

2001 Better Government Competition

HONORABLE MENTION

Overcoming Barriers to Housing Development in Massachusetts

*Jane M. Swift*¹

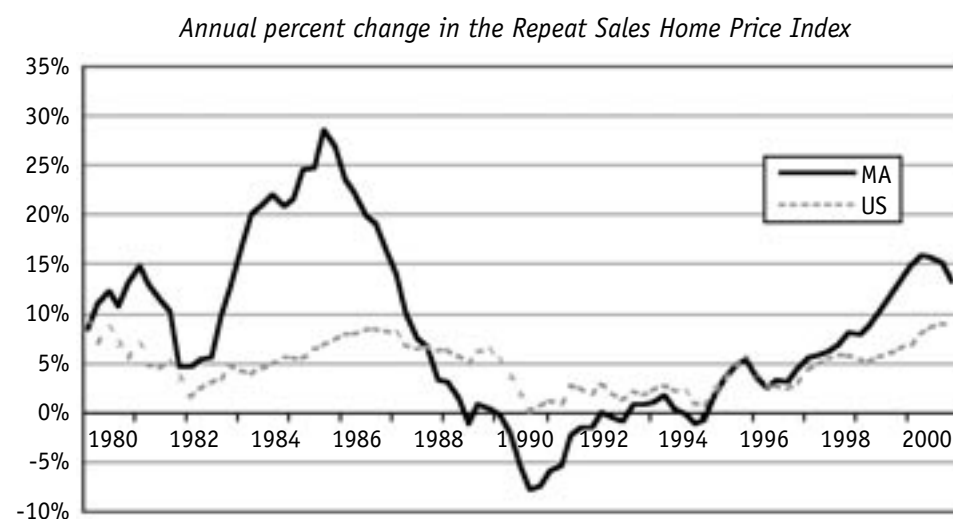
Governor of the Commonwealth of Massachusetts

THE PROBLEM

Rapid economic expansion in Massachusetts in the late 1990s brought unemployment rates to record lows and reversed the income declines of a decade earlier. But as jobs, paychecks, and the amount that households could pay for housing expanded, so too did the cost of housing. Since 1996, housing costs in the Commonwealth have risen at a rate above the national average. In the 12 months ending December 31, 2000, the Repeat Sales House Price Index² for Massachusetts rose 14.5 percent, compared to 8.1 percent for the nation as a whole. Figure 1 shows that between 1995 and 1996, the pattern of declining

Since 1995, Massachusetts housing prices rose faster than those of any other state.

Figure 1. Housing Price Growth



Source: U.S. Office of Federal Housing Enterprise Oversight

or stagnant Massachusetts housing prices was reversed. Housing prices in the United States as a whole also began increasing but were outpaced by Massachusetts prices. Since 1995, Massachusetts housing prices as measured by the Repeat Sales House Price Index rose faster than those of any other state, increasing by 54.6 percent compared to 31.8 percent for the United States.

¹ These initiatives were developed with the help of the Commonwealth's Executive Office for Administration and Finance, Department of Housing and Community Development, Department of Economic Development, Executive Office of Environmental Affairs, Executive Office of Transportation and Construction, and Division of Capital Asset Management and Maintenance and with assistance from the Massachusetts Development Finance Agency.

² The Repeat Sales Home Price Index measures the annual rate of price change for sales of the same homes, thereby isolating market effects from price changes caused by changes in the mix of houses sold.

This pattern of price increases has persisted even in a slowed economy, albeit at a slower pace. The Massachusetts Association of Realtors reports that in the first quarter of 2001, the average selling price of a single-family house in the state had increased by 9.8 percent, to \$285,610, compared to the same quarter one year earlier. In greater Boston, the average price had increased by 16 percent, to \$447,488. In the second quarter of 2001, the average selling price of a single-family house in the state had increased by 7.2 percent, to \$305,454, compared to the same quarter one year earlier. The number of properties sold had decreased, their mean time on market had increased from 108 to 127 days, and the rate of price increase had moderated, but prices nonetheless continued to rise in an economic downturn.

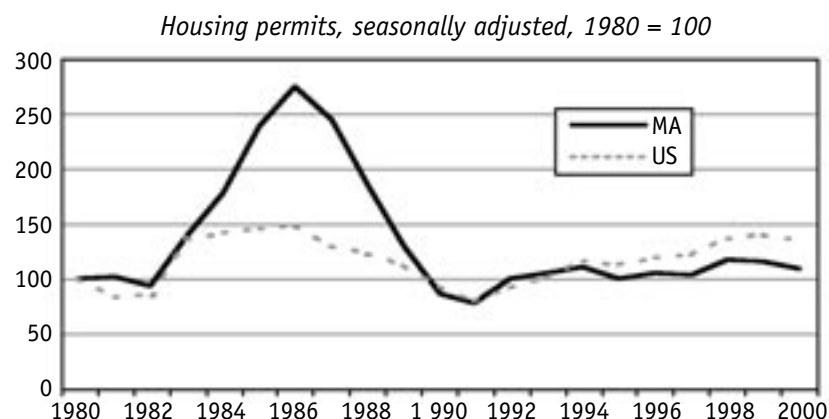
Despite relatively rapid price increases, housing supply growth has been stagnant.

Normally, one would expect higher prices to lead to an increase in production of a product, including housing. Higher market prices would mean that more potential projects are economically feasible, since the higher prices could cover more costly sites and still provide a profit. Yet the price appreciation that began in 1991 and accelerated after 1996 was not accompanied by an increase in housing production in Massachusetts. Despite relatively rapid price increases, housing supply growth has been stagnant, with permits for new housing units remaining at about their 1994 level. In 2000, Massachusetts ranked 46th among the states in residential building permits issued per capita.³

It should be noted that these statistics are based on permits issued for new housing construction. The number of housing units actually built in a year is smaller. Not all buildings that are permitted are completed, and in expensive suburbs, many new houses are built on lots from which an older, smaller house has been cleared. “Tear-downs” are financially indicated in especially expensive areas, such as metropolitan Boston suburbs. Massachusetts’ comparative housing construction is even lower than building permit data would suggest.

This unresponsiveness of supply to price increases is illustrated in figures 1 and 2. While the Massachusetts housing price change curve in figure 1 heads into positive territory between 1995 and 1996 and begins a half-decade of increases that exceeded the national rate, figure 2 shows that Massachusetts housing production has remained fairly flat since 1994, as U.S. annual production has been increasing. Despite record price

Figure 2. Total Housing Permits Authorized Relative to 1980



³ Calculated using U.S. Census Bureau data on state populations and building permits issued.

Source: U.S. Census Bureau

increases, expected increases in production have not materialized. Massachusetts has underperformed the nation in housing production.

Furthermore, new housing being built tends to be at the higher end of the market. On a per capita basis, Massachusetts produces only 50 percent as many housing units as does the United States as a whole. The state's underperformance in multifamily housing development is even more marked. From 1995 to 2000, 15 percent of the housing units granted building permits in the Commonwealth were in multifamily, attached structures, compared to 33 percent in the 1980s. In the United States, 25 percent of housing units permitted from 1995 through 2000 were multifamily units, a rate two-thirds higher than that of Massachusetts.⁴ This pattern of residential development drives up the per-unit cost of new construction because of the larger amount of land cost per unit. This decline in multifamily developments also exacerbates the affordability issue, since renters typically have lower incomes than owners and are left to compete for a very limited supply of rental housing. In addition, single-family development is less dense than multifamily development, whether in apartment buildings or in attached townhouses, and is more likely to lead to urban sprawl.

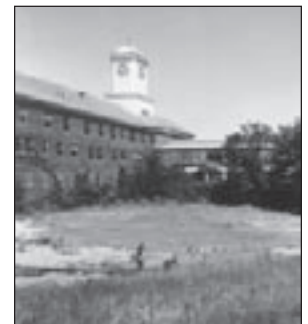
Low housing supply growth threatens to limit the expansion of the Massachusetts economy and has caused the price of housing to rise beyond the reach of many families. Without additional supply, housing costs will continue to increase at an excessive rate, imposing a stiff burden on Massachusetts renters and homebuyers and decreasing the state's overall economic competitiveness. The private housing market has not responded to these higher prices because of constraints on development. Some of these constraints, such as the relative scarcity of land in our old and densely populated state (compared to states in the south and west), are unavoidable. Others, such as local restrictions on residential development, are of our own making and exacerbate the inherent challenges in our development environment.

Land Scarcity and Surplus Land

The scarcity of developable land in Massachusetts has two effects. First, it makes it more difficult to find and to assemble a development site. Second, the limited supply makes the land that is available expensive. In affluent but not traditionally luxury-level Boston suburbs like Needham, builders are buying existing houses and tearing them down to obtain sites on which to build new houses, spending well over \$300,000 to buy buildable lots of less than a quarter-acre.

State government is certainly among the largest landowners in the Commonwealth. Among its extensive holdings are parcels large and small no longer needed for their original purposes. Currently, a procedure exists for such vacant or underutilized properties to be declared surplus and disposed of, but the process can be difficult and slow. Each disposition also requires an act of the legislature. Furthermore, state agencies in possession of properties have little incentive to evaluate which are needed to carry out their missions and which could be put to more productive use if released. The result is that relatively few properties are authorized for disposition, and even when they are, the disposition process can drag out indefinitely. For 20 years officials have been planning the redevelopment of the campus of the former Boston State Hospital, which was closed in 1981 and declared a state surplus property in July 1994.

Without additional supply, housing costs will impose a stiff burden on Massachusetts renters and homebuyers and decrease the state's overall economic competitiveness.



State government's vacant land holdings include Metropolitan State Hospital, a 330-acre site in Waltham vacated in 1992. Redevelopment planning is still in progress.

⁴ Calculated based on U.S. Census Bureau building permits data at www.census.gov/const/www/C40/table2.html.

The Effects of Local Restrictions on Housing Development

Even if more land were available, local practices could inhibit its use. According to Anthony Downs, an economist with the Brookings Institution, “the restrictive behavior of local governments—expressed through their various regulations—is by far the most important single cause of high housing costs.”⁵ Nationally, barriers to residential development take two general forms: 1) ordinances requiring inflexible construction standards and minimum structure sizes, and 2) ordinances requiring low residential densities.⁶ Minimum standards for both construction quality and density are necessary to protect the safety, health, and quality of life of residents and communities. However, research by Downs and the Advisory Commission on Regulatory Barriers to Affordable Housing, established by the United States Department of Housing and Urban Development (HUD) in 1990, indicates that local ordinances often mandate standards for new development that are well in excess of those under which most of the country’s homes were built. For instance, most suburbs in the United States prohibit residential densities in excess of 10 units per acre even though many parts of the country have high-quality housing at densities of more than 35 units per acre.⁷

Downs attributes over half of the cost of building new housing to local regulations that are in excess of minimum requirements for health and safety.⁸ The Advisory Commission on Regulatory Barriers to Affordable Housing reported in 1991 that “the Commission has seen evidence that increases of 20 to 35 percent in housing prices attributable to excessive regulation are not uncommon.”⁹ Writes William A. Fischel of Dartmouth College, “A number of studies have been done [on regulatory growth controls], and almost all of them conclude that growth controls raise housing prices.”¹⁰ His review of these studies indicates that such controls raise housing prices by 8 percent to as much as 38 percent.

Appropriate regulation of land use and of public health and safety is important. Many such regulations are needed. Those regulations and restrictive local practices that go beyond the formal, written rules have often arisen in response to problems caused by development. Nonetheless, a number of categories of rules, practices, and other restrictions have accumulated to slow or raise the expense of development, and while the specific effects are difficult to quantify, examination of the Massachusetts housing market and of what it takes to build here reveals cause for concern.

Zoning Restrictions

In Massachusetts, developed land now has less than half the population density (4.97 persons per acre) than it had in 1950 (11.19 persons per acre). Between 1950 and 1990, the amount of developed land increased at a rate greater than six times population growth.¹¹ One of the reasons for this precipitous drop in density is the imposition of regulatory barriers that require significantly more land to build a unit of housing. For instance, many Massachusetts communities require not only minimum lot sizes of an acre or more, but also minimum setbacks for the buildings, minimum front yard area, minimum lot widths, and minimum setbacks for parking. Accessory, or “in-law,” apartments are often prohibited. Multifamily housing, including rental apartments and attached condominiums, are in some localities prohibited and in many others allowed only with a special permit granted development-by-development—with ample room for abutters’ opposition—by the city council or planning board. At least 45 communities in the Commonwealth have adopted

⁵ Margery Austin Turner and G. Thomas Kingsley, “Housing Markets and Residential Mobility,” The Urban Institute Press, Washington, DC, 1993, p. 261.

⁶ “Residential density” refers to the number of units per acre.

⁷ Turner and Kingsley, p. 262.

⁸ *Ibid.*, p. 263.

⁹ The Advisory Commission on Regulatory Barriers to Affordable Housing, “Not in My Back Yard: Removing Barriers to Affordable Housing,” Report to the President, 1991, p. 1.

¹⁰ William A. Fischel, “Do Growth Controls Matter? A Review of Empirical Evidence on the Effectiveness and Efficiency of Local Government Land Use Regulation,” Lincoln Institute of Land Policy, 1990, p. 29.

¹¹ U.S. Census Data, University of Massachusetts/MacConnel Land Use Data, MassGIS Analysis.

explicit growth rate by-laws that limit the construction of new units. Of 16 communities reviewed in depth by the Executive Office of Environmental Affairs (EOEA), six had adopted regulations making it impossible to build multifamily housing in any form.

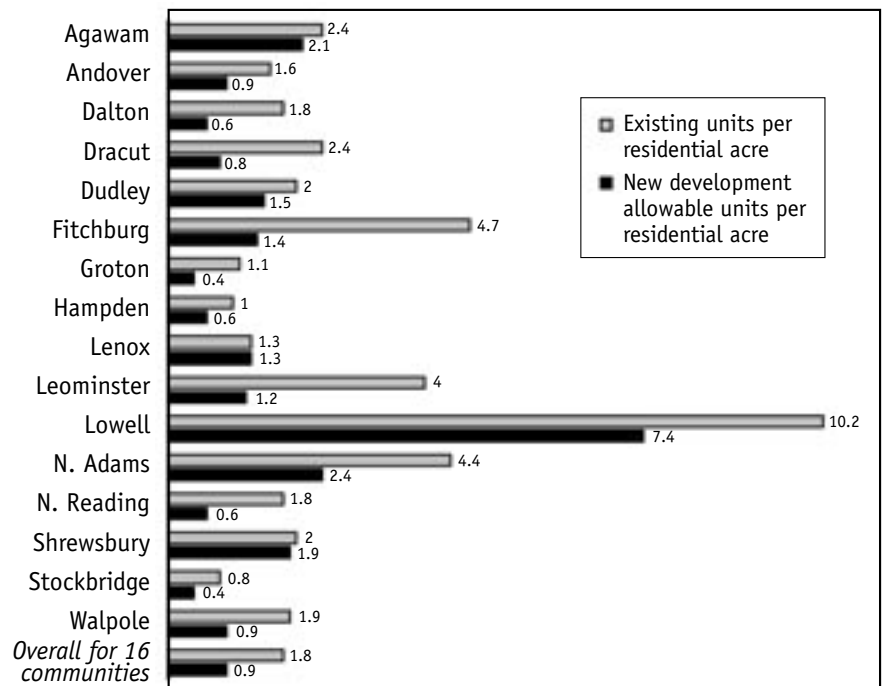
One way to quantify the extent to which these barriers constrict housing supply is to compare how much new development is allowed on vacant land zoned for residential development to the residential density of developed land within the same community. In the 16 cities and towns reviewed by EOEA, current zoning regulations permit an average development density of 0.9 units per residentially zoned acre compared to the average of 1.8 units per acre that exists on land already developed.¹² In some towns, new development requires nearly 3.5 times the amount of land as existing development, and in only one of the 16 communities reviewed do current zoning regulations allow density equivalent to the status quo. This means that current zoning regulations require much less efficient use of land relative to existing development, adversely affecting both the cost of the land needed to build a given amount of housing and the environment.

Additional Governmental Impediments

While zoning is the most obvious and explicit authority local governments can use purposefully or inadvertently to impede housing development, other local powers and processes can more subtly have the same effect. These include subdivision control and regulations to protect public health, safety, and the environment.

- **Subdivision control.** Under the state's Subdivision Control Act, planning boards may adopt regulations prescribing in new subdivisions the standards for turnarounds and dead end streets, underground distribution systems for utility services including electrical and telephone services, police and fire alarm boxes and any similar municipal equipment, and street lighting. Planning board regulations can also include standards for the orientation of new streets, lots, and buildings; building set-back requirements from property lines; limitations on the type, height and placement of vegetation; and restrictive covenants protecting solar access that are not inconsistent with existing local bylaws or ordinances. While the Subdivision Control Law specifically prohibits a planning board from adopting regulations relating to the size, shape, width, frontage or use of lots within a subdivision, or to the buildings to be constructed on the lots, it nevertheless provides localities with significant authority in the development process. In some instances, these powers are used to impinge on areas technically beyond the municipality's jurisdiction and in so doing raise the cost of development by imposing additional standards.

Figure 3. Current vs. Allowable Densities for Residential Development



Scarcity of developable land in Massachusetts makes it more difficult to find and to assemble a development site and makes the land that is available expensive.

¹² Calculations by the Massachusetts Executive Office of Environmental Affairs.

- **Health, Safety, and Environmental Codes and Enforcement.** Beyond land use and zoning restrictions, the misuse of safety- and health-related regulations can unnecessarily impede or increase the cost of housing construction. This misuse can include creating unnecessary or excessive regulations, misinterpreting existing state or local rules, or enforcing requirements not in the rules through local permitting processes. Of particular importance are building and related specialty codes (in areas such as fire protection, architectural access, plumbing and gas fitting, elevators, and sanitation) and environmental regulations such as Title 5, which governs sub-surface wastewater systems.

Although it is the Commonwealth's responsibility to promulgate many building and related safety codes, local building and fire prevention officials and local plumbing, gas, electrical, and health inspectors are responsible for their interpretation and enforcement. These local officials too often impose unduly restrictive building requirements upon builders due to a lack of sufficient understanding of the codes arising from a lack of appropriate training opportunities. This, in turn, places an upward pressure on housing costs. In addition, there is often no practical recourse when local inspectors or safety officials fail to act expeditiously or make determinations that a property owner, builder, or tradesperson believes to be incorrect. Because builders and tradespersons working in a community must rely on local officials to approve their future work, they are reluctant to file complaints or appeals, even when an administrative process exists. Property owners similarly acquiesce so as not to imperil future approvals of their specific projects. Finally, formally imposed requirements that are beyond a locality's legal authority can be impediments to cost-effective construction. Building requirements (as opposed to site requirements) imposed through local rule making or local approval processes under the Subdivision Control Act are examples.

Another source of expense and delay in housing development is caused by the local enforcement of Title 5 requirements for septic systems. The state Department of Environmental Protection (DEP) revised and tightened Title 5 of the State Environmental Code (310 CMR 15) in 1995. Title 5 calls for existing systems to be inspected before property is transferred and, if they fail, to be upgraded within two years. New construction must also comply with the stricter protection standards. Primary enforcement and regulatory responsibility rest with local boards of health.

The standards contained in Title 5 were based on extensive scientific analysis and are sufficient to provide the needed level of resource protection under most conditions. Recognizing that conditions do vary across the state, however, the code allows communities to establish local bylaws that are more stringent than Title 5, and 125 communities have provided notice to DEP that they have adopted such bylaws. Local soil and percolation conditions may indeed necessitate stricter requirements. In addition, a local board of health might adopt an unnecessarily tight standard as a result of an inaccurate analysis of conditions or technology. A community could, however, also use septic system rules intentionally to restrict residential development or at least drive up its cost. DEP indicates that some communities have adopted local bylaws more stringent than Title 5 that may not have their foundation in science. These local bylaws have imposed direct costs, as well as uncertainty and delay that have significant costs of their own. Where conditions dictate more stringent standards, the benefits of such bylaws may outweigh their costs. In other communities, an environmental protection code intended primarily to protect water supplies can be misused to restrict land use that would otherwise be allowed.

“The restrictive behavior of local governments—expressed through their various regulations—is by far the most important single cause of high housing costs.”

***—Anthony Downs,
Brookings Institution***

The Costs of Additional Development to Localities

There are many reasons why communities create such high barriers to further development. Some residents fear the character of their city or town could irrevocably change if too much development occurs. Others believe increases in development will add to traffic congestion and pollution. Yet the predominant concern cited to state officials is that additional residential development will place an undue burden on local budgets. This is because residential development often means more schoolchildren, whose education costs cannot be offset by the property tax revenues generated by the new development. The fear that residential development will cost communities more than they can collect in taxes is shared by local officials throughout the nation, according to University of California at Berkeley professor Elizabeth Deakin's review of opinion surveys on growth controls.¹³

One way to look at the costs of new development is to isolate the effects that additional schoolchildren will have on town finances. The 1987 American Housing Survey conducted by HUD found that single-family housing units had an average of 0.7 additional school-age children.¹⁴ Analysis by the Executive Office for Administration and Finance of single-family development and school enrollments in Massachusetts between 1993 and 1998 indicates that every additional single-family unit contributes a lower number of 0.49 students to a locality's "foundation" enrollment.¹⁵ Table 1 illustrates the cost gap created by different housing types in different circumstances, depending on assessed property values, required educational expenditure, and whether the housing unit is market-rate. The table below shows that using 0.55 as the estimated enrollment increase from the creation of a single-family housing unit, and after factoring out the tax assessment on a house and the additional state aid each new enrollment can be expected to generate, the amounts of educational expenses unrecovered through taxes and state aid will, depending on assessed property values, vary from zero to more than \$2,100 per unit.

The predominant concern of local communities is that additional residential development will place an undue burden on local budgets.

Table 1. Unrecovered Cost Calculation

	Westfield - Single Family House	Wayland - Single Family House	Northborough - "Affordable" ^{**} Single Family House
1 Higher of local foundation budget per pupil or statewide average education	\$7,233	\$7,233	\$7,233
2 Additional pupils due to new unit - single family or multifamily coefficient	0.55	0.55	0.55
3 Expected additional education expense due to new unit (Row 1 x Row 2)	\$3,978	\$3,978	\$3,978
4 Assessed value	\$200,000	\$400,000	\$100,000
5 Less: Anticipated tax revenues from new unit (0.01399 average property tax rate x assessed value [Row 4])	\$2,798	\$5,596	\$1,399
6 Less: Additional education aid for new students ^{**}	\$414	\$414	\$414
7 Annual unrecovered education costs	\$766	(\$2,032)	\$2,165

*An "affordable" single-family house might include a below-market rate unit in a development; subsidized under a government program, such as the Local Initiatives Program.

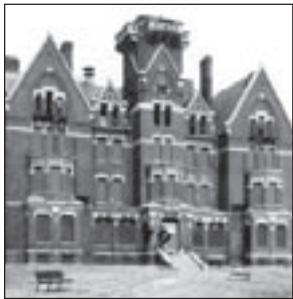
**Assumes minimum incremental aid attainable per the Governor's proposed Chapter 70 reform; multiplied by the coefficient in Row 2.

¹³ William A. Fischel, "Do Growth Controls Matter? A Review of Empirical Evidence on the Effectiveness and Efficiency of Local Government Land Use Regulation," Lincoln Institute of Land Policy, 1990, p. 33.

¹⁴ Commonwealth of Massachusetts, Department of Housing and Community Development, "The Growth Impact Handbook: Ways to Preview Your Community's Future," 1998, p. 57.

¹⁵ "Foundation enrollment" is the number of students for which a school district is financially responsible.

While government-subsidized housing programs have seen significant funding increases over the last two years, they alone will not be able to solve the housing problem.



Closed in 1993, Danvers State Hospital is among vacant state properties. A developer was provisionally designated in October 2001.

PROPOSED SOLUTIONS

Currently, federal and state agencies spend more than \$1.4 billion in housing subsidy programs annually in Massachusetts. While government-subsidized housing programs have seen significant funding increases over the last two years, they alone will not be able to solve the housing problem, if for no other reason than that the private market for new housing dwarfs government programs. The private market produces 18,000 to 19,000 units per year in Massachusetts, even at its inadequate production levels, while government programs at best create approximately 1,800 units. If private developers could produce 10 percent more housing, it would have the same effect on supply as doubling government affordable housing production programs.¹⁶ Furthermore, while these programs provide valuable affordable housing options to many families, they are an expensive answer to the problem of low housing supply growth. Subsidized new construction costs at least \$150,000 to \$200,000 per unit. To bridge the entire gap between per-capita permits nationally and in Massachusetts would require an additional 18,000 units per year costing \$2.7 to \$3.6 billion if they were publicly funded. The money for such an expansive public housing construction program does not exist in public coffers, and there is some evidence that publicly funded new construction displaces private development.¹⁷ A more feasible solution is to remove barriers that have kept the private market from responding to increased demand. The following proposals seek to reduce restrictions by directly addressing their rationale: the scarcity of land available for development and the perceived high costs residential development imposes on local budgets.

► Efficiently Dispose of Surplus State Properties

An expedited and intensive program to identify and dispose of surplus state properties would help address the fundamental constraint on housing development caused by land scarcity. On February 6, 2001, former Governor Paul Cellucci and I filed “An Act Facilitating the Development of Underutilized Facilities and Properties for Housing in the Commonwealth.” The bill remains before the Joint Committee on Housing and Urban Development, and the administration continues to advocate for its passage.

Currently, after a state-owned site or facility has been determined no longer to be needed, its disposition requires an act of the legislature. Even after disposition has been approved, negotiations must be conducted with localities to arrive at a reuse plan. These negotiations often last years. While steps are being taken to improve administrative processes surrounding disposition, statutory changes are also needed to effect real change.

The administration’s bill would streamline the process used to dispose of surplus state property. The Division of Capital Asset Management and Maintenance (DCAMM) would be authorized to transfer property to the Massachusetts Development Finance Agency (MDFA), which would market the property for housing development, or to transfer the property directly to housing developers. In both cases, the transfer terms would be subject to the approval of the Department of Housing and Community Development (DHCD), which would ensure that the site would contain a substantial number of new housing units and that at least 25 percent of the units built would be affordable to low- and moderate-income households. Time limits would be set for reuse plan negotiations. In an initial inventory of surplus properties, the state identified nearly 1,000 acres of land that may be appropriate for housing development, and efforts are underway to identify surplus sites more systematically.

¹⁶ Massachusetts Executive Office for Administration and Finance, *Bringing Down the Barriers: Changing Housing Supply Dynamics in Massachusetts*, 2000, p. 65.

¹⁷ Denise DiPasquale, “Why Don’t We Know More About Housing Supply?” University of Chicago, December 1997, p. 23.

► Overcome Local Barriers

On January 23, 2001, former Governor Cellucci and I issued an executive order creating a Special Commission on Barriers to Housing Development that will identify those restrictions that should be eased in order to facilitate the development of new and affordable homes. The commission has established sub-committees on zoning and permitting, chaired by DHCD Director Jane Gumble; on Title 5, chaired by Department of Environmental Protection Commissioner Lauren Liss; and on building codes, chaired by DHCD Deputy Director Sarah Young.

In addition, the building code sub-committee will present to the commission the work of a special interagency task force lead by the Municipal Law Unit of the Attorney General's office, the Executive Office of Public Safety's Board of Building Regulations and Standards, and the Executive Office for Administration and Finance. This task force is gathering and reviewing all local zoning ordinances, bylaws, and planning regulations that may be in conflict with the state building code. The group will determine to what extent these deviations from state building code may undermine the development of affordable housing across the Commonwealth.

In addition, communities need a "carrot" that will eliminate the fiscal disincentive at the local level to permit residential development, particularly moderately priced single-family and multifamily units. Communities want to be held harmless for the potential increases in the demands on the local school system that new, moderately priced housing will impose. Communities can support the additional costs associated with higher priced homes through the higher property tax revenues such homes generate, but they have difficulty sustaining services to families moving into moderately priced homes or multifamily apartments. Therefore, we have proposed giving communities that allow more residential development priority for state discretionary grants and redirecting part of the growth in lottery proceeds available to be distributed as local aid to communities where such low- and moderate-income development occurs. These two initiatives, known as Executive Order 418 and the Housing Supply Incentive Program, seek to address the greatest concerns localities have about development.

Aid and Encourage Local Action to Promote Housing Development - Executive Order 418. On January 21, 2000, former Governor Cellucci and I issued Executive Order 418, directing the Executive Office of Transportation and Construction, the Department of Housing and Community Development (DHCD) and the Executive Office of Environmental Affairs to help communities plan for future development by providing up to \$30,000 in planning grants and technical assistance to any community that wishes to participate. Furthermore, EO 418 directed these agencies and the state's Department of Economic Development to give priority in awarding discretionary funds to those cities and towns that take steps to increase the supply of housing. EO 418 covers 20 different funding programs totaling more than \$360 million in annual grants.

To receive priority for the funding awards, communities must become "housing certified" by DHCD. The process requires communities to take proactive steps to encourage housing development, giving them several different options and allowing them to develop new techniques for their specific situations. Annually, communities seeking certification submit applications to DHCD documenting housing-friendly measures they have taken. Applications are reviewed by members of a team of DHCD staff members,

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Communities need a "carrot" that will eliminate the fiscal disincentive to permit residential development...

who make certification recommendations to the director. For years one through three of the program, an application would need to demonstrate that a community is taking a sufficient number of enumerated, proactive steps to improve the climate for housing development. These steps vary, from simply undertaking community outreach to promote affordable housing development to rewriting zoning codes to allow greater development density.

The certification standard was initially set at a low level so that most communities could achieve certification as they learned about the process; communities had to earn seven of 23 available points on the certification application. For fiscal year 2001, 201 Massachusetts cities and towns received housing certification. In years two and three, the bar for certification will be raised; communities will have to receive at least 14 points. In year four of the program, housing certification will depend not just on a community undertaking legal and regulatory measures, but on how much new housing is produced in that city or town, standards for which are being developed. This will ensure EO 418 ultimately focuses on outcomes, not process. (Adequate housing production may substitute for documenting proactive steps in any year of the program.)

By emphasizing planning as the first step toward housing certification, EO 418 does not try to force communities to accept development at odds with their unique characters, but rather allows communities to decide how they will meet EO 418's goal of increasing housing supply. EO 418 provides access to resources like open space grants, transportation funding, and Massachusetts Water Pollution Abatement Trust loans that can help a community manage any negative effects communities fear will result from increasing development. For instance, a water pollution abatement loan can fund a sewer system, eliminating the need for larger lot sizes that septic systems require. Strategic purchases of open space can preserve a community's character far better than continuous large lot development. EO 418 challenges communities to address the drawbacks of development directly, rather than hiding behind inefficient and ineffective land use regulations.

Executive Order 418 Online

DHCD will offer EO 418 participation as an online, e-government process. While hard copy filing will remain available for those that are not web-enabled, communities will be encouraged to go online to apply for housing certification and follow results.

Currently, all program materials, including application forms and instructions, are available to be downloaded online. Downloaded applications may be completed and submitted electronically, via e-mail. Results of DHCD's application review and best practices/successful activities are posted online for applicants and other interested parties to view. State agencies whose grant programs are covered under EO 418 can check the housing certification status of grant applicants at DHCD's web site.

A web-enabled, real-time application system is under development for implementation in the winter of 2001-02. This system will allow applications for housing certification to be taken online and loaded directly into an EO 418 database. The database will simplify program administration and allow better, faster communication of information to certification applicants and the public.

Go to www.state.ma.us/dhcd/eo418/index.htm for EO 418 online.

Palmer

As EO 418 enters its second year, indications of progress become visible. The Town of Palmer's FY 2001 certification application earned 11 points for the housing-friendly actions the town had taken. Its FY 2002 application earned 18 points. During 2001, Palmer took a number of housing-friendly actions:

- establishing a local housing partnership
- making zoning changes to allow live and work units, mixed uses, home occupation uses, assisted living facilities, and conversion of certain structures to multifamily housing use in its Village Center Districts
- amending its zoning code to allow senior housing in any district.

Aid Communities with the Costs of Housing Development - Housing Supply Incentive Program. For those communities that accept the challenge presented by EO 418 and look for ways to increase their housing supply, there remains a significant disincentive to residential development: the ongoing costs, particularly education costs, that new development imposes on local budgets. To address these costs, the Cellucci-Swift administration proposed the Housing Supply Incentive Program (HSIP) in conjunction with its fiscal year 2002 budget recommendation. This program will pay the difference between what a community could expect to receive in incremental revenue from new development and the costs of educating the school children anticipated to result from such development.

The formula for distributing this money is based on the predicted addition to foundation enrollment due to new single-family and multifamily units (see appendix). Regression analysis indicated that new single-family houses increase foundation enrollment by 0.49 students on average. The formula applied a single-family coefficient of 0.55 (slightly above the regression estimate) or a multifamily coefficient¹⁸ to statewide average education expenses per pupil or the per-pupil foundation budget of the community, whichever was greater, to determine the expected education costs of new development in a community. The formula calculates an HSIP aid amount based on the assessed valuations of newly created housing units in each city and town. That is, it applies the same coefficient (estimate of enrollment growth per new housing unit) for a given type of housing (e.g., single-family houses, apartments of one or fewer bedrooms, apartments of two or more bedrooms) across the state, but it takes into account the differing assessed property values in different communities to estimate the incremental revenues that each city or town is expected to receive. To the extent expected education costs from each new unit exceed the anticipated tax revenue from that unit, the formula provides the community with the difference. This means that depending on a locality's foundation budget, homes of up to \$250,000 in assessed value would generate additional local aid for most communities. The formula is not necessarily intended to cover the predicted revenue-cost gap on a unit-by-unit basis, but rather to provide a local aid stream specifically tied to housing growth—one calibrated to be more generous in localities where on average the gap will be larger, and which on average fills the gap between incremental expenses and revenues associated with housing development.

...Two initiatives, known as Executive Order 418 and the Housing Supply Incentive Program, seek to address communities' greatest concerns.

¹⁸ Multifamily coefficients of 0.55 and 0.75 were selected for multifamily units of one or fewer bedrooms and two or more bedrooms, respectively. In each case, these coefficients exceed the actual number of students expected to enroll in a school district because of the creation of new housing units. This is done to provide an additional incentive for development of multifamily housing.

Table 2 illustrates how the Housing Supply Incentive Program would work for different housing types in different areas of the state, using hypothetical new units. It expands upon the unrecovered education cost estimate in table 1, showing the increased aid resulting from the use of a higher multifamily coefficient as an extra incentive for the development of multifamily housing. It also shows the program’s responsiveness to assessed property values, providing no additional aid for expensive housing units expected, on average, to be fiscally self-supporting but significant amounts of aid for below-market rate “affordable housing” units whose tax assessments reflect their affordability.

Table 2. Housing Supply Incentive Aid Calculation *(for illustrative purposes only)*

	Boston - 2 Bedroom Apartment	Westfield - Single Family House	Wayland - Single Family House	Northborough - “Affordable”* Single Family House
1 Higher of local foundation budget per pupil or statewide average education	\$8,319	\$7,233	\$7,233	\$7,233
2 Additional pupils due to new unit - single family or multifamily coefficient	0.75	0.55	0.55	0.55
3 Expected additional education expense due to new unit (Row 1 x Row 2)	\$6,239	\$3,978	\$3,978	\$3,978
4 Assessed value	\$300,000	\$200,000	\$400,000	\$100,000
5 Less: Anticipated tax revenues from new unit (0.01399 average property tax rate x assessed value [Row 4])	\$4,197	\$2,798	\$5,596	\$1,399
6 Less: Additional education aid for new students**	\$565	\$414	\$414	\$414
7 Annual unrecovered education costs	\$1,478	\$766	(\$2,032)	\$2,165
8 Annual HSIP aid award	\$1,478	\$766	\$0	\$2,165

*An “affordable” single-family house might include a below-market rate unit in a development; subsidized under a government program, such as the Local Initiatives Program.

**Assumes minimum incremental aid attainable per the Governor’s proposed Chapter 70 reform; multiplied by the coefficient in Row 2.

HSIP would augment and fill a gap left by existing sources of state aid to growing localities. In addition to lottery aid, which is currently distributed on the basis of a community’s size and its per-capita property wealth relative to other communities, Massachusetts municipalities receive so-called Chapter 70 education aid. The Education Reform Act of 1993 established an education funding formula that implicitly provided some recognition of enrollment growth through the “foundation budget” for a community, which is the amount of money deemed necessary to provide a school district’s students with an adequate educational program. The more students there are in a district, the higher its foundation budget. Increases in Chapter 70 aid under the 1993 formula were targeted to closing any gap between districts’ actual spending and the spending required by their foundation budgets. Unfortunately, when all districts had been brought up to their foundation spending levels during fiscal year 2000, the legislature began distributing additional school aid on a flat per-capita basis, whether a district was growing or not. Aid became largely untargeted.

To remedy this situation, the Cellucci-Swift Administration filed a bill with a new Chapter 70 formula in January 2001 and included local aid calculated according to this new formula in its fiscal year 2002 budget recommendation. The administration's proposed formula would have targeted additional state aid to paying for a share of the growth in district foundation budgets, the primary driver of which is enrollment growth. This fundamental shift was included in the Chapter 70 formula proposed by the House Ways and Means Committee and to some extent in the local aid allocations approved by the House and Senate.¹⁹ While any outcome for the fiscal year 2002 budget is likely to be responsive to growth in foundation budgets, including those resulting from enrollment increases, no existing proposal would fully fund the incremental local burden associated with the enrollment growth that is expected to result from new housing development. HSIP would seek to do so.

The funding for the Housing Supply Incentive Program would be drawn from lottery proceeds with new HSIP aid awards made from the annual growth in these proceeds. Currently, assuming that lottery revenues available for local aid grow, each city and town receives in a fiscal year the amount of aid it received in the previous year, plus a share of the growth determined by its population and by its per-capita property wealth relative to other communities. Larger or less wealthy communities receive greater shares of lottery growth than smaller or wealthier communities. This lottery formula is intended to be need-based, but it measures need on general property wealth and does not take into account the cost burden that can be associated with growth. HSIP would add a second need-based criterion for the distribution of lottery aid that explicitly takes this into account.

HSIP aid awards initially granted in each fiscal year would represent a 10-year commitment, so that cities and towns would know that the ongoing costs imposed by development would have a long-term offset. After 10 years, freed-up funds could go to other Commonwealth priorities. Furthermore, even though the formula determines the allocation based on anticipated education expenses, localities would receive the funds as unrestricted local aid and could use them for any government purpose.

In 2000, Massachusetts had the fifth lowest number of permits issued per capita of any state in the nation. The relative scarcity of developable land has been one constraint on building. A tradition of strong local control of zoning and permitting and fear that new development will not be fiscally sustainable has made the situation worse. By removing the fiscal disincentive of residential development, EO 418 and the Housing Supply Incentive Program seek to address the problems that give rise to restrictive zoning head-on. Communities have responded to the fiscal disincentive to allow residential development; it can be expected they will be equally responsive to the removal of that disincentive. In so doing, they will put the power of the private housing market to work, adding far more units than any public program could conceive of building.

COSTS AND BENEFITS

The surplus land initiative, EO 418, and HSIP require *no additional expenditure*. The surplus land initiative will return to productive use state assets that currently lay fallow. EO 418 will use \$9 million from the existing budgets of DHCD, EOTC, and EOEA over three years to fund community development plans for cities and towns. The Department of Housing and Community Development has designated an extensive team of existing

All these initiatives require no additional expenditure.



¹⁹ As this is being written in mid-October 2001, the FY 2002 budgets approved by the House and Senate remain unreconciled, and the conference committee will need to negotiate Chapter 70 appropriations. These appropriations may be made without enacting a new formula, action on which may be deferred until the fall.

staff to review and certify communities' EO 418 submissions. The retargeting of existing resources to this policy priority results in no increase in the department's operating budget. The discretionary grants affected by EO 418 exist already, and it is only their distribution that would be changed.

HSIP would be funded by redirecting a portion of the growth in lottery proceeds available to be distributed as local aid each year; its estimated fiscal year 2002 cost of approximately \$22 million would be less than one-half of 1 percent of the total \$5.1 billion of local aid that the state will distribute. Currently, the growth in lottery proceeds in a given year is allocated among cities and towns according to a need-based formula that measures local fiscal capacity according to municipalities' property wealth per capita.²⁰ The HSIP formula goes one step further by measuring and seeking to mitigate the actual uncompensated costs attributable to the creation of lower costs housing—costs that are borne unequally in the state's communities, depending on where such development occurs.



Not changing the dynamics of housing creation in Massachusetts will have tremendous costs. Workers considering whether to move to or move from Massachusetts will weigh housing costs in their decisions. Research has indicated that high home-ownership costs discourage immigration into and encourage out-migration from a state.²¹ Anecdotal evidence bears out this conclusion. For example, at least one recent press report indicates that hospitals and medical practices are having difficulty in recruiting physicians partially because of high housing costs.²² Inflated housing prices have driven away skilled workers needed for economic growth in the Commonwealth.

The initiatives described in this paper are designed to remove governmental impediments to housing creation and to stimulate private market production. The benefits of doing so will accrue most narrowly to new home buyers and to renters who will not face high housing cost burdens caused by runaway housing price increases; housing has been identified as the largest item in the average household's budget.²³ More of households' disposable incomes will be available to buy other goods and services and to save for the future using assets more liquid than homes. More broadly, the benefits from moderating housing prices through a more responsive housing market will accrue to all residents of the Commonwealth. Protecting the state's economic vitality against the possibility of a housing-induced labor shortage is essential to preserving employment options for Massachusetts residents.

OBSTACLES

EO 418 is in the process of being implemented. Its greatest obstacle will be garnering the participation of communities. For fiscal year 2001, the program's first year of operation, 201 cities and towns were granted housing certification. DHCD will also need to ensure community development plans truly address the need for more housing, as opposed to simply embracing the concept in general without taking any specific measures.

The surplus land legislation and Housing Supply Incentive Program still need legislative approval. The fact that HSIP is funded from lottery revenues is its most controversial aspect. Funding it using part of a dedicated revenue stream already dedicated to local aid provides recipients with assurance that committed HSIP funds will be received. This assures a community that if it makes changes in its zoning laws today, funds will be available to offset the costs of development that occurs three or four years later.

²⁰ The variables in the lottery formula are relative equalized value and population. The smaller a municipality's property wealth per capita compared to the state average or the larger a municipality's population, the greater its share of lottery growth funds.

²¹ Andrew Sum et al., *The Road Ahead*, Massachusetts Institute for a New Commonwealth, 1998, p. 76.

²² "Boston losing appeal for young doctors," *Boston Globe*, August 9, 2001, p. G1.

²³ Sum et al., p. 76.

Potential for Success

The problems of inadequate housing production and excessive price increases over the long term are not easily or quickly solved. As noted earlier, relatively high population density means that land suitable for development is more scarce in Massachusetts than in many areas of the country—a real and natural constraint within which any solution must work. Other constraints, created by government, are changeable. But they have been long in the making and have arisen from localities' real concerns about the effects of development on their finances and on quality of life for their residents. On the other hand, the aggregate effect of localities' restrictions on development in what they perceive to be their best interests are social and economic problems that affect the quality of the lives of residents and threaten the state's economic future. The current statutes and structure of government in the Commonwealth place significant power over the development process in local hands. Convincing local governments to weigh the particular interests of abutters to development and localities against wider social and economic concerns is a great challenge. Success will depend not only on finding ways to address localities' legitimate concerns, but also on increasing their understanding of the negative effects of inadequate housing supply creation. As greater portions of the state's residents confront the burden caused by high housing costs, the market itself may contribute to the education effort and increase the political will to change the government decisions that affect housing affordability.

Protecting the state's economic vitality against the possibility of a housing-induced labor shortage is essential to preserving employment options for Massachusetts residents.

REPLICATION IN OTHER STATES

The problem of housing supply and affordability caused by this clash between the perceived interests of localities and developers, and between the interests of homeowners and those who rent or would like to become homeowners is not limited to Massachusetts. The housing supply and affordability problem is found elsewhere in desirable places where housing demand outstrips supply—particularly in states or metropolitan areas where housing price appreciation has significantly exceeded while construction has lagged behind the national average. Research results cited earlier in this paper about the significant housing impacts of government regulation were drawn from studies that were not specific to Massachusetts. Analysis of comparative price appreciation and development rates similar to that described in this paper can indicate where the housing market is not responding to price signals.

The solutions suggested in this paper are, however, tailored to the specifics of municipal finance and authority in the Commonwealth; the Housing Supply Incentive Program responds to financial gaps caused by the school funding formula and property taxation, while the surplus state property proposal deals with the disposition process prescribed in current state law. Other states interested in addressing issues of housing supply and affordability would need to determine the causes and design initiatives that take into account their specific statutes and organization.

APPENDIX

The Housing Supply Incentive Formula

The Housing Supply Incentive Program is intended to encourage localities to promote housing development by insulating localities from any gap between expected incremental educational costs and incremental revenues associated with the creation of new housing units. It does so through a local aid distribution formula that seeks to measure this gap and target aid accordingly. The formula relies on several variables.

The formula in most cases uses statewide averages rather than community-specific amounts for variables. This is done to keep the formula as neutral as possible toward local decisions, such as whether to be a high service, high expenditure, high tax levy community or to offer more limited services at lower expense paid for with a lower tax levy. Exceptions are noted below.

Incremental Educational Expenses

The formula uses for each locality the higher of the following: the most recently available statewide average education expenditure per pupil and the school district's foundation budget per pupil. For most communities, the state average expenditure is greater and is used. When the locality's foundation budget per pupil is higher, that figure is used so as to reflect the state expenditure mandate inherent in the foundation budget. Data is obtained from the state department of education.

To obtain the projected incremental education expenses associated with creation of a housing unit, the per pupil education expense described above is multiplied by the appropriate coefficient, depending on housing type.

- **Coefficients.** The coefficients used in the formula are assumptions about the number of students expected to enroll in a school district as a result of the creation of a new housing unit in a community. A coefficient of 0.55 was chosen for single-family houses, multifamily housing units with one or fewer bedrooms, and all rehab units (see *Educational Expenses* for definition). A coefficient of 0.75 was selected for multifamily units with two or more bedrooms.

For single-family houses, which constitute approximately 85 percent of new housing construction in the Commonwealth, the 0.55 coefficient approximates the best estimates of the actual school enrollment effect of housing creation. Regression analysis done by the Executive Office for Administration and Finance estimated a 0.49 student enrollment increase per single-family housing unit created in Massachusetts between 1993 and 1998. To check this estimate, it was compared to 1990 census statistics that there were 0.74 school-age children present in houses built between 1985 and 1990. Since this number includes children already in a school system, it might be expected to be somewhat higher than the net enrollment effect a new housing unit has on the district. The 0.49 student estimate is consistent with this expectation.

For multifamily housing units, the 0.55 and 0.75 coefficients exceed the predicted enrollment effect of housing creation. These relatively high coefficients were chosen to provide an explicit extra incentive for multifamily development, which currently meets

with the greatest opposition. For rehab units, a coefficient of 0.55 was used because the assessed value data obtained from assessors did not differentiate between housing types, so the higher two or more bedroom coefficient was not selected.

- **Housing Unit Creation.** The number of housing units created in each community is the average annual number of building permits it issued over the most recently available three-year period. For the fiscal year 2002 HSIP formula, this means 1998 to 2000, inclusive. Permit totals are calculated for single-family units and multifamily units. These data are obtained from the U.S. Census Bureau, which collects building permit data monthly from 268 Massachusetts cities and towns and annually from all Massachusetts cities and towns. The Census Bureau also imputes permit statistics for non-reporting localities. The formula includes in housing unit creation any units created through adaptive reuse of existing structures that are converted to housing use and any abandoned housing units that are rehabilitated and reoccupied. The number of these “rehab units” is collected through a survey sent to the tax assessors in each municipality.

- **Assessed Valuations.** Local tax assessors were asked to report the assessed values of newly created housing units from the most recent available year. As part of preparation of the FY 2002 HSIP formula, this meant units completed in 1999 and assessed for taxes in 2000. They were also asked to classify each unit as a single-family unit, a multifamily unit with one bedroom or less, or a multifamily unit with two or more bedrooms.

The distribution of assessed values as reported by assessors is applied to the average number of building permits obtained from the Census Bureau to construct an assumed distribution of the assessed values of new construction as determined by census building permit data. This is necessary, as opposed to simply using the assessor data, because it is desirable to use a three-year moving average for housing unit creation, and assessor data have not been available for a three-year period.

- **Incremental Tax Revenue.** The projected incremental tax revenue to be produced by newly created housing in a community is calculated by applying the most recent available statewide average residential tax rate of \$13.99 per \$1,000 of assessed value to each unit in the assumed distribution of assessed values (see above). The \$13.99 rate is calculated by the Department of Revenue using the total statewide property taxes levied on residential property and the total statewide assessed value of this property.

- **Incremental Chapter 70 Revenue.** An estimate of the incremental Chapter 70 school aid a community would receive due to the creation of a housing unit contains two components. First, the minimum amount of additional aid that any district could receive due to the addition of a student under the revised Chapter 70 formula filed as legislation by the Cellucci-Swift Administration is calculated to be \$753. Second, this figure is multiplied by the appropriate coefficient that estimates the number of students that would be enrolled in a district as a result of the creation of a housing unit.

- **Incremental Expense/Revenue Gap.** Total incremental revenues from taxes and Chapter 70 are subtracted from incremental education expenses to calculate the gap, if any.

- **Chapter 40B Adjustment.** Because the proposed source of funds for the program is the growth in lottery aid, poorer communities that currently receive relatively large shares of lottery growth funds but have little housing creation would not benefit from the Hous-

ing Supply Incentive Program. If such a community has achieved the 10 percent subsidized housing goal established for every city and town by Chapter 40B of the Massachusetts General Laws, indicating that it has in the past hosted the development of affordable housing, the formula provides an adjustment. The adjustment adds sufficient funds to guarantee such a community a share of lottery growth funds equal to at least 80 percent of the share of lottery growth funds that they received in the previous year.

- **HSIP Aid Award.** The sum of a community’s incremental expense/revenue gap for all housing units created in the relevant period and, if applicable, a Chapter 40B adjustment constitutes its HSIP aid award for that fiscal year.

The formula is presented in table 3.

Table 3. Housing Supply Incentive Aid Formula

For each \$10,000 assessed value cohort, the sum of

<p>(1998-2000 Average Single-family Permits) x (Proportion of 1999 New Homes in each \$10,000 Value Cohort) x [(Single-family Coefficient) x (Per Pupil Education Expenditure) – (Single-family Coefficient) x (Marginal Chapter 70 Aid) – (Average Tax Rev for a home in each \$10,000 value cohort provided the tax revenue is less than predicted education costs net of Chapter 70 Aid)]</p>	<p>Provides the difference between tax revenue generated by new single-family homes and predicted education expenses</p>
+	
<p>(1998-2000 Multifamily Permits) x (Proportion of 1999 New Multifamily Units with less than 2 bedrooms) x [(1 BR MF Coefficient) x (Per Pupil Education Expenditure) – (1 BR MF Coefficient) x (Marginal Chapter 70 Aid) – Tax Rev (Based on Average Multifamily Assessed Value per MF permit issued)]</p>	<p>Rewards production of 1 bedroom or less multifamily units</p>
+	
<p>(1998-2000 Multifamily Permits) x (Proportion of 1999 New Multifamily Units with 2 bedrooms or more) x [(2+ BR MF Coefficient) x (Per Pupil Education Expenditure) – (2+ BR MF Coefficient) x (Marginal Chapter 70 Aid) – Tax Rev (Based on Average Multifamily Assessed Value per MF permit issued)]</p>	<p>Provides the difference between revenue generated by new 2-bedroom or more multifamily units and their predicted education expenses</p>
+	
<p>(1998-1999 Average number of Units Rehabilitated) x [(Rehab Coefficient) x (Per Pupil Education Expenditure) – (Rehab Coefficient) x (Marginal Chapter 70 Aid) – Tax Rev (Based on Average Rehab Assessed Value per Rehab unit)]</p>	<p>Rewards rehabilitation of existing units</p>
<p>► <i>Communities that have achieved 10% subsidized housing under G.L. Chapter 40B receive the greater of the above calculation or the following:</i></p> <p>0.8 x 2001 Lottery Formula Share x Total HSIP Funds (calculated iteratively)</p>	<p>Guarantees communities with at least 10% subsidized housing under G.L Chapter 40B a share of HSIP funds equal to 80% of the share of lottery growth revenues received in the previous year</p>

Description of Variables

Variable	Value	Source
1998-2000 Average Number of Permits	City or Town Specific	U.S. Census Bureau
Proportion of 1999 New Homes by \$10,000 Value Category	City or Town Specific	Information requested from municipality
Single-family (SF) Coefficient	0.55	Determined based on ANF analysis
1 Bedroom Multifamily (1BR MF) Coefficient	0.55	Set at single-family level, assigned to provide additional incentive for multifamily development
2 Bedroom Multifamily (2BR MF) Coefficient	0.75	Assigned to provide additional incentive for multifamily development
Rehab Coefficient	0.55	Set at single-family level
Average Education Expense	Greater of \$7,233 state average expenditure per pupil or FY2002 Local Foundation Budget per pupil	Department of Education
Marginal Chapter 70 Aid	\$753	Minimum state aid for an additional student under governor's revised Chapter 70 formula proposal proposed with FY2002 budget
Tax Rev	\$13.99 per \$1000 state average tax rate on residential property (total levy/total valuation)	Department of Revenue, Division of Local Services

ABOUT THE AUTHOR

Elected Lieutenant Governor of Massachusetts in 1998, **Jane M. Swift** became Governor of the Commonwealth on April 10, 2001, when Gov. Paul Cellucci resigned to become the U.S. Ambassador to Canada. Gov. Swift's career as an elected official began in 1991 at age 25 when she was the youngest woman ever elected to the Massachusetts State Senate. She quickly became the youngest woman in Senate history to hold a leadership position, rising to the rank of Assistant Minority Leader. Gov. William F. Weld appointed her Director of the Office of Consumer Affairs and Business Regulation in 1997. Prior to that position, she served as Director of Regional Airport Development at the Massachusetts Port Authority. Gov. Swift earned her bachelor's degree from Trinity College in 1987.



Massachusetts Governor Jane Swift