advocating policies to improve pubic schools, upgrade recreation facilities, etc.[44]
- "Quality of life" factors such as education and environment are influential for small owner-operated businesses, including entrepreneurial start-ups, where the choice of work site is conditional on the quality of life preferences of the owner or manager.[45]

COMMUNITY CHARACTER

A more difficult to quantify but no less significant consideration is that families with children contribute to a vibrant, sustainable community.

39Cape & Islands Workforce Investment Board.
40 Ibid.

41 Salvesen, David et al. University of North Carolina-Chapel Hill, Center for Urban and Regional Studies. "The Importance of Quality of Life in the Location Decisions of New Economy Firms." January 2003.
42 Malecki, E.J. and S. Bradbury. "R&D Facilities and Professional Labour: Labour Force Dynamics and High Technology." Regional Studies, 26(2):123-136. 1992.

43 Fusi. D.S. "Education Continues to Score High as a Factor in Quality of Life Location Equation." Site Selection, 36:732-738. 1991.
44 Malecki, E.J. "High Technology and Local Economic Development." Journal of the American Planning Association, 50:262-69. 1984.
Rosenberg, R. "What Companies Look For." High Technology, 5 (January):30-37. 1985.
45 Halstead, J.M. and S.C. Deller. "Public Infrastructure in Economic Development and Growth: Evidence from Rural Manufacturers." Journal of the Community Development Society, 28:97-116. 1997.

Volunteer and Civic Engagement

Family households contribute valuable hours of volunteer time and expertise. According to a survey conducted by AAPR, 31-41 year olds are the primary force behind school volunteer organizations such as parent-teacher organizations and school boards. Individuals in the 31-49 year old range are more likely to engage in professional groups and trade organizations, and are more active in local environmental causes and neighborhood groups.[46]

Community Diversity and Stability

Families are part of a diverse and growing community. Community sustainability programs often include population diversity (including age diversity) as an indicator of a community's ability to respond to internal and external events and plan for the future from a broad base of human experience.[47]

The Cape Cod Sustainability Indicators Project focuses on the need to build human capital through spending on public education as an integral component of building a strong, competitive, and resilient work force.

Universities and national charitable foundations contribute significant resources to the study and promotion of intergenerational community programs. The United States Environmental Protection Agency promotes intergenerational environmental programs as a way to encourage cultural exchange, maximize human and financial resources, inspire collaboration, and strengthen communities.

WHAT'S NEXT

The data indicate that Cape Cod has a smaller-than-average number of families with children and that school enrollments are declining. There are many possible causes for this trend, and the lack of housing choices that are affordable to working families is among the ones often cited. Families are an essential part of Cape Cod's community fabric and labor force; they contribute to economic growth and community vitality and diversity.

The larger number of teens and young adults is a bright spot on the horizon. Cape Cod as a region will need to explore ways to ensure that Cape Cod remains a welcoming, affordable, and attractive place to start a career, launch a new business, or raise a family. Possible local and regional actions include:

- Supporting development of economically diverse housing that will enable families to continue to live on Cape Cod and will enable employers to recruit and retain needed employees.

- Promoting use of marginal cost analysis to accurately assess the costs and benefits of residential development and population growth.

- Promoting the use of the State's Inter-District School Choice Program to more fully utilize operating capacity in districts with declining enrollments

46Nakosteen.
47Liebl, David S. et al. Indicators of Community Sustainability--January 1998.

- Promoting economic development and redevelopment that creates high quality job opportunities and enhances the region's ability to compete as a location for new and expanding businesses.

- Promoting investment in high quality public education that will help foster the development of Cape Cod's human capital, and appeal to employees and firms that may be considering Cape Cod as a business location.

RECAP: HOW DO FAMILIES WITH CHILDREN HELP OR HURT THE ECONOMY?

✔ Signifies greater positive performance or public benefit

Areas of Comparison	Kid ≠Taxes	Kid = Taxes
Fiscal Impacts		
▪ Education is a big share of local expenditures, but increases in school spending are not all tied to enrollment.	✔	
▪ Marginal cost analysis demonstrates that increases in population can lower per-capita local expenditures.	✔	
▪ Per-Pupil Costs are an average of school expense and do not reflect the marginal cost of new students.	✔	
Economic Development Impacts		
▪ As Cape Cod's workforce ages, new workers will be needed to replace retiring, relocating, and dying workers.	✔	
▪ Husband and wife households with children spend more on household expenditures than single or two-person households.	✔	
▪ Employers rely on a resident workforce to fill jobs.	✔	
▪ Job vacancies are experienced in a number of growth sectors such as health care, hospitality, and knowledge industries.	✔	
▪ Quality of Life (QoL) factors associated with families are increasingly important to firms and employees.	✔	
▪ QoL factors such as education and environment are influential for small owner-operated firms and entrepreneurial start-ups.	✔	
Community Character		
▪ Family households contribute valuable hours of volunteer time and expertise, particularly for school, environmental, neighborhood, and business organizations.	✔	
▪ Intergenerational programs foster cultural exchanges, maximize human and financial resources, inspire collaboration, and strengthen communities.	✔	
▪ Population diversity enhances a community's ability to respond to internal and external events and plan for the future from a broad base of human experience.	✔	

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Average Cost/Per-Capita Method: The most commonly used method for assessing fiscal impacts is the average cost model. This approach uses the average cost of providing a service today to calculate future costs generated by new development. For example, the average school cost per student – the total budget divided by the total number of students served – is calculated and then applied to the expected number of new students a development would bring to the community. The net fiscal impact is determined by subtracting estimated additional costs from anticipated additional tax revenues generated by the proposed development.

The average cost method assumes that the cost of serving each additional unit -- person/student/household/etc. -- will be the same no matter how many units are added. However, up to a certain point some population growth can be absorbed without the addition of staff and equipment to provide services or the building of new capital facilities. Average cost analysis does not take into account these issues of capacity.

Marginal Cost Method: An alternative approach to fiscal impact analysis that does take into account capacity is the marginal cost or case study method. This method takes a detailed look at the actual costs of services and how many more people can be served at the existing staff levels and with existing equipment and facilities. At the point current capacity is reached the cost of serving even one additional person will significantly increase by the amount of money needed to increase current capacity. For example, if a school can accommodate 100 students, the addition of the 101st student would cost substantially more because services or facilities would have to be expanded to accommodate the growth.

Marginal cost analysis also identifies when capacity is underutilized and growth would actually result in lower per-capita costs. Using the school building example above, if the school accommodates 100 students but only 85 are enrolled, the cost of operating the school remains the same but per-student costs will be higher than at full enrollment. The addition of up to 15 students would not require additional expenditures, but would reduce costs per student. Overall, the calculation of marginal costs is more difficult than average costs, but can yield a more accurate prediction of real cost impacts from population growth.